



PJM– SERTP Planning Process Overview

*Order 1000 Biennial Regional Transmission
Plan Review Meeting – Presentation 1 of 2*

September 23, 2022

Microsoft Teams

Agenda

- SERTP – Process Overview
 - Background
 - SERTP Region Scope
 - Processes and Timelines
 - Regional Model Exchange Process

SERTP PROCESS OVERVIEW

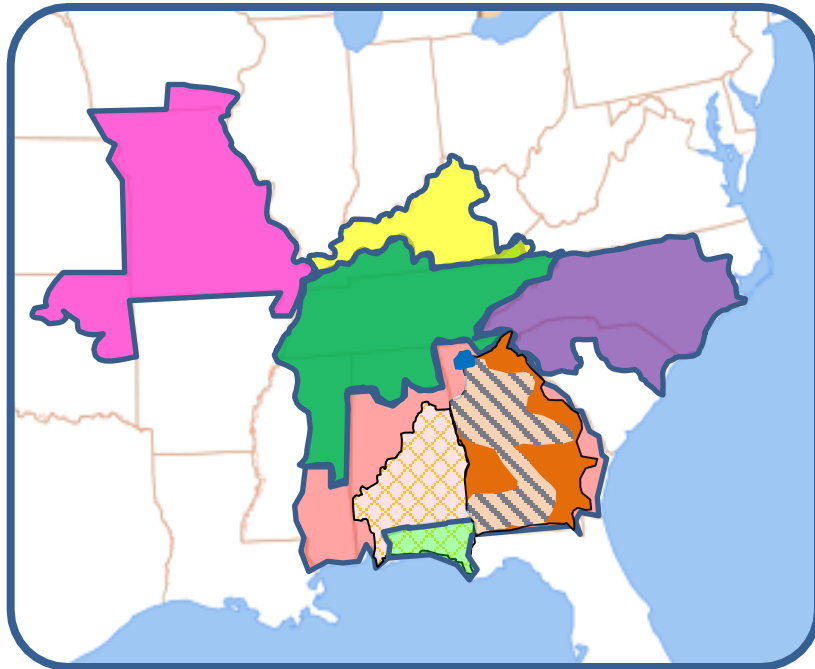
SERTP Background

Southeastern Regional Transmission Planning Process (SERTP)

- Originally formed in 2007 to comply with FERC Order 890
- Provides open and transparent transmission planning forum for transmission providers to engage with stakeholders regarding transmission plans in the region
- Began regional implementation of Order 1000 requirements on June 1, 2014
- Began interregional implementation of Order 1000 on January 1, 2015

SERTP Overview

Southeastern Regional Transmission Planning (SERTP)



SERTP



*Gulf Power is seeking to move to FRSS planning region in 2023 following the merger with FP&L

SERTP Overview

Southeastern Regional Transmission Planning (SERTP)



Balancing Authority Area:

