

New York Independent System Operator, Inc.

Attachment I - Semi-Annual Compliance Report On Demand Response Programs June 1, 2004

I. Summary of Programs

Currently the NYISO offers three demand response programs:

- ICAP Special Case Resources (SCR)
- Emergency Demand Response program (EDRP)
- Day-Ahead Demand Response program (DADRP)

The ICAP Special Case Resources program pays retail electricity customers to provide their load reduction capability for a specified contract period. Program participants receive payments in exchange for an agreement to curtail their load down to a prescribed amount during times when the electric grid could be in jeopardy. Based upon system condition forecasts, participants are notified to curtail this claimed “capacity,” either through the use of on-site generation and/or reducing electricity consumption to a firm power level. Customers register for the program through Responsible Interface Parties (RIPs). RIPs are provided with an installed capacity credit which they may sell or use to offset their own ICAP obligation. In addition, when called upon, RIPs will be paid for verified load reduction at the rate of the real-time zonal locational-based marginal price (LBMP), or a self-submitted strike price between \$0 and \$500/MWh, whichever is greater

EDRP allows participants to be paid for reducing their energy consumption upon notice from the NYISO that an operating reserves deficiency exists or is expected to exist. The program is open to interruptible loads or local “behind-the-fence” generation greater than or equal to 100 kW per Zone. Loads register for the program through Curtailment Service Providers (CSPs); when called upon, CSPs will be paid for verified load reduction at the rate of \$500/MWhr or real-time zonal locational-based marginal price (LBMP), whichever is greater.

DADRP allows loads, through their Load Serving Entities (LSEs) or through third party Demand Reduction Providers (DRPs), to bid load reduction into the day-ahead energy market. Load reduction bids are evaluated along with generation supplier bids as part of the NYISO’s Security Constrained Unit Commitment (SCUC) program. If scheduled through SCUC, DRPs are paid day-ahead LBMP for the scheduled demand reduction, the LSE of the participating load is also paid an incentive (equal to the day-ahead LBMP for the scheduled demand reduction). The load also avoids the retail rate that would otherwise be paid for the actual load reduction provided in real time. If the full scheduled load reduction is not provided in real time, the DRP must settle the imbalance at the greater of day-ahead or real-time LBMP.

II. Program Changes to EDRP/SCR for 2004

A. EDRP Changes

Eliminated Requirement that CSPs Submit to The NYISO Copies of DEC Permits for Distributed Generation (DG) Resources

While retaining the requirement that CSPs certify to the NYISO that DG units meet applicable permitting requirements as part of their registration in the program, the requirement that such resources submit copies of DEC permits to the NYISO has been eliminated. The certification of compliance, and the NYISO's ability to audit such compliance if deemed appropriate, was deemed to be sufficient to ensure that EDRP resources were operating legally. In addition, the NYISO auditors expressed concern that ensuring compliance with environmental regulations was outside the proper scope of the NYISO's responsibilities. This change to the EDRP manual was not controversial and received no substantive opposition from Market Participants.

Clarify that CSPs, not the NYISO, are responsible for adhering to the 200 hour per year DG operating limit and for notifying the NYISO when DG units have been activated in response to Transmission Owner requests/calls

In deference to environmental impact considerations, DG units participating in the EDRP program have, since 2001, been subject to a 200 hour/year operating restriction. To date this restriction has been moot, as the program has never been called for more than 23 hours in any given year. The NYISO does not expect that the 200 hour limit is likely to have any practical impact. Nevertheless, at the suggestion of the NYISO auditors, concerned that the NYISO not be responsible for enforcing compliance with the 200 hour limit, it was decided to revise the EDRP manual to clarify that CSPs bear this responsibility. This change to the EDRP manual was not controversial and received no substantive opposition from Market Participants.

