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Georgia Projects

(Includes ITS & Savannah Projects)

2023 – 2032

Transmission Planning

Southern Company Services

FALL 2022

Southern Company

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CONTENTS

I. GA ITS EXECUTIVE SUMMARY 4
A. Georgia ITS 10 Year Expansion Plan Projects List 6
B. Cancelled Projects List – Removed from the Current 10 Year Expansion Plan 16
C. Completed Projects List – Removed from the Current 10 Year Expansion Plan 17
II. Transmission Planning Process Description 19
A. Annual Planning Process and Base Cases 19
Maintaining System Models 19
Load Forecast 21
Normal Open Points 22
III. PERFORMANCE CRITERIA 23
A. Steady State Analysis 23
Steady State Sensitivity Analysis 28
Steady State Equipment Sparing Analysis 28
B. Stability Analysis 28
Stability Past Studies 31
Stability Sensitivity Analysis (Near-Term Planning Horizon) 31
Steady State Coordination with Adjacent Systems 31
Long-Term Stability Analysis 31
C. Short Circuit Analysis 32
D. Interface Transfer Capability Assessments 32
IV. ANALYSIS RESULTS 33
A. Operating Guides 33
B. Stability Project Details 36
C. Short Circuit Project Details 40
D. Interface Transfer Capability Project Details 42
E. Steady State Project Details 42
F. Expansion Generation Units Details 146
V. ADDITIONAL SYSTEM ANALYSIS NOTES 149
A. Interface Analysis 149
Northern Interface and Florida Interface Studies 149

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B. Nuclear Final Safety Offsite Power Report (FSAR) Study 149
C. Designation Studies 149
VI. Appendix 150
A. Validation Files / Reports 150
B. Generation Assumptions 152
Basecase Definitions 152
Generation in Cases 153
Generation Scenario (Unit Off / Area Max) Cases 161
C. Strategic Projects 163
GTC: Dresden – Talbot 500kV Line Project 163
GTC: East Walton 500/230kV Area Project 169
D. Fleet Transition Tables 176

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I. GA ITS EXECUTIVE SUMMARY

The results of the studies performed on the GA ITS portion demonstrate that required performance criteria are met or a project or operating guide have been developed to address any identified system deficiencies.

A Summary of Georgia ITS Transmission additions starts on the next page, followed by the List of the Georgia ITS 10 Year Expansion Plan Projects.

This group of projects and operating guides, found in Section IV – ANALYSIS RESULTS, is reassessed each year to confirm continued need, timing, and scope for previously identified projects until projects have transitioned from planning to a committed project. These reassessments also investigate potential need for additional projects or modification to projects currently included. Any operating guides identified to address constraints are reviewed by Georgia Power System Operations. The transmission improvements are submitted to ITS Participants for ITS parity inclusion.

The following information is included for each project:

1) project justification,
2) schedule for implementation (start date), and
3) expected required in-service date.

For transmission improvements, lead times necessary to implement plans are considered to ensure the expected required in-service date can be met.

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Summary of Georgia ITS Transmission Additions

Table 1 Summary of Georgia ITS Transmission Additions

	First 5 Years		Total 10 Years	
New Transmission Lines Requiring New Right of Way				
Voltage (kV)	Lines	Miles	Lines	Miles
500	2	47.8	3	102.8
230	10	131	10	131
115	4	38.5	4	38.5
Total	**16**	**217.3**	**17**	**272.3**
Transmission Lines to be Rebuilt / Reconductored on Existing Right-of Way				
Voltage (kV)	Lines	Miles	Lines	Miles
500	0	0	0	0
230	5	133	9	159
115	37	334	47	448
Total	**42**	**467**	**56**	**607**
Transmission Lines Upgraded on Existing Right-of Way				
Voltage (kV)	Lines	Miles	Lines	Miles
500	0	0	0	0
230	1	9	1	9
115	0	0	0	0
Total	**1**	**9**	**1**	**9**
Transformers to be installed (low side ≥ 115kV)				
	Units		Units	
New	7		9	
Upgrade	2		2	
New Capacitor Banks to be Installed				
Voltage (kV)	Units	MVAR	Units	MVAR
230	0	0	0	0
115	4	180	5	240
New Series Reactors to be Installed				
Voltage (kV)	Units		Units	
230	1		1	
115	0		0	

New Shunt Reactors to be Installed				
Voltage (kV)	Units		Units	
230	2		2	
115	0		0	
New Static VAR Systems to be Installed				
Voltage (kV)	Units		Units	
230	2		2	
115	0		0	

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A. Georgia ITS 10 Year Expansion Plan Projects List

Table 2 Ga ITS 10 Year Plan Project List below briefly lists projects in the 10 Year Expansion Plan (details for each project are in later sections).

Table 2 Ga ITS 10 Year Plan Project List

Zone	Year	TEAMS No.	Project Name	Need Date 2022	Project Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
214	2023	19604	BUTLER 230KV REACTORS (BONAIRE-BUTLER 230KV)	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2023	18883	DAVIS STREET-FOWLER STREET 115KV JUMPER REPLACMENTS	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
218	2023	18060	DEAL BRANCH-SYLVANIA 115KV REBUILD	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2023	18945	DOUGLAS - LAKE BEATRICE 115 KV LINE REBUILD	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2023	18911	DU: NELSON AUTOBANK AND JUMPER REPLACEMENT	12/31/2023	DU	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2023	19349	EAST MAYSVILLE CAP BANK	12/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2023	18989	EAST WATKINSVILLE - RUSSELL DAM 230 KV JUMPER REPLACEMENTS	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2023	16897	EAST WATKINSVILLE - RUSSELL DAM 230 KV RECONDUCTOR	8/25/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2023	18879	GEORGE DAM (USA) - HUCKLEBERRY 115 KV REBUILD	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
218	2023	19675	GTC: HI HAT 115KV CAPACITOR BANK INSTALLATION	6/1/2023	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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Zone	Year	TEAMS No.	Project Name	Need Date 2022	Project Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
211	2023	17678	GTC: POSSUM BRANCH 230/115 KV PROJECT	9/1/2023	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2023	18884	GTC: RACCOON CREEK - SCOOTER 230KV JUMPER REPLACMENT	6/1/2023	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2023	15687	KETTLE CREEK - PINE GROVE 115KV LINE UPGRADE PHASE ONE	12/31/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2023	10194	MCEVER ROAD - SHOAL CREEK 115KV REBUILD - PHASE 2	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2023	20007	MEAG: WASHINGTON #3 115KV CAP BANK	6/1/2023	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2023	15882	GTC: SAWHATCHEE SWITCH REPLACEMENT	6/1/2023	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2023	15698	SINCLAIR DAM - WARRENTON 115KV RECONDUCTOR PHASE I	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2023	18329	SITE "H" ENHANCED PHYSICAL SECURITY	12/31/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2023	19388	WEST AUGUSTA 115KV SUBSTATION: OVERSTRESSED BREAKER	6/1/2023	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2024	12016	ARKWRIGHT - LLOYD SHOALS 115K LINE RECONDUCTOR	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2024	20017	ARKWRIGHT-SOUTH MACON (BLACK) 115KV LINE REBUILD	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2024	18670	BANKS CROSSING - POND FORK 115 KV	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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213	2024	11692	BULL CREEK - VICTORY 115KV LINE RECONDUCTOR	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2024	18671	CORN CRIB - LAGRANGE PRIMARY 115KV RECONDUCTOR	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2024	18679	DU: DALTON CITY #12 BUS REPLACEMENT	6/1/2024	DU	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2024	16007	FENWICK STREET-SAND BAR FERRY 115KV (RECONDUCTOR)	12/31/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2024	20002	GORDON-SANDERSVILLE #1 115KV LINE REBUILD	12/31/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2024	19287	GRADY - WEST END 115KV RECONDUCTOR	12/31/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2024	18774	GTC: HEARD COUNTY - TENASKA 500KV (NEW LINE)	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2024	19341	GTC: JUDY MOUNTAIN 230KV SHUNT REACTOR	12/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2024	19340	GTC: MIDDLE FORK STATIC VAR SYSTEM	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2024	19622	GTC: RIDDLEVILLE BUS REPLACEMENT	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2024	20001	GTC: ROBINS SPRING CAPACITOR INSTALLATION	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2024	20021	GTC: UNION CITY 230KV BUS TIE	12/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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218	2024	19028	KINGSLAND BANK C REPLACEMENT	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2024	18772	KLONDIKE 500KV SWITCH REPLACEMENT	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2024	19621	MCEVER ROAD - SHOAL CREEK 115KV REBUILD (College Sq-Lakeside WTP)	10/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2024	19305	MCGRAU FORD STATIC VAR SYSTEM	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2024	13753	MEAG: ALCOVY ROAD - SKC 115KV RECONDUCTOR	6/1/2024	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2024	18832	MEAG: FORTSON 230KV REDUNDANT RELAY	12/31/2024	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
202	2024	17975	NORCROSS - SNELLVILLE PRIMARY 115KV (REBUILD)	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
202	2024	20006	NORCROSS 230KV BUS 2-3 SERIES BUS TIE BREAKER	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
201	2024	13653	NORTH MARIETTA - SMYRNA (BLACK & WHITE) 115KV RECONDUCTORS	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2024	19019	PINE GROVE PRIMARY BANK B REPLACEMENT	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2024	14271	THOMSON PRI - WARRENTON PRI 115KV WHITE LINE REBUILD	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
201	2024	20022	VILLA RICA RELAY MODERNIZATION	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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215	2024	19625	WARRENTON PRIMARY SWITCH REPLACEMENTS	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2025	19676	ADAMSVILLE-JACK MCDONOUGH 230KV RECONDUCTOR	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
219	2025	19966	BIG OGEECHEE 500/230KV SUBSTATION	6/1/2025	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2025	18153	BONAIRE PRIMARY - ECHECONNEE 115KV RECONDUCTOR (BONAIRE - RUSSELL PKWY)	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2025	19627	ECHECONNEE - WELLSTON 115KV REBUILD (N WARNER ROBINS-S WARNER ROBINS)	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2025	18800	ECHECONNEE - WELLSTON 115KV REBUILD (S WARNER ROBINS-WELLSTON)	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2025	20010	GTC: ANTHONY SHOALS - WASHINGTON 115KV LINE REBUILD	12/31/2025	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2025	18691	GTC: HWY 45/234 - WESTOVER 115 KV	6/1/2025	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2025	19603	GTC: SOUTH COWETA 230/115KV SECOND AUTO	6/1/2025	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2025	18889	JEFFERSON STREET#3 - NORTHWEST (WHITE) RECONDUCTOR	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
218	2025	11821	JESUP - LUDOWICI PRIMARY 115 KV RECONDUCTOR	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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219	2025	17075	LITTLE OGEECHEE REDUNDANT RELAY	6/1/2025	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2025	13787	MEAG: AULTMAN ROAD - BONAIRE PRIMARY 115KV	6/1/2025	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2025	18690	PALMYRA REACTOR REMOVAL	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2025	15239	SOUTH COWETA - SOUTH GRIFFIN 115KV LINE REBUILD	6/1/2025	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2026	17977	ATHENA - EAST WATKINSVILLE 115 KV REBUILD	12/31/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2026	18960	BLANKETS CK.-WOODSTOCK 115-KV LN REBUILD	6/1/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2026	20018	QTS FAYETTEVILLE (TRANSMISSION NEEDS)	4/1/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2026	18669	DU: DAWSON CROSSING - NELSON (WHITE) 115 KV RECONDUCTOR (PLACEHOLDER)	6/1/2026	DU	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2026	19618	GORDON - N. DUBLIN 115KV REBUILD (GORDON ENGELHARD)	6/1/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2026	19611	GTC: BROADWAY - DORSETT 115KV LINE	12/1/2026	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2026	20005	GTC: DRESDEN-SOUTH COWETA 230KV JUMPER REPLACEMENT	6/1/2026	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2026	19334	GTC: LAGRANGE - NORTH OPELIKA 230 KV (NEW LINE)	6/1/2026	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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Zone	Year	TEAMS No.	Project Name	Need Date 2022	Project Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
212	2026	20015	GTC: MORNING HORNET 2ND 230/115 KV BANK & THUMBS UP 115KV TL	6/1/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
213	2026	19598	MEAG: DRESDEN - LAGRANGE 230KV LINE REBUILD	6/1/2026	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2026	18492	MITCHELL - NORTH TIFTON 230KV RECONDUCTOR	5/1/2026	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2027	19997	AULTMAN ROAD-PERRY 115KV REBUILD	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
219	2027	20066	BOULEVARD-DEPTFORD 115KV REBUILD	6/1/2027	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2027	19991	CENTER PRIMARY-COMMERCE PRIMARY 115KV REBUILD	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
219	2027	20067	DEPTFORD-MAGNOLIA 115KV REBUILD	6/1/2027	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
219	2027	20065	GOSHEN (SAV)-MCINTOSH 115KV REBUILD	6/1/2027	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2027	19623	GTC: AUGUSTA CORPORATE PARK - VOGTLE 230KV REBUILD	6/1/2027	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2027	19358	GTC: EAST MOULTRIE - HWY 112 230KV LINE (NEW LINE)	6/1/2027	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2027	9662	GTC: EAST WALTON AREA PROJECT	6/1/2027	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
206	2027	19606	GTC: SKC REPLACE 115KV BUS AND JUMPERS	6/1/2027	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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218	2027	18668	JESUP-OFFERMAN 115KV RECONDUCTOR	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2027	20000	LINE CREEK-YATES (BLACK) 230KV SWITCH REPLACEMENT	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2027	19599	MEAG: DRESDEN - YATES 230KV LINE UPGRADE & JUMPER RPLC	6/1/2027	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2027	20019	SANDERSVILLE #1-WADLEY PRIMARY 115KV REBUILD	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2027	20020	GTC: SOUTH HAZELHURST-NEW LACEY 230KV	6/1/2027	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2027	14222	THOMSON PRIMARY 230/115KV SECOND AUTOBANK ADDITION	6/1/2027	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2028	19628	ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR	6/1/2028	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2028	19635	GTC: HICKORY LEVEL - VILLA RICA PRIMARY 230KV	6/1/2028	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2028	19636	HAMMOND - WEISS DAM (APC) 115KV REBUILD	6/1/2028	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2028	19601	MORROW - YATES COMMON 115kV UPGRADE	6/1/2028	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2028	20003	OHARA-SOUTH COWETA 115KV LINE REBUILD	6/1/2028	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
201	2029	12063	DOUGLASVILLE - POST ROAD 115KV REBUILD	6/1/2029	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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Zone	Year	TEAMS No.	Project Name	Need Date 2022	Project Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
213	2029	19950	GTC: DRESDEN-TALBOT COUNTY 500KV LINE	6/1/2029	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
219	2029	15228	KRAFT 230/115-KV TRANSFORMER RATING INCREASE	6/1/2029	SAV	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2030	19610	BONAIRE PRIMARY - ECHECONNEE 115KV (W WARNER ROBINS-RUSSELL PKWY)	6/1/2030	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
208	2030	20004	DYER ROAD-SOUTH COWETA 115KV LINE REBUILD	6/1/2030	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	2030	19999	GTC: ROBINS SPRING BUS REPLACEMENT	6/1/2030	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2030	19629	MEAG: BRUMBLEY CREEK - SOUTH BAINBRIDGE 115KV	6/1/2030	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	2030	19630	MEAG: THOMASVILLE 230/115KV AUTOBANK REPLACEMENT	6/1/2030	MEAG	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
202	2031	19632	AVERY - HOPEWELL 115KV RECONDUCTOR	6/1/2031	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
211	2031	19187	BREMEN - CROOKED CREEK 115KV	6/1/2031	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2031	19626	EATONTON PRIMARY 115KV CAP BANK	6/1/2031	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2031	19996	GOLDENS CREEK-WARRENTON PRIMARY 230KV REBUILD	6/1/2031	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
212	2031	19992	GTC: BOSTWICK-EAST SOCIAL CIRCLE 230KV UPGRADE	6/1/2031	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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Zone	Year	TEAMS No.	Project Name	Need Date 2022	Project Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
212	2031	19995	TALLULAH LODGE-TOCCOA 115KV REBUILD	6/1/2031	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
215	2032	17993	EVANS PRIMARY-THOMOSON PRIMARY 115KV RECONDUCTOR PHASE II	11/1/2032	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
Total						**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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B. Cancelled Projects List – Removed from the Current 10 Year Expansion Plan

Table 3 Cancelled Projects – Removed from the Current Ten-Year Plan below briefly lists removed projects from previous year's 10 Year Expansion Plan.

Table 3 Cancelled Projects – Removed from the Current Ten-Year Plan

Zone	TEAMS	Project Name	Last Year's Need Date	Sponsor	Estimated Cost - GPC	Estimated Cost - GTC	Estimated Cost - MEAG	Estimated Cost - DU	Estimated Cost – ITS Assigned	Totals
212	17294	AVALON JUNCTION - BIO 115 KV REBUILD	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	19338	BRANCH - OASIS 230KV LINE RECONDUCTOR	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	18885	DAISY - WEST VALDOSTA 230KV LINE REBUILD	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
201	18950	DOUGLASVILLE - WEST MARIETTA 115KV RECONDUCTOR	6/1/2030	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
214	19339	EATONTON PRIMARY - OASIS 230KV RECONDUCTOR	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
202	18463	GTC: HOPEWELL 230/115KV AUTOBANK	6/1/2031	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	16589	KETTLE CREEK - PINE GROVE 115KV LINE UPGRADE PHASE TWO	6/1/2030	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	18495	MITCHELL - RACCOON CREEK 230KV RECONDUCTOR	6/1/2024	GTC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
216	19631	SOUTH ADEL SUBSTATION CAPACITOR BANK	6/1/2024	GPC	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**

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C. Completed Projects List – Removed from the Current 10 Year Expansion Plan

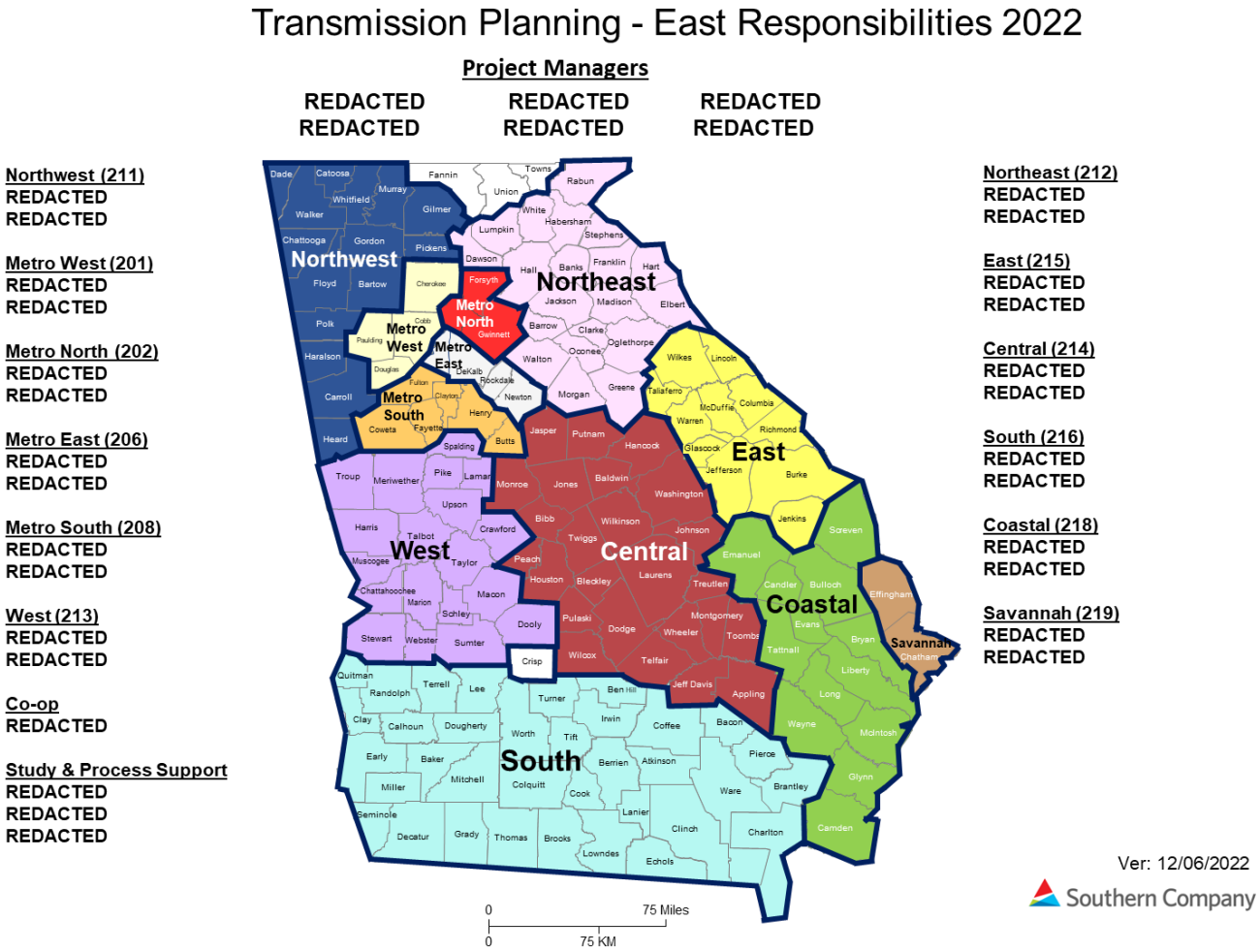
Table 4 Completed Projects – Removed from the Current Ten-Year Plan below, briefly lists projects removed from the previous year's 10 Year Expansion Plan due to In Service or Construction Completion.

