

**NOVEMBER 12, 2007 DRAFT ATTACHMENT K**  
**DRAFT -- SUBJECT TO MANAGEMENT APPROVAL]**

**1. INTRODUCTION**

Duke Energy Carolinas, LLC (Duke) and Progress Energy Carolinas, Inc. (Progress), Transmission Providers with transmission facilities located in the states of North Carolina and South Carolina, ensure that their entire Transmission Systems (i.e., both the portions located in North Carolina and the portions located in South Carolina) are planned in accordance with the requirements imposed by Order No. 890 through the process developed by the North Carolina Transmission Planning Collaborative Process (NCTPC Process). The NCTPC was formed by the following load serving entities (LSEs) in the State of North Carolina: Duke, Progress, Electricities of North Carolina (Electricities), and the North Carolina Electric Membership Corporation (NCEMC) (collectively, NCTPC Participants or Participants).

In addition to engaging in regional planning through the NCTPC Process, as discussed in Section 10, the Transmission Providers engage in “inter-regional” study and planning activities with transmission providers located outside their Control Areas. **Such activities include participation in SERC and the Southeast Inter-Regional Participation Process, which focus on reliability and economic planning respectively.**

**2. NCTPC PROCESS OVERVIEW INCLUDING THE PROCESS FOR CONSULTING WITH CUSTOMERS**

The NCTPC will annually develop a single, coordinated transmission plan (Collaborative Transmission Plan) that appropriately balances costs, benefits, and risks associated with the use of transmission, generation, and demand-side resources to meet the needs of LSEs as well as ~~other~~ Transmission Customers under this Tariff.

- 2.1 The *North Carolina Load Serving Entities Transmission Planning Participation Agreement (Participation Agreement)* governs the NCTPC and the NCTPC Process. The *Participation Agreement* is located on the NCTPC Website (<http://www.nctpc.org/nctpc/>).
- 2.2 The NCTPC Process is summarized in a document entitled *North Carolina Transmission Planning Collaborative Process* that is located on the NCTPC Website.
- 2.3 Participation in the NCTPC
  - 2.3.1 Pursuant to the *Participation Agreement*, the NCTPC has four components: the Oversight/Steering Committee (OSC), the Planning Working Group (PWG), the Transmission Advisory Group (TAG), and the Independent Third Party (ITP).
  - 2.3.2 Eligibility for participation in the four NCTPC components is as follows:

2.3.2.1 The appointment of OSC members by the NCTPC Participants is governed by the *Participation Agreement*. The ITP is an *ex officio* member of the committee. The qualifications required to serve on the OSC are set forth in a document entitled *Scope - Oversight/Steering Committee* that is located on the NCTPC Website.

2.3.2.2 The appointment of PWG members by the NCTPC Participants is governed by the *Participation Agreement*. The ITP also has a representative on the PWG. The qualifications required to serve on the PWG are set forth in a document entitled *Scope - Planning Working Group* that is located on the NCTPC Website.

2.3.2.3 ~~TAG membership is open to all persons interested in the development of a coordinated transmission expansion plan across the respective service territories of the NCTPC Participants in North Carolina and South Carolina.~~ **Anyone may participate in the TAG (TAG participants) and sign-up to receive TAG communications. Entities that are valid stakeholders may apply to become TAG Voting Members. A valid stakeholder includes any Eligible Customer, state or federal agency, and any organization capable of providing Ancillary Services under the Duke Energy Carolinas or Progress Energy Carolinas OATTs. In addition, any Transmission Owner, Transmission Operator, or Transmission Planner as those terms or their successors are used under the NERC Functional Model, as may be amended from time to time, will be considered valid stakeholders and may become a TAG Voting Member. Persons who are not employed by, but are authorized agents of, one or more TAG Voting Members also will be permitted to represent TAG Voting Members in the NCTPC Process. The transmission function of a NCTPC Participant may not be a TAG Voting Member, but the merchant function of an NCTPC Participant may be a TAG Voting Member.**

2.3.2.4 The Independent Third Party (ITP) is selected by the OSC. The ITP must have qualifications similar to OSC and PWG members.

## 2.4 Responsibilities and Decision-making ~~Making~~ of NCTPC Components

The responsibilities of the components within the NCTPC are determined by the *Participation Agreement* and/or the OSC. Decision-making likewise is established in the *Participation Agreement*, or by policies established by the OSC.

### 2.4.1 Oversight/Steering Committee

2.4.1.1 The OSC is responsible for overseeing and directing all the activities associated with this NCTPC Process. A list of the OSC's responsibilities is found in *Scope - Oversight/Steering Committee*.

2.4.1.2 OSC decision-making is governed by the *Participation Agreement*.

2.4.1.3 Officers of the OSC are selected in the manner set forth in the *Participation Agreement*.

#### 2.4.2 Planning Working Group

2.4.2.1 The PWG is responsible for developing and performing the appropriate simulation studies to evaluate the transmission conditions in the Participants' service territories and recommend a coordinated solution for the various transmission limitations identified in the studies. A list of the PWG's responsibilities is found in *Scope - Planning Working Group*.

2.4.2.2 PWG decision-making is governed by the *Participation Agreement*.

2.4.2.3 Officers of the PWG are selected in the manner set forth in the *Participation Agreement*.

#### 2.4.3 Transmission Advisory Group

2.4.3.1 The purpose of the TAG is to provide advice and recommendations to the NCTPC Participants to aid in the development of an annual Collaborative Transmission Plan. ~~Through the TAG, all stakeholders with an interest in the Duke and/or Progress transmission planning have an opportunity to provide input. A~~ **The TAG participants propose enhanced transmission access projects for evaluation as described in Section 4.2.3 hereof. The TAG Voting Members select which of those projects should be evaluated. The TAG participants also provide input on the annual study scope elements of both the Reliability Planning Process as well as the Enhanced Transmission Access Planning Process, including input on the following: Study Assumptions; Study Criteria; Study Methodology; Case Development and Technical Analysis; Problem Identification; Assessment and Development of Solutions (including proposing alternative solutions for evaluation); Comparison and Selection of the Preferred Transmission Plan; and the Transmission Plan Study Results Report. A full** list of the TAG's responsibilities is found in *Scope - Transmission Advisory Group*—~~Scope~~—that, **which** is located on the NCTPC Website.

