Summary of major themes in *Incorporating Demand Resources into the PJM Reliability Pricing Model* (February 2008)

This memo summarizes some of the major themes in our paper in order to provide you with some "talking points" that can be useful in conversations and discussions about the paper. We anticipate that there will be a substantial need for education around many of the core assumptions and conclusions in the paper.

1. A negawatt (NW) from a demand resource is more valuable than a megawatt (MW) from a supply resource.

    a. The demand resource NW is increased for reserves and line losses.

    b. The demand resource NW can defer/avoid T&D upgrades.

    c. The demand resource NW has lower or no emissions (some exceptions).

2. Large quantities of demand resources (especially energy efficiency) are low cost energy and capacity resources.

    a. Energy efficiency costs 3-4 cents per kWh to install ($30-40/MWH).

    b. Over 2500 MW of demand resources cleared at the floor price in New England's first auction (60% of CONE; $4.50/KW-month). A little over 550 MW of demand resources offered at $4.50 or higher.

3. Overall market efficiency improves when supply and demand resources can respond to the same price signal.

    a. Market allocation decisions improve with accurate price signals.

    b. Residential and small commercial demand resources have been particularly disadvantaged with an "average retail rate" as a price signal.

4. Regardless of any other changes to RPM, demand resource participation in the Base Residual Auction should be encouraged.

    a. RPM may have many flaws that need to be addressed.

    b. Demand resource participation can reduce BRA clearing prices.

    c. Demand resource participation can provide a revenue stream (to utilities, state programs, or private aggregators) for more aggressive acquisition of demand resources.

5. Demand resources should participate in all the BRAs for the length of their measure lives.

    a. Investment in a demand resource is similar to investment in a generation resource.

    b. The entity investing needs to have a time-period to recover the investment.

6. A "no add back" approach for cost allocation in the Delivery Year is a better option than attempting to add back cleared demand resources to each individual customer.

    a. "No add back" rewards aggressive acquisition of demand resources.

    b. "No add back" removes the split incentives between customer, utilities, and aggregators.

    c. "No add back" creates some small costs shifts in the Delivery Year that are overwhelmed by auction savings in the BRA.

    d. Add backs, done correctly, are administratively complex for customers without interval meters.

    e. Add backs increase transaction costs for aggregators.

7. AMI can help assure some demand responsiveness, but it is not a substitute for demand resource participation in RPM.

    a. Real-time rates use a stick to change customer behavior; rewarding customers with capacity payments for demand resources uses a carrot approach.

    b. AMI has a host of other issues regarding its implementation and it is unlikely that widespread use of real-time rates will occur soon.

Next steps

RPM Working Group meeting on March 20 to discuss Synapse proposal

Discussions with potential supporters prior to and after March 20 RPMWG meeting

Possible issue for the new PJM Demand Response Policy Working Group

Include in presentations for PJM's DR Symposium May 12 & 13 in Baltimore