

PJM – SERTP Regional Transmission Plan Review

*Order 1000 Biennial Regional Transmission Plan Review
Meeting*

September 24, 2026

Microsoft Teams

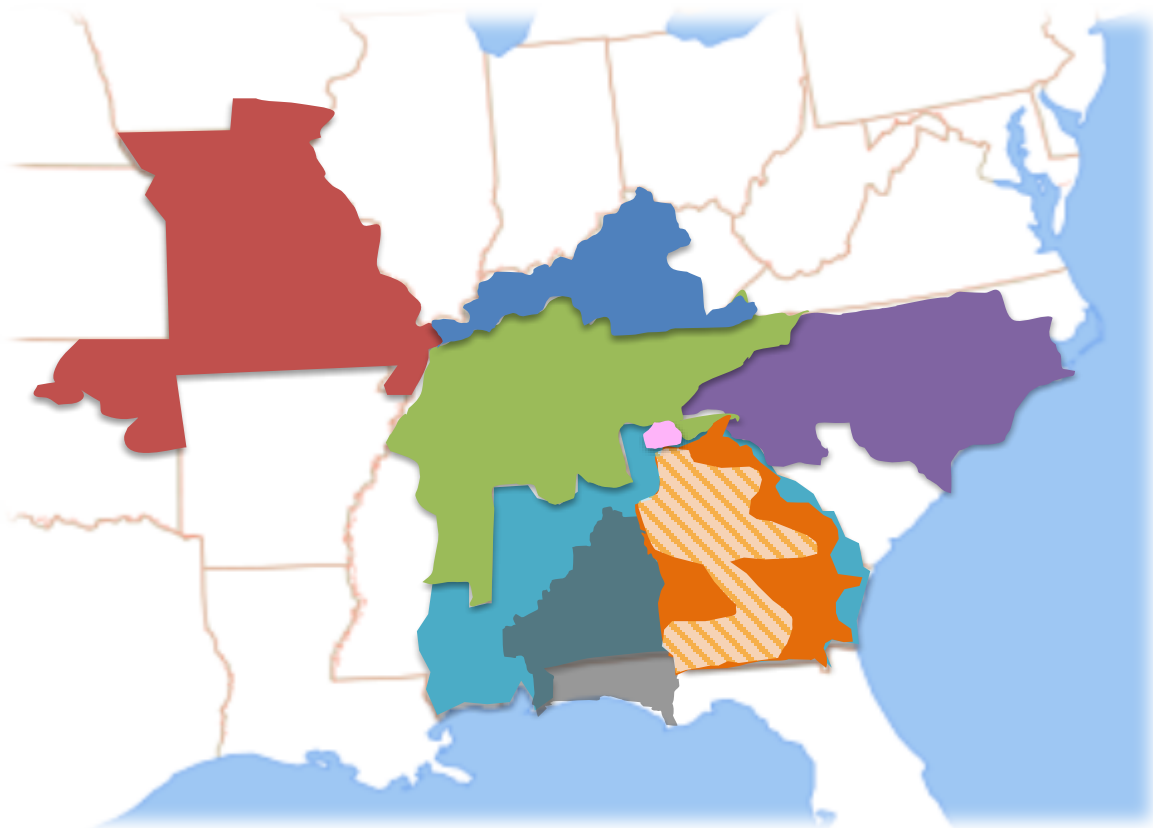
Agenda

- SERTP Process Overview
- SERTP Modeling Input Assumptions
- 2026 SERTP Regional Transmission Plan

SERTP

Process Overview

Southeastern Regional Transmission Planning (SERTP)



SERTP



Process Information

- The SERTP process is a transmission planning process.
- Please contact the respective transmission provider for questions related to real-time operations or Open Access Transmission Tariff (OATT) transmission service.
- Contact Info:
 - SERTP Website Address: www.southeasternrtp.com
 - SERTP Secure Area (CEII and non-CEII Confidential Info): https://www.southeasternrtp.com/secure_area.cshtml
 - Email Inbox: southeasternrtp@southernco.com

SERTP Website - Secure Area

- **Access**

- Sign EIPC PCTP NDA Attachment 2 ONLY



PCTP NDA -
2-19-25.pdf

- [Email](#) Cardin, Taylor Riley <trcardin@tva.gov>
, John Buechler
<jpbuechler11@outlook.com>, and cc the
SERTP Inbox
<southeasternrtp@southernco.com>

- **Contents**

- SERTP Regional Models
- Southern Company Models
- Preliminary and Final Expansion Plans (CEII)
- Economic Planning Study and Regional Analysis and Alternatives
 - Models and Run Files
 - Report (CEII)

Secure Area

[CEII Certification >>](#) [Non-CEII Certification >>](#) [Return Home >>](#)

CEII Certification

This process allows the requestor, once certified, to access the Secure Area of this web site and/or obtain certain CEII directly from the SERTP CEII Coordinator. Note that Base Cases and any underlying data are considered CEII and can only be obtained through this process. If the requestor desires access to both CEII and Confidential Non-CEII Information (or information that contains both types of information), certification from both processes is required. Steps to become certified for access to CEII information are listed below:

1. Complete and submit the [SERTP CEII Request Form](#), which you may submit by fax to 205-257-6654, via electronic email to southeasternrtp@southernco.com, or by mail to:

Southeastern Regional Transmission Planning
600 North 18th Street/13N-8812
P.O. Box 2641
Birmingham, Alabama 35291-8812

2. Each individual employee or consultant who will have access to CEII distributed through the SERTP must successfully complete a background check, which is facilitated by Southern Company Services. A requestor must first submit the SERTP CEII Request Form (refer to item 1 above). Once the request form is received, a representative will contact the requestor to facilitate completion of the background check process and payment of applicable fees.

In association with the background check, each company will be responsible for a one-time CEII application fee of \$180.00. In addition, a background investigation fee of \$100.00 will be required for each individual employee or consultant requesting access to CEII distributed through the SERTP.

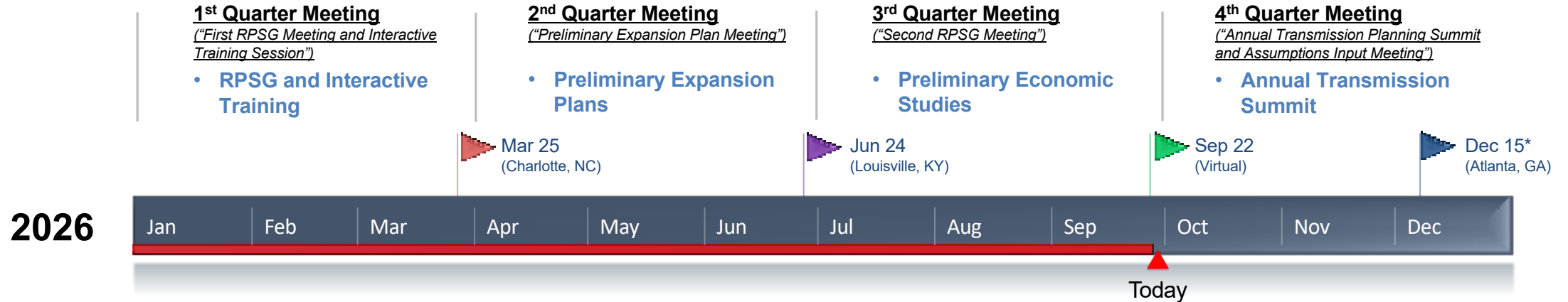
3. Execute the [SERTP CEII Confidentiality Agreement\(s\)](#), one for each entity (including affiliates) that will access CEII distributed through the SERTP.
4. Each individual employee or consultant of an entity that will access CEII distributed through the SERTP must execute Appendix A or Appendix B (as appropriate) of the [SERTP CEII Confidentiality Agreement](#) executed by his/her employer.
5. Once you are approved, you will receive a confirmation e-mail with a username and password through which you may access the secure area via the login button below.

LOGIN

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2026 SERTP

10-Year SERTP Process

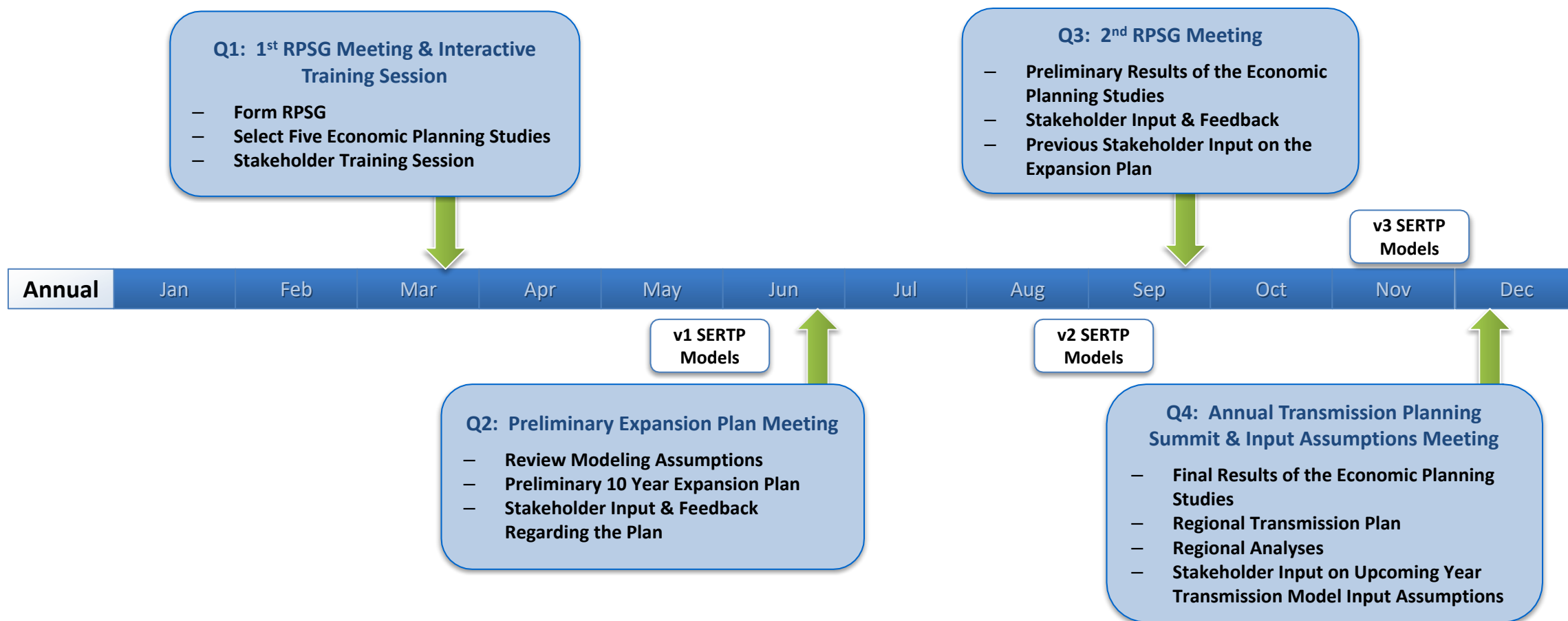


*Subject to change; official meeting dates will be posted on the SERTP website.

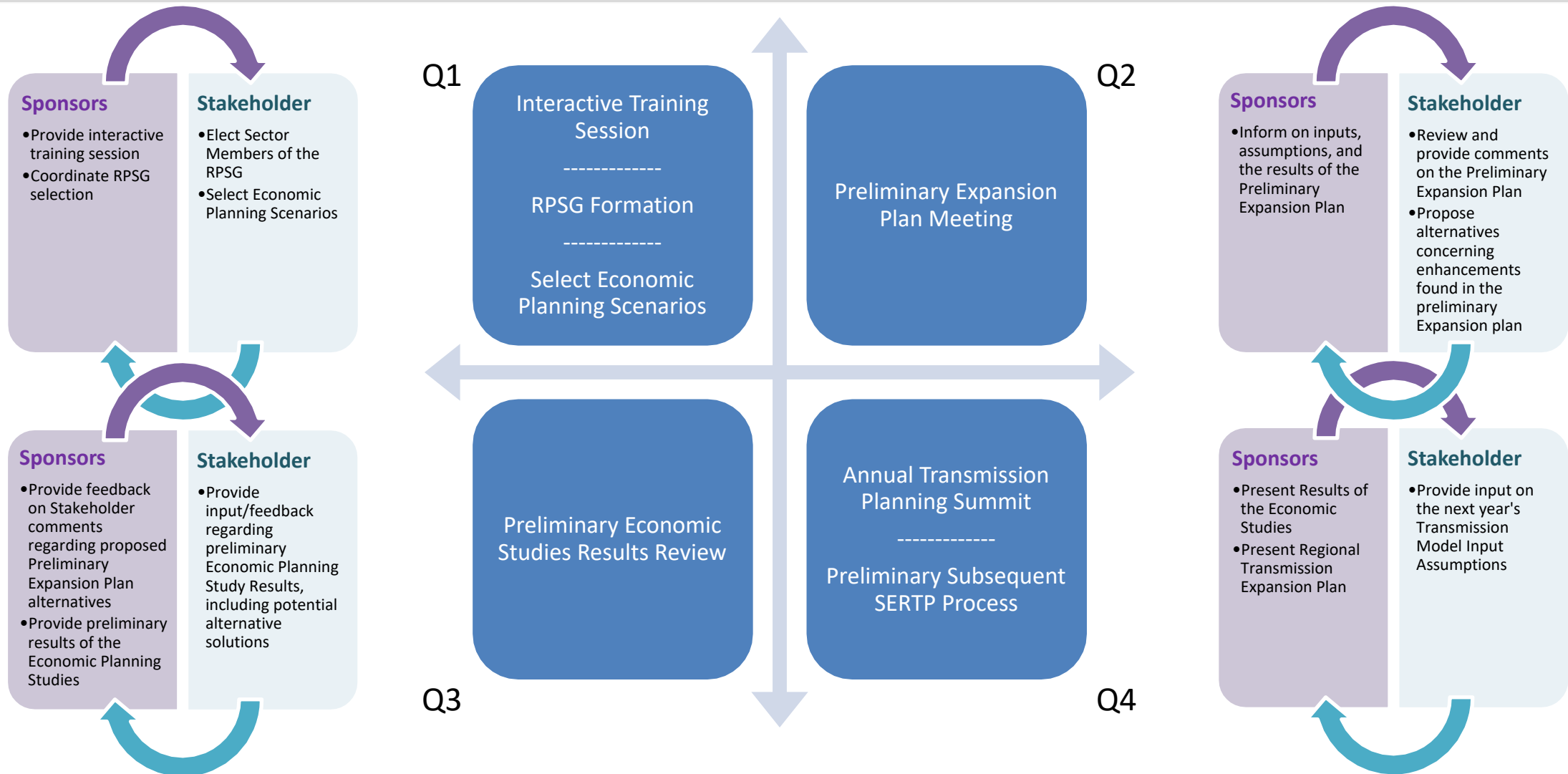


SERTP Processes & Timelines

SERTP Quarterly Stakeholder Meetings



Quarterly Meeting Functions



SERTP Processes & Timelines

2026 SERTP Regional Models

- SERTP will develop 6 coordinated regional models
- Models include latest transmission planning model information within the SERTP region
- Typically 3 versions created annually
- Available on the Secure Area of the SERTP website for those that have executed the *EIPC Planning Coordinator – Transmission Planner NDA*.

No.	Season	Year
1	Summer	2028
2		2031
3		2036
4	Shoulder	2031
5	Winter	2031
6		2036

Economic Planning Studies

- SERTP stakeholders can request up to five economic planning studies be performed annually
- These studies represent analyses of hypothetical scenarios requested by the stakeholders and do not represent an actual transmission need or commitment to build
- SERTP Sponsors identify the transmission requirements needed to move large amounts of power above and beyond existing long-term, firm transmission service commitments
 - Analysis is consistent with company-specific planning criteria

Regional Transmission Analyses

- **Regional Transmission Analyses are performed during the course of each transmission planning cycle in order to:**
 - 1) Assess if the then current regional transmission plan addresses the Transmission Provider's transmission needs
 - 2) Assess whether there may be more efficient or cost effective transmission projects to address transmission needs

SERTP Processes & Timelines

Regional Transmission Plan

Project Descriptions and Drivers

2023 SERTP Regional Transmission Plan and Input Assumptions

Southeastern Regional
TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS
SOUTHERN Balancing Authority Area

In-Service Year: 2024
Project Name: **230/115KV KINGSLAND AUTO TRANSF**
Description: Replace the 230/115kV auto transformer
Supporting Statement: The 230/115kV auto transformer at Kin

In-Service Year: 2024
Project Name: **230/115KV PINE GROVE AUTO TRANSF**
Description: Replace 230/115kV auto transformer bi
Supporting Statement: The 230/115kV auto transformer at Pin

In-Service Year: 2024
Project Name: **ABBEVILLE TS - GEORGE DAM 115 KV T**
Description: Reconductor approximately 9.5 miles
Supporting Statement: Provides additional operation and ma

Southeastern Regional
TRANSMISSION PLANNING

noteworthy generation expansion and retirements/decommissionings in the region below, while Table A7.7 provides a listing of generation assumptions based on (MW) values shown for each year reflect summer peak conditions. Version 2 Summer Peak power flow model.

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

SITE	2024	2025	2026	2027
BOWEN 1*	728	728	728	728
BOWEN 2*	728	728	728	728
BOWEN 3*	889	889	889	889
BOWEN 4*	891	891	891	891
SCHERER 1 ¹	74	74	74	74
SCHERER 2 ¹	74	74	74	74
SCHERER 3	661	661	661	661
YATES EXPANSION UNIT ²	--	--	--	--
BOWEN EXPANSION UNIT ²	--	--	--	--
BARRY 5*	785	0	--	--
BARRY 1	80	80	80	80
BARRY 2	80	80	80	80
GASTON 1	254	254	254	254
GASTON 2	256	256	256	256
GASTON 3	254	254	254	254
GASTON 4	256	256	256	256
GASTON 5	872	895	895	895

Southeastern Regional
TRANSMISSION PLANNING

REGIONAL TRANSMISSION PLAN & INPUT

The SERTP Region – A Robust, Reliable, Resilient
The SERTP transmission planning approach has resulted in a transmission system intended to enable both native load and wholesale customer demand to be met reliably and cost-effectively. The SERTP transmission planning approach provides for a resilient transmission system which responds well under uncertainty and supports routine maintenance and construction.

