

Summer-Only Demand Response Senior Task Force

Rebecca Carroll
Facilitator, SODRSTF
Markets & Reliability Committee
September 27, 2018

www.pjm.com PJM©2018



- Total Unique Responders: 22
- Total Companies Represented: 173

Package	Yes	No	Abstain	% Support	Pass/Fail
A (PJM)	109	58	6	65%	PASS
C (IMM)	0	172	1	0%	FAIL
D (Enernoc)	43	129	1	25%	FAIL

 Non-binding poll question indicated 57% of stakeholders prefer making a change over status quo



Purpose

To better value summer-only demand response resources through the load forecasting process that would serve as an alternative to supply-side participation in the capacity market.

- The focus of the PJM Proposal is to improve the accuracy of the long-term zonal and RTO load forecast
- The proposal attempts to be responsive to participant needs in program design while still satisfying PJM's planning needs
 - Program needs to be both predictable and measurable



- Participation is restricted to load reduction programs (both direct control and behavioral) governed by a tariff or an order approved by the Relevant Electric Retail Regulatory Authority (RERRA)
- The entity subject to the tariff or order will be fully responsible for satisfying the Peak Shaving Adjustment requirements; however, that entity or its authorized agent may manage a portfolio of interruptible customers under the RERRA tariff
- Customers that are included in the Peak Shaving Adjustment may not also participate as DR (Emergency or Economic) or as PRD for the same Delivery Year
 - The purpose of this requirement is to avoid double-counting



- PJM will consider programs on a case-by-case basis
- The program participant must provide PJM with:
 - A THI (Temperature-Humidity Index) Trigger for interruption
 - The duration of the interruption in hours
 - The MW value of the curtailment (this may vary by hour)
 - The months over which the interruption can occur
 - All historical addbacks for the nominated programs
- Programs must file their plans no later than ten business days prior to September 30 for inclusion in the next PJM load forecast



Peak Shaving Adjustment Mechanism

- PJM will initially generate a new lower load forecast based on a modified load history that assumes perfect curtailment performance back to 1998
 - Program will be assumed to be enacted every time a pre-determined
 Temperature-Humidity Index (THI) threshold is reached or exceeded
 - At the conclusion of each summer, the program's actual MW curtailment for each event will be expressed as a percentage of the amount of MW it committed to curtail (this percentage is capped at 100%)
 - The metric to measure performance will be based on the customer baseline load (CBL)
 - The average performance factor of the last three years will then be the assumed performance over all historical years going back to 1998



- Peak Shaving Adjustments will impact the reliability requirement used in the Base Residual Auction (BRA) and Incremental Auctions (IAs) for a given delivery year.
- The MW curtailment value submitted to PJM for the BRA cannot be later reduced in the IAs
 - MW curtailment values submitted to PJM for IAs can only be in addition to those submitted for the BRA and must represent new peak shaving programs that were not in place the previous year.



Valuation of the Load Forecast Impact

- Peak shaving programs will receive no direct payment
- Value will be received as avoided capacity cost based on a shift in the Variable Resource Requirement (VRR) curve used in the Base Residual Auction and Incremental Auctions
- The VRR curve reflects the reliability requirement, which depends on, among other factors, the load forecast and the monthly load profile
- The entire zone receives the benefit of a lower load forecast
 - The EDC will continue to allocate the lower zonal forecast to all LSEs within its zone in accordance with its state-approved allocation methodology



- The 2019 Load Forecast released in late December 2018 will not include the Peak Shaving Adjustment
- PRD plans for the 2022/2023 Delivery Year need to be submitted by January 15, 2019
 - Any PRD plan submitted for the 2022/2023 Delivery Year will be able to be adjusted or withdrawn in April 2019 based on FERC's decision on the SODRSTF filing
- Peak Shaving Adjustments need to be submitted to PJM by February 1, 2019
 - PJM will publish a new load forecast inclusive of the approved Peak Shaving Adjustments by March 15, 2019
 - This new load forecast will be used in the 2022/2023 BRA conducted in August 2019
 - Planning parameters based on the new load forecast will be posted on May 1, 2019



Manual 19

- Section 3 modified to include impact of peak shaving programs on the load forecast process
- Two new attachments for the Peak Shaving Adjustment Plan and Peak Shaving Officer Certification Form
- Governing Documents
 - RAA
 - Definition added for Peak Shaving Adjustment
 - Updates to Schedule 6.1 for the submission of a PRD Plan for the 2022/2023 Delivery Year



- MRC First Read
 - September 27, 2018
- MRC/MC Endorsement
 - October 25, 2018
 - No MC meeting in November
- RAA Board approval
 - Early December