Amend certain deadlines by which the NYISO will notify LSEs of customer registrations in the EDRP program, as well as deadlines by which program participants will be deemed registered in the absence of specific action by the NYISO

Previous program rules dictated that the NYISO was required to notify the LSE of a registering customer of such registration with two days of the registration being received to verify that the customer was not already registered in a similar program by the LSE. In order to provide the NYISO with greater flexibility, the two day requirement has been eliminated. In practice, it is likely that such communication will continue to take place within 2-3 days. In addition, previous rules stated that all registrations would be deemed

approved if the NYISO did not otherwise act within 14 days. The revised manual extends this deadline to 30 days.

These changes to the EDRP manual were not controversial and received no substantive opposition from Market Participants.

B. EDRP and SCR Changes

Allow Distributed Generation to receive energy payments for output in excess of the host facility's load (both EDRP and SCR).

At the request of Market Participants and based on the determination that 1 MW exported to the grid provides the same value to the NYISO as 1 MW of demand reduction provided by DG the EDRP and ICAP(SCR) Manuals have been amended to provide energy payments and capacity credits for DG output in excess of host load (i.e., exported onto the grid) during EDRP/SCR events. Such exports are not eligible for any price guarantees and are compensated solely at the real time LBMP. In order to qualify, CSPs must certify that all local utility parallel interconnection requirements have been met, and that any regulatory approvals required to sell energy at wholesale have been obtained.

C. SCR Changes

Various Clarifications Regarding Registration and Testing

The NYISO provided Market Participants with a variety of clarifications regarding the registration and testing of SCR resources. Briefly, the NYISO intends to run three SCR tests during every other odd numbered month of each capability period (i.e., May, July, September, November, January and March). In order to avoid penalties, every SCR resource that has sold capacity during a capability period will be required to perform during at least one of the scheduled tests, unless performance has been demonstrated during an actual event.

With respect to registration, the NYISO has clarified that while individual resources may be aggregated for purposes of meeting the minimum size and sale thresholds in the ICAP program, performance is measured on a resource (meter)-specific basis. The NYISO has also clarified that, in the event sufficient advance notification is not provided for some hours of an SCR event, performance will only be voluntary for those hours. Performance during hours for which advance notice has been provided will be treated as mandatory.

D. Changes to the Day-Ahead Demand Response Program

The NYISO's reliability driven programs are among the most successful in the nation, with peak participation in the two programs last summer nearly equaling the NYISO's typical 1,800 MW operating reserve requirement. However, participation in the NYISO's

economic demand response program remains limited. In 2004, the NYISO has committed to an all-out effort to address all of the barriers to DADRP identified to date and to aggressively promote the program. Consistent with this effort and in recognition of the fact that part of the current program sunsets on October 31, 2004, the NYISO has worked with Market Participants (MPs) to develop an aggressive DADRP that more fully meets the needs of potential participants.

Once the fundamental programmatic barriers identified in the 2002 and 2003 Neenan Analysis of DADRP have been addressed through the submission of an improved program, the NYISO intends to implement an “extensive outreach campaign to educate customers about DADRP”, as suggested by Multiple Intervenors (MI) in its comments on the NYISO’s June 2003 Demand Response report. As further recommended by MI, the NYISO intends to work closely with the state’s Transmission Owners, as well as other DRPs, to promote DADRP and looks forward to collaborating with the New York State Public Service Commission (NYPSC) and New York State Research and Development Authority (NYSERDA) as well.

While it is possible that significant economic demand response may require the advent of market prices that are significantly higher than those that have prevailed in recent years, it is the NYISO’s intention to promote the registration of DADRP participants and to facilitate the submission of standing bids such that demand side resources are available to moderate prices in the event market fundamentals cause a significant increase.

As of the date of this filing these proposed changes are still being reviewed by stakeholders through the governance process. Unless otherwise indicated, the changes are proposed to take effect on October 31, 2004, if approved, in order, by Market Participants, the NYISO’s Board of Directors, and the Commission.

