SERTP Southeastern Regional Transmission Planning

November 27, 2023

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 three (3) 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 2023 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

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.

Dalton Utilities (Dalton)

Dalton UTILITIES

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.

Duke Energy (Duke)

DUKE ENERGY.

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.

Georgia Transmission Corporation (GTC)

GeorgiaTransmission

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.

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

LGE KU PPL companies

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.

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.

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.

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

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.

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 seven (7) NERC Balancing Authority Areas ("BAAs") in the SERTP region serve combined peak loads totaling more than 129,000 MWs.

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

No.	SERTP States	SERTP
1	Alabama	PowerSouth, Southern, TVA
2	Florida	PowerSouth
3	Georgia	Dalton, GTC, MEAG, Southern, TVA
4	Iowa	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,

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

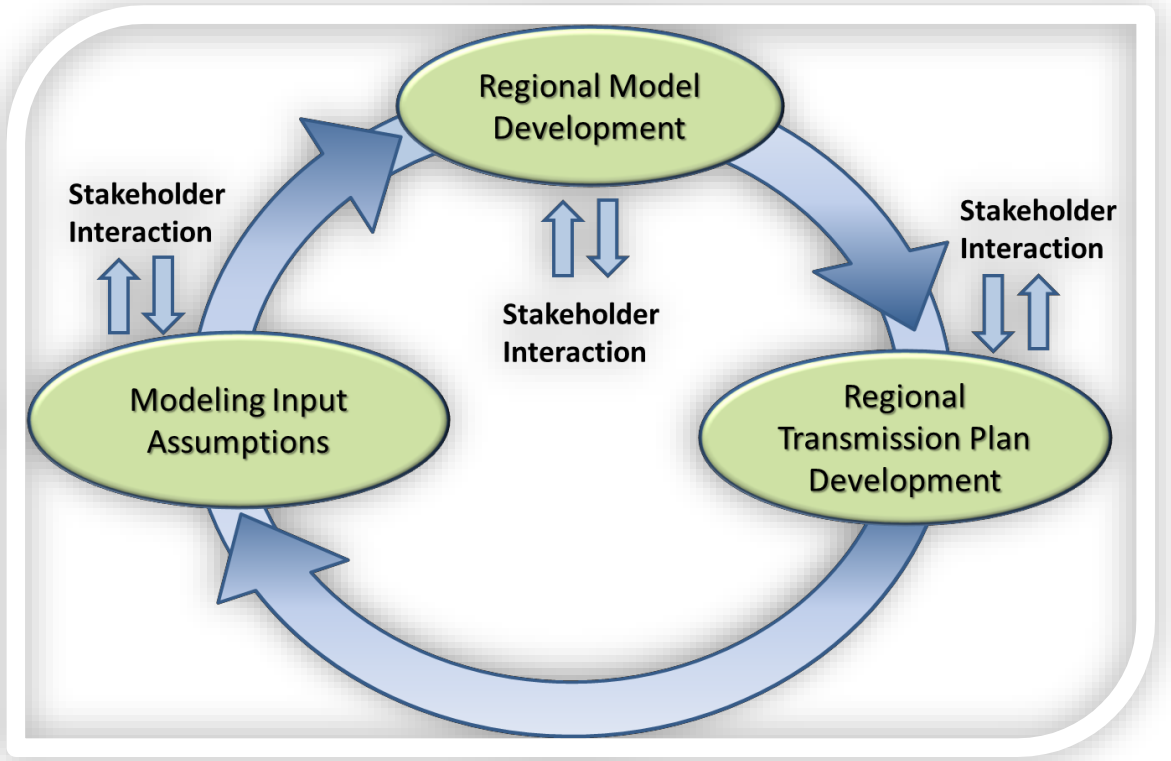
Transmission planning in the SERTP region is focused on identifying reliable, cost-effective transmission projects to meet the long-term firm transmission delivery service obligations to transmission customers, and thereby assisting in serving their forecasted load obligations from their desired resource 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.

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

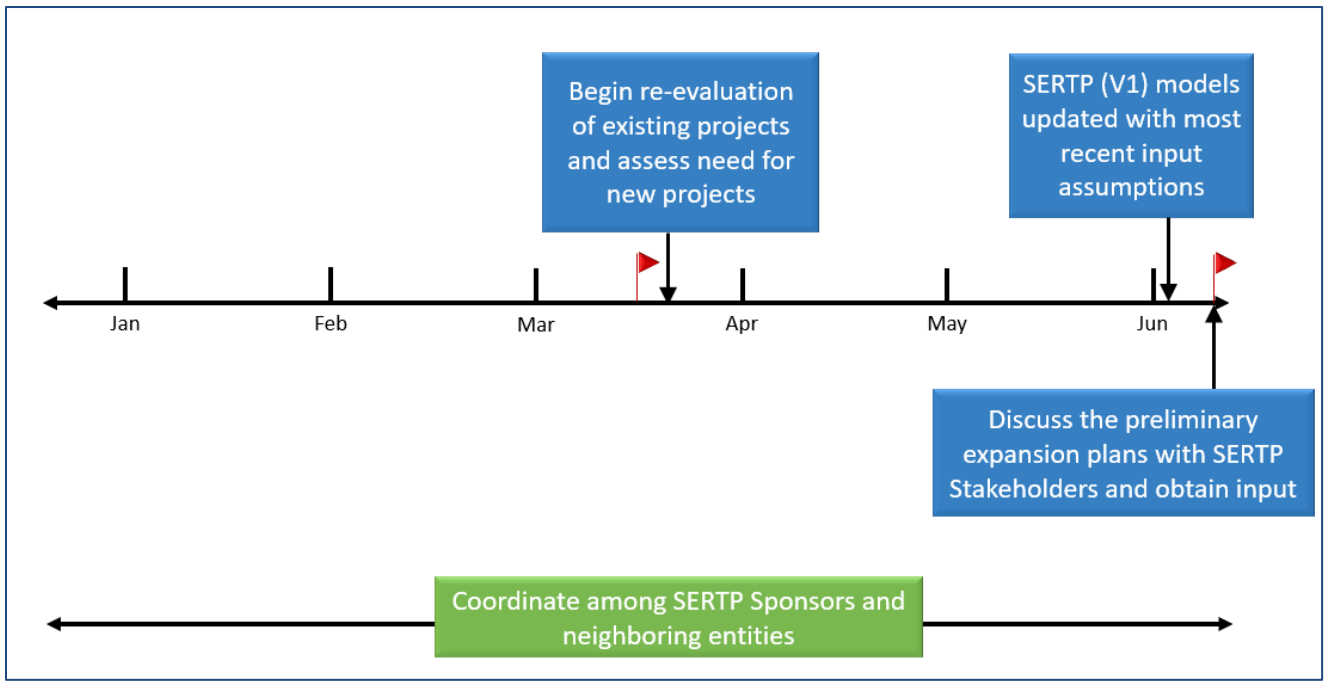
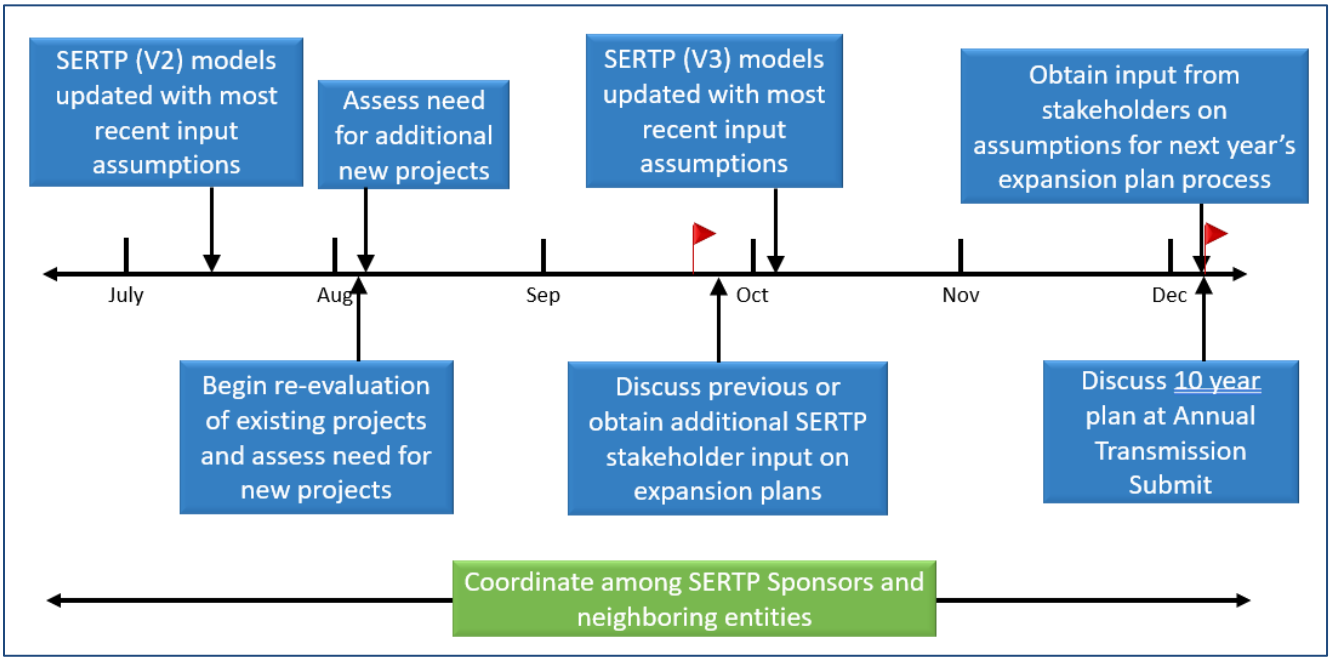


Diagram II.3: SERTP Process – Quarters 3 &4



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 70,000-line miles.

The 2023 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 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot

SERTP	Total
Transmission lines – New (Circuit Mi.)	640.8
Transmission Lines – Uprates[1] (Circuit Mi.)	1631.8
Transformers[2] – New	20
Transformers[2] – Replacements	12
Static VAR Compensators	4

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

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

Table II.2 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage

SERTP	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	97.9	0.0	139.0	281.1	0.0	122.8
Transmission Lines – Uprates[1] (Circuit Mi.)	1138.0	0.0	129.8	349.7	14.3	0.0
Transformers[2] – New	2	0	0	11	0	7
Transformers[2] – Replacements	2	0	0	10	0	0
Static VAR Compensators	0	0	0	4	0	0

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

[2]The 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 power flow 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 secure area 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 2023 series set of SERTP power flow models. Additional models may be developed on an "ad hoc" basis based upon the requirements of the then-current planning cycle.

Table III.1: 2023 Series set of SERTP Power flow Models

No.	Season	Year	MMWG Starting Point Case
1	Summer	2025	2024 SUM
2	Summer	2028	2027 SUM
3	Summer	2033	2032 SUM
4	Shoulder	2028	2027 SSH
5	Winter	2028	2027 WIN
6	Winter	2033	2032 WIN

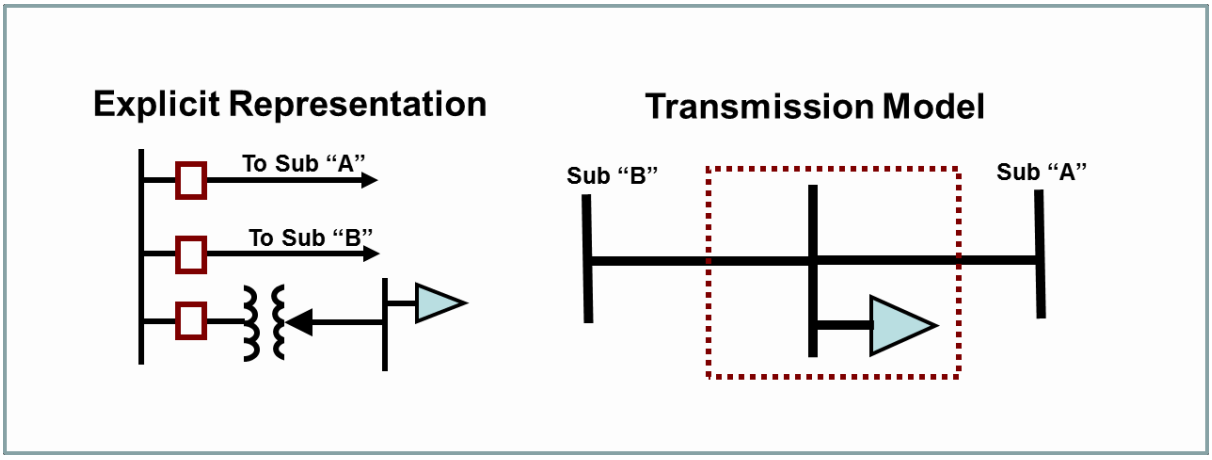
The SERTP regional power flow models provide representations of the existing transmission topology plus forecasted topology changes throughout the ten-year planning horizon. In addition, these models incorporate the input assumptions provided by LSEs and other transmission customers for use in planning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

The power flow 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 power flow models.

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



The regional power flow 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
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

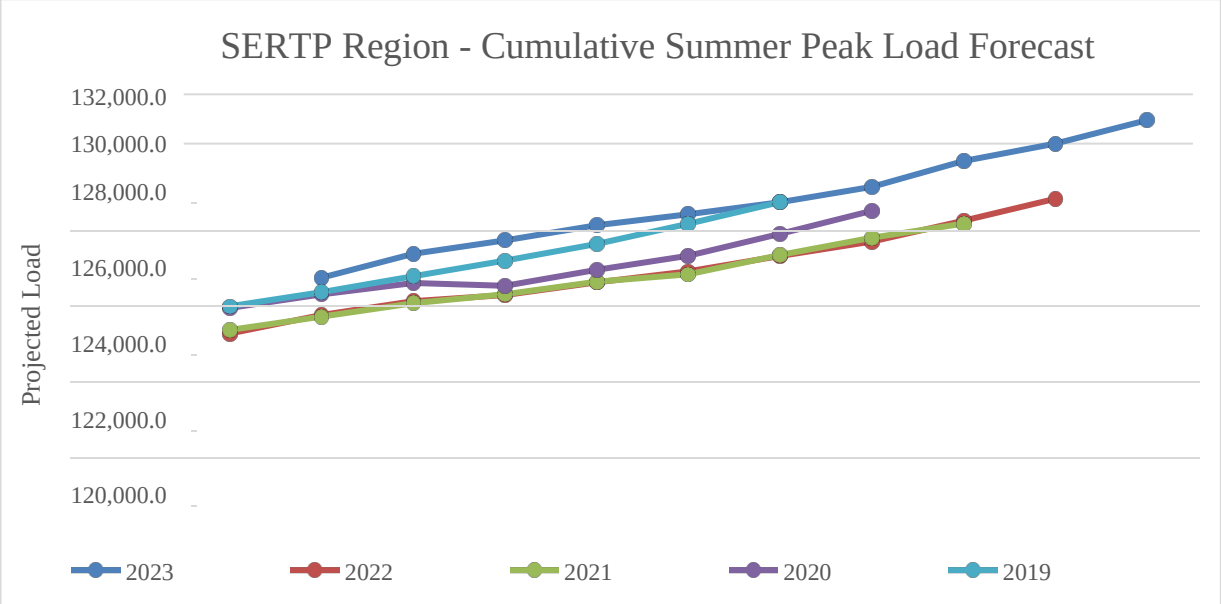
Vast amounts of data and information, such as the SERTP regional models, are available to all SERTP stakeholders, but are generally more geared towards an engineering audience. Therefore, the summaries below are intended to provide an overview of the modeling assumptions. Section III and Appendices 1-8 include detailed information on the input assumptions reflected in the regional power flow 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 2023 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 power flow 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 power flow models provide more detailed information on the forecasted load. The 2023 series SERTP power flow 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 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

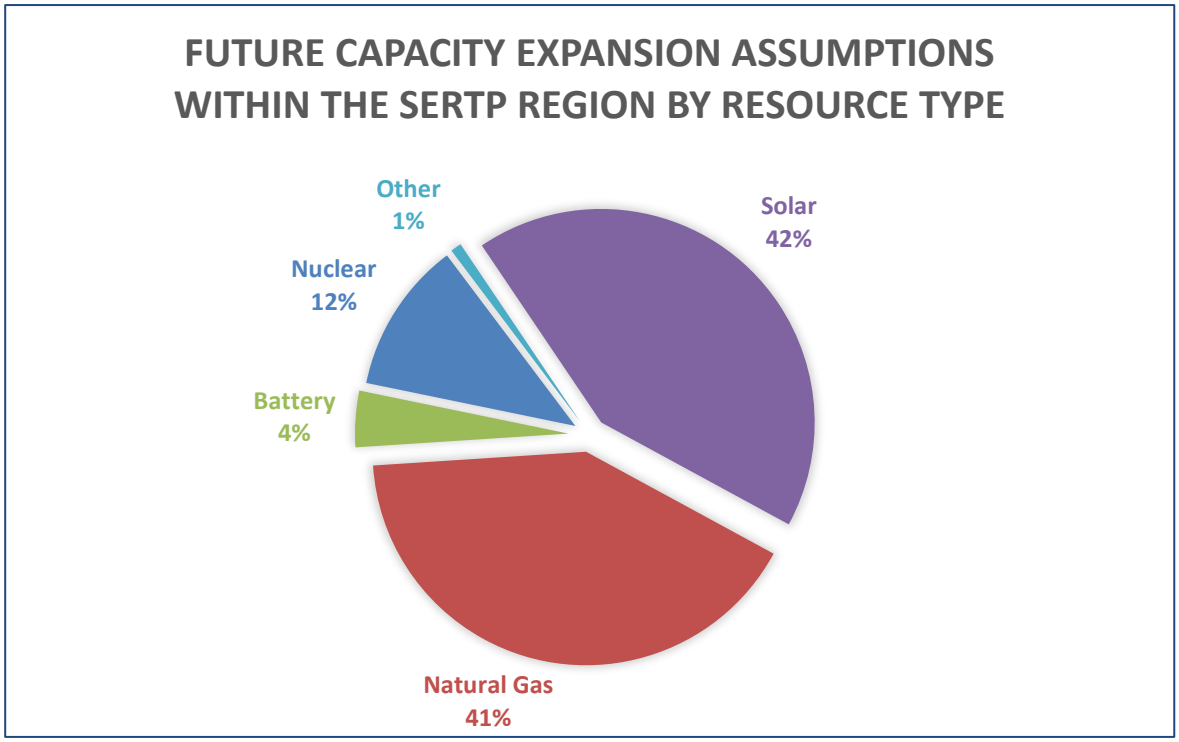
The 2023 series SERTP power flow databases available on the secure area of the SERTP website contain information on each of the generating resources connected within the SERTP region as well as those that are planned to be connected within the ten-year planning horizon. Detailed tabular reports on such information can be run on the power flow 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 8 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 2023 SERTP process is available in Appendices 1 through 8 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 8 provide detail on the interface commitments modeled in the 2023 series SERTP regional power flow models. Additional information on the long-term firm transmission service interface commitments considered in the 2023 SERTP process is available on each SERTP sponsor's respective OASIS sites.

IV. SERTP Regional Transmission Plan Summary

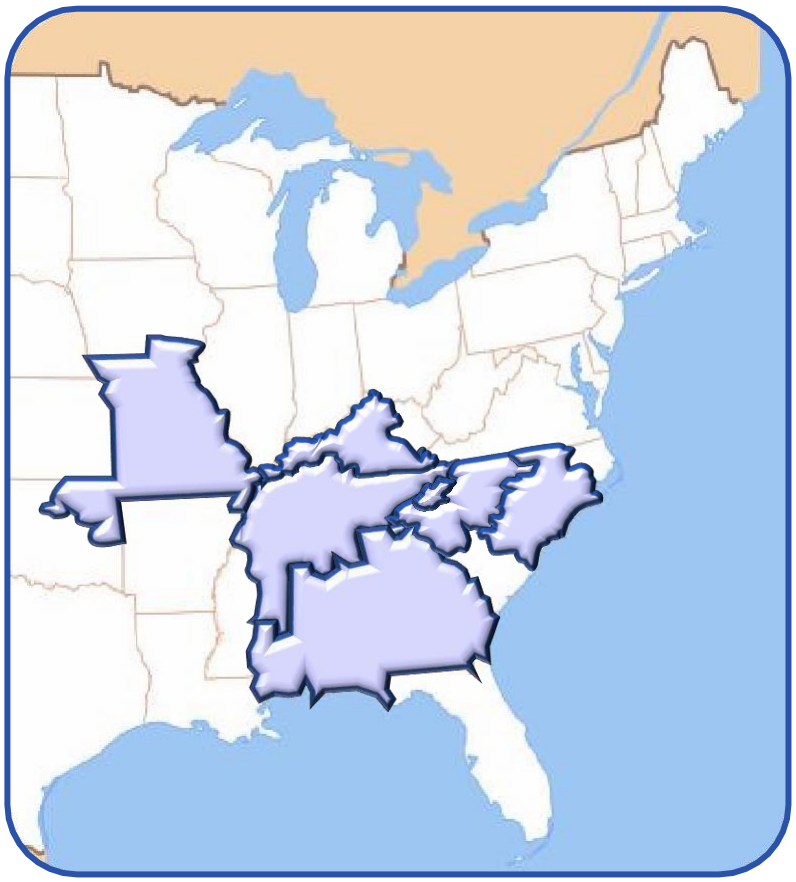
Regional Plan Summary

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 2023 SERTP regional transmission plan, found in its entirety in Section V, consists of around 250 transmission projects, totaling an estimated $6.2 billion dollars, including: over 640 miles of new transmission lines, over 1600 miles of transmission line uprates (including upgrades, reconductors, and rebuilds), and 32 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 8 depict tabular breakdowns for each BAA.

V. SERTP Regional Transmission Plan

SERTP REGIONAL TRANSMISSION PLAN



Associated Electric Cooperative Inc.

