${\color{red} SERTP} \ \ \text{Southeastern Regional Transmission Planning}$



December 14, 2022

Regional Transmission Plan & Input Assumptions Overview

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I. SERTP Overview

About the SERTP

The Southeastern Regional Transmission Planning (SERTP) process is a collaboration of ten (10) transmission planning entities in a twelve (12) state area that coordinates regional transmission planning activities and provides an open and transparent transmission planning forum to engage with stakeholders regarding transmission plans in the region. The SERTP region was initially developed by six (6) sponsors to provide an open and transparent regional transmission planning process and to otherwise comply with the Federal Energy Regulatory Commission's (FERC) Order 890, which was issued in 2007. The SERTP region expanded several times in size and scope. The SERTP region's implementation of FERC's Order 1000, issued in 2011, to establish regional and interregional transmission planning and cost allocation requirements, became effective beginning June 1, 2014. The SERTP region includes four (4) FERC jurisdictional investor-owned utilities and six (6) non-jurisdictional, non-profit public utilities, who have a longstanding history of collaboration in transmission planning activities and who have voluntarily elected to participate in the SERTP region. The expanded SERTP region is one of the largest regional transmission planning regions in the United States.

The SERTP Regional Transmission Plan

The SERTP provides an open and transparent transmission planning process. The SERTP transmission modeling, expansion plans, and other materials are publicly available and provide extensive data regarding the sponsors' transmission systems. Stakeholders can utilize this data to replicate the transmission planning performed through the SERTP as well as to assess a wide range of sensitivities and scenarios of interest.

This SERTP Regional Transmission Plan & Input Assumptions Overview document, which is produced annually, is intended to provide an overview of the 2022 cycle's regional modeling, key assumptions and philosophies, and expansion planning results suitable for any interested stakeholder, as it does not include Critical Energy Infrastructure Information (CEII) materials. Materials which include CEII are also available, subject to completion of the CEII request and certification process. Additional information is available through the SERTP website (http://www.southeasternrtp.com/).

The SERTP

1) Associated Electric Cooperative (AECI)

Associated Electric Cooperative Inc.

AECI, a Generation and Transmission (G&T) rural electric cooperative, provides electric service across approximately 75,000 square miles in three states. Headquartered in Springfield, Missouri, AECI serves approximately 875,000 ultimate members through six regional G&Ts and 51 distribution cooperatives. AECI and its six regional G&Ts own over 9,800 miles of transmission lines operated at 69 through 500 kV.

2) Dalton Utilities (Dalton)



Dalton Utilities provides electric services in Dalton, Georgia and five surrounding counties. Headquartered in Dalton, Georgia, Dalton Utilities serves approximately 18,000 customers and owns over 350 miles of transmission lines.

3) Duke Energy (Duke)



Duke Energy provides electric service across 95,000 square miles in 6 states. Headquartered in Charlotte, NC, Duke Energy serves approximately 7.3 million customers and owns over 19,000 miles of transmission lines.

Two Duke Energy subsidiaries, Duke Energy Carolinas and Duke Energy Progress, are represented on the SERTP.

4) Georgia Transmission Corporation (GTC)



GTC, an electric membership corporation formed in 1997 through a restructuring of Oglethorpe Power Corporation, provides electric service to 38 retail distribution cooperative members in Georgia. Headquartered in Tucker, Georgia, GTC owns approximately 3,150 miles of transmission lines and its members serve approximately 4 million people.

5) Gulf Power (Gulf)



Gulf Power provides electric service to the eleven counties in the northwest panhandle of Florida. Headquartered in Pensacola, Florida, Gulf Power serves approximately 465,000 customers and owns over 1600 miles of transmission lines.



6) Louisville Gas & Electric and Kentucky Utilities (LG&E/KU)



LG&E/KU, an investor owned utility, provides electric service across 6,100 square miles in two states. Headquartered in Louisville, KY, LG&E/KU serves approximately 940,000 customers and 2,690 miles of transmission lines.

7) Municipal Electric Authority of Georgia (MEAG)



MEAG, a public corporation and an instrumentality of the State of Georgia, provides electric service to 48 cities and one county in Georgia. Headquartered in Atlanta, Georgia, MEAG serves approximately 310,000 customers and owns over 1,320 miles of transmission lines.

8) PowerSouth Electric Cooperative (PowerSouth)



PowerSouth, a generation and transmission cooperative consisting of 16 distribution cooperatives and 4 municipal systems, provides electric service across 31,000 square miles in 2 states. Headquartered in Andalusia, Alabama, PowerSouth serves approximately 418,000 customers and owns over 2,200 miles of transmission lines.

9) Southern Company (Southern)



Southern Company, a leading U.S. producer of clean, safe, reliable, and affordable energy, includes three electric utility companies that provide electric service across 112,500 square miles in three states. Headquartered in Atlanta, Georgia, Southern Company serves approximately 4.68 million electric customers and owns over 27,000 miles of transmission lines.

10) Tennessee Valley Authority (TVA)



TVA, a federally-owned electrical utility, provides electric service across 80,000 square miles in 7 states. Headquartered in Knoxville, TN, TVA serves approximately 9 million customers and owns over 16,000 miles of transmission lines.

Southeastern Regional TRANSMISSION PLANNING

REGIONAL TRANSMISSION PLAN & INPUT ASSUMPTIONS OVERVIEW

SERTP Region Scope

The SERTP region is located within 12 states, roughly spanning over 600 miles north to south and 1,100 miles east to west. The SERTP region is one of the largest transmission planning regions in the Eastern Interconnect in terms of transmission line miles and based upon customer peak demand. The eight (8) NERC Balancing Authority Areas ("BAAs") in the SERTP region serve combined peak loads totaling more than 123,907 MWs.

Table I.1: State by State Breakdown of the SERTP

No.	SERTP States	SERTP
1	Alabama	PowerSouth, Southern, TVA
2	Florida	PowerSouth, Gulf Power
3	Georgia	Dalton, GTC, MEAG, Southern, TVA
4	lowa	AECI
5	Kentucky	LG&E/KU, TVA
6	Mississippi	Southern, TVA
7	Missouri	AECI
8	North Carolina	Duke, TVA
9	Oklahoma	AECI
10	South Carolina	Duke
11	Tennessee	TVA
12	Virginia	LG&E/KU, TVA

II. SERTP Transmission Planning Approach

Physical Transmission Delivery Service Markets

The fundamental purpose of the transmission system is to enable transmission users the opportunity to access their desired generating resource options to reliably and economically deliver power to serve their customers' loads. In the SERTP region, physical transmission delivery service markets allow transmission customers to procure long-term transmission service across the transmission system and receive dependable, firm delivery from resources to customer loads. The SERTP sponsors plan and expand the transmission system to reliably and economically satisfy the load projections, resource assumptions, public policy requirements, and transmission service commitments within the region. These transmission system delivery capacity requirements are typically driven by long-term, firm commitments and are planned with the intent that those who have made such commitments will be able to access their resources to serve load without congestion, constraint, or curtailment. In other words, the SERTP sponsors identify, evaluate, and implement efficient and cost-effective transmission expansion options to provide sufficient physical capacity to enable delivery of a long-term, firm transmission customer's service without impacting other long-term, firm delivery commitments, and with the intent that the service will normally be available without interruption or curtailment. The physical transmission delivery service markets in the SERTP region not only help to provide certainty in long-term delivery costs, but also minimize delivery risks for transmission users. The resulting planned physical transmission capacity provides for a robust, reliable, and resilient transmission system which responds well under a wide range of operating uncertainties and supports routine maintenance and construction activities.

Integrated Resource Planning and Transmission Planning Interaction

Although many long-term firm transmission delivery service commitments in the SERTP region are made by individual market participants, the majority are made by Load Serving Entities ("LSEs"). LSEs typically have a legal "duty to serve" obligation to reliably and proactively meet current and future load needs, and therefore procure energy, capacity, and transmission services to accomplish this objective. LSEs in the SERTP typically conduct Integrated Resource Planning ("IRP") processes on a reliable and least-cost basis to assess future load-serving needs, consider supply-side and demand-side options, and procure transmission delivery services. The IRP processes of LSEs, which are often state-regulated, consider a multitude of factors over a long-term horizon in their decisions to select resources and procure delivery services, including reliability, transmission impacts,

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economics, environmental attributes, economic growth, energy efficiency, resource diversity, applicable regulations, fuel delivery, ancillary services, and construction lead-times. Specifically, LSEs use IRP processes to identify a cost-effective mix of supply-side and demand-side capacity resources to meet future requirements. The physical transmission delivery service markets in the SERTP region enable LSEs to base their decisions on long-term, total delivered costs without exposure to congestion pricing or significant delivery risks.

As LSEs make their resource decisions, these decisions and corresponding transmission service commitments are provided to the SERTP sponsors and form the basis for transmission planning assumptions in the SERTP region. Through their commitments for long-term, firm delivery service, LSEs communicate to the SERTP sponsors the set of resources their IRP processes have selected as best situated to serve their customers' long-term needs. This process significantly reduces uncertainties related to future resources and delivery needs and provides sufficient lead times to enable transmission facilities to be planned and constructed.

The load forecasts, demand-side management programs, resource decisions, and corresponding firm transmission commitments resulting from the IRP activities of LSEs establish the majority of delivery obligations and modeling inputs for transmission planning in the SERTP region.

Customer Needs Lead to Continually Evolving Transmission Plans

Transmission planning in the SERTP region is focused on identifying reliable, cost-effective transmission projects to meet the long-term firm transmission delivery service obligations to transmission customers, and thereby assisting in serving their forecasted load obligations from their desired resource choices. Simply put, transmission plans are driven by customer transmission delivery service needs, and these needs can be constantly changing. Each year, load forecasts change, resource decisions change, and, as a result, transmission delivery service needs change. On a recurring basis, LSEs and other transmission customers communicate their delivery needs, which the SERTP incorporates into the latest transmission planning models and analyses. Planned transmission projects are reassessed to ensure that the proper scope and timing of the projects have been identified. Transmission projects are timed to coincide with delivery service needs; early enough to ensure physical capacity is in place to meet delivery commitments, but not so early as to incur significant carrying costs or limit flexibility if delivery needs change. Each year, planned transmission projects are often re-timed and, in some cases, eliminated.

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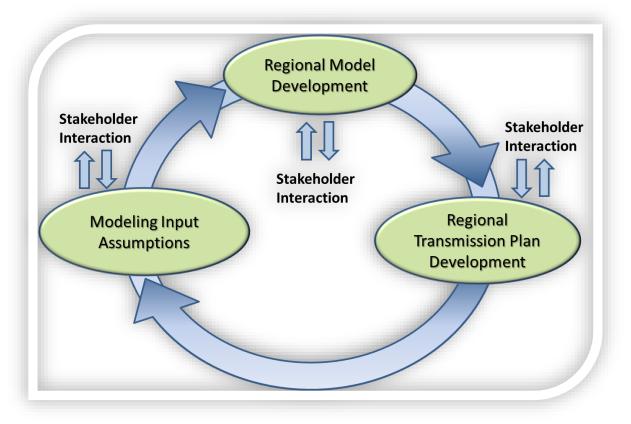
Although the results of these planning efforts culminate annually into a regional transmission plan document, the regional transmission plan is continually re-evaluated as on-going changes in firm delivery service obligations, forecasted conditions, and identified-project alternatives arise.

Therefore, the regional transmission plan is updated and improved upon on a recurring basis, often resulting in the identification of new cost-effective transmission project options, timing changes to existing transmission projects, and the potential removal of some transmission projects from the ten year plan. This planning approach provides a seamless interaction with IRP processes such that as IRP decisions are made, the expected transmission impacts considered in those IRP decisions become reflected in the regional transmission plan, unless other, more cost-effective, reliable solutions have been identified for the then-current forecasted conditions. Similarly, the decisions of other types of market participants to procure long-term, firm transmission delivery service in the SERTP region are incorporated in the development of the regional transmission plan as well. These constantly-changing customer needs drive a constantly-changing regional transmission plan.

The SERTP develops a regional plan each year, but the plan is a "snapshot", solely intended to reflect the then-current transmission plan based upon then-current forecasted assumptions and transmission delivery service needs. Transmission planning is a very iterative process, with delivery needs and associated projects constantly evolving. From the start, transmission planning in the SERTP region reflects a high degree of coordination and joint modeling between neighboring systems. If reliability constraints are identified, the SERTP works to identify cost-effective, reliable transmission projects, not only on their respective transmission systems, but also considering potential transmission projects across two or more transmission systems. Transmission plans are shared with SERTP stakeholders at regular intervals during the year and the frequent engagement with stakeholders allows for additional inputs into potential project alternatives.

Diagram II.1 below illustrates the iterative nature of the SERTP process and the development of the regional transmission plan.

Diagram II.1: Iterative Regional Transmission Plan Development Process



Transmission Planning for Public Policy Requirements

In planning, constructing, operating, and maintaining the transmission system, the responsible transmission entities must meet all local, state, and federal laws/regulations applicable within their respective jurisdictions. These laws and regulations are referred to as public policy requirements ("PPRs"). The SERTP strives to (and are required by law) to meet all PPRs applicable to planning the transmission system. Although PPRs applicable to transmission planning vary by jurisdiction, some common examples of PPRs involving transmission planning include complying with applicable State Public Service Commission requirements, complying with Nuclear Regulatory Commission requirements related to offsite power, and planning consistent with applicable North American Electric Reliability Corporation ("NERC") Reliability Standards.

Although PPRs related to generating resource decisions are typically applicable to LSEs, these too can impact the development of the transmission plan. By offering physical transmission services, SERTP sponsors help facilitate applicable entities, such as LSEs, in meeting their PPR obligations related to resource decisions. As an example, let's assume a state-enacted PPR requires LSEs within



the state to add additional renewable resources to their generation mixes. An LSE, through its IRP analyses and processes, may determine that its most appropriate resource selection is to import renewable generation from a neighboring area. Alternatively, the LSE may determine that its most appropriate option is to interconnect new renewable generation locally. In either case, the LSE can provide its resource selection decisions through long-term, delivery service commitments to the SERTP sponsors, so that the SERTP can incorporate these input assumptions into the transmission expansion planning process to accommodate the delivery of the resource selections.

SERTP Regional Planning Process Timeline

As discussed earlier, the SERTP planning process is an iterative process that continually re-evaluates the regional transmission plan based upon changes in actual and forecasted conditions. Often forecasted conditions can change, driven by inputs from native load and wholesale transmission customers such as their load-serving obligations and resource assumptions.

In light of these on-going changes, in a given planning cycle, transmission projects that may be included in the then-current regional plan are re-assessed by the SERTP sponsors, each applying its respective planning criteria, to determine: 1) if a given project continues to be needed, 2) if the timing of the projects should be adjusted, and 3) if potential alternatives exist that may be more reliable and cost-effective to address the underlying transmission capacity requirements.

Diagrams II.2 and II.3 below illustrate the approximate timing and objectives of the SERTP process.

Diagram II.2: SERTP Process – Quarters 1 & 2

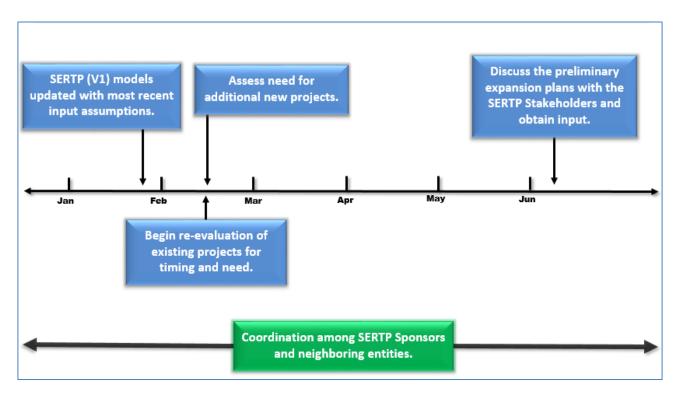
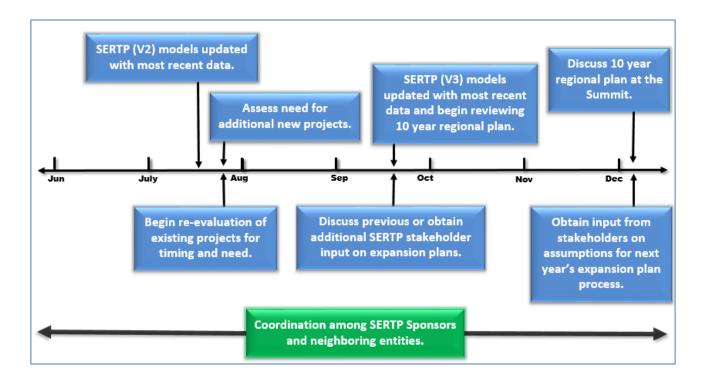


Diagram II.3: SERTP Process - Quarters 3 & 4



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The SERTP Region – A Robust, Reliable, Resilient Transmission System

The SERTP transmission planning approach has resulted in a robust transmission system intended to enable both native load and wholesale customers the right to use the underlying physical transmission capacity in the system associated with their long-term, firm transmission commitments. In fact, the SERTP region is one of the largest transmission planning regions in the Eastern Interconnect in terms of transmission line miles with over 75,000-line miles.

The 2022 regional transmission plan includes forecasted transmission projects to continue to reliably and cost-effectively provide for the transmission needs of the SERTP region. The planned physical transmission capacity provides for a continued robust, reliable, and resilient transmission system which responds well under a wide range of operating uncertainties and supports routine maintenance and construction activities.

Tables II.1 and II.2 below depict a snapshot of the major transmission expansion project types included in the regional transmission plan throughout the ten-year planning horizon.

Table II.1 2022 SERTP Regional Transmission Plan - Transmission Project Snapshot

SERTP	Total
Transmission lines — New (Circuit Mi.)	689
Transmission Lines — Uprates¹ (Circuit Mi.)	1669.6
Transformers ² - New	17
Transformers ² - Replacements	24

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table II.2 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage

SERTP	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines – New (Circuit Mi.)	124.0		139	323.2		102.8
Transmission Lines – Uprates¹ (Circuit Mi.)	1230.0	9.5	100.3	295.1	14.3	
Transformers ² – New	2			7	2	6
Transformers ² – Replacements	4	1	7	11	1	

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

²The voltages shown represent the operating voltages on the high side terminals of the transformer

²The voltages shown represent the operating voltages on the high side terminals of the transformer

III. SERTP Regional Modeling

Regional Model Development

The SERTP annually develops regional powerflow models, which include the coordinated inputs and assumptions needed to support on-going regional transmission planning analyses. These models, which are available to SERTP stakeholders via the <u>secure area</u> of the SERTP website, are utilized by SERTP sponsors to perform regional transmission planning analyses and are also well suited to support SERTP stakeholders in conducting a wide range of scenarios and sensitivities that may be of interest. Table III.1 below provides a list of the 2022 series set of SERTP powerflow models. Additional models may be developed on an "ad hoc" basis based upon the requirements of the then-current planning cycle.

Table III.1: 2022 Series set of SERTP Powerflow Models

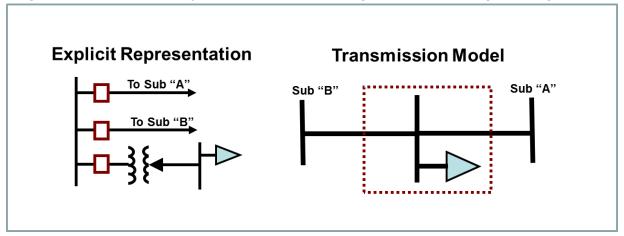
No.	Season	Year	MMWG Starting Point Case
1	Summer	2024	2023SUM
2	Summer	2027	2026SUM
3	Summer	2032	2031SUM
4	Shoulder	2027	2026SSH
5	Winter	2027	2026WIN
6	Winter	2032	2031WIN

The SERTP regional powerflow models provide representations of the existing transmission topology plus forecasted topology changes throughout the ten-year planning horizon. In addition, these models incorporate the input assumptions provided by LSEs and other transmission customers for use in planning the transmission system.

The powerflow models provide a comprehensive representation of the actual and forecasted transmission system so that simulations of the transmission system's ability to reliably accommodate firm delivery service commitments can be performed. The SERTP conducts interactive stakeholder training on modeling and analysis techniques each year intended to help stakeholders better understand and utilize the abundance of information provided in these materials. More information on previous training presentations can be found on the SERTP website.

In the models, transmission lines, transformers, and substations are modeled as branches and nodes (buses). In general, radial transmission facilities only serving load with one source are typically not considered Bulk Electric System (BES) facilities and therefore, are not explicitly modeled. Diagram III.1 depicts a simple example of how an explicit substation representation might be reflected in the powerflow models.

Diagram III.1: SERTP Powerflow Model Substation Representation – Simple Example



The regional powerflow models are considered and marked as Critical Energy Infrastructure Information (CEII). The Federal Energy Regulatory Commission defines CEII as being specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

- 1) Relates details about the production, generation, transmission, or distribution of energy;
- 2) Could be useful to a person planning an attack on the critical infrastructure;
- 3) Is exempt from mandatory disclosure under the Freedom of Information Act; and
- 4) Does not simply give the general location of the critical infrastructure.

The SERTP models and other CEII materials are available to SERTP stakeholders, but are kept in the secure area of the SERTP website for the reasons discussed above. The process by which a stakeholder can obtain access to CEII can be found on the SERTP website.

Regional Modeling Input Assumptions

Vast amounts of data and information, such as the SERTP regional models, are available to all SERTP stakeholders, but are generally more geared towards an engineering audience. Therefore, the summaries below are intended to provide an overview of the modeling assumptions.

Section III and Appendices 1-9 include detailed information on the input assumptions reflected in the regional powerflow models and considered in the transmission planning process. The data shown is representative of the input assumptions provided by LSEs and other transmission customers for specific use in planning the transmission system during the 2022 planning cycle.

Load Forecasts

LSEs, who are responsible for identifying and securing the firm transmission delivery services necessary to meet their current and forecasted load serving requirements, annually supply the

SERTP sponsors with revised load forecasts. The SERTP incorporates the latest load forecasts from each LSE into the latest series of SERTP powerflow models. Diagram III.2 provides cumulative load forecast trends by year for the SERTP region for each of the last five years.

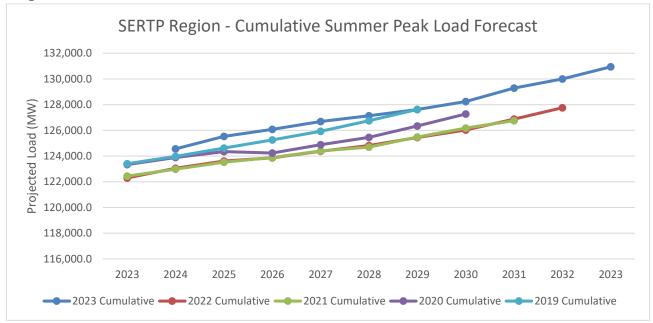


Diagram III.2: Cumulative SERTP Load Forecast

The SERTP powerflow models provide more detailed information on the forecasted load. The 2022 series SERTP powerflow models are made available through the secure area of the SERTP website.

Energy Efficiency and Demand Side Management

The load forecasts provided by LSEs often reflect reduced load serving requirements for particular loads based upon energy efficiency ("EE") and demand side management ("DSM") options. Such options are developed as a part of each individual LSE's IRP processes on a state-by-state and program-by-program basis and therefore can vary in structure and operational characteristics. The transmission planning process in the SERTP necessarily plans for each LSE's loads consistent with their desired treatment of such loads. While each LSE may treat their load forecasting process and assumptions differently, the following describes the typical treatment of energy efficiency and demand side resources.

LSEs proactively seek out DSM options that are economical and of interest to customers. In many cases, such DSM options are setup and implemented under the purview of state-approved programs, and therefore the LSE treats the DSM options in its load forecasting process consistent with the parameters of such programs. Energy efficiency and non-dispatchable (passive) demand

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side resources are typically treated as load-modifying and are reflected in a reduced load forecast provided by the LSEs and incorporated in the SERTP transmission planning models. Dispatchable (active) demand side resources are accounted for and considered as part of the resource decisions that are provided by each LSE. LSEs often do not treat these demand side resources as load-modifying when supplying load forecast assumptions into the SERTP process because of a multitude of factors, including:

- A significant number of exposure hours can greatly exceed the number of hours a DSM resource may be available
- Relying upon active DSM to address transmission constraints can lead to response fatigue from customers and potential withdrawal from DSM programs
- The operational characteristics of active DSM resources may be insufficient to address transient transmission needs

Generating Resources

The 2022 series SERTP powerflow databases available on the secure area of the SERTP website contain information on each of the generating resources connected within the SERTP region as well as those that are planned to be connected within the ten-year planning horizon. Detailed tabular reports on such information can be run on the powerflow databases utilizing PSS/E software.

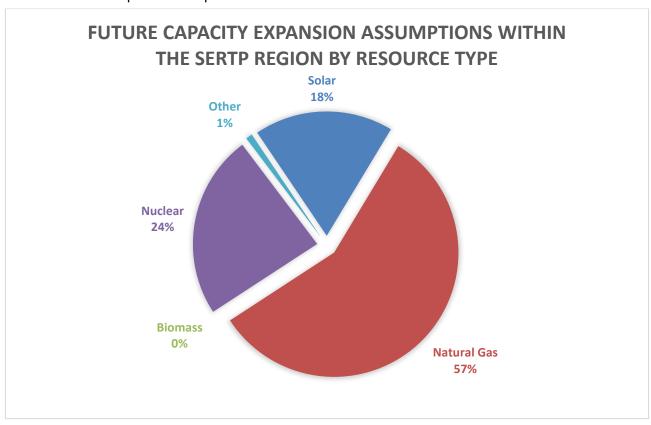
LSEs and market participants routinely make changes in their generation resource assumptions and associated transmission delivery service commitments. These changes can have many different drivers, including the selection of new resources, the retirement of generation, and the expiration of purchase power agreements. The SERTP reflects the latest generation resource assumptions, as provided by LSEs, in the then-current modeling and transmission planning analyses.

Appendices 1 through 9 depict changes in the generation resource assumptions that occur in the ten (10) year transmission planning cycle, including the year(s) in which they occur for each BAA in the SERTP region. Several of the changes in the generation resource assumptions represent capacity sourced from assumed generation expansion within the SERTP region. Diagram III.3 provides a breakdown, by resource type, of these generation expansion assumptions within the SERTP region.

Diagram III.3: Future Capacity Expansion Assumptions within the SERTP Region by Resource Type

Generation assumptions within the SERTP region can also stem from long-term, firm point-to-point transmission service commitments. Additional information on long-term firm transmission service

commitments considered in the 2022 SERTP process is available in Appendices 1 through 9 as well as on each SERTP sponsor's respective OASIS site.



Interface Commitments

In addition to the firm transmission delivery service commitments made by LSEs that source and sink within their NERC BAA, firm transmission delivery service commitments may exist that source and/or sink across two NERC BAAs. These commitments are called interface commitments.

While interface commitments can stem from a number of drivers, many of these commitments are the result of LSEs opting to procure transmission capacity to receive deliveries from off-system resources to serve their loads. Other market participants may also utilize long-term, firm transmission delivery service to obtain delivery priority to access either committed or potential customers in other BAAs. The interfaces are also planned to maintain reliability margins to address uncertainties which may arise in real-time operations. Two types of reliability margins are 1) Transmission Reliability Margin ("TRM"), which is capacity preserved to provide reasonable assurance that the interconnected transmission network will be secure under the inherent uncertainty in real-time system conditions and 2) Capacity Benefit Margin ("CBM"), which is capacity preserved to enable LSEs access to generation from other interconnected systems to meet generation reliability requirements should times of emergency generation deficiencies arise.



Each SERTP sponsor plans the transmission system to accommodate all its long-term firm interface commitments including reliability margins. This planning, along with planning for other long-term firm commitments, has resulted in a highly integrated and robust network of ties within the SERTP region.

Appendices 1 through 9 provide detail on the interface commitments modeled in the 2022 series SERTP regional powerflow models. Additional information on the long-term firm transmission service interface commitments considered in the 2022 SERTP process is available on each SERTP sponsor's respective OASIS sites.

