STATE OF GEORGIA

BEFORE THE

GEORGIA PUBLIC SERVICE COMMISSION

In Re:		
Georgia Power Company's	**)**	**Docket No. 56002**
2025 Integrated Resource Plan	**)**	
Georgia Power Company's	**)**	**Docket No. 56003**
2025 Application for the Certification,	**)**	
Decertification, and Amended	**)**	
Demand-Side Management Plan	**)**	

DIRECT TESTIMONY OF

DEREK P. STENCLIK

ON BEHALF OF NATURAL RESOURCES DEFENSE COUNCIL (NRDC),

THE SIERRA CLUB, AND

THE SOUTHERN ALLIANCE FOR CLEAN ENERGY (SACE)

MAY 2, 2025

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I. INTRODUCTION AND QUALIFICATIONS

Q PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS FOR THE RECORD.

A My name is Derek Stenclik and I am a Founding Partner of Telos Energy, Inc. My business address is 475 Broadway, Unit 6, Saratoga Springs, NY 12866.

Q PLEASE DESCRIBE TELOS ENERGY.

A Telos Energy, Inc. is a power systems analytics and engineering consulting firm specializing in power system planning, grid modeling, and analytics. Founded in 2019, Telos Energy provides detailed modeling, analysis, industry reports, and expert testimony for clients including utilities, grid operators, developers, public interest groups, and researchers, on the topics of power system planning, renewable integration, electric power reliability, resource adequacy, and electric power markets.

Q PLEASE SUMMARIZE YOUR PROFESSIONAL AND EDUCATIONAL QUALIFICATIONS.

A I am the founding partner of Telos Energy, Inc., an analytics and engineering firm specializing in grid planning, renewable integration, and resource adequacy. I have a decade of experience helping clients across the electric power industry navigate evolving markets, adapt to rapidly changing technologies, and accelerate clean energy integration.

I specialize in production cost and resource adequacy modeling for grid planning, asset development, wind and solar integration, and battery energy storage. I am proficient in the use of spreadsheet analysis tools, as well as optimization and electricity dispatch models and resource adequacy models to conduct analyses of utility service territories and regional energy markets. I have direct experience running the PLEXOS, GE MAPS, and SERVM models, and have reviewed input and output data for several other industry models.

I am also involved in many industry groups and forums, including at the Institute of Electrical and Electronics Engineers (IEEE) and Energy Systems Integration Group (ESIG). Currently I am leading the ESIG Working Group on Redefining Resource Adequacy, which is considering novel ways to improve resource adequacy analysis and reliability planning during the power sector's transition. I am also currently participating on the Technical Advisory Panel for the Hawaiian Electric Company's Integrated Grid Planning efforts.

From 2011 to 2018, I was employed by GE Energy Consulting, most recently as the Senior Manager of Power Systems Strategy. In that role I was responsible for a team of engineers and economists that conducted economic and transmission planning studies for utilities, grid operators, and developers across North America.

I hold a master's degree in Applied Economics and Management from Cornell University and graduated with Summa Cum Laude and Phi Beta Kappa honors from State University of New York, College at Geneseo. Additional qualifications are included in my resume, Exhibit DS-1.

Q HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION?

A No. This is my first time testifying as an expert witness before the Georgia Public Service Commission, but I have similar experience in other jurisdictions.

Q IN WHICH OTHER JURISDICTIONS HAVE YOU TESTIFIED BEFORE A STATE COMMISSION?

A I have testified as an expert witness before the South Carolina Public Service Commission for the Dominion Energy South Carolina Integrated Resource Planning and Avoided Cost proceedings. I have also testified as an expert witness before the Colorado Public Utilities Commission related to the Public Service Colorado Electric Resource Plan and Clean Energy Plan and the Tri-State Generation and Transmission Association, Inc's Energy Resource Plan. In addition, I regularly present in proceedings with the Hawaii Public Utilities Commission and have supported testimony for the New Mexico Public Regulation Commission.

Q ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A I am testifying on behalf of the Natural Resources Defense Council, the Sierra Club, and the Southern Alliance for Clean Energy.

Q ARE YOU SPONSORING ANY EXHIBITS FOR YOUR TESTIMONY?

A Yes. I am sponsoring 14 exhibits in my testimony, listed in Table 1.

Table 1. List of Exhibits

Exhibit #	**Title**	**Confidential**
DS-1	Resume of Derek P. Stenclik	Public
DS-2	Company response to Staff discovery request STF-JKA-2-32	Trade Secret
DS-3	Company response to Staff discovery request STF-PIA-5-4	Public
DS-4	Company response to Staff discovery request STF-JKA-1-11	Trade Secret
DS-5	Company response to Staff discovery request STF-GS-1-14	Public
DS-6	Company response to Staff discovery request STF-JKA-1-9	Public
DS-7	Company response to Staff discovery request STF-GS-1-15	Public
DS-8	Company response to Staff discovery request STF-GS-1-19	Public
DS-9	Company response to Staff discovery request STF-GS-1-4	Trade Secret
DS-10	SREA, Winter Storm Elliott: An independent review of Southern Company's performance during the historic events of December	Public
DS-11	Workpaper: Capacity Expansion Plans by Portfolio	Public
DS-12	Workpaper: NPV Calculations by Portfolio - Trade Secret	Trade Secret
DS-13	Workpaper: Capacity Expansion Plans - 2025 IRP - Scenario Comparisons – Stenclik.xlsx	Public
DS-14	Workpaper: Georgia Power Territorial Base Case Load vs. Capability Table - 2025 IRP – Stenclik.xlsx	Public

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A The purpose of my testimony is to review Georgia Power Company's ("GPC" or "the Company") 2025 Integrated Resource Plan (IRP) and to evaluate and provide recommendations on topics related to the load forecast, renewable and thermal resource modeling, transmission, and power system modeling. In my testimony I also describe modeling conducted by myself and staff at Telos Energy that provides alternative portfolios and sensitivities for the Commission to review. In preparing this testimony, I reviewed GPC's 2025 IRP filings, testimony, attachments, and responses to Public Interest Advocacy Staff's data requests.

Q HOW IS YOUR TESTIMONY ORGANIZED?

A My testimony is organized into eight sections, outlined below:

I. Introduction and Qualifications
II. Summary of Testimony and Key Conclusions
III. Independent Modeling of Alternative Portfolios
IV. Load Forecast Uncertainty and Large Loads
V. Variable Renewable Energy and Battery Storage Issues
VI. Thermal Generation Issues
VII. Transmission Modeling Issues
VIII. Final Conclusions and Alternative Portfolios
IX. Recommendations for the Commission

II. <u>SUMMARY OF TESTIMONY AND KEY CONCLUSIONS</u>

Q IN YOUR OPINION, DOES THE MODELING PERFORMED BY GEORGIA POWER COMPANY IN ITS 2025 IRP RESULT IN REASONABLE FUTURE RESOURCE PLANS?

A No, it does not. The Company's IRP shows an unprecedented growth in load and capacity additions. It "includes continuing the operation of Plant Bowen Units 1-4, extending the operation of approximately 1,100 MW at Plants Scherer and Gaston, [and] upgrades of up to 400 MW to nuclear and natural gas units," and "[t]hrough 2031, Georgia Power projects a capacity need of 9,000 MW."[1]

However, GPC's resource plans are based on inappropriate assumptions, including load forecasts that are too high and highly speculative, arbitrary limits on annual solar and wind builds, poorly characterized accreditation of thermal and battery storage resources, capital cost assumptions for new gas resources that are unrealistic, and a failure to fully benefit from federal subsidies available under the Inflation Reduction Act ("IRA"). This resulted in GPC portfolios that have limited fuel diversity, rely heavily on new gas resources, artificially limit lower cost and lower risk renewable energy resources, fail to capitalize on available federal subsidies which would lower costs, and place significant risk on GPC ratepayers for stranded assets that would increase rates if new large loads do not materialize as expected.

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[1] Ga. Power Co., 2025 IRP Main Document at 2 [hereinafter "2025 IRP Main Document"].

My independent modeling indicates that when assumptions are revised to more realistic values, GPC's portfolios are not economically competitive as compared to alternatives that further deploy solar and storage resources and accelerate coal retirement. This approach would help balance GPC's already large reliance on natural gas and coal resources. Based on this analysis, GPC should accelerate coal retirements, increase procurement of solar and storage resources, limit new gas resource investment, and evaluate options for interregional transmission. Furthermore, new resources could be strategically located to take advantage of federal tax credits, improve reliability, and avoid new transmission. Compared to GPC's MG20 Portfolio, doing so could save GPC ratepayers 20-year net present value (NPV) of [redacted] billion (19%) from 2025-2044.

Q CAN YOU PROVIDE A BRIEF SUMMARY OF YOUR MAIN FINDINGS?

A My testimony is divided across five main topics, covering load forecast and uncertainty, variable renewable energy modeling issues, thermal resource modeling issues, transmission modeling issues, and alternative resource portfolios to consider. The following section summarizes the key findings:

Load Forecast and Uncertainty: My testimony begins by addressing the Company's load forecast, which projects unprecedented growth, largely driven by speculative large industrial and data center loads. While GPC acknowledges the uncertainty of these loads in narrative form,[2] it fails to incorporate this uncertainty into the capacity expansion modeling in any meaningful way. The lack of a credible bookend analysis and scenarios isolating the impact of large loads leaves the IRP vulnerable to overbuilding and increased customer costs. My analysis demonstrates that isolating the impact of large load growth is essential to avoid stranded assets and ensure ratepayers are protected from speculative infrastructure development.

Variable Renewable Energy Issues: The Company imposes restrictive and unsupported annual build limits on solar and wind resources. These restrictions artificially constrain the model's ability to identify cost-effective portfolios. These constraints are binding across nearly all future years and drive the selection of new gas capacity instead of allowing the model to reflect industry trends and technological capability. I developed a High Solar and Storage scenario that relaxed these limits and demonstrated comparable or lower system costs, reduced gas reliance, and lower emissions. The IRP also fails to incorporate available federal tax credits, such as energy community bonus incentives, which would materially reduce the cost of clean energy investments.

Thermal Generation Modeling Issues: While the Company applies an effective load carrying capability (ELCC) methodology to solar, wind, and storage, it continues to assign 100% capacity credit to gas and coal resources, ignoring correlated outage risks and fuel

[2] Ga. Power Co., 2025 IRP Technical Appendix Volume 1, Load and Energy Forecast, B2025 Load and Energy Forecast at 103.

constraints—particularly during extreme winter conditions. This inconsistency inflates the reliability value of thermal resources and distorts the resource mix toward unnecessary gas additions. I presented evidence from the Company's own Reserve Margin Study and national best practices showing that cold weather events can significantly impact the reliability contribution of thermal resources. To ensure equitable and accurate modeling, the Company should adopt ELCC or PCAP-based accreditation for all resource types, including thermal. Furthermore, the Company's IRP does not reflect recent supply chain constraints driving price increases for natural gas capacity, significantly understating the costs and overstating the feasibility of its portfolios.

Transmission Modeling Issues: The Company does not evaluate interregional transmission options in its IRP, missing opportunities to access low-cost, geographically diverse resources and reducing its overall reserve margin needs. Studies I contributed to with the Energy Systems Integration Group, as well as third-party analysis by Brattle Group, show that interregional and regional transmission can significantly reduce system costs, enhance reliability, and improve resilience to extreme weather. Internally, the Company fails to model zonal transmission constraints in Aurora and fails to accurately model battery storage in transmission models, even though it proposes major transmission investments. Integrated resource and transmission planning would enable more efficient decisions, ensure the operability of proposed portfolios, and avoid unnecessary upgrades.

Recommendations and Path Forward: Throughout my testimony, I provide concrete recommendations for improving GPC's IRP and provide alternative portfolios to illustrate and quantify the impact of these recommendations. These include modeling a broader range of load scenarios, removing arbitrary clean energy build limits, adopting consistent accreditation for all resources, and integrating transmission constraints and options into the modeling process. By adopting these reforms, the Company can produce more reliable, resilient, and cost-effective portfolios that better reflect today's energy landscape. Most importantly, these improvements will help ensure that customers are not burdened with the costs of speculative load growth or outdated planning assumptions.

III. INDEPENDENT MODELING OF ALTERNATIVE PORTFOLIOS

Q DID YOU PERFORM INDEPENDENT MODELING OF THE GPC SYSTEM TO EVALUATE ALTERNATIVE RESOURCE PORTFOLIO OPTIONS?

A Yes. To better evaluate alternative portfolio options, I independently modeled Southern Company's system using the PLEXOS production cost modeling software. First, I recreated the models and processes developed by GPC, to the closest extent reasonable, and then tested alternative portfolios to gauge the effect of changing the assumptions outlined later in this testimony, specifically, by quantifying the operating, fixed, and capital costs of the alternative portfolios.

This analysis is not meant to replace the modeling conducted by the Company. Instead, it is meant to show how the overly conservative assumptions and modeling approaches used by the Company are leaving value on the table and resulting in a more costly plan for the Company's ratepayers. The alternative portfolios show that there is an opportunity to accelerate coal retirements, maximize federal tax credits, reduce exposure to volatile fossil fuel prices, and maintain reliability while saving ratepayers money.

Q WHY DID YOU THINK IT WAS NECESSARY TO CONDUCT YOUR OWN MODELING AND ANALYSIS?

A There are several areas where the Company's modeling used incorrect or overly conservative assumptions that overly favor new gas generation builds and coal plant retention. Most importantly, the Company failed to appropriately analyze the uncertainty around its load growth forecast in its Resource Mix Study and capacity expansion modeling, especially around large loads. The alternative portfolios I presented in this testimony provide the Commission with resource portfolios that accelerate coal retirements and limit new gas resource development in a way that is both reliable and cost effective.

Q WHAT METHODOLOGIES AND ASSUMPTIONS DID YOU USE FOR THE MODELING?

A To the extent possible, I utilized the same data and similar methods as GPC to test alternative resource portfolios. In general, I made limited changes to inputs and assumptions to allow for a more direct comparison between the Company's IRP portfolios and my results. If certain data or assumptions developed by the Company are used in my analysis, it should not be assumed that I agree with or validate the Company's approach. Instead, I tried to make the number of changes appropriately small to allow the Commission to evaluate what I feel are the most important assumptions that warrant an alternative approach.

Q CAN YOU PROVIDE AN OVERVIEW OF THE SOFTWARE YOU USED FOR YOUR ANALYSIS?

A For my analysis, I utilize the PLEXOS power system modeling software. It is similar to the Aurora model utilized by the Company and licensed by the same software developer, Energy Exemplar. Specifically, I utilized PLEXOS short-term (ST) chronological, 8,670 hour per year, production cost simulations to quantify total generation costs of each portfolio. The production cost simulations quantify fuel costs, variable operations and maintenance costs, startup costs, emissions costs, and fixed operations and maintenance costs for each portfolio. I then utilized the same financial assumptions the Company uses to calculate the NPV of each portfolio after assuming the same capital cost of new equipment, financing terms, tax credits, and project life utilized by the Company.[3]

While I used a similar production cost modeling software to the Company, I developed the PLEXOS database using the specific modeling details provided by the Company in the native Aurora file format, aligning assumptions where reasonable. I would like to thank the Company for its transparency in providing data and its modeling files, which allowed me to conduct my independent review of its system modeling.

[3] Note that NPV calculations were done for the Georgia Power Company only, inclusive of capacity additions and net interchange subject to the pooling agreement. All resource builds and costs of Mississippi Power and Alabama Power were unchanged across portfolios.

Q WHAT WAS YOUR APPROACH TO MODELING ALTERNATIVE PORTFOLIOS?

A In developing alternative portfolios for this analysis, I intentionally did not pursue a traditional least-cost optimization of new resource additions. While the software platform utilized is capable of conducting such an optimization—evaluating the most economic combination of new technologies to meet forecasted demand—my objective was to design alternative portfolios that could be more directly and transparently compared to Georgia Power Company's proposed portfolios.

To achieve this, I structured my analysis around targeted, incremental modifications to a limited number of resource decisions—such as altering the timing of retirements, adjusting the volume of renewable or storage additions, or exploring specific combinations of technologies. When changes to new resource additions or retirements were made, I confirmed that the portfolio met the reserve margin requirement in each year of the study horizon using the same load and resource workbook developed by the Company.[4]

In order to maintain consistency across modeling platforms and to mitigate the influence of any discrepancies in assumptions or modeling configurations, I also reran the Company's own portfolios (MG20) using the same modeling setup I used for my alternatives. This

[4] Ga. Power Co., Technical Appendix Volume 2, Resource Mix Study, workpaper "Georgia Power Territorial Base Case Load vs. Existing Capability Table - 2025 IRP.xlsx."

allowed for a more accurate and apples-to-apples comparison between the Company's proposed plan and the alternatives I analyzed.

Q CAN YOU EXPLAIN WHY YOU TOOK THIS APPROACH?

A This approach was chosen to enable a more direct and transparent comparison between the Company's proposed portfolios and the alternative portfolios I developed. By isolating the impact of individual resource decisions, rather than blending multiple changes into a single optimized scenario, I was able to assess the implications of each decision in a more straightforward and comprehensible manner. This transparency is particularly important when evaluating the trade-offs inherent in resource planning.

Moreover, this approach supported a more detailed and comprehensive production cost analysis. According to the Company, their modeling framework included two steps: "The results of generic expansion plan modeling are combined with the existing fleet of resources as inputs into more detailed production cost modeling to produce hourly avoided energy costs for each scenario."[5] My analysis employed the latter approach, using the Company's own generic expansion plans, and then conducting detailed 8,760-hour production cost simulation. This full-year, hourly simulation enabled a realistic assessment of unit

[5] Direct Testimony of Jeffrey R. Grubb, J. Randy Hubbert, M. Brandon Looney, Michael B. Robinson, and Francisco Valle on behalf of Georgia Power Company, Docket Nos. 56002 & 56003 at 26.

commitment and dispatch and allowed for a more accurate evaluation of portfolio reliability, operability, fuel costs, emissions, renewable curtailment, and overall system performance.

By grounding the analysis in detailed operational modeling, I was able to ensure that the alternative portfolios are not only economically reasonable but also technically viable under real-world system conditions.

Q CAN YOU PROVIDE A DISCUSSION AND SUMMARY TABLE OF THE PORTFOLIOS YOU EVALUATED IN YOUR ANALYSIS?

A Yes. In my analysis, I evaluated a range of both alternative resource portfolios ("scenarios") and post-model sensitivities to test the robustness of results under varying assumptions. The alternative portfolios involved direct modifications to the Company's proposed resource plan, including adjusting retirement dates and altering the timing or scale of gas, renewable, and storage additions. These scenario-based portfolios were designed to test the performance and operability of alternative resource mixes under detailed 8,760-hour production cost modeling.

In addition to these scenario-based portfolios, I also applied a set of sensitivities to test how key assumptions—such as capacity costs and IRA bonus credit incentives—affected the NPV of system costs. These sensitivities were applied after the production cost modeling was completed and did not affect unit dispatch or portfolio operability. Instead, they allowed me to assess the directional impact of changes in external assumptions on the relative cost-effectiveness of each portfolio.

A matrix of the evaluated portfolios and applied sensitivities is summarized in the list and Table 2. Matrix of Scenarios and Sensitivities. Each of these is discussed in more detail throughout my testimony.

- **Company Base Portfolio (MG20):** This portfolio reflects the Company's proposed resource plan as presented in the MG20 case. It aligns with the Company's assumptions for fuel prices, CO_2 prices, and load growth. It serves as the benchmark against which alternative portfolios were evaluated.
- **No Load Forecast Scenario:** This scenario removes the incremental large loads from the Company's load forecast, effectively reverting to a reference case to isolate the impact on portfolio additions, cost, and emissions attributed to large loads. Given the reduced load levels, coal plant retirements were accelerated, and new resource additions were scaled back to meet reserve margin requirements consistent with the lower forecast.
- **50% Large Load Forecast Scenario:** In this case, only half of the projected large load additions were removed from the forecast. Like the No Load Forecast scenario, coal plant retirements were accelerated, and new capacity additions were adjusted downward to reflect the resulting lower reserve margin need.
- **High Solar and Storage Portfolio:** This portfolio increases the planned annual buildout of solar resources by 50% across the planning horizon. To complement the higher solar penetration, 0.5 MW of 4-hour battery storage was added for every 1 MW of solar PV. To meet the planning reserve margin requirement, new gas capacity was reduced accordingly.

- **Combined Scenario:** This scenario combines the 50% Large Load Forecast and the High Solar and Storage Portfolio in a single scenario. It is intended to reflect a more balanced and forward-looking resource strategy that captures the benefits of multiple enhancements simultaneously.

These portfolios were tested under reference assumptions, as well as in sensitivity cases. Sensitivity cases did not adjust the capacity of the underlying portfolios, but post-processed the NPV of the portfolios with different cost assumptions. The two sensitivities were:

- **High CT/CC Costs:** This sensitivity increased the revenue requirements of combustion turbines and combined cycle technologies to reflect observed pricing increases due to increased demand and supply chain constraints. A 150% and 200% scalar was applied to the Company's revenue requirements for the five-year period from 2026-2031.
- **IRA Bonus Credits:** This sensitivity included a 10% bonus credit applied to battery energy storage systems to reflect the potential of the 10% Energy Communities Tax Credit Bonus.

Table 2. Matrix of Scenarios and Sensitivities

	Reference Assumptions	**High CT/CC Costs**	**IRA Bonus Credits**
Company Reference Portfolio (MG20)			
No Large Load Forecast			
50% Large Load Forecast			
High Solar and Storage Portfolio			
Combined Scenario			

Q WHY DID YOU SELECT MG20 AS THE REFERENCE PORTFOLIO TO COMPARE AGAINST?

A Based on my review of the IRP, it does not appear that the Company selected a single preferred portfolio for resource planning purposes. However, the Company uses the 111-MG0 scenario as its base case, which functions as a reference point throughout the Company's analysis.[6] That scenario assumes compliance with EPA's recently finalized Section 111 greenhouse gas rules.

I selected the MG20 portfolio as the primary basis for comparison. The MG20 scenario serves as a reasonable proxy for potential future environmental regulations whether the Section 111 greenhouse gas rules remain in effect over the planning period or not. The MG20 scenario shares many similarities with 111-MG0 in terms of overall resource buildout but replaces the regulatory mandate with a modeled carbon price of $20 per metric ton, increasing over the planning horizon. While there is also uncertainty surrounding the future implementation of carbon pricing, I believe that a gradually escalating CO_2 price serves as a reasonable and transparent proxy for the likelihood of future environmental regulation. It provides a policy-neutral mechanism to reflect the potential cost of carbon while still allowing for flexibility in planning assumptions.

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[6] Direct Testimony of Jeffrey R. Grubb, J. Randy Hubbert, M. Brandon Looney, Michael B. Robinson, and Francisco Valle on behalf of Georgia Power Company, Docket Nos. 56002 & 56003 at 25.

Q HOW IS YOUR MODELING AND ANALYSIS USED THROUGHOUT YOUR TESTIMONY?

A Each of the scenarios was developed to test the implications of specific planning decisions and assumptions on system operations, costs, emissions, and reliability. They are discussed in greater detail in the corresponding sections of my testimony. In Section VIII, I present the combined scenario results to help summarize my findings.

IV. LOAD FORECAST UNCERTAINTY AND LARGE LOADS

The Company is understating load forecast uncertainty, especially for large loads

Q DID YOU REVIEW THE COMPANY'S LOAD FORECASTS, AND IF SO, WHAT WERE YOUR REACTIONS?

A Yes, I reviewed the Company's load forecasts as presented in the 2025 Integrated Resource Plan, and I had two principal reactions.

First, the Company is projecting significant load growth over the planning horizon. Specifically, peak demand is forecasted to increase from 17.8 GW in 2025 to 26.6 GW by the end of 2031. This represents nearly a 50% increase in peak demand over a seven-year period. This growth rate stands in sharp contrast to the Company's historical growth rates over the last several years. In my view, this is an unprecedented shift—not only for the Company, but across the utility industry more broadly.

However, my second and equally important observation is that much of this projected load growth is highly speculative at this stage. This is especially true for large industrial and data center loads ("Large Loads") which represent around 7 GW of the forecasted increase in peak demand by 2031. While it is appropriate for the Company to anticipate and plan for new sources of demand, it is critical to recognize that much of the growth embedded in the forecast lacks formal commitments or verified timelines for interconnection. Therefore, the likelihood and timing of these loads materializing remains uncertain.

The results and conclusions in the Company's IRP modeling are fundamentally dependent on the load forecast. A higher load forecast, particularly for winter peak demand, directly translates into delayed coal retirements and additional need for new capacity resources - namely medium-duration energy storage and natural gas capacity. In effect, the magnitude and composition of forecasted demand drives the resource selection outcomes, making it, in my opinion, the single most important assumption in the entire planning process.

Q IS THIS PHENOMENON UNIQUE TO THE COMPANY?

A No, the magnitude and nature of the projected load growth presented by the Company is not unique. Utilities across the country are forecasting similar increases in demand, driven by many of the same factors such as data centers, advanced manufacturing, and emerging industrial loads.

However, while the phenomenon is widespread, so too are the uncertainties that accompany it. Across jurisdictions, there is growing concern about the speculative nature of these large new loads—particularly those tied to economic development initiatives, nascent industries, or early-stage interconnection requests. In many cases, utilities are planning around prospective load growth that lacks firm customer commitments or clear timelines for materialization.

Q DID THE COMPANY ADEQUATELY MODEL THIS UNCERTAINTY IN THE IRP?

A No, the Company did not adequately model load forecast uncertainty in its 2025 IRP. The Company describes the use of a probabilistic model, stating that "the load realization model utilizes a probabilistic approach to evaluate the range and likelihood of future potential outcomes of the load growth from large new customers. The results from this model support the external adjustment applied to the baseline Commercial and Industrial load and energy forecasts."[7]

However, this analytical approach was not meaningfully reflected in the portfolios used for capacity expansion modeling which all used essentially the same forecast, only adjusting the load forecast due to higher future prices of natural gas in Figure 1.[8] Given the amount of uncertainty inherent in the load forecast, particularly for data center demand, it is critical to evaluate a wide range of scenarios. Of the nine portfolios evaluated by the Company, only two included a variation labeled as "Standard w/ HG0 delta," and even in those cases, the difference in forecasted demand was *de minimis*.

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[7] 2025 IRP Main Document at 137.
[8] 2025 IRP Main Document at 23.

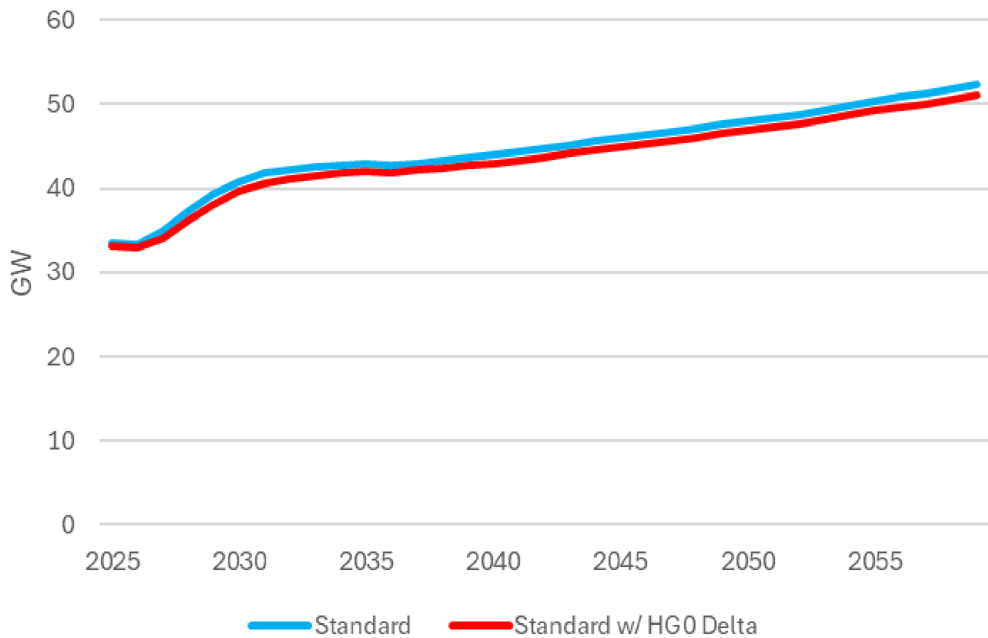

Figure 1. System Winter Peak Load[9]

In practice, the actual load forecasts used in the capacity expansion modeling were nearly identical across all scenarios. While the IRP includes sensitivities on gas prices, carbon prices, technology cost trajectories, and environmental compliance pathways under Section 111, it includes virtually no meaningful sensitivity analysis on load uncertainty, despite the Company's own acknowledgement of the unprecedented scale and volatility associated with large new commercial and industrial load additions.

The Company is facing unprecedented load growth in a short period of time, based on new industries and artificial intelligence that has never been seen historically or in other regions.

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[9] 2025 IRP Main Document at 24.

And yet it offers no sensitivity analysis to evaluate different load trajectories. As a result, the modeling fails to capture the risks associated with potential overbuilding or underbuilding in the face of uncertain large load realization.

Q IF THERE IS A RISK OF ANNOUNCED LOADS NOT MATERIALIZING OR COMING ONLINE AT SLOWER OR LOWER LEVELS, HOW MIGHT THIS AFFECT THE COMPANY'S CUSTOMERS?

A The uncertainty surrounding the Company's load forecast has direct and significant implications for its customers. If the projected load does not materialize as expected, the result could be higher rates for existing customers.

This is because the Company may move forward with the procurement and construction of new resources that ultimately prove unnecessary. These resources, if built in anticipation of growth that does not occur, may see limited utilization and contribute little to system reliability or energy needs. Yet, customers would still be required to cover the fixed costs of these assets through rates.

Q ARE YOU IDENTIFYING A RISK THAT ASSETS COULD BECOME STRANDED IF THEY ARE BUILT FOR SPECULATIVE LOAD THAT DOES NOT ULTIMATELY MATERIALIZE?

A Yes. In effect, GPC's limited load forecast scenario approach creates a stranded asset risk. Ratepayers would be on the hook for infrastructure that was premised on speculative demand and may sit idle for much of their operational life. This outcome is particularly concerning given the scale of capacity additions proposed in the IRP and the high proportion of load growth attributed to uncommitted large customers.

Q WHAT IF THE LOAD EVENTUALLY MATERIALIZES, BUT AT A SLOWER RATE OR LATER DATE?

A Even if the forecasted load ultimately materializes, a slower realization will not justify the Company proactively building resources far in advance. There are several reasons for this. First, rapid advancements in AI development and chip efficiency could significantly alter the long-term demand trajectory, making early infrastructure investments premature. Second, current supply chain constraints are elevating capital costs for new resources, meaning early procurement could lock in unnecessarily high costs. Finally, due to discounting in NPV analysis, costs incurred earlier in the IRP horizon have a disproportionate impact on total system cost, increasing the financial risk of early overbuild.

Q IS THE COMPANY DOING ENOUGH TO PROTECT CUSTOMERS AGAINST THE UNCERTAINTY WITH LARGE LOAD GROWTH?

A No, they are not, but there are ways to mitigate this risk. The first mechanism to protect customers is to avoid speculative load interconnection requests. It is my opinion that a large portion of the large load interconnection requests across the country are redundant or speculative. Now that access to transmission infrastructure has become one of the primary constraints on data center siting, developers are increasingly entering interconnection queues in multiple regions to secure optionality—even in the absence of site-specific development plans or firm commercial commitments. This behavior is analogous to the interconnection queue congestion that has long affected renewable energy developers. As with generation queues, the accumulation of speculative load interconnection requests contributes to inefficiencies, delays, and distortions in system planning.

Q HAS THE COMPANY ACKNOWLEDGED THE POSSIBILITY THAT LARGE CUSTOMERS ARE MAKING MULTIPLE INTERCONNECTION REQUESTS TO DIFFERENT UTILITIES FOR THE SAME LOAD?

A Yes. The Company explicitly acknowledges this possibility. It states that large load "[c]ustomers often evaluate sites in multiple states before finalizing the location of a project."[10] Furthermore, the Company notes that "[a] customer may ultimately end up choosing a different state as the location of a project despite initial indications of interest in Georgia."[11]

The Company also recognizes competition within the state, adding that "there is still uncertainty due to the competitive nature of the bidding process for large load customers among electric service providers in the state, and a customer may choose an electric service provider other than Georgia Power."[12]

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[10] Ga. Power Co., 2025 IRP Technical Appendix Volume 1, Load and Energy Forecast, B2025 Load and Energy Forecast at 104.
[11] *Id.* at 103.
[12] *Id.*

This admission highlights the speculative nature of some large load interconnection requests. While the Company incorporated this uncertainty into its Load Realization Model used to inform adjustments to its organic forecast, the Company has missed an opportunity to have this uncertainty inform a robust set of large load realization alternatives in its Resource Mix Study.

Q ARE YOU SUGGESTING THAT THE COMPANY NOT SERVE NEW LARGE LOAD CUSTOMERS?

A No, I am not suggesting that the Company refuse to serve new large load customers or not prepare for their additions. Rather, I recommend that the Company better isolate the impacts of these loads on its modeling so that it can plan more effectively under conditions of uncertainty. This includes applying a wider range of load growth scenarios to assess risk and ensure the system remains reliable and cost-effective under different outcomes. Importantly, it also ensures that existing customers are not unfairly burdened with the costs of new capacity, transmission upgrades, or the increased emissions and potential reductions in resource adequacy that may result from speculative or unconfirmed large loads.

The Company should isolate the impacts of resource additions, costs, and emissions attributed to large load growth

Q CAN YOU EXPLAIN MODELING THAT THE COMPANY SHOULD HAVE CONDUCTED TO IMPROVE COST ISOLATION FOR LARGE LOADS?

A To improve cost isolation and better assess the risks associated with large load additions, the Company should have evaluated a broader and more comprehensive range of load scenarios. Specifically, the IRP would have benefited from modeling that explicitly isolates the impact of large new loads on resource portfolio decisions, system costs, and emissions outcomes.

At a minimum, the Company should have included a scenario that excludes all large new loads. Such a scenario would serve as a critical reference point—allowing for a clear comparison between a baseline system trajectory and the incremental impacts of large load growth. This would provide valuable insight into the extent to which new resource investments, particularly long-lived thermal capacity, are driven by these uncertain loads and the potential for stranded asset risk if those loads do not materialize as projected.

Furthermore, rather than relying on a narrow and largely immaterial sensitivity ("Standard w/HG0 Delta"), the Company should have conducted a comprehensive bookend analysis that captures a wider range of plausible load outcomes. This would include both low and high realization scenarios, based on the probabilistic load realization modeling referenced in the IRP. Such an approach would better reflect the inherent uncertainty surrounding large commercial and industrial customers and provide a more robust foundation for resource planning decisions.

Q WERE OTHER SCENARIOS CONTEMPLATED BY THE COMPANY?

A Yes, alternative scenarios were contemplated by the Company as directed by the Commission. However, the Company chose not to develop scenarios that would have characterized the portfolio composition, costs, or emissions of alternative loads. According to the Company, "[t]he High Economic Growth, Low Economic Growth, No Load Growth, and Load Growth using a 20-year normal definition of weather, as stipulated in the 2019 IRP, were not modeled in Aurora. These load forecasts were developed for the Load & Energy Forecast pursuant to Commission Rule 515-3-4-.03 Energy and Demand Forecasting Requirements in the Commission's rules and regulations. This rule requires the Company to produce load forecast sensitivities for each of these forecasts but does not require the Company to run each of them through the resource mix process."[13]

Q DID YOUR MODELING AND ANALYSIS ADDRESS THIS CONCERN?

A Yes. My analysis directly addressed this concern by developing and evaluating two alternative load forecasts to illustrate how a bookend approach to large load uncertainty could be effectively conducted. These forecasts were used to construct and simulate resource

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[13] Company response to STF-JKA-2-32 (a) at 2.

portfolios that reflect both the inclusion and exclusion of large new loads, thereby isolating the impact of those loads on system costs, emissions, and resource decisions.

Q WHAT ALTERNATIVE LOAD FORECASTS DID YOU CONSIDER?

A I developed two alternative load forecasts to evaluate the system impacts and planning implications of uncertainty surrounding large commercial and industrial loads. These forecasts are referred to as the "No Large Loads" forecast and the "50% Large Load Forecast."

I inferred the likely contribution of these large loads by analyzing the pronounced increase in system demand between 2026 and 2031—a growth pattern not observed in prior IRPs. Based on this timing and magnitude, I concluded that most of the increase is likely attributable to anticipated data center development and similar large load additions.

To estimate a "No Large Loads" forecast, I assumed that load growth between 2026 and 2031 followed the same compound annual growth rate (CAGR) of 1.07% that the Company applied in the more stable 2032–2040 period. This adjustment effectively removes the anomalous increase attributed to large loads. Beyond 2032, my forecast adopted the same annual growth rates as the Company's base load forecast.

The difference between the Company's Base Load Forecast and the adjusted "No Large Loads" forecast serves as an estimate of the inferred incremental data center demand, which grows from approximately 454 MW in 2026 to 7,137 MW by 2031. To convert this to annual energy values, I applied a load factor of 90%, consistent with the high utilization characteristics typical of data centers.

The “50% Large Load Forecast” scenario assumes that only half of this inferred demand materializes over the planning horizon. The results of this analysis are presented in Figure 2. Together, these two alternative forecasts provide a useful bookend analysis that allows for a more transparent evaluation of the resource needs, cost impacts, and potential risks associated with large load uncertainty.

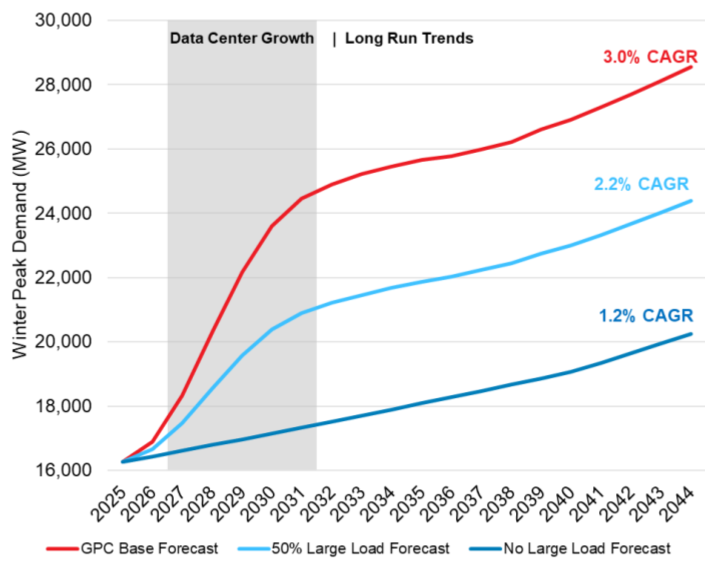

Figure 2. Alternative Demand Forecasts, Winter Peak (MW)

Q DO YOU KNOW OF OTHER UTILITIES IN SIMILAR SITUATIONS WITH ANTICIPATED LARGE LOAD GROWTH THAT HAVE TAKEN A SIMILAR APPROACH TO ANALYZING A WIDE RANGE OF LOAD GROWTH SCENARIOS?

A Yes. The Public Service of Colorado recently completed its 2024 Just Transition Solicitation. In that analysis, three load scenarios were evaluated, including a "Base" forecast, a "Low Load" forecast, and a "Lower Low Load" forecast. In these examples, the peak demand CAGR from 2023 was 4% in the Base forecast, 1.1% in the Low forecast, and 0.7% in the Lower Low forecast.[14] In other words they presented an even wider range of potential future load forecasts than the analysis I conducted.

Q HOW DID YOU ADJUST THE CAPACITY ADDITIONS WITH THE LOWER FORECAST?

A In developing alternative portfolios under the lower load forecasts, I adjusted the capacity additions from the Company's MG20 portfolio to ensure the system continued to meet the reserve margin requirements associated with the reduced demand outlook. My objective was to maintain consistency with the Company's overall planning framework while making incremental, targeted adjustments that reflected the lower system need.

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[14] Colorado Public Utilities Commission, Proceeding No. 24A-0042E, 2024 Just Transition Solicitation, Hearing Exhibit 114, Supplemental Direct Testimony of John M. Goodenough at 9.

To do so, I retained most the Company's proposed capacity additions, particularly those outside of Georgia Power's service territory, and focused changes on the timing and scale of new in-state resources. Specifically, I made the following adjustments:

- Accelerated the retirement of Bowen and Scherer coal units to the end of 2031, moving them forward from the Company's proposed retirement date at the end of 2035.[15]
- Deferred new natural gas builds until such time as the reserve margin became binding under the lower load forecast.
- Reduced battery storage additions to 50% of the incremental solar capacity until reserve margin needs became binding.
- Once the reserve margin was binding, I maintained the Company's battery storage forecast and reduced new gas capacity additions to the level necessary to meet the remaining capacity need.
- Throughout, I preserved the same ratio of combined cycle to simple cycle gas turbines as proposed by the Company in its MG20 portfolio, ensuring consistency in technology mix and operational flexibility.

[15] For reference, the 2022 IRP assumed a 12/31/2027 retirement date of Bowen Units 1-2 and a 12/31/2028 retirement date for Plan Gaston Units 1-4 and Scherer Unit 3. *See* Ga. Power Co., 2023 Integrated Resource Plan Update (Docket No. 55378).

- Other resource additions proposed by the Company in the MG20 portfolio, including battery storage after 2031, solar, wind, medium duration storage, and nuclear remain unchanged.

Q WHY DID YOU CHOOSE TO ACCELERATE COAL RETIREMENTS RATHER THAN DEFER NEW GAS BUILDS?

A Under scenarios with lower load forecasts, the Company's MG20 resource portfolio becomes oversized relative to the reserve margin requirement. In these cases, there are two primary ways to rebalance the portfolio: defer new gas additions or accelerate coal retirements.

My approach prioritized accelerating coal retirements—specifically targeting retirements by the end of 2031—before deferring gas builds. This sequencing provides greater planning optionality. By preparing for earlier coal retirements, the Company can reduce reliance on older, less flexible, and higher-emitting generation. At the same time, if load materializes more quickly than expected or if clean energy deployment is delayed, the Company retains the flexibility to extend the operation of these coal units temporarily, allowing time for new resources to come online.

Q WHAT INFORMATION DOES THIS MODELING PROVIDE?

A The purpose of this modeling, particularly the "No Large Load" scenario, is not to predict the most likely future trajectory of GPC. Rather, the intent is to isolate the incremental impacts—on portfolio composition, costs, and emissions—associated with the inclusion of large, uncertain loads in the Company's planning process. By comparing the alternative load scenarios to the Company's base forecast, this analysis provides valuable information, including:

- **Incremental resource builds**, both in terms of capacity (MW) and energy (MWh), that are required solely to serve the projected large loads.
- **Incremental system costs**, which reflect the net present value of additional generation investments, operating costs, and fuel expenses attributable to large load additions.
- **Incremental emissions impacts,** offering a more transparent view of how large load growth affects the Company's total emissions trajectory, namely CO_2.

Q WHAT WAS THE RESULT OF THE PORTFOLIO RESOURCE BUILDS?

A The results of my analysis, provided in Figure 3 of my testimony, clearly demonstrate the significant influence that large load additions, particularly data center-driven demand, in the Company's service territory have on resource development decisions.

Even with the accelerated retirement of the Bowen and Scherer coal units to the end of 2031, my modeling shows that no new natural gas capacity is required until 2032 in the No Large Loads case, assuming all other assumptions from the Company's MG20 portfolio are held constant. Moreover, the total cumulative natural gas built by 2035 is substantially reduced under the alternative load forecasts (Figure 4):

- In the Company's MG20 portfolio, cumulative new gas capacity reaches approximately 11,400 MW by 2035.

- Under the “50% Large Load Forecast,” this figure falls to 7,850 MW.
- Under the “No Large Load Forecast,” it is reduced further to just 2,050 MW.

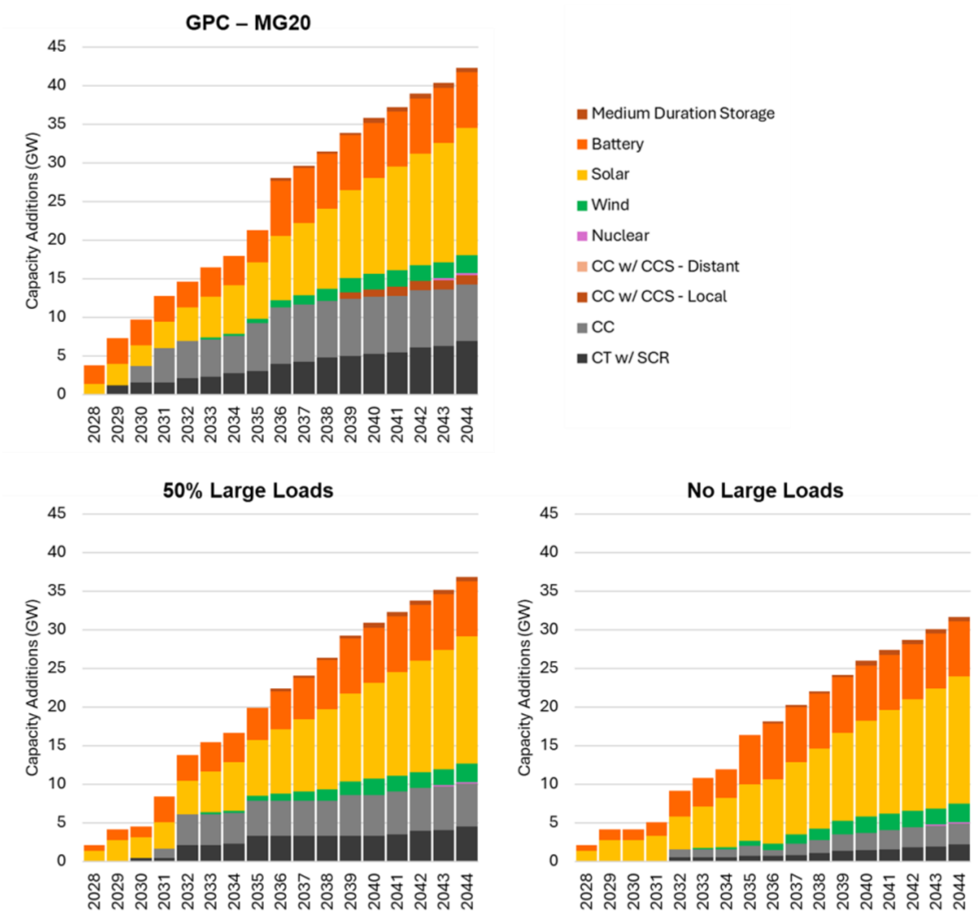

Figure 3. Cumulative Capacity Builds to 2044 by Resource Type, by Load Scenario

Note: the lower loads scenarios also assume accelerated retirement of Bowen and Scherer coal plants

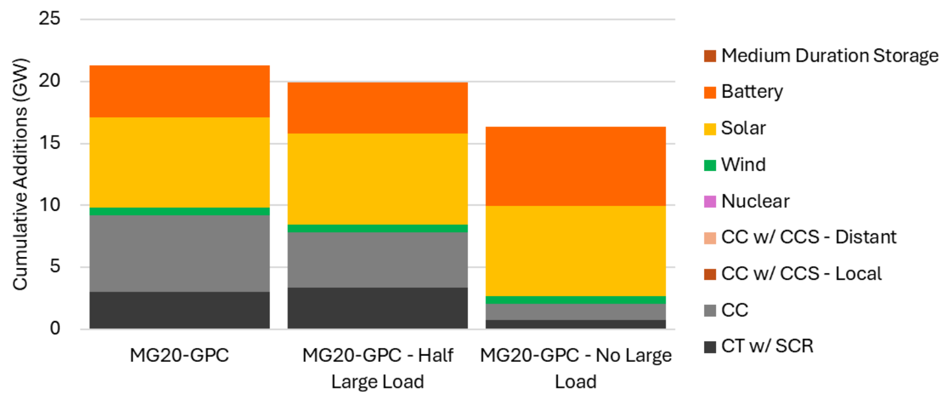

Figure 4. Scenario Comparison, Cumulative Capacity by 2035

Note: the lower loads scenarios also assume accelerated retirement of Bowen and Scherer coal plants

These results indicate that the inclusion of large, uncertain data center load in the Company's planning process is directly responsible for delaying coal retirements to 2036 and prompting up to 9,350 MW of new gas capacity additions. This finding underscores the importance of isolating large load impacts to ensure that long-term infrastructure investments are aligned with actual, realizable system needs and to minimize the risk of overbuilding and stranded assets.

Q WHAT WAS THE RESULT OF THE INCREMENTAL COST OF SERVING LARGE LOADS?

A To assess the cost implications of large new loads, each of the alternative portfolios was evaluated using a full chronological 8,760-hour per year production cost model from 2026-2044. This approach ensured that the portfolios maintained operational reliability and provided accurate estimates of fuel usage, emissions, and other system production costs. In addition, the analysis incorporated the Company's own assumptions for carbon pricing under the MG20 CO_2 scenario, as well as the Company's stated capital cost assumptions for new resource additions, expressed in $/MW-week.

This allowed for a consistent and transparent comparison of system-level NPV across different load scenarios. The results show that the inclusion of large data center loads result in an incremental cost of [redacted] billion dollars NPV. Removing these loads from the Company's forecast results in approximately a 41% reduction in the total system cost under its MG20 portfolio (Table 3).

Table 3. 20-year NPV Comparison by Large Load Scenario

Scenario	NPV ($M)	Change in NPV ($M)	Change in NPV (%)
MG20-GPC	[redacted]	-	-
Half Large Load	[redacted]	[redacted]	-22%
No Large Load	[redacted]	[redacted]	-41%

This cost differential reflects the significant investment required to serve large, uncertain loads and includes investments that include accelerated gas capacity additions, deferred coal retirements, and higher fuel and operating costs. These findings highlight the importance of isolating and scrutinizing large load assumptions in the planning process to avoid overbuilding and to ensure cost-effective, ratepayer-aligned resource decisions.

Q WHAT WERE THE INCREMENTAL EMISSIONS IMPACTS OF LARGE LOADS?

A The emissions impacts of large new loads were also evaluated across the alternative load scenarios. As shown in Figure 5, I calculated the difference in cumulative CO_2 emissions between the base forecast and the alternative forecasts under a consistent set of assumptions. The results show that:

- In the Company's MG20 portfolio, cumulative system-wide CO_2 emissions reach over 1,800 million tons (MT) by 2044.
- Under the "50% Large Load Forecast," this figure falls 14% to 1,573 MT.
- Under the "No Large Load Forecast," it is reduced further to just 1,334 MT, representing a 27% reduction in cumulative emissions.

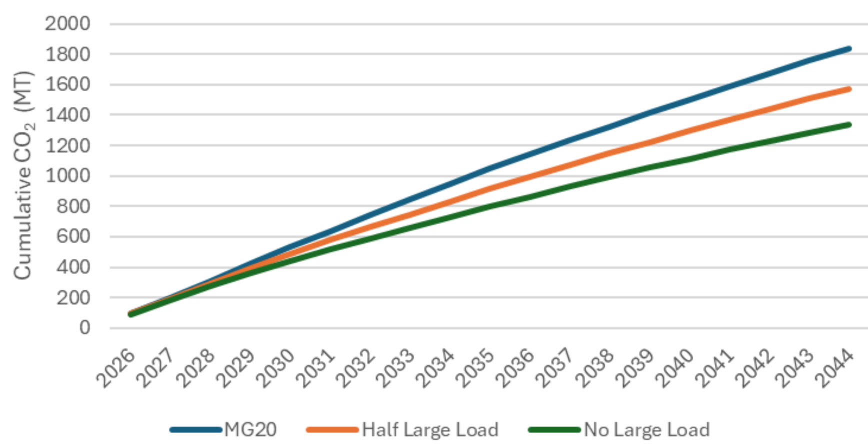

Figure 5. Cumulative, System Wide, CO2 Emissions by Load Scenario

The results indicate that the inclusion of large data center loads (absent other changes to the resource portfolio) would be responsible for a significant increase in carbon emissions over the Company's planning horizon and directly inhibit Southern Company's pathway to meet its net zero by 2050 goal. This includes both the absolute volume of additional emissions and the emissions intensity associated with serving these loads.

Q WHAT ARE THE BENEFITS OF ISOLATING LARGE LOAD GROWTH IN THIS WAY?

A The results of this comparative analysis have three important implications:

1. **Transparency** – They provide stakeholders and the Commission with clearer information about how much of the system buildout is being driven specifically by large load additions.
2. **Accountability** – They enable better tracking of the emissions associated with large loads and informs whether those customers should bear associated environmental and system costs.
3. **Cost Allocation** – They offer a sound analytical basis for developing new rate structures or interconnection terms that ensure large loads are paying their fair share of the infrastructure required to serve them.

The Company does not have appropriate rate structures in place to protect existing customers from large load growth and uncertainty

Q WHAT ARE YOUR CONCERNS ABOUT THE COMPANY'S LACK OF CUSTOMER PROTECTIONS REGARDING THE RESOURCES ADDED TO SERVE NEW LARGE LOADS?

A While new large load customers that request to interconnect to the Company's distribution or transmission system are required to pay for local upgrades, the same is not true for other system needs. Currently, I am unaware of any financial mechanism to protect customers against the potential stranded asset risk that could arise if the Company makes resource investments or bulk transmission system upgrades to serve new large loads that may not materialize or may interconnect slower than anticipated.

Q WHAT IS THE RISK OF THE COMPANY'S CURRENT POLICIES?

A In a worst-case scenario, the Company could overbuild its system based on optimistic assumptions about load growth and then be forced to recover those costs from a smaller-than-expected customer base. This is precisely the kind of misalignment that prudent resource planning seeks to avoid.

Q WHAT STEPS SHOULD THE COMPANY AND THE COMMISSION CONSIDER TO PROTECT EXISTING CUSTOMERS FROM THE FINANCIAL RISKS OF NEW SPECULATIVE LARGE LOADS?

A While rate design itself is not necessarily within the scope of the IRP, the Company's investment decisions arising from this IRP will carry significant long-term costs. These costs must ultimately be allocated across customers, making it essential that the Commission and the Company consider how strategic directions from the IRP will have downstream impacts on rates.

The IRP, as filed, does not provide sufficient strategic direction or transparency in how the costs associated with serving large new loads will be isolated or managed relative to the costs borne by existing customers. Without additional planning or procurement mechanisms in place, existing customers could be exposed to significant financial risk if large loads fail to materialize, develop more slowly than expected, or require different infrastructure than originally anticipated.

To mitigate these risks, the Company and Commission should prioritize procurement strategies that retain flexibility, limit large upfront commitments, and ensure that capital investments for speculative loads are more directly tied to those customers and when growth is more certain. One example of such a strategy is the Pre-Construction Development Asset (PCDA) model adopted by Xcel Energy Colorado. Under this approach, bidders can select into the PCDA process to advance to a "shovel-ready" state and access early-stage development funding at a lower cost to customers. Importantly, these projects are not committed for full construction unless qualifying events occur.[16]

For Georgia, these qualifying events could be more firm commitments as load realization goes from speculative to firm. They could also be used to hedge existing bids dropping out due to challenges with long-lead times and rising costs for equipment due to supply chain constraints. This structure helps preserve optionality and shorten future lead times, both of which will be important aspects of the Company's strategic approach to serving future data center demand without locking in costs for load that may not materialize.

[16] Colorado Public Utilities Commission, Proceeding No. 21A-0141E, Xcel Energy Colorado, Appendix G: PCDA Process, available at: https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Appendix%20G%20-%20PCDA%20Process%20(1).pdf.

There may be other models to consider, but the end goal should be a procurement strategy that shares a common goal of better aligning resource procurement with load realization while protecting existing ratepayers from cost associated with speculative investments. As the Commission considers the approval of significant amounts of new resources directly as a result of large loads, it is essential that the Company provide greater transparency on the total costs attributable to these loads and to explore resource procurement structures that mitigate stranded asset risks and protect all customers, not just the largest ones.

Q ARE OTHER UTILITIES CONSIDERING THESE OPTIONS?

A Yes. There are several utilities across the country implementing new or revised rate structures for large loads. They face similar challenges around how to manage the unprecedented levels of growth and the high level of uncertainty around load growth driven overwhelmingly by one type of demand, data centers. To this end, other regions have begun exploring innovative approaches like the one I described above. The following list, compiled from Lawrence Berkeley National Laboratory[17] and Energy Futures Group,[18] provides examples for further review by the Company and the Commission.

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[17] Andrew Satchwell et al., *Electricity Rate Designs for Large Loads: Evolving Practices and Opportunities*, Lawrence Berkeley National Laboratory (Jan. 2025), available at: https://eta-publications.lbl.gov/sites/default/files/2025-01/electricity_rate_designs_for_large_loads_evolving_practices_and_opportunities_final.pdf

[18] Stacy Sherwood, *Review of Large Load Tariffs to Identify Safeguards and Protections for Existing Ratepayer,*. Energy Futures Group, on behalf of EarthJustice (Jan. 28, 2025), available at: https://energyfuturesgroup.com/wp-content/uploads/2025/01/Review-of-Large-Load-Tariffs-to-Identify-Safeguards-and-Protections-for-Existing-Ratepayers-Report-Final.pdf.

Table 4. Regulatory Status of Large Load Tariff Examples

Source: Lawrence Berkeley National Laboratory and Energy Futures Group

Utility	Tariff	PUC Case Number	Regulatory Status (as of 1/1/2025)
Idaho Power	Brisbie Energy Services Agreement	IPC-E-21-42	Approved
Montana-Dakota Utilities	High Density Contracted Demand Response	PU-22-337	Approved
Ohio Power	New Tariffs Related to Data Centers	24-508-EL-ATA	Pending approval
NV Energy	Callisto Energy Supply Agreement	24-06014	Approved
NV Energy	Clean Transition Tariff	24-05022	Pending approval
Xcel Energy Minnesota	Google Electric Service Agreement	19-39	Approved
Black Hills Energy	Large Power Contract Service Tariff	20003-146-ET-15	Approved
Duke Energy Indiana	Special Agreements with Blocke LLC	45975	Approved
Portland General Electric	Voluntary Renewable Energy Tariff	UM 1953	Approved
Indiana Michigan Power	Industrial Power Tariff	46097	Pending approval
Entergy Mississippi	Large Power Rate	2014-UN-132	Approved
Xcel Energy Colorado	Pre-Construction Development Asset (PCDA)	C22-0559	Approved
NIPSCO	NIPSCO GenCo to serve megaload customers	Cause No. 46183	Pending

Evaluating large load flexibility could have similar reductions in resource additions and cost but was not evaluated by the Company.

Q DID THE COMPANY EVALUATE THE POTENTIAL OPPORTUNITIES THAT COULD BE REALIZED BY LOAD FLEXIBILITY OF LARGE LOADS?

A No. The Company did not evaluate or model the potential opportunities associated with load flexibility from large customers. In the Load and Energy Forecast, the Reserve Margin Study, and the Resource Mix Study, large loads were treated as firm, inflexible sources of demand. The Company states that the "high load factors and historical usage for similar [large load] customers already operating in Georgia" to justify its decision not to model large load flexibility opportunities.[19] However, the Company's decision to exclude large load flexibility due to historical operational behavior is misguided, given growing industry interest around flexible operations, and opportunities to incentivize flexibility such as innovative tariff structures that I will discuss below.

Q COULD LARGE LOAD FLEXIBILITY MITIGATE SOME OF THE UNCERTAINTY RISKS?

A Potentially, yes. This is a missed opportunity. Load flexibility from large loads could serve as a powerful tool to help mitigate system impacts and reduce the need for additional firm capacity. Allowing some degree of dispatchable or interruptible behavior from large loads

[19] Company response to Staff discovery request STF-PIA-5-4.

could reduce the Company's Target Reserve Margin (TRM) requirement and the associated cost of new firm resource additions, especially natural gas capacity.

It is unclear to what extent these large customers will be responsive to time-varying rates or demand response programs, given the capital-intensive nature of their operations and their likely preference for high utilization with limited or no price sensitivity. However, there are mechanisms the Company could explore. For example, a new tariff structure could be developed that grants accelerated interconnection in exchange for a limited degree of operational flexibility. Even a modest level of curtailment—such as 20-40 hours per year—could have significant system value and reduce the need for peaking capacity.[20]

In addition, allowing large loads to integrate onsite backup generation or energy storage, and using that as a capacity resource during tight system conditions, could further enhance flexibility without compromising customer operations.

The Company should refine both its modeling process in the IRP, and its rate structure, to quantify these potential benefits and create incentives (or requirements) to elicit this behavior.