The 2023 regional transmission plan includes forecasted transmission capacity to reliably and cost-effectively provide for the transmission planned physical transmission capacity provides for a resilient transmission system which responds well under uncertainty and supports routine maintenance and construction.

Tables II.1 and II.2 below depict a snapshot of the major transmission types included in the regional transmission plan through the 2027 horizon.

Table II.1 2023 SERTP Regional Transmission Plan – Transmission Lines

SERTP	Total
Transmission Lines – New (Circuit Miles)	640.8
Transmission Lines – Upgrades ¹ (Circuit Miles)	1631.8
Transformers ² – New	20
Transformers ² – Replacements	12
Static VAR Compensators	4

¹A transmission line upgrade may be the result of reconductoring and/or increasing the transmission line.
²The voltages shown represent the operating voltages on the high side terminals of the transmission line.

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

SERTP	100-120 kV	121-150 kV	151-199 kV
Transmission Lines – New (Circuit Miles)	97.9	0.0	139.0
Transmission Lines – Upgrades ¹ (Circuit Miles)	1138.0	0.0	129.8
Transformers ² – New	2	0	0
Transformers ² – Replacements	2	0	0
Static VAR Compensators	0	0	0

¹A transmission line upgrade may be the result of reconductoring and/or increasing the transmission line.
²The voltages shown represent the operating voltages on the high side terminals of the transmission line.

Southeastern Regional
TRANSMISSION PLANNING

REGIONAL TRANSMISSION PLAN & INPUT ASSUMPTIONS OVERVIEW

SERTP Southeastern Regional Transmission Planning



November 27, 2023

Regional Transmission Plan & Input Assumptions Overview

Generation Assumptions/Changes

Project Totals (Mileage, \$, etc.)

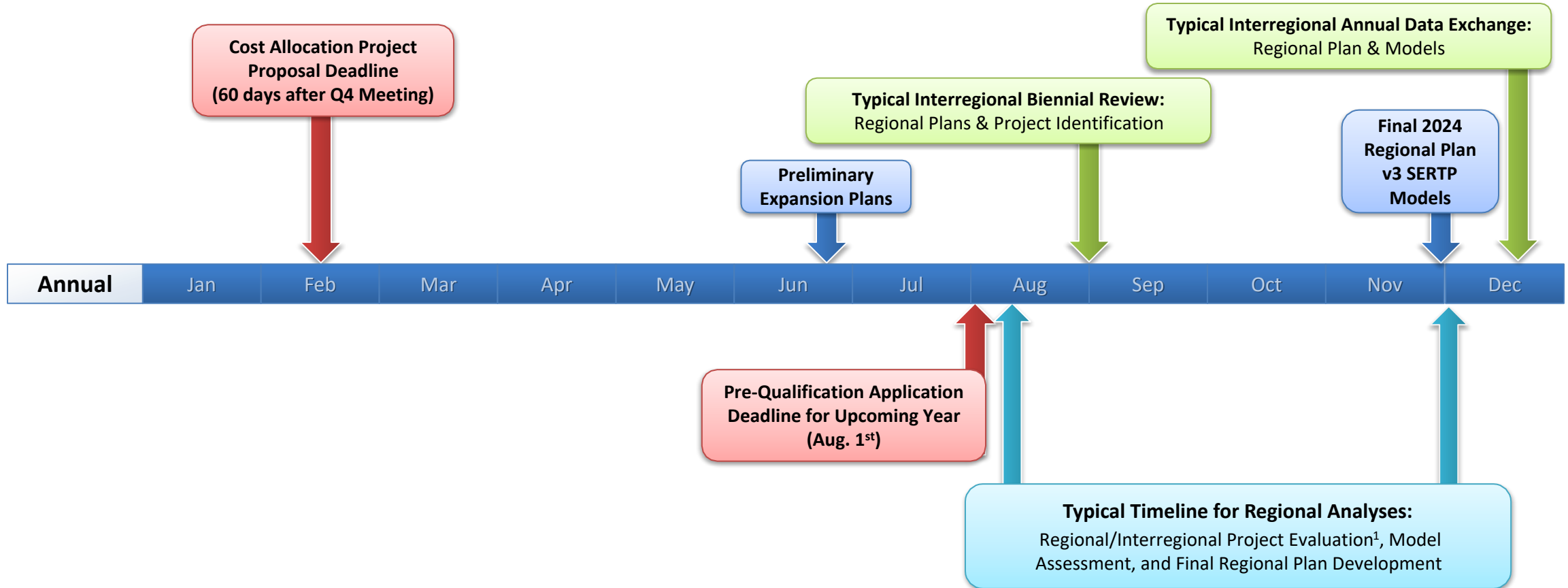
SERTP Processes & Timelines

SERTP Region - Interregional Seams



SERTP Processes & Timelines

Regional/Interregional Process Timing



1. If a potential transmission project proposed for cost allocation satisfies the initial evaluation, a schedule will be developed in consultation with the transmission developer to provide additional detailed information for further detailed analysis.

Regional Cost Allocation

- **Scope of a Regional Project Eligible for Cost Allocation**
 - Transmission line located in the SERTP region
 - 300 kV or greater
 - Spans at least 50 miles
 - Must have significant electrical or geographical differences from projects already under consideration
- **Benefits Considered**
 - Avoided costs of displaced transmission
 - Real power loss savings (regional only)
- **Evaluations**
 - Qualitative & Quantitative – 1.25 Benefit-to-Cost (BTC) Ratio
 - Feasibility
 - State jurisdictional and/or governance authorities opportunity for review

Interregional Cost Allocation

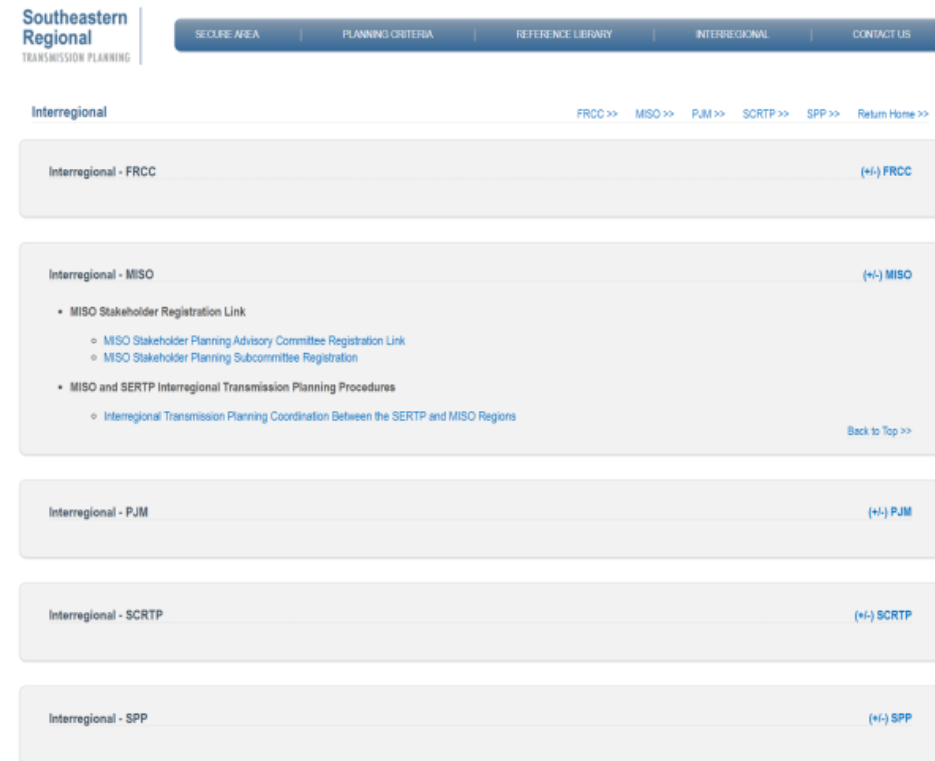
Interregional Project for Cost Allocation Must:

- Interconnect to facilities in both the SERTP and PJM regions
- Have a BTC of at least 1.25 in the SERTP Region
- Meet regional qualifications
- Be proposed in both regional processes

Interregional Coordination

- Meet annually to facilitate coordination procedures
- Website postings
- Annually exchange power-flow models
- Annually exchange regional transmission plans
- Meet biennially to review regional transmission plans
- Coordinate on any joint evaluations of potential interregional transmission projects

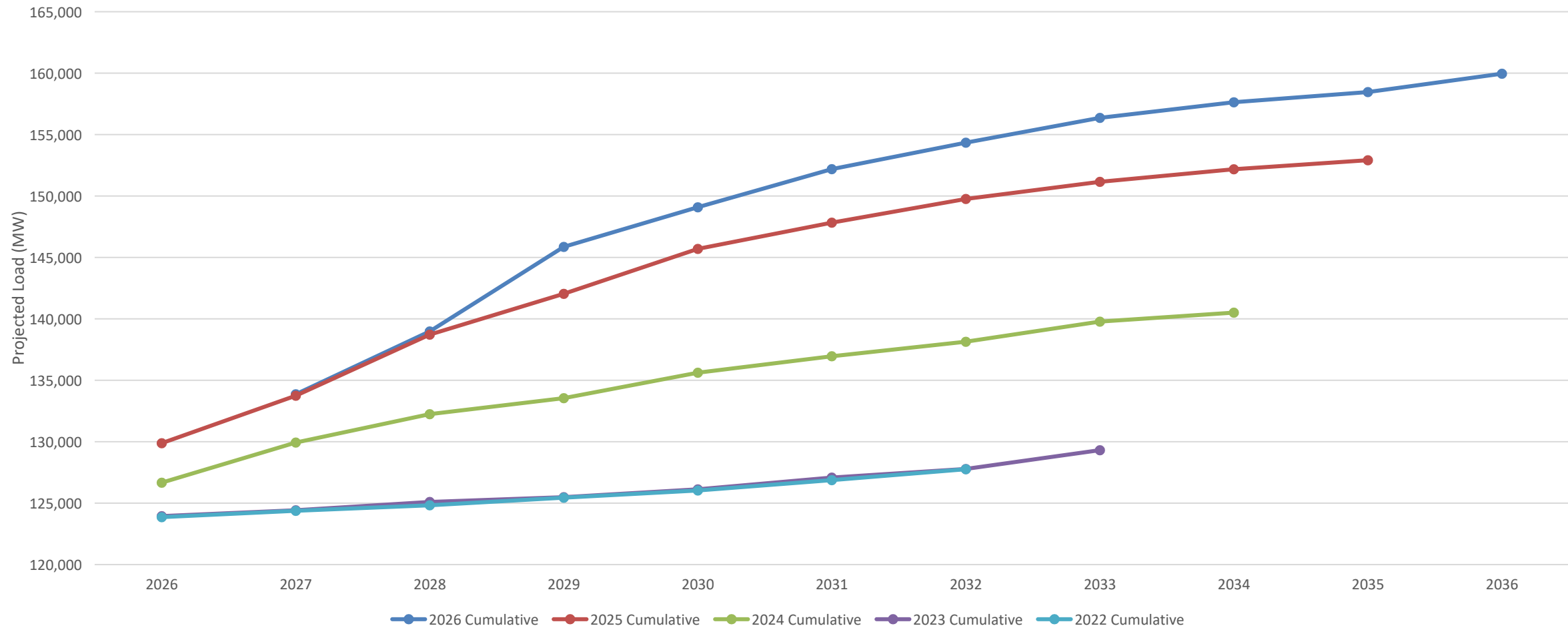
[SERTP Website / Interregional](#)



SERTP Regional Model Assumptions

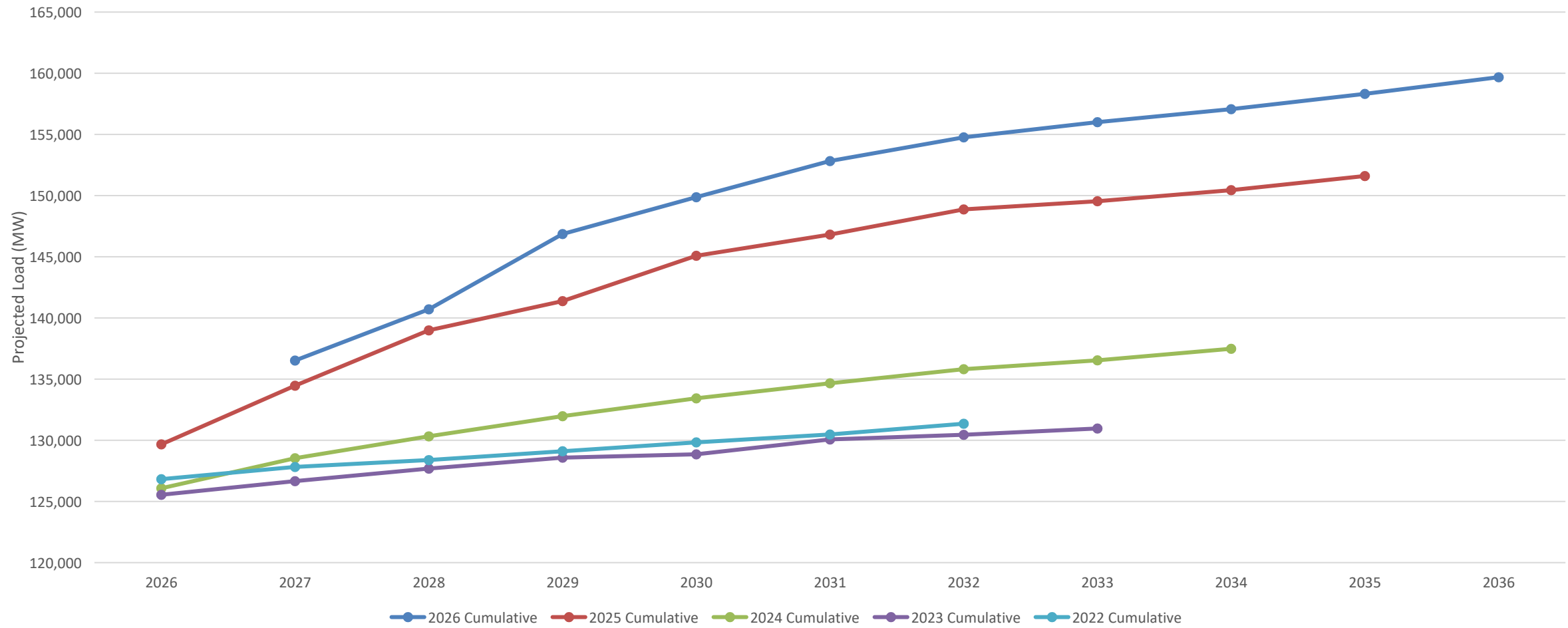
SERTP Cumulative Summer Peak Load Forecast

SERTP Region - Non-Coincident Summer Peak Load Forecast



SERTP Cumulative Winter Peak Load Forecast

SERTP Region - Non-Coincident Winter Peak Load Forecast



SERTP

Preliminary Transmission Expansion Plans

Southeastern Regional Transmission Planning (SERTP)



PRELIMINARY 10 YEAR TRANSMISSION EXPANSION PLANS:

AECI

Duke Energy Carolinas

Duke Energy Progress

LG&E/KU

Southern Balancing Authority Area

TVA

Preliminary Transmission Expansion Plan

The projects described in this presentation represent the preliminary ten (10) year transmission expansion plan. The transmission expansion plan is periodically reviewed and may be revised due to changes in assumptions. This presentation does not represent a commitment to build for projects listed in the future.