Table 4 Completed Projects – Removed from the Current Ten-Year Plan

Zone	TEAMS	Project Name	Last Year's Need Date
214	18157	BAXLEY - JESUP 115KV REBUILD	6/1/2022
216	18315	LUMPKIN SOLAR IMPROVEMENTS (GI-110)	6/1/2022
214	18239	BROADWAY-SOUTH MACON 115KV REBUILD (GRAPHIC PACK-S MACON)	6/1/2022
206	14349	AUSTIN DRIVE-MORROW 115KV REBUILD	12/1/2022
214	18886	BROADWAY & ECHECONNEE CAP BANK INSTALLATION (ALLEN ROAD)	6/1/2022
211	18851	DU: EAST DALTON-OOSTANAULA 115KV REBUILD	12/1/2022
214	18419	GORDON-N. DUBLIN 115KV REBUILD (EVERGREEN CH-ENGELHARD)	12/1/2022
215	18447	GTC: GOSHEN 230KV SERIES REACTORS	6/1/2022
214	18569	SOUTH MACON AUTOBANKS REPLACEMENTS	6/1/2029

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Figure 1 SCS Transmission Planning - East Responsibilities



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II. TRANSMISSION PLANNING PROCESS DESCRIPTION

A. Annual Planning Process and Base Cases

The Transmission Planning process performed by Southern Company Services - Transmission (SCST) Transmission Planning for the 10-year planning horizon is a continual process. The process ensures that the Georgia Integrated Transmission System (ITS) participants have all the information necessary to develop projects for identified system limitations to ensure compliance with all NERC Planning Standard requirements, and in time to meet individual participant budget and scheduling needs. The ITS Joint Committee for Planning and Operations will determine which ITS Participant will have construction and ownership responsibilities based upon a full consideration of surrounding issues including, but not limited to, facility ownership and the ITS parity forecast.

This report summarizes Planning Coordinator (PC) and Transmission Planner (TP) planning studies performed by SCST specifically for the Georgia ITS as described in the *Guidelines for Planning Transmission System Facility Improvements* and is consistent with the NERC TPL-001-5 Standard ("Standard").

The following sections provide an overview of maintaining system models, the detailed studies performed, which includes steady state, stability, and short circuit studies, and the resulting Projects and Operating Guides for the mitigation of identified System deficiencies.

Maintaining System Models

The detailed studies are performed on Transmission System models ("base cases") which are updated annually based on the current 10-year forecast for Southern Balancing Authority Area (SBAA) load and generation required to serve the load. The base cases use data consistent with that provided in accordance with MOD-032, supplemented by other sources as needed, including items represented in the Corrective Action Plan (CAP) and projected System conditions. The base cases include the latest available external representation of the Eastern Interconnection which is generally obtained from the Multi regional Modeling Working Group or SERC Reliability Corporation (SERC) Long Term Study Group. The base cases include the following [Requirement 1]:

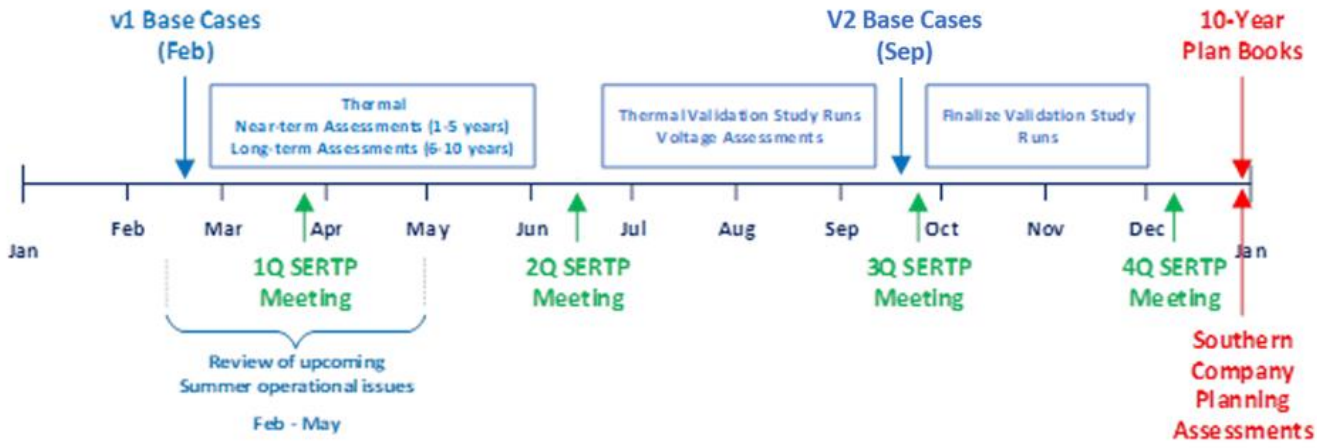
1. Existing facilities.
2. Known outages of generation or Transmission Facilities with a duration of at least six months. All outages meeting this criterion in the Near-Term Transmission planning horizon were modeled with the impacted equipment out-of-service as described in R1 in the Standard.

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3. New planned Facilities and changes to existing Facilities. These Facilities are rated in accordance with NERC Reliability Standard FAC-008-3.
4. Real and reactive Load forecasts are provided for each Load Serving Entity within Southeastern Sub-Region in SERC.
5. Known commitments for Firm Transmission Service and Interchange.
6. Resources required for Load.

The model of the Southern Balancing Authority Area (SBAA) is constantly changing. Computer models, or base cases, of the system are created on an as needed basis at least twice annually on a schedule like the one shown in Figure 2 below. This ensures that as projects are identified they are included in the analysis of future years.

Figure 2 Annual Base Case Release and Study Schedule



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Load Forecast

Refer to the Load Forecast table below for summer peak load projections by year.

Table 5 2022 Series ITS Load Forecast

REDACTED

Figure 3 Total 2022 Series ITS Summer Coincident at the Generator

REDACTED

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Generation

Another key modeling assumption made in case development is generation resources. Future generation assumptions for native load resources for Southern Company, GTC, MEAG, and Dalton are shown in the table in Section VI Generation Assumptions. The table lists units and purchased power agreements, for all parties at the beginning of the year. The dispatch program commits sufficient resources to satisfy the load and reserve requirements for each company in each base case or unit-out case, then adjusts the output level for each generator in the most economical manner.

Normal Open Points

The ITS evaluates normal open point configurations on the Summer Cases. The ITS has alternative transmission service paths to some loads that have radial service. The function of these alternative service paths is to shift load from one circuit path to another should the primary service path be out of service. These alternative service paths cannot remain closed without also opening the primary service path because this new configuration's system protection will not adequately protect the transmission line if operated as a network transmission line and could cause network load flow constraints.

If a normal open point change is desired, Operations and Planning will evaluate the proposed new system to ensure that the system can accommodate the request prior to reconfiguration.

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III. PERFORMANCE CRITERIA

A. Steady State Analysis

Steady state analyses were conducted to consider TPL-001-5 Table 1 Category P0-P7 Planning Events and Extreme Events in both the near-term and longer-term planning horizons for both peak and off-peak loading models. The System Peak loading model represents summer conditions. The System Shoulder loading models represent 93% of summer peak demand with hydro generation motoring off-line and includes models with solar facilities either on or off-line. This load assumption was anticipated to result in the highest system stress, except a summer peak scenario, with a significant portion of energy-limited resources projected to be off-line. Additionally, System Off-Peak cases representing 70% of the summer peak demand were evaluated. All System peak, Off-Peak, and Shoulder cases are evaluated using Rate B (95°F ambient temperature). [Requirement 2 Parts 2.1.1, 2.1.2, and 2.2.1]

Additionally, a Hot Weather case representing 107% of system peak is evaluated under ITS procedures using Rate A (104°F ambient temperature) for all equipment ratings.

All projects resulting from Steady State analysis to address any identified deficiencies have been added to the list of projects in Section IV.

Table 6 Steady State Transmission Planning Criteria below briefly describes the Transmission Planning steady state study methodology to meetTPL-001-5 Table 1 Contingency requirements:

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Table 6 Steady State Transmission Planning Criteria (TPL-001-5 Table 1)

Category	Initial Condition	Event	Fault Type	Study Performed – The CAP addresses facilities that did not meet the appropriate criteria
P0 **No contingency**	Normal System	None	N/A	Thermal and voltage analysis was performed on the SBAA System model assuming no additional outages other than those already modeled as described in the "Base Case Development" section (N-0).
P1 **Single Contingency**	Normal System	Loss of one of the following:	3Ø	
		1. Generator		PSS/E generator transformer branches were removed for each generator as part of N-1 contingency analysis. In some instances, more than one generator are removed in this analysis due to the outage associated with a common collector bus.
		2. Transmission Circuit		Each PSS/E branch of the SBAA System model is removed from service one at a time. This has been compared to opening breaker to breaker and found to produce the same or more severe results for the SBAA System.
		3. Transformer		Each PSS/E transformer branch of the SBAA System model is removed from service one at a time.
		4. Shunt Device		Each PSS/E shunt device of the SBAA System is removed from service one at a time.
		5. Single Pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
P2 **Single Contingency**	Normal System	1. Opening of a line section w/o a fault	N/A	Each PSS/E branch circuit of the SBAA System model is removed from service one at a time.
		2. Bus Section Fault	SLG	Manually defined contingencies on the SBAA System model that simulate a bus section fault are removed from service one at a time.
		3. Internal Breaker Fault (non-Bus-tie Breaker)	SLG	Manually defined contingencies on the SBAA System model that simulate an internal breaker fault (non-bus-tie breaker) are removed from service one at a time.
		4. Internal Breaker Fault (Bus-tie Breaker)	SLG	Manually defined contingencies on the SBAA System model that simulate an internal breaker fault (bus-tie breaker) are removed from service one at a time.

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Category	Initial Condition	Event	Fault Type	Study Performed – The CAP addresses facilities that did not meet the appropriate criteria
P3 Multiple Contingency	Loss of generator unit followed by System adjustments	Loss of one of the following:	3Ø	
		1. Generator		A list of the two largest generators on the SBAA System model per kV level found at any one location is developed. From this list, a set of singular unit out cases is developed and then using these cases, each one of the remaining generators on the list is removed from service one at a time resulting in an N-G-G.
		2. Transmission Circuit		A set of singular unit out cases is developed from the SBAA System model. Using these cases, each branch segment is removed from service one at a time.
		3. Transformer		A set of singular unit out cases are developed from the SBAA System model. Using these cases, each branch segment that includes a transformer is removed from service one at a time.
		4. Shunt Device		A set of singular unit out cases is developed from the SBAA System model. Using these cases, each shunt device is removed from service one at a time.
		5. Single pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
P4 Multiple Contingency (Fault plus stuck breaker)	Normal System	Loss of multiple elements caused by a stuck breaker (non-Bus-tie Breaker) attempting to clear a Fault on one of the following:	SLG	
		1. Generator		Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (non-bus-tie breaker) attempting to clear a Fault on a generator are removed from service one at a time.
		2. Transmission Circuit		Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (non-bus-tie breaker) attempting to clear a Fault on a transmission circuit are removed from service one at a time.
		3. Transformer		Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (non-bus-tie breaker) attempting to clear a Fault on a transformer are removed from service one at a time.
		4. Shunt Device		Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (non-bus-tie breaker) attempting to clear a Fault on a shunt device are removed from service one at a time. Only shunt devices expected to impact the BES are modeled as branch segments.
		5. Bus Section		Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (non-bus-tie breaker) attempting to clear a Fault on a bus section are removed from service one at a time.
		6. Loss of multiple elements caused by a stuck breaker (Bus-tie Breaker) attempting to clear a Fault on the associated bus	SLG	
				Manually defined contingencies that simulate the loss of multiple elements caused by a stuck breaker (bus-tie breaker) attempting to clear a Fault on the associated bus are removed from service one at a time.

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Category	Initial Condition	Event	Fault Type	Study Performed – The CAP addresses facilities that did not meet the appropriate criteria
P5 Multiple Contingency (Fault plus relay failure to operate)	Normal System	Delayed Fault Clearing due to the failure of a non-redundant relay protecting the Faulted element to operate as designed, for one of the following:	SLG	
		1. Generator		This contingency was not analyzed because a review by Southern Company Subject Matter Experts (SMEs) concluded that the most severe contingency would be a P5.5 since it would clear the entire bus. This contingency is expected to be very similar to the P5.5 contingency.
		2. Transmission Circuit		This contingency was not analyzed because a review by Southern Company SMEs concluded that the most severe contingency would be a P5.5 since it would clear the entire bus. This contingency is expected to be very similar to the P5.5 contingency.
		3. Transformer		This contingency was not analyzed because a review by Southern Company SMEs concluded that the most severe contingency would be a P5.5 since it would clear the entire bus. This contingency is expected to be very similar to the P5.5 contingency.
		4. Shunt Device		This contingency was not analyzed because a review by Southern Company SMEs concluded that the most severe contingency would be a P5.5 since it would clear the entire bus. This contingency is expected to be very similar to the P5.5 contingency.
		5. Bus Section		Simulations were run to determine which elements would open to clear the fault if a protection system failure occurred. This information was used to simulate the contingency in the steady state case.
P6 Multiple Contingency (Two overlapping singles)	Loss of one of the following followed by System adjustments. 1. Transmission Circuit 2. Transformer 3. Shunt Device 4. Single pole of a DC line	Loss of one of the following:	3Ø	
		1. Transmission Circuit		PSSE is used to rank and remove from service combinations of elements based on the severity of the impact of the loss of these combinations on the SBAA portion of the planning model.
		2. Transformer		PSSE is used to rank and remove from service combinations of elements based on the severity of the impact of the loss of these combinations on the SBAA portion of the planning model.
		3. Shunt Device		PSSE is used to rank and remove from service combinations of elements based on the severity of the impact of the loss of these combinations on the SBAA portion of the planning model. Only shunt devices expected to impact the BES are modeled as branch segments.
		4. Single pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.

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Category	Initial Condition	Event	Fault Type	Study Performed – The CAP addresses facilities that did not meet the appropriate criteria
P7 Multiple Contingency (Common Structure)	Normal System	The loss of:	SLG	
		1. Any two adjacent (vertically or horizontally) circuits on common structure		Manually defined contingencies on the SBAA System model that simulate the loss of any two adjacent (vertically or horizontally) circuits on a common structure are removed from service one at a time. These contingencies were developed by SMEs to ensure that all are captured.
		2. Loss of a bipolar DC line		Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
Extreme Events	Normal System	Variable	Variable	Extreme events with significant potential impacts were reviewed and options to mitigate the impacts identified. Events evaluated included: 1. Planning events that were mitigated using specific System adjustments. However, it was assumed the adjustments did not occur. Studies were then performed to simulate the next fault with normal clearing before the System adjustments were made. 2. Local area events affecting the Transmission System, as defined by Subject Matter Experts, including: a. Loss of a tower line with three or more circuits. b. Loss of all Transmission lines on a common Right-of-Way. c. Loss of a switching station or substation (loss of the one voltage level plus transformers). d. Loss of all generating units at a generating station. 3. No wide area events affecting the SBAA System were identified.

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Where Table 6 Steady State Transmission Planning Criteria required a generation outage as a portion of the contingency, a summary of key unit outs considered was developed and can be found in Section IV. This table shows not only the units considered but the cases in which they were used as well. Some unit outs were not needed in certain cases because the unit was already off due to the expected dispatch in the case. These selected generating units which provide more severe stress on the system have been identified through experience over many years of conducting power flow analysis based upon their relative size, location or other factors.

Steady State Sensitivity Analysis

The Standard requires additional Sensitivity Studies to be performed to demonstrate the impact of changes to the basic assumptions used in the base cases. The sensitivity selected was the availability of hydroelectric generation. This sensitivity was evaluated utilizing the criteria described in TPL-001-5 Table 1. The analysis was performed on all years of the Near-Term and Long-Term Planning Horizons using Off-Peak conditions with the availability of hydroelectric generation and on System Shoulder conditions, which represent 93% of System peak and the unavailability of hydroelectric generation. [Requirement 2 Part 2.1.4]

Steady State Equipment Sparing Analysis

The Transmission equipment sparing strategy is reviewed annually to identify Transmission equipment without a spare and has a replacement lead time greater than one year. Each piece of equipment was individually modeled as unavailable and evaluated for P0, P1, and P2 events using System peak, Off-Peak, and the sensitivity cases. [Requirement 2 Part 2.1.5]

B. Stability Analysis

Stability studies were conducted to consider P1 - P7 Planning Events and Extreme Events in the Near-Term planning horizon. The simulations were made for System Peak Load conditions and for System Off-Peak load (approximately 50% of System peak load) conditions, for one of the five years in the Near-Term planning horizon. The System peak cases included a dynamic Load model which represents the expected dynamic behavior of induction motor Load that could impact the study area. The light System load level of 50% of System peak load was chosen to be the lowest load level for which base load units are running at maximum output - a worst case for angular stability.

All projects resulting from Stability analysis to address any identified deficiencies have been added to the list of projects in Section IV

Stability Project Details.