Dalton Utilities

Duke Energy

GeorgiaTransmission

LG&E KU

MEAG POWER

PowerSouth Energy Cooperative

Southern Company

TVA

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In-Service Year:	2023
Project Name:	**VIENNA - RICH FOUNTAIN - CHAMOIS 161 KV**
Description:	Rebuild Vienna - Rich Fountain - Chamois 161 kV to 795 ACSR at 100C
Supporting Statement:	Vienna - Rich Fountain - Chamois 161 kV can overload under contingency

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In-Service Year:	2025
Project Name:	**STROUD - GYPSY - BRISTOW 138 KV CONVERSION**
Description:	Convert the Stroud - Gypsy- Bristow conversion to 138 kV 1192 ACSR at 100C
Supporting Statement:	Stroud - Gypsy - Bristow transmission line can overload under contingency

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In-Service Year:	2024
Project Name:	**ASHE ST SWITCHING STATION - PARKWOOD TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 2.6 miles (Customer Tap to Customer Delivery) of the Ashe St Switching Station - Parkwood Tie 100 kV Transmission lines with 477 ACSS/TW rated at 200 °C
Supporting Statement:	To support additional customer growth in the region

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In-Service Year:	2024
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 Statement:	The Great Falls Sw Sta - Wateree Tie 100kV double circuit transmission line can overload under contingencies

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In-Service Year:	2024
Project Name:	**MEBANE TIE - CUSTOMER DELIVERY 44KV TRANSMISSION LINE**
Description:	Rebuild 2.2 miles (Efland Retail to Customer Delivery) of the Mebane Tie - Customer Delivery 44kV Transmission Line to double circuit and establish a new 100 kV Tap off the Mebane Tie - Eno Tie 100 kV Transmission Line with 556 ACSR rated at 120 °C
Supporting Statement:	To support additional customer growth in the region

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In-Service Year:	2024
Project Name:	**WOODRUFF TIE - CUSTOMER DELIVERY 100 KV TRANSMISSION LINE**
Description:	Construct a new 1.3 mile 100 kV line from Woodruff Tie to a new customer delivery with 477 ACSS/TW rated at 200 °C
Supporting Statement:	To support additional customer growth in the region

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In-Service Year:	2025
Project Name:	**ALLEN STEAM STATION TRANSFORMER REPLACEMENT AND SOUTH POINT SWITCHING STATION**
Description:	To facilitate the generation retirement at Allen Steam Station, both 230/100 kV transformers need to be replaced with larger 448MVA units. Due to age and need for physically larger equipment to facilitate the larger transformers, the 100 kV at Allen Steam Station is being rebuilt at a new switching station called South Point Switching Station
Supporting Statement:	Allen Steam Station transformers overload under contingency

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In-Service Year:	2025
Project Name:	**HODGES TIE - CORONACA TIE 100 KV TRANSMISSION LINE**
Description:	Rebuild approximately 9.2 miles of the Hodges Tie - Coronaca Tie 100 kV transmission line with 795 ACSS/TW at 200°C
Supporting Statement:	The Hodes Tie - Coronaca Tie 100 kV transmission line can overload under contingencies

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In-Service Year:	2025
Project Name:	**LEE STEAM STATION - SHADY GROVE TIE 100 KV TRANSMISSION LINE (LEE CIRCUITS)**
Description:	Rebuild the entire Lee Steam Station - Shady Grove 100 kV Transmission Line (Lee circuits) with 1158 ACSS/TW at 200°C
Supporting Statement:	The Lee Steam Station - Shady Grove 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2025
Project Name:	**MOCKSVILLE MAIN - MITCHEL RIVER TIE 100 KV TRANSMISSION LINE**
Description:	Rebuild 10 miles of the Mocksville Main - Mitchel River 100 kV double circuit transmission line with 1295 ACSR rated at 120 °C
Supporting Statement:	Mocksville Switching Station - Mitchel River Tie 100 kV Double Circuit transmission line can overload under contingency

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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:	2025
Project Name:	**PEACH VALLEY TIE - CLIFFSIDE STEAM STATION 100 KV TRANSMISSION LINE**
Description:	Rebuild 1.2 miles (Peach Valley Tie to Enola Retail Tap) of the Peach Valley Tie - Cliffside Steam Station 100 kV Transmission Lines with 954 ACSR rated at 120 °C
Supporting Statement:	The Peach Valley Tie - Cliffside Steam Station 100 kV Lines can overload under contingency

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In-Service Year:	2025
Project Name:	**SCE&G (SALUDA DAM) - NEWBERRY TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild the SCE&G (Saluda Dam) - Newberry Tie 100 kV Line up to the change of ownership with SCE&G with 1272 ACSR at 120°C
Supporting Statement:	Support future solar generation in the area and address potential contingency loading conditions on the SCE&G (Saluda Dam) - Newberry Tie 100 kV

In-Service Year:	2025
Project Name:	**WILKES TIE 230 KV SUBSTATION**
Description:	Install a new 230/100 kV, 448 MVA transformer at Wilkes Tie.
Supporting Statement:	Thermal overloads occur near North Wilkesboro Tie and additional voltage support is needed in the area under contingency.

In-Service Year:	2026
Project Name:	**BOYD SWITCHING STATION**
Description:	Construct a new 230kV switching station along the Marshall Steam Station - Longview Tie 230 kV transmission line
Supporting Statement:	The Marshall Steam Station - Longview Tie 230 kV Transmission Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**BUSH RIVER TIE - LAURENS TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild the full 29 miles of the Bush River Tie - Laurens Tie 100 kV double circuit line with 1272 ACSR at 120°C
Supporting Statement:	Support future solar generation in the area and address potential contingency loading conditions on the Bush River Tie - Laurens Tie 100 kV Transmission Line

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In-Service Year:	2026
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 Statement:	The Creto Tie - Coronaca Tie 100 kV transmission line can overload under contingency

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In-Service Year:	2026
Project Name:	**HAAS CREEK SWITCHING STATION**
Description:	Construct a new 230kV switching station along the Orchard Tie - Longview Tie 230 kV transmission line
Supporting Statement:	The Orchard Tie - Longview Tie 230 kV Transmission Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**HILLTOP TIE - SHELBY TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 3.2 miles (Transco Tap to Reliance Tap) of the Hilltop Tie - Shelby Tie 100 kV Transmission Lines with bundled 954 ACSR conductors rated at 120 °C
Supporting Statement:	The Hilltop Tie - Shelby Tie 100 kV Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**LEE STEAM STATION - SHADY GROVE TIE 100 KV TRANSMISSION LINE (PIEDMONT CIRCUITS)**
Description:	Rebuild the entire Lee Steam Station - Shady Grove 100 kV Transmission Line (Piedmont circuits) with 1158 ACSS/TW at 200°C
Supporting Statement:	The Lee Steam Station - Shady Grove 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**LYLE CREEK SWITCHING STATION**
Description:	Construct a new 100 kV switching station along the Hickory Tie - Lookout Tie 100 kV Transmission Lines.
Supporting Statement:	Hickory Tie - Lookout Tie 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**NORTH GREENSBORO TIE - GREENSBORO MAIN 100 KV TRANSMISSION LINES**
Description:	Rebuild both of the North Greensboro Tie - Greensboro Main 100 kV Transmission Lines with 1158 ACSS/TW at 200°C
Supporting Statement:	The North Greensboro - Greensboro Main 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2026
Project Name:	**OAKVALE TIE - EAST GREENVILLE TIE 100 KV TRANSMISSION LINE**
Description:	Rebuild 4.5 miles (East Greenville to Verdae Retail) of the Oakvale Tie - East Greenville Tie 100 kV Double Circuit line with 1272 ACSR at 120°C
Supporting Statement:	The Oakvale Tie - East Greenville Tie 100 kV Transmission Line can overload under contingency

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In-Service Year:	2026
Project Name:	**STATESVILLE TIE - MOORESVILLE TIE 44KV TRANSMISSION LINE**
Description:	Rebuild 7.9 miles (Statesville Tie - Perth Rd Retail Tap) of the Statesville Tie - Mooresville Tie 44kV line with 954 ACSR rated at 120 °C as double circuit, establishing a new 100 kV circuit out of Statesville Tie
Supporting Statement:	The existing Statesville Tie - Mooresville Tie 44kV Line can overload

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In-Service Year:	2026
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 overload under contingency

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In-Service Year:	2027
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

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In-Service Year:	2028
Project Name:	**DIXON SCHOOL RD - CUSTOMER DELIVERY 230 KV TRANSMISSION LINE**
Description:	Construct a new 1.3 mile 230 kV line from Dixon School Rd to a customer delivery station with 954 ACSR rated at 120 °C
Supporting Statement:	To support additional customer growth in the region

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In-Service Year:	2028
Project Name:	**HARRISBURG TIE - AMITY SWITCHING STATION 100 KV TRANSMISSION LINES**
Description:	Rebuild 6.45 miles (Harrisburg Tie to Structure 52.0) of the Harrisburg Tie - Amity Switching Station 100 kV Transmission line with 1272 ACSR at 120°C
Supporting Statement:	The Harrisburg Tie - Amity Switching Station 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2028
Project Name:	**LAKEWOOD TIE - WOODLAWN TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 2 miles (Lakewood Tie - Remount Rd Retail Tap) of the Lakewood Tie - Woodlawn Tie 100 kV Transmission Lines with 1272 ACSR rated at 120 °C
Supporting Statement:	The Lakewood Tie - Woodlawn Tie 100 kV transmission lines can overload under contingency

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In-Service Year:	2028
Project Name:	**LEE CC - LEE STEAM 100 KV TRANSMISSION LINES**
Description:	Rebuild the existing single circuit 100 kV bus line between Lee CC - Lee Steam 100 kV Transmission Line as double circuit bundled 1272 ACSR rated at 120 °C
Supporting Statement:	The Lee CC - Lee Steam 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2028
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 Statement:	The North Greenville Tie - Pisgah Tie 100 kV transmission can overload under contingencies

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In-Service Year:	2028
Project Name:	**OAK HALLOW SWITCHING STATION**
Description:	Construct a new 8 breaker switching station on the Beckerdite Tie - Greensboro Main 100 kV Transmission Line
Supporting Statement:	The Beckerdite Tie - Greensboro Main 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2028
Project Name:	**PLEASANT GARDEN TIE - MEBANE TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 1.75 miles (Mebane Tie to Trollingwood Retail) of the Pleasant Garden Tie - Mebane Tie 100 kV Transmission Lines with 1272 ACSR rated at 120 °C
Supporting Statement:	The Pleasant Garden Tie - Mebane Tie 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2028
Project Name:	**SHELBY TIE**
Description:	Replace the existing Autobank 3 with a new 448 MVA autobank
Supporting Statement:	Autobank 3 at Shelby Tie can overload under contingency

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In-Service Year:	2029
Project Name:	**HARRISBURG TIE**
Description:	Replace the existing autobank 3 with a new 448 MVA autobank
Supporting Statement:	Autobank 3 at Harrisburg Tie can overload under contingency

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In-Service Year:	2029
Project Name:	**HARRISBURG TIE - CONCORD MAIN 100 KV TRANSMISSION LINES**
Description:	Rebuild 5.6 miles (Concord Main to Customer) of the Harrisburg Tie - Concord Main 100 kV double circuit transmission line with 1272 ACSR at 120°C
Supporting Statement:	The Harrisburg Tie - Concord Main 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2029
Project Name:	**HODGES TIE**
Description:	Add a third 448 MVA autobank at Hodges Tie and expand the 230 kV to a full breaker and a half configuration
Supporting Statement:	The 100 kV lines around Hodges Tie can overload under contingency

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In-Service Year:	2029
Project Name:	**NEWPORT TIE - MORNING STAR TIE 230 KV TRANSMISSION LINE**
Description:	Add a second circuit to the Newport Tie - Morning Star Tie 230 kV Transmission Line by relocated the existing 100 kV circuit on the structures to a new 100 kV corridor, and adding additional 954 ACSR conductors to complete the new circuit.
Supporting Statement:	Existing Newport Tie - Morning Star Tie 230 kV Transmission Line can overload under contingencies

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In-Service Year:	2029
Project Name:	**STONEWATER TIE - WESTFORK SWITCHING STATION 100 KV TRANSMISSION LINES**
Description:	Rebuild 3 miles (Wildcat Tie to Westfork Switching Station) of the Stonewater Tie - Westford Switching Station 100 kV Transmission Line with 1272 ACSR at 120°C
Supporting Statement:	The Stonewater Tie - Westfork Switching Station 100 kV transmission line can overload under contingency

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In-Service Year:	2029
Project Name:	**TIGER TIE**
Description:	Replace the existing autobank 5 with a new 448 MVA autobank
Supporting Statement:	Autobank 5 at Tiger Tie can overload under contingency

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In-Service Year:	2030
Project Name:	**ASHE ST SWITCHING STATION - PARKWOOD TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 2.6 miles (Elis Rd Tap to Triangle Retail) of the Ashe St Switching Station - Parkwood Tie 100 kV Transmission Lines with 795 ACSS/TW rated at 200°C
Supporting Statement:	The Ashe St Switching Station - Parkwood Tie 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2030
Project Name:	**DAN RIVER STEAM - NORTH GREENSBORO TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild the entire Dan River Steam - North Greensboro 100 kV Transmission Lines (25.9 miles) with 1272 ACSR rated at 120 °C
Supporting Statement:	The Dan River Steam - North Greensboro Tie 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2030
Project Name:	**LAWSONS FORK - WEST SPARTANBURG TIE 100 KV TRANSMISSION LINES**
Description:	Rebuild 1.1 miles (Lawsons Fork to Pinewood Retail) of the Lawsons Fork - West Spartanburg Tie 100 kV Transmission Lines with 954 ACSR rated at 120 °C
Supporting Statement:	The Lawsons Fork - West Spartanburg Tie 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2030
Project Name:	**SHELBY TIE - CLIFFSIDE STEAM 100 KV TRANSMISSION LINES**
Description:	Rebuild 5.4 miles (Shelby Tie - PPG Tap) of the Shelby Tie - Cliffside Steam 100 kV Transmission Lines with 1272 ACSR rated at 120 °C
Supporting Statement:	The Shelby Tie - Cliffside Steam 100 kV Transmission Lines can overload under contingency

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In-Service Year:	2031
Project Name:	**LOOKOUT TIE - MARSHALL STEAM 44 KV TRANSMISSION LINE**
Description:	Rebuild the Lookout Tie - Marshall Steam 44kV Transmission line as double circuit with 954 ACSR rated at 120 °C. Establish a 100 kV circuit served out of Lookout Tie
Supporting Statement:	The Lookout Tie - Marshall Steam 44kV Transmission line can experience Thermal and Voltage issues under periods of extreme loading

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In-Service Year:	2031
Project Name:	**MCGUIRE NUCLEAR STATION - MARSHALL STEAM STATION 230 KV TRANSMISSION LINES**
Description:	Rebuild the entire McGuire Nuclear Station - Marshall Steam Station 230 kV Transmission lines with 1533 ACSS/TW rated at 200°C
Supporting Statement:	The McGuire Nuclear Station - Marshall Steam Station 230 kV Transmission lines can overload under contingency

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In-Service Year:	2032
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 Statement:	The addition of a second Sandy Ridge circuit requires the expansion of the 230 kV at Morning Star Tie. The existing banks at Morning Star can overload under contingencies

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In-Service Year:	2033
Project Name:	**DAN RIVER STEAM - SADLER TIE 100 KV TRANSMISSION LINES (REIDSVILLE CIRCUITS)**
Description:	Rebuild the entire Dan River Steam - Sadler Tie 100 kV Transmission Lines (Reidsville Circuits - 8.1 miles) with 1272 ACSR rated at 120 °C
Supporting Statement:	The Dan River Steam - Sadler Tie 100 kV Transmission Lines (Reidsville Circuits) can overload under contingency

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In-Service Year:	2033
Project Name:	**DAN RIVER STEAM - SADLER TIE 100 KV TRANSMISSION LINES (WOLF CREEK CIRCUITS)**
Description:	Rebuild the entire Dan River Steam - Sadler Tie 100 kV Transmission Lines (Wolf Creek Circuits - 8.2 miles) with 1272 ACSR rated at 120 °C
Supporting Statement:	The Dan River Steam - Sadler Tie 100 kV Transmission Lines (Wolf Creek Circuits) can overload under contingency

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In-Service Year:	2034
Project Name:	**WINECOFF TIE - CONLEY SWITCHING STATION 100 KV TRANSMISSION LINE**
Description:	Rebuild 7.89 miles of the Winecoff Tie - Conely Switching Station 100 kV transmission line with 1272 ACSR at 120°C
Supporting Statement:	The Winecoff Tie - Conely Switching Station 100 kV transmission Lines can overload under contingency

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In-Service Year:	2025
Project Name:	**CARTHAGE 230 KV SUBSTATION**
Description:	Construct Carthage 230 kV Substation
Supporting Statement:	Various contingencies cause overloads and low voltages in the area.

In-Service Year:	2025
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 Statement:	Fayetteville – Fayetteville Dupont 115 KV Line Overloads under contingnecy

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In-Service Year:	2026
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 Statement:	The Maxton-Pembroke section of the Weatherspoon-Ind 304440 115 kV transmission line overloads under contingency.

In-Service Year:	2028
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 Statement:	The Durham – RTP 230 kV transmission line overloads under contingency.

In-Service Year:	2028
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 Statement:	Multiple contingencies cause low voltage of the Franklinton - Spring Hope SS 115 KV Line. Falls - Franklinton 115 KV West Line can also overload under a nearby contingency.

In-Service Year:	2030
Project Name:	**CAMDEN JUNCTION - DPC WATEREE 115 KV LINE (CARBON PLAN/RED ZONE)**
Description:	Camden Junction-DPC Wateree 115 kV line - reconductor 4.24 miles
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**CAPE FEAR PLANT - WEST END 230 KV LINE, REBUILD (CARBON PLAN/RED ZONE)**
Description:	Reconductor 26 miles and raise 4.5 miles of the Cape Fear Plant - West End 230 kV Line
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**ERWIN - FAYETTEVILLE 115 KV LINE, RECONDUCTOR TWO SECTIONS (CARBON PLAN/RED ZONE)**
Description:	Reconductor two sections, 8.72 miles, of the Erwin - Fayetteville 115 kV Line
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**ERWIN - FAYETTEVILLE EAST 230 KV LINE, REBUILD (CARBON PLAN/RED ZONE)**
Description:	Reconductor 23 miles of the Erwin - Fayetteville East 230 kV Line
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**FAYETTEVILLE - FAYETTEVILLE DUPONT 115 KV LINE, RECONDUCTOR TWO SECTIONS (CARBON PLAN/RED ZONE)**
Description:	Reconductor two sections, 8.1 miles, of the Fayetteville - Fayetteville DuPont 115 kV Line
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**ROBINSON - ROCKINGHAM 230 KV LINE (CARBON PLAN/RED ZONE)**
Description:	Robinson Plant-Rockingham 230 line - reconductor 41 miles
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2030
Project Name:	**ROBINSON PLANT - ROCKINGHAM 115 KV LINE (CARBON PLAN/RED ZONE)**
Description:	Robinson Plant-Rockingham 115 kV line - reconductor 17.08 miles
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS
DUKE PROGRESS EAST Balancing Authority Area

In-Service Year:	2030
Project Name:	**WEATHERSPOON - MARION 115 KV LINE (CARBON PLAN/RED ZONE)**
Description:	Weatherspoon-Marion 115 kV - raise 6.45 miles
Supporting Statement:	Approved DEP upgrade through NCUC as part of the plan to reach goals for renewable generation detailed in the Carolinas Carbon Plan.

In-Service Year:	2026
Project Name:	**ASHEVILLE PLANT – OTEEN WEST 115 KV TRANSMISSION LINE, BALDWIN TAP**
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:	2026
Project Name:	**CRAGGY-ENKA 230 KV TRANSMISSION LINE**
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 Statement:	The Enka–West Asheville 115 kV line overloads under contingency.

In-Service Year:	2025
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 795MCM 61XAA line risers and jumper in the Blue Lick to Cedar Grove 161kV line with 795MCM 26X7 ACSR or better.
Supporting Statement:	The Blue Lick to Cedar Grove Tap 161kV transmission line overloads.

In-Service Year:	2025
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 Statement:	The Middletown to Buckner 345kV line overloads under contingency.

In-Service Year:	2028
Project Name:	**BULLITT CO TO CEDAR GROVE TAP 161KV TRANSMISSION LINE**
Description:	Replace 1.6 miles of 795MCM 61XAA, on the Bullitt Co to Cedar Grove 161kV line with 795MCM 26X7 ACSR or better.
Supporting Statement:	The Bullitt Co to Cedar Grove Tap 161kV transmission line overloads.

In-Service Year:	2024
Project Name:	**OAK GROVE SWITCHING TO CHUMUCKLA 115KV CONVERSION**
Description:	Construct a new 115kV transmission line from Oak Grove Switching 115kV to Chumuckla 115kV which will replace the existing 46kV transmission line.
Supporting Statement:	This line will complete a 115kV network path from Wye 115kV Switching to Oak Grove 115kV Switching to provide transmission redundancy for area delivery points.

In-Service Year:	2025
Project Name:	**ELSANOR-MIFLIN 115KV SECOND LINE**
Description:	Construct approximately 12 miles of new 115kV transmission line from Elsanor to Miflin with 795 ACSR/AW at 100°C.
Supporting Statement:	The existing Elsanor-Miflin 115kV transmission line overloads under contingency.

In-Service Year:	2025
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.
Supporting Statement:	To support additional load growth in the area.

In-Service Year:	2025
Project Name:	**GRACEVILLE - HOLMES CREEK 115KV TRANSMISSION LINE**
Description:	Construct approximately 1.08 miles of new 115 kV transmission line from PowerSouth's Graceville Switching Station to FPL's Homes Creek Station using 795 ACSR conductor at 100°C design operating temperature.
Supporting Statement:	Improves voltage support for delivery points on PowerSouth system in the area.

In-Service Year:	2028
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 Statement:	Improve the reliability of Gulf Coast Electric's substations by providing a looped service feed.

In-Service Year:	2024
Project Name:	**230/115KV KINGSLAND AUTO TRANSFORMER REPLACEMENT**
Description:	Replace the 230/115kV auto transformer bank C at Kingsland substation.
Supporting Statement:	The 230/115kV auto transformer at Kingsland overloads under contingency.

In-Service Year:	2024
Project Name:	**230/115KV PINE GROVE AUTO TRANSFORMER REPLACEMENT**
Description:	Replace 230/115kV auto transformer bank B at Pine Grove substation.
Supporting Statement:	The 230/115kV auto transformer at Pine Grove overloads under contingency.

