North Carolina Transmission Planning Collaborative Oversight / Steering Committee (OSC) Meeting Highlights June 27, 2022 Webex / Teleconference Meeting 10:00 AM - 12:20 AM ET

Marty Berland, Chairman ElectriCities Kevin Josupait ElectriCities

Mark ByrdDuke Energy ProgressBill QuaintanceDuke Energy ProgressSid DeSouzaDuke Energy Progress

James Manning NCEMC

Edgar Bell Duke Energy Carolinas
Bob Pierce Duke Energy Carolinas
Orvane Piper Duke Energy Carolinas
Sammy Roberts Duke Energy Carolinas
Rich Wodyka Consultant Administrator

OSC Meeting Minutes and Highlights

• The May 23, 2022 OSC Meeting Minutes and Highlights were reviewed and approved.

2022 Study Activities

• Orvane Piper reported on the current 2022 study activities. He reported that the proposed interchange for the base reliability models will be sent out shortly for review. He suggested that the PWG should finalize the interchange assumptions at their July 7th meeting so that we can move forward with creating the base reliability models and start the reliability evaluations. He also noted that this will put us generally on pace to complete the base reliability studies by the end of the year.

TAG Meeting

• Rich Wodyka reviewed the agenda for the afternoon TAG meeting. The agenda of the TAG meeting includes an update on the 2022 Study Activities and Study Scope, the NCTPC 2021 Collaborative Transmission Plan Mid-Year Update report

- including the Duke Energy Red-Zone Transmission Expansion Plan Projects, a Regional Study Activities report, and an update on the 2022 TAG Work Plan.
- Rich also identified the TAG stakeholders that have registered to participate in the meeting. The OSC discussed and agreed to have a follow up meeting after today's TAG meeting. The meeting is tentatively scheduled for today at 4:00 pm. Sid DeSouza will schedule the TAG debriefing meeting.

2022 Study Activities and Study Scope Report

- Orvane Piper and Sid DeSouza led the OSC review and discussion of the 2022 Study Activities and Study Scope presentation. They reviewed the annual reliability study process including the activities associated with each of the eight steps in the study process, and highlighted the 2022 study assumptions including the study years for this years analysis. They also reviewed the fourteen resource supply option hypothetical transfer studies to be conducted this year.
- As part of this presentation review, the OSC also discussed the proposed the scope of the Public Study request that is still under consideration. Rich Wodyka reported that there has not been any further communication with the Clean Power Suppliers Association (CPSA) since the June 9th meeting. In order to finalize the Public Policy study scope the OSC needs additional information from CPSA on the potential solar locations across the NCTPC system. The OSC agreed to have Rich contact the CPSA and request an update on getting the solar location information.

NCTPC 2021 Collaborative Transmission Plan Mid-Year Update Report

- Mark Byrd led the OSC review and discussion of the 2021 Mid-Year Update Report. Initially Mark reviewed the specific changes to the 2021 Transmission Plan approved by the OSC on January 24, 2022. These changes include:
 - One DEP project was completed
 - Five DEP project cost estimates went up and one went down
 - Two DEP projects were accelerated
 - Four DEC projects were delayed
 - Total Reliability Project Cost estimates changed from \$694M to \$748M
- Mark then led the OSC review and discussion of the 18 new Red Zone Transmission Expansion Plan projects that Duke has proposed to be added to the 20223 Collaborative Transmission Plan at mid-year. He reported that the justification for these projects is based on the need to reduce transmission system constraints impacting Duke Energy's ability to connect renewable generation,

ensure system reliability, and achieve public policy goals. He noted that these projects have been identified as constraints in prior generation interconnection studies.

- Mark then reviewed a separate spreadsheet that provides a mapping of queue request studies to the proposed proactive projects. The mapping highlights the 79 interconnection studies that relate to the 18 Red Zone Transmission Expansion Plan Projects. All of the 79 studies shown were assigned Network Upgrades Studies that were performed from 2017 through 2022 and subsequently were withdrawn from the generation queue.
- Mark also presented an example study for DEP Q385 which was just one of the the 79 studies mapped to the proposed proactive projects. Mark then turned over the discussion to Sammy Roberts to review his presentation on additional Duke Energy information on the proposed Red-Zone Transmission Expansion Plan Projects (RZEP).
- Sammy Roberts led the OSC review and discussion of the supplemental information related to the proposed Red-Zone Transmission Expansion Plan Projects. He highlighted the current schedule of activities related to getting feedback from the TAG and ultimately approval from the OSC for including the proposed Red-Zone Transmission Expansion Plan Projects into the 2022 Mid-Year Update to the 2021 Collaborative Transmission Plan. He reviewed the relationship between the generation queue interconnection process, the recently released Carbon Plan, and the need to improve the NC transmission system to support the objectives of House Bill 951. He described how the proposed projects would fit into identifying good areas for solar development and how these would facilitate the development of solar resources. He noted that if these projects don't get approved in a timely manner that achieving the objectives of the House Bill 951 and the benefits of the Duke Carbon Plan may not be realized.
- Finally, Sammy described his key takeaways:
 - TAG Members will have the opportunity to provide input during and after today's TAG meeting which includes input on whether to proactively include the RZEP projects in Local Transmission Plan
 - RZEP Projects need to be considered for all future solar procurements including 2022 to meet timing of carbon reduction objectives 70% by 2030
 - RZEP Projects are cost effective and provide long-term benefit versus a one and done interconnection cycle
 - RZEP Projects have additional reliability benefits for the DEC and DEP systems