AECI

Duke Carolinas

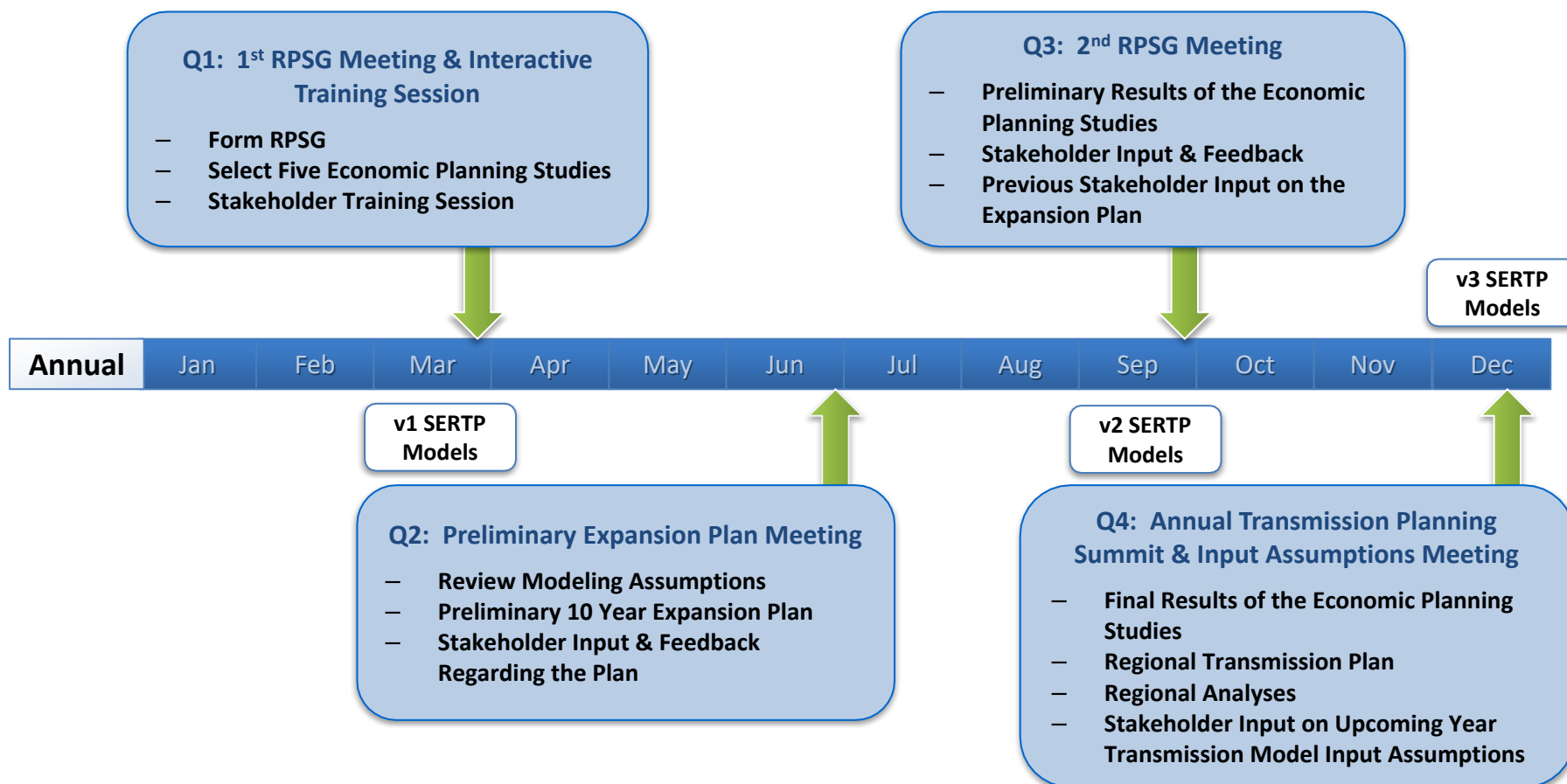
Duke Progress

LG&E/KU

Southern

TVA

SERTP Quarterly Stakeholder Meetings



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 *Planning Coordinator – Transmission Planner NDA*.
 - Limit of 2-3 with capabilities to retrieve the information from the SERTP Secure Area.

No.	Season	Year
1	Summer	2024
2		2027
3		2032
4	Shoulder	2027
5	Winter	2027
6		2032

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 NERC standards and 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

Regional Transmission Plan

Project Descriptions, Drivers, Contingencies

Southeastern Regional TRANSMISSION PLANNING

SERTP TRANSMISSION PROJECTS

DUKE CAROLINAS BALANCING AUTHORITY

In-Service Year: 2020
Project Name: ORCHARD 230/100 KV TIE
Description: Construct a new 230/100 KV Tie Station, southwest of the Lincoln CT - Longview Tie 230 KV transmission line. The 100 KV transmission line.
Supporting Statement: To support additional load growth in the area.

In-Service Year: 2020
Project Name: RURAL HALL STATIC VAR COMPENSATOR (SVC)
Description: Install a new 100 KV, +100/-300 Static VAR Compensator.
Supporting Statement: Additional voltage support is needed in the northern Balancing Authority Area under contingency.

In-Service Year: 2021
Project Name: BELEWS CREEK - ERNEST TIE 230KV TRANSMISSION
Description: Reconductor entire 13.7 miles of the Belews Creek with 1158 ACSS/TW at 200°C.
Supporting Statement: The Belews Creek - Ernest Tie 230KV transmission line.