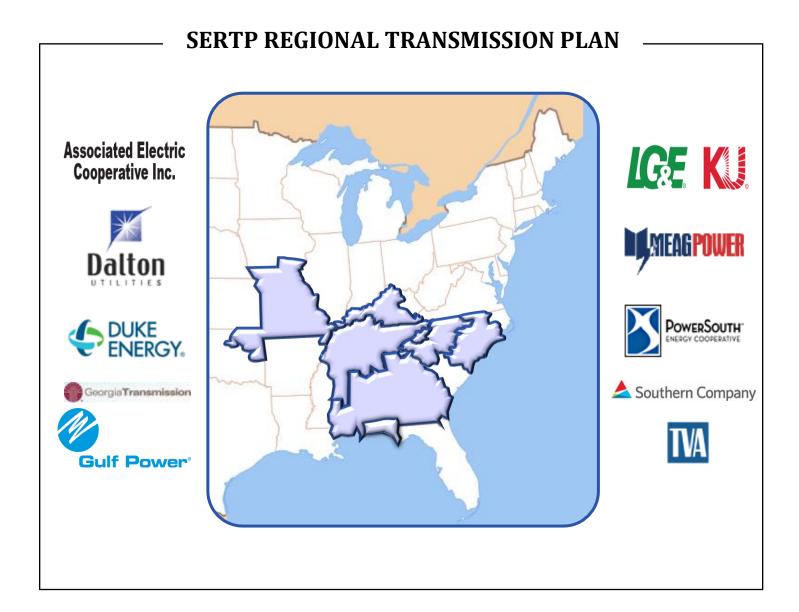


IV. SERTP Regional Transmission Plan Summary

Regional Plan Summary

The regional transmission plan represents the culmination of each year's planning cycle assessment, providing a "snapshot" of the transmission capacity requirements to safely, reliably, and economically serve the load within the SERTP region based upon the current resource assumptions of LSEs and other transmission customers. As described in Sections II & III, the regional transmission plan is continually assessed and may be revised based upon changes to these input assumptions. The 2022 SERTP regional transmission plan, found in its entirety in Section V, consists of around 100 transmission projects, totaling an estimated \$4.8 billion dollars, including: over 650 miles of new transmission lines, over 1650 miles of transmission line uprates (including upgrades, reconductors, and rebuilds), and 41 transformer additions and/or replacements. This planned physical transmission capacity provides for a continued robust, reliable, and resilient transmission system that responds well under a wide range of operating uncertainties and supports routine maintenance and construction activities. Tables II.1 and II.2 in Section II provide additional cumulative breakdowns on the regional transmission plan, while Appendices 1 through 9 depict tabular breakdowns for each BAA.

The SERTP Regional Transmission Plan



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SERTP TRANSMISSION PROJECTS DUKE CAROLINAS Balancing Authority Area

In-Service

2023

Year:

Project Name: GREAT FALLS SW STA - WATEREE TIE 100KV TRANSMISSION LINE

Description: 6-wire the Great Falls Sw Sta - Wateree Tie 100kV Transmission Line

Supporting The Great Falls Sw Sta - Wateree Tie 100kV double circuit transmission line can overload

Statement: under contingencies

2023

In-Service

Year:

Project Name: MOCKSVILLE MAIN - WINSTON SWITCHING STATION 100 KV TRANSMISSION LINE

Description: Rebuild 10 miles (Winston Switching Station to Idols Tap) of the Mocksville Main -

Winston Switching Station 100 kV double circuit transmission line with 1295 ACSR rated

at 120°C

Supporting Mocksville Switching Station -Winston Switching Station 100 kV Double Circuit

Statement: transmission line can overload under contingency

In-Service 2024

Year:

Project Name: SADLER TIE – DAN RIVER 100 KV TRANSMISSION LINE

Description: Construct approximately 9.2 miles of new 100 kV transmission line between Dan River

Steam Station and Sadler Tie with 954 AAC at 120°C.

Supporting Thermal overloads occur around Dan River Steam Station and Dan River Combined Cycle

Statement: Station under contingency.



DUKE CAROLINAS Balancing Authority Area

In-Service

2024

Year:

Project Name: WILKES TIE 230 KV SUBSTATION

Description: Install a new 230/100 kV, 448 MVA transformer at Wilkes Tie.

Supporting Thermal overloads occur near North Wilkesboro Tie and additional voltage support is

Statement: needed in the area under contingency.

In-Service

Year:

Project Name: ALLEN STEAM STATION TRANSFORMER REPLACEMENT

2025

Description: To facilitate the generation retirement at Allen Steam Station, both 230/100 kV

transformers need to be replaced with larger 448MVA units

Supporting Statement: Allen Steam Station transformers overload under contingency

In-Service

Year:

2025

Project Name:

N GREENVILLE TIE - TRANSFORMER REPLACEMENT

Description: REPLACE EXISTING BANK 1 WITH NEW LARGER 448 - MVA 230/100/44KV AUTOBANK.

REPLACE EXISTING 230 KV AND 44 KV OIL BREAKERS WITH GAS

Supporting Statement: EXISTING N GREENVILLE TIE BANK 1 CAN OVERLOAD UNDER CONTINGENCY

In-Service

Year:

Project Name: HODGES TIE - CORONACA TIE 100 KV TRANSMISSION LINE

2026

Description: Rebuild approximately 9.2 miles of the Hodges Tie - Coronaca Tie 100 kV transmission

line with 795 ACSS/TW at 200°C

Supporting

The Hodes Tie - Coronaca Tie 100 kV transmission line can overload under contingencies



DUKE CAROLINAS Balancing Authority Area

In-Service

2026

Year:

Project Name: NORTH GREENVILLE TIE TO PISGAH TIE 100 KV TRANSMISSION LINE

Description: Rebuild 11.5 miles (North Greenville Tie to Marietta Tie) of the North Greenville Tie -

Pisgah Tie 100 kV transmission line with 1272 ACSR at 120°C.

Supporting The North Greenville Tie - Pisgah Tie 100 kV transmission can overload under

Statement: contingencies

2027

In-Service

۳.

Year:

Project Name: LANCASTER MAIN - MONROE MAIN 100KV TRANSMISSION LINE

Description: Rebuild 23.8 miles of Lancaster Main - Monroe Main 100kV double circuit transmission

line with 1158 ACSS/TW rated at 200°C

Supporting Statement: Lancaster Main - Monroe Main 100kV transmission line can overload under contingency

In-Service

2027

Year:

Project Name: MORNING STAR TIE EXPANSION

Description: Expand the 230 kV switchyard at Morning Star Tie to a full breaker and a half

configuration and replace all three existing autobanks with new 230/100/44 kV 448MVA

transformers.

Supporting The addition of a second Sandy Ridge circuit requires the expansion of the 230 kV at

Statement: Morning Star Tie. The existing banks at Morning Star can overload under contingencies



DUKE CAROLINAS Balancing Authority Area

In-Service

Year:

Project Name: WINECOFF TIE - CONLEY SWITCHING STATION 100 KV TRANSMISSION LINE

Description: Rebuild 7.89 miles of the Winecoff Tie - Connely Switching Station 100 kV transmission

line with 1272 ACSR at 120°C

Supporting The Winecoff Tie - Conely Switching Station 100 kV transmission Lines can overload

Statement: under contingency

2028

2027

In-Service

Year:

Project Name: WYLIE SWITCHING STATION - WOODLAWN TIE 100 KV TRANSMISSION LINE

Description: Reconductor 8 miles (Wylie Tie to Arrowood Retail) of the Wylie Tie - Woodlawn Tie

100 kV double circuit transmission line with bundled 477 ACSR at 120°C.

Supporting Statement: The Wylie Tie - Woodlawn Tie 100 kV transmission line can overlaod under contingency

In-Service

2029

Year:

Project Name: CRETO TIE TO CORONACA TIE 100 KV TRANSMISSION LINE

Description: Rebuild and add a second circuit to 13 miles of the single circuit Creto Tie to Coronaca

Tie 100 KV transmission Line with 954 ACSR at 120°C.

Supporting

The Creto Tie - Coronaca Tie 100 kV transmission line can overload under contingency

Statement:

In-Service

Year:

ce 2029

Project Name: NEWPORT TIE - MORNING STAR TIE 230 KV TRANSMISSION LINE

Description: ADD A SECOND CIRCUIT TO THE EXISTING NEW PORT TIE - MORNING STAR TIE 230 KV

TRANSMISSION LINE

Supporting Existing Newport Tie - Morning Star Tie 230 kV Transmission Line can overload under

Statement: contingencies



DUKE PROGRESS EAST Balancing Authority Area

In-Service

Year:

Project Name: CARTHAGE 230 KV SUBSTATION

2025

Description: Construct Carthage 230 kV Substation

Supporting Various contingencies cause overloads and low voltages in the area.

Statement:

In-Service 2025

Year:

Project Name: FAYETTEVILLE - FAYETTEVILLE DUPONT 115 KV LINE

Description: Reconductor the Hope Mills Church St.-Roslin Solar section (3.0 miles) of the Fayetteville

- Fay. DuPont SS 115 kV line with 3-1590 MCM ACSR conductor.

Supporting Fayetteville – Fayetteville Dupont 115 KV Line Overloads under contingnecy

Statement:

In-Service 2026

Year:

Project Name: WEATHERSPOON-LOF 115 KV TRANSMISSION LINE

Description: Reconductor approximately 9.0 miles from Maxton to Pembroke 115 kV substation with

795 MCM ACSR or equivalent. Replace the existing 600A switch (45-2) with a 1200A

switch.

Supporting The Maxton-Pembroke section of the Weatherspoon-Ind 304440 115 kV transmission

Statement: line overloads under contingency.

In-Service 2028

Year:

Project Name: DURHAM – RTP 230 KV TRANSMISSION LINE

Description: Reconductor approximately 10.0 miles of the Durham – RTP 230 kV transmission line

with bundled $6-1590\,ACSR$ rated for 1195 MVA.

Supporting The Durham – RTP 230 kV transmission line overloads under contingency.



DUKE PROGRESS EAST Balancing Authority Area

In-Service

2028

Year:

Project Name: FRANKLINTON - SPRING HOPE 115 KV LINE, TAKE LOAD OFF LINE

Description: Move load off Franklinton-Spring Hope 115kV and put it on Rocky Mount-Person 230kV

Supporting Multiple contingencies cause low voltage of the Franklinton - Spring Hope SS 115 KV
Statement: Line. Falls - Franklinton 115 KV West Line can also overload under a nearby contingency.



DUKE PROGRESS WEST Balancing Authority Area

In-Service

Year:

2026

2026

ASHEVILLE PLANT - OTEEN WEST 115 KV TRANSMISSION LINE, BALDWIN TAP Project Name:

Description: Construct approximately 2.2 miles of new 115 kV transmission line from the Asheville

> Plant – Oteen West 115 kV transmission line to the Asheville Plant – Oteen East 115 kV transmission line, with 795 ACSR. The Baldwin 115 kV substation will be reconnected to

this new tap line.

Supporting Statement: Additional voltage support is needed in the Baldwin area under contingency.

In-Service

Year:

CRAGGY-ENKA 230 KV TRANSMISSION LINE Project Name:

Description: Construct approximately 10.0 miles of new 230 kV transmission line from the Craggy

230 kV substation to the Enka 230 kV substation with 3-1590 MCM ACSR or equivalent.

Supporting

The Enka-West Asheville 115 kV line overloads under contingency.

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

GULF POWER Balancing Authority Area

In-Service

2022

Year:

Project Name:

ARGYLE INJECTION

Description: Build a new 230/115kV substation (Argyle). Loop-in Shoal River-Smith 230kV line and

Glendale Road Tap-Glendale Road 115kV line section. Reconductor Glendale Road Tap-Argyle line section to a minimum of 1044 Amps (208 MVA). Build a new 115kV line of approximately 5 miles rated at 1495 Amps (298 MVA) to Glendale Road Tap to create new Argyle-Holmes Creek 115kV line. Install a 230/115kV, 500 MVA autotransformer at

Argyle substation.

Supporting This project eliminates several overloads under a number of contingency scenarios. This

Statement: project also provides additional operational and maintenance flexibility which then

increases reliability.

In-Service

2022

Project Name: CHIPLEY 115KV LOOP SUBSTATION

Year:

Description: Build a new 115kV line of approximately 1.6 miles rated at 592 Amps (118 MVA) from

Chipley Tap to Chipley to provide loop service.

Supporting Loss of the transmission radial will cause consequential load loss.

Statement:

In-Service

Year:

Project Name: CRIST-DEATON #2 115KV

2022

Description: Reconductor approx. 2.1 miles of JAY ROAD-MUNSON 115kV line to a minimum of 1495

Amps (298 MVA).

Reconductor approx. 2.4 miles of MUNSON-DEATON 115kV line to a minimum of 1495

Amps (298 MVA).

Supporting

The Deaton-Munson-Jay Road 115 kV transmission line overloads under contingency.



GULF POWER Balancing Authority Area

In-Service

2022

Year:

CRIST-SOUTH CRESTVIEW #2 115KV Project Name:

Description: Reconductor approx. 15 miles of DEATON-HOLT TP 115kV line to a minimum of 1495

Amps (298 MVA).

Reconductor approx. 11.3 miles of HOLT TP-SOUTH CRESTVIEW 115kV line to a

minimum of 1495 Amps (298 MVA).

DEATON INJECTION PHASE I AND PHASE II

Supporting The Deaton-Holt TP-South Crestview 115 kV transmission line overloads under

Statement: contingency.

In-Service

Project Name:

2022

Year:

Description: Build a new 115kV substation (Deaton) looping-in the existing Crist-South Crestview #1

> & #2-115kV lines. Loop existing Alligator Swamp-Miller Bayou 230kV line into new Deaton 230kV expansion. Install a new 230/115kV, 500 MVA autotransformer. Loop

existing Blackwater-Crooked Creek 115kV line section into Deaton 115kV.

This project eliminates several overloads under a number of contingency scenarios. This Supporting Statement:

project also provides additional operational and maintenance flexibility which then

increases reliability.

In-Service

2022 Year:

Project Name: **GRACEVILLE 115KV LOOP SUBSTATION**

Description: Build a new 115kV line of approximately 0.5 miles rated at 1411 Amps (281 MVA) from

Graceville Tap to Graceville to provide loop service.

Supporting

Loss of the transmission radial will cause consequential load loss.



GULF POWER Balancing Authority Area

In-Service

2022

Year:

Project Name: **HATHAWAY 115KV LOOP SUBSTATION**

Description: Build a new 115kV line of approximately 2.39 miles rated at 1512 Amps (301 MVA) from

Hathaway Tap to Hathaway to provide loop service. Make Hathaway a breaker station.

Supporting Statement: Loss of the transmission radial will cause consequential load loss.

In-Service

2022

Year:

RAVEN-SINAI CEMETARY 161KV TRANSMISSION LINE Project Name:

Build a new 161kV line of approximately 176 miles rated at 3,210 Amps (895 MVA) from Description:

Raven (FPL) to Sinai Cemetery (GP) substations. Add a 230/161kV transformer at Raven

and Sinai substations.

Supporting This project will help meet future load growth and continue to improve reliability in a Statement:

low cost manner for Gulf Power's customers by implementing a direct transmission

connection between Gulf Power and FPL.

In-Service

Year:

Project Name: **VERNON 115KV LOOP SUBSTATION**

2022

Description: Build a new 115kV line of approximately 0.8 miles rated at 346 Amps (69 MVA) from

Vernon Tap to Vernon to provide loop service.

Supporting

Loss of the transmission radial will cause consequential load loss.



GULF POWER Balancing Authority Area

In-Service

Year:

Project Name: **CRIST 2ND AUTOTRANSFORMER**

2023

Description: Add 2nd, 230/115kV, 500 MVA autotransformer at Crist substation. Replace existing

230/115kV autotransformer at Crist substation with 500 MVA unit.

Supporting This project eliminates overloads under a number of contingency scenarios. This project Statement:

also provides additional operational and maintenance flexibility which then increases

reliability.

In-Service

Project Name:

2023

Year:

CRIST-SOUTH CRESTVIEW #1 115KV

Description: Reconductor approx. 21.64 miles of DEATON-MILLIGAN TAP 115kV line to a minimum

of 1495 Amps (298 MVA).

Reconductor approx. 4.7 miles of MILLIGAN TAP-SOUTH CRESTVIEW 115kV line to a

minimum of 1495 Amps (298 MVA).

Supporting The Deaton-Milligna TP-South Crestview 115 kV transmission line overloads under

Statement: contingency.

In-Service

Year:

Project Name: **DESTIN LOOP PROJECT**

2023

Description: Build a new 115kV line of approximately 4.18 miles to loop-in Destin and Henderson

Park substations on the Bluewater Bay (PS)-Crystal Beach 115kV line section.

Supporting

Statement:

Loss of the transmission radial will cause consequential load loss.



GULF POWER Balancing Authority Area

In-Service

2023

Year:

Project Name: EAST CRESTVIEW 115KV LOOP SUBSTATION

Description: Build a new 115kV line of approximately 0.89 miles rated at 1044 Amps (208 MVA) from

East Crestview Tap to East Crestview to provide loop service.

Supporting Statement: Loss of the transmission radial will cause consequential load loss.

In-Service

2023

Year:

Project Name: GREENWOOD-LANSING SMITH #1 115V

Description: Reconductor approx. 2.8 miles of LANSING SMITH-NORTH BAY 115kV line to a minimum

of 1860 Amps (371 MVA).

Reconductor approx. 2.44 miles of NORTHSIDE-NORTH BAY 115kV line to a minimum of

1860 Amps (371 MVA).

Supporting The Lansing Smith-Norh Bay-Northside 115 kV transmission line overloads under

Statement: contingency.

In-Service

Statement:

Year:

Project Name: HORUS INJECTION

2023

Description: Build a new 230kV substation (HORUS). Loop-in Sinai-Smith 230kV line and Highland City-

Holmes Creek 230kV line. Build a new 230kV line approximately 14 miles rated at 1905

Amps (759 MVA) from Horus to Melvin substaions.

Supporting This project eliminates overloads under a number of contingency scenarios. This project

also provides additional operational and maintenance flexibility which then increases

reliability.

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

GULF POWER Balancing Authority Area

In-Service

2023

2023

Year:

Project Name: INNERARITY 115KV LOOP SUBSTATION

Description: Build a new 115kV line of approximately 8.5 miles rated at 1495 Amps (298 MVA) from

Beach Haven to Innerarity to provide loop service.

Supporting Statement: Loss of the transmission radial will cause consequential load loss.

In-Service

...

Year:

Project Name: LULLWATER 115KV LOOP SUBSTATION

Description: Build a new 115kV line of approximately 0.8 miles rated at 1210 Amps (241 MVA) from

Lullwater Tap to Lullwater to provide loop service.

Supporting Statement: Loss of the transmission radial will cause consequential load loss.

In-Service

Year:

Project Name: ROMANA 115KV LOOP SUBSTATION

2023

Description: Build a new 115kV line of approximately 0.6 miles rated at 973 Amps (194 MVA) from

Romana Tap to Romana to provide loop service.

Supporting Statement:

ting Loss of the transmission radial will cause consequential load loss.

In-Service

2023

Year:

Project Name: SMITH AUTOTRANSFORMER UPGRADE

Description: Upgrade station equipment at Smith substation to increase autotransformer normal

rating to 400 MVA minimum.

Supporting Statement:

This project eliminates overloads under a number of contingency scenarios. This project

also provides additional operational and maintenance flexibility which then increases

reliability.



GULF POWER Balancing Authority Area

In-Service

2024

Year:

Project Name: HOLMES CREEK – SOUTH CRESTVIEW 115 KV TRANSMISSION LINE

Description: Rebuild the ~54.4 mile section of 336.4 ACSR 26/7 at 75°C from Holmes Creek-Pittman-

Geneva Tap-Glendale Tap-East Crestview Tap-South Crest View with 795 26/7 ACSR at

100°C (1,086A)

Supporting This project eliminates high loadings under contingency scenarios. This project also

Statement: provides additional operational and maintenance flexibility, which increases reliability.

In-Service

Project Name:

2025

Year:

ARGYLE – SANTA ROSA 115 KV TRANSMISSION LINE

Description: Build a new 115kV line of approximately 45 miles rated at 1495 Amps (298 MVA) from

the new Argyle substation to Santa Rosa substation. Build a new 115kV line of

approximately 7.4 miles (common structure) from Santa Rosa to Sandestin substations.

Build a 3-breaker ring bus substation at Sandestin site.

Supporting This project eliminates several overloads under a number of contingency scenarios. This

Statement: project also provides additional operational and maintenance flexibility which then

increases reliability.

In-Service

2025

Year:

Project Name: GULF BREEZE 115KV LOOP SUBSTATION

Description: Build a new 115kV line of approximately 3.5 miles rated at 1495 Amps (298 MVA) from

Live Oak to Gulf Breeze to provide loop service.

Supporting

Loss of the transmission radial will cause consequential load loss.



GULF POWER Balancing Authority Area

In-Service

2027

Year:

Project Name: SINAI-GASKIN 115KV TRANSMISSION LINE

Description: Upgrade/reconductor Sinai-Altha (PS) 115kV line section to a minimum of 567Amps

(113MVA)

Supporting

The Sinai-Callaway 115 kV transmission line overloads under contingency.



SERTP TRANSMISSION PROJECTS LG&E/KU Balancing Authority Area

In-Service

2024

Year:

Project Name: BLUE LICK TO CEDAR GROVE TAP 161KV TRANSMISSION LINE

Description: Replace 0.1 miles of 795MCM 61XAA, 4.6 miles of 500MCM 19XCU conductor, and

795 MCM 61 XAA line risers and jumper in the Blue Lick to Cedar Grove 161kV line with

795MCM 26X7 SSAC or better.

Supporting Statement: The Blue Lick to Cedar Grove Tap 161kV transmission line overloads.

In-Service

2025

Year:

Project Name: MIDDLETOWN TO BUCKNER 345KV TRANSMISSION LINE

Description: Replace the 345kV 2000A breakers associated with the Middletown to Buckner 345kV

line with 3000A breakers.

Supporting

The Middletown to Buckner 345kV line overloads under contingency.



SERTP TRANSMISSION PROJECTS POWERSOUTH Planning Authority Area

In-Service

Year:

FOUNTAIN 115KV CAP BANK Project Name:

2022

2024

Description: Install a 30 Mar capacitor bank at the Fountain 115kV substation.

Supporting There is a need for voltage support in the immediate area under contingency and

Statement: additional reactive resources are needed in this area to resolve those issues.

In-Service

Year:

Project Name: OAK GROVE SWITCHING TO CHUMUCKLA 115KV CONVERSION

Construct a new 115kV transmission line from Oak Grove Switching 115kV to Chumuckla Description:

115kV which will replace the existing 46kV transmission line.

Supporting This line will complete a 115kV network path from Wye 115kV Switching to Oak Grove

Statement: 115kV Switching to provide transmission redundancy for area delivery points.

In-Service 2025

Year:

Project Name: **ELSANOR-MIFLIN 115KV SECOND LINE**

Description: Construct approximately 12 miles of new 115kV transmission line from Elsanor to Miflin

with 795 ACSR at 100°C.

Supporting

The existing Elsanor-Miflin 115kV transmission line overloads under contingency.



POWERSOUTH Planning Authority Area

In-Service

2025

Year:

Project Name: EREC 115KV CONVERSION

Description: This project will convert 21.36 miles of 46kV transmission to 115kV operation. Three

46kV distribution delivery points will also be upgraded to 115kV service as part of the

project.

2025

Supporting

To support additional load growth in the area.

Statement:

In-Service

Year:

Project Name: GASKIN – SOUTHPORT 115 KV TRANSMISSION LINE

Description: Construct approximately 9.0 miles of new 115 kV transmission line from Gaskin

Switching Station to Southport substation with 795 ACSR at 100°C.

Supporting Improve the reliability of Gulf Coast Electric's substations by providing a looped service

Statement: feed



In-Service

2023

2023

2023

Year:

Project Name: ARKWRIGHT-LLOYD SHOALS 115KV TRANSMISSION LINE

Description: Reconductor the Arkwright - Lloyd Shoals 115KV line, 35.7 miles, to 100°C ACSR 795

conductor. Upgrade substations along the path of network flow.

Supporting Statement: The Arkwright - Lloyd Shoals 115KV line overloads under certain contingencies.

In-Service

I-Sel Vice

Year:

Project Name: BIG CREEK - ELLICOTT 230 KV UPGRADE

Description: Upgrade approximately 30.4 miles of 1351 51/19 ACSR at 75°C to 100°C from Ellicott SS

to Big Creek TS.

Supporting Statement: The Big Creek - Ellicott 230 kV transmission line overloads under contingency.

In-Service

Year:

Project Name: BLAKELY PRIMARY - GEORGE DAM (USA) 115KV LINE REBUILD

Description: Rebuild 8.9 miles of 477 ACSR Hawk at 75 °C conductor from Huckleberry SS to George

 \mbox{Dam} (USA) line section using 1351 ACSR Martin conductor at 100°C. Ensure all

substation equipment along the path of network flow matches or surpasses the rating of

the new conductor.

Supporting After the Blakely Primary - George Dam (USA) 115kv is split with the construction of

Statement: Huckleberry SS, the new George Dam (USA) Huckleberry 115kV line will become

overloaded under contingency.



In-Service

2023

Year:

Project Name: BONAIRE - KATHLEEN 115 KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor approximately 6 miles of the Bonaire Primary - Kathleen 115 kV

transmission line using 1351 ACSR conductor.

Supporting Statement: The Bonaire - Kathleen 115 kV line overloads under contingency.

In-Service

ervice

Year:

Project Name: BROOKWOOD TS - CAPACITORS

Description: Install two (2) 60 MVAR, 230 kV harmonic filtered capacitor banks at Brookwood TS

Supporting Low voltage in the area under contingency. This project provides voltage support under

Statement: contingency scenarios.

2023

In-Service

Year:

2023

2023

Project Name:

BUTLER REACTORS

Description: Increase the reactance on the reactors on the Bonaire - Butler 230kV line.

Supporting

The Bonaire Primary-Butler 230kV line overloads under contingency.

Statement:

In-Service

Year:

Project Name: CARRIERE SW – MARION SE 230 KV TRANSMISSION LINE

Description: Construct a new approximately 33 mile, 230 kV line from Carriere SW 230/115 kV

substation to a new Marion SE 230 kV switching station with 1351 ACSS at 200°C.

Supporting Statement: The Hattiesburg SW - Wiggins 115 kV line overloads under contingency.



SOUTHERN Balancing Authority Area

In-Service

2023

Year:

CENTRAL CORRIDOR SOLUTION Project Name:

Description: Rebuild approximately 97.0 miles of the West Montgomery - Greenville - Evergreen -

North Brewton 115 kV transmission line with 795 ACSS at 200°C.

Supporting Multiple sections of the central corridor overload under contingency. This project also Statement:

provides additional operational and maintenance flexibility which then increases

reliability.

In-Service

Year:

CROOKED CREEK CAPACITOR BANKS Project Name:

Description: Install two new 115 kV, 15 MVAR capacitor banks at Crooked Creek TS.

Supporting Low voltage in the area under contingency. This project provides voltage support under

Statement: contingency scenarios.

2023

2023

In-Service

Year:

Project Name: DAVIS STREET - FOWLER STREET 115KV JUMPER REPLACEMENTS

Description: Replace jumpers at Davis Street on the Davis Street - Fowler Street 115kV line with

higher rated jumpers.

Supporting For a contingency, the jumpers at Davis Street end of the Davis Street - Fowler Street

Statement: 115kV line load beyond their thermal rating.



SOUTHERN Balancing Authority Area

In-Service

2023

Year:

Project Name: **DEAL BRANCH - SYLVANIA 115 KV (REBUILD)**

Description: Rebuild 24.81 miles from the Deal Branch substation to the Sylvania substation with

100°C 795 ACSR. conductor.

Supporting Statement: The Deal Branch - Sylvania 115kV line overloads under contingency.

In-Service

Year:

DOUGLAS - LAKE BEATRICE 115KV TRANSMISSION LINE UPGRADE Project Name:

Upgrade 3.4 miles of the Douglas - Lake Beatrice 115kV line 50°C 336 ACSR to 100°C Description:

operation.