Table 7 Stability Transmission Planning Performance briefly describes the Transmission Planning stability study methodology to meet TPL-001-5 Table 1 performance requirements:

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Table 7 Stability Transmission Planning Performance Requirements (TPL-001-5 Table 1)

Category	Initial Condition	Event	Fault Type	Study Performed – The CAP addresses facilities that did not meet the appropriate performance requirements
P1 Single Contingency	Normal System	Loss of one of the following:	3Ø	A study was conducted which applied a normally-cleared, three-phase fault on every transmission line (P1.2) and transformer (P1.3) in the SBAA. Faults on generators (P1.1) will not be as severe because fault clearing will result in tripping a unit which is better for stability. Faults on shunt devices (P1.4) will also not be as severe because tripping a shunt device does not result in weakening the System as compared to tripping a transmission line or transformer. Thus, P1.1 and P1.4 were not explicitly studied.
		1. Generator		
		2. Transmission Circuit		
		3. Transformer		
		4. Shunt Device		
		5. Single Pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
P2 Single Contingency	Normal System	1. Opening of a line section w/o a fault	N/A	Opening a line end without a fault will never cause a stability concern that has not already been identified by a category P1 event.
		2. Bus Section Fault	SLG	Planning events P2.2, P2.3, and P2.4 require single line to ground faults to be applied to bus sections or internal to breakers. These will always be less severe than a three-phase fault which will be covered by the extreme events specified inTPL-001-5 Table 1 Stability events 2.d and 2.e. When the three-phase faults in the extreme events result in instability, a solution will generally be included in the CAP. If situations should occur where the CAP is not used to address three-phase faults which resulted in instability, then the single line to ground fault will be investigated and appropriate corrective action included as needed.
		3. Internal Breaker Fault (non-Bus-tie Breaker)	SLG	
		4. Internal Breaker Fault (Bus-tie Breaker)	SLG	
P3 Multiple Contingency	Loss of generator unit followed by System adjustments	Loss of one of the following:	3Ø	The initial System condition of a generator being out of service is generally not a stability concern because less generation is better for transient stability. A generator out is only a potential stability concern for peak load levels in FIDVR prone areas and, therefore was studied only in FIDVR prone areas.
		1. Generator		
		2. Transmission Circuit		
		3. Transformer		
		4. Shunt Device		
		5. Single pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
P4 Multiple Contingency (Fault plus stuck breaker)	Normal System	Loss of multiple elements caused by a stuck breaker (non-Bus-tie Breaker) attempting to clear a Fault on one of the following:	SLG	Planning events P4.1 through P4.6 require single line to ground faults to be applied to generators, Transmission circuits, transformers, shunt devices, and bus sections with delayed clearing due to a stuck breaker. These will always be less severe than a three-phase fault which will be covered by Extreme Events specified in TPL-001-5 Table 1 Stability events 2.a through 2e. When a three-phase fault scenario considered in the extreme events result in instability, a solution will generally be included in the CAP. If a situation should occur where the CAP is not used to address three-phase faults which result in instability, then the single line to ground fault was investigated and the appropriate corrective action was included as needed.
		1. Generator		
		2. Transmission Circuit		
		3. Transformer		
		4. Shunt Device		
		5. Bus Section		

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		6. Loss of multiple elements caused by a stuck breaker (Bus-tie Breaker) attempting to clear a Fault on the associated bus	SLG	
P5 Multiple Contingency (Fault plus relay failure to operate)	Normal System	Delayed Fault Clearing due to the failure of a non-redundant relay protecting the Faulted element to operate as designed, for one of the following: 1. Generator 2. Transmission Circuit 3. Transformer 4. Shunt Device 5. Bus Section	SLG	Planning events P5.1 through P5.5 require single-line-to-ground faults to be applied to generators, Transmission circuits, transformers, shunt devices, and bus sections with delayed clearing due to a relay failure. Single line to ground faults will be less severe than a three-phase fault which will be covered by R4.5 extreme events specified inTPL-001-5 Table 1 Stability events 2.a through 2e. When the three-phase faults evaluated in the R4.5 extreme events resulted in instability, a solution was included in the CAP. In situations where the CAP was not used to address three-phase faults which resulted in instability, then the single line to ground fault was investigated and appropriate corrective action included as needed.
P6 Multiple Contingency (Two overlapping singles)	Loss of one of the following followed by System adjustments. 1. Transmission Circuit 2. Transformer 3. Shunt Device 4. Single pole of a DC line	Loss of one of the following: 1. Transmission Circuit 2. Transformer 3. Shunt Device	3Ø	Studies were performed with a Transmission element (P6.1 and P6.2) out of service at generating plants on the System. Then a three-phase, normally cleared fault was studied on another element at the generating plant. If the generators are not stable for this contingency, then a System adjustment or a CAP project was implemented to make sure that the generation remained stable. Faults on shunt devices (P6.3) were not as severe because tripping a shunt device does not result in weakening the System as compared to tripping a transmission line or transformer. Thus, P6.3 was not explicitly studied.
		4. Single pole of a DC line	SLG	Not applicable as HVDC lines are not currently installed in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
P7 Multiple Contingency (Common Structure)	Normal System	The loss of: 1. Any two adjacent (vertically or horizontally) circuits on common structure	SLG	Single-line-to-ground faults will be simulated on two transmission lines at a generating plant that share a common tower for distances greater than one mile. The circuits to be studied were ones at generating plants which would have the most impact on stability.
		2. Loss of a bipolar DC line		Not applicable as HVDC lines are not currently utilized in the SBAA System and no HVDC lines outside of the SBAA have been identified by adjacent PCs and TPs as affecting the SBAA System in the planning horizon.
Extreme Events				Lists of contingencies which are expected to produce more severe System impacts for extreme events were created for evaluation in the stability studies. These events were divided into two categories: 1. Planning events that were mitigated using specific System adjustments (resulting in temporary SOL's for Operations). Those adjustments should be assumed not to have occurred. Studies were made of the consequences of having the next three-phase fault with normal clearing before the System adjustments are made. 2. Three-phase faults with delayed clearing due to a stuck breaker or a relay failure. These contingencies were applied to generators, Transmission circuits, transformers, shunt devices, and bus sections at or near generating plants. These will have the most severe impact to the stability of the System.

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Stability Past Studies

Past studies were utilized in some situations to demonstrate that performance requirements were met. For each category considered (i.e., P1 - P7 and Extreme Events), past studies were evaluated per requirements R2.6.1 and R2.6.2 of the Standard to ensure that they met the following criteria:

- Less than five years old unless a technical rationale supporting that the results of an older study are still valid;
- No material changes have occurred to the System represented in the study.

All past studies utilized in the assessment met the above criteria. [Requirement 2.6.1 and 2.6.2]

Stability Sensitivity Analysis (Near-Term Planning Horizon)

Requirement R2.4.3 of the Standard requires that additional sensitivity studies be performed to demonstrate the effects of various modeling assumptions used in the analysis. For the system stability studies completed, which used the standard base case, the following sensitivities were evaluated:

- For 50% System peak load cases, transfers to Florida were increased or local generation was increased to maximum output;
- For System peak load cases, the amount of induction motor load that was modeled with a dynamic load model was increased.

For the other studies, including past studies, a specific sensitivity was not evaluated. Those studies modified the output of the generator beyond the amount specified by the base dispatch (i.e., all generation in proximity to the study area was dispatched at full output whether the unit had firm service for full output or not). This study practice resulted in the most conservative results possible; thus, it was not necessary to study additional sensitivities. The sensitivity analysis revealed no new constraints. [Requirement 2.4.3]

Steady State Coordination with Adjacent Systems

In addition to contingencies on the GA ITS system, contingencies provided by neighboring systems in accordance with TPL-001-5 Requirement 3.4.1 are analyzed as a part of the annual study process. These neighboring systems are also monitored as part of all studies to determine if any contingencies on the ITS system have the potential to impact them. If potential impacts to neighboring systems are identified, the impacted neighbor is notified of those contingencies per the requirement.

Long-Term Stability Analysis

Stability studies were also conducted as needed in the Long-Term planning horizon to address the impact of material generation additions or changes in that time frame. Forecasted generation in the Long-Term transmission planning horizon that does not have firm service or

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has not been designated by an entity does not require a stability study. Only new generation for which a firm commitment to build has been made requires a unit specific stability study. [Requirement 2.5]

C. Short Circuit Analysis

The short circuit (breaker duty) assessment was performed by Southern Company Services Protection & Control Applications for the Near-Term planning horizon. The base case model used for this assessment included all existing facilities (transmission and generation) and planned facilities based on forecasted generation and future years' transmission expansion plan. The real and reactive Load forecasts and known commitments for Firm Transmission Service and Interchange were not represented in the models as they were not relevant to this assessment. The study methodology for short circuit analysis employs the Breaker Duty Module with the CAPE Short Circuit Analysis program to calculate margin between fault interrupting device capability and short circuit level at that location. The short circuit currents are at the highest with maximum generation online and with N-0 transmission contingency. Hence, no outages are considered in this assessment. [Requirement 2 Part 2.3]

The assessment is conducted annually for the Near-Term planning horizon to ensure that the fault interrupting devices can successfully interrupt the expected short circuit currents consistent with the Standard and *Guidelines for Short Circuit System Modeling and Short Circuit Assessment of The Southern Company Electric Transmission System*.

All projects resulting from that analysis to address any identified deficiencies have been added to the list of projects in Section IV Short Circuit Project Details. [Requirement 2 Parts 2.3, 2.6 and 2.8]

D. Interface Transfer Capability Assessments

The transfer capability assessments are used to identify transmission facilities that may potentially limit the ITS' ability to maintain its long-term firm obligations across the SBAA interfaces. Linear transfer analysis is performed to simulate an incremental transfer in addition to firm transactions already modeled in the power flow cases. To reduce sensitivities to local generation dispatch issues, each transfer is simulated by scaling load uniformly in the participating areas. Transfer Distribution Factors (TDFs) are considered in evaluating potential limitations to transfers across each interface. In the identification of limiting facilities, known and applicable System Operating Limits ("SOLs") are respected. The assumptions, description of system models, summary of each interfaces transfer capability limitations and resulting projects are detailed in a report that is provided to Transmission Planning for inclusion of results into this document.

Pursuant to FAC-013-2, the interfaces of the SBAA are evaluated annually as part of the planning process. The analysis is done to ensure that the Southern Balancing Authority can maintain all long-term, firm transmission commitments and reliability reserve margins.

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All projects resulting from that analysis to address any identified deficiencies have been added to the list of projects in Section IV Interface Transfer Capability Project Details.

Northern Interface

For the Northern interfaces of MISO, TVA, Duke, SCPSA and SCEG/Dominion, transferring power across one interface may mutually impact the ability to transfer power across other interfaces. Therefore, transfer capability assessments for the "northern" interfaces of the SBAA are evaluated in such a way as to ensure not only that there is sufficient transfer capability to accommodate all firm transactions across a particular interface, but also that there is sufficient transfer capability to accommodate all firm obligations simultaneously across all the "northern" interfaces. Furthermore, the assessments consider potential "netting" impacts. If "netting" transfers (transfers of opposing flow) are allowed to remain in the assessment cases, potential problems may be masked in certain real-time situations when the transfers of opposing flow are not scheduled. Therefore, these opposing flow transfers may be removed to ensure that the most conservative screens are performed.

Florida Interface

The SBAA – FRCC interface consists of ties with four balancing authorities within FRCC: Florida Power and Light Company (FPL), DUKE Energy of Florida (DEF), Jacksonville Electric Authority (JEA), and the City of Tallahassee (TAL); collectively "Florida". However, because the Florida interface is fundamentally radial from the SBAA and the transmission facilities in the connecting balancing authorities have a high-level of interdependence, the Florida interface is studied in a single Transfer Capability assessment. To ensure the most conservative screens are performed, impacts from "netting" are considered in the same manner as the Northern Interface.

IV. ANALYSIS RESULTS

A. Operating Guides

The use of operating guides is, in many cases, a viable alternative to making system improvements. In considering the use of an operating guide, operator action time as well as procedure complexity must be assessed when considering the overall effectiveness to correct the specific problem. If, for any reason, the use of an operating guide results in a violation of the aforementioned risk assessment factors, then the operating guide is not used.

Since risk and complexity are factors that the system operator will have to deal with when an operating guide is necessary, all operating guides that Transmission Planning identifies, and tests are reviewed by Georgia Power Transmission Operations Department. The only exception to this is if an operating guide is developed for use in the future after significant system upgrades have been made and Operations cannot replicate the projected system conditions. All operating guides are re-evaluated with each planning cycle to determine if they are still

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appropriate or should be replaced with a project, and if a project is more appropriate that there is sufficient time to get the project installed.

The following table lists the thermal and voltage operating guides which were used in the development of the ten-year plan.

Table 8 Thermal and Voltage Operating Guides

Line Name (Breaker to Breaker)	OG Start Date	OG End Date	Procedure
Americus - Thrill Hill 115kV Operating Guide	6/1/2023	6/1/2025	**REDACTED**
Athena - East Watkinsville 115kV Operating Guide	6/1/2024	12/31/2026	**REDACTED** **REDACTED**
Augusta Corporate Park - Vogtle 230kV Operating Guide	6/1/2025	6/1/2027	**REDACTED** **REDACTED**
Aultman Road-Bonaire Primary 115kV Operating Guide	6/1/2023	6/1/2025	**REDACTED** **REDACTED**
Avalon Junction - Bio 115kV Operating Guide	6/1/2024	6/1/2032	**REDACTED** **REDACTED**
Brick Store - Thumbs Up Operating Guide	1/1/2024	12/31/2024	**REDACTED**
Branch-Oasis 230kV Operating Guide	6/1/2025	6/1/2026	**REDACTED**
Conyers-Cornish Mountain 115kV Operating Guide	6/1/2024	6/1/2028	**REDACTED** **REDACTED** **REDACTED**
Corn Crib - Lagrange Primary 115kV Operating Guide	6/1/2023	6/1/2024	**REDACTED** **REDACTED**
Daisy - West Valdosta 230kV Operating Guide	6/1/2023	6/1/2026	**REDACTED**
Dawson Crossing - Nelson (White) 115kV Operating Guide	6/1/2024	6/1/2026	**REDACTED** **REDACTED**
Eatonton Primary - Oasis 230kV Operating Guide	6/1/2024	6/1/2026	**REDACTED** **REDACTED**
Echeconnee - Wellston 115kV Operating Guide	6/1/2024	6/1/2025	**REDACTED** **REDACTED**
Echeconnee- Broadway-South Macon 115 Operating Guide	6/1/2023	6/1/2026	**REDACTED**
Evans Primary – Thomson Primary 115kV Operating Guide	6/1/2022	6/1/2027	**REDACTED** **REDACTED** **REDACTED**
Fortson - Lagrange 230kV Operating Guide	6/1/2023	6/1/2024	**REDACTED** **REDACTED** **REDACTED** **REDACTED** **REDACTED** **REDACTED**
Fortson - Lagrange 230kV Operating Guide	6/1/2024	6/1/2027	**REDACTED** **REDACTED**
Gordon - North Dublin 115kV Operating Guide (Pre-Contingency)	6/1/2024	6/1/2026	**REDACTED** **REDACTED**

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Hatch - Vidalia 230kV Operating Guide	6/1/2023	6/1/2024	**REDACTED** **REDACTED**
Jefferson Street #3 - Northwest 115kV Operating Guide	6/1/2023	6/1/2025	**REDACTED** **REDACTED**
Jesup - Ludowici Primary 115KV Operating Guide	1/1/2023	10/1/2023	**REDACTED** **REDACTED**
Jesup - Offerman 115KV Operating Guide	1/1/2023	10/2/2023	**REDACTED** **REDACTED**
Kawikee - South Columbus 115kV Operating Guide	6/1/2024	6/1/2025	**REDACTED**
Kia Motors - Pittman Road 115kV Operating Guide	6/1/2023	6/1/2027	**REDACTED** **REDACTED**
Lower River Road – Webb 115kV	6/1/2023	6/1/2026	**REDACTED**
Mitchell - North Tifton 230kV Operating Guide	6/1/2023	6/1/2025	**REDACTED** **REDACTED** **REDACTED**
Mitchell – Raccoon Creek 230kV Operating Guide	6/1/2023	6/1/2026	**REDACTED** **REDACTED** **REDACTED**
Morrow - Yates Common 115kV Operating Guide	6/1/2023	6/1/2024	**REDACTED** **REDACTED**
Moultrie - Thomasville 115kV Operating Guide	6/1/2026	6/1/2026	**REDACTED**
Pittman Road - West Point Dam 115kV Operating Guide	6/1/2025	6/1/2026	**REDACTED** **REDACTED**
Raccoon Creek – Scooter 230 KV Operating Guide	6/1/2023	6/1/2026	**REDACTED**
Thomson Primary - Warrenton Primary (White) 115kV Operating Guide	6/1/2022	6/1/2024	**REDACTED** **REDACTED** **REDACTED**
Thomson Primary 230/115kV Bank C Operating Guide	6/1/2022	6/1/2027	**REDACTED** **REDACTED** **REDACTED**

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B. Stability Project Details

The following group of projects are the result of the Stability studies conducted as needed in the Long-Term Planning Horizon to address the impact of material generation additions or changes for theTPL-001-5 Table 1.

The following information is included for each project:

A. project justification,
B. schedule for implementation (start date), and
C. expected required in-service date.

For transmission improvements, the start date is to provide necessary lead time to ensure the expected required in-service date can be met.

No new projects were identified in the 2022 Ten Year Plan as the result of Stability analyses.

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MCGRAU FORD STATCOM SYSTEM

TEAMS # 19305

Need Date 6/1/2024 **Start Date** 12/1/2021

Description

Install a +150/-150 MVAR STATCOM connected to the 230kV bus at McGrau Ford.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2023

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: MIDDLE FORK STATCOM SYSTEM

TEAMS # 19340

Need Date 6/1/2024 **Start Date** 12/1/2021

Description

GTC will install a +150/-150 MVAR STATCOM connected to the 230kV bus at Middle Fork.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2023

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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SITE 'H' ENHANCED PHYSICAL SECURITY

TEAMS # 18329

Need Date 12/31/2023 **Start Date** 2/1/2022

Description

Install enhanced physical security equipment to include radar, cameras, perimeter lighting, gate seals, fence upgrades.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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C. Short Circuit Project Details

The following group of projects are the result of the Short Circuit analyses performed by the Southern company Services Protection and Control Department.

The following information is included for each project:

1) project justification,
2) schedule for implementation (start date), and
3) expected required in-service date.

For transmission improvements, the start date is to provide necessary lead time to ensure the expected required in-service date can be met.

No new projects were identified in the 2022 Ten Year Plan as the result of Short Circuit analyses.

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WEST AUGUSTA 115KV BREAKER REPLACEMENT

TEAMS # 19388

Need Date 6/1/2023 **Start Date** 6/1/2022

Description

At West Augusta, replace existing breaker on the Goshen 115kV line with a 40kA or higher rated breaker.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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D. Interface Transfer Capability Project Details

The following projects are the result of the Interface Transfer Capability Assessments analyses performed by the Southern Company Services Transmission Planning OATT Studies & Regional Planning Department.

The following information is included for each project:

1) project justification,
2) schedule for implementation (start date), and
3) expected required in-service date.

For transmission improvements, the start date is to provide necessary lead time to ensure the expected required in-service date can be met.

No new projects were identified in the 2022 Ten Year Plan as the result of Interface Transfer Capability analyses.

E. Steady State Project Details

The following projects are the result of the Steady State analyses for the TPL-001-5 Table 1 Category P0, P1, and P2.3 EHV Planning Events in both the near-term and longer-term planning horizons for both peak and off-peak loading models.

The following information is included for each project:

1) project justification,
2) schedule for implementation (start date), and
3) expected required in-service date.

For transmission improvements, the start date is to provide necessary lead time to ensure the expected required in-service date can be met.