Criteria For Projects in Presentation

- **For the full list of projects, the 2026 SERTP Preliminary Expansion Plan Report is posted on the SERTP website**
 - [2026 SERTP Preliminary Expansion Plan Report \(Non-CEII\)](#)
- **Criteria for projects included in today's presentation:**
 - Tie lines: All projects, *OR*
 - 300 kV and above: All projects, *OR*
 - 161 kV – 300 kV: New BES stations and/or transmission line projects ~20 miles or longer

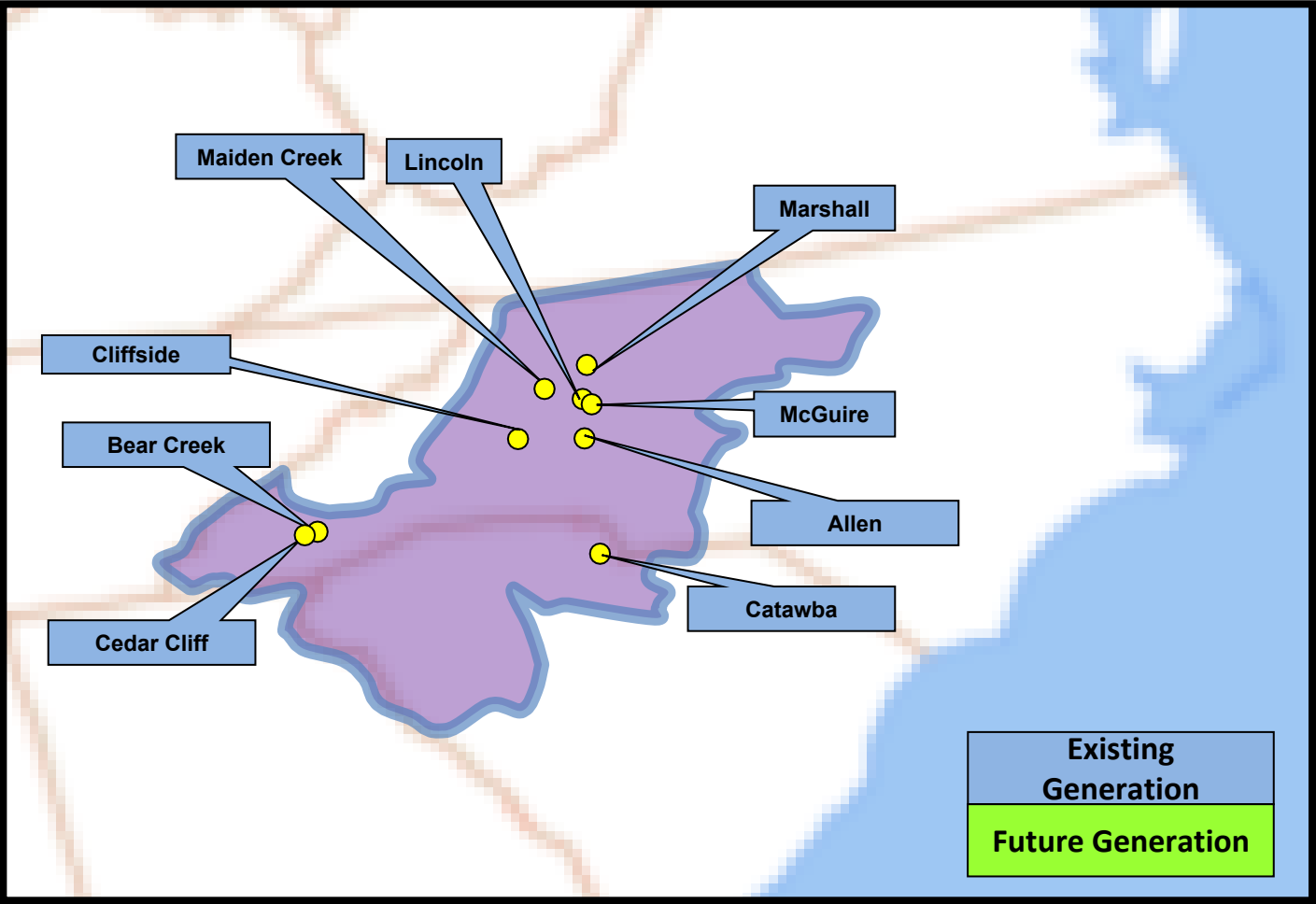
Regional Transmission Expansion Plan – Alternative Transmission Technology

Advanced Transmission Technology	100 kV – 200 kV	200 kV – 300 kV	300 kV – 500 kV	Total
Advance Conductor (mi.)	1,082	767	47	1,896
Static Compensator	2	2	-	4
Power Flow Control Device	-	1	-	1

DUKE ENERGY CAROLINAS Balancing Authority Area 2026 Generation Assumptions

DUKE ENERGY CAROLINAS – Generation Assumptions (Existing)

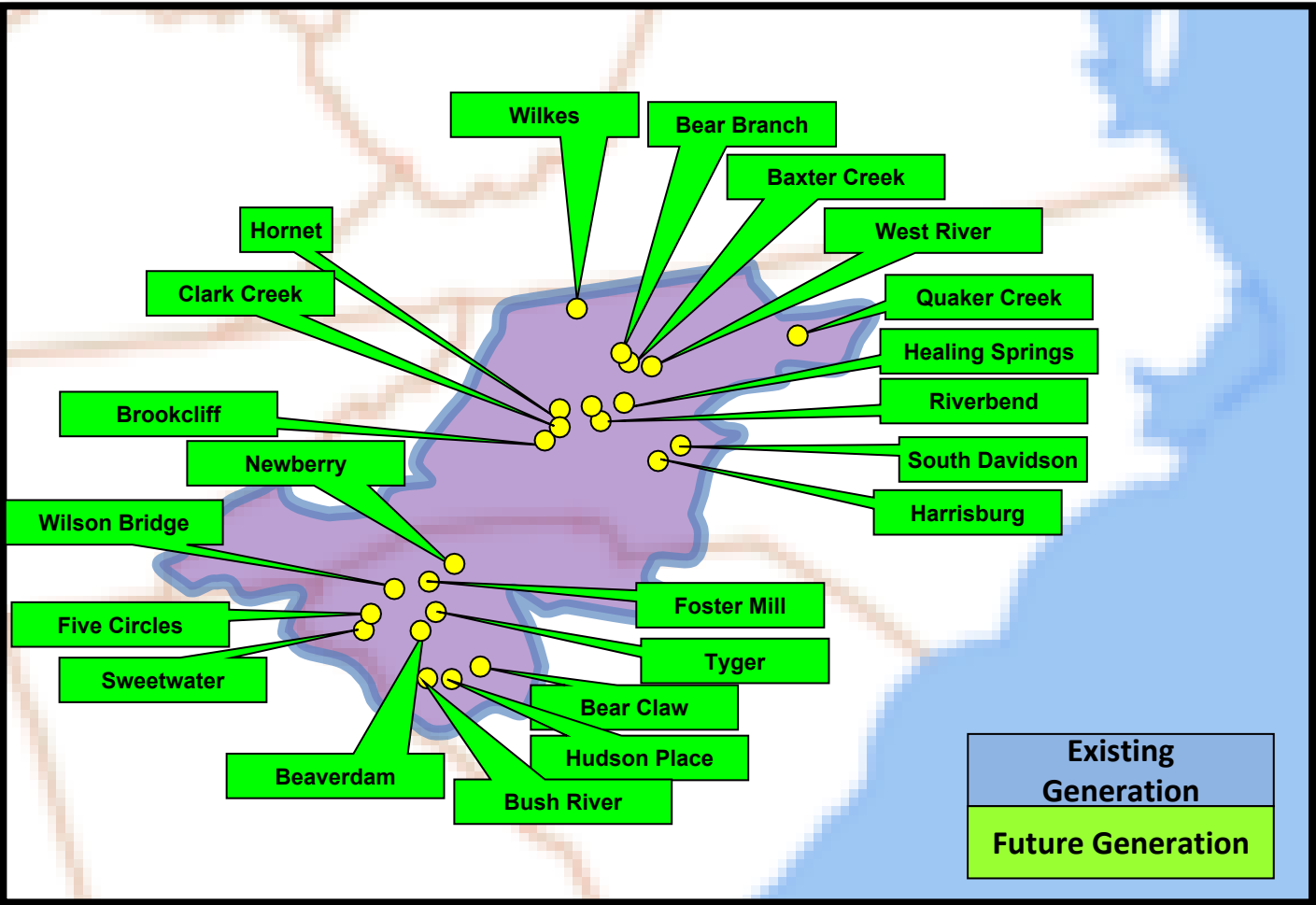
The following diagram depicts the location of generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process.



Includes generation with signed interconnection agreements. Proxy generation used where the Generation Replacement Request Process is expected to be utilized.

DUKE ENERGY CAROLINAS – Generation Assumptions (Future)

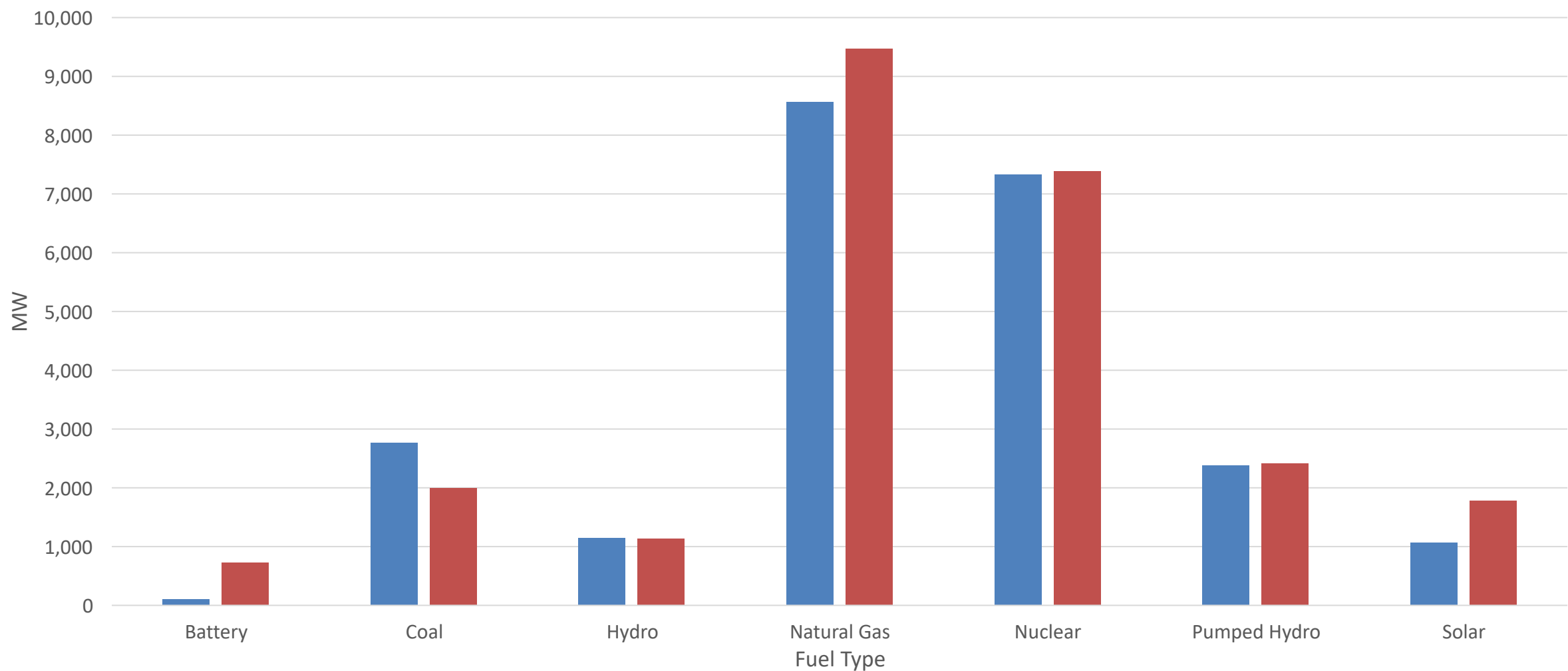
The following diagram depicts the location of generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process.



Includes generation with signed interconnection agreements. Proxy generation used where the Generation Replacement Request Process is expected to be utilized.

DEC Generation Summary

Generation Modeling Assumptions (MW)



■ Summer 2028 ■ Summer 2036

Includes generation with signed interconnection agreements. Proxy generation used where the Generation Replacement Request Process is expected to be utilized.

DEC Balancing Authority Area

DEC – Generation Assumptions

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Cliffside 5	Coal	574	574	574	574	0	--	--	--	--	--
Cliffside 5 Proxy ¹	Proxy Generation	--	--	--	--	574	574	574	574	574	574
Marshall 1	Coal	388	388	0	--	--	--	--	--	--	--
Marshall 1 Replacement	Natural Gas	--	--	388	388	388	388	388	388	388	388
Marshall 2	Coal	392	392	0	--	--	--	--	--	--	--
Marshall 2 Replacement	Natural Gas	--	--	392	392	392	392	392	392	392	392
Marshall 3	Coal	705	705	705	705	705	0	--	--	--	--
Marshall 3 Proxy ¹	Proxy Generation	--	--	--	--	--	705	705	705	705	705
Marshall 4	Coal	711	711	711	711	711	0	--	--	--	--
Marshall 4 Proxy ¹	Proxy Generation	--	--	--	--	--	711	711	711	711	711
Bear Creek Hydro	Hydro Uprate	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Cedar Cliff Hydro	Hydro Uprate	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
McGuire 1	Nuclear Uprate	--	--	--	18	18	18	18	18	18	18
McGuire 2	Nuclear Uprate	--	--	--	--	25	25	25	25	25	25
Catawba 1	Nuclear Uprate	--	--	--	--	12	12	12	12	12	12

1. Generators left in model in expectation of replacement generation through the Generation Replacement Request process.
2. Replacement for retired Allen unit 1 Coal Fired Unit

Includes generation with signed interconnection agreements.

DEC Balancing Authority Area

DEC – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Allen 2 BESS (GRR) ²	Storage	--	167	167	167	167	167	167	167	167	167
Riverbend BESS	Storage	--	115	115	115	115	115	115	115	115	115
Wilkes	Storage	--	120	120	120	120	120	120	120	120	120
Harrisburg BESS	Storage	--	--	197	197	197	197	197	197	197	197
Cliffside 2	Storage	--	--	199.9	199.9	199.9	199.9	199.9	199.9	199.9	199.9
Allen 3	Storage	--	--	199	199	199	199	199	199	199	199
Tyger	Solar + Storage	--	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28	74.99 / 28
Clark Creek	Solar + Storage	--	40 / 14	40 / 14	40 / 14	40 / 14	40 / 14	40 / 14	40 / 14	40 / 14	40 / 14
Maiden Creek	Surplus Storage	50	50	50	50	50	50	50	50	50	50
Bear Branch	Solar	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
Beaverdam	Solar	42	42	42	42	42	42	42	42	42	42
Hornet	Solar	73	73	73	73	73	73	73	73	73	73
Baxter Creek	Solar	30	30	30	30	30	30	30	30	30	30
Healing Springs	Solar	55	55	55	55	55	55	55	55	55	55
Sweetwater	Solar	34	34	34	34	34	34	34	34	34	34
West River	Solar	40	40	40	40	40	40	40	40	40	40

2. Replacement for retired Allen unit 1 Coal Fired Unit

Includes generation with signed interconnection agreements.

DEC Balancing Authority Area

DEC – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Quaker Creek	Solar	--	35	35	35	35	35	35	35	35	35
Bear Claw	Solar	--	28.25	28.25	28.25	28.25	28.25	28.25	28.25	28.25	28.25
Bush River	Solar	--	45	45	45	45	45	45	45	45	45
Hudson Place	Solar	--	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
Newberry	Solar	--	--	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
Brookcliff	Solar	--	--	50	50	50	50	50	50	50	50
Five Circles	Solar	--	--	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
Wilson Bridge	Solar	--	--	72	72	72	72	72	72	72	72
Foster Mill	Solar	--	--	54	54	54	54	54	54	54	54

Includes generation with signed interconnection agreements.

DEC Balancing Authority Area

DEC – Generation Assumptions (Point-to-Point)

The following table depicts generation assumptions based upon expected long-term firm point-to-point commitments for the SERTP 2026 Planning Process. The years shown represent Summer Peak conditions.

SITE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Cleveland	196	196	196	196	196	196	196	196	196	196
Broad River	925	925	925	925	925	925	925	925	925	925
Catawba	557	557	457	457	457	457	457	457	457	457
Rowan	373	376	370	180	180	180	180	180	180	180
Kings Mountain	92	92	92	92	92	92	92	92	92	92
Cherokee	98	98	98	98	98	98	98	98	98	98

DUKE ENERGY CAROLINAS Balancing Authority Area Preliminary Transmission Expansion Plan

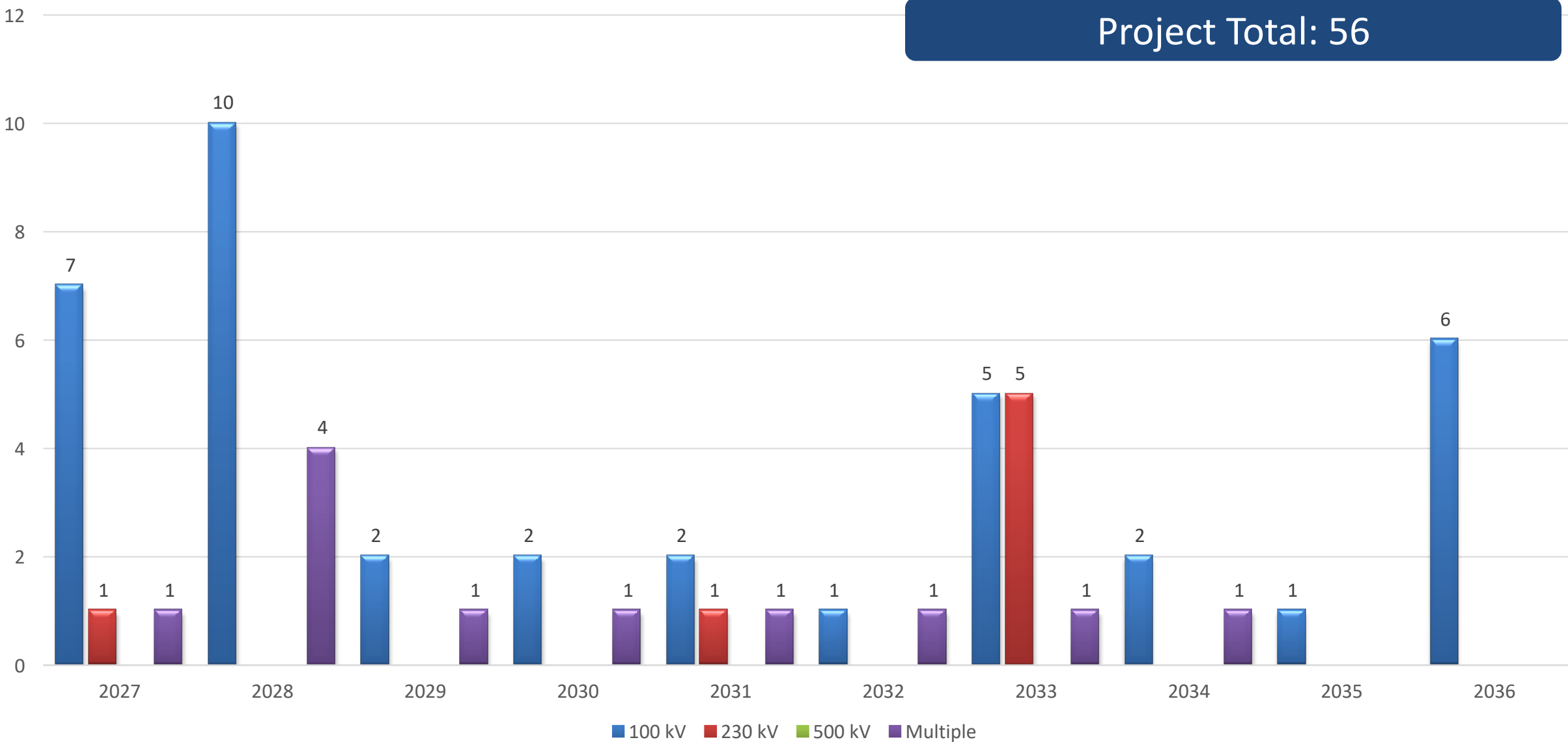
DEC Balancing Authority Area

DEC Projects and descriptions in the SERTP Preliminary Report and presented here are based on the 2025 CTPC Collaborative Transmission Plan Report published on the CTPC Website published in April 2026 (linked below).