2.4.3.2 ~~The TAG meetings are open to all entities, including network, point to point, and interconnection customers under this Tariff.~~ **The ITP will chair the TAG meetings and serve as a facilitator for the group. TAG decision-making is by consensus among the participants. However, in the event consensus cannot be reached, voting will be conducted with each TAG Voting Member represented at the meeting (either physically present or participating via phone) receiving one vote. As to matters that must be resolved by vote, rather than by consensus, majority and minority positions will be forwarded to the OSC for their consideration on the issue. The independent third-party will provide notices to the TAG participants in advance of the TAG meeting that specific votes will be taken during the TAG meeting. Only TAG Voting Members participating in the meeting will be allowed to participate in the voting. A single person may represent more than one TAG Voting Member.**

2.4.3.3 ~~TAG decision making is by consensus. The ITP will chair the TAG meetings and serve as a facilitator for the group.~~

#### 2.4.4 Independent Third Party

2.4.4.1 The ITP facilitates the overall NCTPC Process.

2.4.4.2 A list of the ITP's primary responsibilities is found in *Scope - Planning Working Group* **and Scope - Oversight/Steering Committee.**

2.4.4.3 The ITP also provides the leadership role in developing the Enhanced Transmission Access Planning (ETAP) Process, subject to the oversight of the OSC.

2.4.4.4 The ITP maintains the NCTPC Website.

2.4.4.5 The ITP's role in decision-making varies based on which group s/he is participating **as documented in the NCTPC documents posted on the NCTPC Website.**

#### 2.5 Participation of State Regulators

State regulators, including state-sanctioned entities representing the public, may fully participate in the TAG meetings and provide comments and recommendations on various elements of the NCTPC Process in the TAG discussions. State regulators may receive periodic status updates and the progress reports on the NCTPC Process.

### 3. NOTICE PROCEDURES, MEETINGS, AND PLANNING-RELATED COMMUNICATIONS

All information regarding transmission planning meetings and communications are located on the NCTPC Website.

#### 3.1 Notice

3.1.1 Notice of all meetings of a component (TAG, PWG, OSC) will be by email to such component.

3.1.2 All TAG meeting notices and agendas will be posted on the NCTPC Website.

3.1.3 Information about signing up to be a TAG member **participant** and to receive email communications ~~directed to TAG members~~ is posted on the NCTPC Website. **Information about applying to be a TAG Voting Member also is available. [Rich, this will need to be set up!]**

3.1.4 The OSC will publish highlights of its meetings on the NCTPC Website.

#### 3.2 Location

3.2.1 The location of an OSC or PWG meeting will be determined by the component.

3.2.2 The location of a TAG meeting will be determined by the OSC.

3.2.3 Conference call dial-in technology will be available for meetings upon request.

#### 3.3 Meeting Protocols

##### 3.3.1 OSC

3.3.1.1 The OSC chair schedules meetings, provides notice, ensures that meeting minutes are taken, develops the agenda, chairs the meetings.

3.3.1.2 The OSC generally will meet at least monthly, and more frequently as necessary.

3.3.1.3 OSC meetings are open to the OSC members (including the ITP), their alternates, PWG members, and, if approved, guests.

### 3.3.2 PWG

3.3.2.1 The PWG chair schedules meetings, provides notice, ensures that meeting minutes are taken, develops the agenda, and chairs the meetings.

3.3.2.2 The PWG generally meets at least monthly, and more frequently as necessary.

3.3.2.3 PWG meetings are open to the PWG members, the ITP, the OSC (and their alternates), and, if approved, guests.

### 3.3.3 TAG

3.3.3.1 TAG meetings are chaired and facilitated by the ITP.

3.3.3.2 The TAG generally meets four times a year.

3.3.3.3 Meetings of the TAG **generally** are open to ~~all parties interested in the development of a coordinated transmission plan across the respective service territories of the Participants. There are no restrictions on the number of people attending TAG meetings from any organization~~**the public, i.e., TAG participants. When necessary, TAG meetings may be restricted by the ITP to representatives of TAG Voting Members that are qualified to receive Confidential Information.**

3.3.3.4 A yearly meeting and activity schedule is proposed, discussed with, and provided to TAG ~~members~~**participants** annually.

## 4. DESCRIPTION OF THE METHODOLOGY, CRITERIA, AND PROCESSES USED TO DEVELOP TRANSMISSION PLANS

The NCTPC Process is a coordinated regional planning process that includes both a “Reliability Planning” and an “Enhanced Transmission Access Planning” (ETAP) process, both of which ultimately result in the development of a Collaborative Transmission Plan. The entire, iterative process ultimately results in a single Collaborative Transmission Plan that appropriately balances the costs, benefits and risks associated with the use of transmission, generation, and demand-side resources.

### 4.1 Overview of Reliability Planning Process

The Reliability Planning Process addresses transmission upgrades needed to maintain reliability and to integrate new generation resources and/or loads. The Reliability Planning Process includes a base reliability study (base case) that evaluates each Transmission System’s ability to meet projected load with a defined set of resources as well as the needs of firm point-to-point customers, whose needs are reflected in their transmission contracts and reservations. A resource supply analysis also is conducted to

evaluate transmission system impacts for other potential resource supply options to meet future load requirements. The final results of the Reliability Planning Process include summaries of the estimated costs and schedules to provide any transmission upgrades and/or additions needed to maintain a sufficient level of reliability necessary to serve customers.

#### 4.2 Overview of Enhanced Transmission Access Planning Process

- 4.2.1 The ETAP Process is the economic planning process that allows the TAG **participants** to propose economic upgrades to be studied as part of the transmission planning process. The ETAP Process evaluates the means to increase transmission access to potential supply resources inside and outside the Control Areas of the Transmission Providers. This economic analysis provides the opportunity to study what transmission upgrades would be required to reliably integrate new resources. In addition, this economic analysis would include, if requested, the evaluation of Regional Economic Transmission Paths (RETPs) that would facilitate potential regional point-to-point economic transactions, **including point-to-point transactions that support the designation of network resources that are not located in the same control area as the network loads designating the network resources (i.e., “external network resources”)**. RETPs are described in more detail below and in the document entitled *NCTPC Transmission Cost Allocation-Whitepaper* on the NCTPC Website.
- 4.2.2 The ETAP Process begins with the NCTPC Participants and TAG ~~members~~ **participants** proposing scenarios and interfaces to be studied. The information required and the form necessary to submit a request as well as the submittal deadline is reviewed and discussed with the TAG **participants** at the beginning of the annual planning cycle. The form is posted on the NCTPC Website. **The PWG will determine if it would be efficient to combine and/or cluster any of the proposed scenarios and will also determine if any of the proposed scenarios are of an Inter-Regional nature. The OSC will direct the TAG participants to submit the Inter-Regional study requests to the Southeast Inter-Regional Planning Process since those studies would have to be evaluated within that forum.**
- 4.2.3 ~~The proposed scenarios and interfaces to be studied, including any Regional Economic Transmission Paths (RETPs), are compiled by the PWG. After consultation with the TAG, the PWG develops a means to allow the clustering or batching of requests for economic planning studies so that the PWG can perform the studies in the most efficient manner. The PWG prepares a recommendation for the OSC on the proposed studies to be performed. The OSC will evaluate the PWG recommendation to determine which ones will be included for analysis in the current planning cycle. [Sections 4.2.2 and 4.2.3 reflect the current~~

