EXHIBIT__(RS/RT-16)

BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

GEORGIA POWER COMPANY
DOCKET NO. 44280

Data Request No. STF-WG-2-3

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

As part of Georgia Power Company's 2022 Rate Case filed in Docket No. 44280 ("2022 Rate Case"), Georgia Power Company ("Georgia Power" or the "Company") submits to the Georgia Public Service Commission its response to STF-WG-2-3 ("Response"). In the Response, the Company has provided future expenditures related to a DERMS implementation (the "Information"). All such Information constitutes trade secret information of Southern Company, Georgia Power, and its affiliates and is therefore protected from public disclosure under Commission Rule 515-3-1-.11.

The Information derives economic value from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. Specifically, the Information could give competitors and vendors an unfair advantage by showing individual components of the Company's costs, plans, strategies, and project configurations. With this Information, competitors and vendors could tailor proposals to set a price floor for services to the detriment of the Company and customers. Lastly, the Company's competitors are generally not required to file this information, and to require the Company to do so would put it at an economic disadvantage.

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

PUBLIC DISCLOSURE

GEORGIA POWER COMPANY
Docket No. 44280
Georgia Power Company's 2022 Rate Case
Staff Data Request No. STF-WG-2

STF-WG-2-3

Question:

Refer to the Company's response to STF-WG-1-1 (e), which states "The Company is not deploying DERMS to increase the hosting capacity of the system", and which refers to a brief whitepaper (TS Attachment D) which describes the capabilities and benefits of a DERMS. Refer also to the Company's response to STF-WG-1-1 (i) and Attachment F, which describe potential complications of DER. Please describe:

a. How the Company currently maintains the capabilities and secures the benefits from the resources/devices that DERMS is anticipated to monitor/control (as described in TS Attachment D); and

b. How the Company currently manages the potential complications of DER (as described in response to SRF-WG-1-1 (i) and Attachment F;

c. Why the level of DER the Company forecasts adding 2022-2026 will require a DERMS to manage;

d. Any work the Company has performed in DER aggregation and distribution management and controls;

e. What efforts the Company has undertaken to begin adapting and integrating these efforts toward a centralized DERMS;

f. The alternatives to DERMS deployment the Company has evaluated. Provide all associated analyses of DERMS and its alternatives the Company has completed;

g. Projected spending by year, by FERC account to implement DERMS 2023-2025, including the depreciation period the Company used to calculate revenue requirements in this case for each FERC account; and

h. Actual or projected spending by year, by FERC account to implement DERMS 2020-2022, including the depreciation period the Company used to calculate revenue requirements in this case for each FERC account.

PUBLIC DISCLOSURE

Response:

a. On the transmission system, the Company uses Siemens Energy Management System SCADA which provides real-time monitoring of power flows, equipment status and alarms, and control of major equipment. On the distribution system, the Company uses Oracle Network Management System/GE SCADA which provides real-time monitoring of power flows, equipment status and alarms, and control of equipment on the distribution system. DER interconnected to the grid are managed through these applications.

   The benefits of DERMS described in STF-WG-1-1 Attachment D are not being fully extracted from the Company's current grid management applications. Without DERMS, current tools in use will be insufficient to manage the substantial number of DER expected to connect to the grid. Restricted only to current tools, a system operator may be able to utilize a specific DER site to deliver hyper-local benefits to the grid in solving a particular grid constraint that may only be present for a relatively short period. In contrast, a fully integrated DERMS unlocks the potential to continually optimize larger portions of the grid and solve for a variety of constraints, such as economic dispatch and voltage control. These optimization engines are expected to effectively consume the number of data streams available from a grid with hundreds or thousands of discrete DER interconnections and thereby allow system operators to deliver more benefits offered by DER. These data streams would be overwhelming to a single system operator trying to manage the grid in the absence of DERMS.

b. The Company's Interconnection ("IC") Process described in Section 8.0 of STF-WG-1-1 Attachment F is used to manage potential complications of DER. Major components of the IC Process related to management of DER potential complications include: (i) DER Impact Study; (ii) Interconnection Equipment Study; (iii) Interconnection Agreement Execution; (iv) Interconnection Equipment Installation; (v) DER Interconnection Protection Settings Review; and (vi) DER Witness Testing.

   DER Witness Testing is used to manage potential complications related to (i) Current/Harmonic Distortion and (ii) Radio Frequency Interference.