In-Service Year:	2024
Project Name:	**ABBEVILLE TS - GEORGE DAM 115 KV TL**
Description:	Reconductor approximately 9.5 miles of 397 ACSR at 100 °C of the Abbeville TS to George Dam 115 kV TL to 397 ACSS at 200° C
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2024
Project Name:	**ARKWRIGHT - SOUTH MACON (BLACK) 115KV TRANSMISSION LINE REBUILD**
Description:	Rebuild approximately 2.38 miles of the Arkwright - South Macon 115kV line. Replace limiting element at substation along the line.
Supporting Statement:	The Arkwright - South Macon (Black) 115kV line overloads under contingency.

In-Service Year:	2024
Project Name:	**BANKS CROSSING - POND FORK 115KV TRANSMISSION LINE**
Description:	Build approximately 3.5 miles of new 115kV transmission line from McClure Industrial substation to East Maysville tap point.
Supporting Statement:	The new line helps serve the increased load in the area.

In-Service Year:	2024
Project Name:	**BOULDIN DAM – COUNTY LINE RD 115KV TL**
Description:	Reconductor approximately 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 Year:	2024
Project Name:	**CORN CRIB - LAGRANGE 115KV LINE REBUILD**
Description:	Rebuild approximately 10.9 miles of the Corn Crib - LaGrange Primary 115kV line.
Supporting Statement:	The Corn Crib - LaGgrange Primary 115kV line overloads under contingency.

In-Service Year:	2024
Project Name:	**HEARD COUNTY - TENASKA 500KV (SECOND LINE)**
Description:	Construct a new, second Heard County - Tenaska 500kV line (approximately 0.8 miles).
Supporting Statement:	To minimize the system impact caused by unit retirements and to improve the system reliability, this project has been proposed as the most cost effective solution which solves multiple thermal overloads.

In-Service Year:	2024
Project Name:	**JORDAN DAM - NORTH SELMA 115 KV TL RECONDUCTOR**
Description:	Reconductor approximately 24 Miles of 397 ACSR 115kV TL with 795 ACSS at 200°C between Jordan Dam & Vida TS.
Supporting Statement:	Provides additional operational and maintenance flexibility which then increases reliability.

In-Service Year:	2024
Project Name:	**JUDY MOUNTAIN SHUNT REACTOR**
Description:	Install a shunt reactor set at Judy Mountain connected to the 230kV bus.
Supporting Statement:	This project addresses voltage issues in North Georgia during low-load conditions.

In-Service Year:	2024
Project Name:	**KLONDIKE 500KV SWITCH REPLACEMENT**
Description:	Upgrade limiting element at Klondike substation on the Klondike - Norcross 500kV line.
Supporting Statement:	The Klondike - Norcross 500kV line overloads under contingency.

In-Service Year:	2024
Project Name:	**MCGRAU FORD STATCOM INSTALLATION**
Description:	Install a STATCOM system at McGrau Ford substation.
Supporting Statement:	Fast reactive support is needed to address FIDVR issues in North Georgia. This project will also address high-voltage issues that occur during valley load conditions.

In-Service Year:	2024
Project Name:	**MIDDLE FORK STATCOM**
Description:	Install a STATCOM connected to the 230kV bus at Middle Fork.
Supporting Statement:	Fast reactive support is needed to address FIDVR issues in North Georgia. This project will also address high-voltage issues that occur during valley load conditions.

In-Service Year:	2024
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 at Norcross.
Supporting Statement:	Several transmission elements exceed their rating under contingency.

In-Service Year:	2024
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 Year:	2024
Project Name:	**RIDDLEVILLE BUS REPLACEMENT**
Description:	Upgrade limiting element at Riddleville substation.
Supporting Statement:	The Sandersville #1 - Wadley Primary 115kV line overloads under contingency.

In-Service Year:	2024
Project Name:	**SHUGART FARMS NETWORK UPGRADES**
Description:	Rebuild the Line Creek 230kV as breaker and a half configuration. Connect existing 230kV lines into the new breaker and a half layout at Line Creek. Build two short lines from Line Creek to Shugart Farms (0.3 miles each).
Supporting Statement:	The transmission network improvements are required to serve load growth in the area.

In-Service Year:	2024
Project Name:	**THOMSON PRIMARY - WARRENTON PRIMARY (WHITE) 115KV LINE RECONDUCTOR**
Description:	Reconductor approximately 16.8 miles of the Thomson Primary - Warrenton Primary 115kV White line.
Supporting Statement:	The Thomson Primary - Warrenton Primary line overloads under contingency.

In-Service Year:	2024
Project Name:	**UNION CITY 230KV BUS TIE**
Description:	Construct a 230kV bus tie at Union City.
Supporting Statement:	The Morrow - Union City 230kV line overloads under contingency. Adding a 230kV bus tie at Union City eliminates the contingency.

In-Service Year:	2024
Project Name:	**WARRENTON PRIMARY 230KV SWITCHES AND JUMPERS REPLACEMENT**
Description:	Upgrade limiting elements at the Warrenton Primary substation.
Supporting Statement:	The Goldens Creek - Warrenton Primary 230kV line overloads under contingency.

In-Service Year:	2024
Project Name:	**WEBB – BLAKELY (GPC) 115 KV TL**
Description:	Reconductor approximately 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 Year:	2025
Project Name:	**INSTALLATION OF POWER FLOW CONTROL DEVICES AT EATONTON PRIMARY AND BRANCH**
Description:	Installation of power flow control devices at the Eatonton Primary and Branch substations.
Supporting Statement:	This project addresses multiple thermal constraints in the area that occur under contingency.

In-Service Year:	2025
Project Name:	**ADAMSVILLE - JACK MCDONOUGH 230KV TRANSMISSION LINE REBUILD**
Description:	Rebuild the entire Adamsville - Jack McDonough 230kV line (6.1 miles).
Supporting Statement:	The project provides necessary operational flexibility, and resolves an overload on the Adamsville - Jack McDonough 230kV line under contingency.

In-Service Year:	2025
Project Name:	**ALCOVY ROAD - SKC 115KV REBUILD**
Description:	Rebuild approximately 0.54 miles of the Alcovy Road - SKC 115kV line.
Supporting Statement:	The Alcovy Road - SKC 115kV transmission line overloads under contingency.

In-Service Year:	2025
Project Name:	**ANTHONY SHOALS - WASHINGTON 115KV LINE REBUILD**
Description:	Rebuild approximately 21 miles of the Anthony Shoals – Washington 115kV line.
Supporting Statement:	The Anthony Shoals – Washington 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**AULTMAN ROAD - BONAIRE PRIMARY 115KV RECONDUCTOR**
Description:	Reconductor approximately 1.99 miles of the Aultman Road - Bonaire Primary 115kV line. Upgrade substations along the path of network flow.
Supporting Statement:	The Aultman Road - Bonaire Primary 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**BONAIRE PRIMARY - ECHECONNEE 115KV TRANSMISSION LINE**
Description:	Rebuild approximately 2.3 miles of the Bonaire Primary - Echeconnee 115kV line.
Supporting Statement:	The Bonaire Primary - Echeconnee 115KV line overloads under contingencies.

In-Service Year:	2025
Project Name:	**BREMEN - CROOKED CREEK 115KV PROJECT**
Description:	GPC: Rebuild approximately 14 miles of the Bremen - Crooked Creek 115kV line.
Supporting Statement:	The Bremen - Crooked Creek 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**BRUMBLEY CREEK - SOUTH BAINBRIDGE 115KV (RODDENBERY TAP) TRANSMISSION LINE REBUILD**
Description:	Rebuild approximately 2.1 miles of the South Bainbridge - Thomasville 115kV line.
Supporting Statement:	The South Bainbridge - Thomasville 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**CAMDEN INDUSTRIAL PARK 230/115KV**
Description:	Construct a new Camden Industrial Park 230/115kV substation with a 230/115kV auto transformer, loop in the Colerain-Thalmann 230kV line, and construct a new 115kV line to Kinlaw substation.
Supporting Statement:	The project addresses several themal constraints in the area that occur under contingency.

In-Service Year:	2025
Project Name:	**CAPITOL HEIGHTS – CARTER HILL RD 115 KV TRANSMISSION LINE**
Description:	Reconductor approximately 2.5 miles of 556 AAC at 75°C from Capitol Heights – Carter Hill Rd to 795 ACSR at 100°C
Supporting Statement:	The Capitol Heights - Carter Hill Road 115 kV transmission line overloads under contingency.

In-Service Year:	2025
Project Name:	**DEPTFORD - MAGNOLIA 115KV REBUILD**
Description:	Rebuild appoximately 5 miles of the Deptford-Magnolia 115kV line.
Supporting Statement:	The Deptford-Magnolia 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**ECHECONNEE - WELLSTON 115KV TRANSMISSION LINE RECONDUCTOR**
Description:	Rebuild approximately 1.2 miles of the Echeconnee - Wellston 115kV line.
Supporting Statement:	The Echeconnee - Wellston 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**GARRETT ROAD SWITCHING STATION - TRAE LANE NETWORK UPGRADES**
Description:	Build the new Garrett Road 230kV switching station splitting the Villa Rica - West Marietta 230kV line. Build a new 230kV line (8 miles) from the Trae Lane customer sub to the Garrett Road switching station.
Supporting Statement:	The transmission network improvements are required to serve load growth in the area.

In-Service Year:	2025
Project Name:	**GULFPORT LANDON – COOPERATIVE ENERGY LANDON TAP 115 KV TRANSMISSION LINE REBUILD**
Description:	Rebuild approximately 5.5 mile, 115 kV transmssion line between Gulfport Landon substation and Cooperative Energy's Landon Tap with 1351 ACSR at 100°C.
Supporting Statement:	The Gulfport Landon - Cooperative Energy's Landon Tap 115 kV overloads under contingency.

In-Service Year:	2025
Project Name:	**HAMMOND – WEISS DAM 115KV LINE REBUILD**
Description:	Rebuild approximately 11 miles of the Hammond - Weiss Dam 115kV line.
Supporting Statement:	Hammond - Weiss Dam 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**JEFFERSON STREET#3 - NORTHWEST (WHITE) 115KV REBUILD**
Description:	Rebuild approximately 1.2 miles of the Jefferson Street #3 - Northwest 115kV White line.
Supporting Statement:	The Jefferson Street #3 - Northwest 115kV White line overloads under contingency.

In-Service Year:	2025
Project Name:	**JESUP - LUDOWICI 115KV TRANSMISSION LINE RECONDUCTOR**
Description:	Reconductor approximately 7.5 miles of the Jesup - Ludowici 115kV line.
Supporting Statement:	The Jesup - Ludowici 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**LIZARD LOPE - WESTOVER 115KV**
Description:	Construct two new 115kV stations, Lizard Lope and Westover, and build a new 115kV line (approximately 19.8 miles) from Lizard Lope to Gillionville Substation.
Supporting Statement:	The Dawson Primary - Palmyra 115kV line overloads under contingency.

In-Service Year:	2025
Project Name:	**LUMBERTON - POPLARVILLE 115 KV TRANSMISSION LINE REBUILD**
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 Year:	2025
Project Name:	**NORCROSS 230KV BUS 1-3 SERIES BUS TIE BREAKER INSTALLATION**
Description:	Install a bus tie breaker in series with the existing bus tie breaker at Norcross substation.
Supporting Statement:	The Norcross 230/115kV auto transformer and the Norcross #3 - Northwoods 115kV line overload under contingency.

In-Service Year:	2025
Project Name:	**PALMYRA REACTOR REMOVAL**
Description:	Remove reactor at Palmyra.
Supporting Statement:	A permanent solution makes the reactor at Palmyra unnecessary.

In-Service Year:	2025
Project Name:	**PINE GROVE PRIMARY 115KV DUAL STAGE CAPACITOR BANK**
Description:	Install a Capacitor bank at Pine Grove Primary.
Supporting Statement:	Project addresses voltage issues in the area due to a contingency.

In-Service Year:	2025
Project Name:	**PROJECT CHRONOS TRANSMISSION SERVICE**
Description:	Build approximatley 4 miles of lines that loop in and out the new customer station into the Cartersville - Pinson 230kV line.
Supporting Statement:	The transmission network improvements are required to serve load growth in the area.

In-Service Year:	2025
Project Name:	**ROBINS SPRING BUS REPLACEMENT**
Description:	Upgrade limiting element at Robins Spring substation
Supporting Statement:	The Gordon - Sandersville #1 115kV transmission line overloads under contingency.

In-Service Year:	2025
Project Name:	**ROBINS SPRINGS SUBSTATION CAPACITOR BANK INSTALLATION**
Description:	Install a 115kV 2-stage capacitor bank at Robins Spring.
Supporting Statement:	The Gordon-Sandersville #1 115kV transmission line overloads under contingency.

In-Service Year:	2025
Project Name:	**SAVANNAH AREA TRANSMISSION NETWORK UPGRADES**
Description:	Construct a new 230kV substation (Newton Road) to serve load growth in the area. Construct a new 230kV line from Hyundai Motors substation to Meldrim substation (approximately 9 miles). Construct a new 230kV line from Hyundai Motors substation to Newton Road substation (approximately 12.1 miles).
Supporting Statement:	The new 230kV Newton Rd switching station and two new transmission lines are needed to serve additional load in the area.

In-Service Year:	2025
Project Name:	**SILVERHILL TS 3RD AUTOBANK**
Description:	Add 3rd 230/115 kV Autobank at Silverhill TS during infrastructure project.
Supporting Statement:	The Silverhill 230/115 kV autobank overloads under contingency.

In-Service Year:	2025
Project Name:	**UNION CITY - YATES 230KV WHITE LINE REBUILD**
Description:	Rebuild the entire Union City - Yates 230kV White line with higher rated conductor (23.4 miles).
Supporting Statement:	The Union City - Yates 230kV White line overloads under contingency.

In-Service Year:	2025
Project Name:	**WEBB TS STATCOM**
Description:	Installation of a +/- 150 Mvar STATCOM at Webb TS (230kV)
Supporting Statement:	Provides reactive and stability support under contingency for the area.

In-Service Year:	2026
Project Name:	**ATHENA - EAST WATKINSVILLE 115KV (REBUILD)**
Description:	Rebuild approximately 2.42 miles of the Athena - East Watkinsville 115kV line.
Supporting Statement:	The Athena - East Watkinsville 115kV line overloads under contingency.

In-Service Year:	2026
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.

In-Service Year:	2026
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 auto transformer and an additional 230kV connection to Little Ogeechee.
Supporting Statement:	Multiple 500/230kV West McIntosh auto transformers exceed their ratings under contingency.

In-Service Year:	2026
Project Name:	**BLANKETS CREEK – WOODSTOCK 115KV LINE REBUILD**
Description:	Rebuild approximately 2.5 miles of the Blankets Creek – Woodstock 115kV line.
Supporting Statement:	The Blankets Creek – Woodstock 115kV transmission line overloads under contingency.

In-Service Year:	2026
Project Name:	**BOULEVARD - DEPTFORD 115KV REBUILD**
Description:	Rebuild the entire Boulevard - Deptford 115kV line (appoximately 8 miles). Replace limiting element at substation along the line.
Supporting Statement:	The Boulevard-Deptford 115kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**DRESDEN - LAGRANGE PRIMARY 230KV UPGRADE & JUMPERS**
Description:	Re-sag the Dresden - LaGrange Primary 230kV line and upgrade limiting elements at substations along the line.
Supporting Statement:	Dresden - Lagrange Primary 230kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**DRESDEN 500KV BUS EXPANSION**
Description:	Expand the Dresden 500kV bus to bring additional 500kV lines into the station.
Supporting Statement:	This project will resolve multiple thermal constraints by eliminating a contingency.

In-Service Year:	2026
Project Name:	**FAYETTEVILLE AREA TRANSMISSION NETWORK UPGRADE**
Description:	Build a new 500/230kV station with two 500/230kV auto transformers. Build two new 230kV lines from the new station to customer stations to serve load growth in the area.
Supporting Statement:	The new 500/230kV substation and the new 230kV lines are needed to reliably serve load in the Fayetteville area.

In-Service Year:	2026
Project Name:	**FENWICK STREET - SAND BAR FERRY 115KV (RECONDUCTOR)**
Description:	Reconductor approximately 2.72 miles of the Fenwick Street - Sand Bar Ferry 115kV line.
Supporting Statement:	The Fenwick Street-Sand Bar Ferry 115kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**FULLER ROAD - COLUMBUS FIRST AVE 115 KV TL RECONDUCTOR**
Description:	Reconductor approximately 3 miles of 397 ACSR 115 kV TL at 100°C to 397 ACSS 26/7 at 200°C from Columbus First Ave to Phenix Lumber
Supporting Statement:	The Fuller Road - Columbus First Avenue 115 kV transmission line overloads under contingency.

In-Service Year:	2026
Project Name:	**GOAT ROCK - NORTH OPELIKA 230 KV TRANSMISSION LINE UPGRADE**
Description:	Upgrade the approximately 17.2 mile section of line from North Opelika to Goat Rock to operate at 100° C
Supporting Statement:	The Goat Rock - North Opelika 230 kV transmission line overloads under contingency.

In-Service Year:	2026
Project Name:	**GOAT ROCK 230KV SWITCH & JUMPER REPLACEMENT**
Description:	Upgrade limiting elements at Goat Rock substation on the Goat Rock - North Opelika 230kV line.
Supporting Statement:	The Goat Rock - North Opelika 230kV transmission line overloads under contingency.

In-Service Year:	2026
Project Name:	**GORDON - SANDERSVILLE #1 115KV TRANSMISSION LINE REBUILD**
Description:	Rebuild appoximately 1.87 miles of the Gordon - Sandersville #1 115kV line.
Supporting Statement:	The Gordon - Sandersville #1 115kV transmission line overloads under contingency conditions and the base case.

In-Service Year:	2026
Project Name:	**GORDON-N DUBLIN 115KV REBUILD**
Description:	Rebuild appximately 5.9 miles of the Gordon - North Dublin 115kV line.
Supporting Statement:	The Gordon - North Dublin 115kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**GRADY 230/115KV NEW BREAKER AND RELAY MODERNIZATION**
Description:	Upgrade protection scheme, install a breaker and associated switches at Grady substation.
Supporting Statement:	The project addresses stability issues in the transmission network caused by a multiple contingency event at Grady. It also addresses thermal overload on the Grady - Morrow 115kV White line under contingency.

In-Service Year:	2026
Project Name:	**GRADY-WEST END 115KV LINE RECONDUCTOR**
Description:	Reconductor the entire Grady - West End 115kV line (approximately 2.6 miles).
Supporting Statement:	The Grady - West End 115kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**HILL VIEW AND GRASSY HOLLOW SWITCHING STATIONS**
Description:	Build two 230kV switching stations (Hill View and Grassy Hollow) looping into the Cartersville - McGrau Ford 230kV line (8.5 miles apart). Build three new 230kV lines: Hill View - Cass Pine, Cass Pine - Great Valley and Great Valley - Grassy Hollow (total 14.7 miles of new 230kV line).
Supporting Statement:	The transmission network improvements are required to serve load growth in the area.

In-Service Year:	2026
Project Name:	**HOPE HULL AREA SOLUTION**
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 Hyunda.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2026
Project Name:	**KATHLEEN AREA TRANSMISSION IMPROVEMENTS**
Description:	This project covers transmission network improvements associated with a solar interconnection in the Kathleen area. GTC: - Build the new Big Grocery Creek 230kV switching station looping into the Kathleen - Pitts 230kV line. GPC: - Rebuild the Kathleen - Big Grocery Creek 230kV line (approximately 1.5 miles). - Rebuild the Bonaire Primary - Kathleen 230kV line (approximately 6 miles). - Upgrade limiting elements at substation along the Kathleen - Big Grocery Creek 230kV line.
Supporting Statement:	The transmission network improvements are required for a new solar interconnection and delivery.

In-Service Year:	2026
Project Name:	**LAGRANGE - NORTH OPELIKA 230KV (NEW LINE)**
Description:	GTC: Build a new 15 mile long 230kV line section from the LaGrange Primary substation in Georgia to the metering station near the Georgia-Alabama border
Supporting Statement:	This project solves multiple overloads associated with unit retirements.

In-Service Year:	2026
Project Name:	**LAGRANGE - NORTH OPELIKA TS NEW 230 KV TL**
Description:	APC: Construct approximately 14 miles 230 kV TL between North Opelika TS & new metering station, West Point SS utilizing 1351 54/19 ACSR @ 100°C.
Supporting Statement:	This project solves multiple overloads associated with unit retirements.

In-Service Year:	2026
Project Name:	**MCINTOSH - PURRYSBURG 230KV REACTORS**
Description:	Install reactors on the McIntosh - Purrysburg (Black and White) 230kV tie lines at McIntosh.
Supporting Statement:	The McIntosh-Purrysburg 230kV (Black & White) tie lines overload under contingencies.

In-Service Year:	2026
Project Name:	**MITCHELL - NORTH TIFTON 230KV RECONDUCTOR**
Description:	Reconductor approximately 35.2 miles of the Mitchell - North Tifton 230kV line.
Supporting Statement:	The Mitchell - North Tifton 230kV line overloads under contingency.

In-Service Year:	2026
Project Name:	**MORNING HORNET 2ND 230/115KV BANK & THUMBS UP 115KV TRANSMISSION LINE**
Description:	Add a second 230/115kV autotransformer at Morning Hornet substation. Also, build a new 115kV line from Morning Hornet to Thumbs Up (approximately 0.7 miles).
Supporting Statement:	The East Social Circle - Stanton Springs 115kV and Morning Hornet - Thumbs Up 115kV lines overload under contingency.

In-Service Year:	2026
Project Name:	**MORROW - MOUNTAIN VIEW 115KV LINE REBUILD**
Description:	Rebuild approximately 1.7 miles of the Morrow - Mountain View 115kV line.
Supporting Statement:	The Morrow - Mountain View 115kV line overloads under contingency.

In-Service Year:	2026
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 Statement:	The Moss Point East to Pascagoula MS Chemical 115 kV transmission line overloads under contingency.

