

It Pays to Play...

Get in the Game with Three Electric Load-Management Programs

YOUR UTILITY OR ENERGY SERVICE PROVIDER CAN HELP YOU WIN BIG

2004 SEASON

New York State has three load-management programs that provide opportunities for every electric customer. Each utility or energy service provider in the State can help you get paid for curtailing your electric load during electric grid high-demand periods. These programs offer differing terms and payments, and are open to all types of customers. To see which one, or combination of these programs can benefit you, contact your electric supplier, program provider, or the organizations on page 3.

- **Emergency Demand Response Program** (EDRP) is a short-notice program relying on the ability of many to voluntarily reduce their demand for a short period of time, in exchange for payment.
- **Day-Ahead Demand Response Program** (DADRP) is a customer-initiated economic bidding program, where participants offer their load reduction into the wholesale market a day in advance.
- **Installed Capacity Special Case Resources** (ICAP SCR) is a reserve capacity program that contracts resources to meet NYISO supply requirements over a specified contract period.

These load management programs pay participants, while providing all New York State electric customers with crucial grid stability during times of high electricity demand and helping to prevent extreme market prices.

SUMMER 2003 EXPERIENCE

A variety of customers, large and small, from many sectors, took part in these valuable programs last summer. Although most pledged 1,000 kW or less, several reduced their electricity consumption by over 40,000 kW on just 2-hours notice. Steel foundries, cement factories, and paper mills found these programs worthwhile. But even more diverse sectors, like cheese producers, wineries, scrap yards, and apartment buildings reduced their electricity consumption during certain periods, and were paid for doing so.

More than \$7.2 million was paid to over 1400 commercial, industrial, and multi-family residential customers for reducing their peak electricity consumption by 700 MW.

These commitments helped to avoid jeopardizing the State's electric grid stability. Participants understood just how important their participation was: "The program helps to keep prices reasonable during high electric demand," said one satisfied participant. Another noted: "We are aware of the critical situation that could develop...without programs such as these." They saw the inherent value in developing good energy management habits.

NEW FOR 2004

For 2004, you too can get in the game. Join the customer load management team that plays a role in achieving New York State's energy goals.

During summer 2003, more than \$7.2 million was paid to over 1400 commercial, industrial and multi-family residential customers for reducing their peak electricity consumption by 700 MW.



EMERGENCY DEMAND RESPONSE PROGRAM

Emergency Demand Response Program (EDRP) pays retail electricity customers to reduce load during specific times when electric service in New York State could be jeopardized. During these “declared events,” participants are expected, though not obligated, to either reduce electricity consumption and/or transfer load to an on-site generator for a minimum of four hours. During these emergency program events, performance is based on how much metered load is reduced.

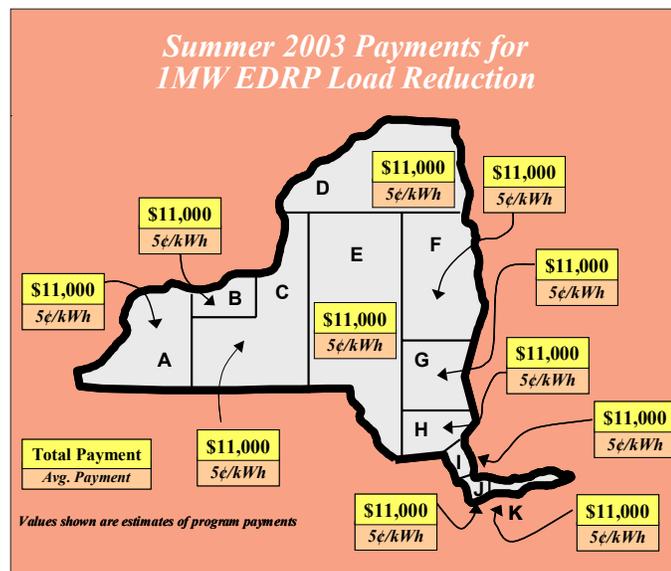
NOTIFICATION: Usually, a program provider will give notice the day prior to an expected emergency program event. When the program is activated, participants receive a confirmation notice indicating that participation is needed; providers will generally be able to provide this notice two hours prior to when an event starts.

PERFORMANCE: Metered load, during the event hours, is compared with a customer baseline (CBL, a statistical estimate of how much electricity would have been used during the same time period.) The difference between metered load and CBL is the basis for payment. Since this program is strictly *voluntary*, there is no obligation to reduce load when an emergency event is declared; similarly, there is no penalty for non-performance.

PAYMENT: Performance during emergency program events is measured on an hourly basis and payment is computed on the higher of either \$500/MWH, or the wholesale electricity price in the customer’s area, during the time of the event. Exact payment arrangements differ by program provider.

NEW FOR 2004

- ◆ EDRP has been extended through October 31, 2005.
- ◆ EDRP event notification has been separated from ICAP-SCR events. If you sign up for EDRP, you cannot participate as an ICAP Special Case Resource. EDRP participants are notified after ICAP-SCR resources



have been called, if additional load reduction is necessary.