[20] Tyler Norris et al., *Rethinking Load Growth: Assessing the Potential for Integration of Large Flexible Loads in US Power Systems*, Nicholas Institute for Energy, Environment & Sustainability, Duke University (Feb. 2025), available at: https://nicholasinstitute.duke.edu/publications/rethinking-load-growth.

Q GIVEN YOUR REVIEW AND DISCUSSION, WHAT ARE YOUR FINAL CONCLUSIONS RELATED TO THE LOAD FORECAST?

A To be clear, I am not arguing that the Company's load forecast is inherently wrong. Rather, my concern is that it does not sufficiently account for the deep uncertainty surrounding new large loads, nor does it adequately incorporate the necessary protections for existing customers or incentives for system flexibility.

Q WHAT DO YOU RECOMMEND THAT THE COMMISSION DO REGARDING LOAD FORECASTS AND NEW LARGE LOADS?

A Below is a list of recommendations for the Commission and the Company to make in this IRP.

- The Commission should require that the Company develop all-source resource procurement structures that mitigate potential upward rate pressures on existing customers due to the financial risks of speculative large loads.
- The Commission should require that the Company model a much wider and more realistic range of assumptions in the Resource Mix Study, including alternative large load realization scenarios.
- The Company should include a scenario that excludes all large new loads to isolate the costs, emissions, and resource decisions associated with speculative demand.

- The Commission should require that the Company run each requested load forecast sensitivity through the capacity expansion process, not just develop them for compliance with forecasting rules.
- The Company should evaluate options for large load flexibility, such as interruptible rates and onsite generation to reduce capacity needs.
- In the next IRP, the Company's Reserve Margin Study should evaluate potential reduction in the Target Reserve Margin that could be achieved with load flexibility from large loads.

V. VARIABLE RENEWABLE ENERGY AND BATTERY STORAGE ISSUES

The Company arbitrarily limited the amount of solar and wind added to the system which constrained the options available to meet rising load.

Q WHAT ARE YOUR CONCERNS REGARDING GPC'S ASSUMED BUILD LIMITS FOR SOLAR RESOURCES IN THE 2025 IRP?

A The Company continues to use unrealistic, unsupported constraints on solar, wind, and storage resources in its optimized Aurora modeling, specifically, limiting the annual build of solar resources to 1500 MW and wind resources to 300 MW per year across Georgia Power, Mississippi Power, and Alabama Power Companies. This is a critical assumption in the modeling as the additional wind and solar limit is hit every year from 2033 to 2044 in the

MG0, and every year from 2028-2029 and 2033 to 2044 in the MG20 portfolios.[21] In addition, the Company's Aurora files set the maximum builds for solar in [redacted] only. Absent this, it is very likely the solar build limits would have been reached in those years as well. similar constraints are seen across other portfolios. This makes any claims of an "optimized" capacity expansion meaningless, as the results are entirely driven by the Company's exogenous, arbitrary assumption limits on solar PV and wind that can be integrated in a single year.

The Company, at times, distances itself from its own analysis, stating that "[i]mportantly, generic expansion plans do not represent a resource planning decision by the Company, but rather, are indicative of what may be an economically optimal mix of resources within various scenarios."[22] But if the Company is simply evaluating economically optimal mixes of resources, why are they constraining the models most economic build decisions?

To be very clear, while the Company claims the IRP evaluated a wide range of resource candidates, they limited builds of clean energy technologies so there were no available options for the model to meet load growth and coal retirements without significant gas build.

[21] Ga. Power Co., 2025 IRP Technical Appendix Volume 2, Resource Mix Study, workpaper "Capacity Expansion Plans - 2025 IRP.xlsx."
[22] 2025 IRP Main Document at 71.

Q IS GPC'S 1500 MW PER YEAR SOLAR LIMIT AND 300 MW PER YEAR WIND LIMIT REASONABLE?

A No, these limits are not reasonable, particularly given the purpose of modeling in an IRP. The objective of resource planning modeling is to use analysis to inform decision-making—not to constrain the analysis based on pre-determined decisions about what the utility considers reasonable or achievable. In this case, the Company is doing the opposite: it is embedding subjective decision-making assumptions into the model itself, thereby limiting the ability of the model to identify the least-cost or most prudent portfolio.

Furthermore, while GPC does not have extensive in-state wind development experience, this is not a justification for maintaining such restrictive limits. There are numerous viable opportunities to procure wind energy via interregional transmission from areas with strong wind resources. By overlooking this potential, the Company is failing to fully explore cost-effective and geographically diverse resource options that could enhance reliability and reduce costs for ratepayers. In fact, between the 2023 IRP Update and 2025 IRP, the Company reduced its annual maximum build limit for wind by 50%, and cumulative maximum build limit by 44%, and failed to provide justification for this change - despite being directly asked by Staff to directly provide a justification for any such changes in resource build limits.[23]

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[23] Company response to Staff discovery request to STF-JKA-1-11.

Q WHAT DO YOU RECOMMEND FOR A BUILD LIMIT?

A At a minimum, I recommend that the Company include an unconstrained case—one in which annual build limits on solar, wind, and storage are removed entirely.[24] This would allow the model to freely select resources based on system need and relative cost-effectiveness, rather than being artificially limited by subjective judgments or assumed implementation barriers.

While an unconstrained case may produce a portfolio that could be challenging to implement in practice, the value of such an analysis is not in whether the outcome is immediately actionable, but in the insight it provides. It would allow the Commission and stakeholders to clearly see how the system would evolve if these resources were selected purely on cost and operational merit.

Moreover, I believe the results of such a case would reinforce what we see across the industry and in the Company's own modeling: that solar, wind, and battery storage are consistently among the least-regrets resources across a wide range of futures.

Q HOW DID YOU EVALUATE DIFFERENT BUILD LIMITS IN YOUR PORTFOLIO?

A To evaluate the impact of alternative build limits, I developed a scenario referred to as the "MG20 – High Solar" portfolio. In this scenario, I increased annual solar capacity additions by 50% relative to the Company's assumptions in the MG20 reference case. To ensure

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[24] Capacity expansion models typically require a maximum units built in order to solve. In this case I would recommend increasing the constraint until it is no longer binding.

system reliability and capture the operational benefits of paired storage, I also added 0.5 MW of four-hour battery storage capacity for every 1 MW of incremental solar.

As expected, this higher rate of clean energy deployment resulted in a modest overshoot of the Company's target reserve margin in several years. To correct for this and maintain a balanced resource mix, I removed natural gas capacity from the plan until the reserve margin returned to target levels.

This scenario was not intended to serve as a final resource plan recommendation, but rather to quantify an illustrative example of increased solar capacity, absent the artificial annual build constraints imposed by the Company. It demonstrates the potential for clean energy resources to displace new gas capacity while still maintaining system reliability and resource adequacy.

Q HOW DID THOSE BUILD LIMITS CHANGE THE COMPOSITION OF THE OVERALL PORTFOLIO?

A The adjusted build limits in the "MG20 – High Solar" scenario resulted in a substantial shift in the composition of the overall resource portfolio, shown in Figure 6.

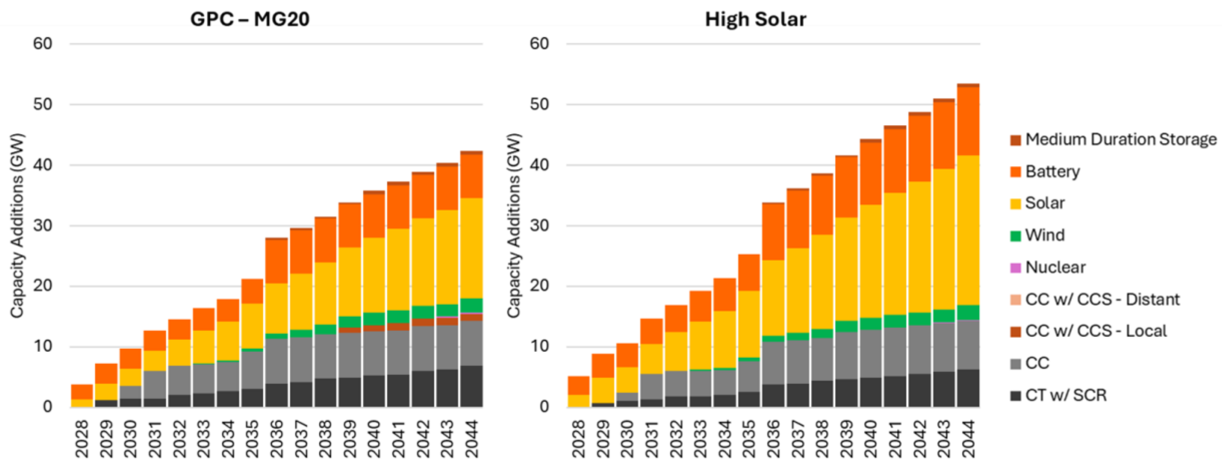

Figure 6. Cumulative Capacity Builds to 2044 by Resource Type with High Solar

Note: both scenarios assume end of 2035 retirement of Bowen and Scherer coal plants and the Company produced GPC - MG20 load forecast

By 2035, the portfolio included:

- 3.6 GW more solar capacity than the MG20 reference case,
- 1.8 GW more battery energy storage, and
- 1.5 GW less natural gas capacity.

By 2044, the impacts were even more pronounced. The portfolio reached:

- 24.7 GW of total solar capacity, representing an increase of 8.2 GW over the MG20 baseline,
- 11.3 GW of total battery storage, or 4.1 GW more than in MG20, and
- 1.1 GW less cumulative gas capacity.

These results underscore the capacity of solar and battery storage to meaningfully contribute to system reliability and energy needs when unconstrained by arbitrary build limits. The findings also suggest that clean energy resources can significantly reduce reliance on new gas capacity while maintaining or enhancing reserve margin compliance.

Q WHAT DID YOU FIND BASED ON THOSE MODELING RUNS?

A The results of the "MG20 – High Solar" scenario were compelling. After significantly increasing the deployment of solar and battery storage resources, the NPV of GPC's total system costs was nearly identical to that of the MG20 reference case, with a slight cost savings observed in favor of the High Solar scenario. If carbon prices are removed, the "MG20 - High Solar" scenario results in almost identical NPV, just 0.07% higher. As discussed later, other factors such as higher gas capacity costs and IRA bonus tax credits available to the Company would swing the "MG20 - High Solar" portfolio to lower cost even without carbon prices.

Importantly, this scenario reflects a strategic trade-off: it replaces higher capital costs—costs that are known, fixed, and incurred upfront—with lower fuel and CO_2 costs, which are uncertain, variable, and carry long-term price risk. As such, the High Solar scenario acts as a hedge against future volatility in natural gas and CO_2 prices. It delivers long-term value to ratepayers by reducing exposure to these uncertain inputs while maintaining or improving cost performance.

The emissions benefits were also significant. The High Solar scenario resulted in 65 MT fewer CO_2 emissions (8.2%) attributable to the Company over the planning horizon compared to the MG20 reference case. Total renewable energy generation increased to 29% in 2035 and 41% in 2044, compared to 23% and 33%, respectively, in the MG20 case.

Table 5. 20-year NPV Comparison of MG20 and High Solar and Storage Scenario

Scenario	NPV ($M)	Change in NPV ($M)	Change in NPV (%)
MG20-GPC	[redacted]	-	-
High Solar and Storage	[redacted]	[redacted]	-0.5%

Table 6. GPC Emissions Comparison of MG20 and High Solar and Storage Scenario

Scenario	Cumulative GPC Emissions (MT)	Change in Emissions (MT)	Change in Emissions (%)
MG20-GPC	798	-	-
High Solar and Storage	732	(65)	-8.2%

Taken together, these results demonstrate that a higher clean energy buildout can reduce emissions, mitigate financial risk, and offer comparable—if not lower—cost outcomes for customers. This strongly supports the inclusion of less restrictive or unconstrained clean energy build assumptions in future planning analyses.

The Company ignored possible bonus credits that could reduce capital costs of new wind, solar, and battery technologies by 10%

Q YOU HAVE MENTIONED MULTIPLE ISSUES WITH THE BUILD LIMITS AND CAPACITY CREDITS ASSIGNED TO SOLAR AND STORAGE. IN ADDITION TO THOSE ISSUES, DID THE COMPANY APPROPRIATELY CAPTURE THE FEDERAL SUBSIDIES AVAILABLE UNDER THE INFLATION REDUCTION ACT?

A No, the Company did not appropriately incorporate all opportunities and benefits associated with the IRA. According to the Company, "[a]dditional IRA bonuses for meeting the domestic content and the energy community provisions were not included for generic expansion units due to uncertainty regarding the ability to meet the requirements."[25]

The Energy Communities bonus credits provide a unique opportunity for the Company. If resources are sited in census tracts with retiring coal plants, for example, they are eligible for a 10% bonus credit to the investment tax credit (ITC) or an additional 0.26 cents/kWh production tax credit (PTC). This means that a resource located in a Designated Energy Community could increase its federal subsidy from 30% up to 40-50% of the upfront capital cost or receive an additional 20% PTC. This significantly changes the project economics of clean energy resources. Unfortunately, the Company implicitly assumed in their modeling

[25] Ga. Power Co., 2025 IRP Technical Appendix Volume 2, Resource Mix Study at 8.

that no projects could receive these bonus credits because exact siting is not known at this time.

Q ARE THERE ENERGY COMMUNITIES IN GEORGIA TODAY AND WHAT MIGHT THAT LOOK LIKE IN THE FUTURE?

A A map of the Southern Company's Designated Energy Communities is provided in Figure 7. A large portion of Georgia, Alabama, and Mississippi is available for these bonus credits. While it is unlikely that all proposed solar additions could be sited in these census tracts, it is likely that many will be. And it is entirely reasonable to assume that all standalone battery energy storage projects could be located in the census tracts to receive a 10% IRA bonus credit. It is also a real possibility that those battery projects could be sited at the same locations as the retiring Bowen and Scherer coal plants to leverage existing plant interconnection and transmission infrastructure. This would further expand the sites available for bonus tax credits.

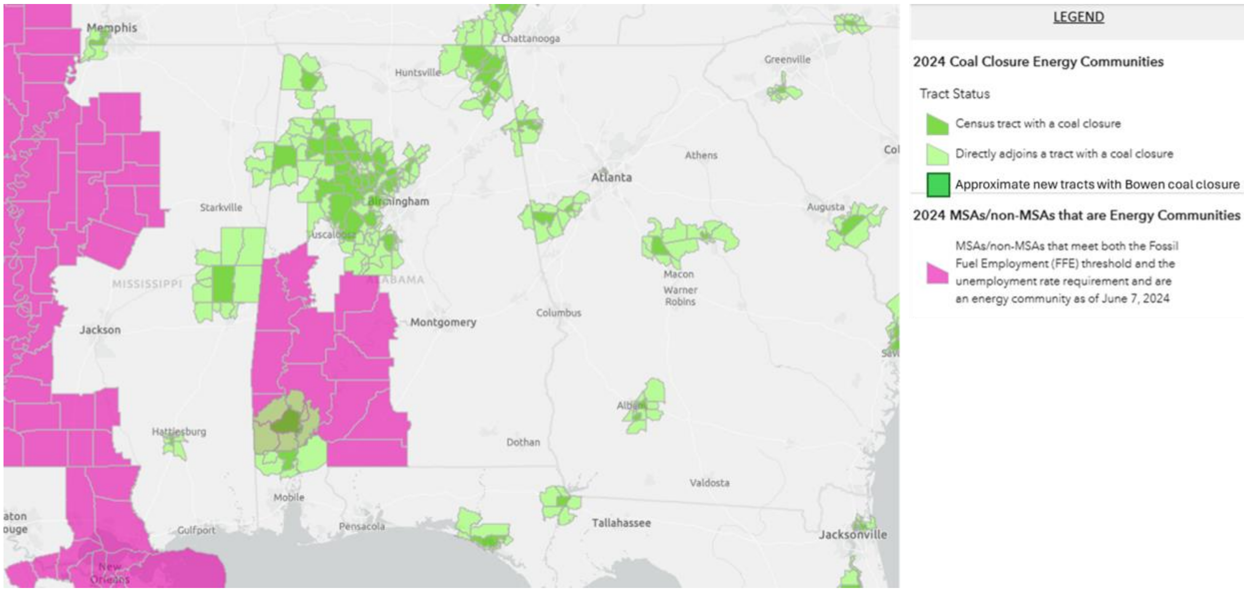

Figure 7. Map of Energy Community Tax Credit Bonus

Source: U.S. Department of Energy[26]

Finally, it is worth noting that pursuing the energy community bonus credits could generate additional benefits besides lower cost resources for the Company's ratepayers. The siting incentivized under the credits could provide jobs and tax revenue for the communities where the retiring coal plants are located, and for other communities impacted by the switch from coal to gas over the past several decades. Not only should the Company include the bonus credit in its modeling, but it should also be actively pursuing opportunities to site resources in these communities to help offset the economic impacts of coal retirements and support workforce development in new and growing industries.

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[26] U.S. Dept. of Energy, National Energy Technology Laboratory, *Energy Community Tax Credit Bonus, 2024 Coal Closure Energy Communities,* availablet at: https://arcgis netl.doe.gov/portal/apps/experiencebuilder/experience/?id=a2ce47d4721a477a8701bd0e08495e1d.

Q DID YOU EVALUATE THE IMPACT OF THESE BONUS CREDITS ON THE PORTFOLIOS YOU EVALUATED?

A Yes, I did evaluate the potential impact of federal bonus tax credits on the portfolios I analyzed. The approach was intentionally straightforward to demonstrate how this type of analysis could be incorporated into the IRP process without requiring a full re-optimization of the resource portfolio.

Table 7 compares the NPV of the Company's MG20 portfolio—reproduced consistent with my modeling framework—with and without these assumed bonus credits. The results show between [redacted] and [redacted] 20-year NPV when the bonus credits are realized, reinforcing the importance of incorporating this type of sensitivity into future IRPs and my recommendation that the Company include analysis like this in future proceedings across all scenarios evaluated.

Table 7. 20-year NPV Comparison with Energy Community Bonus Tax Credits

Scenario	NPV ($M)	Change in NPV ($M)	Change in NPV (%)
MG20-GPC	[redacted]	-	-
MG20-GPC - with Bonus Credits	[redacted]	[redacted]	-0.6%
High Solar and Storage	[redacted]	-	-
High Solar and Storage - with Bonus Credits	[redacted]	[redacted]	-0.8%

The Company failed to properly model portfolio effects of solar and storage resources in capacity accreditation

Q CAN YOU DESCRIBE EFFECTIVE LOAD CARRYING CAPABILITY AND EXPLAIN HOW IT IS USED IN THE IRP?

A ELCC is a methodology used to determine the accredited capacity contribution of different resources toward meeting a system's resource adequacy needs. It reflects the amount of firm capacity a resource can be counted as contributing to the Total Reserve Margin (TRM).

ELCC is derived through probabilistic modeling, typically using a Loss of Load Expectation (LOLE) framework, which is also employed in the Company's Reserve Margin Study. These simulations evaluate the likelihood that a given resource will be available to reliably serve load during periods of highest system risk—typically during extreme weather, high demand, or unexpected outages.

In more technical terms, ELCC measures how much additional firm load the system could support after adding a resource, while maintaining the same level of reliability, as measured by the target LOLE. For example, if a solar or battery resource enables the system to serve more load without increasing reliability risk, that resource is credited with a certain level of capacity—its ELCC value.

In this IRP, GPC applies the ELCC methodology to solar, wind, and storage resources to determine how much of their nameplate capacity can be used to meet reserve margin requirements. The higher the ELCC of these resources, the more effectively they reduce the system's net capacity requirement. As a result, higher ELCC values lead to, all other things equal, reduced reliance on thermal capacity additions and a lower overall cost for the resulting portfolio.

Q HOW DO DIFFERENT RESOURCES INTERACT WITH ONE ANOTHER WITH RESPECT TO CAPACITY ACCREDITATION?

A There are well-documented interactions in the literature that describe how different resources affect one another's accredited capacity, a phenomenon often referred to as "portfolio effects."[27,28] Capacity accreditation, particularly under an ELCC framework, is not static or intrinsic to a given resource type—it is highly dependent on the broader system context, including the overall resource mix and the shape of the load profile.

In general, a resource does not provide capacity in isolation; it provides capacity as part of an integrated system. As the composition of the system changes—whether through the addition of new resources or shifts in demand—the capacity value, or ELCC, of any given resource will also change. These interactions are often non-linear and can either diminish or enhance total portfolio capacity.

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[27] Schlag, N. *Capacity and Reliability Planning in the Era of Decarbonization,* Energy + Environmental Economics (E3), (Aug. 2020), available at: https://www.ethree.com/wp-content/uploads/2020/08/E3-Practical-Application-of-ELCC.pdf

[28] Energy Systems Integration Group, *Ensuring Efficient Reliability: New Design Principles for Capacity Accreditation,* A Report of the Redefining Resource Adequacy Task Force (Feb. 2023), available at: https://www.esig.energy/new-design-principles-for-capacity-accreditation.

There are two principal types of portfolio effects:

- **Antagonistic effects,** in which resources compete with one another to provide capacity during the same hours, leading to diminishing returns. For example, energy limited resources like demand response and battery storage can, at times, compete for the same resource adequacy risk hours.
- **Synergistic effects,** in which different resources complement each other and jointly enhance overall capacity value. In these cases, the whole is greater than the sum of the parts.

A good example of a synergistic relationship is that between solar and battery storage. Individually, each resource will experience declining ELCC at higher penetrations due to saturation effects. However, when deployed together—as modeled in the Company's Resource Mix Study—the decline in ELCC can be mitigated. Solar energy can be used to charge batteries, and the addition of solar flattens and shifts the net load curve (i.e., the load after accounting for renewables), making it more compatible with battery storage discharge patterns. This improves the reliability contribution of both technologies relative to what they could achieve in isolation.

These interactive effects are a critical consideration when assessing resource adequacy and designing portfolios and should be explicitly accounted for in modeling and planning analyses to ensure accurate and cost-effective investment decisions.

Q DID THE COMPANY TAKE INTO CONSIDERATION THE CHANGING RESOURCE MIX AND POTENTIAL PORTFOLIO EFFECTS WHEN DEVELOPING ELCC FOR SOLAR AND STORAGE RESOURCES?

A No, the Company did not. Despite well-established findings in the literature regarding the presence of portfolio effects, particularly between solar and battery storage, the Company evaluated the ELCC of solar and storage resources in isolation.

This is a significant oversight, especially given that the Company's own resource portfolios propose substantial buildouts of both solar and storage resources over the planning horizon. As a result, the Company's approach likely understates the combined capacity value these resources can provide when deployed together.

Q HOW WOULD THESE FINDINGS CHANGE THE OVERALL RESOURCE MIX DEVELOPED BY THE COMPANY IN THE IRP?

A Based on my analysis, I believe the portfolios proposed by the Company include more natural gas capacity than is necessary to meet system reliability requirements. This likely results in overbuilding the resource mix and distorts the intended balance between cost and reliability.

Had the Company appropriately considered the portfolio effects between solar and storage resources, it could have developed an ELCC "surface" or matrix that captures the interactive capacity value of these technologies when deployed together. Such an approach would reflect the increased contribution these resources make to system reliability as a function of their joint penetration levels.

By using a static, isolated approach to ELCC, the Company underestimates the capacity contribution of solar and storage, leading to a higher modeled capacity need—primarily met by new gas resources—to satisfy reserve margin requirements.

Q WHAT DO YOU RECOMMEND THE COMPANY DO IN FUTURE IRP PROCEEDINGS TO BETTER REFLECT THE CAPACITY ACCREDITATION OF SOLAR AND STORAGE RESOURCES?

A In future IRPs, the Company should improve its Reserve Margin Study by evaluating the combined capacity contribution of solar and storage resources. Specifically, it should develop a two-dimensional ELCC matrix that shows how the capacity value of these resources changes depending on how much solar and battery storage is on the system. This is illustrated in Table 8 and Table 9 which were developed for IRPs in two neighboring Southeast utilities. This should be completed prior to GPC's proposed All-Source Capacity RFP, anticipated in the third quarter of 2025, to ensure capacity resources are evaluated on an equal playing field.[29]

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[29] Direct Testimony of Jeffrey R. Grubb, J. Randy Hubbert, M. Brandon Looney, Michael B. Robinson, and Francisco Valle on behalf of Georgia Power Company, Docket Nos. 56002 & 56003 at 36.

Table 8. Duke Energy Carolinas Solar-Storage Surface Matrix[30]

		Solar MW						
	DEC	-	2,000	3,000	4,000	6,000	8,000	8,000
Battery MW	-							
	300							
	600							
	1,200							
	2,400							
	3,200							

Table 9. Dominion Energy South Carolina Solar-Storage Surface Matrix[31]

	Battery(MW)				
Solar(MW)	**100**	**150**	**400**	**650**	**900**
1,335		x	x	x	x
1,435	x	x			
1,935	x		x		
2,435	x			x	
2,935	x				x

This ELCC matrix should then be integrated into the capacity expansion model so that the planning process can reflect the real-world interactions between these resources. This would improve accuracy in identifying capacity needs and help avoid overbuilding gas resources, ensuring that ratepayers dollars support the most economic portfolio of capacity resources while minimizing stranded asset risk.

[30] Duke Energy Carolinas 2023 Integrated Resource Plan, Attachment II - 2022 ELCC Study, available at: https://www.duke-energy.com/our-company/about-us/irp-carolinas/prior-plans

[31] Dominion Energy South Carolina 2023 Integrated Resource Plan, DESC 2023 Planning Reserve Margin Study, January 27, 2023.

Q ARE THERE OTHER METHODS THAT THE COMPANY CAN USE TO ENSURE FUTURE PORTFOLIOS ARE RELIABLE AND THAT THE SYSTEM IS NOT OVERBUILDING NEW GAS RESOURCES?

A Yes. I recommend that the Company should adopt a round-trip modeling approach, also known as ex-post modeling, which tests the reliability of portfolios selected through capacity expansion modeling. This ensures that the portfolios are neither underbuilt, failing to meet resource adequacy standards, nor overbuilt with unnecessary resources.

Importantly, this approach does not rely solely on the target reserve margin and ELCC estimates to ensure resource adequacy. It tests the portfolio explicitly against the loss of load criterion (1-day-in-10-years) and across many weather years, generator outages, and load levels.

It also accounts for how ELCC values change over time with the evolving resource mix, rather than relying on static planning reserve margins. By evaluating system risk across different years and scenarios, this approach provides a clearer picture of reliability and helps avoid unnecessary gas builds while maintaining system adequacy. An example of this approach is done in Public Service of Colorado's "Reliability Rubric" which tests capacity expansion portfolios in the resource adequacy model.[32]

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[32] Colorado Public Utilities Commission, Proceeding No. 24A-0442E, Public Service of Colorado, 2024 Just Transition Solicitation, Volume 2 Technical Appendix at 229.

Q CAN YOU SUMMARIZE YOUR RECOMMENDATIONS RELATED TO RENEWABLE AND BATTERY STORAGE RESOURCE MODELING IN THE IRP?

A The following list provides a set of recommendations for the Commission and the Company to improve modeling of renewable resources and battery storage in future IRPs.

- The Commission should require that the Company remove annual build limits on solar, wind, and storage in at least one unconstrained scenario to assess least-cost outcomes.
- The Commission should require that the Company justify how resource build limits were developed and explain why the Company reduced its annual maximum build limit for wind by 50% since the 2023 IRP Update.
- The Company should develop a method to incorporate the 10% IRA bonus credit for the anticipated number of projects that may be eligible to receive the energy community provisions.
- The Commission should require that the Company develop an ELCC matrix that reflects the capacity contribution of solar and battery storage resources assuming both resources are added to the model together.
- The Company should adopt round-trip modeling, also known as ex-post modeling, to verify that selected portfolios meet reliability targets without overbuilding.

VI. <u>THERMAL GENERATION ISSUES</u>

The Company is overstating accreditation of thermal resources by using ICAP, should transition to PCAP with ELCC accreditation.

Q EARLIER IN YOUR TESTIMONY YOU EXPRESSED CONCERNS REGARDING THE ACCREDITATION OF SOLAR AND STORAGE RESOURCES TOWARDS THE PLANNING RESERVE MARGIN. WHAT ARE YOUR CONCERNS RELATED TO THERMAL RESOURCES?

A Unlike solar, wind, and storage resources, the Company uses installed capacity (ICAP) for thermal resources, assigning 100% firm capacity credit to its portfolio, accrediting the unit's entire capacity towards the reserve margin requirement. This includes new gas generation resources included as options in the Company's build plans.

As a result, the Company places 100% of the risk of gas, coal, and other thermal generator outages into its planning reserve margin. This prevents an apples-to-apples comparison between new candidate resource types for the reliability contributions they provide when meeting the planning reserve margin requirement. This approach has been rejected by other jurisdictions because while the firm capacity value of thermal generators may be higher than other resources, they are not perfect capacity units.

A recent statement from former FERC Commissioner Clements stated that this type of capacity accreditation structure is "unduly discriminatory because it reduces the capacity accreditation of wind and solar [and storage] resources based on historically demonstrated performance, while failing to account in any way for non-performance of other resource types."[33] Capacity accreditation can and should be used for all types of resources in a consistent manner. This ensures that resource planning models such as Aurora can properly account for the inherent limitations of all types of resources.

Q ARE THERE CORRELATED RISKS ASSOCIATED WITH NATURAL GAS AND COAL GENERATION THAT SHOULD BE REFLECTED IN THE CAPACITY ACCREDITATION?

A Yes. The risks from correlated outages and fuel supply availability are not represented for existing and candidate thermal resources in the Company's IRP portfolio related to natural gas and coal generation risks during extreme weather events. When combined with normal weather forced outage rate assumptions. accreditation of thermal resources is overstated in the Company's build plans.

The Company acknowledges this risk, stating that "the greatest reliability risk exists in the winter season due to the following drivers: (1) the narrowing of the difference between summer and winter weather-normal peak loads; (2) the distribution and duration of peak loads relative to the norm; *(3) cold weather-related unit outages*; (4) the penetration of solar resources which correlate more directly to summer peak periods; (5) *increased reliance on*

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[33] Federal Energy Regulatory Commission, Commissioner Clements' Concurrence on Rehearing of Southwest Power Pool's ELCC Capacity Accreditation Proposal, March 2, 2023, Docket Nos. ER22-379-003, ER22-379-004, available at: https://www ferc.gov/news-events/news/commissioner-clements-concurrence-rehearing-southwest-power-pools-elcc-capacity.

natural gas which can be constrained in winter peak periods; and (6) market purchase availability (*emphasis added*)."[34]

It is important to note that the Company socializes these correlated outage and fuel supply risks by increasing the target reserve margin, rather than applying a lower accreditation to thermal resources. Specifically, the 2024 Reserve Margin Study does include an incremental cold weather outage curve that increases generator outage probabilities as temperatures decline and results in a higher target reserve margin. While this data is included in the Reserve Margin Study, it is not used to evaluate the actual capacity contribution provided by natural gas and coal generation in the system in a similar manner to how renewables and storage are treated. Furthermore, while the Company does include incremental cold weather outages, it also assumes that since the 2015 and 2022 cold weather events, Company owned resources have improved cold weather reliability and therefore use an adjusted incremental outage curve, shown in Figure 8.

[34] Direct Testimony of Jeffrey R. Grubb, J. Randy Hubbert, M. Brandon Looney, Michael B. Robinson, and Francisco Valle on behalf of Georgia Power Company, Docket Nos. 56002 & 56003 at 19.

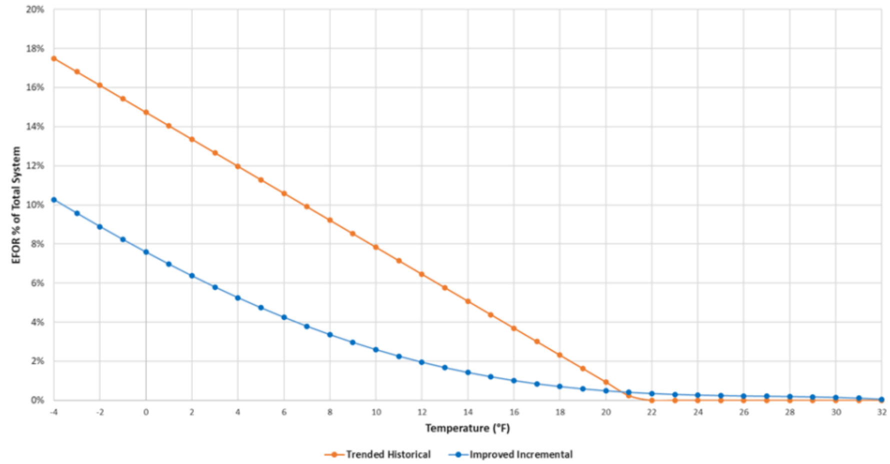

Figure 8. Cold Weather Outage Assumptions (Figure I.9 from 2024 Reserve Margin Study)

Given these recurring risks, the capacity accreditation of gas and coal resources should reflect the potential for simultaneous failures during high-risk periods. Failing to account for these correlated vulnerabilities overstates the reliability of thermal capacity and understates the system's true need for diverse and weather-resilient resources.

Q DO YOU AGREE WITH THE COMPANY'S BASIS FOR ASSUMING IMPROVED INCREMENTAL COLD WEATHER OUTAGES IN ITS 2024 RESERVE MARGIN STUDY?

A No, I believe the assumed improvements are too premature to assume the substantial performance improvements shown in Figure 8 have materialized. The Company makes several assertions that do not support the level of improvements assumed in the Reserve Margin Study. For example, in 2015, the incremental cold weather outage rate on January 8, 2015 was 7.63% and eight years later, on December 24, 2022, it was 6.67%; only a 12.5%

reduction in forced outage rates in eight years.[35] However, the assumed improved curve in Figure 8 shows for a similar system-wide temperature of 12.9 F, the incremental forced rate is <2%. These assumed improvements indicate that nearly all cold weather outage risks have been resolved since 2022. Given the extreme and rare nature of this type of cold weather on the system, the Company should not adjust cold weather reliability impacts without several examples of similar sustained cold weather conditions backing up the assumed improvements.

The Company's claims that cold weather outage rates have already improved are based on sparse data points during recent cold weather events that aren't as severe as Winter Storm Elliott in terms of both temperature and wind speed, the most recent example.[36,37,38]

Q DO YOU HAVE ANY DATA TO SUPPORT YOUR ASSERTION THAT COLD WEATHER OUTAGE RISKS AND FUEL AVAILABILITY COULD SIGNIFICANTLY IMPACT THERMAL ACCREDITATION?

A Yes, both the Company's own analysis through their external consultant Astrape Consulting and recent cold weather event data reviewed in the 2023 IRP back up the assertion that these effects should be reflected in capacity accreditation, and that assuming incremental improvements in cold weather reliability modeling is a premature action. These effects were

[35] Company response to Staff discovery request STF-GS-1-14
[36] Company response to Staff discovery request STF-JKA-1-9.
[37] Company response to Staff discovery request STF-GS-1-15.
[38] Ga. Power Co., 2023 Integrated Resource Plan Update, Docket No. 55378 HR-1-5.

reviewed in detail in my review of winter generator performance data from Docket No. 55378.[39]

Both cold weather impacts on outage rates and fuel supply availability significantly impact the 1-in-10-day LOLE planning reserve margin discussed in the 2024 Reserve Margin Study. Table 10 summarizes the change in 1-in-10-day LOLE reserve margin requirements under the Cold Weather Outage and Unlimited Natural Gas sensitivities, including how these sensitivities would impact the incremental capacity needed in 2035 due to different reserve margin levels. For comparison to the Reserve Margin Study, GPC capacity needed was calculated based on the system 25.75%, not the GPC allocation. The 2035 GPC winter peak load is used to calculate the incremental capacity need for the comparison.

Table 10. Summary Table of Georgia Power's 2024 Reserve Margin Cold Weather and Natural Gas Availability Sensitivities

Reserve Margin Study Sensitivity	Southern Company 1:10 LOLE Winter Reserve Margin	Sensitivity 1:10 LOLE Reserve Margin	GPC 2035 Incremental Capacity Need Impact
No Cold Weather Outages	25.75%	22.50%	-834 MW
Historical Cold Weather Outages	25.75%	30.25%	+1,154 MW
Unlimited Natural Gas	25.75%	20.25%	-1,411

[39] SREA, *Winter Storm Elliott: An independent review of Southern Company's performance during the historic events of December 22-25, 2022.*, (2024), available at: https://www.southernrenewable.org/uploads/1/9/8/9/19892499/winter_storm_elliott_report_southern_renewable_energy_association.pdf.

As shown, just the inclusion of cold weather outages (assuming the improved outage curve in Figure 8) increases the reserve margin by 3.25%, translating to 834 MW of additional firm capacity needed in 2035 due to their effects.

Similarly, results for historical cold weather outage performances and relaxing natural gas constraints both have substantial impacts on reserve margin targets, indicating the importance of these assumptions on system reliability. Historical cold weather outages would increase reserve margin requirements by 4.5%, which translates to 1,154 MW of additional firm capacity needed.

Lastly, the impact of natural gas constraints embedded in the Reserve Margin Study requires a higher reserve margin. The impacts of relaxing this constraint drop the requirement by 5.5%, translating to a 1,411 MW of additional firm capacity because of natural gas constraints.

These values show that risks inherent in the thermal generation fleet require higher reserve margins. Instead, the Company should accredit all resource types using a similar methodology to wind, solar, and battery storage to better reflect fleetwide contributions to firm capacity on a level field.

Q DID THE COMPANY FAIRLY REPRESENT DIFFERENT RESOURCE TYPES IN THEIR RESERVE MARGIN STUDY AND ELCC ASSUMPTIONS?

A No. While the Company applies the ELCC method to solar, wind, and battery storage, it assumes thermal resources—such as gas and coal—contribute 100% of their nameplate capacity. This ignores the correlated risks and outage potential of thermal units, especially during extreme weather. As a result, the current approach overstates the reliability contribution of thermal resources and applies inconsistent standards across resource types. The Company asserts that "[i]ncremental cold weather forced outages were not factored into the capacity accreditation [...] because it is a weather normal analysis and [...] generator outages is accounted for in the reserve margin."[40] This shows that the Company is unfairly assessing resources using inconsistent methodologies and choosing to socialize the very real risks of correlated thermal generator outages and fuel supply constraints onto customers instead of optimizing build plans to mitigate this inherent risk.

Q HOW MIGHT THE COMPANY EVALUATE THE CAPACITY CONTRIBUTIONS OF THERMAL RESOURCES?

A While it was once common to credit thermal units at 100% of nameplate installed capacity (ICAP) similar to the Company's current approach, this is no longer standard practice. Most utilities now use unforced capacity (UCAP), which adjusts for a unit's average forced outage rate. However, UCAP has two key limitations: it doesn't account for shaft risk (the impact of losing large units) and it overlooks correlated outages, such as widespread failures during extreme cold or fuel shortages.

[40] Company response to Staff discovery request STF-GS-1-19.

To address these gaps, many utilities and system operators are moving toward perfect capacity (PCAP) or ELCC-based accreditation for all resource types, including thermal. This ensures a more accurate, risk-adjusted view of each resource's true reliability contribution.

Q DO YOU KNOW OF OTHER JURISDICTIONS THAT ACCREDIT THERMAL RESOURCES USING THE SAME METHOD AS RENEWABLE AND STORAGE RESOURCES?

A Yes, several jurisdictions that encompass a large variety of states have shifted to use more accurate accreditation methods. A non-exhaustive list of these jurisdictions include, but are not limited to, Independent System Operator of New England (CT, ME, MA, NH, RI, VT),[41] Midcontinent Independent System Operator (AR, IL, IN, IA, KY, LA, MI, MN, MO, MS, MT, ND, SD, TX, WI),[42] PJM (DL, IL, IN, KY, MD, MI, NJ, NC, OH, PA, TN, VA, WV),[43] Public Service Company of Colorado (CO), At some level, at least 31 out of the 50 states have a utility, market, or system operator recognizing the need to accredit all resources, thermal generation included, using a consistent methodology.

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[41] ISO New England, *Resource Capacity Accreditation in the Forward Capacity Market*, available at: https://www.iso-ne.com/static-assets/documents/100008/a02c_mc_2024_02_06_07_rca_impact_analysis.pdf.
[42] Midcontinent Independent System Operator, *Resource Accreditation Reform,* FERC Docket ER24p-1638, available at: https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240328-5329&optimized=false.
[43] PJM, *ELCC Class Ratings for the 2026/2027 Base Residual Auction,* available at: https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/2026-27-bra-elcc-class-ratings.pdf.

Q HOW MIGHT A COMMON ACCREDITATION FOR ALL RESOURCE TYPES IMPACT PORTFOLIO SELECTION DECISIONS?

A These accreditation gaps overstate the reliability contribution of thermal resources while understating the value of solar and storage. The result is an overbuild of total capacity, especially natural gas additions, to meet reserve margin targets. This skews the balance between cost and reliability and leads to higher-cost portfolios than necessary.

The Company is understating the cost and timeline of new gas resources, making their near-term build plan unrealistic.

Q HOW MUCH GAS IS THE COMPANY PROPOSING BY THE END OF 2032?

A In the first five years of the IRP planning horizon where new resource additions are considered—specifically from 2028 through 2032—the Company's Resource Mix Study proposes a substantial buildout of new natural gas capacity. In the 111-MG0 scenario, the Company adds approximately 6,000 MW of gas capacity by 2032, while in the MG20 scenario, this increases to 6,900 MW by the end of 2032.

Q GIVEN SUPPLY CHAIN CONSTRAINTS, ARE YOU CONCERNED WITH THE TIMING OF THESE ADDITIONS?

A Yes, I am concerned. Even under normal conditions, the Company's proposed gas buildout between 2028 and 2032 would be considered ambitious. However, in today's constrained supply chain environment, it may be unrealistic or even infeasible.

Demand for natural gas turbines and related infrastructure has surged, particularly due to the rapid growth of AI and data center development. With only a few original equipment manufacturers (OEMs) supplying these technologies, the supply chain is currently outpaced by global demand. Industry reports indicate that the backlog for new turbine orders is now at least five years, and many OEMs require large, non-refundable deposits well in advance.

As a result, even if procurement decisions were made today, it is uncertain whether the Company could bring new gas capacity online within the proposed timeline. This raises serious questions about the feasibility of the Company's near-term gas build plans and suggests a need for greater consideration of alternative, lower-risk resource strategies that are more achievable within the current market environment.

Q ARE THERE OTHER OPTIONS AVAILABLE TO THE COMPANY THAT COULD MITIGATE THE TIMELINE AND SUPPLY CHAIN RISKS?

A Yes. There are existing resources already on the system that the Company is not considering in its Resource Mix Study but could be used to mitigate near-term reliability risks and reduce the need for new gas capacity. For example, Florida Power & Light (FPL) is a joint owner of

Scherer Unit 3 and has publicly expressed willingness to retire its stake.[44] If Georgia Power were to assume FPL's share, it could add around 200 MW of winter capacity to the Company's portfolio. There is a precedent for this type of transaction. Southern Company affiliates have executed similar asset transfers in the past, including at Plant Daniel.[45]

In addition, the Company assumes that 5,475 MW of Purchased Generating Capacity, largely made up of PPAs with third-party generators, will expire between 2028 and 2044.[46] While these PPAs are scheduled to terminate, many of the associated facilities remain technically viable beyond their current contract terms. Rather than treating these units as retired, the Company should evaluate PPA extensions or ownership transfers as viable alternatives to new construction. These options would reduce reliance on long-lead, high-cost new gas builds and provide a more flexible and timely solution to meet capacity needs.

These options would immediately defer the need for new gas resources and mitigate risks of delayed installations and supply chain constraints.

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[44] FPL's predecessor in interest as to Unit No. 3, Gulf Power Company, announced that it, too, would seek to retire Unit No. 3 as its compliance option with the ELG Rule." Complaint at 14, Fla. Power & Light Co. v. Georgia Power Co., No. 1:22-CV-1798-MLB, 2024 WL 1287025 (N.D. Ga. Mar. 26, 2024).

[45] Florida Public Service Commission, Florida Power & Light Company, Docket No. 20250011-EI, OPC's Sixth Set of Interrogatories, #138.

[46] Ga. Power Co., 2025 IRP Technical Appendix Volume 2, Resource Mix Study, workpaper "Georgia Power Territorial Base Case Load vs. Existing Capability Table - 2025 IRP.xlsx."

Q ARE YOU CONCERNED WITH THE ASSUMED COST OF THESE ADDITIONS?

A Yes, in addition to the risk of delays, I am also concerned with the Company's capital cost assumptions for new natural gas capacity. According to the Company's Resource Mix Study, the assumed capital cost for new combined cycle gas plants is [redacted] for simple cycle CTs. These values appear significantly lower than current market conditions.

Due to rising demand—particularly driven by large-scale AI and data center development—and persistent supply chain constraints, capital costs for new gas generation have increased substantially. Industry quotes for comparable combined cycle projects are now exceeding $2,000/kW, with some projects reporting even higher costs depending on location and configuration. For example, Dominion Energy South Carolina modeled new 1x1 combined cycle gas resources with a capital cost of $1,562 /kW in its 2024 IRP Update; preliminary cost estimates for its forthcoming 2025 IRP Update show 1x1 combined cycle costs increasing to $2,453/kW - a 57% increase in one year.[47] Similarly, Louisville Gas & Electric Kentucky Utilities (LG&E-KU) used a $2,121/kW nominal overnight cost assumptions for a natural gas combined cycle to go online in 2030 in its IRP filed in October of 2024.[48]

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[47] Dominion Energy South Carolina IRP Advisory Group Session XVI Presentation, Tuesday, (Nov. 12, 2024), available at: https://www.desc-irp-stakeholder-group.com/Portals/0/Documents/MeetingMaterials/DESC_IRP_Stakeholder_Advisory_Group_Session_XVI.pdf.
[48] LGE-KU Integrated Resource Plan, Volume I, KPSC Case 2024-00326 (Oct. 18, 2024), available at: https://psc.ky.gov/pscecf/2024-00326/rick.lovekamp%40lge-ku.com/10182024014139/06-LGE_KU_2024_IRP_Volume_I.pdf.

If the Company proceeds with the planned 6.9 GW of new gas capacity by 2032 under these higher cost conditions, the total capital investment in gas resources could reach $17 billion, far more than is currently reflected in the IRP's portfolio cost estimates.

Q DID YOU EVALUATE THE IMPACT ON PORTFOLIO NPV WITH THESE NEW COST ESTIMATES?

A Yes. I evaluated the impact of higher gas capital costs using a method similar to the bonus credit sensitivity analysis discussed earlier. Specifically, I applied two sensitivities to the annualized revenue requirements of new gas resources, increasing them by +50% and +100%, respectively. These adjustments were made solely in the financial NPV analysis for the years 2028–2032; the capacity expansion modeling itself was not reoptimized.

Given that battery storage ELCC is already saturated in the Company's portfolios and that annual build limits for solar and wind have been reached, it is unlikely that the portfolio composition would change materially under full re-optimization. Instead, the added costs would simply result in a higher NPV to meet the same load and reserve margin requirements.

Table 11. 20-year NPV comparison of High Gas Revenue Requirements Sensitivities

Scenario	**NPV ($M)**	**Change in NPV ($M)**	**Change in NPV (%)**
MG20-GPC	[redacted]	-	-
MG20-GPC - 150% Gas Rev Req	[redacted]	[redacted]	2.8%
MG20-GPC - 200% Gas Rev Req	[redacted]	[redacted]	5.6%
High Solar and Storage	[redacted]	-	-
High Solar and Storage - 150% Gas Rev Req	[redacted]	[redacted]	2.4%
High Solar and Storage - 200% Gas Rev Req	[redacted]	[redacted]	4.8%

The results of this analysis show that the NPV of the MG20 portfolio increases by 2.8% and 5.6% under the higher gas capital cost assumptions. In contrast, in the portfolio with greater solar and storage additions, the NPV increase is smaller—2.4% and 4.8%—highlighting the ability of renewable resources to mitigate cost pressures associated with volatile gas infrastructure pricing. This reinforces the value of diversifying the portfolio with clean energy investments to hedge against capital cost uncertainty.

Q CAN YOU SUMMARIZE YOUR RECOMMENDATIONS RELATED TO THERMAL RESOURCE MODELING IN THE IRP?

A The list below provides a set of recommendations that the Commission and the Company can use to improve the current and future IRPs on topics related to modeling of thermal resources:

- The Company should test higher gas capital cost sensitivities in its financial analysis to capture risk exposure and provide a more realistic picture of ratepayer impacts.
- The Commission should require that the Company update its cost and timeline assumptions for new gas generators to reflect current market conditions and supply chain constraints.
- The Company should stop assigning 100% capacity credit to thermal resources and adopt a consistent accreditation methodology across all resource types.
- The Commission should require that the Company transition from an ICAP framework to a PCAP or ELCC-based accreditation method for gas, coal, and other thermal resources.

- The Company should account for correlated outage and fuel supply risks in the capacity accreditation of thermal generators, especially during extreme cold weather.

VII. TRANSMISSION MODELING ISSUES

The Company did not evaluate interregional transmission that could provide resource adequacy and access to lower cost and geographically diverse resources

Q DID THE COMPANY EVALUATE OPTIONS FOR INTERREGIONAL TRANSMISSION TO SERVE CAPACITY OR ENERGY NEEDS IN THE IRP?

A No, the Company did not evaluate interregional transmission options in the 2025 IRP. There is no evidence that the Company considered transmission expansions that would allow access to low-cost wind resources from other regions, nor did it explore how interregional transmission could improve system reliability or reduce the overall capacity need within the IRP.

The Company did include an "Unlimited Transmission" sensitivity in the 2024 Reserve Margin Study which found a reduction in reserve margin requirements. However, the Company only considers immediate neighboring balancing authorities when considering interregional transmissions impacts on the total reserve margin requirement. In essence, the Company has not fully evaluated or considered the benefit of increasing transfer capabilities beyond the SERTP/FRCC regions, leaving the analysis incomplete.

This is a significant omission, as interregional transmission has the potential to enhance resource diversity, reduce reliance on in-state gas generation, and lower the Total Reserve Margin requirement by improving system balancing across a broader geographic footprint.

Q CAN YOU CHARACTERIZE ANY BENEFITS THAT INTERREGIONAL TRANSMISSION CAN PROVIDE?

A Yes. Interregional transmission offers a range of benefits, several of which are particularly relevant to the objectives of this IRP proceeding:

- **Facilitates lower-cost energy transfers** across the Southeast and neighboring systems, allowing GPC to access surplus energy from other regions during periods of high demand or resource scarcity.
- **Enhances capacity and resource adequacy** by tapping into geographic diversity in both load and resource availability, which can reduce the overall system reserve margin requirement and improve reliability.
- **Improves resilience to extreme weather events** by expanding the geographic footprint of available resources and reducing reliance on localized generation that may be impacted by regional storms or cold weather events.
- **Enables access to lower-cost renewable energy,** particularly wind resources from regions such as the Midwest and Texas, which are not available at scale within GPC's service territory but could be accessed through transmission investment.

Q CAN YOU PROVIDE AN EXAMPLE OF ANY PROPOSED TRANSMISSION PROJECTS THAT COULD PROVIDE INTERREGIONAL TRANSMISSION BENEFITS?

A Yes. There are several proposed interregional transmission projects across the country that are designed to deliver the types of benefits discussed previously—namely, improved reliability, lower reserve margin needs, and access to low-cost renewable energy.

One project particularly relevant to this proceeding is a proposed 3,000 MW transmission line that would interconnect the ERCOT with the Southern Company system, which includes GPC. This project is being developed specifically to enable large-scale energy transfers between regions, improve reliability through geographic diversity, and unlock access to low-cost wind and solar resources in Texas.[49]

Q HAVE YOU ANALYZED SIMILAR INTERREGIONAL TRANSMISSION PROJECTS FOR SOUTHERN COMPANY'S SERVICE TERRITORY?

A Yes. I have conducted studies that directly evaluate the benefits of interregional transmission for Southern Company's service territory. One study is the ESIG Multi-Benefits of Transmission Planning Study,[50] which modeled the addition of a 2,000 MW transmission line

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[49] Pattern Energy, Southern Spirit Transmission, available at: https://patternenergy.com/projects/southern-spirit-transmission/.

[50] Energy Systems Integration Group, *Multi-Value Transmission Planning for a Clean Energy Future* (June 2022), available at: https://www.esig.energy/wp-content/uploads/2022/07/ESIG-Multi-Value-Transmission-Planning-report-2022a.pdf.

between ERCOT and Southern Company. The results showed strong cost-benefit ratios of 166% and, importantly, demonstrated that even when both regions began the simulation with reliability levels below the industry standard (i.e., LOLE above 0.1 days/year), the transmission line enabled a reduction of 2,000 MW of gas capacity on each side. The added transfer capability improved resource adequacy for both ERCOT and Southern Company, making each region reliable under the planning criterion.

Q ARE YOU AWARE OF OTHER TRANSMISSION STUDIES CONDUCTED IN THE SOUTHEAST THAT SHOW SIMILAR BENEFITS OF REGIONAL COORDINATION?

A Yes. A recent study conducted by The Brattle Group, titled *Modernizing Southeast Grid Investments*, provides compelling evidence that enhanced regional transmission planning within the Southeast via SERTP can significantly reduce system costs, improve reliability, and increase resilience to extreme weather events.[51]

The report identifies critical gaps in the current Southeast Regional Transmission Planning (SERTP) process, which relies on a bottom-up aggregation of local utility plans and has not approved a single regional transmission project in over a decade due to the narrow and

[51] The Brattle Group, *Modernizing Southeast Grid Investments: How Enhanced Regional Transmission Planning Supports a Growing Economy* (April 2025), available at: https://www.brattle.com/wp-content/uploads/2025/04/Modernizing-Southeast-Grid-Investments-How-Enhanced-Regional-Transmission-Planning-Supports-a-Growing-Economy.pdf

reactive nature of Southeast transmission planning. This limited scope fails to reflect the rapid load growth forecasts developing across the region.

To demonstrate the potential benefits of a more proactive approach, Brattle evaluated three transmission upgrades identified by SERTP in 2024. The analysis shows that when using a broad set of cost and reliability metrics, total benefits were $8 billion versus $5 billion in cost. To realize these benefits, it is recommended that planners adopt scenario-based, multi-value planning aligned with FERC Order No. 1920, which would enable utilities to better evaluate long-term needs.

Taken together with the ESIG study I conducted, these findings clearly demonstrate that regional and interregional transmission planning is an underutilized tool that could provide meaningful cost and reliability benefits for the Company.

Q HOW CAN TRANSMISSION PROVIDE RESOURCE ADEQUACY?

A Interregional transmission can serve as a source of firm capacity by allowing access to surplus generation in neighboring systems that naturally arises due to diversity in weather and load. The ELCC framework used in the ESIG study is well-suited to evaluate this resource type. Just like other supply-side resources, transmission can be assessed based on its ability to reduce loss-of-load events under correlated weather and load conditions. In particular, the geographic and temporal diversity of load and renewable generation across regions makes transmission a potentially high-value resource for enhancing resource adequacy.

Properly accounting for interregional transmission within the ELCC framework would allow the Company and the Commission to weigh it alongside other capacity resources.[52,53] It would also provide greater transparency into the benefits of transmission development—particularly in light of diminishing returns from wind, solar, and storage as their penetration levels increase.

Q HOW COULD THE COMPANY EVALUATE INTERREGIONAL TRANSMISSION IN THE RESERVE MARGIN STUDY?

A The capacity contribution of interregional transmission can—and should—be evaluated in the same manner as other resources in the ELCC framework. The ELCC methodology is fundamentally designed to quantify the contribution of a resource to system reliability, and this logic applies equally to geographic diversity enabled through transmission as it does to generation or storage resources.

Assuming neighboring systems are explicitly modeled, the Company could conduct a loss-of-load expectation ("LOLE") analysis under the 0.1 days/year reliability criterion, just as it does for existing resources. Then a new transmission interface could be introduced into the model, representing firm import capability from a neighboring region. The resulting

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[52] *Id.*
[53] Astrapé Consulting, *North Plains Connector (NPC) Evaluation*, Prepared for Grid United, (May 24, 2024), available at: https://northplainsconnector.com/wp-content/uploads/2024/06/North-Plains-Connector-Evaluation_Final-Report_Astrape-Reviewed_FINAL.pdf

reduction in LOLE can then be used to calculate the ELCC of the transmission asset as additional load is added.

Q HOW MIGHT THE COMPANY INCLUDE INTERREGIONAL TRANSMISSION IN FUTURE IRPS AND ALL-SOURCE PROCUREMENTS?

A In future IRPs, the Company can and should incorporate interregional transmission as a resource option within its Reserve Margin Study and capacity expansion modeling. There are two primary ways to reflect its reliability value:

1. **Reduce the Total Reserve Margin** to reflect the added resource adequacy benefits provided by the interregional tie, or
2. **Assign a capacity credit to the transmission line,** which can then be incorporated into the Aurora capacity expansion model.

In the second approach, the transmission line would be treated as a selectable resource in the model, with assumptions about its cost, ability to buy or sell power, and associated environmental attributes. This would allow the model to economically evaluate the transmission investment alongside other local resource options, without requiring a full multi-jurisdictional transmission planning process.

A similar framework applies to all-source procurements. The transmission line could be treated like a conventional generating resource, with a defined capacity value based on expected availability during high-risk periods. This is consistent with how the Company currently uses probabilistic methods to assign ELCC values to solar, wind, and storage.

The key principle is that even without firm capacity contracts on the other side, the line itself can be reliably assigned a capacity credit based on expected import capability during periods of system stress. This enables interregional transmission to be evaluated on a level playing field with other supply-side options.

The Company's resource selection process does not incorporate internal transmission limitations, missing opportunities to strategically locate resources and mitigate transmission needs.

Q DID THE COMPANY'S MODELING INCORPORATE LOCATIONAL CONSIDERATIONS OF NEW RESOURCES OR RETIREMENTS?

A Currently, the Aurora modeling conducted by the Company does not evaluate any Southern Company transmission constraints between Georgia Power, Alabama Power, and Mississippi Power. Modeling internal zonal transmission constraints within the Company's capacity expansion, resource adequacy, and production simulations is essential for accurately reflecting the operational realities of the power grid and ensuring that resource investments are both cost-effective and reliable. Transmission plays a pivotal role in shaping resource availability, operational flexibility, and system costs, yet traditional resource planning models often oversimplify or omit these constraints. This leads to suboptimal resource portfolios that fail to account for localized congestion, inter-zonal energy flows, or critical bottlenecks.

Q WHY IS THIS APPROACH LIMITED?

A By not considering internal transmission constraints, the Company has limited insight into where new resources should be added. In addition, the Company is proposing significant transmission builds but has not evaluated whether strategic placement of generating or storage resources could defer the need for new transmission. The Company's Resource Mix Study proposes between 3,000 and 4,470 MW of battery storage by 2032 in the GPC service territory. This is a significant buildout of battery storage that could mitigate some of the transmission needs identified by the Company.

Q DO YOU THINK THE COMPANY SHOULD HAVE INCLUDED TRANSMISSION CONSIDERATIONS IN THEIR AURORA MODELING?

A Yes. Incorporating zonal, or nodal, transmission constraints in their Aurora model would enable the Company to develop resource portfolios that align better with the physical capabilities of its grid and provide valuable information to regulators and developers on best locations to site projects. Omitting zonal constraints means the interplay between transmission and generation is gone and portfolios may appear feasible on paper but encounter significant hurdles when evaluating them in transmission planning or resource adequacy studies.

Omitting modeling intra-regional transmission constraints may only be warranted if the Southern Company System truly does not experience congestion. However, if there is no transmission congestion within the Southern Company footprint, then I find it highly unusual that the Company would also be requesting [redacted] billion of new transmission upgrades.[54] Based on the transmission system upgrades requested, there is a clear need for new transmission and these needs should be reflected in the Aurora model. As stated, representing at least some level of transmission constraints and costs to alleviate interface limits results in lower cost and more optimal planning.

Q IF THE COMPANY INCLUDED LOCATIONAL CONSIDERATIONS IN THEIR AC POWER FLOW MODELING, IS THIS SUFFICIENT?

A No, it is not sufficient. While incorporating locational considerations into AC power flow modeling is a step in the right direction, the Company's approach remains limited by the use of only a small number of snapshot analyses. This narrow scope makes it difficult to determine whether identified transmission constraints should be addressed through redispatch, operational adjustments (such as battery storage dispatch), or new transmission infrastructure.

For example, as noted in Witness Richwine's testimony, the Company's transmission analysis did not properly consider battery storage, despite nearly 5 GW of battery resources being included in the 2032 resource mix. Furthermore, the Company states that "[redacted]

[54] Ga. Power Co., 2025 IRP Volume 3 TRADE SECRET 2024 Georgia ITS Ten-Year Plan (2025-2034), Table 2 Georgia ITS 10 Year Plan Project List at 20.

