

South Carolina Regional Transmission Planning Stakeholder Meeting

Web Conference

June 13, 2013

Purpose and Goals of Today's Meeting

- FERC Order 1000 Interregional Requirements
 - Review associated Tariff language
- Southeast Inter-regional Participation Process (SIRPP)
- EIPC Stakeholder Group

FERC Order 1000 Transmission Planning and Cost Allocation

Interregional Requirements – Tariff Language

Clay Young

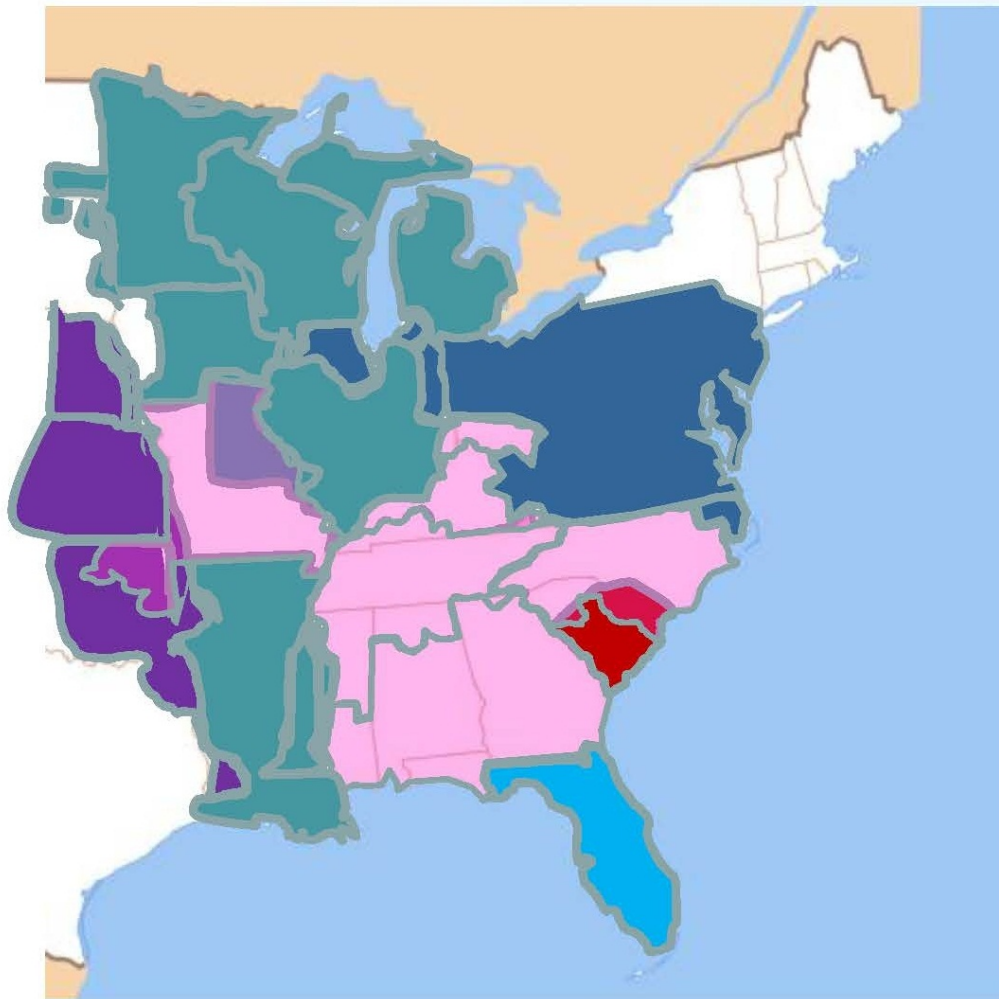
Order 1000 – Regional Requirements Update

- October 11, 2011 Order 1000 Rule
 - Regional and Interregional Requirements
- October 11, 2012 SCE&G filed Regional compliance filing
- April 18, 2013 FERC approved SCE&G Regional filing with changes required

Order 1000 – Interregional Requirements

- April 11, 2013 Interregional compliance filing original due date
- July 10, 2013 Interregional filing due (90 day extension granted by FERC)
- April 1, 2013 Emailed DRAFT Strawman
- April 15, 2013 Discussion with Stakeholder Group
- June 7, 2013 Emailed DRAFT Tariff language
- June 13, 2013 SCRTP Stakeholder Group discussion

