

# SERTP

## *Southeastern Regional Transmission Planning Process Overview*

**November 3, 2016**

**EIPC Webinar 1**

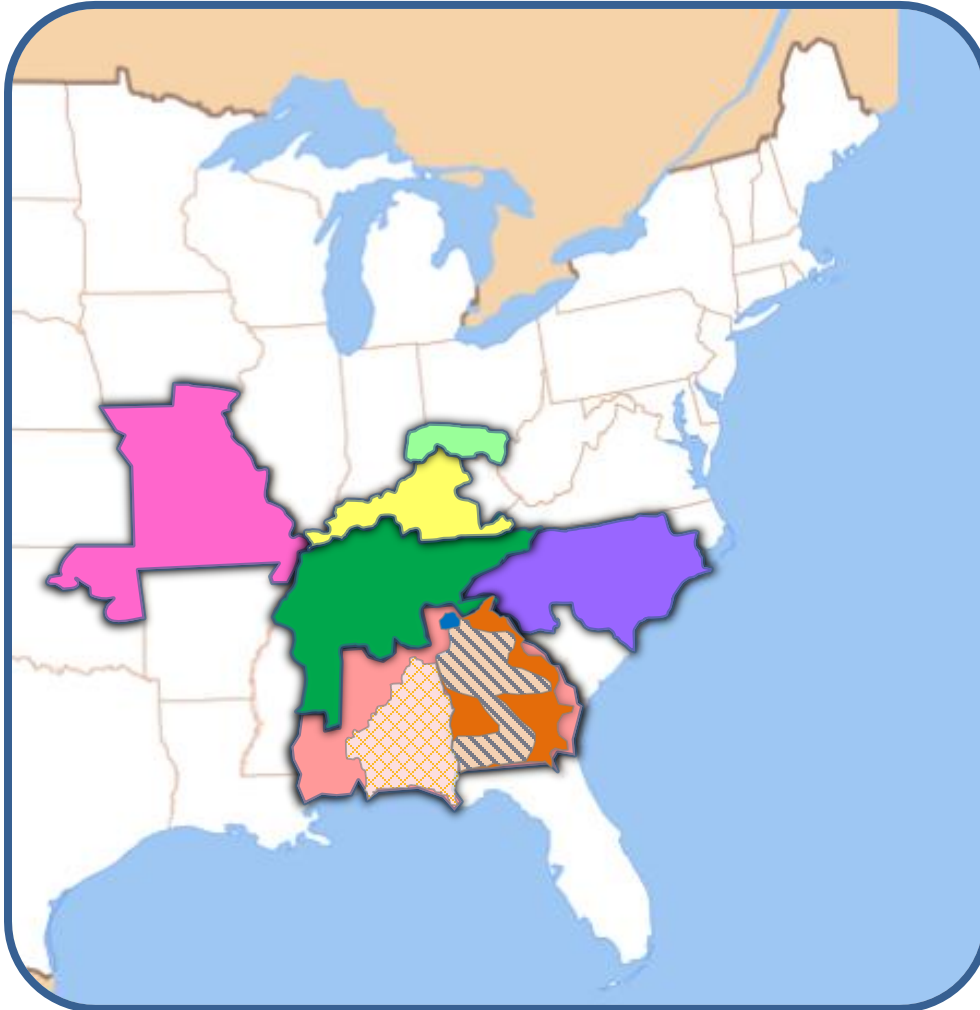
## SERTP Background

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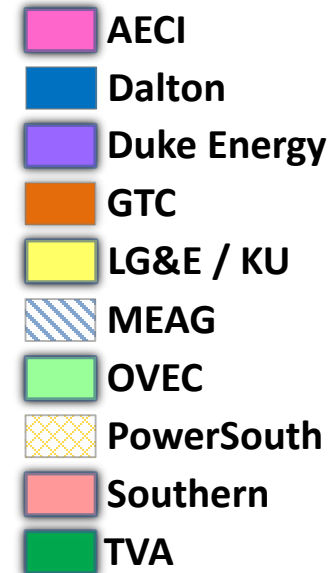
### **Southeastern Regional Transmission Planning Process (SERTP)**

- **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**
- **Region has expanded several times in both size and scope since formation (most recently in 2014) to currently include 10 Sponsor utilities**
- **Began regional implementation of Order 1000 requirements on June 1, 2014**
- **Began interregional implementation of Order 1000 on January 1, 2015**

## SERTP Region



## SERTP Sponsors



- Spans portions of 14 states
- Includes 9 BAAs
- > 90,000 miles of transmission lines
- > 120,000 MW of total peak demand

## SERTP Regional Models

- SERTP Sponsors develop 12 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 upon satisfying access requirements