[redacted] Any transmission projects supported using this type of analysis should be carefully reviewed since the default could lead to overly conservative conditions if alternative cases are not assessed based on actual expected and historical operations. If battery storage is expected to serve a meaningful share of peak demand, its operational behavior should be reflected in transmission planning models. Figure 9 are two hourly dispatch charts for summer and winter peak periods in the PLEXOS model developed for this testimony. Battery operations are identified and charged prior to the worst-case hours at lower load conditions based only on a 1-day lookahead period. The Company's current operational practices would provide sufficient lookahead forecasts to schedule storage resources to meet similar performance.

A more effective approach would involve integrated transmission and resource planning—linking the capacity expansion and production cost modeling conducted in Aurora with detailed AC power flow analysis. This would allow the Company to more holistically evaluate the most efficient combination of generation, storage, and transmission investments, ensuring that reliability and cost objectives are met in a coordinated manner.

[55] Company response to Staff discovery request STF-GS-1-4.

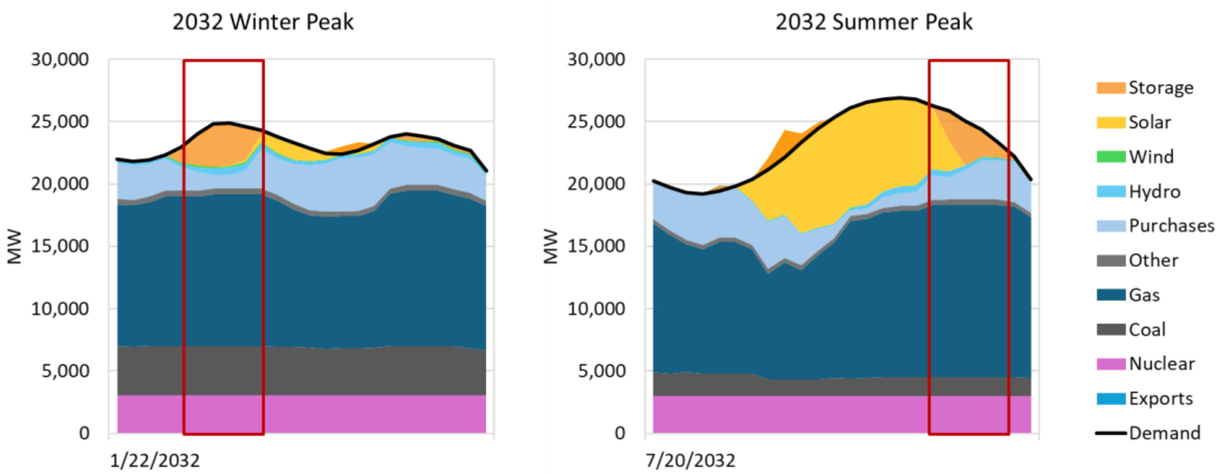

Figure 9. Hourly Dispatch for 2032 Winter (Left) and Summer (Right) Peak Load Periods

Q CAN YOU DESCRIBE HOW THE COMPANY COULD BETTER REPRESENT TRANSMISSION IN THEIR AURORA MODELING AND FUTURE RESOURCE CONSIDERATIONS?

A Yes. The Company could significantly improve the representation of transmission in its Aurora modeling by adopting a three-step zonal transmission planning approach:

1. **Cluster generation and loads by electrical proximity and interaction.** This involves grouping buses or substations into zones that reflect how power flows on the system. An example of this clustering method is discussed in Witness Richwine's testimony, with a corresponding map provided in "Figure 2: Map of Strategic Transmission Projects, Large Centralized Generators, New Large Loads."[56]

[56] Direct Testimony of Matthew Richwine.

2. **Calculate area-to-area transfer capability using AC power flow (ACPF) tools.** Once zones are defined, the Company can use power flow analysis to determine the Total Transfer Capability (TTC) between each pair of zones. This quantifies how much power can be reliably transferred across regions without violating transmission limits.
3. **Incorporate these zones and transfer limits into Aurora modeling.**

Q HOW MIGHT THIS INFORMATION BE USED TO HELP PLAN BOTH GENERATION AND TRANSMISSION RESOURCES?

A By modeling regional constraints and power transfer capabilities directly in Aurora, the Company can more accurately determine where new resources should be located to avoid triggering new transmission needs. Additionally, candidate transmission upgrades can be included as selectable options in the model, allowing the planning process to evaluate whether expanding transfer capacity would unlock lower-cost or more reliable resource portfolios.

Q WHAT ARE YOUR RECOMMENDATIONS RELATED TO TRANSMISSION MODELING IN THE IRP?

A The following recommendations will help improve integrated resource and transmission modeling in future IRPs:

- The Commission should require the Company to evaluate the ELCC of interregional transmission lines in future Reserve Margin Studies using the same ELCC framework applied to other resources.
- The Commission should require the Company to evaluate interregional transmission as a candidate resource option in its Resource Mix Study, allowing the model to select a least cost portfolio of local generating resources and interregional transmission.
- The Company should explicitly consider transmission projects like the proposed 3,000 MW ERCOT–Southern Company tie in future planning cycles.
- The Company should review findings from the ESIG and Brattle studies and apply scenario-based, multi-value transmission planning aligned with FERC Order No. 1920 and incorporate those findings into the IRP.
- The Company should improve its internal transmission modeling by representing zonal or nodal constraints in Aurora.

VIII. FINAL CONCLUSIONS AND ALTERNATIVE PORTFOLIOS

Taken together, adjustments to load, thermal modeling assumptions, and treatment of renewable energy and storage could yield a dramatically different portfolio with limited new gas builds, accelerated coal retirements and faster renewable adoption.

Q DID YOU EVALUATE HOW CHANGES TO THE LOAD FORECAST, RENEWABLE RESOURCE MODELING, AND CAPITAL COSTS OF NEW GAS RESOURCES COLLECTIVELY AFFECT THE RESOURCE SELECTION?

A Yes. While much of my testimony up to this point has focused on evaluating individual assumptions—such as load forecasts, renewable build limits, capital costs, and tax credits—in isolation, I also examined how these factors interact when applied collectively. This step is important because, while individual sensitivities provide clarity, the combined effect of these assumptions can produce even more significant changes to the resource portfolio, system costs, and emissions. For this analysis, I used the Company's MG20 portfolio as the reference case and created a "Combined Portfolio" scenario with the following modifications:

- Adjusted the load forecast to reflect the "50% Large Load Demand" scenario, which explores a middle ground if some portion of large loads do not materialize, similar to concerns raised by NRDC/SACE/Sierra Club's Witness Dr. Fagan regarding near-term load realization.

- Increased solar build limits by 50%, along with an additional 0.5 MW of 4-hour battery storage for every 1 MW of solar added, to reflect the potential for faster clean energy deployment.
- Accelerated coal retirements to 2031, aligning with reliability and cost optimization strategies discussed previously.
- Deferred new gas builds, reducing reliance on long-lead, high-cost thermal additions while still meeting the reserve margin requirement.
- Assumed 100% of battery storage additions received the 10% energy community bonus credit under the IRA.

The outcome of this analysis shows that when taken together, these changes drive a substantially different portfolio—one with lower total costs, reduced emissions, and greater flexibility in meeting long-term system needs. The exercise highlights the importance of evaluating realistic combinations of assumptions rather than relying solely on overly constrained, static inputs. This type of analysis better reflects the dynamic nature of today's energy landscape and provides the Commission with a more accurate basis for decision-making.

Q WHAT WERE THE RESULTS OF THAT ANALYSIS?

A The results of the Combined Portfolio analysis are significant and demonstrate how a more appropriate and flexible set of assumptions can produce a portfolio that has both lower cost and lower risk than any proposed by the Company. In some ways, my results show similar findings to the Company, namely that "[a]ll scenarios show substantial additions of solar and wind resources to be cost effective through the planning period."[57] But the Company could go further. As shown in Figure 10, the resulting portfolio is markedly different in composition and performance:

- Coal retirements accelerated to the end of 2031.
- Natural gas build is reduced by 6.5 GW, representing a 42% decrease by 2044 compared to the Company's MG20 portfolio.
- Solar additions increased by 8.2 GW, a 50% increase over MG20.
- Battery storage grows by 4.1 GW, or 58% more than in the Company's plan.
- The portfolio yields [redacted] billion lower NPV, a cost reduction of 19%.
- It also results in 265 million tons less cumulative CO_2 emissions, a reduction of 33% of system-wide emissions attributable to the Company.[58]

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[57] 2025 IRP Main Document at 75.

[58] In this calculation, avoided CO2 emissions were quantified as the reduction in CO2 emissions for all Southern Company resources given an incremental addition of solar in the Georgia Power Company territory, regardless of which generators saw a decrease in generation.

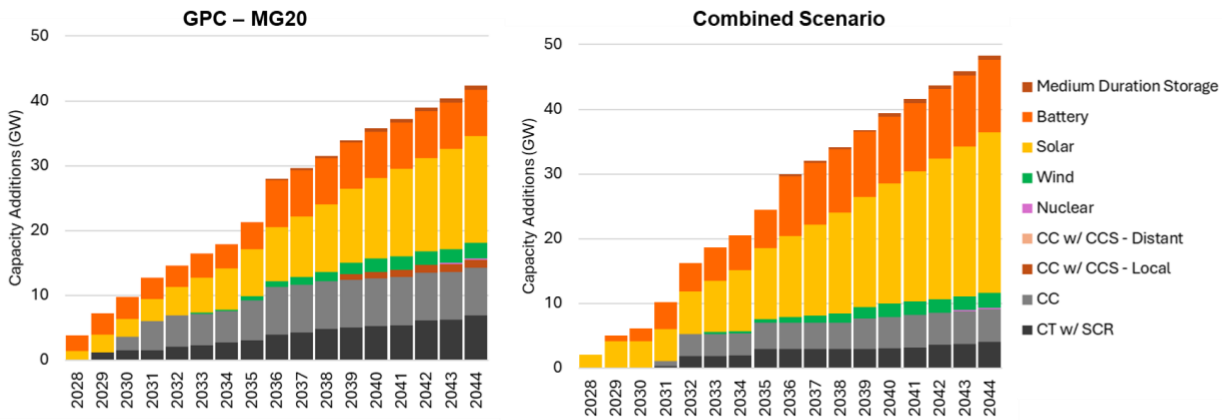

Figure 10. Cumulative Capacity Builds to 2044 by Resource Type with High Solar

Note: the Combined Scenario also assume accelerated retirement of Bowen and Scherer coal plants.

These results clearly illustrate the importance of evaluating these changes in combination. When realistic changes are made to load forecasts, renewable deployment constraints, tax credit eligibility, and gas capital costs, the system requires far less gas, retires coal earlier, and deploys more clean energy—all while lowering costs to customers and reducing emissions.

Q WHAT CONCLUSIONS CAN YOU DRAW FROM THESE RESULTS?

A The results of this analysis lead to several important conclusions about the limitations of the Company's current IRP and the opportunities for improvement.

First, the Company failed to plan for a more realistic trajectory of load growth and did not consider portfolios with higher levels of solar and battery storage that could deliver lower system costs, both in total and on a $/MWh basis.

Second, the analysis demonstrates that it is entirely possible to achieve these cost savings while maintaining the Company's target reserve margin and ensuring the same level of reliability as the Company's proposed portfolios.

Third, the findings underscore how the Company's outdated capital cost assumptions for new gas resources—when adjusted to reflect current market trends—significantly increase the cost and risk of the proposed portfolios, especially given ongoing supply chain constraints and long lead times for gas infrastructure.

Based on these findings, I recommend that the Commission require the Company to model a wider and more realistic range of assumptions, including:

- Alternative load forecasts with lower data center demand realization;
- Accelerated coal retirements;
- Higher build limits for solar, wind, and battery storage;
- Updated capital costs for new gas resources; and
- Inclusion of federal tax credits, including energy community bonus incentives.

IX. RECOMMENDATIONS FOR THE COMMISSION

My recommendations for the Commission and the Company are summarized in Table 12. The recommendations are organized by topic and prioritized by recommendations for changes that should be implemented in this IRP and others that can be addressed in future planning cycles.

1 **Table 12. Summary of Recommendations for the Commission and the Company**

Topic	Recommendation	Timing
Load Forecast	The Company should include a scenario that excludes all large new loads to isolate the costs, emissions, and resource decisions associated with speculative demand.	This IRP
Load Forecast	The Commission should consider resource procurement needs identified in the IRP that align with the uncertainty around large load realization and natural gas procurements.	This IRP
Load Forecast	The Commission should require that the Company model a much wider and more realistic range of assumptions in the Resource Mix Study, including alternative large load realization scenarios.	Future IRPs
Load Forecast	The Commission should require that the Company run each requested load forecast sensitivity through the capacity expansion process, not just develop them for compliance with forecasting rules.	Future IRPs
Load Forecast	The Company should evaluate options for large load flexibility, such as interruptible rates and onsite generation to reduce capacity needs.	Future IRPs
Load Forecast	In the next reserve margin study, the Company should evaluate potential reduction in the Target Reserve Margin that could be achieved with load flexibility from large loads.	Future IRPs
Variable Renewables & Storage	The Company should develop a method to incorporate the 10% IRA bonus credit for the anticipated number of projects that may be eligible to receive the energy community provisions.	This IRP
Variable Renewables & Storage	The Company should adopt round-trip modeling, also known as ex-post modeling, to verify that selected portfolios meet reliability targets without overbuilding.	This IRP
Variable Renewables & Storage	The Commission should require that the Company remove annual build limits on solar, wind, and storage in at least one unconstrained scenario to assess least-cost outcomes.	This IRP
Variable Renewables & Storage	The Commission should require that the Company justify how resource build limits were developed and explain any changes to annual maximum build limits for wind, solar, or battery storage.	Future IRPs
Variable Renewables & Storage	The Commission should require that the Company develop an ELCC matrix that reflects the capacity contribution of solar and battery storage resources assuming both resources are added to the model together.	Prior to Capacity IRP
Thermal Resources	The Company should test higher gas capital cost sensitivities in its financial analysis to capture risk exposure and provide a more realistic picture of ratepayer impacts.	This IRP

Thermal Resources	The Commission should require that the Company update its cost and timeline assumptions for new gas generators to reflect current market conditions and supply chain constraints.	This IRP
Thermal Resources	The Company should evaluate extending or acquiring contracts to existing resources like Scherer 3 and existing PPAs prior to building new gas resources.	This IRP
Thermal Resources	The Company should stop assigning 100% capacity credit to thermal resources and adopt a consistent accreditation methodology across all resource types.	Future IRPs
Thermal Resources	The Commission should require that the Company transition from an ICAP framework to a PCAP or ELCC-based accreditation method for gas, coal, and other thermal resources.	Future IRPs
Thermal Resources	The Company should account for correlated outage and fuel supply risks in the capacity accreditation of thermal generators, especially during extreme cold weather.	Future IRPs
Transmission	The Commission should require the Company to evaluate ELCC of interregional transmission lines in future Reserve Margin Studies using the same ELCC framework applied to other resources.	Future IRPs
Transmission	The Commission should require the Company to evaluate interregional transmission as a candidate resource option in its Resource Mix Study, allowing the model to select a portfolio of local generating resources and interregional transmission.	Future IRPs
Transmission	The Company should review findings from the ESIG and Brattle studies and apply scenario-based, multi-value transmission planning aligned with FERC Order No. 1920 and incorporate those findings into the IRP.	Future IRPs
Transmission	The Company should improve its internal transmission modeling by representing zonal or nodal constraints in Aurora.	Future IRPs

Q DOES THIS CONCLUDE YOUR TESTIMONY?

A Yes.

DS-1:

Resume of Derek P. Stenclik

TELOS ENERGY

Derek P. Stenclik

Founding Partner

Saratoga Springs, NY

M.S. Applied Economics & Management, Cornell University
B.A. International Relations, State University of New York at Geneseo

Derek Stenclik is a founding partner of Telos Energy and is an industry leader in power grid planning, operations, and reliability. He has over fifteen years of experience helping clients across the electric power industry navigate evolving markets, adapt to rapidly changing technologies, and accelerate clean energy integration. He is a recognized expert on renewable integration, resource adequacy, and grid planning.

Mr. Stenclik combines economic and engineering principles to bring a balanced perspective towards the opportunities and challenges of our current and future energy mix. He recognizes the role of a diverse resource mix and understands the need to balance affordability, reliability, and sustainability. He provides his clients unbiased, technical, and quantitative analysis by leveraging detailed power system models and simulations.

He regularly contributes to industry forums, including IEEE, CIGRE, ESIG, and peer-reviewed publications. He has authored over a dozen peer-reviewed articles and given numerous talks related to renewable integration, resource adequacy, energy storage, and ancillary market design.

Prior to founding Telos Energy, Derek spent eight years in GE Power's Energy Consulting department, most recently as the Senior Manager of Power System Strategy. In that role he supported global clients across the energy industry, including utilities, grid operators, developers, and equity investors. He also provided power market expertise across GE's portfolio of businesses, including the GE Power, Renewables and Capital divisions.

Derek graduated with an M.S. degree in Applied Economics and Management from Cornell University, with a concentration in Environmental and Natural Resource Economics. He also holds a B.A. in International Relations from the State University of New York, College at Geneseo, where he graduated Phi Beta Kappa and Summa Cum Laude.

Derek P. Stenclik

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SHORT BIO

Derek Stenclik is a founding partner of Telos Energy and is an industry leader in power grid planning, operations, and reliability. He has over fifteen years of experience helping clients across the electric power industry navigate evolving markets and accelerate clean energy integration.

EXPERIENCE

2019-Present — Founding Partner, *Telos Energy*

· Lead business development, marketing, and finance initiatives
· Consult global clients in the electric power industry

2015-2019 — Senior Engagement Manager, *GE Energy Consulting*

· Supported utilities, grid operators, developers, governments, and NGOs
· Managed a diverse team of 11 power systems engineers and consultants

2011-2015 — Consultant & Senior Consultant, *GE Energy Consulting*

2010-2011 — Energy Analyst Intern, Office of Climate Change
New York State Energy Research and Development Authority
New York State Department of Environmental Conservation

EDUCATION

Aug. 2011 — M.S. Applied Economics & Management, *Cornell University*

· Concentration: Environmental and Natural Resource Economics
· Thesis: *Understanding Private Forest Owner Participation in Future Carbon Offset Programs in the Catskills Region: A Contingent Valuation Approach.*

May 2009 — B.A. International Relations, State University of New York at Geneseo

· Honors: Phi Beta Kappa, Summa Cum Laude

EXPERTISE

Energy Markets and Power System Planning Expertise:

· Economic dispatch and production cost modeling (GE MAPS and PLEXOS software)
· Renewable integration, integrated resource planning, and cost-benefit analysis
· Resource adequacy analysis and reliability planning
· Market design, energy and capacity market forecasting
· Financial proforma analysis, asset valuation, and tax equity investment
· Transmission congestion and curtailment risk analysis

AWARDS

- D. Stenclik, 2019 Excellence Award of the Electric System Integration Group (ESIG) for his work related to advances in PV-battery peaking plants.
- D. Stenclik, 2016 Annual Achievement Award of the Utility Variable-Generation Integration Group for the contribution to the Pan Canadian Wind Integration Study
- M. Richwine, D. Stenclik, 2016 Next Generation Network Paper Competition, 1st Place, CIGRE-US National Committee.

PUBLICATIONS & REPORTS

- **D. Stenclik**, New Resource Adequacy Criteria for the Energy Transition: Modernizing Reliability Requirements, Energy Systems Integration Group, Mar 2024
- **D. Stenclik,** et al., The Moonshot 100% clean electricity study: Assessing the tradeoffs among clean portfolios with a PNM case study, Aug 2023
- **D. Stenclik**, Ensuring Efficient Reliability: New Design Principles for Capacity Accreditation, Energy Systems Integration Group, Feb 2023
- **D. Stenclik**, et al., Beyond Expected Values, Evolving Metrics for Resource Adequacy Assessment, CIGRE Session 2022, Aug 2022.
- **D. Stenclik**, M. Welch, P. Sreedharan, Reliably Reaching California's Clean Electricity Targets, Stress Testing Accelerated 2030 Clean Portfolios,
- **D. Stenclik,** Redefining Resource Adequacy for Modern Power Systems, Energy Systems Integration Group, 2021.
- **D. Stenclik,** et al., Quantifying Risk in an Uncertain Future: The Evolution of Resource Adequacy, IEEE Power & Energy Magazine, Nov/Dec 2021.
- D. Lew, […], **D. Stenclik,** Secrets of Successful Integration, IEEE Power & Energy Magazine, Nov/Dec 2019.
- B. Zhang, **D. Stenclik**, W. Hall, Calculating the Capacity Value and Resource Adequacy of Energy Storage on High Solar Grids, CIGRE-US Grid of the Future, Reston, 2018.
- **D. Stenclik**, B. Zhang, R. Rocheleau, J. Cole, Energy Storage as a Peaker Replacement, IEEE Electrification, Vol. 6 No. 3, 2018.
- **D. Stenclik**, M. Richwine, C. Cox, To Shift or Not to Shift? An Energy Storage Analysis from Hawaii, Hybrid Power Systems Workshop, Tenerife, May 2018.
- **D. Stenclik**, M. Richwine, N. Miller, The Role of Fast Frequency Response in Low Inertia Power Systems, CIGRE Session, Paris, 2018.
- M. Richwine, **D. Stenclik**, Analysis and Impact of Autonomous Fast Frequency Response Relative to Synchronous Machine Sources on Oahu, CIGRE-US Grid of the Future, Reston, 2018.
- E. Ibanez, B. Daryanian, **D. Stenclik**, Capacity Value of Canadian Wind and the Effects of Decarbonization, 2017 Ninth Annual IEEE Green Technologies Conference (GreenTech), Denver, 2017.
- **D. Stenclik**, P. Denholm, B. Chalamala, Maintaining Balance: The Increasing Role of Energy Storage for Renewable Integration, IEEE Power and Energy Magazine, Volume: 15, Issue: 6, Nov. - Dec. 2017.
- G. de Mijolla, **D. Stenclik**, E. Ibanez, D. Lew, Regional Valuation of Regulating Reserves from Distributed Flexible Resources, CIGRE-US Grid of the Future, Cleveland, 2017.
- M. Richwine, **D. Stenclik**, Analysis of Grid Strength for Inverter-Based Generation Resources on Oahu, CIGRE-US Grid of the Future, 2017.
- M. Richwine, **D. Stenclik**, An Integrated Approach to Analyzing the Impact of Increasing Distributed PV on Dynamic Stability, CIGRE-US Grid of the Future, 2016.
- D. Woodford, B. Daryanian, **D. Stenclik**, M. Salimi, The Way to a TransCanada Electric Transmission System, CIGRE Canada Conference, Vancouver, 2016.

DS-2:

Company response to Staff discovery request STF-JKA-2-32

Georgia Power Company
Docket Nos. 56002 & 56003
2025 Integrated Resource Plan and 2025 Demand-Side Management Application
STF-JKA Data Request Set No. 2

STF-JKA-2-32

Question:

Refer to page 23 of the Main Document of the IRP describing two load forecasts (Standard, Standard w/ HG0 Delta) and references to "additional load views considered in the B2025 Load & Energy Forecast in the Technical Appendix Volume 1 and the Financial Review in Technical Appendix Volume 2."

a. Please provide a list of the load forecast sensitivities produced and which were also studied in the resource mix process. Please reconcile any differences. If any load sensitivities were produced, but not studied in Aurora for an optimal expansion plan, please explain why not.

b. Refer to the list of load forecasts provided in "Table 1: List of Sensitivities for Financial Review" provided in 2025 IRP Financial Review TRADE SECRET.docx. Please reconcile the financial review sensitivities to those provided in part a.

c. Please provide a summary of any statutory requirements related to load forecasting and how GPC has complied.

d. Provide a summary of the sensitivity forecasts on an annual GWh, winter Peak, and summer peak basis (similar to Attachment 8.2-1)

Response:

a. The table below shows the loads developed as part of the Load & Energy Forecast and indicates which forecasts were modeled in Aurora for the Resource Mix Study, Financial Review, and/or Demand Side Management ("DSM") Step 9 analyses.

Load Forecast	Resource Mix Study	Financial Review	DSM Step 9
Standard	X	X	
Standard with HG Delta	X	X	
High Economic Growth			
Low Economic Growth			
No Load Growth			

High growth in large load customers		X	
Load growth with no DSM growth		X	X
Load growth with aggressive DSM growth		X	X
Load growth using a 20-year normal definition of weather, as stipulated in the 2019 IRP			
Proposed DSM			X
Capacity and Affordability DSM			X

The scenario design for the Resource Mix Study includes the standard view of load growth and an alternative view considering the effects of higher natural gas prices on the load forecast. To support previous Integrated Resource Plan ("IRP") Resource Mix Studies, the Company has considered as few as zero and as many as three alternatives to its official load forecast, which were not meaningfully different from one another from either a Resource Mix Study perspective or when used to perform resource-specific economic evaluations for both demand-side and supply-side options. The Company's scenario design strives to assemble views into scenarios that are meaningfully different from one another. For the set of scenarios analyzed in the 2025 IRP, it was determined that one alternative was sufficient, especially when combined with other key uncertainties in developing the wide range of possible futures in the nine scenarios ultimately included in the 2025 IRP.

The High Economic Growth, Low Economic Growth, No Load Growth, and Load Growth using a 20-year normal definition of weather, as stipulated in the 2019 IRP, were not modeled in Aurora. These load forecasts were developed for the Load & Energy Forecast pursuant to Commission Rule 515-3-4-.03 Energy and Demand Forecasting Requirements in the Commission's rules and regulations. This rule requires the Company to produce load forecast sensitivities for each of these forecasts but does not require the Company to run each of them through the resource mix process. All other load forecasts listed in the table above were modeled in Aurora as part of the Resource Mix Study or pursuant to Commission Rule 515-3-4.05 and are included in the Financial Review.

b. See the table in the response to subpart (a).

c. See response to subpart (a).

d. As noted, Figure 8.2-1 of Technical Appendix Volume 1 B2025 Load and Energy Forecast TRADE SECRET provides annual energy and summer and winter peak demand for the Standard and Standard with HG0 delta load forecasts. Figures 8.1-1 through 8.1-3 provide this information for the High Economic Growth, Low Economic Growth, No Load Growth, 20-Year Weather Normal, High Growth in Large Customers, No DSM, and Aggressive DSM cases. Please see STF-JKA-2-32 Attachment TRADE SECRET for the Company's summer and winter peak demand and annual energy for the Proposed and Capacity and Affordability DSM cases.

C & A

	GPC		
	Peak Demand (MW)		Energy (MWh)
	Summer	Winter	
2025	[redacted]		
2026			
2027			
2028			
2029			
2030			
2031			
2032			
2033			
2034			
2035			
2036			
2037			
2038			
2039			
2040			
2041			
2042			
2043			
2044			

Proposed

	GPC		
	Peak Demand (MW)		Energy (MWh)
	Summer	Winter	
2025	[redacted]		
2026			
2027			
2028			
2029			
2030			
2031			
2032			
2033			
2034			
2035			
2036			
2037			
2038			
2039			
2040			
2041			
2042			
2043			
2044			

DS-3:

Company response to Staff discovery request
STF-PIA-5-4

STF-PIA-5-4

Question:

Please identify the assumptions that have been made regarding on-site flexibility at the large loads and their ability to reduce grid consumption during system peak hours. If there was no flexibility assumed, please explain why not and whether the utility asked the large loads about their willingness to be flexible and reduce grid consumption (potentially in return for faster interconnection and/or bill reduction)?

Response:

From a forecasting perspective, the Company is planning the system to meet the needs of our customers using our risk-adjusted framework (Load Realization Model). Given the high load factors and historical usage for similar customers already operating in Georgia, additional flexibility considerations were not modeled. The Company offers several programs large load customers can enroll in to provide value in exchange for a commitment to load flexibility. If customers enroll in these programs, their participation will be considered in the Company's planning processes.

DS-4:

Company response to Staff discovery request
STF-JKA-1-11

STF-JKA-1-11

Question:

Regarding interconnection and build limits modeled for generic resources:

a. For all the modeled portfolios, provide any annual and cumulative build limits that were modeled by resource. Also, provide all workpapers used to derive the limits as used in Aurora modeling in the IRP.

b. Has Georgia Power changed any annual or cumulative build limits between the 2023 IRP Update and the 2025 IRP? Explain what has changed and why, if applicable.

c. Provide supporting industry information, justification, and support for the interconnection and/or build limit assumptions utilized.

d. Please describe any firm transportation and/or gas availability assumptions considered in the development of the limits modeled.

e. What contractual commitments or financial commitments, if any, has Georgia Power/SCS/Southern Company made to Transco for Southeast Supply Enhancement (SSE) project as of January 15, 2025?

f. What contractual commitments or financial commitments, if any, has Georgia Power/SCS/Southern Company made to SNG for South System 4 (SS4) project as of January 15, 2025?

g. What contractual commitments or financial commitments, if any, has Georgia Power/SCS/Southern Company made to Transco for FT on Station 85 receipt area (West Alabama) northeast to Georgia as of January 15, 2025?

Response:

a. See 2025 IRP Technical Appendix Vol 2 Resource Mix Study for all modeled annual and cumulative build limits. Additionally, see STF-JKA-1-11 Attachment A TRADE SECRET for derivation of the natural gas firm transportation ("FT") availability limit used for expansion CC resources.

b. Table 1 below summarizes the build limits assumed in 2025 IRP capacity expansion modeling and provides a comparison with assumptions in the 2023 IRP Update.

Table 1. Summary of Limits on Expansion Units.

Technology	2023 IRP Update	2025 IRP
CT w/SCR	• No limit	• No limit
CC	• Cumulative build limit based on annual FT availability	• Cumulative build limit based on annual FT availability
CC w/CCS	• Cumulative build limit based on annual FT availability	• Cumulative limit based on annual FT availability • Distinguishes between Local and Distant CCS • Local CCS limited to **REDACTED** total (**REDACTED** limit for GPC)
Solar	• Annual Max – 1,500 MW/yr	• Annual Max – 1,500 MW/yr
Wind	• Annual Max – 600 MW/yr • Cumulative Max – 8,100 MW	• Annual Max – 300 MW/yr • Cumulative Max – 4,500 MW
BESS	• Annual Max – 3,000 MW/yr • Cumulative Max – 18,000 MW	• Annual Max – 3,000 MW/yr • Cumulative Max – 18,000 MW
MDESS	• No limit	• No Limit
Nuclear	• Annual Max – 300 MW/yr	• Annual Max – 600 MW/yr

Annual Limit on CT and CC Builds

The Company used an annual maximum build limit in the 2023 IRP Update for CTs and CCs that was calculated based on the system's annual incremental capacity need. The purpose of this limit was to reduce the number of new resource options Aurora evaluates and improve runtime. Because the limit was set at or above the system's annual incremental capacity need, it did not actually limit the number of CTs or CCs that were selected by the model. For the 2025 IRP, the Company determined that having a static value that is large enough to allow Aurora to meet an entire year's capacity need with a single new resource type (if optimal), but not calculated based on annual need, simplifies the calculations required for each scenario and does not significantly increase run time.

For CTs and CC w/CCS, this limit is set to 30 blocks per year, which is equivalent to 9,000 MW (300 MW/block). For CCs, the build is limited to 3 blocks in 2029, the first year CC is allowed, and 15 blocks in 2030 to represent the estimated amount that could be constructed in that timeframe. For 2031 and beyond, the CC build limit is set to 30 blocks per year.

FT Availability Limit on CC Builds

In both the 2023 IRP Update and the 2025 IRP, the Company assumed FT used for existing units would become available to new CCs as the existing units either retired or power purchase agreement (“PPA”) expired. In addition, for planning purposes, the Company assumed some additional pipeline expansion and associated FT would become available during the planning horizon. STF-JKA-1-11 Attachment B TRADE SECRET shows the resulting cumulative MW build limits that were included in the capacity expansion modeling for the 2023 IRP Update and the 2025 IRP.

Assumptions on Gas Availability for CTs

Given the current operational realities and the challenges facing the pipeline infrastructure industry, the Company assumes the most reliable operational plan for new generic expansion CTs is for them to be dual-fueled, capable of combusting either fuel oil or natural gas. For the 2023 IRP Update, the Company assumed year-round fuel oil operation for new generic CTs because the pipelines serving the Company region have become increasingly constrained and less flexible in recent years. For the 2025 IRP, this assumption was revised to only require CTs to operate on oil during the winter months (Dec-Jan-Feb) and to operate as needed on gas throughout the remainder of the year.

Local Versus Distant CC w/CCS

Areas of favorable geology for carbon storage within the Southern Company footprint are limited. For CCs that are distant from carbon storage regions, application of CCS requires that the captured CO_2 be transported by pipeline to a storage site (i.e., Distant CC w/CCS), which results in significant additional cost to construct and operate the unit. For the 2025 IRP, the Company has determined that it is reasonable to assume that only **REDACTED** of CC w/CCS could be constructed near favorable carbon storage sites (i.e., Local CC w/CCS), with significantly less cost for CO_2 transport than Distant CC w/CCS. The Company assumes REDACTED miles of pipeline for Local CC w/ CCS and REDACTED miles of pipeline for Distant CC w/ CCS. In addition, the Company assumes that only **REDACTED** of Local CC w/CCS could be constructed in the GPC service territory. Local CC w/CCS builds in the capacity expansion modeling are limited based on operating company need (e.g., if GPC is the only Operating Company with a capacity need, the build cannot exceed GPCs need for that year and cannot exceed **REDACTED**) and is limited to a system total of **REDACTED**. This limit was not included in the 2023 IRP Update modeling.

c. The Company aims to develop any generic resource limits tailored to technology deployment within its regulated service territory, rather than relying on public sources, which often cover a broader geographic scope. It is common utility practice to apply limits on generic resources in expansion plan modeling.

d. Given the challenges facing the pipeline infrastructure industry, the Company has applied a limit on the amount of new CC (including CC w/CCS) builds allowed in capacity expansion modeling. The limit is a cumulative build constraint that is based on the amount of natural gas firm transportation ("FT") that is estimated to be available from retirement of existing resources, PPA expiration, and/or pipeline expansion. See JKA-1-11 Attachment A TRADE SECRET for derivation of the FT limits used for CC expansion resources.

e. Please see the response to STF-JKA-1-13.

f. Please see the response to STF-JKA-1-13.

g. Georgia Power/SCS/Southern Company have not made any contractual or financial commitments to Transco for new capacity with receipt points in the Station 85 area.

DS-5:

Company response to Staff discovery request STF-GS-1-14

Georgia Power Company
Docket Nos. 56002 & 56003
2025 Integrated Resource Plan and 2025 Demand-Side Management Application
STF-GS Data Request Set No. 1

STF-GS-1-14

Question:

At page 20 in the reserve margin study, please see the statement that "Historically, these incremental outages have materialized at system weighted temperatures of roughly 17°F and below. However, the Company has undertaken efforts to mitigate cold weather outages. Based on these efforts, it is expected that these incremental outages will not begin to materialize until the local temperatures reach approximately 10°F for retail, owned or operated resources and approximately 18°F for contracted resources."

a. Please provide the sources and assumptions that were used to determine the impact of the Company's weatherization efforts on cold weather forced outages.

b. Please provide any recent performance data used to inform or validate those assumptions regarding the impact of the Company's weatherization efforts on cold weather forced outages.

c. Please provide any evidence to support the assumption that contracted resources are less weatherized than resources owned by the Company.

d. Have gas supply or transportation constraints resulted in forced outages of Company-operated gas generators with firm gas transportation? If so, please document the generators and MW affected and the duration of each event. If so, were these outages accounted for in Astrape's analysis?

Response:

a. As of 2023, when the 2024 Reserve Margin Study cold weather assumptions were developed, Southern Company and Georgia Power plants were moving towards a design criterion of 0 degrees Fahrenheit for a 72-hour period with 25 mile per hour winds. However, this effort was still ongoing at the time of model development, so the decision was made to conservatively target 10 degrees Fahrenheit until further winterization improvements were made. The Company has since begun moving towards a by-unit Extreme Cold Weather Temperature ("ECWT") model per NERC reliability standard EOP-012-2.

b. Since 2014, there have only been two notable extreme cold weather events in the Southern Company System included in the cold weather analysis. On January 8, 2015, the system-weighted temperature dropped to 12.9°F resulting in an incremental cold weather outage rate of 7.63%. On December 24, 2022, the system-weighted temperature again dropped to 12.9°F resulting in an incremental cold weather outage rate of 6.67%. Per the cold weather outage assumptions curve on Figure I.9, page 21 of the 2024 Reserve Margin Study, the 2022 event falls slightly above the trended historical, but is an improvement over the 2015 event at the same temperature.

c. A forced outage analysis was performed at the peak load hour for Winter Storm Elliott for Power Purchase Agreement ("PPA") resources contracted by Georgia Power at the time.

	Total Capacity	**Capacity on Reserve**	**Capacity on Planned**	**Capacity on Forced**	**Available Capacity**	**Forced Outage Rate**
PPA	2,336.12	310.18	317.69	611.20	1,097.05	36%
Biomass PPA	303	-	-	267	36	88%

Per results of this analysis, the forced outage rate for PPA resources was much higher than normal. In contrast, Georgia Power resources had a total outage rate of 12% during the same hour. While this is a singular event, it offers some supporting evidence for the assertion that PPA resources might not have the same level of winterization as resources owned by the Company.

d. Per the 1980-2022 cold weather analysis for the 2024 Reserve Margin Study, no gas supply or transportation constraints resulted in forced outages of Company-operated gas generators with firm gas transportation.

DS-6:

Company response to Staff discovery request

STF-JKA-1-9

STF-JKA-1-9

Question:

For a number of years, the Company has taken steps to mitigate risks of cold weather reliability. Please describe all efforts undertaken since the 2022 IRP including capital investment and O&M expense, and explain how those steps have paid off, and how the Company's Aurora and SERVM modeling assumptions have been revised since the 2022 IRP as a result of the mitigation efforts undertaken.

Response:

Since the 2022 IRP, cold weather outage assumptions in the model have been adjusted to account for the ongoing winterization improvements performed across the System. In the 2021 Reserve Margin Study, incremental cold weather-related outages for all modeled resources were anticipated to start when system-weighted temperatures fell below 13°F. In the 2024 Reserve Margin Study, this threshold was adjusted downward to 10°F but only for retail resources owned and operated by Southern Company. For contracted resources, the threshold was increased to 18°F due to fewer winterization improvements being performed on these units. In addition to the threshold, a geographic adjustment was also made at each generation site to account for differences between local temperature and the system-weighted temperature. Part I, Section I of the 2024 Reserve Margin Study provided in Technical Appendix Volume 1 details the cold weather outage modeling methodology and assumptions applied. The Aurora modeling for the Resource Mix Study applies the target reserve margin determined in the Reserve Margin Study to help identify an optimized resource expansion plan. Loads modeled in the Resource Mix Study are based on normal weather, so no incremental extreme weather outages are applied.

Southern Company is currently implementing a fleetwide winterization program with the goal of not only improving the reliability of freeze protection systems at each plant but also lowering the minimum operating temperature and freeze related parameters. This includes adding/replacing various components such as heat tracing, insulation, instrument enclosures, heated tube bundles, equipment enclosures, and other auxiliaries related to protecting components during cold weather events. Procedures have also been updated to assure compliance with NERC EOP-012-2 Extreme Cold Weather Preparedness. To date, Georgia Power has invested over $100M capital and over $7M O&M in this effort. As a result, the Georgia Power fleet winter reliability continues to improve. No unplanned generation weather related events were experienced for Company owned resources during Winter Storms Enzo and Cora.

DS-7:

Company response to Staff discovery request STF-GS-1-15

STF-GS-1-15

Question:

Please see Figure I.10 and the supporting text on page 22 of the Reserve Margin Study.

a. Please explain why the outage rate trajectory for all other regions is perfectly linear, while the trajectory for the Company's fleet curves sharply upward at low temperatures?

b. Please provide any data and assumptions used to develop or validate the curves for each region in Figure I.10.

c. Please confirm that Astrape's modeling of cold weather outages in each neighboring region using historical weather data accounts for weather/climate diversity between Southern Company and neighbors in the timing of cold weather outages.

Response:

a. The historical trend for the Company is linear in nature. However, an additional calibration was performed using historical cold weather outage time-to-repair information that was not available for the other regions. This calibration was necessary to account for the reality that a unit may not immediately recover from a cold weather outage as soon as the local temperature rises above its winterization threshold. As illustrated in Figure I.9, this resulted in a more gradual decline above approximately 8 degrees Fahrenheit, contrasting with the abrupt cutoff depicted in the historical trend curve.

b. See "Figure I.10 - Tier CWO Comparison.xlsx" provided to Commission Staff on January 31, 2025, in 2025 IRP Workpapers, Technical Appendix Volume 1, Section 2, Part I.

c. Yes, the modeling method applied by Southern Company using the historical outage versus temperature data provided by Astrapé accounts for weather/climate diversity between Southern Company and neighboring systems in the timing of cold weather outages.

DS-8:

Company response to Staff discovery request STF-GS-1-19

STF-GS-1-19

Question:

Was the cold weather-related forced outage of generators, as discussed at page 20 of the Reserve Margin Study, factored into their capacity accreditation for the generating resource selection in the Company's capacity expansion modeling?

Response:

Incremental cold weather forced outages were not factored into the capacity accreditation for the generating resources chosen during expansion modeling because it is a weather-normal analysis, and the impact of generator outages is accounted for in the reserve margin requirement included in the capacity expansion modeling.

DS-9:

Company response to Staff discovery request STF-GS-1-4

STF-GS-1-4

Question:

Please see Table 14 (Base Case Definitions) on page 260 in Section D (Ten Year Transmission Expansion Plan) of the Volume 3 Technical Appendix.

a. Please confirm that the Company assumes that battery resources are off in studies of summer peak and charging at full capacity in studies of winter peak.

b. Does this assumption potentially overstate the need for grid upgrades by ignoring how batteries can discharge to help meet load during peak conditions?

c. Are the same battery charging and discharging assumptions also used for interconnection studies? If not, please provide the battery dispatch assumptions used for interconnection studies.

d. Please provide data showing the actual dispatch (charging and discharging) of the Company's operating batteries during summer and winter peak conditions for the last three years.

Response:

a. For Southern Company's base case models, battery resources are modeled off in summer peak. Winter peak is a little more nuanced. Batteries are expected to be discharging during winter peak and charging within four hours between peaks, which is estimated to be approximately 90% of winter peak load. Since a 90% winter peak load case does not currently exist, batteries are modeled as charging for winter in the off-the-shelf base cases.

b. No, this assumption does not overstate the need for grid upgrades. If appropriately sized and available for that purpose, a local battery could be discharged to push back on an identified constraint. In summer peak cases, modeling the battery in the off state initially allows planners to see any overloads without unintentionally creating small pockets of must-run generation, which may not be sized and/or be suitable for the purpose of alleviating transmission constraints long term. Similarly, if constraints are identified for charging at winter peak, planners can determine whether that is a scenario that requires a project.

c. No. While existing batteries will be modeled in the stated configuration in the base cases, interconnection studies consider only discharging of the battery in any transmission delivery screens. From an interconnection perspective, all necessary network upgrades required for the facility to safely and reliability interconnect to the Southern Company Transmission System are captured for the facility regardless of its charging or discharging state. A separate Transmission Service Request is required for both discharging and charging from a battery. The transmission service studies are performed, and any resulting service is offered, separately from the interconnection study process. Please refer to Southern Companies' Generator Interconnection Business Practices, Section 2.9.4. ESR Grid Charging available at, which is publicly available on OASIS.

d. Georgia Power has one battery resource currently online, Mossy Branch Battery Energy Storage System, which achieved commercial operation in October 2024. As such, actual dispatch data is only available for winter peak 2025. Please see STF-GS-1-4 Attachment TRADE SECRET for charging and discharging data for the winter peak on January 22, 2025.

TRADE SECRET

Table 1: Real Time Data of Mossy Branch BESS on 1/22/2025 (Winter Peak)

Date/Time	Mossy Branch (MW)	Mossy Branch (MVAR)	Southern BA Total Load (MW)
01/22/2025 00:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 00:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 01:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 01:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 02:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 02:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 03:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 03:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 04:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 04:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 05:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 05:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 06:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 06:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 07:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 07:05:54	[redacted]	[redacted]	[redacted]
01/22/2025 07:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 08:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 08:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 09:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 09:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 10:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 10:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 11:00:30	[redacted]	[redacted]	[redacted]
01/22/2025 11:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 12:00:00	[redacted]	[redacted]	[redacted]
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01/22/2025 13:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 13:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 14:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 14:30:00	[redacted]	[redacted]	[redacted]
01/22/2025 15:00:00	[redacted]	[redacted]	[redacted]
01/22/2025 15:30:00	[redacted]	[redacted]	[redacted]
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SREA, Winter Storm Elliott: An independent review of Southern Company's performance during the historic events of December

Winter Storm Elliott

An independent review of Southern Company's performance during the historic events of December 22-25, 2022.

TELOS ENERGY

SOUTHERN RENEWABLE ENERGY ASSOCIATION

Prepared by Telos Energy for the Southern Renewable Energy Association.

Foreword

Winter Storm Elliott was a historic and sobering event, testing the reliability of our power system against extreme weather, high loads, gas supply disruptions, and generator outages.

From December 22 to December 25, 2022, extreme cold gripped much of the country, even extending into the Southeast, pushing grid operators and utilities to their limits. Utilities across the region called for energy emergencies and at times involuntary load shedding occurred.

In the aftermath of the event, FERC and NERC conducted a detailed post-mortem to evaluate root causes of the event. While this report provided valuable insights for each balancing area in the Southeast, it did not include a detailed overview of Southern Company's generator performance, nor did it look at the timeframe most important for Southern Company.

To fill this gap, Telos Energy, on behalf of the Southeast Renewable Energy Association, conducted an independent review of generator performance within Southern Company's footprint during this storm. Our goal was simple: to better understand what worked, what didn't, and what we can learn to improve future grid planning and reliability.

Before diving into the report, we want to recognize the operators who managed the power system during this storm. They no doubt worked tirelessly to maintain service for their customers and their communities. Southern Company managed to avoid rolling blackouts during the extreme weather—while neighbors could not.

Operators made decisions under immense pressure, ensuring customers had heat, preventing property damage and even saving lives.

This report is not about second-guessing those efforts. Instead, it aims to shed light on generator performance and planning processes, helping ensure our future systems can withstand similar events.

What this storm highlighted is that no resource is perfect and all resources - whether natural gas, coal, hydro, wind, or solar - are affected by the weather. Robust and fair accreditation of all resources is essential not just to make informed investment decisions, but to ensure reliability.

This starts with accrediting natural gas and coal resources using effective load carrying capability similar to what is being done for solar and battery storage. It also extends to interregional transmission, which can also be treated as a capacity resource. Together, proper accreditation can enable a diversified portfolio that strengthens the grid.

Transparency is another cornerstone of effective planning. Much of our analysis relied on data from Georgia Power Company's (GPC) regulatory filings, but gaps remained, requiring us to piece together a fuller picture using publicly available sources like EPA and EIA datasets.

At times we had to use generation during EEA events as a proxy for availability and outages. No doubt there are small errors or omissions in this analysis, and we look forward to additional data to help correct these. Transparency matters—not just for analysts like us, but for regulators, planners, and stakeholders who need accurate information to make informed decisions.

We hope this report serves as a constructive step toward greater understanding of past events and enables more robust planning. Together, let's continue building a grid that's ready to meet the reliability challenges ahead.

Introduction

Winter Storm Elliott created severe stress on the electric grid from December 21 - 26, 2022. The storm brought extreme cold, high winds, and snow, leading to a dramatic surge in electricity demand coupled with widespread outages caused by freezing equipment and disrupted fuel supplies.

Many utilities, including those in regions managed by the Tennessee Valley Authority (TVA), PJM (Pennsylvania-New Jersey-Maryland Interconnection), Duke Energy, and Southern Company, faced challenging conditions and implemented emergency procedures to maintain grid stability. The North American Electric Reliability Corporation (NERC) and the Federal Energy Regulatory Commission (FERC) subsequently released reports[1] detailing the storm's impact on utilities and highlighted region-wide deficiencies in both electric-gas coordination and preparedness for extreme weather. These reports underscored the urgency of enhancing reliability frameworks to address correlated failures across energy and fuel networks.

Post-storm scrutiny focused on the severe impacts in TVA, PJM, and the Carolinas where there was involuntary load shedding. However, Southern Company and its subsidiaries—Georgia Power, Alabama Power, Mississippi Power, and Southern Power—also faced substantial operational challenges.

On December 24, 2022, Southern Company issued an Energy Emergency Alert Level 2 (EEA 2), signaling the need to manage load through voluntary reductions. Unlike TVA and other utilities that implemented controlled outages, Southern Company managed to avoid EEA 3 measures which would have triggered involuntary load shedding, or "rolling blackouts."

During this time, the thermal generating fleet across the eastern interconnection experienced widespread outages, fuel supply disruptions, and unavailability. Figure 1 below shows a timeline of hourly electricity demand from the Southern Pool with callouts for key periods identified in this analysis. Additionally, yellow bars indicate approximate times when neighboring regions were under EEA 1 to EEA 2 and orange bars represent regions where EEA 1 to EEA 3 conditions occurred in relation to Southern. Periods of EEA for non-Southern regions represent approximate times any EEA was in effect.

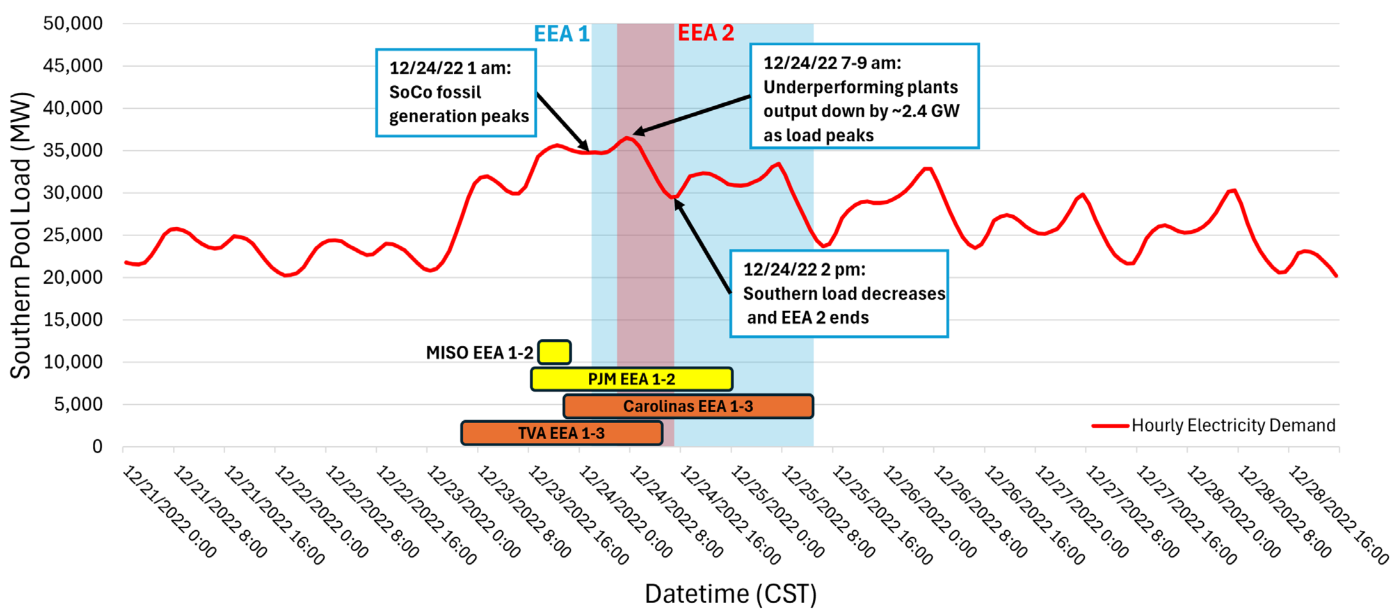


Figure 1. Summary timeline for Southern Company generator performance during Winter Storm Elliott

1 FERC, NERC, & Regional Entity Staff. (2023, October). Inquiry into bulk-power system operations during December 2022 Winter Storm Elliott. Retrieved from https://www.ferc.gov/news-events/news/ferc-nerc-release-final-report-lessons-winter-storm-elliott

The EEA declaration underscores the significant strain on its system, prompting an examination of the company's resource preparedness, load forecasting accuracy under extreme conditions, and planning processes to mitigate risks to system reliability and control costs for ratepayers. It also highlights the importance of including these types of weather events – and the corresponding generator performance – in long-term planning.

This report evaluates Southern Company's performance in key areas during Winter Storm Elliott, including generator performance, load forecasting accuracy, and both bilateral and SEEM market transactions. Key findings explore how well Southern Company anticipated and mitigated cold weather risks, the extent of generator derates or outages during the event, and the performance of renewable resources under extreme conditions.

Transparency remains a key challenge: although power purchases increased significantly during Southern Company's EEA 2 event, limited information is available, particularly regarding price formation, leaving ratepayers to bear unclear emergency costs.

The company's forecasting and planning for winter peak loads appear insufficient for managing high-impact, low-frequency events without resorting to extreme measures, and further assessment is needed to ensure Southern Company is accounting for winter outage risks across its generation fleet.

As a vertically integrated utility operating in a non-organized market, Southern Company lacks the standardized post-event reporting and market transparency seen in regulated regions like PJM and MISO. This limited transparency restricts a full evaluation of Southern Company's operational decisions and financial impact on ratepayers. Consequently, stakeholders lack critical insights into the company's efficiency, resource planning efficacy, and the true costs of emergency power.

This report addresses these gaps using limited data available from Georgia Power dockets, EPA data on large fossil-fuel plant operations, and grid operation data from the Energy Information Administration (EIA), seeking to answer critical questions on Southern Company's performance during Winter Storm Elliott.

This report seeks to address four primary questions:

- **Winter Load Forecasting:** How well does Southern Company predict winter peak load events, and did actual risks during the storm align with utility expectations?
- **Generator Performance:** How did all generation resources perform during severe conditions, and how effectively does Southern Company account for cold weather outage risks in its planning?
- **Emergency Power Purchases and Costs:** From where did emergency power originate, and at what cost? How did these costs compare to those in nearby regional markets?
- **Southeast Energy Exchange Market (SEEM) Performance:** How was the Southeast Energy Exchange Market (SEEM) leveraged during Winter Storm Elliott, and how has it been used in subsequent winter peak load events in 2023 and 2024?

This report aims to inform Southern Company stakeholders and regulatory authorities on the overall performance of the generation fleet, how well winter risk is characterized, and opportunities for increased transparency during and after emergency events, and recommendations on how to better incorporate these challenges in long-term planning.

"Transparency remains a key challenge: although power purchases increased significantly during Southern Company's EEA 2 event, limited information is available, particularly regarding price formation, leaving ratepayers to bear unclear emergency costs."

Winter Load Forecasting

The Southern Company region operates as a dual-peaking system, with high loads and tight reserve margins both in summer, due to air conditioning demands, and in winter, due to electric heating needs.

2022-2023 Winter Reliability Load and Resource Summary	Southern
50/50 Winter Forecast (MW)	41,300
90/10 Winter Forecast (MW)	45,462
Winter Storm Elliot Peak (MW)	45,153
Expected Available Resources (MW)[3]	52,133
Expected Reserves to 50/50	26.2%
Expected Reserves to 90/10	14.7%
Expected Reserves to Actual Peak	15.5%

Table 1. Southern Winter Reliability Summary from NERC and FERC Inquiry into Winter Storm Elliott.

Every year, the Southern Balancing Authority (SBA), comprising Southern Company subsidiaries like Georgia Power, Alabama Power, and Mississippi Power, develops both a base winter peak load (50/50 load forecast) and an extreme peak load (90/10 load forecast) to prepare for severe weather scenarios. For the 2022-2023 winter season, SBA's extreme winter peak load forecast was 45,462 MW, slightly under the all-time winter peak of 45,887 MW[2].

To meet these forecasted loads, SBA projected resource availability based on its planning criteria, estimating 53,759 MW of resource capacity. After accounting for planned and unplanned outages and demand response, total capacity available was 52,133 MW. Under the 90/10 extreme peak forecast, the SBA projected reserve capacity of 6,671 MW, indicating a 15% reserve margin.

Given these assumptions, SBA anticipated sufficient resources to cover demand even during challenging weather like Winter Storm Elliott. However, on December 24, despite actual peak load remaining slightly below the 90/10 forecast at 45,153 MW, the SBA entered both EEA 1 and EEA 2 conditions, signaling that actual resource availability was below expectations during this high-demand period.

Table 1 shows the winter reliability expectations going into Winter Storm Elliott from the NERC/FERC inquiry.

Evaluating Operational Forecast Accuracy and Error Margins

Reviewing the 2022 resource adequacy assessments for the Southern Pool (Georgia Power, Mississippi Power, and Alabama Power) reveals significant forecasting challenges for December peak loads. The historical data shown in Table 2 *(page 5, top)* shows that high forecast error exists even 1-hour ahead of peak load in December. For Winter Storm Elliott, the average error leading up to peak load would be 271 – 455 MW, depending on how far ahead the forecast is made. Assuming that the standard deviation is for a normal distribution, there was a 16% probability that December peak load could have been more than 3,600 MW above the forecasted peak load based on historical forecast error.

This high variability in forecast winter peak load means grid operators face high levels of uncertainty during extreme cold weather. Even though going into the event it appeared that adequate reserves were available, and peak load would be within the 90/10 forecast, clearly risks developed that prompted emergency procedures.

More insight into the specific decision-making steps from normal operations to EEA 1, 2, and potentially EEA 3 would help contextualize the risks of Winter Storm Elliott. Post-event analysis reports are commonplace in regions with markets, like PJM, MISO, and SPP, since market transparency builds trust and creates accountability for remedial actions.

2 Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC), FERC, NERC Release Final Report on Lessons from Winter Storm Elliott (2023), available at https://www.ferc.gov/news-events/news/ferc-nerc-release-final-report-lessons-winter-storm-elliott.

3 Expected available resources includes 53,759 MW of capacity, 2,510 MW of demand response, and -4,136 MW of expected planned and forced outages.

Historical Peak Load Forecast Error	Peak Load	4-hour mean error	1-hour mean error	4-hour std dev	1-hour std dev
December Error		1.0%	0.6%	10.4%	8.0%
Winter Storm Elliott Risk	45,153 MW	455 MW	271 MW	4,696 MW	3,612 MW

Table 2. 2022 Georgia Power Reserve Margin Study Historical Dispatchers' December Peak Load Forecast Error

Greater transparency in Southern's decision-making framework could clarify whether improvements are needed in forecasting accuracy, resource adequacy modeling, or operational protocols.

Suggestions to Improve Confidence in Winter Planning

Though Winter Storm Elliott brought conditions close to the 90/10 forecast, the region experienced emergency conditions not anticipated by existing plans. Despite projected reserves, the system escalated to EEA 2 conditions, where voluntary load reductions were employed.

This raises questions about whether Southern is making appropriate assumptions on generator availability during extreme, but anticipated, winter weather.

As winter reliability grows increasingly critical, Southern Company's strategies and readiness for low-frequency, high-impact events like Winter Storm Elliott require further scrutiny, particularly given the challenges of electric-gas coordination and growing electricity demand from data centers and electric vehicles.

The following actions are recommended to improve winter peak planning and transparency for stakeholders:

- Improvements to mitigate volatility in winter peak load are needed. These could include more advanced demand side management strategies, improved home efficiency programs, or virtual power plants to mitigate winter peak load risk while mitigating transmission system constraints.
- Evaluate load diversity and peak load risks for neighbors outside of SERC to enable more robust interregional support during high impact low probability events.

Generator Performance

The following analysis reviews how generators and different fuel types across Southern Company's footprint performed during Winter Storm Elliott.

Given the scale and severity of the event, units were expected to maintain or increase output to meet peak demand, especially as the region moved into EEA 1 and EEA 2. However, after reviewing generation data, significant drops in capacity or availability during this period are assumed to indicate operational challenges. The period used to evaluate generator performance is referred to as the "emergency window" which extends from December 24th at 7 am – 9 am. This three-hour window surrounding the peak load hour is used to represent the hours of greatest risk across the region.

Unfortunately, actual operational data was only provided by Georgia Power. Data transparency limitations make it challenging to assess performance throughout the broader balancing authority. This results in substantial gaps for Mississippi Power, Alabama Power, and Southern Power. This lack of detail underscores the need for Southern Company to provide comprehensive post-event analyses for their entire footprint. This practice aligns with other regions and supports transparent planning for system reliability and ensures accountability.

