

NYISO Comments on Demand Response BME and Price-Taker Issues

February 28, 2002

In response to the PRLWG request that the NYISO discuss the possibility of (i) expanding the current DADRP to the Hour-Ahead Market and (ii) allowing Demand response resources to participate in the Real-Time energy market as price takers, the following is a brief analysis of some of the points made in the two white papers put forth by Keith O'Neal.

While we see a number of pitfalls in the suggested approaches, we want to take a broader view on the need for real-time demand response mechanisms. Given the ongoing efforts to develop a Standard Market Design and discussions on NERTO, we will look at the program design and effectiveness of real-time demand response programs in New England and PJM to see if there are elements that can and should be adapted to the Standard Market Design.

Expansion of the DADRP to the Hour-Ahead Market:

1. Commitment parameter should be the same for HAM bids as DAM Bids
 - Minimum Run-time not honored by BME- BME evaluates on an hour-by-hour basis and demand response resources will be committed as such. BME also does not honor a unit's minimum run-time. The current DADRP program allows for DRP to enter a minimum run-time characteristic (maximum of 8 hours) to ensure that the DRP recovers its cost for load curtailment. NYISO needs to seriously consider the amount of participation NY will obtain by expanding the program to the hour-ahead market. For large industrial customers who depend on shutting down production process for load reduction this may not be an advantageous market.
 - Demand response providers bidding as On or Off dispatch
 - For a demand response provider to be guaranteed their full LRBG they must be classified as an On-Dispatch unit. To be classified as On-Dispatch, DRP's must be able to follow five-minute SCD base points. Currently none of the demand response providers have the ability to receive SCD basepoints from the NYISO. Furthermore, the NYISO does not currently receive real-time individual load data directly from the end use customer/DRP.
 - If demand response providers are classified as Off-dispatch they will not be guaranteed their full LRBG. To keep the treatment of demand response providers on equal footing with

generator's only the DRP's Curtailment initiation cost (Start-Up) and any Minimum generation \$ will be include in the calculation of the LRBG. The DRP's will not receive a bid guarantee for any portion of their incremental energy curve.

2. No penalties should be assessed other than the provider must buy any shortage at real-time prices and will sell any curtailments greater than scheduled at RT-prices.
 - The current DADRP program assesses a penalty equal to 110% of the greater of day-ahead or real-time LBMP for any curtailment amount less than scheduled. In addition, demand response providers are not paid for any MW's greater than their Day-ahead schedule. To state that DRP's will sell back any curtailment greater than scheduled at real-time prices means that these resources will be either given OOM status or PURPA status all the time.
3. DRP's accepted HAM bids can set real-time prices.
 - The current DADRP program is design so that no curtailment bids will be eligible to set LBMP prices when they are the last available internal resource. Only On-dispatch units can set LBMP prices in real-time. As noted under #1 to be considered as on dispatch DRP's must be able to follow five- minute SCD basepoints.
4. If a DAM bid is unaccepted day-ahead the bid should be allowed to remain active with an option to withdraw for the HAM.
 - Bids that are unaccepted in the DAM do not automatically get transferred over to the HAM. Currently, they only way an unaccepted DAM bid gets transferred over is if the bidder selects the both choice on the generator bid page and also the units bid does not expire. (DRP's have been told by NYISO staff to expire their bids a few minutes after DAM post time of 11:00 so they would not be available for a SRE call.)

Allow participation by DRR in the Energy Markets, including Real-Time, as Price Taker.

1. Recommended that DRP be allowed to be price takers in the NYISO energy markets at any time.
 - The current DADRP does allow DRP's to be price takers in the Day-Ahead market by allowing them to bid a zero start-up, mingen, and energy cost. Allowing DRP's to be price takers in the real-time market

may result in metering and other issues already stated in the HAM evaluation above.

- Payment of an incentive for real-time price takers at any price would require enormous market monitoring effort to insure that shutdowns and/or normal load reductions weren't being submitted.
- Real-time price takers would need to know their customer baseline load (CBL) very accurately before notifying the ISO – would limit the program to only a few legitimate loads with very repeatable or static load profiles.
- Operations procedures would need to accommodate and respond to demand response price takers.
- It's not clear that this approach would reduce price volatility in the real-time market – it may exacerbate it.
- Real-time load response is arguably better accomplished through time-of-use or real-time pricing tariffs at the retail level – much greater participation could be achieved through retail programs.