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ADAMSVILLE - JACK MCDONOUGH 230KV LINE REBUILD

TEAMS # 19676

Need Date 6/1/2025 **Start Date** 6/1/2024

Description

Rebuild the entire Adamsville - Jack McDonough 230kV line, 6.1 mile line to 160C ACSS.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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ARKWRIGHT - LLOYD SHOALS 115 KV LINE RECONDUCTOR

TEAMS # 12016

Need Date 6/1/2024 **Start Date** 6/1/2021

Description

Reconductor the Arkwright - Lloyd Shoals 115kV line with 100C 795 ACSR.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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ARKWRIGHT - SOUTH MACON (BLACK) 115KV LINE REBUILD

TEAMS # 20017

Need Date 6/1/2024 **Start Date** 1/15/2023

Description

Replace jumper CU 4/0 at Arkwright substation with higher rating and rebuild 2.38 miles of line from Arkwright to Town Creek J1 with 100C 795 ACSR.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR

TEAMS # 19628

Need Date 6/1/2028 **Start Date** 6/1/2026

Description

Reconductor 42.61 miles of the Arlington Primary-Highway 45/234 115kV Line from 100C 795 ACSR Drake conductor with 200C 795 ACSS Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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ATHENA - EAST WATKINSVILLE 115 KV (REBUILD)

TEAMS # 17977

Need Date 12/31/2026 **Start Date** 8/1/2024

Description

Rebuild appriximately 2.42 miles of 115kV line from East Athens to Whitehall, part of the Athena - East Watkinsville 115kV line with 100C 1033 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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AULTMAN ROAD-PERRY 115KV LINE REBUILD

TEAMS # 19997

Need Date 6/1/2027 **Start Date** 6/1/2025

Description

Rebuild the PPG J2 to Sandefur J line section (5.07miles) of the Aultman Road-Perry 115kV line from 100C 336 ACSR Linnet conductor to 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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AVERY - HOPEWELL 115KV RECONDUCTOR

TEAMS # 19632

Need Date 6/1/2031 **Start Date** 1/1/2030

Description

Reconductor approximately 3.3 miles of line from Hopewell to Birmingham using 100C 795 ACSR and replace jumpers at Birmingham

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BANKS CROSSING - POND FORK 115 KV

TEAMS # 18670

Need Date 6/1/2024 **Start Date** 6/1/2021

Description

Build new 115kV line from McClure Industrial to structure 21N on the Ridgeway Church Road Juction or Tap Point (approximately 3 miles). Close normally open switch at Ridgeway Church Road to establish the Banks Crossing - Pond Fork 115 kV line. All new conductor should be 100C 1351 ACSR Martin.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BIG OGEECHEE 500/230KV

TEAMS # 19966

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

Construct a new substation near Little Ogeechee, adjacent to the 500kV and 230kV shared right of way for McCall Road-Thalmann 500kV and the Little Ogeechee-Meldrim 230kV Black and White lines. The new substation will loop in the existing McCall Road-Thalmann 500kV line, loop in the existing Little Ogeechee-Meldrim 230kV lines, and accommodate a new 1344MVA 500/230kV autobank and an additional 230kV connection to Little Ogeechee.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BLANKETS CK.-WOODSTOCK 115-KV LN REBLD, (WOODSTK-LITTLE RVR)

TEAMS # 18960

Need Date 6/1/2026 **Start Date** 6/1/2024

Description

Rebuild the Woodstock – Little River 115kV section, approximately 2.5 miles of 100C 636 ACSR, using 100C 1351 ACSR.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BONAIRE PRIMARY - ECHECONNEE 115KV(W WARNER ROBINS-RUSSEL PKWY)

TEAMS # 19610

Need Date 6/1/2030 **Start Date** 6/1/2027

Description

Reconductor/rebuild the West Warner Robins-Russell Parkway line section of the Bonaire Primary-Echeconnee 115kV line from 100C 636 ACSR to 100C 795 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BONAIRE PRIMARY - ECHECONNEE 115KV (BONAIRE-RUSSELL PKWY)

TEAMS # 18153

Need Date 6/1/2025 **Start Date** 1/1/2029

Description

Reconductor the Bonaire Primary - Russell Parkway Junction section of the line (2.3 miles) with 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2030

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BOULEVARD - DEPTFORD 115KV REBUILD

TEAMS # 20066

Need Date 6/1/2027 **Start Date** 6/1/2023

Description

Rebuild the Boulevard-Deptford 115kV line, approximately 8 miles, using 100C 1351 ACSR Martin conductor. Replace 750 AAC jumpers at Deptford substation with 1590 AAC Coreopsis jumpers.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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BREMEN - CROOKED CREEK (APC) 115 KV PROJECT

TEAMS # 19187

Need Date 6/1/2031 **Start Date** 9/1/2021

Description

Rebuild from Bremen to Indian Creek Road, on the Bremen - Crooked Creek 115kV line, (14.0 miles), using 100C 795 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BULL CREEK - VICTORY DRIVE 115 KV LINE RECONDUCTOR

TEAMS # 11692

Need Date 6/1/2024 **Start Date** 1/1/2023

Description

Reconductor 1.3 miles of 115kV line with 100C 795 ACSR Drake conductor from Victory Drive to Chloride.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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BUTLER REACTORS

TEAMS # 19604

Need Date 6/1/2023 **Start Date** 6/1/2022

Description

Replace the 2% series reactors on the Bonaire Primary 230 kV line with 5% reactors. They will be tapped at 3% in 2023 and at 4% in 2025.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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CC - QTS FAYETTEVILLE TRANSMISSION NEEDS

TEAMS # 20018

Need Date 4/1/2026 **Start Date** 6/1/2023

Description

Phase 1: Install a second 500/230kV Autobank at the Ohara station. Build a 230kV switching station (McDonough Road) approximately 2 miles South of the Ohara station. Bring the Ohara - Union City 230kV and Ohara - South Griffin 230kV lines into the new switching station. Then, build two 230kV lines (9 miles each) from the switching station using 100C (2) 1351 ACSR Martin conductor; one line goes to Charles station and the other goes to Creola station in Fayette county.
Phase 2: Rebuild the two lines from Ohara to the new 230kV switching station (2 miles each; previously part of Ohara - Union City 230kV and Ohara - South Griffin 230kV) with 100C (2) 1590 ACSR Lapwing conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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CENTER PRIMARY - COMMERCE PRIMARY 115 KV REBUILD

TEAMS # 19991

Need Date 6/1/2027 **Start Date** 10/1/2025

Description

Rebuild Center Primary - Nicholson - JM Huber (Commerce) and Commerce #4 - Southeast Toyota line segments, part of the Center Primary - Commerce Primary 115 kV line. GTC to replace 750 AAC jumpers at Center Primary.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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CORN CRIB - LAGRANGE 115KV LINE REBUILD

TEAMS # 18671

Need Date 6/1/2024 **Start Date** 12/1/2022

Description

Reconductor 10.9 miles of 100C 477 ACSR, from Lagrange Bus 1 up to Hogansville #2 Junction of the Corn Crib - Lagrange 115 kV line with 100C 1351.5 ACSR.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2027

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DAVIS STREET-FOWLER STREET 115KV JUMPER REPLACEMENTS

TEAMS # 18883

Need Date 6/1/2023 **Start Date** 1/1/2026

Description

Replace 750AAC jumpers at Davis Street with 1590AAC jumpers.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DEAL BRANCH - SYLVANIA 115 KV (REBUILD)

TEAMS # 18060

Need Date 6/1/2023 **Start Date** 3/1/2022

Description

Rebuild the entire 23.81 miles of 100C 336 ACSR Linnet line with 100C 795 ACSR Drake.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DEPTFORD - MAGNOLIA 115KV REBUILD

TEAMS # 20067

Need Date 12/31/2025 **Start Date** 6/1/2025

Description

Rebuild the Deptford-Magnolia 115kV line, approximately 5 miles, using 100C 1351 ACSR Martin conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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DOUGLAS - LAKE BEATRICE 115KV LINE SEGMENT REBUILD

TEAMS # 18945

Need Date 6/1/2023 **Start Date** 1/5/2022

Description

Rebuild 3.4 miles of 100C 336 ACSR, from Douglas to Bushnell, with 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DOUGLASVILLE - POST RD 115 KV REBLD. PH- 2,(DGLS TO ANEW J)

TEAMS # 12063

Need Date 6/1/2029 **Start Date** 6/1/2027

Description

Rebuild from Douglasville to the Anneewakee Jct. on the Douglasville - Post Road 115 kV line, (6.0 miles of 100C 397 ACSR), using 100C 795 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DU: DALTON CITY #12 BUS REPLACEMENT

TEAMS # 18679

Need Date 6/1/2024 **Start Date** 6/1/2023

Description

DU: Replace 477 ACSR bus and jumpers conductor with more capable conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DU: DAWSON CROSSING - NELSON (WHITE) 115 KV RECONDUCTOR

TEAMS # 18669

Need Date 6/1/2026 **Start Date** 6/1/2024

Description

DU: Rebuild the Dawson Crossing - Etowah - Reavis Mountain sections, about 14 miles, using 100C 795 ACSR Drake conductor. GPC will make any necessary relaying changes at Dawson Crossing.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advance from 2028

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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DU: NELSON 230/115KV AUTOBANK AND JUMPER REPLACEMENT

TEAMS # 18911

Need Date 12/31/2023 **Start Date** 1/1/2025

Description

DU: Replace both existing 230/115kV autotransformers with new 400MVA 230/115kV autotransformers.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2028

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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DYER ROAD - SOUTH COWETA 115KV LINE REBUILD

TEAMS # 20004

Need Date 6/1/2030 **Start Date** 6/1/2027

Description

Rebuild the Dyer Road - Madras 115kV line section (9.2 miles) with 100C ACSR 1351 Martin conductor. Replace jumpers at Dyer Road and Madras with 2-1590 AAC jumpers. Replace 1200A switch at Madras with 3000A switch.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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EAST MAYSVILLE CAP BANK

TEAMS # 19349

Need Date 12/31/2023 **Start Date** 8/1/2023

Description

Install a 115kV two-stage 30-MVAR capacitor bank (total capacity of 60 MVAR) at East Maysville substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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EAST WATKINSVILLE - RUSSELL DAM 230 KV JUMPER REPLACEMENTS

TEAMS # 18989

Need Date 5/1/2023 **Start Date** 1/30/2022

Description

Replace the existing 90C 1590 AAC jumpers with 90C 2-1590 AAC or equivalent at Russell Dam and East Watkinsville substations on the East Watkinsville - Russell Dam 230 kV line. GTC will perform replacement at East Watkinsville.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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EAST WATKINSVILLE - RUSSELL DAM 230 KV RECONDUCTOR

TEAMS # 16897

Need Date 8/25/2023 **Start Date** 6/1/2021

Description

Replace the 100C 1351.5 ACSR/SD Self Damping Conductor on the the East Watkinsville - Russell Dam 230 kV line with 200C 1351.5 ACCR Martin conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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EATONTON PRIMARY 115KV CAP BANK

TEAMS # 19626

Need Date 6/1/2031 **Start Date** 8/1/2030

Description

Install a 115kV two-stage 30-MVAR capacitor bank (total capacity of 60 MVAR) at Eatonton Primary substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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ECHECONNEE - WELLSTON 115KV LINE RECONDUCTOR

TEAMS # 18800

Need Date 6/1/2025 **Start Date** 1/1/2024

Description

Reconductor the South Warner Robins - Wellston section (1.2 miles) with 100C 1351.5 ACSR Martin conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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ECHECONNEE-WELLSTON 115KV (N WARNWE ROB-SWARNER ROB) REBUILD

TEAMS # 19627

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

Rebuild the line section between North Warner Robins-South Warner Robins on the Echeconnee-Wellston 115kV line. Replace AAC 750 main bus and jumper at North Warner Robins substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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EVANS PRIMARY - THOMSON PRIMARY 115 KV RECONDUCTOR PHASE II

TEAMS # 17993

Need Date 11/1/2032 **Start Date** 1/1/2030

Description

Rebuild the existing 100C 336 ACSR conductor for the Thomson Primary to Pumpkin Center 115 kV line section (approximately 5.28 miles), part of the Evans Primary - Thomson Primary 115kV line with minimum 100C 1351 ACSR Martin conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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FENWICK STREET - SAND BAR FERRY 115KV (RECONDUCTOR)

TEAMS # 16007

Need Date 12/31/2024 **Start Date** 9/1/2022

Description

Reconductor existing appriximately 2.72 miles of 115kV line sections from Fenwick St - Gwinett St - Boral Brick - East Augusta Jct., part of the Fenwik Street - Sand Bar Ferry 115kV line with 100C 1351 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GEORGE DAM (USA) - HUCKLEBERRY 115KV REBUILD

TEAMS # 18879

Need Date 6/1/2023 **Start Date** 6/9/2021

Description

Rebuild the Huckleberry SS - George Dam section (8.9 miles) using 100C 1351.5 ACSR Martin conductor. Replace switches, bus and jumpers at Fort Gaines. GTC will replace jumpers at George Dam.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GOLDENS CREEK - WARRENTON PRIMARY 230 KV REBUILD

TEAMS # 19996

Need Date 6/1/2031 **Start Date** 10/1/2030

Description

GPC: Rebuild/Reconductor the Goldens Creek - Warrenton Primary 230kV line (0.34 mile) of existing 100C 1351.5 ACSR Martin conductor with 200C 1351 ACCR Martin conductor (907 MVA) or equivalent.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GORDON-N DUBLIN 115KV (GORDON-ENGL MCI J) REBUILD

TEAMS # 19618

Need Date 6/1/2026 **Start Date** 3/1/2023

Description

Rebuild the Gordon - Engelhard McIntyre J of the Gordon-North Dublin 115kV line from 100C 336.4 ACSR (2.81miles) Linnet and 75C 4/0 F Copper/CW (3.18 miles) to 100C 795 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GORDON - SANDERSVILLE #1 115KV LINE REBUILD

TEAMS # 20002

Need Date 12/31/2024 **Start Date** 2/1/2023

Description

Rebuild the 1.87 miles of Sandersville #1-Sandersville #6 line section of the Gordon - Sandersville #1 115kV line from 100C ACSR 336 conductor to 100C ACSR 795 conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GOSHEN (SAV) - MCINTOSH 115KV REBUILD

TEAMS # 20065

Need Date 6/1/2027 **Start Date** 6/1/2025

Description

Rebuild the Goshen (Savannah)-Georgia Pacific (Rincon) section, approximately 6.7 miles, of the Goshen (Sav)-McIntosh 115kV line using 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GRADY-WEST END PART OF JACK MCDONOUGH AREA SOLUTION

TEAMS # 19287

Need Date 12/31/2024 **Start Date** 6/1/2022

Description

Reconductor the Grady - West End 115 kV line, 2.6 miles, using 160C 636 ACSS conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: ANTHONY SHOALS - WASHINGTON 115 KV LINE REBUILD

TEAMS # 20010

Need Date 12/31/2025 **Start Date** 1/1/2025

Description

GTC to rebuild the ~21-mile Double Branches Junction – Washington 115 kV line section with (minimum) 100C 795 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: AUGUSTA CORPORATE PARK - VOGTLE 230KV REBUILD

TEAMS # 19623

Need Date 6/1/2027 **Start Date** 8/1/2025

Description

GTC: Rebuild/Reconductor the Augusta Corporate Park - Vogtle 230kV line (14.2 miles) of existing 100C 2-795 ACSR Drake conductor with at least, 100C 2-1351 ACSR Martin conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: BOSTWICK - EAST SOCIAL CIRCLE 230 KV UPGRADE CONDUCTOR

TEAMS # 19992

Need Date 6/1/2031 **Start Date** 10/1/2029

Description

GTC: Upgrade 230kV 100C 1033 ACSR Curlew conductor for approximately 10.8 miles of the East Social Circle - East Watkinsville 230kV line (up to future Bostwick location) with 200C 1033 ACCR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: BROADWAY-DORSETT 115KV LINE

TEAMS # 19611

Need Date 12/1/2026 **Start Date** 8/1/2022

Description

Build a 115kV transmission line between Broadway and Dorsett substations. Build the transmission line to 230kV specifications. Modify substation to accomodate the new line.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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GTC: DRESDEN - SOUTH COWETA 230KV JUMPER REPLACEMENT

TEAMS # 20005

Need Date 6/1/2026 **Start Date** 12/1/2024

Description

Replace jumper at the Dresden end of the Dresden-South Coweta 230kV line with 2-1590 AAC jumper.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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GTC: DRESDEN - TALBOT 500KV LINE

TEAMS # 19950

Need Date 6/1/2029 **Start Date** 6/1/2023

Description

The project will break the Fortson - North Tifton 500kV line near Talbot to create new Talbot 500/230kV substation. A 500/230kV autobank will be installed at the new Talbot substation. The low side of the autobank will connect to Talbot County #1 230kV. Then, a new 500kV line will be built from Talbot to Dresden (55 miles).

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: EAST MOULTRIE - HIGHWAY 112 230 KV LINE

TEAMS # 19358

Need Date 6/1/2027 **Start Date** 6/1/2022

Description

GTC to build a new 230kV line between Scooter and East Moultrie to mitigate several thermal overloads.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: EAST WALTON 500/230KV PROJECT

TEAMS # 09662

Need Date 6/1/2027 **Start Date** 6/1/2023

Description

GTC:
- Construct the East Walton 500/230kV substation
- Construct the Bostwick 230kV switching station
- Construct the East Walton - Rockville 500kV line
- Construct the Bethabara - East Walton 230kV line (200C 1351.5 ACSS)
- Construct the Bostwick - East Walton 230kV line (200C 1351.5 ACSS)
- Construct the East Walton - Jack's Creek 230kV line (200C 1351.5 ACSS)
- At Bethabara, terminate the East Walton 230kV line
- Loop the East Social Circle - East Watkinsville 230kV line into Bostwick
- Replace line trap at East Watkinsville on the Bostwick 230kV line

GPC:
- Construct the Rockville 500kV switching station
- Loop the Scherer - Warthen 500kV line into Rockville
- Loop the Doyle - LG&E Monroe 230kV line into Jack's Creek

MEAG:
- Construct the Jack's Creek 230kV switching station

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: HEARD COUNTY - TENASKA 500KV (SECOND LINE)

TEAMS # 18774

Need Date 6/1/2024 **Start Date** 12/1/2021

Description

GTC: Build a second Heard County - Tenaska 500 kV line, 0.8 miles, with 100C (3) 1113 ACSR Bluejay conductors per phase. Add a 500 kV ring-bus breaker at Heard County.
GPC: Add a 500 kV ring-bus breaker at Tenaska.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: HI HAT 115KV CAPACITOR BANK INSTALLATION

TEAMS # 19675

Need Date 5/1/2023 **Start Date** 6/1/2022

Description

GTC will install a 115kV 45MVAR capacitor bank at Hi Hat substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: HICKORY LEVEL - VILLA RICA 230KV LINE REBUILD

TEAMS # 19635

Need Date 6/1/2028 **Start Date** 6/1/2026

Description

GTC will reconductor 8.6 miles of 230kV line from 100C 1351 ACSR to 160C 1351 ACSS.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: HIGHWAY 45/234 - WESTOVER 115 KV

TEAMS # 18691

Need Date 6/1/2025 **Start Date** 6/1/2021

Description

GTC will construct a new 19.8 mile 115kV line from Greenhouse Rd to Gillonville Substation using 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2024

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: JUDY MOUNTAIN SHUNT REACTOR

TEAMS # 19341

Need Date 12/1/2024 **Start Date** 2/1/2021

Description

GTC will install 2-75 MVAR shunt reactors at Judy Mountain connected to the 230kV bus.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2023

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: LAGRANGE - NORTH OPELIKA 230 KV (NEW LINE)

TEAMS # 19334

Need Date 6/1/2026 **Start Date** 6/1/2023

Description

Build a new Lagrange - North Opelika (APC) 230kV line, 29.4 miles, with 100C ACSR 1351.5 Martin Conductor. GTC will construct the 15.5-mile section from Lagrange to the Metering Point at the Georgia - Alabama border. The Metering Point will be ITS Assigned. APC will construct the 230kV line from the Metering Point to North Opelika.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2027

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: MORNING HORNET 2ND 230/115 KV BANK & THUMBS UP 115KV TL

TEAMS # 20015

Need Date 6/1/2026 **Start Date** 10/1/2024

Description

GTC will add a second 230/115kV autobank at Morning Hornet substation. Also, build a new 115kV line from Morning Hornet – Thumbs Up 115kV line (approximately 0.7 miles) using 100C 1351 ACSR conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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GTC: POSSUM BRANCH 230/115 KV PROJECT

TEAMS # 17678

Need Date 9/1/2023 **Start Date** 6/1/2019

Description

GTC will construct the 14 mile, Possum Branch – Roopville 230kV line with 100C 1351 ACSR conductor and install a 230/115kV, 400 MVA autotransformer at Possum Branch. GPC will construct a 230kV ring bus switching station at Roopville.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2022

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: RACCOON CREEK - SCOOTER 230KV LINE JUMPER REPLACEMENT

TEAMS # 18884

Need Date 6/1/2023 **Start Date** 1/1/2023

Description

GTC: Replace AAC Larkspur 1033.5 jumpers at Raccoon Creek on the Scooter 230kV line, with AAC 1590 jumpers that match, or surpass, the rating of 1033.5 ACSR Curlew line conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2024

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: RIDDLEVILLE BUS REPLACEMENT

TEAMS # 19622

Need Date 6/1/2024 **Start Date** 1/9/2023

Description

Replace the main 115kV bus at Riddleville substation with rating higher than 124MVA.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: ROBINS SPRING BUS REPLACEMENT

TEAMS # 19999

Need Date 6/1/2030 **Start Date** 6/1/2028

Description

Replace the main 115kV bus 90C ACSR 336.4 Linnet conductor with higher rating.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: ROBINS SPRING CAPACITOR BANK INSTALLATION

TEAMS # 20001

Need Date 6/1/2024 **Start Date** 1/1/2023

Description

Install a 115kV 2-stage 22.5MVar (45 total) capacitor bank at Robins Spring.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: SAWHATCHEE SWITCH REPLACEMENT

TEAMS # 15882

Need Date 6/1/2023 **Start Date** 6/1/2024

Description

GTC: Replace 600A switch 68101 at Sawhatchee substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2026

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: SECOND SOUTH COWETA 230/115 KV AUTOBANK

TEAMS # 19603

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

Add a second 400 MVA, 230/115 kV autobank at South Coweta.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: SKC REPLACE 115KV BUS AND JUMPERS

TEAMS # 19606

Need Date 6/1/2027 **Start Date** 6/1/2026

Description

Replace 115kV Bus and jumpers

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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GTC: SOUTH HAZLEHURST - NEW LACY 230KV LINE

TEAMS # 20020

Need Date 6/1/2027 **Start Date** 1/15/2024

Description

Build a new 230kV transmission line between South Hazlehurst (bus 2) and New Lacy substation approximatley 25 miles with 100C ACSR 1351 Martin conductor. Do all the necessary upgrade work to accommodate the additional line in both facilities.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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GTC: UNION CITY 230KV BUS TIE

TEAMS # 20021

Need Date 12/1/2024 **Start Date** 6/1/2023

Description

Construct a 230 kV bus tie at Union City, with a 2000A breaker.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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HAMMOND - WEISS DAM 115KV LINE REBUILD

TEAMS # 19636

Need Date 5/1/2028 **Start Date** 6/1/2026

Description

Rebuild or replace the line conductor to 100C 795 ACSR

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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JEFFERSON STREET#3 - NORTHWEST (WHITE) 115 KV RECONDUCTOR

TEAMS # 18889

Need Date 6/1/2025 **Start Date** 1/1/2024

Description

Rebuild approximately 1.2 miles of TL with 200C 1351 ACSS conductor .