2023

Supporting The Douglas - Lake Beatrice 115 kV transmission line becomes overloaded under

Statement: contingency.

In-Service Year:

2023

Project Name: **EAST MAYSVILLE 115KV CAPACITOR BANK**

Description: Install a 115kVcapacitor bank at East Maysville substation.

Supporting This project addresses low votage on the buses of Midway, East Maysville, and

Statement: Ridgeway Church Rd 115kV buses under contingency.



In-Service

2023

Year:

Project Name: EAST WATKINSVILLE - RUSSELL DAM 230 KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor approximately 48.3 miles of 100°C 1351.5 ACSR/SD conductor, with 200°C

1351.5 ACCR conductor. Replace the Over Head Ground Wire.

Supporting The existing self-damping conductor has reached the end of its service life. Also, the

Statement: existing rating is exceeded under contingency in import scenarios.

In-Service

Year:

Project Name: EAST WATKINSVILLE - RUSSELL DAM 230KV JUMPER REPLACEMENTS

Description: Replace the existing jumpers from 90° C 1-1590 AAC with 90° C 2-1590 AAC or

equivalent at Russell Dam and East Watkinsville substations on the East Watkinsville -

Russell Dam 230 kV line.

Supporting Statement:

This project addresses capacity increase needs.

In-Service

2023

2023

2023

Year:

Project Name: ENTERPRISE 230 KV SHUNT REACTORS

Description: Install (2) 3-phase 230 kV, 51 MVAR shunt reactors at Enterprise 230 kV SS

Supporting

Provides voltage support in during light load conditions

Statement:

In-Service

Year:

Project Name: FAYETTE – GOODSPRINGS 161 KV TRANSMISSION LINE

Description: Rebuild approximately 37.0 miles of 397.5 ACSR at 100°C on the Fayette to Goodsprings

161 kV transmission line, with 795 ACSS at 200°C.

Supporting Statement:

The Fayette - Goodsprings 161 kV transmission line overloads under contingency.

45



In-Service

2023

2023

Year:

Project Name: HI HAT 115KV CAPACITOR BANK INSTALLATION

Description: Install a 115kV 45MVAR capacitor bank at Hi Hat substation.

Supporting This project addresses low voltage issues at Hi Hat substation under contingency.

Statement:

In-Service

Year:

Project Name: HIGHWAY 11 BROOKWOOD SOLUTION

Description: Construct approximately 6.0 miles of 795 ACSR from Vance SS to Scott Davis DS 115 kV

transmission line. Construct a new approximately 5.2 mile 115 kV transmission line from South Bessemer to Scott Davis Tap with 795 26/7 ACSR at 100°C. Construct a new approximately 4 mile 115 kV TL from Brookwood TS to Cedar Cove Tap with 795 26/7

ACSR at 100°C.

Supporting The Vance SS - South Bessemer TS 115 kV transmission line overloads under

Statement: contingency. This project also addresses voltage constraints under contingency.

In-Service

Year:

2023

Project Name: HOPE HULL AREA SOLUTION PHASE 1

Description: Construct approximately 1.8 miles of 795 ACSS 115 kV transmission line at 200°C

between Hyundai Power Transformers to a tap point on the W. Montgomery to Pintlala 115 kV transmission line. Reconductor approximately 2.7 miles of the Hope Hull Tap to

Hyundai Power Transformers 115 kV transmission line with 795 ACSS at 200 $^{\circ}\text{C}.$

Supporting

Statement:

Provides additional operational and maintenance flexibility, which increases reliability.



In-Service

2023

Year:

Project Name: JUDY MOUNTAIN SHUNT REACTOR

Description: Install one 150 MVAR shunt reactor set at Judy Mountain connected to the 230 kV bus.

Supporting Unacceptably high voltages have been observed across North Georgia during very low-

Statement: load conditions.

2023

In-Service

Year:

rear:

Project Name: KETTLE CREEK - PINE GROVE 115 KV TRANSMISSION LINE UPGRADE PHASE ONE

Description: Rebuild approximately 20.5 miles of 4/0 ACSR at 50°C to 75°C from Kettle Creek Primary

to Pearson Tap.

Supporting The Kettle Creek Primary – Pine Grove 115 kV transmission line overloads under

Statement: contingency in NFRC cases.

2023

In-Service

Year:

Project Name: MCEVER ROAD - SHOAL CREEK 115 KV TRANSMISSION LINE REBUILD - PHASE 2

Description: Rebuild approximately 2.41 miles (2-4/0 copper) of the McEver Road - College Square

section of the McEver Road - Shoal Creek 115 kV transmission line with 100C 1033 ACSR.

Supporting

Statement:

The McEver Road – Shoal Creek 115 kV transmission line overloads under contingency.

In-Service 2023

Year:

Project Name: MIDDLE FORK STATIC VAR SYSTEM

Description: Install a +150/-150 MVAR STATCOM connected to the 230 kV bus at Middle Fork

Supporting Fast reactive support is needed to address FIDVR issues in North Georgia. This project

Statement: will also address high-voltage issues that occur during valley load conditions.

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

SOUTHERN Balancing Authority Area

In-Service

2023

Year:

Project Name: NELSON 230-115-46KV SUBSTATION (REBUILD)

Description: Extensive rebuild of the Nelson 230-115-46kV substation per the latest standrads.

Replace the two 230/115 kV Autobanks at Nelson and upgrade jumpers on the Holly

Springs - Nelson 115kV line from 500CU to 1590AAC.

Supporting Substation upgrade is required to get all major equipment, relaying and facilities to the

Statement: latest standards.
Holly Springs - Nelson 115kV line overloads under contingency.

The The

230/115kV auto transformer #2 overloads under contingency.

In-Service

Year:

2023

Project Name: POSSUM BRANCH 230/115 KV PROJECT

Description: Construct approximately 14 miles of new 230 kV line from Possum Branch to Roopville

with 1351 ACSR conductor at 100°C. Install a 230/115 kV, 400 MVA transformer at Possum Branch with a 230 kV bus. (GPC): Construct a 230 kV a ring bus switching

station at Roopville along with additional substation modifications.

Supporting Statement: Project is necessary to facilitate planned maintenance in the Bremen area.

In-Service

Year:

Project Name: RACCOON CREEK - SCOOTER 230KV JUMPER REPLACMENT

Description: Replace AAC Larkspur 1033.5 jumpers at Raccoon Creek, for the Scooter 230kV line,

with AAC 1590 jumpers that match, or surpass, the rating of 1033.5 ACSR Curlew line

conductor.

2023

Supporting

The Raccoon Creek - Scooter 230kV line overloads under contingency.



SOUTHERN Balancing Authority Area

In-Service

Year:

2023

2023

Project Name: SAWHATCHEE SWITCH REPLACEMENT

Description: Replace 600A switch at Sawhatchee substation.

Supporting The switch at Sawhatchee exceeds its thermal capacity rating under contingency.

Statement:

In-Service

Year:

Project Name: SINCLAIR DAM - WARRENTON 115KV RECONDUCTOR

Description: Reconductor the entire Sinclair Dam - Warrenton Primary line (17.4 miles of 50°C 4/0

CU) with 100°C 795 ACSR Drake conductor. Replace limiting elements in substations

along the network path.

Supporting Statement: The Sinclair Dam - Warrenton Primary 115kV line overloads under contingency.

In-Service Year:

2023

Project Name:

SITE 'H' ENHANCED PHYSICAL SECURITY

Description: Install enhanced physical security equipment. NFRC-Driven project.

Supporting

CIP-014 Corrective Action Plan

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

SOUTHERN Balancing Authority Area

In-Service

2023

Year:

Project Name:

SOUTH BIRMINGHAM 115 KV PROJECT

Description: Construct a 115 kV switching station (Lakeshore SS) between Bessemer TS and Magella

TS that loops in the existing Bessemer to Magella 115 kV transmission line and the North Helena to Patton Chapel 115 kV transmission line. Construct another 115 kV switching station (Massey Rd SS) at Massey Rd DS to loop in the Massey Rd to S Jefferson 115 kV transmission line, Massey Rd to Chace Lake 115 kV transmission line, and Massey Rd to

Lakeshore SS 115 kV transmission line.

Supporting

Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service

Year:

2023

Project Name: UNION POINT PRIMARY CAPACITOR BANK REPLACEMENT

Description: Replace existing 115kV, 33 MVAR single stage capacitor bank at Union Point Primary

substation (GPC) with a two-stage 15 MVAR capacitor bank (total capacity of 30 MVAR).

Supporting The 2-stages 15 MVAR capacitor bank adddresses issues high voltage issues during low

Statement: load periodsfor abnormal conditions.

In-Service

ce 2023

Year:
Project Name: WASHINGTON #3 115 KV CAPACITOR BANK

Description: Install a 115kV two-stage capacitor bank of 30-MVAR of total capacity at Washington #3

substation.

Supporting Voltage support is needed to address low voltage issues while serving load at

Statement: Washington #3 substation under contingency and changes to normally open point in the

area.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

Year:

WEST AUGUSTA 115KV SUBSTATION Project Name:

2023

Description: Replace existing breaker on the Goshen 115kV line with a 40kA or higher rated breaker.

Supporting The breaker duty margin for this breaker in 2023 is -0.4%. In 6/30/2023, with the

Statement: addition of Vogtle Unit 4 the breaker duty margin becomes negative.

In-Service

Year:

Project Name: 230/115KV KINGSLAND AUTOBANK REPLACEMENT

2024

Replace 230/115kV auto-transformer bank C at Kingsland substation. Description:

Supporting The project addresses loading on the Pine Grove 230/115kV auto-transformer due to

Statement: the new 161kV transmission line between Gulf and FPL

In-Service

Year:

2024

Project Name: 230/115KV PINE GROVE AUTOBANK REPLACEMENT

Description: Replace 230/115kV auto-transformer bank B at Pine Grove substation.

Supporting The project addresses loading on the Pine Grove 230/115kV auto-transformer due to

Statement: the new 161kV transmission line between Gulf and FPL

In-Service

2024

Year:

ARKWRIGHT - LLOYD SHOALS 115 KV LINE RECONDUCTOR Project Name:

Description: Reconductor the Arkwright - Lloyd Shoals 115kV line.

Supporting

The Arkwright - Lloyd Shoals 115kV line becomes overloaded under contingency.



In-Service

2024

Year:

Project Name: ARKWRIGHT - SOUTH MACON (BLACK) 115KV TRANSMISSION LINE REBUILD

Description: Replace limiting element at Arkwright substation with higher rating and rebuild 2.38 mi

of line from Arkwright to Town Creek J1 to 100C 795 ACSR.

Supporting Latest P-events compliance screens show a thermal constraint for the Arkwright - South

Statement: Macon (Black) 115kV line due to a P2 event.

In-Service

_

2024

Year:

Project Name: BANKS CROOSING - POND FORK 115KV TRANSMISSION LINE

Description: Build a 3.5 miles, 115kV transmission line from McClure Industrial substation to

structure 21 A/B on the East Maysville tap with 100°C 1351 ACSR Martin.

Supporting This new network path accomodates the increase of load in the area and offers

Statement: operational flexibility in the area.

In-Service

Project Name:

2024

Year:

BOULDIN DAM – COUNTY LINE RD 115KV TL

Description: Reconductor ~6 miles of 795 ACSR 100°C from Bouldin Dam to Sonat Elmore Tap 115kV

TL to 795 ACSS 200°C

Supporting

Statement:

Provides additional operational and maintenance flexibility, which increases reliability.

In-Service

2024

Year:

Project Name: BULL CREEK - VICTORY DRIVE 115 KV LINE RECONDUCTOR

Description: Reconductor 1.3 miles of 115 kV line from Victory Drive to Chloride.

Supporting Statement:

Line section on the Bull Creek-Victory Drive 115 kV line is overloaded under contingency.



In-Service

2024

2024

2024

2024

Year:

Project Name: COLLEGE SQUARE - LAKESIDE WTP 115KV LINE SEGMENT REBUILD

Description: Rebuild 2.05 miles of 2-4/0 copper part of the College Square to Lakeside WTP B line

section, part of the McEver Road - Shoal Creek 115kV line, using 100°C 795 ACSR.

Supporting The College Square - Lakeside WTP B line section of the McEver Road - Shoal Creek

Statement: 115kV transmission line overloads under contingency.

In-Service

Year:

Project Name: CORN CRIB - LAGRANGE 115KV LINE REBUILD

Description: Rebuild line sections (total 10.9 miles) on the Corn Crib - Lagrange Primary 115 kV line.

Supporting The Corn Crib - Lagrande Primary 115 kV line overloads under contingency.

Statement:

In-Service

Year:

Project Name: DALTON CITY #12 BUS REPLACEMENT

Description: Replace 115 kV 477 ACSR bus and jumpers at the Dalton City #12 Substation.

Supporting

The Dalton City #12 bus and jumpers exceed their ratings under contingency.

Statement:

In-Service

Year:

Project Name: DEMOPOLIS TS - CEMEX 115 KV TRANSMISSION LINE

Description: Construct approximately 1.0 mile of 795 ACSR 115 kV transmission line at 100°C from

Demopolis TS to Cemex Tap.

Supporting

Provides additional operational and maintenance flexibility, which increases reliability.



In-Service

2024

Year:

Project Name: ELLICOTT SUBSTATION EXPANSION PROJECT

Description: Relocate six existing 115 kV transmission lines to a new 115 kV substation.

Supporting Upgrade existing and construct new transmission facilities to provide additional

Statement: operational and maintenance flexibility, which increases reliability.

In-Service

Year:

Teal.

2024

Project Name: EUFALA – GEORGE DAM – WEBB 115 KV TRANSMISSION LINE

Description: Phase 1: Reconductor approximately 18.3 miles of 266 ACSR at 100 °C from Eufaula to

Abbeville TS with 795 ACSR at 100° C. Phase 2: Reconductor ~27 miles of 266 ACSR at

100 °C of the Abbeville - Webb 115 kV TL to 795 ACSR 26/7 100 °C

Supporting Statement:

The Eufaula – Abbeville-Webb 115 kV transmission line overloads under contingency.

In-Service

2024

2024

Year:

Project Name: FORTSON 500 KV RELAY REPLACEMENT

Description: Replacing breaker failure relay scheme at Fortson substation (MEAG).

Supporting

The Fortson 230 kV Relay Failure results in several thermal overloads.

Statement:

In-Service

Year:

Project Name: GRADY-WEST END PART OF JACK MCDONOUGH AREA SOLUTION

Description: Reconductor the Grady - West End 115 kV line.

Supporting Project enhances operational flexibility and mitigates line overload.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

2024

Year:

HEARD COUNTY - TENASKA 500KV TRANSMISSION LINE Project Name:

Description: Construct a new, second Heard County - Tenaska 500KV transmission line.

Supporting To minimize the system impact caused by unit retirements and to improve the system Statement:

reliability, this project has been proposed as the most cost effective solution which

solves multiple.

In-Service

2024

Year:

Project Name: JORDAN DAM - NORTH SELMA 115 KV TL RECONDUCTOR

Description: Reconductor approximately 24 miles of 397 ACSR 115 kV TL with 795 ACSS at 200°C

between Jordan Dam & Vida TS.

Supporting The Jordan Dam - North Selma 115 kV transmission line overloads under contingency. Statement:

This project also provides additional operational and maintenance flexibility which then

increases reliability.

In-Service

Year:

Project Name: LAFAYETTE - ROANOKE 115 KV UPGRADE

Description: Phase 1: Upgrade approximately 2.5 miles 397 ACSR to 100° C from City of Lafayette No.

1 to Lafayette TS.

Phase 2: Upgrade approximately 12.2 miles from Lafayette TS - Roanoke TS & ~4.5 miles

Roanoke TS - East Roanoke SS 115 kV TL 397 ACSR to 125°

2024

Phase 3: Upgrade ~4.4 miles from Lafayette Solar Farm to LaFayette TS & upgrade 14.9

miles North Auburn TS to Lafayette Solar Farm of 397 ACSR 115 kV TL to 125°C

Supporting

The LaFayette to Roanoke 115 kV transmission line overloads under contingency.



In-Service

Year:

2024

2024

2024

Project Name: MCEVER ROAD - SHOAL CREEK 115KV TRANSMISSION LINE REBUILD

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 100 °C 795 ACSR.

Supporting The College Square - Lakeside WTP B section of the McEver Road - Shoal Creek 115kV

Statement: transmission line becomes overloaded under contingency.

In-Service

Year:

Project Name: MCGRAU FORD STATIC VARS SYSTEM INSTALLATION

Description: Install a STATCOM system at McGrau Ford substation.

Supporting Fast reactive support is needed to address FIDVR issues in North Georgia. This project

Statement: will also address high-voltage issues that occur during valley load conditions.

In-Service

Year:

Project Name: MEAG 230KV REDUNDANT RELAY (PART OF FORTSON SUBSTATION MODERNIZATION)

Description: Add a 230kV redundant relay scheme at Fortson. This is a small part of the Fortson

substation modernization project.

Supporting

Project eliminates a contingency that causes multiple overloads in the system.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

Year:

MORNING HORNET 2ND 230/115 KV BANK & THUMBS UP 115 KV TRANSMISSION LINE Project Name:

Description: Add a second 230/115 kV autobank at Morning Hornet substation. Also, build a new

additional 115 kV line from Morning Hornet - Thumbs Up 115 kV line (approximately 0.7

mile).

2024

2024

Supporting The East Social Circle - Stanton Springs 115 kV and Morning Hornet - Thumbs Up 115 kV

Statement: lines overload under contingency.

In-Service

Year:

NORCROSS - SNELLVILLE PRIMARY 115KV (REBUILD) Project Name:

Description: Rebuild the Norcross - Snellville Primary 115 kV line.

Supporting The initial project driver was that the OHGW had minimal lifetime, and needed to be Statement:

replaced. Given age and condition of line, the project became a complete rebuild, which

will require easements.

In-Service

Year:

Project Name: NORCROSS 230KV BUS 2-3 SERIES BUS TIE UPGRADE

Description: Install a 230kV bus tie breaker in series with the existing bus tie breaker.

Supporting Beginning in 2024, several transmission elements will exceed their rating for a breaker

Statement: failure event.

2024



In-Service

Year:

2024

2024

Project Name:

NORTH MARIETTA – SMYRNA (BLACK & WHITE) 115 KV TRANSMISSION LINE RECONDU

Description: GPC will reconductor parts of the North Marietta-Smyna (Black and White) 115 kV lines.

Supporting These lines will exceed their ratings under contingency.

Statement:

In-Service

Year:

Project Name: PICAYUNE - CARRIERE SW 115 KV REBUILD

Description: Rebuild approximately 0.8 mile, 115 kV line between Carriere SW and Pigott Tap 115 kV

line segment with 1033.5 ACSR at 100°C and upgrade bus at Picayune North.

Supporting

Statement:

The Carriere SW – Picayune 115 kV line overloads under contingency.

In-Service

2024

2024

Year:

Project Name: RIDDLEVILLE BUS REPLACEMENT

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

Supporting The Riddleville-North Louisville J line section of the Sandersville #1 - Wadley Primary

Statement: 115kV line overloads under contingency.

In-Service

Year:

Project Name: ROBINS SPRINGS SUBSTATION CAPACITOR BANK INSTALLATION

Description: Install a 115kV 2-stage capacitor bank at Robins Spring.

Supporting The loss of Sandersville #1 - Sandersville #6 line section of the Gordon-Sandersville #1

Statement: 115kV transmission line causes low voltage issues on several buses of this line.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

2024

Year:

SAVANNAH AREA TRANSMISSION NETWORK UPGRADES Project Name:

Description: Construct the new Newton Road six element ring bus substation looping in and out the

> Little - Ogeechee (Black & White) 230kV lines and build a 230kV line to serve new load. Construct the new Hyundai Motors - Meldrim 230kV line approximately 9 miles long with 100C ACSR 1351 Martin conductor. Construct a new Hyundai Motors - Newton Road 230kV line approximately 12.1 miles long with 100C ACSR 1351 Martin conductor.

Supporting The new 230kV Newton Rd switching station and two new transmission lines are needed

Statement: to reliably serve new load.

2024

In-Service

Year:

Project Name: THOMSON PRIMARY - WARRENTON PRIMARY (WHITE) 115 KV LINE RECONDUCTOR

Description: Reconductor approximately 16.8 miles of 336 ACSR at 100°C on the Thomson Primary -

Warrenton Primary 115 kV (White) transmission line with 795 ACSR at 100°C.

Supporting

The Thomson Primary - Warrenton Primary line overloads under contingency. Statement:

In-Service

2024

Year:

Project Name: **UNION CITY 230KV BUS TIE**

Description: Construct a 230 kV bus tie at Union City.

Supporting Morrow - Union City 230kV line overloads under contingency. Adding a 230kV bus tie at

Statement: Union City eliminates the contingency.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

2024

Year:

VILLA RICA RELAY MODERNIZATION Project Name:

Description: Modify protection schemes at Villa Rica to add protection redundancy on 230kV bus,

230/46kV bank and 500/230kV bank.

Supporting Adamsville - Buzzard Roost 230kV line overloads under contingency. Protection scheme

Statement: upgrades at Villa Rica are also needed to comply with the latest SoCo standards.

In-Service

Year:

Project Name: WARRENTON PRIMARY 230KV SWITCHES AND JUMPERS REPLACEMENT

Description: Replace 230kV 1200 A switches with 2000 A switches at Warrenton Primary side.

Also, replace existing 230kV 1590 AAC Coreopsis jumpers at Warrenton Primary with at

least 2-1590 AAC jumpers.

Supporting Statement: The Goldens Creek - Warrenton Primary 230kV line overloads under contingency.

In-Service

2025

2024

Year:

Project Name: ADAMSVILLE - JACK MCDONOUGH 230KV TRANSMISSION LINE REBUILD

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

Supporting ystem Operations has identified that there are some difficulties doing certain routine

Statement: maintenance work. Area system improvement is needed for maintenence support.



SOUTHERN Balancing Authority Area

In-Service

2025

2025

2025

Year:

Project Name: ALBERTA CITY - HOLT 115 KV TL RECONDUCTOR

Description: Reconductor approximately 4 miles of 795 ACSR at 100°C on the Alberta City - Holt 115

kV transmission line to 795 ACSS at 200°C.

Supporting Statement: Provides additional operational and maintenance flexibility, which increases reliability.

In-Service

Year:

Project Name: ALCOVY ROAD - SKC 115KV RECONDUCTOR

Description: Reconductor part of the Alcovy Road - SKC 115kV line.

Supporting The Alcovy Road - SKC 115 kV line overloads under contingency.

Statement:

In-Service

Year:

Project Name: ANTHONY SHOALS - WASHINGTON 115 KV LINE REBUILD

Description: Rebuild the 21 miles Double Branches Junction – Washington 115 kV line section with

(minimum) 795 ACSR 100°C conductor.

Supporting

The Anthony Shoals – Washington 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: AULTMAN ROAD - BONAIRE PRIMARY 115 KV RECONDUCTOR

Description: Reconductor the 1.99 miles, Sleepy Hollow - Peach Blossom 115 kV section (presently

 100°C 336 ACSR) of the Aultman Road - Bonaire Primary 115kV line, with 100°C 795

ACSR.

2025

GTC: Upgrade substations along the path of network flow.

Supporting Statement: The Aultman Road - Bonaire Primary 115KV line overloads under contingency.



SOUTHERN Balancing Authority Area

In-Service

2025

Year:

Project Name:

BIG OGEECHEE 500/230KV NEW SUBSTATION

Description: Construct a new 500/230kV substation near Little Ogeechee. The new substation will

loop in the existing McCall Road-Thalmann 500kV line and the existing Little Ogeechee-

Meldrim 230kV lines. It will accommodate a new 500/230kV autobank and an

additional 230kV connection to Little Ogeechee.

Supporting

The West McIntosh 500/230kV bank A and bank B auto transformers overload under

Statement: contingency.

In-Service

Year:

Project Name:

BONAIRE PRIMARY - ECHECONNEE 115KV TRANSMISSION LINE

Description: Reconductor 2.3 miles of the Bonaire Primary - Echeconnee 115KV line of 100°C ACSR

636 to 100°C ACSR 795 conductor.

Supporting

The Bonaire Primary - Echeconnee 115KV line becomes overloaded under certain

Statement: contingencies.

2025

In-Service

2025

Year:

Project Name: CAPITOL HEIGHTS – CARTER HILL RD 115 KV TRANSMISSION LINE

Description: Reconductor ~2.5 miles of 556 AAC at 75°C from Capitol Heights – Carter Hill Rd to 795

ACSR at 100°C

Supporting

Statement:

Provides additional operational and maintenance flexibility, which increases reliability.



SOUTHERN Balancing Authority Area

In-Service

2025

Year:

Project Name: ECHECONNEE - WELLSTON 115KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor 1.2 miles of the Echeconnee - Wellston 115KV line of 100°C 636 ACSR with

100°C 1033 ACSR

Supporting Statement: The Echeconnee - Wellston 115kv line overloads under contingency.

Statement

In-Service

Year:

2025

Project Name: ECHECONNEE-WELLSTON 115KV (N WARNER ROB-S WARNER ROB) REBUILD

Description: Rebuild the line section between North Warner Robins - South Warner Robins, 1.5

miles, on the Echeconnee - Wellston 115kV line from 100°C ACSR 636 to 100°C ACSR

1351. Upgrade substations along the network path.flow.

Supporting The North Warner Robins-South Warner Robins line section of the Echeconnee-Wellston

Statement: 115kV line overloads under contingency.

In-Service

Year:

2025

Project Name:

GORDON - SANDERSVILLE #1 115KV TRANSMISSION LINE REBUILD

Description: Rebuild 1.87 miles of the Gordon - Sandersville #1 115kV line from 100C ACSR 336

conductor to 100C ACSR 795 conductor.

Supporting

The Gordon - Sandersville #1 115kV transmission line overloads under non-contingency

Statement: conditions.



In-Service

2025

Year:

Project Name: GULFPORT LANDON – COOPERATIVE ENERGY LANDON TAP 115 KV TRANSMISSION LIN

Description: Rebuild approximately 5.5 mile, 115 kV transmisson line between Gulfport Landon

substation and Coopertive Energy's Landon Tap with 1351 ACSR at 100°C.

Supporting The Gulfport Landon - Coopertive Energy's Landon Tap 115 kV overloads under

Statement: contingency.

In-Service

2025

Year:

Project Name: HWY 45/234 - WESTOVER 115KV LINE

Description: Construct a new 115 kV line from Greenhouse Rd to Gillionville Substation (GTC).

Supporting The Dawson - Palmyra 115 kV line overloads under contingency.

Statement:

In-Service

Year:

2025

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

Description: Rebuild 1.2 miles of transmission line from Northwest to Jefferson Street #3.

Supporting

Statement:

In-Service

2025

Year:

rear:

Project Name: JESUP - LUDOWICI 115KV TRANSMISSION LINE RECONDUCTOR

The line overloads under contingency.

Description: Reconductor 2.6 miles of the Jesup - Ludowici 115kV line of 100°C 336.4 ACSR with

100°C 795 ACSR conductor.

Supporting

The Jesup - Ludowici 115 kV transmission line overloads under contingency.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

2025

2025

Year:

LITTLE OGEECHEE REDUNDANT RELAY INSTALLATION Project Name:

Description: Add a redundant relay scheme at Little Ogeechee 230 kV substation.

the Jesup - Offerman 115 kV line overloads under contingency.

Supporting

Statement:

In-Service

Year:

LUMBERTON - POPARVILLE 115 KV TRANSMISSION LINE REBUILD Project Name:

Description: Rebuild approximately 2.8 mile, 115 kV transmission line segment between Lumberton

and Hilldale Tap 115 kV segment with 1033.5 ACSR at 100°C.

Supporting

Statement:

The Lumberton – Poplarville 115 kV transmission line overloads under contingency.

In-Service

2025

Year:

Project Name: PALMYRA REACTOR REMOVAL

Description: Remove reactor at Palmyra.

Supporting

Statement:

Permanent solution renders reactor no longer needed.

In-Service

2025

Year:

SECOND SOUTH COWETA 230/115 KV AUTOBANK Project Name:

Description: Add a second 230/115kV auto transformer at South Coweta.

Supporting

The 230/115kV South Coweta auto transformer becomes overloaded under contingency.



