

Seasonal Capacity Market:

- Past Discussions in PJM
- Other ISOs

SCRSTF

May 25, 2016

- Motivation: To allow resources that are not available all year to be able to offer into RPM auctions.
- The focus was on generation since DR was proposed as a summer product at that time receiving annual credit.
- A seasonal clearing process was filed in the original FERC filing on 8/31/05.
- The approach was abandoned in the 2006 RPM Settlement.
 - Annual market is consistent with annual fixed charges associated with generation investment.

- Constant RTO and LDA reliability requirements/VRR curves for entire Delivery Year.
- Seasons: Summer: June-Sept; Fall: Oct-Nov; Winter: Dec – Feb; Spring: Mar-May.
- Generation may offer capacity by season, with separate offer prices for each season, or for the entire Delivery Year with a single offer price.
- DR was a summer product; Offered and cleared for the summer would be automatically included in other seasons at zero price.
- Objective function for clearing algorithm was to minimize cost, over the entire Delivery Year, of procuring capacity needed to satisfy RTO and LDA reliability requirements.
- Separate Resource Clearing Prices, CTR credits, and Zonal Capacity Prices calculated for each season.

- Brattle brought back seasonal pricing idea. Brattle focused on generation and identified reasons that prevented all-year availability of certain generation resources: contracts, retirements, external capacity offered summer only from systems with winter peak loads. Brattle suggested allowing capacity available for summer to participate even if it is not available the rest of the year and pay the cleared capacity a price based on its contribution to reliability.
- CMEC discussed seasonal markets in August-October 2009 and took a vote
 - 79 voted that there need be no further consideration of seasonal capacity pricing for RPM
 - 32 voted to add seasonal capacity pricing to the list of RPM issues for long-term discussion
- PJM filed with FERC that seasonal capacity pricing will not be pursued further (ER10-000, December 1, 2009).

- NYISO has separate summer and winter capability periods in its capacity market
 - The requirement in both seasons is the same, reflecting summer peak load
 - Annual, seasonal, and monthly markets
- ISO-NE has an annual construct and is implementing the “Pay-for-Performance” feature that is intended to support resource adequacy and improve performance during reliability events in all seasons.

<https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/LOLEWG/2015/20151202/20151202%20LOLEWG-SAWG%20Joint%20Meeting%20Item%2011%20Seasonal%20Detailed%20Design%20Document.pdf>

- Recently proposed a seasonal market: Summer: June-Sept; Winter: Oct-May.
- Motivation stated: Ability to reflect seasonal variations in resource performance and availability
 - Increased visibility into resource adequacy needs outside the summer
 - Ease of capacity entry into and exit from MISO's Resource Adequacy Requirements
 - Ability to de-staff plants for non-summer seasons due to a reduction in must-offer Requirements
- Will use LOLE criterion (events/year) of 0.1 for summer and 0.01 for winter and establish 'separate' summer and winter Planning Reserve Margin requirements.
- Resource accreditation to determine which resources are available in which seasons; use of seasonal outage rates.
- Single auction to procure capacity for the entire year (unlike NYISO with intra-year auctions) with seasonal offers or one offer for the entire year.
- Expected implementation: 2018/19.