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PUBLIC DISCLOSURE

August 9, 2024

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

Re: Compliance Filing – Georgia Power Company's Engineering, Procurement, and Construction Agreement for the McGrau Ford Phase I Battery Energy Storage System
Docket No. 44160

Dear Ms. Tanner:

Pursuant to the process approved by the Georgia Public Service Commission's (the "Commission") July 29, 2022 Final Order Adopting the Stipulation ("Final Order") in Docket No. 44160, Georgia Power Company ("Georgia Power") is filing the Engineering, Procurement, and Construction Agreement for the McGrau Ford Phase I Battery Energy Storage System.

In the Final Order, the Commission provisionally authorized Georgia Power to develop, own, and operate the McGrau Ford Battery Facility and directed Georgia Power to provide the final Engineering Procurement and Construction ("EPC") agreement to the Commission prior to undertaking procurement for or construction of the project. Accordingly, and in compliance with the Final Order and Stipulation, Georgia Power now submits the Engineering, Procurement, and Construction Agreement Compliance Filing for the McGrau Ford Phase I Battery Energy Storage System, which includes the EPC Agreement for McGrau Ford Phase I, as well as other supporting information to assist with the Commission's review. Consistent with the procedure approved by the Commission in the Final Order, Georgia Power requests that the Commission: (1) allow the Company to proceed with the McGrau Ford Phase I BESS project; and (2) approve the deemed certified cost presented in the Compliance Filing.

This filing is covered under the trade secret rules of the Commission as explained in the enclosed document regarding the basis for the assertion. This letter and the accompanying

documents are submitted consistent with the Alternative Electronic Filing Procedures established by the Commission on March 17, 2020.

Please me at 404-885-3683 if you have any questions regarding this filing.

Sincerely,

Brandon F. Marzo

Enclosure

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

GEORGIA POWER COMPANY
DOCKET NO. 44160

AFFIDAVIT AND BASIS FOR THE ASSERTION THAT PORTIONS OF THE INFORMATION SUBMITTED ARE PROTECTED TRADE SECRETS

As part of its 2022 Integrated Resource Plan ("2022 IRP"), filed in Docket No. 44160, Georgia Power Company ("Georgia Power" or the "Company") submits to the Georgia Public Service Commission its Engineering, Procurement, and Construction Agreement ("EPC Agreement") Compliance Filing for the McGrau Ford Phase 1 Battery Energy Storage System, which contains information and data supporting the McGrau Ford Phase 1 Battery Energy Storage System proposed in the 2022 IRP, including sensitive terms and conditions contained within the EPC Agreement and the Battery and Equipment Supply Agreement ("BESA"), pricing information, resource operational capability data, and development timelines, as well as certain information regarding the Company's proprietary planning processes, financial data, technology screening assumptions, generic technology and resource cost information, specific resource and technology cost information, economic analyses, and other data (the "Information"). Certain portions of the Information are trade secrets of Georgia Power and Southern Company and their affiliates and is therefore protected from public disclosure under Commission Rule 515-3-1-.11.

The trade secret portions of the Information derive economic value from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from their disclosure or use. Specifically, the trade secret portions of the Information contained herein include competitively sensitive contractual terms and conditions, pricing and operational capability data, including project development timelines where applicable, specific to the resources under contract or proposed to be developed. If the Information were made public, competitors, bidders, and suppliers could use the Information to unfairly manipulate the request for proposals process and competitive market to structure future bids and set an artificial price floor to arbitrarily increase prices to the detriment of the Company and its customers. Furthermore, public dissemination of the Information would undermine Georgia Power's ability to negotiate the best price and contract terms and could harm the Company's ability to secure the best cost bids and resources for the benefit of customers. In addition, the terms of the Engineering, Procurement, and Construction agreement, as well as the BESA, provides for the confidentiality and protection of the Information. Compromising the confidentiality of such Information could harm Georgia Power in future negotiations, as counterparties may fear compelled disclosure of key contractual terms. Lastly, the Company's competitors are not required to reveal or publish similar information.

