Transmission Advisory Group Scope

Rich Wodyka February 3, 2006

TAG Scope Overview

- Purpose
- Responsibilities
- Membership
- Meeting Chair
- Meeting Procedures

TAG Purpose

- Formed from the NC Load Serving Entities' Transmission Planning Participation Agreement
- Provide advice and recommendations to the Agreement Participants in the development of a Coordinated Transmission Plan for NC



TAG Responsibilities

- Work constructively with the Agreement Participants in the development of a Coordinated Transmission Plan for NC
- Duties
 - Adhere to FERC Standards of Conduct
 - Participate in TAG meetings
 - Provide timely input on the associated issues
 - Provide input to the OSC on process and results

TAG Membership

Open to all parties interested in the development of a Coordinated Transmission Plan for NC

<u>www.nctpc.org/nctpc</u> Sign up for TAG Distribution List

TAG Meeting Chair

- Independent third-party (Gestalt, LLC) hired by Agreement Participants
- Facilitator for TAG working to develop consensus
- Duties
 - Organize and Chair the TAG meeting
 - Solicit input from TAG
 - Take action to ensure no preferential treatment or competitive advantage results from TAG activities
 - Ensure information confidentiality and Standards of Conduct are being adhered to in the TAG process
 - Responsible for TAG meeting highlights being taken and posted on the NCTPC website

TAG Meeting Procedures

- TAG meetings open to all, no restrictions on number of attendees
- Quorum no requirements
- Voting one vote per organization in attendance at the meeting, no proxy votes
- Protocol Robert's Rules of Order

TAG Scope Document

QUESTIONS ? or COMMENTS

Scope Document Approval

Transmission Advisory Group NCTPC Process Update

David Beam, NCEMC February 3, 2006

Overview

- Provide Participants and other stakeholders the opportunity to participate in the NC Transmission Planning Collaborative (NCTPC) process
- Preserve integrity of the current reliability and least cost planning process
- Analysis of increased access to resources inside and outside Progress and Duke control areas
- Develop a single transmission plan that includes reliability and enhanced access solutions while appropriately balancing costs, benefits and risks

Roles

- Oversight Steering Committee (OSC) overall responsibility for managing the process
- Planning Working Group (PWG) support development of the Process and conduct studies
- Transmission Advisory Group (TAG) Advice and recommendations on Process and study results



Reliability Planning Process

- Expansion of process traditionally used by transmission owners to ensure reliability
- OSC to establish scope and oversee study analysis
- Start with most recent reliability studies and planned transmission upgrades
- PWG will conduct reliability studies based on approved scope and develop recommendations



Reliability Planning Process Results

- Results include the estimated costs and schedules for upgrades needed to maintain reliable service to native load of the Participants
- Participants and TAG review and comment on results
- OSC reviews comments and directs additional analysis, if needed
- OSC finalizes reliability solutions to be carried forward into a single Collaborative Plan



Enhanced Transmission Access Planning (ETAP) Process

- ETAP evaluates means to increase access to resources inside and outside Progress and Duke control areas
- OSC to approve scope, assumptions and oversee PWG study process
- Participants and TAG propose scenarios and interfaces to be studied
- OSC decides what scenarios and interfaces will be analyzed in 2006 Planning Process
- PWG will conduct studies based on approved scope and develop recommended solutions



ETAP Results

- Results include the estimated costs and schedules for increased transmission capabilities
- Participants and TAG review results
- OSC reviews comments and directs additional analysis, if needed
- OSC finalizes results and decides on the enhance access solutions to be carried forward in to a single Collaborative Plan



Collaborative Transmission Plan

- OSC reviews combined reliability and ETAP results and develops a Draft of the final Collaborative Plan
- TAG reviews and provides input to OSC
- OSC reviews comments and develops the 2006 final Collaborative Plan
- Final Collaborative Plan gets factored into the Participants' future Integrated Resource Plans
- TAG members and other stakeholders can use this information for their own planning processes

2006 Overview Schedule

North Carolina Transmission Planning Collaborative

Reliability Planning Process

TAG Meetings

- > Evaluate current reliability problems and transmission upgrade plans
 - Develop Reliability Study Scope
 - Perform analysis, identify problems, and develop solutions
 - > Review Reliability Study Results