   All other potential complications, including (iii) Unintentional Islanding, (iv) Equipment Ratings, (v) Voltage Regulation, (vi) System Protection (including coordination of protective devices), (vii) Instantaneous Overvoltage and (viii) Rapid Voltage Changes, and (x) Flicker, are handled through all phases of the IC Process mentioned above beginning with performance of DER Impact Studies. These studies identify potential complication(s) and their solutions, which could involve the addition of new electric/communication system equipment or upgrades to existing electric system equipment. Following identification of solutions to potential complications, an Interconnection Equipment Study is performed to determine estimated cost of implementing all solutions. The cost is presented to the DER Owner. Following acceptance of Interconnection Proposal by and Notice to Proceed from the DER Owner, the remaining phases of the IC Process are then executed to grant DER Parallel Operation permission.

PUBLIC DISCLOSURE

c. The volume of DER adoption will drive an increase in the rates of changes to the state of the grid. As more DERs are added to the system, it becomes increasingly important to have awareness of these assets as they affect the load the system must serve. This awareness can help the Company better optimize around these DER assets with the fleet generation assets. A system operator will not be able to process all the information coming in and make decisions fast enough to optimize the grid. Furthermore, those decisions cannot be made by a human on a grid-level scale. DERMS will be necessary to begin introducing the task of balancing generation capacity and load on the grid to distribution system operators. The Company's implementation of DERMS will allow for maturation of the solution before hundreds or thousands of additional discrete DER are connected to the grid. The Company envisions all customer generation sized 250 kilowatts and above to be installed with communications capabilities that allow visibility and control by the Company. It is conceivable that this threshold could be lowered in the future, thereby opening the door for an even greater number of DER that need to be optimized on the distribution grid. Furthermore, DERMS is an enabling technology to consider demand-side resources alongside supply-side resources in future IRPs, as ordered by the Commission in the 2022 IRP in Docket No. 44160. DERMS functionality is necessary to effectively dispatch these demand-side resources in a manner that delivers their full benefits to customers.

d. The Company completed a limited DERMS deployment in 2018-2019 with Advanced Control Systems ("ACS"). The ACS solution was applied to a feeder that hosts a solar site at the University of Georgia. The pilot demonstrated that the system could connect to a controller at the solar site and the distribution capacitors along the feeder. The system could interact with the solar site control and the capacitors to manage voltage along the feeder.

   The Company's Tech Square microgrid that was approved by the Commission began operation in 2021. The microgrid is an urban microgrid demonstration and is connected to an underground network, a traditional distribution feeder, and loads in the adjacent building. The microgrid incorporates a fuel cell, battery storage, and diesel and natural gas generators.

   The Company's DER offerings have given rise to numerous DER sites that are interconnected to various points of the Company's distribution grid. Those DER sites operate in parallel with the distribution system, as described in STF-WG-1-1 Attachment F.

e. Please refer to STF-WG-1-1 Attachment E. In 2021, the Electric Power Research Institute performed a comparative assessment of leading DERMS product vendors and developed this document to better understand what DERMS functionalities vendors had at the time along with future plans for each product offering. The Company has met with several of the vendors mentioned in this document.

   The Company is pursuing a DERMS solution to develop an enterprise-wide approach to implementing and operating variable energy resources and DER. This framework is cognizant of and informed by the efforts described in the response to subpart 'd' above. The Company has released a DERMS Request for Information ("RFI"). The responses received from the RFI will further inform the Company's requirements for an integrated DERMS.

PUBLIC DISCLOSURE

f. A DERMS solution is a natural and logical step for a utility facing large growth in renewable and other DER resources. The Company views the alternative to DERMS being a posture where DER interconnections are restricted because of human limitations in managing and responding to additional data streams coming from the distribution grid. If DER growth is unrestricted without the benefit of DERMS, the utility risks a loss of grid control, which would compromise grid reliability and stability. A DERMS solution implemented alongside a growth in DER interconnections positions the Company to deliver the full intended benefits of DER at the time of interconnection without compromising grid reliability and stability.

g. The Company projects to spend REDACTED, REDACTED, and REDACTED of DERMS capital investment in 2023, 2024, and 2025, respectively, which will be recorded to FERC account 101. The DERMS capital investment will be depreciated over a 5-year depreciable life.

h. The Company did not have any actual DERMS capital expenditures for 2020 and 2021 and does not project any DERMS capital expenditures for 2022.