NCTPC Process and are being reevaluated in light of Order No. 890.] OSC will review the PWG analysis, approve the compiled study list, and provide the study list to the TAG. For the study scenarios that impact the NCTPC region, but are not Inter-Regional in nature, the TAG Voting Members will select a maximum of five scenarios that will be studied within the current NCTPC planning cycle. TAG Voting Members will be permitted to cast one vote in support of any particular scenario and may vote for up to a maximum of five study scenarios. There may be multiple representatives of TAG Voting Members within the TAG; however, for voting purposes, each TAG Voting Member can only submit one vote. The five study scenarios that receive the largest number of votes will be the study scenarios that are selected to be studied within the current NCPTC planning cycle. To be able to vote, the TAG Voting Member must participate in the meeting, either by having a representative physically present at the meeting or through participation by phone. No representative of a TAG Voting Member shall be permitted to cast a vote of another TAG Voting Member that has no participating representative.

4.2.4 There will be no charge to the TAG participants for the five studies selected by the TAG Voting Members. However, if a particular TAG participant wants the NCTPC to evaluate a scenario that was not chosen by the TAG Voting Members, then the TAG participant can request to have the NCTPC conduct the study. The NCTPC will evaluate this request and will conduct the study if the study can be reasonably accommodated, however the cost of conducting this additional study will be allocated to that specific TAG participant.

4.2.5 4.2.4-RETPs

4.2.5.1 4.2.4.1-As part of the ETAP, TAG members Voting Members may propose that a particular RETP be studied. An RETP would ensure that Point to Point Transmission Service can be provided over the Duke and/or Progress systems. TAG members will be permitted to propose that RETPs be created. The costs of the projects necessary to create such RETPs will be subject to the “requestor pays” cost allocation methodology described *infra*. The creation of an RETP would permit energy to be transferred on a Point-to Point basis from an interface (or a Point of Receipt) on one Transmission Provider’s system to an interface (or a Point of Delivery) on another Transmission Provider’s system for a specific period of time. The TAG will identify RETPs that they would like studied. There would be a need for an Initial Study of an RETP (“Initial RETP Study”). If a proposed RETP would be solely contained within the NCTPC, then the NCTPC process would be used to address the RETP. However, if a proposed RETP would impact transmission providers outside the NCTPC, there will be a need to



coordinate such an initial study with other transmission providers. A subscriber to an RETP is under no obligation to use the complete RETP, it may resell its rights to portions of the RETP. An RETP ensures that Point-to-Point Transmission Service can be provided over the Duke and/or Progress systems. The costs of the projects necessary to create an RETP will be subject to the “requestor pays” cost allocation methodology described *infra*.

4.2.5.2 A network customer may seek to use an RETP as the source of firm Point-to-Point Transmission Service to designate a network resource external to the Control Area in which its load is located.

4.2.5.3 The TAG Voting Members will identify RETPs that they would like studied. There would be a need for an initial study of an RETP (“Initial RETP Study”). If a proposed RETP would be solely contained within the NCTPC, then the NCTPC Process would be used to address the RETP. However, if a proposed RETP would impact transmission providers outside the NCTPC, there will be a need to coordinate such an initial study with other transmission providers. If a network customer indicates that it is interested in an RETP, and the proposed RETP to be studied does not otherwise terminate at the interface at or within the control area in which such network customer’s load is located, the Initial RETP Study would be of an RETP designed to ensure that power could be delivered within such control area.

4.2.5.4 4.2.4.2 If an Initial RETP Study is performed, it would identify any transmission system problems/limitations related to the Transmission Providers ~~along~~ **impacted by** the RETP ~~providing Point-to-Point Transmission Service~~ and would identify the transmission solutions/upgrades that would be needed to accommodate the RETP. An RETP would be evaluated in the Initial RETP Study as if it was a request for Point-to-Point Transmission Service from a source control area (Point of Receipt) to a sink control area (Point of Delivery) over a specific period of time (the ~~stakeholders~~ **TAG Voting Members** requesting the study would determine the time period), but it will not be considered to be a request that is in the transmission queue. The Point of Receipt and Point of Delivery can be interfaces.

4.2.5.5 If the RETP potentially would be used by a network customer, in addition to the analysis described above, the Transmission Provider for the Control Area in which the network load is located would also evaluate a request to designate a network

resource that would be an import to an interface on the RETP (“RETP-Related DNR Initial Study”). But, the relevant Transmission Provider will not queue a request to designate a network resource.

4.2.5.6 The Initial RETP Study would only provide preliminary information on the projected cost and scope of the facilities that would be needed to create the RETP, and the time it would take to complete the RETP. In the Initial RETP Study, each Transmission Provider along the RETP would identify the estimated costs for any upgrades necessary to provide service over the RETP. Similarly, the RETP-Related DNR Initial Study would contain preliminary information on the cost and scope of any upgrade caused by any proposed external network resource designations related to the RETP.

4.2.5.7 ~~4.2.4.3~~ The Initial RETP Study would only provide preliminary information on the projected cost and scope of the facilities that would be needed to create the RETP, and the time it would take to complete the RETP. In the Initial RETP Study, each Transmission Provider along the RETP would identify the estimated costs for any upgrades necessary to provide service. If the RETP was totally contained within the NCTPC, then the following process would be used to move the RETP through the study to potential project commitment phases. Once the Initial RETP Study is complete, a determination would be made as to whether there is sufficient interest in the project to move the RETP from the “initial study” mode to the establishment of an “Open Season” for the RETP. The Open Season will ~~have a similar impact to someone queuing a~~ provide the structure whereby Duke and Progress will be able to process these RETP Point-to Point Transmission Service ~~request~~ requests for the entire proposed MW of the RETP from the source control area to the sink control area for the relevant time period. During this Open Season all potential ~~Transmission Customers~~ transmission customers would have a 30 to 60-day window to put in their request to subscribe to all or a portion of the MW of service being made available along the RETP. Through the Open Season process, which will be iterative, if the RETP is fully subscribed, it would move forward to a Facilities Study stage. After such stage, if it remained fully subscribed, the RETP would be included in the Collaborative Transmission Plan (and/or a supplement to such Plan). If an RETP encompasses Transmission Providers outside the NCTPC, the impacted Transmission Providers will try and work individually and through applicable stakeholder forums to perform the necessary studies and develop the processes that would be used to move from a study of a RETP to actual transmission reservations

that would be needed to support the RETP. The above study and Open Season concepts could be used by these larger inter-regional transmission provider groups.