SCRTP Neighboring Seam



RTOs

MISO

SPP

PJM

Non-RTOs

SERTP

SCRTP

FRCC

FERC Order 1000 – Interregional Requirements

Tariff Language Structure

- Introduction
- Coordination
- Data Exchange
- Joint Evaluation
- Cost Allocation
- Transparency

FERC Order 1000 – Interregional Requirements

- Introduction
 - SCRTP and SERTP (the regions) will address transmission planning issues related to interregional transmission facilities
 - The regions will coordinate with respect to interregional facilities to be located in both transmission planning regions
 - The regions will identify possible interregional facilities that could address transmission needs more efficiently or cost effectively than transmission facilities included in current transmission plans

FERC Order 1000 – Interregional Requirements

- Introduction
 - The regions commit to:
 - sharing transmission plans within the SCRTP and SERTP
 - jointly evaluate transmission facilities that are proposed to be located in both regions
 - exchange planning data and information, at least annually
 - maintain a website or email list for communication of information related to the coordinated planning process

FERC Order 1000 – Interregional Requirements

- Coordination
 - The regions will meet, at least annually, to facilitate the interregional coordination procedures
 - Biennially, the regions will review respective transmission plans and engaged in data exchange and joint evaluation
 - The regions will review proposed interregional transmission projects
 - The regions will coordinate assumptions used in joint evaluations

FERC Order 1000 – Interregional Requirements

- Data Exchange
 - At least annually, transmission providers in the SCRTP and the SERTP will exchange power-flow models and associated data used in the transmission planning process
 - Additional transmission models will be developed and exchanged, as necessary, to evaluate proposed transmission facilities
 - Models and data will be posted in the SCRTP website and may be treated as CEII or confidential
 - Transmission plans within the SCRTP will be posted

FERC Order 1000 – Interregional Requirements

- Joint Evaluation
 - Identification of interregional projects by transmission providers
 - Identification of interregional projects by stakeholders
 - Evaluation of interregional projects
 - Consistent with transmission planning practices used in developing regional and local plans
 - Evaluation of interregional projects for Interregional Cost Allocation Purposes
 - Subject to cost allocation methodology

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Interregional Projects proposed for Interregional Cost Allocation Purposes
 - Project must be interregional in nature, that is,
 - Must be located in both regions
 - Must interconnected to facilities in both regions
 - Must meet the Regional qualification criteria in both regions
 - On a case-by-case basis, the regions will consider a transmission project that meets the Regional qualification criteria for only one region

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - (Continued) Must be proposed for cost allocation purposes in both regions
 - Evaluation of interregional projects proposed for Interregional CAP
 - Each region will evaluate proposals to determine if and which current projects would be displaced
 - Each region will quantify a Regional Benefit based on projected avoided transmission costs due to the proposed project

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Calculation of Benefit to Cost Ratio
 - Each region will use the benefits calculation(s) as defined in such region's regional transmission planning process
 - Each region will use the cost calculation(s) as defined in such region's regional transmission planning process
 - The SCRTP benefits-to-cost ratio threshold will be 1.25

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Inclusion in Regional Transmission Plans after:
 - Each region has performed all evaluations, as prescribe in its regional transmission planning process
 - All approvals and agreements have been obtained, as prescribed in its regional transmission planning process

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Allocation of costs between the regions
 - Each region will be allocated a portion of the interregional project's costs in proportion to such region's Regional Benefit to the sum of the Regional Benefits for both regions
 - Costs allocation to each region shall be further allocated within each region pursuant to the cost allocation methodology prescribed in its regional planning process

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Removal from regional plans
 - If the developer does not meet developmental milestones
 - Pursuant to reevaluation procedures of the region
 - If the project is removed from one of the region's regional transmission plan

FERC Order 1000 – Interregional Requirements

- Cost Allocation
 - Abandonment
 - Transmission provider may choose to complete project or may propose alternative projects
 - If abandonment causes a NERC Reliability Standard to be violated, the transmission provider will submit a mitigation plan to the appropriate entity

FERC Order 1000 – Interregional Requirements

- Transparency
 - Procedures for coordination are posted on the SCRTP website
 - Access to models and data will be made available, subject to CEI and confidentiality requirements
 - Status updates provided at SCRTP meetings
 - Stakeholders will have opportunity to provide input and feedback through the SCRTP process