The trade secret portions of the Information also contain competitively sensitive cost information related to available technology options, processes and data used by Georgia Power in analyzing resource addition schedules, financial data used in the Company's resource analyses, and other confidential details. Public dissemination of the trade secret portions of the Information would allow Georgia Power's competitors and suppliers to have access to such processes and strategies and thereby gain an unfair competitive advantage in the marketplace. Competitors would obtain an unfair advantage because they are not required to reveal similar information and can utilize such trade secret portions of the Information to manipulate pricing and timing of supply to the disadvantage of Georgia Power. Competitors would also unfairly benefit in having access and insight into the Company's planning and selection processes and methodologies. This competitive advantage for the Company's suppliers and competitors would mean

that Georgia Power will potentially pay higher prices to suppliers, ultimately harming Georgia Power and its customers.

The trade secret portions of the Information are subject to substantial procedures to maintain their secrecy. Only select Georgia Power and Southern Company personnel are granted access to the trade secret portions of the Information. Those personnel receive access only on a "need to know" basis. Parties outside Georgia Power and Southern Company affiliates and their legal counsel who have been granted access to the trade secret portions of the Information, if any, have been required to sign confidentiality agreements.

Jeffrey R. Grubb, first being duly sworn, deposes and states that he has reviewed the Engineering, Procurement, and Construction Agreement Compliance Filing for the McGrau Ford Phase 1 Battery Energy Storage System filed in Georgia Power's 2022 IRP in Docket No. 44160 and that to the best of his knowledge the specific information designated as trade secret constitute trade secrets in accordance with O.C.G.A. § 10-1-761 (2021).

Jeffrey R. Grubb
Director, Resource Policy & Planning
Georgia Power Company

Subscribed and sworn to before me this 8 day of August, 2024.

Notary Public

My Commission expires:





Engineering, Procurement, and Construction Agreement Compliance Filing for the McGrau Ford Phase I Battery Energy Storage System

August 9, 2024

Docket No. 44160

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McGrau Ford Phase I BESS Project Overview & Provisional Authorization

On January 31, 2022, Georgia Power Company ("Georgia Power" or the "Company") filed its 2022 Integrated Resource Plan ("IRP") in Docket No. 44160. The 2022 IRP highlighted the importance of energy storage system solutions, including battery energy storage system ("BESS") solutions, to manage the significant expansion of renewable resources in the Company's long-term resource plan. To that end, the 2022 IRP proposed to add Company-owned storage systems to support projected levels of installed intermittent renewable capacity by 2030, and this request included the addition of the McGrau Ford Battery Facility located in Cherokee County, Georgia. This project is a 265 MW 2-hour lithium-ion facility interconnected at the McGrau Ford substation with an expected commercial operation date by the end of 2026.[1]

On July 29, 2022, the Georgia Public Service Commission issued its Final Order Adopting the Stipulation ("Final Order") in Georgia Power's 2022 IRP and Application for the Certification, Decertification, and Amended Demand-Side Management Plan ("DSM Application"), Docket Nos. 44160 and 44161, respectively. In the 2022 IRP Final Order, the Commission provisionally authorized Georgia Power to develop, own, and operate the McGrau Ford Battery Facility. The Final Order required that Georgia Power provide the final Engineering, Procurement, and Construction ("EPC") agreement to the Commission prior to undertaking procurement for or construction of the project.

The Final Order further specified that following the Company's provision of the EPC agreement, the Commission will determine whether to proceed with the McGrau Ford Battery Facility project and provide a deemed certified amount for the project. If the Company exceeds the deemed certified amount, the Company has the burden of showing that such costs were prudently incurred. The Final Order also requires that the Company file quarterly construction monitoring reports from the date construction begins through the date of commercial operation.

In compliance with the EPC agreement filing requirement outlined in the Final Order and 2022 IRP Stipulation, the Company submits the final EPC agreement and other relevant contracts for the McGrau Ford Phase I project[2] for the Commission's review. To assist the Commission's review, this compliance filing also includes further information on expected project schedule and costs.