**4.2.5.8 If a transmission customer is a network customer and intends to use service on the RETP to designate an external network resource, its preliminary subscription in the Open Season will so indicate this intent. A request to designate a new network resource from the relevant interface to the network load will be placed in the transmission queue. The network customer, however, need not provide a statement that it owns or has committed to purchase a designated network resource to support its queued request.**

**4.2.5.9 Through the Open Season process, which will be iterative, if the RETP is fully subscribed, it would move forward to a Facilities Study stage. After such stage, if it remained fully subscribed, the RETP would be included in the Collaborative Transmission Plan (and/or a supplement to such Plan) and Service Agreements will be executed (or filed on an unexecuted basis). If a network customer that subscribes to an RETP seeks to retain its queue position with regard to its external network resource, a statement that it owns or has committed to purchase a designated network resource to support its queued request will be required within 120 days of its Service Agreement relating to an RETP being executed or filed.**

**4.2.5.10 If an RETP encompasses Transmission Providers outside the NCTPC, the impacted Transmission Providers will try and work individually and through applicable stakeholder forums to perform the necessary studies and develop the processes that would be used to move from a study of a RETP to actual transmission reservations that would be needed to support the RETP. The above study and Open Season concepts could be used by these larger inter-regional transmission provider groups.**

**4.2.6** 4.2.5-The final results of the ETAP Process include the estimated costs and schedules to provide the increased transmission capabilities. The enhanced transmission access study results are reviewed and discussed with the TAG **participants**.

#### 4.3 Overview of the Steps in the Planning Processes

4.3.1 Each year, the OSC will initiate the process to develop the annual Collaborative Transmission Plan.

- 4.3.2 The OSC will provide notice of the commencement of the process to develop the annual Collaborative Transmission Plan via e-mail to the TAG and posts a notice on the NCTPC Website.
- 4.3.3 The process will allow for flexibility to make modifications to the development of the plan throughout the year as needs change, new needs arise, or new solutions to problems are identified.
- 4.3.4 The schedule for all of the activities will be set by the PWG and OSC, but will vary from year to year. The basic order of events is as set forth in Section 5, although the planning process is an iterative one.

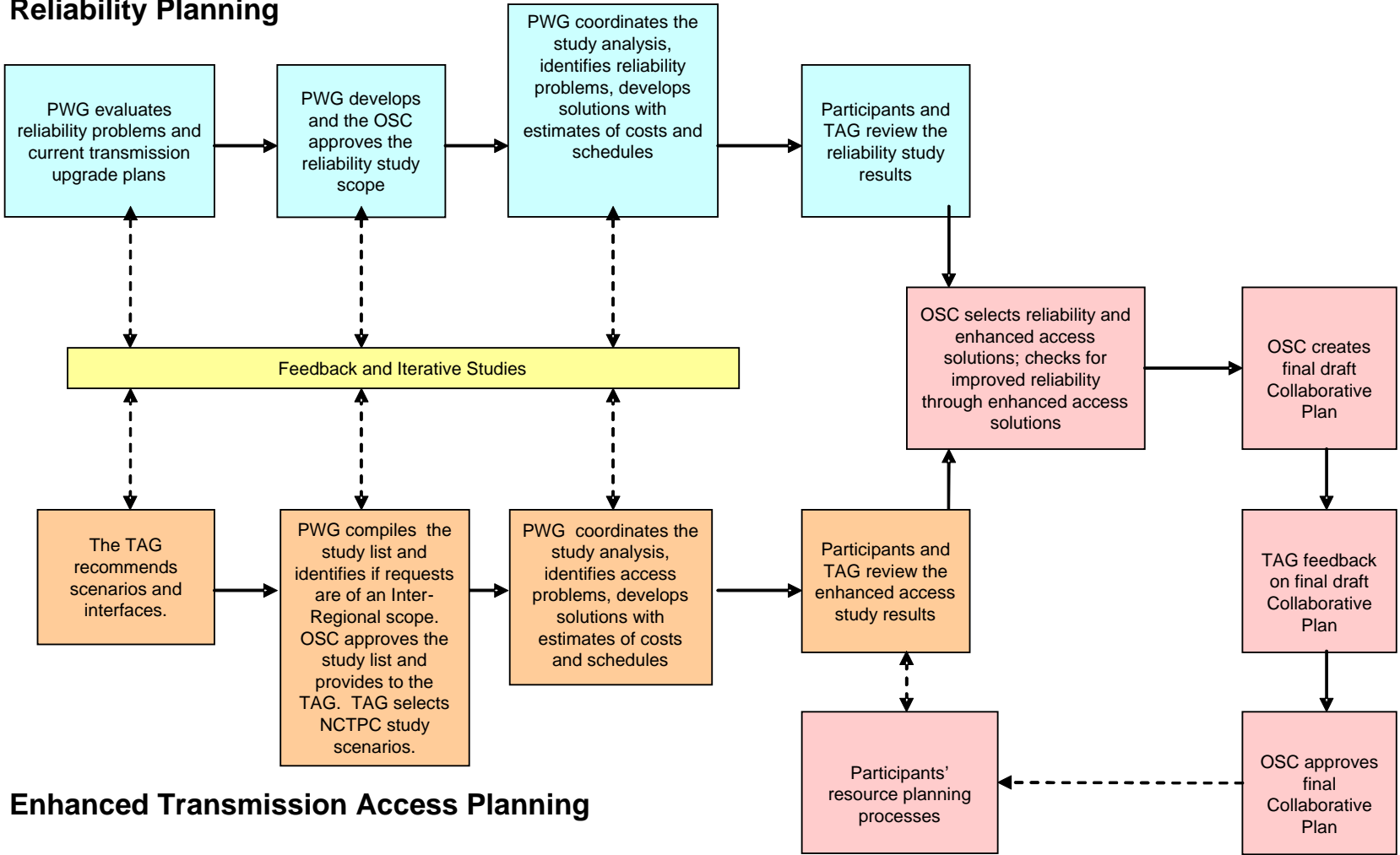
#### 4.4 Summary Flow Chart of Process

The following page contains a flow chart of the NCTPC Process. **[Note: New chart is attached]**

**~~[This draft flow chart reflects the current NCTPC Process and is likely to be revised in light of the reevaluation discussed *supra*.]~~**