No.	Season	Year
1	Summer	2017
2		2019
3		2021
4		2022
5		2024
6		2026
7	Shoulder	2019
8		2021
9		2024
10		2026
11	Winter	2021
12		2026

## Economic Planning Studies

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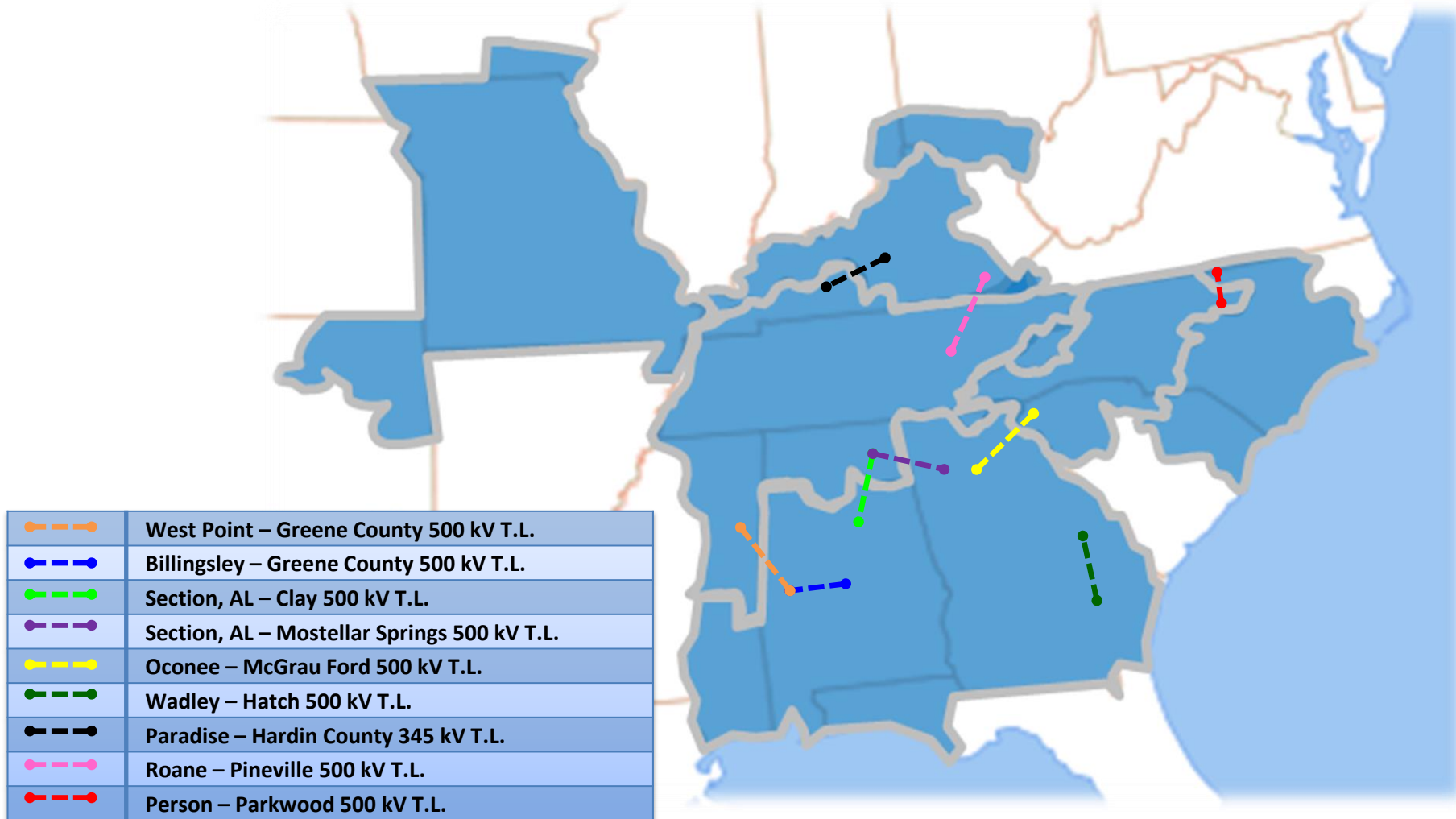
- **SERTP stakeholders can request up to five economic planning studies be performed annually**
- **These studies represent analyses of hypothetical scenarios requested by the stakeholders and do not represent an actual transmission need or commitment to build**
- **SERTP Sponsors identify the transmission 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
- **[2016 SERTP Preliminary Economic Planning Study Report](#)**

## Regional Transmission Analyses

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- **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
- [2015 SERTP Regional Analyses Summary](#)

## 2016 Preliminary List of Alternative Regional Transmission Projects



## Regional Transmission Plan

Project Descriptions,  
Drivers, Contingencies

### 2015 SERTP Regional Transmission Plan

**Southeastern Regional TRANSMISSION PLANNING** | SERTP TRANSMISSION PROJECTS | SOUTHERN Balancing

In-Service Year: 2015  
Project Name: **NORTH BREWTON – ALLIGATOR SWAMP 230**  
Description: Construct a new 54.7 mile 230 KV transmission line between Alligator Swamp and Silverhill #1 230 KV and Barr under contingency.