Overall Southern Company Fossil Fleet Performance by Fuel Type

The performance of Southern Company's fossil-fuel fleet, broken down by fuel type, is illustrated in Figure 2 *(below)*. Total generation is from EPA's Continuous Emissions Monitoring System (CEMS) data, discounted by 2-7% based on technology type to approximate auxiliary loads. The gap in the data represents the remaining amount of demand served by nuclear, hydro, solar, and external power purchases.

Fossil-fuel generation in Southern Company's territory declined throughout the EEA 2 period when risks were highest, despite calls for voluntary load reductions. Fossil-fuel generation declined 2.4% in the hours before, 3.3% during, and 6% in the hours following peak load. Load shown in the figure represents the total reported generation from Georgia Power for all Southern Company entities.

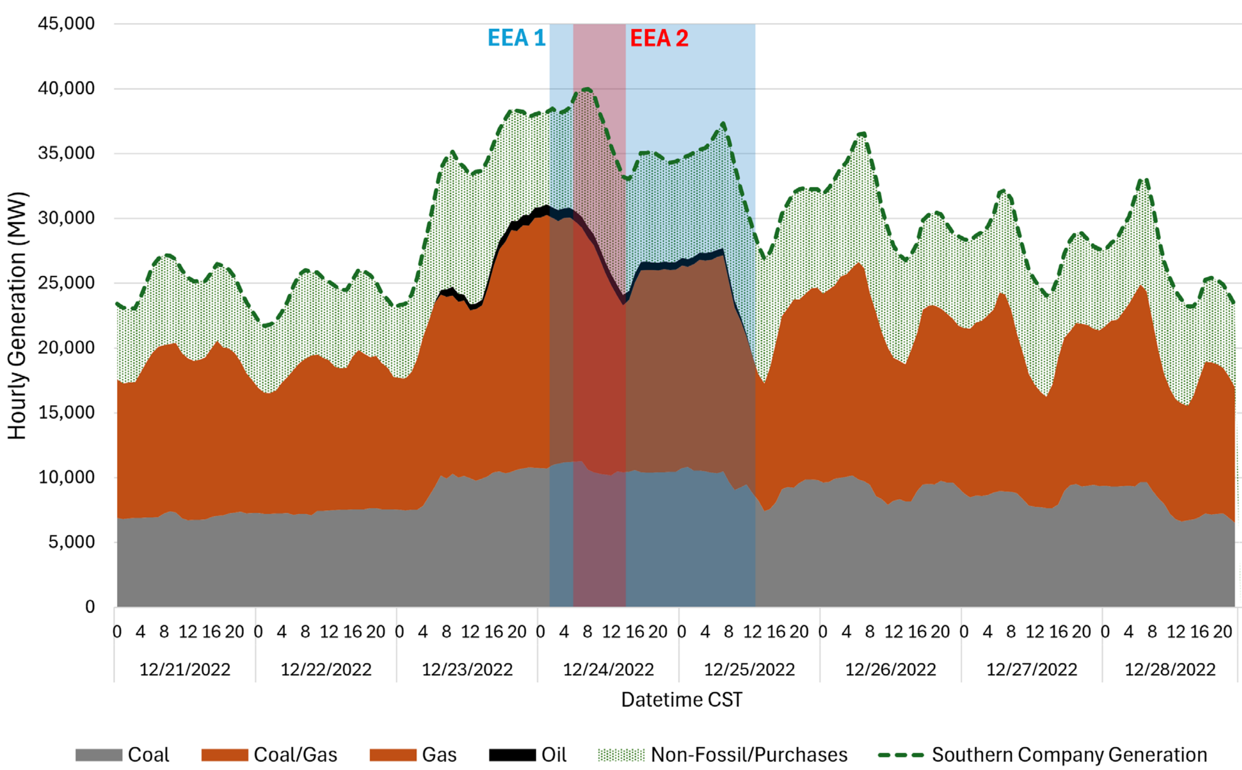


Figure 2. Southern Company Fossil Generation by Fuel Type during Winter Storm Elliott.

The data indicates that fossil generation peaked approximately 5 hours before peak load with numerous outages occurring when the capacity was needed most.

The fleetwide capacity factor for each fossil fuel type during EEA 2 is shown in Figure 3 *(below)*. Notably, coal and natural gas generation decreased by 7.5% and 8.1% relative to their maximum leading up to the emergency window.

While no load shedding occurred as the fleets experienced outages during EEA 1 and EEA 2 periods, the effects of cold weather on outage rates warrants further evaluation due to the volatility in winter demand described in the Winter Load Forecasting section.

Based on the emergency window of 7 am – 9 am on December 24, there were 22 plants (including aggregated one) that had either known outages reported by GPC, or had substantial deviations in the EPA data, or simply did not generate at all during the event.

These plants' winter ratings total 15,816 MW; however, average generation across these units was 8,084 MW, meaning that during the most extreme hours of the storm these units were only operating at 51% capacity factor across the fleet 51%.

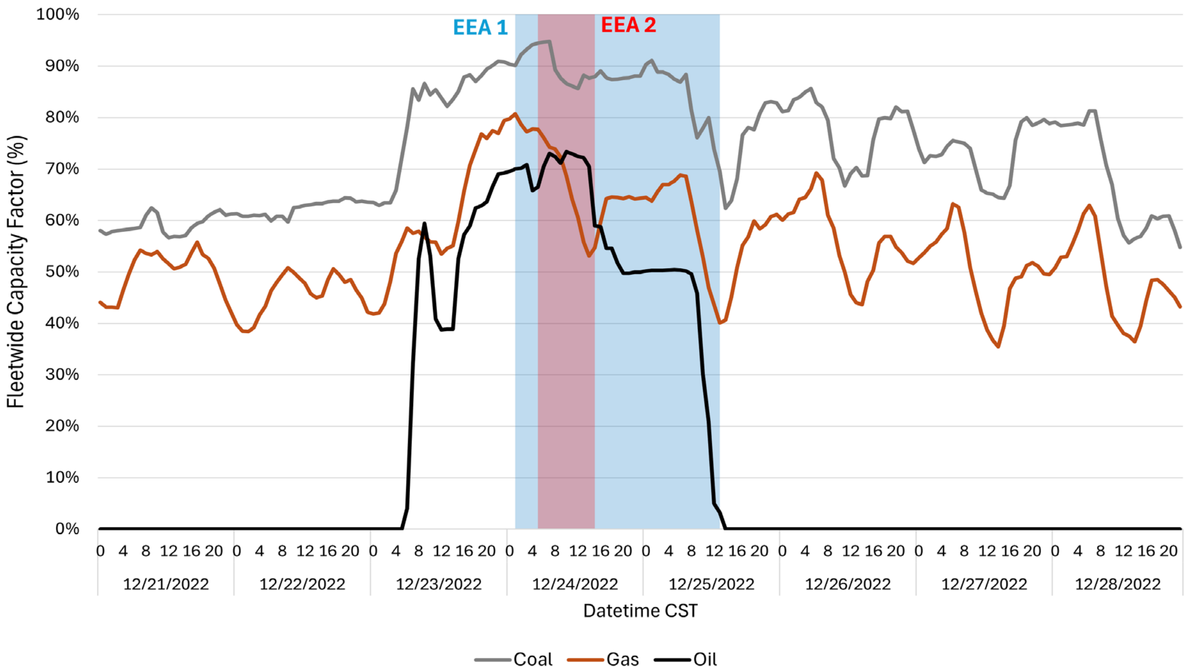


Figure 3. Southern Company Fossil Fleet Capacity Factors during Winter Storm Elliott.

Not all the unavailability exhibited by these plants can be attributed to forced outages without additional information. But the fact remains that these plants either had generators on some type of outage or were experiencing derates due to fuel supply availability during the emergency window. Figure 4 *(page 8, top)* shows the plants identified as underperformers and their average generation during the emergency window.

Generators that were GPC power purchase agreements were aggregated if they were less than 100 MW. Undispatched capacity represents the delta between the generation during the emergency window and the plants winter ratings.

In some cases, units were completely unavailable, in others output had been decreasing since the EEA 1 period was declared, or sharp drops in generation were observed in at least one of the emergency window hours.

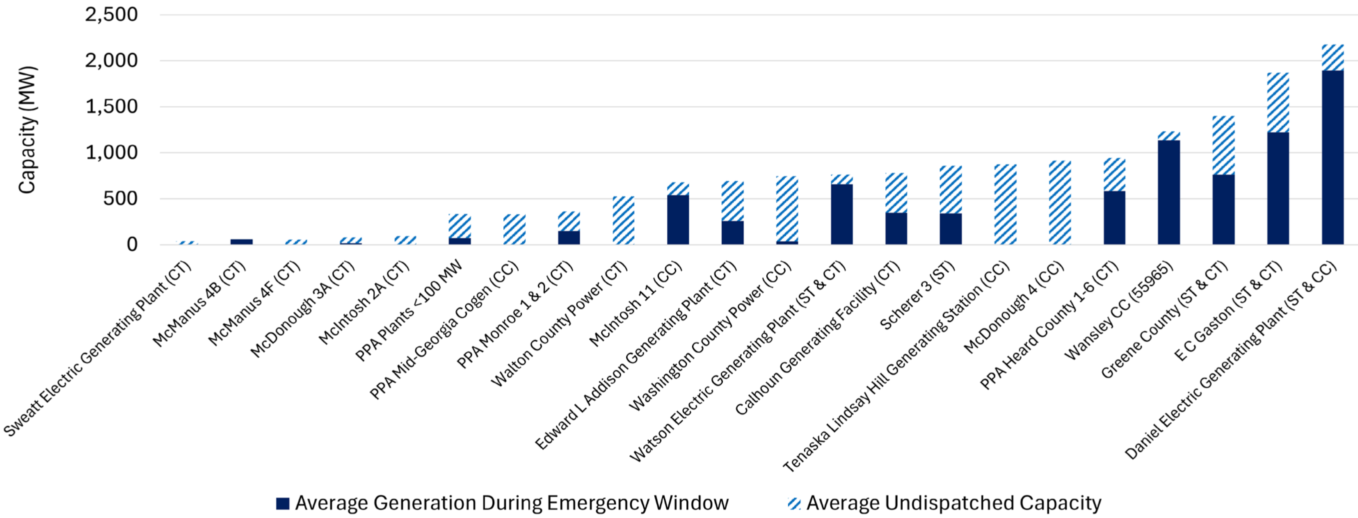


Figure 4. Southern Company known and potential unavailable capacity due to outages on 12/24/2022 hours 7am - 9am CST.

Known Georgia Power Plant Outages

This section provides a review of available hourly generation data for plants that experienced known outages as reported by Georgia Power. More information on the entire company's performance is needed to accurately determine where and when cold weather affects power plant outages although further sections provide estimates of unavailable capacity by Southern Company subsidiary and PPA resources.

Georgia Power Company owned plants where known outages occurred on December 24, 2022, from 1 am – 1 pm are:

- McDonough Unit 4 – 808 MW Combined Cycle
- McIntosh Unit 11 – 294 MW Combined Cycle
- McDonough CT 3B – 40 MW Combustion Turbine
- McIntosh CT 2 – 94 MW Combustion Turbine
- McManus CT 4B – 55 MW Combustion Turbine
- McManus CT 4F – 55 MW Combustion Turbine
- Scherer 3 – 644 MW Coal Steam Turbine

Including a planned derate of 71 MW at the Hatch nuclear plant, a total of 2,061 MW of GPC owned resources out of 14,092 MW of capacity resources (15%) were on outage during Southern Company's highest risk period during the storm.

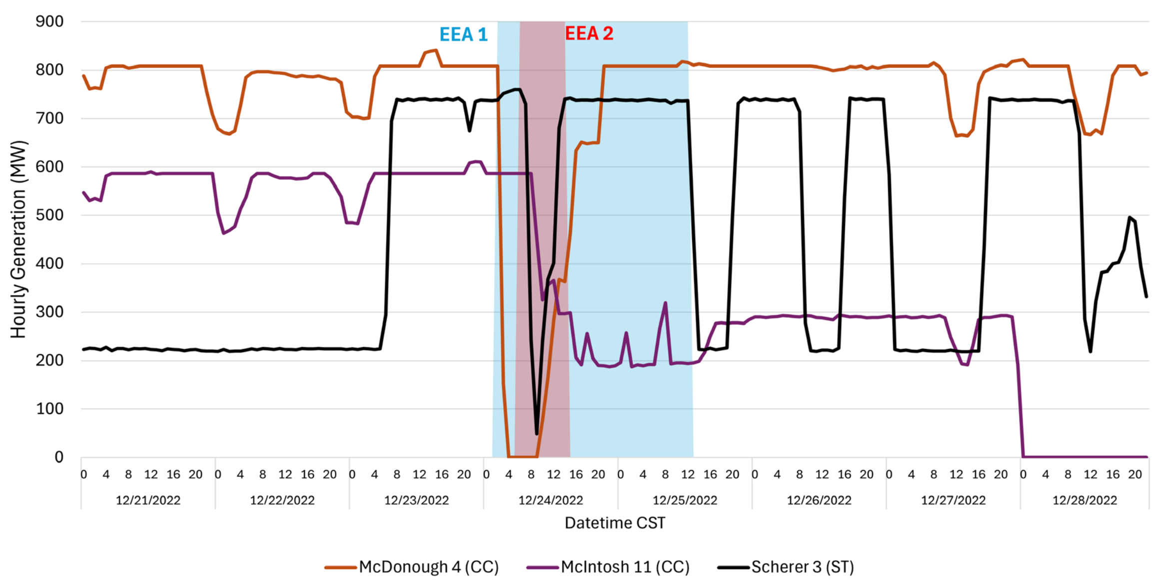


Figure 5. Hourly Generation for Large GPC Units with Outages During Winter Storm Elliott.

Figure 5 *(page 8)* shows the operations for McDonough Unit 4, McIntosh 11 and Scherer 3 based on GPC provided hourly generation data.

The timing of outages for each of the three units shown above varies, but the most significant impact is what the total amount of generation was on outage during the peak load hour. Based on Energy Information Administration winter ratings for these three units had 1,622 MW of reduced output during peak load. The worst-case level of reduced output for these three plants was 1,952 MW, one hour after peak load.

Figure 6 *(below)* shows the smaller unit outages during this period. Notably, McManus appears to have returned to service in time for the EEA 2 event. Both McDonough 3A, and McIntosh 2A, and McManus 4F were either unavailable during the EEA 2 event or unable to operate at their maximum rating.

The total amount of these plants operating below their rating during the peak load was 212.6 MW, one hour after peak load.

It is not unreasonable for power plant outages to occur during extreme weather conditions. Additional information provided by GPC indicated that the 2,061 MW of outages GPC experienced resulted in 15% of their total capacity resources on outage during the storm.

In addition to the GPC owned resources on outage, a total of 1,031 MW of GPC Capacity PPA resources were on outage during the storm. These units were not identified but represented 25% of GPCs capacity PPA resources. In total, 14.5% of the GPC owned and GPC PPA fleet experienced a forced outage during Winter Storm Elliott[4].

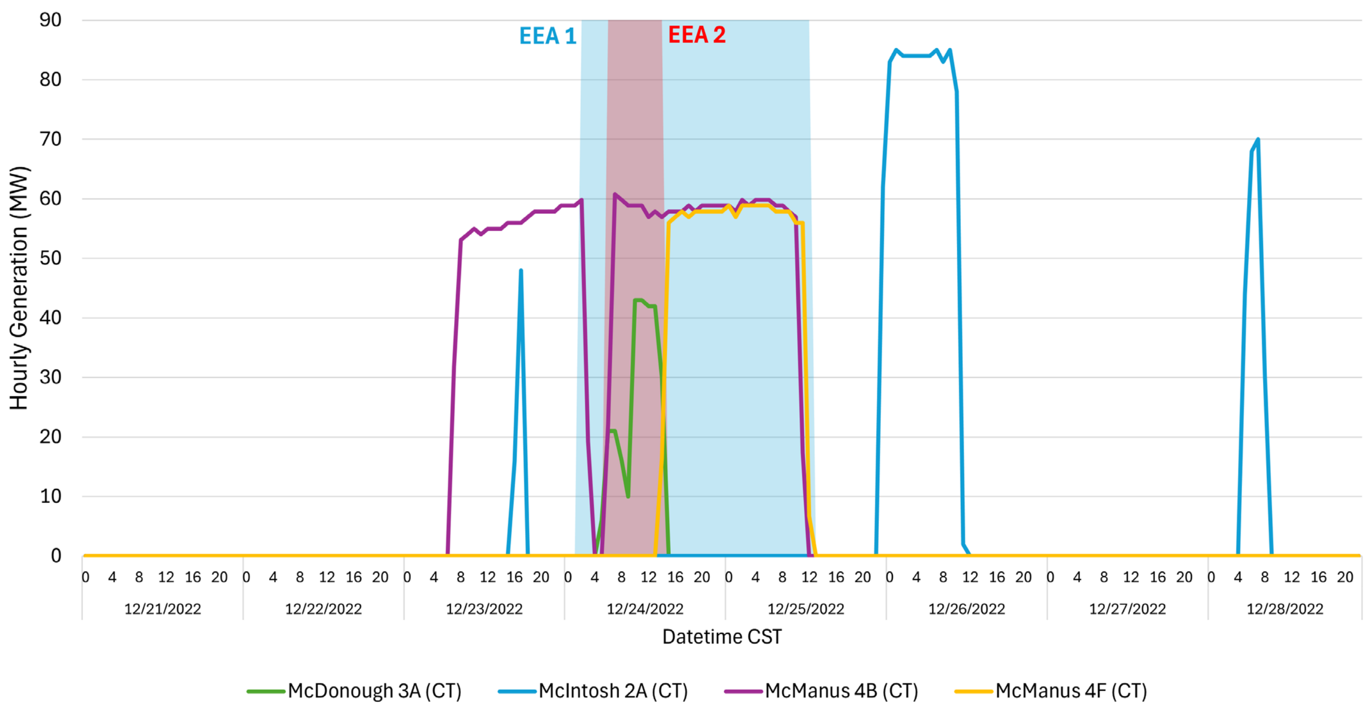


Figure 6. Hourly Generation for Small GPC Units with Outages During Winter Storm Elliott.

Performance of Non-Georgia Power Generators

The previous section only reviewed Georgia Power generators because the unit-specific data was made available in regulatory filings. To augment this data, a review of other Southern Company resources was conducted using publicly available data from the EPA CEMS database. All owned or PPA resources from Alabama Power, Mississippi Power, and Southern Power that were equipped with emissions monitoring systems were reviewed.

While only gross generation data is available, power plants that showed substantially low output or significant deviations during the emergency window (7 am to 9 am) were deemed potential outages.

4 Docket No. 55378, Georgia Power Company's 2023 Integrated Resource Plan Update – Hearing Request Set Number 1 (HR-1-1)

This assumes that the resources would have been utilized further, if available, to avoid EEA 2 and xpensive market purchases.

Performance of Alabama Power Generators

Review of Alabama Power fossil fueled generation showed three dual fuel gas/oil power plants with declining output or substantially reduced output. Figure 7 *(below)* shows the total plants hourly generation as a percentage of their winter rating based on EPA CEMS and EIA 860 data. These plants stand out because due to overall lower generation than might be expected during the event considering emergency purchases were required.

The three plants shown here are:

- 1,400 MW Greene County (owned by Alabama Power and Mississippi Power)
- 1,872 MW E C Gaston plant (owned by Alabama Power and Georgia Power), and
- 80 MW Calhoun Generating Facility.

During the emergency window, Greene County output was 318 MW lower than the maximum during EEA 1. E C Gaston output was 20 MW lower, but overall output was limited to only 65% of its capacity. Calhoun Generating Facility output was 255 MW lower. This behavior may be indicative of unit outages or fuel supply disruptions and a sign of correlated cold weather outages. In total, these three plants had reduced output of approximately 1,881 MW at their worst hour during the emergency window.

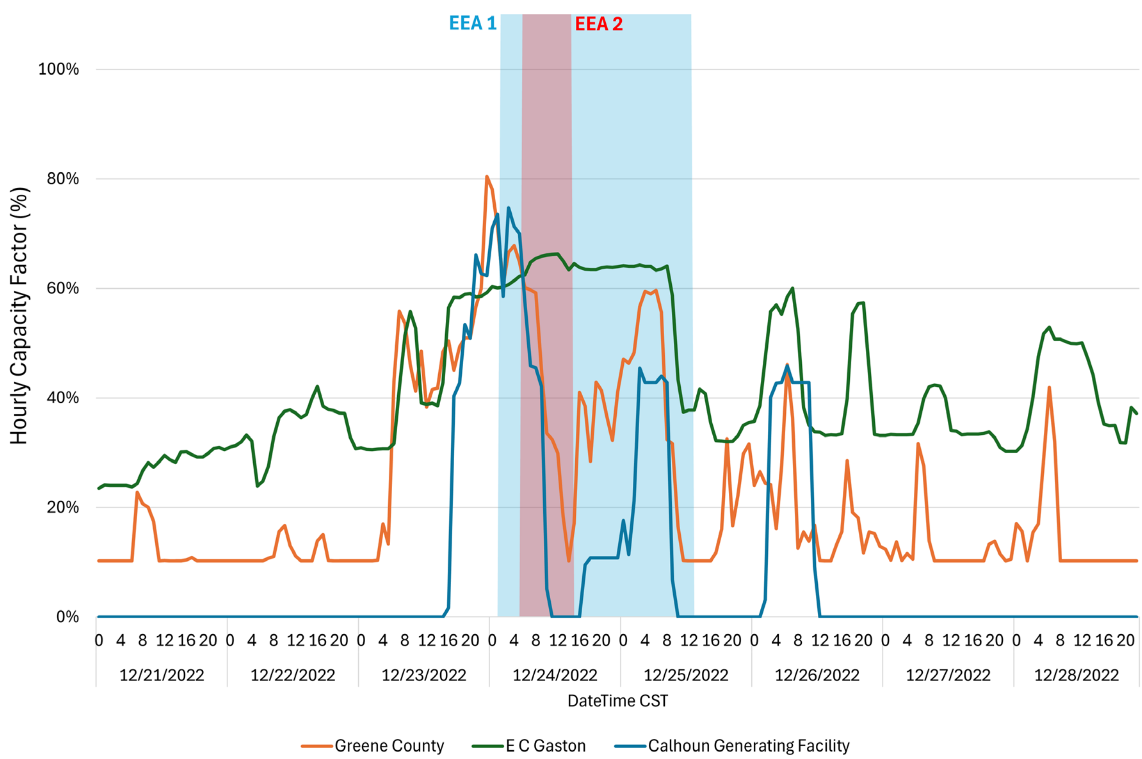


Figure 7. Alabama Power generation identified as having potential outages during Winter Storm Elliott.

In addition to the fossil fueled plants, Unit 1 at the 1,791 MW Joseph M Farley nuclear plant in Houston, AL was offline until the EEA event occurred. This unit represents 895 MW of capacity unavailable to the system due to a planned refueling outage. Typically, refueling outages aren't notable because they are scheduled in the shoulder season where risk is lower.

However, in 2022 the refueling outage for Farley 1 started on 9/18/2022 and didn't end until 12/22/2022 when the unit started slowing increasing output. This represents a 95 day outage for the unit. Typically refueling outages are between 30-45 days indicating the system faced higher risk in the winter due to the extended outage at the unit.

Figure 8 *(below)* shows the daily power reactor status report for Farley 1 from 12/21/2022 – 12/28/2022. Data is interpolated for each day since the reactor reports status at the beginning of each day. The squares on the chart represent the daily power reactor status report percentage of power output.

By the time of the EEA 1 and EEA 2 declaration Farley 1 was estimated to be between 18-30% of its rating, meaning an additional 638.4 - 733.9 MW had yet to ramp up. The extended refueling outage timeline exacerbated risks in December which is a highly volatile winter month.

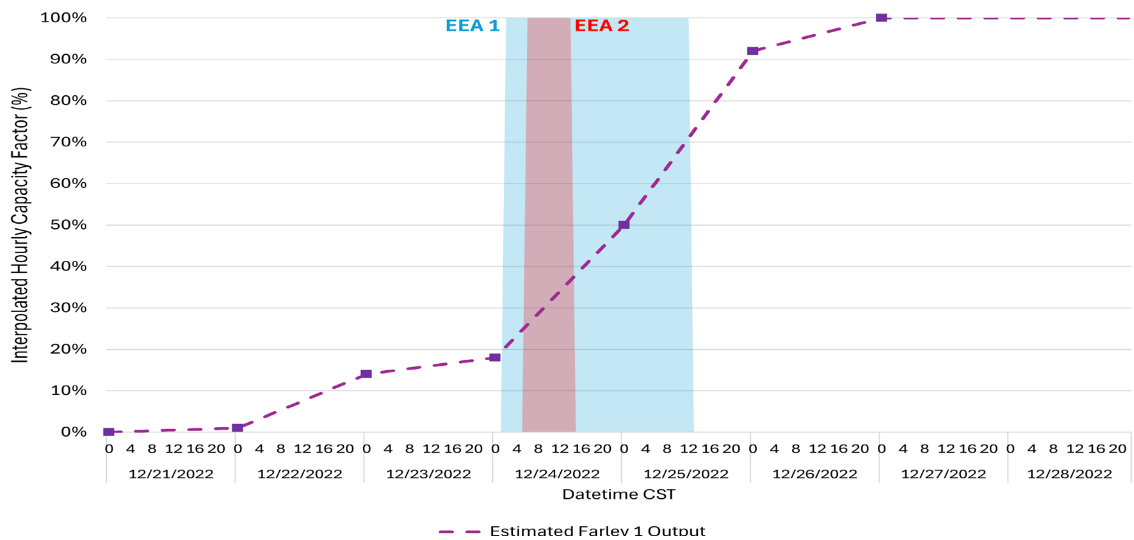


Figure 8. Joseph M Farley Unit 1 Daily Power Reactor Status (square markers) and interpolated ramp (dotted line)

Performance of Mississippi Power Generators

Review of Mississippi Power fossil fueled generation showed three plants where output leading up to the peak load hour was declining or well below its winter rating. Figure 9 *(page 12, top)* shows the total plants hourly generation as a percentage of their winter rating based on EPA CEMS and EIA 860 data.

These plants stand out because of substantial deviations in generation during the emergency window due to overall lower generation than might be expected during the event considering emergency purchases were required.

The three plants identified as having potential outages or were the:

- 41 MW Sweatt Electric Generating Plant
- 762 MW Watson Electric Generating Plant, and
- 2,180 MW Daniel Electric Generating Plant.

The Sweatt Electric Generating Plant appears to have been offline or unavailable throughout the entire period. This may indicate an extended outage that started before the storm.

This unit was flagged because no operations were found at any point during the EEA 2 period.

During emergency window, the Watson Electric Generating Plant output was 163 MW lower than its maximum during the EEA 1 period that morning. The Daniel Electric Generating Plant output was 436 MW lower. This behavior may be indicative of unit outages or fuel supply disruptions and a sign of correlated cold weather outages.

In total, these two plants' output during the emergency window was lower by 598 MW. Including Sweatt in the total brings it to 639.5 MW.

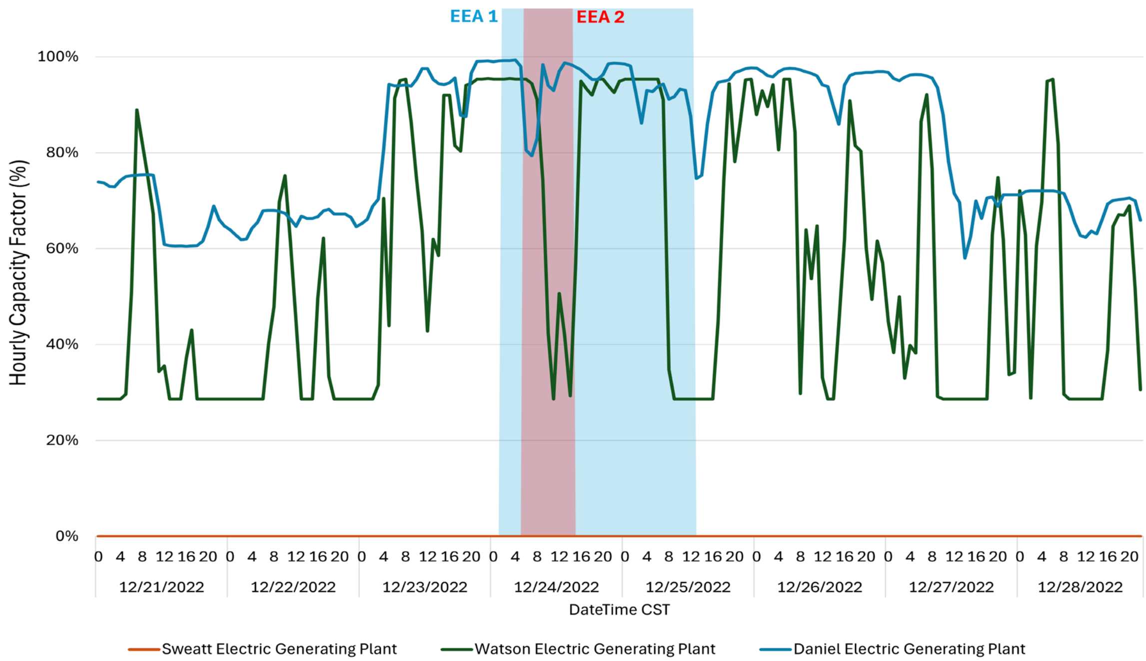


Figure 9. Mississippi Power generation identified as having potential outages during Winter Storm Elliott.

Performance of Southern Power Generators

Review of Southern Power fossil fueled generation showed two plants where output leading up to the peak load hour was declining or well below its winter rating. Figure 10 *(below)* shows the total plants hourly generation as a percentage of their winter rating based on EPA CEMS and EIA 860 data. These plants stand out because of substantial deviations in generation after EEA 1 and EEA 2 were declared and due to overall lower generation than might be expected during the event considering emergency purchases were required.

The two plants identified as having potential outages or derates during the EEA period were the 693 MW Edward L. Addison Generating Plant and the 1,233 MW Wansley Combined Cycle.

During the emergency window, the Edward L. Addison Generating Plant output was lower by 275 MW relative to the EEA 1 hours prior. The Wansley Combined Cycle output was 209 MW lower. This behavior may be indicative of unit outages or fuel supply disruptions and a sign of correlated cold weather outages. In total, these two plants' output during the emergency window was lower by 483 MW.

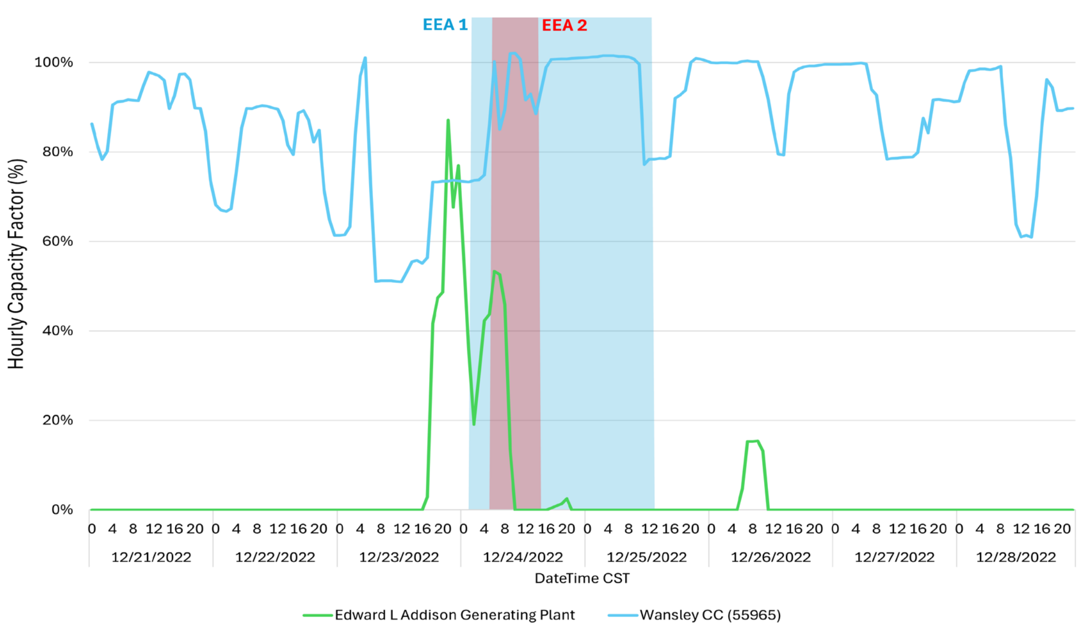


Figure 10. Southern Power generators identified as having potential outages during Winter Storm Elliott.

Performance of PPA Generators

In addition to utility owned assets, Southern Company and its subsidiaries also procure capacity and energy via PPAs.

These types of resources use a variety of fuels, including gas, landfill gas, oil, and biomass. EPA data is not available for non-utility generating units, nor units that are less than 25 MW in size. Due to this limitation, only those PPA units that are known to contract with Southern Company subsidiaries and met the size threshold or those that Georgia Power provided data on were reviewed in this section. Generation by plant for different fuel types is reviewed in the following subsections.

Biomass PPA Generator Performance

Data was only available for biomass generators reported in the Georgia Power IRP and provided in the docket request. Review of these units' output leading up to and during the peak load hour shows a general underperformance relative to the size of the PPA.

Figure 11 *(below)* shows the five plants that had zero output during the peak load hour. The hourly data shown also indicates little to no generation for these plants during the entire EEA 1 and 2 period. The total capacity unavailable during the emergency window was 230 MW out of 302 MW of biomass PPA resources.

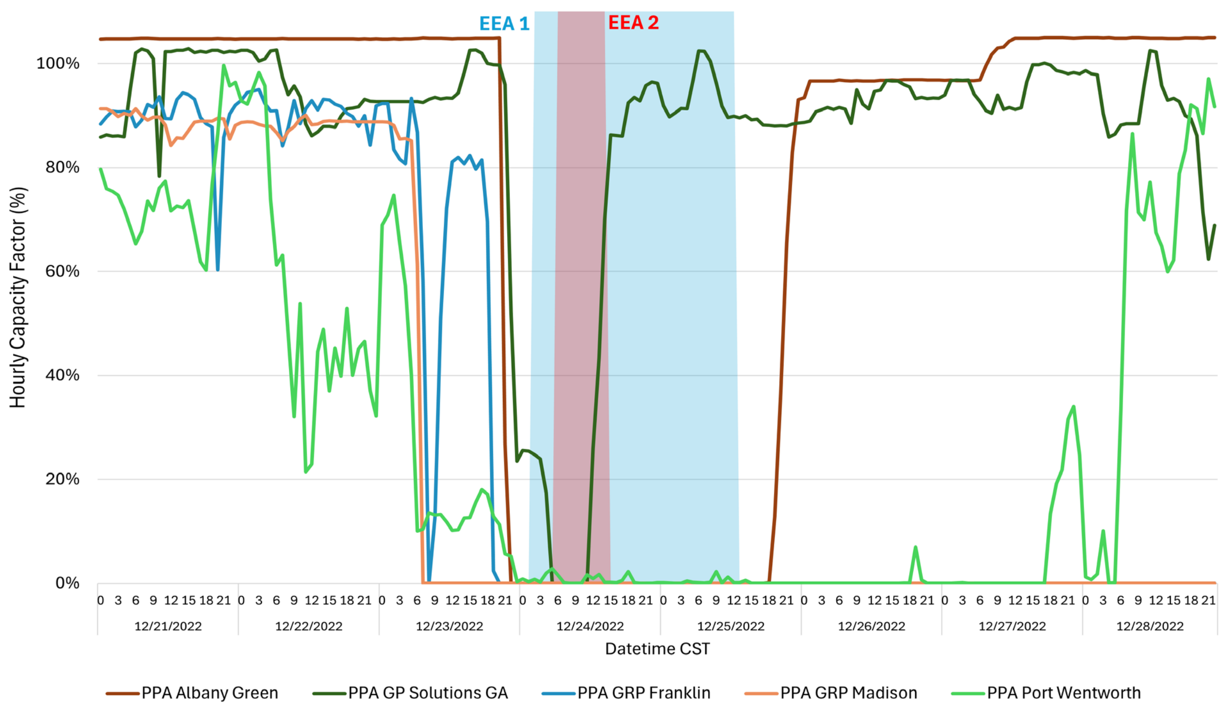


Figure 11. Georgia Power Biomass PPA generators identified as having potential outages during Winter Storm Elliot.

Landfill Gas (LFG) PPA Generator Performance

Data was only available for landfill gas generators reported in the Georgia Power IRP and provided in the docket request. Review of these units' output leading up to and during the peak load hour shows a general underperformance relative to the size of the PPA.

Figure 12 *(page 14, top)* shows that all five plants had zero output during the peak load hour. The hourly data shown also indicates no generation for these plants from 12/23/2022 to until the morning of 12/27/2022. The total capacity unavailable during the peak load hour was 32.3 MW and 100% of the LFG PPA resources.

Gas PPA Generator Performance

Several larger gas generators that are not owned by Southern Company also serve load via PPAs. A review of both the EPA CEMS data and data provided by Georgia Power shows that six plants had potential outages or derates leading up to the peak hour.

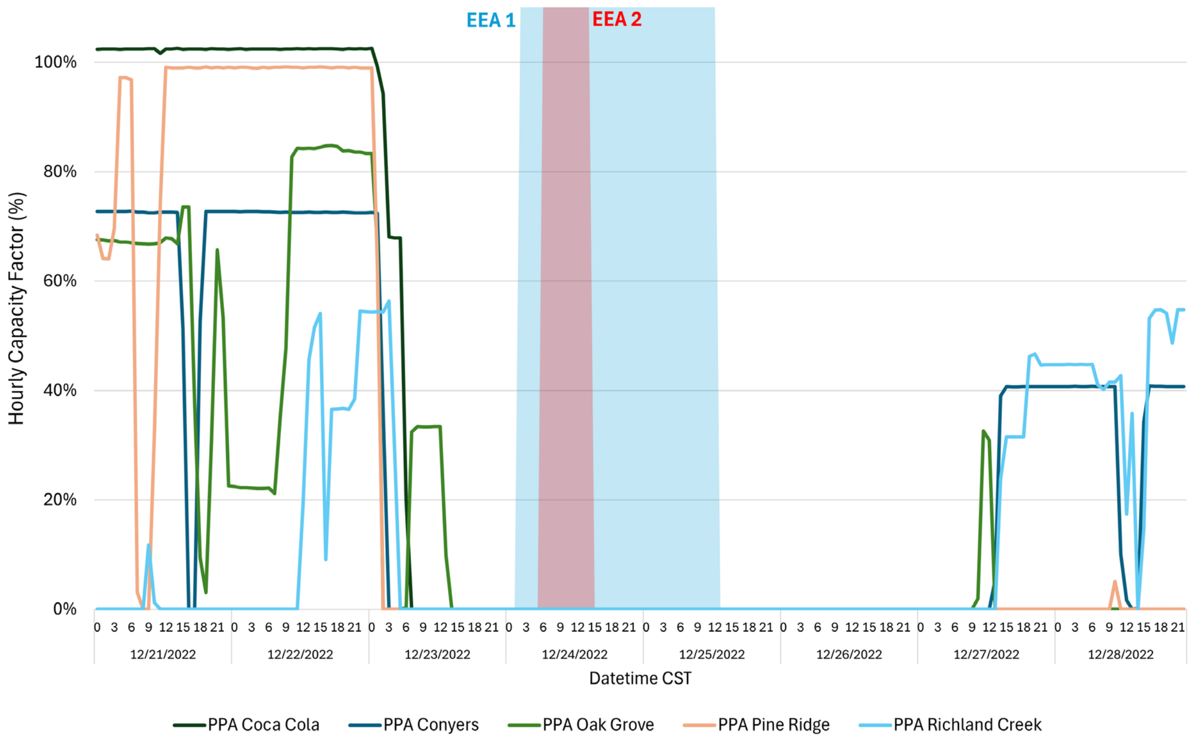


Figure 12 Georgia Power LFG PPA generators identified as having potential outages during Winter Storm Elliott.

Figure 13 (below) shows the hourly generation data for the plants using EPA CEMS data. These three units shown indicate likely low resource availability that is likely not attributable to Winter Storm Elliott except for potentially Washington County Power which sees a reduction in outFigure 13. Additional Southern Company PPA generators identified as put going into the EEA 1 period. Relative to their winter capacity ratings, the lack of generation totals 2,044 MW.

Additional information based on monthly net generation for each of the facilities in 2022 and 2021 indicate that there may have been extended outages at all three plants since monthly net generation was either 0 or substantially reduced in October, November, and December relative to the same months in 2021.

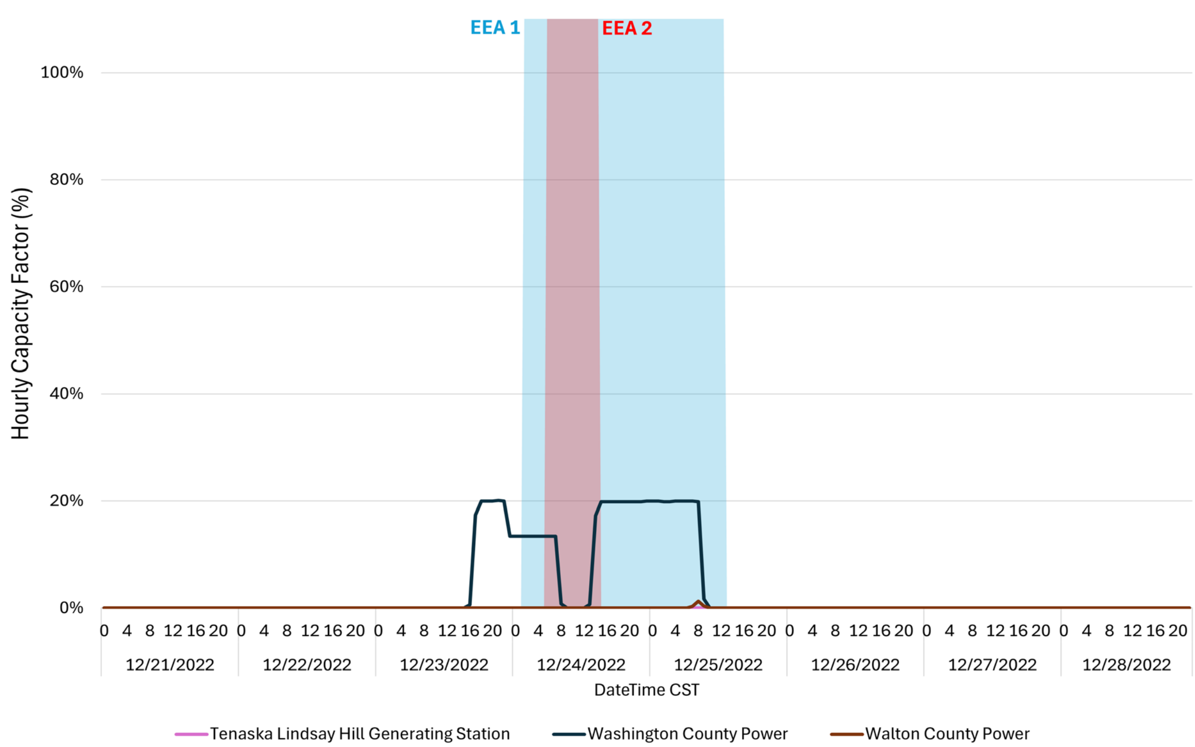


Figure 13. Additional Southern Company PPA generators identified as unavailable during Winter Storm Elliott based on EPA CEMS data.

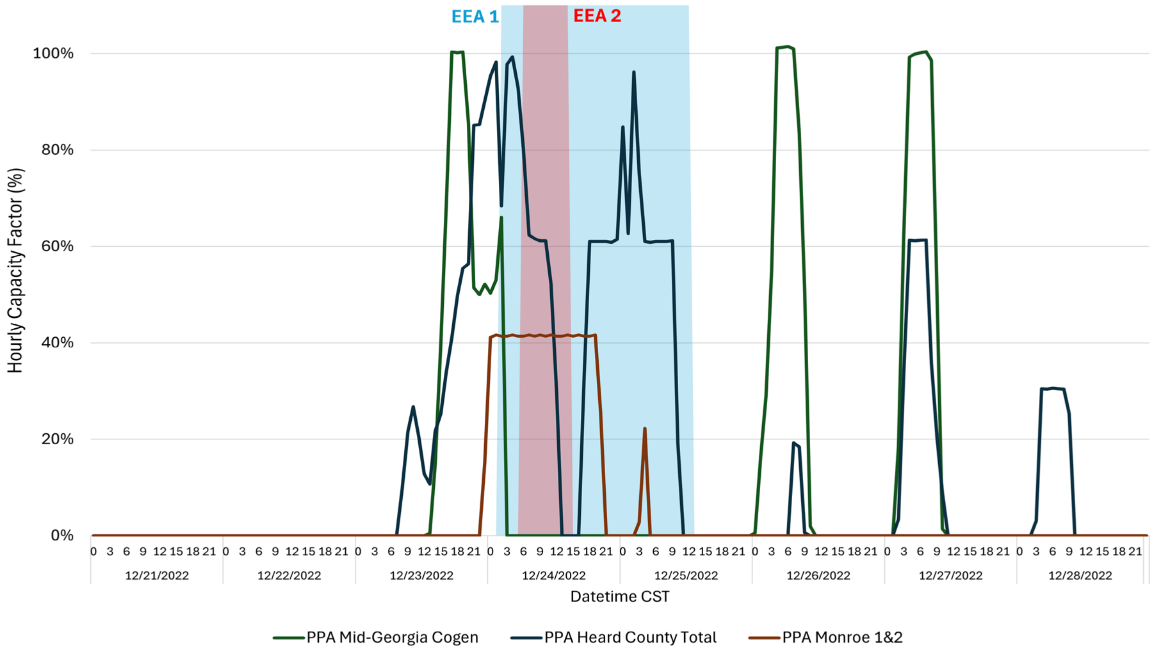


Figure 14. Additional Southern Company PPA generators identified as unavailable during Winter Storm Elliott based on Georgia Power data.

Figure 14 *(above)* shows the hourly generation data for additional PPA plants using Georgia Power provided data. The three plants are the 945 MW Exelon Heard facility (also called Tenaska Georgia Generating Station), the 300 MW Mid-Georgia Cogen, and the 360 MW Monroe plant (also called MPC Generating).

The data shown indicates that all three plants faced decreased generating capability during the emergency window. The Mid-Georgia Cogen plant has a noticeable drop in generation down to 0.

The Heard County plant has a similar trajectory where the plant is at full output prior to the event and eventually drops to 62% output during the peak load hour. Lastly, the Monroe facility was operating only at 41% output due to no generation from Monroe unit 2 during the EEA period. In total, these plants provided 727 MW of output during the emergency window relative to their total 1,635 MW winter ratings.

Evaluating Incremental Cold Weather Outages

In their 2022 IRP, Georgia Power shared the Southern Pool's assumptions on incremental cold weather outages for Southern Company resources. Their recognition that cold weather increases the probability of generators going on outage is a best practice; however, the data provided is highly aggregated, assuming all unit types are affected equally, and only shown at the pool level.

Risks will vary by fuel type and by region in the pool and should be communicated as such.

Additionally, Southern Company assumed in their analysis that actions they took reduced cold weather outage risks in the future relative to the historical period. This is shown by the shift down and to the left of the orange line (assumed improvements) relative to the blue line (historical performance) in Figure 15

Considering Winter Storm Elliott and upcoming IRPs, these assumptions should be re-evaluated to ensure they are valid. The results of applying these assumptions to their modeling process should be documented in more detail to show the magnitude of additional outages that can occur as temperatures drop. Reporting the worst-case fleet availability level rather than just the incremental effect would go a long way in properly communicating what cold weather risks look like for the generation fleet.

Based on the data from the 2022 Georgia Power IRP, the fleetwide incremental cold weather outages are shown in Figure 15 *(page 16, top).* Based on Figure 15 and an average temperature of 7 degrees F during the morning of 12/24/2022 across Southern Company the improved incremental outage rate was 2.77%. The original incremental cold weather outage rate was 5.28%.

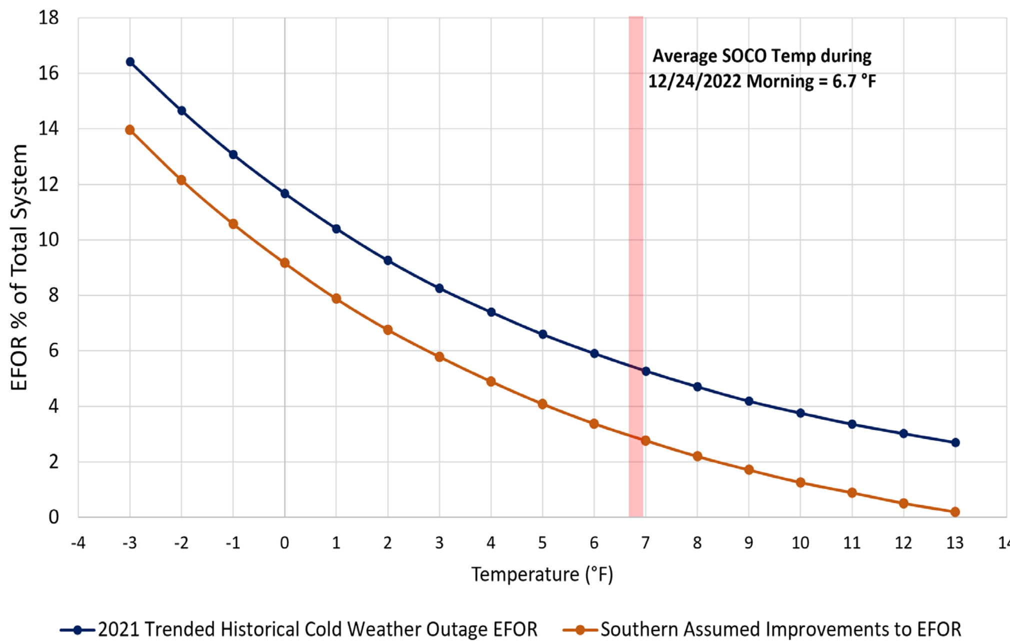


Figure 15. Incremental Equivalent Forced Outage Rate (EFOR) at the Total Southern Company System.

Given that Georgia Power alone experienced a 15% reduction in capacity due forced outages during the storm, the assumed incremental outage rates of 2.77% discussed above appear to significantly underrepresent winter outage risks for the system. Therefore, these assumptions should be revisited and results of the analysis should be transparent for stakeholders.

The challenges due to cold weather outages reinforce the need for all resources to be evaluated for their firm capacity contribution using probabilistic methods just like wind, solar, and battery storage.

As discussed, another issue is that the company-wide risk due to cold weather outages remains unclear since reported data is missing for Alabama, Mississippi, and Southern Power owned units and PPAs during the event. This report has estimated the performance of these plants, but actual detailed information is needed.

Furthermore, Georgia Power only provided information on outages that occurred on the peak load day of December 24, 2022. Extreme cold weather affected the entire region prior, during, and after the worst day while temperatures were still low, and the effects of cold weather outages could have occurred on other days than the peak day.

Performance of Renewable Resources

Figure 16 *(below)* illustrates the total generation from solar resources within the Southern Company balancing authority footprint during the storm. As expected, solar resources did contribute to meeting demand throughout the day, but in the early morning hours output was limited. Compared to other winter peak events, solar performance was generally stable, but its role in peak support remains constrained due to the lack of irradiance at critical morning and and

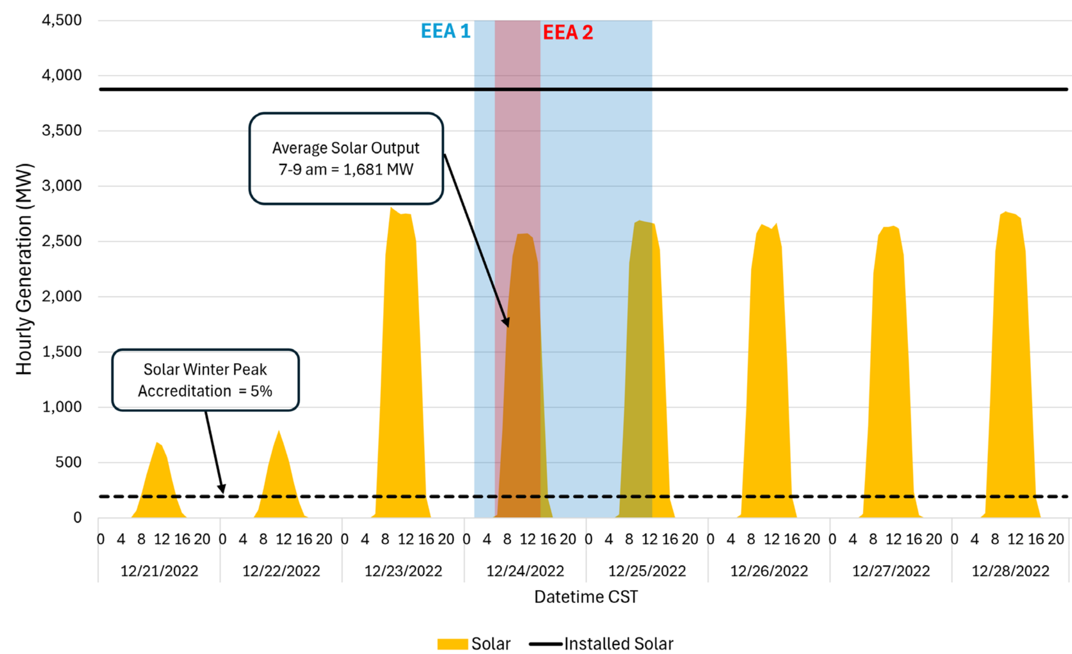


Figure 16. Solar generation for the entire Southern Company Balancing Authority during Winter Storm Elliott.

Month-Year	Peak Load Hour	Peak Load (MW)	Solar Capacity Factor at Peak
January 2019	1/30/19 6:00	40,450	1%
January 2020	1/22/20 6:00	40,410	1%
February 2021	2/17/21 6:00	40,922	4%
December 2022	12/24/22 7:00	45,131	21%
December 2023	12/20/23 7:00	37,890	23%
January 2024	1/17/24 6:00	47,368	2%

Table 3. Southern Company Balancing Authority solar capacity factor during historical peak load hours based on EIA data.

evening peaks. This shows that while solar production was low on the days leading up to the extreme cold event, production was high in the day prior to, and during, the event. This suggests that in the future, with increased battery storage resources, solar resources can improve reliability even if they are unavailable during the early morning peak load hours.

Table 3 *(above)* shows historical peak load and solar output relative to installed capacity for the 2019-2024 winter peak load events in the Southern Company Balancing Authority according to EIA 930 and EIA 860 data. Solar resources are not expected to contribute to winter peak load and utilities plan for this accordingly.

For example, the 2022 Georgia Power IRP evaluated the capacity accreditation for solar resources and determined their winter accreditation is 0-10% depending on the type of solar array and the penetration on the system[5]. Results in Table 3 and Figure 16 indicate that solar performed well above it's expected contribution during Winter Storm Elliott.

Other historical peak loads show performance can vary widely, largely driven by whether peak loads occur between 6-7 am based on the data shown. While solar generation during winter peak loads can vary, if battery storage resources are added alongside solar then greater utilization can be achieved, especially for early morning peak load hours in the wintertime. Currently, battery storage deployment is limited in Southern Company.

It is clear though that prior to the extreme events occurring on December 24, 2022, that storage resources could have been charged in advance to mitigate the hours of highest peak load enhancing resilience by rapidly offsetting unexpected generator outages and increasing system flexibility. Furthermore, solar, storage, and wind resources create portfolio effects that can boost the total renewable systems capacity accreditation. These effects should be evaluated and accreditation refined over time.

Recommendations to Improve Planning for Cold Weather Outages

The following are recommendations on how Southern Company and its subsidiaries can provide greater clarity on how the generation fleet performs under cold weather conditions and how to better represent the risks that all generation faces when planning for new generation resources to meet demand or replace retirements:

1. **Conduct transparent evaluation of how increases to power plant outages due to cold weather. Current information is from the Georgia Power 2022 IRP and only provides fleetwide incremental outages.**
2. **Assess whether assumed cold weather outage improvements in 2021 have been effective.**
3. **Assess all future resource addition options based on every resource type and its effective load carry capability (ELCC) like how wind, solar, and battery storage is assessed. This necessitates including cold weather outages in the assessment.**
4. **Provide transparency on the current capacity accreditation assumed for all resources. Historical accreditation using incremental capacity equivalent (ICE) is redacted in previous full IRP filings.**

5 2022 GPC IRP, Study of Renewable Capacity Values using the ELCC Methodology in the Southern Company System, December 2021.

Emergency Power Purchases and Costs

One key reliability feature of the bulk power system is the ability to import power from neighboring regions to alleviate stress during extreme events.

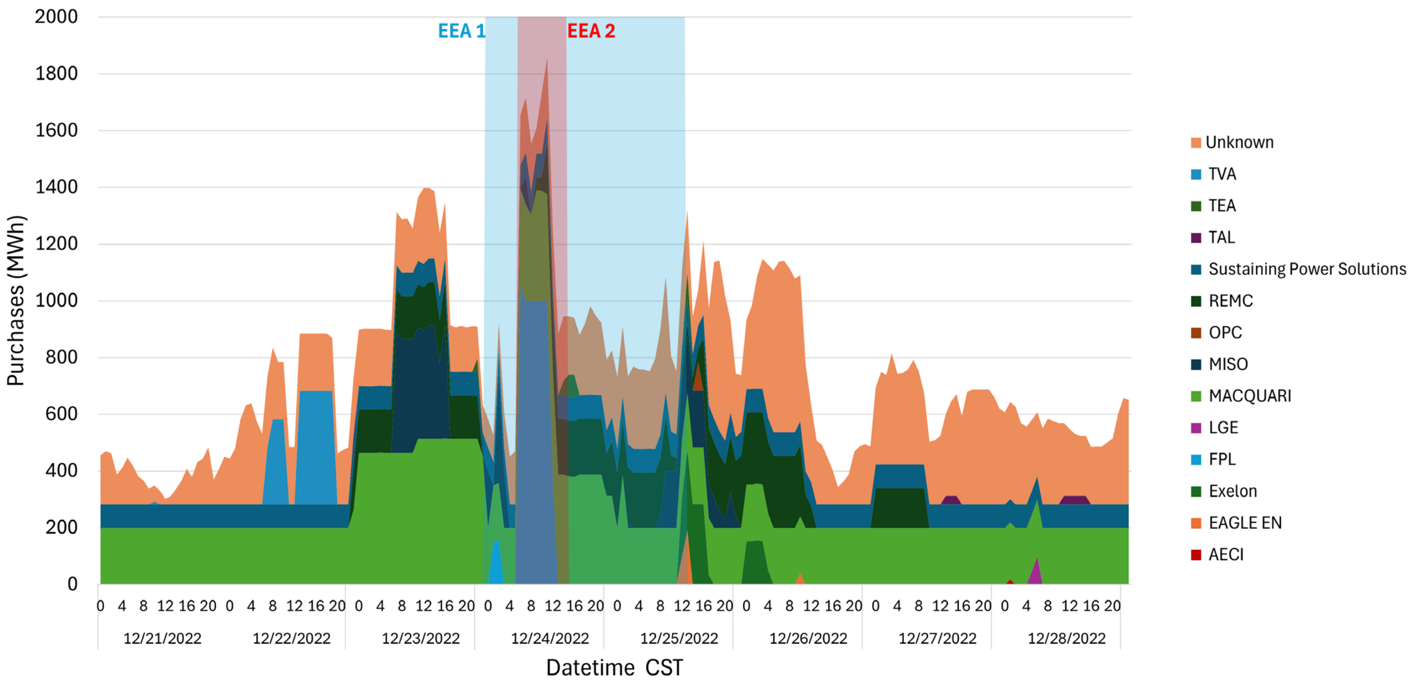


Figure 17. Winter Storm Elliott - Southern Company Known and Estimated Purchases by Source.

Even in vertically integrated areas like the Southeast, energy exchanges play a crucial role in balancing supply and demand and ensuring system reliability, especially during emergencies such as Winter Storm Elliott.

However, these regions typically lack transparency about where emergency power originates and its cost to customers, limiting public oversight of emergency spending and raising questions about planning for reliable external support an ensuring that prices are based in some transparent fashion.

In response to regulatory data requests, some data for Georgia Power was released, though comprehensive data for the full Southern Company system remains unavailable. By matching resource IDs and timestamps from Georgia Power with anonymized data from other Southern Company entities, it was possible to estimate the source, magnitude, and cost of emergency power for the broader system.

