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NYISO
Day-Ahead Demand Response Program Manual

Draft revised: 02 . 14 . 2004

Date Effective: 10.31.2004

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What's New for 2004?

Following the summer of 2003, a number of changes to the DADRP program were approved by the NYISO Market Participants or implemented by NYISO:

1. Elimination of the DADRP sunset date. The DADRP program is now a permanent part of the NYISO market design..
2. Elimination of the LSE incentive. The day ahead credit previously provided to LSEs providing commodity service to DADRP participating customers has been eliminated. Thus, there is no longer a "double payment" and the program is no longer "incentivized". The day ahead LBMP payment for scheduled reductions to DRPs has been retained.
3. Elimination of the "greater of" penalty. Deviations from Day Ahead schedules will no longer be settled at the higher of day ahead or real time LBMP. Settlement of deviations from Day Ahead schedules will now be settled in a manner consistent with all other resources, at the real time LBMP.
4. Increase in floor price. In order to address concerns regarding free ridership (participants receiving DADRP payments for planned outages) the minimum DADRP bid price has been increased to $75/MWh.
5. Reintroduction of Local Generation to the program. With the removal of the DADRP incentive, concerns regarding incentives for Local Generation to "go behind the fence" have been reduced significantly. As such, Local Generation will be allowed to participate in DADRP.
6. Elimination the requirement that meter data be submitted to the NYISO by PSC-certified Meter Data Service Providers (MDSPs).
7. Lowered the threshold for participation in the Small Customer Aggregation Program to 1 MW.

1.0 Definitions and Acronyms

Bid - Offer to purchase and/or sell Energy, Demand Reductions, Transmission Congestion Contracts and/or Ancillary Services at a specified price that is duly submitted to the ISO pursuant to ISO Procedures.

Bid Price - The price at which the Supplier offering the Bid is prepared to provide the product or service, or the buyer offering the Bid is willing to pay to receive such product or service.

Bid Production Cost - Total cost of the Generators required to meet Load and reliability Constraints based upon Bids corresponding to the usual measures of Generator production cost (e.g., running cost and Minimum Generation and Start-Up Bid).

Bidder - An entity that bids a Demand Reduction into the Day-Ahead market.

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2.0 Day-Ahead Demand Reduction Program - Overview

2.1 Administration

Beginning July 1, 2003, DADRP will be open to both host Load Serving Entities (LSEs) and Demand Reduction Providers (collectively termed DRPs) including non-host LSEs.

2.2 Bidding

The NYISO will accept Demand Reduction Bids wherein an DRP can bid on behalf of a Demand Side Resource for a specific MW curtailment (in minimum increments of 1 MW by Bus) in contiguous "strips" of one or more hours. A single bid will be limited to a strip of no more than eight hours. The Demand Reduction Bid would include the Day-Ahead LBMP above which the Load would not consume, and could also include a Curtailment Initiation Cost. Following the implementation of SMD 2.0, the 1 MW increment requirement will be lifted. However, the 1 MW minimum bid will remain in place.

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Bidders are required to submit an average energy bid of at least $75/MWh to be eligible for scheduling in the Day-Ahead market. Bids submitted below the floor price will be rejected from the MIS.

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2.3 SCUC Objective Function

The objective function for SCUC will be to eliminate Demand Reduction Bids from Day-Ahead Bid Load when the total Bid Production Cost over the 24 hour Dispatch Day will be reduced compared to serving that Load, including consideration of paying the Demand Reduction Bid and any bid Curtailment Initiation Costs. Thus, curtailments will not be scheduled unless they reduced total Day-Ahead production costs.

2.4 Setting LBMP

Demand Reduction Bids can set Day-Ahead LBMP just as a comparably bid Generator. If no Supply Bids remain and a Demand Reduction Bid is the last resource chosen, NYISO's Market Monitoring and Performance Unit will reserve the day-ahead price for those hours and subsequently determine if the LBMP as set by the Demand Side Resource is appropriate or if a supply-side resource should set LBMP.