[2025 CTPC Collaborative Transmission Plan Report 04-16-2026](#)

DEC Project Summary

Project Total: 56



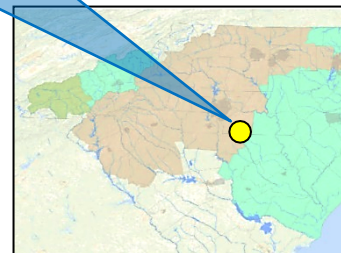
DUKE ENERGY CAROLINAS

• 2027

OAKBORO TIE – LILESVILLE TIE (DEP) 230 KV TRANSMISSION LINE



- **DESCRIPTION:**
 - Rebuild 5.13 miles (Oakboro to DEP change of ownership) of the Oakboro Tie – Lilesville Tie (DEP) 230 kV Transmission Line with bundled 1272 ACSR at 120°C.
- **SUPPORTING STATEMENT:**
 - Various generator interconnection studies have shown the need to upgrade this line. This upgrade is needed to enable generation consistent with the approved IRP.
 - Included in the Red Zone 2.0 list of projects.



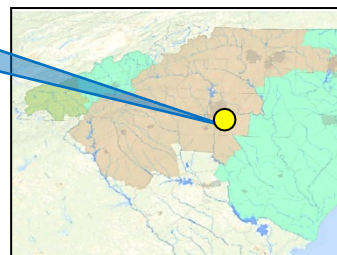
DUKE ENERGY CAROLINAS

• 2033

NEWPORT TIE – MORNING STAR TIE 230 KV TRANSMISSION LINE



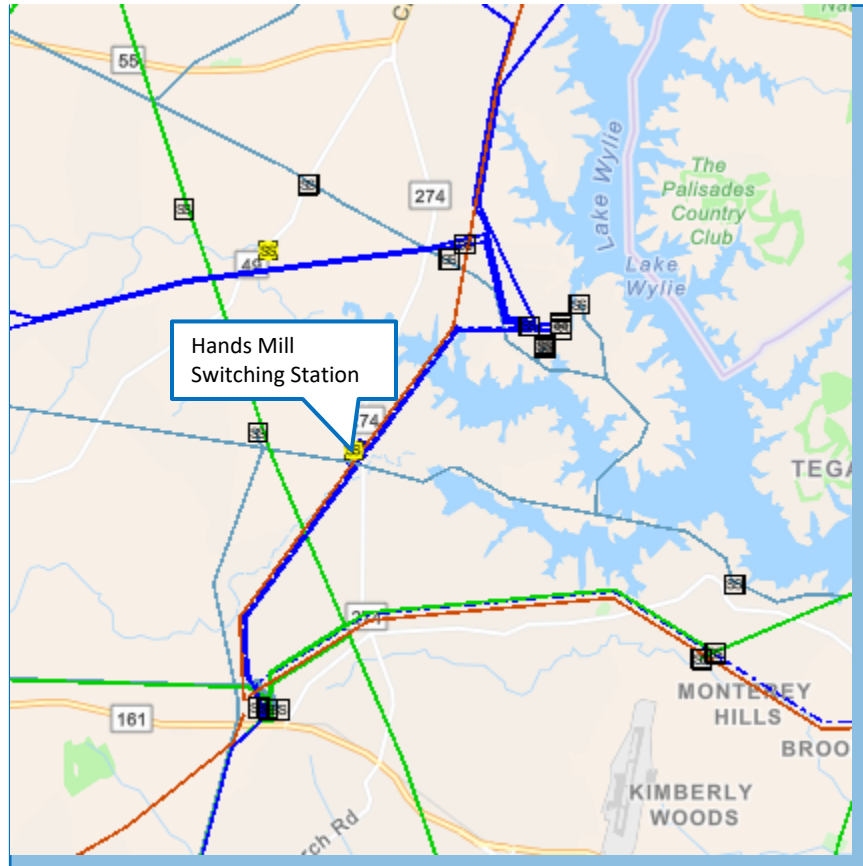
- **DESCRIPTION:**
 - Add a second circuit to the existing Newport Tie – Morning Star Tie 230 kV Transmission Line. Conductor will be 954 ACSR at 120°C.
- **SUPPORTING STATEMENT:**
 - A number of contingencies on the Duke Energy Carolinas 230 kV transmission system can cause thermal overloads on the Newport Tie – Morning Star Tie 230 kV T.L.



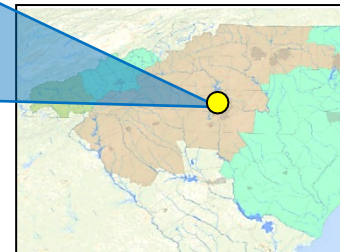
DUKE ENERGY CAROLINAS

• 2026

HANDS MILL SWITCHING STATION



- **DESCRIPTION:**
 - Construct a new switching station on the Newport Tie – Catawba Nuclear Station 230 kV Transmission Line
- **SUPPORTING STATEMENT:**
 - New loads in the vicinity require the new switching station.



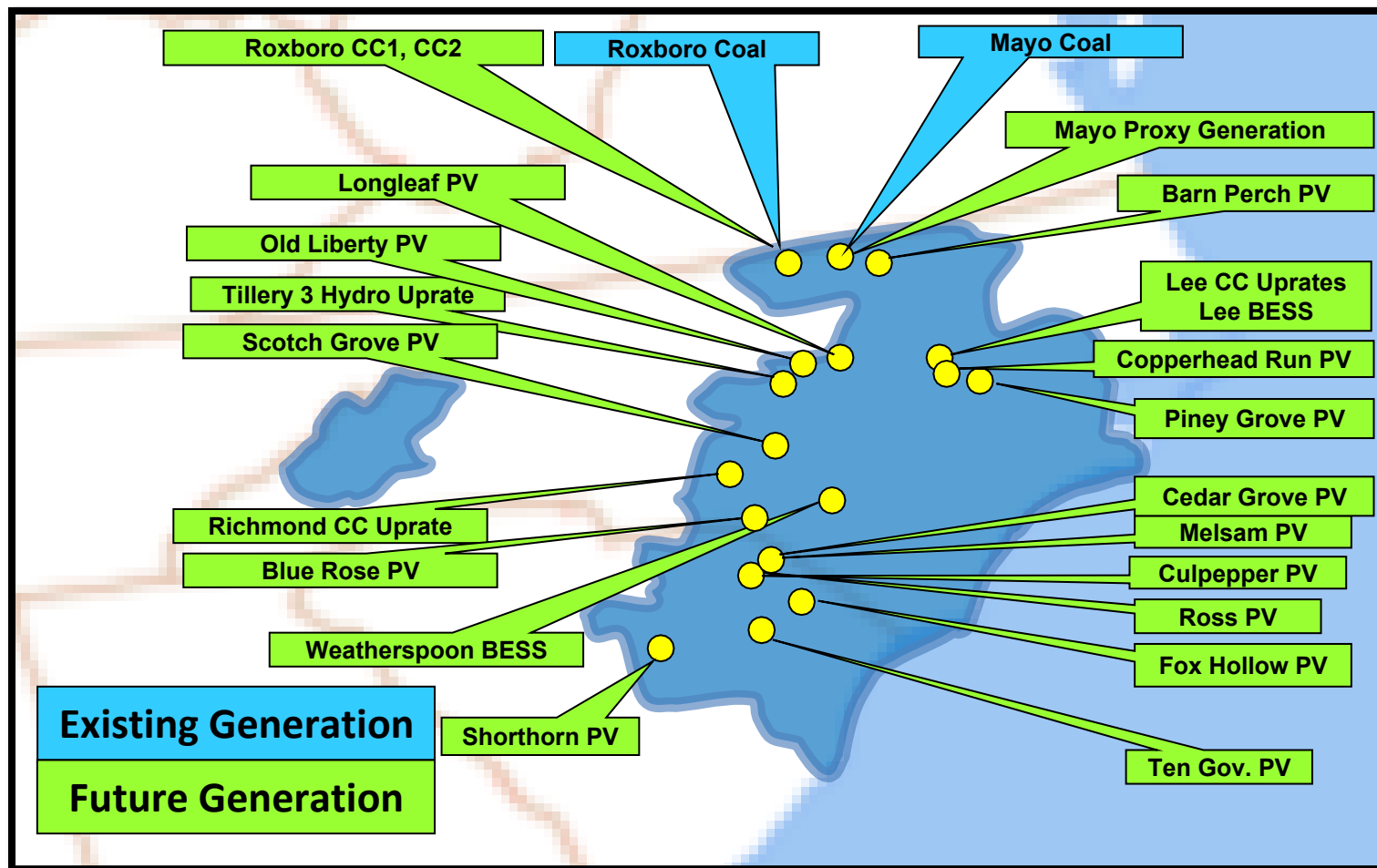
DUKE ENERGY PROGRESS

Balancing Authority Areas

2026 Generation Assumptions

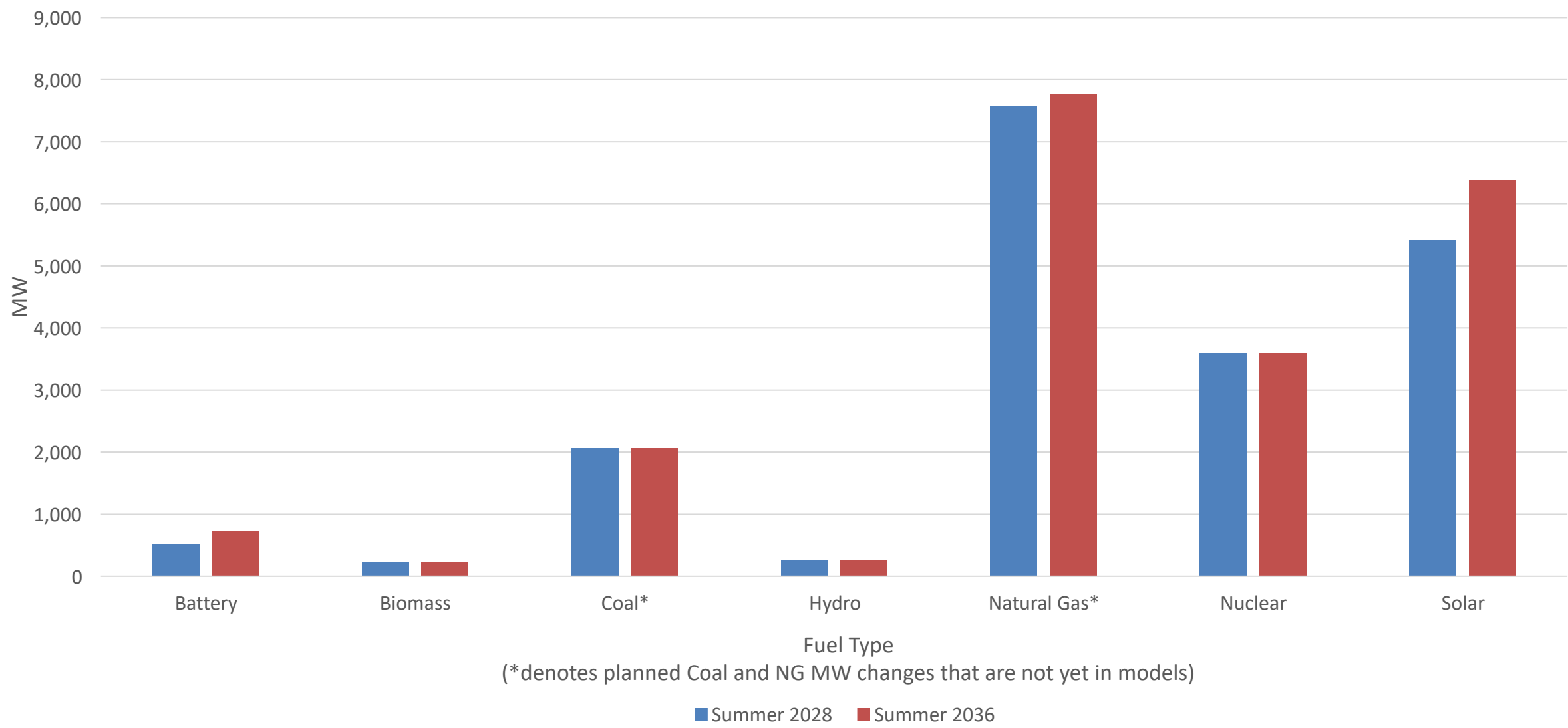
DUKE ENERGY PROGRESS – Generation Assumptions

The following diagram depicts the location of generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process.



DEP Generation Summary

Generation Capacity (MW)



DEP Balancing Authority Areas

DEP – Generation Assumptions

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
ROXBORO #1 COAL	Coal	379	0	--	--	--	--	--	--	--	--
ROXBORO #4 COAL	Coal	698	0	--	--	--	--	--	--	--	--
ROXBORO #2 COAL ¹	Coal	668	668	668	668	668	668	668	0	--	--
ROXBORO #3 COAL ¹	Coal	694	694	694	694	694	694	694	0	--	--
MAYO COAL ¹	Coal	704	704	704	704	0	--	--	--	--	--
ROXBORO CC1 (REPLACEMENT)	Natural Gas	--	1047	1047	1047	1047	1047	1047	1047	1047	1047
ROXBORO CC1 (INCREMENTAL)	Natural Gas	--	307	307	307	307	307	307	307	307	307
ROXBORO CC2 (FUTURE) ²	Natural Gas	--	--	--	1312	1312	1312	1312	1312	1312	1312
MAYO (FUTURE) ³	TBD	--	--	--	--	704	704	704	704	704	704

1. Generators left in models in expectation of replacement generation through the Generation Replacement Request (GRR) or DISIS processes.
2. Additional planned generation through the large generator interconnection process, not yet in power flow models.
3. Approximate beginning-of-year time frame for Mayo retirement pending equally reliable replacement resources exist to allow retirements, not yet in power flow models

DEP – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
TILLERY 3 UPRATE	Hydro	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26	6.26
HF LEE CC 115 UPRATE	Natural Gas	52	52	52	52	52	52	52	52	52	52
HF LEE CC 230 UPRATE	Natural Gas	74	74	74	74	74	74	74	74	74	74
SMITH CC UPRATE	Natural Gas	46.75	46.75	46.75	46.75	46.75	46.75	46.75	46.75	46.75	46.75

Includes generation with signed interconnection agreements.

DUKE ENERGY PROGRESS EAST/WEST Balancing Authority Areas

DEP – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Dist. BESS	Storage	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55
Lee BESS	Storage	--	260	260	260	260	260	260	260	260	260
Cedar Grove SPS	Solar + Storage	--	70 / 28	70 / 28	70 / 28	70 / 28	70 / 28	70 / 28	70 / 28	70 / 28	70 / 28
Scotch Grove SPS	Solar + Storage	--	80 / 32	80 / 32	80 / 32	80 / 32	80 / 32	80 / 32	80 / 32	80 / 32	80 / 32
Old Liberty SPS	Solar + Storage	--	44 / 17	44 / 17	44 / 17	44 / 17	44 / 17	44 / 17	44 / 17	44 / 17	44 / 17
Fox Hollow SPS	Solar + Storage	--	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1	63.9 / 24.1
Ten Governors SPS	Solar + Storage	--	65 / 35	65 / 35	65 / 35	65 / 35	65 / 35	65 / 35	65 / 35	65 / 35	65 / 35
Melsam SPS	Solar + Storage	--	65 / 25	65 / 25	65 / 25	65 / 25	65 / 25	65 / 25	65 / 25	65 / 25	65 / 25
Barn Perch PV	Solar	--	80	80	80	80	80	80	80	80	80
Blue Rose PV	Solar	--	275	275	275	275	275	275	275	275	275
Longleaf SPS	Solar + Storage	--	100 / 35	100 / 35	100 / 35	100 / 35	100 / 35	100 / 35	100 / 35	100 / 35	100 / 35
Culpepper PV	Solar	--	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
Ross PV	Solar	--	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
Shorthorn PV	Solar	--	--	60	60	60	60	60	60	60	60
Piney Grove SPS	Solar + Storage	--	--	67 / 25	67 / 25	67 / 25	67 / 25	67 / 25	67 / 25	67 / 25	67 / 25
Copperhead Run PV	Solar	--	--	80	80	80	80	80	80	80	80
Weatherspoon BESS	Storage	--	--	199.9	199.9	199.9	199.9	199.9	199.9	199.9	199.9

Includes generation with signed interconnection agreements.

DEP– Generation Assumptions (Point-to-Point)

The following table depicts generation assumptions based upon expected long-term firm point-to-point commitments for the SERTP 2026 Planning Process. The years shown represent Summer Peak conditions.