However, only Georgia Power Company transactions are shown with complete information regarding the source and price of power, while non-GPC transactions are based on estimations.

Figure 17 *(above)* displays all purchases by source including estimated and unidentified purchases for all Southern Company entities.

Note that outside of known balancing authorities, the exact power plants and owners are uncertain so additional tracking to what kind of units are providing the power is difficult to accomplish.

Price Variability by Seller and Estimated Costs

Throughout Winter Storm Elliott, prices varied significantly depending on the seller. This variation is expected during extreme events as regions experience fluctuating spare capacity. Figure 18 *(below)* illustrates the known and estimated costs of power purchased by Southern Company by seller, with unknown purchases estimated based on the average price for known purchases during each hour. In total, emergency purchases cost $51 million, or $350/MWh.

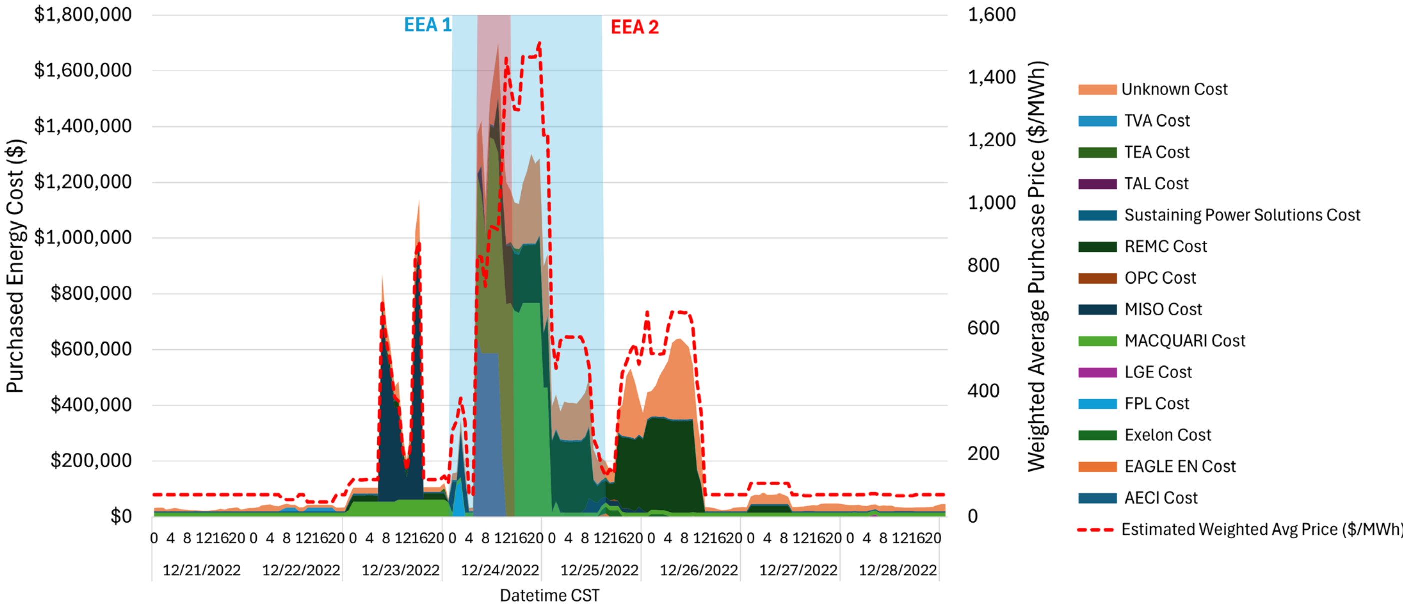


Figure 18. Winter Storm Elliot - Southern Company Estimated Cost by Source.

Table 4 *(page 20)* provides a summary of purchase data available via Georgia Power's discovery request, including estimates for all Southern Company purchases matched with GPC resource IDs, where prices for matched sellers were set to the GPC rate. For transactions labeled "unknown," no GPC resource ID was available for matching.

This summary highlights several points: while energy costs generally track with total MWh purchased, certain sellers exhibited disproportionately high prices. For instance, purchases from REMC, MISO, and FPL accounted for a much higher percentage of total costs compared to MWh purchased.

Specifically, REMC transactions represented only 9.9% of the total MWh but contributed 24.3% of total costs due to elevated prices that persisted well after EEA 1 and EEA 2 conditions had ended.

The price formation for non-market regions like MISO lack transparency, making it difficult to determine the reasons behind these elevated rates. It is expected that prices across the region will be high during the event.

But the reason some prices were $400/MWh versus $4,000/MWh is worth providing more detail on.

Other sellers also contributed to high overall costs, notably Macquarie and FPL. FPL provided 6,736 MWh at an average price of $599/MWh, reaching a peak of $1,000/MWh. Macquarie, supplying roughly 33% of Southern Company's total purchased MWh during the event, averaged $330/MWh, with some purchases reaching as high as $4,000/MWh during EEA 2.

Such data points suggest the potential for substantial savings if lower-cost alternatives were available and less market power given to emergency purchases by planning for a more resilient system.

Seller Name	Total MWh	% of Total MWh	Total Cost ($)	% of Total Cost	Average Price ($/MWh)	Max Price ($/MWh)
AECI	18	0.0%	$946	0.002%	$53	$54
EAGLE EN	331	0.2%	$22,015	0.04%	$67	$70
Exelon	2,045	1.4%	$160,005	0.31%	$78	$85
FPL	6,736	4.6%	$4,033,643	7.85%	$599	$1,000
LGE	146	0.1%	$12,182	0.02%	$83	$96
MACQUARI	48,596	33.2%	$16,053,050	31.24%	$330	$4,000
MISO	6,909	4.7%	$5,246,666	10.27%	$764	$2,832
OPC	100	0.1%	$6,000	0.01%	$60	$60
REMC	14,498	9.9%	$12,518,350	24.36%	$863	$1,300
Sustaining Power Solutions	15,936	10.9%	$987,235	1.92%	$62	$62
TAL	270	0.2%	$8,730	0.02%	$32	$36
TEA	357	0.2%	$56,714	0.11%	$159	$303
TVA	3,909	2.7%	$128,399	0.25%	$33	$44
Unknown*	46,633	31.8%	$12,118,397	23.58%	$260	$1,081
Total Purchases	146,484	100%	$51,382,333	100%	$351	$4,000

Table 4. Summary data by Southern Company during Winter Storm Elliott based on GPC Data (12/21/2022 - 12/28/2022).

Implications of Non-Transparent Price Setting

This review of emergency power purchases underscores the wide range of prices paid by Georgia Power to different sellers during Winter Storm Elliott, revealing challenges inherent in a system without transparent locational marginal pricing (LMP) for transactions in vertically integrated regions like the Southeast.

In contrast, neighboring regions impacted by Winter Storm Elliott, such as MISO, provide LMP data that reflects both energy production and transportation costs, including information on transmission congestion and losses.

Notably, MISO provides real-time price data at its interface with Southern Company in Mississippi, updated on a five-minute basis. This level of pricing transparency allows stakeholders to verify that prices reflect actual market conditions.

For Southern Company customers, the lack of similar transparency represents a challenge, particularly in the context of high emergency costs.

Currently, neither Georgia Power's public data nor the Southeast Energy Exchange Market (SEEM), reviewed in detail in the next section, offers information on price formation, especially under stress conditions.

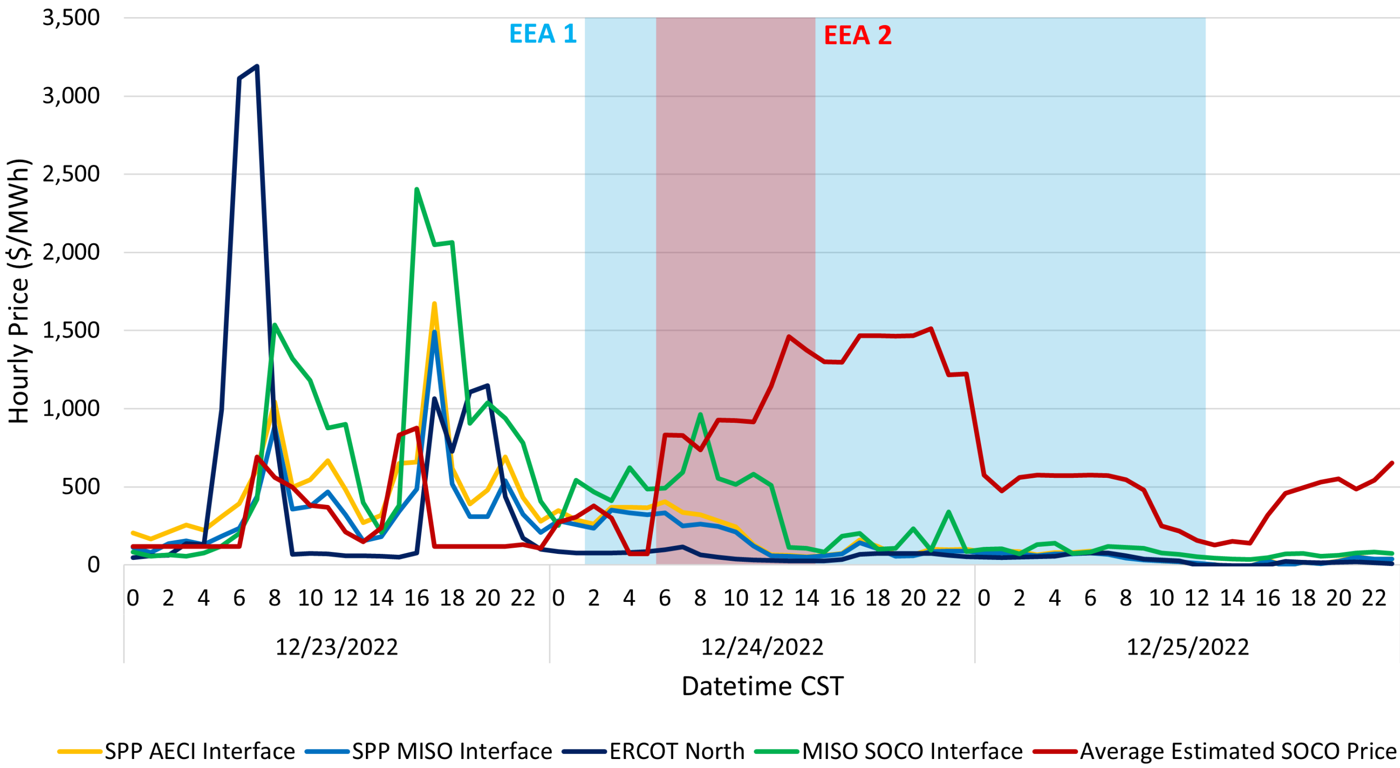


Figure 19. Average Known Southern Company Purchase Price vs Nearby Market LMP ($/MWh)

This limitation prevents customers from understanding the rationale behind emergency prices and assessing whether costs could have been mitigated through better planning or interregional coordination.

Opportunities for Interregional Transmission to Improve Reliability and Reduce Costs

Reviewing LMPs for nearby regions highlights potential cost savings and reliability benefits that increased imports from neighboring regions could provide if transmission were available.

Enhanced interregional transmission connections with transparent pricing could offer more reliable access to affordable external resources.

Figure 19 *(above)* shows that prices in ERCOT, SPP, and MISO (at the Southern Company interface) were considerably lower than GPC purchase prices on December 24 and 25, when generation weighted known prices averaged over $1,000/MWh.

Leveraging interregional transfers could thus help Southern Company meet peak demands more cost-effectively during future extreme events, while offering customers clearer insights into price formation.

Southeast Energy Exchange Market Performance

The Southeast Energy Exchange Market (SEEM) began operations in November 2022, just one month before Winter Storm Elliott stressed power systems across the Southeastern United States. SEEM was designed to facilitate voluntary bilateral energy trade across the region, providing participants with a way to exchange surplus energy efficiently.

However, during the critical hours of December 24th, 2022, when the Southern region declared EEA 1 and EEA 2 energy emergencies, publicly available data shows that no exchanges occurred among SEEM participants. This absence of trades highlights questions about SEEM's role in supporting reliability during peak demand events and the broader applicability of its platform under emergency conditions.

While SEEM data is anonymized, the platform generally shows transaction volumes across different periods, allowing observers to see broad trends without detailed participant information. Analysis of SEEM's transaction volumes during Winter Storm Elliott suggests low utilization by market participants at a time when system operators were under significant stress to maintain grid stability. This could be attributed, in part, to SEEM's novelty or uncertainty about the available capacity and pricing under extreme conditions.

However, low activity in SEEM during the storm aligns with the independent market auditor's reports[6], which indicate that SEEM transactions were limited during cold weather events, potentially due to limited availability of surplus energy and participant hesitancy during tight grid conditions. Despite SEEM's low trading volume during Winter Storm Elliott, bilateral transactions outside SEEM were still active across the region. Southern Company, for example, engaged in multiple direct purchases during this period, reflecting a preference for more established bilateral agreements rather than SEEM exchanges under emergency circumstances.

This trend indicates that SEEM's structure may not yet fully align with participant needs during stress events, when timely and cost-effective energy transactions are most critical.

SEEM Performance in Subsequent Winter Peak Events

Since Winter Storm Elliott, SEEM has continued operating through subsequent winter peak load events, but its performance under these conditions has similarly shown limited market activity during peak demand periods. This ongoing trend suggests that SEEM, while potentially valuable for regular trading, has not become a resource for emergency support during peak conditions such as those that occurred during Winter Storm Heather[7].

Furthermore, the anonymized structure of SEEM data limits participants and stakeholders from understanding price formation or the dynamics of energy exchanges during tight conditions, in contrast to organized markets like MISO or PJM, where locational marginal pricing (LMP) provides detailed price signals reflecting supply and demand fluctuations in real time.

In summary, SEEM's first significant test under Winter Storm Elliott highlighted critical limitations in the platform's ability to facilitate energy exchanges during emergencies.

Its low utilization during peak load events like Winter Storm Elliott and Winter Storm Heather calls into question its ability to aid the system in matching economic transactions during reliability events. As a result, SEEM may not yet be equipped to provide meaningful support for system operators or offer cost-effective, transparent solutions for ratepayers during critical grid conditions.

6 Potomac Economics, Monthly Audit Report on the Southeast Energy Exchange Market - December 2022, January 31, 2023.
7 Potomac Economics, Monthly Audit Report on the Southeast Energy Exchange Market - January 2024, February 29, 2024.

Conclusion and Recommendations

This report examined Southern Company's generation fleet performance, load forecasting accuracy, and market transactions during Winter Storm Elliott. While Southern Company successfully managed the event without resorting to involuntary load shedding, the system operated under tight conditions, revealing areas where improvements in resource reliability, forecasting, and market transparency could enhance resilience against future weather-related stress.

Additionally, the Southeast Energy Exchange Market (SEEM), which had launched only a month earlier, showed minimal trading activity, highlighting opportunities for enhancements to support reliability during emergencies. Questions remain regarding how the system might have performed if demand had been higher, such as on a non-holiday weekday when electricity use is typically greater.

These considerations underscore the need for a deeper examination of how risk is evaluated in system planning and how potentially high-value opportunities to mitigate risk from extreme weather (such as by improving energy efficiency and increasing access to interregional resources) are assessed. This is of particular importance for extreme winter events which have high uncertainty on both generator outages and electricity demand.

To address these challenges, the following actions would benefit both Southern Company and stakeholders in improving transparency and ensuring reliability.

1. **Enhance Thermal Resource Evaluation:** Future grid planning should improve methods for evaluating the capacity contribution of thermal resources. Rather than discounting by average forced outage rates, planning should reflect the real correlated outage risk of these resources during extreme events. Consistent with the evaluation approach for wind and solar resources, this revised methodology would provide a more accurate picture of available capacity during winter peak demands and extreme weather events.

2. **Reassess Incremental Cold Weather Outages:** Southern Company should re-evaluate incremental cold weather outage assumptions, disaggregating data by fuel type rather than applying fleet-wide assumptions. Analyzing outage probabilities by fuel type could highlight distinct vulnerabilities and more accurately inform resource adequacy planning for cold weather conditions.

3. **Increase Transparency:** Southern Company should establish more transparent mechanisms for purchased power and emergency cost formation. Adopting some form of locational marginal pricing (LMP) across the Southern Company territory would align emergency prices with real-time market conditions, offering regulators and customers a clearer understanding of cost drivers during emergencies as they relate to both the price of energy and the cost of transmission.

4. **Enhance SEEM Functionality and Transparency:** Based on SEEM's limited use during Winter Storm Elliott, improvements should be considered to enhance its role in reliability. The platform could incorporate faster price signaling or offer day-ahead market signals to increase utilization during peak events. Recommendations already exist from the SEEM independent auditor to improve performance. Current reviews of SEEM by FERC also offer a chance to improve operations during emergencies, particularly with external regions into SEEM.

5. **Evaluate interregional transmission opportunities to mitigate winter reliability risks by accessing low cost and uncorrelated resources in external regions.** It is well documented that interregional transmission can provide substantial resource adequacy and resilience benefits. Long-term and multi-value transmission planning should be adopted in the region.

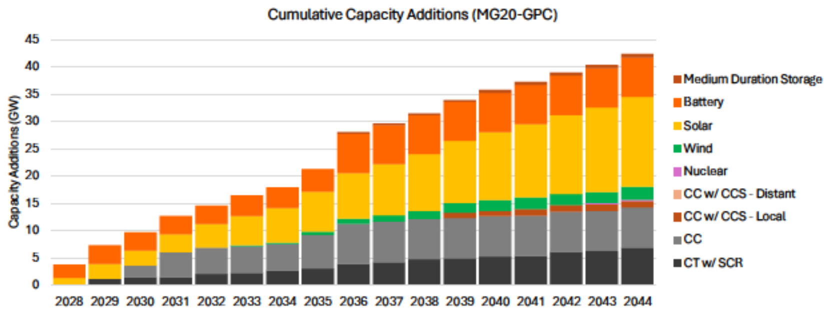
6. **Evaluate targeted energy efficiency opportunities to reduce load and volatility during cold weather events, including building envelope efficiency improvements and more efficient heating programs to mitigate winter load volatility.**

By implementing these recommendations, Southern Company and its stakeholders can strengthen reliability, ensure resource adequacy, and reduce costs under extreme weather conditions. A focus on accurate resource evaluation, refined forecasting, and transparent pricing mechanisms will better equip the region to manage future winter peak events effectively.

DS-11:

Workpaper: Capacity Expansion Plans by Portfolio

Scenario MG20-GPC
Title Cumulative Capacity Additions (MG20-GPC)



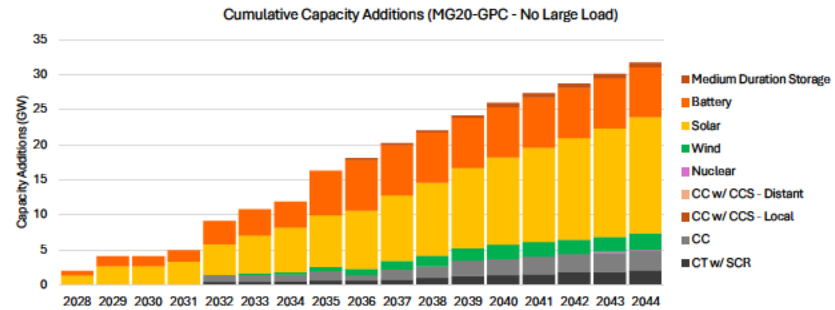
Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2028	0	0	0	0	0	0	1370	2430	0	1530	900	0	0	0	0	0	3800
2029	1200	0	0	0	0	0	2750	3330	0	1530	1800	0	0	0	0	0	7280
2030	1500	2130	0	0	0	0	2750	3330	0	1530	1800	0	0	0	0	0	9710
2031	1500	4530	0	0	0	0	3350	3330	0	1530	1800	0	0	0	0	0	12710
2032	2100	4800	0	0	0	0	4340	3330	0	1530	1800	0	0	0	0	0	14570
2033	2310	4800	0	0	0	240	5330	3750	0	1530	2220	0	0	0	0	0	16430
2034	2730	4800	0	0	0	300	6320	3750	0	1530	2220	0	0	0	0	0	17900
2035	3030	6180	0	0	0	600	7310	4170	0	1530	2640	0	0	0	0	0	21290
2036	3930	7380	0	0	0	900	8330	7170	300	1530	2640	3000	0	0	0	300	28010
2037	4230	7380	0	0	0	1200	9350	7170	300	1530	2640	3000	0	0	0	300	29630
2038	4770	7380	0	0	0	1500	10370	7170	300	1530	2640	3000	0	0	0	300	31490
2039	4980	7380	900	0	0	1770	11390	7170	300	1530	2640	3000	0	0	0	300	33890
2040	5280	7380	900	0	0	2070	12410	7170	600	1530	2640	3000	0	0	0	600	35810
2041	5400	7380	1200	0	0	2070	13430	7170	600	1530	2640	3000	0	0	0	600	37250
2042	6090	7380	1200	0	0	2070	14450	7170	600	1530	2640	3000	0	0	0	600	38960
2043	6240	7380	1200	0	210	2070	15470	7170	600	1530	2640	3000	0	0	0	600	40340
2044	6900	7380	1200	0	210	2370	16490	7170	600	1530	2640	3000	0	0	0	600	42320
Total	**6900**	**7380**	**1200**	**0**	**210**	2370	16490	**7170**	**600**	**1530**	**2640**	**3000**	**0**	**0**	**0**	**600**	**42320**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2025																	
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	1370	2430	0	1530	900	0	0	0	0	0	3800
2029	1200	0	0	0	0	0	1380	900	0	0	900	0	0	0	0	0	3480
2030	300	2130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2430
2031	0	2400	0	0	0	0	600	0	0	0	0	0	0	0	0	0	3000
2032	600	270	0	0	0	0	990	0	0	0	0	0	0	0	0	0	1860
2033	210	0	0	0	0	240	990	420	0	0	420	0	0	0	0	0	1860
2034	420	0	0	0	0	60	990	0	0	0	0	0	0	0	0	0	1470
2035	300	1380	0	0	0	300	990	420	0	0	420	0	0	0	0	0	3390
2036	900	1200	0	0	0	300	1020	3000	300	0	0	3000	0	0	0	300	6720
2037	300	0	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1620
2038	540	0	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1860
2039	210	0	900	0	0	270	1020	0	0	0	0	0	0	0	0	0	2400
2040	300	0	0	0	0	300	1020	0	300	0	0	0	0	0	0	300	1920
2041	120	0	300	0	0	0	1020	0	0	0	0	0	0	0	0	0	1440
2042	690	0	0	0	0	0	1020	0	0	0	0	0	0	0	0	0	1710
2043	150	0	0	0	210	0	1020	0	0	0	0	0	0	0	0	0	1380
2044	660	0	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1980

Scenario MG20-GPC - No Large Load
Title Cumulative Capacity Additions (MG20-GPC - No Large Load)



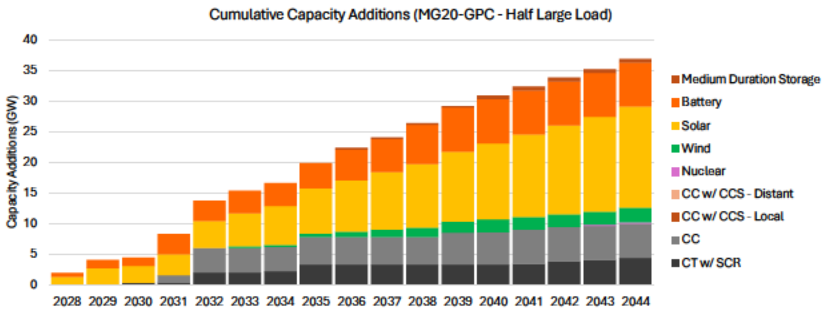
Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2028	0	0	0	0	0	0	1370	685	0	685	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	2750	1375	0	1375	0	0	0	0	0	0	4125
2030	0	0	0	0	0	0	2750	1375	0	1375	0	0	0	0	0	0	4125
2031	0	0	0	0	0	0	3350	1675	0	1530	145	0	0	0	0	0	5025
2032	500	1000	0	0	0	0	4340	3330	0	1530	1800	0	0	0	0	0	9170
2033	500	1000	0	0	0	240	5330	3750	0	1530	2220	0	0	0	0	0	10820
2034	560	1000	0	0	0	300	6320	3750	0	1530	2220	0	0	0	0	0	11930
2035	710	1340	0	0	0	600	7310	6370	0	1530	2640	2200	0	0	0	0	16330
2036	710	710	0	0	0	900	8330	7170	300	1530	2640	3000	0	0	0	300	18120
2037	820	1430	0	0	0	1200	9350	7170	300	1530	2640	3000	0	0	0	300	20270
2038	1070	1650	0	0	0	1500	10370	7170	300	1530	2640	3000	0	0	0	300	22060
2039	1320	2200	0	0	0	1770	11390	7170	300	1530	2640	3000	0	0	0	300	24150
2040	1450	2270	0	0	0	2070	12410	7170	600	1530	2640	3000	0	0	0	600	25970
2041	1580	2510	0	0	0	2070	13430	7170	600	1530	2640	3000	0	0	0	600	27360
2042	1840	2600	0	0	0	2070	14450	7170	600	1530	2640	3000	0	0	0	600	28730
2043	1930	2660	0	0	210	2070	15470	7170	600	1530	2640	3000	0	0	0	600	30110
2044	2160	2690	0	0	210	2370	16490	7170	600	1530	2640	3000	0	0	0	600	31690
Total	**2160**	**2690**	**0**	**0**	**210**	2370	16490	**7170**	**600**	**1530**	**2640**	**3000**	**0**	**0**	**0**	**600**	**31690**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2025																	
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	1370	685	0	685	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	1380	690	0	690	0	0	0	0	0	0	2070
2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	600	300	0	155	145	0	0	0	0	0	900
2032	500	1000	0	0	0	0	990	1655	0	0	1655	0	0	0	0	0	4145
2033	0	0	0	0	0	240	990	420	0	0	420	0	0	0	0	0	1650
2034	60	0	0	0	0	60	990	0	0	0	0	0	0	0	0	0	1110
2035	150	340	0	0	0	300	990	2620	0	0	420	2200	0	0	0	0	4400
2036	0	-630	0	0	0	300	1020	800	300	0	0	800	0	0	0	300	1790
2037	110	720	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	2150
2038	250	220	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1790
2039	250	550	0	0	0	270	1020	0	0	0	0	0	0	0	0	0	2090
2040	130	70	0	0	0	300	1020	0	300	0	0	0	0	0	0	300	1820
2041	130	240	0	0	0	0	1020	0	0	0	0	0	0	0	0	0	1390
2042	260	90	0	0	0	0	1020	0	0	0	0	0	0	0	0	0	1370
2043	90	60	0	0	210	0	1020	0	0	0	0	0	0	0	0	0	1380
2044	230	30	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1580

Scenario **MG20-GPC - Half Large Load**
Title Cumulative Capacity Additions (MG20-GPC - Half Large Load)



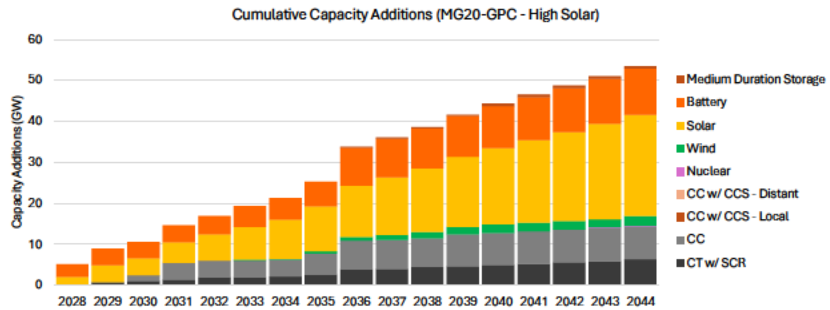
Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2028	0	0	0	0	0	0	1370	685	0	685	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	2750	1375	0	1375	0	0	0	0	0	0	4125
2030	400	0	0	0	0	0	2750	1375	0	1375	0	0	0	0	0	0	4525
2031	420	1260	0	0	0	0	3350	3330	0	1530	1800	0	0	0	0	0	8360
2032	2100	4000	0	0	0	0	4340	3330	0	1530	1800	0	0	0	0	0	13770
2033	2100	4000	0	0	0	240	5330	3750	0	1530	2220	0	0	0	0	0	15420
2034	2270	4000	0	0	0	300	6320	3750	0	1530	2220	0	0	0	0	0	16640
2035	3350	4500	0	0	0	600	7310	4170	0	1530	2640	0	0	0	0	0	19930
2036	3350	4500	0	0	0	900	8330	4970	300	1530	2640	800	0	0	0	300	22350
2037	3350	4500	0	0	0	1200	9350	5370	300	1530	2640	1200	0	0	0	300	24070
2038	3350	4500	0	0	0	1500	10370	6370	300	1530	2640	2200	0	0	0	300	26390
2039	3350	5220	0	0	0	1770	11390	7170	300	1530	2640	3000	0	0	0	300	29200
2040	3350	5270	0	0	0	2070	12410	7170	600	1530	2640	3000	0	0	0	600	30870
2041	3500	5560	0	0	0	2070	13430	7170	600	1530	2640	3000	0	0	0	600	32330
2042	3930	5560	0	0	0	2070	14450	7170	600	1530	2640	3000	0	0	0	600	33780
2043	4090	5560	0	0	210	2070	15470	7170	600	1530	2640	3000	0	0	0	600	35170
2044	4480	5560	0	0	210	2370	16490	7170	600	1530	2640	3000	0	0	0	600	36880
Total	**4480**	**5560**	**0**	**0**	**210**	2370	16490	**7170**	**600**	**1530**	**2640**	**3000**	**0**	**0**	**0**	**600**	**36880**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2025																	
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	1370	685	0	685	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	1380	690	0	690	0	0	0	0	0	0	2070
2030	400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400
2031	20	1260	0	0	0	0	600	1955	0	155	1800	0	0	0	0	0	3835
2032	1680	2740	0	0	0	0	990	0	0	0	0	0	0	0	0	0	5410
2033	0	0	0	0	0	240	990	420	0	0	420	0	0	0	0	0	1650
2034	170	0	0	0	0	60	990	0	0	0	0	0	0	0	0	0	1220
2035	1080	500	0	0	0	300	990	420	0	0	420	0	0	0	0	0	3290
2036	0	0	0	0	0	300	1020	800	300	0	0	800	0	0	0	300	2420
2037	0	0	0	0	0	300	1020	400	0	0	0	400	0	0	0	0	1720
2038	0	0	0	0	0	300	1020	1000	0	0	0	1000	0	0	0	0	2320
2039	0	720	0	0	0	270	1020	800	0	0	0	800	0	0	0	0	2810
2040	0	50	0	0	0	300	1020	0	300	0	0	0	0	0	0	300	1670
2041	150	290	0	0	0	0	1020	0	0	0	0	0	0	0	0	0	1460
2042	430	0	0	0	0	0	1020	0	0	0	0	0	0	0	0	0	1450
2043	160	0	0	0	210	0	1020	0	0	0	0	0	0	0	0	0	1390
2044	390	0	0	0	0	300	1020	0	0	0	0	0	0	0	0	0	1710

Scenario **MG20-GPC - High Solar**
Title Cumulative Capacity Additions (MG20-GPC - High Solar)



Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage
2028	0	0	0	0	0	0	2055	3115	0
2029	800	0	0	0	0	0	4125	4017.5	0
2030	1100	1400	0	0	0	0	4125	4017.5	0
2031	1400	4100	0	0	0	0	5025	4170	0
2032	1900	4100	0	0	0	0	6510	4415	0
2033	1900	4100	0	0	0	240	7995	5083	0
2034	2100	4100	0	0	0	300	9480	5330	0
2035	2600	5100	0	0	0	600	10965	5998	0
2036	3800	7100	0	0	0	900	12495	9253	300
2037	4000	7100	0	0	0	1200	14025	9508	300
2038	4400	7100	0	0	0	1500	15555	9763	300
2039	4700	7800	0	0	0	1770	17085	10018	300
2040	5000	7800	0	0	0	2070	18615	10273	600
2041	5200	8000	0	0	0	2070	20145	10528	600
2042	5600	8000	0	0	0	2070	21675	10783	600
2043	5900	8000	0	0	210	2070	23205	11038	600
2044	6300	8000	0	0	210	2370	24735	11293	600
Total	**6300**	**8000**	**0**	**0**	**210**	2370	24735	**11293**	**600**

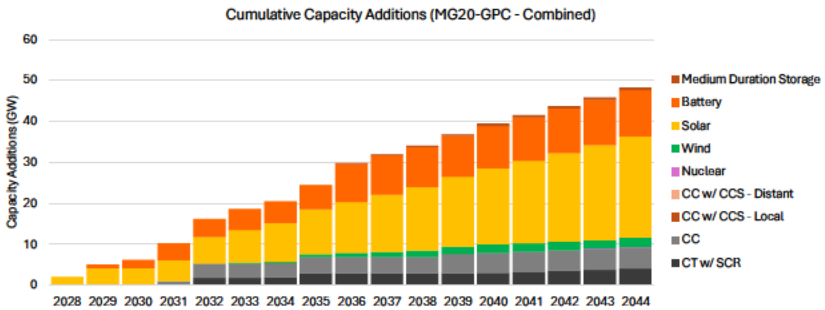
Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
1530	1585	0	0	0	0	0	5170
1530	2487.5	0	0	0	0	0	8942.5
1530	2487.5	0	0	0	0	0	10642.5
1530	2640	0	0	0	0	0	14695
1530	2640	245	0	0	0	0	16925
1530	2640	913	0	0	0	0	19318
1530	2640	1160	0	0	0	0	21310
1530	2640	1828	0	0	0	0	25263
1530	2640	3000	2083	0	0	300	33848
1530	2640	3000	2338	0	0	300	36133
1530	2640	3000	2593	0	0	300	38618
1530	2640	3000	2848	0	0	300	41673
1530	2640	3000	3103	0	0	600	44358
1530	2640	3000	3358	0	0	600	46543
1530	2640	3000	3613	0	0	600	48728
1530	2640	3000	3868	0	0	600	51023
1530	2640	3000	4123	0	0	600	53508
1530	**2640**	**3000**	**4123**	**0**	**0**	**600**	**53508**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage
2025									
2026	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	2055	3115	0
2029	800	0	0	0	0	0	2070	902.5	0
2030	300	1400	0	0	0	0	0	0	0
2031	300	2700	0	0	0	0	900	152.5	0
2032	500	0	0	0	0	0	1485	245	0
2033	0	0	0	0	0	240	1485	668	0
2034	200	0	0	0	0	60	1485	247	0
2035	500	1000	0	0	0	300	1485	668	0
2036	1200	2000	0	0	0	300	1530	3255	300
2037	200	0	0	0	0	300	1530	255	0
2038	400	0	0	0	0	300	1530	255	0
2039	300	700	0	0	0	270	1530	255	0
2040	300	0	0	0	0	300	1530	255	300
2041	200	200	0	0	0	0	1530	255	0
2042	400	0	0	0	0	0	1530	255	0
2043	300	0	0	0	210	0	1530	255	0
2044	400	0	0	0	0	300	1530	255	0

Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
1530	1585	0	0	0	0	0	5170
0	902.5	0	0	0	0	0	3772.5
0	0	0	0	0	0	0	1700
0	152.5	0	0	0	0	0	4052.5
0	0	245	0	0	0	0	2230
0	0	668	0	0	0	0	2393
0	0	247	0	0	0	0	1992
0	0	668	0	0	0	0	3953
0	0	1172	2083	0	0	300	8585
0	0	0	255	0	0	0	2285
0	0	0	255	0	0	0	2485
0	0	0	255	0	0	0	3055
0	0	0	255	0	0	300	2685
0	0	0	255	0	0	0	2185
0	0	0	255	0	0	0	2185
0	0	0	255	0	0	0	2295
0	0	0	255	0	0	0	2485

Scenario MG20-GPC - Combined
Title Cumulative Capacity Additions (MG20-GPC - Combined)



Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2028	0	0	0	0	0	0	2055	0	0	0	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	4125	900	0	900	0	0	0	0	0	0	5025
2030	0	0	0	0	0	0	4125	2030	0	1530	500	0	0	0	0	0	6155
2031	260	790	0	0	0	0	5025	4170	0	1530	2640	0	0	0	0	0	10245
2032	1820	3480	0	0	0	0	6510	4415	0	1530	2640	245	0	0	0	0	16225
2033	1820	3480	0	0	0	240	7995	5083	0	1530	2640	913	0	0	0	0	18618
2034	1920	3480	0	0	0	300	9480	5330	0	1530	2640	1160	0	0	0	0	20510
2035	2980	3980	0	0	0	600	10965	5998	0	1530	2640	1828	0	0	0	0	24523
2036	2980	3980	0	0	0	900	12495	9253	300	1530	2640	3000	2083	0	0	300	29908
2037	2980	3980	0	0	0	1200	14025	9508	300	1530	2640	3000	2338	0	0	300	31993
2038	2980	3980	0	0	0	1500	15555	9763	300	1530	2640	3000	2593	0	0	300	34078
2039	2980	4660	0	0	0	1770	17085	10018	300	1530	2640	3000	2848	0	0	300	36813
2040	3080	4800	0	0	0	2070	18615	10273	600	1530	2640	3000	3103	0	0	600	39438
2041	3180	5040	0	0	0	2070	20145	10528	600	1530	2640	3000	3358	0	0	600	41563
2042	3550	5040	0	0	0	2070	21675	10783	600	1530	2640	3000	3613	0	0	600	43718
2043	3710	5040	0	0	210	2070	23205	11038	600	1530	2640	3000	3868	0	0	600	45873
2044	4030	5040	0	0	210	2370	24735	11293	600	1530	2640	3000	4123	0	0	600	48278
Total	**4030**	**5040**	**0**	**0**	**210**	2370	24735	**11293**	**600**	**1530**	**2640**	**3000**	**4123**	**0**	**0**	**600**	**48278**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4 hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2025																	
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	2055	0	0	0	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	2070	900	0	900	0	0	0	0	0	0	2970
2030	0	0	0	0	0	0	0	1130	0	630	500	0	0	0	0	0	1130
2031	260	790	0	0	0	0	900	2140	0	0	2140	0	0	0	0	0	4090
2032	1560	2690	0	0	0	0	1485	245	0	0	0	245	0	0	0	0	5980
2033	0	0	0	0	0	240	1485	668	0	0	0	668	0	0	0	0	2393
2034	100	0	0	0	0	60	1485	247	0	0	0	247	0	0	0	0	1892
2035	1060	500	0	0	0	300	1485	668	0	0	0	668	0	0	0	0	4013
2036	0	0	0	0	0	300	1530	3255	300	0	0	1172	2083	0	0	300	5385
2037	0	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2085
2038	0	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2085
2039	0	680	0	0	0	270	1530	255	0	0	0	0	255	0	0	0	2735
2040	100	140	0	0	0	300	1530	255	300	0	0	0	255	0	0	300	2625
2041	100	240	0	0	0	0	1530	255	0	0	0	0	255	0	0	0	2125
2042	370	0	0	0	0	0	1530	255	0	0	0	0	255	0	0	0	2155
2043	160	0	0	0	210	0	1530	255	0	0	0	0	255	0	0	0	2155
2044	320	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2405

DS-12:

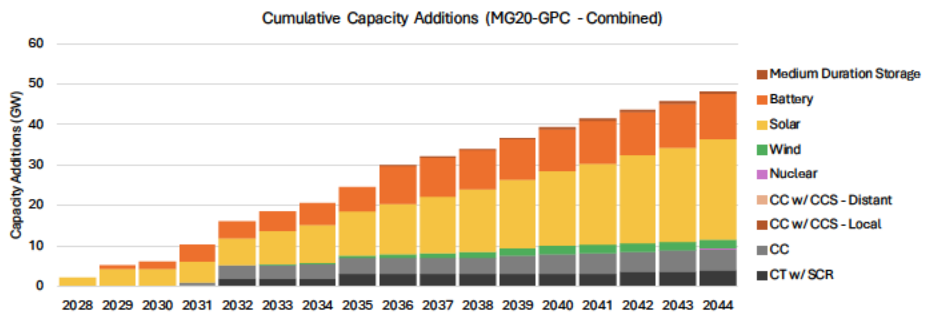
Workpaper: NPV Calculations by Portfolio - Trade Secret

File has been redacted in its entirety.

DS-13:

Workpaper: Capacity Expansion Plans - 2025 IRP - Scenario Comparisons – Stenclik.xlsx

Scenario MG20-GPC - Combined
Title Cumulative Capacity Additions (MG20-GPC - Combined)



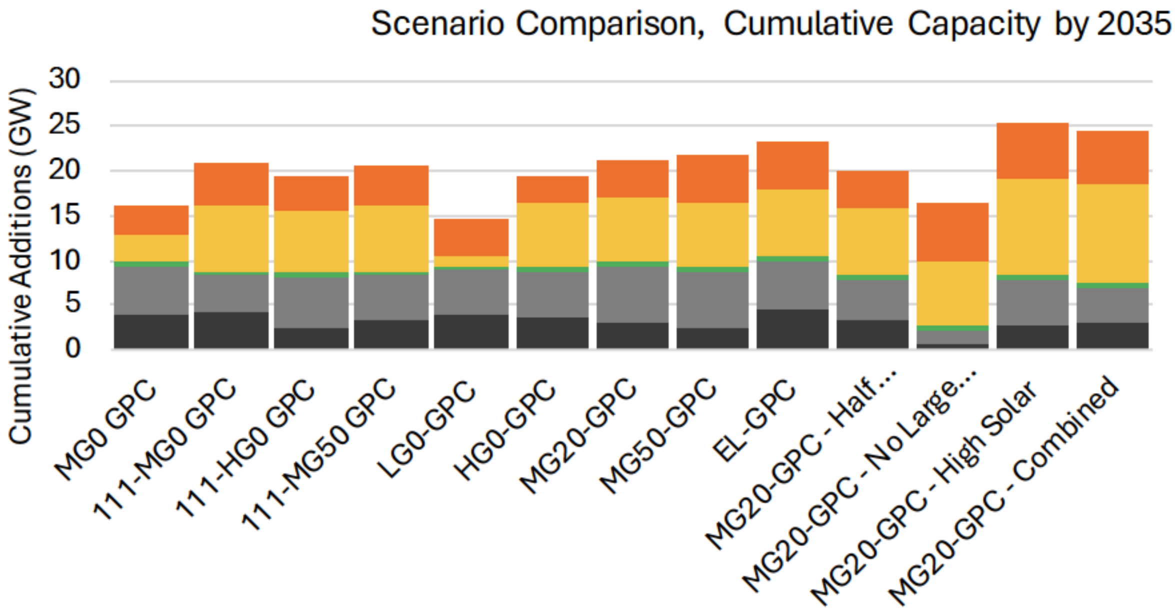
Cumulative Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4-hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2028	0	0	0	0	0	0	2055	0	0	0	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	4125	900	0	900	0	0	0	0	0	0	5025
2030	0	0	0	0	0	0	4125	2030	0	1530	500	0	0	0	0	0	6155
2031	260	790	0	0	0	0	5025	4170	0	1530	2640	0	0	0	0	0	10245
2032	1820	3480	0	0	0	0	6510	4415	0	1530	2640	245	0	0	0	0	16225
2033	1820	3480	0	0	0	240	7995	5083	0	1530	2640	913	0	0	0	0	18618
2034	1920	3480	0	0	0	300	9480	5330	0	1530	2640	1160	0	0	0	0	20510
2035	2980	3980	0	0	0	600	10965	5998	0	1530	2640	1828	0	0	0	0	24523
2036	2980	3980	0	0	0	900	12495	9253	300	1530	2640	3000	2083	0	0	300	29908
2037	2980	3980	0	0	0	1200	14025	9508	300	1530	2640	3000	2338	0	0	300	31993
2038	2980	3980	0	0	0	1500	15555	9763	300	1530	2640	3000	2593	0	0	300	34078
2039	2980	4660	0	0	0	1770	17085	10018	300	1530	2640	3000	2848	0	0	300	36813
2040	3080	4800	0	0	0	2070	18615	10273	600	1530	2640	3000	3103	0	0	600	39438
2041	3180	5040	0	0	0	2070	20145	10528	600	1530	2640	3000	3358	0	0	600	41563
2042	3550	5040	0	0	0	2070	21675	10783	600	1530	2640	3000	3613	0	0	600	43718
2043	3710	5040	0	0	210	2070	23205	11038	600	1530	2640	3000	3868	0	0	600	45873
2044	4030	5040	0	0	210	2370	24735	11293	600	1530	2640	3000	4123	0	0	600	48278
Total	**4030**	**5040**	**0**	**0**	**210**	**2370**	**24735**	**11293**	**600**	**1530**	**2640**	**3000**	**4123**	**0**	**0**	**600**	**48278**

Incremental Additions (MW)

Year	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar	Battery	Medium Duration Storage	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4-hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)	Battery 4-hr (T2_2)	Medium Duration Storage	Total Storage
2025																	
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	2055	0	0	0	0	0	0	0	0	0	2055
2029	0	0	0	0	0	0	2070	900	0	900	0	0	0	0	0	0	2970
2030	0	0	0	0	0	0	0	1130	0	630	500	0	0	0	0	0	1130
2031	260	790	0	0	0	0	900	2140	0	0	2140	0	0	0	0	0	4090
2032	1560	2690	0	0	0	0	1485	245	0	0	0	245	0	0	0	0	5980
2033	0	0	0	0	0	240	1485	668	0	0	0	668	0	0	0	0	2393
2034	100	0	0	0	0	60	1485	247	0	0	0	247	0	0	0	0	1892
2035	1060	500	0	0	0	300	1485	668	0	0	0	668	0	0	0	0	4013
2036	0	0	0	0	0	300	1530	3255	300	0	0	1172	2083	0	0	300	5385
2037	0	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2085
2038	0	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2085
2039	0	680	0	0	0	270	1530	255	0	0	0	0	255	0	0	0	2735
2040	100	140	0	0	0	300	1530	255	300	0	0	0	255	0	0	300	2625
2041	100	240	0	0	0	0	1530	255	0	0	0	0	255	0	0	0	2125
2042	370	0	0	0	0	0	1530	255	0	0	0	0	255	0	0	0	2155
2043	160	0	0	0	210	0	1530	255	0	0	0	0	255	0	0	0	2155
2044	320	0	0	0	0	300	1530	255	0	0	0	0	255	0	0	0	2405

Year	**2035**
Title	Scenario Comparison, Cumulative Capacity by 2035



	CT w/ SCR	CC	CC w/ CCS - Local	CC w/ CCS - Distant	Nuclear	Wind	Solar
MG0 GPC	3840	5340	0	0	0	630	2970
111-MG0 GPC	4230	4140	0	0	0	420	7310
111-HG0 GPC	2490	5520	0	0	0	600	7030
111-MG50 GPC	3330	4920	0	0	0	480	7310
LG0-GPC	3870	5010	0	0	0	540	1200
HG0-GPC	3480	5130	0	0	0	630	7310
MG20-GPC	3030	6180	0	0	0	600	7310
MG50-GPC	2280	6330	0	0	0	600	7310
EL-GPC	4560	5430	0	0	0	510	7310
MG20-GPC - Half L	3350	4500	0	0	0	600	7310
MG20-GPC - No La	710	1340	0	0	0	600	7310
MG20-GPC - High	2600	5100	0	0	0	600	10965
MG20-GPC - Com	2980	3980	0	0	0	600	10965

MG0	4200	7200	0	0	0	900	4500
111-MG0	4500	5700	0	0	0	900	9900
111-HG0	2700	7500	0	0	0	900	9600
111-MG50	3600	6600	0	0	0	900	9900
LG0	4500	6600	0	0	0	900	1800
HG0	3900	6900	0	0	0	900	9900
MG20	3300	8100	0	0	0	900	9900
MG50	2700	8100	0	0	0	900	9900

EL	5400	7800	0	0	0	900	9900
MG20-GPC - Half L	3350	4500	0	0	0	600	7310
MG20-GPC - No La	710	1340	0	0	0	600	7310
MG20-GPC - High	2600	5100	0	0	0	600	10965
MG20-GPC - Com	2980	3980	0	0	0	600	10965

■ Medium Duration Storage
■ Battery
■ Solar
■ Wind
■ Nuclear
■ CC w/ CCS - Distant
■ CC w/ CCS - Local
■ CC
■ CT w/ SCR

Battery	Medium Duration Storage	Total
3360	0	16140
4830	0	20930
3900	0	19540
4470	0	20510
3900	0	14520
3000	0	19550
4170	0	21290
5160	0	21680
5370	0	23180
4170	0	19930
6370	0	16330
5998	0	25263
5998	0	24523

3900	0	20700
5700	0	26700
3900	0	24600
5100	0	26100
4500	0	18300
3000	0	24600
5100	0	27300
6300	0	27900

6300	0	30300
4170	0	19930
6370	0	16330
5998	0	25263
5998	0	24523

Scenario	Property	Year	CT w/ SCR	CC
MG0	Incremental Additions (MW)	2025	0	0
MG0	Incremental Additions (MW)	2026	0	0
MG0	Incremental Additions (MW)	2027	0	0
MG0	Incremental Additions (MW)	2028	0	0
MG0	Incremental Additions (MW)	2029	1200	900
MG0	Incremental Additions (MW)	2030	300	1800
MG0	Incremental Additions (MW)	2031	900	2400
MG0	Incremental Additions (MW)	2032	300	300
MG0	Incremental Additions (MW)	2033	600	0
MG0	Incremental Additions (MW)	2034	600	0
MG0	Incremental Additions (MW)	2035	300	1800
MG0	Incremental Additions (MW)	2036	1200	2100
MG0	Incremental Additions (MW)	2037	300	0
MG0	Incremental Additions (MW)	2038	300	0
MG0	Incremental Additions (MW)	2039	300	1200
MG0	Incremental Additions (MW)	2040	900	0
MG0	Incremental Additions (MW)	2041	900	0
MG0	Incremental Additions (MW)	2042	900	0
MG0	Incremental Additions (MW)	2043	600	0
MG0	Incremental Additions (MW)	2044	300	0
MG0	Incremental Additions (MW)	Total	9900	10500
MG0 GPC	Incremental Additions (MW)	2026	0	0
MG0 GPC	Incremental Additions (MW)	2027	0	0
MG0 GPC	Incremental Additions (MW)	2028	0	0
MG0 GPC	Incremental Additions (MW)	2029	1200	0
MG0 GPC	Incremental Additions (MW)	2030	300	1500
MG0 GPC	Incremental Additions (MW)	2031	900	2190
MG0 GPC	Incremental Additions (MW)	2032	300	240
MG0 GPC	Incremental Additions (MW)	2033	420	0
MG0 GPC	Incremental Additions (MW)	2034	420	0
MG0 GPC	Incremental Additions (MW)	2035	300	1410
MG0 GPC	Incremental Additions (MW)	2036	1200	2100
MG0 GPC	Incremental Additions (MW)	2037	240	0
MG0 GPC	Incremental Additions (MW)	2038	300	0
MG0 GPC	Incremental Additions (MW)	2039	300	870
MG0 GPC	Incremental Additions (MW)	2040	810	0
MG0 GPC	Incremental Additions (MW)	2041	210	0
MG0 GPC	Incremental Additions (MW)	2042	510	0
MG0 GPC	Incremental Additions (MW)	2043	420	0
MG0 GPC	Incremental Additions (MW)	2044	210	0
MG0 GPC	Incremental Additions (MW)	Total	8040	8310
111-MG0	Incremental Additions (MW)	2026	0	0
111-MG0	Incremental Additions (MW)	2027	0	0
111-MG0	Incremental Additions (MW)	2028	0	0
111-MG0	Incremental Additions (MW)	2029	900	900

111-MG0	Incremental Additions (MW)	2030	600	1500
111-MG0	Incremental Additions (MW)	2031	900	1800
111-MG0	Incremental Additions (MW)	2032	300	300
111-MG0	Incremental Additions (MW)	2033	900	600
111-MG0	Incremental Additions (MW)	2034	0	600
111-MG0	Incremental Additions (MW)	2035	900	0
111-MG0	Incremental Additions (MW)	2036	0	300
111-MG0	Incremental Additions (MW)	2037	0	900
111-MG0	Incremental Additions (MW)	2038	300	300
111-MG0	Incremental Additions (MW)	2039	900	1500
111-MG0	Incremental Additions (MW)	2040	600	1200
111-MG0	Incremental Additions (MW)	2041	900	0
111-MG0	Incremental Additions (MW)	2042	600	600
111-MG0	Incremental Additions (MW)	2043	300	300
111-MG0	Incremental Additions (MW)	2044	300	600
111-MG0	Incremental Additions (MW)	Total	8400	11400
111-MG0 GPC	Incremental Additions (MW)	2026	0	0
111-MG0 GPC	Incremental Additions (MW)	2027	0	0
111-MG0 GPC	Incremental Additions (MW)	2028	0	0
111-MG0 GPC	Incremental Additions (MW)	2029	900	0
111-MG0 GPC	Incremental Additions (MW)	2030	600	1260
111-MG0 GPC	Incremental Additions (MW)	2031	900	1800
111-MG0 GPC	Incremental Additions (MW)	2032	300	240
111-MG0 GPC	Incremental Additions (MW)	2033	630	420
111-MG0 GPC	Incremental Additions (MW)	2034	0	420
111-MG0 GPC	Incremental Additions (MW)	2035	900	0
111-MG0 GPC	Incremental Additions (MW)	2036	0	210
111-MG0 GPC	Incremental Additions (MW)	2037	0	630
111-MG0 GPC	Incremental Additions (MW)	2038	210	210
111-MG0 GPC	Incremental Additions (MW)	2039	900	1500
111-MG0 GPC	Incremental Additions (MW)	2040	600	1200
111-MG0 GPC	Incremental Additions (MW)	2041	330	0
111-MG0 GPC	Incremental Additions (MW)	2042	390	420
111-MG0 GPC	Incremental Additions (MW)	2043	150	210
111-MG0 GPC	Incremental Additions (MW)	2044	240	420
111-MG0 GPC	Incremental Additions (MW)	Total	7050	8940
111-HG0	Incremental Additions (MW)	2026	0	0
111-HG0	Incremental Additions (MW)	2027	0	0
111-HG0	Incremental Additions (MW)	2028	0	0
111-HG0	Incremental Additions (MW)	2029	300	900
111-HG0	Incremental Additions (MW)	2030	900	2400
111-HG0	Incremental Additions (MW)	2031	300	900
111-HG0	Incremental Additions (MW)	2032	300	600
111-HG0	Incremental Additions (MW)	2033	0	1200
111-HG0	Incremental Additions (MW)	2034	600	600
111-HG0	Incremental Additions (MW)	2035	300	900
111-HG0	Incremental Additions (MW)	2036	600	600
111-HG0	Incremental Additions (MW)	2037	1200	0

111-HG0	Incremental Additions (MW)	2038	0	0
111-HG0	Incremental Additions (MW)	2039	600	600
111-HG0	Incremental Additions (MW)	2040	600	600
111-HG0	Incremental Additions (MW)	2041	900	0
111-HG0	Incremental Additions (MW)	2042	600	300
111-HG0	Incremental Additions (MW)	2043	300	600
111-HG0	Incremental Additions (MW)	2044	300	600
111-HG0	Incremental Additions (MW)	Total	7800	10800
111-HG0 GPC	Incremental Additions (MW)	2026	0	0
111-HG0 GPC	Incremental Additions (MW)	2027	0	0
111-HG0 GPC	Incremental Additions (MW)	2028	0	0
111-HG0 GPC	Incremental Additions (MW)	2029	300	0
111-HG0 GPC	Incremental Additions (MW)	2030	900	1770
111-HG0 GPC	Incremental Additions (MW)	2031	300	900
111-HG0 GPC	Incremental Additions (MW)	2032	300	600
111-HG0 GPC	Incremental Additions (MW)	2033	0	960
111-HG0 GPC	Incremental Additions (MW)	2034	390	420
111-HG0 GPC	Incremental Additions (MW)	2035	300	870
111-HG0 GPC	Incremental Additions (MW)	2036	420	420
111-HG0 GPC	Incremental Additions (MW)	2037	840	0
111-HG0 GPC	Incremental Additions (MW)	2038	0	0
111-HG0 GPC	Incremental Additions (MW)	2039	600	600
111-HG0 GPC	Incremental Additions (MW)	2040	600	600
111-HG0 GPC	Incremental Additions (MW)	2041	210	0
111-HG0 GPC	Incremental Additions (MW)	2042	300	210
111-HG0 GPC	Incremental Additions (MW)	2043	120	420
111-HG0 GPC	Incremental Additions (MW)	2044	240	420
111-HG0 GPC	Incremental Additions (MW)	Total	5820	8190
111-MG50	Incremental Additions (MW)	2026	0	0
111-MG50	Incremental Additions (MW)	2027	0	0
111-MG50	Incremental Additions (MW)	2028	0	0
111-MG50	Incremental Additions (MW)	2029	900	900
111-MG50	Incremental Additions (MW)	2030	600	1500
111-MG50	Incremental Additions (MW)	2031	300	2100
111-MG50	Incremental Additions (MW)	2032	300	900
111-MG50	Incremental Additions (MW)	2033	600	600
111-MG50	Incremental Additions (MW)	2034	300	300
111-MG50	Incremental Additions (MW)	2035	600	300
111-MG50	Incremental Additions (MW)	2036	900	300
111-MG50	Incremental Additions (MW)	2037	0	300
111-MG50	Incremental Additions (MW)	2038	0	0
111-MG50	Incremental Additions (MW)	2039	1200	300
111-MG50	Incremental Additions (MW)	2040	300	300
111-MG50	Incremental Additions (MW)	2041	0	300
111-MG50	Incremental Additions (MW)	2042	0	0
111-MG50	Incremental Additions (MW)	2043	0	600
111-MG50	Incremental Additions (MW)	2044	0	300
111-MG50	Incremental Additions (MW)	Total	6000	9000

111-MG50 GPC	Incremental Additions (MW)	2026	0	0
111-MG50 GPC	Incremental Additions (MW)	2027	0	0
111-MG50 GPC	Incremental Additions (MW)	2028	0	0
111-MG50 GPC	Incremental Additions (MW)	2029	900	0
111-MG50 GPC	Incremental Additions (MW)	2030	600	1260
111-MG50 GPC	Incremental Additions (MW)	2031	300	2100
111-MG50 GPC	Incremental Additions (MW)	2032	300	630
111-MG50 GPC	Incremental Additions (MW)	2033	420	420
111-MG50 GPC	Incremental Additions (MW)	2034	210	210
111-MG50 GPC	Incremental Additions (MW)	2035	600	300
111-MG50 GPC	Incremental Additions (MW)	2036	630	210
111-MG50 GPC	Incremental Additions (MW)	2037	0	210
111-MG50 GPC	Incremental Additions (MW)	2038	0	0
111-MG50 GPC	Incremental Additions (MW)	2039	1200	300
111-MG50 GPC	Incremental Additions (MW)	2040	300	300
111-MG50 GPC	Incremental Additions (MW)	2041	0	210
111-MG50 GPC	Incremental Additions (MW)	2042	0	0
111-MG50 GPC	Incremental Additions (MW)	2043	0	510
111-MG50 GPC	Incremental Additions (MW)	2044	0	240
111-MG50 GPC	Incremental Additions (MW)	Total	5460	6900
LG0	Incremental Additions (MW)	2026	0	0
LG0	Incremental Additions (MW)	2027	0	0
LG0	Incremental Additions (MW)	2028	0	0
LG0	Incremental Additions (MW)	2029	900	900
LG0	Incremental Additions (MW)	2030	600	1500
LG0	Incremental Additions (MW)	2031	300	3000
LG0	Incremental Additions (MW)	2032	900	0
LG0	Incremental Additions (MW)	2033	900	0
LG0	Incremental Additions (MW)	2034	600	0
LG0	Incremental Additions (MW)	2035	300	1200
LG0	Incremental Additions (MW)	2036	900	2700
LG0	Incremental Additions (MW)	2037	300	0
LG0	Incremental Additions (MW)	2038	300	0
LG0	Incremental Additions (MW)	2039	300	1200
LG0	Incremental Additions (MW)	2040	1200	0
LG0	Incremental Additions (MW)	2041	600	0
LG0	Incremental Additions (MW)	2042	1200	0
LG0	Incremental Additions (MW)	2043	300	0
LG0	Incremental Additions (MW)	2044	900	0
LG0	Incremental Additions (MW)	Total	10500	10500
LG0-GPC	Incremental Additions (MW)	2026	0	0
LG0-GPC	Incremental Additions (MW)	2027	0	0
LG0-GPC	Incremental Additions (MW)	2028	0	0
LG0-GPC	Incremental Additions (MW)	2029	900	0
LG0-GPC	Incremental Additions (MW)	2030	600	1200
LG0-GPC	Incremental Additions (MW)	2031	300	2790
LG0-GPC	Incremental Additions (MW)	2032	720	0
LG0-GPC	Incremental Additions (MW)	2033	630	0