In-Service Year:	2026
Project Name:	**RAY PLACE RD - WASHINGTON (RAY PLACE RD - WASHINGTON 2) 115KV LINE REBUILD**
Description:	Rebuild appoximately 17.4 miles of the Ray Place Rd - Washington 115kV line.
Supporting Statement:	The Ray Place Rd - Washington 115kV line exceeds its thermal rating due to contingency.

In-Service Year:	2026
Project Name:	**RAY PLACE RD - WASHINGTON (WASHINGTON - WASHINGTON 3) 115KV LINE REBUILD**
Description:	Rebuild appoximately 1.2 miles of the Ray Place Rd - Washington 115kV line. Upgrade limiting element at substation along the line.
Supporting Statement:	The Ray Place Rd - Washington 115kV line exceeds its thermal rating due to contingency.

In-Service Year:	2026
Project Name:	**STONEWALL TELL ROAD NETWORK UPGRADES**
Description:	Build 230kV line segment to loop in the Stonewall Tell Road customer station into the East Point - Union City 230kV Black line.
Supporting Statement:	The project is required to serve load growth in the area.

In-Service Year:	2026
Project Name:	**SUNNY SOUTH CAPACITOR BANK**
Description:	Install 1 - 15 Mvar, 115 kV harmonic filter bank at Sunny South SS
Supporting Statement:	Low voltage in the area under contingency. This project provides voltage support under contingency scenarios.

In-Service Year:	2026
Project Name:	**WEST TECH CAPACITOR BANKS**
Description:	Install two new 115kV, 15MVAr capacitors at West Tech
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2027
Project Name:	**ADAMSVILLE - BUZZARD ROOST 230KV REBUILD AND JUMPER UPGRADE**
Description:	Rebuild approximately 7.2 miles of the Adamsville - Buzzard Roost 230kV line. Upgrade limiting elements at substations along the line.
Supporting Statement:	The Adamsville - Buzzard Roost 230kV line overloads under contingency.

In-Service Year:	2027
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:	2027
Project Name:	**ANNISTON-BYNUM 115 KV UPGRADE**
Description:	Upgrade 6.5 miles from Coldwater – Anniston from 1351 ACSS 54/19 170°C to 200°C
Supporting Statement:	The Anniston - Bynum 115 kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**ARKWRIGHT - LLOYD SHOALS 115KV LINE RECONDUCTOR**
Description:	Rebuild the entire Arkwright - Lloyd Shoals 115kV line (35.7 miles).
Supporting Statement:	The Arkwright - Lloyd Shoals 115kV line overloads under contingency.

In-Service Year:	2027
Project Name:	**AUTAUGAVILLE - EAST PELHAM NEW 230 KV TRANSMISSION LINE**
Description:	Construct approximately 75 miles new 230 kV transmission line bundled 795 26/7 ACSS 200°C from Autaugaville TS to East Pelham TS
Supporting Statement:	The Bessemer – South Bessemer 230 kV transmission line overloads under contingency. Reduces multiple 230 kV line loadings and provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2027
Project Name:	**BESSEMER – SOUTH BESSEMER 115 KV TRANSMISSION LINE**
Description:	Reconductor approximately 2 miles of 115 kV TL from McAdory Tap – Airport Lane Tap from 397 ACSR to 795 ACSR 26/7 at 100C
Supporting Statement:	The Bessemer - South Bessemer 115 kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**DOYLE - LG&E MONROE 230KV - JACKS CREEK LOOP IN**
Description:	Loop in and out the new Jack's Creek 230kV switching station into the Doyle - LG&E Monroe 230kV line.
Supporting Statement:	Contingencies of 230kV transmission lines in the area causes several 230kV lines to overload.

In-Service Year:	2027
Project Name:	**EAST WALTON 500/230KV PROJECT**
Description:	GTC: - 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 Statement:	This project addresses multiple contingencies in the area.

In-Service Year:	2027
Project Name:	**ENTERPRISE TS – PINCKARD #2 115 KV TRANSMISSION LINE**
Description:	Reconductor approximately 7.5 miles of 266 ACSR at 100 °C of the Enterprise to Daleville DS to 795 ACSR at 100° C
Supporting Statement:	The Enterprise - Pinckard #2 115 kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**GOSHEN (SAV) - MCINTOSH 115KV REBUILD**
Description:	Rebuild appoximately 6.7 miles of the Goshen (Sav)-McIntosh 115kV line.
Supporting Statement:	The Goshen (Sav) - McIntosh 115kV line overloads under contingency.

In-Service Year:	2027
Project Name:	**HWY 112-EAST MOULTRIE 230KV LINE (NEW LINE)**
Description:	Build a new 230kV line between HWY 112 and East Moultrie substations (approximately 27 miles).
Supporting Statement:	This project addresses thermal overloads on the Daisy - West Valdosta 230kV line and Mitchell - Raccoon Creek 230kV line under contingency.

In-Service Year:	2027
Project Name:	**JESUP - OFFERMAN 115KV TRANSMISSION LINE RECONDUCTOR**
Description:	Reconductor approximately 16 miles of the Jesup - Offerman 115kV line.
Supporting Statement:	The Jesup - Offerman 115kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**LAWRENCEVILLE - WINDER 115KV LINE RECONDUCTOR**
Description:	Reconductor approximately 1.1 miles of the Lawrenceville - Winder 115kV line.
Supporting Statement:	The Lawrenceville - Winder 115kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**NEW SOUTH HAZLEHURST - NEW LACY 230KV TRANSMISSION LINE**
Description:	Build a new 230kV transmission line (appoximately 25 miles) between South Hazlehurst and New Lacy.
Supporting Statement:	The project will address multiple thermal overloads that occur under contingency.

In-Service Year:	2027
Project Name:	**NORTH SELMA – SELMA #2 115 KV TRANSMISSION LINE**
Description:	Rebuild approximately 27 miles of 397 ACSR at 100 °C of Selma TS – Vida TS 115 kV TL to 795 ACSS at 200° C
Supporting Statement:	Provides additional operational and maintenance flexibility which then increases reliability.

In-Service Year:	2027
Project Name:	**SANDERSVILLE #1 - WADLEY PRIMARY 115KV TRANSMISSION LINE REBUILD**
Description:	GPC: Rebuild the Sandersville #1 - Wadley Primary 115kV main line (appoximately 24.3 miles) excluding the taps. GTC/MEAG: Upgrade limiting jumpers along the line.
Supporting Statement:	The Sandersville #1 - Wadley Primary 115kV line overloads under contingency.

In-Service Year:	2027
Project Name:	**SKC 115KV BUS AND JUMPER REPLACEMENT**
Description:	Upgrade limiting elements at the SKC substation.
Supporting Statement:	The Covington #2 - SKC 115kV line overloads under contingency.

In-Service Year:	2027
Project Name:	**SWITCH WAY - THORNTON ROAD 230KV LINE RECONDUCTOR**
Description:	Reconductor approximately 0.9 miles of the Switch Way - Thornton Road 230kV line.
Supporting Statement:	The Switch Way - Thornton Road 230kV line overloads under contingency.

In-Service Year:	2028
Project Name:	**ACIPCO EAF - BOYLES 230 KV TRANSMISSION LINE**
Description:	Construct approximately 3 miles of 1351 54/19 ACSR at 100°C from ACIPCO EAF to Boyles TS. Reconductor approximately 1.8 miles from ACIPCO TS to ACIPCO EAF from 795 ACSR to 1351 ACSR.
Supporting Statement:	The Boyles - Miller 230 kV transmission line overloads under contingency. Also Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2028
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 Statement:	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 Year:	2028
Project Name:	**BARNEYVILLE - EAST MOULTRIE 115KV NEW LINE**
Description:	Build a new 115kV line from Barneyville to East Moultrie (approximately 20 miles).
Supporting Statement:	The Barneyville - Pine Grove Primary 115kV line and Barneyville - Douglas 115kV line overload under contingency.

In-Service Year:	2028
Project Name:	**ELLICOTT SUBSTATION EXPANSION PROJECT**
Description:	Add 6 new 230kV terminals at Ellicott SS. Ellicott SS to become Ellicott TS. Add new 115kV station with breaker and a half configuration to support (13) - 115kV line terminations, to include a new 230/115kV autobank. Barry SP - Reconfigure substation and replace structures.
Supporting Statement:	Upgrade existing and construct new transmission facilities to provide additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2028
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.
Supporting Statement:	Provides additional operational and maintenance flexibility which then increases reliability. In addition, associated with replacing aging equipment at Gulf States Steel DS.

In-Service Year:	2028
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 Statement:	Provides additional operational and maintenance flexibility which then increases reliability.

In-Service Year:	2028
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 Statement:	The Leeds to Moody 115 kV transmission line overloads under contingency.

In-Service Year:	2028
Project Name:	**MAGNOLIA - TRUMAN PARKWAY 115KV RECONDUCTOR**
Description:	Reconductor approximately 3 miles of the Magnolia-Truman Parkway 115kV line. Upgrade limiting elements in substations along the line.
Supporting Statement:	This Magnolia-Truman Parkway 115kV line overloads under contingency.

In-Service Year:	2028
Project Name:	**MILLER SP 500 KV SERIES BREAKER**
Description:	Install 500 kV series breaker between Miller – Clay 500 kV TL and Miller – East Point (TVA) TL at Miller SP
Supporting Statement:	The Boyles - Miller 230 kV transmission line overloads under contingency.

In-Service Year:	2028
Project Name:	**NORTH THEODORE AREA PROJECT**
Description:	Reconductor approximately 0.9 miles of the Hollinger's Island – Holcim 115kV TL to 795 ACSR at 100°C. Construct New SS near Tronox LLC. Construcapproximatelapproximatel approximately 5.3 miles of 795 ACSR at 100°C 115kV TL from N. Theodore – Praxair Ta. Install new 115kV terminal at N. Theodore TS.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2028
Project Name:	**UNION CITY - YATES 230KV BLACK LINE REBUILD**
Description:	Rebuild the entire Union City - Yates 230kV Black line (approximately 23.4 miles). Upgrade limiting elements at substations along the line.
Supporting Statement:	The Union City - Yates 230kV Black line overloads under contingency.

In-Service Year:	2029
Project Name:	**ARLINGTON PRIMARY - HWY45/234 115KV TRANSMISSION LINE RECONDUCTOR**
Description:	Reconductor approximately 42.61 miles of the Arlington - Dawson Primary 115kV line.
Supporting Statement:	The Arlington Primary - Dawson Primary 115kV transmission line overloads under contingency.

In-Service Year:	2029
Project Name:	**AUGUSTA CORPORATE PARK - VOGTLE 230KV TRANSMISSION LINE REBUILD**
Description:	Rebuild approximately 14.2 miles of the Augusta Corporate Park - Vogtle 230kV line.
Supporting Statement:	The Augusta Corporate Park - Vogtle 230kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**BANKS CROSSING - CENTER PRIMARY (BLACK) 230KV LINE**
Description:	Build a new 230kV line from Banks Crossing to Center Primary (approximately 14.6 miles).
Supporting Statement:	The Center Primary - Commerce Primary 115kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**BREMEN - CROOKED CREEK 115 KV TL**
Description:	APC: Reconductor approximately 29.5 miles of 397 30/7 ACSR 100°C to 795 26/7 ACSR 100°C from Crooked Creek TS to Indian Creek Metering Station.
Supporting Statement:	The Bremen - Crooked Creek 115 kV transmission line overloads under contingency.

In-Service Year:	2029
Project Name:	**DOUGLASVILLE - POST ROAD 115KV LINE REBUILD**
Description:	Rebuild approximately 6 miles of the Douglasville - Post Road 115kV line.
Supporting Statement:	The Douglasville - Post Road 115kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**DRESDEN – TALBOT 500KV LINE PROJECT**
Description:	Build a new 500/230kV substation with one 500/230kV auto transformer. Build a new 500kV line from the new station to Dresden (approximately 75 miles).
Supporting Statement:	This strategic project will address multiple thermal overloads caused by a contingency.

In-Service Year:	2029
Project Name:	**FLOMATON 230/115 KV SUBSTATION**
Description:	Install a new 230/115 kV, 480 MVA transformer at Flomaton TS.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2029
Project Name:	**KETTLE CREEK PRIMARY - PINE GROVE PRIMARY 115KV REBUILD**
Description:	Rebuild approximately 15.3 miles of the Kettle Creek Primary - Pine Grove 115kV line.
Supporting Statement:	Kettle Creek - Pine Grove 115kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**KRAFT 230/115KV TRANSFORMER RATING INCREASE**
Description:	Replace the 230kV underground cable that connects the 230/115kV autotransformer B at Kraft substation with a higher rated cable.
Supporting Statement:	Either 230/115kV auto transformer at Kraft overloads under contingency.

In-Service Year:	2029
Project Name:	**LAWRENCEVILLE - WINDER 230KV LINE REBUILD**
Description:	Rebuild approximately 6.6 miles of the Lawrenceville - Winder 230kV transmission line.
Supporting Statement:	The Lawrenceville - Winder 230kV transmission line overloads under contingency.

In-Service Year:	2029
Project Name:	**MCEVER ROAD - SHOAL CREEK 115KV TRANSMISSION LINE REBUILD**
Description:	Rebuild approximately 2 miles of the McEver Road - Shoal Creek 115kV line.
Supporting Statement:	The McEver Road - Shoal Creek 115kV transmission line overloads under contingency

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In-Service Year:	2029
Project Name:	**MCMANUS - WEST BRUNSWICK 115KV RECONDUCTOR**
Description:	Reconductor the entire McManus - West Brunswick 115kV line (approximately 5.7 miles).
Supporting Statement:	The McManus-West Brunswick 115kV line overloads under contingency.

In-Service Year:	2029
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 Statement:	The Miller - Gorgas 230 kV transmission line overloads under contingency.

In-Service Year:	2029
Project Name:	**MOBILE AREA NETWORKING – 3RD PATH**
Description:	Construct new Dawes SS at Dawes Tap on the Big Creek – N. Theodore 115kV TL.Reconductoapproximately 6.3 miles on the N. Mobile – Michael Blvd 115kV TL.Upgrad approximately 4.0 miles of 795 ACSR on the Big Creek – North Theodore 115kV TL from 100°C to 125°C from Big Creek TS to Snow Rd DS to Dawes Tap.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2029
Project Name:	**MOUNDVILLE SOLUTION**
Description:	Construct a new 6-mile, 115kV TL, 795, 26/7 ACSS @ 200°C from Moundville TS to a new 3-way switch near structure 7 between Colonial Pipe (Moundville) and Westervelt Co, new terminal at Moundville TS, Install 1-way switch near Structure 41.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2029
Project Name:	**PALMYRA - SLAPPEY DRIVE 115KV LINE RECONDUCTOR**
Description:	Reconductor approximately 4.33 miles of the Palmyra - Slappey Drive 115kV line.
Supporting Statement:	The Palmyra - Slappey Drive 115kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**ROCKY RIDGE RADIAL 115 KV TRANSMISSION LINE**
Description:	Reconductor approximately 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:	**THOMASVILLE 230/115KV AUTOBANK REPLACEMENT**
Description:	Replace the 230/115kV autotransformer #4 at Thomasville substation.
Supporting Statement:	The 230/115kV auto transformer #4 at Thomasville substation overloads under contingency.

In-Service Year:	2029
Project Name:	**THURLOW DAM – UNION SPRINGS 115 KV TL**
Description:	Rebuild approximately 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:	2029
Project Name:	**VILLA RICA - GARRETT ROAD 230KV LINE RECONDUCTOR**
Description:	Reconductor approximately 4.6 miles of the Garrett Road - Villa Rica 230kV line (currently the Villa Rica - West Marietta 230kV line). Upgrade limiting elements at substation along the line.
Supporting Statement:	The Garrett Road - Villa Rica 230kV line overloads under contingency.

In-Service Year:	2029
Project Name:	**WESTLAKE ROAD SS**
Description:	GTC: - Build the new Westlake Road 230kV switching station looping in the Bonaire Primary - South Macon 230kV and Bonaire Primary - Savage Creek 230kV lines. - Build the new Big Grocery Creek - Westlake Road 230kV line (approximately 20 miles).
Supporting Statement:	The transmission network improvements are required for a new solar interconnection and delivery.

In-Service Year:	2029
Project Name:	**YATES 6&7 230KV SWITCH REPLACEMENTS**
Description:	Upgrade limiting elements at Yates 6&7 substation.
Supporting Statement:	The Line Creek - Yates 230kV (Black) line and the Dresden - Yates 230kV line overload under contingency.

In-Service Year:	2030
Project Name:	**BAINBRIDGE TRANSMISSION: EAST RIVER ROAD AND EAST BAINBRIDGE**
Description:	This project will construct a new 115kV breaker and a half substation.
Supporting Statement:	This project is part of an overall reconfiguration of the Bainbridge area to improve the distribution reliability, transmission security and operational flexibility.

In-Service Year:	2030
Project Name:	**BAY CREEK 230/115KV SECOND AUTO TRANSFORMER**
Description:	Add a second 230/115kV auto transformer at Bay Creek.
Supporting Statement:	The Bay Creek - Monroe 115kV line overloads under contingency.

In-Service Year:	2030
Project Name:	**BOSTWICK - EAST SOCIAL CIRCLE 230KV TRANSMISSION LINE RECONDUCTOR**
Description:	Reconductor appoximately 10.8 miles of the East Social Circle - East Watkinsville 230kV Line.
Supporting Statement:	The Bostwick - East Social Circle 230kV line (currently the East Social Circle - East Watkinsville 230kV line) overloads under contingency.

In-Service Year:	2030
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 Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2030
Project Name:	**GOLDENS CREEK - WARRENTON PRIMARY 230KV TRANSMISSION LINE REBUILD**
Description:	Rebuild appoximately 0.34 miles of the Goldens Creek - Warrenton Primary 230kV line.
Supporting Statement:	The Goldens Creek - Warrenton Primary 230kV transmission line overloads under contingency.

In-Service Year:	2030
Project Name:	**GORDON-SANDERSVILLE #1 115KV LINE REBUILD (DEEPSTEP-SAND #6)**
Description:	Rebuild approximately 10.5 miles of the Gordon-Sandersville #1 115kV line.
Supporting Statement:	The Gordon-Sandersville #1 115kV transmission line overloads under contingency.

In-Service Year:	2030
Project Name:	**LOWER RIVER - WEBB (APC) 115KV RECONDUCTOR**
Description:	Reconductor approximately 0.97 miles of the Lower River - Webb 115kV line.
Supporting Statement:	Lower River - Webb (APC) 115kV line overloads under contingency.

In-Service Year:	2030
Project Name:	**RAY PLACE RD - WARRENTON PRIMARY 115KV LINE REBUILD**
Description:	Rebuild appoximately 10 miles of the Ray Place - Warrenton Primary 115kV line. Upgrade limiting element at substation along the line.
Supporting Statement:	The Ray Place Rd - Warrenton 115kV line exceeds its thermal rating for various contingencies.

In-Service Year:	2030
Project Name:	**SOUTH BESSEMER 500/230 AUTOBANK**
Description:	Add a second 500/230 kV autobank at South Bessemer TS
Supporting Statement:	Low voltage in the area under contingency. This project provides voltage support under contingency scenarios.

In-Service Year:	2030
Project Name:	**TALLULAH LODGE - TOCCOA 115KV LINE REBUILD**
Description:	Rebuild the entire Tallulah Lodge - Toccoa 115kV line (appoximately 10.3 miles). Replace limiting elements in substations along the line.
Supporting Statement:	The Tallulah Lodge - Toccoa 115kV line overloads under contingency.

In-Service Year:	2030
Project Name:	**THURLOW DAM - NOTASULGA 115 KV TL**
Description:	Upgrade approximately 14 miles of 397 ACSR at 100 °C from Thurlow Dam to Notasulga to 397 ACSR at 125° C.
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2030
Project Name:	**UNION SPRINGS - PINCKARD 115 KV TRANSMISSION LINE**
Description:	Rebuild approximately 10.6 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 approximately 50 miles of 397 ACSR at 50 °C Union Springs – Ewell 115 kV TL to 795 ACSR at 100° C
Supporting Statement:	The Union Springs - Pinckard 115 kV TL overloads under contingency. Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2031
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 approximately 4.52 miles from new West Alex City SS to City of Alex City #3 with 795 45/7 ACSR at 100°C
Supporting Statement:	The Martin Dam – Sylacauga 115 kV transmission line overloads under contingency. Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2031
Project Name:	**AVERY - HOPEWELL 115KV RECONDUCTOR**
Description:	Reconductor approximately 3.3 miles of the Avery - Hopewell 115kV line. Replace substation equipment along the section of the line with one that matches or surpasses the rating of the new conductor.
Supporting Statement:	The Avery - Hopewell 115kV line overloads under contingency.

In-Service Year:	2031
Project Name:	**EAST POINT - UNION CITY 230KV BLACK LINE RECONDUCTOR**
Description:	Reconductor approximately 1.5 miles of the East Point - Union City 230kV Black line.
Supporting Statement:	The East Point - Union City 230kV Black line overloads under contingency.

In-Service Year:	2031
Project Name:	**EATONTON PRIMARY 115KV CAP BANK**
Description:	Install a 115kV capacitor bank at Eatonton Primary substation.
Supporting Statement:	This project addresses low voltage issues on buses along the Eatonton Primary - Lake Oconee 115kV line under contingency.

In-Service Year:	2031
Project Name:	**GOSHEN - VOGTLE 230KV REBUILD**
Description:	Rebuild appoximately 18.7 miles of the Goshen - Vogtle 230kV line.
Supporting Statement:	The Goshen - Vogtle 230kV line overloads under contingency.

In-Service Year:	2031
Project Name:	**GREENVILLE AREA SOLUTION**
Description:	Construct 230 kV ring bus at Greenville TS
Supporting Statement:	Provides additional operational and maintenance flexibility, which increases reliability.

In-Service Year:	2031
Project Name:	**PITTMAN ROAD - WEST POINT DAM 115KV REBUILD**
Description:	Rebuild the entire Pittman Road - West Point Dam 115kV line (approximately 3 miles). Upgrade limiting element at substation along the line.
Supporting Statement:	The Pittman Road - West Point Dam 115kV line overloads under contingency.