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2030

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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JESUP - LUDOWICI PRIMARY 115-KV RECONDUCTOR

TEAMS # 11821

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

Reconductor the Jesup - North Jesup - Rayonier section (7.5 miles) using 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2024

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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JESUP - OFFERMAN 115KV RECONDUCTOR

TEAMS # 18668

Need Date 6/1/2027 **Start Date** 4/6/2021

Description

Reconductor 16 miles of 100C 4/0 ACSR Penguin conductor (91 MVA Summer B rating) from structure Screven to Offerman Substation with 100C 795 ACSR Drake conductor (216 MVA Summer B rating).

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2023

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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KETTLE CREEK - PINE GROVE 115KV LINE UPGRADE PHASE ONE

TEAMS # 15687

Need Date 12/31/2023 **Start Date** 9/11/2020

Description

Rebuild the Kettle Creek Primary - Pearson Tap portion of the line (20.5 miles) with 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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KINGSLAND BANK C REPLACEMENT

TEAMS # 19028

Need Date 6/1/2024 **Start Date** 10/1/2021

Description

Replace 160MVA, 230/115kV Bank C at Kingsland with a 300MVA, 230/115kV autobank.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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KLONDIKE 500 KV SWITCH REPLACEMENT

TEAMS # 18772

Need Date 6/1/2024 **Start Date** 6/1/2023

Description

Replace 2500A line switch 146161 in the Norcross 500 kV line terminal at Klondike with a 4000A switch.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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KRAFT 230/115-KV TRANSFORMER RATING INCREASE

TEAMS # 15228

Need Date 6/1/2029 **Start Date** 6/1/2028

Description

Bank B has a nameplate rating of 400MVA but is limited to 280MVA by this underground cable that connects the bank's high-side to the 230kV bus at Kraft.
Replace the 230kV underground cable that connects the 230/115kV Bank B, with a bigger cable.
Get the Kraft Auto bank B to its nameplate rating of 400MVA

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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LINE CREEK - YATES (BLACK) 230KV SWITCH REPLACEMENT

TEAMS # 20000

Need Date 6/1/2027 **Start Date** 12/1/2025

Description

Replace the 1200A line switch (050867) at Yates 6&7 with 3000A switch.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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LITTLE OGEECHEE 230-115KV : RELAY MODERNIZATION

TEAMS # 17075

Need Date 6/1/2025 **Start Date** 6/1/2022

Description

Install an additional 115kV bus current differential protection scheme for both North & South 115kV busses.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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MCEVER ROAD - SHOAL CREEK 115KV REBUILD - PHASE 2

TEAMS # 10194

Need Date 6/1/2023 **Start Date** 6/1/2021

Description

Rebuild the 2-4/0 copper sections (approximately 2.41 miles from structure 391-411A) and the 636 portion of the line (about 1 mile from McEver Rd - structure 391) using 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MCEVER ROAD-SHOAL CREEK 115KV REBUILD (COLLEGE SQ-LAKESIDE)

TEAMS # 19621

Need Date 10/1/2024 **Start Date** 2/1/2024

Description

Rebuild the 2-4/0 copper part (2.05 miles) of the College Square to Lakeside WTP B line section, part of the McEver Road - Shoal Creek 115kV line, using 100C 795 ACSR.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MEAG: ALCOVY ROAD - SKC 115 KV RECONDUCTOR

TEAMS # 13753

Need Date 6/1/2024 **Start Date** 6/1/2023

Description

MEAG will reconductor approximately 0.53 mile of 336 ACSR conductor with 1033 ACSR conductor from Alcovy Road to Alcovy Road Jct. on the Alcovy Road - SKC 115kV line.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MEAG: AULTMAN ROAD - BONAIRE PRIMARY 115 KV REBUILD

TEAMS # 13787

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

MEAG: Reconductor the 1.99 miles, Sleepy Hollow - Peach Blossom 115 kV line section (presently 100C 336 ACSR) of the Aultman Road - Bonaire Primary 115kV line, with 100C 795 ACSR.
GTC: Replace the jumpers at Sleepy Hollow with 1590 AAC.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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MEAG: BRUMBLEY CREEK - SOUTH BAINBRIDGE 115KV REBUILD

TEAMS # 19629

Need Date 6/1/2030 **Start Date** 6/1/2027

Description

Rebuild segment from line tap into Roddenbery Station on the South Bainbridge - Thomasville 115kV line.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MEAG: DRESDEN - LAGRANGE PRIMARY 230 KV LINE REBUILD

TEAMS # 19598

Need Date 6/1/2026 **Start Date** 6/1/2023

Description

Rebuild the Dresden - Lagrange Primary 230kV line (25.2 miles) with 200C 1351 ACSS Martin conductor. Replace the jumpers at Dresden and Lagrange with 2-1590 AAC jumpers.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MEAG: DRESDEN - YATES 230 KV LINE UPGRADE

TEAMS # 19599

Need Date 6/1/2027 **Start Date** 6/1/2024

Description

Upgrade the line conductor (1351 ACSS Martin) to 200C on the Dresden - Yates 230 kV line (9.4 miles). Replace the jumpers at Dresden and Yates on with 2-1590 AAC jumpers. Replace the 1200 A switch at Yates (050777) with a 3000 A switch. Replace the jumpers at Newnan #8 on the Dresden - Yates 230 kV line with 2-1590 AAC jumpers. Replace the 1600A RLB line switches (243569 and 243521) at Newnan #8 with 3000 A switches.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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MEAG: FORTSON 230 KV REDUNDANT RELAY

TEAMS # 18832

Need Date 12/31/2024 **Start Date** 01/01/2023

Description

Add a redundant relay scheme at Fortson. This is a small part of a larger substation modernization project.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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MEAG: THOMASVILLE 230/115KV AUTOBANK REPLACEMENT

TEAMS # 19630

Need Date 6/1/2030 **Start Date** 6/1/2027

Description

Replace 140MVA 230/115kV Autobank #4

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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MEAG: WASHINGTON #3 115 KV CAP BANK

TEAMS # 20007

Need Date 6/1/2023 **Start Date** 1/1/2023

Description

MEAG: Install a 115kV two-stage 15-MVAR capacitor bank (total capacity of 30 MVAR) at Washington #3 substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MITCHELL - NORTH TIFTON 230KV RECONDUCTOR

TEAMS # 18492

Need Date 5/1/2026 **Start Date** 12/31/2021

Description

GPC will reconductor 35.21 miles of 100C 795 ACSR with 100C 1351 ACSR Martin conductor

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2024

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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MORROW - YATES COMMON 115KV LINE UPGRADE

TEAMS # 19601

Need Date 6/1/2028 **Start Date** 6/1/2026

Description

On the Morrow - Yates 115 kV line, upgrade the Fife - Fairburn SW- Owens Corning Tap sections, approximately 5.8 miles of 50C 477 ACSR, for 100C operation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned* [redacted]

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NORCROSS - SNELLVILLE PRIMARY 115KV (REBUILD)

TEAMS # 17975

Need Date 6/1/2024 **Start Date** 6/1/2023

Description

Rebuild 14.42 miles of the Norcross - Snellville Primary 115 kV line.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Advanced from 2026

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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NORCROSS 230KV BUS 2-3 SERIES BUS TIE BREAKER INSTALLATION

TEAMS # 20006

Need Date 6/1/2024 **Start Date** 6/1/2023

Description

Install a bus tie breaker in series with existing bus tie breaker between 230kV Bus 2 and Bus 3 at Norcross.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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NORTH MARIETTA - SMYRNA (BLACK & WHITE) 115KV RECONDUCTORS

TEAMS # 13653

Need Date 6/1/2024 **Start Date** 6/1/2022

Description

Reconductor the North Marietta - Lockheed Jct. sections of both lines with 150C 636 ACSS conductor, aproximately 2.1 miles for each line.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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OHARA - SOUTH COWETA 115KV LINE REBUILD

TEAMS # 20003

Need Date 6/1/2028 **Start Date** 6/1/2025

Description

Rebuild the South Coweta - Ebenezer tap - Bernhard Road line sections (total 3.8 miles) with 100C ACSR 1351 Martin conductor. Replace jumpers at South Coweta and Bernhard Road with 2-1590 AAC jumpers. Replace the 1200A switch at Ebenezer tap (#187791) with 2000A switch. Replace the main bus at Bernhard Road with Sch 40 3" AL tube bus.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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PALMYRA REACTOR REMOVAL

TEAMS # 18690

Need Date 6/1/2025 **Start Date** 5/1/2023

Description

Remove the 6% reactors installed at the Palmyra Substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2024

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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PINE GROVE PRIMARY BANK B REPLACEMENT

TEAMS # 19019

Need Date 6/1/2024 **Start Date** 12/1/2021

Description

Replace 230/115 kV Bank B with a 400 MVA autobank.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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SANDERSVILLE #1 - WADLEY PRIMARY 115 KV REBUILD

TEAMS # 20019

Need Date 6/1/2027 **Start Date** 1/15/2024

Description

GPC: Rebuild all the main line of the Sandersville #1 - Wadley Primary 115 kV line (total of 24.3 miles) of existing100C 336 ACSR Linnet conductor with at least, 100C 795 ACSR Drake conductor.
- MEAG: Replace existing Copper 500 jumpers at Wadley Primary substation with 1590 AAC Coreopsis jumpers or equivalent.
- GTC: Replace existing 750 AAC Petunia jumpers at Riddleville substation with 1590 AAC Coreopsis jumpers or equivalent.
- MEAG: Replace existing 795 AAC Arbutus jumpers at Sandersville #1 substation with 1590 AAC Coreopsis jumpers or equivalent.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New project

Estimated Cost - GPC	[redacted]
Estimated Cost - GTC	
Estimated Cost - MEAG	
Estimated Cost - DU	
Estimated Cost - ITS Assigned*	

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SINCLAIR DAM - WARRENTON 115KV RECONDUCTOR PHASE I

TEAMS # 15698

Need Date 6/1/2023 **Start Date** 1/1/2022

Description

Reconductor the entire Sinclair Dam - Warrenton Primary line (17.4 miles of 50C 4/0 CU) with 100C 795 ACSR Drake conductor. Replace 4/0 copper jumpers with AAC 1590 at Buffalo Road and South Devereux.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

No Change

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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SOUTH COWETA - SOUTH GRIFFIN 115KV LINE REBUILD

TEAMS # 15239

Need Date 6/1/2025 **Start Date** 6/1/2023

Description

Rebuild the South Coweta – North Griffin 115kV line sections (total 18.3 miles) with 100C ACSR 1351 Martin. Replace jumpers at South Coweta, Brooks, Spalding, Steele Road and North Griffin stations with 2-1590 AAC jumpers. Replace 1200A switches at Spalding, Steele Road and North Griffin with 2000A switches. Replace main bus at Brooks and North Griffin with 2-1590 AAC bus.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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TALLULAH LODGE - TOCCOA 115 KV REBUILD

TEAMS # 19995

Need Date 6/1/2031 **Start Date** 10/1/2029

Description

GPC: Rebuild the Tallulah Lodge - Toccoa 115 kV Line with 100C 795 ACSR conductor (total of 10.3 miles). Replace 750 AAC Petunia jumpers at Toccoa substation.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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THOMSON PRI - WARRENTON PRI 115KV WHITE LINE REBUILD

TEAMS # 14271

Need Date 6/1/2024 **Start Date** 3/12/2022

Description

Reconductor the Thomson Primary - Warrenton Primary (White) 115kV line (16.8 mi) with 100C 795 ACSR Drake conductor.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

Delayed from 2023

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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THOMSON PRIMARY 230/115-KV SECOND TRANSFORMER

TEAMS # 14222

Need Date 6/1/2027 **Start Date** 8/1/2025

Description

GPC will install a 2nd 300 MVA, 230/115-kV transformer at Thomson Primary.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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VILLA RICA RELAY MODERNIZATION

TEAMS # 20022

Need Date 6/1/2024 **Start Date** 12/1/2022

Description

Modify protection schemes at Villa Rica to add protection redundancy on 230kV bus, 230/46kV bank and 500/230kV bank.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC

Estimated Cost - GTC

Estimated Cost - MEAG

Estimated Cost - DU

Estimated Cost - ITS Assigned*

[redacted]

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WARRENTON PRIMARY 230KV SWITCHES AND JUMPERS REPLACEMENT

TEAMS # 19625

Need Date 6/1/2024 **Start Date** 2/1/2024

Description

Replace existing 230kV - 1200 A switches #130637 and #130639 with 2000 A switches at Warrenton Primary side. Also, replace existing 230kV - 1590 AAC Coreopsis jumpers at Warrenton Primary ends with at least 2-1590 AAC jumpers.

Supporting Statement

[redacted]

Change From Previous Ten Year Plan

New Project

Estimated Cost - GPC
Estimated Cost - GTC
Estimated Cost - MEAG
Estimated Cost - DU
Estimated Cost - ITS Assigned*

[redacted]

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F. Expansion Generation Units Details

The following projects are the result of the addition of Proxy Generation onto the ITS system.

The following information is included for each project:

1) project justification,
2) schedule for implementation (start date), and
3) expected required in-service date.

For transmission improvements, the start date is to provide necessary lead time to ensure the expected required in-service date can be met.

It is not yet known where any new generation resources will be located after 2024. To balance load and generation in the base cases as load grows and existing fossil units are retired, it is necessary to make assumptions for the locations of generation to be added. When the cases are created, the “expansion units” listed in the above table are included as needed, mostly in 800 MW increments. The sites chosen for these units are locations where fossil units have been or are expected to be retired, since existing transmission connections are (or previously have been) adequate, and therefore are expected to cause minimal new constraints.

These large expansion units have the potential to mask constraints that would otherwise be identified, or to cause constraints that would not otherwise occur. Accordingly, when the statewide screens are performed, the expansion units are removed, and equivalent MWs of “proxy unit” generation are added at 41 500 kV buses across the Southern Balancing Authority Area. The increased number of sites, spreading them out, and putting them on the 500 kV system tend to reduce the local effects seen with the expansion unit method. Any constraints seen that are suspected of being caused by a of proxy unit or group of proxy units are reevaluated with the unit(s) removed.

No projects were attributed to the expansion units included in the base cases as shown below.

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Table 9 Expansion Unit Details

Case Type	APC (MW)	MPC (MW)	GPC (MW)	Total (MW)	Version Cases
Winter 2028	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Winter 2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Winter 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Winter 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Winter 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Daylight Shoulder 2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Daylight Shoulder 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V1
Daylight Shoulder 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Daylight Shoulder 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Dusk Shoulder 2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Dusk Shoulder 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V1
Dusk Shoulder 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Dusk Shoulder 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V1
Summer 2030	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Summer 2031	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Summer 2032	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Hot Weather 2031	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Hot Weather 2032	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V1
Winter 2028	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Winter 2029	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Winter 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2

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Case Type	APC (MW)	MPC (MW)	GPC (MW)	Total (MW)	Version Cases
Winter 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Winter 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Daylight Shoulder 2028	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Daylight Shoulder 2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Daylight Shoulder 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Daylight Shoulder 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Daylight Shoulder 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Dusk Shoulder 2028	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Dusk Shoulder 2029	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Dusk Shoulder 2030	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Dusk Shoulder 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Dusk Shoulder 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED** **REDACTED** **REDACTED**	**REDACTED**	V2
Summer 2030	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**	V2
Summer 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Summer 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Hot Weather 2031	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2
Hot Weather 2032	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**	V2

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V. ADDITIONAL SYSTEM ANALYSIS NOTES

There are several other studies done throughout the year that involve the Southern Company System as a whole. These studies are performed by the Transmission Planning – Bulk Transmission Group. The studies have the potential to require improvements to the Southern Company Transmission System. Some of these could be in the Georgia ITS. If System enhancements are pursued from these study results, then the impacts of the enhancements are included in the annual planning cycle.

A. Interface Analysis

Pursuant to FAC-013-2, the interfaces of the SBAA are evaluated annually as part of the planning process. The analysis is done to ensure that the Southern Balancing Authority can maintain all long-term, firm transmission commitments and reliability reserve margins.

Northern Interface and Florida Interface Studies

The Northern Interface Study and Florida Interface Study are done to ensure that the Southern Balancing Authority can maintain all long-term, firm transmission commitments and reserve margins while assessing the import and export capability of the Northern and Florida Interfaces. When a transmission project is identified by an Interface Study, the proposed recommendation will be included in the Analysis Results above.

B. Nuclear Final Safety Offsite Power Report (FSAR) Study

The FSAR analysis is a requirement of the NUC-001 Nuclear Plant Interface Coordination for Southern Nuclear Operating Company and Transmission Planning. For GPC, this analysis is performed annually for Plant Vogtle and Plant Hatch and the results are communicated to Southern Nuclear.

C. Designation Studies

A Designation Study is a study performed to identify the transmission system improvements needed to provide firm transmission capability for a resource designated to serve native load customers and wholesale network customers.

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VI. APPENDIX

A. Validation Files / Reports

The transmission projects and operating guides listed were justified by data output from the report files listed below.

