



Monitoring
Analytics

Comments on PJM's Price Responsive Demand (PRD) Proposal of March 3, 2011

The Independent Market Monitor for PJM

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Markets require both a supply side and a demand side to function effectively but the demand side of wholesale electricity markets has been and continues to be underdeveloped. The MMU agrees with the fundamental purpose of the Price Responsive Demand (PRD) program, which is to provide a mechanism for load to respond to nodal prices. However, the MMU does not believe that the PRD program as currently proposed by PJM will result in efficiency gains in the energy and capacity markets and improvements in system operations and reliability.

The MMU agrees that market efficiency will be improved when customers are provided the means and incentives to make rational consumption decisions on the basis of the locational marginal price of energy. The MMU agrees that in order for the PRD program to provide these efficiency benefits, participating load must be served via retail rates that are linked to nodal real time prices. The MMU agrees that, to the extent that PRD participation will affect the reliability requirements in the RPM market, PRD participation must be subject to supervisory control that will guarantee reductions to promised levels when needed. The MMU agrees that properly specified PRD resources can be eligible to set price in the energy market as part of the security constrained dispatch. The MMU agrees that PRD, properly defined, would result in the reduction of the reserve requirement target that is the basis of the RPM VRR curve.

The MMU has a number of concerns with PJM's current proposal:

1. PJM's PRD proposal requires that there be only a tenuous relationship between nodal LMP and the retail rates of the PRD customers. It is the MMU position that obtaining the efficiency gains available from PRD require that customers have the ability to make decisions about levels of power consumption based on the locational marginal price of electricity. This requires retail rates that equal, or closely track, nodal real time LMPs. The PRD participant's retail rates paid should reflect the customer's nodal price.
2. PJM's PRD proposal indicates that letting PRD load set price is essential. However, PJM's PRD proposal would allow PRD customers without telemetry and without performance requirements or criteria to set price under emergency and non-emergency conditions. It is the MMU position that if PRD load is to set price, it is essential to require telemetry that allows the discrete locational dispatch of demand resources in response to price based dispatch instructions in order to maintain the direct causal link between nodal prices and the actual dispatch.
3. PJM's PRD proposal treats PRD load as an emergency resource. Under PJM's proposal PRD is actually required to interrupt only as a result of emergency conditions. It is the MMU position that PRD should be required to be fully

deployed, regardless of price, as a last economic step before the PJM takes any emergency actions. PRD load is an economic and not an emergency resource. PRD load is interruptible because PRD customers do not pay for capacity in return for agreeing to not use capacity when those who have paid for the capacity need it. In addition, PRD should not be eligible to set price in the energy market when required to interrupt. Only reductions taken prior to interruption should be eligible to set price, and only to the extent that the reductions are verifiable in real time and there are node and customer specific performance penalties for non-performance.

4. PJM's PRD proposal does not require PRD to reduce to MESL commitment levels prior to maximum emergency generation events, regardless of price levels. Prior to a maximum emergency generation event, PJM's PRD proposal does not require that PRD reduce load according to the price and MW pairs submitted as demand response. It is the MMU position that PRD should be required to respond according to its submitted price and MW pairs, or face the penalties outlined in the PJM's Proposal if it does not, on any day for which PJM has declared a Maximum Emergency Generation Alert or during any period in which DR has been called in the zone or sub zone where the PRD resource is located.
5. PJM's proposal would permit maximum emergency segments from generating resources to set price at levels in excess of current offer caps. It is the MMU position that the PRD program should not include any provision related to maximum emergency segments from generating resources. In general, the single offer price cap should be applicable to all resources including PRD resources.
6. PJM's proposal would clear all PRD MW elections in capacity market auctions for a delivery year regardless of the RPM clearing price. It is the MMU position that participants should be required to include reservation prices as part of their PRD MW elections in the RPM auctions.
7. It is the MMU position that PRD load should be identified by node for both the energy market and the capacity market in order to maintain the efficiency of both markets. Intra LDA constraints mean that location matters in the capacity market as well as in the energy market where all supply offers are identified by node.
8. It is the MMU position that as long as the 2.5 percent offset remains part of the PJM market model, PRD MW should be netted against the 2.5 percent VRR offset.