In-Service Year:	2031
Project Name:	**THOMSON PRIMARY 230/115KV SECOND TRANSFORMER**
Description:	Install a second 230/115kV auto transformer at Thomson Primary substation.
Supporting Statement:	This project addresses overloads under contingency on the Thomson Primary 230/115 kV auto transformer and the Evans Primary - Thomson Primary 115kV line.

In-Service Year:	2032
Project Name:	**PELL CITY AREA SOLUTION**
Description:	Construct new Pell City Industrial Park SS and new approximately 12 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 Statement:	Low voltage and thermal constraints in the area under contingency. This project provides additional operational and maintenance flexibility, which increases reliability.

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In-Service Year:	2033
Project Name:	**EATONTON PRIMARY - LAKE OCONEE 115KV LINE REBUILD**
Description:	Rebuild approximately 0.1 miles of the Eatonton Primary - Lake Oconee 115kV line.
Supporting Statement:	The Eatonton Primary-Lake Oconee 115kV line overloads under base case conditions.

In-Service Year:	2024
Project Name:	**ANDERSON 500KV SUBSTATION**
Description:	Construct a new 500kV substation across from the Bull Run FP. Looping in the Roane - BRF 500kV TL , terminating 4-161kV lines, and installing 4-1phase 500/161 transformers. A direct 161kV tie will be created between BRF and the Anderson 500kV Substation.
Supporting Statement:	Area 500/161 kV transformer overloads under contingency.

In-Service Year:	2024
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 Statement:	The Gallatin FP - Cairo Bend 161 kV transmission line section overloads under contingency.

In-Service Year:	2024
Project Name:	**PHIPPS BEND 500 KV SUBSTATION**
Description:	Rebuild structures with weathered steel in the Phipps Bend 500 and 161 kV yard.
Supporting Statement:	Steel structures in the Phipps Bend 500 kV and 161 kV yards are beginning to show signs of corrosion and will be replaced.

In-Service Year:	2025
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 4.0 miles of new transmission line to create the Alcoa SS – Nixon Rd 161 kV #2 transmission line.
Supporting Statement:	The Alcoa Switching Station – Nixon Road 161 kV transmission line overloads under contingency.

In-Service Year:	2025
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 Statement:	Voltage support is needed in the Dickson, TN area under contingency.

In-Service Year:	2025
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 Statement:	Additional thermal capacity and voltage support is needed in the North Dayton, TN area under contingency.

In-Service Year:	2025
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:	2026
Project Name:	**ISLAND RD 138KV CAPACITOR BANK**
Description:	Construct the Island Road 138kV Substation with a minimum of a 81MVAR capacitor bank.
Supporting Statement:	Voltage support is needed in the North Bristol, TN area under contingency.

In-Service Year:	2026
Project Name:	**LOVING, KY 161KV STATION**
Description:	Construct the Loving, KY 161kV Substation. Reconductor BG - Lost City and BG to E. BG.
Supporting Statement:	Additional capacity is needed in the Bowling Green area for economic development.

In-Service Year:	2026
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 Year:	2026
Project Name:	**PHILADELPHIA REACTOR**
Description:	Install three 27MVAR reactors at the Philadelphia 161kV Substation.
Supporting Statement:	Voltage support is needed in TVA's Mississippi area under contingency.

In-Service Year:	2027
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.
Supporting Statement:	The Apalachia - Basin 161 kV transmission line overloads under contingency.

In-Service Year:	2027
Project Name:	**APALACHIA AREA IMPROVEMENT PLAN**
Description:	Construct Martin's Creek 161 kV substation. Construct approximately 25 miles of new TL from Apalachia 161 kV substation to Ranger 161 kV switching station.
Supporting Statement:	The Apalachia - Basin 161 kV transmission line overloads under contingency.

In-Service Year:	2027
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 Statement:	Additional thermal capacity and voltage support is needed in the Huntsville, AL area under contingency.

In-Service Year:	2027
Project Name:	**MIDWAY - S MACON - DEKALB 161 KV TRANSMISSION LINE**
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 Statement:	Voltage support is needed in TVA's Mississippi area under contingency.

In-Service Year:	2028
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 Statement:	Additional thermal capacity and voltage support is needed in the Davidson County, TN area under contingency.

In-Service Year:	2028
Project Name:	**LIMESTONE 500KV DOUBLE BREAKER AND LOOP**
Description:	Construct a double breaker station in the 500kV yard at Limestone and loop in the Browns Ferry - Maury 500kV TL.
Supporting Statement:	The Trinity 500/161kV transformer overloads under contingency.

VI. 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: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (AECI BAA)

AECI BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	--	--		--	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	--		64.87	--	--	--
Transformers[2] – New	--	--	--	--	--	--
Transformers[2] – Replacements	--			--	--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A1.2: Interface commitments[1] modeled in the SERTP Summer Peak models – AECI BAA

To	2025	2028	2033
SPP	-623	-623	-623
MISO	-551	-533	-533
Total	-1174	-1156	-1156

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

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 power flow model.

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

Site	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
None										

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

Site	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
None										

Table A1.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – AECI BAA

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

Holden	300014	1HOLDNG13 13.800	1	110.1
Chouteau	300020	1CHOTCT4 16.000	1	172.3
Chouteau	300021	1CHOTCT5 16.000	1	172.5
Chouteau	300024	1CHOTST6 16.000	1	189.7
Nodaway	300025	1NDWYG1 13.800	1	93.1
Nodaway	300026	1NDWYG2 13.800	1	93.1
WestPlains	300027	1WPLCTG1 13.800	1	22
WestPlains	300028	1WPLCTG2 13.800	1	22
Essex	300029	1ESSEXG 13.800	1	98.1
Chouteau	300031	1CHOTST3 16.000	1	155
Chouteau	300032	1CHOTCT1 16.000	1	150.4
Chouteau	300033	1CHOTCT2 16.000	1	158.4
Conception	300273	1CLYDEG1 0.6000	1	50.4
LostCreek	301358	1WINSLOWG1 0.6900	1	168
Osage	301382	1OSAGEWINDG10.6900	1	150
MtPleasant	301449	2MTPLCTY 69.000	1	24
WhiteCloud	301490	1WHITCLDG1 0.6900	1	214.5
ClearCreek	301493	1CLEARCKG1 0.6900	1	121
ClearCreek	301512	1CLEARCKG2 0.6900	2	99
WhiteCloud	301585	1WHITCLDG2 0.6900	2	22
ClearCreek	301619	1CLEARCKG3 0.6900	3	22

VII. 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: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Energy Carolinas BAA)

Duke Energy Carolinas BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	1.3	--	--	1.3	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	281.4	--	--	48.5	--	--
Transformers[2] – New	--	--	--	4	--	--
Transformers[2] – Replacements	--	--	--	7	--	0

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A2.2: Interface commitments[1] modeled in the SERTP Summer Peak models – Duke Energy Carolinas BAA

To	2025	2028	2033
Duke Progress East	1888	1826	1269
SCE&G	165	165	165
SC	-196	-204	-218
Southern	-61	0	0
PJM	100	100	100
SEPA	-294	-294	-294
Total	1584	1733	2982

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

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 2023 series set of SERTP power flow 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 power flow model.

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

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Allen 1	158	0	--	--	--	--	--	--	--	--
Allen 5	253	0	--	--	--	--	--	--	--	--
Cliffside 5	574	574	0	--	--	--	--	--	--	--
Marshall 1	388	388	388	388	388	0	--	--	--	--
Marshall 2	392	392	392	392	392	0	--	--	--	--
Lincoln 17	402	402	402	402	402	402	402	402	402	402
Bad Creek 4	420	420	420	420	420	420	420	420	420	420
Cliffside 5 Proxy[1]	--	--	574	574	574	574	574	574	574	574
Marshall 1Proxy[1]	--	--	--	--	--	388	388	388	388	388
Marshall 2 Proxy[1]	--	--	--	--	--	392	392	392	392	392
Apex	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
Blackburn	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
Misenheimer	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
Olin Creek	35	35	35	35	35	35	35	35	35	35
Pelham	32	32	32	32	32	32	32	32	32	32
Two Hearted	22	22	22	22	22	22	22	22	22	22
West River	40	40	40	40	40	40	40	40	40	40
Brookcliff	50	50	50	50	50	50	50	50	50	50

Newberry	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
Quail	30	30	30	30	30	30	30	30	30	30
Aquadale	--	50	50	50	50	50	50	50	50	50
Bear Branch	--	35	35	35	35	35	35	35	35	35
Healing Springs	--	55	55	55	55	55	55	55	55	55
Hornet	--	75	75	75	75	75	75	75	75	75
Hunters Cove	--	50	50	50	50	50	50	50	50	50
Oakboro	--	40	40	40	40	40	40	40	40	40
Beaverdam	--	--	42	42	42	42	42	42	42	42

[1] Generators left in model in expectation of replacement generation through the Generation Replacement Request process.

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

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Cleveland	195	195	195	195	196	0	--	--	--	--
Broad River	875	875	875	875	875	875	875	875	875	875
Catawba	407	407	407	407	407	407	407	407	407	407
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 Power flow Model – Duke Energy Carolinas BAA

Plant	Bus Number	Bus Name	Id	Pmax (MW)
Mill Creek	306082	1MILLCKG1 13.800	1	76
Mill Creek	306083	1MILLCKG2 13.800	2	76
Mill Creek	306084	1MILLCKG3 13.800	3	76
Mill Creek	306086	1MILLCKG4 13.800	4	76
Mill Creek	306087	1MILLCKG5 13.800	5	76
Mill Creek	306088	1MILLCKG6 13.800	6	76
Mill Creek	306090	1MILLCKG7 13.800	7	76
Mill Creek	306091	1MILLCKG8 13.800	8	76
Rutherford	306146	RUTHPV 100.00	PV	67
Bad Creek	306207	1BADCRK12 19.000	1	420
Bad Creek	306207	1BADCRK12 19.000	2	420
Bad Creek	306208	1BADCRK34 19.000	3	420
Bad Creek	306208	1BADCRK34 19.000	4	420
Broad River Energy	306222	1BRECG4 18.000	4	177
Broad River Energy	306224	1BRECG5 18.000	5	177
Broad River Energy	306314	1BRECG1 18.000	1	177
Broad River Energy	306315	1BRECG2 18.000	2	177
Broad River Energy	306316	1BRECG3 18.000	3	177
Cherokee	306325	1CHEROKEG 13.800	1	52
Cherokee	306326	1CHEROKES 13.800	1	32
Lincoln	306509	1LINCLN1 13.800	1	79
Lincoln	306510	1LINCLN2 13.800	2	79
Lincoln	306511	1LINCLN3 13.800	3	79
Lincoln	306512	1LINCLN4 13.800	4	79
Lincoln	306513	1LINCLN5 13.800	5	79
Lincoln	306514	1LINCLN6 13.800	6	79
Lincoln	306515	1LINCLN7 13.800	7	79
Lincoln	306516	1LINCLN8 13.800	8	79

Lincoln	306517	1LINCLN9	13.800	9	79
Lincoln	306518	1LINCLN10	13.800	A	79
Lincoln	306519	1LINCLN11	13.800	B	79
Lincoln	306520	1LINCLN12	13.800	C	79
Lincoln	306521	1LINCLN13	13.800	D	79
Lincoln	306522	1LINCLN14	13.800	E	79
Lincoln	306523	1LINCLN15	13.800	F	79
Lincoln	306524	1LINCLN16	13.800	G	79
Rockingham County	306828	1ROCKHMG04	18.000	4	165
Rockingham County	306829	1ROCKHMG05	18.000	5	165
Rockingham County	306831	1ROCKHMG01	18.000	1	165
Rockingham County	306832	1ROCKHMG02	18.000	2	165
Rockingham County	306833	1ROCKHMG03	18.000	3	165
West River	306972	WESTRVRPV	100.00	PV	40
Rowan	306991	1ROWANC1	18.000	1	154
Rowan	306992	1ROWANC2	18.000	2	154
Rowan	306993	1ROWANC3	18.000	3	154
Rowan	306994	1ROWANC4	18.000	4	154
Rowan	306995	1ROWANC5	18.000	5	154
Rowan	306996	1ROWANS1	18.000	6	170
Buzzard Roost	307037	1BUZZHYD	4.1600	1	4.3
Buzzard Roost	307037	1BUZZHYD	4.1600	2	4.3
Buzzard Roost	307037	1BUZZHYD	4.1600	3	4.3
Keowee	307195	1KEOWEE	13.800	1	80
Lee	307198	1LEE CT7	13.800	7	43
Oconee	307199	1OCONEE1	19.000	1	884
Oconee	307200	1OCONEE3	19.000	3	884
Oconee	307210	1OCONEE2	19.000	2	885.9999
Jocassee	307370	1JOCASSE1	14.400	1	195
Jocassee	307371	1JOCASSE2	14.400	2	195
Jocassee	307372	1JOCASSE3	14.400	3	195

Jocassee	307373	1JOCASSE4 14.400	4	195
Gaston Shoals	307466	1GAST HY 2.4000	1	5.7
Misenheimer	307527	MISENHEPV 100.00	PV	74.4
Turner	307599	1TURN HY 2.4000	1	1.5
Turner	307599	1TURN HY 2.4000	2	1.5
Tuxedo	307601	1TUX HYD 6.6000	1	3.2
Tuxedo	307601	1TUX HYD 6.6000	2	3.2
Cliffside	307610	1CLIFSID5 24.000	5	574
Mocksville	307613	1MOCKSVPV 44.000	PV	12.9
Monroe	307614	MONROEPV 100.00	PV	53.6
Great Falls	307702	1GTFALLS 2.4000	1	3
Great Falls	307702	1GTFALLS 2.4000	2	3
Great Falls	307702	1GTFALLS 2.4000	5	3
Great Falls	307702	1GTFALLS 2.4000	6	3
Ninety-Nine Islands	307749	1NINETY9 2.2000	1	15
Wylie	307840	1WYLIE H 6.6000	1	18
Wylie	307840	1WYLIE H 6.6000	2	18
Wylie	307840	1WYLIE H 6.6000	3	18
Wylie	307840	1WYLIE H 6.6000	4	18
Catawba	307856	1CATAWBA1 22.000	1	1172
Catawba	307857	1CATAWBA2 22.000	2	1142
Cedar Cliff	307858	1CEDAR CK 6.6000	1	13
Cedar Cliff	307858	1CEDAR CK 6.6000	2	15
Cedar Cliff	307858	1CEDAR CK 6.6000	3	15
Dearborn	307859	1DEARBN1 6.6000	1	14
Dearborn	307860	1DEARBN23 6.6000	2	14
Dearborn	307860	1DEARBN23 6.6000	3	14
Fishing Creek	307861	1FISHNG C 6.6000	1	11
Fishing Creek	307861	1FISHNG C 6.6000	2	9.5
Wateree	307862	1WATEREE 6.6000	1	17
Wateree	307862	1WATEREE 6.6000	2	17

Wateree	307862	1WATEREE 6.6000	3	17
Wateree	307862	1WATEREE 6.6000	4	17
Wateree	307862	1WATEREE 6.6000	5	17
Lee	307882	1LEE CT8 13.800	8	43
Bridgewater	308079	1BRIDGEW 6.6000	1	15.5
Lookout Tie	308080	1LOOKOUT 6.6000	1	9.33
Lookout Tie	308080	1LOOKOUT 6.6000	2	9.33
Lookout Tie	308080	1LOOKOUT 6.6000	3	9.33
Marshall	308081	1MARSHAL1 20.000	1	193
Marshall	308081	1MARSHAL1 20.000	L	195
Marshall	308082	1MARSHAL3 24.000	3	705
Oxford	308083	1OXFORD 6.6000	1	20
Rhodhiss	308084	1RHODHIS 6.6000	1	10
Rhodhiss	308084	1RHODHIS 6.6000	2	12
Rhodhiss	308084	1RHODHIS 6.6000	3	12
Marshall	308087	1MARSHAL2 20.000	2	200
Marshall	308087	1MARSHAL2 20.000	L	192
Marshall	308088	1MARSHAL4 24.000	4	711
Buck	308090	1BUCKG11 18.000	11	176.5
Buck	308091	1BUCKG12 18.000	12	176.5
Buck	308092	1BUCKS10 18.000	10	333
McBride	308107	UNEMC14 100.00	PV	74.9
Mountain Island	308179	1MT ISLE 6.6000	1	14
Mountain Island	308179	1MT ISLE 6.6000	2	17
Mountain Island	308179	1MT ISLE 6.6000	3	17
Mountain Island	308179	1MT ISLE 6.6000	4	17
Cowans Ford	308227	1COWANS1 13.800	1	81
McGuire	308228	1MCGUIRE1 24.000	1	1172
McGuire	308229	1MCGUIRE2 24.000	2	1165
Cowans Ford	308237	1COWANS2 13.800	2	81
Cowans Ford	308238	1COWANS3 13.800	3	81

Cowans Ford	308239	1COWANS4	13.800	4	81
Ayrshire	308375	1AYRSHIRE	44.000	PV	16.8
Belews Creek	308377	1BELEWS1	18.000	1	612
Belews Creek	308377	1BELEWS1	18.000	L	515
Belews Creek	308378	1BELEWS2	18.000	2	622
Belews Creek	308378	1BELEWS2	18.000	L	508
Apple	308387	APPLEPV3	100.00	PV	16.2
Apple	308391	APPLEPV2	100.00	PV	20
Cedar Creek	308516	1CEDARCL	6.6000	1	6.4
Bear Creek	308517	1BEARCRK	4.1600	1	9
Tennessee Creek	308518	1TENNCRK	4.1600	1	11.5
Nantahala	308558	1NANTAHA	13.200	1	45
Thorpe	308600	1THORPE	6.6000	1	21.6
Thorpe	308600	1THORPE	6.6000	2	3
Dan River	308603	1DNRVRG8	18.000	8	176.5
Dan River	308604	1DNRVRG9	18.000	9	176.5
Dan River	308605	1DNRVRS7	18.000	7	333
Cleveland County	308607	1CLEVELAND1	16.500	1	178
Cleveland County	308608	1CLEVELAND2	16.500	2	178
Cleveland County	308609	1CLEVELAND3	16.500	3	178
Cleveland County	308610	1CLEVELAND4	16.500	4	178
Lee	308613	1LEECCS10	22.000	10	329
Lee	308614	1LEECCG11	18.000	11	231
Lee	308615	1LEECCG12	18.000	12	231
Kings Mountain Energy Center	308653	1KMECS	18.000	1	208
Kings Mountain Energy Center	308654	1KMECG	21.000	2	244
Stanly	308673	STANLYPV	100.00	PV	50
Gaston	308675	1GASTONPV	44.000	PV	25
Oxford	308683	1OXFORD2	6.6000	2	20

Maiden Creek	308685	MAIDENCRKPV 100.00	PV	69
Lincoln	308692	1LINCLN17 22.000	H	525
SunEd	308784	SUNED100 100.00	PV	15
Cliffside	308789	1CLFSDGEN 24.500	6	880
Clemson	308878	CLEMSONU 100.00	1	17.8
Keowee	308880	1KEOWEE2 13.800	2	80
Fishing Creek	308912	1FISHNG C2 6.6000	3	9.5
Fishing Creek	308912	1FISHNG C2 6.6000	4	11
Fishing Creek	308912	1FISHNG C2 6.6000	5	8
Bridgewater	308920	1BRIDGEW2 6.6000	2	15.5
Aquadale	309376	AQDALEPV 100.00	PV	50
Partin	309606	PARTINPV 100.00	PV	50
Hunters Cove	309607	HNTRSCOVEPV 100.00	PV	50
Ruff	309608	1RUFFPV 44.000	PV	22
Hornet	309609	HORNETPV 100.00	PV	75
High Shoals	309615	1HGHSHLPV 44.000	PV	16
Brookcliff	309621	BROOKCLIFFPV100.00	PV	50
Westminster	309707	WESTMINSTERP100.00	BT	25
Westminster	309707	WESTMINSTERP100.00	PV	75
Newbery	309712	NEWBERYPV 100.00	PV	74.5
Oakboro	309714	OAKBOROPV 100.00	BT	13.5
Oakboro	309714	OAKBOROPV 100.00	PV	40
Pelham	309716	1PELHAMPV 44.000	PV	32
Stony Knoll	309789	1STONYKNLLPV44.000	PV	22.6
Blackburn	309796	BLKBURNPV 100.00	PV	60.1
Apex	309803	1APEXPV 44.000	PV	28.9
Two Hearted	309804	1TWOHRTDPV 44.000	PV	22
Speedway	309809	SPEEDWAYPV 100.00	PV	22.6
Pinson	309810	1PINSONPV 44.000	PV	20
Broad River	309814	BROADRVRPV 100.00	PV	50
Olin Creek	309824	1OLINCKPV 44.000	PV	35

Lick Creek	309853	LICKCRKPV	100.00	PV	50
Sugar	309857	SUGARPV	100.00	PV	60
Healing Springs	309859	HLNGSPRNGSPV	100.00	PV	55
Bear Branch	309860	1BEARBRNCHPV	44.000	PV	35
Quail	309902	1QUAILPV	44.000	PV	30

VIII. 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: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Progress East BAA)

Duke Progress East BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	--	--	--	4.5	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	94	--	--	73	--	--
Transformers[2] – New	2	--	--	--	--	--
Transformers[2] – Replacements	2	--	--	--	--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A3.2: Interface commitments[1] modeled in the SERTP Summer Peak models – Duke Progress East BAA

To	2025	2028	2033
Duke Carolinas	-1888	-1826	-1269
Duke Progress West	0	0	0
PJM	-105	-105	-105
Total	-1993	-1931	-1374

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

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 power flow model.