Table 10 PSSE Output Results

Version	File Location
v1D - STRE (2023-2032)	T:\TP-East\2022_TPE_Workplan\Screens\v1D
v2C - VAL (2023-2032)	T:\TP-East\2022_TPE_Workplan\Screens\v2C

Table 6 Thermal Problem Databases

Version	File Location
v1D - STRE (2023-2032)	T:\TP-East\ 2022_TPE_Workplan\Screens\v1D\Problem Database\2023-2032 TP-East Thermal Problems - v1D DHOST.accdb
v2C - VAL (2023-2032)	T:\TP-East\ 2022_TPE_Workplan\Screens\v2C\Problem Database\2023-2032 TP-East Thermal Problems - v2C DHOST.accdb

Table 7 Voltage Problem Databases

Version	File Location
v1D - STRE (2023-2032)	T:\TP-East\ 2022_TPE_Workplan\Screens\v1D\Problem Database\2023-2032 TP-East Voltage Problems - v1D DHOST.accdb
v2C - VAL (2023-2032)	T:\TP-East\ 2022_TPE_Workplan\Screens\v2C\Problem Database\2023-2032 TP-East Voltage Problems – v2C DHOST.accdb

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Table 13 Study Reports

Study Type	File Location
P-Events	TP-OATT_RegionalPlanning\Misc. Studies\22-001_TPL-001_Compliance
Extreme Events	TP-OATT_RegionalPlanning\Misc. Studies\22-001_TPL-001_Compliance\ExtremeEvents
Northern Interface	T:\TP-OATT_RegionalPlanning\Interface\2022\NIS
Florida Interface	T:\TP-OATT_RegionalPlanning\Interface\2022\FIS
Nuclear FSAR - Hatch	T:\TP-Archive\Planning General (7.021-CY15)\2022\22-002_Annual_FSAR\Hatch
Nuclear FSAR - Vogtle	T:\TP-Archive\Planning General (7.021-CY15)\2022\22-002_Annual_FSAR\Vogtle
Stability Studies	T:\TP-Stab\Generation (7.020-LOF6)\GA
Designation Studies	T:\TP-Strategic\2022

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B. Generation Assumptions

Basecase Definitions

Table 14 Basecase Definitions

2022 Steady State Case Definitions						
Name	**Prefix**	**Suffix**	**Load Level**	**Solar**	**Hydro**	**MISO Transfer**
Summer Peak	S	SNWE	Summer Peak	On	On	1000 S->N
Summer NS Regional Flows	S	NSEW	Summer Peak	On	On	1000 N->S
Summer SN Max Regional Flows	S	SNmaxWE	Summer Peak	On	On	2500 S->N
Summer NS Max Regional Flows	S	NSmaxEW	Summer Peak	On	On	3000 N->S
Off Peak	O	SNWE	Off Peak (70%)	On	Motor	1000 S->N
Off Peak NS Regional Flows	O	NSEW	Off Peak (70%)	On	Motor	1000 N->S
Off Peak SN Max Regional Flows	O	SNmaxWE	Off Peak (70%)	On	Motor	2500 S->N
Off Peak NS Max Regional Flows	O	NSmaxEW	Off Peak (70%)	On	Motor	3000 N->S
Daylight Shoulder	D	SNWE	Shoulder (93%)	On	Motor	1000 S->N
Daylight Shoulder NS Regional Flows	D	NSEW	Shoulder (93%)	On	Motor	1000 N->S
Daylight Shoulder SN Max Regional Flows	D	SNmaxWE	Shoulder (93%)	On	Motor	2500 S->N
Daylight Shoulder NS Max Regional Flows	D	NSmaxEW	Shoulder (93%)	On	Motor	3000 N->S
Shoulder	H	SNWE	Shoulder (93%)	Off	50%	1000 S->N
Shoulder NS Regional Flows	H	NSEW	Shoulder (93%)	Off	50%	1000 N->S
Shoulder SN Max Regional Flows	H	SNmaxWE	Shoulder (93%)	Off	50%	2500 S->N
Shoulder NS Max Regional Flows	H	NSmaxEW	Shoulder (93%)	Off	50%	3000 N->S
Hot Weather	T	SNWE	Hot Weather (107%)	On	On	1000 S->N
Hot Weather NS Regional Flows	T	NSEW	Hot Weather (107%)	On	On	1000 N->S
Winter	W	SNWE	Winter Peak	Off	On	1000 S->N
Winter NS Regional Flows	W	NSEW	Winter Peak	Off	On	1000 N->S
Winter SN Max Regional Flows	W	SNmaxWE	Winter Peak	Off	On	2500 S->N
Winter NS Max Regional Flows	W	NSmaxEW	Winter Peak	Off	On	3000 N->S
Spring Peak	Z	SNWE	Spring Peak	On	On	As Provided
Valley	L	SNWE	Spring Valley	Off	Motor/ Pump	As Provided
Fall Peak	F	SNWE	Spring Peak	On	On	As Provided

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Generation in Cases

Table 15 ITS Generation P_{max} in Cases

Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
ADDISON 1 (WEST GA)	GPC	PPA-CT	**REDACTED**	**REDACTED**
ADDISON 3 (WEST GA)	GPC	PPA-CT	**REDACTED**	**REDACTED**
ALBANY RENEWABLE ENERGY	GPC	PPA-Bio	**REDACTED**	**REDACTED**
Alligator Creek Solar	GPC	QF-Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
ASI CLASSIC 210 MW - US 1: RINCON SOLAR CENTER	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI CLASSIC 210 MW - US 2: BUTLER SOLAR FARM	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI CLASSIC 210 MW - US 2: DECATUR COUNTY SOLAR PROJECT	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI CLASSIC 210 MW - US 2: OLD MIDVILLE RD LLC	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 1: BUTLER SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 1: DECATUR PARKWAY SOLAR PROJECT	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 1: LS PAWPAW	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 2: LIVE OAK SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 2: WHITE OAK SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ASI PRIME 525 MW - US 2: WHITE PINE SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 5 HY	GPC	Hydro	**REDACTED**	**REDACTED**
BARTLETT'S FERRY 6 HY	GPC	Hydro	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
BOULEVARD 1	GPC	CT	**REDACTED**	**REDACTED**
BOWEN 1	GPC	Coal	**REDACTED**	**REDACTED**
BOWEN 2	GPC	Coal	**REDACTED**	**REDACTED**
BOWEN 3	GPC	Coal	**REDACTED**	**REDACTED**
BOWEN 4	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
DAHLBERG 10	GPC	PPA-CT	**REDACTED**	**REDACTED**
DAHLBERG 2	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
DAHLBERG 4	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
DAHLBERG 6	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
DAHLBERG 8	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
DOUBLE RUN SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED REDACTED**	**REDACTED**
EXELON HEARD 1	GPC	PPA-CT	**REDACTED**	**REDACTED**
EXELON HEARD 2	GPC	PPA-CT	**REDACTED**	**REDACTED**
EXELON HEARD 3	GPC	PPA-CT	**REDACTED**	**REDACTED**
EXELON HEARD 4	GPC	PPA-CT	**REDACTED**	**REDACTED**
EXELON HEARD 5	GPC	PPA-CT	**REDACTED**	**REDACTED**
EXELON HEARD 6	GPC	PPA-CT	**REDACTED**	**REDACTED**
FLINT RIVER 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
FLINT RIVER 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
FLINT RIVER 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
FLINT RIVER SOLAR (DECATUR SLR)	GPC	PPA-Solar	**REDACTED**	**REDACTED**
FORT BENNING SOLAR	GPC	Solar	**REDACTED**	**REDACTED**
FORT GORDON 1 SOLAR	GPC	Solar	**REDACTED**	**REDACTED**
FORT STEWART SOLAR	GPC	Solar	**REDACTED**	**REDACTED**
FORT VALLEY STATE UNIVERSITY	GPC	Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED REDACTED**	**REDACTED**

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
GASTON A	GPC	CT	**REDACTED**	**REDACTED**
GEORGIA RENEWABLE POWER FRANKLIN LLC	GPC	PPA-Bio	**REDACTED**	**REDACTED**
GEORGIA RENEWABLE POWER MADISON	GPC	PPA-Bio	**REDACTED**	**REDACTED**
GOAT ROCK 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GOAT ROCK 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GOAT ROCK 5 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GOAT ROCK 6 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GOAT ROCK 7 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GOAT ROCK 8 HY	GPC	Hydro	**REDACTED**	**REDACTED**
GREEN POWER SOLUTIONS	GPC	PPA-Bio	**REDACTED**	**REDACTED**
HARRIS 1 - GPC	GPC	PPA-CC	**REDACTED**	**REDACTED**
HARRIS 2 - GPC	GPC	CC	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
HATCH 1	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
HATCH 2	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
INTERNATIONAL PAPER - FLINT RIVER	GPC	PPA-Bio	**REDACTED**	**REDACTED**
INTERNATIONAL PAPER - PORT WENTWORTH	GPC	PPA-Bio	**REDACTED**	**REDACTED**
KINGS BAY SOLAR	GPC	Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
LLOYD SHOALS 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
LLOYD SHOALS 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
LLOYD SHOALS 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
LLOYD SHOALS 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
LLOYD SHOALS 5 HY	GPC	Hydro	**REDACTED**	**REDACTED**
LLOYD SHOALS 6 HY	GPC	Hydro	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
LSS 50 MW - SIMON SOLAR FARM	GPC	PPA-Solar	**REDACTED**	**REDACTED**
LSS 50 MW - SOLAR D&D CAMILLA	GPC	PPA-Solar	**REDACTED**	**REDACTED**
MARINE CORPS LOGISTICS BASE	GPC	Solar	**REDACTED**	**REDACTED**
MAS GEORGIA LFG - PINE RIDGE	GPC	PPA-Bio	**REDACTED**	**REDACTED**

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
MAS GEORGIA LFG - RICHLAND CREEK	GPC	PPA-Bio	**REDACTED**	**REDACTED**
MCDONOUGH 4	GPC	CC	**REDACTED**	**REDACTED**
MCDONOUGH 5	GPC	CC	**REDACTED**	**REDACTED**
MCDONOUGH 6	GPC	CC	**REDACTED**	**REDACTED**
MCGRAU FORD BESS	GPC	Battery	**REDACTED**	**REDACTED**
MCINTOSH 10	GPC	CC	**REDACTED**	**REDACTED**
MCINTOSH 11	GPC	CC	**REDACTED**	**REDACTED**
MCINTOSH 1A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 2A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 3A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 4A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 5A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 6A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 7A	GPC	CT	**REDACTED**	**REDACTED**
MCINTOSH 8A	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 3A	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 3B	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 3C	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4A	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4B	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4C	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4D	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4E	GPC	CT	**REDACTED**	**REDACTED**
MCMANUS 4F	GPC	CT	**REDACTED**	**REDACTED**
MID GEORGIA COGEN	GPC	PPA-Cogen	**REDACTED**	**REDACTED**
MONROE POWER	GPC	PPA-CT	**REDACTED**	**REDACTED**
MONROE POWER	GPC	PPA-CT	**REDACTED**	**REDACTED**
MOODY AFB	GPC	Solar	**REDACTED**	**REDACTED**
MORGAN FALLS 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 5 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 6 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MORGAN FALLS 7 HY	GPC	Hydro	**REDACTED**	**REDACTED**
MOSSY BRANCH	GPC	PPA-BES	**REDACTED**	**REDACTED**
NACOOCHEE 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
NACOOCHEE 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
NORTH HIGHLANDS 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
NORTH HIGHLANDS 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
NORTH HIGHLANDS 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
NORTH HIGHLANDS 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
OLIVER 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
OLIVER 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
OLIVER 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
OLIVER 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
PIEDMONT GREEN POWER	GPC	PPA-Bio	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDI 1400 MW - C&I: DOUGHERTY COUNTY SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - C&I: TANGLEWOOD SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 1: QUITMAN II SOLAR ENERGY CENTER	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 1: QUITMAN SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 1: SOUTHERN OAK SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 1: TWIGGS COUNTY SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 2: BROKEN SPOKE (Hickory Park)	GPC	PPA-Solar	**REDACTED**	**REDACTED**
REDI 1400 MW - US 2: COOL SPRINGS	GPC	PPA-Solar	**REDACTED**	**REDACTED**
ROBINS AFB	GPC	Solar	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED REDACTED REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED REDACTED REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED REDACTED REDACTED**	**REDACTED**	**REDACTED**
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REDACTED	**REDACTED**	**REDACTED REDACTED REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED REDACTED REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
SCHERER 1	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
SCHERER 2	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
SCHERER 3	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
SINCLAIR 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
SINCLAIR 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
TALLULAH 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TALLULAH 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TALLULAH 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TALLULAH 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TALLULAH 5 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TALLULAH 6 HY	GPC	Hydro	**REDACTED**	**REDACTED**

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
TERRORA 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TERRORA 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TIMBERLAND SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
TUGALO 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TUGALO 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TUGALO 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
TUGALO 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
VOGTLE 1	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
VOGTLE 2	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
VOGTLE 3	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
VOGTLE 4	GPC	Nuclear	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
WADLEY SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
WALLACE DAM 1 PS	GPC	Pump Storage Hydro	**REDACTED**	**REDACTED**
WALLACE DAM 2 PS	GPC	Pump Storage Hydro	**REDACTED**	**REDACTED**
WALLACE DAM 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**
WALLACE DAM 4 HY	GPC	Hydro	**REDACTED**	**REDACTED**
WALLACE DAM 5 PS	GPC	Pump Storage Hydro	**REDACTED**	**REDACTED**
WALLACE DAM 6 PS	GPC	Pump Storage Hydro	**REDACTED**	**REDACTED**
WALTON COUNTY	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	
WANSLEY 1	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	

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Unit Name	Recipient	Fuel Type	PSSE Bus Number	Net Installed (MW)
WANSLEY 2	GPC	Coal	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED** **REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
WARNER ROBINS 1	GPC	CT	**REDACTED**	**REDACTED**
WARNER ROBINS 2	GPC	CT	**REDACTED**	**REDACTED**
WASHINGTON COUNTY	GPC	PPA-CT	**REDACTED**	**REDACTED**
REDACTED	**REDACTED**	**REDACTED**	**REDACTED**	**REDACTED**
WASHINGTON COUNTY SOLAR	GPC	PPA-Solar	**REDACTED**	**REDACTED**
WILSON 1A	GPC	CT	**REDACTED**	**REDACTED**
WILSON 1B	GPC	CT	**REDACTED**	**REDACTED**
WILSON 1C	GPC	CT	**REDACTED**	**REDACTED**
WILSON 1D	GPC	CT	**REDACTED**	**REDACTED**
WILSON 1E	GPC	CT	**REDACTED**	**REDACTED**
WILSON 1F	GPC	CT	**REDACTED**	**REDACTED**
YATES 6 GAS	GPC	Oil/Gas Steam	**REDACTED**	**REDACTED**
YATES 7 GAS	GPC	Oil/Gas Steam	**REDACTED**	**REDACTED**
YONAH 1 HY	GPC	Hydro	**REDACTED**	**REDACTED**
YONAH 2 HY	GPC	Hydro	**REDACTED**	**REDACTED**
YONAH 3 HY	GPC	Hydro	**REDACTED**	**REDACTED**

FOOTNOTES:

1. VALUES FOUND IN TABLE MAY NOT REFLECT WHAT IS MODELED IN THE CASES. THE INFORMATION PROVIDED DOES NOT ALWAYS REFLECT OPERATIONAL LIMITS OR DESIGNATION AMOUNTS.

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Generation Scenario (Unit Off / Area Max) Cases

Table 16 Generation Scenario (Unit Off) By Case Type

Generation Code	Description	Summer Peak	Shoulder	Off-Peak
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
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REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	

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REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED REDACTED	REDACTED	REDACTED	
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED		REDACTED
REDACTED	REDACTED	REDACTED	REDACTED	REDACTED

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C. Strategic Projects

GTC: Dresden – Talbot 500kV Line Project
TEAMS 19950
Project Date June 1, 2029

I. Executive Summary

The Dresden – Talbot 500kV line project addresses multiple thermal overloads resulting from Category P1 – Single Contingency events identified as part of the Georgia Integrated Transmission System (ITS) transmission planning processes in compliance with NERC TPL-001-5.

Beginning in 2024 with the Fortson – Tenaska 500kV contingency, power from the Franklin generators flows north via the 230kV and 115kV network in West Georgia causing **REDACTED** miles of 230kV lines and **REDACTED** miles of 115kV lines to exceed their thermal ratings. To alleviate the overloaded transmission lines the ITS Participants jointly planned a preferred solution that consists of constructing approximately **REDACTED** miles of new 500kV transmission line between a new 500/230kV transmission station, adjacent to the existing Talbot County #1 230kV station, and the existing Dresden 500/230kV station.

II. Background and Problem Description

As noted in the Executive Summary, with the outage of the Fortson – Tenaska 500kV line, power from the Franklin generators flow north via the 230kV and 115kV network in West Georgia causing **REDACTED** miles of 230kV lines and **REDACTED**miles of 115kV lines to exceed their thermal ratings. Table 17 breaks out the impacted transmission facilities and Figure 4 provides a map of the impacted areas.

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Line Name	Worst Loading Year	Worst N-1 Loading	Line Length (Miles)
Fortson-Lagrange 230kV	2031	REDACTED	REDACTED
Dresden - Lagrange 230kV	2031	REDACTED	REDACTED
Goat Rock-North Opelika (APC) 230kV	2028	REDACTED	REDACTED
Bonaire Primary - Butler 230kV	2032	REDACTED	REDACTED
Bremen - Crooked Creek 115kV	2031	REDACTED	REDACTED
Dyer Road - East Roanoke (APC) 115kV	2031	REDACTED	REDACTED
Kia Motors - Pittman Road 115kV	2026	REDACTED	REDACTED
Pittman Road - West Point Dam 115kV	2025	REDACTED	REDACTED

Table 17: Impacted Transmission Facilities

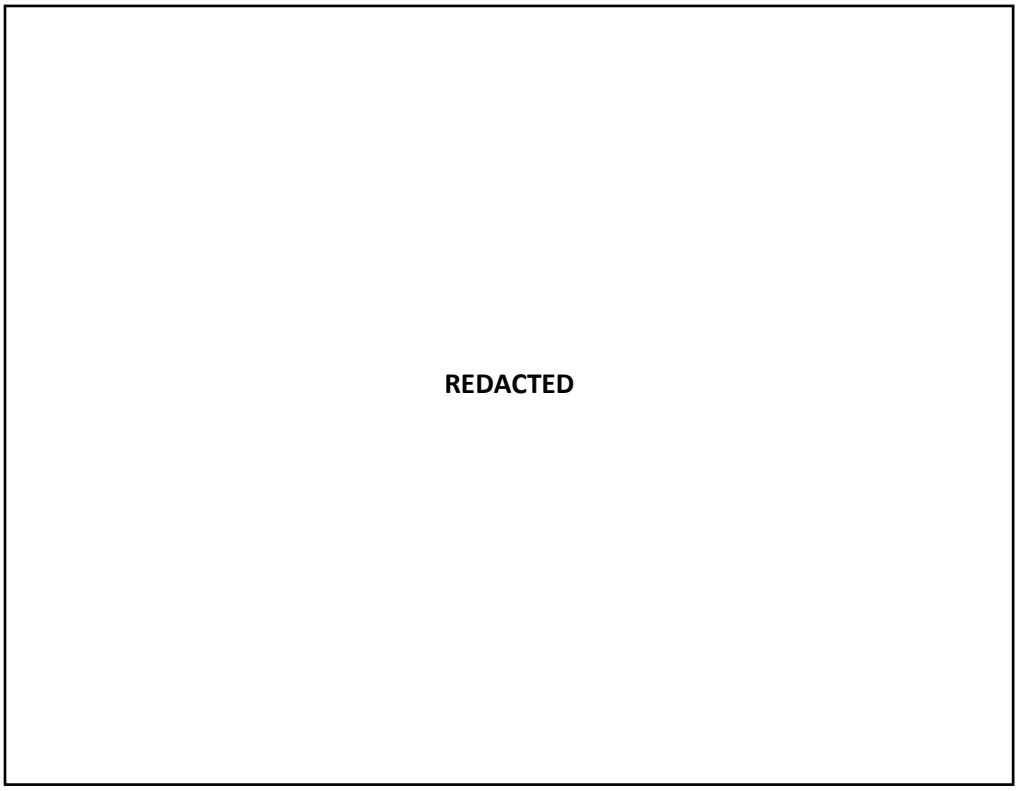


Figure 4: Map of Impacted Areas

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III. Study Assumptions

- Load Flow Cases: Series 2022, Version 1 and 2 base cases
- Study years: 2023 - 2032
- Planned Heard Co. – Tenaska 500kV line remained in the cases with an in-service date of 2024.
- Planned Lagrange – North Opelika 230kV line remained in the cases with an in-service date of 2026.

IV. Discussion of Alternatives

The Preferred Plan consists of:

- Construct new 500/230kV transmission station near Talbot Co. #1 station and loop in the Fortson – North Tifton 500kV line creating the Fortson – Talbot and North Tifton – Talbot 500kV lines. Install 500/230kV autotransformer and on the 230kV bus low side bus connect 230kV line between Talbot and Talbot #1. (**REDACTED**)
- Acquire right of way and build new 500kV line (approximately **REDACTED** miles) from Talbot to Dresden. (**REDACTED**)
- At Dresden, expand bus work to accommodate new 500kV line. (**REDACTED**)

GTC will perform all project work with an approximate planning grade estimate of **REDACTED**. Figures 5 and 6 provide an illustrative view of the overall solution.