2.5 Customer Baseline Load

A Demand Side Resource's Customer Baseline Load (CBL) will provide a reference to verify its compliance with a scheduled curtailment. The CBL for DSRs bidding curtailable load is based upon the five highest energy consumption levels in comparable time periods over the past ten days, beginning two days prior to the day for which the load reduction is bid. More information can be found in Section 5, Calculating Customer Baseline Load for DADRP.

2.6 Determining the Amount of Load Reduction

For DSRs bidding curtailable load, the amount of actual Real-Time curtailment determined will be equal to its CBL less its actual Real-Time consumption during the specified curtailment.

2.7 Payments

An DRP with a Demand Side Resource that curtails Load (as scheduled Day-Ahead by the NYISO) will be paid by the NYISO the Day-Ahead LBMP. If needed, a supplemental payment will be made to allow full recovery of the Curtailment Initiation Cost.

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2.8 Payment Sharing

The payments under the Day-Ahead Demand Reduction Program will be made by the NYISO to the DRP. The portion that will be transferred from the DRP to the Demand Side Resource is

outside the scope of the NYISO, and must be arranged between the LSP/DRP and the Demand Side Resource. Each Investor Owned Utility (IOU) Transmission Owner (excluding LIPA and NYPA) shall designate in its retail tariff the portion of the total payments that it will share with Demand Side Resources that curtail use under this program, and it will apply such portion in a non-discriminatory manner. LIPA and NYPA agree to implement the intent of the preceding sentence in a consistent manner.

2.9 Cost Allocation of Incentives and Uplift

The ISO shall recover supplemental payments to Demand Reduction Providers pursuant to Rate Schedule I of its Open Access Transmission Services Tariff. Cost recovery will be allocated to all Loads excluding exports and Wheels Through on a zonal basis in proportion to the benefits received after accounting for, pursuant to ISO Procedures, Demand Reduction imbalance charges paid by Demand Reduction Providers. Section 9, DADRP Cost Allocation, defines the cost allocation method to be used. Briefly, the approach:

- charges loads in all Zones when DADRP curtailment occurs and no NYCA constraints exist,
- charges loads in all Zones upstream of a constraint when DADRP curtailment occurs upstream of that constraint, and
- charges loads in all Zones downstream of a constraint when DADRP curtailment occurs downstream of that constraint.

Constraints at the three significant limiting NYCA Interfaces (Central East, Sprainbrook-Dunwoodie, and Con Ed – Long Island) will be modeled as static percentages; together with the unconstrained portion of time, these will sum to 100%.

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2.10 End-User Requirements

Demand Side Resources will be required to have interval billing metering, and will be responsible for any incremental metering and billing system implementation and administration costs in accordance with applicable retail tariffs.

2.11 Small Generator Eligibility

Effective 2004, load reduction through on-site generation will be allowed.

2.12 Non-Performance Penalties

If an DRP has a Demand Side Resource scheduled for a curtailment that would have been eligible for the Incentive payment, but that subsequently fails to curtail, the DRP will be charged the Real-Time LBMP for non-curtailed Load.

2.13 ICAP Eligibility

Demand Side Resources that qualify as Special Case Resources will be treated identically as other Special Case Resources for purposes of ICAP payments.

2.14 Conversion to Economic Day-Ahead Program

Effective 2004 the program has been converted into an Economic Day-Ahead Load Curtailment Program retaining the same rules and features as the Incentivized Program with the exceptions that:

- The Incentive payment to LSEs will no longer be made by the NYISO.

A DRP with a Demand Side Resource that curtails Load (as scheduled Day-Ahead by the NYISO) will continue to be paid by the NYISO the higher of the Demand Reduction Load Bid or Day-Ahead LBMP.