Consistent with the 2022 IRP Final Order, Georgia Power requests that the Commission: (1) allow the Company to proceed with the McGrau Ford Phase I BESS project; and (2) approve the deemed certified cost of **REDACTED**.

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[1] Technical Appendix Volume 2 to the 2022 IRP filing included a cost-benefit analysis for the McGrau Ford Battery Facility – this analysis demonstrated the substantial benefits a BESS facility of this type will provide customers.

[2] This project is referred to as the McGrau Ford Phase I BESS project for the remainder of this filing, since an additional 265 MW project at the McGrau Ford site, referred to as the McGrau Ford Phase II BESS, has been identified as part of the 500 MW of Company-owned BESS approved in the Final Order Approving the Stipulation in Georgia Power's 2023 IRP Update in Docket No. 55378. Georgia Power plans to file the certification application for the 500 MW Company-owned BESS projects in August 2024.

Project Description

The McGrau Ford Phase I BESS project is planned to be a 265 MW 2-hour lithium-ion battery storage facility in Cherokee County, Georgia, interconnected at the McGrau Ford substation. The expected commercial operation date for this project is November 2026, and the capacity is accounted for in Georgia Power's resource capacity totals starting in winter of 2026/2027 with an expected useful life of 20 years. To maintain the nameplate energy capacity over the 20 years, the project is designed with an initial 3-year energy capacity overbuild and will have space for future augmentations.

Plans for the 265 MW BESS were developed by the Company and improved using learnings and industry relationships cultivated via the 2019 IRP 80 MW battery demonstration projects, as well as the recently approved 500 MW portfolio. An adjacent land parcel to the McGrau Ford Substation was purchased in December 2023 for the purposes of constructing the McGrau Ford Phase I BESS project. The project has a Large Generation Interconnection Agreement ("LGIA") in place and has designated transmission delivery for charging and discharging beginning in 2026.

As outlined in the 2022 IRP docket, the McGrau Ford Phase I BESS will serve as a cost-effective dispatchable capacity resource that will optimize energy savings by shifting energy from hours with relatively low system marginal cost to hours with a relatively high system marginal cost. In addition, the BESS will fulfill a wider array of system and grid requirements beyond the more commonly recognized benefits of capacity value and energy value. BESS can be instrumental in providing cost-effective essential services for grid reliability, particularly operating reserves, leading to reductions in total system operational costs. As the energy mix evolves, these services and the role of BESS will likely become increasingly important, especially with the rise of intermittent resources.

Projected Operation

The Company will strategically operate the BESS to minimize total system production costs and enhance system reliability. Designed as a 265 MW AC 2-hour BESS, this system will operate as a stand-alone facility connected to the transmission grid, capable of both charging from and discharging to the grid as needed. The Company plans for the BESS to be primarily managed remotely through its Energy Management System ("EMS"), enabling responsive actions to system events and efficient dispatching through the Automatic Generation Control ("AGC") function. Leveraging the latest AGC software, the company aims to optimize storage dispatch, thereby maximizing the storage value.

When providing energy arbitrage services, the Company will typically charge the BESS during periods of low energy prices and discharge when prices are higher. Consequently, the variable costs associated with BESS operation are primarily influenced by the production costs incurred to charge the battery, adjusted for losses typically measured as round-trip efficiency ("RTE"), providing an overall benefit of minimizing production costs. Furthermore, the BESS is expected to deliver significant flexibility benefits. It is anticipated that this resource will also incur variable charging costs required to ensure it remains capable of providing operating reserves. This approach reduces the system cost of providing operating reserves but requires that the BESS is charged and ready to discharge rapidly. Overall, the Company expects that the variable costs will be largely comprised of charging expenses, with operational benefits tailored to meet the dynamic needs of the system as real-time conditions unfold.

