

Transmission Planning Improvement Task Force (TPITF)

Net Conference

January 6, 2017

2:30 p.m. – 4:30 p.m.

• M i n u t e s •

Agenda Item 1: Welcome (Brian Gedrich)

Brian Gedrich started with a roll call. Mo Awad awarded his proxy to Nathan McNeil. Members present in addition to Brian and Nathan (proxy) were Jason Atwood, Bruce Cude, John Krajewski, Alan Myers, Katy Onnen, and Steve Sanders.

The group discussed whether voting member Lloyd Kolb's departure from Golden Spread would create a need for a TPITF replacement. Antoine responded that membership would follow Lloyd, but he noted Brian as chair would have some leeway in handling these types of issues. Antoine said he would lead internal discussion and share feedback with the chair.

Agenda Item 2: Discussion: Renewables Methodology (Brian Gedrich)

Brian led the group through a discussion of the renewable modeling methodology recommended for the base reliability powerflow model based on the language below:

Common Planning Model

The TPITF recommends the development of a single, base reliability powerflow model that will be used for all SPP planning processes including Transmission Service and Generation Interconnection as well as the TPL Steady State assessment.

- One base reliability model for all planning processes including TPL Steady State assessment replacing the Scenario 0 and 5 models with an as-expected model.
- Model renewable facilities with firm service at each facility's highest summer output (months July and August; hours 15:00-19:00) for the last three years per facility and off-peak and light load at 100% of firm service. For new renewable resources, the average of facility peaks within the new resources' areas will be used to model the resources' outputs.

Discussion focused on the high level of renewables that SPP staff showed would be modeled – 100% based on the criteria highlighted above. The group revisited several options presented by staff during the previous TPITF call. The two options discussed in greatest detail were the SPP Criteria and 3-year coincident peak average approaches. Highlights of the discussion:

- Brian: From the analysis, the recommended approach does not change things from Scenario 5. We are moving from two models (S0/S5) to one and need to figure out what to do with the single scenario. In the current cycle of the ITPNT, Scenario 5 has been minimized with study process changes.

- Antoine: While the TWG did not endorse a specific change, they indicated they would support a TPITF request for a change and would prefer the SPP Criteria method among the options presented by staff.
- Nathan: Criteria method is too far from the 100% that came from the recommendation. Looking at firm service only will push more issues to operations.
- Antoine: The issues Nathan referenced would be addressed in the economic analysis with the dispatching of resources based on CBA/market dispatch.
- Nathan: Wind forecasts are still a crucial part of the model and need to be as accurate as possible.
- Bruce Cude: Agreed with Nathan and said he did not want to see the wind levels move too far away from the recommendation levels. He said he would support the 3-year coincident peak approach.
- Nathan replied he would support the 3-year coincident peak approach as well.
- Alan Myers added the 3-year coincident peak approach would be more representative of the group's intent.
- Jason Atwood voiced his support of the SPP Criteria approach, stating it is an established, vetted approach.
- Nathan replied that the Criteria is a conservative approach from a capacity perspective, while the 3-year approach is based on historical data.
- Jason asked if the data was on a per-unit basis. Michael Odom replied it is on a per-unit basis; each value was calculated and applied to each unit.
- Katy Onnen noted she was leaning toward the 3-year coincident peak average approach.
- John Krajewski added he was leaning toward the Criteria approach and might consider the 3-year coincident approach if the TPITF settles on it as a compromise. He did not have any major concerns with setting non-firm service at 0 in the models.
- Travis Hyde shared the TWG was looking to the TPITF for direction regarding renewables modeling. They did take a vote that was not unanimous to go with the Criteria approach if the TPITF were to decide to make a change. He assumed the TWG would support the 3-year coincident approach as well.
- Steve Gaw inquired to the variability in the data in regards to if a *high* year and a *low* year were seen that might skew the averages. Michael Odom replied the values from his analysis were close to the Criteria method with variability around 5% or so. He added the 3-year coincident peak and criteria approaches were both based off historical data.
- Jason agreed with Steve's observation of the potential impact of variable levels used with the averaging.

- Jason shared working groups have been comfortable with the light load and winters full out. Antoine added the TWG will need to address potential issues, taking into consideration the different non-summer scenarios.
- Jason asked the group their opinion on using a 5-year average instead of a 3-year to address potential outliers. He added it may be a more realistic number.
- Brian, Antoine, Alan, John, Bruce, and Nathan voiced support for using a 5-year approach after a short discussion.
- Steve Sanders inquired to the consideration given to areas that experience a winter peak. Antoine responded it is just a summer issue and will need to work through the alternate season but they have not been an issue in the past.
- Brian called for a motion and a second. Alan provided the motion and Nathan provided the second. The motion is as follows:

The TPITF recommends renewable resource output with firm service will be modeled in the summer peak base scenario model at each facility's latest 5-year average for the SPP coincident summer peak, not to exceed each facility's firm service. Resource non-firm service will be modeled at zero.

- A vote of task force members present was taken and the motion to revise the TPITF Recommendations Whitepaper to reflect the revision to the approved renewables methodology as stated above was passed unanimously. The revised language will be included in the TPITF MOPC update presentation and a red-lined whitepaper and corresponding recommendation form will be provided to MOPC as well.

Agenda Item 3: Whitepaper Language Development (Renewables)

Approved revised recommendation included in notes above.

Agenda Item 4: Review of draft MOPC update

The TPITF MOPC materials will be reviewed with Brian and Jason off-line.

Agenda Item 5: Timing of First 20-Year Assessment

Antoine noted the TPITF had provided very little detail around how to handle 20-year assessments outside the new ITP approach. Discussion is needed on when and how the assessment will be performed.

- Brian recommended a face-to-face meeting to discuss the issue. He committed to look for meeting space at NextEra's facility in Juno for a meeting in the next few weeks.

Agenda Item 8: Next Steps/Conclusion (Brian Gedrich)

Brian adjourned the meeting about 3:55 pm.

First Name	Last Name	Company
Alan	Myers	ITC Holdings, Inc
Anthony	Cook	SPP
Antoine	Lucas	SPP
Brian	Gedrich	NextEra Energy Transmission LLC
Brian	Johnson	AEP
Brian	Rounds	AESL
Bryan	Rushing	
Charles	Hendrix	SPP
Chris	Giles	
Eddie	Watson	SPP
English	Cook	Southwest Power Pool
Gayle	Nansel	
Jamie	Hajek	NWE
Jason	Atwood	Northeast Texas Electric Cooperative
Jason	Davis	SPP
John	Krajewski	Nebraska Power Review Board
John	Turner	BPU
Josh	Verzal	
Josie	Daggett	WAPA
Juliano	Freitas	SPP
Katy	Onnen	KCPL
Kirk	Hall	SPP
Marisa	Choate	SPP
Michael	Wegner	ITC Holdings, Inc
Michael	Odom	SPP
Moses	Rotich	SPP
Nathan	McNeil	Westar
Ryan	Yokley	
Scott	Maple	SPP
Steve	Gaw	Wind Coalition
Steve	Hohman	
Steve	Sanders	WAPA
Tim	Owens	NPPD
Travis	Hyde	
Will	Tootle	Southwest Power Pool