SOUTHERN Balancing Authority Area

In-Service

2025

Year:

Project Name: SILVERHILL TS 3RD AUTOBANK

2025

Description: Add 3rd 230/115 kV Autobank at Silverhill TS during infrastructure project.

Supporting

The Silverhill 230/115 kV autobank overloads under contingency.

Statement:

In-Service

Year:

Project Name: SOUTH COWETA - SOUTH GRIFFIN 115KV LINE REBUILD

Description: Rebuild the South Coweta - North Griffin 115kV line sections on the South Coweta -

South Griffin 115kV line. Replace limiting equipment along the line (from South Coweta

to North Griffin) to match or surpass the conductor rating.

Supporting Statement: The South Coweta – South Griffin 115kV transmission line overloads under contingency.

In-Service

Year:

Project Name: SUNNY SOUTH CAPACITOR BANK

Description: Install 1 - 15 Mvar, 115 kV FILTERED capacitor bank at Sunny South SS

Supporting Low voltage in the area under contingency. This project provides voltage support under

Statement: contingency scenarios.

2025

In-Service

2026

Year:

Project Name: ATHENA - EAST WATKINSVILLE 115 KV (REBUILD)

Description: Rebuild 2.42 miles of the East Athens - Whitehall line section on the Athena - East

Watkinsville 115kV line with from 100°C ACSR 336 to 100°C 1033 ACSR conductor.

Supporting

The East Athens to Whitehall line sections of the Athena - East Watkinsville 115kV line

Statement: overloads under contingency.



SOUTHERN Balancing Authority Area

In-Service

2026

Year:

Project Name: BESSEMER – SOUTH BESSEMER 115 KV TRANSMISSION LINE

Description: Reconductor ~2 miles of 115 kV TL from McAdory Tap – Airport Lane Tap from 397 ACSR

to 795 ACSR 26/7 at 100C

Supporting

The Bessemer - South Bessemer 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: BLANKETS CREEK - WOODSTOCK 115 KV TRANSMISSION LINE REBUILD

Description: Rebuild approximately 2.5 miles of the Blankets Creek – Woodstock 115 kV transmission

line

2026

Supporting Statement: The Blankets Creek – Woodstock 115 kV transmission line overloads under contingency.

In-Service

2026

Year: Project Name:

BROADWAY-DORSETT 115KV LINE

Description: Build a new 115kV transmission line between Broadway and Dorsett substations.

Modify substation to accomodate the new line.

Supporting This project addresses voltage and thermal constraints on the Broadway-Echeconnee

Statement: and Broadway-South Macon 115kV lines.

In-Service

Project Name:

e 2026

Year:

DAWSON CROSSING - NELSON (WHITE) 115 KV LINE REBUILD

Description: Rebuild approximately 14 miles of 336 ACSR the Dawson Crossing - Nelson (White) 115

kV line from Dawson Crossing - Reavis Mountain using 100 $^{\circ}\text{C}$ 795 ACSR Drake.

Supporting Statement:

The Dawson Crossing - Nelson (White) 115 kV line overloads under contingnecy.

67



In-Service

2026

2026

Year:

Project Name: DRESDEN - SOUTH COWETA 230KV JUMPER REPLACEMENT

Description: Replace jumper at the Dresden end of the Dresden-South Coweta 230kV line with higher

rated jumper.

Supporting Statement:

Dresden - South Coweta 230kV line overloads under contingency.

In-Service

III-SEI VICE

Year:

Project Name: DRESDEN-LAGRANGE 230KV LINE REBUILD

Description: Rebuild the entire Dresden - Lagrange Primary 230kV line (25.2 miles). Replace the

jumpers at Dresden and Lagrange with 2-1590 AAC jumpers.

Supporting

The Dresden - Lagrange Primary 230kV line overloads under contingency.

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

SOUTHERN Balancing Authority Area

In-Service

2026

Year:

EAST WALTON 500/230KV PROJECT Project Name:

Description:

- Construct the East Walton 500/230 kV substation - Construct the Bostwick 230 kV switching station - Construct the East Walton - Rockville 500 kV line

- Construct the Bethabara - East Walton 230 kV line - Construct the Bostwick - East Walton 230 kV line - Construct the East Walton - Jack's Creek 230 kV line - At Bethabara, terminate the East Walton 230 kV line

- Loop the East Social Circle - East Watkinsville 230 kV line into Bostwick

- Replace line trap at East Watkinsville on the Bostwick 230 kV line

GPC:

- Construct the Rockville 500 kV switching station

- Loop the Scherer - Warthen 500 kV line into Rockville

- Loop the Doyle - LG&E Monroe 230 kV line into Jack's Creek

MEAG:

- Construct the Jack's Creek 230 kV switching station

Supporting

This project is driven by increasing loads in Northeast Georgia and the increase of South Statement: to North flow due to solar generation located in South GA. Contingencies of 230kV

transmission lines in the area causes several 230kV lines to overload.

In-Service

2026

Year:

FAYETTEVILLE AREA TRANSMISSION NETWORK UPGRADE NEEDS Project Name:

Description: Add a 230/115kV autobank at Ohara. Build a 230kV switching station (McDonough

> Road) South of Ohara. Build two 230kV lines from the switching station to Charles and Creola stations in Fayette county. Rebuild the 230kV lines coming to the switching

station from Ohara.

Supporting The additional 230/115kV autobank at Ohara, the new 230kV switching station

Statement: (McDonough Road), and the new 230kV lines are needed to reliably serve load in the

Fayetteville area. In 2027 and beyond, each of the two 230kV lines from Ohara to the

new 230kV switching station will overload under contingency.



In-Service

2026

Year:

Project Name: FLOMATON 230/115 KV SUBSTATION

Description: Install a new 230/115 kV, 480 MVA transformer at Flomaton TS.

Supporting Provides additional operational and maintenance flexibility, which increases reliability.

Statement: This project also provides voltage support under contingency scenarios.

In-Service

Year:

Project Name: FULLER ROAD - COLUMBUS FIRST AVE 115 KV TL RECONDUCTOR

2026

Description: Reconductor approximately 3 miles of 397 ACSR 115 kV TL at 100°C to 795 ACSR at

100°C from Columbus First Ave to Phenix Lumber.

Supporting The Fuller Road - Columbus First Avenue 115 kV transmission line overloads under

Statement: contingency.

2026

In-Service

Year:

Project Name: GADSDEN – GULF STATES STEEL 115 KV TRANSMISSION LINE

Description: (1.) Reconductor approximately 2.5 miles 397 26/7 ACSR to 795 ACSR 26/7 from Gulf

States Steel to Morgan's Crossroads. (2.) Replace Gulf States Steel DS with a new 5-terminal, 4-breaker 115 kV ring bus SS across the street from the existing substation.

(3.) Rebuild Praxair DS (115/6.9 kV) and connect it to the ring via a single terminal.

Supporting Provides additional operational and maintenance flexibility which then increases

Statement: reliability. In addition, associated with replacing aging equipment at Gulf States Steel DS.



SOUTHERN Balancing Authority Area

In-Service

2026

Year:

GOAT ROCK - NORTH OPELIKA 230 KV TRANSMISSION LINE UPGRADE Project Name:

Description: Upgrade the approximately 17.2 mile section of line from North Opelika to Goat Rock to

operate at 100° C

Supporting

The Goat Rock - North Opelika 230 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

2026

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

Rebuild the Gordon - Engelhard McIntyre J of the Gordon-North Dublin 115kV line from Description:

100°C 336.4 ACSR (2.81mi) Linnet and 75°C 4/0 F Copper/CW (3.18mi) to 100°C ACSR

795 conductor.

Supporting The Gordon - North Dublin 115kV transmission line becomes overloaded under

Statement: contingency.

2026

In-Service

Year:

Project Name: LAGRANGE - NORTH OPELIKA 230 KV (NEW LINE)

Build a new Lagrange - North Opelika (APC) 230 kV line (29.4 miles) via a Metering Point Description:

located at the Georgia - Alabama border.

Supporting To minimize system impact caused by unit retirements and to improve system reliability,

Statement: the project has been proposed as the most cost-effective solution which solves multiple

overloads.



In-Service

2026

Year:

Project Name: LAGRANGE - NORTH OPELIKA TS NEW 230 KV TL

Description: Construct ~14 miles 230 kV TL between North Opelika TS & new metering station, West

Point SS utilizing 1351 54/19 ACSR @ 100°C.

Supporting To minimize the system impact caused by ELG retirements and improve the system

reliability, this project has been proposed as the most cost-effective solution which

solves multiple overloads.

In-Service

Statement:

2026

2026

2026

Year: Project Name:

LEEDS TS - MOODY SS 115 KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor approximately 5.0 miles of 795 ACSR at 100°C with 1033.5 ACSS at 200°C.

Supporting The Leeds to Moody 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: MILLER - GORGAS 230 KV TL UPGRADE

Description: Upgrade approximately 16 miles of 1351 54/19 ACSR at 100° to 125°C on the Miller -

Gorgas 230 kV transmission line.

Supporting

The Miller - Gorgas 230 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: MITCHELL - NORTH TIFTON 230 KV RECONDUCTOR

Description: Reconductor approximately 35.2 miles of the Mitchell - North Tifton 230 kV

transmission line with 1351 ACSR at 100°C.

Supporting Statement:

The Mitchell - North Tifton 230 kV line overloads under contingency.

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SOUTHERN Balancing Authority Area

In-Service

2026

Year:

Project Name: MOBILE AREA NETWORKING – 3RD PATH

Description: Construct a new substation at Dawes Tap on the Big Creek to N. Theodore 115 kV

transmission line. Reconductor approximately 4.0 miles of 115 kV transmission line from Lott Road to Schillinger Road with 795 ACSS at 200°C. Reconductor approximately 6.3 miles of 115 kV transmission line from North Mobile to Michael Blvd with 397 ACSS at 200°C. Upgrade approximately 4.0 miles of 795 ACSR on the Big Creek – North Theodore 115 kV transmission line from 100°C to 125°C from Big Creek TS to Snow Rd DS to

Dawes Tap.

Supporting

Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service

Year:

Project Name: MOSS POINT EAST – PASCAGOULA BAYOU CASOTTE 115 KV TRANSMISSION LINE

Description: Construct approximately 2.7 miles of new 1033.5 ACSR 115 kV transmission line at

100°C from Moss Point East and connect into the existing BP Amoco to Pascagoula

Bayou Cassotte 115 kV transmission line.

Supporting The Moss Point East to Pascagoula MS Chemical 115 kV transmission line overloads

Statement: under contingency.

2026

In-Service

rvice 2026 Year:

Project Name: NORTH SELMA – SELMA #2 115 KV TRANSMISSION LINE

Description: Rebuild ~27 miles of 397 ACSR at 100 °C of Selma TS – Vida TS 115 kV TL to 795 ACSS at

200° C

Supporting Provides additional operational and maintenance flexibility which then increases

Statement: reliability.



In-Service

2026

Year:

Project Name: NORTH THEODORE AREA PROJECT

Description: Construct approximately 5.3 miles of new 115 kV transmission line to the Praxair Tap

from North Theodore and add a switching station near Multistate CU. Reconductor approximately 1.0 mile of the Hollinger's Island DS – Holcim CU 115 kV transmission line

to 795 ACSR at 100°C.

Supporting

Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service

Year:

Project Name: WEST TECH CAPACITOR BANKS

2026

Description: Install two new 115kV, 15MVAr capacitors at West Tech

Supporting Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service 2027

Year:

Project Name: AUGUSTA CORPORATE PARK - VOGTLE 230KV TRANSMISSION LINE REBUILD

Description: Rebuild 14.2 miles of the Augusta Corporate Park - Vogtle 230kV line of existing 100°C 2-

795 ACSR Drake conductor with 100°C 2-1351 ACSR Martin conductor.

Supporting The Augusta Corportate Park - Vogtle 230 kV transmission line becomes overloaded

Statement: under contingency.



SERTP TRANSMISSION PROJECTS SOUTHERN Balancing Authority Area

In-Service

2027

Year:

AULTMAN ROAD-PERRY 115KV LINE REBUILD Project Name:

Description: Rebuild the PPG J2 to Sandefur J line section (5.07mi) of the Aultman Road-Perry 115kV

line from 100C 336 ACSR Linnet conductor to 100C 795 ACSR Drake conductor.

Supporting The PPG J2 - Sandefur J line section of the Aultman Road-Perry 115kV line overload

Statement: under contingency.

2027

In-Service

Year:

Project Name: **AUTAUGAVILLE - EAST PELHAM NEW 230 KV TRANSMISSION LINE**

Description: Construct ~75 miles new 230 kV transmission line bundled 795 ACSS rated at 200C from

Autaugaville TS to East Pelham TS

Supporting The Bessemer – South Bessemer 230 kV transmission line overloads under contingency.

Statement: Reduces multiple 230 kV line loadings and provides additional operational and

maintenance flexibility, which increases reliability.

In-Service

2027

Year:

Project Name: **BASSETT CREEK - OCTAGON 115 KV TRANSMISSION LINE**

Description: Reconductor 0.89 miles of 397 ACSR 100°C to 795 ACSR 100°C from Bassett Creek TS -

Fulton TS. Upgrade approximately 32 miles of 397.5 ACSR from Bassett Creek to

Octagon 115 kV transmission line from 75°C to 125°C.

Supporting Statement: The Bassett Creek to Thomasville 115 kV transmission line overloads under contingency.



SOUTHERN Balancing Authority Area

In-Service

2027

Year:

BREMEN - CROOKED CREEK 115 KV TL Project Name:

Upgrade ~29.5 miles of 397 30/7 ACSR from 100°C to 125°C from Crooked Creek TS to Description:

Indian Creek metering station. Upgrade 4 miles of 397 30/7 ACSR from 75°C to 125°C

from Ranburne to Indian Creek Metering Station.

Supporting

The Bremen - Crooked Creek 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

2027

Project Name:

Description: Rebuild 11.1 miles of the Center Primary - Nicholson - JM Huber (Commerce) and

> Commerce #4 - Southeast Toyota line segments, part of the Center Primary - Commerce Primary 115 kV Line, with 100 °C 795 ACSR conductor. Upgrade substations along the

CENTER PRIMARY - COMMERCE PRIMARY 115KV TRANSMISSION LINE REBUILD

path of network flow.

GTC: Upgrade substations along the path of network flow.

Supporting The Center Primary - Commerce Primary 115 kV transmission line becomes overloaded

Statement: under contingency.

In-Service

2027

Year: Project Name:

DRESDEN - YATES 230 KV LINE UPGRADE AND JUMPER REPLACEMENT

Upgrade the line conductor on the Dresden - Yates 230 kV line (9.4 miles). Ensure all Description:

substation and line equipment along the path of network flow matches or surpasses the

rating of the new conductor.

Supporting

The Dresden - Yates 230 kV transmission line becomes overloaded under contingency.

Statement:



SOUTHERN Balancing Authority Area

In-Service

_ ...

2027

2027

Year:

Project Name: ENTERPRISE TS – PINCKARD #2 115 KV TRANSMISSION LINE

Description: Reconductor ~7.5 miles of 266 ACSR at 100 °C of the Enterprise to Daleville DS to 795

ACSR at 100° C

Supporting

The Enterprise - Pinckard #2 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: HWY 112-EAST MOULTRIE 230KV LINE (NEW LINE)

Description: Build a new 27 miles 230 kV line between HWY 112 and East Moultrie substations with

100 °C 1351 ACSR conductor.

Supporting This project addresses thermal overloads on the Daisy - West Valdosta 230 kV line and

Statement: Mitchell - Raccoon Creek 230 kV under contingency.

In-Service

2027

Year:

Project Name: JESUP - OFFERMAN 115 KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor approximately 17.7 miles of 4/0 ACSR at 100°C on the Jesup - Offerman

115 kV transmission line with 795 ACSR 100°C.

Supporting

The Jesup - Offerman 115 kV transmission line overloads under contingency.

Statement:

In-Service

2027

Year:

Project Name: JORDAN DAM - MARTIN DAM 115 KV TL (LINE B)

Description: Reconductor approximately 21 miles of 397 ACSR with 795 ACSS at 200°C between

Jordan Dam and Martin Dam 115 kV TL (Line B).

Supporting Provides additional operational and maintenance flexibility which then increases

Statement: reliability.



In-Service

2027

Year:

Project Name: LINE CREEK - YATES (BLACK) 230KV SWITCH REPLACEMENT

Description: Replace line switch at Yates 6&7 end with higher rated switch.

Supporting Line Creek - Yates 230kV (Black) line overloads under contingency.

Statement:

In-Service 2027

Year:

Project Name: NEW SOUTH HAZLEHURST - NEW LACY 230KV TRANSMISSION LINE

Description: Build a new 25-mile 230kV transmission line between South Hazlehurst and New Lacy

with 100C ACSR 1351 Martin conductor. Do all the necessary upgrade work to

accomodate the new line in both facilities.

Supporting Latest 2022 P-Events compliace screens show a thermal constraint for the Baxley - South

Statement: Hazlehurst 115kV line for N-1-1 contingency.

In-Service 2027

Year:

Project Name: SANDERSVILLE #1 - WADLEY PRIMARY 115 KV TRANSMISSION LINE REBUILD

Description: GPC: Rebuild all the main line of the Sandersville #1 - Wadley Primary 115 kV line (total

of 24.3 miles) of existing 100 deg C 336 ACSR Linnet conductor with at least, 100 deg C 795 ACSR Drake conductor. GTC/MEAG: Replace limiting elements in substations along

the network path.

Supporting Latest 2022 P-Events compliace screens show a thermal constraint for the Sandersville

Statement: #1 - Wadley Primay 115 kV line due to a P7 event.



SOUTHERN Balancing Authority Area

In-Service

2027

Year:

Project Name: SKC REPLACE 115KV BUS AND JUMPERS

Description: Replace 115kV bus and jumpers at SKC substation.

Supporting On the Covington #2 - SKC 115kV line, the jumpers and bus at SKC, load beyond their

Statement: rating during a contingency

2027

In-Service

Year:

Project Name: THOMSON PRIMARY 230/115-KV SECOND TRANSFORMER

Description: Install a second 300 MVA, 230/115kV transformer at Thomson Primary substation.

Supporting This project addreses overlods under contingency on the Thomson Primary 230/115

Statement: kVauto transformer and the Evans Primary - Thomson Primary 115kV line.

In-Service

2027

Year: Project Name:

WEBB - BLAKELY (GPC) 115 KV TL

Description: Reconductor ~10.5 miles of 397 ACSS at 160 °C of the Webb to Blakely (GPC) 115kV TL

to 795 ACSS at 200° C.

Supporting Statement:

The Webb - Blakely 115 kV transmission line overloads under contingency.

In-Service

2028

Year:

Project Name: ACIPCO EAF - BOYLES 230 KV TRANSMISSION LINE

Description: Construct ~3 miles of 1351 54/19 ACSR at 100°C from ACIPCO EAF to Boyles TS.

Reconductor ~1.8 miles from ACIPCO TS to ACIPCO EAF from 795 ACSR to 1351 ACSR.

Supporting The Boyles - Miller 230 kV transmission line overloads under contingency. Also Provides

Statement: additional operational and maintenance flexibility, which increases reliability.



In-Service

2028

Year:

Project Name: ANNISTON - CROOKED CREEK 115 KV TL

Description: Reconductor approximately 28 miles of 397 30/7 ACSR to 795 26/7 ACSR from Golden

Springs DS to Crooked Creek TS 115 kV transmission line

Supporting Provides additional operational and maintenance flexibility, which increases reliability.

In addition, the line is being reconductored due to the age and condition of the

structures and conductor.

In-Service

Statement:

2028

Year:

Project Name: ARLINGTON PRIMARY - HWY45/234 115KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor approximately 42.61 miles along the Arlington - Dawson Primary 115 kV

transmission line with 1351 ACSR at 100 °C.

Supporting The Arlington Primary - Dawson Primary 115 kV transmission line becomes overloaded

Statement: under contingency.

In-Service

ervice 2028 Year:

Project Name:

FLOMATON - NORTH BREWTON 115 KV TL

Description:

Reconductor approximately 16.0 miles of 795 ACSR at 100°C from N. Brewton –

Flomaton 115kV with 795 ACSS at 200°C.

Supporting

The Flomaton - North Brewton 115 kV transmission line overloads under contingency.

Statement:



In-Service

2028

Year:

Project Name: HAMMOND – WEISS DAM 115 KV LINE REBUILD

Description: Rebuild the line from Hammond to the State line (11 miles) with higher rated conductor.

Supporting Hammond - Weiss Dam 115kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: MILLER SP 500 KV SERIES BREAKER

2028

2028

2028

Description: Install 500 kV series breaker between Miller – Clay 500 kV TL and Miller – East Point

(TVA) TL at Miller SP

Supporting The Boyles - Miller 230 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: MORROW - YATES COMMON 115KV LINE UPGRADE

Description: Upgrade the Fife - Fairburn SW- Owens Corning Tap line sections (5.8 miles) on the

Morrow - Yates Common 115kV line.

Supporting The Morrow - Yates Common 115kV line overloads under contingency.

Statement:

In-Service

Year:

Project Name: OHARA - SOUTH COWETA 115KV LINE REBUILD

Description: Rebuild the line sections from South Coweta to Bernhard Road on the Ohara - South

Coweta 115kV line. Replace limiting equipment along the line (from South Coweta to

Bernhard Road) to match or surpass the conductor rating.

Supporting

The Ohara - South Coweta 115kV transmission line overloads under contingency.

Statement:



In-Service

2028

Year:

Project Name: SOUTH BESSEMER 500/230 AUTOBANK

Description: Add a second 500/230 kV autobank at South Bessemer TS

Supporting Low voltage in the area under contingency. This project provides voltage support under

Statement: contingency scenarios.

2029

2029

In-Service

Year:

Project Name: DOUGLASVILLE - POST ROAD 115KV LINE REBUILD PHASE 2 (DOUGLASVILLE - ANNEEW

Description: Rebuild 6 miles from Douglasville to the Anneewakee Junction on the Douglasville - Post

Road 115 kV line of 100 °C 397 ACSR using 100 °C 795 ACSR conductor.

Supporting

The Douglasville - Post Road 115 kV transmission line overloads under contingency.

Statement:

In-Service

Year:

Project Name: DRESDEN - TALBOT 500KV LINE PROJECT

Description: Build a new Talbot 500/230kV substation by breaking the Fortson - North Tifton 500kV

line. Then, build a new 500kV line from the Talbot station to Dresden (55 miles). A

500/230kV autobank will be installed at the Talbot station. Low-side of the autobank will

connect to Talbot County #1 230kV bus.

Supporting Multiple 230kV and 115kV transmission lines in West and Central Georgia are

Statement: overloaded under contingency. This project will address those overloads, and will create

additional transfer capability in the area.



In-Service

2029

Year:

Project Name: KRAFT 230/115KV TRANSFORMER RATING INCREASE

Description: Replace the 230kV underground cable that connects the 230/115kV Bank B with cable

with higher rating. This cable limits the rating of the transformer to 280MVA.

Supporting Loss of either 230/115kV transformer in the substation will load the other transformer

Statement: past its 280 MVA rating.

2029

In-Service

Year:

Project Name: ROCKY RIDGE RADIAL 115 KV TRANSMISSION LINE

Description: Reconductor ~0.5 miles of 115 kV TL from Rocky Ridge Tap to Rocky Ridge DS from 4/0

ACSR at 50C to 795 ACSR 26/7 at 100C

Supporting Statement:

Provides additional operational and maintenance flexibility, which increases reliability.

In-Service

Year:

2029

Project Name:

THURLOW DAM - NOTASULGA 115 KV TL

Description: Upgrade ~14 miles of 397 ACSR at 100 °C from Thurlow Dam to Notasulga to 397 ACSR

at 125° C.

Supporting

Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service

iervice ₂₀₂₉ Year:

Project Name: THURLOW DAM – UNION SPRINGS 115 KV TL

Description: Rebuild ~25 miles of 397 ACSR at 75 °C from Union Springs to Halla Climate Tap to 795

ACSR at 100° C

Supporting Statement:

The Thurlow Dam - Union Springs 115 kV transmission line overloads under contingency.



In-Service

Year:

Project Name: BONAIRE PRIM - ECHECONNEE 115KV(W WARNER ROBINS-RUSSELL PKWY) TRANSMISS

Description: Rebuild the West Warner Robins-Russell Parkway line section of the Bonaire Primary-

Echeconnee 115kV line from 100C ACSR 636 to 100C ACSR 1351 Martin conductor.

Supporting The Bonaire Primary-Echeconnee 115kV transmission line becomes overloaded under

Statement: contingency.

2030

2030

2030

In-Service

Year:

Project Name: BRUMBLEY CREEK - SOUTH BAINBRIDGE 115KV (RODDENBERY TAP) TRANSMISSION LI

Description: Rebuild 2.1 miles segment from line tap into Roddenbery Station on the South

Bainbridge - Thomasville 115kV line from 50 °C ACSR TW 762.8 to 100°C ACSR 795.

Supporting The Roddenberry - Roddenberry J tap on the South Bainbridge - Thomasville 115kV

Statement: transmission line becomes overloaded under contingency.

In-Service

Year:

Project Name: DYER ROAD - SOUTH COWETA 115KV LINE REBUILD

Description: Rebuild the Dyer Road - Madras 115kV line section (9.2 miles). Replace limiting jumpers

at Dyer Road and Madras with higher rated jumpers. Replace limiting switch at Madras

with higher rated switch.

Supporting Dyer Road - South Coweta 115kV line (Dyer Road - Madras section) overloads under

Statement: contingency.



SERTP TRANSMISSION PROJECTS **SOUTHERN Balancing Authority Area**

In-Service

Year:

2030

Project Name:

NORTH BAY MINETTE AREA SOLUTION

Description: Construct a new substation at Bay Minette Tap and upgrade approximately 12.4 miles of

the Bay Minette DS to Steelwood 115 kV transmission line to 100°C.

Supporting

Statement:

Provides additional operational and maintenance flexibility, which increases reliability.

In-Service

Year:

Project Name: **PELL CITY AREA SOLUTION**

2030

Description: Construct new Pell City Industrial Park SS and new approximately 10 mile 115 kV TL from

Pell City Industrial Park SS – Jackson Shoals TS utilizing 795 26/7 ACSR @ 100°C. Convert

East Pell City DS and 25th Street DS to 115 kV

Supporting Low voltage and thermal constraints in the area under contingency. This project

Statement: provides additional operational and maintenance flexibility, which increases reliability.

In-Service

2030

Year:

ROBINS SPRING BUS REPLACEMENT

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

Supporting

Project Name:

The Gordon - Sandersville #1 115kV transmission line overloads under contingency.

Statement:

In-Service

Project Name:

Year:

THOMASVILLE 230/115KV AUTOBANK REPLACEMENT

Description: Replace 140MVA 230/115kV auto transformer #4 at Thomasville substation.

Supporting The 230/115kV auto transformer #4 at Thomasville substation becomes overloaded

Statement: under contingency.



SOUTHERN Balancing Authority Area

In-Service

2030

Year:

Project Name: UNION SPRINGS - PINCKARD 115 KV TRANSMISSION LINE

Description: Rebuild ~8.1 miles of 397 ACSR of the Pinckard – Ewell SS 115 kV TL from 397 ACSR at

49°C to 795 ACSR at 100° C. Reconductor ~50 miles of 397 ACSR at 50 °C Union Springs –

Ewell 115 kV TL to 795 ACSR at 100° C

Supporting The Union Springs - Pinckard 115 kV TL overloads under contingency. Provides

Statement: additional operational and maintenance flexibility, which increases reliability.

In-Service

2031

Year:

Project Name:

ALEX CITY AREA SOLUTION

Description: Construct new West Alex City SS and upgrade approximately 34 miles from Sylacauga TS

to Willow Point DS 115 kV TL 397.5 30/7 ACSR at 75°C to 100°C. Construct new West Dadeville TS networking Alex City, Crooked Creek – Martin Dam No. 2, and Thweatt. Reconductor ~4.52 miles from new West Alex City SS to City of Alex City #3 with 795

45/7 ACSR at 100°C

Supporting The Martin Dam – Sylacauga 115 kV transmission line overloads under contingency.

Statement: Provides additional operational and maintenance flexibility, which increases reliability.