2.16 Small Customer Aggregation

1. Aggregations must be at least 10 MW for DADRP. The NYISO will establish an up-front means of certifying that the aggregation has an expectation of meeting this requirement. This will

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The Incentive portion of the Day-Ahead Demand Reduction Program will expire on October 31, 2005 unless the NYISO Management Committee affirmatively extends the program. The program will be re-evaluated every year for potential modifications and improvements.¶
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<#>The non-performance penalty will no longer apply (i.e., Loads that fail to curtail will be charged Real-Time LBMP).¶

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be established as part of the approval of the verification methodology; the sampling plan or other measurement methodology will assign an initial (a priori deemed) estimate of the response per site in order to drive the sample size. The aggregation can be comprised of two or more different sampling methods, provided that such a super aggregation was allowed by the NYISO. The MW limit can also be met by combining participants enrolled by different brokers (DRP or LSE) provided that the brokers agree to submit all participants under a single program entity.

2. Aggregators must accept full responsibility for payments to and penalties levied against the members of the aggregation. The NYISO will require that each member of the aggregation execute an agreement to participate indicating that it accepts the provisions of the ISO program and authorizes the DRP to act as its broker for the purposes of participation

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3. Proposals for measuring aggregation performance can involve one of several methods:
a. The deployment of approved whole-premise kW metering devices on a sample of participants
b. The deployment of approved end-use device or process kW metering devices on a sample of participants that elect to limit PRL program participation to specified end-use devices or processes.
c. Provision for supplying verifiable behavioral actions, equipment operating logs, or other data that is deemed to be sufficiently indicate the load level the customer otherwise would have consumed, but for the PRL program event participation
d. Other measurement systems that indicate the load level the customer otherwise would have consumed, but for the PRL program event participation

4. Promulgate provisions that govern applications. A process and procedures will be drawn to govern how applications are made, processed and ruled upon, and to set limits to aggregation projects by zone, provider, program, or any other category. The number of aggregations allowed needs to accommodate all of the utilities plus a reasonable number of DRPs and LSEs. Each proposal for small customer aggregation will be reviewed by the NYISO staff and the Price Responsive Load Working Group, and must be approved by a majority of the Chairs and Vice-Chairs of the Management Committee and Business Issues Committee and the Chairman of the Price Responsive Load Working Group.

5. Aggregations may be declared as ICAP or UCAP, subject to the rules established in the applicable NYISO Procedures for ICAP/UCAP suppliers.

6. The Aggregation broker is responsible for all costs associated with developing and administering the alternative performance methodology. Applications for approval of alternative methodologies must include a explicit description of the methodology and how it would be tracked and administered, accompanied by the specific administration processes required. The NYISO in approving an application will specify the costs associated with administration that the applicant must bear. The aggregation applicant must agree to be responsible for all such costs, including costs incurred by the ISO for developing and administrating the alternative methodology. The ISO may, at its discretion, require that some or all of such cost be reimbursed by the applicant upon approval of the methodology, or deduct all costs from payments for curtailments by participants, or a combination of the two methods of cost recovery.

7. One method per end-use premise. End-use electricity customers may subscribe load at a given premise to PRL programs only under a singe performance methodology, either the standard method or an approved alternative methodology.

8. Failure to comply with aggregation procedures. The NYISO may, at any time, terminate its agreement with an aggregation broker if it determines that the broker is not fulfilling it obligation under the aggregation agreement. Customers belonging to such aggregation may henceforth participate by signing up under any approved means of participation.

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3.0 DADRP Registration Procedures

Registration material and a copy of this manual can be found on the NYISO website at:

http://www.nyiso.com/services/documents/manuals/pdf/planning_manuals/dadrp_final090903.pdf

You can also access this information from the NYISO website front page by following the link to The Markets > Demand Response Programs.

If you are an LSE or DRP currently registered as a Customer with the NYISO, please complete Attachment A, the DRP Registration Form. In addition, fill in one Demand Side Resource Registration Form (Attachment B) for each Demand Side Resource you will be sponsoring in the program.