Remove DADRP Sunset Date

Participation in DADRP has consistently been hampered by the fact that the program has had a built in sunset date and has suffered over the last two years from year-to-year extensions. The result has been that LSEs and DRPs have been unwilling to devote significant resources to marketing a program that might disappear or be changed in fundamental ways in a year or two.

The NYISO has proposed to eliminate the sunset date from the tariff and manual and propose to MPs that the design of DADRP would be evaluated annually by the NYISO and MPs, with changes recommended as necessary. The continuing need for DADRP would be evaluated annually, particularly in light of ongoing efforts to develop retail real-time pricing (RTP) programs by LSEs. It is possible that with the widespread adoption of RTP, DADRP would no longer be necessary.

Retain Current Payment/Credit/Cost Recovery Structure

During discussions with the MPs it became clear that the popular designation of the current program as “incentivized” is misleading. In fact, elimination of the “incentive” was discussed at length as part of the NYISO’s initial proposal to make the program permanent. At the end of that process it became clear that the only difference between the “incentivized” and “unincentivized” programs was who the cost of the payment to the DRP was recovered from. In the incentivized version it is recovered from all LSEs who benefit from having the resource in the market. In the unincentivized version it is recovered solely from the participating load’s host LSE. LSEs informed us that the latter proposal would force them to prohibit their customers from enrolling in DADRP through another DRP. Since, LSEs can already offer the equivalent of DADRP to their own customers through Price Capped Load Bidding, this option would be tantamount to elimination of DADRP. Most (but not all) parties viewed this as unacceptable.

In addition, during the discussion of an unincentivized program, it became clear that the “incentive” payment (actually the credit to the participating customer’s LSE) was seldom if ever being paid to the participating customer, thus the characterization of the program as “paying customers twice” is not accurate. While it is true that the customers do generally save the amount of their retail rate, this amount is likely to be significantly less than the LBMP credit, especially if the floor price revisions discussed below are adopted.

Settle Real-Time Deviations at RTM Prices

Because of early concerns about potential gaming, the current DADRP retains an initial program provision that requires DRPs to settle deviations from their day-ahead schedules at the higher of the DAM or RTM price, thus depriving the DRP of any possible benefit from failing to deliver. The original program design included an additional 10% penalty to further discourage non-performance, however this provision was removed last year.

The Commission has previously opined, in ruling on PJM’s version of DADRP, that deviations from schedules for DRPs should be settled the same way generator deviations are. The NYISO and its MPs concur. The current proposal is to schedule deviations from day-ahead schedules at the real-time LBMP, consistent with how other MPs are treated.

Remove MDSP Requirement

The current DADRP requires that meter data be submitted by PSC-certified Meter Data Service Providers and that meters be read by PSC-certified Meter Service Providers. In order to avoid charges and delays imposed by the current MDSPs, DRPs have sought PSC certification so that they can obtain the data from MSPs (almost always the local utility) and then submit the data directly to the NYISO. In cases where the DRP is an end-use customer, the PSC has been justifiably reluctant to grant such certification. The NYISO and MPs support the elimination of this requirement and propose instead to allow

DRPs to submit DADRP meter data directly to the NYISO. The NYISO will retain the right to audit such data in the event that a concern arises that DRPs are abusing this privilege.

Continue to Limit Participation to Curtailable Loads

Based on the theory that the “incentive” might encourage customer-owned generation to shun the NYISO markets as generators and instead “hide behind the fence”, as well as in response to concerns regarding the potential environmental impacts of facilitating the participation of Distributed Generation (DG) in the NYISO’s economic markets, the original DADRP precluded diesel generation from participation in the program and allowed non-diesel generation to participate only on an “unincentivized” basis.

Subsequently, it was decided that all generation should be precluded from the program because, absent the “incentive”, LSEs seeking to have DG participate in the program could accomplish the same result through price capped load bidding.

For the reasons noted in the past, the NYISO continues to believe that it is inappropriate for DG units to participate in the DADRP and has proposed that participation continue to be limited to curtailable loads.