In-Service

2031

Year:

Project Name: AVERY - HOPEWELL 115KV RECONDUCTOR

Description: Reconductor approximately 3.3 miles of 100 °C ACSR 636 to 100 °C ACSR 795

conductor on the Hopewell to Birmingham line section on the Avery - Hopewell 115kV line. Replace substation equipment along the path of network flow with one that

matches or surpasses the rating of the new conductor.

Supporting The Hopewell - Birmingham line section of the Avery - Hopewell 115 kV transmission

Statement: line becomes overloaded under contingency.



SOUTHERN Balancing Authority Area

In-Service

2031

Year:

Project Name: BOSTWICK - EAST SOCIAL CIRCLE 230KV TRANSMISSION LINE RECONDUCTOR

Description: Reconductor 10.8 miles of the 230 kV 1033 ACSR Curlew conductor of the East Social

Circle - East Watkinsville 230 kV Line (up to future Bostwick location) with 1033 ACCR

200 °C conductor.

Supporting The Bostwick - East Social Circle 230 kV line, currently the East Social Circle - East

Statement: Watkinsville 230kV transmission line becomes overloaded under contingency.

In-Service

2031

Year:

Project Name: EATONTON PRIMARY 115KV CAP BANK

Description: Install a 115kV capacitor bank at Eatonton Primary substation.

Supporting This project addresses low voltage on buses along the Eatonton Primary - Lake Oconee

Statement: 115kV transmission line under contingency.

In-Service

2031

Year:

Project Name: GOLDENS CREEK - WARRENTON PRIMARY 230KV TRANSMISSION LINE REBUILD

Description: Rebuild 0.34 miles of the Goldens Creek - Warrenton Primary 230kV line of existing 100

°C 1-1351.5 ACSR Martin conductor with 200 °C 1351 ACCR Martin conductor or

equivalent.

Supporting

The Goldens Creek - Warrenton Primary 230kV transmission line becomes overloaded

Statement: under contingency.



In-Service

Year:

Project Name: GREENVILLE AREA SOLUTION

2031

Description: Construct 230 kV ring bus at Greenville TS

Supporting Provides additional operational and maintenance flexibility, which increases reliability.

Statement:

In-Service 2031

Year:

Project Name: TALLULAH LODGE - TOCCOA 115 KV TRANSMISSION LINE REBUILD

Description: Rebuild 10.3 miles of the Tallulah Lodge - Toccoa 115 kV Line with 100 °C 795 ACSR

conductor. Upgrade substations along the path of network flow.

Supporting The Tallulah Lodge - Toccoa 115kV transmission line becomes overloaded under

Statement: contingency.

In-Service 2032

Year:

Project Name: EVANS PRIMARY - THOMSON PRIMARY 115 KVTRANSMISSION LINE RECONDUCTOR PH

Description: Rebuild 5.28 miles of the existing 336 ACSR conductor for the Thomson Primary to

Pumpkin Center 115 kV line section, part of the Evans Primary - Thomson Primary 115kV

line with minimum 100 deg C 1351 ACSR Martin conductor.

Replace jumpers at Thomson Primary substation with with higher rating.

Supporting The Evans Primary-Thompson Primary 115kV transmission line overloads under

Statement: contingency.



TVA Balancing Authority Area

In-Service

2022

Year:

Project Name: ARTESIA - W. COLUMBUS 161 KV TRANSMISSION LINE

Description: Construct the Artesia 161 kV Substation. Construct approximately 12.0 miles for

Artesia - W. Columbus with 954 ACSS at 150°C. Reconductor approximately 15.0 miles

of W. Point - Starkville 161 kV with 954 ACSS at 150°C.

Supporting Additional thermal capacity and voltage support is needed in the West Point and

Statement: Columbus area under contingency.

In-Service

Year:

Project Name: KNOX - DOUGLAS 161 KV TRANSMISSION LINE

2022

Description: Rebuild approximately 11.0 miles of the Knox – Douglas 161 kV transmission line with

954 ACSS at 125°C.

Supporting The Knox – Douglas 161 kV transmission line overloads under contingency.

Statement:

In-Service 2022

Year:

Project Name: PHIPPS BEND 500 KV SUBSTATION

Description: Rebuild structures with weathered steel in the Phipps Bend 500 and 161 kV yard.

Supporting Steel structures in the Phipps Bend 500 kV and 161 kV yards are beginning to show signs

Statement: of corrosion and will be replaced.



TVA Balancing Authority Area

In-Service

2023

Year:

Project Name: ALCOA SS – NIXON ROAD 161 KV TRANSMISSION LINE

Description: Rebuild approximately 12.0 miles of the Alcoa North – Nixon Road 161 kV transmission

line with 1590 ACSR at 100°C and construct approximately 2.0 miles of new transmission

line to create the Alcoa SS – Nixon Rd 161 kV #2 transmission line.

Supporting The Alcoa Switching Station – Nixon Road 161 kV transmission line overloads under

Statement: contingency.

In-Service

Project Name:

2023

2023

Year:

ANDERSON 500 KV SUBSTATION

Description: Build new Anderson 500kV Substation and build Anderson 500/161 kV transformer.

Supporting

500/161 kV transformer in the area overloads under contingency.

Statement:

In-Service

Year:

Project Name: GALLATIN - CAIRO BEND 161 KV TRANSMISSION LINE

Description: Reconductor approximately 2.2 miles of the Gallatin - Cairo Bend 161 kV transmission

line section with 954 ACSS at 150°C and upgrade terminal equipment to 440 MVA at

Gallatin 161 kV.

Supporting The Gallatin FP - Cairo Bend 161 kV transmission line section overloads under

Statement: contingency.



TVA Balancing Authority Area

In-Service

Year:

Project Name: NORTH DAYTON 161 KV TRANSMISSION LINE

Description: Construct North Dayton 161 kV substation. Loop in Sequoyah - WBHP 161 kV

transmission line into new substation by constructing approximately 27.0 miles of

transmission line using 1351 ACSR.

Supporting Additional thermal capacity and voltage support is needed in the North Dayton, TN area

Statement: under contingency.

2023

2023

In-Service

Year: Project Name:

WILSON - LEBANON 161 KV TRANSMISSION LINE

Description: Rebuild approximately 6.0 miles on the Wilson - Lebanon 161 kV transmission line with

636 ACSR at 100°C and upgrade terminal equipment to 230 MVA at Lebanon 161 kV

substation.

Supporting Statement:

The Wilson - Lebanon 161 kV transmission line overloads under contingency.

In-Service

Year:

Project Name: APALACHIA - BASIN RECONDUCTOR/UPRATE

Description: Reconductor the 8.4 miles of ACSR 477, replace a wave trap at Basin, and reset a CT at

Apalachia.

2025

Supporting

The Apalachia - Basin 161 kV transmission line overloads under contingency.

Statement:



TVA Balancing Authority Area

In-Service

2025

Year:

Project Name: DICKSON 161 KV AREA IMPROVEMENT

Description: Construct approximately 19.5 miles of new 161 kV transmission line from Bon Aqua to

Burns, construct approximately 4.3 miles new 161 kV double circuit into Dickson, and

construct a new Locust Creek 161 kV Substation.

Supporting

Voltage support is needed in the Dickson, TN area under contingency.

Statement:

In-Service

Year:

Project Name: ISLAND RD 138KV CAPACITOR BANK

Description: Construct the Island Road 138kV Substation with a minimum of a 72MVAR capacitor

bank

2025

Supporting 'Statement:

Voltage support is needed in the North Bristol, TN area under contingency.

In-Service

2026

Year:

Project Name: LIMESTONE - SEWELL 161 KV #2 TRANSMISSION LINE

Description: Construct approximately 2.1 miles of 161 kV transmission line with 2034 ACSR at 100°C

on the existing Limestone - Sewell 161 kV double circuit towers.

Supporting Additional thermal capacity and voltage support is needed in the Huntsville, AL area

Statement: under contingency.



SERTP TRANSMISSION PROJECTS TVA Balancing Authority Area

In-Service

2026

Year:

Project Name: NORTH OAKLAND - COFFEEVILLE 161 KV TRANSMISSION LINE

Description: Construct approximately 18.0 miles of new 161 kV transmission line from North

Oakland - Coffeeville using 954 ACSR at 100°C and upgrade terminal equipment to 472

MVA at Batesville 161 kV substation.

Supporting Statement: Multiple 161 kV transmission lines overload under contingency.

In-Service

e 2026

Year:

Project Name: PHILADELPHIA REACTOR

Description: Install three 27MVAR reactors at the Philadelphia 161kV Substation.

Supporting

Voltage support is needed in TVA's Mississippi area under contingency.

Statement:

In-Service

2027

Year: Project Name:

DAVIDSON 500 KV SWITCH HOUSE

Description: Construct a new 500 kV switch house with all new assets and replace aging assets in the

Davidson Yard.

Supporting

Additional thermal capacity and voltage support is needed in the Davidson County, TN

Statement:

area under contingency.



SERTP TRANSMISSION PROJECTS TVA Balancing Authority Area

In-Service

2027

Year:

MIDWAY - S MACON - DEKALB 161 KV TRANSMISSION LINE **Project Name:**

Description: Construct approximately 20 miles new 161 kV transmission line from Midway to S

Macon and approximately 31.3 miles new 161 kV transmission line from S Macon to

Dekalb via Scooba.

Supporting

Voltage support is needed in TVA's Mississippi area under contingency.

Statement:

In-Service

Year:

Project Name: LIMESTONE 500KV DOUBLE BREAKER AND LOOP

Description: For a fault on the Limestone - Madison 500kV TL and a stuck breaker at the Limestone

> 500kV Substation, the Trinity 500kV transformer bank exceeds its capacity. By June 2028, TVA will reconfigure the Limestone 500kV substation by adding breakers to the

station.

2028

Supporting Reconfigure the 500kV yard at Limestone by adding breakers and loop in the Browns

Statement: Ferry - Maury 500kV TL.

¹ The projects described in this document represent the current regional transmission plan. This plan, along with the transmission projects included within it, is periodically reviewed and may be revised due to changes in assumptions. This document does not represent a commitment to build for projects listed in the future.



Appendix 1: AECI BAA

The following information provides a more granular overview of the AECI BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A1.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (AECI BAA)

8			, ,	J 1	0 0	,
AECI BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New						
(Circuit Mi.)						
Transmission Lines - Uprates1		9.5				
(Circuit Mi.)		9.5				
Transformers ² – New						
Transformers ² - Replacements		1	7			

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A1.2: Interface commitments¹ modeled in the SERTP Summer Peak models – AECI BAA

То	2024	2027	2032
SPP	-623	-623	-623
MISO	-551	-533	-533
Total	-1174	-1156	-1156

¹A positive number represents a net export from the AECI BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the AECI BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A1.3 below. Table A1.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A1.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A1.3: Changes in Generation Assumptions Based Upon LSEs – AECI BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
				None						

Table A1.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – AECI BAA

				N.1						
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

None

Table A1.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model - AECI BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
ThomasHill	1	300001	1THLG1 20.000	177
ThomasHill	1	300002	1THLG2 22.000	285
ThomasHill	1	300003	1THLG3 24.000	747
NewMadrid	1	300006	1NM G1 22.000	624.3
NewMadrid	1	300007	1NM G2 22.000	607.6
BluegrassRidge	1	300008	1GNTRYG1 0.6000	56.7
CowBranch	1	300009	1ACHSNG1 0.6000	50.4
StFrancis	1	300010	1STFRG1 16.000	245
StFrancis	1	300011	1STFRG2 16.000	225.8
Holden	1	300012	1HOLDNG11 13.800	110.1
Holden	1	300013	1HOLDNG12 13.800	110.1
Holden	1	300014	1HOLDNG13 13.800	110.1
Chouteau	1	300020	1CHOTCT4 16.000	172.3

Chouteau	1	300021	1CHOTCT5 16.000	172.5
Chouteau	1	300024	1CHOTST6 16.000	189.7
Nodaway	1	300025	1NDWYG1 13.800	93.1
Nodaway	1	300026	1NDWYG2 13.800	93.1
WestPlains	1	300027	1WPLCTG1 13.800	22
WestPlains	1	300028	1WPLCTG2 13.800	22
Essex	1	300029	1ESSEXG 13.800	98.1
Chouteau	1	300031	1CHOTST3 16.000	155
Chouteau	1	300032	1CHOTCT1 16.000	150.4
Chouteau	1	300033	1CHOTCT2 16.000	158.4
Conception	1	300273	1CLYDEG1 0.6000	50.4
LostCreek	1	301358	1WINSLOWG1 0.6900	168
Osage	1	301382	10SAGEWINDG10.6900	150
MtPleasant	1	301449	2MTPLCTY 69.000	24
WhiteCloud	1	301490	1WHITCLDG1 0.6900	214.5
ClearCreek	1	301493	1CLEARCKG1 0.6900	121
ClearCreek	2	301512	1CLEARCKG2 0.6900	99
WhiteCloud	2	301585	1WHITCLDG2 0.6900	22
ClearCreek	3	301619	1CLEARCKG3 0.6900	22



Appendix 2: Duke Energy Carolinas BAA

The following information provides a more granular overview of the Duke Energy Carolinas BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A2.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Energy Carolinas BAA)

· ·			,		0 0	0,0
Duke Energy Carolinas BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New	7.8			33.5		
(Circuit Mi.)	7.0			33.3		
Transmission Lines - Uprates ¹	119					
(Circuit Mi.)	119					
Transformers ² – New				1		
Transformers ² - Replacements				6		

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A2.2: Interface commitments¹ modeled in the SERTP Summer Peak models – Duke Energy Carolinas BAA

То	2024	2027	2032
Duke Progress East	2031	2013	3390
SCE&G	3	3	3
SC	-193	-87	-215
Southern	-61	0	0
PJM	98	98	98
SEPA	-294	-294	-294
Total	1584	1733	2982

¹A positive number represents a net export from the Duke Energy Carolinas BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the Duke Energy Carolinas BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A2.3 below. Furthermore, supplemental information regarding noteworthy generation expansion and retirements/decertifications included in the 2022 series set of SERTP powerflow models is provided below, while Table A2.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A2.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A2.3: Changes in Generation Assumptions Based Upon LSEs – Duke Energy Carolinas BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Allen 1	158	0								
Allen 5	253	0								
Cliffside 5	574	574	574	0						
Marshall 1	388	388	388	388	388	388	0			
Marshall 2	392	392	392	392	392	392	0			
Misenheimer	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
Westminster	75	75	75	75	75	75	75	75	75	75
Hornet		74	74	74	74	74	74	74	74	74
Newberry		74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
Lincoln 17		402	402	402	402	402	402	402	402	402
Bad Creek 3	420	420	420	420	420	420	420	420	420	420
Bad Creek 4	340	420	420	420	420	420	420	420	420	420

Table A2.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Duke Energy Carolinas BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Cleveland	195	195	195	195	196	196	0	0	0	0
Broad River	875	875	875	875	875	875	875	875	875	875
Catawba	407	407	407	407	407	407	407	407	407	407

Re	egional ISMISSION PLANNING								2	202	22
	Rowan	460	441	428	373	376	370	180	180	180	180
	Kings Mountain	32	92	92	92	92	92	92	92	92	92

Table A2.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model – Duke Energy Carolinas BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
Mill Creek	1	306082	1MILLCKG1 13.800	76
Mill Creek	2	306083	1MILLCKG2 13.800	76
Mill Creek	3	306084	1MILLCKG3 13.800	76
Mill Creek	4	306086	1MILLCKG4 13.800	76
Mill Creek	5	306087	1MILLCKG5 13.800	76
Mill Creek	6	306088	1MILLCKG6 13.800	76
Mill Creek	7	306090	1MILLCKG7 13.800	76
Mill Creek	8	306091	1MILLCKG8 13.800	76
Rutherford	PV	306146	RUTHPV 100.00	67
Bad Creek	1	306207	1BADCRK12 19.000	420
Bad Creek	2	306207	1BADCRK12 19.000	420
Bad Creek	3	306208	1BADCRK34 19.000	420
Bad Creek	4	306208	1BADCRK34 19.000	420
Broad River Energy	4	306222	1BRECG4 18.000	177
Broad River Energy	5	306224	1BRECG5 18.000	177
Broad River Energy	1	306314	1BRECG1 18.000	177
Broad River Energy	2	306315	1BRECG2 18.000	177
Broad River Energy	3	306316	1BRECG3 18.000	177
Cherokee	1	306325	1CHEROKEG 13.800	52
Cherokee	1	306326	1CHEROKES 13.800	32
Lincoln	1	306509	1LINCLN1 13.800	79
Lincoln	2	306510	1LINCLN2 13.800	79
Lincoln	3	306511	1LINCLN3 13.800	79
Lincoln	4	306512	1LINCLN4 13.800	79
			100	

Lincoln	5	306513	1LINCLN5 13.800	79
Lincoln	6	306514	1LINCLN6 13.800	79
Lincoln	7	306515	1LINCLN7 13.800	79
Lincoln	8	306516	1LINCLN8 13.800	79
Lincoln	9	306517	1LINCLN9 13.800	79
Lincoln	А	306518	1LINCLN10 13.800	79
Lincoln	В	306519	1LINCLN11 13.800	79
Lincoln	С	306520	1LINCLN12 13.800	79
Lincoln	D	306521	1LINCLN13 13.800	79
Lincoln	Е	306522	1LINCLN14 13.800	79
Lincoln	F	306523	1LINCLN15 13.800	79
Lincoln	G	306524	1LINCLN16 13.800	79
Rockingham County	4	306828	1ROCKHMG04 18.000	165
Rockingham County	5	306829	1ROCKHMG05 18.000	165
Rockingham County	1	306831	1ROCKHMG01 18.000	165
Rockingham County	2	306832	1ROCKHMG02 18.000	165
Rockingham County	3	306833	1ROCKHMG03 18.000	165
West River	PV	306972	WESTRVRPV 100.00	40
Rowan	1	306991	1ROWANC1 18.000	154
Rowan	2	306992	1ROWANC2 18.000	154
Rowan	3	306993	1ROWANC3 18.000	154
Rowan	4	306994	1ROWANC4 18.000	154
Rowan	5	306995	1ROWANC5 18.000	154
Rowan	6	306996	1ROWANS1 18.000	170
Buzzard Roost	1	307037	1BUZZHYD 4.1600	4.3
Buzzard Roost	2	307037	1BUZZHYD 4.1600	4.3
Buzzard Roost	3	307037	1BUZZHYD 4.1600	4.3
Keowee	1	307195	1KEOWEE 13.800	80
Lee	7	307198	1LEE CT7 13.800	43
Oconee	1	307199	10CONEE1 19.000	884

Oconee	3	307200	10CONEE3 19.000	884
Oconee	2	307210	10CONEE2 19.000	885.9999
Jocassee	1	307370	1JOCASSE1 14.400	195
Jocassee	2	307371	1JOCASSE2 14.400	195
Jocassee	3	307372	1JOCASSE3 14.400	195
Jocassee	4	307373	1JOCASSE4 14.400	195
Gaston Shoals	1	307466	1GAST HY 2.4000	5.7
Misenheimer	PV	307527	MISENHEPV 100.00	74.4
Turner	1	307599	1TURN HY 2.4000	1.5
Turner	2	307599	1TURN HY 2.4000	1.5
Tuxedo	1	307601	1TUX HYD 6.6000	3.2
Tuxedo	2	307601	1TUX HYD 6.6000	3.2
Cliffside	5	307610	1CLIFSID5 24.000	574
Mocksville	PV	307613	1MOCKSVPV 44.000	12.9
Monroe	PV	307614	MONROEPV 100.00	53.6
Great Falls	1	307702	1GTFALLS 2.4000	3
Great Falls	2	307702	1GTFALLS 2.4000	3
Great Falls	5	307702	1GTFALLS 2.4000	3
Great Falls	6	307702	1GTFALLS 2.4000	3
Ninety-Nine Islands	1	307749	1NINETY9 2.2000	15
Wylie	1	307840	1WYLIE H 6.6000	18
Wylie	2	307840	1WYLIE H 6.6000	18
Wylie	3	307840	1WYLIE H 6.6000	18
Wylie	4	307840	1WYLIE H 6.6000	18
Catawba	1	307856	1CATAWBA1 22.000	1172
Catawba	2	307857	1CATAWBA2 22.000	1142
Cedar Cliff	1	307858	1CEDAR CK 6.6000	13
Cedar Cliff	2	307858	1CEDAR CK 6.6000	15
Cedar Cliff	3	307858	1CEDAR CK 6.6000	15
Dearborn	1	307859	1DEARBN1 6.6000	14

Dearborn	2	307860	1DEARBN23 6.6000	14
Dearborn	3	307860	1DEARBN23 6.6000	14
Fishing Creek	1	307861	1FISHNG C 6.6000	11
Fishing Creek	2	307861	1FISHNG C 6.6000	9.5
Wateree	1	307862	1WATEREE 6.6000	17
Wateree	2	307862	1WATEREE 6.6000	17
Wateree	3	307862	1WATEREE 6.6000	17
Wateree	4	307862	1WATEREE 6.6000	17
Wateree	5	307862	1WATEREE 6.6000	17
Lee	8	307882	1LEE CT8 13.800	43
Bridgewater	1	308079	1BRIDGEW 6.6000	15.5
Lookout Tie	1	308080	1LOOKOUT 6.6000	9.33
Lookout Tie	2	308080	1LOOKOUT 6.6000	9.33
Lookout Tie	3	308080	1LOOKOUT 6.6000	9.33
Marshall	1	308081	1MARSHAL1 20.000	193
Marshall	L	308081	1MARSHAL1 20.000	195
Marshall	3	308082	1MARSHAL3 24.000	705
Oxford	1	308083	10XFORD 6.6000	20
Rhodhiss	1	308084	1RHODHIS 6.6000	10
Rhodhiss	2	308084	1RHODHIS 6.6000	12
Rhodhiss	3	308084	1RHODHIS 6.6000	12
Marshall	2	308087	1MARSHAL2 20.000	200
Marshall	L	308087	1MARSHAL2 20.000	192
Marshall	4	308088	1MARSHAL4 24.000	711
Buck	11	308090	1BUCKG11 18.000	176.5
Buck	12	308091	1BUCKG12 18.000	176.5
Buck	10	308092	1BUCKS10 18.000	333
McBride	PV	308107	UNEMC14 100.00	74.9
Mountain Island	1	308179	1MT ISLE 6.6000	14
Mountain Island	2	308179	1MT ISLE 6.6000	14

Mountain Island	3	308179	1MT ISLE 6.6000	17
Mountain Island	4	308179	1MT ISLE 6.6000	17
Cowans Ford	1	308227	1COWANS1 13.800	81
McGuire	1	308228	1MCGUIRE1 24.000	1172
McGuire	2	308229	1MCGUIRE2 24.000	1165
Cowans Ford	2	308237	1COWANS2 13.800	81
Cowans Ford	3	308238	1COWANS3 13.800	81
Cowans Ford	4	308239	1COWANS4 13.800	81
Ayrshire	PV	308375	1AYRSHIRE 44.000	16.8
Belews Creek	1	308377	1BELEWS1 18.000	612
Belews Creek	L	308377	1BELEWS1 18.000	515
Belews Creek	2	308378	1BELEWS2 18.000	622
Belews Creek	L	308378	1BELEWS2 18.000	508
Apple	PV	308387	APPLEPV3 100.00	16.2
Apple	PV	308391	APPLEPV2 100.00	20
Cedar Creek	1	308516	1CEDARCL 6.6000	6.4
Bear Creek	1	308517	1BEARCRK 4.1600	9
Tennessee Creek	1	308518	1TENNCRK 4.1600	10.8
Nantahala	1	308558	1NANTAHA 13.200	51
Thorpe	1	308600	1THORPE 6.6000	21.6
Thorpe	2	308600	1THORPE 6.6000	3
Dan River	8	308603	1DNRVRG8 18.000	176.5
Dan River	9	308604	1DNRVRG9 18.000	176.5
Dan River	7	308605	1DNRVRS7 18.000	333
Cleveland County	1	308607	1CLEVELAND1 16.500	178
Cleveland County	2	308608	1CLEVELAND2 16.500	178
Cleveland County	3	308609	1CLEVELAND3 16.500	178
Cleveland County	4	308610	1CLEVELAND4 16.500	178
Lee	10	308613	1LEECCS10 22.000	329
Lee	11	308614	1LEECCG11 18.000	231

Lee					
Kings Mountain Energy Center 2 308654 1KMECG 21.000 244 Stanly PV 308673 STANLYPV 100.00 50 Gaston PV 308675 1GASTONPV 44.000 25 Oxford 2 308683 10XFORD2 6.6000 20 Maiden Creek PV 308685 MAIDENCRKPV 100.00 69.3 Lincoln H 308692 1LILNT7 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEZ 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 5 308912 1FISHNG C2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 <td>Lee</td> <td>12</td> <td>308615</td> <td>1LEECCG12 18.000</td> <td>231</td>	Lee	12	308615	1LEECCG12 18.000	231
Stanly PV 308673 STANLYPV 100.00 50 Gaston PV 308675 1GASTONPV 44.000 25 Oxford 2 308683 10XFORD2 6.6000 20 Maiden Creek PV 308685 MAIDENCKRPV 100.00 69.3 Lincoln H 308692 1LINCLN17 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 1CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 </td <td>Kings Mountain Energy Center</td> <td>1</td> <td>308653</td> <td>1KMECS 18.000</td> <td>208</td>	Kings Mountain Energy Center	1	308653	1KMECS 18.000	208
Gaston PV 308675 1GASTONPV 44.000 25 Oxford 2 308683 1OXFORD2 6.6000 20 Maiden Creek PV 308685 MAIDENCRKPV 100.00 69.3 Lincoln H 308692 1LINCLN17 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 88 Clemson 1 3088789 1CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 15.5 Partin PV 309606 PARTINY 0.00.00 50 Ruff PV 309606 PARTINY 0.00.00 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals	Kings Mountain Energy Center	2	308654	1KMECG 21.000	244
Oxford 2 308683 10XFORD2 6.6000 20 Maiden Creek PV 308685 MAIDENCRKPV 100.00 69.3 Lincoln H 308692 1LINCLN17 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWER 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309615 1HGHSHLPV 44.000 16 Brookcliff	Stanly	PV	308673	STANLYPV 100.00	50
Maiden Creek PV 308685 MAIDENCRKPV 100.00 69.3 Lincoln H 308692 1LINCLN17 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 15 Fishing Creek 5 308912 1FISHNG C2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV	Gaston	PV	308675	1GASTONPV 44.000	25
Lincoln H 308692 1LINCLN17 22.000 525 SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 15.5 Partin PV 309606 PARTINFU 100.00 0 50 Ruff PV 309608 <	Oxford	2	308683	10XFORD2 6.6000	20
SunEd PV 308784 SUNED100 100.00 15 Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00	Maiden Creek	PV	308685	MAIDENCRKPV 100.00	69.3
Cliffside 6 308789 1CLFSDGEN 24.500 880 Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbe	Lincoln	Н	308692	1LINCLN17 22.000	525
Clemson 1 308878 CLEMSONU 100.00 17.8 Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.	SunEd	PV	308784	SUNED100 100.00	15
Keowee 2 308880 1KEOWEE2 13.800 80 Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 <	Cliffside	6	308789	1CLFSDGEN 24.500	880
Fishing Creek 3 308912 1FISHNG C2 6.6000 9.5 Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5	Clemson	1	308878	CLEMSONU 100.00	17.8
Fishing Creek 4 308912 1FISHNG C2 6.6000 11 Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 32 S	Keowee	2	308880	1KEOWEE2 13.800	80
Fishing Creek 5 308912 1FISHNG C2 6.6000 8 Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Kn	Fishing Creek	3	308912	1FISHNG C2 6.6000	9.5
Bridgewater 2 308920 1BRIDGEW2 6.6000 15.5 Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Fishing Creek	4	308912	1FISHNG C2 6.6000	11
Partin PV 309606 PARTINPV 100.00 50 Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Fishing Creek	5	308912	1FISHNG C2 6.6000	8
Ruff PV 309608 1RUFFPV 44.000 22 Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Bridgewater	2	308920	1BRIDGEW2 6.6000	15.5
Hornet PV 309609 HORNETPV 100.00 75 High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Partin	PV	309606	PARTINPV 100.00	50
High Shoals PV 309615 1HGHSHLPV 44.000 16 Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Ruff	PV	309608	1RUFFPV 44.000	22
Brookcliff PV 309621 BROOKCLIFFPV100.00 50 Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Hornet	PV	309609	HORNETPV 100.00	75
Westminster BT 309707 WESTMINSTERP100.00 25 Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	High Shoals	PV	309615	1HGHSHLPV 44.000	16
Westminster PV 309707 WESTMINSTERP100.00 75 Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Brookcliff	PV	309621	BROOKCLIFFPV100.00	50
Newbery BT 309712 NEWBERYPV 100.00 74.5 Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Westminster	BT	309707	WESTMINSTERP100.00	25
Newbery PV 309712 NEWBERYPV 100.00 74.5 Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Westminster	PV	309707	WESTMINSTERP100.00	75
Oakboro BT 309714 OAKBOROPV 100.00 13.5 Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Newbery	ВТ	309712	NEWBERYPV 100.00	74.5
Oakboro PV 309714 OAKBOROPV 100.00 40 Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Newbery	PV	309712	NEWBERYPV 100.00	74.5
Pelham PV 309716 1PELHAMPV 44.000 32 Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Oakboro	ВТ	309714	OAKBOROPV 100.00	13.5
Stony Knoll PV 309789 1STONYKNLLPV44.000 22.6	Oakboro	PV	309714	OAKBOROPV 100.00	40
•	Pelham	PV	309716	1PELHAMPV 44.000	32
Blackburn BT 309796 BLKBURNPV 100.00 10	Stony Knoll	PV	309789	1STONYKNLLPV44.000	22.6
	Blackburn	ВТ	309796	BLKBURNPV 100.00	10