Attachment A is available in electronic form on the NYISO website at: http://www.nyiso.com/services/documents/groups/bic_price_responsive_wg/demand_response/lse_reg_form_dadrp.doc

Attachment B is available in electronic form on the NYISO website at: http://www.nyiso.com/services/documents/groups/bic_price_responsive_wg/demand_response/dadrp_att_b2003.doc

The NYISO also needs to know specific information for modeling the Demand Side Resource bid. LSEs/DRPs must fill out Attachment C for each single or composite Demand Side Resource being modeled.

If you are not currently an LSE, or you are interested in acting as a DRP, you need to register as a Customer with the NYISO using the Market Relations Registration Packet found on the NYISO website at:

http://www.nyiso.com/services/registration.html

Specific instructions for registration are contained in the following sections.

3.1 Load Serving Entities

For LSE's who are enrolling a retail end user whose load is served by the LSE:

1. Complete Attachment A of this manual.

2. Register each Demand Side Resource with the NYISO after signing a contract with that resource, using the appropriate DADRP Certification form provided in Attachment B or C of this manual. Any information on the identity of a Demand Side Resource that is provided to the NYISO will be treated as confidential, and will not be disclosed to third parties without the express permission of the end-use customer, unless aggregated or otherwise presented in such a way as to preserve confidentiality.

3. By submitting the DADRP Certification Form, the LSE confirms that the load to be reduced is not under any specific contractual obligation that would prevent participation in the DADRP.

4. The DADRP participant registration is deemed approved for bidding after the Demand Side Resource has been assigned a generator bus and the billing relationship between the LSE and the Demand Side Resource has been set up. The NYISO will confirm approval via phone or e-mail to the LSE.

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For LSE's that are enrolling a Demand Side Resource whose load is served by a different LSE (Commodity Provider):

1. Complete Attachment A of this manual.

2. Register each Demand Side Resource with the NYISO after signing a contract using the appropriate DADRP Certification form provided in Attachment B or C of this manual. Any information on the identity of a Demand Side Resource that is provided to the NYISO will be treated as confidential, and will not be disclosed to third parties without the express permission of the end-use customer, unless aggregated or otherwise presented in such a way as to preserve confidentiality.

3. Within 2 days after receipt of the DADRP Certification Form, the NYISO will forward the registration to the appropriate Commodity Provider to confirm that the load to be reduced is not under any specific contractual obligation that would prevent participation in the DADRP.

4. Unless otherwise prohibited by the Commodity Provider, the DADRP participant registration is deemed approved for bidding after the Demand Side Resource has been assigned a generator bus and the billing relationship between the LSE and the Demand Side Resource has been set up. The NYISO will confirm approval via phone or e-mail to the LSE.

3.2 Demand Response Providers

To register as a Demand Response Provider you must become a NYISO Customer. If you are applying for NYISO Customer status:

1. Complete Attachment A of this manual.

2. Complete Sections A, B, G, H, I, J, L, N and O of the NYISO Registration Packet, available at the NYISO website

3. Sign the Market Services Tariff.

4. Register each Demand Side Resource with the NYISO after signing a contract using the appropriate DADRP Certification form provided in Attachment B or C of this manual. Any information on the identity of a Demand Side Resource that is provided to the NYISO will be treated as confidential, and will not be disclosed to third parties without the express permission of the end-use customer, unless aggregated or otherwise presented in such a way as to preserve confidentiality.

5. Within 2 days after receipt of the DADRP Certification Form, the NYISO will forward the registration to the appropriate Commodity Provider to confirm that the load to be reduced is not under any specific contractual obligation that would prevent participation in the DADRP.

6. Unless otherwise prohibited by the Commodity Provider, the DADRP participant registration is deemed approved for bidding after the Demand Side Resource has been assigned a generator bus and the billing relationship between the LSE and the Demand Side Resource has been set up. The NYISO will confirm approval via phone or e-mail to the LSE.