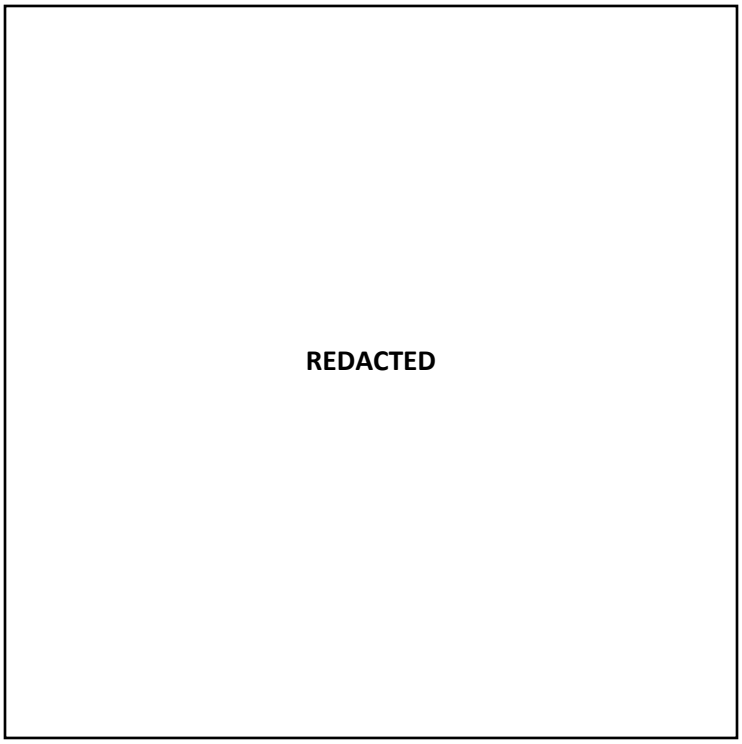


Figure 5: Talbot 500/230kV Station

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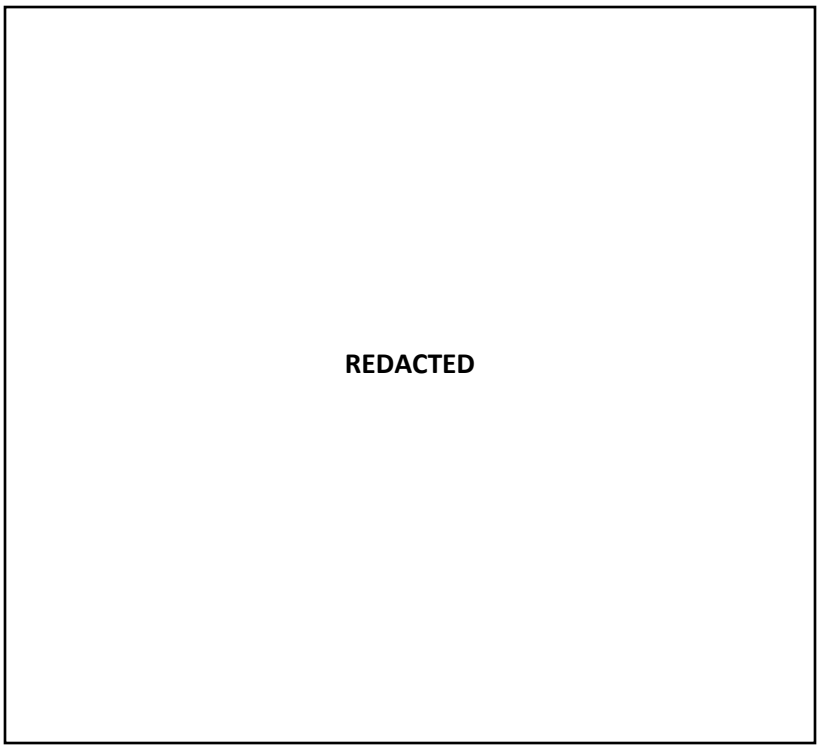


Figure 6: Dresden - Talbot 500kV Line

The Preferred Plan will:

- Provide an additional 500kV corridor to deliver solar generation power from South Georgia to North Georgia.
- Increase transfer capability of the 230kV and 115kV networks in West Georgia, Central GA, and Eastern Alabama.
- Minimize outage impacts to the transmission system during construction.
- Alleviate overloads identified in the Background and Problem Description section of this document. Table 18 provides resulting loading on the impacted lines with the preferred solution in service.

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Line Name	Worst Loading Year	Worst N-1 Loading (Before)	Worst N-1 Loading (After)	Loading Reduction (%)
Fortson-Lagrange 230kV	2031	REDACTED	REDACTED	REDACTED
Dresden - Lagrange 230kV	2031	REDACTED	REDACTED	REDACTED
Goat Rock-North Opelika (APC) 230kV	2028	REDACTED	REDACTED	REDACTED
Bonaire Primary - Butler 230kV	2032	REDACTED	REDACTED	REDACTED
Bremen - Crooked Creek 115kV	2031	REDACTED	REDACTED	REDACTED
Dyer Road - East Roanoke (APC) 115kV	2031	REDACTED	REDACTED	REDACTED
Kia Motors - Pittman Road 115kV	2026	REDACTED	REDACTED	REDACTED
Pittman Road - West Point Dam 115kV	2025	REDACTED	REDACTED	REDACTED

Table 18: Impacted Line Loading Results

- Increase power flow on the lines listed in the table below. These lines have mitigating projects to alleviate the thermal loading constraints.

Line Name	Project Number	Worst Loading Year	Worst N-1 Loading (Before)	Worst N-1 Loading (After)	Loading Increase (%)
Dresden-Yates 230kV	19599	2029	REDACTED	REDACTED	REDACTED
Hickory Level-Villa Rica Primary 230kV	19635	2031	REDACTED	REDACTED	REDACTED
Morrow-Yates Common 115kV	19601	2032	REDACTED	REDACTED	REDACTED

Table 19: Increased Line Loading Results

Alternate Plans

Alternate Plan 1: Do nothing ($0). This is not a viable option to remain in compliance with NERC TPL-001-5.

Alternate Plan 2: Mitigating projects for each of the overloaded lines identified in the Background and Problem section of this document. Table 20 provides the planning grade estimates for the required transmission line rebuild projects.

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Line Name	Rebuild Line Length (Miles)	Planning Grade Estimate
Fortson - Lagrange 230kV	REDACTED	REDACTED
Lagrange-Dresden 230kV	REDACTED	REDACTED
Goat Rock - North Opelika (APC) 230kV	REDACTED	REDACTED
Bonaire Primary - Butler 230kV	REDACTED	REDACTED
Bremen - Crooked Creek (APC) 115kV	REDACTED	REDACTED
Dyer Road - East Roanoke (APC) 115kV	REDACTED	REDACTED
Kia Motors - Pittman Road 115kV	REDACTED	REDACTED
Pittman Road - West Point Dam 115kV	REDACTED	REDACTED
Total	REDACTED	REDACTED

Table 20: Transmission Line Rebuild Estimates

With Alternate Plan 2, the main concerns are:

- Accommodating the necessary outages to facilitate construction activities along with maintaining system reliability.
- Lack of solution robustness to facilitate power transfers from South Georgia to north Georgia driven by increased solar generation and load growth.

V. Conclusion and Recommendations

Although the Preferred Plan is not the least cost plan, it was selected because it solves the identified thermal problems, provides an additional 500kV corridor for solar generation power transfers, and minimizes outage impacts to the transmission system during construction.

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GTC: East Walton 500/230kV Area Project
TEAMS 09662
Project Date June 1, 2027

I. Executive Summary

The East Walton 500/230kV area project addresses multiple thermal overloads resulting from Category P1 – Single Contingency events that were identified as part of the Georgia Integrated Transmission System (ITS) transmission planning processes in compliance with NERC TPL-001-5.

Beginning in 2024 with various line outages, power from solar generation located in South Georgia flows north via the 230kV and 115kV network in Central and Eastern Georgia causing **REDACTED** miles of 230kV line, **REDACTED** miles of 115kV line, and a 230/115kV autotransformer to exceed their thermal ratings. Large new loads and load expansions in the Social Circle area are contributing factors. As more fossil-fueled generation in North Georgia is retired and more solar generation is developed in South Georgia, these loadings will continue to increase.

The East Walton project includes a new switching station on the Scherer - Warthen 500kV line near Wallace Dam, a new East Walton 500/230kV substation between Athens and Monroe, a **REDACTED** -mile 500kV line between them, and three 230kV lines radiating out from East Walton. Substation sites and line rights-of-way were acquired in the 2008-2009 timeframe. Estimated project costs total **REDACTED** (**REDACTED** for GTC, **REDACTED** for GPC, and **REDACTED** for MEAG). The project provides a strong alternative 500kV path to inject power into the Northeast Georgia load center from points to the South, thereby providing loading relief to the underlying 230kV and 115kV facilities.

This solution is the result of joint planning efforts amongst the ITS Participants.

II. Background and Problem Description

Beginning in 2024 with various line outages, power from solar generation located in South Georgia flows north via the 230kV and 115kV network in Central and Eastern Georgia causing the following transmission facilities to exceed their thermal ratings. Table 21 breaks out the impacted transmission facilities and Figure 7 provides a map of the impacted areas.

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Line Name	Worst Loading Year	Worst N-1 Loading (Before)	Worst N-1 Loading (After)	Loading Reduction (%)
Branch – Eatonton Primary #2 230kV	2031	REDACTED	REDACTED	REDACTED
Branch – Oasis 230kV	2031	REDACTED	REDACTED	REDACTED
Eatonton Primary – Oasis 230kV	2032	REDACTED	REDACTED	REDACTED
Eatonton Primary – Newborn Road 230kV	2031	REDACTED	REDACTED	REDACTED
Lloyd Shoals – Porterdale Primary 115kV	2032	REDACTED	REDACTED	REDACTED
Sandersville #1 – Wadley Primary 115kV	2027	REDACTED	REDACTED	REDACTED
Thomson 230/115kV Autotransformer C	2026	REDACTED	REDACTED	REDACTED
Bio – Center Primary 230kV	2032	REDACTED	REDACTED	REDACTED
Bio – Pooles Creek 115kV	2032	REDACTED	REDACTED	REDACTED
Branch – Tiger Creek (Black) 230kV	2031	REDACTED	REDACTED	REDACTED
Branch – Tiger Creek (White) 230kV	2031	REDACTED	REDACTED	REDACTED

Table 21: Impacted Transmission Facilities

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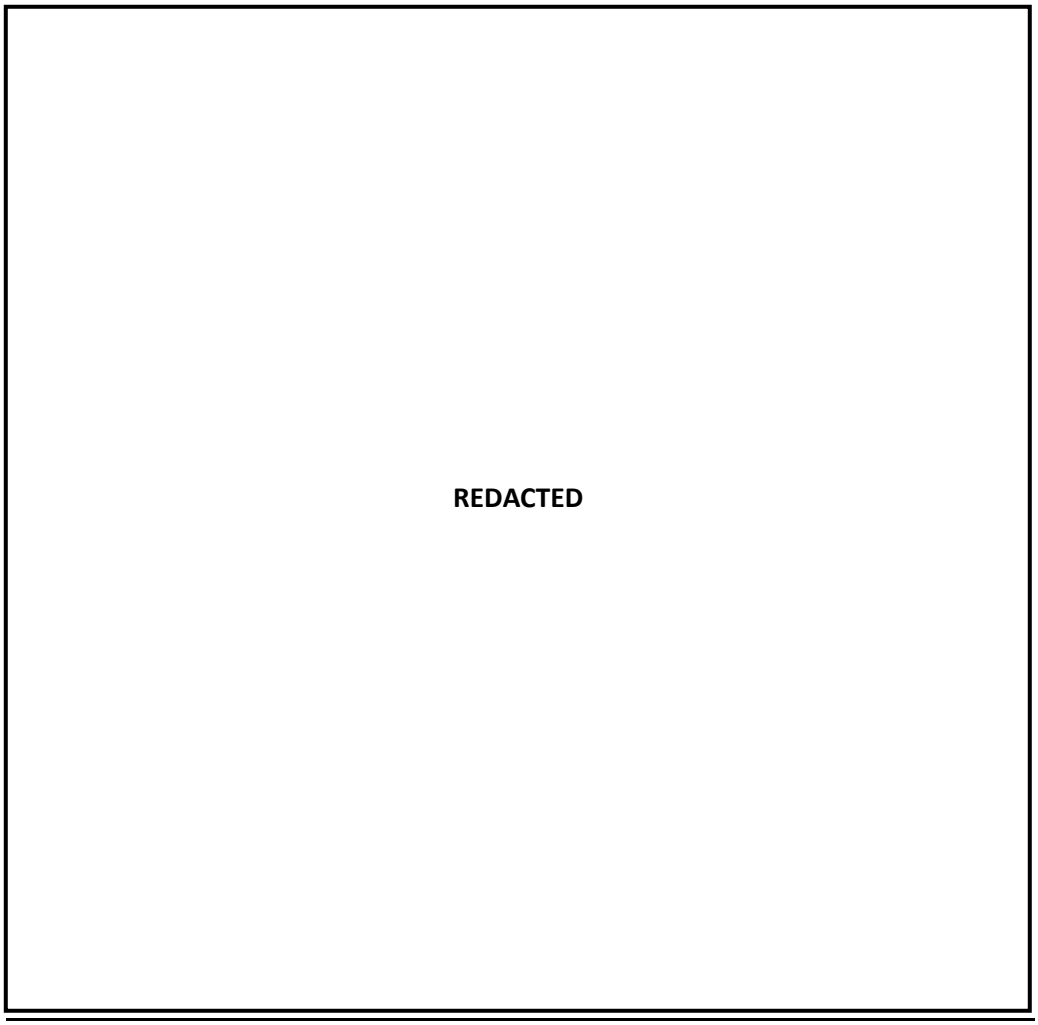


Figure 7: Map of Impacted Areas

III. Study Assumptions

- Load Flow Cases: Series 2022, Version 1 and 2 base cases
- Study years: 2023 - 2032
- Planned Heard Co. – Tenaska 500kV line remained in the cases with an in-service date of 2024.
- Planned Lagrange – North Opelika 230kV line remained in the cases with an in-service date of 2026.

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IV. Discussion of Alternatives

The preferred solution is as follows:

- GTC to construct the following items (**REDACTED**):
  - East Walton 500/230kV station
  - Bostwick 230kV station – will require looping in the East Social Circle – East Watkinsville 230kV line creating the Bostwick – East Social Circle and Bostwick – East Watkinsville 230kV lines.
  - East Walton – Rockville 500kV line approximately **REDACTED** miles
  - Bethabara – East Walton 230kV line approximately **REDACTED** miles
  - Bostwick – East Walton 230kV approximately **REDACTED** miles
  - East Walton – Jack's Creek 230kV line approximately **REDACTED** miles
- GPC to construct the following items (**REDACTED**)
  - Rockville 500kV station – will require looping in the Scherer – Warthen 500kV line creating the Rockville – Scherer 500kV and Rockville – Warthen 500kV lines
- MEAG to construct the following items (**REDACTED**)
  - Jack's Creek 230kV station – will require looping in the Doyle – LG&E Monroe 230kV line creating the Doyle – Jack's Creek 230kV and Doyle – LG&E Monroe 230kV lines.

Figure 8 provides an illustrative view of the overall solution. The new substations are denoted as follows:

EW = East Walton 500/230kV
R = Rockville 500kV
BO = Bostwick 230kV
BE = Bethabara 230kV
JC = Jack's Creek 230kV

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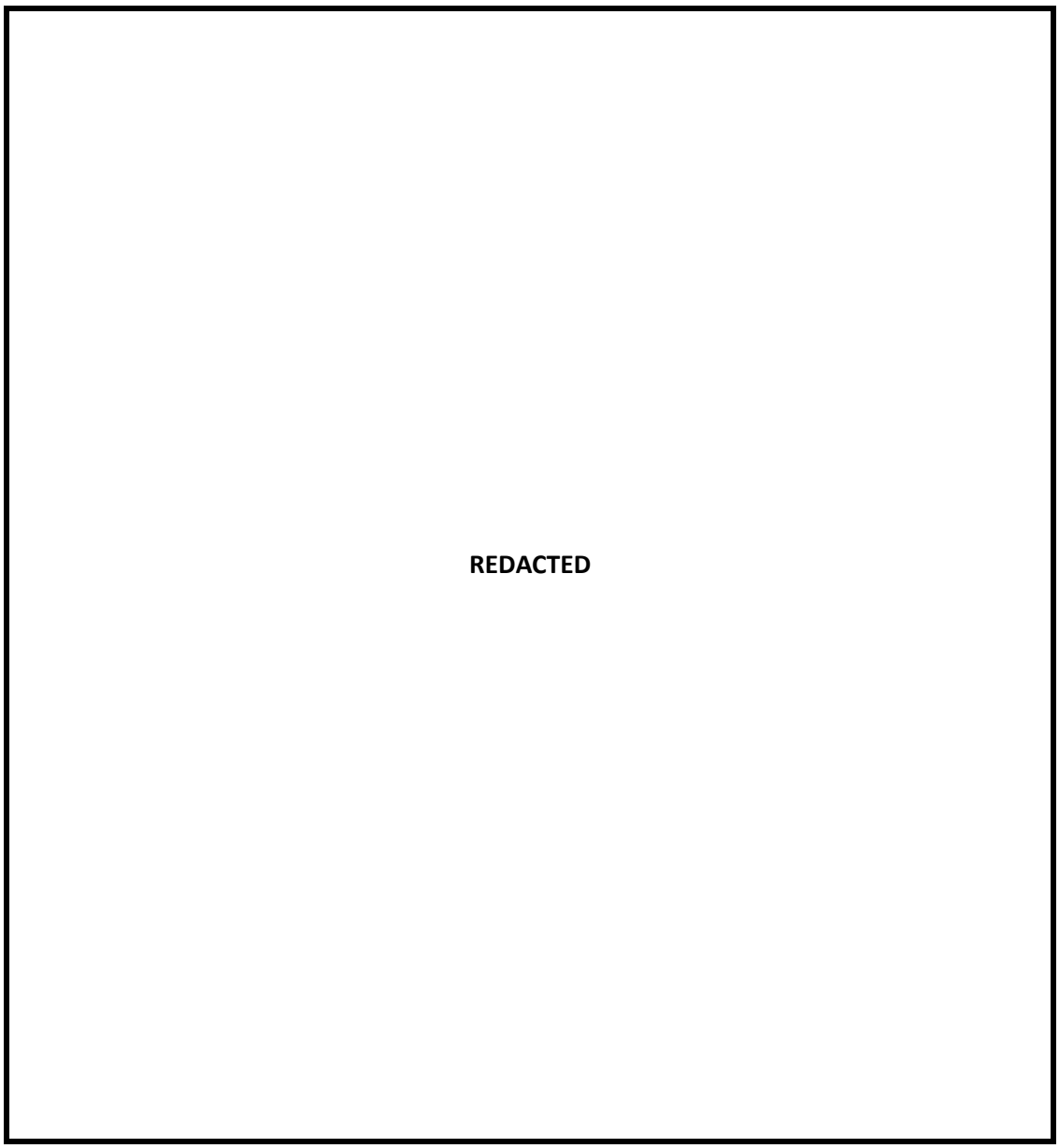


Figure 8: East Walton 500/230kV Project

The Preferred Plan will:

- Provide an additional 500kV corridor to deliver solar generation power from South Georgia to North Georgia. It carries more than **REDACTED** MW during the 2027 Summer peak with no facilities out of service.
- Minimize outage impacts to the transmission system during construction.
- Leverage previously acquired right of way and substation property. Almost all of the land required for the project was acquired in 2008-2009, and the Georgia Power property has been in Land Held For Future Use since that time.

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- Reduce system losses. Loss reduction in 2027 Summer peak is **REDACTED** MW.
- Alleviate overloads identified in the Background and Problem Description section of this document. Table 22 provides resulting loading on the impacted lines with the preferred solution in service.

Line Name	Worst Loading Year	Worst N-1 Loading (Before)	Worst N-1 Loading (After)	Loading Reduction (%)
Branch – Eatonton Primary #2 230kV	2031	REDACTED	REDACTED	REDACTED
Branch – Oasis 230kV	2031	REDACTED	REDACTED	REDACTED
Eatonton Primary – Oasis 230kV	2032	REDACTED	REDACTED	REDACTED
Eatonton Primary – Newborn Road 230kV	2031	REDACTED	REDACTED	REDACTED
Lloyd Shoals – Porterdale Primary 115kV	2032	REDACTED	REDACTED	REDACTED
Sandersville #1 – Wadley Primary 115kV	2027	REDACTED	REDACTED	REDACTED
Thomson 230/115kV Autotransformer C	2026	REDACTED	REDACTED	REDACTED
Bio – Center Primary 230kV	2032	REDACTED	REDACTED	REDACTED
Bio – Pooles Creek 115kV	2032	REDACTED	REDACTED	REDACTED
Branch – Tiger Creek (Black) 230kV	2031	REDACTED	REDACTED	REDACTED
Branch – Tiger Creek (White) 230kV	2031	REDACTED	REDACTED	REDACTED

Table 22: Impacted Line Loading Results

- Increase power flow on the lines listed in the table below. The lines in Table 23 have mitigating projects to alleviate the thermal loading constraints.

Line Name	Project Number	Worst Loading Year	Worst N-1 Loading (Before)	Worst N-1 Loading (After)	Loading Increase (%)
Athens – Winder Primary 115kV	---	2032	REDACTED	REDACTED	REDACTED
Center Primary – Commerce Primary 115kV	19991	2032	REDACTED	REDACTED	REDACTED
Bostwick – East Social Circle 230kV (Future)	19992	2032	REDACTED	REDACTED	REDACTED
East Social Circle – Stanton Springs 115kV	---	2031	REDACTED	REDACTED	REDACTED

Table 23: Increased Line Loading Results

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Alternate Plans

Alternate Plan 1: Do nothing ($0). This is not a viable option to remain in compliance with NERC TPL-001-5.

