

PJM Synchronized Reserves: NAPP's Short-Notice, On-Call Program

Demand Response Program: Providing a “Short-Notice” Resource

Ancillary Services – Reserves Program



In order to assure the reliability of the electric grid, System Operators must have resources or reserves readily available to respond immediately if a generator or transmission line fails. Without reserves to replace lost generation, demand for electricity would exceed supply, placing the electric grid in jeopardy. Reserves (Generation or Demand Response) is a contingency resource that must be able to respond immediately to a system emergency, and must be fully responsive within 10 minutes and receive payment for the reduction.

- **Tier 2 Reserves** consist of:

- dispatchable load resources that have controls in place to automatically drop load in response to a signal from PJM.

SYNCHRONIZED RESERVES OVERVIEW:

*Synchronized Reserve service supplies electricity if the grid has an unexpected need for more power on short notice. The power output of generating units supplying synchronized reserve can be increased quickly to supply the needed energy to balance supply and demand; demand resources also can bid to supply synchronized reserve by reducing their energy use on short notice.

*<http://www.pjm.com/markets-and-operations/ancillary-services/synchronized-service.aspx>

PJM Synchronized Reserves Load Response:

- *Mandatory Curtailment Load drop within 10 minutes of PJM Call*
- *Up to Thirty (30) Minute Load Reduction per event call*
- *Minimum commitment of 1000 kW (1MW)*
- *NAPP provides necessary PJM required metering*
- *Environmental Benefits Tracking and Reporting*
- *Customer TRAINING , CERTIFICATION AND qualification by NAPP*
- *Maximum of 5 Calls per Month*
- *2 hour notice needed to withdraw bid with no penalties*
- *Customer chooses Schedule: M-F, 8 AM to 5 PM, 5PM to Midnight(Operations expanding to 24/7 in 2011)*

Penalty for Non-performance:

- *Additional performance obligation in the amount of the shortfall for next three, same-peak days*
- *Repeated Non-performance will result in expulsion from Program*

Under current market rules, demand resources must provide metering information at no less than a one-minute scan rate surrounding a call for synchronized reserves.

(Data accessible via www.pjm.com)

Metering & Settlements

To validate your load reduction performance, PJM requires meter data. NAPP submits the data to PJM in accordance with PJM's time limits for payment. NAPP also tracks emissions reductions for your

DEMAND RESPONSE OVERVIEW:

Demand Response is the temporary reduction of electrical usage by a customer for an economic or emergency response. DR programs are designed to contribute to energy load reduction during times of high prices, critical peak demand, or supply shortfalls on the electric grid.

ABOUT NORTH AMERICA POWER PARTNERS

North America Power Partners is a leading provider of Demand Response resources across the United States. We enable our customers to participate in a range of programs including Capacity, Reserves, and Self-Scheduled Energy. Our DR solutions include advanced metering with web-based reporting tools for all our customers. NAPP provides engineering audits, automation, and controls for customers who want to automate their demand response.

BENEFITS TO OUR CUSTOMERS

Revenue

Create a significant recurring new revenue stream for your business

Grid Reliability

Reduce the likelihood of a blackout in your community

Environmental

Offset the need for new generation plants; reduce GHG emissions

Usage Reports

Customers can access valuable electric usage reports every hour to monitor energy use and manage utility costs

NAPP works with our customers to identify the portion of electric load at each facility that will be reduced – aligning our customers' objectives to generate revenues while limiting impact on facility operations. Ways that facilities reduce their energy usage include idling equipment, shutting down processes, raising thermostats, utilizing building automation and energy management systems, or reducing lighting. NAPP will provide the metering, technology, automation and transaction systems required to participate in our DR programs.