SITE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
HAMLET #2 AND #3	110	110	110	110	110	110	110	110	110	110
HAMLET #6	55	55	55	55	55	55	55	55	55	55

DUKE ENERGY PROGRESS Balancing Authority Areas Preliminary Transmission Expansion Plans

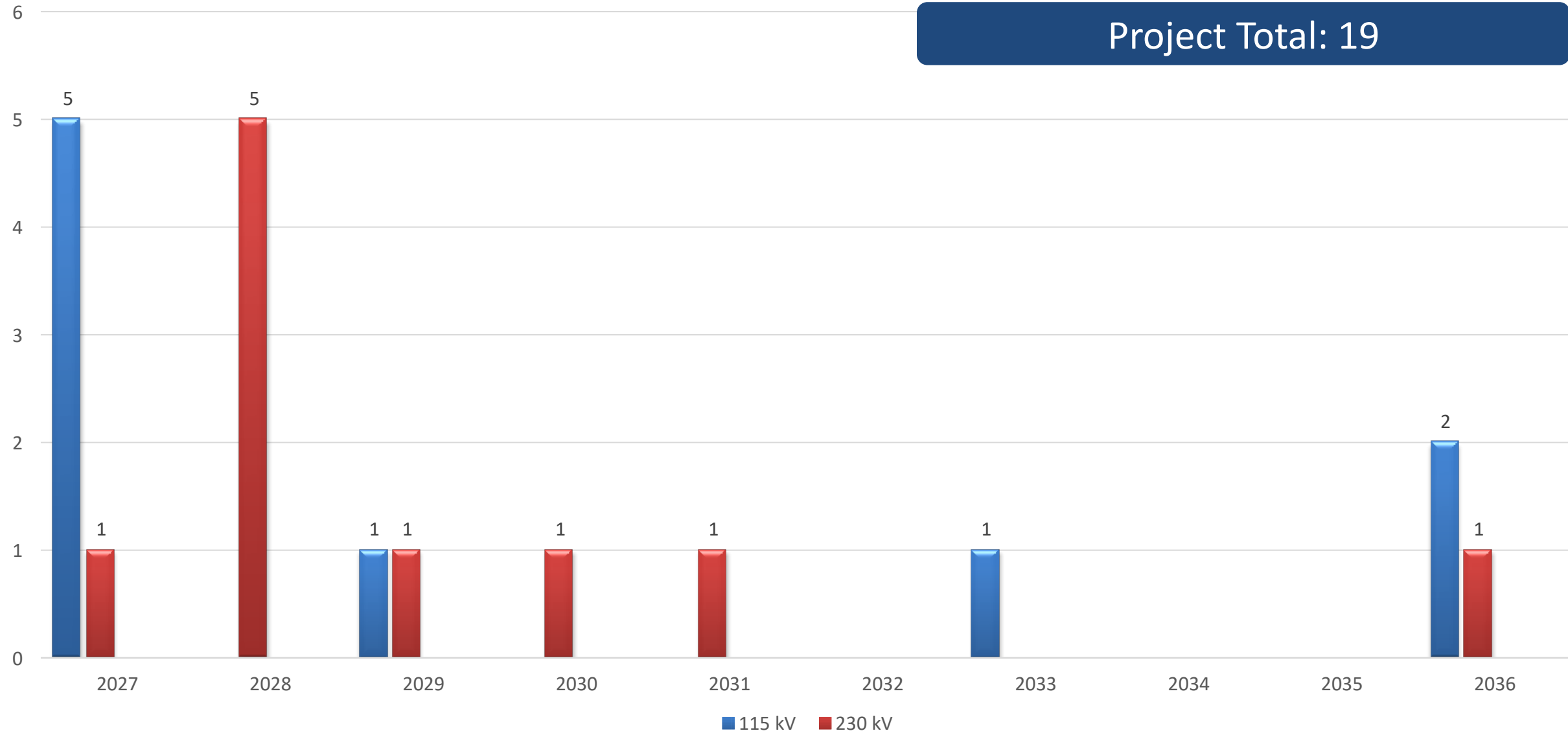
DEP Balancing Authority Area

DEP Projects and descriptions in the SERTP Preliminary Report and presented here are based on the 2025 CTPC Collaborative Transmission Plan Report published on the CTPC Website published in April 2026 (linked below).

[2025 CTPC Collaborative Transmission Plan Report 04-16-2026](#)

DEP Project Summary

Project Total: 19



DUKE ENERGY PROGRESS EAST

Balancing Authority Area

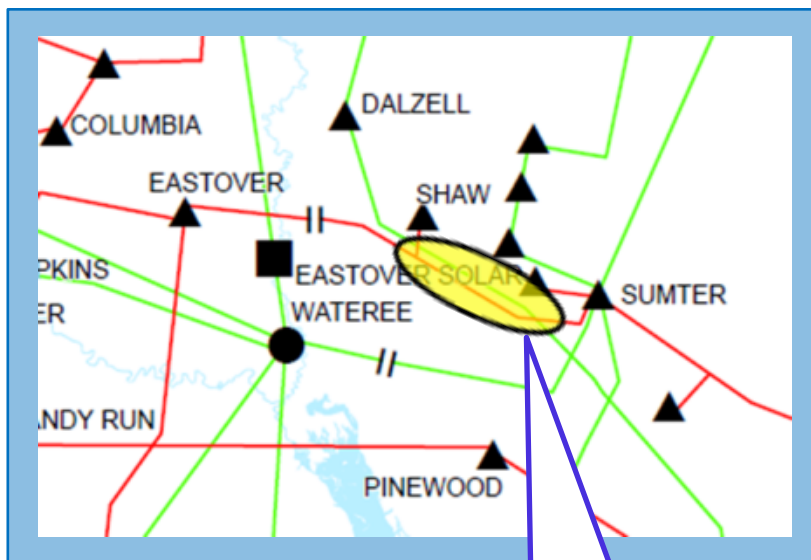
Preliminary Transmission Expansion Plan

DEP Balancing Authority Areas

DUKE ENERGY PROGRESS EAST

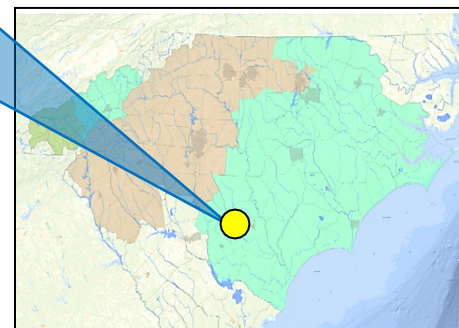
• 2027

SUMTER – DESC EASTOVER 115 KV LINE, REBUILD GOLD KIST - KINGS HWY



REBUILD 5.82 MILES OF 115 KV T.L.
WITH 1272 ACSR

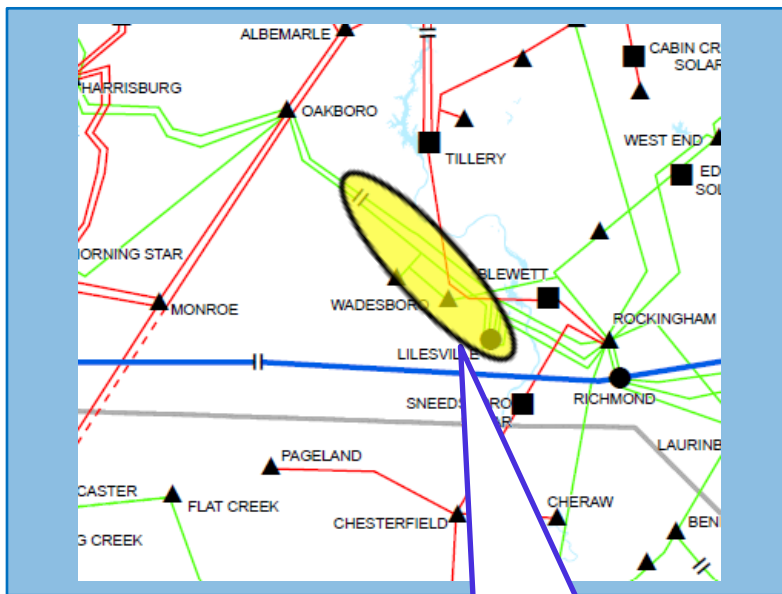
- **DESCRIPTION:**
 - Rebuild 5.82 miles, the 397.5 ACSR portion of Sumter Gold Kist Tap - Sumter Kings Hwy, to 1272 ACSR 212°F.
- **SUPPORTING STATEMENT:**
 - Multiple contingencies cause the Gold Kist - Kings Hwy section of the Sumter-Eastover 115 kv line to overload.



DUKE ENERGY PROGRESS EAST

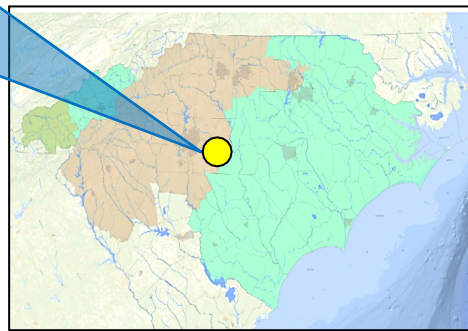
• 2028

LILESVILLE – OAKBORO (DEC TIE) 230 KV BLACK AND WHITE LINES, REBUILD



REBUILD 49.4 MILES OF 230 KV T.L.
WITH 6-1272 ACSR

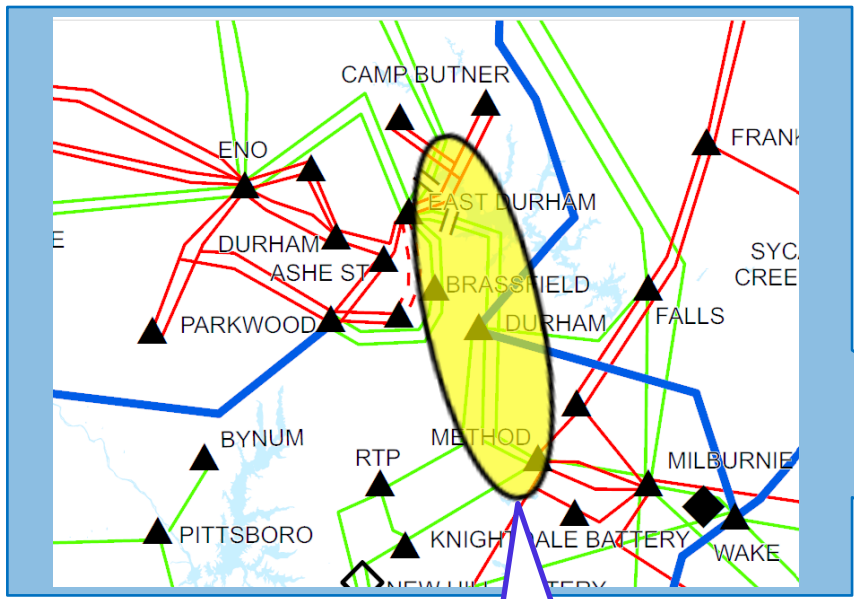
- **DESCRIPTION:**
 - Rebuild the DEP portion of Lilesville - Oakboro 230 kV Black and White lines to 6-1272 ACSR 212°F conductor, 29.7 miles each line.
- **SUPPORTING STATEMENT:**
 - Various generator interconnection studies have shown the need to upgrade this line. This upgrade is needed to enable generation consistent with the approved IRP.



DUKE ENERGY PROGRESS EAST

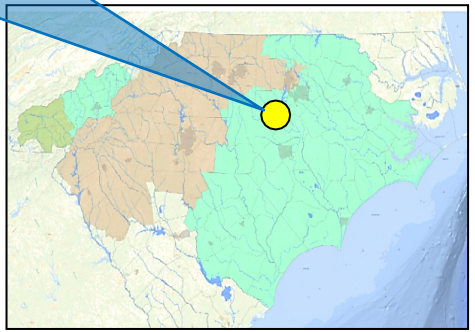
• 2028

METHOD-DPC EAST DURHAM 230 KV LINE, UPGRADE EQUIPMENT



UPGRADE LINE SWITCHES
AND TERMINAL EQUIPMENT

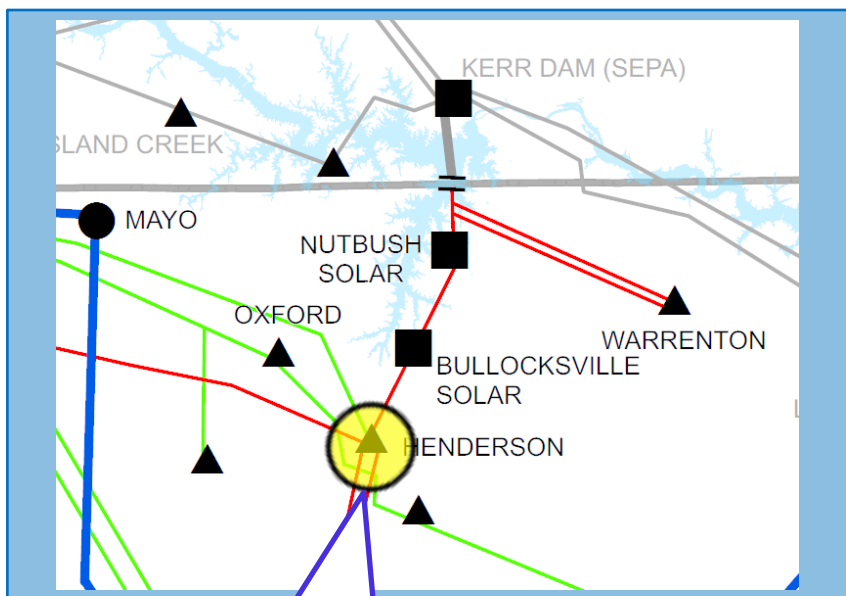
- **DESCRIPTION:**
 - Upgrade line switches and terminal equipment at both ends of the Method – DPC East Durham 230 kV line to allow the full cold winter line conductor rating.
- **SUPPORTING STATEMENT:**
 - Various outages overload the Method – DPC East Durham 230 kV line.



DUKE ENERGY PROGRESS EAST

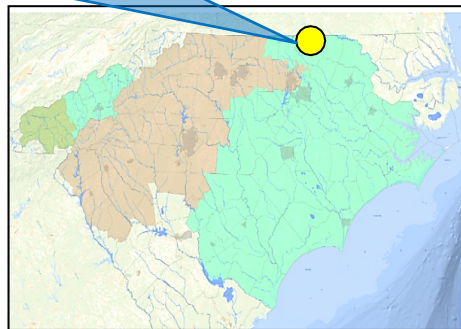
• 2029

HENDERSON – DVP KERR DAM 115 KV LINE, UPGRADE EQUIPMENT



UPGRADE TERMINAL EQUIPMENT AT
HENDERSON 230 KV SUB

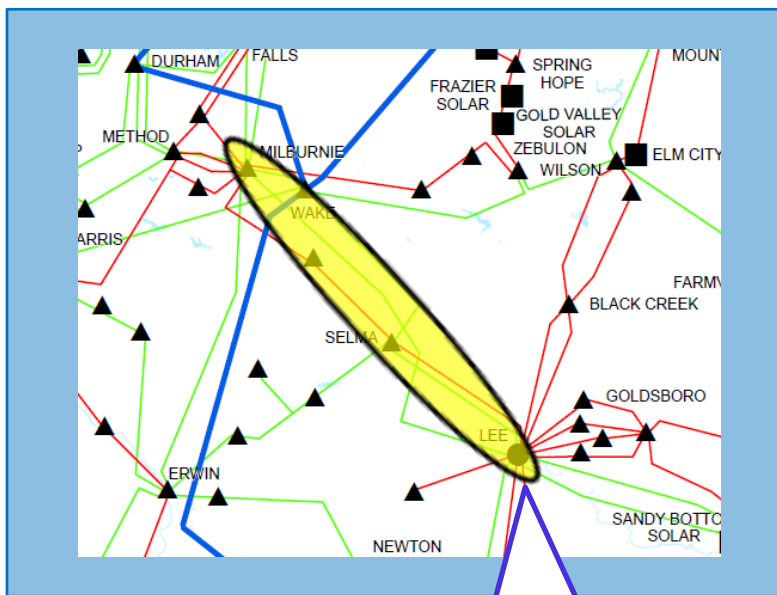
- **DESCRIPTION:**
 - Upgrade terminal equipment at the Henderson 230 kV Sub on the Henderson-DVP Kerr Dam 115 kV line.
- **SUPPORTING STATEMENT:**
 - The Henderson – DVP Kerr Dam 115 kV line overloads for various contingencies.



DUKE ENERGY PROGRESS EAST

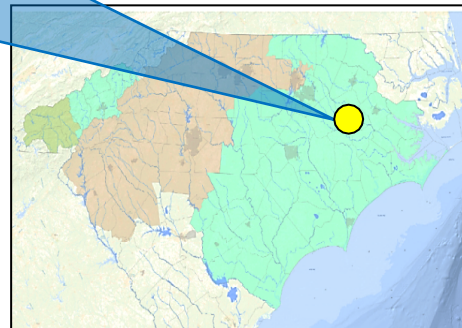
• 2031

LEE - MILBURNIE 230 KV TRANSMISSION LINE, REBUILD



REBUILD 40.2 MILES OF 230 kV T.L.
WITH 954 HS285 ACSS/TW

- **DESCRIPTION:**
 - Rebuild the entire Lee - Milburnie 230 kV transmission line with 954 MCM HS285 ACSS/TW 392°F conductor (40.2 miles) and upgrade terminal equipment.
- **SUPPORTING STATEMENT:**
 - Various generator interconnection studies have shown the need to upgrade this line. This upgrade is needed to enable generation consistent with the approved IRP.