In-Service Year: 2021
Project Name: ERNEST TIE - SADLER TIE 230KV INLINE REACTOR
Description: Add 3% reactors to both circuits of the Ernest Tie.
Supporting Statement: The Ernest Tie - Sadler Tie 230 KV transmission line.

Southeastern Regional TRANSMISSION PLANNING

2019

A detailed listing of the changes in generation assumptions within the 2019 year(s) in which they occur, is provided in Table A1.3 below. Table A1.4 provides point-to-point commitments. The capacity (MW) values shown for each generator modeled in the 2020 Version 2 Summer Peak powerflow model.

Table A1.3: Changes in Generation Assumptions Based Upon LSEs - AEP

Site	2020	2021	2022	2023	2024	2025
White Cloud	238	238	238	238	238	238
Clear Creek	230	230	230	230	230	230

Table A1.4: Generation Assumptions Based Upon Expected Long-term

Site	2020	2021	2022	2023	2024	2025
None						

Table A1.5: Generating Units Modeled in the 2020 Version 2 Summer Peak

Plant	Unit	Bus #	Bus Name
Albany City	1	300269	2ALB
Atchison	1	300009	1ACH
Bethany City	1	300219	2BET
Butler East	1	300690	2BUT
Chillicothe City	1	300214	2CHIL
Chillicothe City	2	300214	2CHIL
Chillicothe City B	3	301364	2CHIL
Chouteau	1	300020	1CHO
Chouteau	1	300021	1CHO
Chouteau	1	300024	1CHO
Chouteau	1	300031	1CHO


Generation Assumptions/Changes

Southeastern Regional TRANSMISSION PLANNING

2019

REGIONAL TRANSMISSION PLAN & INPUT ASSUMPTIONS OVERVIEW

SERTP Southeastern Regional Transmission Planning



December 2, 2019

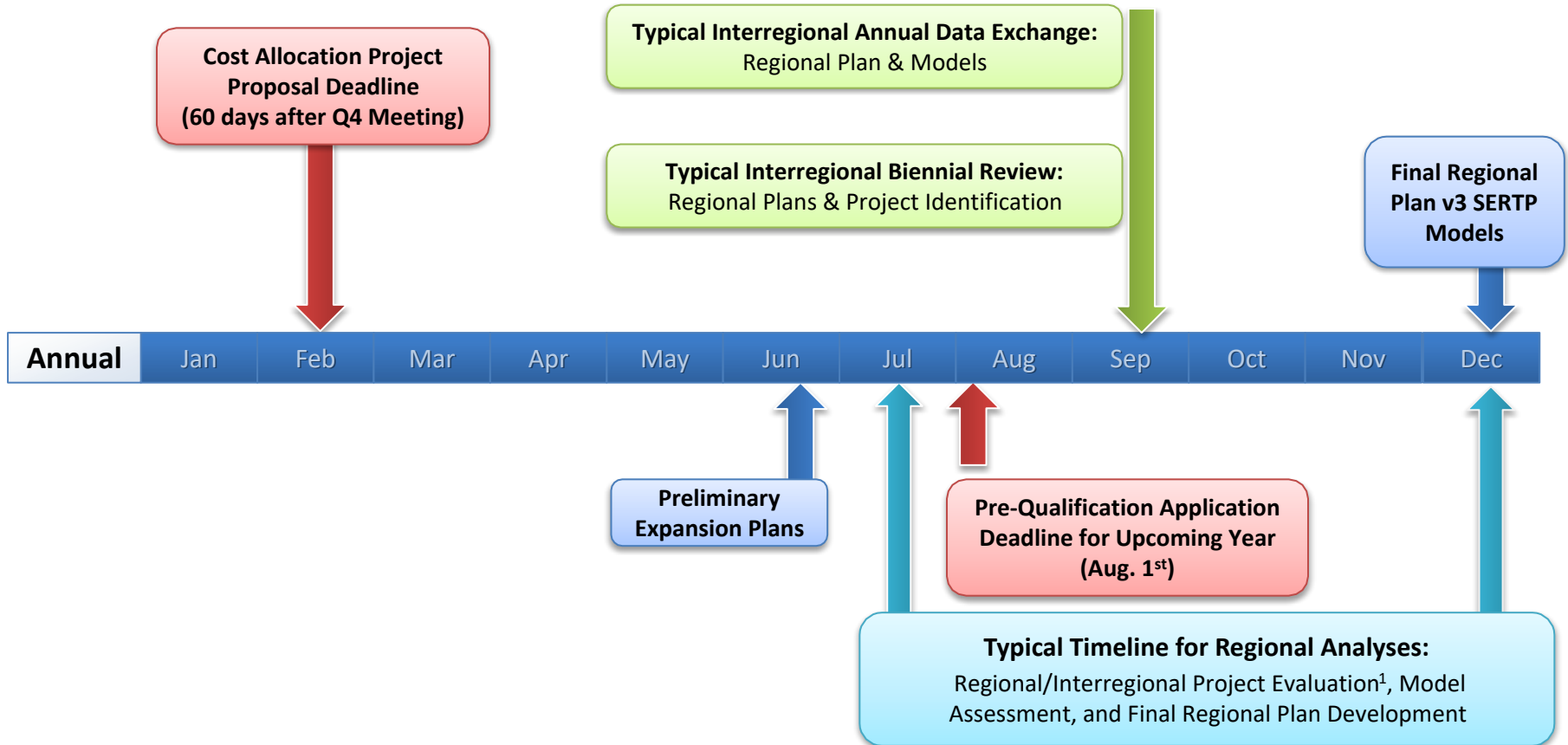
Regional Transmission Plan & Input Assumptions Overview

