Southeastern Regional
TRANSMISSION PLANNING

PJM – SERTP
Planning Process Overview

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

May 7th, 2020

Agenda

- SERTP – Process Overview
  - Background
  - SERTP Region Scope
  - Processes and Timelines

SERTP

PROCESS OVERVIEW

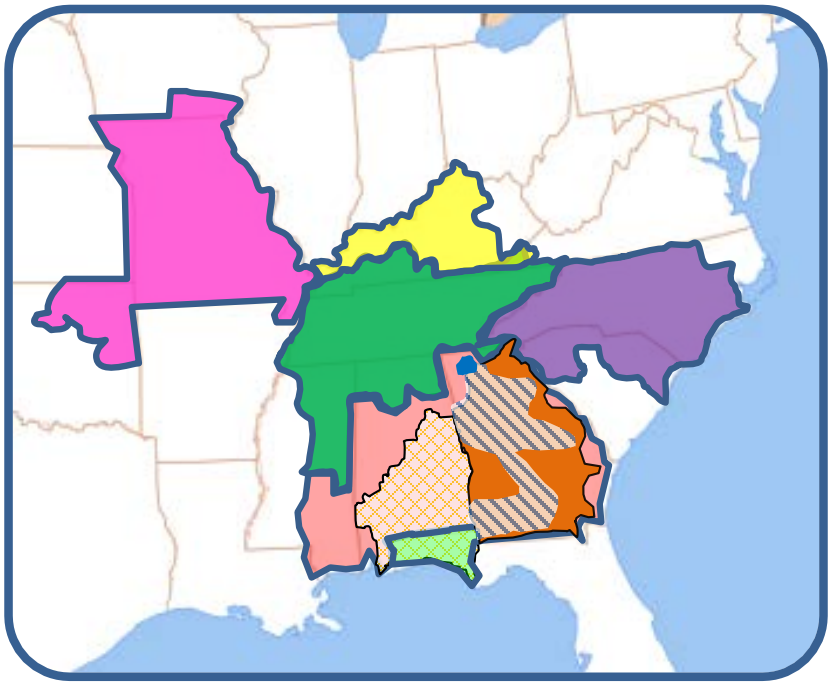
SERTP Background

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

- Associated Electric Cooperative Inc.
- Dalton Utilities
- Duke Energy
- Georgia Transmission
- Gulf Power
- LG&E KU
- MEAG Power
- PowerSouth Energy Cooperative
- Southern Company
- TVA

SERTP Overview

Southeastern Regional Transmission Planning (SERTP)

Balancing Authority Area:

