

LSE-NYISO Coordinated Program for Day-Ahead Price Responsive Load

Definitions

DAM LBMP – Day-Ahead Locational-Based Marginal Price.

FLB (Fixed Load Bid) – Load bid as a firm purchase in the day-ahead market.

NML (Net Metered Load) – The actual load consumed by the price-responsive load in real time as determined by approved metering.

PRL – (Price-Responsive Load) – The amount of interruptible load bid into the day-ahead market by a price-responsive load.

RT LBMP – Real-Time Locational-Based Marginal Price.

Background

The Price-Responsive Load Working Group (PRLWG) has considered several variations on a day-ahead price-responsive load bidding program as developed by Neenan & Associates, with modifications from market participants.

On Dec. 20, 2000, the New York Public Service Commission issued its “Order Requiring Filings and Reports on Utility Demand Response Programs”, Case 00-E-2054. It is anticipated that there will be a number of these programs in place by the summer of 2001, incorporating both PSC modifications and refinements resulting from the NYISO’s programs.

In developing programs for its market participants, the NYISO recognizes the need to work with LSE-sponsored programs in a way that captures the unit commitment benefits of price-responsive load. Since many of the LSEs have expressed a desire to run their own programs, the NYISO also want to provide a nonintrusive program that avoids duplication of effort.

Program Description

The LSE/NYISO coordinated program models interruptible loads as generators, with minimum run (shutdown) times, startup costs, etc. The process would work as follows:

1. After collecting interruptible load bids from end users, LSEs would formulate one or more aggregate pseudo-generator bids to represent the price responsive load. These bids would follow the same form as those for generators, including multi-hour strip bids.
2. SCUC would consider price-responsive load resources and generators identically, and would select that set of load bids consistent with LBMP for each hour. The bids are actively evaluated by SCUC and accepted only if they improve the overall system economics.
3. The LSE’s firm load bid FLB will be satisfied in part by the amount of price-responsive load (PRL) pseudo-generators selected by SCUC, i.e., new DAM load requirement = FLB – PRL.
4. The NYISO net settlement procedure is unaffected. That is, the LSE pays for FBL but receives a refund for PRL. LSEs can use the savings from reduced DAM load to fund payments to responding end-use customers.
5. LSEs would be subject to audit verification that the amount of price-responsive load actually achieved in-day is consistent with that scheduled in the DAM.

There will be limitations on the total number of price-responsive load bids that can be submitted, since there are only approximately 50-60 generator slots available for use. If LSEs submit bids representing an aggregate of individual price-responsive load bids, this should not be a significant limitation.

There will also need to be modifications to the MIS to allow price-responsive loads to submit the same type of bid information as required from generators using field descriptions more appropriate to price-responsive loads.

The day-ahead and real-time flow of funds are shown graphically in Figure 1.

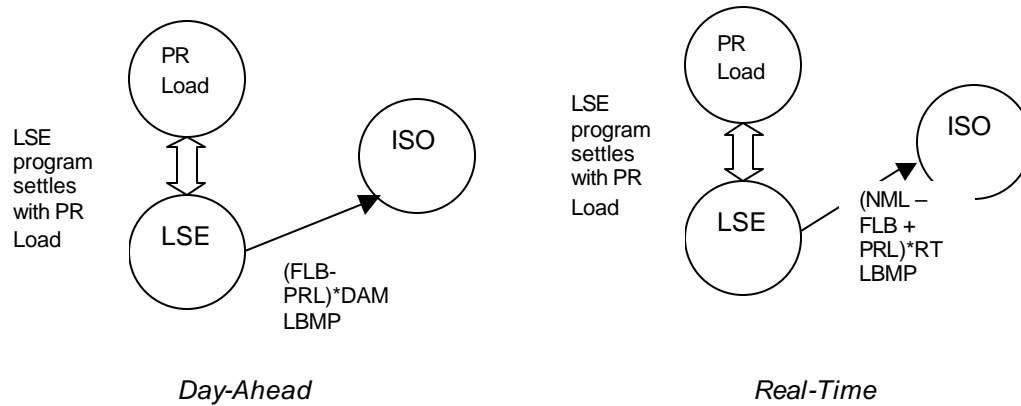


Figure 1 – Priceline Program for LSEs