1

SERTP Region - Interregional Seams



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](#)

The screenshot shows the website's navigation menu with 'INTERREGIONAL' selected. Below the menu, there are four main sections: 'Interregional - FRCC', 'Interregional - MISO', 'Interregional - PJM', and 'Interregional - SC RTP'. The 'Interregional - SC RTP' section is expanded, showing a list of links: 'SC RTP Stakeholder Registration Link' (with a sub-link 'SC RTP Stakeholder Committee Registration Link'), and 'SC RTP and SERTP Interregional Transmission Planning Procedures' (with a sub-link 'Interregional Transmission Planning Coordination Between the SERTP and SC RTP Regions'). A blue arrow points from the 'INTERREGIONAL' menu item to the 'Interregional - SC RTP' section.

SERTP Secure Site Access

[SERTP Website](#)

[SECURE AREA](#)

[PLANNING CRITERIA](#)

[REFERENCE LIBRARY](#)

[INTERREGIONAL](#)

[CONTACT US](#)

About Us

The Southeastern Regional Transmission Planning (SERTP) process provides an open and transparent transmission planning forum for transmission providers to engage with stakeholders regarding transmission plans in the region. The SERTP was originally developed to provide such 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 on February 16, 2007 to reform the decade-old Open Access Transmission Tariff (OATT) regulatory framework adopted in Order 888.

The SERTP has expanded several times, both in the scope and in the size of the region, since its initial voluntary formation and now includes the following Sponsors: Southern Company (SCS), Dalton Utilities, Georgia Transmission Corporation (GTC), the Municipal Electric Authority of Georgia (MEAG), PowerSouth, Louisville Gas & Electric Company and Kentucky Utilities Company (LG&E/KU), Associated Electric Cooperative Inc. (AECI), the Tennessee Valley Authority (TVA), and Duke Energy (Duke Energy Carolinas, LLC and Duke Energy Progress, LLC). As a result of this expanded size and scope, the SERTP region has become one of the largest regional transmission planning processes in the United States.

On July 11, 2011, FERC issued Order 1000, which adopted transmission planning and cost allocation requirements. The expanded SERTP, implementing the additional Order No. 1000 directives, is effective on June 1, 2014.

2022 Calendar of Events

June 2022

2nd Quarter SERTP Meeting
Thursday, June 30th
10:00 AM — 1:00 PM ET

March 2022

SERTP 1st Quarter Meeting
Tuesday, March 22nd
10:00 AM — 1:00 PM ET

June 2022

SERTP 2nd Quarter Meeting

September 2022

SERTP 3rd Quarter Meeting

December 2022

SERTP 4th Quarter Meeting

SERTP Secure Site Access

[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

[Back to Top >>](#)

QUESTIONS?

WWW.SOUTHEASTERNRTP.COM