

Proposal

NYISO should create a Price Responsive Load program in the day-ahead market that shares the NYISO bill savings associated with price responsive load between the LSE that is responsible for serving the load and the CSP that recruits the price responsive load. The proposed program will ensure that:

- Retail end users receive the maximum amount of NYISO bill savings achieved in the day-ahead market.
- No payments beyond the bill savings are provided by the NYISO.
- CSPs receive a direct payment from the NYISO for their procurement of price responsive load.
- LSEs that provide the energy requirements of the retail end users are financially neutral to the arrangement.

The proposed program will require the NYISO to approve the following changes to current operating provisions:

1. The role of Curtailment Service Providers (CSPs) would be extended to bidding price responsive load into the NYISO day-ahead market and in the real time market.
2. CSPs would be eligible for payment by the NYISO for their price responsive load, when called.
3. Payments for price responsive load requested by the NYISO would be set at a price equal to the day-ahead LBMP minus the total retail rate of the LSE that serves the participating retail end user.
4. NYISO would authorize the increase the net metered loads of the LSE in the real time market by the amount of load shed achieved by retail end users on behalf of other CSPs.
5. CSPs would be required to for settle any differences between the requested load shed and the achieved load shed in the real time market.

Description of the Proposal

The Revenue Neutral proposal is intended to provide incentives for price responsive that are commensurate with the NYISO bill savings that price responsive load (PRL) can achieve. The proposal also ensures that LSEs responsible for providing the base energy requirements of retail end users are not financially harmed by CSPs that recruit the same retail end users for their load shedding capabilities.

The proposal covers the performance of the market participants in the day-ahead market and the real time market. It extends the concept of Curtailment Service Provider (CSP) that was approved for the Emergency Demand Response program. Under this proposal, CSPs would have financial responsibilities to the NYISO in the real time market, and would require a fuller membership status to participate. The additional requirements would include credit-related items, at a minimum.

The proposal also distinguishes CSPs from LSEs, for purposes of clarity. LSEs can be CSPs as well. For descriptive purposes, CSPs refers to the curtailment-related behavior of any market participant, including an LSE that seeks to aggregate retail end users not served by that LSE. LSEs that wish to enroll its own retail end users may participate in this program, or could operate its program internally, without reference to the NYISO program.

The Revenue Neutral program operates in the day-ahead market, with financial and performance true-ups in the real time market. The expected day-ahead transactions are:

1. The LSE bids its entire load (before or without reductions) into the day-ahead market.
2. The CSP bids its price responsive load (reductions only) into the day-ahead market.
3. The day-ahead price is determined from the net load bid in by all LSEs and CSPs.
4. The LSEs are charged for their entire load in the day-ahead market at the day-ahead LBMP adjusted for their retail rate.
5. The CSPs are paid for their load reductions in the day-ahead market at the day-ahead LBMP adjusted for the LSE's retail rate.

The process is depicted on the attached diagram. In the diagram, it is assumed that the LSE has a base load of 4,100 MW, and that a competitive CSP has signed up 100 MW of that load as price responsive. In the day-ahead market, the LSE will bid in its entire 4,100 MW as a "fixed load bid". The CSP will independently bid a price responsive load of 100 MW at the appropriate price. In this example, the price cap load bid is some value less than \$150/mWh, so the day-ahead market solution is an LBMP \$150/mWh and 100 MW of curtailed load.

In the settlement of the day-ahead market, the LSE will pay for all 4,100 MWs of its fixed load bid. The ISO will pass along 4,000 MW of that payment to the generator, and split the remaining payment between the CSP and the LSE. The LSE will get a refund of \$10,000, which is the 100 MW times the LSE's retail rate. The CSP will get a payment of \$5,000 from the NYISO, which is the 100 MW time the net transaction price (the day-ahead market LBMP minus the LSE's retail rate).

The transaction price for the payments is the hourly LBMP in the day-ahead market, adjusted for the retail energy rate of the LSE. There are two reasons for adjusting the LBMP:

- Reducing the payment to the CSP recognizes that the retail end user will receive part of the benefit from price responsive load through a reduced bill from its LSE.
- Refunding the retail rate to the LSE keeps the LSE revenue neutral, eliminating some of the resistance to recognizing CSPs that have no load serving responsibility for the retail end user.

Additional transactions may also occur in the real time market as a result of the proposed program. In the real time market:

1. The real-time LBMP is based on the actual measured loads of all LSEs.
2. The actual load reductions are measured for each CSP.
3. The measured loads of the LSEs are increased by the actual amount of reduction achieved by CSPs.
4. LSEs are charged for any differences between their day-ahead loads and their adjusted real time loads at the real time LBMP.
5. CSPs are charged for any differences between their day-ahead load reductions and their actual (real time) load reductions at the real time LBMP.

It is worth noting that the prices associated the real time transactions are not adjusted for the LSE's retail rate. LSEs are charged for any variation from their fixed load bid and CSPs are responsible for providing 100% of the real time LBMP to meet their load shed obligations.

Benefits of the Revenue Neutral Program

- The revenue neutral program will accommodate the maximum level of load shedding participation that is justifiable on the basis of LSE bill savings.
- The retail end use customer receives the entire value of the day-ahead LBMP through a combination of bill reductions and direct payments (less any benefits withheld by the CSP according to their agreement).
- CSPs receive direct payments from the NYISO to fund their load shedding activities.
- LSEs receive the same net revenues they would have without load shedding by CSPs.
- Bilateral agreements between LSEs and generators remain effective.