**Figure 1**  
**North Carolina Transmission Planning Collaborative Process Flowchart**

**Reliability Planning**



## 5. CRITERIA, ASSUMPTIONS, AND DATA UNDERLYING THE PLAN AND METHOD OF DISCLOSURE OF TRANSMISSION PLANS AND STUDIES

### 5.1 Study Assumptions

- 5.1.1 The PWG will select the study assumptions for the analysis based on direction provided by the OSC.
- 5.1.2 Once the PWG identifies the study assumptions, they will be reviewed with the TAG participants before the set of final assumptions are approved by the OSC. The process for this dialogue is in-person meetings, written submissions, and/or other forms of communication selected by TAG ~~members~~ participants. Input should be provided in the timeframes agreed upon.
- 5.1.3 The study assumptions shall be set forth in an annual *Study Scope Document*.
- 5.1.4 The Transmission Providers will prepare the base case models. These models will be reviewed with the PWG to ensure that they represent the study assumptions approved by the OSC.
- 5.1.5 The Transmission Providers will also develop the necessary change case models as required to evaluate different resource supply scenarios and enhanced transmission access scenarios as directed by the OSC. Such change case models will also be reviewed with the PWG to ensure that they represent the study assumptions approved by the OSC.

### 5.2 Study Criteria

- 5.2.1 The PWG establishes the planning criteria by which the study results will be measured, in accordance with NERC and SERC Reliability Standards and individual Transmission Provider criteria. **TAG participants may review and comment on the planning criteria.**
- 5.2.2 For the Duke Transmission System, the following documents describe the criteria used by Duke. Such documents may be obtained from Duke through the contact listed on the Duke Website, but may be subject CEII protection.

Transmission System Planning Guidelines

Facility Connection Requirements

**[Note: List is incomplete at this time and will be completed by December 7th]**

- 5.2.3 For the Progress Transmission System, the following documents describe the criteria used by Progress. Such documents may be obtained from

Progress through the contact listed on the Progress Website, but may be subject CEII protection.

Progress' Transmission Planning Reliability Criteria  
Facility Connection Requirements

**[Note: List is incomplete at this time and will be completed by December 7th]**

### 5.3 Data Collection and Case Development

5.3.1 The most current Multi-Regional Modeling Working Group (MMWG) or SERC Long-Term Study Group model will be used for the systems external to Duke and Progress as a starting point for the base case to be used by both Progress and Duke. The base case will include the detailed internal models for Progress and Duke and will include current transmission additions planned to be in-service for given years.

5.3.2 The following data are relevant to the development of internal models for Progress and Duke:

Load and resource projections provided by network customers (including the native load of the NCTPC Participants);

Confirmed, firm point-to-point transmission service reservations (including rollover rights);

Generation real and reactive capacity data;

Generation dispatch priority data;

Transmission facility impedance and rating data; and

Interchange data adjusted to correctly model transfers associated with designated ~~Network Resources~~ **network resources** from outside the Transmission Providers' Control Areas.

5.3.3 The Transmission Providers collect the necessary planning data and information that are not already in their possession. **One element of this data collection process will be the annual collection of data from Network Customers required by this Tariff.** Any guidelines, data formats, and schedules for ~~the~~ **any** data and information ~~exchange~~ **exchanges** will be established by the PWG. ~~The~~ **Aside from the annual submission of data by Network Customers, the** timing of this data collection process is established as part of the development of the annual study work plan that is prepared by the PWG, reviewed with ~~the~~ **the TAG participants**, and approved by the OSC.

5.3.4 TAG ~~members~~ **participants** may provide additional input into the data collection process (i.e., the provision of data not required to be submitted under this Tariff), such as providing information on future point-to-point

transmission service scenarios. Such non-required information may be used in the appropriate study process.

5.3.5 Transmission Customers ~~customers~~ **customers** should provide the Transmission Providers with timely written notice of material changes in any information previously provided relating to load, resources, or other aspects of its facilities or operations affecting the Transmission Provider's ability to provide service. **Network customer may provide revised versions of previously submitted annual data reporting forms.**

5.3.6 Additional cases will be developed as required for different scenarios to evaluate other options to meet load demand forecasts in the study, including where fictitious or as yet undesignated network resources are deemed to be designated. Other cases may be developed and approved by the OSC to evaluate enhanced access scenarios, such as predicted future point-to-point transmission uses, as submitted by the TAG **participants.** ~~[May be reevaluated in light of Order No. 890.~~

5.3.7 The Case Development details will be identified in the annual *Study Scope Document*.

5.3.8 Sufficient information will be made available, subject to CEII and confidentiality restrictions, to enable interested persons **TAG Voting Members** to replicate the results of planning studies. ~~[The process for making such information available has not been determined and will be formalized by December 7, 2007.]~~ **A TAG Voting Member seeking data and information that would allow it to replicate the NCTPC planning studies should provide such request to the ITP, who will verify that confidentiality requirements described in Section 9 have been met before providing such information.**

#### 5.4 Methodology

5.4.1 The PWG determines the methodologies that will be used to carry out the technical analysis required for the approved studies. The PWG also determines the specific software and models that will be utilized to perform the technical analysis. The study methodology will be identified in the annual *Study Scope Document*. **TAG participants may review and comment on the study methodology.**

#### 5.5 Technical Analysis and Study Results

5.5.1 The PWG performs the technical study analysis in accordance with the OSC approved study methodology and produces the study results.

5.5.2 Results from the technical analysis are reported to identify transmission elements approaching their limits such that all NCTPC Participants are made aware of potential issues and appropriate steps can be identified to



correct these issues, including the potential of identifying previously undetected problems.

5.5.3 Study results are made available to the TAG **participants for review and comment.**

## 5.6 Assessment and Problem Identification

5.6.1 The Transmission Providers provide the summary data identifying the reliability problems and causes resulting from their assessments and comprehensively review the information with the PWG. The PWG evaluates the technical results provided by the Transmission Providers to identify problems and issues and reports to the OSC.

5.6.2 ~~The TAG is~~ **participants are** provided information relating to technical assessments and problem identification.

## 5.7 Solution Development

5.7.1 The PWG identifies potential solutions to the transmission problems identified and will test the effectiveness of the potential solutions through additional analysis as required and ensure that the solutions meet the study criteria previously developed.

**5.7.2 TAG participants will have the opportunity to suggest alternative solutions.**

~~5.7.3~~ **5.7.3** ~~5.7.2-~~All options that satisfactorily resolve an identified reliability problem would be given consideration.

~~5.7.4~~ **5.7.4** ~~5.7.3-~~The Transmission Providers estimate the costs for each of the proposed transmission solutions (e.g., cost, cash flow, present value) and develop a rough schedule estimate to complete the construction of the proposed facility. This information is reviewed and discussed by the PWG.

