

Advanced Energy Management Alliance

Energy Price Formation Demand Response Elements

Energy Price Formation Senior Task Force

January 23, 2019

Advanced Energy Management Alliance

Empowering consumers through distributed energy resources, including demand response and advanced energy management.

We are providers and consumers united to overcome barriers to nationwide use of distributed energy resources. We advocate for and educate on policies that empower and compensate consumers to have cost-effective, efficient, resilient, reliable, and environmentally-sustainable choices.

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A low-angle photograph of several high-voltage electrical transmission towers against a bright, hazy sky with a sun flare. The towers are silhouetted against the light, and power lines stretch across the frame. The overall tone is warm and atmospheric.

OVERVIEW

AEMA supports PJM's Energy Price Formation framework

- Accurately reflect cost of serving load and maintaining reserves to minimize out-of-market make-whole payments
- Procure Ancillary Service needs to better support grid reliability
- Shares concerns regarding transition and impacts on capacity

Request Demand Response elements developed at DRS

- AEMA believes “strike price” proposal is not only an implementation detail but a policy item meriting discussion outside EPFSTF
- AEMA believes evaluating DR capability to reliably provide a 30 minute AS product merits discussion outside EPFSTF
- Demand response elements could be brought to Demand Response Subcommittee meetings beginning on January 30, 2019

The background of the slide features a low-angle shot of several high-voltage electrical transmission towers and power lines stretching across a bright, hazy sky. The towers are silhouetted against the light, creating a sense of depth and scale. The overall color palette is dominated by light blues, whites, and yellows, giving it a clean, professional appearance.

**DEMAND RESPONSE ELEMENTS
MERIT ADDITIONAL DISCUSSIONS**

LMP determination under emergency

- PJM proposal removes link to penalty factor as basis for strike prices
- If deploy emergency energy to meet power balance and maintain reserves, emergency energy will avoid shortage pricing in LMP and if marginal can set LMP (ER09-1063)
- Scarcity and emergency energy price levels based on \$850/MWh penalty factor versus on \$2,000/MWh penalty factors

Scarcity - Today	Scarcity - Future	Failed to meet which requirements?
1,849*	3,999	30 minute load reduction strike price
2,850	4,000	RTO-wide 30 minute reserves
3,700	6,000	Emergency purchases & max emergency gen cap
3,700	6,000	RTO-wide primary reserves
3,700	8,000	RTO-wide & sub-zone primary reserves
3,700	8,000	RTO-wide synchronized reserves
3,700	12,000	RTO-wide and sub-zone synchronized reserves

*DR strike price today needs adjusted to \$2,849/MWh given \$2,000/MWh cost-based offer cap.

Secondary Reserve limits merit discussion

- Ensuring rules allow Demand Response resources to participate in new Ancillary Service paradigm supports competitive markets
- PJM proposing to limit demand response ability to meet 30 minute reserve requirement
 - Limit at 33% of 30 minute reserve requirement
 - Logic to maintain same level as synchronized reserve requirement
- AEMA believes it is necessary to discuss further whether demand response resources should be limited in AS product that requires 30 minute lead time
 - While merit may exist for limiting DR to 33% of 10 minute product
 - AEMA is not aware of a need to limit DR for a 30 minute product
- AEMA requests in-depth discussion on DR participation rules to be held at the Demand Response Subcommittee.

Questions?

To learn more about Advanced Energy Management Alliance, visit our website.

www.aem-alliance.org