Table A3.3: Changes in Generation Assumptions Based Upon LSEs – Duke Progress East BAA

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BLEWETT IC #1	13	0	--	--	--	--	--	--	--	--
BLEWETT IC #2	13	0	--	--	--	--	--	--	--	--
BLEWETT IC #3	13	0	--	--	--	--	--	--	--	--
BLEWETT IC #4	13	0	--	--	--	--	--	--	--	--
WEATHERSPOON IC #1	32	0	--	--	--	--	--	--	--	--
WEATHERSPOON IC #2	32	0	--	--	--	--	--	--	--	--
WEATHERSPOON IC #3	33	0	--	--	--	--	--	--	--	--
WEATHERSPOON IC #4	31	0	--	--	--	--	--	--	--	--
ROXBORO #1 COAL	379	379	379	379	379	0	--	--	--	--
ROXBORO #2 COAL	665	665	665	665	665	0	--	--	--	--
ROXBORO #3 COAL	691	691	691	691	0	--	--	--	--	--
ROXBORO #4 COAL	698	698	698	698	0	--	--	--	--	--
MAYO COAL	727	727	727	727	727	0	--	--	--	--
ROXBORO PROXY #1	--	--	--	--	1350	1350	1350	1350	1350	1350
ROXBORO PROXY #2	--	--	--	--	--	1350	1350	1350	1350	1350
MAYO PROXY	--	--	--	--	--	602	602	602	602	602

PANOLA	--	67	67	67	67	67	67	67	67	67
EAST NASH PV3	--	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
LOFTINS XROADS PV	--	75	75	75	75	75	75	75	75	75
PIG BSKT CRK PV	--	80	80	80	80	80	80	80	80	80
KNIGHTDALE BATTERY	--	100	100	100	100	100	100	100	100	100
KINGSTREE WEST	--	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9

Table A3.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Duke Progress East BAA

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
HAMLET #1 and #2	110	110	110	110	110	110	110	110	110	110
HAMLET #6	55	55	55	55	55	55	55	55	55	55
HAMLET #3	0	4	6	9	9	11	13	14	0	0

Table A3.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – Duke Progress East BAA

Plant	Bus Number	Bus Name	Id	Pmax (MW)
Dist. Solar	304364	ABERDEEN 115.00	PV	1.998
Dist. Solar	304214	ANGIER 230.00	PV	9.4
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	304199	ARCH LODGE 230.00	PV	6.99

Dist. Solar	304312	ASHEBOR E TT115.00	PV	4.938
Dist. Solar	304319	ASHEBORO NO 115.00	PV	7.836
Dist. Solar	304178	AUBURN 230.00	PV	1.04
Aurora PCS	304455	AURORA PCS1 230.00	A	42
Dist. Solar	304075	BAHAMA 230.00	PV	5
Dist. Solar	304198	BAILEY 230.00	PV	24.68
Dist. Solar	304462	BAYBORO 230.00	PV	9.998
Bay Tree Solar	305834	BAYTRESOLGLV0.6300	PV	71.3
Dist. Solar	304408	BEARD 115.00	PV	20
Dist. Solar	304281	BELFAST 115.00	PV	15
Dist. Solar	304194	BENSON 230.00	PV	17.327
Dist. Solar	304280	BEULAVILLE 115.00	PV	20.987
Dist. Solar	304294	BISCOE SUB 115.00	PV	25.02
Dist. Solar	304712	BISHOPVILLE 230.00	PV	13.6
Dist. Solar	304574	BLADENBORO 115.00	PV	14.525
Bladenboro Solar	305334	BLADENSOLGLV0.3700	PV	35
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	304464	BRIDGETON 115.00	PV	9.974
Brunswick #1	304862	BRUNSWICK#1 24.000	1	938
Brunswick #2	304863	BRUNSWICK#2 24.000	1	932
Dist. Solar	304215	BUIES CREEK 230.00	PV	12.308
Buckleberry Solar	305714	BUKLEBSOLGLV0.5500	PV	52.9

Bullock Solar	305644	BULLOKSOLGLV0.3850	PV	50.58
Dist. Solar	304513	BURGAW SUB 115.00	PV	19.492
Dist. Solar	304334	BYNUM 230.00	PV	3.294
Cabin Creek Solar	305874	CABCRKSOLGLV0.5500	PV	71.2
Dist. Solar	304306	CANDOR 115.00	PV	19.83
Dist. Solar	304115	CARY TRENTON230.00	PV	2.326
Dist. Solar	304081	CASTALIA 230.00	PV	18.909
Dist. Biogas	304521	CATHERN LAKE230.00	BG	1.753
Dist. Biogas	304521	CATHERN LAKE230.00	PV	4.992
Craven Wood Energy	304472	CC WD EN SUB230.00	1	45
Dist. Solar	304589	CHADBORN 115.00	PV	13.8
Dist. Solar	304445	CHOCOWINITY 230.00	PV	34.45
Dist. Solar	304570	CLARKTON 115.00	PV	11.947
Dist. Solar	304170	CLAYTON 115.00	PV	4
Dist. Biogas	304256	CLINT FERREL115.00	BG	1.76
Dist. Biogas	304256	CLINT FERREL115.00	PV	4.95
Dist. Solar	304258	CLINTON NTH 115.00	PV	15
Lumberton Cogen	304603	COG LUMB SUB115.00	1	32
County Line Solar	305384	COLINSOL1GLV0.3700	PV	71
Crooked Run	305884	CROOKDSOLGLV0.5500	PV	71.25
	304010	CUMBPROXY 230.00	D	1000
Darlington Co. Plant	304908	DARL CO #12 13.800	12	115
Darlington Co. Plant	304909	DARL CO #13 13.800	13	115
Dist. Solar	304649	DARL PINEVIL115.00	PV	2.02
Dist. Solar	304660	DARLINGTON 115.00	PV	10.61
Dist. Solar	304627	DELCO 115.00	PV	19.492
Dist. Solar	304664	DILLON MAPLE230.00	PV	9.996
Dist. Solar	304506	DOVER 230.00	PV	16.944
Dist. Solar	304197	DUNN 230.00	PV	7.016
Dist. Solar	305001	E1-CHAD PEA 230.00	PV	1
Dist. Solar	305009	E1-DAWSCREEK230.00	PV	1.2

Dist. Solar	305092	E10-HOG SWMP115.00	PV	7.999
Dist. Solar	305097	E10-RENNERT 115.00	PV	1.998
Dist. Solar	305098	E10-ROCKFISH115.00	BG	2.118
Dist. Solar	305098	E10-ROCKFISH115.00	PV	1.999
Dist. Solar	305099	E10-WESTLUMB115.00	PV	1.999
Dist. Biogas	305054	E13-FARMVILE230.00	BG	1.075
Dist. Solar	305107	E14-ETHER 115.00	PV	3.989
Dist. Solar	305109	E14-LIBERTY 115.00	PV	6.5
Dist. Solar	305110	E14-PARKWOOD115.00	PV	1.999
Dist. Solar	305114	E14-ROBBINS 115.00	PV	4.998
Dist. Solar	305112	E14-TROY 115.00	PV	1.99
Dist. Solar	305113	E14-ULAH 115.00	PV	5
Dist. Solar	305129	E15-GRAYSCRK115.00	PV	5.997
Dist. Solar	305131	E15-HARGROVE115.00	PV	1.5
Dist. Solar	305134	E15-VANDER 115.00	PV	1
Dist. Solar	305152	E17-DUDLEY 115.00	PV	2
Dist. Solar	305159	E17-LAGRANGE115.00	PV	2
Dist. Solar	305160	E17-MT OLIVE115.00	PV	1.999
Dist. Solar	305162	E17-ROSEWOOD115.00	PV	2
Dist. Solar	305034	E4-POWELL 230.00	PV	2.299
Dist. Solar	305061	E9-DAWSON 115.00	PV	1.99
Dist. Solar	305062	E9-EAGLE NST115.00	PV	5
Dist. Solar	305075	E9-W ONSLOW 230.00	PV	1.99
Dist. Solar	304565	EAGLE ISLAND115.00	PV	3.083
Eden Solar	305324	EDENSOL1GLV 0.3800	PV	24.4
Eden Solar	305327	EDENSOL2GLV 0.3800	PV	24.4
Dist. Solar	304186	EDMONDSON 230.00	PV	8.654
Dist. Solar	304572	ELIZTOWN SUB115.00	PV	4.8
Dist. Solar	304327	ELLERBE 230.00	PV	1.999
Dist. Solar	304711	ELLIOTT SUB 230.00	PV	3.96
Dist. Solar	304227	ELM CITY 115.00	PV	9.975

Elm City Solar	305314	ELMCTYSOLGLV0.3600	PV	40.7
Dist. Solar	304202	ERWIN115 SUB115.00	PV	4.95
Dist. Solar	304599	FAIR BLUFF 115.00	PV	5
Dist. Solar	304448	FAIRMONT SUB115.00	PV	27.817
Dist. Solar	304289	FARMVILLE 230.00	PV	5
Fay PWC Plant	304948	FAY PWC ST 13.800	A	60
Fay PWC Plant	304940	FAY PWC1 13.800	A	20
Fay PWC Plant	304941	FAY PWC2 13.800	A	20
Fay PWC Plant	304942	FAY PWC3 13.200	A	20
Fay PWC Plant	304943	FAY PWC4 13.200	A	20
Fay PWC Plant	304944	FAY PWC5 13.800	A	20
Fay PWC Plant	304945	FAY PWC6 13.800	A	20
Fay PWC Plant	304946	FAY PWC7 13.800	A	20
Fay PWC Plant	304947	FAY PWC8 13.800	A	20
Fayetteville Solar	305224	FAYSOL-GLV 0.4800	PV	23.4
Dist. Solar	304613	FLOR MARBLUF115.00	PV	10
Dist. Solar	304671	FLOR SARDIS 230.00	PV	1.116
Florence Stone Container	304641	FLOR STONE 115.00	1	68
Dist. Solar	304659	FLOSUB115WTT115.00	PV	1.055
Dist. Biogas	304193	FOUR OAKS 230.00	BG	1.76
Dist. Biogas	304193	FOUR OAKS 230.00	PV	17.788
Fox Creek Solar	305664	FOXCRKSOLGLV0.5500	PV	50.2
Frazier Solar	305674	FRAZERSOLGLV0.5500	PV	51
Dist. Biogas	304240	FREMONT 115.00	BG	4.2
Dist. Biogas	304240	FREMONT 115.00	PV	12.393
Dist. Solar	304213	FUQUAY 230.00	PV	10.745
Dist. Solar	304133	FUQUAY BELLS230.00	PV	1.52
Dist. Solar	304584	GARLAND 230.00	PV	9.998
Dist. Solar	304152	GARNER 115.00	PV	4.998
Dist. Solar	304153	GARNER TRYON115.00	PV	2.337

Dist. Solar	304151	GARNER W OAK230.00	PV	3.55
Dist. Solar	304321	GLOBAL TPARK115.00	PV	6.994
Dist. Solar	304410	GODWIN 115.00	PV	18.397
Dist. Solar	304282	GOLDSB LANGS115.00	PV	11.999
Gold Valley Solar	305464	GOLDVYSOLGLV0.5500	PV	80
Dist. Biogas	304267	GRANTHAM 230.00	BG	3.18
Dist. Biogas	304267	GRANTHAM 230.00	PV	14.241
Dist. Solar	304452	GREENVILE W 230.00	PV	9.998
Dist. Solar	304459	GRIFTON 115.00	PV	19.949
Dist. Solar	304355	HAMLET 230.00	PV	14.972
Hamlet CT	304987	HAMLET CT1 13.800	1	56
Hamlet CT	304988	HAMLET CT2 13.800	2	56
Hamlet CT	304989	HAMLET CT3 13.800	3	56
Hamlet CT	304990	HAMLET CT4 13.800	4	56
Hamlet CT	304991	HAMLET CT5 13.800	5	56
Hamlet CT	304992	HAMLET CT6 13.800	6	56
Hamlet CT	304865	HARRIS 22.000	1	964.0001
Dist. Solar	304672	HARTS SEGARS230.00	PV	2.02
Dist. Solar	304645	HEMINGWAY 115.00	PV	10
Dist. Solar	304087	HENDER EAST 230.00	PV	33.19
Dist. Solar	304101	HENDER NORTH115.00	PV	24.992
Dist. Biogas	304058	HOLLY SPRG 230.00	BG	7.3
Dist. Solar	304297	JONESBORO 230.00	PV	9.916
Dist. Solar	304676	KINGSTREE N 230.00	PV	1.018
Dist. Solar	304273	KORNEGAY SUB115.00	PV	16.781
Dist. Solar	304288	LAGRANGE 115.00	PV	19.973
Dist. Solar	304675	LAKE CITY 230.00	PV	3.98
Dist. Solar	304575	LAKE WACCA 115.00	PV	4.975
Dist. Solar	304367	LAKEVIEW 115.00	PV	5
Dist. Solar	304423	LAUREL HILL 230.00	PV	19.95
Dist. Solar	304422	LAURINBGCITY230.00	PV	19.96

Dist. Solar	304421	LAURNB115WTT115.00	PV	16.192
Lee Plant	304961	LEE CC_1A 16.500	1A	170
Lee Plant	304962	LEE CC_1B 16.500	1B	170
Lee Plant	304963	LEE CC_1C 16.500	1C	170
Lee Plant	304964	LEE CC_S1 19.500	S1	378
Dist. Solar	304537	LEJEUNE#2 230.00	PV	12.75
Dist. Solar	304566	LELAND IND 115.00	PV	9.889
Dist. Solar	304326	LIBERTY 115.00	PV	10
Dist. Solar	304220	LILLINGTON 115.00	PV	9.998
Dist. Solar	304108	LOUISBURG 115.00	PV	13.782
Dist. Solar	304681	MANNING 115.00	PV	4
Dist. Solar	304632	MARION115 TT115.00	PV	8.96
Maxton Solar	305424	MAXTNSOLGLV 0.3700	PV	34.4
Dist. Solar	304435	MAXTON 115.00	PV	18.572
Dist. Solar	304420	MAXTON APT 115.00	PV	19.8
Mayo Plant	304873	MAYO #1 20.000	1	704
Dist. Solar	304134	MONCURE 115.00	HY	5.9
Dist. Solar	304134	MONCURE 115.00	PV	5
Dist. Solar	304269	MT OLV SUB 115.00	PV	18.414
Dist. Solar	304270	MT OLV WEST 115.00	PV	23.95
Dist. Solar	304341	MTGILEAD 115.00	PV	3.5
Dist. Solar	304116	NASHVILLE 115.00	PV	11.988
NCSU Gen	304011	NCSU GEN 115.00	1	11
Dist. Biogas	304463	NEW BERN WES230.00	BG	4
Dist. Biogas	304463	NEW BERN WES230.00	PV	24.968
Dist. Solar	304283	NEW HOPE 115.00	PV	10.359
Dist. Solar	304207	NEWTON GROVE230.00	PV	16.844
Dist. Solar	304629	NICHOLS 115.00	PV	5
Dist. Solar	304674	OLANTA 230.00	PV	2
Dist. Solar	304086	OXFORD NORTH230.00	PV	22.748
Dist. Solar	304080	OXFORD SOUTH230.00	PV	15.358

Dist. Solar	304481	PA-AYDEN 115.00	PV	4.999
Dist. Solar	304229	PA-FARMVILLE230.00	PV	5
Dist. Solar	304508	PA-KINSTON 115.00	PV	4.999
Dist. Solar	304439	PA-LUMB#4 115.00	PV	2
Dist. Solar	304221	PA-ROCKMT TT69.000	PV	4.999
Dist. Solar	304188	PA-SELMA#3 230.00	PV	1.98
Dist. Solar	304187	PA-SMTHFLD2 230.00	PV	1.98
Dist. Solar	304235	PA-W-11 115.00	PV	19.998
Dist. Solar	304236	PA-W-2&3 115.00	PV	28.5
Dist. Solar	304244	PA-W-5 115.00	PV	20
Dist. Solar	304246	PA-W12 WEC 230.00	PV	10
Dist. Solar	304473	PA-WASHINTON230.00	PV	27.5
Dist. Solar	304644	PAMPLICO 115.00	PV	6.799
Dist. Solar	304436	PEMBROKE 115.00	PV	15.988
Dist. Solar	304333	PITTSBORO 230.00	PV	9.953
Dist. Solar	304252	PRINCETON 115.00	PV	24.948
Dist. Solar	304413	RAEFORD NOR 115.00	PV	5
Dist. Solar	304381	RAEFORD SOU 115.00	PV	9.975
Dist. Solar	304073	RAL BL RIDGE230.00	PV	1
Ramseur Hydro	304328	RAMSEUR 115 115.00	HY	1.225
Dist. Solar	304430	RED SPR SUB 115.00	PV	19.896
Dist. Solar	304528	RHEMS 230.00	PV	20.82
Richmond County Plant	304971	RICH CT1 18.000	1	157
Richmond County Plant	304980	RICH CT10 16.500	10	178
Richmond County Plant	304972	RICH CT2 18.000	2	156
Richmond County Plant	304973	RICH CT3 18.000	3	155

Richmond County Plant	304974	RICH CT4 18.000	4	159
Richmond County Plant	304975	RICH CT6 18.000	6	145
Richmond County Plant	304976	RICH CT7 18.000	7	152
Richmond County Plant	304977	RICH CT8 18.000	8	152
Richmond County Plant	304979	RICH CT9 16.500	9	178
Richmond County Plant	304978	RICH ST4 18.000	S4	171
Richmond County Plant	304981	RICH ST5 18.000	S5	252
Dist. Solar	304298	ROBBINS 115.00	PV	5
Robinson Nuclear	304864	ROBINSON#2 22.000	1	759
Dist. Solar	304320	ROCKHAM SUB 115.00	PV	4.938
Dist. Solar	304345	ROCKHAM WEST115.00	PV	5
Dist. Solar	304505	ROSE HILL 230.00	PV	16.899
Dist. Solar	304260	ROSEBORO 115.00	BG	9
Dist. Solar	304260	ROSEBORO 115.00	PV	10.96
Dist. Solar	304250	ROSEWOOD 115.00	PV	9.99
Roslin Solar	305414	ROSLNSOL1GLV0.3700	PV	40
Roslin Solar	305417	ROSLNSOL2GLV0.3700	PV	39
Rowan Creek Solar	305394	ROWANSOL1GLV0.3570	PV	20.5
Rowan Creek Solar	305397	ROWANSOL2GLV0.3570	PV	18.9
Dist. Solar	304443	ROWLAND SUB 230.00	PV	9.975
Dist. Solar	304068	ROX BOWMAN 230.00	PV	15.075
Dist. Solar	304065	ROXBOLDURRD 230.00	PV	3.94
Dist. Solar	304092	ROXBOR 115TT115.00	PV	8.971
Roxboro Plant	304869	ROXBORO #1 22.000	1	379

Roxboro Plant	304870	ROXBORO #2 24.000	1	668
Roxboro Plant	304871	ROXBORO #3 24.000	1	694
Roxboro Plant	304872	ROXBORO #4 24.000	1	698
Dist. Solar	304609	SAMARIA 115.00	PV	28.961
Sandy Bottom Solar	305454	SANDYBSOLGLV0.6000	PV	49.6
Dist. Solar	304376	SANF DP RVR 230.00	PV	9.948
Dist. Solar	304374	SANF GARDEN 230.00	PV	16.965
Dist. Solar	304303	SEAGROVE 115.00	PV	9.466
Dist. Solar	304177	SELMA 115 TT115.00	PV	15.479
Dist. Solar	304431	SHANNON 115.00	PV	14.924
Shoe Heel Creek Solar	305634	SHOECKSOLGLV0.3850	PV	65.36
Dist. Solar	304335	SILER CITY 115.00	PV	19.492
Sneedsboro Solar	305404	SNEEDSOL1GLV0.3570	PV	38.8
Sneedsboro Solar	305407	SNEEDSOL2GLV0.3570	PV	40.9
Dist. Solar	304483	SNOW HILL 115.00	PV	13.964
Dist. Solar	304705	SOCIETY HILL230.00	PV	2
Dist. Solar	304110	SPRING HOPE 115.00	PV	6.715
Dist. Solar	304406	ST PAULS 115.00	PV	19.969
Dist. Solar	304109	STALLING XRD115.00	PV	20.998
Dist. Biogas	304692	SUM GOLDKIST115.00	BG	1.546
Dist. Solar	304701	SUMMERTON 230.00	PV	4.06
Sutton Plant	305911	SUT CC 1A 16.500	1A	173
Sutton Plant	305912	SUT CC 1B 16.500	1B	173
Sutton Plant	305913	SUT CC ST 21.000	ST	268
Sutton Plant	304919	SUTTONCT4 13.800	4	42
Sutton Plant	304920	SUTTONCT5 13.800	5	42
Dist. Solar	304527	SWANSBORO 230.00	PV	19.94
Sycamore Creek Solar	305894	SYCAMRSOLGLV0.6300	PV	49.4
Dist. Solar	304596	TABOR CITY 115.00	PV	5

Tillery	304888	TILLERY #1 13.800	1	21
Tillery	304889	TILLERY #2 13.800	1	18
Tillery	304890	TILLERY #3 13.800	1	21
Tillery	304891	TILLERY #4 13.800	1	25
Trent River Solar	305544	TRENTRSOLGLV0.6300	PV	79.9
Dist. Solar	304301	TROY 115.00	HY	1.782
Dist. Solar	304301	TROY 115.00	PV	4.97
Dist. Solar	304637	TROY BURN ST115.00	PV	9.998
Turnbull Creek Solar	305534	TURNBLSOLGLV0.5500	PV	51
Uwharrie Landfill Gas	304012	UWHARRIE LFG115.00	1	9
Dist. Solar	304401	VANDERSUB TT115.00	PV	5
Dist. Solar	304532	VISTA 115.00	PV	4.59
Dist. Solar	304344	WADESBORO 230.00	PV	14.998
Dist. Solar	304359	WADESBOW SUB230.00	PV	12.242
Dist. Solar	304512	WALLACE SUB 115.00	PV	16.986
Dist. Solar	304103	WARRENTON 115.00	PV	31.205
Warsaw Solar	304504	WARSAW 230 230.00	PV	34.917
Warsaw Solar	305903	WARSWSOL1GLV0.3600	PV	40.2
Warsaw Solar	305906	WARSWSOL2GLV0.3600	PV	25.6
Wayne Co. Plant	304956	WAYNE CO #1018.000	10	169
Wayne Co. Plant	304957	WAYNE CO #1118.000	11	174
Wayne Co. Plant	304958	WAYNE CO #1218.000	12	164
Wayne Co. Plant	304959	WAYNE CO #1318.000	13	162
Wayne Co. Plant	304960	WAYNE CO #1418.000	14	153
Dist. Solar	304446	WEATHERSPOON230.00	PV	26.288
Dist. Solar	304191	WENDELL 230.00	PV	4.423
Dist. Solar	304360	WEST END SUB230.00	PV	20.012
Weyerhauser	304476	WEYERHAUSR 115.00	A	38
Dist. Solar	304623	WHITEVIL115 115.00	PV	9.948
Dist. Solar	304593	WHITEVL IND 115.00	PV	5

Willard Solar	305474	WILARDSOLGLV0.6000	PV	34.7
Dist. Solar	304179	WILSON MILLS230.00	PV	9.976
Weatherspoon Plant	304924	WSPN IC#1 13.800	A	31
Weatherspoon Plant	304925	WSPN IC#2 13.800	A	31
Weatherspoon Plant	304927	WSPN IC#3 13.800	A	32
Weatherspoon Plant	304928	WSPN IC#4 13.800	A	30
Dist. Solar	304095	YANCYVILLE 230.00	PV	14.945
Dist. Solar	304165	ZEBULON SUB115.00	PV	5.257

IX. 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: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Duke Progress West BAA)

Duke Progress West BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	2.2	--	--	10	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	--	--	--	--	--	--
Transformers[2] – New	--	--	--		--	--
Transformers[2] – Replacements	--	--	--	--	--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A4.2: Interface commitments[1] modeled in the SERTP Summer Peak models – Duke Progress West BAA

To	2025	2028	2033
Duke Progress East	0	0	0
Duke Carolinas	0	0	0
SC	-22	-22	-22
TVA	-14	-14	-14
Total	-36	-36	-36

[1]A positive number represents a net export from the Duke Progress West BAA

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 power flow model.