Order 1000 – Interregional Requirements

Stakeholder comments, questions and input

Order 1000 – Interregional Requirements

Next Steps

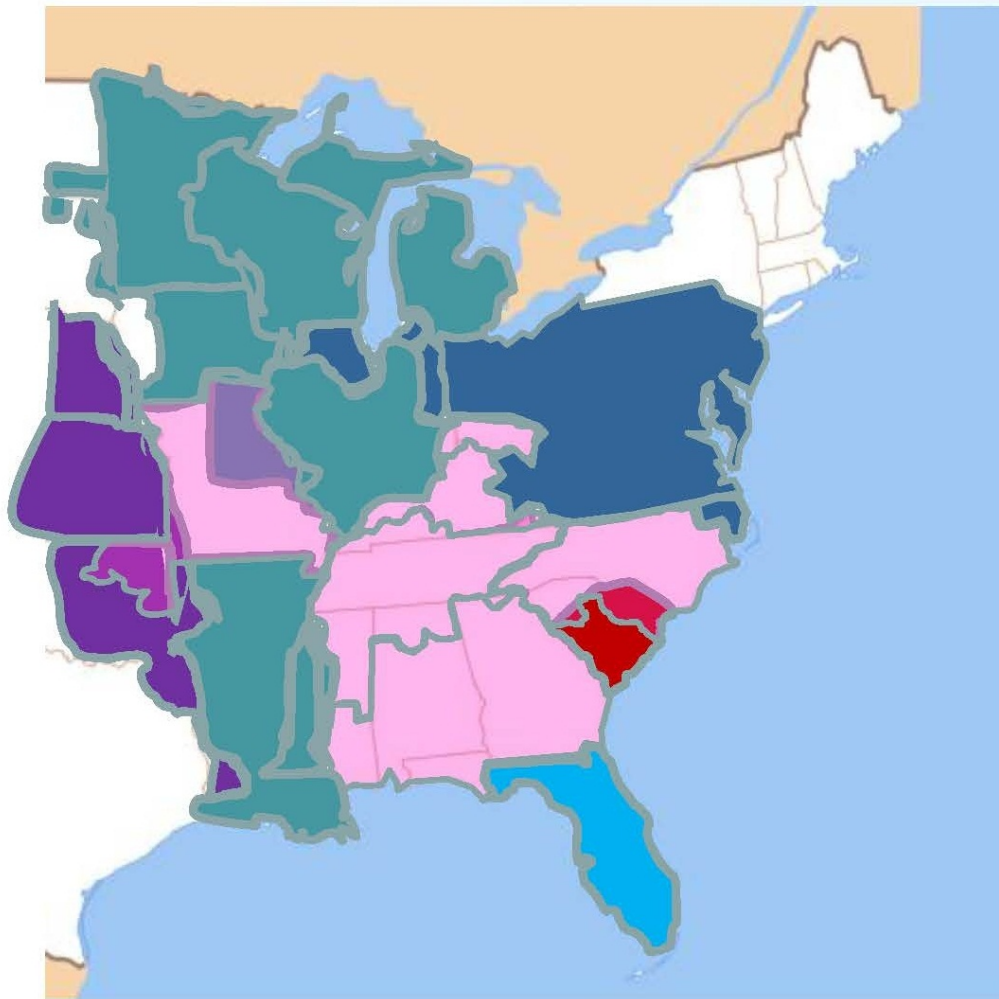
- June 27: Stakeholders submit comments on Tariff language to cyoung@scana.com
- July 10: Interregional compliance filing due

Southeast Inter-regional Participation Process (SIRPP)

Clay Young

- Southeast Interregional Participation Process
 - Interregional process among several southeastern interconnected transmission owners (outlined in each owner's Attachment K)
 - Originally established to augment the Order 890 regional participation processes outlined in neighboring planning regions
 - Conducts Economic Planning Studies on a wide-area footprint

SIRPP Membership Status



RTOs

MISO

SPP

PJM

Non-RTOs

SERTP

SCRTP

FRCC

- Southeast Interregional Participation Process
 - The SERTP region's recent expansion to include five additional Sponsors encompasses the vast majority of the original SIRPP footprint into the SERTP Region
 - The SERTP provides for data exchange, evaluation, and economic planning studies among the expanded Sponsors
 - In addition, FERC Order 1000 interregional requirements satisfy the primary purpose of the SIRPP
 - Interregional Joint Evaluation, Data Exchange, & Coordination

- Southeast Interregional Participation Process
 - Therefore, SCRTP TPs and SERTP Sponsors propose to replace the SIRPP with the FERC Order 1000 interregional procedures
 - Economic Planning Studies are still available for the SCRTP region through the regional process
 - Wide-area Economic Planning Studies can be requested in both regional processes to determine wide-area information

Eastern Interconnecton Planning Collaborative (EIPC)