Major Agreements and Financial Information

Owner's Scope

To develop and construct the McGrau Ford Phase I BESS, the Company will manage certain aspects of the project and execute two major contracts. The Company activities include procuring and delivering two generator step-up ("GSU") transformers to the site, building the project-level substation, and constructing the generation tie-line to the McGrau Ford interconnecting substation. Moreover, the Company commits to providing a range of site and owner-specific contributions, such as asset management, construction oversight and technical support, and assistance with start-up operations.

Engineering, Procurement, and Construction Agreement

In August 2024, the Company entered into an EPC Agreement with Burns and McDonnell. This agreement was executed following a comprehensive Supply Chain Request for Proposal ("RFP") process. Burns and McDonnell was selected as the best evaluated bid and will bring extensive experience in the engineering and construction of battery energy storage systems.

As the appointed EPC contractor, Burns and McDonnell is tasked with the engineering, procurement, and construction services necessary for the design and installation of the BESS at the McGrau Ford Phase I site. Georgia Power will directly purchase the battery systems from Tesla under a Battery and Equipment Supply Agreement ("BESA"). The EPC contractor will be responsible for the engineering, design, procurement and construction of balance of system components, civil grading, and on-site equipment installation.

Under the terms of the EPC Agreement, Burns and McDonnell will deliver all services for a fixed price, adhering to a detailed scope of work and specifications for the McGrau Ford Phase I BESS project.

Included as TS Attachment A to this filing is the executed EPC Agreement between Georgia Power Company and Burns and McDonnell.

Battery and Equipment Supply Agreement

In August 2024, the Company finalized a BESA with Tesla for the procurement of an integrated battery energy storage system, the Megapack 2 XL, for deployment at McGrau Ford Phase I BESS. This agreement was executed following a comprehensive Supply Chain RFP process. Manufactured at Tesla's Megafactory in Lathrop, CA, the basic storage component in the Tesla Megapack 2 XL is the lithium-iron phosphate ("LFP") battery cell. These cells are assembled into battery modules and integrated into the Megapack units. Megapack's modular design allows for easy scalability, connecting multiple units to meet project requirements. Each unit can store over 3.9 MWh of energy. The system arrives on-site fully integrated with initial testing completed, ready to deliver alternating current ("AC") electrical output.

Safety is crucial in the Megapack design. Each unit undergoes rigorous testing to ensure safe operation. Tesla's advanced Battery Management System ("BMS") monitors and regulates temperature, voltage, and state-of-charge, ensuring optimal performance. Tesla's technology is well-proven and reliable with grid-scale batteries operational in over 65 countries.

The agreement with Tesla includes a warranty that safeguards against equipment defects and guarantees against energy capacity degradation. In addition to the Sales and Purchase Agreement, the Company will

enter into a Long-Term Commitments Agreement ("LTCA"), which will provide an enhanced guaranteed energy retention capacity curve, as well as a Site RTE guarantee for each year of operation, with the Guaranteed Site RTE through the BESA at commissioning completion of **REDACTED**.

Included as TS Attachment B to this filing is the executed Sales and Purchase Agreement between Georgia Power Company and Tesla.

These agreements collectively secure, along with the Company's scope, coverage of the necessary design, engineering, equipment procurement, and construction services for the BESS.

Project Schedule

"TS Attachment C – McGrau Ford Phase I BESS Schedule" contains the McGrau Ford Phase I construction schedule with expected commercial operation date of November 2026.

Due to the accelerated long lead times associated with engineering and procurement necessary to develop the McGrau Phase I BESS, the Company issued Limited Notices to Proceed ("LNTP") on April 9, 2024, and June 11, 2024, with Burns and McDonnell to maintain the schedule and initiate the engineering and subsurface investigations at the site. This agreement has allowed Burns and McDonnell to finalize equipment specifications and be ready to place equipment purchase orders upon the EPC contract execution and filing.

Similarly, the Company has made equipment reservations for the GSU transformers needed for this project in order to ensure availability to maintain project schedule.