Table A4.3: Changes in Generation Assumptions Based Upon LSEs – Duke Progress West BAA

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
ASHEVILLE SOLAR	--	--	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
CRAGGY BATTERY	--	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
ASHEVILLE BATTERY	--	--	17.25	17.25	17.25	17.25	17.25	17.25	17.25	17.25

Table A4.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Duke Progress West BAA

Site	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
None										

Table A4.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – Duke Progress West BAA

Plant	Bus Number	Bus Name	Id	Pmax (MW)
	304805	ASH ROCK HIL115.00	BA	8.8
Asheville Plant	304875	ASHVCC1CT5 18.000	5	163
Asheville Plant	304876	ASHVCC1ST6 13.800	6	85
Asheville Plant	304877	ASHVCC2CT7 18.000	7	161
Asheville Plant	304878	ASHVCC2ST8 13.800	8	85
	304860	ASHVILPROXY 230.00	D	200
Asheville Plant	304858	ASHVL #3CT 18.000	3	160
Asheville Plant	304859	ASHVL #4CT 18.000	4	160

Dist. Solar	304818	BALDWIN 115.00	PV	1.424
Barnardsville Hydro	304772	BARNARDSVILE115.00	HY	1
Dist. Solar	304743	CANTON115 TT115.00	PV	1.74
Elk Mountain Hydro	304766	ELK MOUNTAIN115.00	HY	2.5
Dist. BG	304759	LEICESTER 115.00	BG	1.415
Dist. Solar	304759	LEICESTER 115.00	PV	3.59
	304856	MARSHAL 1&2 4.1600	1	2
	304856	MARSHAL 1&2 4.1600	2	2
Walters Plant	304853	WALTERS #1 13.800	1	36
Walters Plant	304854	WALTERS #2 13.800	1	40
Walters Plant	304855	WALTERS #3 13.800	1	36
Dist. Solar	304791	WESTASHEV TT115.00	PV	1.857

X. Appendix 5: 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 A5.1: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (LG&E/KU BAA)

LG&E/KU BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	--	--	--	--	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	--	--	6.3	--	14.29	--
Transformers[2] – New	--	--	--	--	--	--
Transformers[2] – Replacements	--	--	--	--	--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A5.2: Interface commitments[1] modeled in the SERTP Summer Peak models – LG&E/KU BAA

To	2025	2028	2033
PJM	663.8	663.8	663.8
OVEC	-179	-179	-179
MISO	-180.9	-181.9	-183.9
Owensboro Municipal	0	0	0
TVA	-3	-3	-3
Total	300.9	299.9	297.9

[1]A positive number represents a net export from the LG&E/KU BAA

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 A5.3 below. Furthermore, supplemental information regarding noteworthy generation expansion and retirements/decertifications included in the 2023 series set of SERTP power flow models is provided below while Table A5.4 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 A5.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak power flow model.

Table A5.3: Changes in Generation Assumptions Based Upon LSEs – LG&E/KU BAA

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
GI-2017-002	86	86	86	86	86	86	86	86	86	86
GI-2019-029	100	100	100	100	100	100	100	100	100	100
GI-2021-007	128	128	128	128	128	128	128	128	128	128

Table A5.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – LG&E/KU BAA

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
TRIMBLE COUNTY	324	324	324	324	324	324	324	324	324	324

Table A5.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – LG&E/KU BAA

Plant	Bus Number	Bus Name		Id	Pmax (MW)
Brown	324002	1BROWN 3	24.000	3	455
Brown	324003	1BROWN 5	13.800	5	131
Brown	324004	1BROWN 6	18.000	6	147
Brown	324005	1BROWN 7	18.000	7	147
Brown	324006	1BROWN 8	13.800	8	122
Brown	324007	1BROWN 9	13.800	9	122
Brown	324008	1BROWN 10	13.800	10	122
Brown	324009	1BROWN 11	13.800	11	122

Dix Dam	324014	1DIX DAM 1 13.200	1	11.2
Dix Dam	324015	1DIX DAM 2 13.200	2	11.2
Dix Dam	324016	1DIX DAM 3 13.200	3	11.2
Ghent	324017	1GHENT 1 18.000	1	520
Ghent	324018	1GHENT 2 22.000	2	520
Ghent	324019	1GHENT 3 22.000	3	530
Ghent	324020	1GHENT 4 22.000	4	525
Haefling	324023	1HAEFLING 13.800	1	12
Haefling	324023	1HAEFLING 13.800	2	12
Mill Creek	324024	1MILL CRK 1 22.000	1	330
Mill Creek	324025	1MILL CRK 2 22.000	2	330
Mill Creek	324026	1MILL CRK 3 22.000	3	422
Mill Creek	324027	1MILL CRK 4 22.000	4	517
Paddys Run	324031	1PADDY RN 1316.000	13	148
Trimble County	324034	1TRIM CO 1 22.000	1	530
Trimble County	324035	1TRIM CO 2 24.000	2	781
Trimble County	324036	1TRIM CO 5 18.000	5	160
Trimble County	324037	1TRIM CO 6 18.000	6	160
Trimble County	324038	1TRIM CO 7 18.000	7	160
Trimble County	324039	1TRIM CO 8 18.000	8	160
Trimble County	324040	1TRIM CO 9 18.000	9	160
Trimble County	324041	1TRIM CO 10 18.000	10	160
Buckner	324044	1BLUEGRASS 118.000	1	166

Buckner	324045	1BLUEGRASS 218.000	2	166
Buckner	324046	1BLUEGRASS 318.000	3	166
Lock	324052	1LOCK 7 2.4000	1	2
Ohio Falls	324234	1OHIO FALL 114.000	1	9.375
Ohio Falls	324234	1OHIO FALL 114.000	2	9.375
Ohio Falls	324234	1OHIO FALL 114.000	3	9.375
Ohio Falls	324234	1OHIO FALL 114.000	4	9.375
Ohio Falls	324235	1OHIO FALL 214.000	5	9.375
Ohio Falls	324235	1OHIO FALL 214.000	6	9.375
Ohio Falls	324235	1OHIO FALL 214.000	7	9.375
Ohio Falls	324235	1OHIO FALL 214.000	8	9.375
Paris	324677	2PARIS 12 69.000	1	11.27
Paducah	324697	1KMPA PAD2 13.800	2	54
Paducah	324933	1KMPA PAD1 13.800	1	54
Brown	325012	1BROWN SOLAR13.200	S1	8
GI2017-002	325029	1GI2017-002G0.6450	1	86.4
GI2019-002	325067	1GI2019-002G0.6000	1	105.5
G2019-004	325090	1G2019-004GS0.6450	1	200
Cane Run	325093	1CANERUN7CT118.000	71	219
Cane Run	325094	1CANERUN7CT218.000	72	219
Cane Run	325095	1CANERUN7ST 18.000	7S	237
GI2019-001	325120	1GI2019-001G0.6450	1	122
GI2019-008	325125	1GI2019-008G0.6000	1	101.1
GI2019-029	325130	1GI2019-029G0.6000	1	100
GI2019-003	325131	1GI2019-003G0.6000	1	100
GI2021-007	325143	1GI2021-007G0.6000	1	128.03
GI2020-001	325180	1GI2020-001G0.6000	1	54
GI2019-025	325185	1GI2019-025G0.6000	1	100
Paddys Run	326515	1PADDY RN 1214.000	12	23
EKPC Office	326541	2EKPC OFFICE69.000	P1	8.5

XI. Appendix 6: 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 A6.1: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (PowerSouth Planning Authority)

PowerSouth PAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	22	--	--	--	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	41.3	--	--	--	--	--
Transformers[2] – New	--	--	--	--	--	--
Transformers[2] – Replacements	--	--	--		--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The 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 A6.3 below.

Table A6.3: Changes in Generation Assumptions Based Upon LSEs – PowerSouth Planning Authority

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Fountain	--	75	75	75	75	75	75	75	75	75
Walker Springs III	--	--	80	80	80	80	80	80	80	80

XII. Appendix 7: 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 7.1: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (Southern BAA)

Southern BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	72.4	0.0	0.0	265.3	0.0	122.8
Transmission Lines – Uprates[1] (Circuit Mi.)	721.3	0.0	0.0	228.2	0.0	0.0
Transformers[2] – New	0	0	0	7	0	6
Transformers[2] – Replacements	0	0	0	3	0	0
Static VAR Compensators	0	0	0	4	0	0

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table 7.2: Interface commitments[1] modeled in the SERTP Summer Peak models – Southern BAA

To	2025	2028	2033
Duke Carolinas	61	0	0
TVA	-55	-55	-57
SEPA	-625	-625	-625
MISO	-132	-184	-276
FRCC	705	612	404
Total	86	-68	-278

[1]A 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 A7.3 through A7.6 below. Furthermore, supplemental information regarding

noteworthy generation expansion and retirements/decertifications included in the 2023 series set of SERTP power flow models is provided below, while Table A7.7 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 A7.8 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak power flow model.

Table A7.3: Changes in Generation Assumptions Based Upon LSEs – Southern Company

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
BOWEN 1*	728	728	728	728	728	0	--	--	--	--
BOWEN 2 *	728	728	728	728	728	0	--	--	--	--
BOWEN 3*	889	889	889	889	889	889	889	0	--	--
BOWEN 4 *	891	891	891	891	891	891	891	0	--	--
SCHERER 1[1]	74	74	74	74	74	0	--	--	--	--
SCHERER 2[1]	74	74	74	74	74	0	--	--	--	--
SCHERER 3	661	661	661	661	661	0	--	--	--	--
YATES EXPANSION UNIT[2]	--	--	--	--	--	--	800	800	800	800
BOWEN EXPANSION UNIT[2]	--	--	--	--	--	--	--	800	1600	1600
BARRY 5*	785	0	--	--	--	--	--	--	--	--
BARRY 1	80	80	80	80	0	--	--	--	--	--
BARRY 2	80	80	80	80	0	--	--	--	--	--
GASTON 1	254	254	254	254	254	0	--	--	--	--
GASTON 2	256	256	256	256	256	0	--	--	--	--
GASTON 3	254	254	254	254	254	0	--	--	--	--
GASTON 4	256	256	256	256	256	0	--	--	--	--
GASTON 5	872	895	895	895	895	895	895	895	895	895

GASTON EXPANSION UNIT[2]	--	--	--	--	--	--	--	800	800	800
WATSON 4	0	--	--	--	--	--	--	--	--	--
DANIEL 2	510	510	510	510	0	--	--	--	--	--
GREENE COUNTY 1	258	258	0	--	--	--	--	--	--	--
GREENE COUNTY 2	258	258	258	0	--	--	--	--	--	--
BARRY 8	653	653	653	653	685	685	685	685	685	685
VOGTLE 4	509	509	509	509	509	509	509	509	509	509
YATES 6-7	714	714	714	714	714	714	714	714	714	714
WANSLEY 7	--	622	622	622	622	622	622	622	622	622
DAHLBERG	371	502	502	502	758	685	685	685	685	685
WADLEY SOLAR	260	260	260	260	260	260	260	260	260	260
WALKER SPRINGS I, II SOLAR	--	160	160	160	160	160	160	160	160	160
NOTCH SOLAR	--	--	160	160	160	160	160	160	160	160
EAST ATMORE SOLAR	--	80	80	80	80	80	80	80	80	80
FOLEY SOLAR	--	80	80	80	80	80	80	80	80	80
DOUBLE RUN SOLAR	220	220	220	220	220	220	220	220	220	220
DECATUR SOLAR	200	200	200	200	200	200	200	200	200	200
WASHINGTON CO	150	150	150	150	150	150	150	150	150	150
TIMBERLAND Solar	140	140	140	140	140	140	140	140	140	140
FORT STEWART SOLAR	43	43	43	43	43	43	43	43	43	43
MCGRAU FORD BESS	--	--	265	265	265	265	265	265	265	265

* This assumption may be modified as resource decisions are made by the corresponding LSEs pursuant to applicable regulatory processes

[1] Only includes GPC's portion of Scherer 1 & 2

[2] The expansion unit locations shown do not represent long term generation resource plans and may be moved based on study needs

Table A7.4: Changes in Generation Assumptions Based Upon LSEs – GTC

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
SR AILEY	80	80	80	80	80	80	80	80	80	80
SR Desoto	250	250	250	250	250	250	250	250	250	250
Vogtle 4	334	334	334	334	334	334	334	334	334	334
Effingham	545	545	545	545	545	545	545	545	545	545
TIGER CREEK	320	320	320	320	320	320	320	320	320	320
SR Toombs	--	250	250	250	250	250	250	250	250	250

Table A7.5: Changes in Generation Assumptions Based Upon LSEs – MEAG

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Vogtle 4	253	253	253	253	253	253	253	253	253	253

Table A7.6: Changes in Generation Assumptions Based Upon LSEs – Dalton

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Vogtle 4	18	18	18	18	18	18	18	18	18	18

Table A7.7: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – Southern Company

SITE	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Dahlberg	44	44	44	44	44	44	44	44	44	44
Daniel	100	100	100	100	100	100	100	100	100	100
Harris	456	106	106	106	106	106	106	106	106	106
HILLABEE	210	210	210	210	210	210	210	210	210	210
Lindsay Hill	220	220	220	220	220	220	220	220	220	220
Miller	400	400	500	500	500	500	500	500	500	500

Scherer	215	215	215	215	215	0	0	0	0	0
Vogtle	206	206	206	206	206	206	206	206	206	206

Table A7.8: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – Southern BAA

Plant	Bus Number	Bus Name	Id	Pmax (MW)
Point A Hydro	317071	2_1POINTA_HY4.2000	H1	8
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	384
Lowman EC	317713	2LOWMANEC2 21.000	2	257
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	2MCNTSH4G 13.200	4	172
McIntosh	317755	2MCNTSH5G 13.200	5	173
Fountain Solar	317764	2FOUNTAIN_PV0.6300	S1	76.2
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	25
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	102
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
Stwart 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 AFB Solar	383416	2RAFB SLR 34.500	S1	133
Moody Air Force Solar	383417	2MAFB SLR 34.500	S1	50
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
Terrell County Solar	383430	2SR TERRELL 34.500	S1	83.1
Toombs Solar	383431	2TOOMBS SLR 34.500	S1	250
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 (Camilla II)	383440	2SO OAK PV 134.500	S1	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 Battery	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	107

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	11
Morgan Falls Dam	383500	2MORGAN F 4.2000	1	10.7
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	345
Rocky Mountain	383512	2ROCKY MTN 220.000	2	345
Rocky Mountain	383513	2ROCKY MTN 320.000	3	345
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	20.2
Bartletts Ferry Dam	383518	2BARTLFY6 13.800	5	54.4
Bartletts Ferry Dam	383518	2BARTLFY6 13.800	6	54.4
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	2OLIVER 1 7.2000	1	17.7
Oliver Dam	383523	2OLIVER 2 7.6000	2	17.7
Oliver Dam	383524	2OLIVER 3-4 7.6000	3	17.7
Oliver Dam	383524	2OLIVER 3-4 7.6000	4	6
North Highlands Dam	383525	2N HIGHLAND 12.000	1	34.4
Terrora Dam	383530	2TERRORA 6.6000	1	19.8
Tugalo Dam	383532	2TUGALO 1-2 6.6000	1	22.2
Tugalo Dam	383533	2TUGALO 3-4 6.6000	3	22.2
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	62.5
Wallace Dam	383537	2WALLACE 4-614.400	4	62.5
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	6.4
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 1ST16.000	1	179.6
Chattahoochee Energy	383633	2CHAT EN 1A 16.000	1A	163.8
Chattahoochee Energy	383634	2CHAT EN 1B 16.000	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	288.4
Franklin	383675	2FRANKLIN 2A18.000	2A	187
Franklin	383676	2FRANKLIN 2B18.000	2B	187
Franklin	383677	2FRANKLIN3ST21.000	3	291.7
Franklin	383678	2FRANKLIN 3A18.000	3A	183.3
Franklin	383679	2FRANKLIN 3B18.000	3B	183.3
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	A	80
Robins Air Force Base	383742	2RAFB CT B 13.800	B	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	A	41
Wilson	383762	2WILSON B 13.800	B	56
Wilson	383763	2WILSON C 13.800	C	49
Wilson	383764	2WILSON D 13.800	D	41
Wilson	383765	2WILSON E 13.800	E	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
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	718
Bowen	383842	2BOWEN 2 25.000	2	722
Bowen	383843	2BOWEN 3 18.000	3	888.5
Bowen	383844	2BOWEN 4 18.000	4	890.5
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	158
Tiger Creek	383856	2TIGER CK2 18.000	2	158
Tiger Creek	383857	2TIGER CK3 18.000	3	157
Tiger Creek	383858	2TIGER CK4 18.000	4	157
Monroe Power	383860	2MONROEPWR 113.800	1	154.5
Monroe Power	383861	2MONROEPWR 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	2OPCHWE 1 18.000	1	150
OPC Hartwell	383882	2OPCHWE 2 18.000	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	166.7
Hawk Road	383928	2HAWK RD 2 18.000	2	166.7
Hawk Road	383929	2HAWK RD 3 18.000	3	166.6
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
East Atmore Solar	386002	2ATMORESOLAR34.500	S1	80
Walker Springs Solar	386027	2WLKR SPR I 34.500	S1	80
Walker Springs Solar	386028	2WLKR SPR II34.500	S1	80
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	168.5
Calhoun	386062	2CALHOUNCT2 18.000	2	168.5
Calhoun	386063	2CALHOUNCT3 18.000	3	168.5
Calhoun	386064	2CALHOUNCT4 18.000	4	168.5
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	74

Hog Bayou	386090	2HOGBAYOU1A 18.000	1A	150
Greenville Solar	386094	2PEAK CLN SL34.500	S1	80
Miller	386401	2MILLER 1 24.000	1	695
Miller	386402	2MILLER 2 24.000	2	701
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	894.5
Gaston	386416	2GASTON A 13.800	A	16
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	423.9
Central Alabama	386428	2CENTAL 2A 18.000	2A	178.7
Central Alabama	386429	2CENTAL 2B 18.000	2B	178.7
Central Alabama	386430	2CENTAL 2C 18.000	2C	178.7
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	A	84
Greene County	386451	2GREENCOB 13.800	B	82

Greene County	386452	2GREENCOC 13.800	C	81
Greene County	386453	2GREENCOD 13.800	D	82
Greene County	386454	2GREENCOE 13.800	E	81
Greene County	386455	2GREENCOF 13.800	F	80
Greene County	386456	2GREENCOG 13.800	G	83
Greene County	386457	2GREENCOH 13.800	H	82
Greene County	386458	2GREENCOI 13.800	I	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	205.8
Barry	386477	2BARRY 6A 18.000	6A	191.5
Barry	386478	2BARRY 6B 18.000	6B	191.5
Barry	386479	2BARRY 7ST 18.000	7	206.3
Barry	386480	2BARRY 7A 18.000	7A	190
Barry	386481	2BARRY 7B 18.000	7B	190
Barry	386482	2BARRY 8ST 21.000	8	287.7
Barry	386483	2BARRY 8A 19.000	8A	399
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	A	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	A	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	212.6
Daniel	386874	2DANIEL 3A 18.000	3A	193.2
Daniel	386875	2DANIEL 3B 18.000	3B	193.2
Daniel	386876	2DANIEL 4ST 18.000	4	212.6
Daniel	386877	2DANIEL 4A 18.000	4A	193.2
Daniel	386878	2DANIEL 4B 18.000	4B	193.2
Origis Solar	386887	2ORIGIS 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
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

XIII. Appendix 8: 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 A8.1: 2023 SERTP Regional Transmission Plan – Transmission Project Snapshot by operating voltage (TVA BAA)

TVA BAA	100-120 kV	121-150 kV	151-199 kV	200-299 kV	300-399 kV	400-550 kV
Transmission lines – New (Circuit Mi.)	--	--	139	--	--	--
Transmission Lines – Uprates[1] (Circuit Mi.)	--	--	58.6	--	--	--
Transformers[2] – New	--	--	--	--	--	1
Transformers[2] – Replacements	--	--	--	--	--	--

[1]A transmission line uprate may be the result of reconductoring and/or increasing the operating temperature/voltage along the transmission line.
[2]The voltages shown represent the operating voltages on the high side terminals of the transformer

Table A8.2: Interface commitments[1] modeled in the SERTP Summer Peak models – TVA BAA

To	2025	2028	2033
PJM	-250	-250	-250
MISO	213	213	213
Duke Progress West	14	14	14
Southern	55	55	57
LG&E/KU	3	3	3
Brookfield/Smoky Mountain	-99	-99	-99
APGI-Tapoco	0	0	0
SPP	-78	-78	-78
Owensboro Municipal	25	25	25
Total	-117	-117	-115

[1]A positive number represents a net export from the TVA BAA

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 A8.3 below. Furthermore, supplemental information regarding noteworthy generation expansion and retirements/decertifications included in the 2023 series set of SERTP power flow models is provided below, while Table A8.4 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 A8.5 provides a listing of all generators modeled in the 2023 Version 2 Summer Peak power flow model.