3.3 Historical Operating Data

LSEs/DRPs shall be required to provide historical operating data for each Demand Side Resource upon acceptance for participation in the DADRP. These requirements may be met by:

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For loads with existing interval meters:

1) Provide the most recent complete billing period of hourly interval data.

For totalized loads with existing interval meters:

2) For totalized loads, provide hourly interval data for one complete billing period of hourly interval data for all participating loads at the premise; or

For newly installed load interval meters:

3) For newly installed interval meters, provide the prior three month's summary of monthly MWh consumption and demand values, if available.

3.4 Credit Requirements for DADRP

Demand Response Providers will need to adhere to the following credit requirements if they intend to participate in the NYISO enhanced DADRP program. Collateral will need to be obtained by the DRP and presented to the NYISO before the DRP can participate in the DADRP program. Once participation is granted the NYISO credit department will monitor the activity of the DRP and will reserve the right to request additional collateral if conditions warrant. The collateral will stay in place for the duration of the DRP's participation in the DADRP program.

For those Market Participants who are required to post collateral, the collateral requirement will be calculated by the following formula:

Collateral Requirement: = (Average accepted MWh per month) * (Average Day-Ahead LBMP Price during the prior years summer capability period) * (20% Percentage Factor) * (4)

Where
Average accepted MWh per month =

- *For DRP's that are currently active in the DADRP program = The* average will be determined by the historical number of accepted MWh made per month by the DRP, for the months associated with previous years summer capability period.

- *For DRP's that are currently registered in the DADRP program, but have never been active or for new DRP's who are not currently registered in the DADRP program =* Estimate of the average number of projected accepted MWh per month, for the months associated with the summer capability period.

  The estimated value will be determined during the registration process with input from both the DRP and NYISO staff. For estimates that are significantly higher than actual accepted MWh the NYISO will review the collateral requirement after four months of activity and may reduce the collateral requirement. If the estimated value is significantly lower than actual accepted MWh the NYISO, as stated above, does reserve the right to request additional collateral at any time during the program.

Average Day-Ahead LBMP Price during the prior years summer capability period = The average Day-Ahead LBMP at the NYISO reference bus for the previous summers capability period for hours in which the Day-Ahead price is greater than $75.

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4.0 DADRP Bidding Instructions

LSE Offers
When bidding as a Demand Reduction Provider the LSE must place two separate bids into the MIS System. The first bid is its normal load bid that it would submit regardless of whether or not the LSE is Demand Reduction Provider. In addition to its normal load bid the same LSE must also submit a generator bid for the amount that the LSE is willing to curtail.

DRP Offers
A DRP is not required to submit a load bid into the MIS – this is the responsibility of the LSE who serves the Demand Side Resource. The DRP must submit a generator bid for the amount of load curtailment desired to be scheduled in the DAM.

The curtailable load will be modeled as a generator in the ISO's unit commitment software, and uses a generator bid to make the curtailable MW's available to the ISO. The bidding instructions on the following pages track the payment examples in Section 8, and will demonstrate different ways to input bidding information into the MIS system.

To prevent situations where load bids an outage that would occur regardless of whether or not the bid was accepted during periods when load reduction is not needed, a floor bid price has been established for DADRP. A curtailment bid for an individual hour must have a bid price that is at or above $75/MWh for every block of load offered for curtailment. The load- weighted average bid price for bids that include curtailment production cost guarantees or minimum run times must be equal to or greater than $75/MWh. Bids submitted below the floor price will be rejected from the MIS.

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6.0 Reporting and Verifying Customer Baseline Load and Meter Data

6.1 Metering Requirements

DRPs are required to provide hourly interval metering data to validate performance. Demand Side Resources participating in the DADRP must have an integrated hourly metering device, installed to capture the facility's net load, certified by a Meter Service Provider (MSP) that provides integrated hourly kWh values for market settlement purposes. DADRP participants must also contract with a Meter Data Service Provider (MDSP) for collection of DADRP data.