Alternate Plan 2: Mitigating projects for each of the overloaded lines identified in the Background and Problem section of this document. The approximate planning grade estimates for each project is provided in the table below:

Line Name	Rebuild Line Length (Miles)	Planning Grade Estimate
Branch – Eatonton Primary #2 230kV	REDACTED	REDACTED
Branch – Oasis 230kV	REDACTED	REDACTED
Eatonton Primary – Oasis 230kV	REDACTED	REDACTED
Eatonton Primary – Newborn 230kV	REDACTED	REDACTED
Lloyd Shoals – Porterdale Primary 115kV	REDACTED	REDACTED
Sandersville #1 – Wadley Primary 115kV	REDACTED	REDACTED
Thomson 230/115kV Autotransformer C	REDACTED	REDACTED
Bio – Center Primary 230kV	REDACTED	REDACTED
Bio – Pooles Creek 115kV	REDACTED	REDACTED
Branch – Tiger Creek (Black) 230kV	REDACTED	REDACTED
Branch – Tiger Creek (White) 230kV	REDACTED	REDACTED
Total	REDACTED	REDACTED

Table 24: Transmission Line Rebuild Estimates

With Alternate Plan 2, the main concerns are:

- Accommodating the necessary outages to facilitate construction activities along with maintaining system reliability.
- Lack of solution robustness to facilitate power transfers from South Georgia to north Georgia driven by increased solar generation and load growth.

V. Conclusion and Recommendations

Although the Preferred Plan is not the least cost plan, it was selected because it solves the identified thermal problems effectively, provides an additional 500kV corridor for solar generation power transfers, reduces system losses, and minimizes outage impacts to the transmission system during construction.

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D. Fleet Transition Tables

This appendix provides a comparison between the transmission projects listed in the Unit Retirement Study contained within Technical Appendix Volume 2 of the 2022 Georgia Power Integrated Resource Plan (Docket 44160) and the transmission projects contained within the 2022 Georgia Integrated Transmission System Ten Year Plan (2023 – 2032).

For the Unit Retirement studies, Table 25 provides a breakdown of the studied generation scenarios.

Scenario	Generation Units	Year Unavailable
Fleet 0	Wansley 1 & 2	2022
	Bowen 1 & 2	2027
Fleet 0A	Wansley 1 & 2	2022
	Bowen 1 & 2	2027
	Scherer 3	2022
Fleet 1	Wansley 1 & 2	2022
	Bowen 1 & 2	2027
	Scherer 1 - 3	2028
Fleet 2	Wansley 1 & 2	2022
	Bowen 1 & 2	2027
	Scherer 1 - 3	2028
	Bowen 3 & 4	2028

Table 25: Unit Retirement Generation Scenarios

For the 2022 Ten Year planning process, Table 26 shows the years that the coal generation facilities were unavailable in both version 1 and version 2 of the transmission planning load flow cases.

Generation Units	v1 Year Unavailable	v2 Year Unavailable
Wansley 1 & 2	2022	2022
Bowen 1 & 2	2027	2027
Scherer 3	2028	2028
Bowen 3 & 4	2030	2030

Table 26: Coal Generation Assumptions

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Fleet Scenario 0:

Table 27 below notes the required projects from the Unit Retirement studies along with the current project number and need year of the project in the 2022 GA ITS Ten-Year Plan.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
15882	GTC: SAWHATCHEE SWITCH REPLACEMENT (F.K.A. BLAKELY PRIMARY - WEBB (APC) 115KV	2026	2023	**REDACTED**	**REDACTED**
12016	ARKWRIGHT - LLOYD SHOALS 115KV	2024	2024	**REDACTED**	**REDACTED**
11692	BULL CREEK - VICTORY DRIVE 115KV	2024	2024	**REDACTED**	**REDACTED**
18671	CORN CRIB - LAGRANGE PRIMARY 115KV RECONDUCTOR (F.K.A. CORN CRIB - LAGRANGE 115KV)	2027	2024	**REDACTED**	**REDACTED**
18774	GTC: HEARD COUNTY - TENASKA 500KV (NEW LINE) (F.K.A. TENASKA - HEARD CO 500KV (NEW LINE))	2024	2024	**REDACTED**	**REDACTED**
18772	KLONDIKE SWITCH REPLACEMENT (F.K.A. KLONDIKE - NORCROSS 500KV SWITCH REPLACEMENT)	2024	2024	**REDACTED**	**REDACTED**
18153	BONAIRE PRIMARY - ECHECONNEE RECONDUCTOR 115KV (BONAIRE - RUSSELL PKWY) (F.K.A. BONAIRE PRIMARY - ECHECONNEE 115KV)	2030	2025	**REDACTED**	**REDACTED**
---	CAPITAL HEIGHTS - CARTER HILL ROAD - FISK ROAD 115KV (APC Project)	2026	2025	**REDACTED**	**REDACTED**
18800	ECHECONNEE - WELLSTON 115KV REBUILD (S WARNER ROBINS-WELLSTON) (F.K.A. ECHECONNEE - WELLSTON 115KV)	2024	2025	**REDACTED**	**REDACTED**
19334	GTC: LAGRANGE - NORTH OPELIKA 230KV (NEW LINE) (F.K.A. LAGRANGE - NORTH OPELIKA 230KV (NEW LINE))	2027	2026	**REDACTED**	**REDACTED**
19628	ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR 115KV (F.K.A. ARLINGTON PRIMARY - DAWSON PRIMARY 115KV)	2028	2028	**REDACTED**	**REDACTED**

Table 27: Projects Still Required

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Table 28 notes additional projects required to implement Fleet Scenario 0 from the 2022 GA ITS Ten-Year planning process.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19627	ECHECONNEE - WELLSTON 115KV REBUILD (N WARNER ROBINS-S WARNER ROBINS)	---	2025	---	**REDACTED**

Table 28: Additional Projects

Fleet Scenario 0A:

Table 29 below notes the projects that required to implement Fleet Scenario 0A from the 2022 GA ITS Ten-Year planning process. Please note that Scherer 3 is unavailable in the 2022 Transmission Planning cases starting in 2028 versus 2022 in the Unit Retirement Studies.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19604	BUTLER 230KV REACTORS (BONAIRE - BUTLER 230KV) (F.K.A. BONAIRE PRIMARY - BUTLER 230KV)	2030	2023	**REDACTED**	**REDACTED**
15882	GTC: SAWHATCHEE SWITCH REPLACEMENT (F.K.A. BLAKELY PRIMARY - WEBB (APC) 115KV	2026	2023	**REDACTED**	**REDACTED**
12016	ARKWRIGHT - LLOYD SHOALS 115KV	2024	2024	**REDACTED**	**REDACTED**
11692	BULL CREEK - VICTORY DRIVE 115KV	2024	2024	**REDACTED**	**REDACTED**
18671	CORN CRIB - LAGRANGE PRIMARY 115KV RECONDUCTOR (F.K.A. CORN CRIB - LAGRANGE 115KV)	2027	2024	**REDACTED**	**REDACTED**
18774	GTC: HEARD COUNTY - TENASKA 500KV (NEW LINE) (F.K.A. TENASKA - HEARD CO 500KV (NEW LINE))	2024	2024	**REDACTED**	**REDACTED**
18772	KLONDIKE SWITCH REPLACEMENT (F.K.A. KLONDIKE - NORCROSS 500KV SWITCH REPLACEMENT)	2024	2024	**REDACTED**	**REDACTED**
18153	BONAIRE PRIMARY - ECHECONNEE RECONDUCTOR 115KV (BONAIRE - RUSSELL PKWY) (F.K.A. BONAIRE PRIMARY - ECHECONNEE 115KV)	2030	2025	**REDACTED**	**REDACTED**
---	CAPITAL HEIGHTS - CARTER HILL ROAD - FISK ROAD 115KV (APC Project)	2026	2025	**REDACTED**	**REDACTED**
18800	ECHECONNEE - WELLSTON 115KV REBUILD (S WARNER ROBINS-WELLSTON) (F.K.A. ECHECONNEE - WELLSTON 115KV)	2024	2025	**REDACTED**	**REDACTED**
19603	GTC: SOUTH COWETA 230/115KV SECOND AUTO (F.K.A. S COWETA BANK A)	2030	2025	**REDACTED**	**REDACTED**

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19334	GTC: LAGRANGE - NORTH OPELIKA 230KV (NEW LINE) (F.K.A. LAGRANGE - NORTH OPELIKA 230KV (NEW LINE))	2027	2026	**REDACTED**	**REDACTED**
19598	MEAG: DRESDEN - LAGRANGE 230KV LINE REBUILD	2031	2026	**REDACTED**	**REDACTED**
19628	ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR 115KV (F.K.A. ARLINGTON PRIMARY - DAWSON PRIMARY 115KV)	2028	2028	**REDACTED**	**REDACTED**
19187	BREMEN - CROOKED CREEK 115KV (F.K.A. BREMEN - CROOKED CREEK (APC) 115KV	2028	2031	**REDACTED**	**REDACTED**

Table 29: Projects Still Required

Table 30 notes the additional projects required to implement Fleet Scenario 0A from the 2022 GA ITS Ten-Year planning process. Please note that Scherer 3 is unavailable in the 2022 Transmission Planning cases starting in 2028 versus 2022 in the Unit Retirement Studies.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19627	ECHECONNEE - WELLSTON 115KV REBUILD (N WARNER ROBINS-S WARNER ROBINS)	---	2025	---	**REDACTED**
19950	GTC: DRESDEN - TALBOT COUNTY 500KV LINE (NEW LINE)	---	2029	---	**REDACTED**

Table 30: Additional Projects

Fleet Scenario 1:

Table 31 shows the projects still required to implement Fleet Scenario 1 from the 2022 GA ITS Ten-Year planning process. Please note that Scherer units 1 & 2 are allowed to dispatch while Scherer 3 is unavailable in the 2022 Transmission Planning cases starting in 2028.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19604	BUTLER 230KV REACTORS (BONAIRE - BUTLER 230KV) (F.K.A. BONAIRE PRIMARY - BUTLER 230KV)	2030	2023	**REDACTED**	**REDACTED**
15882	GTC: SAWHATCHEE SWITCH REPLACEMENT (F.K.A. BLAKELY PRIMARY - WEBB (APC) 115KV	2026	2023	**REDACTED**	**REDACTED**
12016	ARKWRIGHT - LLOYD SHOALS 115KV	2024	2024	**REDACTED**	**REDACTED**
11692	BULL CREEK - VICTORY DRIVE 115KV	2024	2024	**REDACTED**	**REDACTED**
18671	CORN CRIB - LAGRANGE PRIMARY 115KV RECONDUCTOR (F.K.A. CORN CRIB - LAGRANGE 115KV)	2027	2024	**REDACTED**	**REDACTED**

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---	EUFALA - GEORGE DAM (COE) - WEBB 115KV (APC Project)	2030	2024	**REDACTED**	**REDACTED**
20002	GORDON - SANDERSVILLE #1 115KV LINE REBUILD (F.K.A. GORDON - SANDERSVILLE #1 115KV)	2028	2024	**REDACTED**	**REDACTED**
18774	GTC: HEARD COUNTY - TENASKA 500KV (NEW LINE) (F.K.A. TENASKA - HEARD CO 500KV (NEW LINE))	2024	2024	**REDACTED**	**REDACTED**
18772	KLONDIKE SWITCH REPLACEMENT (F.K.A. KLONDIKE - NORCROSS 500KV SWITCH REPLACEMENT)	2024	2024	**REDACTED**	**REDACTED**
18153	BONAIRE PRIMARY - ECHECONNEE RECONDUCTOR 115KV (BONAIRE - RUSSELL PKWY) (F.K.A. BONAIRE PRIMARY - ECHECONNEE 115KV)	2030	2025	**REDACTED**	**REDACTED**
---	CAPITAL HEIGHTS - CARTER HILL ROAD - FISK ROAD 115KV (APC Project)	2026	2025	**REDACTED**	**REDACTED**
18800	ECHECONNEE - WELLSTON 115KV REBUILD (S WARNER ROBINS-WELLSTON) (F.K.A. ECHECONNEE - WELLSTON 115KV)	2024	2025	**REDACTED**	**REDACTED**
19603	GTC: SOUTH COWETA 230/115KV SECOND AUTO (F.K.A. S COWETA BANK A)	2030	2025	**REDACTED**	**REDACTED**
19334	GTC: LAGRANGE - NORTH OPELIKA 230KV (NEW LINE) (F.K.A. LAGRANGE - NORTH OPELIKA 230KV (NEW LINE))	2027	2026	**REDACTED**	**REDACTED**
19598	MEAG: DRESDEN - LAGRANGE 230KV LINE REBUILD	2031	2026	**REDACTED**	**REDACTED**
19628	ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR 115KV (F.K.A. ARLINGTON PRIMARY - DAWSON PRIMARY 115KV)	2028	2028	**REDACTED**	**REDACTED**
19636	HAMMOND - WEISS DAM (APC) 115KV REBUILD (F.K.A HAMMOND - WEISS DAM (APC) 115KV)	2030	2028	**REDACTED**	**REDACTED**
19601	MORROW - YATES COMMON 115kV UPGRADE (F.K.A. MORROW - YATES COMMON 115KV)	2028	2028	**REDACTED**	**REDACTED**
19187	BREMEN - CROOKED CREEK 115KV (F.K.A. BREMEN - CROOKED CREEK (APC) 115KV	2028	2031	**REDACTED**	**REDACTED**

Table 31: Projects Still Required

Table 32 shows the additional projects required to implement Fleet Scenario 1 from the 2022 GA ITS Ten-Year planning process.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19627	ECHECONNEE - WELLSTON 115KV REBUILD (N WARNER ROBINS-S WARNER ROBINS)	---	2025	---	**REDACTED**
19950	GTC: DRESDEN - TALBOT COUNTY 500KV LINE (NEW LINE)	---	2029	---	**REDACTED**
19999	GTC: ROBINS SPRING BUS REPLACEMENT	---	2030	---	**REDACTED**

Table 32: Additional Projects

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Table 33 shows the projects no longer required based on the 2022 GA ITS Ten-Year planning process.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
---	DRESDEN - HOLLINGSWORTH FERRY 230KV	2028	---	**REDACTED**	---
---	HOLLINGSWORTH FERRY - YELLOW DIRT 230KV	2028	---	**REDACTED**	---

Table 33: Projects No Longer Required

Fleet Scenario 2:

Table 34 shows the projects still required to implement Fleet Scenario 2 from the 2022 GA ITS Ten-Year planning process. Please note that Scherer units 1 & 2 are allowed to dispatch while Scherer unit 3 is unavailable beginning in 2028 and Bowen Units 3 & 4 are unavailable beginning in 2030 in the 2022 Ten Year Plan base cases.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19604	BUTLER 230KV REACTORS (BONAIRE - BUTLER 230KV) (F.K.A. BONAIRE PRIMARY - BUTLER 230KV)	2030	2023	**REDACTED**	**REDACTED**
15882	GTC: SAWHATCHEE SWITCH REPLACEMENT (F.K.A. BLAKELY PRIMARY - WEBB (APC) 115KV	2026	2023	**REDACTED**	**REDACTED**
12016	ARKWRIGHT - LLOYD SHOALS 115KV	2024	2024	**REDACTED**	**REDACTED**
11692	BULL CREEK - VICTORY DRIVE 115KV	2024	2024	**REDACTED**	**REDACTED**
18671	CORN CRIB - LAGRANGE PRIMARY 115KV RECONDUCTOR (F.K.A. CORN CRIB - LAGRANGE 115KV)	2027	2024	**REDACTED**	**REDACTED**
---	EUFALA - GEORGE DAM (COE) - WEBB 115KV (APC Project)	2030	2024	**REDACTED**	**REDACTED**
20002	GORDON - SANDERSVILLE #1 115KV LINE REBUILD (F.K.A. GORDON - SANDERSVILLE #1 115KV)	2028	2024	**REDACTED**	**REDACTED**
18774	GTC: HEARD COUNTY - TENASKA 500KV (NEW LINE) (F.K.A. TENASKA - HEARD CO 500KV (NEW LINE))	2024	2024	**REDACTED**	**REDACTED**
18772	KLONDIKE SWITCH REPLACEMENT (F.K.A. KLONDIKE - NORCROSS 500KV SWITCH REPLACEMENT)	2024	2024	**REDACTED**	**REDACTED**
18153	BONAIRE PRIMARY - ECHECONNEE RECONDUCTOR 115KV (BONAIRE - RUSSELL PKWY) (F.K.A. BONAIRE PRIMARY - ECHECONNEE 115KV)	2030	2025	**REDACTED**	**REDACTED**
---	CAPITAL HEIGHTS - CARTER HILL ROAD - FISK ROAD 115KV (APC Project)	2026	2025	**REDACTED**	**REDACTED**

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18800	ECHECONNEE - WELLSTON 115KV REBUILD (S WARNER ROBINS-WELLSTON) (F.K.A. ECHECONNEE - WELLSTON 115KV)	2024	2025	**REDACTED**	**REDACTED**
19603	GTC: SOUTH COWETA 230/115KV SECOND AUTO (F.K.A. S COWETA BANK A)	2030	2025	**REDACTED**	**REDACTED**
19334	GTC: LAGRANGE - NORTH OPELIKA 230KV (NEW LINE) (F.K.A. LAGRANGE - NORTH OPELIKA 230KV (NEW LINE))	2027	2026	**REDACTED**	**REDACTED**
19598	MEAG: DRESDEN - LAGRANGE 230KV LINE REBUILD	2031	2026	**REDACTED**	**REDACTED**
19628	ARLINGTON PRIMARY - HWY45/234 RECONDUCTOR 115KV (F.K.A. ARLINGTON PRIMARY - DAWSON PRIMARY 115KV)	2028	2028	**REDACTED**	**REDACTED**
19635	GTC: HICKORY LEVEL - VILLA RICA PRIMARY 230KV (Replace jumpers and reconductor) (F.K.A. HICKORY LEVEL - VILLA RICA PRIMARY 230KV)	2030	2028	**REDACTED**	**REDACTED**
19636	HAMMOND - WEISS DAM (APC) 115KV REBUILD (F.K.A HAMMOND - WEISS DAM (APC) 115KV)	2030	2028	**REDACTED**	**REDACTED**
19601	MORROW - YATES COMMON 115kV UPGRADE (F.K.A. MORROW - YATES COMMON 115KV)	2028	2028	**REDACTED**	**REDACTED**
20004	DYER ROAD-SOUTH COWETA 115KV LINE REBUILD (F.K.A. DYER ROAD - SOUTH COWETA 115KV)	2030	2030	**REDACTED**	**REDACTED**
19187	BREMEN - CROOKED CREEK 115KV (F.K.A. BREMEN - CROOKED CREEK (APC) 115KV	2028	2031	**REDACTED**	**REDACTED**

Table 34: Projects Still Required

Table 35 shows the additional projects required to implement Fleet Scenario 2 from the 2022 GA ITS Ten-Year planning process.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
19627	ECHECONNEE - WELLSTON 115KV REBUILD (N WARNER ROBINS-S WARNER ROBINS)	---	2025	---	**REDACTED**
19950	GTC: DRESDEN - TALBOT COUNTY 500KV LINE (NEW LINE)	---	2029	---	**REDACTED**
19999	GTC: ROBINS SPRING BUS REPLACEMENT	---	2030	---	**REDACTED**

Table 35: Additional Projects

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Table 36 shows the projects no longer required to implement Fleet Scenario 2 from the 2022 GA ITS Ten-Year planning process.

Project Number	Project Name	2021 Unit Retirement Study Need Year	2022 GA ITS TYP Need Year	2021 Planning Grade Estimate	2022 Planning Grade Estimate
---	DALTON - LOOPERS FARM 230KV (Interface)	2028	---	**REDACTED**	---
---	DRESDEN - HOLLINGSWORTH FERRY 230KV	2028	---	**REDACTED**	---
---	EAST DALTON - OOSTANAULA 115KV	2028	---	**REDACTED**	---
---	HOLLINGSWORTH FERRY - YELLOW DIRT 230KV	2028	---	**REDACTED**	---
---	BARNESVILLE PRIMARY - SOUTH GRIFFIN 115KV	2030	---	**REDACTED**	---
---	UNION CITY - YATES (BLACK) 230KV	2030	---	**REDACTED**	---
---	UNION CITY - YATES (WHITE) 230KV	2030	---	**REDACTED**	---

Table 36: Projects No Longer Required