Table A8.3: Changes in Generation Assumptions Based Upon LSEs – TVA BAA

SITE	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Bull Run FP Unit 1	760	0	--	--	--	--	--	--	--	--
Johnsonville CT	800	800	0	--	--	--	--	--	--	--
Cumberland FP Unit 2	1130	1130	1130	1130	0	--	--	--	--	--
Cumberland FP Unit 1	1130	1130	1130	1130	1130	1130	0	--	--	--
Skyhawk	100	100	100	100	100	100	100	100	100	100
SR McKellar	70	70	70	70	70	70	70	70	70	70
Golden triangle	--	200	200	200	200	200	200	200	200	200
Colbert CT	--	221	221	221	221	221	221	221	221	221
Paradise CT	--	221	221	221	221	221	221	221	221	221
Horus KY	--	--	69	69	69	69	69	69	69	69
Johnsonville Aeros	--	--	530	530	530	530	530	530	530	530
Cumberland CC	--	--	--	--	1346	1346	1346	1346	1346	1346

Table A8.4: Generation Assumptions Based Upon Expected Long-term, Firm Point-to-Point Commitments – TVA BAA

Site	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
None										

Table A8.5: Generating Units Modeled in the 2023 Version 2 Summer Peak Power flow Model – TVA BAA

Plant	Bus Number	Bus Name	Id	Pmax (MW)
Browns Ferry Nuclear	364001	1BR FERRY N122.000	1	1297.6
Browns Ferry Nuclear	364002	1BR FERRY N222.000	1	1311.4
Browns Ferry Nuclear	364003	1BR FERRY N322.000	1	1302.5
Sequoyah Nuclear	364011	1SEQUOYAH N124.000	1	1200.24
Sequoyah Nuclear	364012	1SEQUOYAH N224.000	1	1187.24
Watts Bar Nuclear	364021	1WBNP N1 24.000	1	1324.1
Watts Bar Nuclear	364022	1WBNP N2 24.000	2	1293.89
Optimist Solar	364023	0OPTMST SLR 0.6300	1	200
Bell Buckle Solar	364025	0BELLBUCKSOL0.6000	1	35
Canadaville Solar	364027	0CANADA SOL 0.6000	1	16
Millington II Solar	364030	0MILLNGTN II0.6900	1	75
Normandy Lake Solar	364031	0NORMNDY SLR0.6000	1	200
Optimist Battery	364032	0OPTMST BAT 0.6000	1	50
Skyhawk Solar	364037	1SKYHAWK SOL34.500	1	100
Russellville Solar	364040	0RUSSVIL SOL0.6000	1	173
Ridgely Lake County Solar	364044	1RIDGELY SOL34.500	1	177
Latitude Solar	364048	1LATIT SOLAR13.000	1	15

Providence Solar	364049	0PROV SOLAR 0.8000	1	16.1
Selmer Farm Solar	364050	0SELMER FARM0.2000	1	17
Mulberry Solar	364053	0MULB SOLAR 0.2000	1	16
River Bend Solar	364054	0RIVER BEND 0.5500	1	75
Millington Solar	364055	0MILNGTN SOL0.6900	1	53
Wildberry Solar	364056	0WILDBRY SOL0.8000	1	15
Muscle Shoals Solar	364057	0MUS SHL SLR0.6000	1	227
Elora Solar	364058	0ELORA SOLAR0.6600	1	150
Yum Yum Solar	364059	0YUM YUM SOL0.5500	1	147
Horus Solar	364060	0HORS SLR 0.6300	1	69.3
Ardmore Solar	364063	0ARDMORE SOL0.6500	1	15.71
Selmer North Solar	364064	0SELMER NOR10.3900	1	16.1
Selmer North Solar	364065	0SELMER NOR20.3900	1	8.5
Golden Triangle Solar 1	364067	0GN TRI SOL10.6000	1	200
Golden Triangle Battery 1	364068	0G TRI BAT1 0.6000	1	50
McKellar Solar	364070	0MCKLLR SLR 0.6600	1	70
Vonore Battery Energy Storage System	364071	1VONORE BESS13.800	1	20
Graceland Solar	364074	0GRACE SOLAR0.6000	1	150
Golden Triangle Solar 2	364076	0 G TRI GEN20.6300	1	150
Golden Triangle Battery 2	364077	0 G TRI BAT20.6000	1	50
Colbert Combined Cycle	364081	1COLBERT CT918.000	9	240
Colbert Combined Cycle	364082	1COLBERTCT1018.000	10	240
Colbert Combined Cycle	364083	1COLBERTCT1118.000	11	240
Cumberland Steam	364119	1CUMBRL F1HL22.000	1	662.5
Cumberland Steam	364119	1CUMBRL F1HL22.000	2	662.5
Cumberland Steam	364120	1CUMBRL F2HL22.000	1	667.5

Cumberland Steam	364120	1CUMBRL F2HL22.000	2	656.5
Gallatin Steam	364121	1GALLATIN F124.000	1	240
Gallatin Steam	364122	1GALLATIN F224.000	1	240
Gallatin Steam	364123	1GALLATIN F324.000	1	281
Gallatin Steam	364124	1GALLATIN F424.000	1	281
Kingston Steam	364151	1KINGSTON F118.000	1	159.7
Kingston Steam	364152	1KINGSTON F218.000	1	144
Kingston Steam	364153	1KINGSTON F318.000	1	144
Kingston Steam	364154	1KINGSTON F418.000	1	144
Kingston Steam	364155	1KINGSTON F520.000	1	190
Kingston Steam	364156	1KINGSTON F620.000	1	190
Kingston Steam	364157	1KINGSTON F720.000	1	190
Kingston Steam	364158	1KINGSTON F820.000	1	190
Kingston Steam	364159	1KINGSTON F920.000	1	203.6
Shawnee Steam	364171	1SHAWNEE F1 18.000	1	143
Shawnee Steam	364172	1SHAWNEE F2 18.000	1	143
Shawnee Steam	364173	1SHAWNEE F3 18.000	1	143
Shawnee Steam	364174	1SHAWNEE F4 18.000	1	143
Shawnee Steam	364175	1SHAWNEE F5 18.000	1	143
Shawnee Steam	364176	1SHAWNEE F6 18.000	1	143
Shawnee Steam	364177	1SHAWNEE F7 18.000	1	143
Shawnee Steam	364178	1SHAWNEE F8 18.000	1	143
Shawnee Steam	364179	1SHAWNEE F9 18.000	1	143
Colbert Gas Turbines	364211	1COLBERT T1 13.800	1	49
Colbert Gas Turbines	364212	1COLBERT T2 13.800	2	49
Colbert Gas Turbines	364213	1COLBERT T3 13.800	3	49
Colbert Gas Turbines	364214	1COLBERT T4 13.800	4	49
Colbert Gas Turbines	364215	1COLBERT T5 13.800	5	49
Colbert Gas Turbines	364216	1COLBERT T6 13.800	6	49

Colbert Gas Turbines	364217	1COLBERT T7 13.800	7	49
Colbert Gas Turbines	364218	1COLBERT T8 13.800	8	49
Gallatin Steam	364221	1GALLATIN T113.800	1	77
Gallatin Steam	364222	1GALLATIN T213.800	2	77
Gallatin Steam	364223	1GALLATIN T313.800	3	77
Gallatin Steam	364224	1GALLATIN T413.800	4	77
Gallatin Steam	364225	1GALLATIN T513.800	5	84
Gallatin Steam	364226	1GALLATIN T613.800	6	84
Gallatin Steam	364227	1GALLATIN T713.800	7	84
Gallatin Steam	364228	1GALLATIN T813.800	8	84
Gleason Combustion Turbine	364231	1GLEASON T1 18.000	1	171.33
Gleason Combustion Turbine	364232	1GLEASON T2 18.000	2	171.33
Gleason Combustion Turbine	364233	1GLEASON T3 13.800	3	171.34
Johnsonville Steam	364257	1JVILLE T17 13.800	1	84
Johnsonville Steam	364258	1JVILLE T18 13.800	1	84
Johnsonville Steam	364259	1JVILLE T19 13.800	1	84
Johnsonville Steam	364260	1JVILLE T20 13.800	1	84
Kemper Combustion Turbine	364261	1KEMPER T1 13.800	1	84
Kemper Combustion Turbine	364262	1KEMPER T2 13.800	1	84
Kemper Combustion Turbine	364263	1KEMPER T3 13.800	1	84
Kemper Combustion Turbine	364264	1KEMPER T4 13.800	1	84
Lagoon Creek Combustion Turbine	364271	1LAG CRK T1 13.800	1	85
Lagoon Creek Combustion Turbine	364272	1LAG CRK T2 13.800	1	85
Lagoon Creek Combustion Turbine	364273	1LAG CRK T3 13.800	1	85
Lagoon Creek Combustion Turbine	364274	1LAG CRK T4 13.800	1	85

Lagoon Creek Combustion Turbine	364275	1LAG CRK T5 13.800	1	85
Lagoon Creek Combustion Turbine	364276	1LAG CRK T6 13.800	1	85
Lagoon Creek Combustion Turbine	364277	1LAG CRK T7 13.800	1	85
Lagoon Creek Combustion Turbine	364278	1LAG CRK T8 13.800	1	85
Lagoon Creek Combustion Turbine	364279	1LAG CRK T9 13.800	1	84
Lagoon Creek Combustion Turbine	364280	1LAG CRK T1013.800	1	84
Lagoon Creek Combustion Turbine	364281	1LAG CRK T1113.800	1	84
Lagoon Creek Combustion Turbine	364282	1LAG CRK T1213.800	1	84
Marshall Combustion Turbine	364291	1MARSHALL T113.800	1	85.63
Marshall Combustion Turbine	364292	1MARSHALL T213.800	1	85.63
Marshall Combustion Turbine	364293	1MARSHALL T313.800	1	85.63
Marshall Combustion Turbine	364294	1MARSHALL T413.800	1	85.63
Marshall Combustion Turbine	364295	1MARSHALL T513.800	1	85.63
Marshall Combustion Turbine	364296	1MARSHALL T613.800	1	85.63
Marshall Combustion Turbine	364297	1MARSHALL T713.800	1	85.63
Marshall Combustion Turbine	364298	1MARSHALL T813.800	1	85.63
Lagoon Creek Combined Cycle	364301	1LAG CRK CT116.500	1	175.22
Lagoon Creek Combined Cycle	364302	1LAG CRK CT216.500	1	176.21
Lagoon Creek Combined Cycle	364303	1LAG CRK STG18.000	1	238.57
Paradise Combined Cycle	364304	1PARADIS CT118.000	1	211
Paradise Combined Cycle	364305	1PARADIS CT218.000	2	211
Paradise Combined Cycle	364306	1PARADIS CT318.000	3	211

Paradise Combined Cycle	364307	1PARADIS S1 19.000	1	467
Paradise Combined Cycle	364308	1PARADIS CT518.000	1	240
Paradise Combined Cycle	364309	1PARADIS CT618.000	1	240
Paradise Combined Cycle	364310	1PARADIS CT718.000	1	240
John Sevier Combined Cycle	364321	1J SEVIER C118.000	1	165.57
John Sevier Combined Cycle	364322	1J SEVIER C218.000	2	165.57
John Sevier Combined Cycle	364323	1J SEVIER C318.000	3	165.56
John Sevier Combined Cycle	364324	1J SEVIER S419.500	4	377.3
Allen Combined Cycle	364325	1ALLENCC CT125.000	1	314
Allen Combined Cycle	364326	1ALLENCC CT225.000	1	314
Allen Combined Cycle	364327	1ALLENCC ST119.000	1	454
Johnsonville Aeros	364361	1JCT AERO 2113.800	21	57.5
Johnsonville Aeros	364362	1JCT AERO 2213.800	22	57.5
Johnsonville Aeros	364363	1JCT AERO 2313.800	23	57.5
Johnsonville Aeros	364364	1JCT AERO 2413.800	24	57.5
Johnsonville Aeros	364365	1JCT AERO 2513.800	25	57.5
Johnsonville Aeros	364366	1JCT AERO 2613.800	26	57.5
Johnsonville Aeros	364367	1JCT AERO 2713.800	27	57.5
Johnsonville Aeros	364368	1JCT AERO 2813.800	28	57.5
Johnsonville Aeros	364369	1JCT AERO 2913.800	29	57.5
Johnsonville Aeros	364370	1JCT AERO 3013.800	30	57.5
Raccoon Mtn Pump Storage	364401	1RACCOON P1 23.000	1	440
Raccoon Mtn Pump Storage	364402	1RACCOON P2 23.000	1	440
Raccoon Mtn Pump Storage	364403	1RACCOON P3 23.000	1	440
Raccoon Mtn Pump Storage	364404	1RACCOON P4 23.000	1	440
Apalachia Hydro	364421	1APALACH H1 13.800	1	41.19
Blue Ridge Hydro	364423	1BLUERIDG H112.500	1	17.35
Boone Hydro	364424	1BOONE H1 13.800	1	37.8
Boone Hydro	364425	1BOONE H2 13.800	1	37.8

Chatuge Hydro	364428	1CHATUGE H1 6.9000	1	13.92
Chickamauga Hydro	364431	1CHICKAMG H113.800	1	35.8
Chickamauga Hydro	364432	1CHICKAMG H213.800	1	35.8
Douglas Hydro	364435	1DOUGLAS H1 13.800	1	45.82
Douglas Hydro	364436	1DOUGLAS H2 13.800	1	45.82
Fontana Hydro	364439	1FONTANA H1 13.800	1	103
Fontana Hydro	364440	1FONTANA H2 13.800	1	103
Fort Loudoun Hydro	364442	1FTLOUD H1 13.800	1	36
Fort Loudoun Hydro	364444	1FTLOUD H2 13.800	1	36
Ft. Patrick Henry Hydro	364446	1FT PAT H1-213.800	2	20.32
Great Falls Hydro	364447	1GFALLS H1-26.6000	1	15.93
Guntersville Hydro	364448	1GUNTERSV H113.800	1	28.81
Guntersville Hydro	364449	1GUNTERSV H213.800	1	30.6
Hiwassee Hydro	364452	1HIWASSEE H113.800	1	87.69
Kentucky Hydro	364456	1KY HYDRO H113.800	1	44.6
Kentucky Hydro	364457	1KY HYDRO H213.800	1	46.1
Kentucky Hydro	364458	1KY HYDRO H313.800	1	45.1
Melton Hill Hydro	364461	1MELTON H H113.800	1	39.49
Norris Hydro	364465	1NORRIS H1 13.800	1	63.47
Nottely Hydro	364467	1NOTTELY H1 13.800	1	19.22
Ocoee Hydro	364468	1OCOEE#1H1-32.3000	1	4.81
Ocoee Hydro	364468	1OCOEE#1H1-32.3000	2	4.81
Ocoee Hydro	364470	1OCOEE#2H1-26.6000	1	10.9
Ocoee Hydro	364471	1OCOEE #3 H113.800	1	29.3
Pickwick Hydro	364472	1PICKWICK H113.800	1	44.3
Pickwick Hydro	364473	1PICKWICK H213.800	1	42.9
Pickwick Hydro	364474	1PICKWICK H313.800	1	42.8

Pickwick Hydro	364475	1PICKWICK H413.800	1	43.59
South Holston Hydro	364478	1SHOLSTON H113.800	1	44.37
Watauga Hydro	364480	1WATAUGA H1 13.800	1	37.86
Watts Bar Hydro	364482	1WBHP H1 13.800	1	39.27
Watts Bar Hydro	364483	1WBHP H2 13.800	1	39.27
Watts Bar Hydro	364484	1WBHP H3 13.800	1	39.27
Wilbur Hydro	364493	1WILBUR H4 2.3000	1	7.2
Wilson Hydro	364499	1WILSON11-1213.800	2	29.5
Wilson Hydro	364500	1WILSON13-1413.800	1	29.6
Wilson Hydro	364500	1WILSON13-1413.800	2	29.6
Wilson Hydro	364501	1WILSON15-1613.800	1	29.23
Wilson Hydro	364501	1WILSON15-1613.800	2	29.23
Wilson Hydro	364502	1WILSON17-1813.800	1	29.01
Wilson Hydro	364502	1WILSON17-1813.800	2	29.03
Wilson Hydro	364503	1WILSON H19 13.800	1	54.97
Wilson Hydro	364504	1WILSON H20 13.800	1	56.06
Wilson Hydro	364505	1WILSON H21 13.800	1	54.97
Cherokee Hydro	364511	1CHEROKEE H113.800	1	37.2
Cherokee Hydro	364512	1CHEROKEE H213.800	2	39.83
Nickajack Hydro	364521	1NICKAJACK 113.800	1	30.7
Nickajack Hydro	364523	1NICKAJACK 313.800	1	26.03
Nickajack Hydro	364524	1NICKAJACK 413.800	1	26.08
Barkley Hydro	364601	1BARKLEY H1 13.800	1	35.5
Barkley Hydro	364602	1BARKLEY H2 13.800	1	35.5
Barkley Hydro	364603	1BARKLEY H3 13.800	1	35.5
Barkley Hydro	364604	1BARKLEY H4 13.800	1	35.5
Center Hill Hydro	364605	1CENTHILL H113.800	1	52
Center Hill Hydro	364606	1CENTHILL H213.800	1	52

Center Hill Hydro	364607	1CENTHILL H313.800	1	52
Cheatham Hydro	364608	1CHEATHAM H113.800	1	13
Cheatham Hydro	364609	1CHEATHAM H213.800	1	13
Cheatham Hydro	364610	1CHEATHAM H313.800	1	13
Cordell Hull Hydro	364611	1CORDELL H1 13.800	1	37
Cordell Hull Hydro	364612	1CORDELL H2 13.800	1	37
Cordell Hull Hydro	364613	1CORDELL H3 13.800	1	37
Dale Hollow Hydro	364614	1DALE HOL H113.800	1	19.9
Dale Hollow Hydro	364615	1DALE HOL H213.800	1	19.9
Dale Hollow Hydro	364616	1DALE HOL H313.800	1	19.9
Old Hickory Hydro	364617	1OLDHICKH1-213.800	1	28.7
Old Hickory Hydro	364617	1OLDHICKH1-213.800	2	29
Old Hickory Hydro	364618	1OLDHICKH3-413.800	1	29
Old Hickory Hydro	364618	1OLDHICKH3-413.800	2	29
Percy Priest Hydro	364619	1PERCY PR H113.800	1	30
Wolf Creek Hydro	364620	1WOLFCR H1-213.800	1	52
Wolf Creek Hydro	364620	1WOLFCR H1-213.800	2	52
Wolf Creek Hydro	364621	1WOLFCR H3-413.800	1	52
Wolf Creek Hydro	364621	1WOLFCR H3-413.800	2	52
Wolf Creek Hydro	364622	1WOLFCR H5-613.800	1	52
Wolf Creek Hydro	364622	1WOLFCR H5-613.800	2	52
Wheeler Hydro	364650	1WHEELER 1-213.800	1	38.77
Wheeler Hydro	364650	1WHEELER 1-213.800	2	33.23
Wheeler Hydro	364651	1WHEELER 3-413.800	1	33.62
Wheeler Hydro	364651	1WHEELER 3-413.800	2	33.43
Wheeler Hydro	364652	1WHEELER 5-613.800	1	34.69

Brownsville Combustion Turbine	364701	1BROWNSVL T113.800	1	115
Brownsville Combustion Turbine	364702	1BROWNSVL T213.800	2	115
Brownsville Combustion Turbine	364703	1BROWNSVL T313.800	3	116.86
Brownsville Combustion Turbine	364704	1BROWNSVL T413.800	4	115
Ackerman Combined Cycle	364721	1ACKERMAN T116.000	1	229.78
Ackerman Combined Cycle	364722	1ACKERMAN T216.000	1	229.78
Ackerman Combined Cycle	364723	1ACKERMAN S116.000	1	295.43
Decatur Combined Cycle	364731	1DEC CT1 18.000	1	181.3
Decatur Combined Cycle	364732	1DEC CT2 18.000	1	181.3
Decatur Combined Cycle	364733	1DEC CT3 18.000	1	181.3
Decatur Combined Cycle	364734	1DEC STG 18.000	1	299.9
Magnolia Combined Cycle	364761	1MAGNOL T1 18.000	1	175.71
Magnolia Combined Cycle	364762	1MAGNOL T2 18.000	1	168.48
Magnolia Combined Cycle	364763	1MAGNOL T3 18.000	1	174.68
Magnolia Combined Cycle	364764	1MAGNOL S1 18.000	1	155.04
Magnolia Combined Cycle	364765	1MAGNOL S2 18.000	1	155.04
Magnolia Combined Cycle	364766	1MAGNOL S3 18.000	1	155.04
Morgan Combined Cycle	364771	1MEC CT1 18.000	1	176.48
Morgan Combined Cycle	364772	1MEC CT2 18.000	1	176.48
Morgan Combined Cycle	364773	1MEC CT3 18.000	1	176.48
Morgan Combined Cycle	364774	1MEC STG 18.000	1	291.57
Red Hills Steam	364780	1REDHILLS F120.000	1	489
Southaven Combined Cycle	364791	1S HAVEN T1 18.000	1	168.06

Southaven Combined Cycle	364792	1S HAVEN T2 18.000	3	165.03
Southaven Combined Cycle	364793	1S HAVEN T3 18.000	5	167.06
Southaven Combined Cycle	364794	1S HAVEN S1 13.800	2	104.28
Southaven Combined Cycle	364795	1S HAVEN S2 13.800	4	104.28
Southaven Combined Cycle	364796	1S HAVEN S3 13.800	6	104.28
Caledonia Combined Cycle	364801	1COGCALED T118.000	1	180.4
Caledonia Combined Cycle	364802	1COGCALED S113.800	2	117.1
Caledonia Combined Cycle	364803	1COGCALED T218.000	3	180.4
Caledonia Combined Cycle	364804	1COGCALED S213.800	4	117.1
Caledonia Combined Cycle	364805	1COGCALED T318.000	5	180.4
Caledonia Combined Cycle	364806	1COGCALED S313.800	6	117.1