Blackburn	PV	309796	BLKBURNPV 100.00	60.1
Apex	PV	309803	1APEXPV 44.000	28.9
Two Hearted	BT	309804	1TWOHRTDPV 44.000	7.5
Two Hearted	PV	309804	1TWOHRTDPV 44.000	22
Speedway	PV	309809	SPEEDWAYPV 100.00	22.6
Pinson	PV	309810	1PINSONPV 44.000	20
Broad River	PV	309814	BROADRVRPV 100.00	50
Olin Creek	PV	309824	10LINCKPV 44.000	35
Lick Creek	PV	309853	LICKCRKPV 100.00	50
Sugar	PV	309857	SUGARPV 100.00	60
Quail	PV	309902	1QUAILPV 44.000	30



Appendix 3: Duke Progress East BAA

The following information provides a more granular overview of the Duke Progress East BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A3.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Progress East BAA)

9			,		0 0 (0
Duke Progress East BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New						
(Circuit Mi.)						
Transmission Lines - Uprates1	38			10		
(Circuit Mi.)	38			10		
Transformers ² - New	2					
Transformers ² - Replacements	4					

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A3.2: Interface commitments¹ modeled in the SERTP Summer Peak models – Duke Progress East BAA

То	2024	2027	2032
Duke Carolinas	-1852	-1841	-1269
Duke Progress West	0	150	200
PJM	-105	-89	-72
Total	-1957	-1780	-1141

¹A positive number represents a net export from the Duke Progress East BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the Duke Progress East BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A3.3 below. Table A3.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A3.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A3.3: Changes in Generation Assumptions Based Upon LSEs – Duke Progress East BAA

able Heler enanges in a	The 113.3. Changes in deneration 1133amptions based opon 11313			Dake 110gress Base Billi						
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Blewett IC #1	13	13	0							
Blewett IC #2	13	13	0							
Blewett IC #3	13	13	0							
Blewett IC #4	13	13	0							
Weatherspoon IC #1	32	32	0							
Weatherspoon IC #2	32	32	0							
Weatherspoon IC #3	33	33	0							
Weatherspoon IC #4	31	31	0							
Roxboro #1 Coal	379	379	379	379	379	379	0			
Roxboro #2 Coal	665	665	665	665	665	665	0			
Roxboro #3 Coal	691	691	691	691	691	0				
Roxboro #4 Coal	698	698	698	698	698	0				
Mayo Coal	727	727	727	727	727	727	0			
Panola PV	67	67	67	67	67	67	67	67	67	67
Roxboro Proxy #1						1350	1350	1350	1350	1350
Roxboro Proxy #2							1350	1350	1350	1350
Mayo Proxy							602	602	602	602

Table A3.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Duke Progress East BAA

			-	•	_					
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Hamlet #1	55	55	55	55	55	55	555	55	55	55
Hamlet #2	55	55	55	55	55	55	55	55	55	55
Hamlet #3	55	55	55	55	55	55	55	55	55	55

Table A3.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model - Duke Progress East BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
Dist. Solar	305001	E1-CHAD PEA 230.00	PV	1
Dist. Solar	305134	E15-VANDER 115.00	PV	1
Anson CT	304993	ANSON CT1 13.800	1	57.5
Anson CT	304994	ANSON CT2 13.800	2	57.5
Anson CT	304995	ANSON CT3 13.800	3	57.5
Anson CT	304996	ANSON CT4 13.800	4	57.5
Anson CT	304997	ANSON CT5 13.800	5	57.5
Anson CT	304998	ANSON CT6 13.800	6	57.5
Dist. Solar	304073	RAL BL RIDGE230.00	PV	1
Dist. Solar	304676	KINGSTREE N 230.00	PV	1.018
Dist. Solar	304178	AUBURN 230.00	PV	1.04
Dist. Solar	304659	FLOSUB115WTT115.00	PV	1.055
Aurora PCS	304455	AURORA PCS1 230.00	А	42
Dist. Solar	304671	FLOR SARDIS 230.00	PV	1.116
Dist. Solar	305009	E1-DAWSCREEK230.00	PV	1.2
Dist. Solar	305131	E15-HARGROVE115.00	PV	1.5
Dist. Solar	304133	FUQUAY BELLS230.00	PV	1.52
Dist. Solar	304188	PA-SELMA#3 230.00	PV	1.98
Dist. Solar	304187	PA-SMTHFLD2 230.00	PV	1.98
Dist. Solar	305112	E14-TROY 115.00	PV	1.99
Dist. Solar	305061	E9-DAWSON 115.00	PV	1.99

Dist. Solar	305075	E9-W ONSLOW 230.00	PV	1.99
Dist. Solar	304364	ABERDEEN 115.00	PV	1.998
Dist. Solar	305097	E10-RENNERT 115.00	PV	1.998
Dist. Solar	305098	E10-ROCKFISH115.00	PV	1.999
Blewett Hydro	304892	BLEWETT 1-3 4.8000	1	4
Blewett Hydro	304892	BLEWETT 1-3 4.8000	2	4
Blewett Hydro	304892	BLEWETT 1-3 4.8000	3	4
Blewett Hydro	304893	BLEWETT 4-6 4.8000	4	5
Blewett Hydro	304893	BLEWETT 4-6 4.8000	5	5
Blewett Hydro	304893	BLEWETT 4-6 4.8000	6	5
Blewett IC	304933	BLW IC 1&2 13.800	C1	13
Blewett IC	304933	BLW IC 1&2 13.800	C2	13
Blewett IC	304934	BLW IC 3&4 13.800	C3	13
Blewett IC	304934	BLW IC 3&4 13.800	C4	13
Dist. Solar	305099	E10-WESTLUMB115.00	PV	1.999
Brunswick #1	304862	BRUNSWICK#1 24.000	1	938
Brunswick #2	304863	BRUNSWICK#2 24.000	1	932
Dist. Solar	305110	E14-PARKWOOD115.00	PV	1.999
Dist. Solar	305160	E17-MT OLIVE115.00	PV	1.999
Dist. Solar	304327	ELLERBE 230.00	PV	1.999
Dist. Solar	305152	E17-DUDLEY 115.00	PV	2
Dist. Solar	305159	E17-LAGRANGE115.00	PV	2
Dist. Solar	305162	E17-ROSEWOOD115.00	PV	2
Dist. Solar	304674	OLANTA 230.00	PV	2
Dist. Solar	304439	PA-LUMB#4 115.00	PV	2
Dist. Solar	304705	SOCIETY HILL230.00	PV	2
Dist. Biogas	304521	CATHERN LAKE230.00	BG	1.753
Dist. Solar	304649	DARL PINEVIL115.00	PV	2.02
Craven Wood Energy	304472	CC WD EN SUB230.00	1	45
Dist. Solar	304672	HARTS SEGARS230.00	PV	2.02

Southea Regiona	
TRANSMISSION	
	Dist. 9

Dist. Solar	305034	E4-POWELL 230.00	PV	2.299
Dist. Solar	304115	CARY TRENTON230.00	PV	2.326
Dist. Solar	304153	GARNER TRYON115.00	PV	2.337
Dist. Biogas	304256	CLINT FERREL115.00	BG	1.76
Dist. Solar	304565	EAGLE ISLAND115.00	PV	3.083
Dist. Solar	304334	BYNUM 230.00	PV	3.294
Lumberton Cogen	304603	COG LUMB SUB115.00	1	32
Dist. Solar	304341	MTGILEAD 115.00	PV	3.5
Dist. Solar	304151	GARNER W OAK230.00	PV	3.55



Appendix 4: Duke Progress West BAA

The following information provides a more granular overview of the Duke Progress West BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A4.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Progress West BAA)

9					0 0	•
Duke Progress West BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New	2.2			10		
(Circuit Mi.)	2.2			10		
Transmission Lines - Uprates1						
(Circuit Mi.)						
Transformers ² – New						
Transformers ² - Replacements						

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A4.2: Interface commitments¹ modeled in the SERTP Summer Peak models – Duke Progress West BAA

То	2024	2027	2032
Duke Progress East	0	0	0
Duke Carolinas	0	0	0
SC	-22	-22	-22
TVA	-14	-14	-14
Total	-36	-36	-36

¹A positive number represents a net export from the Duke Progress West BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer



A detailed listing of the changes in generation assumptions within the Duke Progress West BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A4.3 below. Table A4.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A4.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A4.3: Changes in Generation Assumptions Based Upon LSEs – Duke Progress West BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
				None						

Table A4.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Duke Progress West BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
None										

Table A4.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model – Duke Progress West BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
Aggregated Distribution Gen	PV	304743	CANTON115 TT115.00	1.5
Aggregated Distribution Gen	BG	304759	LEICESTER 115.00	1.415
Aggregated Distribution Gen	PV	304759	LEICESTER 115.00	3.59
Aggregated Distribution Gen	НҮ	304766	ELK MOUNTAIN115.00	2.5
Aggregated Distribution Gen	НҮ	304772	BARNARDSVILE115.00	1
Aggregated Distribution Gen	PV	304791	WESTASHEV TT115.00	1.857

Aggregated Distribution Gen	ВА	304805	ASH ROCK HIL115.00	8.8
Aggregated Distribution Gen	PV	304818	BALDWIN 115.00	1.424
Walters	1	304853	WALTERS #1 13.800	36
Walters	1	304854	WALTERS #2 13.800	40
Walters	1	304855	WALTERS #3 13.800	36
Marshall	1	304856	MARSHAL 1&2 4.1600	2
Marshall	2	304856	MARSHAL 1&2 4.1600	2
Asheville	3	304858	ASHVL #3CT 18.000	160
Asheville	4	304859	ASHVL #4CT 18.000	160
Asheville	5	304875	ASHVCC1CT5 18.000	165
Asheville	6	304876	ASHVCC1ST6 13.800	95
Asheville	7	304877	ASHVCC2CT7 18.000	165
Asheville	8	304878	ASHVCC2ST8 13.800	95



Appendix 5: GULF POWER BAA

The following information provides a more granular overview of the future GULF Power BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A5.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (GULF POWER BAA)

S			,	, L	0 (
GULF POWER BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New	61.8		176	35		
(Circuit Mi.)	01.0		170	55		
Transmission Lines - Uprates1	25			16.9		
(Circuit Mi.)	23			10.9		
Transformers ² – New	1		1			
Transformers ² - Replacements	1					

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A5.2: Interface commitments¹ modeled in the SERTP Summer Peak models – GULF POWER BAA

То	2023	2026	2031
Southern	-1745.34	-865.492	-870.5
Total	-1745.34	-865.492	-870.5

¹A positive number represents a net export from the GULF Power BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the future GULF Power BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A5.3 below. Table A5.4 provides a listing of generation assumptions based upon long-term, firm delivery service commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A5.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A5.3: Changes in Generation Assumptions Based Upon LSEs – GULF POWER BAA

abio monor diffinges in a	THE BUBS	LS GOLI I OWLIT DILI								
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
FLOWERS CREEK PV	75	75	75	75	75	75	75	75	75	75
WILD AZALEA PV	75	75	75	75	75	75	75	75	75	75
APALACHEE PV	75	75	75	75	75	75	75	75	75	75
BLACKWATER RIVER PV	75	75	75	75	75	75	75	75	75	75
CANOE PV	75	75	75	75	75	75	75	75	75	75
CHAUTAUQUA PV	75	75	75	75	75	75	75	75	75	75
CHIPOLA 1 PV	75	75	75	75	75	75	75	75	75	75
CHIPOLA 2 PV	75	75	75	75	75	75	75	75	75	75
CHIPOLA 3 PV		75	75	75	75	75	75	75	75	75
CHIPOLA 4 PV		75	75	75	75	75	75	75	75	75
CYPRESS POND PV	75	75	75	75	75	75	75	75	75	75
FIRST CITY PV	75	75	75	75	75	75	75	75	75	75
SAW PALMETTO PV	75	75	75	75	75	75	75	75	75	75
SHIRER BRANCH PV	75	75	75	75	75	75	75	75	75	75
SLAVIC PV		75	75	75	75	75	75	75	75	75
SPARKLEBERRY	75	75	75	75	75	75	75	75	75	75

Table A5.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – GULF POWER BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
DANIEL 1 & 2	500	0	0	0	0	0	0	0	0	0
SCHERER 3	220	220	220	220	220	220	0	0	0	0
CENTRAL ALABAMA										
PEA RIDGE	12	12	0	0	0	0	0	0	0	0
FPL ¹	500	850	850	-600	-600	-700	-700	-850	-850	-850

Table A5.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model - GULF POWER BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
BLUE INDIGO 0.6000	1	397041	BLUE INDIGO 0.6000	74.5
GP-IC621_PV 0.6000	1	397042	GP-IC621_PV 0.6000	74.5
GP-IC643_PV 0.6000	1	397043	GP-IC643_PV 0.6000	74.5
CRIST8-CTA 18.000	30	397440	CRIST8-CTA 18.000	235
CRIST8-CTB 18.000	30	397441	CRIST8-CTB 18.000	235
CRIST8-CTC 18.000	30	397442	CRIST8-CTC 18.000	235
CRIST8-CTD 18.000	30	397443	CRIST8-CTD 18.000	235
LSMITH A 13.800	Α	397680	LSMITH A 13.800	32
LSMITH 3ST 18.000	3	397683	LSMITH 3ST 18.000	233
LSMITH 3A 18.000	3A	397684	LSMITH 3A 18.000	221
LSMITH 3B 18.000	3B	397685	LSMITH 3B 18.000	221
CRIST 4 13.800	4	397704	CRIST 4 13.800	79
CRIST 5 13.800	5	397705	CRIST 5 13.800	79
CRIST 6 24.000	6	397706	CRIST 6 24.000	310
CRIST 7 20.000	7	397707	CRIST 7 20.000	504



Appendix 6: LG&E/KU BAA

The following information provides a more granular overview of the LG&E/KU BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A6.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (LG&E/KU BAA)

			-		0 0 - (, , ,
LG&E/KU BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New						
(Circuit Mi.)						
Transmission Lines - Uprates1			4.7		14.29	
(Circuit Mi.)			4.7		14.29	
Transformers ² - New					2	
Transformers ² - Replacements					1	

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A6.2: Interface commitments¹ modeled in the SERTP Summer Peak models – LG&E/KU BAA

То	2024	2027	2032
PJM	727	727	727
OVEC	-179	-179	-179
MISO	-234.9	-234.9	-234.9
Owensboro Municipal	0	0	0
TVA	-30	-33	-36
Total	283.1	280.1	277.1

¹A positive number represents a net export from the LG&E/KU BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the LG&E/KU BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A6.3 below. Furthermore, supplemental information regarding noteworthy generation expansion and retirements/decertifications included in the 2022 series set of SERTP powerflow models is provided below while Table A6.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A6.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A6.3: Changes in Generation Assumptions Based Upon LSEs - LG&E/KU BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Zorn	0	0	0	0	0	0	0	0	0	0
Ashwood	86	86	86	86	86	86	86	86	86	86
Rhudes Creek	100	100	100	100	100	100	100	100	100	100

Table A6.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – LG&E/KU BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Trimble County	324	324	324	324	324	324	324	324	324	324

Table A6.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model - LG&E/KU BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
E.W. Brown	3	324002	1BROWN 3 24.000	456
E.W. Brown	5	324003	1BROWN 5 13.800	131
E.W. Brown	6	324004	1BROWN 6 18.000	149
E.W. Brown	7	324005	1BROWN 7 18.000	151
E.W. Brown	8	324006	1BROWN 8 13.800	122
E.W. Brown	9	324007	1BROWN 9 13.800	122
E.W. Brown	10	324008	1BROWN 10 13.800	122
E.W. Brown	11	324009	1BROWN 11 13.800	122

Southeastern Regional TRANSMISSION PLANNING

Dix Dam	1	324014	1DIX DAM 1 13.200	11.2
Dix Dam	2	324015	1DIX DAM 2 13.200	11.2
Dix Dam	3	324016	1DIX DAM 3 13.200	11.2
Ghent	1	324017	1GHENT 1 18.000	526
Ghent	2	324018	1GHENT 2 22.000	530
Ghent	3	324019	1GHENT 3 22.000	535
Ghent	4	324020	1GHENT 4 22.000	529
Haefling	1	324023	1HAEFLING 13.800	12
Haefling	2	324023	1HAEFLING 13.800	12
Mill Creek	1	324024	1MILL CRK 1 22.000	333
Mill Creek	2	324025	1MILL CRK 2 22.000	334
Mill Creek	3	324026	1MILL CRK 3 22.000	425
Mill Creek	4	324027	1MILL CRK 4 22.000	526
Paddys Run	13	324031	1PADDY RN 1316.000	153
Trimble County	1	324034	1TRIM CO 1 22.000	548
Trimble County	2	324035	1TRIM CO 2 24.000	790
Trimble County	5	324036	1TRIM CO 5 18.000	160
Trimble County	6	324037	1TRIM CO 6 18.000	167
Trimble County	7	324038	1TRIM CO 7 18.000	163
Trimble County	8	324039	1TRIM CO 8 18.000	160
Trimble County	9	324040	1TRIM CO 9 18.000	166
Trimble County	10	324041	1TRIM CO 10 18.000	165
Zorn	1	324043	1ZORN 13.800	14
Bluegrass	1	324044	1BLUEGRASS 118.000	166
Bluegrass	2	324045	1BLUEGRASS 218.000	166
Bluegrass	3	324046	1BLUEGRASS 318.000	166
Lock	1	324052	1LOCK 7 2.4000	2
Ohio Falls	1	324234	10HIO FALL 114.000	9.375
Ohio Falls	2	324234	10HIO FALL 114.000	9.375
Ohio Falls	3	324234	10HIO FALL 114.000	9.375

Ohio Falls 4 324234 10HIO FALL 114.000 9.375 Ohio Falls 5 324235 10HIO FALL 214.000 9.375 Ohio Falls 6 324235 10HIO FALL 214.000 9.375 Ohio Falls 8 324235 10HIO FALL 214.000 9.375 Ohio Falls 8 324235 10HIO FALL 214.000 9.375 Paris 1 324677 2PARIS 12 69.000 11.27 Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23					
Ohio Falls 6 324235 10HIO FALL 214.000 9.375 Ohio Falls 7 324235 10HIO FALL 214.000 9.375 Ohio Falls 8 324235 10HIO FALL 214.000 9.375 Paris 1 324677 2PARIS 12 69.000 11.27 Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 75 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ohio Falls	4	324234	10HIO FALL 114.000	9.375
Ohio Falls 7 324235 10HIO FALL 214.000 9.375 Ohio Falls 8 324235 10HIO FALL 214.000 9.375 Paris 1 324677 2PARIS 12 69.000 11.27 Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 75 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ohio Falls	5	324235	10HIO FALL 214.000	9.375
Ohio Falls 8 324235 1 OHIO FALL 214.000 9.375 Paris 1 324677 2PARIS 12 69.000 11.27 Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ohio Falls	6	324235	10HIO FALL 214.000	9.375
Paris 1 324677 2PARIS 12 69.000 11.27 Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ohio Falls	7	324235	10HIO FALL 214.000	9.375
Paducah 2 324697 1KMPA PAD2 13.800 54 Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ohio Falls	8	324235	10HIO FALL 214.000	9.375
Paducah 1 324933 1KMPA PAD1 13.800 54 E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Paris	1	324677	2PARIS 12 69.000	11.27
E.W. Brown S1 325012 1BROWN SOLAR13.200 8 Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Paducah	2	324697	1KMPA PAD2 13.800	54
Ashwood Solar 1 325029 1ASHWOOD GEN0.6450 69.12 Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Paducah	1	324933	1KMPA PAD1 13.800	54
Cane Run 71 325093 1CANERUN7CT118.000 233 Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	E.W. Brown	S1	325012	1BROWN SOLAR13.200	8
Cane Run 72 325094 1CANERUN7CT218.000 233 Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Ashwood Solar	1	325029	1ASHWOOD GEN0.6450	69.12
Cane Run 7S 325095 1CANERUN7ST 18.000 238 Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Cane Run	71	325093	1CANERUN7CT118.000	233
Paddys Run 11 326514 1PADDY RN 1114.000 12 Paddys Run 12 326515 1PADDY RN 1214.000 23	Cane Run	72	325094	1CANERUN7CT218.000	233
Paddys Run 12 326515 1PADDY RN 1214.000 23	Cane Run	7 S	325095	1CANERUN7ST 18.000	238
	Paddys Run	11	326514	1PADDY RN 1114.000	12
EKPC Office P1 326541 2EKPC OFFICE69.000 6.8	Paddys Run	12	326515	1PADDY RN 1214.000	23
	EKPC Office	P1	326541	2EKPC OFFICE69.000	6.8



Appendix 7: PowerSouth Planning Authority

The following information provides a more granular overview of the PowerSouth Planning Authority input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A7.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (PowerSouth Planning Authority)

PowerSouth Planning Authority	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines — New (Circuit Mi.)	9.5					
Transmission Lines — Uprates¹ (Circuit Mi.)						
Transformers ² – New						
Transformers ² - Replacements						

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A7.2: Interface commitments¹ modeled in the SERTP Summer Peak models – PowerSouth Planning Authority

То	2023	2026	2031
Southern	499.8	405.2	444.4
Total	499.8	405.2	444.4

¹A positive number represents a net export from the PowerSouth Planning Authority

²The voltages shown represent the operating voltages on the high side terminals of the transformer



A detailed listing of the changes in generation assumptions within the PowerSouth Planning Authority throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A7.3 below. Table A7.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A7.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A7.3: Changes in Generation Assumptions Based Upon LSEs – PowerSouth Planning Authority

U			L	L				0		
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Lowman EC 1 & 2	632	632	632	632	632	632	632	632	632	632
Wing	80	80	80	80	80	80	80	80	80	80
Fountain			80	80	80	80	80	80	80	80

 $Table\ A7.4:\ Generation\ Assumptions\ Based\ Upon\ Expected\ Long-term,\ Firm\ Point-to-Point\ Commitments-PowerSouth\ Planning\ Authority$

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032

Table A7.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model – PowerSouth Planning Authority

Plant	Unit	Bus #	Bus Name	Pmax (MW)
Point A Hydro	317071	1POINTA_HYD 4.2000	Н	8
Point A Hydro	317071	1POINTA_HYD 4.2000	H1	4.4
Wing Solar	317129	2WINGSOLAR1G34.500	S1	80
Gantt	317134	2GANTT GSU 2.3000	H1	2.6
Vann Plant	317701	2VANN 1G 18.000	1	170
Vann Plant	317702	2VANN 2G 18.000	2	170
Vann Plant	317703	2VANN 3G 18.000	3	182
Lowman EC	317712	2LOWMANEC1 19.000	1	372
Lowman EC	317713	2LOWMANEC2 21.000	2	261

Re	utheastern gional SMISSION PLANNING				2022
	McIntosh	317721	2MCNTSH1G 13.800	1	110
	McIntosh	317722	2MCNTSH2G 13.200	2	114
	McIntosh	317723	2MCNTSH3G 13.200	3	114
	McWilliams	317731	2MCWLMS1G 4.2000	1	8
	McWilliams	317732	2MCWLMS2G 4.2000	2	8
	McWilliams	317733	2MCWLMS3G 13.800	3	17
	McWilliams	317734	2MCWLMS4G 13.800	4	119
	McIntosh	317754	3MCNTSH4G 115.00	4	172
	McIntosh	317755	2MCNTSH5G 13.200	5	173



Appendix 8: Southern BAA

The following information provides a more granular overview of the Southern BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table 8.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Southern BAA)

· ·			, ,	J 1	0 0	
Southern BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New (Circuit Mi.)	104.5			279.7		102.8
Transmission Lines – Uprates¹ (Circuit Mi.)	1073.0		37.0	285.1		20.5
Transformers ² – New				6		5
Transformers ² - Replacements				5		

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table 8.2: Interface commitments¹ modeled in the SERTP Summer Peak models – Southern BAA

То	2024	2027	2032
Duke Carolinas	71	71	71
DESC	0	0	0
SCPSA	0	0	0
TVA	-65	-62	-59
SEPA	-625	-625	-625
MISO	0	0	0
FRCC	331	331	331
Total	-288	-285	-282

¹A positive number represents a net export from the Southern BAA

A detailed listing of the changes in generation assumptions within the Southern BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Tables A8.3 through A8.6 below. Furthermore, supplemental information regarding noteworthy

²The voltages shown represent the operating voltages on the high side terminals of the transformer

generation expansion and retirements/decertifications included in the 2022 series set of SERTP powerflow models is provided below, while Table A8.7 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A8.8 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A8.3: Changes in Generation Assumptions Based Upon LSEs – Southern Company

Tubic 110.5. Changes in deneration 1155 amptions Dusca Opon 1555 Southern Company											
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
ADDISON 1&3	305	305	305	305	305	305	305	0			
DAHLBERG	373	373	75	504	504	760	760	685	685	685	
HARRIS 1	640	640	640	640	640	640	640	0			
HARRIS 2			689	689	689	689	689	689	689	689	
MID GA COGEN	300	300	300	300	300	0					
MONROE POWER	309	0	360	360	360	360	360	360	360	360	
TIGER CREEK 1&4	313	0									
TENASKA HEAR 1-6	945	945	945	945	945	945	945	0			
WALTON COUNTY	465	0									
BARRY1	685	685	685	685	685	685	685	685	685	685	
GASTON 1-4	465	515	515	515	515	515	515	515	515	515	
VOGTLE 3	504	504	504	504	504	504	504	504	504	504	
VOGTLE 4		504	504	504	504	504	504	504	504	504	
YATES 6-7	649	714	714	714	714	714	714	714	714	714	
Central Alabama	890	890	890	890	890	890	890	890	890	890	
CALHOUN 1-4	690	690	690	690	690	690	690	690	690	690	
WANSLEY 7			622	622	622	622	622	622	622	622	
BIRD DOG SOLAR	40	40	40	40	40	40	40	40	40	40	
BULLDOG SOLAR	80	80	80	80	80	80	80	80	80	80	
Crane Creek Solar	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	
mOONsHOT sOLAR	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	

m.II	ISMISSION I LANNING										
	PEAK CLEAN Solar	80	80	80	80	80	80	80	80	80	80
	SONNY SOLAR	40	40	40	40	40	40	40	40	40	40
	WADLEY SOLAR		260	260	260	260	260	260	260	260	260
	WALKER SPRINGS SOLAR			160	160	160	160	160	160	160	160
	ALLIGATOR CREEK SOLAR	80	80	80	80	80	80	80	80	80	80
	BLACK WATER SOLAR	80	80	80	80	80	80	80	80	80	80
	WOLFSKIN SOLAR	38	38	38	38	38	38	38	38	38	38
	DOUBLE RUN SOLAR		220	220	220	220	220	220	220	220	220
	DECATUR SOLAR		200	200	200	200	200	200	200	200	200
	WASHINGTON CO		150	150	150	150	150	150	150	150	150
	TIMBERLAND Solar		140	140	140	140	140	140	140	140	140
	HOBNAIL SOLAR	70	70	70	70	70	70	70	70	70	70
	FORT STEWART SOLAR	30	43	43	43	43	43	43	43	43	43
	MCGRAU FORD BESS				265	265	265	265	265	265	265

¹This assumption may be modified as resource decisions are made by the corresponding LSEs pursuant to applicable regulatory processes.