DUKE ENERGY PROGRESS WEST

Balancing Authority Area

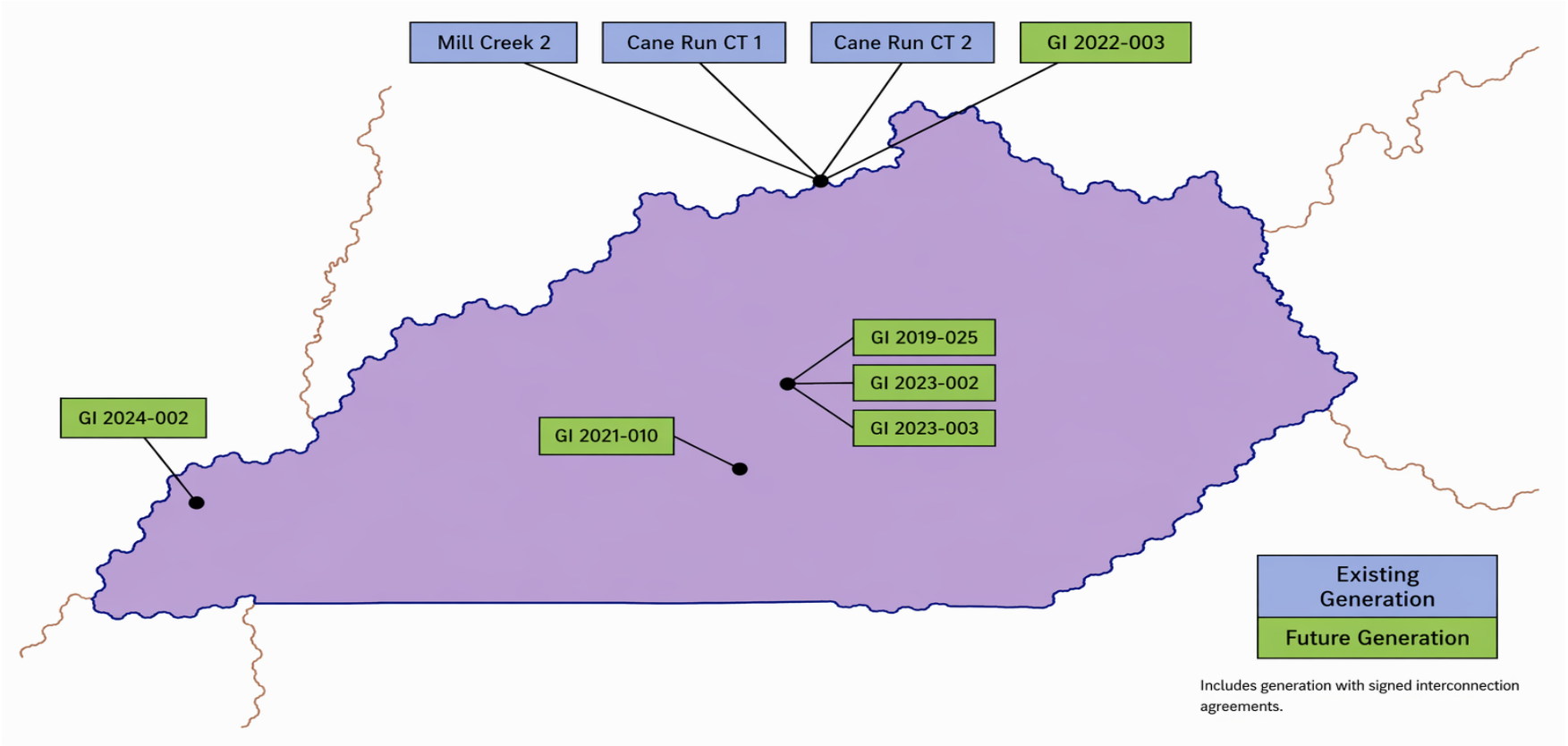
Preliminary Transmission Expansion Plan

* DEP West has no projects that meet the presentation criteria in the 2026 SERTP Process.

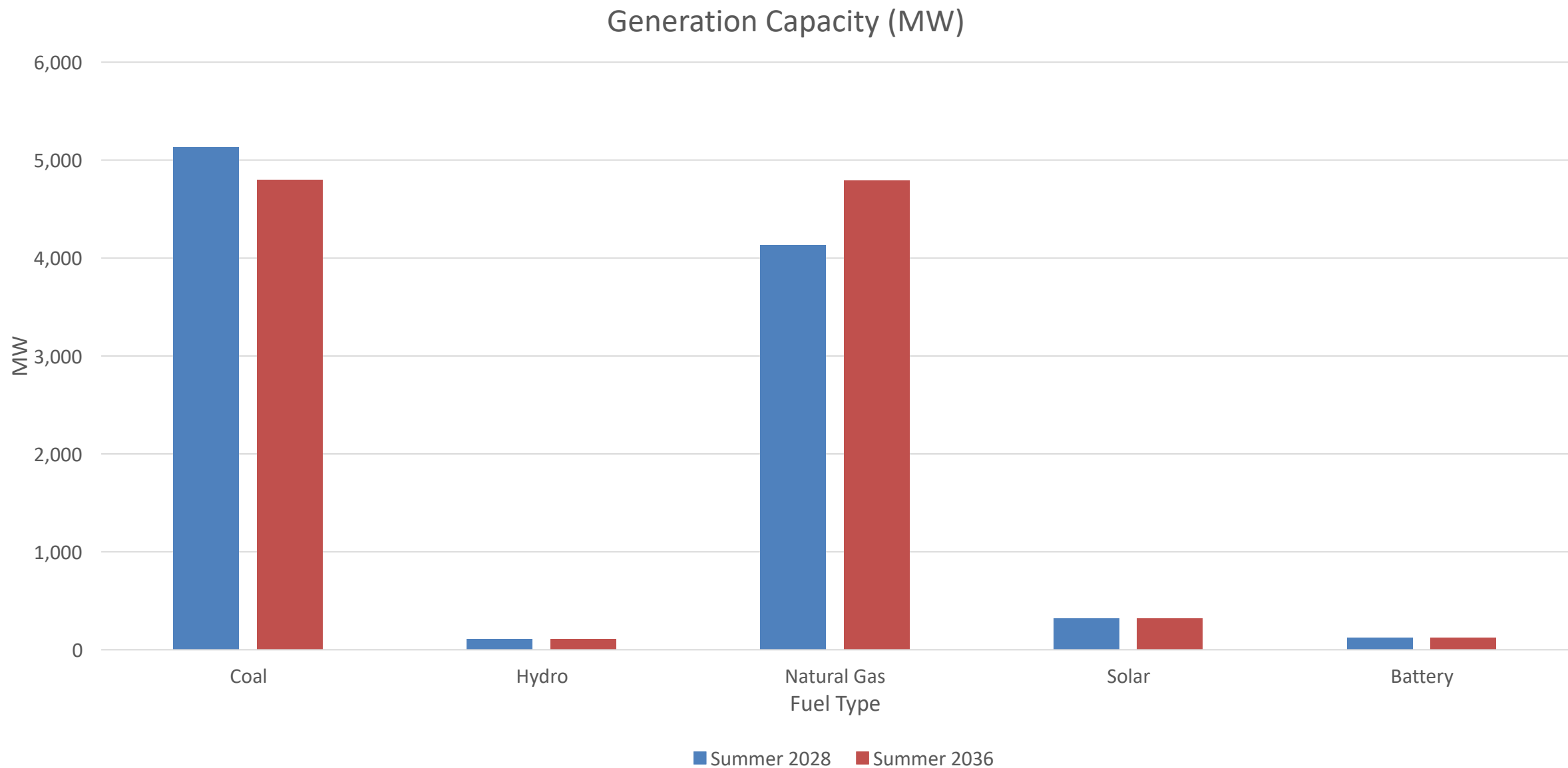
LG&E/KU Balancing Authority Area 2026 Generation Assumptions

LG&E/KU Generation Assumptions

The following diagram depicts location of generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process.



LG&E/KU Generation Summary



LG&E/KU Balancing Authority Area

LG&E/KU – Generation Assumptions

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Mill Creek 2	Coal	330	330	330	330	0	0	0	0	0	0
GI-2022-003	Gas	661	661	661	661	661	661	661	661	661	661
GI-2021-010	Solar	120	120	120	120	120	120	120	120	120	120
GI-2019-025	Solar	122	122	122	122	122	122	122	122	122	122
GI-2023-002	Gas	--	--	--	661	661	661	661	661	661	661
GI-2023-003	Battery	125	125	125	125	125	125	125	125	125	125
GI-2024-002	Gas	75	75	75	75	75	75	75	75	75	75
Cane Run 7 CT1	Gas	261	261	261	261	261	261	261	261	261	261
Cane Run 7 CT2	Gas	261	261	261	261	261	261	261	261	261	261

LG&E/KU Balancing Authority Area

LG&E/KU – Generation Assumptions (Point-to-Point)

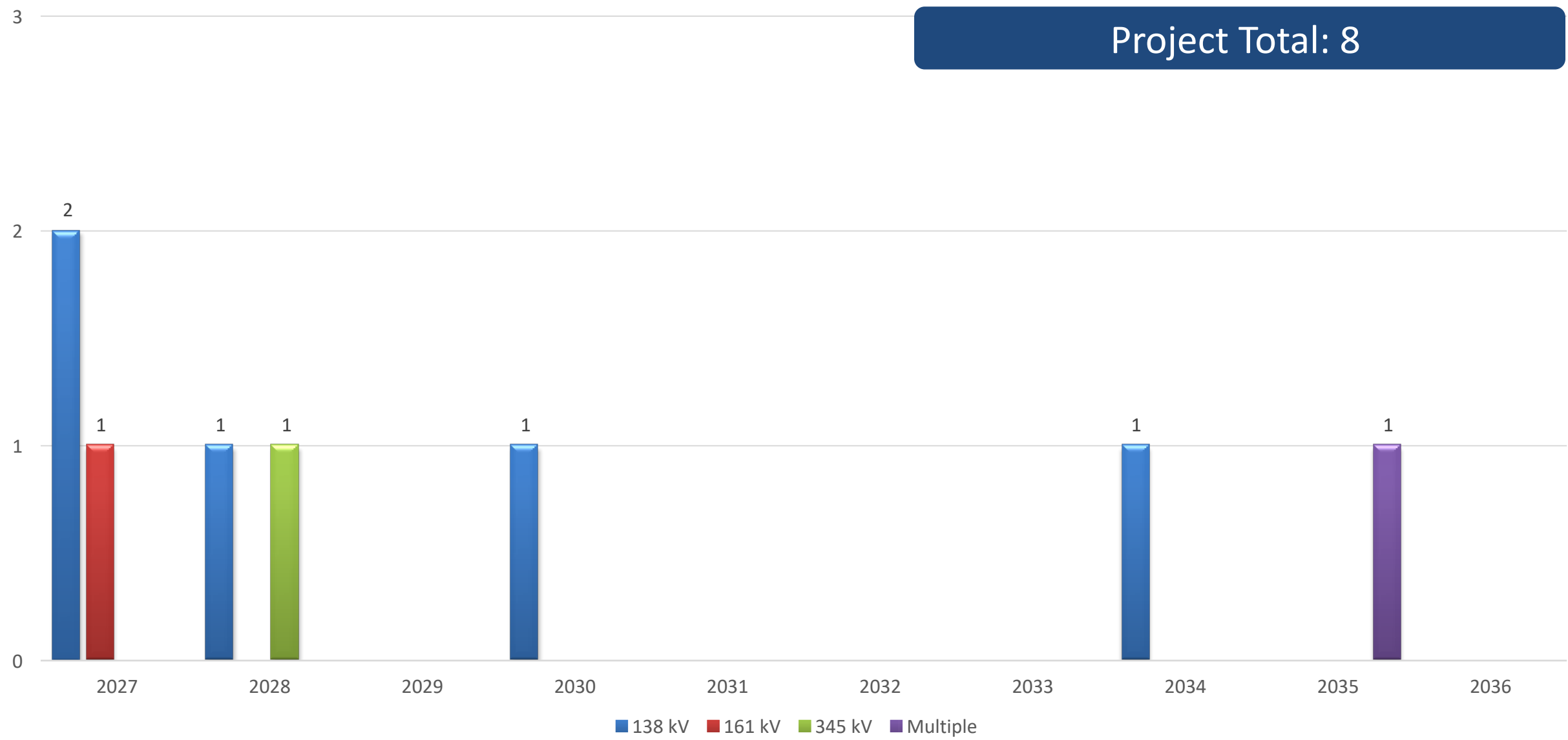
The following table depicts generation assumptions based upon expected long-term firm point-to-point commitments. The years shown represent Summer Peak conditions.

SITE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
TRIMBLE COUNTY	324	324	324	324	324	324	324	324	324	324

LG&E/KU Balancing Authority Area

Preliminary Transmission Expansion Plan

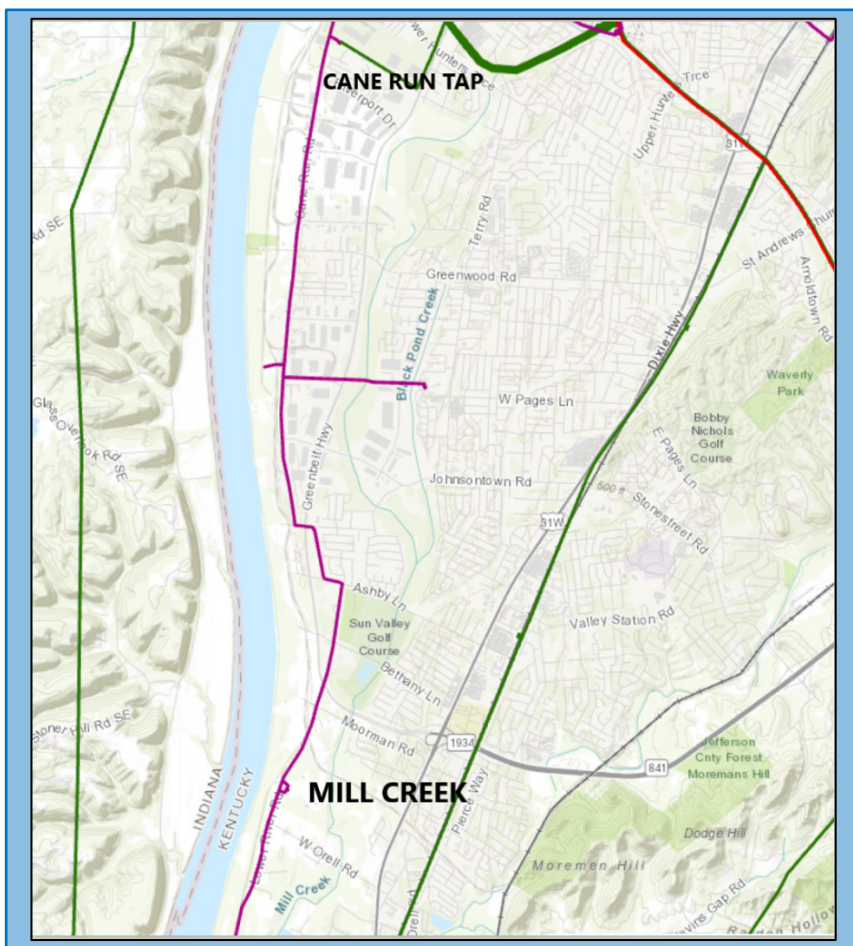
LG&E/KU Project Summary



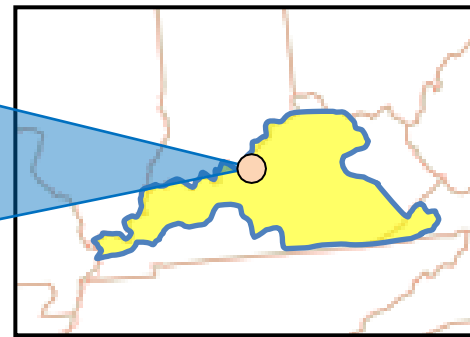
LG&E/KU

• 2028

MILL CREEK – CANE RUN TAP 345 KV TRANSMISSION LINE



- **DESCRIPTION:**
 - Replace 0.38 miles of transmission line with bundled 954 ACSR and increase the maximum operating temperature of 10.23 miles of bundled 954 ACSR to 205°F in the Mill Creek to Cane Run Tap 345 kv transmission line.
- **SUPPORTING STATEMENT:**
 - New generation causes the Mill Creek – Cane Run Tap 345 kv transmission line to become overloaded.