Enhanced Access Planning Process

- Propose and select enhanced access scenarios and interface
 - Develop Enhanced Access Study Scope
 - Perform analysis, identify problems, and develop solutions
 - Review Enhanced Access Study Results

Coordinated Plan Development

Combine Reliability and Enhanced Results

> OSC publishes DRAFT Plan

TAG review and comment





Questions? or Comments

Transmission Advisory Group Planning Process Status

Bryan Guy, Chair PWG February 3, 2005

Overview

- Planning practices
- Study
- Improvements

Planning Practices

- Shared planning practices among Participants
- Identified similarities and differences

- Assumptions
 - 2011 Summer
 - LSE input for load and resources
 - Dispatch order provided by LSEs
 - Coordinated Interchange

- Study Criteria
 - NERC Reliability Standards
 - SERC Requirements
 - Individual company criteria

- Case Development
 - Latest MMWG/VSTE case updated
 - Combined detailed model for Duke and PEC
 - Model planned transmission additions

- Methodology
 - Thermal Load Flow Analysis
 - Duke and PEC Contingencies
 - Duke and PEC Monitored Elements
 - Study voltage, stability, short circuit, phase angle as needed

- Technical Analysis
 - Identify problems
- Solutions
 - Jointly develop potential solutions and test
 - Estimate cost and schedule

- Reliability Study Results
 - Compare alternatives
 - Select solutions
 - Select set of transmission improvements

NCTPC Improvements Now

- Common planning cycle
- Integrated detailed modeling
- Detailed verification of resources and load
- Coordinated dispatch
- Expanded contingency analysis
- More informed planning back at the office



Questions? or Comments

Transmission Advisory Group Enhanced Transmission Access Planning

Pam Kozlowski February 3, 2006

Enhanced Transmission Access Planning

- PURPOSE Evaluate the means to increase transmission access to potential resources inside and outside the control areas of Duke and Progress to serve load in NC.
- STEP 1 Participants and TAG members propose scenarios and interfaces to be studied.



Enhanced Transmission Access Option Form – Part 1

Date of Submittal
Submitting Company
Company Contact
Contact Phone Number
Contact E-Mail Address

Enhanced Transmission Access Option Form – Part 2

Sink 1. Specify Duke, CPLE, or CPLW as the sink control area. 2. Specify LSE, if applicable.	
 Source Specify the source control area. Specify if the transaction is a system purchase or purchase from a specific generator(s). If from a specific generator(s), provide location of the generator for proper modeling. Attach interconnection one-line diagram as necessary. 	
Point-of-Receipt/Point-of Delivery Path: (Examples: AEP/DUK – DUK/CPLE; SCEG/CPLE; SOCO/DUK)	
Maximum Capacity in MW Summer Winter	
Start date	
End date, if applicable	
Purpose and benefit for this study request.	

Enhanced Transmission Access Planning

- TAG Responses Due by February 17, 2006
- Email Forms to: Pam Kozlowski, Gestalt LLC

pkozlowski@gestalt-llc.com

- PWG reviews all proposed scenarios / interfaces and provides OSC a recommendation on the Enhanced Transmission Access Options for analysis in 2006
- OSC provides TAG feedback in 2nd Quarter

Enhanced Transmission Access Planning – TAG Input

QUESTIONS ? or COMMENTS

Transmission Advisory Group 2006 Activity Schedule

Rich Wodyka February 3, 2006

2006 - 1st Quarter Activities

- Receive update and provide comments on the NCTPC Process
- Provide comments on the Scope of TAG
- Review and comment on the 2006 TAG Activity Schedule
- Provide input to the OSC on proposed Enhanced Transmission Access scenarios and interfaces for study

2006 - 2nd Quarter Activities

- Receive OSC feedback on the Enhanced Transmission Access scenarios and interfaces selected for analysis in 2006
- Receive update on the Reliability Planning studies

2006 - 3rd Quarter Activities

- Review and comment on the Reliability Planning study results
- Receive update on the Enhanced Transmission Access Planning studies

2006 - 4th Quarter Activities

- Review and comment on the Enhanced Transmission Access Planning study results
- Review draft of final combined Collaborative Transmission Plan
- Provide feedback to the OSC on the 2006 NCTPC Process

TAG 2006 Activity Schedule

QUESTIONS ? or COMMENTS

Transmission Advisory Group

Open Forum Discussion