Stakeholder Group

Phil Kleckley

Outline

- EIPC Background and History
- EIPC Scope of Activities (non-grant)
- EIPC Work Plan 2013-2014 (non-grant)
- Stakeholder Process Overview
- Stakeholder Role and Expectations
- Questions for Discussion
- Schedule for 2013
- 2018 and 2023 Roll-up Cases
- Discussion of Potential Scenarios to be Studied

About the EIPC

- Eastern Interconnection Planning Collaborative (EIPC)
- 25 Planning Authority (Planning Coordinator) members including ISOs/RTOs, non-ISO regions, municipals, cooperatives, ...
- Members are from the U.S. and Canada
- Approximately 95% of the Eastern Interconnection customers covered
- Formed in the Spring of 2009

Planning Authority Members of EIPC

- Alcoa Power Generating
- American Transmission Co.
- Duke Energy Carolinas
- Electric Energy Inc.
- Entergy *
- Florida Power & Light
- Georgia Transmission Corp.
- IESO *
- International Transmission Co.
- ISO-New England *
- JEA
- LG&E/KU
- MAPPCOR *
- Midwest ISO *
- Municipal Electric Authority of Georgia
- New York ISO *
- PJM Interconnection *
- PowerSouth Energy Coop.
- Progress Energy – Carolinas
- Progress Energy – Florida
- South Carolina Electric & Gas
- Santee Cooper
- Southern Company *
- Southwest Power Pool
- Tennessee Valley Authority *

*Primary participants on portions of the DOE funded project.

EIPC Activities

South Carolina Regional Transmission Planning

SCRTP

1. DOE Interconnection Studies Grant
 - ARRA funded
 - EIPC selected in fall of 2009
 - Study continues into 2015
2. EIPC Model Development and Analysis (non-grant)
 - Funded by EIPC members

DOE Interconnection Studies Grant

- Study of stakeholder-specified futures
- Two Phase Process:
 - Phase I
 - Developed base case starting point for expansion analyses
 - Macroeconomic study of resource needs under different policy and economic growth futures then determine three scenarios for further analysis
 - Phase II
 - Detailed transmission buildouts for three scenarios, production cost analysis, and costs estimated for generation and transmission development in three scenarios
 - Draft report sent to DOE and posted 4Q 2012
- DOE Guidance on Gas-Electric System Interface Study

Gas-Electric System Interface Study

- Phase I assumption that natural gas delivery can keep pace with electric generation development with no impact on gas price
- Recent interest in Gas-Electric interface by DOE, FERC, states, etc.
- EIPC working with DOE to study the issue:
 - Base line of existing electric and gas system analysis
 - Future gas adequacy assessment
 - Detailed modeling under gas contingency conditions, and impact on electric system operations
 - Dual fuel evaluation

EIPC Activities

1. DOE Interconnection Studies Grant
 - ARRA funded
 - EIPC selected in fall of 2009
 - Study continues through 2014
2. EIPC Model Development and Analysis (non-grant) - funded by EIPC members

Remainder of presentation focuses on activity #2

EIPC Scope of Activities (non-grant)

- Initial EIPC Scope of Activities adopted 12/22/09
- Non-grant work in 2013-2014:
 - Roll-up analysis of the PA's plans to find possible changes that will improve their efficiency and effectiveness
 - Result of this analysis available for consideration in regional and inter-regional planning processes
 - Perform a defined number of scenarios/sensitivities against the rolled-up model

EIPC Work Plan 2013-2014

- 2013 – Model roll-up and evaluation by Planning Authorities – during Q1,Q2,and Q3
- 2013 – Develop and put in place a new stakeholder process
 - Develop process
 - Poll states and other stakeholders for input and comment
 - Finalize and implement new stakeholder process
 - Hold initial open stakeholder webinars

EIPC Work Plan 2013-2014 (cont'd)

- Late 2013 through 2014
 - Provide results of updated roll-up analysis to stakeholders
 - With stakeholder input, develop resource expansion scenarios to be studied in 2014 on 2013 roll-up models
 - Perform inter-regional transmission analysis to support selected scenarios
 - Provide cost estimate for incremental transmission improvements and build-out required to support selected scenarios
 - Discuss interim results with Stakeholders and receive feedback
 - Revise analysis as appropriate
 - Hold Stakeholder meeting(s) to present final results of analysis
 - Publish results
 - In 2014, develop a new work plan for 2015 and beyond

EIPC Work Plan 2013-2014 (cont'd)