When submitting DADRP performance data to the NYISO, DSPs who are not MDSPs must identify to the NYISO the contact information for MDSP organization they are using to collect DADRP load data. The NYISO will periodically verify the load data submitted by the DSP with the MDSP.

When a Demand Side Resource registers for participation in the program, whether as a self-supply or interruptible load customer, an hourly interval meter shall be installed to meter the entire facility or for totalized load at each Demand Side Resource. An hourly interval meter is required for each participating load.

6.2 Historical Operating Data

LSEs shall be required to provide historical operating data for each load upon acceptance for participation in the DADRP. These requirements may be met by:

For loads with existing interval meters:

1) Provide a minimum of 1 complete billing period of hourly interval data immediately preceding the first Capability Period the load will participate in.

For totalized loads with existing interval meters:

2) For totalized loads, provide hourly interval data for a minimum of 1 complete billing period of hourly interval data for all participating loads at the premise; or

For newly installed load interval meters:

3) For newly installed interval meters, provide the prior three month's summary of monthly kwh consumption and demand values, if available.

6.3 Performance

Performance for interruptible loads is measured as the difference between the Customer Baseline and the actual metered usage by hour during the period when load reduction is scheduled. The Customer Baseline type used for computing performance shall be the same day-type as the day-type corresponding to the period when load reduction is scheduled, as described in Section 5 of this manual.

Performance for a interruptible load Demand Side Resource/Aggregate for each hour shall be calculated as:

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$PRL_{meter\ h} = (CBL\text{-}xx)_h - NML_h$

Where $PRL_{meter\ h}$ = calculated actual performance (Demand Reduction) for the hour

$CBL\text{-}xx_h$ = Customer Baseline day-type (weekday – CB-WD, Saturday-CB-SA, or Sunday-CB-SU)

NML_h = actual net hourly metered load

If the quantity (CBL-xx)h-NML_h is negative in any scheduled hour, then $PRL_{meter\ h}$ should be set equal to zero.
$PRL_{meter\ h}$ should be set equal to zero for all hours in which the Demand Side Resource/Aggregate was not scheduled for a Demand Reduction.

6.4 Data Submission

The DRP will provide the Demand Side Resource net metered load to the LSE.

The DRP will receive copies of the Demand Side Resource Registration Form, and the Aggregated Bid Reporting Form, as well as corresponding unique Point Identifiers for each accepted Demand Side Resource/Aggregate from the NYISO.

The DRP will receive Hourly Interval Meter readings for the net load at each Demand Side Resource from an MDSP. The DRP will aggregate the meter reads where necessary per the Aggregated Bid Reporting Form, and unique Point Identifier definitions provided by the NYISO.

The DRP will use the Hourly Interval meter readings for each Demand Side Resource/Aggregate to calculate a Customer Base Load, per the procedure in Section 5 for each Demand Side Resource/Aggregate.

The DRP will calculate Demand Reduction Performance ($PRL_{meter\ h}$), for hours in which the Demand Side Resource was scheduled for reduction per the formula described in Section 6.3 or 6.4 of this manual, whichever is applicable. The Demand Side Resource/Aggregate metered Load Data and the calculated Customer Base Load should be retained by the DRP for a period of at least two years.

The DRP will report the Demand Side Resource/Aggregate to the NYISO's Web Based Reconciliation (WBR) system. This can be achieved by using the upload/download templates or directly through the web interface. If the metered data can be obtained, and the CBL calculation performed in time for the initial monthly billing, then the actual data should be used. If the metered data cannot be obtained, and/or if the CBL calculation cannot be performed in time for the initial monthly billing, then Demand Reduction Performance (PRLmeter) should be set equal to Scheduled Demand Reduction. Sometime between the Initial Monthly Billing and the First Settlement Adjustment, an updated MWH Data Daily file should be submitted to the ISO based upon actual metered data.