## 5.8 Selection of Preferred Transmission Plan

5.8.1 The PWG compares all of the alternatives and select the preferred solution by balancing the project cost, benefit, and associated risks.

5.8.2 The PWG selects a preferred set of transmission improvements that provides the most reliable and cost effective transmission solution while prudently managing the associated risks.

5.8.3 The PWG provides the OSC and the TAG **participants** with their recommendations based on this selection process **in order to obtain their input.**

## 5.9 Collaborative Transmission Plan Report

- 5.9.1 The PWG prepares a draft “Collaborative Transmission Plan Report” based on the study results and the recommended transmission solutions and provides to the OSC for review. The draft Report describes the plan in a manner that is understandable to ~~stakeholders~~ **the TAG participants** (e.g., describing any needs, the underlying assumptions, applicable planning criteria, and methodology used to determine the need), rather than simply reporting engineering results. The report includes a comprehensive summary of all the study activities as well as the recommended transmission improvements including estimates of costs and construction schedules.
- 5.9.2 The OSC forwards the draft report to the TAG **participants** for their review and discussion. The PWG members are the technical points of contact that can respond to questions regarding modeling criteria, assumptions, and data underlying the Report. The TAG ~~members~~ **participants** may discuss, question, or propose alternatives for any upgrades identified by the draft Report.
- 5.9.3 The OSC evaluates the results and the PWG recommendations and the TAG **participants’** input. The OSC approves the final Collaborative Transmission Plan for posting on the NCTPC Website. The Plan also is posted on the Transmission Providers’ OASIS and distributed to the TAG **participants**.
- 5.9.4 The Collaborative Transmission Plan Report allows the NCTPC Participants to identify alternative, least-cost resources to include with their respective Integrated Resource Plans. ~~Other stakeholders~~ **Others** can similarly use this information for their own resource planning purposes.

## 5.10 Status Reports

- 5.10.1 As part of the NCTPC Process, the Transmission Providers periodically provide the TAG **participants** a report on the status of the transmission upgrades presented in the previous Collaborative Transmission Plans. The update is posted on the NCPTC Website and includes the following information: the name of the project, the issue it resolves, the name of the relevant Transmission Provider(s), the original planned in-service date and the current expected in-service date.

## 6. DISPUTE RESOLUTION MECHANISM

### 6.1 NCTPC Process Disputes

- 6.1.1 The OSC voting structure allows the ITP to cast a tie breaking vote if necessary to decide on a particular issue.

- 6.1.2 A Transmission Provider has the right to reject an OSC decision if it believes that it would harm reliability.
- 6.1.3 Any NCTPC Participant or TAG Voting Member has the right to seek assistance from the NCUC Public Staff to mediate an issue and render a non-binding opinion on any disputed decision. [Note: Kendal will ask NCUC Public Staff to sign off on this.]
- 6.1.4 If the Participants cannot resolve a disputed decision by NCUC Public Staff facilitation, they may seek review from a judicial or regulatory body that has jurisdiction.

~~[The NCTPC is evaluating how disputes raised by TAG members relating to the NCTPC Process will be resolved.]~~

## 6.2 Transmission Siting Disputes

- 6.2.1 The South Carolina Code of Laws Section 58, Chapter 33 addresses disputes involving utilities' transmission projects that require South Carolina authorization through the certificates of public convenience and necessity process.
- 6.2.2 NCUC Rule R8-62 addresses disputes involving utilities' transmission projects that require North Carolina authorization through the certificates of public convenience and necessity process.

## 6.3 Integrated Resource Planning Disputes

- 6.3.1 The NCUC allows public participation in and may hold hearings regarding matters related to integrated resource planning.
- 6.3.2 The SC PSC allows public participation in and may hold hearings regarding matters related to integrated resource planning.

## 6.4 Tariff Disputes

- 6.4.1 The dispute resolution process provisions included in this Tariff apply to disputes involving compliance with the Commission's transmission planning obligations set forth in Order No. 890. Matters over which the Commission does not have jurisdiction, including planning to meet retail native load of the Transmission Providers shall not be within the scope of the dispute resolution process of this Tariff.

## 6.5 Regional Reliability Project Planning Disputes

- 6.5.1 The Commission's Dispute Resolution Service would be used to settle any issues arising from the cost allocation related to Regional Reliability

Projects, discussed *infra*, that involve transmission providers outside the NCTPC.

## **7. TRANSMISSION COST ALLOCATION**

### **7.1 OATT Cost Allocation**

- 7.1.1 The costs of Reliability Projects included in the Collaborative Transmission Plan are allocated in accordance with this Tariff. “Regional Reliability Projects,” as discussed below, are an exception to this rule.
- 7.1.2 While the Transmission Providers study economic upgrades through ETAP, they do not have an obligation to build or fund such projects and thus the projects studied are not included in the Collaborative Transmission Plan, unless and until either: 1) a transmission service request is submitted to the appropriate Transmission Provider(s) or 2) an RETP is fully subscribed.
- 7.1.3 If a transmission service request is submitted under this Tariff for an economic project, its costs will be allocated in accordance with this Tariff.

### **7.2 Regional Reliability Project Cost Allocation**

- 7.2.1 An “avoided cost” cost allocation methodology will apply to reliability projects where there is a demonstration that a regional transmission solution and regional approach to cost allocation results in cost savings.
- 7.2.2 The NCTPC Planning Process results in a set of projects that satisfy the reliability criteria of the Transmission Providers who are a party to the Participation Agreement (i.e., Reliability Projects). Through this process, a project may be identified that meets a reliability need in a more cost-effective manner than if each Transmission Provider were only considering projects on its system to meet its reliability criteria. A Regional Reliability Project can be defined as any reliability project that requires an upgrade to a Transmission Provider’s system that would not have otherwise been made based upon the reliability needs of the Transmission Provider. A Regional Reliability Project must have a cost of at least \$1 million to be subject to the avoided-cost cost allocation methodology. The costs of a Regional Reliability Project with a cost of less than \$1 million would be borne by each Transmission Provider based on the costs incurred on its system.
- 7.2.3 Unless a Regional Reliability Project is determined by the NCTPC to be the most cost-effective solution to a reliability need, it will not be selected to be included in the Collaborative Transmission Plan. But, if a Regional Reliability Project is cost effective, it will have its costs allocated based on an avoided cost approach, whereby each Transmission Provider looks at the stand-alone approach to maintaining reliable service and shares the

savings of not implementing the stand-alone approach on a pro-rata basis. The avoided cost approach formula can be expressed as follow:

$$\begin{aligned} & (\text{Transmission Provider}_x\text{'s Avoided Cost/Total} \\ & \text{Avoided Cost}) * \text{cost of Regional Reliability Project} \\ & = \text{Transmission Provider}_x\text{'s Cost Allocation} \end{aligned}$$

$$\begin{aligned} & (\text{Transmission Provider}_y\text{'s Avoided Cost/Total} \\ & \text{Avoided Cost}) * \text{cost of Regional Reliability Project} \\ & = \text{Transmission Provider}_y\text{'s Cost Allocation} \end{aligned}$$

These cost responsibility determinations will then be reflected in transmission rates. The avoided cost approach also will take into account in determining avoided costs, the acceleration or delay of Reliability Projects. Examples of the application of the avoided-cost approach may be found in ~~the~~ *NCTPC Transmission Cost Allocation-Whitepaper*.