SUMMER 2003 EXPERIENCE

- ◆ More than \$7.2 million was paid to emergency and special-case resource program participants for two summer events, on August 15 and August 16, 2003.
- ◆ Enrollment in EDRP totaled over 1300 participants and 67% of 2002 participants re-enrolled for summer 2003.

CUSTOMER QUESTIONS FOR PROVIDERS

- ◆ Is there a minimum load reduction requirement?
- ◆ What CBL options are offered?
- ◆ How and when will a customer be notified of an opportunity to curtail?
- ◆ If use is curtailed, when does payment occur?
- ◆ What services are available to encourage participation?
- ◆ Is NYSEERDA financial assistance available to help in purchasing load curtailment equipment?
- ◆ What are the requirements for on-site generators?

NOTICE

This informational brochure was prepared by Neenan Associates for NYSEERDA as an introduction to NYISO’s Demand Response Programs. Neither NYSEERDA, its members, nor any person acting on their behalf: (a) makes any warranty, express or implied, with respect to the use of any information, apparatus, method or process contained, described, or referred to herein or that such use may not infringe privately owned rights; or (b) assumes any liabilities with respect to the use of, or for damages resulting from the use of, any information, apparatus, method or process contained, described or referred to herein.

The details in this NYSEERDA publication are accurate as of the time of printing, but are subject to change. For final program rules and procedures, contact the Market Relations Department of NYISO: (518) 356-6060 or check the NYISO website: www.nyiso.com/services/documents/manuals.

As with any market, a certain level of risk is associated with a transaction. To effectively assess risk of a transaction or bid, a participant should develop a familiarity and knowledge of the market and its principles. Analysis supporting the calculation of potential benefits referenced herein is available at www.bneenan.com.

DAY-AHEAD DEMAND RESPONSE PROGRAM

Day-Ahead Demand Response Program

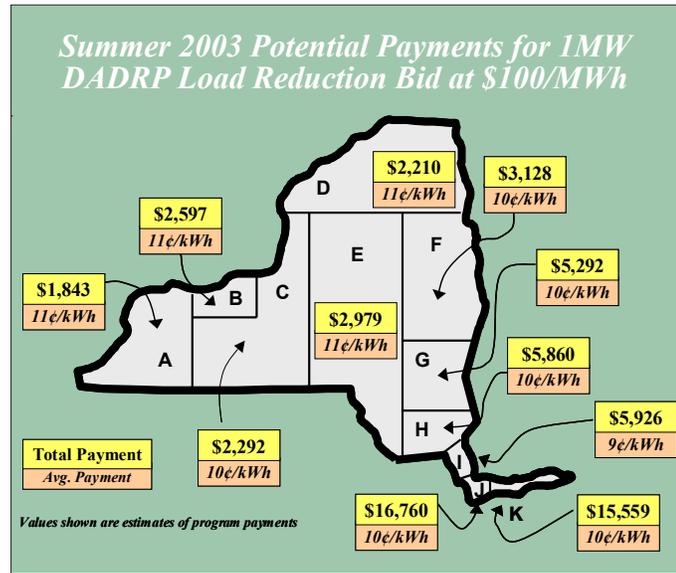
(DADRP), offers retail electricity customers a chance to bid load reduction capability in New York State's wholesale electricity market. To participate, companies bid their load reduction capability, on a day-ahead basis, into the wholesale electricity market, where these load reduction bids compete with generators' offers to meet the State's electricity demands. If the load reduction bid is a less expensive alternative than a generator's offer, it is accepted and the bidder is scheduled to reduce load during the hours specified the following day.

The bid amount, term, frequency of submitted bids and use of generation may be subject to some restrictions, based on each program provider's rules and regulations.

NOTIFICATION: When a curtailment bid is accepted, the program provider notifies the customer of the scheduled load curtailment.

PERFORMANCE: Participant metered load during the event hours is compared with a customer baseline (CBL, a statistical estimate of the amount of electricity that would have been used during the same time period.) The difference between the two is determined to be the level of load curtailment and is the basis of payment. Since a load reduction bid was accepted in the day-ahead wholesale electricity market, participants are *obligated* to meet the posted load-reduction schedule. Any shortfall will be charged the higher of either the day-ahead, or spot-market price.

PAYMENT: Customer performance during scheduled load reductions is calculated on an hourly basis, at the wholesale price for electricity in the day-ahead market, during those hours scheduled. Participants may specify a minimum payment, called the curtailment initiation cost, as a condition for being scheduled for one or more hours in a specified block of consecutive hours. Generally, in such cases, the full block is scheduled and the participant receives the higher of the curtailment initiation cost or the hourly locational-based marginal prices times the scheduled load.



NEW FOR 2004

- ◆ DADRP service is available from program providers other than your electricity commodity provider.

SUMMER 2003 EXPERIENCE

- ◆ More than \$100,000 in payments was distributed among the 27 day-ahead program participants.
- ◆ 1,752 MWh of load reduction bids were accepted over a wide range of hours and days.

