**STF-DEA-2-33**

Question:

Please refer to p. 97 of the “2024 GA ITS Ten-Year Plan,” within the “2025 IRP Volume 3 TRADE SECRET,” regarding the GTC: LaGrange - North Opelika 230kV (New Line) and respond to the following questions:

1. How does this new 230kV line improve regional power reliability and support growing industrial loads?
2. What are the expected load flow impacts on the adjacent transmission infrastructure?
3. Will this project require additional substation investments, and what are the associated costs?
4. How does this project fit into Southern Company’s overall transmission expansion strategy?

Response:

1. The Georgia Transmission Corporation (“GTC”): Lagrange-North Opelika 230kV line provides an additional network connection from Alabama Power Company (“APC”) into Georgia and a high-capacity corridor to alleviate the West to East flows. This new transmission line addresses thermal constraints as defined in the Steady State Transmission Planning Criteria of the NERC Reliability Standard (TPL-001-5) under P1-Single Contingency event. Please refer to Section III.A, Table 6 (p 29) of the 2024 GA ITS Ten-Year Plan and Section B2, R3 (p 18) of the ITS Planning Procedure #9, in Technical Appendix Volume 3. -This project also supports future Georgia Power unit retirements as noted in Appendix D of the 2024 Georgia ITS Ten-Year Plan in Technical Appendix Volume 3.
2. The GTC: Lagrange-North Opelika 230kV line provides load reduction mainly to the Fortson – Lagrange 230kV transmission line. Historically, the Fortson - Lagrange 230kV has been a heavily loaded line, supporting steadily the West to East flows. Additionally, accommodating and coordinating necessary outages to facilitate maintenance on the Fortson - Lagrange 230kV is difficult; therefore, the Lagrange - North Opelika 230kV New line project is essential to support the area.
3. The construction of the Lagrange - North Opelika 230kV line requires modifications at the Lagrange and North Opelika substation in addition to the construction of Oseligee Creek as a metering station. Refer to Section E (p 97) of the 2024 GA ITS Ten-Year Plan for the cost associated to the work needed at Lagrange substation owned by Georgia Power. Oseligee Creek will be constructed and owned by GTC. North Opelika is owned by APC; therefore, cost for these facilities will be incurred by GTC and APC.
4. Please refer to the Company’s response to subpart (a).