- 7.2.4 If a Regional Reliability Project that is suitable for this alternate cost allocation approach involves a Transmission System(s) outside the NCTPC, the costs should be fairly allocated among the affected Transmission Providers based on good-faith negotiation among the parties involved using the “avoided cost” approach outlined above used as a starting point in the negotiations. The resulting transmission costs and the associated revenue requirements of each Transmission Provider will be recovered through their respective existing rate structures at the time.

### 7.3 RETP Cost Allocation

- 7.3.1 The costs of upgrades or facilities that result from RETPs are allocated on a “requestor pays” basis.
- 7.3.2 Transmission ~~Customer~~customer(s) that are subscribing to the RETP would provide the up-front funding of any transmission construction that was required to ensure that the path was available for the relevant time period. These “requestor(s)” would be the ~~Transmission~~ transmission ~~Customers~~customers that were awarded the MW as a result of the successful subscription during the Open Season process. On the Duke and/or Progress systems, the ~~Transmission Customer~~ transmission customer would receive a levelized repayment of this initial funding amount from Duke and/or Progress in the form of monthly transmission credits over a maximum 20-year period. The Transmission Providers will be permitted to work with the ~~Transmission Customers~~ transmission customers to provide shorter or different crediting. As credits are paid, Duke and Progress would have the opportunity to include the costs of upgrades that were needed for the RETP in transmission rates, similar to the Generator Interconnection pricing/rate approach.

- 7.3.3 No compensation is provided to the “requestors” of the RETPs for any “head-room” that would be created on the Transmission Systems. The total project cost for the transmission expansion required due to an RETP will be adjusted to provide compensation for the positive transmission impacts that the RETP would provide, given the existing Collaborative Transmission Plan.
- 7.3.4 This RETP concept and cost allocation methodology applies to the NCTPC footprint. ~~The NCTPC Participants will work with, which~~ **consists of the Duke and Progress Control Areas. Pursuant to Order No. 890, other regions to adopt approaches that are consistent with its requestor pays approach will adopt cost methodologies that apply to the costs of facilities located in their region.**

## 8. COST ALLOCATION FOR PLANNING COSTS

### 8.1 NCTPC-Related Planning Costs

- 8.1.1 Each NCTPC Participant bears its own expenses.
- 8.1.2 TAG ~~members~~ **participants and TAG Voting Members** bear their own expenses.
- 8.1.3 The costs of the NCTPC base reliability studies are born by Duke and Progress.
- 8.1.4 Costs associated with incremental reliability studies, the ITP’s costs, and the costs of the ETAP are all allocated to NCTPC Participants in the manner set forth in the *Participation Agreement*. ~~[A provision relating to costs of studies that are requested, but are outside the studies whose costs are allocated pursuant to this section, will be included in the Final Attachment K.]~~
- 8.1.5 Pursuant to Section 4, costs associated with economic studies that are outside the scope of the ETAP, will be borne by the study requestor.**
- 8.1.6** ~~8.1.5~~-NCTPC Participants may challenge the correctness of NCTPC cost allocations.
- 8.1.7** ~~8.1.6~~-For the Transmission Providers, transmission planning costs are a routine cost-of-service item that would be reflected in both wholesale and retail transmission rates. There is no plan to allocate planning costs to customers, other than as described above, or as contemplated by this Tariff when a customer makes a specific request that must be studied.

### 8.2 Non-NCTPC-Related Planning Costs

Each Transmission Provider will bear its own costs of planning-related activities that are not occurring through the rubric of the NCTPC Process, which costs may be recovered in rates, pursuant to the then-applicable ratemaking policies.

## 9. CONFIDENTIALITY

- 9.1 The Transmission Providers will take appropriate steps to protect CEII information. ~~[NCTPC needs to determine appropriate means of implementation and will provide additional detail by December 7, 2007.]~~
- 9.2 Identification of (non-CEII) Confidential Information
- 9.2.1 Aside from CEII restrictions, the only data that is expected to require confidentiality protection is customer-related information that is proprietary to a particular wholesale or retail customer (“Confidential Information”).
- 9.2.2 The confidentiality of such customer information is determined in the first instance by a NCTPC Participant or the TAG member participant. NCTPC Participants will abide by any internal, state-mandated, and/or FERC-mandated confidentiality rules, policies, and laws with regard to customer information in their possession in determining whether such information is confidential.
- 9.2.3 A person providing information that it considers to be Confidential Information to the PWG or OSC must indicate that the information is Confidential Information.
- 9.3 Availability of (non-CEII) Confidential Information
- 9.3.1 The NCTPC Participants will mask Confidential Information in documents that are released to the public.
- 9.3.2 Confidential Information will be made available, to the extent necessary, only to the NCTPC Participants, as limited by the *Participation Agreement*. Each NCTPC Participant is restricted from sharing or giving access to Confidential Information with any employee, representative, and/or organization directly involved in the sale and/or resale of electricity in the wholesale electricity such that they do not receive preferential treatment or a competitive advantage.
- 9.3.3 There may be occasions where guests of the NCTPC, the TAG Voting Members, or others (such as neighboring Transmission Providers) may be provided Confidential Information. In such circumstances, such persons will be expected to sign confidentiality agreements that will in effect bind them to the confidentiality provisions in the *Participation Agreement*. Any disclosures of Confidential Information will only be made if

otherwise in accordance with the FERC Standards of Conduct and Code of Conduct.

9.4 **Role of the ITP** **Obtaining CEII or non-CEII Confidential Information**

9.4.1 The ITP is tasked with ensuring that no marketing/brokering organizations receive preferential treatment or achieve competitive advantage through the distribution of any transmission-related information in the TAG. **Only persons representing TAG Voting Members may have access to confidential or CEII information.**

9.4.2 The ITP ensures that the confidentiality of information and Standards/Code of Conduct requirements are being adhered to within the TAG process, to the extent necessary.