Revising the Bid Floor Price

It had been noted in the first year of the DADRP that at times, zero cost load reduction bids were submitted and accepted in the day-ahead market by end-use customers during planned shutdown periods. To eliminate this “free rider” problem and focus on those periods when competition with generation suppliers is more intense, a minimum floor bid of \$50/MWh was established for DADRP offers in the day-ahead market.

Since this change, the NYISO has continued to observe instances of \$50/MWh bids being submitted by market participants on or around major holidays and confirmed that in at least some such instances the bids were submitted during planned facility outages. In addition, analysis of the 2003 DADRP program by Neenan Associates has indicated that the reduction in economic deadweight losses during times when the NYISO supply curve is relatively flat and prices are low (such as was the case in 2003) can be very low or even negative. During such times, the increase in net social welfare does not outweigh the payments to DADRP suppliers.

Payments to DADRP suppliers in 2003 were very small, on the order of \$150,000. Nevertheless, in order to further reduce the likelihood for free riding and to better address the problem of low to negative social welfare impacts when prices are low, we believe that further adjustments to the floor price are warranted.

The NYISO is proposing that the floor price be raised to \$75/MWh effective with the start of the 2004-2005 Winter Capability period (November through April) and is exploring alternatives for adjusting the floor price from time to time if market and participation factors warrant an adjustment. In addition, the NYISO intends to explore software improvements that would facilitate the implementation of time-varying bid floors on at least an on- and off-peak basis. The NYISO software currently supports the ability to revise the floor price on a manual basis as often as desired. This capability has not been utilized as the floor has been stipulated by tariff.

At the NYISO's May 19, 2004, meeting of its Business Issues Committee, Market Participants endorsed all of the above described changes to the DADRP by a near-unanimous margin, with some abstentions. The NYISO's Management Committee is scheduled to address the changes at its June 4 meeting.

III. Preparing for Summer 2004

As part of the NYISO's outreach to RIPs, CSPs, DRPs and end-use customers, the NYISO collaborated with the PSC and NYSERDA to present four workshops on demand response. Workshops were held in March and April in New York City, Albany, Syracuse and Buffalo to acquaint participants with the NYISO's three demand response programs and NYSERDA's associated program opportunities. The workshops were extremely successful and attracted a total attendance of over 750, a 50% increase over participation in 2002 and 2003.

In order to bolster support in the capacity constrained downstate area, the NYISO has also participated in two additional outreach sessions aimed at customers of Consolidated Edison.

NYISO personnel have also taken part in other outreach meetings sponsored by various LSEs; these presentations are scheduled to continue through the summer.

Current Registration Status

Table 1 shows the registration, as of May 4, 2004, by Zone for the ICAP SCR program. There are currently a total of 16 RIPs acting as intermediaries between the NYISO and end-use customers.

Table 1 – SCR Registration by Zone (as of 5/4/2003)

Zone	MW Registered	# Customers Registered
A	287.2	38
B	27.9	18
C	87	34
D	159.7	7
E	16.6	12
F	37.6	13

G	0	0
H	0.7	1
I	4	3
J	153.8	81
K	9.8	24
Total	784.3	231

Similar information is provided for the EDRP program in Table 2; a total of 24 CSPs are registered in the program as of 5/14/2003.

Table 2 – EDRP Registration by Zone (as of 5/4/2003)

Zone	MW Registered	# Customers Registered
A	54	58
B	62.5	16
C	39.1	156
D	5	13
E	57.6	58
F	79.8	64
G	55.5	42
H	7.3	9
I	16.7	31
J	156.3	129
K	204.7	815
Total	738.5	1391

The registration process is ongoing, with roughly 250 MW of 2003 EDRP resources not confirmed in either program as of the date of this report.

Figures 3 and 4 plot the historical performance of participants in DADRP; these figures update those presented in Figures 7 and 8, respectively, included in the NYISO's 12/1/2003 FERC filing on demand response programs¹.