LG0-GPC	Incremental Additions (MW)	2034	420	0
LG0-GPC	Incremental Additions (MW)	2035	300	1020
LG0-GPC	Incremental Additions (MW)	2036	900	2700
LG0-GPC	Incremental Additions (MW)	2037	240	0
LG0-GPC	Incremental Additions (MW)	2038	300	0
LG0-GPC	Incremental Additions (MW)	2039	300	870
LG0-GPC	Incremental Additions (MW)	2040	960	0
LG0-GPC	Incremental Additions (MW)	2041	0	0
LG0-GPC	Incremental Additions (MW)	2042	690	0
LG0-GPC	Incremental Additions (MW)	2043	150	0
LG0-GPC	Incremental Additions (MW)	2044	510	0
LG0-GPC	Incremental Additions (MW)	Total	7920	8580
HG0	Incremental Additions (MW)	2026	0	0
HG0	Incremental Additions (MW)	2027	0	0
HG0	Incremental Additions (MW)	2028	0	0
HG0	Incremental Additions (MW)	2029	300	900
HG0	Incremental Additions (MW)	2030	900	1500
HG0	Incremental Additions (MW)	2031	300	2700
HG0	Incremental Additions (MW)	2032	600	0
HG0	Incremental Additions (MW)	2033	600	0
HG0	Incremental Additions (MW)	2034	600	0
HG0	Incremental Additions (MW)	2035	600	1800
HG0	Incremental Additions (MW)	2036	600	2400
HG0	Incremental Additions (MW)	2037	300	0
HG0	Incremental Additions (MW)	2038	300	0
HG0	Incremental Additions (MW)	2039	300	1200
HG0	Incremental Additions (MW)	2040	900	0
HG0	Incremental Additions (MW)	2041	600	0
HG0	Incremental Additions (MW)	2042	600	0
HG0	Incremental Additions (MW)	2043	300	0
HG0	Incremental Additions (MW)	2044	300	0
HG0	Incremental Additions (MW)	Total	8100	10500
HG0-GPC	Incremental Additions (MW)	2026	0	0
HG0-GPC	Incremental Additions (MW)	2027	0	0
HG0-GPC	Incremental Additions (MW)	2028	0	0
HG0-GPC	Incremental Additions (MW)	2029	300	0
HG0-GPC	Incremental Additions (MW)	2030	900	1200
HG0-GPC	Incremental Additions (MW)	2031	300	2640
HG0-GPC	Incremental Additions (MW)	2032	540	0
HG0-GPC	Incremental Additions (MW)	2033	420	0
HG0-GPC	Incremental Additions (MW)	2034	420	0
HG0-GPC	Incremental Additions (MW)	2035	600	1290
HG0-GPC	Incremental Additions (MW)	2036	600	2400
HG0-GPC	Incremental Additions (MW)	2037	240	0
HG0-GPC	Incremental Additions (MW)	2038	300	0
HG0-GPC	Incremental Additions (MW)	2039	300	840
HG0-GPC	Incremental Additions (MW)	2040	780	0
HG0-GPC	Incremental Additions (MW)	2041	0	0

HG0-GPC	Incremental Additions (MW)	2042	300	0
HG0-GPC	Incremental Additions (MW)	2043	180	0
HG0-GPC	Incremental Additions (MW)	2044	210	0
HG0-GPC	Incremental Additions (MW)	Total	6390	8370
MG20	Incremental Additions (MW)	2026	0	0
MG20	Incremental Additions (MW)	2027	0	0
MG20	Incremental Additions (MW)	2028	0	0
MG20	Incremental Additions (MW)	2029	1200	900
MG20	Incremental Additions (MW)	2030	300	2700
MG20	Incremental Additions (MW)	2031	0	2400
MG20	Incremental Additions (MW)	2032	600	300
MG20	Incremental Additions (MW)	2033	300	0
MG20	Incremental Additions (MW)	2034	600	0
MG20	Incremental Additions (MW)	2035	300	1800
MG20	Incremental Additions (MW)	2036	900	1200
MG20	Incremental Additions (MW)	2037	300	0
MG20	Incremental Additions (MW)	2038	600	0
MG20	Incremental Additions (MW)	2039	300	0
MG20	Incremental Additions (MW)	2040	300	0
MG20	Incremental Additions (MW)	2041	300	0
MG20	Incremental Additions (MW)	2042	1200	0
MG20	Incremental Additions (MW)	2043	300	0
MG20	Incremental Additions (MW)	2044	900	0
MG20	Incremental Additions (MW)	Total	8400	9300
MG20-GPC	Incremental Additions (MW)	2026	0	0
MG20-GPC	Incremental Additions (MW)	2027	0	0
MG20-GPC	Incremental Additions (MW)	2028	0	0
MG20-GPC	Incremental Additions (MW)	2029	1200	0
MG20-GPC	Incremental Additions (MW)	2030	300	2130
MG20-GPC	Incremental Additions (MW)	2031	0	2400
MG20-GPC	Incremental Additions (MW)	2032	600	270
MG20-GPC	Incremental Additions (MW)	2033	210	0
MG20-GPC	Incremental Additions (MW)	2034	420	0
MG20-GPC	Incremental Additions (MW)	2035	300	1380
MG20-GPC	Incremental Additions (MW)	2036	900	1200
MG20-GPC	Incremental Additions (MW)	2037	300	0
MG20-GPC	Incremental Additions (MW)	2038	540	0
MG20-GPC	Incremental Additions (MW)	2039	210	0
MG20-GPC	Incremental Additions (MW)	2040	300	0
MG20-GPC	Incremental Additions (MW)	2041	120	0
MG20-GPC	Incremental Additions (MW)	2042	690	0
MG20-GPC	Incremental Additions (MW)	2043	150	0
MG20-GPC	Incremental Additions (MW)	2044	660	0
MG20-GPC	Incremental Additions (MW)	Total	6900	7380
MG50	Incremental Additions (MW)	2026	0	0
MG50	Incremental Additions (MW)	2027	0	0
MG50	Incremental Additions (MW)	2028	0	0
MG50	Incremental Additions (MW)	2029	900	900

MG50	Incremental Additions (MW)	2030	0	3000
MG50	Incremental Additions (MW)	2031	0	2700
MG50	Incremental Additions (MW)	2032	0	300
MG50	Incremental Additions (MW)	2033	300	0
MG50	Incremental Additions (MW)	2034	1200	0
MG50	Incremental Additions (MW)	2035	300	1200
MG50	Incremental Additions (MW)	2036	1800	1200
MG50	Incremental Additions (MW)	2037	0	0
MG50	Incremental Additions (MW)	2038	0	0
MG50	Incremental Additions (MW)	2039	0	0
MG50	Incremental Additions (MW)	2040	0	0
MG50	Incremental Additions (MW)	2041	0	0
MG50	Incremental Additions (MW)	2042	0	0
MG50	Incremental Additions (MW)	2043	0	0
MG50	Incremental Additions (MW)	2044	300	0
MG50	Incremental Additions (MW)	Total	4800	9300
MG50-GPC	Incremental Additions (MW)	2026	0	0
MG50-GPC	Incremental Additions (MW)	2027	0	0
MG50-GPC	Incremental Additions (MW)	2028	0	0
MG50-GPC	Incremental Additions (MW)	2029	900	0
MG50-GPC	Incremental Additions (MW)	2030	0	2340
MG50-GPC	Incremental Additions (MW)	2031	0	2700
MG50-GPC	Incremental Additions (MW)	2032	0	300
MG50-GPC	Incremental Additions (MW)	2033	270	0
MG50-GPC	Incremental Additions (MW)	2034	810	0
MG50-GPC	Incremental Additions (MW)	2035	300	990
MG50-GPC	Incremental Additions (MW)	2036	1800	1200
MG50-GPC	Incremental Additions (MW)	2037	0	0
MG50-GPC	Incremental Additions (MW)	2038	0	0
MG50-GPC	Incremental Additions (MW)	2039	0	0
MG50-GPC	Incremental Additions (MW)	2040	0	0
MG50-GPC	Incremental Additions (MW)	2041	0	0
MG50-GPC	Incremental Additions (MW)	2042	0	0
MG50-GPC	Incremental Additions (MW)	2043	0	0
MG50-GPC	Incremental Additions (MW)	2044	240	0
MG50-GPC	Incremental Additions (MW)	Total	4320	7530
EL	Incremental Additions (MW)	2026	0	0
EL	Incremental Additions (MW)	2027	0	0
EL	Incremental Additions (MW)	2028	0	0
EL	Incremental Additions (MW)	2029	900	900
EL	Incremental Additions (MW)	2030	600	4500
EL	Incremental Additions (MW)	2031	600	1500
EL	Incremental Additions (MW)	2032	900	0
EL	Incremental Additions (MW)	2033	900	0
EL	Incremental Additions (MW)	2034	1500	0
EL	Incremental Additions (MW)	2035	0	900
EL	Incremental Additions (MW)	2036	900	0
EL	Incremental Additions (MW)	2037	0	0

EL	Incremental Additions (MW)	2038	0	0
EL	Incremental Additions (MW)	2039	0	0
EL	Incremental Additions (MW)	2040	0	0
EL	Incremental Additions (MW)	2041	0	0
EL	Incremental Additions (MW)	2042	0	0
EL	Incremental Additions (MW)	2043	0	0
EL	Incremental Additions (MW)	2044	0	0
EL	Incremental Additions (MW)	Total	6300	7800
EL-GPC	Incremental Additions (MW)	2026	0	0
EL-GPC	Incremental Additions (MW)	2027	0	0
EL-GPC	Incremental Additions (MW)	2028	0	0
EL-GPC	Incremental Additions (MW)	2029	900	0
EL-GPC	Incremental Additions (MW)	2030	570	3030
EL-GPC	Incremental Additions (MW)	2031	600	1500
EL-GPC	Incremental Additions (MW)	2032	900	0
EL-GPC	Incremental Additions (MW)	2033	630	0
EL-GPC	Incremental Additions (MW)	2034	960	0
EL-GPC	Incremental Additions (MW)	2035	0	900
EL-GPC	Incremental Additions (MW)	2036	900	0
EL-GPC	Incremental Additions (MW)	2037	0	0
EL-GPC	Incremental Additions (MW)	2038	0	0
EL-GPC	Incremental Additions (MW)	2039	0	0
EL-GPC	Incremental Additions (MW)	2040	0	0
EL-GPC	Incremental Additions (MW)	2041	0	0
EL-GPC	Incremental Additions (MW)	2042	0	0
EL-GPC	Incremental Additions (MW)	2043	0	0
EL-GPC	Incremental Additions (MW)	2044	0	0
EL-GPC	Incremental Additions (MW)	Total	5460	5430
MG0	Cumulative Additions (MW)	2025	0	0
MG0	Cumulative Additions (MW)	2026	0	0
MG0	Cumulative Additions (MW)	2027	0	0
MG0	Cumulative Additions (MW)	2028	0	0
MG0	Cumulative Additions (MW)	2029	1200	900
MG0	Cumulative Additions (MW)	2030	1500	2700
MG0	Cumulative Additions (MW)	2031	2400	5100
MG0	Cumulative Additions (MW)	2032	2700	5400
MG0	Cumulative Additions (MW)	2033	3300	5400
MG0	Cumulative Additions (MW)	2034	3900	5400
MG0	Cumulative Additions (MW)	2035	4200	7200
MG0	Cumulative Additions (MW)	2036	5400	9300
MG0	Cumulative Additions (MW)	2037	5700	9300
MG0	Cumulative Additions (MW)	2038	6000	9300
MG0	Cumulative Additions (MW)	2039	6300	10500
MG0	Cumulative Additions (MW)	2040	7200	10500
MG0	Cumulative Additions (MW)	2041	8100	10500
MG0	Cumulative Additions (MW)	2042	9000	10500
MG0	Cumulative Additions (MW)	2043	9600	10500
MG0	Cumulative Additions (MW)	2044	9900	10500

MG0	Cumulative Additions (MW)	Total	9900	10500
MG0 GPC	Cumulative Additions (MW)	2026	0	0
MG0 GPC	Cumulative Additions (MW)	2027	0	0
MG0 GPC	Cumulative Additions (MW)	2028	0	0
MG0 GPC	Cumulative Additions (MW)	2029	1200	0
MG0 GPC	Cumulative Additions (MW)	2030	1500	1500
MG0 GPC	Cumulative Additions (MW)	2031	2400	3690
MG0 GPC	Cumulative Additions (MW)	2032	2700	3930
MG0 GPC	Cumulative Additions (MW)	2033	3120	3930
MG0 GPC	Cumulative Additions (MW)	2034	3540	3930
MG0 GPC	Cumulative Additions (MW)	2035	3840	5340
MG0 GPC	Cumulative Additions (MW)	2036	5040	7440
MG0 GPC	Cumulative Additions (MW)	2037	5280	7440
MG0 GPC	Cumulative Additions (MW)	2038	5580	7440
MG0 GPC	Cumulative Additions (MW)	2039	5880	8310
MG0 GPC	Cumulative Additions (MW)	2040	6690	8310
MG0 GPC	Cumulative Additions (MW)	2041	6900	8310
MG0 GPC	Cumulative Additions (MW)	2042	7410	8310
MG0 GPC	Cumulative Additions (MW)	2043	7830	8310
MG0 GPC	Cumulative Additions (MW)	2044	8040	8310
MG0 GPC	Cumulative Additions (MW)	Total	8040	8310
111-MG0	Cumulative Additions (MW)	2026	0	0
111-MG0	Cumulative Additions (MW)	2027	0	0
111-MG0	Cumulative Additions (MW)	2028	0	0
111-MG0	Cumulative Additions (MW)	2029	900	900
111-MG0	Cumulative Additions (MW)	2030	1500	2400
111-MG0	Cumulative Additions (MW)	2031	2400	4200
111-MG0	Cumulative Additions (MW)	2032	2700	4500
111-MG0	Cumulative Additions (MW)	2033	3600	5100
111-MG0	Cumulative Additions (MW)	2034	3600	5700
111-MG0	Cumulative Additions (MW)	2035	4500	5700
111-MG0	Cumulative Additions (MW)	2036	4500	6000
111-MG0	Cumulative Additions (MW)	2037	4500	6900
111-MG0	Cumulative Additions (MW)	2038	4800	7200
111-MG0	Cumulative Additions (MW)	2039	5700	8700
111-MG0	Cumulative Additions (MW)	2040	6300	9900
111-MG0	Cumulative Additions (MW)	2041	7200	9900
111-MG0	Cumulative Additions (MW)	2042	7800	10500
111-MG0	Cumulative Additions (MW)	2043	8100	10800
111-MG0	Cumulative Additions (MW)	2044	8400	11400
111-MG0	Cumulative Additions (MW)	Total	8400	11400
111-MG0 GPC	Cumulative Additions (MW)	2026	0	0
111-MG0 GPC	Cumulative Additions (MW)	2027	0	0
111-MG0 GPC	Cumulative Additions (MW)	2028	0	0
111-MG0 GPC	Cumulative Additions (MW)	2029	900	0
111-MG0 GPC	Cumulative Additions (MW)	2030	1500	1260
111-MG0 GPC	Cumulative Additions (MW)	2031	2400	3060
111-MG0 GPC	Cumulative Additions (MW)	2032	2700	3300

111-MG0 GPC	Cumulative Additions (MW)	2033	3330	3720
111-MG0 GPC	Cumulative Additions (MW)	2034	3330	4140
111-MG0 GPC	Cumulative Additions (MW)	2035	4230	4140
111-MG0 GPC	Cumulative Additions (MW)	2036	4230	4350
111-MG0 GPC	Cumulative Additions (MW)	2037	4230	4980
111-MG0 GPC	Cumulative Additions (MW)	2038	4440	5190
111-MG0 GPC	Cumulative Additions (MW)	2039	5340	6690
111-MG0 GPC	Cumulative Additions (MW)	2040	5940	7890
111-MG0 GPC	Cumulative Additions (MW)	2041	6270	7890
111-MG0 GPC	Cumulative Additions (MW)	2042	6660	8310
111-MG0 GPC	Cumulative Additions (MW)	2043	6810	8520
111-MG0 GPC	Cumulative Additions (MW)	2044	7050	8940
111-MG0 GPC	Cumulative Additions (MW)	Total	7050	8940
111-HG0	Cumulative Additions (MW)	2026	0	0
111-HG0	Cumulative Additions (MW)	2027	0	0
111-HG0	Cumulative Additions (MW)	2028	0	0
111-HG0	Cumulative Additions (MW)	2029	300	900
111-HG0	Cumulative Additions (MW)	2030	1200	3300
111-HG0	Cumulative Additions (MW)	2031	1500	4200
111-HG0	Cumulative Additions (MW)	2032	1800	4800
111-HG0	Cumulative Additions (MW)	2033	1800	6000
111-HG0	Cumulative Additions (MW)	2034	2400	6600
111-HG0	Cumulative Additions (MW)	2035	2700	7500
111-HG0	Cumulative Additions (MW)	2036	3300	8100
111-HG0	Cumulative Additions (MW)	2037	4500	8100
111-HG0	Cumulative Additions (MW)	2038	4500	8100
111-HG0	Cumulative Additions (MW)	2039	5100	8700
111-HG0	Cumulative Additions (MW)	2040	5700	9300
111-HG0	Cumulative Additions (MW)	2041	6600	9300
111-HG0	Cumulative Additions (MW)	2042	7200	9600
111-HG0	Cumulative Additions (MW)	2043	7500	10200
111-HG0	Cumulative Additions (MW)	2044	7800	10800
111-HG0	Cumulative Additions (MW)	Total	7800	10800
111-HG0 GPC	Cumulative Additions (MW)	2026	0	0
111-HG0 GPC	Cumulative Additions (MW)	2027	0	0
111-HG0 GPC	Cumulative Additions (MW)	2028	0	0
111-HG0 GPC	Cumulative Additions (MW)	2029	300	0
111-HG0 GPC	Cumulative Additions (MW)	2030	1200	1770
111-HG0 GPC	Cumulative Additions (MW)	2031	1500	2670
111-HG0 GPC	Cumulative Additions (MW)	2032	1800	3270
111-HG0 GPC	Cumulative Additions (MW)	2033	1800	4230
111-HG0 GPC	Cumulative Additions (MW)	2034	2190	4650
111-HG0 GPC	Cumulative Additions (MW)	2035	2490	5520
111-HG0 GPC	Cumulative Additions (MW)	2036	2910	5940
111-HG0 GPC	Cumulative Additions (MW)	2037	3750	5940
111-HG0 GPC	Cumulative Additions (MW)	2038	3750	5940
111-HG0 GPC	Cumulative Additions (MW)	2039	4350	6540
111-HG0 GPC	Cumulative Additions (MW)	2040	4950	7140

111-HG0 GPC	Cumulative Additions (MW)	2041	5160	7140
111-HG0 GPC	Cumulative Additions (MW)	2042	5460	7350
111-HG0 GPC	Cumulative Additions (MW)	2043	5580	7770
111-HG0 GPC	Cumulative Additions (MW)	2044	5820	8190
111-HG0 GPC	Cumulative Additions (MW)	Total	5820	8190
111-MG50	Cumulative Additions (MW)	2026	0	0
111-MG50	Cumulative Additions (MW)	2027	0	0
111-MG50	Cumulative Additions (MW)	2028	0	0
111-MG50	Cumulative Additions (MW)	2029	900	900
111-MG50	Cumulative Additions (MW)	2030	1500	2400
111-MG50	Cumulative Additions (MW)	2031	1800	4500
111-MG50	Cumulative Additions (MW)	2032	2100	5400
111-MG50	Cumulative Additions (MW)	2033	2700	6000
111-MG50	Cumulative Additions (MW)	2034	3000	6300
111-MG50	Cumulative Additions (MW)	2035	3600	6600
111-MG50	Cumulative Additions (MW)	2036	4500	6900
111-MG50	Cumulative Additions (MW)	2037	4500	7200
111-MG50	Cumulative Additions (MW)	2038	4500	7200
111-MG50	Cumulative Additions (MW)	2039	5700	7500
111-MG50	Cumulative Additions (MW)	2040	6000	7800
111-MG50	Cumulative Additions (MW)	2041	6000	8100
111-MG50	Cumulative Additions (MW)	2042	6000	8100
111-MG50	Cumulative Additions (MW)	2043	6000	8700
111-MG50	Cumulative Additions (MW)	2044	6000	9000
111-MG50	Cumulative Additions (MW)	Total	6000	9000
111-MG50 GPC	Cumulative Additions (MW)	2026	0	0
111-MG50 GPC	Cumulative Additions (MW)	2027	0	0
111-MG50 GPC	Cumulative Additions (MW)	2028	0	0
111-MG50 GPC	Cumulative Additions (MW)	2029	900	0
111-MG50 GPC	Cumulative Additions (MW)	2030	1500	1260
111-MG50 GPC	Cumulative Additions (MW)	2031	1800	3360
111-MG50 GPC	Cumulative Additions (MW)	2032	2100	3990
111-MG50 GPC	Cumulative Additions (MW)	2033	2520	4410
111-MG50 GPC	Cumulative Additions (MW)	2034	2730	4620
111-MG50 GPC	Cumulative Additions (MW)	2035	3330	4920
111-MG50 GPC	Cumulative Additions (MW)	2036	3960	5130
111-MG50 GPC	Cumulative Additions (MW)	2037	3960	5340
111-MG50 GPC	Cumulative Additions (MW)	2038	3960	5340
111-MG50 GPC	Cumulative Additions (MW)	2039	5160	5640
111-MG50 GPC	Cumulative Additions (MW)	2040	5460	5940
111-MG50 GPC	Cumulative Additions (MW)	2041	5460	6150
111-MG50 GPC	Cumulative Additions (MW)	2042	5460	6150
111-MG50 GPC	Cumulative Additions (MW)	2043	5460	6660
111-MG50 GPC	Cumulative Additions (MW)	2044	5460	6900
111-MG50 GPC	Cumulative Additions (MW)	Total	5460	6900
LG0	Cumulative Additions (MW)	2026	0	0
LG0	Cumulative Additions (MW)	2027	0	0
LG0	Cumulative Additions (MW)	2028	0	0

LG0	Cumulative Additions (MW)	2029	900	900
LG0	Cumulative Additions (MW)	2030	1500	2400
LG0	Cumulative Additions (MW)	2031	1800	5400
LG0	Cumulative Additions (MW)	2032	2700	5400
LG0	Cumulative Additions (MW)	2033	3600	5400
LG0	Cumulative Additions (MW)	2034	4200	5400
LG0	Cumulative Additions (MW)	2035	4500	6600
LG0	Cumulative Additions (MW)	2036	5400	9300
LG0	Cumulative Additions (MW)	2037	5700	9300
LG0	Cumulative Additions (MW)	2038	6000	9300
LG0	Cumulative Additions (MW)	2039	6300	10500
LG0	Cumulative Additions (MW)	2040	7500	10500
LG0	Cumulative Additions (MW)	2041	8100	10500
LG0	Cumulative Additions (MW)	2042	9300	10500
LG0	Cumulative Additions (MW)	2043	9600	10500
LG0	Cumulative Additions (MW)	2044	10500	10500
LG0	Cumulative Additions (MW)	Total	10500	10500
LG0-GPC	Cumulative Additions (MW)	2026	0	0
LG0-GPC	Cumulative Additions (MW)	2027	0	0
LG0-GPC	Cumulative Additions (MW)	2028	0	0
LG0-GPC	Cumulative Additions (MW)	2029	900	0
LG0-GPC	Cumulative Additions (MW)	2030	1500	1200
LG0-GPC	Cumulative Additions (MW)	2031	1800	3990
LG0-GPC	Cumulative Additions (MW)	2032	2520	3990
LG0-GPC	Cumulative Additions (MW)	2033	3150	3990
LG0-GPC	Cumulative Additions (MW)	2034	3570	3990
LG0-GPC	Cumulative Additions (MW)	2035	3870	5010
LG0-GPC	Cumulative Additions (MW)	2036	4770	7710
LG0-GPC	Cumulative Additions (MW)	2037	5010	7710
LG0-GPC	Cumulative Additions (MW)	2038	5310	7710
LG0-GPC	Cumulative Additions (MW)	2039	5610	8580
LG0-GPC	Cumulative Additions (MW)	2040	6570	8580
LG0-GPC	Cumulative Additions (MW)	2041	6570	8580
LG0-GPC	Cumulative Additions (MW)	2042	7260	8580
LG0-GPC	Cumulative Additions (MW)	2043	7410	8580
LG0-GPC	Cumulative Additions (MW)	2044	7920	8580
LG0-GPC	Cumulative Additions (MW)	Total	7920	8580
HG0	Cumulative Additions (MW)	2026	0	0
HG0	Cumulative Additions (MW)	2027	0	0
HG0	Cumulative Additions (MW)	2028	0	0
HG0	Cumulative Additions (MW)	2029	300	900
HG0	Cumulative Additions (MW)	2030	1200	2400
HG0	Cumulative Additions (MW)	2031	1500	5100
HG0	Cumulative Additions (MW)	2032	2100	5100
HG0	Cumulative Additions (MW)	2033	2700	5100
HG0	Cumulative Additions (MW)	2034	3300	5100
HG0	Cumulative Additions (MW)	2035	3900	6900
HG0	Cumulative Additions (MW)	2036	4500	9300

HG0	Cumulative Additions (MW)	2037	4800	9300
HG0	Cumulative Additions (MW)	2038	5100	9300
HG0	Cumulative Additions (MW)	2039	5400	10500
HG0	Cumulative Additions (MW)	2040	6300	10500
HG0	Cumulative Additions (MW)	2041	6900	10500
HG0	Cumulative Additions (MW)	2042	7500	10500
HG0	Cumulative Additions (MW)	2043	7800	10500
HG0	Cumulative Additions (MW)	2044	8100	10500
HG0	Cumulative Additions (MW)	Total	8100	10500
HG0-GPC	Cumulative Additions (MW)	2026	0	0
HG0-GPC	Cumulative Additions (MW)	2027	0	0
HG0-GPC	Cumulative Additions (MW)	2028	0	0
HG0-GPC	Cumulative Additions (MW)	2029	300	0
HG0-GPC	Cumulative Additions (MW)	2030	1200	1200
HG0-GPC	Cumulative Additions (MW)	2031	1500	3840
HG0-GPC	Cumulative Additions (MW)	2032	2040	3840
HG0-GPC	Cumulative Additions (MW)	2033	2460	3840
HG0-GPC	Cumulative Additions (MW)	2034	2880	3840
HG0-GPC	Cumulative Additions (MW)	2035	3480	5130
HG0-GPC	Cumulative Additions (MW)	2036	4080	7530
HG0-GPC	Cumulative Additions (MW)	2037	4320	7530
HG0-GPC	Cumulative Additions (MW)	2038	4620	7530
HG0-GPC	Cumulative Additions (MW)	2039	4920	8370
HG0-GPC	Cumulative Additions (MW)	2040	5700	8370
HG0-GPC	Cumulative Additions (MW)	2041	5700	8370
HG0-GPC	Cumulative Additions (MW)	2042	6000	8370
HG0-GPC	Cumulative Additions (MW)	2043	6180	8370
HG0-GPC	Cumulative Additions (MW)	2044	6390	8370
HG0-GPC	Cumulative Additions (MW)	Total	6390	8370
MG20	Cumulative Additions (MW)	2026	0	0
MG20	Cumulative Additions (MW)	2027	0	0
MG20	Cumulative Additions (MW)	2028	0	0
MG20	Cumulative Additions (MW)	2029	1200	900
MG20	Cumulative Additions (MW)	2030	1500	3600
MG20	Cumulative Additions (MW)	2031	1500	6000
MG20	Cumulative Additions (MW)	2032	2100	6300
MG20	Cumulative Additions (MW)	2033	2400	6300
MG20	Cumulative Additions (MW)	2034	3000	6300
MG20	Cumulative Additions (MW)	2035	3300	8100
MG20	Cumulative Additions (MW)	2036	4200	9300
MG20	Cumulative Additions (MW)	2037	4500	9300
MG20	Cumulative Additions (MW)	2038	5100	9300
MG20	Cumulative Additions (MW)	2039	5400	9300
MG20	Cumulative Additions (MW)	2040	5700	9300
MG20	Cumulative Additions (MW)	2041	6000	9300
MG20	Cumulative Additions (MW)	2042	7200	9300
MG20	Cumulative Additions (MW)	2043	7500	9300
MG20	Cumulative Additions (MW)	2044	8400	9300

MG20	Cumulative Additions (MW)	Total	8400	9300
MG20-GPC	Cumulative Additions (MW)	2026	0	0
MG20-GPC	Cumulative Additions (MW)	2027	0	0
MG20-GPC	Cumulative Additions (MW)	2028	0	0
MG20-GPC	Cumulative Additions (MW)	2029	1200	0
MG20-GPC	Cumulative Additions (MW)	2030	1500	2130
MG20-GPC	Cumulative Additions (MW)	2031	1500	4530
MG20-GPC	Cumulative Additions (MW)	2032	2100	4800
MG20-GPC	Cumulative Additions (MW)	2033	2310	4800
MG20-GPC	Cumulative Additions (MW)	2034	2730	4800
MG20-GPC	Cumulative Additions (MW)	2035	3030	6180
MG20-GPC	Cumulative Additions (MW)	2036	3930	7380
MG20-GPC	Cumulative Additions (MW)	2037	4230	7380
MG20-GPC	Cumulative Additions (MW)	2038	4770	7380
MG20-GPC	Cumulative Additions (MW)	2039	4980	7380
MG20-GPC	Cumulative Additions (MW)	2040	5280	7380
MG20-GPC	Cumulative Additions (MW)	2041	5400	7380
MG20-GPC	Cumulative Additions (MW)	2042	6090	7380
MG20-GPC	Cumulative Additions (MW)	2043	6240	7380
MG20-GPC	Cumulative Additions (MW)	2044	6900	7380
MG20-GPC	Cumulative Additions (MW)	Total	6900	7380
MG50	Cumulative Additions (MW)	2026	0	0
MG50	Cumulative Additions (MW)	2027	0	0
MG50	Cumulative Additions (MW)	2028	0	0
MG50	Cumulative Additions (MW)	2029	900	900
MG50	Cumulative Additions (MW)	2030	900	3900
MG50	Cumulative Additions (MW)	2031	900	6600
MG50	Cumulative Additions (MW)	2032	900	6900
MG50	Cumulative Additions (MW)	2033	1200	6900
MG50	Cumulative Additions (MW)	2034	2400	6900
MG50	Cumulative Additions (MW)	2035	2700	8100
MG50	Cumulative Additions (MW)	2036	4500	9300
MG50	Cumulative Additions (MW)	2037	4500	9300
MG50	Cumulative Additions (MW)	2038	4500	9300
MG50	Cumulative Additions (MW)	2039	4500	9300
MG50	Cumulative Additions (MW)	2040	4500	9300
MG50	Cumulative Additions (MW)	2041	4500	9300
MG50	Cumulative Additions (MW)	2042	4500	9300
MG50	Cumulative Additions (MW)	2043	4500	9300
MG50	Cumulative Additions (MW)	2044	4800	9300
MG50	Cumulative Additions (MW)	Total	4800	9300
MG50-GPC	Cumulative Additions (MW)	2026	0	0
MG50-GPC	Cumulative Additions (MW)	2027	0	0
MG50-GPC	Cumulative Additions (MW)	2028	0	0
MG50-GPC	Cumulative Additions (MW)	2029	900	0
MG50-GPC	Cumulative Additions (MW)	2030	900	2340
MG50-GPC	Cumulative Additions (MW)	2031	900	5040
MG50-GPC	Cumulative Additions (MW)	2032	900	5340

MG50-GPC	Cumulative Additions (MW)	2033	1170	5340
MG50-GPC	Cumulative Additions (MW)	2034	1980	5340
MG50-GPC	Cumulative Additions (MW)	2035	2280	6330
MG50-GPC	Cumulative Additions (MW)	2036	4080	7530
MG50-GPC	Cumulative Additions (MW)	2037	4080	7530
MG50-GPC	Cumulative Additions (MW)	2038	4080	7530
MG50-GPC	Cumulative Additions (MW)	2039	4080	7530
MG50-GPC	Cumulative Additions (MW)	2040	4080	7530
MG50-GPC	Cumulative Additions (MW)	2041	4080	7530
MG50-GPC	Cumulative Additions (MW)	2042	4080	7530
MG50-GPC	Cumulative Additions (MW)	2043	4080	7530
MG50-GPC	Cumulative Additions (MW)	2044	4320	7530
MG50-GPC	Cumulative Additions (MW)	Total	4320	7530
EL	Cumulative Additions (MW)	2026	0	0
EL	Cumulative Additions (MW)	2027	0	0
EL	Cumulative Additions (MW)	2028	0	0
EL	Cumulative Additions (MW)	2029	900	900
EL	Cumulative Additions (MW)	2030	1500	5400
EL	Cumulative Additions (MW)	2031	2100	6900
EL	Cumulative Additions (MW)	2032	3000	6900
EL	Cumulative Additions (MW)	2033	3900	6900
EL	Cumulative Additions (MW)	2034	5400	6900
EL	Cumulative Additions (MW)	2035	5400	7800
EL	Cumulative Additions (MW)	2036	6300	7800
EL	Cumulative Additions (MW)	2037	6300	7800
EL	Cumulative Additions (MW)	2038	6300	7800
EL	Cumulative Additions (MW)	2039	6300	7800
EL	Cumulative Additions (MW)	2040	6300	7800
EL	Cumulative Additions (MW)	2041	6300	7800
EL	Cumulative Additions (MW)	2042	6300	7800
EL	Cumulative Additions (MW)	2043	6300	7800
EL	Cumulative Additions (MW)	2044	6300	7800
EL	Cumulative Additions (MW)	Total	6300	7800
EL-GPC	Cumulative Additions (MW)	2026	0	0
EL-GPC	Cumulative Additions (MW)	2027	0	0
EL-GPC	Cumulative Additions (MW)	2028	0	0
EL-GPC	Cumulative Additions (MW)	2029	900	0
EL-GPC	Cumulative Additions (MW)	2030	1470	3030
EL-GPC	Cumulative Additions (MW)	2031	2070	4530
EL-GPC	Cumulative Additions (MW)	2032	2970	4530
EL-GPC	Cumulative Additions (MW)	2033	3600	4530
EL-GPC	Cumulative Additions (MW)	2034	4560	4530
EL-GPC	Cumulative Additions (MW)	2035	4560	5430
EL-GPC	Cumulative Additions (MW)	2036	5460	5430
EL-GPC	Cumulative Additions (MW)	2037	5460	5430
EL-GPC	Cumulative Additions (MW)	2038	5460	5430
EL-GPC	Cumulative Additions (MW)	2039	5460	5430
EL-GPC	Cumulative Additions (MW)	2040	5460	5430

EL-GPC	Cumulative Additions (MW)	2041	5460	5430
EL-GPC	Cumulative Additions (MW)	2042	5460	5430
EL-GPC	Cumulative Additions (MW)	2043	5460	5430
EL-GPC	Cumulative Additions (MW)	2044	5460	5430
EL-GPC	Cumulative Additions (MW)	Total	5460	5430
MG20-SYSTEM	Cumulative Additions (MW)	2026	0	0
MG20-SYSTEM	Cumulative Additions (MW)	2027	0	0
MG20-SYSTEM	Cumulative Additions (MW)	2028	0	0
MG20-SYSTEM	Cumulative Additions (MW)	2029	0	900
MG20-SYSTEM	Cumulative Additions (MW)	2030	0	1470
MG20-SYSTEM	Cumulative Additions (MW)	2031	0	1470
MG20-SYSTEM	Cumulative Additions (MW)	2032	0	1500
MG20-SYSTEM	Cumulative Additions (MW)	2033	90	1500
MG20-SYSTEM	Cumulative Additions (MW)	2034	270	1500
MG20-SYSTEM	Cumulative Additions (MW)	2035	270	1920
MG20-SYSTEM	Cumulative Additions (MW)	2036	270	1920
MG20-SYSTEM	Cumulative Additions (MW)	2037	270	1920
MG20-SYSTEM	Cumulative Additions (MW)	2038	330	1920
MG20-SYSTEM	Cumulative Additions (MW)	2039	420	1920
MG20-SYSTEM	Cumulative Additions (MW)	2040	420	1920
MG20-SYSTEM	Cumulative Additions (MW)	2041	600	1920
MG20-SYSTEM	Cumulative Additions (MW)	2042	1110	1920
MG20-SYSTEM	Cumulative Additions (MW)	2043	1260	1920
MG20-SYSTEM	Cumulative Additions (MW)	2044	1500	1920
MG20-SYSTEM	Cumulative Additions (MW)	Total	1500	1920
MG20-GPC - No Large Load	Cumulative Additions (MW)	2026	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2027	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2028	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2029	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2030	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2031	0	0
MG20-GPC - No Large Load	Cumulative Additions (MW)	2032	500	1000
MG20-GPC - No Large Load	Cumulative Additions (MW)	2033	500	1000
MG20-GPC - No Large Load	Cumulative Additions (MW)	2034	560	1000
MG20-GPC - No Large Load	Cumulative Additions (MW)	2035	710	1340
MG20-GPC - No Large Load	Cumulative Additions (MW)	2036	710	710
MG20-GPC - No Large Load	Cumulative Additions (MW)	2037	820	1430
MG20-GPC - No Large Load	Cumulative Additions (MW)	2038	1070	1650
MG20-GPC - No Large Load	Cumulative Additions (MW)	2039	1320	2200
MG20-GPC - No Large Load	Cumulative Additions (MW)	2040	1450	2270
MG20-GPC - No Large Load	Cumulative Additions (MW)	2041	1580	2510
MG20-GPC - No Large Load	Cumulative Additions (MW)	2042	1840	2600
MG20-GPC - No Large Load	Cumulative Additions (MW)	2043	1930	2660
MG20-GPC - No Large Load	Cumulative Additions (MW)	2044	2160	2690
MG20-GPC - No Large Load	Cumulative Additions (MW)	Total	2160	2690
MG20-GPC - No Large Load	Incremental Additions (MW)	2026	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2027	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2028	0	0

MG20-GPC - No Large Load	Incremental Additions (MW)	2029	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2030	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2031	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2032	500	1000
MG20-GPC - No Large Load	Incremental Additions (MW)	2033	0	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2034	60	0
MG20-GPC - No Large Load	Incremental Additions (MW)	2035	150	340
MG20-GPC - No Large Load	Incremental Additions (MW)	2036	0	-630
MG20-GPC - No Large Load	Incremental Additions (MW)	2037	110	720
MG20-GPC - No Large Load	Incremental Additions (MW)	2038	250	220
MG20-GPC - No Large Load	Incremental Additions (MW)	2039	250	550
MG20-GPC - No Large Load	Incremental Additions (MW)	2040	130	70
MG20-GPC - No Large Load	Incremental Additions (MW)	2041	130	240
MG20-GPC - No Large Load	Incremental Additions (MW)	2042	260	90
MG20-GPC - No Large Load	Incremental Additions (MW)	2043	90	60
MG20-GPC - No Large Load	Incremental Additions (MW)	2044	230	30
MG20-GPC - No Large Load	Incremental Additions (MW)	Total	2160	2690
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2026	0	0
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2027	0	0
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2028	0	0
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2029	0	0
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2030	400	0
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2031	420	1260
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2032	2100	4000
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2033	2100	4000
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2034	2270	4000
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2035	3350	4500
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2036	3350	4500
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2037	3350	4500
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2038	3350	4500
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2039	3350	5220
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2040	3350	5270
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2041	3500	5560
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2042	3930	5560
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2043	4090	5560
MG20-GPC - Half Large Load	Cumulative Additions (MW)	2044	4480	5560
MG20-GPC - Half Large Load	Cumulative Additions (MW)	Total	4480	5560
MG20-GPC - Half Large Load	Incremental Additions (MW)	2026	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2027	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2028	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2029	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2030	400	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2031	20	1260
MG20-GPC - Half Large Load	Incremental Additions (MW)	2032	1680	2740
MG20-GPC - Half Large Load	Incremental Additions (MW)	2033	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2034	170	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2035	1080	500
MG20-GPC - Half Large Load	Incremental Additions (MW)	2036	0	0

MG20-GPC - Half Large Load	Incremental Additions (MW)	2037	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2038	0	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2039	0	720
MG20-GPC - Half Large Load	Incremental Additions (MW)	2040	0	50
MG20-GPC - Half Large Load	Incremental Additions (MW)	2041	150	290
MG20-GPC - Half Large Load	Incremental Additions (MW)	2042	430	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2043	160	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	2044	390	0
MG20-GPC - Half Large Load	Incremental Additions (MW)	Total	0	0
MG20-GPC - High Solar	Cumulative Additions (MW)	2026	0	0
MG20-GPC - High Solar	Cumulative Additions (MW)	2027	0	0
MG20-GPC - High Solar	Cumulative Additions (MW)	2028	0	0
MG20-GPC - High Solar	Cumulative Additions (MW)	2029	800	0
MG20-GPC - High Solar	Cumulative Additions (MW)	2030	1100	1400
MG20-GPC - High Solar	Cumulative Additions (MW)	2031	1400	4100
MG20-GPC - High Solar	Cumulative Additions (MW)	2032	1900	4100
MG20-GPC - High Solar	Cumulative Additions (MW)	2033	1900	4100
MG20-GPC - High Solar	Cumulative Additions (MW)	2034	2100	4100
MG20-GPC - High Solar	Cumulative Additions (MW)	2035	2600	5100
MG20-GPC - High Solar	Cumulative Additions (MW)	2036	3800	7100
MG20-GPC - High Solar	Cumulative Additions (MW)	2037	4000	7100
MG20-GPC - High Solar	Cumulative Additions (MW)	2038	4400	7100
MG20-GPC - High Solar	Cumulative Additions (MW)	2039	4700	7800
MG20-GPC - High Solar	Cumulative Additions (MW)	2040	5000	7800
MG20-GPC - High Solar	Cumulative Additions (MW)	2041	5200	8000
MG20-GPC - High Solar	Cumulative Additions (MW)	2042	5600	8000
MG20-GPC - High Solar	Cumulative Additions (MW)	2043	5900	8000
MG20-GPC - High Solar	Cumulative Additions (MW)	2044	6300	8000
MG20-GPC - High Solar	Cumulative Additions (MW)	Total	6300	8000
MG20-GPC - High Solar	Incremental Additions (MW)	2026	0	0
MG20-GPC - High Solar	Incremental Additions (MW)	2027	0	0
MG20-GPC - High Solar	Incremental Additions (MW)	2028	0	0
MG20-GPC - High Solar	Incremental Additions (MW)	2029	800	0
MG20-GPC - High Solar	Incremental Additions (MW)	2030	300	1400
MG20-GPC - High Solar	Incremental Additions (MW)	2031	300	2700
MG20-GPC - High Solar	Incremental Additions (MW)	2032	500	0
MG20-GPC - High Solar	Incremental Additions (MW)	2033	0	0
MG20-GPC - High Solar	Incremental Additions (MW)	2034	200	0
MG20-GPC - High Solar	Incremental Additions (MW)	2035	500	1000
MG20-GPC - High Solar	Incremental Additions (MW)	2036	1200	2000
MG20-GPC - High Solar	Incremental Additions (MW)	2037	200	0
MG20-GPC - High Solar	Incremental Additions (MW)	2038	400	0
MG20-GPC - High Solar	Incremental Additions (MW)	2039	300	700
MG20-GPC - High Solar	Incremental Additions (MW)	2040	300	0
MG20-GPC - High Solar	Incremental Additions (MW)	2041	200	200
MG20-GPC - High Solar	Incremental Additions (MW)	2042	400	0
MG20-GPC - High Solar	Incremental Additions (MW)	2043	300	0
MG20-GPC - High Solar	Incremental Additions (MW)	2044	400	0

MG20-GPC - High Solar	Incremental Additions (MW)	Total	6300	8000
MG20-GPC - Combined	Cumulative Additions (MW)	2026	0	0
MG20-GPC - Combined	Cumulative Additions (MW)	2027	0	0
MG20-GPC - Combined	Cumulative Additions (MW)	2028	0	0
MG20-GPC - Combined	Cumulative Additions (MW)	2029	0	0
MG20-GPC - Combined	Cumulative Additions (MW)	2030	0	0
MG20-GPC - Combined	Cumulative Additions (MW)	2031	260	790
MG20-GPC - Combined	Cumulative Additions (MW)	2032	1820	3480
MG20-GPC - Combined	Cumulative Additions (MW)	2033	1820	3480
MG20-GPC - Combined	Cumulative Additions (MW)	2034	1920	3480
MG20-GPC - Combined	Cumulative Additions (MW)	2035	2980	3980
MG20-GPC - Combined	Cumulative Additions (MW)	2036	2980	3980
MG20-GPC - Combined	Cumulative Additions (MW)	2037	2980	3980
MG20-GPC - Combined	Cumulative Additions (MW)	2038	2980	3980
MG20-GPC - Combined	Cumulative Additions (MW)	2039	2980	4660
MG20-GPC - Combined	Cumulative Additions (MW)	2040	3080	4800
MG20-GPC - Combined	Cumulative Additions (MW)	2041	3180	5040
MG20-GPC - Combined	Cumulative Additions (MW)	2042	3550	5040
MG20-GPC - Combined	Cumulative Additions (MW)	2043	3710	5040
MG20-GPC - Combined	Cumulative Additions (MW)	2044	4030	5040
MG20-GPC - Combined	Cumulative Additions (MW)	Total	4030	5040
MG20-GPC - Combined	Incremental Additions (MW)	2026	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2027	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2028	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2029	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2030	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2031	260	790
MG20-GPC - Combined	Incremental Additions (MW)	2032	1560	2690
MG20-GPC - Combined	Incremental Additions (MW)	2033	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2034	100	0
MG20-GPC - Combined	Incremental Additions (MW)	2035	1060	500
MG20-GPC - Combined	Incremental Additions (MW)	2036	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2037	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2038	0	0
MG20-GPC - Combined	Incremental Additions (MW)	2039	0	680
MG20-GPC - Combined	Incremental Additions (MW)	2040	100	140
MG20-GPC - Combined	Incremental Additions (MW)	2041	100	240
MG20-GPC - Combined	Incremental Additions (MW)	2042	370	0
MG20-GPC - Combined	Incremental Additions (MW)	2043	160	0
MG20-GPC - Combined	Incremental Additions (MW)	2044	320	0
MG20-GPC - Combined	Incremental Additions (MW)	Total	4030	5040
		2026	0	0
		2027	0	0
		2028	0	0
		2029	0	0
		2030	-400	0
		2031	-160	-470
		2032	-280	-520

		2033	-280	-520
		2034	-350	-520
		2035	-370	-520
		2036	-370	-520
		2037	-370	-520
		2038	-370	-520
		2039	-370	-560
		2040	-270	-470
		2041	-320	-520
		2042	-380	-520
		2043	-380	-520
		2044	-450	-520

CC w/ CCS - Local	CC w/ CCS - Distant	Solar	Wind	Battery 4-hr (T1)	Battery 4-hr (T2)	Battery 4-hr (T3)	Battery 4-hr (T4)	Battery 4-hr (T1_2)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	1500	0	0	0	0
0	0	0	0	600	1800	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	1200	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
600	0	1500	300	0	0	0	0	0
300	0	1500	300	0	0	0	0	0
900	0	18000	3600	2100	3000	0	0	
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	1500	0	0	0	0
0	0	0	0	390	1470	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	990	270	0	0	0	0	0
0	0	990	60	0	0	0	0	0
0	0	990	300	0	0	0	0	0
0	0	1020	300	0	840	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
330	0	1020	0	0	0	0	0	0
240	0	1020	300	0	0	0	0	0
570	0	12150	2430	1890	2310	0	0	
0	0	0	0	0	0	0	0	0
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0	0	1500	0	1500	0	0	0	0
0	0	1500	0	600	2100	0	0	0

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0	0	1500	0	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	300	600	0	0
0	0	1500	300	0	0	900	0	0
300	0	1500	300	0	0	0	0	0
600	0	1500	300	0	0	0	0	0
900	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
300	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
2100	0	23400	3600	2100	3000	1500	0	
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0	0	0	0	0	0	0	0	0
0	0	1370	0	1500	0	0	0	0
0	0	1380	0	390	1800	0	0	0
0	0	0	0	0	0	0	0	0
0	0	600	0	0	450	0	0	0
0	0	990	0	0	0	0	0	0
0	0	990	60	0	0	0	0	0
0	0	990	60	0	0	0	0	0
0	0	990	300	0	210	480	0	0
0	0	1020	90	0	0	630	0	0
270	0	1020	30	0	0	0	0	0
540	0	1020	120	0	0	0	0	0
660	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
1470	0	16490	1560	1890	2460	1110	0	
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1500	0	900	0	0	0	0
0	0	1200	0	1200	900	0	0	0
0	0	0	0	0	0	0	0	0
0	0	900	0	0	900	0	0	0
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0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
300	0	1500	300	0	0	0	0	0

600	0	1500	300	0	0	0	0	0
600	0	1500	300	0	1200	1500	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
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0	0	1500	300	0	0	0	0	0
1500	0	23100	3600	2100	3000	1500	0	
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270	0	1020	0	0	0	0	0	0
540	0	1020	270	0	0	0	0	0
570	0	1020	300	0	1200	1500	0	0
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0	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
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1380	0	16210	1770	2100	3000	1500	0	
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0	0	1500	0	1500	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	900	0	0	900	0	0	0
0	0	1500	0	0	0	0	0	0
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600	0	1500	300	0	0	0	0	0
900	600	1500	300	0	0	600	0	0
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600	0	1500	300	0	0	0	0	0
600	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	900	0	0
0	0	1500	300	0	0	1200	300	0
3000	600	23400	3600	2100	3000	3000	300	

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0	0	1380	0	390	1800	0	0	0
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0	0	990	120	0	0	0	0	0
0	0	990	60	0	0	0	0	0
0	0	990	300	0	0	0	0	0
0	0	1020	150	0	0	210	0	0
270	0	1020	30	0	0	0	0	0
540	0	1020	180	0	0	0	0	0
660	600	1020	300	0	0	600	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	630	0	0
0	0	1020	300	0	0	840	210	0
1470	600	16490	2340	1890	2580	2280	210	
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0	0	0	0	0	0	0	0	0
0	0	0	0	1800	0	0	0	0
0	0	0	0	300	2100	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	600	0	0
1200	0	1500	300	0	0	0	0	0
1200	0	15300	3600	2100	3000	2400	0	
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0	0	0	0	1650	0	0	0	0
0	0	0	0	210	1830	0	0	0
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0	0	0	180	0	0	0	0	0

0	0	210	60	0	0	0	0	0
0	0	990	300	0	210	0	0	0
0	0	1020	300	0	420	990	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	480	0	0
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0	0	1020	0	0	0	420	0	0
990	0	1020	0	0	0	0	0	0
990	0	10380	2040	1860	2460	1890	0	
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0	0	1500	0	1200	0	0	0	0
0	0	1500	0	900	900	0	0	0
0	0	0	0	0	0	0	0	0
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300	0	1500	300	0	0	0	0	0
600	0	23400	3600	2100	3000	3000	1500	
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0	0	1370	0	1200	0	0	0	0
0	0	1380	0	900	900	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	990	0	0	0	0	0	0
0	0	990	270	0	0	0	0	0
0	0	990	60	0	0	0	0	0
0	0	990	300	0	0	0	0	0
0	0	1020	300	0	1560	900	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	450	0	0
0	0	1020	300	0	0	630	0	0
0	0	1020	300	0	0	210	0	0
0	0	1020	0	0	0	210	0	0

0	0	1020	0	0	0	0	1080	0
150	0	1020	0	0	0	0	0	0
240	0	1020	300	0	0	0	0	0
390	0	16490	2430	2100	2460	2400	1080	
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0	0	0	0	0	0	0	0	0
0	0	1500	0	2100	900	0	0	0
0	0	1500	0	0	900	0	0	0
0	0	0	0	0	0	0	0	0
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0	0	1500	300	0	600	0	0	0
0	0	1500	300	0	0	3000	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
1200	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
900	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
2100	0	23400	3600	2100	3000	3000	0	
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0	0	1370	0	1530	900	0	0	0
0	0	1380	0	0	900	0	0	0
0	0	0	0	0	0	0	0	0
0	0	600	0	0	0	0	0	0
0	0	990	0	0	0	0	0	0
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0	0	990	60	0	0	0	0	0
0	0	990	300	0	420	0	0	0
0	0	1020	300	0	0	3000	0	0
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0	0	1020	300	0	0	0	0	0
900	0	1020	270	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
300	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	0	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
1200	0	16490	2370	1530	2640	3000	0	
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0	0	1500	0	1500	0	0	0	0
0	0	1500	0	600	2100	0	0	0

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0	0	1500	0	0	0	0	0	0
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0	0	1500	300	0	300	0	0	0
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1200	0	1500	300	0	0	0	0	0
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1200	0	1500	300	0	0	0	0	0
0	0	1500	300	0	0	0	0	0
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0	0	1500	300	0	0	0	0	0
2400	0	23400	3600	2100	3000	3000	900	
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0	0	1370	0	1500	0	0	0	0
0	0	1380	0	390	1800	0	0	0
0	0	0	0	0	0	0	0	0
0	0	600	0	0	0	0	0	0
0	0	990	0	0	0	0	0	0
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0	0	990	0	0	210	0	0	0
0	0	990	300	0	210	840	0	0
0	0	1020	300	0	0	1800	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	630	0
900	0	1020	210	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
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0	0	1020	300	0	0	0	0	0
1290	0	16490	2310	1890	2430	2640	630	
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	1500	0	1800	0	0	0	0
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0	0	0	0	0	0	0	0	0
0	0	900	0	0	300	0	0	0
0	0	1500	0	0	300	0	0	0
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300	1200	1500	300	0	0	0	0	0

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1200	0	1500	300	0	0	0	0	0
300	3300	1500	300	0	0	0	0	0
900	0	1500	300	0	0	0	0	0
300	0	1500	300	0	0	0	0	0
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0	0	1500	300	0	0	0	0	0
3000	4500	23400	3600	2100	3000	2400	0	
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0	0	1380	0	210	1830	0	0	0
0	0	0	0	0	0	0	0	0
0	0	600	0	0	300	0	0	0
0	0	990	0	0	210	0	0	0
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0	0	990	0	0	210	420	0	0
0	0	990	300	0	0	540	0	0
0	0	1020	300	0	0	1200	0	0
270	1200	1020	300	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
900	0	1020	300	0	0	0	0	0
300	2250	1020	0	0	0	0	0	0
30	0	1020	0	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
0	0	1020	270	0	0	0	0	0
0	0	1020	300	0	0	0	0	0
1500	3450	16490	2580	1860	2550	2160	0	
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0	0	0	0	1500	0	0	0	0
0	0	0	0	2100	1800	0	0	0
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0	0	10500	2100	2100	3000	0	0	0
0	0	12000	2400	2100	3000	0	0	0
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600	0	16500	3300	2100	3000	0	0	0
900	0	18000	3600	2100	3000	0	0	0

900	0	18000	3600	2100	3000	0	0	0
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0	0	1980	330	1890	1470	0	0	0
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0	0	10110	2130	1890	2310	0	0	0
330	0	11130	2130	1890	2310	0	0	0
570	0	12150	2430	1890	2310	0	0	0
570	0	12150	2430	1890	2310	0	0	0
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0	0	3000	0	2100	2100	0	0	0
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0	0	3900	0	2100	2700	0	0	0
0	0	5400	0	2100	2700	0	0	0
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300	0	12900	1500	2100	3000	1500	0	0
900	0	14400	1800	2100	3000	1500	0	0
1800	0	15900	2100	2100	3000	1500	0	0
1800	0	17400	2400	2100	3000	1500	0	0
2100	0	18900	2700	2100	3000	1500	0	0
2100	0	20400	3000	2100	3000	1500	0	0
2100	0	21900	3300	2100	3000	1500	0	0
2100	0	23400	3600	2100	3000	1500	0	0
2100	0	23400	3600	2100	3000	1500	0	0
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0	0	2750	0	1890	1800	0	0	0
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0	0	8330	510	1890	2460	1110	0	0
270	0	9350	540	1890	2460	1110	0	0
810	0	10370	660	1890	2460	1110	0	0
1470	0	11390	960	1890	2460	1110	0	0
1470	0	12410	1260	1890	2460	1110	0	0
1470	0	13430	1260	1890	2460	1110	0	0
1470	0	14450	1260	1890	2460	1110	0	0
1470	0	15470	1260	1890	2460	1110	0	0
1470	0	16490	1560	1890	2460	1110	0	0
1470	0	16490	1560	1890	2460	1110	0	0
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0	0	0	0	0	0	0	0	0
0	0	1500	0	900	0	0	0	0
0	0	2700	0	2100	900	0	0	0
0	0	2700	0	2100	900	0	0	0
0	0	3600	0	2100	1800	0	0	0
0	0	5100	0	2100	1800	0	0	0
0	0	6600	300	2100	1800	0	0	0
0	0	8100	600	2100	1800	0	0	0
0	0	9600	900	2100	1800	0	0	0
0	0	11100	1200	2100	1800	0	0	0
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270	0	9070	600	2100	1800	0	0	0
810	0	10090	870	2100	1800	0	0	0
1380	0	11110	1170	2100	3000	1500	0	0
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1380	0	16210	1770	2100	3000	1500	0	0
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810	0	10370	840	1890	2580	210	0	0
1470	600	11390	1140	1890	2580	810	0	0
1470	600	12410	1440	1890	2580	810	0	0
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900	0	12410	2070	1530	2640	3000	0	0
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900	0	11390	1710	1890	2430	2640	630	0
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270	1200	9350	1110	1860	2550	2160	0	0
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1170	1200	11390	1710	1860	2550	2160	0	0
1470	3450	12410	1710	1860	2550	2160	0	0

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0	0	21675	2070	1530	2640	3000	3613	0
0	0	23205	2070	1530	2640	3000	3868	0
0	0	24735	2370	1530	2640	3000	4123	0
0	0	24735	2370	1530	2640	3000	4123	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2055	0	1530	1585	0	0	0
0	0	2070	0	0	902.5	0	0	0
0	0	0	0	0	0	0	0	0
0	0	900	0	0	152.5	0	0	0
0	0	1485	0	0	0	245	0	0
0	0	1485	240	0	0	668	0	0
0	0	1485	60	0	0	247	0	0
0	0	1485	300	0	0	668	0	0
0	0	1530	300	0	0	1172	2083	0
0	0	1530	300	0	0	0	255	0
0	0	1530	300	0	0	0	255	0
0	0	1530	270	0	0	0	255	0
0	0	1530	300	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	300	0	0	0	255	0

0	0	24735	2370	1530	2640	3000	4123	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2055	0	0	0	0	0	0
0	0	4125	0	900	0	0	0	0
0	0	4125	0	1530	500	0	0	0
0	0	5025	0	1530	2640	0	0	0
0	0	6510	0	1530	2640	245	0	0
0	0	7995	240	1530	2640	913	0	0
0	0	9480	300	1530	2640	1160	0	0
0	0	10965	600	1530	2640	1828	0	0
0	0	12495	900	1530	2640	3000	2083	0
0	0	14025	1200	1530	2640	3000	2338	0
0	0	15555	1500	1530	2640	3000	2593	0
0	0	17085	1770	1530	2640	3000	2848	0
0	0	18615	2070	1530	2640	3000	3103	0
0	0	20145	2070	1530	2640	3000	3358	0
0	0	21675	2070	1530	2640	3000	3613	0
0	0	23205	2070	1530	2640	3000	3868	0
0	0	24735	2370	1530	2640	3000	4123	0
0	0	24735	2370	1530	2640	3000	4123	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2055	0	0	0	0	0	0
0	0	2070	0	900	0	0	0	0
0	0	0	0	630	500	0	0	0
0	0	900	0	0	2140	0	0	0
0	0	1485	0	0	0	245	0	0
0	0	1485	240	0	0	668	0	0
0	0	1485	60	0	0	247	0	0
0	0	1485	300	0	0	668	0	0
0	0	1530	300	0	0	1172	2083	0
0	0	1530	300	0	0	0	255	0
0	0	1530	300	0	0	0	255	0
0	0	1530	270	0	0	0	255	0
0	0	1530	300	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	0	0	0	0	255	0
0	0	1530	300	0	0	0	255	0
0	0	24735	2370	1530	2640	3000	4123	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	685	0	-685	0	0	0	0
0	0	1375	0	-475	0	0	0	0
0	0	1375	0	155	500	0	0	0
0	0	1675	0	0	840	0	0	0
0	0	2170	0	0	840	245	0	0

