719 Requirements: MA vs. PJM Proposals

SPWG February 18, 2010 Howard J. Haas



"Under the revised criteria, we expect an RTO or ISO to explain how its market rules will reduce or avoid periods of operating reserve shortages as well as how its market rules will reliably reduce demand and increase generation during periods of operating reserve shortage. Nothing in this Final Rule dictates the particular market rules or mechanisms an RTO or ISO must adopt. For example, we do not require regions that have not adopted a capacity market to develop such markets."

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- FERC has recognized that scarcity pricing and capacity markets perform the same function:
 - Ensuring enough reserves
 - Ensuring sufficient revenues to provide for required reserves
- If both present need an effective revenue offset mechanism



- "Improve reliability by reducing demand and increasing generation during periods of operating reserve shortage"
 - MA and PJM ORDC approaches would increase generation.
 - Both would ensure that energy prices would increase and be sustained during a shortage.
 - This could increase available energy and make more reserves available.
 - MA approach would allow continued participation of DR in Tier 2 market.
 - Higher energy prices will reduce demand if participants can see the price



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- "Make it more worthwhile for customers to invest in demand response technologies"
 - Current price levels (max energy price of \$1,000) and markets (RPM, energy and ancillary service markets) have demand response participation and provide incentives for additional investment in these technologies.
 - Both the MA and PJM ORDC approach would provide incentives to invest in demand response technologies.
 - Hour ahead Tier 2 market should be maintained for additional incentives for DR investment and market participation (MA position)

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- "Encourage existing generation and demand resources to continue to be relied upon during an operating reserve shortage"
 - Current markets (RPM, energy and ancillary service markets) encourage resources to be relied upon during an operating reserve shortage.
 - Both the MA and PJM ORDC approach would provide clearer signal of the need for existing generation and demand resources to perform.
 - Hour ahead Tier 2 market should be maintained to provide continued participation of reserve resources.



- "Encourage entry of new generation and demand resources"
 - Current price levels (max \$1,000 in energy) and markets (RPM, energy and ancillary service markets) have demand response participation and provide incentives for additional investment in these technologies.
 - Both the MA and PJM ORDC approach would provide incentives to invest in demand response technologies.
 - Hour ahead Tier 2 market should be maintained for additional incentives for DR investment and market participation (MA position)



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- "Ensure that the principle of comparability in treatment of and compensation to all resources is not discarded during periods of operating reserve shortage..."
 - Current markets (RPM, energy and ancillary service markets) provide for comparable treatment and compensation during periods of operating reserve shortage.
 - Some issues with treatment of emergency capacity resources
 - PJM offset proposal is not consistent with this requirement
 - Hour ahead Tier 2 market should be maintained to provide DR market participation



- "Ensure that the principle of comparability in treatment of and compensation to all resources is not discarded during periods of operating reserve shortage..." (continued)
 - If PJM proposal works as asserted, total compensation should be the same as under MA proposals (offset, scarcity prices, RPM)
 - Scarcity revenues can come from RPM and/or Scarcity Pricing, but sum of revenues should be the same, regardless of approach
 - Are total scarcity revenues (RPM and scarcity prices) going to be higher under PJM proposals?



- "Ensure market power is mitigated and gaming behavior is deterred during periods of operating reserve shortages including, but not limited to, showing how demand resources discipline bidding behavior to competitive levels."
 - Due to limited exposure to real time prices demand resources discipline bidding behavior in a very limited way, not through emergency DR, but through economic DR and natural response to prices
 - DR cannot discipline bidding behavior adequately in the absence of customers being exposed to real time prices



- PJM proposals to have emergency DR set price will not discipline bidding behavior to competitive levels
 - Intended to increase, not discipline, prices
 - No provisions to ensure the correct incentives for emergency DR "bids"
 - **Capacity payments drive provision of this product**
 - Emergency resources should not be capacity resources
 - Would need means to mitigate potential market power incentives of Emergency DR resources
 - o Cap "bids" at fixed retail rates, if applicable



- PJM proposals to have emergency purchases set price will not discipline bidding behavior to competitive levels
 - Current rules prevent emergency purchases from setting price to prevent market power abuse
 - PJM proposal would remove this market protection
 - No proposed means to mitigate market power



- "Ensure market power is mitigated and gaming behavior is deterred during periods of operating reserve shortages including, but not limited to, showing how demand resources discipline bidding behavior to competitive levels" (continued)
 - MA ORDC curves approach maintains integrity of \$1,000 offer cap and intended affect on prices
 - \$1,000 price cap intended to minimize incentives to exercise market power
 - PJM proposal to increase offer caps DA would remove this market feature and would provide greater opportunities to exercise market power



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MA issue with PJM Day Ahead Market "Fix"

- PJM \$2,700 peak real time price proposal has resulted in a PJM proposal to increase INC and DEC offer caps in DA to \$2,700
- PJM proposed \$2,700 peak real time price is creating more problems than it fixes
 - Prices in excess of offer caps
 - Reasonable offset mechanisms undermined
 - Market power issues Day Ahead with proposal to allow \$2,700 INC/DEC
 - Wealth transfers with no change in resource availability DA (no resources available above \$1,000)



MA issue with PJM Day Ahead Market "Fix"

- Objective needs to be competitive behavior and prices in both DA and RT energy markets
- Same rules should apply to RT and DA market
 - Same offer caps
 - DA scarcity pricing mechanism using the same concepts as RT scarcity pricing mechanism