CUSTOMER QUESTIONS FOR PROVIDERS

- ◆ What kind of bidding options are offered?
- ◆ What are the frequency and duration requirements for bids?
- ◆ How long are the bids good for?
- ◆ If a participant fails to curtail, what is the penalty and when are they notified of the amount?

“This year, we plan to get involved in DADRP. The investment in time and effort we made to participate in last summer’s EDRP events taught us what we need to do to reduce load.”

For more information:

New York State Energy Research and Development Authority (NYSERDA) toll-free at (866) NYSERDA or (866) 697-3732 or visit NYSERDA's website at www.nyserda.org or e-mail info@nyserda.org

New York State Public Service Commission toll-free at (877) 661-9223 or on the web: www.AskPSC.com or www.dps.state.ny.us/eschoice.htm

New York State Department of Environmental Conservation (DEC) at (518) 402-9167 or visit the Regional Environmental Permitting page on the web at www.dec.state.ny.us/website/dcs/regions/state.htm

New York Independent System Operator at (518) 356-6060 or via e-mail: market_relations@nysio.com

INSTALLED CAPACITY-SPECIAL CASE RESOURCES

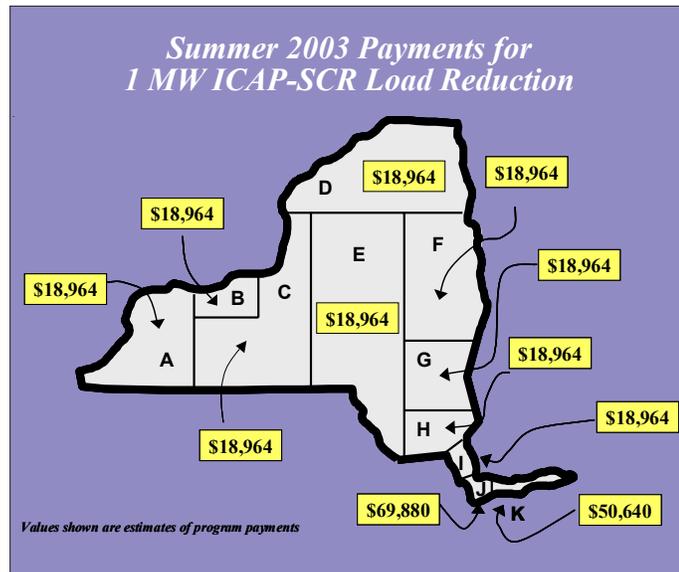
Installed Capacity-Special Case

Resources program pays retail electricity customers to provide their load reduction capability for a specified *contract* period. Program participants receive payments for an agreement to curtail usage during times when the electric grid could be jeopardized. Based upon system condition forecasts, participants are notified to curtail this subscribed “capacity,” either through the use of on-site generation and/or reducing electricity consumption to a firm power level. Any under-performance results in an assessment of a penalty. To register for the program, participants commit to a load reduction of a minimum of 100 kW with 100 kW increments, subject to a one-hour verification either through an actual event or test to be called by NYISO.

NOTIFICATION: Program providers offer 21-hour advance notice of any anticipated need for curtailment. A confirmation notice is provided a minimum of two hours before the actual event begins.

PERFORMANCE: The participant’s metered load during the event hours is compared with the subscribed firm-power level, or the metered generator output is compared with its subscribed output level. Any under-performance of either load curtailment efforts, or generator output, will result in a reduction, or “derate,” of any future capacity claims. Such a “derate” will require the customer to fulfill any *contractual obligations* entered into for capacity and will result in a proportional reduction of any future long-term contractual payments.

PAYMENT: When initially registering for ICAP SCR, program providers calculate an unforced capacity obligation (UCAP) that is based upon a participant’s claimed load reduction capability, line losses, and historical program performance, if any exists. The UCAP is then sold into wholesale capacity markets where payment rates vary according to a participant’s location in the State and the contract period.



NEW FOR 2004

- ◆ ICAP-SCR calls have been separated from EDRP events and ICAP-SCR resources are called first.
- ◆ You may participate in either EDRP or ICAP-SCR, but not both.
- ◆ If a qualified ICAP-SCR resource has not been contracted in a given month, that resource will be eligible for energy payments during EDRP events.
- ◆ If less than all ICAP-SCR resources are needed in a selected zone, the number required to serve the need will be called in ascending order based on the submitted minimum price guarantee of participants.
- ◆ ICAP-SCR resources are eligible for an energy payment at the minimum price guarantee, up to \$500/MWh. The minimum price guarantee, or strike price, is specified by the ICAP-SCR resource and may be revised monthly. Energy payments are computed using the same performance calculations as EDRP.

SUMMER 2003 EXPERIENCE

- ◆ Payments ranged from \$1.25 per kWh Statewide to \$11.25 per kWh in New York City
- ◆ 850 MW registered
- ◆ ICAP-SCR resources provided approximately 50% of the load reduction during summer curtailment events

CUSTOMER QUESTIONS FOR PROVIDERS

- ◆ Will the provider purchase the offered load curtailment capability? If not, what type of arrangements can be made for purchase?
- ◆ How is a “derate” in load curtailment capability handled?
- ◆ If “derated,” what penalties apply and when do they take effect?