AECI

Duke Carolinas

Duke Progress

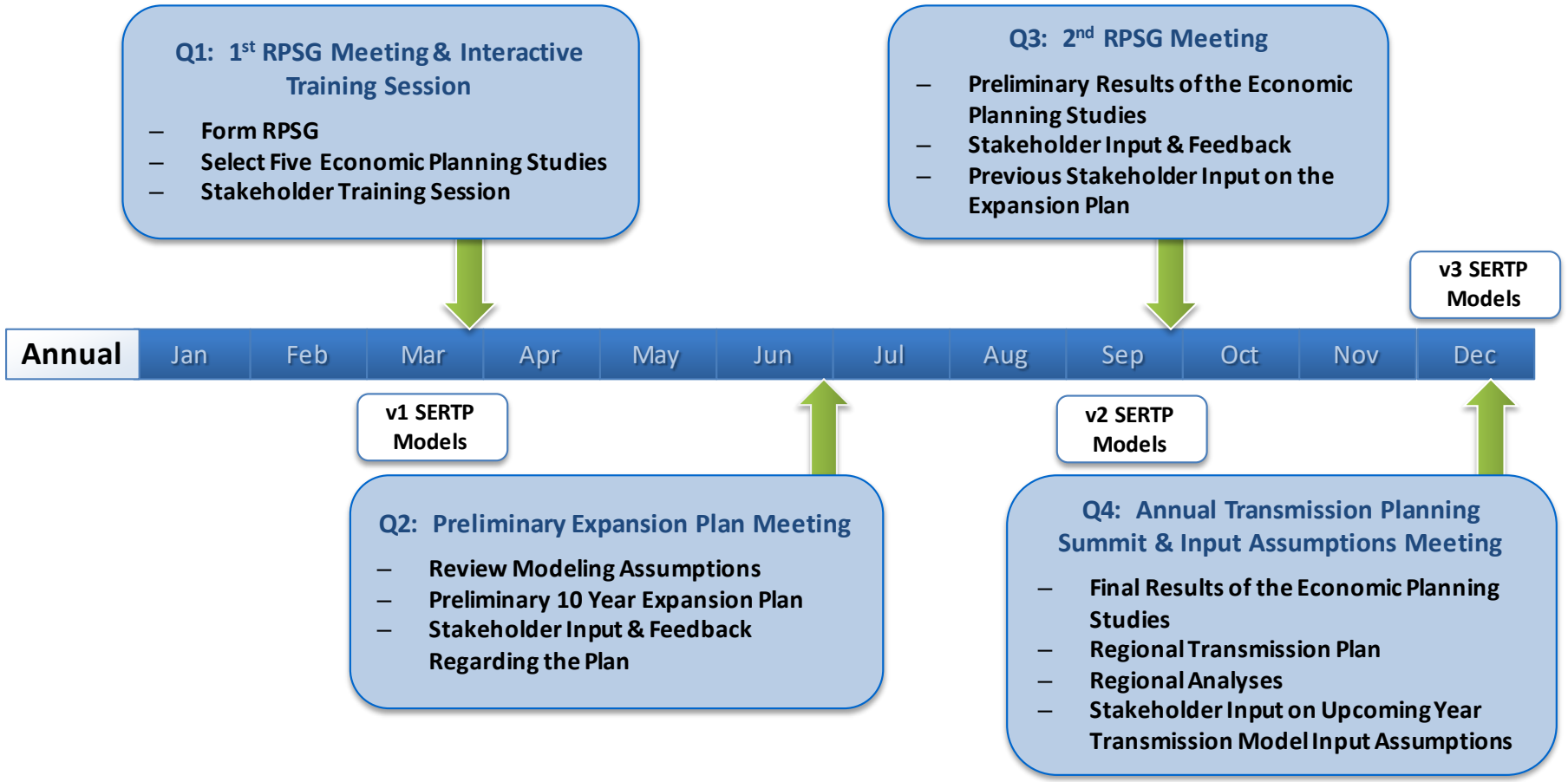
LG&E/KU

PowerSouth

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 for regional information exchange.*
  - Prefer to Limit of 2-3 with capabilities to retrieve the information from the SERTP Secure Area.

No.	Season	Year
1	Summer	2022
2		2025
3		2030
4	Shoulder	2025
5	Winter	2025
6		2030

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
- **2019 SERTP Economic Planning Study Report**

Regional Transmission Analyses

- **Regional Transmission Analyses are performed during the course of each transmission planning cycle in order to:**

