North Carolina Transmission Planning Collaborative Oversight / Steering Committee (OSC) Meeting Highlights March 13, 2019 Teleconference Meeting 10:00 AM - 11:30 AM ET

Mark Byrd, Vice Chairman Duke Energy Progress

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Bob Pierce Duke Energy Carolinas

Jennifer Stenger Duke Energy

Bill Quaintance Duke Energy Progress
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Rich Wodyka Consultant Administrator

Administrative

OSC Meeting Minutes and Highlights

• The February 19, 2019 OSC Meeting Minutes and Highlights were reviewed and approved.

TAG Meeting Presentations

• Rich Wodyka led the OSC review and discussion of the proposed TAG meeting agenda and draft presentations. Rich identified the stakeholders that have registered to participate in the TAG meeting.

2019 Study Activities and Scope of Work Presentation

• Mark Byrd led the OSC discussion on the review of the 2019 studies activities presentation. No Local Economic Studies or Public Policy Studies were submitted this year by the TAG stakeholders but the participants have discussed and agreed that this years scope of work would include the interregional transfer analysis studies that we have typically performed every other year.

- The updated list of specific inter-regional transfer studies includes two new hypothetical transfer scenarios including: a DUK to SOCO to TVA (1000 MW) and a PJM to CPLE to SCEG (1000 MW). To balance the PWG workload for this year the OSC agreed to remove four hypothetical transfer scenarios including: the SCEG to DUK (1000 MW), SCPSA to DUK (1000 MW), SCEG to CPLE (1000 MW) and SCPSA to CPLE (1000 MW).
- In addition to the fourteen total hypothetical transfer scenarios to be evaluated, the 2019 scope of work will include two hypothetical resource supply generation studies. These two generation studies are:
 - 1. Model 10 MW solar + 20 MWh / 10 MW battery storage system in Davidson County connected to DPC's 100 kV Buck to Beckerdite line.
 - 2. Model 2,200 MW Combined Cycle 2x1 (H/J-class) in Davidson County connected to DPC's 230 kV Buck to Beckerdite line.
- Mark discussed the study assumptions. He noted that the 2019 study analysis includes our standard reliability analysis for 2024 summer, 2024 2025 winter along with the 2029 summer. He also reviewed the major generation facility changes that are included in each of the study models which are currently being developed for this year's analysis.

Regional Studies Reports Presentation

Bob Pierce reported on the following regional studies activities:

SERC LTWG Update

 Bob reported that the SERC has begun working on their 2019 series of LTWG study cases. He noted that the process to integrate FRCC joint SERC has begun and should be completed sometime this summer.

SERTP Activities Update

 Bob reported that the SERTP group 1st Quarter Meeting will held on March 20th in Charlotte. The primary purpose of this meeting will be to discuss and determine what economic planning studies will be performed in 2019. He also noted that there will be a training session on inverter based generation interconnection standards.

NERC Activities Update

- Bob reported on the recent NERC inverter based resource performance and analysis workshop held in February. The workshop focused on the recent analysis of the CA events involving the inverter based resources. He highlighted the recommended measurement data and retention periods for the necessary data required for evaluating these events.
- Bob highlighted the key takeaways from the February workshop. He noted that the NERC Inverter Based Resource Performance Task Force (IRPTF) is developing a reliability guideline for improvements to interconnection requirements for bulk power system connected inverter based resources. Transmission Owners, Balancing Authorities, and Reliability Coordinators should proactively analyze all grid disturbances and monitor the performance of the inverter based resources connected to the bulk power system.
- In addition, Bob highlighted the elements of the recommended performance of bulk power system connected inverter based resources identified as part of the workshop. Finally, he reported on the problems and issues associated with the modeling and simulation related to the performance of inverter based resources.

TAG 2019 Work Plan Presentation

• Rich Wodyka reviewed and discussed the updated work plan for the 2019 TAG activities. He highlighted the TAG activities to date and reviewed the upcoming activities including the date for the 2nd quarter TAG meeting which is planned for June 20th.

2019 Study Scope of Work Document Discussion

- Rich Wodyka led the OSC discussion on the 2019 scope of work document.
 The primary OSC discussion centered on including additional information in
 the study assumptions section. Specifically, the OSC discussed and agreed to
 include the information related to major generation changes that will be
 reflected in the study models for 2024 summer, 2024 2025 winter along with
 the 2029 summer.
- In addition, the OSC discussed and agreed to relocate the resource supply options table from the case development section to the study assumptions

- section. The OSC instructed Rich to make the changes to the scope of work document and send it back out to the OSC for a final review.
- Once the OSC approves the updated 2019 study scope document as a final draft, it will be distributed to the TAG stakeholders for their final review. The OSC will review any additional TAG comments or questions prior to the OSC final review and approval of the 2019 scope of work document at the April OSC meeting.

Regional Studies Reports

SERTP Activities Update

• Bob Pierce reported on the SERTP activities as part of his TAG presentation review. No additional discussion.

PWG Items

PWG Minutes

• There were no comments or questions on the March 6th PWG meeting minutes distributed by Lee Adams.

SERC LTWG Update

 Bob Pierce reported on the SERC LTWG activities as part of his TAG presentation review. No additional discussion.

CTCA Update

• Lee Adams reported that the CTCA is currently developing and reviewing the study cases for this years analysis.

EIPC Update

 Mark Byrd reported that the Transmission Analysis Working Group has initiated the 2019 ten year study analysis that will evaluate 5,000 MW transfers across the same interfaces as was analyzed in the 2016 EIPC transfer study.

NERC Activities Update

• Lee Adams reported that the MMWG has started building the 2019 series of models. The MMWG first quarter meeting will be held March 20th and 21st in Tampa, FL.

Other Items

NCTPC Website

• Mark Byrd reported that the problem he uncovered was related to the GoDaddy server storage. Mark was not sure how much storage now exists but he will investigate increasing the server storage with GoDaddy along with off loading or eliminating old files no longer necessary. The OSC will discuss this item again at the April meeting.

Future OSC Meeting Schedule

• The OSC approved the meeting dates and times listed below.

Date	Time	Location
April 9, 2019	10:00 am - 12:00 pm	Teleconference
May 15, 2019	10:00 am - 12:00 pm	Teleconference
June 20, 2019	OSC 10 am - noon TAG 1:00 pm - 2:30 pm	In-person / Webinar TBD