In-Service Year: 2015  
Project Name: **NORTH COTTONTON CAPACITOR STATION**  
Description: Add a 15 MVAR 115 KV capacitor station on the transmission line between Cottonton TS and additional voltage support is needed in the E

In-Service Year: 2015  
Project Name: **NORTH CRICHTON SWITCHING STATION**  
Description: Construct a six terminal 2000 A 115 KV ring bus station.

In-Service Year: 2015  
Project Name: **NORTH MOBILE – CRICHTON #1 115 KV T.L.**  
Description: Reconductor approximately 2.81 miles along 115 KV transmission line with 795 ACSS. Loop transmission line into the North Crichton Switching Station to the Crichton 115 KV transmission line between Switching Station.

Supporting Statement: Network reliability improvement needed in the

**Southeastern Regional TRANSMISSION PLANNING**

A detailed listing of the changes in generation capacity for each year(s) in which they occur, is provided in Table A8.7. Table A8.7 provides a listing of generation capacity changes for each year that reflect summer peak capacity.

**Table A8.3: Changes in Generation Capacity**

Site	2015	2016
Dahlberg	367	367
Branch 1	0	0
Branch 3-4	0	0
Gorgas 6-7	0	0
McManus 1-2	0	0
Scholz 1-2	0	0
Yates 1-5	0	0
Vogtle 2	540	540
Simon	27	27
Franklin 2	625	625
West Georgia	298	298
Kraft	316	316
Harris 1	0	628
Wansley 6	561	561
Vogtle 3	0	0
Vogtle 4	0	0
Harris 2	628	628
Central Alabama	885	885
Calhoun 1-4	632	632

**Southeastern Regional TRANSMISSION PLANNING**

The SERTP Region – Assumptions Overview

The SERTP Sponsors' transmission capacity commitments are intended to enable both new and existing physical transmission capacity commitments without congestion in the Eastern planning region in the Eastern United States.

The 2014 regional transmission capacity and cost-effectively provide transmission capacity provided, which responds well under a maintenance and construction.

Tables II.1 and II.2 below depict the regional transmission capacity assumptions included in the regional transmission plan.

**Table II.1 2014 SERTP Region Assumptions Overview**

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- Transmission Lines – New (Circuit Mi.)
- Transmission Lines – Upgrades (Circuit Mi.)
- Transformers – New
- Transformers – Replacements

\*A transmission line upgrade may be the result of a transmission line replacement. The voltages shown represent the operating voltage.

**Table II.2 2014 SERTP Region Assumptions Overview**

SERTP

- Transmission Lines – New (Circuit Mi.)
- Transmission Lines – Upgrades (Circuit Mi.)
- Transformers – New
- Transformers – Replacements

\*A transmission line upgrade may be the result of a transmission line replacement. The voltages shown represent the operating voltage.

**Southeastern Regional TRANSMISSION PLANNING** | 2015

Southeastern Regional Transmission Planning (SERTP)

**December 2015**

Regional Transmission Plan & Input Assumptions Overview

Generation Assumptions/Changes

Project Totals (Mileage, \$, etc.)



## SERTP Quarterly Stakeholder Meetings

### Q1: 1<sup>st</sup> RPSG Meeting & Interactive Training Session

- Form RPSG
- Select Five Economic Planning Studies
- Stakeholder Training Session

### Q3: 2<sup>nd</sup> RPSG Meeting

- Preliminary Results of the Economic Planning Studies
- Stakeholder Input & Feedback
- Previous Stakeholder Input on the Expansion Plan

### Q2: Preliminary Expansion Plan Meeting

- Review Modeling Assumptions
- Preliminary 10 Year Expansion Plan
- Stakeholder Input & Feedback Regarding the Plan

### Q4: Annual Transmission Planning Summit & Input Assumptions Meeting

- Final Results of the Economic Planning Studies
- Regional Transmission Plan
- Regional Analyses
- Stakeholder Input on Upcoming Year Transmission Model Input Assumptions

2016

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

Dec

## Regional Cost Allocation

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- **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

# Questions?

[www.southeasternrtp.com](http://www.southeasternrtp.com)