**9.4.3 If a representative of a TAG Voting Member seeks CEII or non-CEII Confidential Information, s/he must formally request the data from the ITP and demonstrate that s/he has:**

**9.4.3.1 Been authorized by FERC to receive the CEII-protected version of Form 715 for both Duke and Progress.**

**9.4.3.2 Signed a current SERC Confidentiality Agreement.**

**9.4.3.3 Signed a NCTPC Confidentiality Agreement. [Note: Not yet drafted, needs to be drafted.]**

**9.4.4 The NCTPC ITP will process the above requests, approve/deny the request, and if approved, provide the data to the representative of the TAG Voting Member.**

## 10. INTER-REGIONAL COORDINATION

The Transmission Providers will coordinate with other transmission systems primarily through participation in SERC, other inter-regional study groups, and bilateral agreements between Duke and/or Progress and transmission systems to which they are interconnected.

### 10.1 Description of SERC Planning-Related Activities

10.1.1 All transmission providers within SERC participate in the Transmission Assessment Study Process which ensures that there is coordination of modeling data and assessment of transfer capability for the entire Southeast region. Through the SERC Transmission Assessment Study Process, the Transmission Providers will coordinate with other interconnected systems in SERC by sharing their modeling data, assumptions, and transmission expansion plans **that results from their own regional planning processes. The results of such coordinated efforts will be addressed with the TAG participants.**



10.1.2 The Transmission Providers will participate in SERC studies conducted to assess the performance of the interconnected system under both normal and contingency conditions and to assess the ability of the interconnected system to support large economy or emergency power transfers across subregions.

10.1.3 Duke and Progress must abide by SERC's own confidentiality requirements.

~~10.1.4 SERC study reports and model base cases are reported to FERC as part of the annual Form 715 filings and are available to interested parties from SERC.~~

## 10.2 Description of ERAG & SERC-RFC East Planning-Related Activities

10.2.1 SERC is a Member of the Eastern Interconnection Reliability Assessment Group (ERAG) along with the Florida Reliability Coordinating Council, Inc., the Midwest Reliability Organization, the Northeast Power Coordinating Council, Inc., ReliabilityFirst Corporation, and the Southwest Power Pool. ERAG augments the reliability of the bulk-power system through periodic reviews of generation and transmission expansion programs and forecasted system conditions within the regions served by ERAG members.

10.2.2 The Eastern Interconnection Reliability Assessment Group (ERAG) Multi-Regional Modeling Working Group (MMWG) administers the development of a library of power-flow base case models for the benefit of members.

10.2.3 The SERC-RFC East study group was established in 2006 and is a sub-group within the ERAG structure. Through the SERC-RFC East study group, coordination of plans, data and assumptions is achieved between Tennessee Valley Authority, VACAR, and the transmission systems of the eastern portion of PJM.

## 10.3 Description of VACAR Planning-Related Activities

10.3.1 The Transmission Providers both participate with Fayetteville, NCEMC, Electricities, South Carolina Electric & Gas Company, South Carolina Public Service Authority, Southeastern Power Administration, Dominion Virginia Power, and Alcoa-Yadkin, Inc. in the VACAR Planning Task Force.

10.3.2 A VACAR contract agreement provides for coordination of planning between the various entities within the VACAR region.

10.3.3 As members of the VACAR Planning Task Force, the Transmission Providers will engage in studies of the bulk power supply system.

VACAR typically analyzes the performance of their proposed future transmission systems based on five- or ten-year projections. VACAR studies are similar to those conducted for SERC, but are focused on the VACAR subregion, although VACAR coordinates with Southern and TVA under existing agreements.

#### 10.4 Bilateral Planning-Related Activities

Through bilateral interconnection agreements or joint operating agreements with the interconnected transmission systems of American Electric Power, TVA, Southern Companies, PJM, Dominion, SCE&G, Santee Cooper, and Yadkin, Duke and Progress perform coordinated planning studies on an as-needed basis.

#### 10.5 Description of Southeast Inter-Regional Participation Process Planning-Related Activities

10.5.1 Duke and Progress ~~are working~~**have joined** with a group of southeast utilities ~~in the development of a process whereby stakeholders could~~**to develop the Southeast Inter-Regional Participation Process. This process provides valid stakeholders the ability to** request economic studies that would be evaluated on an inter-regional basis. The framework for this process is provided in a document entitled “**Southeast Inter-Regional Participation White Paper.**” ~~[This framework will be vetted with the southeast stakeholders with the expectation that a more fully developed process will be described in the final Attachment K that will be filed in December, 2007.]~~**Process**” which is posted on the **Southeast Inter-Regional Participation Process website. [Need to make sure website exists by 12/7/07] The purpose of the Southeast Inter-Regional Participation Process is to facilitate the development of inter-regional economic planning studies.**

## 11. INTEGRATED RESOURCE PLANNING

In addition to the NCTPC Process, the Transmission Providers must abide by state laws regarding Integrated Resource Planning (IRP). The information provided below is intended to assist ~~stakeholders~~**persons** who may want to participate in state IRP and siting proceedings.

### 11.1 North Carolina

North Carolina Utilities Commission (NCUC) analyzes the probable growth in the use of electricity and the long-range need for future generating capacity in North Carolina. Duke and Progress annually furnish the NCUC a report of their respective resource plans, which contain a ten-year forecast of loads and generating capacity. The report describes all generating facilities and known transmission facilities with operating voltage of 161 kV or more which, in the judgment of the utility, will be required to supply system demands during the 10-year forecast period. Such filings must include a section containing a comprehensive analysis of their Demand-Side Management (DSM) plans and activities.

## 11.2 South Carolina

Section 58-37-40 of the South Carolina Code of Laws requires that all electrical utilities prepare integrated resource plans and submit them to the State Energy Office. The plans must be submitted every three years and must be updated on an annual basis. For electrical utilities subject to the jurisdiction of the SC PSC, submission of the IRP plans required by the SC PSC (which similarly are submitted triennially and updated at least annually) constitutes compliance with the state law. The SC PSC requires that the plans submitted cover 15 years and evaluate the cost effectiveness of supply-side and demand-side options in an economic and reliable manner that considers relevant costs and benefits.

## **12. LOCAL PLANNING**

**The Transmission Providers coordinate with their network and native load customers to ensure adequate and reliable electric service to all points of delivery within their control areas. The focus of the NCTPC is planning higher-voltage facilities and transfers of bulk power and thus “local planning” focuses on lower-voltage facilities and the delivery of energy to customer locations. Customer meetings may be held, when necessary, to discuss the respective plans of the customer and the provider and how such plans impact local areas. Any local area plans developed by a Transmission Provider are rolled into the power system models of the transmission providers and these models subsequently roll up to the NCTPC transmission models. The same data and assumptions would be used in local planning as are used in the NCTPC Process.**