¹ New York Independent System Operator, Inc. Bi-Annual Compliance Report on Demand Response Programs and the Addition of New Generation in Docket No. ER01-3001-00, December 3, 2002

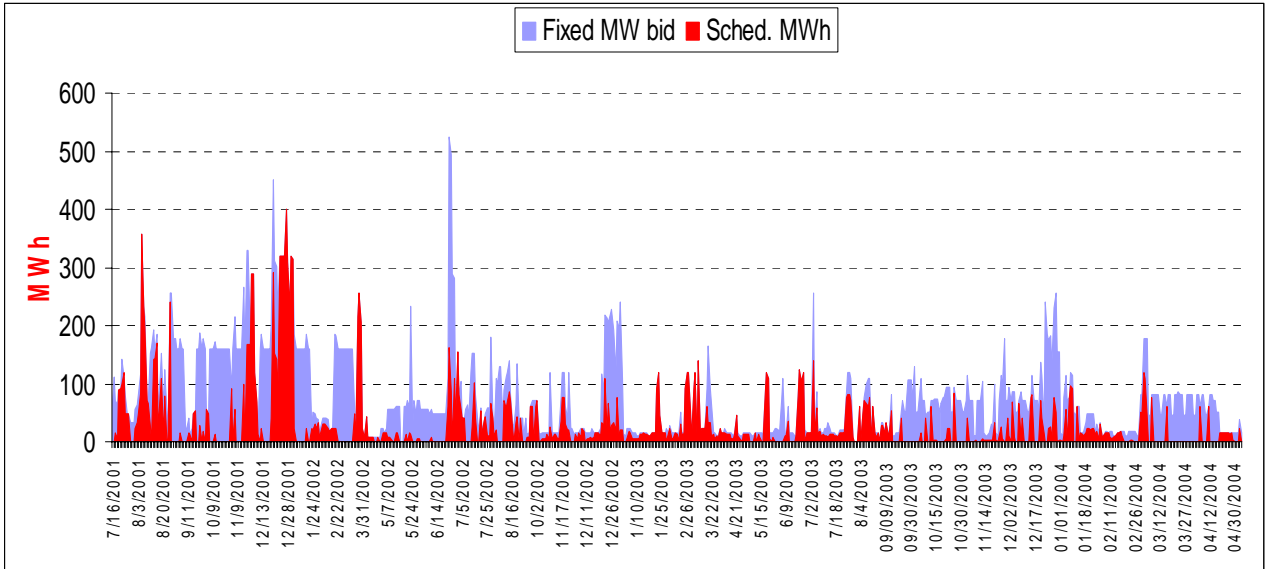


Figure 3 – DADRP Offered and Accepted MWh

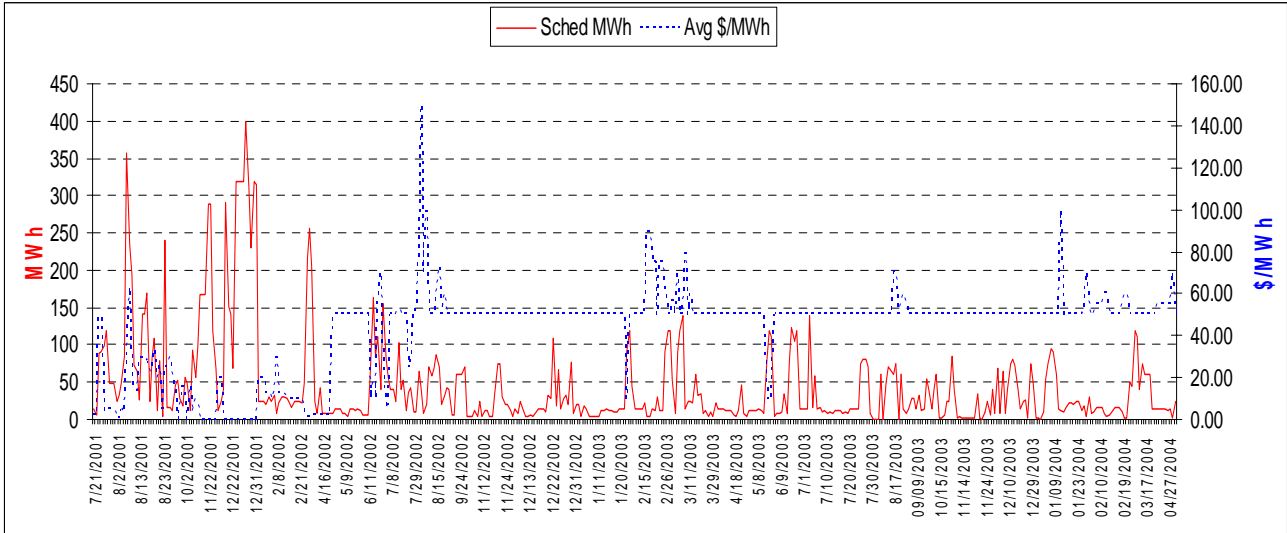


Figure 4 – DADRP Accepted Offer Price and \$/MWh

Demand Response Participation in Reserve Markets

Consistent with the Commission’s February 11, 2004 Order authorizing the move to SMD 2.0, the NYISO continues to work with Market Participants to develop a mechanism for incorporating DR into its reserve markets. Once fully understood, the previous proposal presented to Market Participants last year, which would have allowed DR resources to participate in the real-time reserve markets proved unattractive to customers and the decision was made to delay deployment so that more attractive alternatives could be developed.

Since that time, the NYISO has assessed the stated desires of potential participants as well as the likely revenues available from the reserve markets and concluded that facilitating DR participation in the day-ahead reserve markets is likely to engender significantly more interest than the real-time reserve markets. Participation in the NYISO day-ahead reserve markets will necessarily require the NYISO and MPs to address the flow through of DAM reserve schedules into the real-time markets. These issues will be discussed further over the coming months.

The NYISO has already laid the necessary groundwork with NERC, NPCC and the New York State Reliability Council (NYSRC) to ensure that DR faces no reliability rule obstacles to participation. The NYISO has confirmed that NERC, NPCC and NYSRC rules currently in effect offer no bar to DR participation in the 30-minute and 10-minute non-synchronous reserve markets. Although NERC rules do not prohibit DR from providing synchronous reserves, NERC and NYSRC rules currently limit the definition of synchronous reserve providers to generators. Nevertheless, given appropriate metering and telemetry is in place, both organizations have indicated their support for the NYISO initiatives to amend the rules to allow DR to provide synchronous reserves.

The necessary NPCC definitional changes are now under consideration and it is expected that approval will be forthcoming by the end of 2004. NYSRC consideration is expected to follow soon thereafter and appears likely given NPCC endorsement.

The NYISO has explained to MPs that, while after the fact reporting of metered DR response has been sufficient for the emergency and DADRP programs, system operators and reliability organizations alike have made it clear that real- or near real-time reporting of measured response will be necessary for DR resources providing reserves. Metering and reporting protocols sufficient to meet these requirements were developed as part of last years Real-Time Demand Response Program and it is likely that future efforts will be able to benefit from this work.

IV. 2004 Demand Response Program Evaluation Efforts

For 2004, the NYISO plans to evaluate its demand response programs as deployed during 2004. In addition, the NYISO will be working with market participants to develop options for DR to participate in reserve markets, as discussed above.

The NYISO's 2004 evaluation effort will expand on the use of the registration database developed in 2003 to track participation and migration of participants from one program to another, ascertain the amount of "churn", and identify the reasons that customers join, switch or leave the programs.

The 2004 effort will continue previous years' analyses providing estimates of the reliability and market impacts of the reliability and economic programs, including revising estimates of the reliability benefits of EDRP and SCR, as well as the collateral and hedging benefits of DADRP.