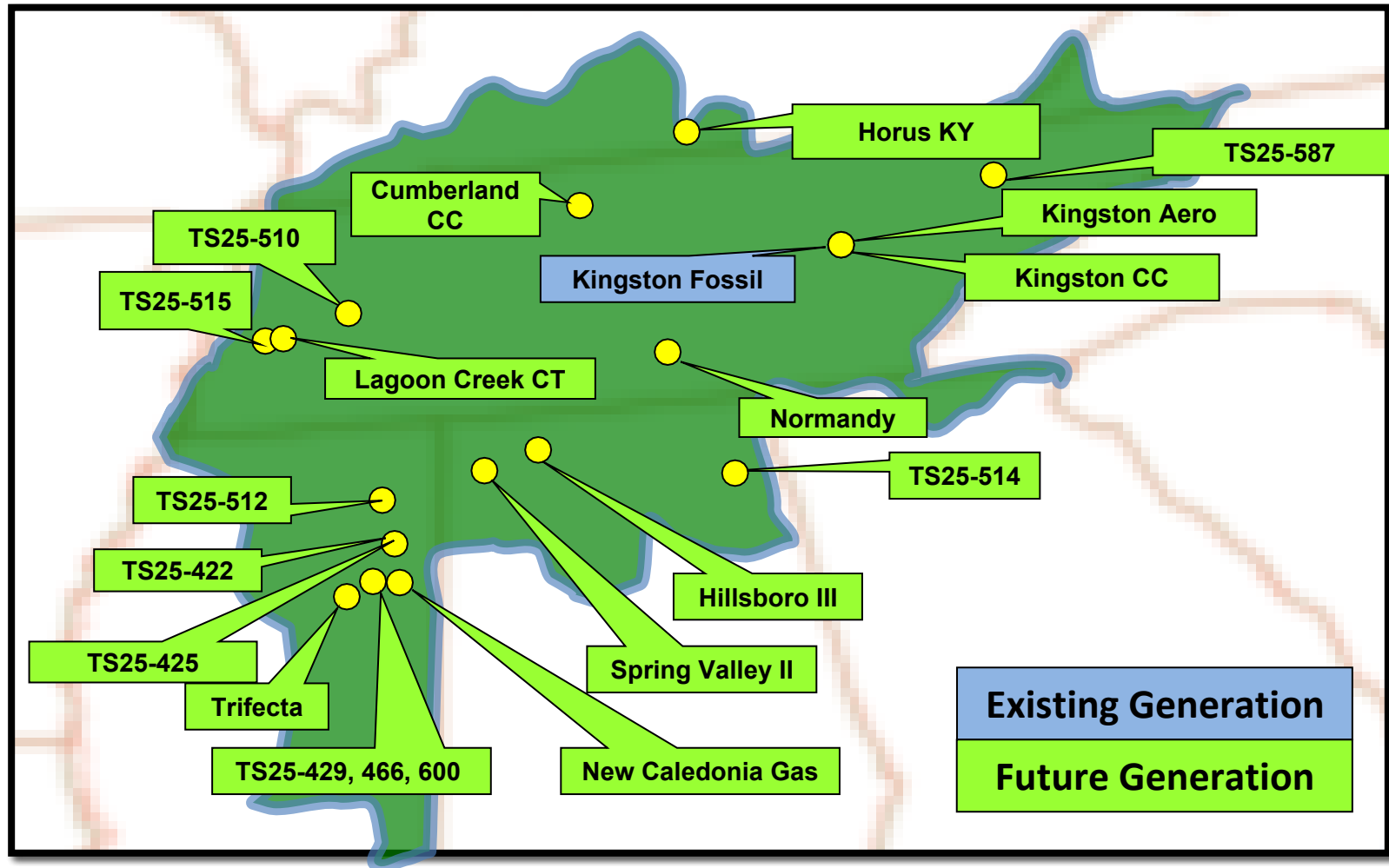


TVA Balancing Authority Area 2026 Generation Assumptions

TVA Balancing Authority Area

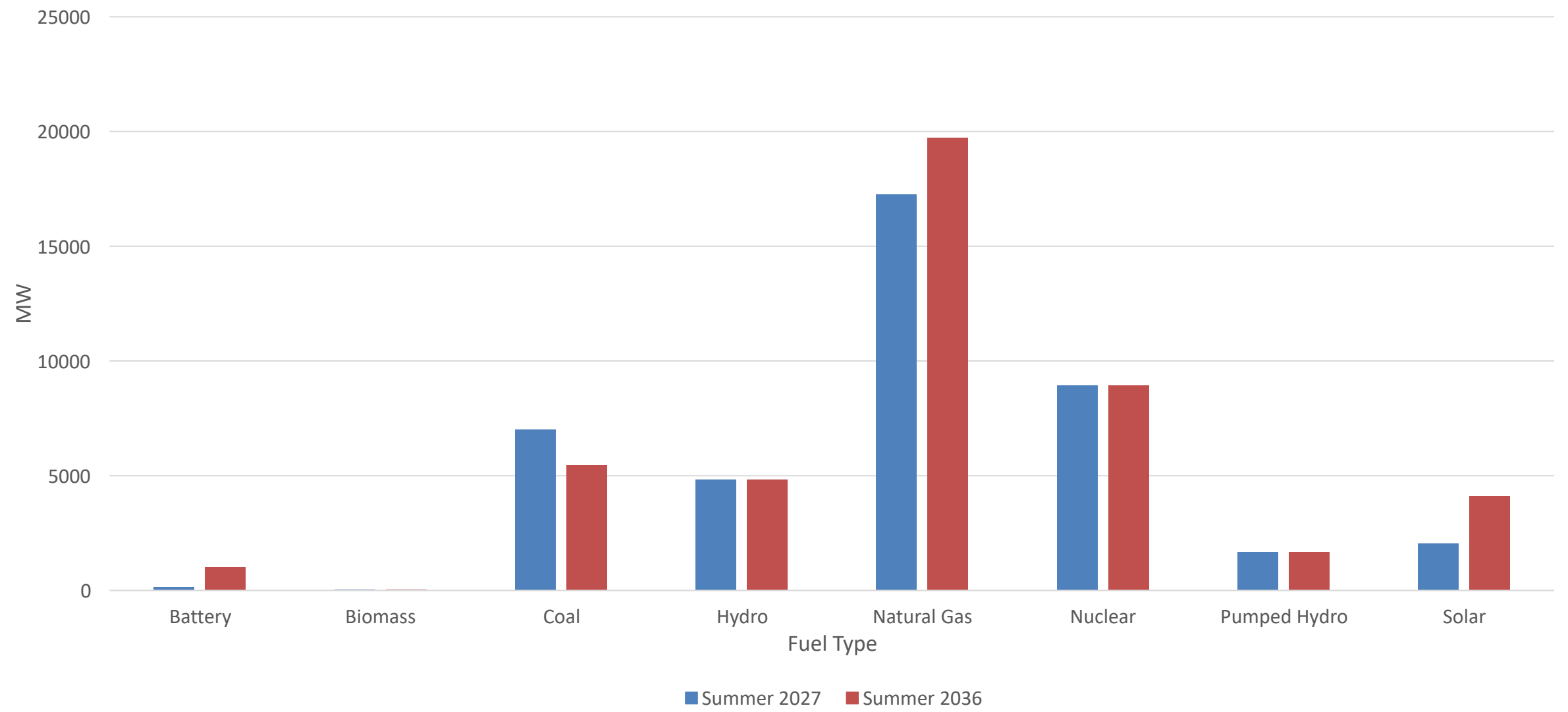
TVA – Generation Assumptions

The following diagram depicts the location of generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process.



TVA Generation Summary

Generation Capacity (MW)



TVA Balancing Authority Area

TVA – Generation Assumptions

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
CUMBERLAND FP UNIT 2 ¹	COAL	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130
CUMBERLAND FP UNIT 1 ¹	COAL	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130
KINGSTON FP ¹	COAL	1157	0	--	--	--	--	--	--	--	--
CUMBERLAND CC	GAS	1346	1346	1346	1346	1346	1346	1346	1346	1346	1346
KINGSTON CC	GAS	--	715	715	715	715	715	715	715	715	715
KINGSTON AERO	GAS	--	848	848	848	848	848	848	848	848	848
NEW CALEDONIA	GAS	515	515	515	515	515	515	515	515	515	515
LAGOON CREEK	GAS	--	345	345	345	345	345	345	345	345	345

1. Coal Extension plans are likely to change in the SERTP v2 models. The table above reflects what was modeled in the v1 models.

TVA Balancing Authority Area

TVA – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
TRIFECTA	SOLAR	--	68	68	68	68	68	68	68	68	68
HILLSBORO III	SOLAR	--	200	200	200	200	200	200	200	200	200
SPRING VALLEY II	SOLAR	--	--	200	200	200	200	200	200	200	200
OKOLONA	SOLAR	--	145	145	145	145	145	145	145	145	145
NORMANDY	SOLAR	--	213	213	213	213	213	213	213	213	213
HORUS KY	SOLAR	--	--	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
TS25-466	SOLAR	--	200	200	200	200	200	200	200	200	200
TS25-512	SOLAR	--	--	200	200	200	200	200	200	200	200
TS25-515	SOLAR	--	66	66	66	66	66	66	66	66	66
TS25-425	SOLAR	--	153	153	153	153	153	153	153	153	153
TS25-510	SOLAR	--	--	--	140	140	140	140	140	140	140

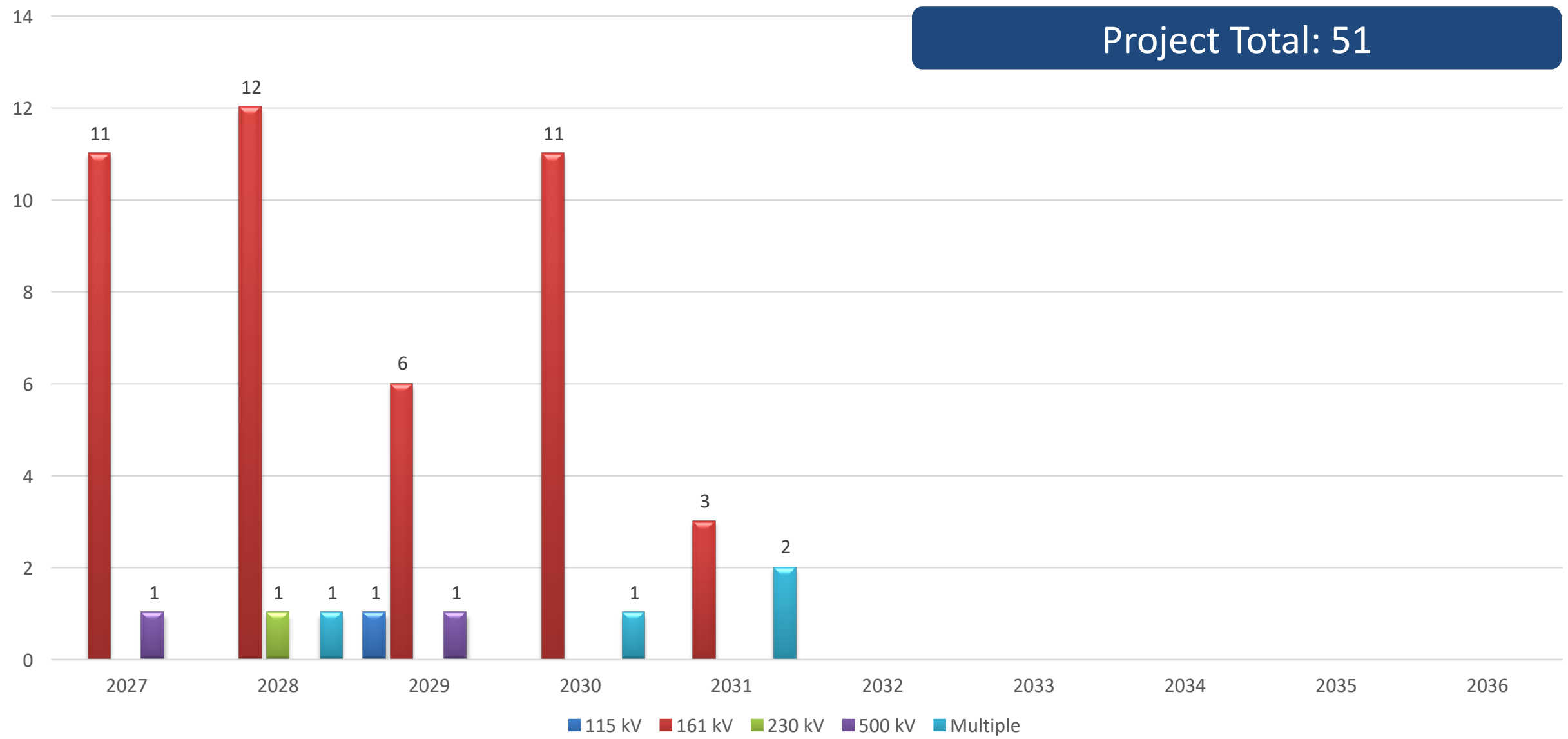
TVA – Generation Assumptions Continued

The following table depicts the generation assumptions that change throughout the ten-year planning horizon for the 2026 SERTP Process. The years shown represent Summer Peak conditions.

SITE	FUEL TYPE	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
TS25-514	BESS	--	--	200	200	200	200	200	200	200	200
TS25-600	BESS	--	200	200	200	200	200	200	200	200	200
TS25-429	BESS	--	200	200	200	200	200	200	200	200	200
TS25-587	BESS	--	--	225	225	225	225	225	225	225	225

TVA Project Summary

Project Total: 51



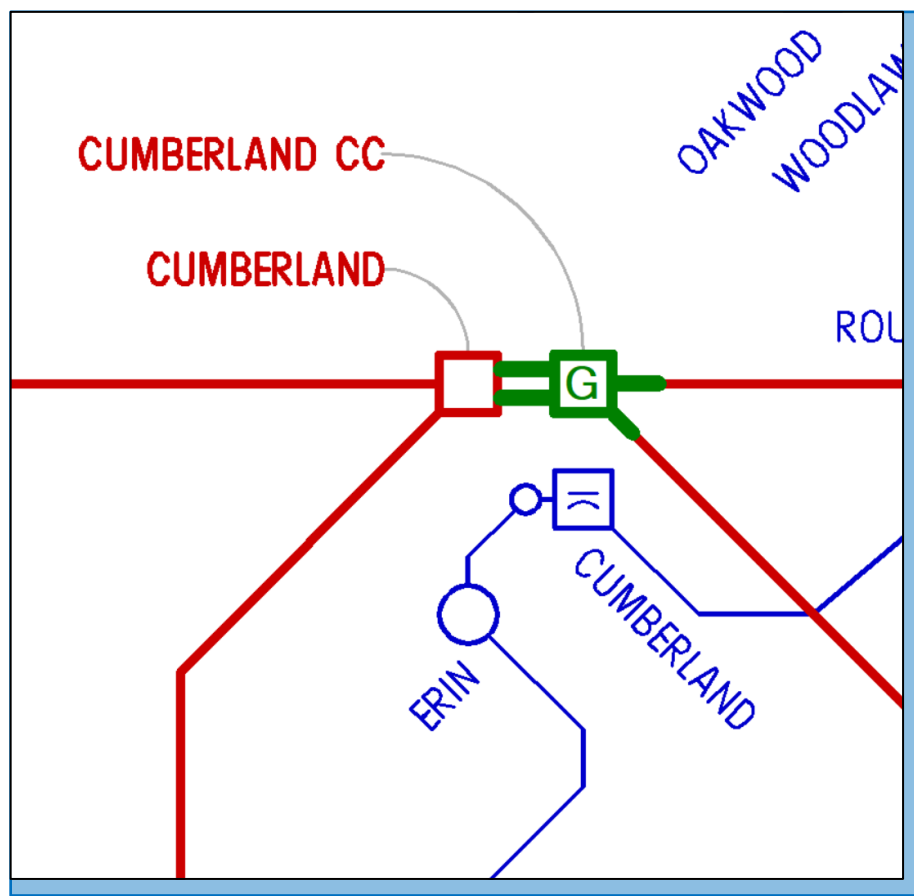
TVA Balancing Authority Area

Preliminary Transmission Expansion Plan

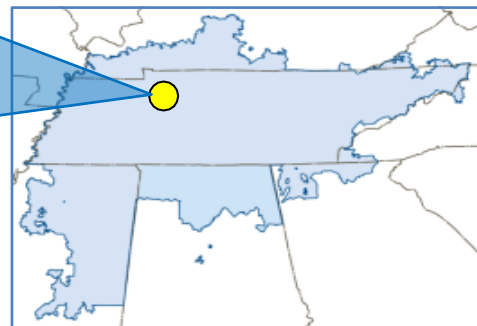
TVA

• 2027

CUMBERLAND CC GENERATION INTERCONNECTION



- **DESCRIPTION:**
 - Construct new 500 kV station to interconnect new natural gas fired CC generation. Loop in two nearby 500 kV TLs.
- **SUPPORTING STATEMENT:**
 - Scope is driven by the interconnection of new generation. This is Q483 in TVA's Interconnection Queue which is publicly available on TVA's OASIS.

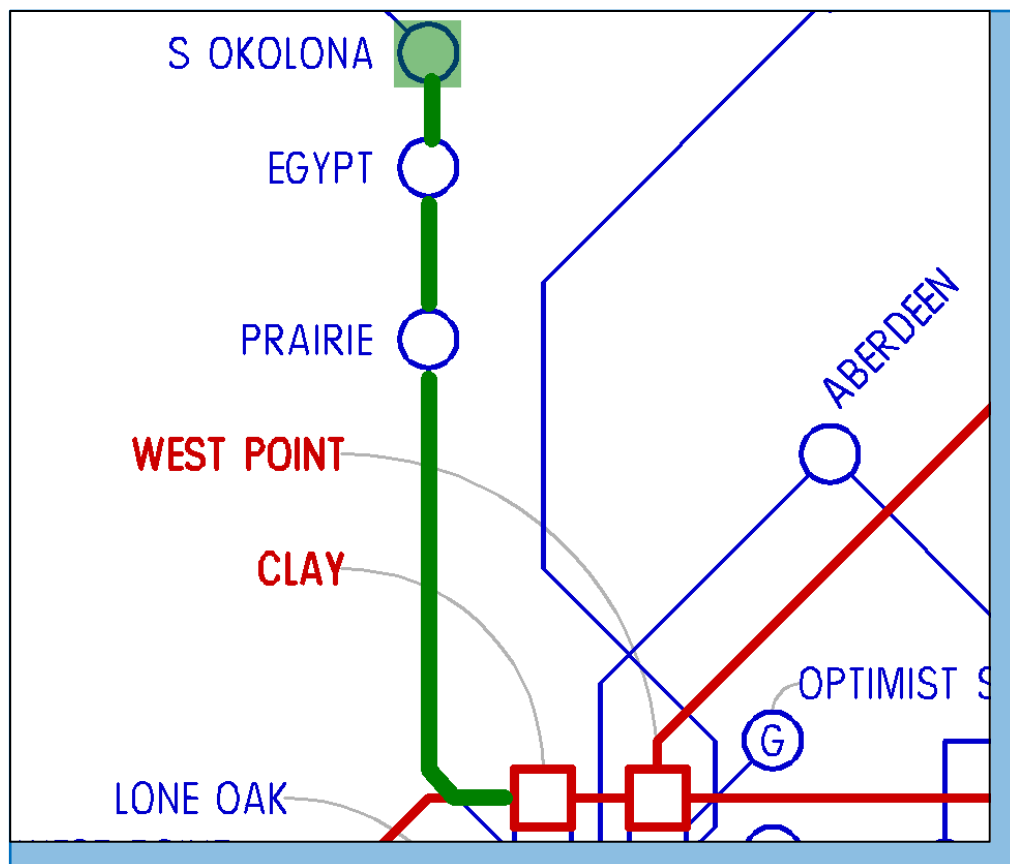


TVA Balancing Authority Area

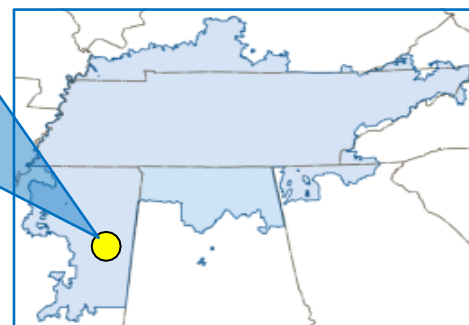
TVA

• 2027

NEW CALEDONIA GAS



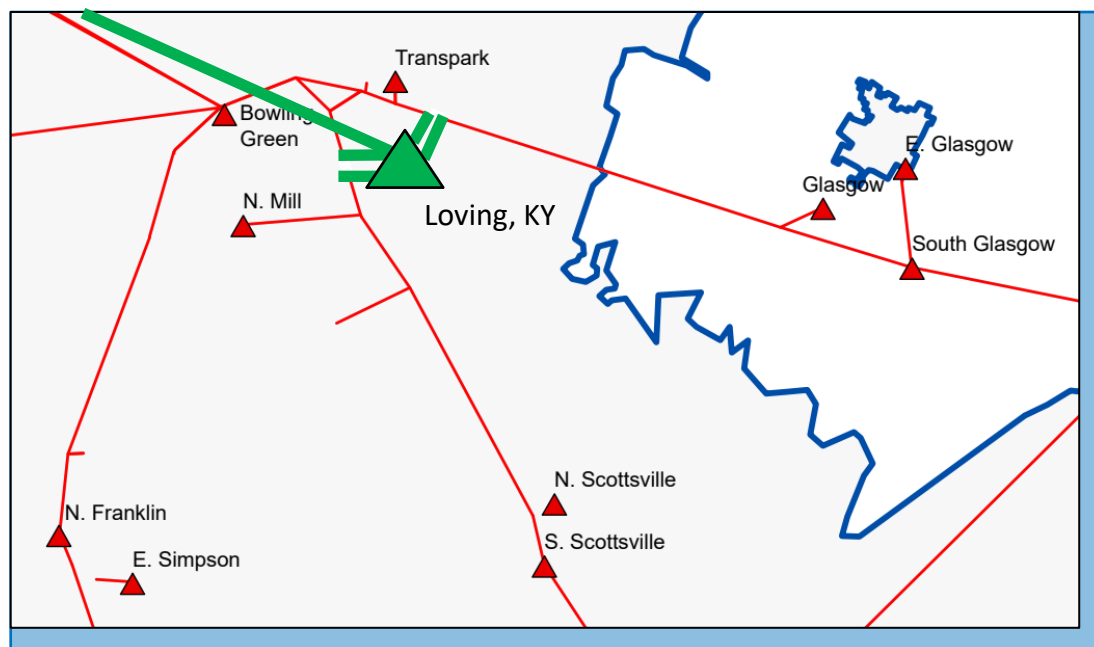
- **DESCRIPTION:**
 - Clay - Prairie 161 kV TL rebuild 11.54 miles and reconductor 0.23 miles. Prairie - Egypt MS rebuild 4.61 miles. Egypt - Okolona reconductor 9.36 miles and bus and jumper replacement at Okolona.
- **SUPPORTING STATEMENT:**
 - New Caledonia CT is adding 520 MW summer (610 MW winter) at the Lowndes 161 kV bus. Plant causes thermal overload on Clay to Okolona line.