- ✓ Rebuild projects involve replacing aging structures with new more reliable equipment
- ✓ New higher capacity conductors generally have lower impedance that reduces transmission losses
- ✓ Furthermore, subsequent studies performed at OSC member request showed the RZEP projects do not cause any significant impact on other transmission
- At the conclusion of Mark and Sammy's presentations related to the 2022 Mid-Year Update, the OSC discussed a schedule for getting the TAG feedback on the Mid-Year report. It was discussed and agreed that the deadline for TAG feedback would be the end of the day on July 6th. This would enable the PWG, at their July 7th meeting, to review any comments or questions received from the TAG. Depending on the comments and questions received from the TAG, the PWG would forward their perspective on the comments and their answers to any questions to the OSC for their review and consideration. After the PWG meeting, it will be determined if and when the OSC would meet to decide to either include or exclude the Red-Zone Transmission Expansion Plan Projects in the 2022 Mid-Year Update.

Regional Studies Report Presentation

• Bob Pierce led the OSC review and discussion of the presentation on the various regional study activities.

SERC LTWG Update

- Bob reported that LTWG has completed work on 2022 series of LTWG cases, they are beginning the 2027 Summer Study, and are building 2022 series MMWG cases.

EIPC Activities Update

- Bob reported that EIPC is assisting DOE on the National Transmission Study

SERTP Update

- Bob reported that the SERTP 1st Quarter Meeting was held virtually on March 22nd and the 2nd Quarter Meeting will be held on June 30th via a WebEx

- He also reported on the following SERTP 2022 Economic Planning Studies.

NO.	Requestor	Source	Sink	MW	Year
1	NCEMC	Southern	DEC	1000	2032(s)
2	NCEMC	SCE&G	DEC	1000	2032 (s)
3	Santee Cooper	SOCO	SC	600	2027(w)
4	Santee Cooper	SOCO	SC	500	2024 (s)
5	Santee Cooper	DEC	SC	600	2027(w)

2022 TAG Work Plan Presentation

- Rich Wodyka reviewed and discussed the updated work plan for the 2022 TAG activities.
- After the review and discussion of the set of TAG presentations, the OSC instructed Rich Wodyka to update the presentations as discussed. Rich will then send out the final set of presentations to those who have registered for the TAG meeting and also post them on the NCTPC website under the meeting materials for the June 27th TAG meeting.

NCTPC Model Data Request

 Rich Wodyka reported that the update NCTPC model data process through the Duke Energy FERC 845 process has been initiated. The two requestors (Illuminate Power Analytics and the Clean Power Suppliers Association) have worked through the updated model request process and they have received the NCTPC 2021 model data.

NCTPC Maintenance

• The ongoing maintenance of the NCTPC website remains an open OSC issue. There are continuing discussions on how to best keep the NCTPC website updated when issues are detected. After discussion, the OSC agreed that there needs to be an arrangement to maintain and update the NCTPC website going forward. It was agreed to continue these discussions at the next OSC meeting on how the NCTPC website maintenance can be done moving forward.

Regional Updates

SERTP Activities

No additional report

PWG Items

SERC LTWG Update

No additional report

EIPC Update

No additional report

NERC Activities Update

No additional report

PWG Minutes

• There were no comments or questions on the last PWG meeting minutes distributed by James Manning.

Other Items

- Mark Byrd previously announced his retirement effective July 1st. Mark had served on the OSC since 2005 and this is his last OSC meeting. In honor of his retirement, the OSC recognized Mark for his many years of dedicated service to the NCTPC and his contributions to the reliable and economic development of the North Carolina transmission system. The OSC also wished Mark a long, healthy, and happy retirement.
- At the TAG meeting, the OSC also agreed to honor Kim Jones of the NCUC staff for her many years of dedicated participation and her contributions on the NCTPC Transmission Advisory Committee.

Future OSC Meeting Schedule

• The OSC reviewed and approved the following meeting schedules. Marty Berland agreed to send out Doddle Polls to set the OSC meeting schedule for the rest of 2022. He will report on the proposed OSC schedule at the July 25th OSC meeting.

Date	Time	Location	
July25, 2022	10:00 am - 12:00 pm	OSC Meeting Webex	
August 15, 2022	2:00 pm - 4:00 pm	OSC Meeting Webex	