0	0	2665	0	0	420	913	0	0
0	0	3160	0	0	420	1160	0	0
0	0	3655	0	0	0	1828	0	0
0	0	4165	0	0	0	2200	2083	0
0	0	4675	0	0	0	1800	2338	0
0	0	5185	0	0	0	800	2593	0
0	0	5695	0	0	0	0	2848	0
0	0	6205	0	0	0	0	3103	0
0	0	6715	0	0	0	0	3358	0
0	0	7225	0	0	0	0	3613	0
0	0	7735	0	0	0	0	3868	0
0	0	8245	0	0	0	0	4123	0

Battery 4-hr (T2_2)	Medium Duration Storage	Nuclear	Total	Battery (Total)
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1500	1500
0	0	0	4500	2400
0	0	0	2100	0
0	0	0	3300	0
0	0	0	600	0
0	0	0	2400	0
0	0	0	2400	0
0	0	0	3900	0
0	600	0	6900	1200
0	0	0	2100	0
0	300	0	2400	0
0	0	0	3300	0
0	0	0	2700	0
0	0	0	2700	0
0	0	0	2700	0
0	0	0	3000	0
0	0	0	2400	0
	900	0	48900	5100
0	0	0	0	0
0	0	0	0	0
0	0	0	1500	1500
0	0	0	3060	1860
0	0	0	1800	0
0	0	0	3090	0
0	0	0	540	0
0	0	0	1680	0
0	0	0	1470	0
0	0	0	3000	0
0	570	0	6030	840
0	0	0	1560	0
0	240	0	1860	0
0	0	0	2490	0
0	0	0	2130	0
0	0	0	1230	0
0	0	0	1530	0
0	0	0	1770	0
0	0	0	1770	0
	810	0	36510	4200
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	6000	2700

0	0	0	2100	0
0	0	0	4200	600
0	0	0	2100	0
0	0	0	3300	0
0	0	0	2400	0
0	0	0	3600	900
0	0	0	3000	900
0	0	0	3000	0
0	0	0	3000	0
0	0	600	5700	0
0	0	0	3600	0
0	0	0	3000	0
0	0	0	3000	0
0	0	0	2400	0
0	0	0	2700	0
	0	600	56100	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	4470	2190
0	0	0	1860	0
0	0	0	3750	450
0	0	0	1530	0
0	0	0	2100	0
0	0	0	1470	0
0	0	0	2880	690
0	0	0	1950	630
0	0	0	1950	0
0	0	0	2100	0
0	0	600	4980	0
0	0	0	3120	0
0	0	0	1350	0
0	0	0	1830	0
0	0	0	1380	0
0	0	0	1980	0
	0	600	41570	5460
0	0	0	0	0
0	0	0	0	0
0	0	0	2400	900
0	0	0	4500	2100
0	0	0	3300	0
0	0	0	3000	900
0	0	0	2400	0
0	0	0	3000	0
0	0	0	3000	0
0	0	0	3000	0
0	0	0	3000	0
0	0	0	3300	0

0	0	0	2400	0
0	0	600	6900	2700
0	0	600	3600	0
0	0	0	2700	0
0	0	0	2700	0
0	0	0	2700	0
0	0	0	2700	0
	0	1200	54600	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	2270	900
0	0	0	3500	2100
0	0	0	2670	0
0	0	0	2700	900
0	0	0	1890	0
0	0	0	2250	0
0	0	0	1800	0
0	0	0	2460	0
0	0	0	1860	0
0	0	0	2130	0
0	0	0	1830	0
0	0	600	6390	2700
0	0	420	2940	0
0	0	0	1230	0
0	0	0	1530	0
0	0	0	1560	0
0	0	0	1980	0
	0	1020	40990	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	6000	2700
0	0	0	2100	0
0	0	0	4200	900
0	0	0	2700	0
0	0	0	3000	0
0	0	0	2400	0
0	0	0	2700	0
0	0	0	3300	300
0	0	600	3000	0
0	0	300	2700	0
0	0	600	6000	600
0	0	600	3000	0
0	0	600	3300	0
0	0	600	3000	0
0	0	0	3300	900
0	0	0	3600	1500
	0	3300	57300	8400

0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	4470	2190
0	0	0	1860	0
0	0	0	3780	780
0	0	0	1920	0
0	0	0	1950	0
0	0	0	1470	0
0	0	0	2190	0
0	0	0	2220	210
0	0	420	1950	0
0	0	210	1950	0
0	0	600	5280	600
0	0	600	2520	0
0	0	420	1650	0
0	0	510	1830	0
0	0	0	2460	630
0	0	0	2610	1050
	0	2760	42980	6960
0	0	0	0	0
0	0	0	0	0
0	0	0	1800	1800
0	0	0	4200	2400
0	0	0	2100	0
0	0	0	3300	0
0	0	0	900	0
0	0	0	1200	0
0	0	0	1200	0
0	0	0	3600	300
0	0	0	7200	1800
0	0	0	2100	0
0	0	0	2700	600
0	0	0	3300	0
0	0	0	3000	0
0	0	0	2400	0
0	0	0	3000	0
0	0	0	2700	600
0	0	0	3900	0
	0	0	48600	7500
0	0	0	0	0
0	0	0	0	0
0	0	0	1650	1650
0	0	0	2940	2040
0	0	0	1800	0
0	0	0	3090	0
0	0	0	720	0
0	0	0	810	0

0	0	0	690	0
0	0	0	2820	210
0	0	0	6330	1410
0	0	0	1560	0
0	0	0	2100	480
0	0	0	2490	0
0	0	0	2280	0
0	0	0	1020	0
0	0	0	1710	0
0	0	0	1590	420
0	0	0	2520	0
	0	0	36120	6210
0	0	0	0	0
0	0	0	0	0
0	0	0	2700	1200
0	0	0	4500	1800
0	0	0	2400	0
0	0	0	3900	0
0	0	0	2100	0
0	0	0	2400	0
0	0	0	2400	0
0	0	0	4200	0
0	0	0	7800	3000
0	0	0	2100	0
0	0	0	2700	600
0	0	0	4200	900
0	0	0	3000	300
0	0	0	2700	300
0	0	0	3900	1500
0	0	0	2400	0
0	0	0	2400	0
	0	0	55800	9600
0	0	0	0	0
0	0	0	0	0
0	0	0	2570	1200
0	0	0	3480	1800
0	0	0	2100	0
0	0	0	3540	0
0	0	0	1530	0
0	0	0	1680	0
0	0	0	1470	0
0	0	0	3180	0
0	0	0	6780	2460
0	0	0	1560	0
0	0	0	2070	450
0	0	0	3090	630
0	0	0	2310	210
0	0	0	1230	210

0	0	0	2400	1080
0	0	0	1350	0
0	0	0	1770	0
	0	0	42110	8040
0	0	0	0	0
0	0	0	0	0
0	0	0	4500	3000
0	0	0	4500	900
0	0	0	3000	0
0	0	0	3300	0
0	0	0	2400	0
0	0	0	2700	600
0	0	0	2400	0
0	0	0	4500	600
0	300	0	7200	3000
0	0	0	2100	0
0	0	0	2400	0
0	0	0	3300	0
0	300	0	2400	0
0	0	0	3000	0
0	0	0	3000	0
0	0	300	2400	0
0	0	0	2700	0
	600	300	55800	8100
0	0	0	0	0
0	0	0	0	0
0	0	0	3800	2430
0	0	0	3480	900
0	0	0	2430	0
0	0	0	3000	0
0	0	0	1860	0
0	0	0	1860	420
0	0	0	1470	0
0	0	0	3390	420
0	300	0	6720	3000
0	0	0	1620	0
0	0	0	1860	0
0	0	0	2400	0
0	300	0	1920	0
0	0	0	1440	0
0	0	0	1710	0
0	0	210	1380	0
0	0	0	1980	0
	600	210	42320	7170
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	6000	2700

0	0	0	3000	0
0	0	0	3600	0
0	0	0	1800	0
0	0	0	2400	300
0	0	0	3300	300
0	0	0	4800	1500
0	0	0	6600	1800
0	0	600	2400	0
0	0	600	3300	900
0	0	600	3600	0
0	0	600	2400	0
0	0	600	3600	0
0	0	600	2400	0
0	0	0	1800	0
0	0	0	2100	0
	0	3600	56100	9000
0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	4470	2190
0	0	0	2340	0
0	0	0	3300	0
0	0	0	1290	0
0	0	0	1770	210
0	0	0	2010	210
0	0	0	3630	1050
0	0	0	6120	1800
0	0	480	1800	0
0	0	510	2460	630
0	0	420	2550	0
0	0	600	1920	0
0	0	390	1800	0
0	0	330	1350	0
0	0	0	1020	0
0	0	0	1560	0
	0	2730	42260	7590
0	0	0	0	0
0	0	0	0	0
0	0	0	3300	1800
0	0	0	5700	2400
0	0	0	5100	0
0	0	0	3300	300
0	0	0	2700	300
0	0	0	2700	0
0	0	0	4200	900
0	0	0	3300	600
0	0	0	3900	1200
0	0	600	3900	0

0	0	600	2400	0
0	0	600	3600	0
0	0	600	6000	0
0	0	600	3300	0
0	0	600	2700	0
0	0	600	2400	0
0	0	600	2400	0
	0	4800	60900	7500
0	0	0	0	0
0	0	0	0	0
0	0	0	3020	1650
0	0	0	4320	2040
0	0	0	3600	0
0	0	0	3000	300
0	0	0	2100	210
0	0	0	1830	0
0	0	0	2580	630
0	0	0	2730	540
0	0	0	3420	1200
0	0	600	3390	0
0	0	600	1920	0
0	0	600	2820	0
0	0	420	3990	0
0	0	300	1350	0
0	0	540	1860	0
0	0	420	1710	0
0	0	480	1800	0
	0	3960	45440	6570
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1500	1500
0	0	0	6000	3900
0	0	0	8100	3900
0	0	0	11400	3900
0	0	0	12000	3900
0	0	0	14400	3900
0	0	0	16800	3900
0	0	0	20700	3900
0	600	0	27600	5100
0	600	0	29700	5100
0	900	0	32100	5100
0	900	0	35400	5100
0	900	0	38100	5100
0	900	0	40800	5100
0	900	0	43500	5100
0	900	0	46500	5100
0	900	0	48900	5100

0	900	0	48900	5100
0	0	0	0	0
0	0	0	0	0
0	0	0	1500	1500
0	0	0	4560	3360
0	0	0	6360	3360
0	0	0	9450	3360
0	0	0	9990	3360
0	0	0	11670	3360
0	0	0	13140	3360
0	0	0	16140	3360
0	570	0	22170	4200
0	570	0	23730	4200
0	810	0	25590	4200
0	810	0	28080	4200
0	810	0	30210	4200
0	810	0	31440	4200
0	810	0	32970	4200
0	810	0	34740	4200
0	810	0	36510	4200
0	810	0	36510	4200
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	9000	4200
0	0	0	11100	4200
0	0	0	15300	4800
0	0	0	17400	4800
0	0	0	20700	4800
0	0	0	23100	4800
0	0	0	26700	5700
0	0	0	29700	6600
0	0	0	32700	6600
0	0	0	35700	6600
0	0	600	41400	6600
0	0	600	45000	6600
0	0	600	48000	6600
0	0	600	51000	6600
0	0	600	53400	6600
0	0	600	56100	6600
0	0	600	56100	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	7340	3690
0	0	0	9200	3690
0	0	0	12950	4140
0	0	0	14480	4140

0	0	0	16580	4140
0	0	0	18050	4140
0	0	0	20930	4830
0	0	0	22880	5460
0	0	0	24830	5460
0	0	0	26930	5460
0	0	600	31910	5460
0	0	600	35030	5460
0	0	600	36380	5460
0	0	600	38210	5460
0	0	600	39590	5460
0	0	600	41570	5460
0	0	600	41570	5460
0	0	0	0	0
0	0	0	0	0
0	0	0	2400	900
0	0	0	6900	3000
0	0	0	10200	3000
0	0	0	13200	3900
0	0	0	15600	3900
0	0	0	18600	3900
0	0	0	21600	3900
0	0	0	24600	3900
0	0	0	27600	3900
0	0	0	30900	3900
0	0	0	33300	3900
0	0	600	40200	6600
0	0	1200	43800	6600
0	0	1200	46500	6600
0	0	1200	49200	6600
0	0	1200	51900	6600
0	0	1200	54600	6600
0	0	1200	54600	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	2270	900
0	0	0	5770	3000
0	0	0	8440	3000
0	0	0	11140	3900
0	0	0	13030	3900
0	0	0	15280	3900
0	0	0	17080	3900
0	0	0	19540	3900
0	0	0	21400	3900
0	0	0	23530	3900
0	0	0	25360	3900
0	0	600	31750	6600
0	0	1020	34690	6600

0	0	1020	35920	6600
0	0	1020	37450	6600
0	0	1020	39010	6600
0	0	1020	40990	6600
0	0	1020	40990	6600
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	9000	4200
0	0	0	11100	4200
0	0	0	15300	5100
0	0	0	18000	5100
0	0	0	21000	5100
0	0	0	23400	5100
0	0	0	26100	5100
0	0	0	29400	5400
0	0	600	32400	5400
0	0	900	35100	5400
0	0	1500	41100	6000
0	0	2100	44100	6000
0	0	2700	47400	6000
0	0	3300	50400	6000
0	0	3300	53700	6900
0	0	3300	57300	8400
0	0	3300	57300	8400
0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	7340	3690
0	0	0	9200	3690
0	0	0	12980	4470
0	0	0	14900	4470
0	0	0	16850	4470
0	0	0	18320	4470
0	0	0	20510	4470
0	0	0	22730	4680
0	0	420	24680	4680
0	0	630	26630	4680
0	0	1230	31910	5280
0	0	1830	34430	5280
0	0	2250	36080	5280
0	0	2760	37910	5280
0	0	2760	40370	5910
0	0	2760	42980	6960
0	0	2760	42980	6960
0	0	0	0	0
0	0	0	0	0
0	0	0	1800	1800

0	0	0	6000	4200
0	0	0	8100	4200
0	0	0	11400	4200
0	0	0	12300	4200
0	0	0	13500	4200
0	0	0	14700	4200
0	0	0	18300	4500
0	0	0	25500	6300
0	0	0	27600	6300
0	0	0	30300	6900
0	0	0	33600	6900
0	0	0	36600	6900
0	0	0	39000	6900
0	0	0	42000	6900
0	0	0	44700	7500
0	0	0	48600	7500
0	0	0	48600	7500
0	0	0	0	0
0	0	0	0	0
0	0	0	1650	1650
0	0	0	4590	3690
0	0	0	6390	3690
0	0	0	9480	3690
0	0	0	10200	3690
0	0	0	11010	3690
0	0	0	11700	3690
0	0	0	14520	3900
0	0	0	20850	5310
0	0	0	22410	5310
0	0	0	24510	5790
0	0	0	27000	5790
0	0	0	29280	5790
0	0	0	30300	5790
0	0	0	32010	5790
0	0	0	33600	6210
0	0	0	36120	6210
0	0	0	36120	6210
0	0	0	0	0
0	0	0	0	0
0	0	0	2700	1200
0	0	0	7200	3000
0	0	0	9600	3000
0	0	0	13500	3000
0	0	0	15600	3000
0	0	0	18000	3000
0	0	0	20400	3000
0	0	0	24600	3000
0	0	0	32400	6000

0	0	0	34500	6000
0	0	0	37200	6600
0	0	0	41400	7500
0	0	0	44400	7800
0	0	0	47100	8100
0	0	0	51000	9600
0	0	0	53400	9600
0	0	0	55800	9600
0	0	0	55800	9600
0	0	0	0	0
0	0	0	0	0
0	0	0	2570	1200
0	0	0	6050	3000
0	0	0	8150	3000
0	0	0	11690	3000
0	0	0	13220	3000
0	0	0	14900	3000
0	0	0	16370	3000
0	0	0	19550	3000
0	0	0	26330	5460
0	0	0	27890	5460
0	0	0	29960	5910
0	0	0	33050	6540
0	0	0	35360	6750
0	0	0	36590	6960
0	0	0	38990	8040
0	0	0	40340	8040
0	0	0	42110	8040
0	0	0	42110	8040
0	0	0	0	0
0	0	0	0	0
0	0	0	4500	3000
0	0	0	9000	3900
0	0	0	12000	3900
0	0	0	15300	3900
0	0	0	17700	3900
0	0	0	20400	4500
0	0	0	22800	4500
0	0	0	27300	5100
0	300	0	34500	8100
0	300	0	36600	8100
0	300	0	39000	8100
0	300	0	42300	8100
0	600	0	44700	8100
0	600	0	47700	8100
0	600	0	50700	8100
0	600	300	53100	8100
0	600	300	55800	8100

0	600	300	55800	8100
0	0	0	0	0
0	0	0	0	0
0	0	0	3800	2430
0	0	0	7280	3330
0	0	0	9710	3330
0	0	0	12710	3330
0	0	0	14570	3330
0	0	0	16430	3750
0	0	0	17900	3750
0	0	0	21290	4170
0	300	0	28010	7170
0	300	0	29630	7170
0	300	0	31490	7170
0	300	0	33890	7170
0	600	0	35810	7170
0	600	0	37250	7170
0	600	0	38960	7170
0	600	210	40340	7170
0	600	210	42320	7170
0	600	210	42320	7170
0	0	0	0	0
0	0	0	0	0
0	0	0	3000	1500
0	0	0	9000	4200
0	0	0	12000	4200
0	0	0	15600	4200
0	0	0	17400	4200
0	0	0	19800	4500
0	0	0	23100	4800
0	0	0	27900	6300
0	0	0	34500	8100
0	0	600	36900	8100
0	0	1200	40200	9000
0	0	1800	43800	9000
0	0	2400	46200	9000
0	0	3000	49800	9000
0	0	3600	52200	9000
0	0	3600	54000	9000
0	0	3600	56100	9000
0	0	3600	56100	9000
0	0	0	0	0
0	0	0	0	0
0	0	0	2870	1500
0	0	0	7340	3690
0	0	0	9680	3690
0	0	0	12980	3690
0	0	0	14270	3690

0	0	0	16040	3900
0	0	0	18050	4110
0	0	0	21680	5160
0	0	0	27800	6960
0	0	480	29600	6960
0	0	990	32060	7590
0	0	1410	34610	7590
0	0	2010	36530	7590
0	0	2400	38330	7590
0	0	2730	39680	7590
0	0	2730	40700	7590
0	0	2730	42260	7590
0	0	2730	42260	7590
0	0	0	0	0
0	0	0	0	0
0	0	0	3300	1800
0	0	0	9000	4200
0	0	0	14100	4200
0	0	0	17400	4500
0	0	0	20100	4800
0	0	0	22800	4800
0	0	0	27000	5700
0	0	0	30300	6300
0	0	0	34200	7500
0	0	600	38100	7500
0	0	1200	40500	7500
0	0	1800	44100	7500
0	0	2400	50100	7500
0	0	3000	53400	7500
0	0	3600	56100	7500
0	0	4200	58500	7500
0	0	4800	60900	7500
0	0	4800	60900	7500
0	0	0	0	0
0	0	0	0	0
0	0	0	3020	1650
0	0	0	7340	3690
0	0	0	10940	3690
0	0	0	13940	3990
0	0	0	16040	4200
0	0	0	17870	4200
0	0	0	20450	4830
0	0	0	23180	5370
0	0	0	26600	6570
0	0	600	29990	6570
0	0	1200	31910	6570
0	0	1800	34730	6570
0	0	2220	38720	6570

0	0	2520	40070	6570
0	0	3060	41930	6570
0	0	3480	43640	6570
0	0	3960	45440	6570
0	0	3960	45440	6570
0	0	0	0	
0	0	0	0	
0	0	0	700	
0	0	0	1720	
0	0	0	2290	
0	0	0	2590	
0	0	0	3130	
0	0	0	3970	
0	0	0	4900	
0	0	0	6010	
0	0	0	6490	
0	0	0	6970	
0	0	0	7510	
0	0	0	8410	
0	0	0	8890	
0	0	0	10450	
0	0	0	11740	
0	0	90	12760	
0	0	90	13480	
0	0	90	13480	
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	685
0	0	0	4125	1375
0	0	0	4125	1375
0	0	0	5025	1675
0	0	0	9170	3330
0	0	0	10820	3750
0	0	0	11930	3750
0	0	0	16330	6370
0	300	0	18120	7170
0	300	0	20270	7170
0	300	0	22060	7170
0	300	0	24150	7170
0	600	0	25970	7170
0	600	0	27360	7170
0	600	0	28730	7170
0	600	210	30110	7170
0	600	210	31690	7170
0	600	210	31690	7170
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	685

0	0	0	2070	690
0	0	0	0	0
0	0	0	900	300
0	0	0	4145	1655
0	0	0	1650	420
0	0	0	1110	0
0	0	0	4400	2620
0	300	0	1790	800
0	0	0	2150	0
0	0	0	1790	0
0	0	0	2090	0
0	300	0	1820	0
0	0	0	1390	0
0	0	0	1370	0
0	0	210	1380	0
0	0	0	1580	0
0	600	210	31690	7170
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	685
0	0	0	4125	1375
0	0	0	4525	1375
0	0	0	8360	3330
0	0	0	13770	3330
0	0	0	15420	3750
0	0	0	16640	3750
0	0	0	19930	4170
0	300	0	22350	4970
0	300	0	24070	5370
0	300	0	26390	6370
0	300	0	29200	7170
0	600	0	30870	7170
0	600	0	32330	7170
0	600	0	33780	7170
0	600	210	35170	7170
0	600	210	36880	7170
0	600	210	36880	7170
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	685
0	0	0	2070	690
0	0	0	400	0
0	0	0	3835	1955
0	0	0	5410	0
0	0	0	1650	420
0	0	0	1220	0
0	0	0	3290	420
0	300	0	2420	800

0	0	0	1720	400
0	0	0	2320	1000
0	0	0	2810	800
0	300	0	1670	0
0	0	0	1460	0
0	0	0	1450	0
0	0	210	1390	0
0	0	0	1710	0
0	0	0	36880	0
0	0	0	0	0
0	0	0	0	0
0	0	0	5170	3115
0	0	0	8942.5	4017.5
0	0	0	10642.5	4017.5
0	0	0	14695	4170
0	0	0	16925	4415
0	0	0	19318	5083
0	0	0	21310	5330
0	0	0	25263	5998
0	300	0	33848	9253
0	300	0	36133	9508
0	300	0	38618	9763
0	300	0	41673	10018
0	600	0	44358	10273
0	600	0	46543	10528
0	600	0	48728	10783
0	600	210	51023	11038
0	600	210	53508	11293
0	600	210	53508	11293
0	0	0	0	0
0	0	0	0	0
0	0	0	5170	3115
0	0	0	3772.5	902.5
0	0	0	1700	0
0	0	0	4052.5	152.5
0	0	0	2230	245
0	0	0	2393	668
0	0	0	1992	247
0	0	0	3953	668
0	300	0	8585	3255
0	0	0	2285	255
0	0	0	2485	255
0	0	0	3055	255
0	300	0	2685	255
0	0	0	2185	255
0	0	0	2185	255
0	0	210	2295	255
0	0	0	2485	255

0	600	210	53508	11293
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	0
0	0	0	5025	900
0	0	0	6155	2030
0	0	0	10245	4170
0	0	0	16225	4415
0	0	0	18618	5083
0	0	0	20510	5330
0	0	0	24523	5998
0	300	0	29908	9253
0	300	0	31993	9508
0	300	0	34078	9763
0	300	0	36813	10018
0	600	0	39438	10273
0	600	0	41563	10528
0	600	0	43718	10783
0	600	210	45873	11038
0	600	210	48278	11293
0	600	210	48278	11293
0	0	0	0	0
0	0	0	0	0
0	0	0	2055	0
0	0	0	2970	900
0	0	0	1130	1130
0	0	0	4090	2140
0	0	0	5980	245
0	0	0	2393	668
0	0	0	1892	247
0	0	0	4013	668
0	300	0	5385	3255
0	0	0	2085	255
0	0	0	2085	255
0	0	0	2735	255
0	300	0	2625	255
0	0	0	2125	255
0	0	0	2155	255
0	0	210	2155	255
0	0	0	2405	255
0	600	210	48278	11293
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	900	
0	0	0	1630	
0	0	0	1885	
0	0	0	2455	

0	0	0	3198	
0	0	0	3870	
0	0	0	4593	
0	0	0	7558	
0	0	0	7923	
0	0	0	7688	
0	0	0	7613	
0	0	0	8568	
0	0	0	9233	
0	0	0	9938	
0	0	0	10703	
0	0	0	11398	

DS-14:

Workpaper: Georgia Power Territorial Base Case Load vs. Capability Table - 2025 IRP – Stenclik.xlsx

Table 4.6.1c - Georgia Power Territorial Base Case Load vs. Existing Capability MG0 (Winter)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Peak Demand (MW), (A)	16,264	16,892	18,334	20,320	22,168	23,612	24,469	24,900	25,213	25,451	25,653	25,768	25,987	26,216	26,605	26,917	27,295	27,687	28,118	28,544
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	17,194	17,194	17,194	16,724	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Purchased Generating Capacity (MW), (B)	5,913	6,012	6,242	6,503	5,723	5,830	3,787	3,787	3,732	3,729	2,412	1,830	1,763	1,414	1,414	1,054	1,034	1,031	1,028	1,028
Dispatchable DSOs (MW), (C)	649	652	656	656	659	661	665	667	670	673	675	676	681	703	711	720	728	737	748	758
Total Capacity (MW)	20,868	21,829	23,443	23,960	23,654	23,765	21,671	21,648	21,596	21,595	19,811	15,265	15,203	14,875	14,235	13,884	13,871	13,879	13,887	13,896
Capacity Required to Meet GPC Target (MW), (D)	(602)	(781)	(598)	1,467	4,086	5,783	8,948	9,511	9,954	10,252	12,290	16,980	17,316	17,930	19,057	19,799	20,284	20,768	21,299	21,822
GPC Reserve Margin (%)	28.3%	29.2%	27.9%	17.9%	6.7%	0.6%	-11.4%	-13.1%	-14.3%	-15.1%	-22.8%	-40.8%	-41.5%	-43.3%	-46.5%	-48.4%	-49.2%	-49.9%	-50.6%	-51.3%
Total Capacity with Generic Additions (MW)	20,868	21,829	23,443	26,089	27,658	30,198	30,504	31,352	31,909	32,349	32,664	32,124	32,467	32,783	33,348	33,702	34,109	34,807	35,175	35,949
Capacity Deficit (Surplus) MW	(602)	(781)	(598)	(662)	82	(651)	115	(193)	(359)	(501)	(564)	122	52	21	(56)	(19)	46	(160)	11	(231)
Reserve Margin (%)	28.3%	29.2%	27.9%	28.4%	24.8%	27.9%	24.7%	25.9%	26.6%	27.1%	27.3%	24.7%	24.9%	25.1%	25.3%	25.2%	25.0%	25.7%	25.1%	25.9%

Notes
(A) Territorial Load requirements less non-dispatchable DSOs
(B) Includes territorial and imported power purchases. Capacity does not include the Winter 2027/2028 BESS Request for Proposals (RFP) approved in the 2023 Integrated Resource Plan (IRP) Update to show total procurement needs.
(C) Values stated in combustion turbine equivalence terms
(D) Does not consider planning reserve sharing. Reflects GPC's Target Reserve Margin, resulting from a System Target Reserve Margin of 25.50% (2025-2027) and 26% (2028 and beyond).

Existing Capability

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Owned Generating Capacity (MW)	**14,306**	**15,164**	**16,545**	**16,801**	**17,272**	**17,273**	**17,218**	**17,194**	**17,194**	**17,194**	**16,724**	**12,759**	**12,759**	**12,759**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**
Nuclear	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**
HATCH 1	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451
HATCH 2	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
VOGTLE 1	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
VOGTLE 2	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
VOGTLE 3	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
VOGTLE 4	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
Coal	**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**3,990**	**3,965**	**3,965**	**3,965**	**3,965**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
BOWEN 1	740	740	740	740	740	740	740	740	740	740	740	-	-	-	-	-	-	-	-	-
BOWEN 2	760	760	760	760	760	760	760	760	760	760	760	-	-	-	-	-	-	-	-	-
BOWEN 3	950	950	950	950	950	950	950	950	950	950	950	-	-	-	-	-	-	-	-	-
BOWEN 4	910	910	910	910	910	910	910	910	910	910	910	-	-	-	-	-	-	-	-	-
SCHERER 1	75	75	75	75	75	75	75	75	75	75	75	-	-	-	-	-	-	-	-	-
SCHERER 2	72	72	72	72	72	72	72	72	72	72	72	-	-	-	-	-	-	-	-	-
SCHERER 3	537	537	537	537	537	537	482	458	458	458	458	-	-	-	-	-	-	-	-	-
WANSLEY 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Cycle	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**
MCDONOUGH 4	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934
MCDONOUGH 5	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928
MCDONOUGH 6	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930
MCINTOSH 10	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
MCINTOSH 11	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685
Oil/Gas Steam	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**648**	**648**	**648**	**648**	**-**	**-**	**-**	**-**	**-**	**-**
GASTON 1 GAS	127	127	127	127	127	127	127	127	127	127	-	-	-	-	-	-	-	-	-	-
GASTON 2 GAS	128	128	128	128	128	128	128	128	128	128	-	-	-	-	-	-	-	-	-	-
GASTON 3 GAS	102	102	102	102	102	102	102	102	102	102	-	-	-	-	-	-	-	-	-	-
GASTON 4 GAS	103	103	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-
YATES 6 GAS	323	323	323	323	323	323	323	323	323	323	323	323	323	323	-	-	-	-	-	-
YATES 7 GAS	326	326	326	326	326	326	326	326	326	326	326	326	326	326	-	-	-	-	-	-
Combustion Turbine	**1,855**	**1,855**	**2,211**	**2,454**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**
GASTON A	10	10	10	10	10	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
MCDONOUGH 3A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCDONOUGH 3B	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCINTOSH 1A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 2A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 3A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 4A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 5A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 6A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 7A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 8A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCMANUS 3A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55

	MCMANUS 3B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 3C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4D	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4E	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4F	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WARNER ROBINS 1	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WARNER ROBINS 2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WILSON 1A	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	WILSON 1B	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	WILSON 1C	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WILSON 1D	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	WILSON 1E	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON 1F	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YATES 10	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 8	-	-	357	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 9	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Pump Storage		**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**
	ROCKY MTN 1 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 2 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 3 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	WALLACE DAM 1 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 2 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 5 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 6 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Hydro		**678**	**691**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**
	BARTLETT'S FERRY 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 4 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	BARTLETT'S FERRY 5 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BARTLETT'S FERRY 6 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BURTON 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	BURTON 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ESTATOAH 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	FLINT RIVER 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 3 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	GOAT ROCK 3 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 6 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 7 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	GOAT ROCK 8 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	LANGDALE 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LANGDALE 6 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LLOYD SHOALS 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 3 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 4 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 5 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 6 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MORGAN FALLS 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 3 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 5 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 6 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 7 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	NACOOCHEE 1 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NACOOCHEE 2 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NORTH HIGHLANDS 1 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 2 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 3 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 4 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	OLIVER 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 4 HY	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	RIVERVIEW 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIVERVIEW 2 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SINCLAIR 1 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	SINCLAIR 2 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	TALLULAH 1 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 2 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 3 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 4 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 5 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 6 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERRORA 1 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERRORA 2 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

TUGALO 1 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 2 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 3 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 4 HY	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
WALLACE DAM 3 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
WALLACE DAM 4 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
YONAH 1 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 2 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 3 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Solar	**51**	**51**	**51**	**51**	**51**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**
COMMUNITY SOLAR - COMER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - GUYTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - WAYNESBORO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FALCONS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORT BENNING	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT GORDON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT STEWART SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT VALLEY STATE UNIVERSITY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KINGS BAY SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MCINTOSH CLOSED ASH POND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MCLB	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MOODY AFB	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RIGHT OF WAY SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROBINS AFB	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
UGA SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unassigned Self-Build Solar	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System Sales	**(1,052)**	**(206)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
SYSTEM SALE	(1,052)	(206)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Generating Capacity (MW)	**5,913**	**6,012**	**6,242**	**6,503**	**5,723**	**5,830**	**3,787**	**3,787**	**3,732**	**3,729**	**2,412**	**1,830**	**1,763**	**1,414**	**1,414**	**1,054**	**1,034**	**1,031**	**1,028**	**1,028**
2019 IRP RENEWABLES - DGS2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGS2330	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2019 IRP RENEWABLES - DGS2430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGW2330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2019 IRP RENEWABLES - DGW2430	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2022 IRP BIOMASS - AGE	-	-	-	-	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
2022 IRP ESS RFP	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
2022 IRP SOLAR DG RFP 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2022 IRP SOLAR DG RFP 2	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
2022 IRP SOLAR US RFP 1	-	-	-	-	-	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
2022 IRP SOLAR US RFP 2	-	-	-	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	24
2022/2023 US - FLINT RIVER SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2022/2023 US - TIMBERLAND SOLAR	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2022/2023 US - WADLEY SOLAR	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022/2023 US - WASHINGTON COUNTY SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
2023 IRP UPDATE BESS RFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 1 (WESTGA)	186	186	186	186	186	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 3 (WESTGA)	181	181	181	181	181	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALBANY RENEWABLE ENERGY	50	50	50	50	50	50	50	50	50	50	50	50	50	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1320	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1420	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1520	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1620	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1420	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1520	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1620	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: DUBLIN SOLAR CENTER - DUBLIN	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: RICHLAND SOLAR CENTER	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: RINCON SOLAR CENTER	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: BUTLER SOLAR FARM	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: DECATUR COUNTY SOLAR PROJECT	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: HECATE ENERGY - OLD MIDVILLE RD LLC	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: SOLAR GLYNN	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ASI PRIME 525 MW - DGS1635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGS1725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
ASI PRIME 525 MW - DGS1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1735	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1815	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGS1835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGW1725	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
ASI PRIME 525 MW - DGW1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGW1735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGW1815	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1820	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1825	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
ASI PRIME 525 MW - DGW1830	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASI PRIME 525 MW - DGW1835	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - US1: BUTLER SOLAR	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
ASI PRIME 525 MW - US1: DECATUR PARKWAY SOLAR PROJECT	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	-	-	-	-
ASI PRIME 525 MW - US1: PAWPAW SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASI PRIME 525 MW - US2: LIVE OAK SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
ASI PRIME 525 MW - US2: WHITE OAK SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AXIUM US SOLAR HOLDINGS (SD&D)	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUE CANYON	82	82	82	82	82	82	82	82	82	82	82	-	-	-	-	-	-	-	-	-
CCSP DG - ONLINE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCSP DG - REMAINING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COCA-COLA	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
CONYERS RENEWABLE ENERGY	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-
DAHLBERG 1	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 10	89	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 2	88	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-
DAHLBERG 3	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 4	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAHLBERG 5	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 6	88	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 8	86	86	86	86	86	86	86	86	86	86	86	-	-	-	-	-	-	-	-	-
DAHLBERG 9	-	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
EXELON HEARD 1	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 2	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 3	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 4	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 5	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 6	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEORGIA RENEWABLE POWER FRANKLIN LLC	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GEORGIA RENEWABLE POWER MADISON	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GREEN POWER SOLUTIONS	29	29	29	29	29	29	29	29	29	29	29	-	-	-	-	-	-	-	-	-
HARRIS 1	668	668	668	668	668	668	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 2	690	690	690	690	690	690	690	690	690	690	-	-	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - FLINT RIVER	27	27	27	27	27	27	27	27	27	27	27	27	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - PORT WENTWORTH	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-	-	-
LSS 50 MW - HSH PEMBROOKE	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
LSS 50 MW - SIMON SOLAR FARM	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMILLA	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMP (MERIWETHER COUNTY)	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - OAK GROVE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - PINE RIDGE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - RICHLAND CREEK	11	11	11	11	11	11	11	11	11	11	11	11	-	-	-	-	-	-	-	-
MID-GEORGIA COGEN	300	300	300	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONROE POWER	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	-	-	-	-	-
MPC PPA	750	750	750	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIEDMONT GREEN POWER	55	55	55	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
REDI 1400 MW - DG CS S1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
REDI 1400 MW - DG CS S1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS S1930	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS S1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS W1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
REDI 1400 MW - DG CS W1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS W1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG S2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG S2035	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
REDI 1400 MW - DG W2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG W2035	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - US 1: QUITMAN SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: COOL SPRINGS	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
REDI 1400 MW - US 2: HICKORY PARK	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: QUITMAN II	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI CS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA ROSA	-	-	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR - WASTE MANAGEMENT	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-
WALTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 7	622	622	622	622	622	622	622	622	622	622	-	-	-	-	-	-	-	-	-	-
WASHINGTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dispatchable DSOs (MW)	**649**	**652**	**656**	**656**	**659**	**661**	**665**	**667**	**670**	**673**	**675**	**676**	**681**	**703**	**711**	**720**	**728**	**737**	**748**	**758**
CVR Level 1	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
CVR Level 2	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
DER Customer Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPEC	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
RTPeDA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RTPeHA	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
Temp Check	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Energy Storage	**-**	**-**	**812**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**
2019 IRP BESS DEMO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019 IRP BESS DEMO - FORT STEWART 4 HR BESS	-	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022 IRP MCGRAU FORD 2 HR BATTERY	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - HAMMOND	-	-	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2023 IRP Update - MCGRAU FORD PHASE 2	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - MOODY AFB	-	-	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
2023 IRP UPDATE - ROBINS AFB	-	-	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

	MOSSY BRANCH	-	-	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65

Resource Additions (Nameplate MW)		**-**	**-**	**3,800**	**7,280**	**9,710**	**12,710**	**14,570**	**16,430**	**17,900**	**21,290**	**28,010**	**29,630**	**31,490**	**33,890**	**35,810**	**37,250**	**38,960**	**40,340**	**42,320**
	CT w/ SCR	0	0	0	1200	1500	1500	2100	2310	2730	3030	3930	4230	4770	4980	5280	5400	6090	6240	6900
	CC	0	0	0	0	2130	4530	4800	4800	4800	6180	7380	7380	7380	7380	7380	7380	7380	7380	7380
	CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	900	900	1200	1200	1200	1200
	CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Solar	0	0	1370	2750	2750	3350	4340	5330	6320	7310	8330	9350	10370	11390	12410	13430	14450	15470	16490
	Wind	0	0	0	0	0	0	0	240	300	600	900	1200	1500	1770	2070	2070	2070	2070	2370
	Battery 4-hr (T1)	0	0	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530
	Battery 4-hr (T2)	0	0	900	1800	1800	1800	1800	2220	2220	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
	Battery 4-hr (T3)	0	0	0	0	0	0	0	0	0	0	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
	Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210
Resource Additions (Effective MW)		**-**	**-**	**2,129**	**4,004**	**6,434**	**8,834**	**9,704**	**10,313**	**10,754**	**12,854**	**16,859**	**17,264**	**17,909**	**19,113**	**19,818**	**20,238**	**20,928**	**21,288**	**22,053**
1.0	CT w/ SCR	0	0	0	1200	1500	1500	2100	2310	2730	3030	3930	4230	4770	4980	5280	5400	6090	6240	6900
1.0	CC	0	0	0	0	2130	4530	4800	4800	4800	6180	7380	7380	7380	7380	7380	7380	7380	7380	7380
1.0	CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	900	900	1200	1200	1200	1200
1.0	CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.4	Wind	0	0	0	0	0	0	0	84	105	210	315	420	525	619.5	724.5	724.5	724.5	724.5	829.5
1.0	Battery 4-hr (T1)	0	0	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5
0.8	Battery 4-hr (T2)	0	0	675	1350	1350	1350	1350	1665	1665	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
0.5	Battery 4-hr (T3)	0	0	0	0	0	0	0	0	0	0	1500	1500	1500	1500	1500	1500	1500	1500	1500
0.3	Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8	Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
1.0	Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Georgia Power Territorial Base Case Load vs. Existing Capability MG0, No Large Load (Winter)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Peak Demand (MW), (A)	16,264	16,437	16,613	16,789	16,968	17,149	17,332	17,516	17,703	17,891	18,082	18,275	18,469	18,666	18,865	19,066	19,352	19,643	19,938	20,238
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	13,228	13,228	13,228	12,759	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Purchased Generating Capacity (MW), (B)	5,913	6,012	6,242	6,503	5,723	5,830	3,787	3,787	3,732	3,729	2,412	1,830	1,763	1,414	1,414	1,054	1,034	1,031	1,028	1,028
Dispatchable DSOs (MW), (C)	649	652	656	656	659	661	665	667	670	673	675	676	681	703	711	720	728	737	748	758
Total Capacity (MW)	20,868	21,829	23,443	23,960	23,654	23,765	21,671	17,683	17,631	17,630	15,845	15,265	15,203	14,875	14,235	13,884	13,871	13,879	13,887	13,896
Capacity Required to Meet GPC Target (MW), (D)	(602)	(1,347)	(2,743)	(2,951)	(2,421)	(2,305)	17	4,236	4,522	4,758	6,782	7,603	7,908	8,483	9,372	9,974	10,345	10,702	11,063	11,429
GPC Reserve Margin (%)	28.3%	32.8%	41.1%	42.7%	39.4%	38.6%	25.0%	1.0%	-0.4%	-1.5%	-12.4%	-16.5%	-17.7%	-20.3%	-24.5%	-27.2%	-28.3%	-29.3%	-30.4%	-31.3%
Total Capacity with Generic Additions (MW)	20,868	21,829	23,443	24,611	24,960	25,071	23,233	21,987	22,333	22,413	22,639	22,864	23,107	23,353	23,608	23,862	24,219	24,577	24,945	25,319
Capacity Deficit (Surplus) MW	(602)	(1,347)	(2,743)	(3,602)	(3,727)	(3,611)	(1,545)	(67)	(181)	(25)	(12)	4	5	4	(1)	(4)	(3)	4	5	6
Reserve Margin (%)	28.3%	32.8%	41.1%	46.6%	47.1%	46.2%	34.1%	25.5%	26.2%	25.3%	25.2%	25.1%	25.1%	25.1%	25.1%	25.2%	25.2%	25.1%	25.1%	25.1%

Notes
(A) Territorial Load requirements less non-dispatchable DSOs
(B) Includes territorial and imported power purchases. Capacity does not include the Winter 2027/2028 BESS Request for Proposals (RFP) approved in the 2023 Integrated Resource Plan (IRP) Update to show total procurement needs.
(C) Values stated in combustion turbine equivalence terms
(D) Does not consider planning reserve sharing. Reflects GPC's Target Reserve Margin, resulting from a System Target Reserve Margin of 25.50% (2025-2027) and 26% (2028 and beyond).

Existing Capability

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	13,228	13,228	13,228	12,759	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Nuclear	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049
HATCH 1	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451
HATCH 2	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
VOGTLE 1	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
VOGTLE 2	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
VOGTLE 3	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
VOGTLE 4	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
Coal	4,045	4,045	4,045	4,045	4,045	4,045	3,990	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 1	740	740	740	740	740	740	740	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 2	760	760	760	760	760	760	760	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 3	950	950	950	950	950	950	950	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 4	910	910	910	910	910	910	910	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 1	75	75	75	75	75	75	75	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 2	72	72	72	72	72	72	72	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 3	537	537	537	537	537	537	482	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Cycle	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169
MCDONOUGH 4	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934
MCDONOUGH 5	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928
MCDONOUGH 6	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930
MCINTOSH 10	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
MCINTOSH 11	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685
Oil/Gas Steam	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	648	648	648	648	-	-	-	-	-	-
GASTON 1 GAS	127	127	127	127	127	127	127	127	127	127	-	-	-	-	-	-	-	-	-	-
GASTON 2 GAS	128	128	128	128	128	128	128	128	128	128	-	-	-	-	-	-	-	-	-	-
GASTON 3 GAS	102	102	102	102	102	102	102	102	102	102	-	-	-	-	-	-	-	-	-	-
GASTON 4 GAS	103	103	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-
YATES 6 GAS	323	323	323	323	323	323	323	323	323	323	323	323	323	323	-	-	-	-	-	-
YATES 7 GAS	326	326	326	326	326	326	326	326	326	326	326	326	326	326	-	-	-	-	-	-
Combustion Turbine	1,855	1,855	2,211	2,454	2,925	2,925	2,925	2,925	2,925	2,925	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915
GASTON A	10	10	10	10	10	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
MCDONOUGH 3A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCDONOUGH 3B	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCINTOSH 1A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 2A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 3A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 4A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 5A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 6A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 7A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 8A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCMANUS 3A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55

	MCMANUS 3B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 3C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4D	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4E	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4F	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WARNER ROBINS 1	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WARNER ROBINS 2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WILSON 1A	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	WILSON 1B	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	WILSON 1C	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WILSON 1D	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	WILSON 1E	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON 1F	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YATES 10	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 8	-	-	357	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 9	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Pump Storage		**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**
	ROCKY MTN 1 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 2 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 3 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	WALLACE DAM 1 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 2 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 5 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 6 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Hydro		**678**	**691**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**
	BARTLETT'S FERRY 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 4 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	BARTLETT'S FERRY 5 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BARTLETT'S FERRY 6 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BURTON 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	BURTON 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ESTATOAH 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	FLINT RIVER 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 3 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	GOAT ROCK 3 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 6 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 7 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	GOAT ROCK 8 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	LANGDALE 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LANGDALE 6 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LLOYD SHOALS 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 3 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 4 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 5 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 6 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MORGAN FALLS 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 3 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 5 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 6 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 7 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	NACOOCHEE 1 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NACOOCHEE 2 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NORTH HIGHLANDS 1 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 2 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 3 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 4 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	OLIVER 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 4 HY	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	RIVERVIEW 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIVERVIEW 2 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SINCLAIR 1 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	SINCLAIR 2 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	TALLULAH 1 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 2 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 3 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 4 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 5 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 6 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERRORA 1 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERRORA 2 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

TUGALO 1 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 2 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 3 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 4 HY	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
WALLACE DAM 3 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
WALLACE DAM 4 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
YONAH 1 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 2 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 3 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Solar	**51**	**51**	**51**	**51**	**51**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**
COMMUNITY SOLAR - COMER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - GUYTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - WAYNESBORO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FALCONS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORT BENNING	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT GORDON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT STEWART SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT VALLEY STATE UNIVERSITY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KINGS BAY SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MCINTOSH CLOSED ASH POND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MCLB	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MOODY AFB	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RIGHT OF WAY SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROBINS AFB	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
UGA SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unassigned Self-Build Solar	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System Sales	**(1,052)**	**(206)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
SYSTEM SALE	(1,052)	(206)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Generating Capacity (MW)	**5,913**	**6,012**	**6,242**	**6,503**	**5,723**	**5,830**	**3,787**	**3,787**	**3,732**	**3,729**	**2,412**	**1,830**	**1,763**	**1,414**	**1,414**	**1,054**	**1,034**	**1,031**	**1,028**	**1,028**
2019 IRP RENEWABLES - DGS2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGS2330	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2019 IRP RENEWABLES - DGS2430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGW2330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2019 IRP RENEWABLES - DGW2430	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2022 IRP BIOMASS - AGE	-	-	-	-	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
2022 IRP ESS RFP	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
2022 IRP SOLAR DG RFP 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2022 IRP SOLAR DG RFP 2	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
2022 IRP SOLAR US RFP 1	-	-	-	-	-	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
2022 IRP SOLAR US RFP 2	-	-	-	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	24
2022/2023 US - FLINT RIVER SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2022/2023 US - TIMBERLAND SOLAR	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2022/2023 US - WADLEY SOLAR	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022/2023 US - WASHINGTON COUNTY SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
2023 IRP UPDATE BESS RFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 1 (WESTGA)	186	186	186	186	186	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 3 (WESTGA)	181	181	181	181	181	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALBANY RENEWABLE ENERGY	50	50	50	50	50	50	50	50	50	50	50	50	50	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1320	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1420	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1520	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1620	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1420	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1520	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1620	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: DUBLIN SOLAR CENTER - DUBLIN	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: RICHLAND SOLAR CENTER	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US1: RINCON SOLAR CENTER	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: BUTLER SOLAR FARM	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: DECATUR COUNTY SOLAR PROJECT	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: HECATE ENERGY - OLD MIDVILLE RD LLC	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US2: SOLAR GLYNN	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ASI PRIME 525 MW - DGS1635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGS1725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
ASI PRIME 525 MW - DGS1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1735	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1815	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGS1835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGW1725	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
ASI PRIME 525 MW - DGW1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGW1735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGW1815	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1825	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
ASI PRIME 525 MW - DGW1830	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASI PRIME 525 MW - DGW1835	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - US1: BUTLER SOLAR	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
ASI PRIME 525 MW - US1: DECATUR PARKWAY SOLAR PROJECT	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	-	-	-	-
ASI PRIME 525 MW - US1: PAWPAW SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASI PRIME 525 MW - US2: LIVE OAK SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
ASI PRIME 525 MW - US2: WHITE OAK SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AXIUM US SOLAR HOLDINGS (SD&D)	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUE CANYON	82	82	82	82	82	82	82	82	82	82	82	-	-	-	-	-	-	-	-	-
CCSP DG - ONLINE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCSP DG - REMAINING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COCA-COLA	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
CONYERS RENEWABLE ENERGY	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-
DAHLBERG 1	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 10	89	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 2	88	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-
DAHLBERG 3	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 4	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAHLBERG 5	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 6	88	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 8	86	86	86	86	86	86	86	86	86	86	86	-	-	-	-	-	-	-	-	-
DAHLBERG 9	-	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
EXELON HEARD 1	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 2	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 3	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 4	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 5	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 6	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEORGIA RENEWABLE POWER FRANKLIN LLC	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GEORGIA RENEWABLE POWER MADISON	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GREEN POWER SOLUTIONS	29	29	29	29	29	29	29	29	29	29	29	-	-	-	-	-	-	-	-	-
HARRIS 1	668	668	668	668	668	668	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 2	690	690	690	690	690	690	690	690	690	690	-	-	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - FLINT RIVER	27	27	27	27	27	27	27	27	27	27	27	27	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - PORT WENTWORTH	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-	-	-
LSS 50 MW - HSH PEMBROOKE	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
LSS 50 MW - SIMON SOLAR FARM	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMILLA	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMP (MERIWETHER COUNTY)	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - OAK GROVE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - PINE RIDGE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - RICHLAND CREEK	11	11	11	11	11	11	11	11	11	11	11	11	-	-	-	-	-	-	-	-
MID-GEORGIA COGEN	300	300	300	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONROE POWER	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	-	-	-	-	-
MPC PPA	750	750	750	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIEDMONT GREEN POWER	55	55	55	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
REDI 1400 MW - DG CS S1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
REDI 1400 MW - DG CS S1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS S1930	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS S1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS W1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
REDI 1400 MW - DG CS W1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS W1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG S2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG S2035	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
REDI 1400 MW - DG W2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG W2035	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - US 1: QUITMAN SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: COOL SPRINGS	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
REDI 1400 MW - US 2: HICKORY PARK	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: QUITMAN II	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI CS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA ROSA	-	-	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR - WASTE MANAGEMENT	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-
WALTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 7	622	622	622	622	622	622	622	622	622	622	-	-	-	-	-	-	-	-	-	-
WASHINGTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dispatchable DSOs (MW)	**649**	**652**	**656**	**656**	**659**	**661**	**665**	**667**	**670**	**673**	**675**	**676**	**681**	**703**	**711**	**720**	**728**	**737**	**748**	**758**
CVR Level 1	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
CVR Level 2	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
DER Customer Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPEC	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
RTPeDA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RTPeHA	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
Temp Check	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Energy Storage	**-**	**-**	**812**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**
2019 IRP BESS DEMO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019 IRP BESS DEMO - FORT STEWART 4 HR BESS	-	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022 IRP MCGRAU FORD 2 HR BATTERY	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - HAMMOND	-	-	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2023 IRP Update - MCGRAU FORD PHASE 2	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - MOODY AFB	-	-	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
2023 IRP UPDATE - ROBINS AFB	-	-	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

MOSSY BRANCH	-	-	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Resource Additions (Nameplate MW)		-	-	2,055	4,125	4,125	5,025	9,170	10,820	11,930	16,330	18,750	20,270	22,060	24,150	25,970	27,360	28,730	30,110	31,690
CT w/ SCR	0	0	0	0	0	0	0	500	500	560	710	710	820	1070	1320	1450	1580	1840	1930	2160
CC	0	0	0	0	0	0	0	1000	1000	1000	1340	1340	1430	1650	2200	2270	2510	2600	2660	2690
CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	1370	2750	2750	3350	4340	5330	6320	7310	8330	9350	10370	11390	12410	13430	14450	15470	16490
Wind	0	0	0	0	0	0	0	0	240	300	600	900	1200	1500	1770	2070	2070	2070	2070	2370
Battery 4-hr (T1)	0	0	0	685	1375	1375	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530
Battery 4-hr (T2)	0	0	0	0	0	0	145	1800	2220	2220	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Battery 4-hr (T3)	0	0	0	0	0	0	0	0	0	0	2200	3000	3000	3000	3000	3000	3000	3000	3000	3000
Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Resource Additions (Effective MW)			-	-	651	1,306	1,306	1,562	4,304	4,703	4,784	6,794	7,599	7,904	8,479	9,373	9,978	10,348	10,698	11,058	11,423
1.0	CT w/ SCR		0	0	0	0	0	0	500	500	560	710	710	820	1070	1320	1450	1580	1840	1930	2160
1.0	CC		0	0	0	0	0	0	1000	1000	1000	1340	1340	1430	1650	2200	2270	2510	2600	2660	2690
1.0	CC w/ CCS - Local		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	CC w/ CCS - Distant		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	Solar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.4	Wind		0	0	0	0	0	0	0	84	105	210	315	420	525	619.5	724.5	724.5	724.5	724.5	829.5
1.0	Battery 4-hr (T1)		0	0	650.75	1306.25	1306.25	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5
0.8	Battery 4-hr (T2)		0	0	0	0	0	108.75	1350	1665	1665	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
0.5	Battery 4-hr (T3)		0	0	0	0	0	0	0	0	0	1100	1500	1500	1500	1500	1500	1500	1500	1500	1500
0.3	Battery 4-hr (T4)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Battery 4-hr (T1_2)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8	Battery 4-hr (T2_2)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Medium Duration Storage		0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
1.0	Nuclear		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Georgia Power Territorial Base Case Load vs. Existing Capability MG0, Half Large Load (Winter)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Peak Demand (MW), (A)	16,264	16,664	17,473	18,555	19,568	20,381	20,900	21,208	21,458	21,671	21,867	22,022	22,228	22,441	22,735	22,991	23,323	23,665	24,028	24,391
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	13,228	13,228	13,228	12,759	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Purchased Generating Capacity (MW), (B)	5,913	6,012	6,242	6,503	5,723	5,830	3,787	3,787	3,732	3,729	2,412	1,830	1,763	1,414	1,414	1,054	1,034	1,031	1,028	1,028
Dispatchable DSOs (MW), (C)	649	652	656	656	659	661	665	667	670	673	675	676	681	703	711	720	728	737	748	758
Total Capacity (MW)	20,868	21,829	23,443	23,960	23,654	23,765	21,671	17,683	17,631	17,630	15,845	15,265	15,203	14,875	14,235	13,884	13,871	13,879	13,887	13,896
Capacity Required to Meet GPC Target (MW), (D)	(602)	(1,064)	(1,671)	(742)	832	1,739	4,483	8,856	9,220	9,488	11,518	12,291	12,612	13,206	14,214	14,887	15,314	15,735	16,181	16,625
GPC Reserve Margin (%)	28.3%	31.0%	34.2%	29.1%	20.9%	16.6%	3.7%	-16.6%	-17.8%	-18.6%	-27.5%	-30.7%	-31.6%	-33.7%	-37.4%	-39.6%	-40.5%	-41.4%	-42.2%	-43.0%
Total Capacity with Generic Additions (MW)	20,868	21,829	23,443	24,611	24,960	25,471	26,154	26,587	26,933	27,123	27,339	27,564	27,807	28,083	28,658	28,762	29,189	29,627	30,005	30,509
Capacity Deficit (Surplus) MW	(602)	(1,064)	(1,671)	(1,393)	(474)	33	(1)	(48)	(82)	(5)	25	(7)	9	(2)	(209)	9	(4)	(13)	63	12
Reserve Margin (%)	28.3%	31.0%	34.2%	32.6%	27.6%	25.0%	25.1%	25.4%	25.5%	25.2%	25.0%	25.2%	25.1%	25.1%	26.1%	25.1%	25.2%	25.2%	24.9%	25.1%

Notes
(A) Territorial Load requirements less non-dispatchable DSOs
(B) Includes territorial and imported power purchases. Capacity does not include the Winter 2027/2028 BESS Request for Proposals (RFP) approved in the 2023 Integrated Resource Plan (IRP) Update to show total procurement needs.
(C) Values stated in combustion turbine equivalence terms
(D) Does not consider planning reserve sharing. Reflects GPC's Target Reserve Margin, resulting from a System Target Reserve Margin of 25.50% (2025-2027) and 26% (2028 and beyond).

