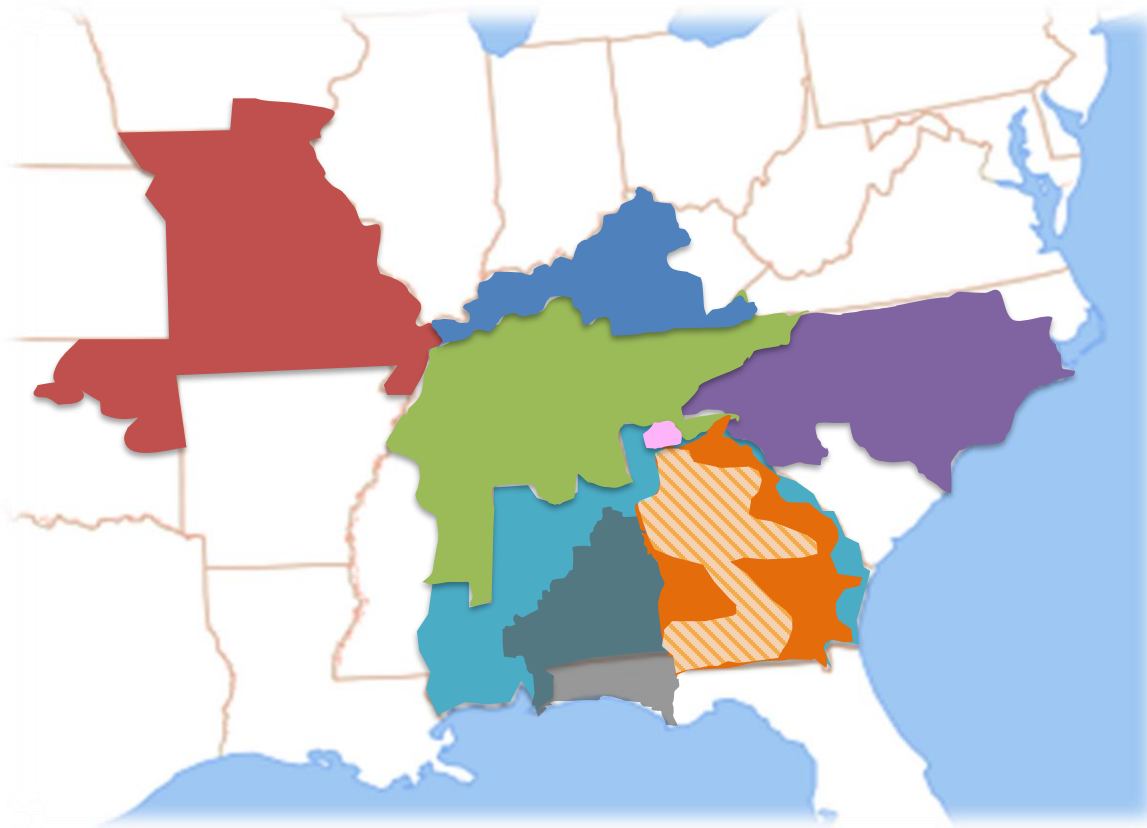


SERTP

Process Overview

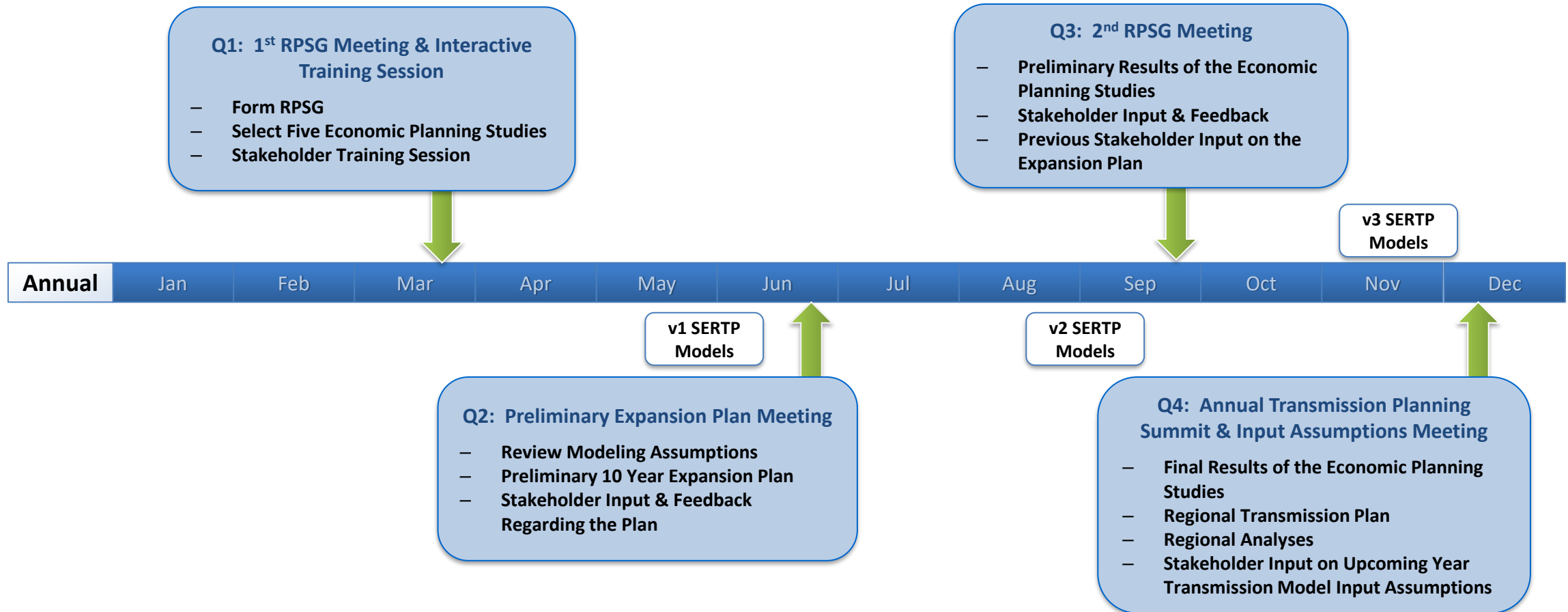
Southeastern Regional Transmission Planning (SERTP)



SERTP

-  Associated Electric Cooperative Inc.
-  Dalton Utilities
-  DUKE ENERGY
-  Georgia Transmission
-  LGE & KU
-  MEAG POWER
-  POWER SOUTH ENERGY COOPERATIVE
-  Southern Company
-  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*.

| No. | Season | Year |
|-----|----------|------|
| 1 | Summer | 2026 |
| 2 | | 2029 |
| 3 | | 2034 |
| 4 | Shoulder | 2029 |
| 5 | Winter | 2029 |
| 6 | | 2034 |

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

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 TRANSFORMER**
 Description: Replace the 230/115kV auto transformer at Kingsland
 Supporting Statement: The 230/115kV auto transformer at Kingsland

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

In-Service Year: 2024
 Project Name: **ABBEVILLE TS - GEORGE DAM 115 KV TL**
 Description: Reconductor approximately 9.5 miles of George Dam 115 kV TL to 397 ACS
 Supporting Statement: Provides additional operation and maintenance

Southeastern Regional TRANSMISSION PLANNING

noteworthy generation expansion and retirements/decertifications included below, while Table A7.7 provides a listing of generation assumptions by (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 resilient transmission system which responds well under uncertainty and supports routine maintenance and cost-effective operation.

The 2023 regional transmission plan includes forecasted transmission projects intended to reliably and cost-effectively provide for the transmission capacity needed to meet the region's growing demand for electricity.