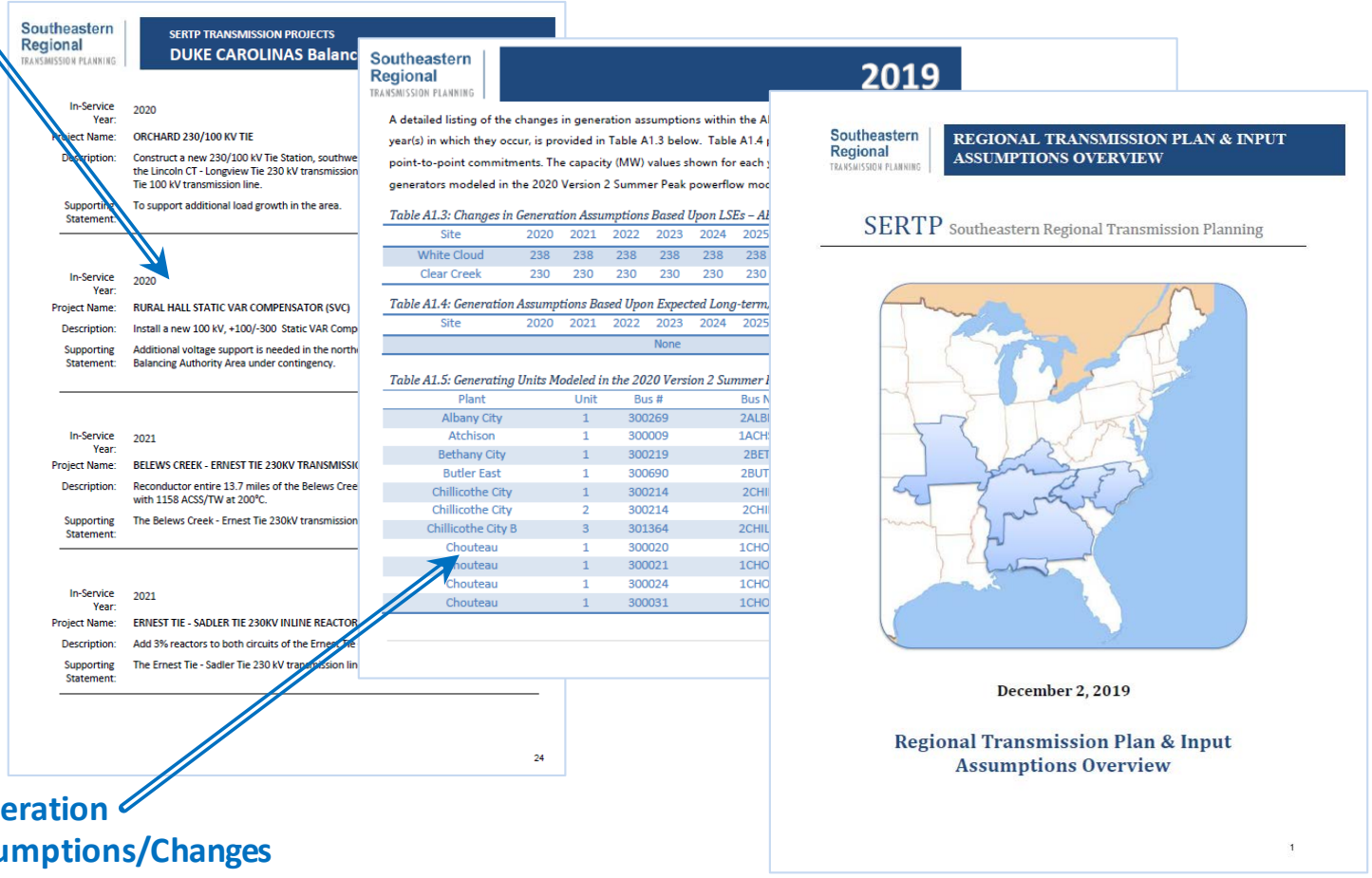
1) Assess if the then current regional transmission plan addresses the Transmission Provider's transmission needs
2) Assess whether there may be more efficient or cost effective transmission projects to address transmission needs