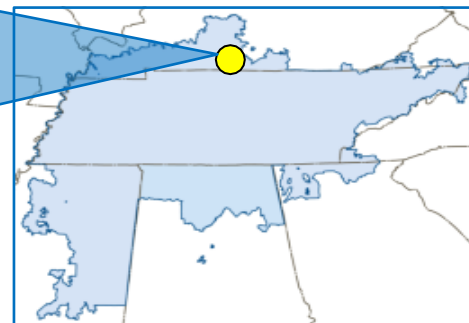
TVA

• 2027

LOVING, KY 161 KV STATION



- **DESCRIPTION:**
 - Construct the Loving, KY 161 kV Substation. Reconductor approximately 26.71 miles of transmission line from Bowling Green to Lost City with 1351 ACSS at 140°C. Reconductor approximately 8.64 miles of transmission line from Bowling Green to East Bowling Green with 1351 ACSS at 135°C.
- **SUPPORTING STATEMENT:**
 - Additional voltage support & thermal capacity is needed in the Bowling Green area for economic development.

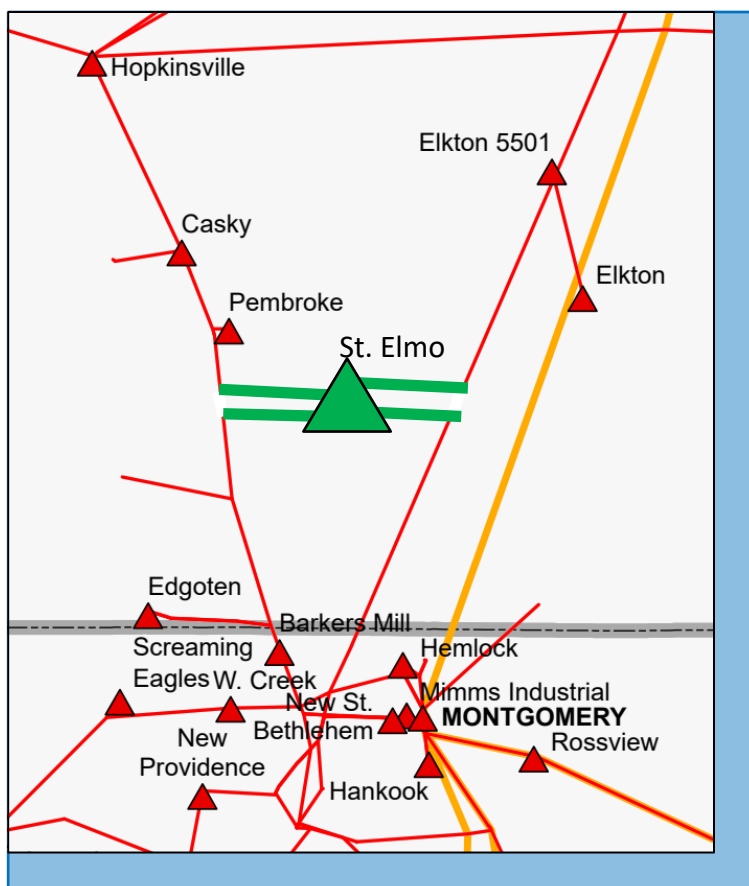


TVA Balancing Authority Area

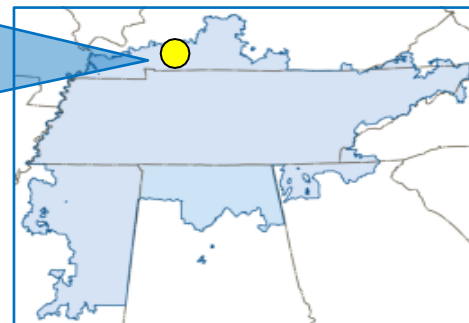
TVA

• 2027

ST. ELMO, KY 161 KV SUBSTATION



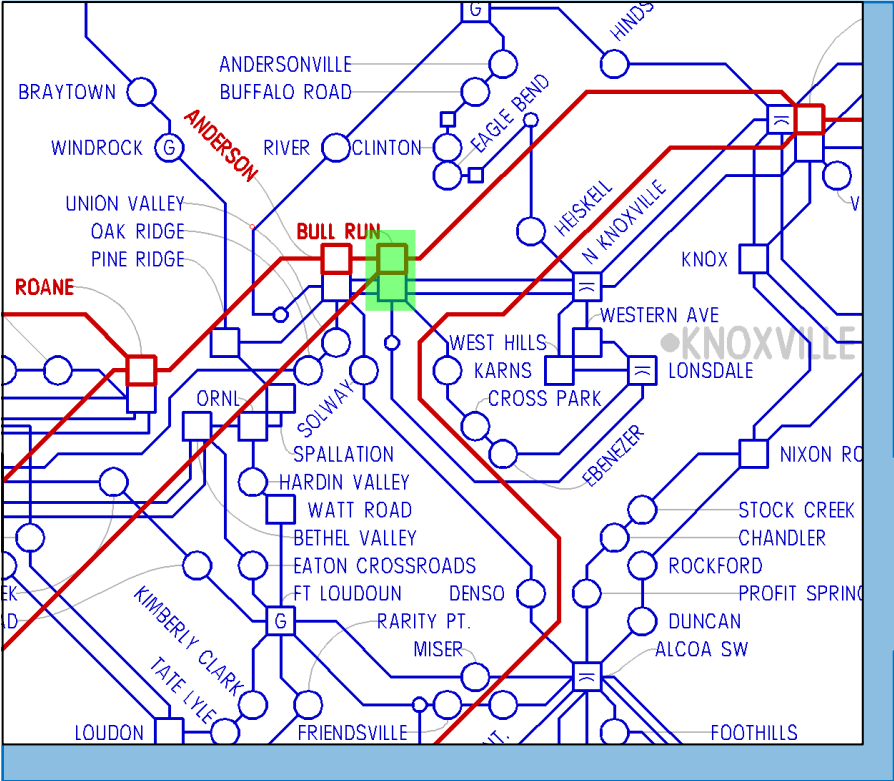
- **DESCRIPTION:**
 - Construct the St. Elmo KY 161 kV and loop in the Casky - Edgoten line and the Paradise - Clarksville line.
- **SUPPORTING STATEMENT:**
 - Voltage support and additional thermal capacity is needed for economic development in the area.



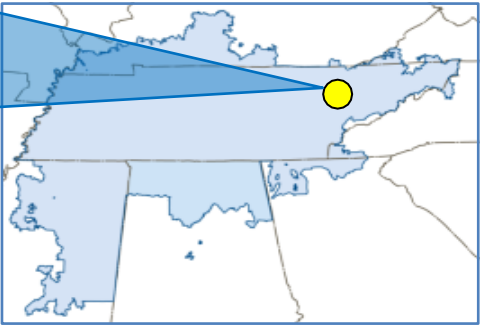
TVA

• 2027

BULL RUN SYNCHRONOUS CONDENSER



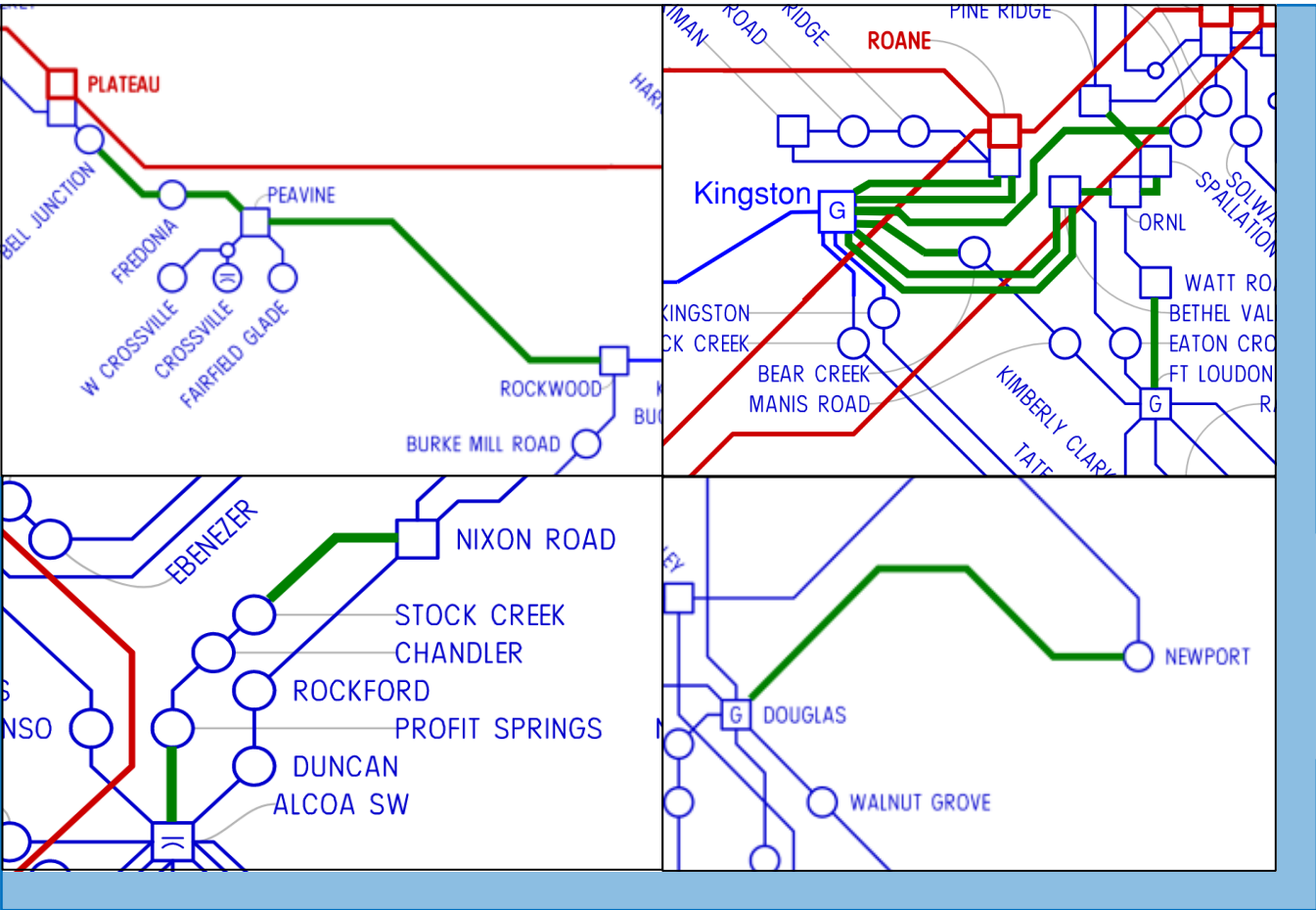
- **DESCRIPTION:**
 - TVA to install Breaker, Switches, Relaying and metering to support synchronous condensing units at Bull Run 500 kV.
- **SUPPORTING STATEMENT:**
 - Voltage support and additional capacity is needed for economic development in the area.



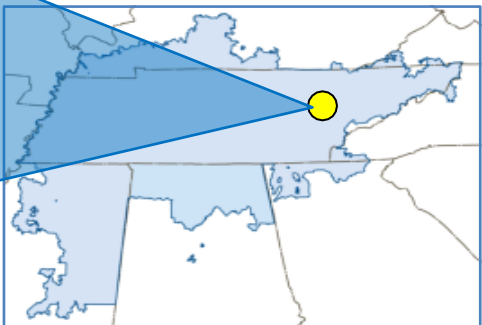
TVA

• 2027

KINGSTON CC & AERODERIVATIVE CT GENERATION INTERCONNECTION



- **DESCRIPTION:**
 - Construct new 161 kV station to interconnect new natural gas fired CC and Aeroderivative generation. Loop in area 161 kV TLs. Reconductor/uptate fifteen existing 161 kV TLs to increase the thermal rating of each.
- **SUPPORTING STATEMENT:**
 - Scope is driven by the interconnection of new generation. This is Q489 in TVA's Interconnection Queue which is publicly available on TVA's OASIS.

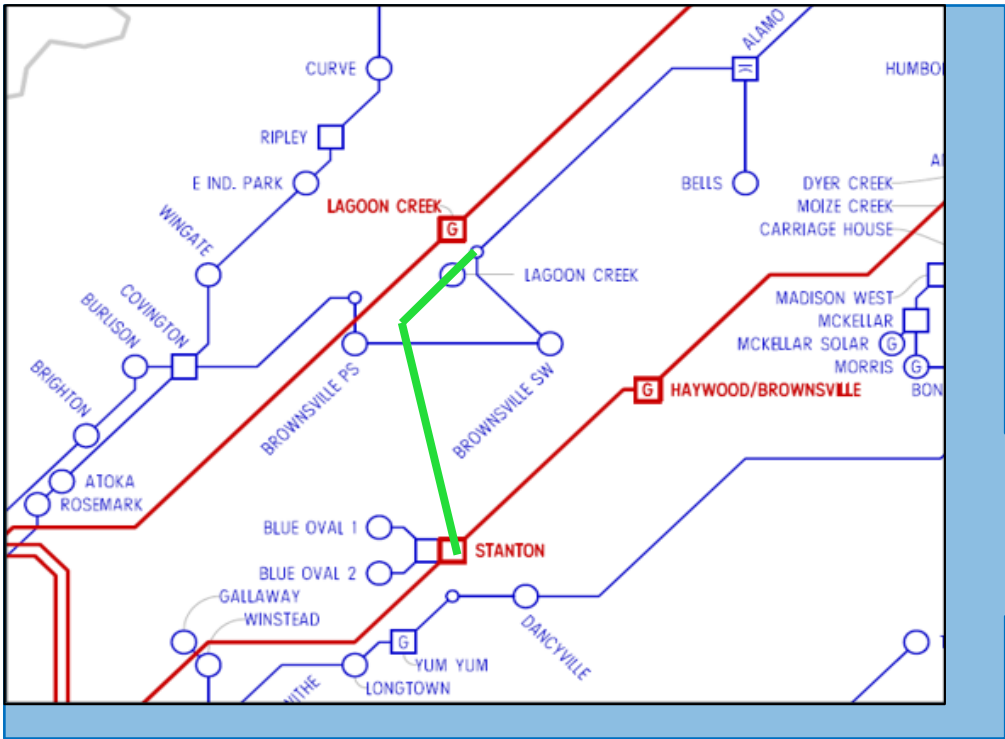


TVA Balancing Authority Area

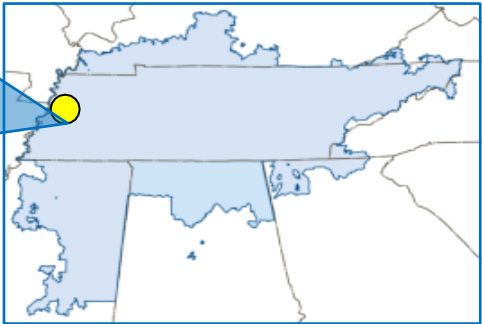
TVA

• 2030

Lagoon Creek CT



- **DESCRIPTION:**
 - Construct a new 500kV station to interconnect new combined cycle generation. Connect to existing 500kv TL. Build ~22 miles of new 500 kV TL from Lagoon Creek to Stanton.
- **SUPPORTING STATEMENT:**
 - Scope is driven by the interconnection of new generation. This is Q624 in TVA's Interconnection Queue which is publicly available on TVA's OASIS.



SERTP

Miscellaneous Updates

Interregional Update

- Latest interregional coordination procedures are posted on the [SERTP website](#).
- Meetings will occur in the third quarter to facilitate the exchange of power-flow models and transmission expansion plans.

Next Meeting Activities

- **2026 SERTP 3rd Quarter Meeting**

- **Date: September 22nd, 2026**
- **Held Virtual**
- **Purpose:**
 - Preliminary Results of the Economic Studies
 - Stakeholder Input & Feedback Regarding the Study Results
 - Discuss Previous Stakeholder Input on the Expansion Plan

- **2026 SERTP 4th Quarter Meeting**

- **Date: December 15th, 2026**
- **Hosted by MEAG in Atlanta, GA**
- **Purpose:**
 - Final Results of the Economic Studies
 - Regional Transmission Plan
 - Regional Analyses
 - Stakeholder Input on the 2027 Transmission Model Input Assumptions



Questions?

www.southeasternrtp.com

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