Estimated Cost Information

Total Cost Estimate

Development of McGrau Ford Phase I BESS is estimated to cost approximately **REDACTED**, which is the total of the engineering, construction, oversight, and associated procurement costs of **REDACTED**, financing cost of **REDACTED**, and ad valorem taxes of **REDACTED**. Further detail on each of these components is provided in the subsections below.

Cost Expenditure Plan

Costs shown are in thousands of nominal dollars.

Category	2023	2024	2025	2026	2027	Total
Planning	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Land Acquisition	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
EPC Contract	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
BESA Contract	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Engineering/Design & Construction	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Start-Up	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Transmission	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Contingency	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Total	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

Descriptions of each category are provided below:

- Planning – Preliminary studies and investigation ("PSI") and environmental support.
- Land Acquisition – Land purchase cost.
- EPC Contract – EPC contract costs.
- BESA Contract – BESA contract cost.
- Engineering/Design & Construction – Internal technical engineering and services, interconnection, process safety management ("PSM"), vendor quality, construction power, information technology ("IT"), onsite security, pre-commercial operation labor and supplies, supply chain support, project controls, legal, builder's risk insurance, site controller, Prevailing Wage and Apprenticeship ("PWA") review, distribution, and asset management.
- Start-Up – Test energy and BESA provider support.
- Transmission – Design and construction of project level substation and generation tie-line to McGrau Ford interconnection substation.
- Contingency – Contingency.

AFUDC, Ad Valorem, and Sales Tax

Pre-commercial operation allowance for funds used during construction ("AFUDC"), ad valorem, and sales tax costs are shown in thousands of nominal dollars in the table below. Sales tax costs are estimated as zero for the BESA and EPC purchases due to applicable sales and use tax exemptions. An estimate of sales tax for items that are not exempt from sales and use tax, such as real property materials and fixtures, is not available.

	AFUDC	Ad Valorem	Sales Tax
2024	**REDACTED**	**REDACTED**	$0
2025	**REDACTED**	**REDACTED**	$0
2026	**REDACTED**	**REDACTED**	$0
Total	**REDACTED**	**REDACTED**	**$0**

Estimated Annual Costs

The table below includes estimated annual costs. All costs are thousands of dollars in nominal terms.

Year	Estimated Annual Depreciation	Estimated Annual Debt and Equity Financing Costs on Capital Investment	Estimated Annual Income Taxes on Capital Investment	Estimated Fixed O&M	Estimated Insurance	Estimated Property Taxes	Estimated Annual Capital Additions
2024	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2025	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2026	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2027	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2028	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2030	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2031	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2032	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2033	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2034	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2035	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2036	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2037	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2038	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2039	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2040	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2041	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2042	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2043	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2044	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2045	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
2046	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

Rates of Escalation of Cost

Post in-service capital, insurance, and operation & maintenance ("O&M") costs that are fixed are escalated per an assumed inflation rate of **REDACTED**, unless otherwise defined in a contractual agreement. The inflation rate is based on a forecast of Gross Domestic Product Implicit Price Deflator ("GDPIPD").

Cost Recovery

Georgia Power proposes to recover the costs associated with the construction of the McGrau Ford Phase I BESS in rate base and will reflect the operating expenses associated with the units in its retail cost of service. Regulatory treatment for this project will be consistent with the current treatment of Georgia Power's existing owned retail generation facilities.

Conclusion

This filing completes the compliance requirement from the 2022 IRP Final Order in Docket No. 44160 provisionally authorizing Georgia Power to develop, own, and operate the McGrau Ford Phase I BESS project. Consistent with the procedure approved by the Commission in the 2022 IRP Final Order, Georgia Power requests that the Commission: (1) allow the Company to proceed with the McGrau Ford Phase I BESS project; and (2) approve the deemed certified cost presented in the Compliance Filing. Beginning in the winter of 2026/2027, this 265 MW BESS facility will provide customers with a cost-effective dispatchable capacity resource with the operational flexibility and reliability necessary to support renewable integration and fleet transition for years to come.

These files have been redacted in their entirety.