Existing Capability

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	13,228	13,228	13,228	12,759	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Nuclear	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049	3,049
HATCH 1	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451
HATCH 2	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
VOGTLE 1	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
VOGTLE 2	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
VOGTLE 3	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
VOGTLE 4	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
Coal	4,045	4,045	4,045	4,045	4,045	4,045	3,990	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 1	740	740	740	740	740	740	740	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 2	760	760	760	760	760	760	760	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 3	950	950	950	950	950	950	950	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 4	910	910	910	910	910	910	910	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 1	75	75	75	75	75	75	75	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 2	72	72	72	72	72	72	72	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 3	537	537	537	537	537	537	482	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Cycle	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169	4,169
MCDONOUGH 4	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934
MCDONOUGH 5	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928
MCDONOUGH 6	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930
MCINTOSH 10	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
MCINTOSH 11	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685
Oil/Gas Steam	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	648	648	648	648	-	-	-	-	-	-
GASTON 1 GAS	127	127	127	127	127	127	127	127	127	127	-	-	-	-	-	-	-	-	-	-
GASTON 2 GAS	128	128	128	128	128	128	128	128	128	128	-	-	-	-	-	-	-	-	-	-
GASTON 3 GAS	102	102	102	102	102	102	102	102	102	102	-	-	-	-	-	-	-	-	-	-
GASTON 4 GAS	103	103	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-
YATES 6 GAS	323	323	323	323	323	323	323	323	323	323	323	323	323	323	-	-	-	-	-	-
YATES 7 GAS	326	326	326	326	326	326	326	326	326	326	326	326	326	326	-	-	-	-	-	-
Combustion Turbine	1,855	1,855	2,211	2,454	2,925	2,925	2,925	2,925	2,925	2,925	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915	2,915
GASTON A	10	10	10	10	10	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
MCDONOUGH 3A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCDONOUGH 3B	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCINTOSH 1A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 2A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 3A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 4A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 5A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 6A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 7A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 8A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCMANUS 3A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55

	MCMANUS 3B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 3C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4D	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4E	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4F	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WARNER ROBINS 1	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WARNER ROBINS 2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WILSON 1A	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	WILSON 1B	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	WILSON 1C	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WILSON 1D	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	WILSON 1E	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON 1F	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YATES 10	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 8	-	-	357	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 9	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Pump Storage		**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**
	ROCKY MTN 1 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 2 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 3 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	WALLACE DAM 1 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 2 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 5 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 6 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Hydro		**678**	**691**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**
	BARTLETT'S FERRY 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 4 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	BARTLETT'S FERRY 5 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BARTLETT'S FERRY 6 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BURTON 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	BURTON 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ESTATOAH 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	FLINTRIVER 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINTRIVER 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINTRIVER 3 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	GOATROCK 3 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOATROCK 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOATROCK 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOATROCK 6 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOATROCK 7 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	GOATROCK 8 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	LANGDALE 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LANGDALE 6 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LLOYD SHOALS 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 3 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 4 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 5 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 6 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MORGAN FALLS 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 3 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 5 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 6 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 7 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	NACOOCHEE 1 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NACOOCHEE 2 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NORTH HIGHLANDS 1 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 2 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 3 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 4 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	OLIVER 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 4 HY	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	RIVERVIEW 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIVERVIEW 2 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SINCLAIR 1 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	SINCLAIR 2 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	TALLULAH 1 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 2 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 3 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 4 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 5 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 6 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERRORA 1 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERRORA 2 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

	TUGALO 1 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	TUGALO 2 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	TUGALO 3 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	TUGALO 4 HY	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	WALLACE DAM 3 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
	WALLACE DAM 4 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
	YONAH 1 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	YONAH 2 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	YONAH 3 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Solar		**51**	**51**	**51**	**51**	**51**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**
	COMMUNITY SOLAR - COMER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	COMMUNITY SOLAR - GUYTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	COMMUNITY SOLAR - WAYNESBORO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FALCONS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FORT BENNING	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	FORT GORDON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	FORT STEWART SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	FORT VALLEY STATE UNIVERSITY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	KINGS BAY SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	MCINTOSH CLOSED ASH POND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	MCLB	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	MOODY AFB	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	RIGHT OF WAY SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ROBINS AFB	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	UGA SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unassigned Self-Build Solar	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System Sales		**(1,052)**	**(206)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	SYSTEM SALE	(1,052)	(206)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Generating Capacity (MW)		**5,913**	**6,012**	**6,242**	**6,503**	**5,723**	**5,830**	**3,787**	**3,787**	**3,732**	**3,729**	**2,412**	**1,830**	**1,763**	**1,414**	**1,414**	**1,054**	**1,034**	**1,031**	**1,028**	**1,028**
	2019 IRP RENEWABLES - DGS2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 IRP RENEWABLES - DGS2330	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2019 IRP RENEWABLES - DGS2430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 IRP RENEWABLES - DGW2330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2019 IRP RENEWABLES - DGW2430	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2022 IRP BIOMASS - AGE	-	-	-	-	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	2022 IRP ESS RFP	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
	2022 IRP SOLAR DG RFP 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2022 IRP SOLAR DG RFP 2	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	2022 IRP SOLAR US RFP 1	-	-	-	-	-	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
	2022 IRP SOLAR US RFP 2	-	-	-	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	2022/2023 US - FLINT RIVER SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	2022/2023 US - TIMBERLAND SOLAR	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	2022/2023 US - WADLEY SOLAR	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	2022/2023 US - WASHINGTON COUNTY SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	2023 IRP UPDATE BESS RFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ADDISON 1 (WESTGA)	186	186	186	186	186	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ADDISON 3 (WESTGA)	181	181	181	181	181	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ALBANY RENEWABLE ENERGY	50	50	50	50	50	50	50	50	50	50	50	50	50	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGS1320	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGS1420	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGS1520	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGS1620	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGW1420	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGW1520	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - DGW1620	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 1: DUBLIN SOLAR CENTER - DUBLIN	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 1: RICHLAND SOLAR CENTER	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 1: RINCON SOLAR CENTER	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 2: BUTLER SOLAR FARM	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 2: DECATUR COUNTY SOLAR PROJECT	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 2: HECATE ENERGY - OLD MIDVILLE RD LLC	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-
	ASI CLASSIC 210 MW - US 2: SOLAR GLYNN	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
	ASI PRIME 525 MW - DGS1625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
	ASI PRIME 525 MW - DGS1635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ASI PRIME 525 MW - DGS1725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
	ASI PRIME 525 MW - DGS1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ASI PRIME 525 MW - DGS1735	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ASI PRIME 525 MW - DGS1815	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
	ASI PRIME 525 MW - DGS1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
	ASI PRIME 525 MW - DGS1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	ASI PRIME 525 MW - DGS1835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	ASI PRIME 525 MW - DGW1725	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
	ASI PRIME 525 MW - DGW1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ASI PRIME 525 MW - DGW1735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ASI PRIME 525 MW - DGW1815	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
	ASI PRIME 525 MW - DGW1820	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-
	ASI PRIME 525 MW - DGW1825	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
	ASI PRIME 525 MW - DGW1830	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ASI PRIME 525 MW - DGW1835	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ASI PRIME 525 MW - US 1: BUTLER SOLAR	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	ASI PRIME 525 MW - US 1: DECATUR PARKWAY SOLAR PROJECT	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	-	-	-	-
	ASI PRIME 525 MW - US 1: PAWPAW SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	ASI PRIME 525 MW - US 2: LIVE OAK SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	ASI PRIME 525 MW - US 2: WHITE OAK SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AXIUM US SOLAR HOLDINGS (SD&D)	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUE CANYON	82	82	82	82	82	82	82	82	82	82	82	-	-	-	-	-	-	-	-	-
CCSP DG - ONLINE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCSP DG - REMAINING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COCA-COLA	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
CONYERS RENEWABLE ENERGY	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-
DAHLBERG 1	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 10	89	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 2	88	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-
DAHLBERG 3	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 4	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAHLBERG 5	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 6	88	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 8	86	86	86	86	86	86	86	86	86	86	86	-	-	-	-	-	-	-	-	-
DAHLBERG 9	-	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
EXELON HEARD 1	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 2	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 3	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 4	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 5	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 6	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEORGIA RENEWABLE POWER FRANKLIN LLC	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GEORGIA RENEWABLE POWER MADISON	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GREEN POWER SOLUTIONS	29	29	29	29	29	29	29	29	29	29	29	-	-	-	-	-	-	-	-	-
HARRIS 1	668	668	668	668	668	668	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 2	690	690	690	690	690	690	690	690	690	690	-	-	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - FLINT RIVER	27	27	27	27	27	27	27	27	27	27	27	27	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - PORT WENTWORTH	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-	-	-
LSS 50 MW - HSH PEMBROOKE	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
LSS 50 MW - SIMON SOLAR FARM	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMILLA	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMP (MERIWETHER COUNTY)	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - OAK GROVE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - PINE RIDGE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - RICHLAND CREEK	11	11	11	11	11	11	11	11	11	11	11	11	-	-	-	-	-	-	-	-
MID-GEORGIA COGEN	300	300	300	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONROE POWER	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	-	-	-	-	-
MPC PPA	750	750	750	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIEDMONT GREEN POWER	55	55	55	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
REDI 1400 MW - DG CS S1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
REDI 1400 MW - DG CS S1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS S1930	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS S1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS W1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
REDI 1400 MW - DG CS W1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS W1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG S2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG S2035	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
REDI 1400 MW - DG W2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG W2035	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - US 1: QUITMAN SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: COOL SPRINGS	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
REDI 1400 MW - US 2: HICKORY PARK	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: QUITMAN II	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI CS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA ROSA	-	-	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR - WASTE MANAGEMENT	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-
WALTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 7	622	622	622	622	622	622	622	622	622	622	-	-	-	-	-	-	-	-	-	-
WASHINGTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dispatchable DSOs (MW)	**649**	**652**	**656**	**656**	**659**	**661**	**665**	**667**	**670**	**673**	**675**	**676**	**681**	**703**	**711**	**720**	**728**	**737**	**748**	**758**
CVR Level 1	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
CVR Level 2	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
DER Customer Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPEC	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
RTPeDA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RTPeHA	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
Temp Check	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Energy Storage	**-**	**-**	**812**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**
2019 IRP BESS DEMO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019 IRP BESS DEMO - FORT STEWART 4 HR BESS	-	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022 IRP MCGRAU FORD 2 HR BATTERY	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - HAMMOND	-	-	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2023 IRP Update - MCGRAU FORD PHASE 2	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - MOODY AFB	-	-	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
2023 IRP UPDATE - ROBINS AFB	-	-	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

MOSSY BRANCH	-	-	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65

Resource Additions (Nameplate MW)	**-**	**-**	**2,055**	**4,125**	**4,525**	**8,360**	**13,770**	**15,420**	**16,640**	**19,930**	**22,350**	**24,070**	**26,390**	**29,200**	**30,870**	**32,330**	**33,780**	**35,170**	**36,880**
CT w/ SCR	0	0	0	0	400	420	2100	2100	2270	3350	3350	3350	3350	3350	3350	3500	3930	4090	4480
CC	0	0	0	0	0	1260	4000	4000	4000	4500	4500	4500	4500	5220	5270	5560	5560	5560	5560
CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	1370	2750	2750	3350	4340	5330	6320	7310	8330	9350	10370	11390	12410	13430	14450	15470	16490
Wind	0	0	0	0	0	0	0	240	300	600	900	1200	1500	1770	2070	2070	2070	2070	2370
Battery 4-hr (T1)	0	0	685	1375	1375	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530
Battery 4-hr (T2)	0	0	0	0	0	1800	1800	2220	2220	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Battery 4-hr (T3)	0	0	0	0	0	0	0	0	0	0	800	1200	2200	3000	3000	3000	3000	3000	3000
Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Resource Additions (Effective MW)		**-**	**-**	**651**	**1,306**	**1,706**	**4,484**	**8,904**	**9,303**	**9,494**	**11,494**	**12,299**	**12,604**	**13,209**	**14,423**	**14,878**	**15,318**	**15,748**	**16,118**	**16,613**
1.0	CT w/ SCR	0	0	0	0	400	420	2100	2100	2270	3350	3350	3350	3350	3350	3350	3500	3930	4090	4480
1.0	CC	0	0	0	0	0	1260	4000	4000	4000	4500	4500	4500	4500	5220	5270	5560	5560	5560	5560
1.0	CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.4	Wind	0	0	0	0	0	0	0	84	105	210	315	420	525	619.5	724.5	724.5	724.5	724.5	829.5
1.0	Battery 4-hr (T1)	0	0	650.75	1306.25	1306.25	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5
0.8	Battery 4-hr (T2)	0	0	0	0	0	1350	1350	1665	1665	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
0.5	Battery 4-hr (T3)	0	0	0	0	0	0	0	0	0	0	400	600	1100	1500	1500	1500	1500	1500	1500
0.3	Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8	Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
1.0	Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Georgia Power Territorial Base Case Load vs. Existing Capability MG0, High Solar (Winter)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Peak Demand (MW), (A)	16,264	16,892	18,334	20,320	22,168	23,612	24,469	24,900	25,213	25,451	25,653	25,768	25,987	26,216	26,605	26,917	27,295	27,687	28,118	28,544
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	17,194	17,194	17,194	16,724	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Purchased Generating Capacity (MW), (B)	5,913	6,012	6,242	6,503	5,723	5,830	3,787	3,787	3,732	3,729	2,412	1,830	1,763	1,414	1,414	1,054	1,034	1,031	1,028	1,028
Dispatchable DSOs (MW), (C)	649	652	656	656	659	661	665	667	670	673	675	676	681	703	711	720	728	737	748	758
Total Capacity (MW)	20,868	21,829	23,443	23,960	23,654	23,765	21,671	21,648	21,596	21,595	19,811	15,265	15,203	14,875	14,235	13,884	13,871	13,879	13,887	13,896
Capacity Required to Meet GPC Target (MW), (D)	(602)	(781)	(598)	1,467	4,086	5,783	8,948	9,511	9,954	10,252	12,290	16,980	17,316	17,930	19,057	19,799	20,284	20,768	21,299	21,822
GPC Reserve Margin (%)	28.3%	29.2%	27.9%	17.9%	6.7%	0.6%	-11.4%	-13.1%	-14.3%	-15.1%	-22.8%	-40.8%	-41.5%	-43.3%	-46.5%	-48.4%	-49.2%	-49.9%	-50.6%	-51.3%
Total Capacity with Generic Additions (MW)	20,868	21,829	23,443	26,603	27,773	29,584	30,604	31,204	31,570	31,914	32,068	32,235	32,541	32,782	33,300	33,717	34,169	34,640	35,222	35,800
Capacity Deficit (Surplus) MW	(602)	(781)	(598)	(1,176)	(33)	(36)	15	(45)	(20)	(66)	32	11	(22)	23	(8)	(35)	(14)	7	(36)	(82)
Reserve Margin (%)	28.3%	29.2%	27.9%	30.9%	25.3%	25.3%	25.1%	25.3%	25.2%	25.4%	25.0%	25.1%	25.2%	25.0%	25.2%	25.3%	25.2%	25.1%	25.3%	25.4%

Notes
(A) Territorial Load requirements less non-dispatchable DSOs
(B) Includes territorial and imported power purchases. Capacity does not include the Winter 2027/2028 BESS Request for Proposals (RFP) approved in the 2023 Integrated Resource Plan (IRP) Update to show total procurement needs.
(C) Values stated in combustion turbine equivalence terms
(D) Does not consider planning reserve sharing. Reflects GPC's Target Reserve Margin, resulting from a System Target Reserve Margin of 25.50% (2025-2027) and 26% (2028 and beyond).

Existing Capability

		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Owned Generating Capacity (MW)		**14,306**	**15,164**	**16,545**	**16,801**	**17,272**	**17,273**	**17,218**	**17,194**	**17,194**	**17,194**	**16,724**	**12,759**	**12,759**	**12,759**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**
Nuclear		**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**
	HATCH 1	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451
	HATCH 2	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
	VOGTLE 1	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
	VOGTLE 2	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
	VOGTLE 3	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
	VOGTLE 4	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
Coal		**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**3,990**	**3,965**	**3,965**	**3,965**	**3,965**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	BOWEN 1	740	740	740	740	740	740	740	740	740	740	740	-	-	-	-	-	-	-	-	-
	BOWEN 2	760	760	760	760	760	760	760	760	760	760	760	-	-	-	-	-	-	-	-	-
	BOWEN 3	950	950	950	950	950	950	950	950	950	950	950	-	-	-	-	-	-	-	-	-
	BOWEN 4	910	910	910	910	910	910	910	910	910	910	910	-	-	-	-	-	-	-	-	-
	SCHERER 1	75	75	75	75	75	75	75	75	75	75	75	-	-	-	-	-	-	-	-	-
	SCHERER 2	72	72	72	72	72	72	72	72	72	72	72	-	-	-	-	-	-	-	-	-
	SCHERER 3	537	537	537	537	537	537	482	458	458	458	458	-	-	-	-	-	-	-	-	-
	WANSLEY 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Cycle		**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**
	MCDONOUGH 4	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934
	MCDONOUGH 5	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928
	MCDONOUGH 6	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930
	MCINTOSH 10	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
	MCINTOSH 11	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685
Oil/Gas Steam		**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**648**	**648**	**648**	**648**	**-**	**-**	**-**	**-**	**-**	**-**
	GASTON 1 GAS	127	127	127	127	127	127	127	127	127	127	-	-	-	-	-	-	-	-	-	-
	GASTON 2 GAS	128	128	128	128	128	128	128	128	128	128	-	-	-	-	-	-	-	-	-	-
	GASTON 3 GAS	102	102	102	102	102	102	102	102	102	102	-	-	-	-	-	-	-	-	-	-
	GASTON 4 GAS	103	103	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-
	YATES 6 GAS	323	323	323	323	323	323	323	323	323	323	323	323	323	323	-	-	-	-	-	-
	YATES 7 GAS	326	326	326	326	326	326	326	326	326	326	326	326	326	326	-	-	-	-	-	-
Combustion Turbine		**1,855**	**1,855**	**2,211**	**2,454**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**
	GASTON A	10	10	10	10	10	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
	MCDONOUGH 3A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	MCDONOUGH 3B	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
	MCINTOSH 1A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 2A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 3A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 4A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 5A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 6A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 7A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCINTOSH 8A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
	MCMANUS 3A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55

	MCMANUS 3B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 3C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4D	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4E	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4F	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WARNER ROBINS 1	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WARNER ROBINS 2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WILSON 1A	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	WILSON 1B	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	WILSON 1C	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WILSON 1D	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	WILSON 1E	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON 1F	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YATES 10	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 8	-	-	357	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 9	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Pump Storage		**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**
	ROCKY MTN 1 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 2 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 3 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	WALLACE DAM 1 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 2 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 5 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 6 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Hydro		**678**	**691**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**
	BARTLETT'S FERRY 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 4 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	BARTLETT'S FERRY 5 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BARTLETT'S FERRY 6 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BURTON 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	BURTON 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ESTATOAH 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	FLINT RIVER 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 3 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	GOAT ROCK 3 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 6 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 7 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	GOAT ROCK 8 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	LANGDALE 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LANGDALE 6 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LLOYD SHOALS 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 3 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 4 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 5 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 6 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MORGAN FALLS 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 3 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 5 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 6 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 7 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	NACOOCHEE 1 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NACOOCHEE 2 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NORTH HIGHLANDS 1 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 2 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 3 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 4 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	OLIVER 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 4 HY	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	RIVERVIEW 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIVERVIEW 2 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SINCLAIR 1 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	SINCLAIR 2 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	TALLULAH 1 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 2 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 3 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 4 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 5 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 6 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERRORA 1 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERRORA 2 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

TUGALO 1 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 2 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 3 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 4 HY	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
WALLACE DAM 3 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
WALLACE DAM 4 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
YONAH 1 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 2 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 3 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Solar	**51**	**51**	**51**	**51**	**51**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**
COMMUNITY SOLAR - COMER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - GUYTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - WAYNESBORO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FALCONS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORT BENNING	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT GORDON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT STEWART SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT VALLEY STATE UNIVERSITY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KINGS BAY SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MCINTOSH CLOSED ASH POND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MCLB	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MOODY AFB	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RIGHT OF WAY SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROBINS AFB	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
UGA SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unassigned Self-Build Solar	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System Sales	**(1,052)**	**(206)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
SYSTEM SALE	(1,052)	(206)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Generating Capacity (MW)	**5,913**	**6,012**	**6,242**	**6,503**	**5,723**	**5,830**	**3,787**	**3,787**	**3,732**	**3,729**	**2,412**	**1,830**	**1,763**	**1,414**	**1,414**	**1,054**	**1,034**	**1,031**	**1,028**	**1,028**
2019 IRP RENEWABLES - DGS2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGS2330	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2019 IRP RENEWABLES - DGS2430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGW2330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2019 IRP RENEWABLES - DGW2430	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2022 IRP BIOMASS - AGE	-	-	-	-	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
2022 IRP ESS RFP	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
2022 IRP SOLAR DG RFP 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2022 IRP SOLAR DG RFP 2	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
2022 IRP SOLAR US RFP 1	-	-	-	-	-	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
2022 IRP SOLAR US RFP 2	-	-	-	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	24
2022/2023 US - FLINT RIVER SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2022/2023 US - TIMBERLAND SOLAR	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2022/2023 US - WADLEY SOLAR	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022/2023 US - WASHINGTON COUNTY SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
2023 IRP UPDATE BESS RFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 1 (WESTGA)	186	186	186	186	186	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 3 (WESTGA)	181	181	181	181	181	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALBANY RENEWABLE ENERGY	50	50	50	50	50	50	50	50	50	50	50	50	50	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1320	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1420	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1520	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1620	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1420	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1520	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1620	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: DUBLIN SOLAR CENTER - DUBLIN	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: RICHLAND SOLAR CENTER	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: RINCON SOLAR CENTER	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: BUTLER SOLAR FARM	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: DECATUR COUNTY SOLAR PROJECT	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: HECATE ENERGY - OLD MIDVILLE RD LLC	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: SOLAR GLYNN	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ASI PRIME 525 MW - DGS1635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGS1725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
ASI PRIME 525 MW - DGS1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1735	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1815	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGS1835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGW1725	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
ASI PRIME 525 MW - DGW1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGW1735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGW1815	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1820	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1825	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
ASI PRIME 525 MW - DGW1830	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASI PRIME 525 MW - DGW1835	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - US 1: BUTLER SOLAR	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
ASI PRIME 525 MW - US 1: DECATUR PARKWAY SOLAR PROJECT	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	-	-	-	-
ASI PRIME 525 MW - US 1: PAWPAW SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASI PRIME 525 MW - US 2: LIVE OAK SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
ASI PRIME 525 MW - US 2: WHITE OAK SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AXIUM US SOLAR HOLDINGS (SD&D)	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUE CANYON	82	82	82	82	82	82	82	82	82	82	82	-	-	-	-	-	-	-	-	-
CCSP DG - ONLINE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCSP DG - REMAINING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COCA-COLA	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
CONYERS RENEWABLE ENERGY	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-
DAHLBERG 1	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 10	89	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 2	88	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-
DAHLBERG 3	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 4	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAHLBERG 5	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 6	88	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 8	86	86	86	86	86	86	86	86	86	86	86	-	-	-	-	-	-	-	-	-
DAHLBERG 9	-	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
EXELON HEARD 1	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 2	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 3	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 4	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 5	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 6	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEORGIA RENEWABLE POWER FRANKLIN LLC	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GEORGIA RENEWABLE POWER MADISON	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GREEN POWER SOLUTIONS	29	29	29	29	29	29	29	29	29	29	29	-	-	-	-	-	-	-	-	-
HARRIS 1	668	668	668	668	668	668	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 2	690	690	690	690	690	690	690	690	690	690	-	-	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - FLINT RIVER	27	27	27	27	27	27	27	27	27	27	27	27	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - PORT WENTWORTH	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-	-	-
LSS 50 MW - HSH PEMBROOKE	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
LSS 50 MW - SIMON SOLAR FARM	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMILLA	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMP (MERIWETHER COUNTY)	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - OAK GROVE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - PINE RIDGE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - RICHLAND CREEK	11	11	11	11	11	11	11	11	11	11	11	11	-	-	-	-	-	-	-	-
MID-GEORGIA COGEN	300	300	300	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONROE POWER	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	-	-	-	-	-
MPC PPA	750	750	750	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIEDMONT GREEN POWER	55	55	55	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
REDI 1400 MW - DG CS S1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
REDI 1400 MW - DG CS S1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS S1930	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS S1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS W1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
REDI 1400 MW - DG CS W1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS W1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG S2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG S2035	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
REDI 1400 MW - DG W2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG W2035	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - US 1: QUITMAN SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: COOL SPRINGS	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
REDI 1400 MW - US 2: HICKORY PARK	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: QUITMAN II	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI CS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA ROSA	-	-	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR - WASTE MANAGEMENT	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-
WALTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 7	622	622	622	622	622	622	622	622	622	622	-	-	-	-	-	-	-	-	-	-
WASHINGTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dispatchable DSOs (MW)	**649**	**652**	**656**	**656**	**659**	**661**	**665**	**667**	**670**	**673**	**675**	**676**	**681**	**703**	**711**	**720**	**728**	**737**	**748**	**758**
CVR Level 1	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
CVR Level 2	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
DER Customer Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPEC	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
RTPeDA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RTPeHA	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
Temp Check	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Energy Storage	**-**	**-**	**812**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**
2019 IRP BESS DEMO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019 IRP BESS DEMO - FORT STEWART 4 HR BESS	-	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022 IRP MCGRAU FORD 2 HR BATTERY	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - HAMMOND	-	-	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2023 IRP Update - MCGRAU FORD PHASE 2	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - MOODY AFB	-	-	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
2023 IRP UPDATE - ROBINS AFB	-	-	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

	MOSSY BRANCH	-	-	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Resource Additions (Nameplate MW)			-	-	5,170	8,943	10,643	14,695	16,925	19,318	21,310	25,263	33,848	36,133	38,618	41,673	44,358	46,543	48,728	51,023	53,508
	CT w/ SCR		0	0	0	800	1100	1400	1900	1900	2100	2600	3800	4000	4400	4700	5000	5200	5600	5900	6300
	CC		0	0	0	0	1400	4100	4100	4100	4100	5100	7100	7100	7100	7800	7800	8000	8000	8000	8000
	CC w/ CCS - Local		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Solar		0	0	2055	4125	4125	5025	6510	7995	9480	10965	12495	14025	15555	17085	18615	20145	21675	23205	24735
	Wind		0	0	0	0	0	0	0	240	300	600	900	1200	1500	1770	2070	2070	2070	2070	2370
	Battery 4-hr (T1)		0	0	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530
	Battery 4-hr (T2)		0	0	1585	2488	2488	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
	Battery 4-hr (T3)		0	0	0	0	0	0	245	913	1160	1828	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Battery 4-hr (T4)		0	0	0	0	0	0	0	0	0	0	2083	2338	2593	2848	3103	3358	3613	3868	4123
	Medium Duration Storage		0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
	Nuclear		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210
Resource Additions (Effective MW)			-	-	2,642	4,119	5,819	8,934	9,556	9,974	10,319	12,258	16,969	17,338	17,907	19,065	19,834	20,298	20,761	21,335	21,904
1.0	CT w/ SCR		0	0	0	800	1100	1400	1900	1900	2100	2600	3800	4000	4400	4700	5000	5200	5600	5900	6300
1.0	CC		0	0	0	0	1400	4100	4100	4100	4100	5100	7100	7100	7100	7800	7800	8000	8000	8000	8000
1.0	CC w/ CCS - Local		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	CC w/ CCS - Distant		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	Solar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.4	Wind		0	0	0	0	0	0	0	84	105	210	315	420	525	619.5	724.5	724.5	724.5	724.5	829.5
1.0	Battery 4-hr (T1)		0	0	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5
0.8	Battery 4-hr (T2)		0	0	1188.75	1865.625	1865.625	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
0.5	Battery 4-hr (T3)		0	0	0	0	0	0	122.5	456.5	580	914	1500	1500	1500	1500	1500	1500	1500	1500	1500
0.3	Battery 4-hr (T4)		0	0	0	0	0	0	0	0	0	0	520.75	584.5	648.25	712	775.75	839.5	903.25	967	1030.75
1.0	Battery 4-hr (T1_2)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8	Battery 4-hr (T2_2)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Medium Duration Storage		0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
1.0	Nuclear		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210
	MG20 bess				2430	3330	3330	3330	3330	3750	3750	4170	7170	7170	7170	7170	7170	7170	7170	7170	7170
	MG20 solar				1370	2750	2750	3350	4340	5330	6320	7310	8330	9350	10370	11390	12410	13430	14450	15470	16490
	50% more solar				2055	4125	4125	5025	6510	7995	9480	10965	12495	14025	15555	17085	18615	20145	21675	23205	24735
	incremental solar additions				685	1375	1375	1675	2170	2665	3160	3655	4165	4675	5185	5695	6205	6715	7225	7735	8245
	additional bess				685	687.5	687.5	837.5	1085	1332.5	1580	1827.5	2082.5	2337.5	2592.5	2847.5	3102.5	3357.5	3612.5	3867.5	4122.5
	total bess				3115	4018	4018	4168	4415	5083	5330	5998	9253	9508	9763	10018	10273	10528	10783	11038	11293
	total solar units				6.9	13.8	13.8	16.8	21.7	26.7	31.6	36.6	41.7	46.8	51.9	57	62.1	67.2	72.3	77.4	82.5
	additional bess units				2.3	2.3	2.3	2.8	3.6	4.4	5.3	6.1	6.9	7.8	8.6	9.5	10.3	11.2	12	12.9	13.7

Georgia Power Territorial Base Case Load vs. Existing Capability MG0, Combined (Winter)

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Peak Demand (MW), (A)	16,264	16,664	17,473	18,555	19,568	20,381	20,900	21,208	21,458	21,671	21,867	22,022	22,228	22,441	22,735	22,991	23,323	23,665	24,028	24,391
Owned Generating Capacity (MW)	14,306	15,164	16,545	16,801	17,272	17,273	17,218	13,228	13,228	13,228	12,759	12,759	12,759	12,759	12,110	12,110	12,110	12,110	12,110	12,110
Purchased Generating Capacity (MW), (B)	5,913	6,012	6,242	6,503	5,723	5,830	3,787	3,787	3,732	3,729	2,412	1,830	1,763	1,414	1,414	1,054	1,034	1,031	1,028	1,028
Dispatchable DSOs (MW), (C)	649	652	656	656	659	661	665	667	670	673	675	676	681	703	711	720	728	737	748	758
Total Capacity (MW)	20,868	21,829	23,443	23,960	23,654	23,765	21,671	17,683	17,631	17,630	15,845	15,265	15,203	14,875	14,235	13,884	13,871	13,879	13,887	13,896
Capacity Required to Meet GPC Target (MW), (D)	(602)	(1,064)	(1,671)	(742)	832	1,739	4,483	8,856	9,220	9,488	11,518	12,291	12,612	13,206	14,214	14,887	15,314	15,735	16,181	16,625
GPC Reserve Margin (%)	28.3%	31.0%	34.2%	29.1%	20.9%	16.6%	3.7%	-16.6%	-17.8%	-18.6%	-27.5%	-30.7%	-31.6%	-33.7%	-37.4%	-39.6%	-40.5%	-41.4%	-42.2%	-43.0%
Total Capacity with Generic Additions (MW)	20,868	21,829	23,443	23,960	24,509	25,593	26,154	26,539	26,905	27,148	27,363	28,295	28,401	28,242	28,440	28,797	29,189	29,630	30,072	30,570
Capacity Deficit (Surplus) MW	(602)	(1,064)	(1,671)	(742)	(23)	(90)	(1)	(0)	(54)	(30)	1	(738)	(586)	(160)	9	(27)	(3)	(16)	(4)	(48)
Reserve Margin (%)	28.3%	31.0%	34.2%	29.1%	25.3%	25.6%	25.1%	25.1%	25.4%	25.3%	25.1%	28.5%	27.8%	25.8%	25.1%	25.3%	25.1%	25.2%	25.2%	25.3%

Notes
(A) Territorial Load requirements less non-dispatchable DSOs
(B) Includes territorial and imported power purchases. Capacity does not include the Winter 2027/2028 BESS Request for Proposals (RFP) approved in the 2023 Integrated Resource Plan (IRP) Update to show total procurement needs.
(C) Values stated in combustion turbine equivalence terms
(D) Does not consider planning reserve sharing. Reflects GPC's Target Reserve Margin, resulting from a System Target Reserve Margin of 25.50% (2025-2027) and 26% (2028 and beyond).

Existing Capability

	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Owned Generating Capacity (MW)	**14,306**	**15,164**	**16,545**	**16,801**	**17,272**	**17,273**	**17,218**	**13,228**	**13,228**	**13,228**	**12,759**	**12,759**	**12,759**	**12,759**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**	**12,110**
Nuclear	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**	**3,049**
HATCH 1	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451	451
HATCH 2	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
VOGTLE 1	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560	560
VOGTLE 2	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
VOGTLE 3	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
VOGTLE 4	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510	510
Coal	**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**4,045**	**3,990**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
BOWEN 1	740	740	740	740	740	740	740	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 2	760	760	760	760	760	760	760	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 3	950	950	950	950	950	950	950	-	-	-	-	-	-	-	-	-	-	-	-	-
BOWEN 4	910	910	910	910	910	910	910	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 1	75	75	75	75	75	75	75	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 2	72	72	72	72	72	72	72	-	-	-	-	-	-	-	-	-	-	-	-	-
SCHERER 3	537	537	537	537	537	537	482	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Cycle	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**	**4,169**
MCDONOUGH 4	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934	934
MCDONOUGH 5	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928	928
MCDONOUGH 6	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930	930
MCINTOSH 10	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692	692
MCINTOSH 11	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685	685
Oil/Gas Steam	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**1,108**	**648**	**648**	**648**	**648**	**-**	**-**	**-**	**-**	**-**	**-**
GASTON 1 GAS	127	127	127	127	127	127	127	127	127	127	-	-	-	-	-	-	-	-	-	-
GASTON 2 GAS	128	128	128	128	128	128	128	128	128	128	-	-	-	-	-	-	-	-	-	-
GASTON 3 GAS	102	102	102	102	102	102	102	102	102	102	-	-	-	-	-	-	-	-	-	-
GASTON 4 GAS	103	103	103	103	103	103	103	103	103	103	-	-	-	-	-	-	-	-	-	-
YATES 6 GAS	323	323	323	323	323	323	323	323	323	323	323	323	323	323	-	-	-	-	-	-
YATES 7 GAS	326	326	326	326	326	326	326	326	326	326	326	326	326	326	-	-	-	-	-	-
Combustion Turbine	**1,855**	**1,855**	**2,211**	**2,454**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,925**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**	**2,915**
GASTON A	10	10	10	10	10	10	10	10	10	10	-	-	-	-	-	-	-	-	-	-
MCDONOUGH 3A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCDONOUGH 3B	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MCINTOSH 1A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 2A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 3A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 4A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 5A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 6A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 7A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCINTOSH 8A	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
MCMANUS 3A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55

	MCMANUS 3B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 3C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4A	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4B	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4C	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4D	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4E	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS 4F	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
	MCMANUS DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WANSLEY 5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WARNER ROBINS 1	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WARNER ROBINS 2	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	WILSON 1A	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
	WILSON 1B	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
	WILSON 1C	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WILSON 1D	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	WILSON 1E	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON 1F	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	WILSON DIESEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	YATES 10	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 8	-	-	357	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
	YATES 9	-	-	-	200	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
Pump Storage		**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**	**403**
	ROCKY MTN 1 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 2 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	ROCKY MTN 3 PS	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
	WALLACE DAM 1 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 2 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 5 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
	WALLACE DAM 6 PS	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
Hydro		**678**	**691**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**	**697**
	BARTLETT'S FERRY 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	BARTLETT'S FERRY 4 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	BARTLETT'S FERRY 5 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BARTLETT'S FERRY 6 HY	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
	BURTON 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	BURTON 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	ESTATOAH 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	FLINT RIVER 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	FLINT RIVER 3 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	GOAT ROCK 3 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GOAT ROCK 6 HY	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GOAT ROCK 7 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	GOAT ROCK 8 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	LANGDALE 5 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LANGDALE 6 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LLOYD SHOALS 1 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 2 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 3 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 4 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 5 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	LLOYD SHOALS 6 HY	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	MORGAN FALLS 1 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 2 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 3 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 4 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MORGAN FALLS 5 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 6 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	MORGAN FALLS 7 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	NACOOCHEE 1 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NACOOCHEE 2 HY	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	NORTH HIGHLANDS 1 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 2 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 3 HY	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	NORTH HIGHLANDS 4 HY	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	OLIVER 1 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 2 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 3 HY	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	OLIVER 4 HY	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	RIVERVIEW 1 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RIVERVIEW 2 HY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SINCLAIR 1 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	SINCLAIR 2 HY	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	TALLULAH 1 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 2 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 3 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 4 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 5 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TALLULAH 6 HY	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	TERRORA 1 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	TERRORA 2 HY	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

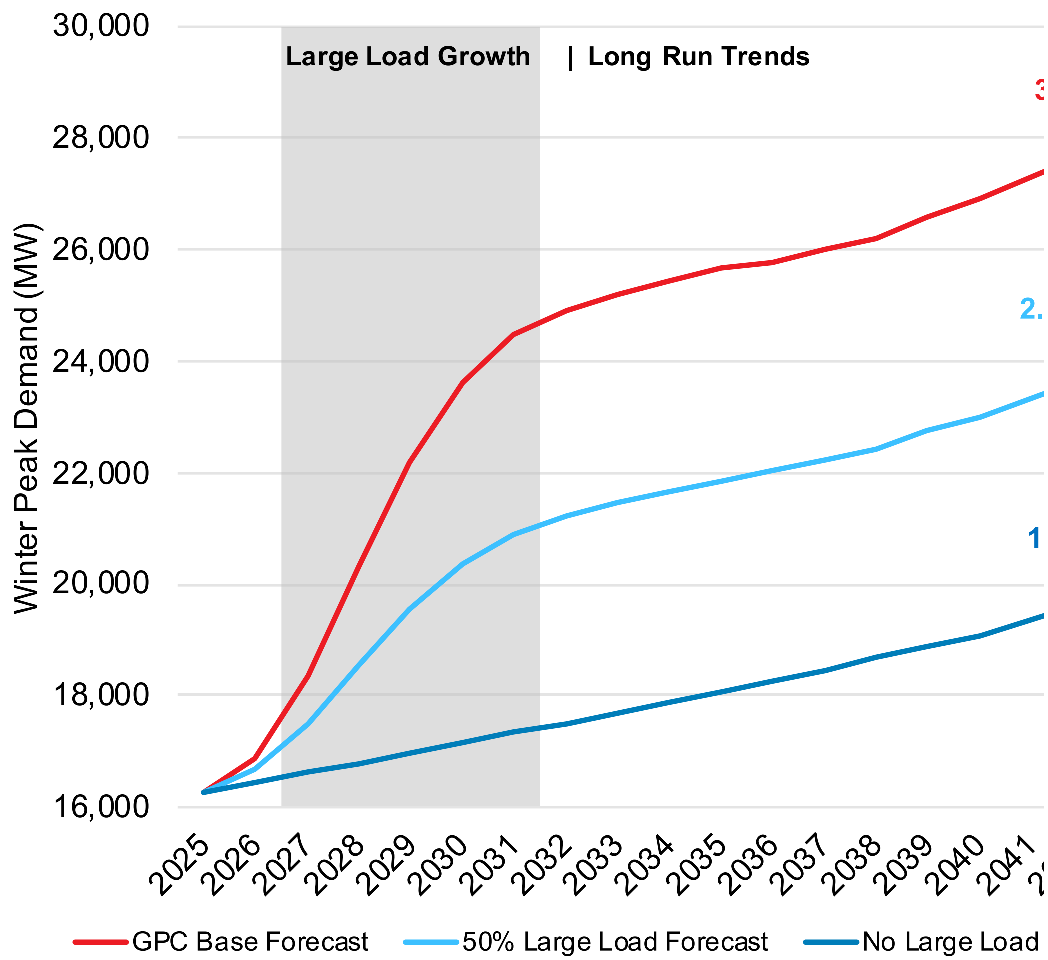
TUGALO 1 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 2 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 3 HY	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
TUGALO 4 HY	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
WALLACE DAM 3 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
WALLACE DAM 4 HY	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
YONAH 1 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 2 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
YONAH 3 HY	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Solar	**51**	**51**	**51**	**51**	**51**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**	**52**
COMMUNITY SOLAR - COMER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - GUYTON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMUNITY SOLAR - WAYNESBORO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FALCONS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FORT BENNING	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT GORDON	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT STEWART SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
FORT VALLEY STATE UNIVERSITY	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KINGS BAY SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MCINTOSH CLOSED ASH POND	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MCLB	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MOODY AFB	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RIGHT OF WAY SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROBINS AFB	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
UGA SOLAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unassigned Self-Build Solar	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System Sales	**(1,052)**	**(206)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
SYSTEM SALE	(1,052)	(206)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purchased Generating Capacity (MW)	**5,913**	**6,012**	**6,242**	**6,503**	**5,723**	**5,830**	**3,787**	**3,787**	**3,732**	**3,729**	**2,412**	**1,830**	**1,763**	**1,414**	**1,414**	**1,054**	**1,034**	**1,031**	**1,028**	**1,028**
2019 IRP RENEWABLES - DGS2230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGS2330	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2019 IRP RENEWABLES - DGS2430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 IRP RENEWABLES - DGW2330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2019 IRP RENEWABLES - DGW2430	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2022 IRP BIOMASS - AGE	-	-	-	-	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
2022 IRP ESS RFP	-	-	-	-	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
2022 IRP SOLAR DG RFP 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2022 IRP SOLAR DG RFP 2	-	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
2022 IRP SOLAR US RFP 1	-	-	-	-	-	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
2022 IRP SOLAR US RFP 2	-	-	-	-	-	-	24	24	24	24	24	24	24	24	24	24	24	24	24	24
2022/2023 US - FLINT RIVER SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2022/2023 US - TIMBERLAND SOLAR	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
2022/2023 US - WADLEY SOLAR	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022/2023 US - WASHINGTON COUNTY SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
2023 IRP UPDATE BESS RFP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 1 (WESTGA)	186	186	186	186	186	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ADDISON 3 (WESTGA)	181	181	181	181	181	181	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALBANY RENEWABLE ENERGY	50	50	50	50	50	50	50	50	50	50	50	50	50	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1320	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1420	2	2	2	2	2	2	2	2	2	2	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1520	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGS1620	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1420	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1520	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - DGW1620	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: DUBLIN SOLAR CENTER - DUBLIN	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: RICHLAND SOLAR CENTER	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 1: RINCON SOLAR CENTER	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: BUTLER SOLAR FARM	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: DECATUR COUNTY SOLAR PROJECT	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: HECATE ENERGY - OLD MIDVILLE RD LLC	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	-	-	-	-	-
ASI CLASSIC 210 MW - US 2: SOLAR GLYNN	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1625	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
ASI PRIME 525 MW - DGS1635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGS1725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
ASI PRIME 525 MW - DGS1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1735	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGS1815	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1820	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-
ASI PRIME 525 MW - DGS1825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGS1835	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
ASI PRIME 525 MW - DGW1725	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-
ASI PRIME 525 MW - DGW1730	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - DGW1735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASI PRIME 525 MW - DGW1815	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1820	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-
ASI PRIME 525 MW - DGW1825	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-
ASI PRIME 525 MW - DGW1830	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASI PRIME 525 MW - DGW1835	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASI PRIME 525 MW - US 1: BUTLER SOLAR	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
ASI PRIME 525 MW - US 1: DECATUR PARKWAY SOLAR PROJECT	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	-	-	-	-
ASI PRIME 525 MW - US 1: PAW PAW SOLAR	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASI PRIME 525 MW - US 2: LIVE OAK SOLAR	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
ASI PRIME 525 MW - US 2: WHITE OAK SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
AXIUM US SOLAR HOLDINGS (SD&D)	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BLUE CANYON	82	82	82	82	82	82	82	82	82	82	82	-	-	-	-	-	-	-	-	-
CCSP DG - ONLINE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCSP DG - REMAINING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COCA-COLA	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
CONYERS RENEWABLE ENERGY	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-
DAHLBERG 1	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 10	89	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 2	88	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-
DAHLBERG 3	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 4	87	87	87	87	87	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAHLBERG 5	-	-	-	87	87	87	87	87	87	87	87	87	87	-	-	-	-	-	-	-
DAHLBERG 6	88	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
DAHLBERG 8	86	86	86	86	86	86	86	86	86	86	86	-	-	-	-	-	-	-	-	-
DAHLBERG 9	-	88	88	88	88	88	88	88	88	88	88	-	-	-	-	-	-	-	-	-
EXELON HEARD 1	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 2	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 3	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 4	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 5	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXELON HEARD 6	158	158	158	158	158	158	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GEORGIA RENEWABLE POWER FRANKLIN LLC	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GEORGIA RENEWABLE POWER MADISON	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
GREEN POWER SOLUTIONS	29	29	29	29	29	29	29	29	29	29	29	-	-	-	-	-	-	-	-	-
HARRIS 1	668	668	668	668	668	668	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HARRIS 2	690	690	690	690	690	690	690	690	690	690	-	-	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - FLINT RIVER	27	27	27	27	27	27	27	27	27	27	27	27	-	-	-	-	-	-	-	-
INTERNATIONAL PAPER - PORT WENTWORTH	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	-	-	-	-	-
LSS 50 MW - HSH PEMBROOKE	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
LSS 50 MW - SIMON SOLAR FARM	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMILLA	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-	-	-	-	-
LSS 50 MW - SOLAR D&D CAMP (MERIWETHER COUNTY)	1	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - OAK GROVE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - PINE RIDGE	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-	-
MAS GEORGIA LFG - RICHLAND CREEK	11	11	11	11	11	11	11	11	11	11	11	11	-	-	-	-	-	-	-	-
MID-GEORGIA COGEN	300	300	300	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONROE POWER	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360	-	-	-	-	-
MPC PPA	750	750	750	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIEDMONT GREEN POWER	55	55	55	55	55	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
REDI 1400 MW - DG CS S1920	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
REDI 1400 MW - DG CS S1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS S1930	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS S1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG CS W1925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
REDI 1400 MW - DG CS W1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG CS W1935	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - DG S2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG S2035	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
REDI 1400 MW - DG W2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REDI 1400 MW - DG W2035	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
REDI 1400 MW - US 1: QUITMAN SOLAR	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: COOL SPRINGS	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
REDI 1400 MW - US 2: HICKORY PARK	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
REDI 1400 MW - US 2: QUITMAN II	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
REDI CS2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SANTA ROSA	-	-	230	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPERIOR - WASTE MANAGEMENT	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	-	-	-	-
WALTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WANSLEY 7	622	622	622	622	622	622	622	622	622	622	-	-	-	-	-	-	-	-	-	-
WASHINGTON COUNTY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dispatchable DSOs (MW)	**649**	**652**	**656**	**656**	**659**	**661**	**665**	**667**	**670**	**673**	**675**	**676**	**681**	**703**	**711**	**720**	**728**	**737**	**748**	**758**
CVR Level 1	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
CVR Level 2	200	202	204	204	205	207	209	210	211	212	213	214	217	227	232	236	240	245	250	255
DER Customer Program	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DPEC	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
RTPeDA	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RTPeHA	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124	124
Temp Check	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Energy Storage	**-**	**-**	**812**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**	**825**
2019 IRP BESS DEMO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019 IRP BESS DEMO - FORT STEWART 4 HR BESS	-	-	-	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
2022 IRP MCGRAU FORD 2 HR BATTERY	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - HAMMOND	-	-	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
2023 IRP Update - MCGRAU FORD PHASE 2	-	-	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
2023 IRP UPDATE - MOODY AFB	-	-	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
2023 IRP UPDATE - ROBINS AFB	-	-	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

	MOSSY BRANCH	-	-	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Resource Additions (Nameplate MW)		-	-	2,055	5,025	6,155	10,245	16,225	18,618	20,510	24,523	29,908	31,993	34,078	36,813	39,438	41,563	43,718	45,873	48,278
	CT w/ SCR	0	0	0	0	0	260	1820	1820	1920	2980	2980	2980	2980	2980	3080	3180	3550	3710	4030
	CC	0	0	0	0	0	790	3480	3480	3480	3980	3980	3980	3980	4660	4800	5040	5040	5040	5040
	CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Solar	0	0	2055	4125	4125	5025	6510	7995	9480	10965	12495	14025	15555	17085	18615	20145	21675	23205	24735
	Wind	0	0	0	0	0	0	0	240	300	600	900	1200	1500	1770	2070	2070	2070	2070	2370
	Battery 4-hr (T1)	0	0	0	900	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530	1530
	Battery 4-hr (T2)	0	0	0	0	500	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
	Battery 4-hr (T3)	0	0	0	0	0	0	245	913	1160	1828	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	2083	2338	2593	2848	3103	3358	3613	3868	4123
	Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
	Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210
Resource Additions (Effective MW)		-	-	-	855	1,829	4,484	8,856	9,274	9,519	11,518	13,029	13,198	13,367	14,205	14,914	15,318	15,751	16,185	16,674
1.0	CT w/ SCR	0	0	0	0	0	260	1820	1820	1920	2980	2980	2980	2980	2980	3080	3180	3550	3710	4030
1.0	CC	0	0	0	0	0	790	3480	3480	3480	3980	3980	3980	3980	4660	4800	5040	5040	5040	5040
1.0	CC w/ CCS - Local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	CC w/ CCS - Distant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.0	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.4	Wind	0	0	0	0	0	0	0	84	105	210	315	420	525	619.5	724.5	724.5	724.5	724.5	829.5
1.0	Battery 4-hr (T1)	0	0	0	855	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5	1453.5
0.8	Battery 4-hr (T2)	0	0	0	0	375	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980
0.5	Battery 4-hr (T3)	0	0	0	0	0	0	122.5	456.5	580	914	1500	1500	1500	1500	1500	1500	1500	1500	1500
0.3	Battery 4-hr (T4)	0	0	0	0	0	0	0	0	0	0	520.75	584.5	648.25	712	775.75	839.5	903.25	967	1030.75
1.0	Battery 4-hr (T1_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.8	Battery 4-hr (T2_2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	Medium Duration Storage	0	0	0	0	0	0	0	0	0	0	300	300	300	300	600	600	600	600	600
1.0	Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	210

Winter Peak Load Forecast (MW)

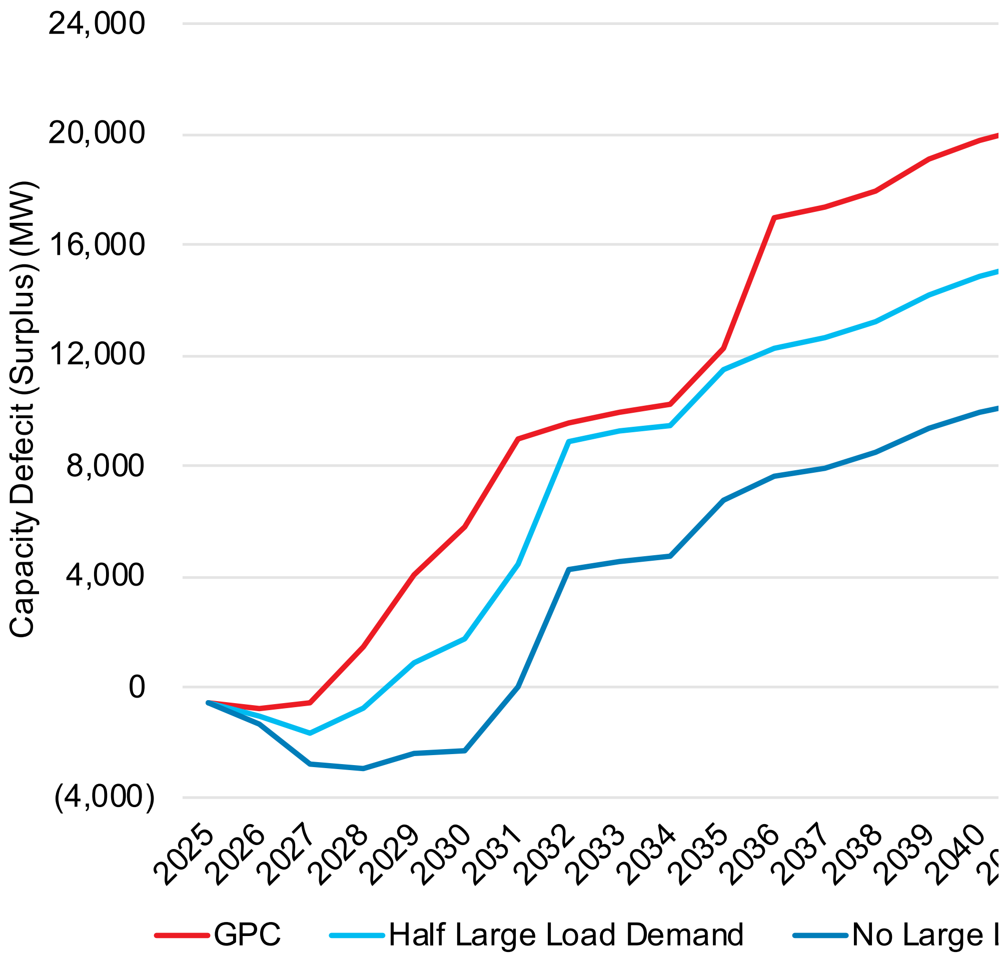
	2025	2026	2027	2028	2029
Large Load Grwoth Period	0	0	1	1	1
GPC	16,264	**16,892**	**18,334**	**20,320**	**22,168**
No Large Load	16,264	16,437	16,613	16,789	16,968
Implied Large Load Demand		454	1,721	3,530	5,200
Half Large Load Demand	16,264	16,664	17,473	18,555	19,568
GPC Peak Winter Demand Growth (%)		3.9%	8.5%	10.8%	9.1%
		1.1%	1.1%	1.1%	1.1%
		2.5%	4.9%	6.2%	5.5%
Target Rese	25%	25%	25%	25%	25%



Summer Peak Load Forecast (MW)

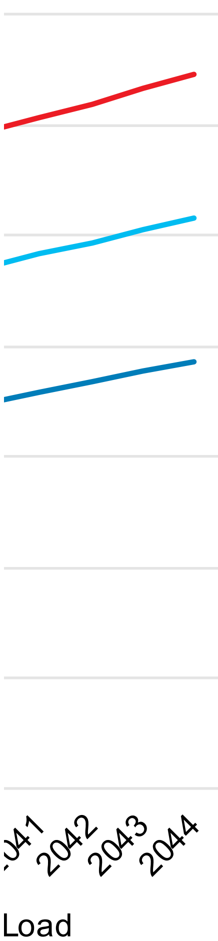
	2025	2026	2027	2028	2029
Large Load Boom Period	0	0	1	1	1
GPC	17,802	18,770	**20,552**	**22,730**	**24,621**
No Large Load	17,802	17,966	18,132	18,299	18,467
Implied Large Load Demand (Summer)		804	2,420	4,431	6,154
Half Large Load Demand	17,802	18,368	19,342	20,514	21,544
GPC Peak Summer Demand Growth (%)		5.4%	9.5%	10.6%	8.3%
		0.9%	0.9%	0.9%	0.9%
		3.2%	5.3%	6.1%	5.0%
Annual Energy (GWh)	95,294	102,557	116,340	133,719	148,718
Large Load Energy (GWh)	0	4,960	16,324	31,384	44,756
Annual Energy, No Large Loads (GWh)	95,294	97,597	100,016	102,335	103,962
Half Large Load Energy (GWh)	0	2,480	8,162	15,692	22,378
Annual Energy, Half Large Loads (GWh)	95,294	100,077	108,178	118,027	126,340

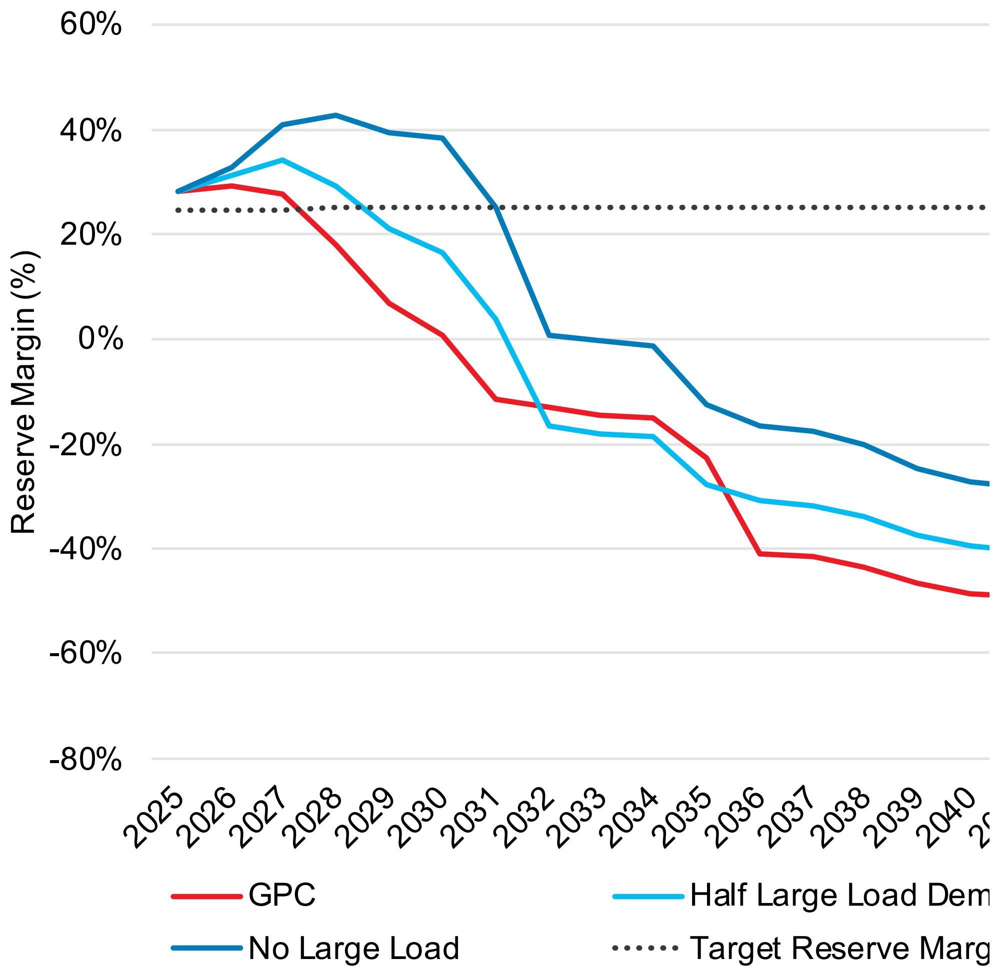
2030	2031	2032	2033	2034	2035	2036	2037
1	1	0	0	0	0	0	0
23,612	24,469	24,900	25,213	25,451	25,653	25,768	25,987
17,149	17,332	17,516	17,703	17,891	18,082	18,275	18,469
6,463	7,137	7,384	7,510	7,559	7,570	7,494	7,518
20,381	20,900	21,208	21,458	21,671	21,867	22,022	22,228
6.5%	3.6%	1.8%	1.3%	0.9%	0.8%	0.5%	0.8%
1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
4.2%	2.5%	1.5%	1.2%	1.0%	0.9%	0.7%	0.9%
25%	25%	25%	25%	25%	25%	25%	25%



2030	2031	2032	2033	2034	2035	2036	2037
1	1	0	0	0	0	0	0
25,841	**26,554**	**26,895**	**27,268**	**27,550**	**27,790**	**27,939**	**28,206**
18,638	18,809	18,983	19,158	19,334	19,512	19,692	19,874
7,203	7,744	7,912	8,110	8,216	8,277	8,246	8,332
22,239	22,682	22,939	23,213	23,442	23,651	23,815	24,040
5.0%	2.8%	1.3%	1.4%	1.0%	0.9%	0.5%	1.0%
0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
3.2%	2.0%	1.1%	1.2%	1.0%	0.9%	0.7%	0.9%
159,372	165,702	169,287	171,652	174,043	176,365	178,515	180,221
53,873	58,663	60,298	61,572	62,185	62,472	62,048	62,480
105,499	107,039	108,989	110,080	111,858	113,893	116,467	117,741
26,936	29,331	30,149	30,786	31,093	31,236	31,024	31,240
132,435	136,370	139,138	140,866	142,951	145,129	147,491	148,981

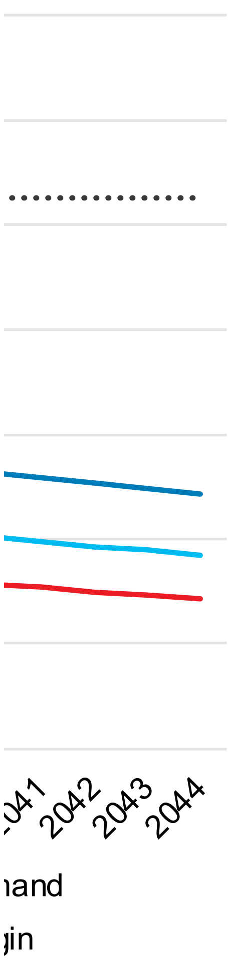
2038	2039	2040	2041	2042	2043	2044	
0	0	0	0	0	0	0	
26,216	**26,605**	**26,917**	**27,295**	**27,687**	**28,118**	**28,544**	
18,666	18,865	19,066	19,352	19,643	19,938	20,238	
7,550	7,740	7,851	7,942	8,044	8,179	8,306	
22,441	22,735	22,991	23,323	23,665	24,028	24,391	**:AGR ('31-'40**
0.9%	1.5%	1.2%	1.4%	1.4%	1.6%	1.5%	**1.07%**
1.1%	1.1%	1.1%	1.5%	1.5%	1.5%	1.5%	**1.07%**
1.0%	1.3%	1.1%	1.4%	1.5%	1.5%	1.5%	**1.07%**
25%	25%	25%	25%	25%	25%	25%	





2038	2039	2040	2041	2042	2043	2044	
0	0	0	0	0	0	0	
28,412	**28,675**	**28,839**	**29,219**	**29,619**	**30,030**	**30,514**	
20,057	20,242	20,428	20,726	21,027	21,334	21,644	
8,355	8,433	8,411	8,493	8,592	8,697	8,870	
24,234	24,458	24,634	24,972	25,323	25,682	26,079	**CAGR ('31-'44**
0.7%	0.9%	0.6%	1.3%	1.4%	1.4%	1.6%	**0.92%**
0.9%	0.9%	0.9%	1.5%	1.5%	1.5%	1.5%	**0.92%**
0.8%	0.9%	0.7%	1.4%	1.4%	1.4%	1.5%	**0.92%**
182,040	184,137	186,391	188,280	190,386	192,476	194,890	
62,696	63,755	64,105	64,788	65,578	66,526	67,705	
119,344	120,383	122,286	123,492	124,808	125,950	127,185	
31,348	31,877	32,053	32,394	32,789	33,263	33,853	
150,692	152,260	154,338	155,886	157,597	159,213	161,037	

CAGR ('41-'44	AGR ('25-'44)
1.50%	3.00%
1.50%	1.16%
1.50%	2.16%



CAGR ('41-'44	AGR ('25-'44)
1.46%	2.88%
1.46%	1.03%
1.46%	2.03%

Resource Type	UCAP
CT w/ SCR	100%
CC	100%
CC w/ CCS - Local	100%
CC w/ CCS - Distant	100%
Solar	0%
Wind	35%
Battery 4-hr (T1)	95%
Battery 4-hr (T2)	75%
Battery 4-hr (T3)	50%
Battery 4-hr (T4)	25%
Battery 4-hr (T1_2)	95%
Battery 4-hr (T2_2)	75%
Medium Duration Storage	100%
Nuclear	100%

*source: Aurora input files