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

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

| SERTP | Total |
|----------------------------------------------------------|--------|
| Transmission Lines – New (Circuit Mi.) | 640.8 |
| Transmission Lines – Upgrades ¹ (Circuit Mi.) | 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 Projects by operating voltage

| SERTP | 100-120 kV | 121-150 kV | 151-199 kV |
|----------------------------------------------------------|------------|------------|------------|
| Transmission Lines – New (Circuit Mi.) | 97.9 | 0.0 | 139.0 |
| Transmission Lines – Upgrades ¹ (Circuit Mi.) | 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



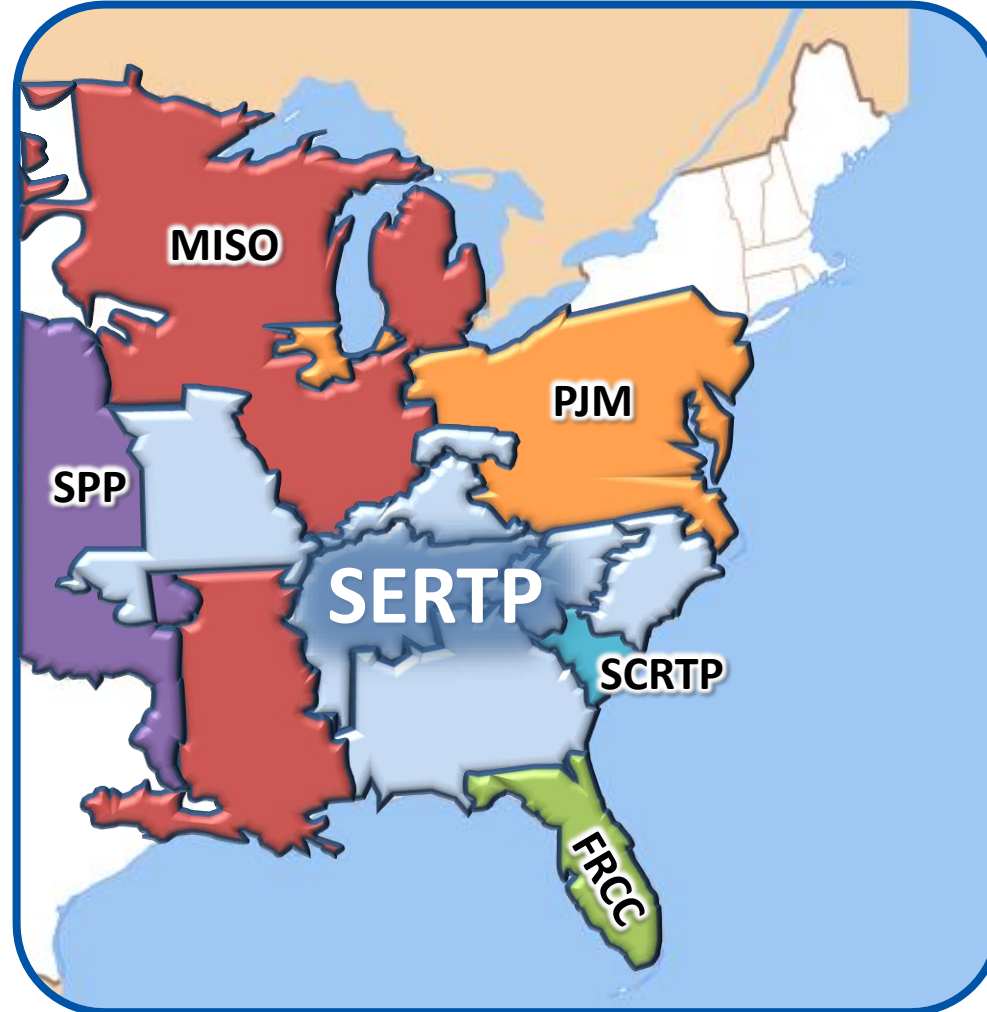
November 27, 2023

Regional Transmission Plan & Input Assumptions Overview

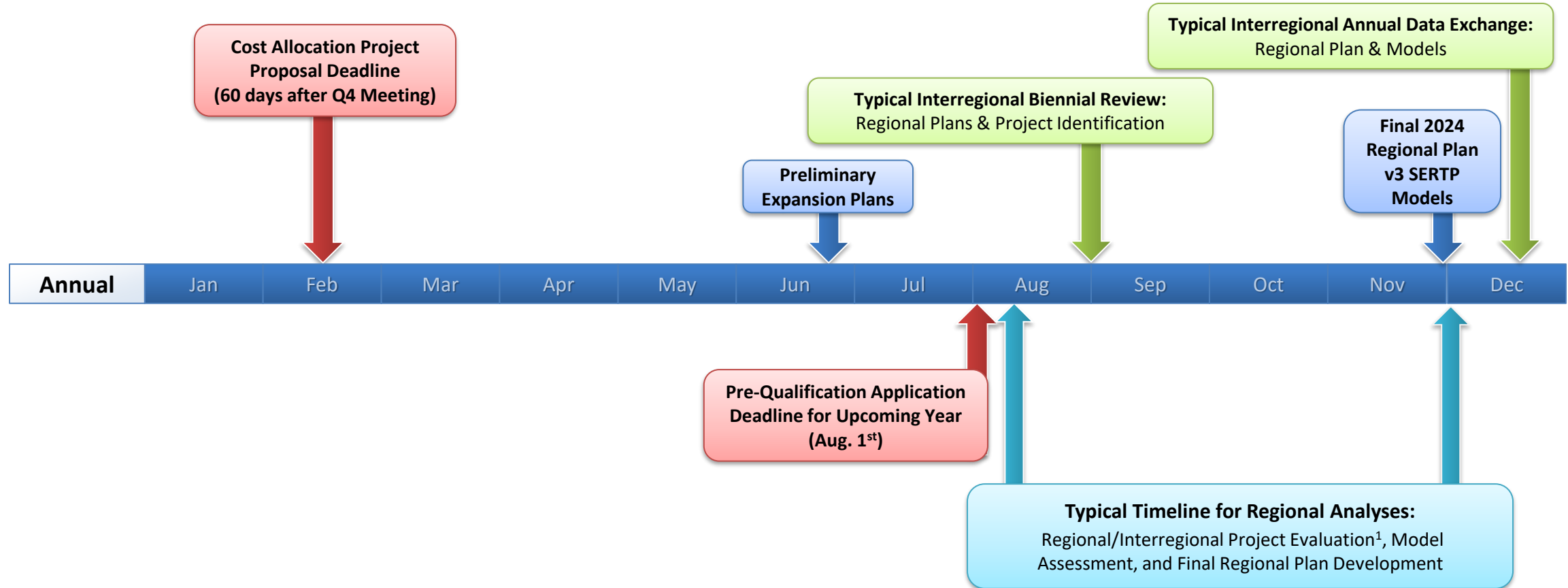
Generation Assumptions/Changes

Project Totals (Mileage, \$, etc.)

SERTP 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](#)

Southeastern
Regional
TRANSMISSION PLANNING

SECURE AREA | PLANNING CRITERIA | REFERENCE LIBRARY | INTERREGIONAL | CONTACT US

Interregional FRCC >> MISO >> PJM >> SCRT >> SPP >> Return Home >>

Interregional - FRCC (+) FRCC

Interregional - MISO (+) MISO

- MISO Stakeholder Registration Link
 - MISO Stakeholder Planning Advisory Committee Registration Link
 - MISO Stakeholder Planning Subcommittee Registration
- MISO and SERTP Interregional Transmission Planning Procedures
 - Interregional Transmission Planning Coordination Between the SERTP and MISO Regions

[Back to Top >>](#)

Interregional - PJM (+) PJM

Interregional - SCRT > (+) SCRT >

Interregional - SPP (+) SPP

Questions?

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