Table A8.4: Changes in Generation Assumptions Based Upon LSEs – GTC

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
SR CEDAR SPRINGS	70	70	70	70	70	70	70	70	70	70
Sr Clay	106	106	106	106	106	106	106	106	106	106
SR AILEY		80	80	80	80	80	80	80	80	80
Sr Snipesville III	107	107	107	107	107	107	107	107	107	107
Vogtle 3	330	330	330	330	330	330	330	330	330	330
Vogtle 4		330	330	330	330	330	330	330	330	330

Effingham	518	545	545	545	545	545	545	545	545	545			
TIGER CREEK		320	320	320	320	320	320	320	320	320			
Table A8.5: Changes in Generation Assumptions Based Upon LSEs – MEAG													
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032			
Voglte 3	250	250	250	250	250	250	250	250	250	250			
Voglte 4		250	250	250	250	250	250	250	250	250			
Table A8.6: Changes is	Table A8.6: Changes in Generation Assumptions Based Upon LSEs – Dalton												
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032			
Voglte 3	19	19	19	19	19	19	19	19	19	19			
Vogtle 4		19	19	19	19	19	19	19	19	19			

Table A8.7: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Southern BAA

				•	•	0				
Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Bowen	159	159	159	159	159	159	159	159	159	159
Central Alabama	0									
Dahlberg	494	494	419	419	419	194	194	194	194	194
Daniel	650	600	600	600	600	600	600	600	600	600
Hammond	10	10	10	10	10	10	10	10	10	10
HILLABEE	350	350	350	350	350	350	350	350	350	350
Lindsay Hill	220	220	220	220	220	220	220	220	220	220
Scherer	1131	1131	1131	1131	1131	1131	1131	1131	1131	1131
Vogtle	103	206	206	206	206	206	206	206	206	206

Table A8.8: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model - Southern BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
USMC Supply	380714	3USMC SUPPLY115.00	1	12.5
Jeffersonville	380813	3JEFFERSONVL115.00	S1	20

Decatur County Industrial	381031	3DEC CO IND 115.00	S1	19
Spring Branch	381493	3SPRING BRN 115.00	S1	27.4
East Berlin	381888	6E BERLIN 230.00	S1	20
Fort Valley Solar	382323	3FT VALLEY 115.00	S1	10.7
Double Run Solar	383301	2DBL RUN SLR34.500	B1	20
Double Run Solar	383301	2DBL RUN SLR34.500	S1	220
Decatur Solar	383303	2DECATUR SLR34.500	S1	200
Wadley Solar	383305	2WADLEY SLR 34.500	S1	270
Timberland Solar	383308	2TMBRLND SLR34.500	B1	70
Timberland Solar	383308	2TMBRLND SLR34.500	S1	140
Alligator Solar	383313	2ALIGATOR PV34.500	S1	80
Mossy Branch Battery	383400	2MOSSY BESS 34.500	B1	65
Decatur Solar	383401	2DEC PKY SLR34.500	S1	79.9
Old Midville Solar	383402	3MIDVIL SLR 115.00	S1	20
LIVEOAK SOLAR	383403	2LIVEOAK SLR34.500	S1	51
White Oak Solar	383404	2WHT OAK SLR34.500	S1	76.5
White Pine Solar	383405	2WH PINE SLR34.500	S1	101.3
Bulter Solar	383406	2BUTLER SLR 34.500	S1	100
Paw Solar	383407	6PAW PAW SLR230.00	S1	30
Fall Line Solar	383408	3FALL LN SLR115.00	S1	20
Sandhills Solar	383409	2SANDHLS SLR34.500	S1	143
Fort Benning Solar	383411	3BENNING SLR115.00	S1	30
Gordon Solar	383412	2GORDON SLR 34.500	S1	30
Stwart Solar	383413	2STEWART SLR34.500	B1	13
Stewart Solar	383413	2STEWART SLR34.500	S1	30
Kingsbay Solar	383414	2KNGSBAY SLR34.500	B1	1.3
Kingsbay Solar	383414	2KNGSBAY SLR34.500	S1	30
Mclb Solar	383415	2MCLB SOLAR 34.500	S1	31
Robins Solar	383416	2RAFB SLR 34.500	S1	133
Moody Air Force Solar	383417	2MAFB SLR 34.500	S1	46

Rincon Solar	383422	2RINCON SLR 34.500	S1	16
Stagecoach Solar	383424	2STAGECH SLR34.500	S1	80
Camilla Solar	383425	6CAMILLA SLR230.00	S1	16
Hazlehurst Solar	383427	2SR HAZLE 2 34.500	S1	52.5
Hazelhurst Solar	383428	3SR HAZLE 1 115.00	S1	20
Hazelhurst Solar	383429	2SR HAZLE 3 34.500	S1	40.8
Thrill Hill Solar	383430	2SR TERRELL 34.500	S1	83.1
Dougherty Solar	383433	2DOUGH PV 34.500	S1	130
Arlington Solar	383434	2SR ARLINGTN34.500	S1	123
Lancaster Solar	383435	2LANCSTR SLR34.500	S1	80
Clay Solar	383438	2SR CLAY 34.500	S1	106
Perry Solar	383439	2SR PERRY 34.500	S1	70
Southern Oak Solar			S1	
(Camilla II)	383440	2SO OAK PV 134.500	31	160
Twiggs Solar	383443	2TWIGGS SLR 34.500	S1	200
Quitman Solar	383444	2QUITMAN1 PV34.500	S1	150
Tanglewood Solar	383446	2TANGLE SLR 34.500	S1	60
Quitman II Solar	383449	2QUITMAN2 PV34.500	S1	150
Turkey Run Solar	383450	2HICK PK PV 34.500	S1	195.5
Cool Springs Solar	383452	2COOL SPR PV34.500	S1	213
Sonny Solar	383454	2SONNY PV 34.500	S1	40
Bird Dog Solar	383455	2BIRD DOG PV34.500	S1	40
Bulldog Solar	383456	2BULLDOG PV 34.500	S1	80
Americus Solar	383460	2AMER BESS 34.500	B1	200
Americus Solar	383461	2AMERICUS 1 34.500	S1	615
Americus Solar	383462	2AMERICUS 2 34.500	S2	250
Americus Solar	383463	2AMERICUS 3 34.500	S3	250
Washington County Solar	383464	2WSHCNTY SLR34.500	S1	150
Blackwater Solar	383466	2BLCKWTR SLR34.500	S1	80
Hobnail Solar	383468	2HOBNAIL SLR34.500	S1	70

Wolfskin Solar	383469	2WLFSKIN SLR34.500	S1	38
Lumpkin Solar	383470	2SR LUMPKIN 34.500	S1	100
Snipesville Solar	383471	2SR SNPSVL 134.500	S1	86
Snipesville Solar II	383472	2SR SNPSVL 234.500	S1	130
Snipesville Solar III	383473	2SR SNPSVL 334.500	S1	107
Cedar Springs Solar	383474	2SR CEDAR SP34.500	S1	70
Desoto Solar	383475	2SR DESOTO 34.500	S1	263
SR Ailey Solar	383476	2SR AILEY PV34.500	S1	80
Alb Green	383480	2ALB GRN NRG13.800	1	50
GRP Franklin Bio	383481	2GRP FRK BIO13.800	1	65
GRP Madison Bio	383486	2GRP MAD BIO13.800	1	65
Pine Ridge	383497	2PINE RIDGE 24.950	1	8.2
Richland Creek	383498	2RICHLD CK 4.2000	1	10.6
Morgan Falls Dam	383500	2MORGAN F 4.2000	1	10.4
Lloyd Shoals Dam	383501	2LLOYD SHL 2.3000	1	19.6
Carters Dam	383502	2CARTERSDAM113.800	1	148
Carters Dam	383503	2CARTERSDAM213.800	2	148
Carters Dam	383504	2CARTERSDAM313.800	3	148
Carters Dam	383505	2CARTERSDAM413.800	4	148
Allatoona Dam	383506	2ALLA DAM 13.800	1	72
West Point Dam	383508	2W PT DAM 13.800	1	87
Buford Dam	383509	2BUF DAM 1+313.800	1	60.1
Buford Dam	383509	2BUF DAM 1+313.800	3	6.8
Buford Dam	383510	2BUF DAM 2 13.800	2	60.1
Rocky Mountain	383511	2ROCKY MTN 120.000	1	346.3
Rocky Mountain	383512	2ROCKY MTN 220.000	2	346.3
Rocky Mountain	383513	2ROCKY MTN 320.000	3	346.3
Bartletts Ferry Dam	383514	2BARTLFY1 12.000	1	15.2
Bartletts Ferry Dam	383515	2BARTLFY2 12.000	2	15.2
Bartletts Ferry Dam	383516	2BARTLFY3 12.000	3	15.2

Bartletts Ferry Dam	383517	2BARTLFY4 6.9000	4	20.3
Bartletts Ferry Dam	383518	2BARTLFY6 13.800	5	54.7
Bartletts Ferry Dam	383518	2BARTLFY6 13.800	6	54.7
Goat Rock Dam	383520	2GOATROCK 12.000	3	5
Goat Rock Dam	383520	2GOATROCK 12.000	4	5
Goat Rock Dam	383520	2GOATROCK 12.000	7	9.3
Goat Rock Dam	383520	2GOATROCK 12.000	8	9.3
Goat Rock Dam	383521	2GOATRK 56 4.2000	5	5
Goat Rock Dam	383521	2GOATRK 56 4.2000	6	5
Oliver Dam	383522	20LIVER 1 7.2000	1	17.7
Oliver Dam	383523	20LIVER 2 7.6000	2	17.7
Oliver Dam	383524	20LIVER 3-4 7.6000	3	17.7
Oliver Dam	383524	20LIVER 3-4 7.6000	4	6
North Highlands Dam	383525	2N HIGHLAND 12.000	1	34.4
Terrora Dam	383530	2TERRORA 6.6000	1	14.5
Tugalo Dam	383532	2TUGALO 1-2 6.6000	1	22.1
Tugalo Dam	383533	2TUGALO 3-4 6.6000	3	22.1
Yonah Dam	383534	2YONAH 6.6000	1	25.4
Wallace Dam	383536	2WALLACE 1-314.400	1	50.7
Wallace Dam	383536	2WALLACE 1-314.400	2	50.7
Wallace Dam	383536	2WALLACE 1-314.400	3	54.6
Wallace Dam	383537	2WALLACE 4-614.400	4	54.6
Wallace Dam	383537	2WALLACE 4-614.400	5	50.7
Wallace Dam	383537	2WALLACE 4-614.400	6	50.7
Flint River Dam	383538	2FLINT HYDRO2.3000	1	6.5
Crisp Co. Dam	383541	2CRISPCO1 6.6000	1	23
Tallulah Falls Dam	383542	2TALLULAH 1 6.6000	1	11.4
Tallulah Falls Dam	383543	2TALLULAH 2 6.6000	2	11.4
Tallulah Falls Dam	383544	2TALLULAH 3 6.6000	3	11.4
Tallulah Falls Dam	383545	2TALLULAH 4 6.6000	4	11.4

Tallulah Falls Dam	383546	2TALLULAH 5 6.6000	5	11.4
Tallulah Falls Dam	383547	2TALLULAH 6 6.6000	6	11.4
Sinclair Dam	383548	2SINCLAIR 1 6.9000	1	19.3
Sinclair Dam	383549	2SINCLAIR 2 6.9000	2	19.3
George Dam	383551	2GEORGE 1 13.800	1	40.5
George Dam	383552	2GEORGE 2 13.800	2	40.5
George Dam	383553	2GEORGE 3 13.800	3	40.5
George Dam	383554	2GEORGE 4 13.800	4	40.5
McDonough	383600	2MCDON 3B 13.800	3B	40
T.A. Smith I	383604	2TA SMITH 1S18.000	1	322.5
T.A. Smith I	383605	2TA SMITH 1A18.000	1A	162.3
T.A. Smith I	383606	2TA SMITH 1B18.000	1B	162.3
T.A. Smith II	383607	2TA SMITH 2S18.000	2	322.5
T.A. Smith II	383608	2TA SMITH 2A18.000	2A	162.3
T.A. Smith II	383609	2TA SMITH 2B18.000	2B	162.3
Wansley	383620	2WANSLEY 5A 13.800	5A	49
Wansley	383621	2WANSLEY 1 18.000	1	876.5001
Wansley	383622	2WANSLEY 2 18.000	2	876.5001
Wansley	383623	2WANSLEY 6ST18.000	6	225
Wansley	383624	2WANSLEY 6A 18.000	6A	184
Wansley	383625	2WANSLEY 6B 18.000	6B	184
Wansley	383626	2WANSLEY 7ST18.000	7	226.5
Wansley	383627	2WANSLEY 7A 18.000	7A	184.1
Wansley	383628	2WANSLEY 7B 18.000	7B	184.1
Wansley	383629	2WANSLEY 9ST18.000	1	202.6
Wansley	383630	2WANSLEY 9A 18.000	1A	145.4
Wansley	383631	2WANSLEY 9B 18.000	1B	145.4
Chattahoochee Energy	383632	2CHAT EN 1ST18.000	1	179.6
Chattahoochee Energy	383633	2CHAT EN 1A 18.000	1A	163.8
Chattahoochee Energy	383634	2CHAT EN 1B 18.000	1B	163.8

Yates	383646	2YATES 6 22.000	6	355.5
Yates	383647	2YATES 7 22.000	7	358.5
Dahlberg	383661	2DAHLBERG 1 13.800	1	74.8
Dahlberg	383662	2DAHLBERG 2 13.800	2	74
Dahlberg	383663	2DAHLBERG 3 13.800	3	74.7
Dahlberg	383664	2DAHLBERG 4 13.800	4	73.5
Dahlberg	383665	2DAHLBERG 5 13.800	5	74.7
Dahlberg	383666	2DAHLBERG 6 13.800	6	74.9
Dahlberg	383667	2DAHLBERG 7 13.800	7	75
Dahlberg	383668	2DAHLBERG 8 13.800	8	74
Dahlberg	383669	2DAHLBERG 9 13.800	9	74.8
Dahlberg	383670	2DAHLBERG 1013.800	10	75.2
Franklin	383671	2FRANKLIN1ST18.000	1	221
Franklin	383672	2FRANKLIN 1A18.000	1A	187
Franklin	383673	2FRANKLIN 1B18.000	1B	187
Franklin	383674	2FRANKLIN2ST21.000	2	282.4
Franklin	383675	2FRANKLIN 2A18.000	2A	183.1
Franklin	383676	2FRANKLIN 2B18.000	2B	183.1
Franklin	383677	2FRANKLIN3ST21.000	3	277
Franklin	383678	2FRANKLIN 3A18.000	3A	174
Franklin	383679	2FRANKLIN 3B18.000	3B	174
Calhoun	383680	2CALHOUN GEN13.800	4	20
Scherer	383681	2SCHERER 1 25.000	1	883
Scherer	383682	2SCHERER 2 25.000	2	881.0001
Scherer	383683	2SCHERER 3 25.000	3	881.0001
Scherer	383684	2SCHERER 4 25.000	4	882
Mid Georgia	383711	2MID GA 1ST 13.800	1	96
Mid Georgia	383712	2MID GA 1A 13.800	1A	102
Mid Georgia	383713	2MID GA 1B 13.800	1B	102
Rumble Road	383721	2RMBL CT1 13.800	1	94

Rumble Road	383722	2RMBL CT2 13.800	2	94
Robins Air Force Base	383741	2RAFB CT A 13.800	Α	80
Robins Air Force Base	383742	2RAFB CT B 13.800	В	80
Warthen	383743	2WARTHEN 1 13.800	1	69
Warthen	383744	2WARTHEN 2 13.800	2	69
Warthen	383745	2WARTHEN 3 13.800	3	69
Warthen	383746	2WARTHEN 4 13.800	4	69
Warthen	383747	2WARTHEN 5 13.800	5	69
Warthen	383748	2WARTHEN 6 13.800	6	69
Warthen	383749	2WARTHEN 7 13.800	7	69
Warthen	383750	2WARTHEN 8 13.800	8	69
Vogtle	383751	2VOGTLE1 25.000	1	1158.4
Vogtle	383752	2VOGTLE2 25.000	2	1160.5
Vogtle	383753	2VOGTLE3 26.000	3	1139
Vogtle	383754	2VOGTLE4 26.000	4	1139
Wilson	383761	2WILSON A 13.800	Α	41
Wilson	383762	2WILSON B 13.800	В	56
Wilson	383763	2WILSON C 13.800	С	49
Wilson	383764	2WILSON D 13.800	D	41
Wilson	383765	2WILSON E 13.800	Е	54
Wilson	383766	2WILSON F 13.800	F	54
Rabun Gap	383775	2RABUN BIO 13.800	1	18
Piedmont	383777	2PIEDMNT BIO13.800	1	55
Flint Biomass	383786	2FLINT BIO 13.800	1	42
Flint Biomass	383786	2FLINT BIO 13.800	2	38.3
Dublin Biomass 1	383787	2DUBLIN B1 12.500	1	41
SOWEGA	383791	2BACNTN 1 13.800	1	47
SOWEGA	383792	2BACNTN 2 13.800	2	46
Simon	383798	2SSFGEN 34.500	S1	30
SOWEGA	383802	2BACNTN 3 13.800	3	46

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SOWEGA	383803	2BACNTN 4 13.800	4	47
SOWEGA	383804	2BACNTN 5 13.800	5	47
SOWEGA	383805	2BACNTN 6 13.800	6	47
Hatch	383811	2HATCH 1 24.000	1	880.2
Hatch	383812	2HATCH 2 24.000	2	889.7
McManus	383821	2MCMANUS 4A 13.800	4A	46
McManus	383822	2MCMANUS 4B 13.800	4B	46
McManus	383823	2MCMANUS 4C 13.800	4C	46
McManus	383824	2MCMANUS 4D 13.800	4D	46
McManus	383825	2MCMANUS 4E 13.800	4E	46
McManus	383826	2MCMANUS 4F 13.800	4F	46
McManus	383833	2MCMANUS 3A 13.800	3A	46
McManus	383834	2MCMANUS 3B 13.800	3B	46
McManus	383835	2MCMANUS 3C 13.800	3C	46
Bowen	383841	2BOWEN 1 25.000	1	728
Bowen	383842	2BOWEN 2 25.000	2	728
Bowen	383843	2BOWEN 3 18.000	3	897.5001
Bowen	383844	2BOWEN 4 18.000	4	897.5001
Sewell Creek	383851	2SEWCRK 21 13.800	21	130
Sewell Creek	383852	2SEWCRK 22 13.800	22	132
Sewell Creek	383853	2SEWCRK 11 13.800	11	94
Sewell Creek	383854	2SEWCRK 12 13.800	12	93
Tiger Creek	383855	2TIGER CK1 18.000	1	157.9
Tiger Creek	383856	2TIGER CK2 18.000	2	157
Tiger Creek	383857	2TIGER CK3 18.000	3	157
Tiger Creek	383858	2TIGER CK4 18.000	4	156.6
		2MONROEPWR		
Monroe Power	383860	113.800	1	154.5
		2MONROEPWR		
Monroe Power	383861	213.800	2	154.5

LG&E Monroe	383862	2LGEMONROE1 16.000	1	160
LG&E Monroe	383863	2LGEMONROE2 16.000	2	160
LG&E Monroe	383864	2LGEMONROE3 16.000	3	160
Effingham	383867	2EFFHAM 1ST 18.000	1	199
Effingham	383868	2EFFHAM 1A 18.000	1A	173
Effingham	383869	2EFFHAM 1B 18.000	1B	173
Doyle	383871	2DOYLE 1 14.400	1	61
Doyle	383872	2DOYLE 2 13.800	2	62
Doyle	383873	2DOYLE 3 13.800	3	62
Doyle	383874	2DOYLE 4 13.800	4	75
Doyle	383875	2DOYLE 5 13.800	5	75
McDonough	383878	2MCDON 4ST 18.000	4	375
McDonough	383879	2MCDON 4A 21.000	4A	246
McDonough	383880	2MCDON 4B 21.000	4B	246
OPC Hartwell	383881	20PCHWE 1 13.800	1	150
OPC Hartwell	383882	20PCHWE 2 13.800	2	149
McDonough	383883	2MCDON 6ST 18.000	6	374
McDonough	383884	2MCDON 6A 21.000	6A	242
McDonough	383885	2MCDON 6B 21.000	6B	242
McDonough	383886	2MCDON 3A 13.800	3A	40
MS Bainbridge	383890	2MSBAINBR 13.800	1	78
Addison	383901	2ADDISON 1 18.000	1	148.5
Addison	383902	2ADDISON 2 18.000	2	149
Addison	383903	2ADDISON 3 18.000	3	148.5
Addison	383904	2ADDISON 4 18.000	4	145.9
Walton Discover	383905	2WALT DISC 113.800	1	50
Walton Discover	383906	2WALT DISC 213.800	2	50
Talbot County	383911	2TALBOT 1 13.800	1	98
Talbot County	383912	2TALBOT 2 13.800	2	98
Talbot County	383913	2TALBOT 3 13.800	3	94.7

Talbot County	383914	2TALBOT 4 13.800	4	96.9
Talbot County	383915	2TALBOT 5 13.800	5	98
Talbot County	383916	2TALBOT 6 13.800	6	98
Tenaska - Heard County	383921	2TENSKA GA 118.000	1	157.5
Tenaska - Heard County	383922	2TENSKA GA 218.000	2	157.5
Tenaska - Heard County	383923	2TENSKA GA 318.000	3	157.5
Tenaska - Heard County	383924	2TENSKA GA 418.000	4	157.5
Tenaska - Heard County	383925	2TENSKA GA 518.000	5	157.5
Tenaska - Heard County	383926	2TENSKA GA 618.000	6	157.5
Hawk Road	383927	2HAWK RD 1 18.000	1	166.5
Hawk Road	383928	2HAWK RD 2 18.000	2	166.5
Hawk Road	383929	2HAWK RD 3 18.000	3	166.5
McDonough	383961	2MCDON 5ST 18.000	5	374
McDonough	383962	2MCDON 5A 21.000	5A	242
McDonough	383963	2MCDON 5B 21.000	5B	242
Smith Dam	384142	2SMITH GN 13.800	1	82.5
Smith Dam	384142	2SMITH GN 13.800	2	82.5
Holt Dam	384355	2HOLT GEN 13.800	1	45
Bankhead Dam	384357	2BANK GEN 13.800	1	52
Yates Dam	384448	2YATE GEN 6.9000	1	46
RF Henry Dam	385401	2RF HENRY 1313.800	1	82
Millers Ferry Dam	385402	2MILERSFY1 13.800	1	30
Millers Ferry Dam	385403	2MILERSFY2 13.800	2	30
Millers Ferry Dam	385404	2MILERSFY3 13.800	3	30
Black Bear Solar	386031	2BLK BR SLR 34.500	S1	100
Fort Rucker Solar	386034	3RUCKER SLR 115.00	S1	10.6
Anniston Army Solar	386035	3ANAD SLR 115.00	S1	11
AMEA Sylacauga	386036	2AMEA CT1 13.800	1	47.5
AMEA Sylacauga	386037	2AMEA CT2 13.800	2	47.5
Origis Solar	386046	2LAFAYTE SLR34.500	S1	80

Calhoun	386061	2CALHOUNCT1 18.000	1	172.5
Calhoun	386062	2CALHOUNCT2 18.000	2	172.5
Calhoun	386063	2CALHOUNCT3 18.000	3	172.5
Calhoun	386064	2CALHOUNCT4 18.000	4	172.5
Washington County	386081	2WASH CO 1 13.800	1	22.8
Washington County	386082	2WASH CO 2 13.800	1A	77.9
Lowndes County	386083	2LOWDN CO1 13.800	1	11.9
Lowndes County	386084	2LOWDN CO2 13.800	1A	72.6
Theodore	386085	2THEO 1 13.800	1	64
Theodore	386086	2THEO A 18.000	1A	167
Hog Bayou	386089	2HOGBAYOU 1 13.800	1	75
Hog Bayou	386090	2HOGBAYOU1A 18.000	1A	150
Greenville Solar	386094	2PEAK CLN SL34.500	S1	80
Miller	386401	2MILLER 1 24.000	1	697.9
Miller	386402	2MILLER 2 24.000	2	703.9
Miller	386403	2MILLER 3 24.000	3	701
Miller	386404	2MILLER 4 24.000	4	712
Gaston	386411	2GASTON 1 15.000	1	127
Gaston	386411	2GASTON 1 15.000	1L	127
Gaston	386412	2GASTON 2 15.000	2	128
Gaston	386412	2GASTON 2 15.000	2L	128
Gaston	386413	2GASTON 3 15.000	3	127
Gaston	386413	2GASTON 3 15.000	3L	127
Gaston	386414	2GASTON 4 15.000	4	128
Gaston	386414	2GASTON 4 15.000	4L	128
Gaston	386415	2GASTON 5 18.000	5	871.5
Gaston	386416	2GASTON A 13.800	А	16
Gadsden	386421	2GADSDEN1 13.800	1	64
Gadsden	386422	2GADSDEN2 13.800	2	66
Lindsay Hill	386423	2LHILL 1ST 22.000	1	361

Lindsay Hill	386424	2LHILL 1A 18.000	1A	163
Lindsay Hill	386425	2LHILL 1B 18.000	1B	163
Lindsay Hill	386426	2LHILL 1C 18.000	1C	163
Central Alabama	386427	2CENTAL 2ST 22.000	2	393
Central Alabama	386428	2CENTAL 2A 18.000	2A	165.7
Central Alabama	386429	2CENTAL 2B 18.000	2B	165.7
Central Alabama	386430	2CENTAL 2C 18.000	2C	165.7
Hillabee	386437	2HILL ST1 23.000	1	300
Hillabee	386438	2HILLCT1A 16.000	1A	250
Hillabee	386439	2HILLCT1B 16.000	1B	250
Greene County	386441	2GREENE CO 120.000	1	257.8
Greene County	386442	2GREENE CO 220.000	2	258.3
Greene County	386450	2GREENCOA 13.800	Α	84
Greene County	386451	2GREENCOB 13.800	В	82
Greene County	386452	2GREENCOC 13.800	С	81
Greene County	386453	2GREENCOD 13.800	D	82
Greene County	386454	2GREENCOE 13.800	Е	81
Greene County	386455	2GREENCOF 13.800	F	80
Greene County	386456	2GREENCOG 13.800	G	83
Greene County	386457	2GREENCOH 13.800	Н	82
Greene County	386458	2GREENCOI 13.800	1	85
Farley	386461	2FARLEY 1 22.000	1	919.6
Farley	386462	2FARLEY 2 22.000	2	907.1
Barry	386471	2BARRY 1 18.000	1	138
Barry	386472	2BARRY 2 18.000	2	137
Barry	386474	2BARRY 4 22.000	4	368
Barry	386475	2BARRY 5 26.000	5	785
Barry	386476	2BARRY 6ST 18.000	6	202.3
Barry	386477	2BARRY 6A 18.000	6A	188.2
Barry	386478	2BARRY 6B 18.000	6B	188.2