- **2019 SERTP Regional Analyses Summary**

Regional Transmission Plan

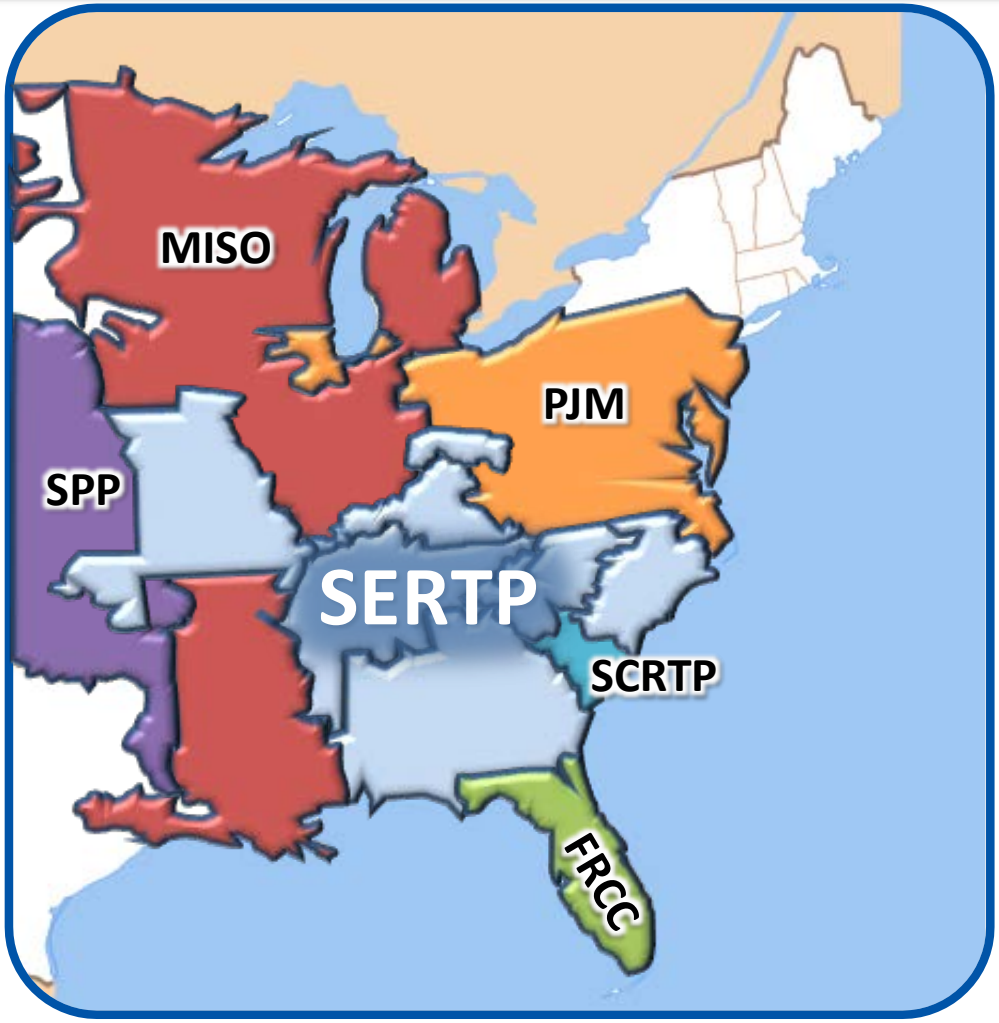
Project Descriptions, Drivers, Contingencies