- Supporting Activities
 - CELL: Continue to make EIPC models available to those who have completed the EIPC CELL process (based on regional clearance)
 - Website: www.eipconline.com
 - Continue to host the EIPC website
 - Review current EIPC website and recommend modifications as appropriate
 - Post material from both grant and non-grant EIPC activities

Stakeholder Process Overview

- Existing stakeholder groups previously created for other purposes such as compliance with FERC Order 890 will be used to facilitate stakeholder input
- Ensure a regional focus:
 - Present roll-up models and results
 - Receive stakeholder feedback, input, comments and suggestions on specific scenarios to be studied
 - Present the results of scenario studies
 - Seek stakeholder feedback on reports that are created

Stakeholder Process Overview (cont'd)

- EIPC plans to hold two to three interconnection-wide stakeholder webinars each year
- These webinars provide transparency and coordination between the regions and to seek additional stakeholder input
- Webinars will be open to all stakeholders including federal and state (EISPC) representatives
- If necessary, interconnection-wide in-person stakeholder meetings could be held in place of or in addition to the webinars

Planning Authority Responsibility

- Ensure appropriate communication with regional stakeholder processes
- Coordinate with EISPC to ensure they have the opportunity to provide input and feedback
- Develop potential scenarios to be presented to stakeholders for input
- Solicit, organize, and review input from stakeholders

Planning Authority Responsibility (cont'd)

- Work with stakeholders through webinars (and meetings, if necessary) to provide transparency and resolve disagreements if possible
- Determine which scenarios will be studied based on input from stakeholders and guidance from the EIPC Executive Committee
- Post chosen scenarios and explanations for why those scenarios were chosen
- Report back to each region on interim and final study results

Stakeholder Role and Expectation

- Participate in regional processes and meetings
- Provide input on the roll-up models and results
- Provide input on potential scenarios developed by the PAs
- Suggest other scenarios of interest that should be considered
- Work with other stakeholders in determining which scenarios would be of most value
- Participate in interconnection-wide webinars (and meetings, if necessary) to provide input on the interim results, draft conclusions, and recommendations

Questions for Discussion

- When and how would stakeholders like to hear from the EIPC on the status of EIPC work?
- Do stakeholders want a separate set of EI-wide calls/webexes?
- What is the best use of EI-wide web meetings?
- How often would stakeholders like to be updated on EIPC work?
- Would stakeholders want the capability to provide input via an EIPC “mail box” in addition to input via their regional process?
- What would you like to get from EIPC studies?
- How much time do folks need to be able to provide comments once material is shared with them in – 2 days, 2 weeks, 1 month?

Schedule for 2013

- Regional Meetings: June through August
 - Background on non-grant work
 - Stakeholder process
 - 2018 and 2023 roll-up base cases
 - General discussion on potential scenarios to be studied
- Stakeholder Comments and Input on Stakeholder Process, Roll-up, and Scenarios Due – 9/3/13
 - Comments on stakeholder process
 - Roll-up work
 - Input on scenarios to be studied

Schedule for 2013 (cont'd)

- EIPC Consideration of Comments Received on Stakeholder Process: August and September
 - Finalize any recommended changes to stakeholder process – 9/19/13
- Regional Meetings: Mid-September – October
 - Results of roll-up case contingency and transfer testing
 - List of potential scenarios to be studied in 2014
 - Stakeholder feedback on which potential scenarios to select
- Eastern Interconnection-Wide Webinar – November
- EIPC Develops 2014 Study Schedule – October to December
 - Consider PA manpower requirements
 - Final selection of scenarios – 12/19/13
 - Post/notify stakeholders final scenarios to be studied in 2014

Discussion of Potential Scenarios to be Studied

- Principles
- Guidelines

Principles for Scenario Development

- All scenarios will be run as changes to a Base Plan created by the EIPC ...
- Scenarios will be identified for the purpose of developing high-level transmission buildouts ...
- Scenarios should not be duplicative of any other local or regional planning efforts ...
- The assumptions defining a scenario should be provided by the stakeholder sponsors ...
- Changes to the base plan resulting from the scenario assumptions will be determined by the EIPC members ...

Guidelines for Scenario Definition

- A general narrative description of the scenario, including the overall objective should be provided ...
- For transfer studies, the source and sink of power transferred should be identified ...
- The addition or removal of resources must be identified ...
- Scenarios that include storage technologies must identify on-peak contribution and off-peak demand ...
- Changes to the peak demand forecast should be specified as a change to the aggregate demand in the Base Plan ...

Questions and Discussion



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