Barry	386479	2BARRY 7ST 18.000	7	204
Barry	386480	2BARRY 7A 18.000	7A	187.8
Barry	386481	2BARRY 7B 18.000	7B	187.8
Barry	386482	2BARRY 8ST 21.000	8	287.7
Barry	386483	2BARRY 8A 19.000	8A	364.8
Harris	386491	2HARRIS 1ST 21.000	1	294
Harris	386492	2HARRIS 1A 18.000	1A	174
Harris	386493	2HARRIS 1B 18.000	1B	174
Harris	386494	2HARRIS 2ST 21.000	2	286.6
Harris	386495	2HARRIS 2A 18.000	2A	185
Harris	386496	2HARRIS 2B 18.000	2B	185
Henry Dam	386501	2HENRYGEN 11.500	1	62
Weiss Dam	386511	2WEISSGEN 11.500	1	71
Martin Dam	386521	2LMARTGEN 13.800	1	120
Harris Dam	386531	2HARISGEN 13.800	1	62
Harris Dam	386531	2HARISGEN 13.800	2	62
Lay Dam	386541	2LAY1-3GN 11.500	1	87
Lay Dam	386544	2LAY4-6GN 11.500	4	87
Martin Dam	386551	2MART1GEN 12.000	1	45.9
Martin Dam	386552	2MART2GEN 12.000	2	37.7
Martin Dam	386553	2MART3GEN 12.000	3	37.7
Martin Dam	386554	2MART4GEN 12.000	4	57.1
Jordan Dam	386561	2JORD1GEN 12.000	1	30.3
Jordan Dam	386561	2JORD1GEN 12.000	2	30.3
Jordan Dam	386563	2JORD3GEN 12.000	3	30.3
Jordan Dam	386563	2JORD3GEN 12.000	4	30.3
Mitchell Dam	386574	2MITC4GEN 6.6000	4	19
Mitchell Dam	386575	2MITC5GEN 13.800	5	48
Mitchell Dam	386575	2MITC5GEN 13.800	6	48
Mitchell Dam	386575	2MITC5GEN 13.800	7	48

Bouldin Dam	386581	2BOULD1GN 13.800	1	75.7
Bouldin Dam	386582	2BOULD2GN 13.800	2	75.3
Bouldin Dam	386583	2BOULD3GN 13.800	3	75.3
Thurlgen	386591	2THURLGEN 13.800	1	69.4
Thurlgen	386591	2THURLGEN 13.800	3	10
Sweatt	386800	2SWEATT A 13.800	А	32
Chevron	386831	2CHEVRON1 13.200	1	15
Chevron	386832	2CHEVRON2 13.200	2	15
Chevron	386833	2CHEVRON3 13.200	3	16
Chevron	386834	2CHEVRON4 13.200	4	16
Chevron	386835	2CHEVRON5 13.800	5	70
Moonshot Solar	386841	2MOONSHOT SL34.500	S1	78.5
Cane Creek Solar	386842	2CANE CK SL 34.500	S1	78.5
Watson	386850	2WATSON A 13.800	А	33
Watson	386854	2WATSON 4 20.000	4	271.5
Watson	386855	2WATSON 5 24.000	5	516
Daniel	386871	2DANIEL 1 18.000	1	510
Daniel	386872	2DANIEL 2 18.000	2	510
Daniel	386873	2DANIEL 3ST 18.000	3	209.7
Daniel	386874	2DANIEL 3A 18.000	3A	170.7
Daniel	386875	2DANIEL 3B 18.000	3B	170.7
Daniel	386876	2DANIEL 4ST 18.000	4	205.5
Daniel	386877	2DANIEL 4A 18.000	4A	172.3
Daniel	386878	2DANIEL 4B 18.000	4B	172.3
Origis Solar	386887	20RIGIS SLR 34.500	S1	52
Hattiesburg Solar	386888	2HATTIESB SL34.500	S1	50.8
Lauderdale East Solar	386889	2LAUDR E SLR34.500	S1	55
Ratcliffe	386891	2RATCLF1ST_N18.000	1	296
Ratcliffe	386892	2RATCLF1A_N 18.000	1A	204.5
Ratcliffe	386893	2RATCLF1B_N 18.000	1B	204.5

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Boulevard	389017	2BLVD1 13.800	1	14
McIntosh	389122	2MCINCT-1 13.800	1	82.2
McIntosh	389123	2MCINCT-2 13.800	2	82.2
McIntosh	389124	2MCINCT-3 13.800	3	82.2
McIntosh	389125	2MCINCT-4 13.800	4	82.2
McIntosh	389126	2MCINCT-5 13.800	5	82.2
McIntosh	389127	2MCINCT-6 13.800	6	82.2
McIntosh	389128	2MCINCT-7 13.800	7	82.2
McIntosh	389129	2MCINCT-8 13.800	8	82.2
McIntosh	389131	2MCINT 10ST 21.000	10	283.4
McIntosh	389132	2MCINT 10A 21.000	1A	192.3
McIntosh	389133	2MCINT 10B 21.000	1B	192.3
McIntosh	389134	2MCINT 11ST 21.000	11	283
McIntosh	389135	2MCINT 11A 21.000	1A	192
McIntosh	389136	2MCINT 11B 21.000	1B	192
Weyerhauser Biomass	389199	2WEYERPW BIO13.800	1	40
Weyerhauser Biomass	389199	2WEYERPW BIO13.800	2	25



Appendix 9: TVA BAA

The following information provides a more granular overview of the TVA BAA input assumptions and transmission expansion plan that are incorporated in the development of the SERTP regional transmission plan.

Table A9.1: 2022 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (TVA BAA)

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TVA BAA	100-120	121-150	151-199	200-299	300-399	400-550
	kV	kV	kV	kV	kV	kV
Transmission lines - New			139			
(Circuit Mi.)			139			
Transmission Lines - Uprates1			58.6			
(Circuit Mi.)			38.0			
Transformers ² – New						1
Transformers ² - Replacements						

¹A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.

Table A9.2: Interface commitments¹ modeled in the SERTP Summer Peak models – TVA BAA

То	2024	2027	2032
PJM	-250	-250	-250
MISO	226	226	226
Duke Progress West	14	14	14
Southern	65	62	59
LG&E/KU	30	33	36
Brookfield/Smoky Mountain	-99	-99	-99
APGI-Tapoco	0	0	0
SPP	-78	-78	-78
Owensboro Municipal	25	25	25
Total	-67	-67	-67

¹A positive number represents a net export from the TVA BAA

²The voltages shown represent the operating voltages on the high side terminals of the transformer

A detailed listing of the changes in generation assumptions within the TVA BAA throughout the ten (10) year planning horizon, including the year(s) in which they occur, is provided in Table A9.3 below. Furthermore, supplemental information regarding noteworthy generation expansion and retirements/decertifications included in the 2022 series set of SERTP powerflow models is provided below, while Table A9.4 provides a listing of generation assumptions based upon long-term, firm point-to-point commitments. The capacity (MW) values shown for each year reflect summer peak conditions. Table A9.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak powerflow model.

Table A9.3: Changes in Generation Assumptions Based Upon LSEs - TVA BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Golden Triangle Solar	200	200	200	200	200	200	200	200	200	200
Horus KY Solar	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
Skyhawk Solar	100	100	100	100	100	100	100	100	100	100
SR McKellar Solar	80	80	80	80	80	80	80	80	80	80

Table A9.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – TVA BAA

Site	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
				None						

Table A9.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Powerflow Model – TVA BAA

Plant	Unit	Bus #	Bus Name	Pmax (MW)
Browns Ferry Nuclear	1	364001	1BR FERRY N122.000	1297.6
Browns Ferry Nuclear	1	364002	1BR FERRY N222.000	1299.4
Browns Ferry Nuclear	1	364003	1BR FERRY N322.000	1302.5
Sequoyah Nuclear	1	364011	1SEQUOYAH N124.000	1200.24
Sequoyah Nuclear	1	364012	1SEQUOYAH N224.000	1187.24
Watts Bar Nuclear	1	364021	1WBNP N1 24.000	1324.1
Watts Bar Nuclear	2	364022	1WBNP N2 24.000	1293.89
Optimist Solar	1	364023	00PTMST SLR 0.6300	200

Southeastern Regional TRANSMISSION PLANNING

Bell Buckle Solar	1	364025	OBELLBUCKSOLO.6000	35
Canadaville Solar	1	364027	OCANADA SOL 0.6000	16
Millington II Solar	1	364030	OMILLNGTN II0.6900	75
Tullahoma Solar	1	364031	0TULLHM S 1 0.6000	200
Optimist Battery	1	364032	00PTMST BAT 0.6000	50
Skyhawk Solar	1	364037	1SKYHAWK SOL34.500	100
Russellville Solar	1	364040	ORUSSVIL SOLO.6000	173
Lake County Solar	1	364044	1RIDGELY SOL34.500	177
Latitude Solar	1	364048	1LATIT SOLAR13.000	15
Providence Solar	1	364049	0PROV SOLAR 0.8000	16.1
Selmer Solar	1	364050	OSELMER FARMO.2000	17
Mulberry Solar	1	364053	OMULB SOLAR 0.2000	16
River Bend Solar	1	364054	ORIVER BEND 0.5500	75
Millington Solar	1	364055	OMILNGTN SOL0.6900	53
Wildberry Solar	1	364056	OWILDBRY SOL0.8000	15
Muscle Shoals Solar	1	364057	0MUS SHL SLR0.6000	228.5
Elora Solar	1	364058	0ELORA SOLARO.6600	150
Yum Yum Solar	1	364059	0YUM YUM SOL0.5500	147
Horus Solar	1	364060	0HORS SLR 0.6300	69.3
Ardmore Solar	1	364063	OARDMORE SOLO.6500	15.71
Selmer North Solar	1	364064	OSELMER NOR10.3900	16.1
Selmer North Solar	1	364065	OSELMER NOR20.3900	8.5
Golden Triangle Solar	1	364067	0GN TRI SOL10.6000	100
Golden Triangle Battery	1	364068	0G TRI BAT1 0.6000	50
McKellar Solar	1	364070	OMCKLLR SLR 0.6600	70
Vonore Battery Energy Storage				
System	1	364071	1VONORE BESS13.800	20
Graceland Solar	1	364074	OGRACE SOLARO.6000	150
Golden Triangle Solar 1	1	364076	0 G TRI GEN20.6300	100
Golden Triangle Battery 1	1	364077	0 G TRI BAT20.6000	50

Colbert Combined Cycle	9	364081	1COLBERT CT918.000	240
Colbert Combined Cycle	10	364082	1COLBERTCT1018.000	240
Colbert Combined Cycle	11	364083	1COLBERTCT1118.000	240
Cumberland Steam	1	364119	1CUMBRL F1HL22.000	662.5
Cumberland Steam	2	364119	1CUMBRL F1HL22.000	662.5
Cumberland Steam	1	364120	1CUMBRL F2HL22.000	667.5
Cumberland Steam	2	364120	1CUMBRL F2HL22.000	656.5
Gallatin Steam	1	364121	1GALLATIN F124.000	240
Gallatin Steam	1	364122	1GALLATIN F224.000	240
Gallatin Steam	1	364123	1GALLATIN F324.000	281
Gallatin Steam	1	364124	1GALLATIN F424.000	281
Kingston Steam	1	364151	1KINGSTON F118.000	159.7
Kingston Steam	1	364154	1KINGSTON F418.000	144
Kingston Steam	1	364155	1KINGSTON F520.000	190
Kingston Steam	1	364156	1KINGSTON F620.000	190
Kingston Steam	1	364157	1KINGSTON F720.000	190
Kingston Steam	1	364158	1KINGSTON F820.000	190
Kingston Steam	1	364159	1KINGSTON F920.000	203.6
Shawnee Steam	1	364171	1SHAWNEE F1 18.000	143
Shawnee Steam	1	364172	1SHAWNEE F2 18.000	143
Shawnee Steam	1	364173	1SHAWNEE F3 18.000	143
Shawnee Steam	1	364174	1SHAWNEE F4 18.000	143
Shawnee Steam	1	364175	1SHAWNEE F5 18.000	143
Shawnee Steam	1	364176	1SHAWNEE F6 18.000	143
Shawnee Steam	1	364177	1SHAWNEE F7 18.000	143
Shawnee Steam	1	364178	1SHAWNEE F8 18.000	143
Shawnee Steam	1	364179	1SHAWNEE F9 18.000	143
Gallatin Steam	5	364225	1GALLATIN T513.800	84
Gallatin Steam	6	364226	1GALLATIN T613.800	84
Gallatin Steam	7	364227	1GALLATIN T713.800	84

Gallatin Steam	8	364228	1GALLATIN T813.800	84
Gleason Combustion Turbine	1	364231	1GLEASON T1 18.000	171.33
Gleason Combustion Turbine	2	364232	1GLEASON T2 18.000	171.33
Gleason Combustion Turbine	3	364233	1GLEASON T3 13.800	171.34
Johnsonville Steam	1	364241	1JVILLE T1 13.800	56
Johnsonville Steam	2	364242	1JVILLE T2 13.800	56
Johnsonville Steam	3	364243	1JVILLE T3 13.800	56
Johnsonville Steam	4	364244	1JVILLE T4 13.800	56
Johnsonville Steam	5	364245	1JVILLE T5 13.800	56
Johnsonville Steam	6	364246	1JVILLE T6 13.800	56
Johnsonville Steam	7	364247	1JVILLE T7 13.800	56
Johnsonville Steam	8	364248	1JVILLE T8 13.800	56
Johnsonville Steam	9	364249	1JVILLE T9 13.800	56
Johnsonville Steam	1	364250	1JVILLE T10 13.800	56
Johnsonville Steam	1	364251	1JVILLE T11 13.800	56
Johnsonville Steam	1	364252	1JVILLE T12 13.800	56
Johnsonville Steam	1	364253	1JVILLE T13 13.800	56
Johnsonville Steam	1	364254	1JVILLE T14 13.800	56
Johnsonville Steam	1	364255	1JVILLE T15 13.800	56
Johnsonville Steam	1	364256	1JVILLE T16 13.800	56
Johnsonville Steam	1	364257	1JVILLE T17 13.800	84
Johnsonville Steam	1	364258	1JVILLE T18 13.800	84
Johnsonville Steam	1	364259	1JVILLE T19 13.800	84
Johnsonville Steam	1	364260	1JVILLE T20 13.800	84
Kemper City Combustion				
Turbine	1	364261	1KEMPER T1 13.800	84
Kemper City Combustion				
Turbine	1	364262	1KEMPER T2 13.800	84
Kemper City Combustion				
Turbine	1	364263	1KEMPER T3 13.800	84
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Kemper City Combustion				
Turbine	1	364264	1KEMPER T4 13.800	84
Lagoon Creek Combustion				
Turbine	1	364271	1LAG CRK T1 13.800	85
Lagoon Creek Combustion				
Turbine	1	364272	1LAG CRK T2 13.800	85
Lagoon Creek Combustion				
Turbine	1	364273	1LAG CRK T3 13.800	85
Lagoon Creek Combustion				
Turbine	1	364274	1LAG CRK T4 13.800	85
Lagoon Creek Combustion				
Turbine	1	364275	1LAG CRK T5 13.800	85
Lagoon Creek Combustion				
Turbine	1	364276	1LAG CRK T6 13.800	85
Lagoon Creek Combustion				
Turbine	1	364277	1LAG CRK T7 13.800	85
Lagoon Creek Combustion				
Turbine	1	364278	1LAG CRK T8 13.800	85
Lagoon Creek Combustion				
Turbine	1	364279	1LAG CRK T9 13.800	84
Lagoon Creek Combustion				
Turbine	1	364280	1LAG CRK T1013.800	84
Lagoon Creek Combustion				
Turbine	1	364281	1LAG CRK T1113.800	84
Lagoon Creek Combustion				
Turbine	1	364282	1LAG CRK T1213.800	84
Marshall Combustion Turbine	1	364291	1MARSHALL T113.800	85.63
Marshall Combustion Turbine	1	364292	1MARSHALL T213.800	85.63
Marshall Combustion Turbine	1	364293	1MARSHALL T313.800	85.63
Marshall Combustion Turbine	1	364294	1MARSHALL T413.800	85.63

Marshall Combustion Turbine	1	364295	1MARSHALL T513.800	85.63
Marshall Combustion Turbine	1	364296	1MARSHALL T613.800	85.63
Marshall Combustion Turbine	1	364297	1MARSHALL T713.800	85.63
Marshall Combustion Turbine	1	364298	1MARSHALL T813.800	85.63
Lagoon Creek Combined Cycle	1	364301	1LAG CRK CT116.500	179.81
Lagoon Creek Combined Cycle	1	364302	1LAG CRK CT216.500	179.81
Lagoon Creek Combined Cycle	1	364303	1LAG CRK STG18.000	230.38
Paradise Combined Cycle	1	364304	1PARADIS CT118.000	211
Paradise Combined Cycle	2	364305	1PARADIS CT218.000	211
Paradise Combined Cycle	3	364306	1PARADIS CT318.000	211
Paradise Combined Cycle	1	364307	1PARADIS S1 19.000	467
Paradise Combined Cycle	1	364308	1PARADIS CT518.000	240
Paradise Combined Cycle	1	364309	1PARADIS CT618.000	240
Paradise Combined Cycle	1	364310	1PARADIS CT718.000	240
John Sevier Combined Cycle	1	364321	1J SEVIER C118.000	165.57
John Sevier Combined Cycle	2	364322	1J SEVIER C218.000	165.57
John Sevier Combined Cycle	3	364323	1J SEVIER C318.000	165.56
John Sevier Combined Cycle	4	364324	1J SEVIER S419.500	377.3
Allen Combined Cycle	1	364325	1ALLENCC CT125.000	333
Allen Combined Cycle	1	364326	1ALLENCC CT225.000	333
Allen Combined Cycle	1	364327	1ALLENCC ST119.000	439
Raccoon Mtn Pump Storage	1	364401	1RACCOON P1 23.000	440
Raccoon Mtn Pump Storage	1	364402	1RACCOON P2 23.000	440
Raccoon Mtn Pump Storage	1	364403	1RACCOON P3 23.000	440
Raccoon Mtn Pump Storage	1	364404	1RACCOON P4 23.000	440
Apalachia Hydro	1	364421	1APALACH H1 13.800	41.19
Apalachia Hydro	1	364422	1APALACH H2 13.800	41.22
Blue Ridge Hydro	1	364423	1BLUERIDG H112.500	17.35
Boone Hydro	1	364424	1BOONE H1 13.800	37.8
Boone Hydro	1	364425	1BOONE H2 13.800	37.8

Chatuge Hydro	1	364428	1CHATUGE H1 6.9000	13.92
Chickamauga Hydro	1	364431	1CHICKAMG H113.800	35.8
Chickamauga Hydro	1	364432	1CHICKAMG H213.800	35.8
Chickamauga Hydro	1	364433	1CHICKAMG H313.800	35.8
Douglas Hydro	1	364435	1DOUGLAS H1 13.800	45.82
Douglas Hydro	1	364436	1DOUGLAS H2 13.800	45.82
Douglas Hydro	1	364437	1DOUGLAS H3 13.800	45.82
Fontana Hydro	1	364439	1FONTANA H1 13.800	103
Fontana Hydro	1	364440	1FONTANA H2 13.800	103
Fontana Hydro	1	364441	1FONTANA H3 13.800	103
Fort Loudoun Hydro	1	364442	1FTLOUD H1 13.800	36
Fort Loudoun Hydro	3	364443	1FTLOUD H3 13.800	45.31
Fort Loudoun Hydro	1	364444	1FTLOUD H2 13.800	36
Fort Loudoun Hydro	4	364445	1FTLOUD H4 13.800	45.31
Ft. Patrick Henry Hyrdro	2	364446	1FT PAT H1-213.800	20.32
Great Falls Hydro	1	364447	1GFALLS H1-26.6000	15.93
Guntersville Hydro	1	364448	1GUNTERSV H113.800	28.81
Guntersville Hydro	1	364449	1GUNTERSV H213.800	30.6
Guntersville Hydro	1	364450	1GUNTERSV H313.800	29.84
Guntersville Hydro	1	364451	1GUNTERSV H413.800	31.27
Hiwassee Hydro	1	364452	1HIWASSEE H113.800	87.69
Hiwassee Hydro	1	364453	1HIWASSEE H213.800	94.2
Kentucky Hydro	1	364456	1KY HYDRO H113.800	44.6
Kentucky Hydro	1	364457	1KY HYDRO H213.800	46.1
Kentucky Hydro	1	364458	1KY HYDRO H313.800	45.1
Kentucky Hydro	1	364459	1KY HYDRO H413.800	45.8
Kentucky Hydro	1	364460	1KY HYDRO H513.800	45.3
Melton Hill Hydro	1	364461	1MELTON H H113.800	39.49
Norris Hydro	1	364465	1NORRIS H1 13.800	63.47
Norris Hydro	1	364466	1NORRIS H2 13.800	63.47

Nottely Hydro	1	364467	1NOTTELY H1 13.800	19.22
Ocoee Hydro	1	364468	10COEE#1H1-32.3000	4.81
Ocoee Hydro	2	364468	10COEE#1H1-32.3000	4.81
Ocoee Hydro	1	364470	10COEE#2H1-26.6000	10.9
Ocoee Hydro	1	364471	10COEE #3 H113.800	29.3
Pickwick Hydro	1	364472	1PICKWICK H113.800	44.3
Pickwick Hydro	1	364473	1PICKWICK H213.800	42.9
Pickwick Hydro	1	364474	1PICKWICK H313.800	42.8
Pickwick Hydro	1	364475	1PICKWICK H413.800	43.59
Pickwick Hydro	1	364476	1PICKWICK H513.800	43.7
South Holston Hydro	1	364478	1SHOLSTON H113.800	44.37
Watauga Hydro	1	364480	1WATAUGA H1 13.800	37.86
Watts Bar Hydro	1	364482	1WBHP H1 13.800	39.27
Watts Bar Hydro	1	364483	1WBHP H2 13.800	39.27
Watts Bar Hydro	1	364484	1WBHP H3 13.800	39.27
Watts Bar Hydro	1	364485	1WBHP H4 13.800	39.2
Watts Bar Hydro	1	364486	1WBHP H5 13.800	39.2
Wilbur Hydro	1	364493	1WILBUR H4 2.3000	7.2
Wilson Hydro	1	364499	1WILSON11-1213.800	29.8
Wilson Hydro	2	364499	1WILSON11-1213.800	29.5
Wilson Hydro	1	364500	1WILSON13-1413.800	29.6
Wilson Hydro	2	364500	1WILSON13-1413.800	29.6
Wilson Hydro	1	364501	1WILSON15-1613.800	29.23
Wilson Hydro	2	364501	1WILSON15-1613.800	29.23
Wilson Hydro	1	364502	1WILSON17-1813.800	29.01
Wilson Hydro	2	364502	1WILSON17-1813.800	29.03
Wilson Hydro	1	364503	1WILSON H19 13.800	54.97
Wilson Hydro	1	364504	1WILSON H20 13.800	56.06
Wilson Hydro	1	364505	1WILSON H21 13.800	54.97
Cherokee Hydro	1	364511	1CHEROKEE H113.800	37.2

Cherokee Hydro	2	364512	1CHEROKEE H213.800	39.83
Cherokee Hydro	3	364513	1CHEROKEE H313.800	39.83
Cherokee Hydro	4	364514	1CHEROKEE H413.800	36.84
Nickajack Hydro	1	364521	1NICKAJACK 113.800	30.7
Nickajack Hydro	1	364522	1NICKAJACK 213.800	27.31
Nickajack Hydro	1	364523	1NICKAJACK 313.800	26.03
Nickajack Hydro	1	364524	1NICKAJACK 413.800	26.08
Barkley Hydro	1	364601	1BARKLEY H1 13.800	35.5
Barkley Hydro	1	364602	1BARKLEY H2 13.800	35.5
Barkley Hydro	1	364603	1BARKLEY H3 13.800	35.5
Barkley Hydro	1	364604	1BARKLEY H4 13.800	35.5
Center Hill Hydro	1	364605	1CENTHILL H113.800	52
Center Hill Hydro	1	364606	1CENTHILL H213.800	52
Center Hill Hydro	1	364607	1CENTHILL H313.800	52
Cheatham Hydro	1	364608	1CHEATHAM H113.800	13
Cheatham Hydro	1	364609	1CHEATHAM H213.800	13
Cheatham Hydro	1	364610	1CHEATHAM H313.800	13
Cordell Hull Hydro	1	364611	1CORDELL H1 13.800	37
Cordell Hull Hydro	1	364612	1CORDELL H2 13.800	37
Cordell Hull Hydro	1	364613	1CORDELL H3 13.800	37
Dale Hollow Hydro	1	364614	1DALE HOL H113.800	19.9
Dale Hollow Hydro	1	364615	1DALE HOL H213.800	19.9
Dale Hollow Hydro	1	364616	1DALE HOL H313.800	19.9
Old Hickory Hydro	1	364617	10LDHICKH1-213.800	28.7
Old Hickory Hydro	2	364617	10LDHICKH1-213.800	29
Old Hickory Hydro	1	364618	10LDHICKH3-413.800	29
Old Hickory Hydro	2	364618	10LDHICKH3-413.800	29
Percy Priest Hydro	1	364619	1PERCY PR H113.800	30
Wolf Creek Hydro	1	364620	1WOLFCR H1-213.800	52
Wolf Creek Hydro	2	364620	1WOLFCR H1-213.800	52

Wolf Creek Hydro	1	364621	1WOLFCR H3-413.800	52
Wolf Creek Hydro	2	364621	1WOLFCR H3-413.800	52
Wolf Creek Hydro	1	364622	1WOLFCR H5-613.800	52
Wolf Creek Hydro	2	364622	1WOLFCR H5-613.800	52
Wheeler Hydro	1	364650	1WHEELER 1-213.800	38.77
Wheeler Hydro	2	364650	1WHEELER 1-213.800	33.23
Wheeler Hydro	1	364651	1WHEELER 3-413.800	33.62
Wheeler Hydro	2	364651	1WHEELER 3-413.800	33.43
Wheeler Hydro	1	364652	1WHEELER 5-613.800	34.69
Brownsville Combustion				
Turbine	1	364701	1BROWNSVL T113.800	115
Brownsville Combustion				
Turbine	2	364702	1BROWNSVL T213.800	115
Ackerman Combined Cycle	1	364721	1ACKERMAN T116.000	229.78
Ackerman Combined Cycle	1	364722	1ACKERMAN T216.000	229.78
Ackerman Combined Cycle	1	364723	1ACKERMAN S116.000	295.43
Decatur Combined Cycle	1	364731	1DEC CT1 18.000	184
Decatur Combined Cycle	1	364732	1DEC CT2 18.000	184
Decatur Combined Cycle	1	364733	1DEC CT3 18.000	184
Decatur Combined Cycle	1	364734	1DEC STG 18.000	296
Magnolia Combined Cycle	1	364761	1MAGNOL T1 18.000	167.21
Magnolia Combined Cycle	1	364762	1MAGNOL T2 18.000	167.21
Magnolia Combined Cycle	1	364763	1MAGNOL T3 18.000	167.21
Magnolia Combined Cycle	1	364764	1MAGNOL S1 18.000	160.79
Magnolia Combined Cycle	1	364765	1MAGNOL S2 18.000	160.79
Magnolia Combined Cycle	1	364766	1MAGNOL S3 18.000	160.79
Morgan Combined Cycle	1	364771	1MEC CT1 18.000	157.99
Morgan Combined Cycle	1	364772	1MEC CT2 18.000	157.99
Morgan Combined Cycle	1	364773	1MEC CT3 18.000	157.99
Morgan Combined Cycle	1	364774	1MEC STG 18.000	261.03

Red Hills Steam	1	364780	1REDHILLS F120.000	489
Southaven Combined Cycle	1	364791	1S HAVEN T1 18.000	163.64
Southaven Combined Cycle	3	364792	1S HAVEN T2 18.000	163.64
Southaven Combined Cycle	5	364793	1S HAVEN T3 18.000	163.64
Southaven Combined Cycle	2	364794	1S HAVEN S1 13.800	107.36
Southaven Combined Cycle	4	364795	1S HAVEN S2 13.800	107.36
Southaven Combined Cycle	6	364796	1S HAVEN S3 13.800	107.36
Caledonia Combined Cycle	1	364801	1COGCALED T118.000	180.4
Caledonia Combined Cycle	2	364802	1COGCALED S113.800	117.1
Caledonia Combined Cycle	3	364803	1COGCALED T218.000	180.4
Caledonia Combined Cycle	4	364804	1COGCALED S213.800	117.1
Caledonia Combined Cycle	5	364805	1COGCALED T318.000	180.4
Caledonia Combined Cycle	6	364806	1COGCALED S313.800	117.1