2019 SERTP Regional Transmission Plan

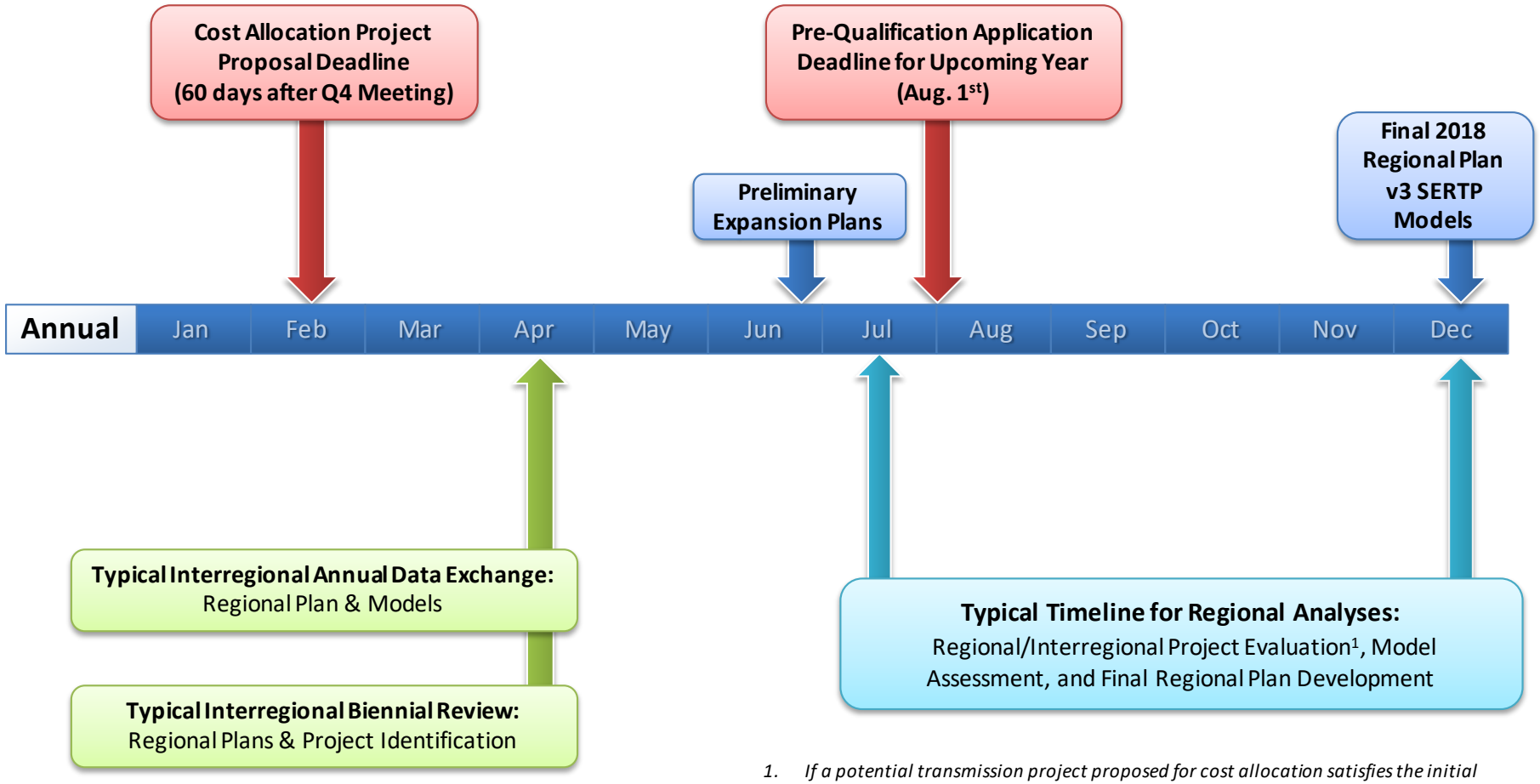


Generation Assumptions/Changes

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

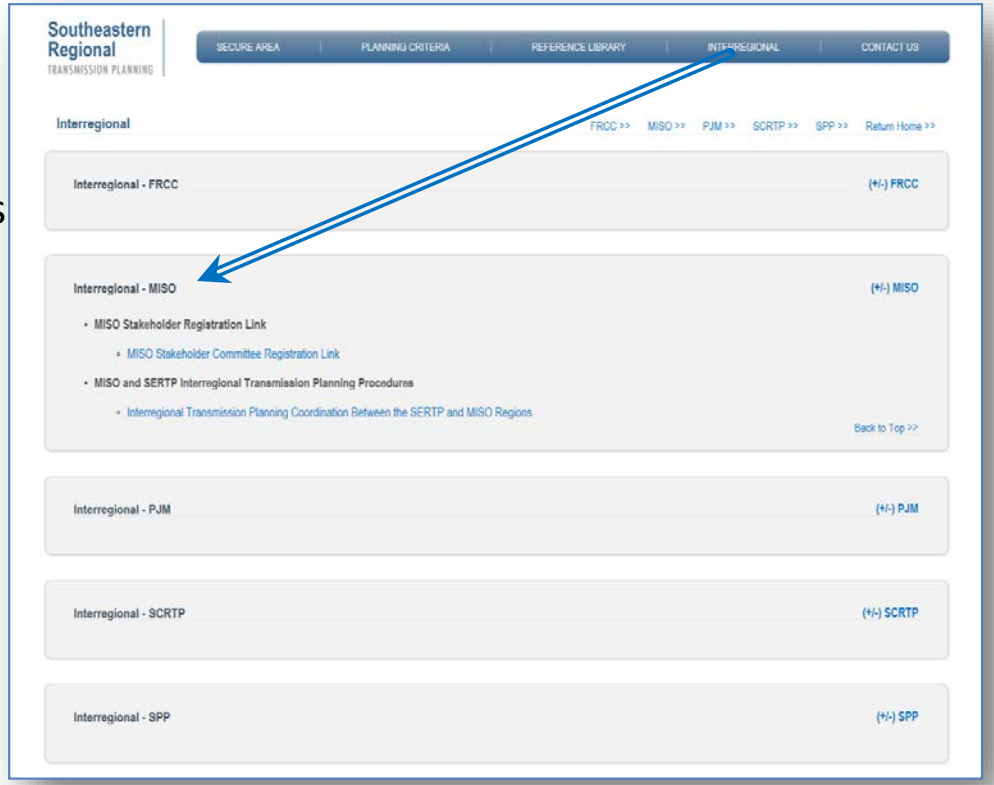
Interregional Project for Cost Allocation Must:

- Interconnect to facilities in both the SERTP and MISO 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



QUESTIONS?

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