Q&A from August 6, 2018 EPFSTF

PJM Staff
EPFSTF
August 22, 2018
A more in-depth look at Tier 1 response during spinning events was requested. Are there trends in response rate by unit class?
Tier 1 Estimates

- Response evenly distributed between steam and CC
- Total Tier 1 response MW as a percentage of Tier 1 estimate by resource type
- Spinning events >= 10 minutes since January 2017
- Other units made up of CT, Hydro, and NUG
How are SR charges currently allocated between MAD and non-MAD (rest of RTO)?

- Credits are allocated as charges using the market participant’s obligation ratio share (total credits * (participant obligation / total obligation))
  - Obligation ratio share is the load ratio share, adjusted by bilateral transactions and offset by Tier 1 estimates

- If the clearing price for MAD and RTO are equal, the credits are allocated as one bucket to all load in the RTO
  - The participant’s obligation ratio share in the RTO is used to determine their allocation of total RTO credits

- If the clearing price for MAD and RTO separate, the credits awarded in MAD and non-MAD are allocated separately to load in MAD and non-MAD, respectively
  - The participant’s obligation ratio share in MAD and non-MAD are calculated separately and used to determine their allocation credits in each sub-zone
How are SR charges allocated to load that is in transmission zones that span reserve sub-zones (MAD and non-MAD)?

• PJM identifies the sub-zone in which each load bus in the transmission zone resides
• PJM calculates the percentage of zonal load residing in each sub-zone using the state estimator load at each bus
• PJM allocates the participant’s zonal load to each sub-zone using this percentage. This is then used to calculate the obligation ratio share in the sub-zone.
• PJM proposes using this same process for any load that may span a new sub-zone that could be created under the flexible reserve zone modeling proposal
As part of the annual recalculation of the downward sloping segment of the ORDC, would it make sense to review the results in a manner similar to what is done for the load forecast at the Load Analysis Subcommittee?

• Overview of the Load Analysis Subcommittee process
• Discussion of ORDC data to be reviewed
Are extreme outliers in the forecast error included or excluded when calculating the downward sloping segment of the ORDC? How they will be handled going forward?

- Bad data was excluded from the distributions used to calculate the downward sloping segment of the curve.
- Valid outliers were included in the distributions.
- PJM proposes to do the same in the annual recalculation.
Why were the season and time of day blocks chosen as proposed part of the PJM proposal?

Winter (Dec – Feb)  
Block 1 (2300 – 0200)

Spring (Mar – May)  
Block 2 (0300 – 0600)

Summer (Jun – Aug)  
Block 3 (0700 – 1000)

Fall (Sep - Nov)  
Block 4 (1100 – 1400)

Block 5 (1500 – 1800)

Block 6 (1900 – 2200)