



Project Scope Document

Project Name:	Lawrenceville 300 MW HDL	Date Issued:	1/30/2025
Estimated Budget Amount:	\$59,447,262	In-Service Date:	36-48 month after funds deposited
Estimated Customer Responsibility:	\$51,987,262		

Justification for Project:

The city of Lawrenceville has requested MEAG Power to develop a method of service to serve a 300 MW High-Density Load (HDL) near the customer property at 4020 Cornelia Hwy, Lula, GA 30554. The proposed method of service for this load includes constructing a new 230/25 kV ring bus substation with (4) 100 MVA transformer banks at the customer property. This substation will be fed using Clermont Junction – South Hall 230kV line.

Transmission planning analysis were performed in PSSE software in accordance with the planning events and system performance criteria in TPL-001 Table 1. Normal and contingency conditions were examined for each case with the generation dispatch unchanged from the base cases.

Description/Scope of project:

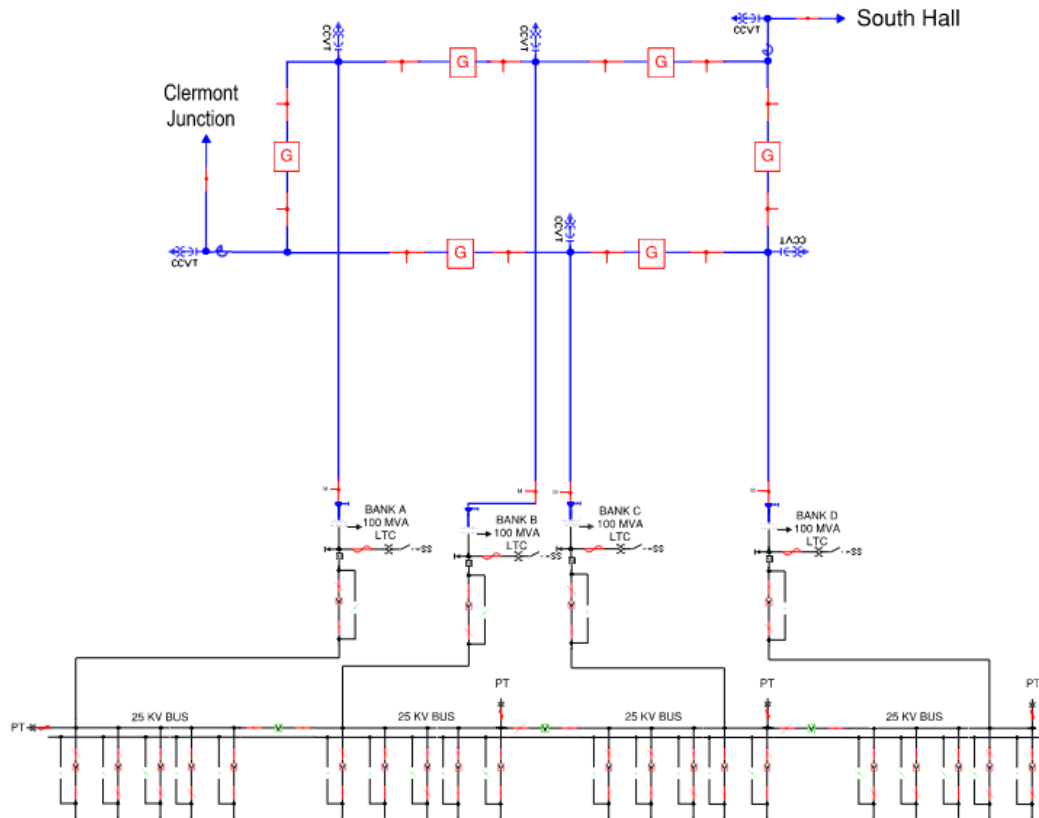
1. Build a 230 kV ring bus substation with six 3000 A breakers. Each breaker will have two associated 3000 A bus disconnect switches for a total of 12 bus switches. 230 kV bus material will be 4” Al Tube Schedule 80. Six bus CCVT’s will be installed – see attached one-line diagram.
2. Loop the Clermont Junction – South Hall 230 kV line into the customer substation (Lawrenceville #5). Each line termination will have a 3000 A motor operated switch and CCVT and 2-1590 AAC line jumpers. Two 3000A wave traps will be needed at the Clermont Junction and South Hall terminations.
3. Install four 100 MVA LTC Transformers. Install motor operated high-side 3000 A switches for each transformer connected to the 230 kV ring bus. Install 3000 A 25 kV low side bank breakers for all four transformers along with a low-side 3000 A disconnect switch between the low-side breaker and 25 kV main bus.
4. Build low-side main bus and transfer bus at 25 kV rated for 2400 A (100 MVA) or greater. Build five fully dressed out feeder positions for all four transformers. Dressed out feeder positions will have 1200 A breakers. All feeder disconnects and transfer bypass switches will be 1200 A. Install three 3000 A bus tie breakers and disconnect switches on the 25 kV bus.
5. Build a new control house.
6. Install line relay panels in control house as necessary for line terminations. Coordinate line relay work with remote end substations; including any relay equipment/setting changes needed at Clermont Junction – South Hall Substations.
7. Install standard MEAG transformer differential relay panels, RTAC relay panel and 25 kV feeder relay panels as necessary in control house.
8. Install revenue metering with PT’s and CT’s for each bank.

Cost Breakdown:

Project Name	Responsible Party	Estimated Cost
230/25kV Distribution Station	Customer	\$51,987,262
Transmission Line and associated land	MEAG	\$7,460,000
Total		\$59,447,262



Lawrenceville #5 New 230/25 kV Ring Bus Station



PRELIMINARY ONLINE
DESIGN SUBJECT TO CHANGE

GEORGIA INTEGRATED TRANSMISSION SYSTEM SUBSTATION DIAGRAM	
Lawrenceville #5 (MEAG)	
Drawn	Revised

Proposed Customer Substation Location Feeding From Clermont Junction-South Hall 230 KV line

(Line routing is subject to change and depends on the final line/siting study results)