6.5 Verification, Errors and Fraud

All load reduction data is subject to audit by the NYISO and its Market Monitoring unit. Disputes concerning erroneous payments shall be resolved through the ISO's Dispute Resolution Procedures.

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If the ISO in it's review of the DRP's account determines the DRP or one of its customers has committed fraud to extract DADRP payments from the ISO, the ISO will have the right to ban the DRP or the DRP's customer from the DADRP as well as pursue all of the ISO's legal rights, at its sole discretion.

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7.0 Performance and Payment Examples

7.1 Economic "Incentivized" Curtailment of Load – LSE-Sponsored

For Load scheduled to economically curtail Day-Ahead, and that actually does curtail in Real-Time, the LSE would be paid Day-Ahead LBMP and would include a supplement, if needed, to allow full recovery of the "Curtailment Initiation Cost". Also, the LSE would be charged for that curtailed Load, but then would receive a rebate for this charge as the "Incentive".

As an example, assume:

a) A 10 MW Load bids 10 MW fixed Load and bids to curtail 3 MW of Load at a Price Cap of $100/Mwh plus $2,000 for "Curtailment Initiation Costs" for a continuous time strip of 6 hours. This amounts to a total curtailment bid of $3,800 = (3 MW x $100/MWh x 6 hours) plus $2,000.
b) That Load is scheduled Day-Ahead for a 3 MW curtailment for 6 hours.
c) Day-Ahead LBMP is $250/MWh for those 6 hours.
d) Real-Time LBMP is $275/MWh for those 6 hours.
e) The Load actually consumes 7 MW and curtails 3 MW over those 6 hours.

The resulting payments and charges would be as follows:

a) The DRP would be paid $4,500 = $250/MWh LBMP x 3 MW x 6 hours for the curtailment.
b) No supplemental "Uplift" payment for a "Bid Curtailment Cost Guarantee" would be needed since the $4,500 LBMP payment would exceed the $3,800 total curtailment bid.
c) The DRP would be charged $15,000 = $250/MWh LBMP x 10 MW x 6 hours for the fixed Load.
d) The DRP would then also receive a rebate of $4,500 = $250/MWh LBMP x 3 MW x 6 hours for the curtailed Load as an "Incentive".
e) The DRP would be charged $4,950 = $275/MWh * 3 MW * 6 hours for the curtailed load as a Load Balance.
f) The DRP would receive a rebate of $4,950 = $275/MWh * 3 MW * 6 hours for the balancing of their Day-Ahead energy purchase.

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8.0 DADRP Cost Allocation

The DADRP will result in an under-collection of revenue by the NYISO. The revenue deficiency will be the result of the load reduction bid guarantee, whereby the LBMP revenue will be supplemented to ensure the load reduction recovers their bid costs for the actual real-time MW reduction accomplished.

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the rebate offered to the end-user's LSE/DRP for the real-time MW reduction accomplished at day-ahead LBMP, and¶
penalty charges, which offset the revenue deficiency to the extent the non-performance penalties exceed real-time LBMP.

A static method will be used to allocate costs associated with the under-collective of revenue according to those who benefit from the DADRP:

a) Each Zone (or set of Zones) are allocated the cost of the DADRP based upon its load ratio share on a daily basis using real-time metered daily load data and the static probability: (i) that no constraints existed, (ii) that this Zone(s) was upstream of a constraint and curtailment occurred upstream, and (iii) that this Zone(s) was downstream of a constraint and curtailment occurred downstream.

b) The three most often limiting NYCA interfaces are used, with the total probabilities of them being limiting or having no constraints normalized to 100%. Based upon current data, the three most limiting interfaces historically have been Central-East, Sprainbrook-Dunwoodie, and Con Ed - Long Island. For the purposes of DADRP cost allocation, four composite zones are used: West of Central-East (Zones A,B,C,D,E,), East Upstate Excluding NYC and LI (Zones F,G,H,I), New York City (Zone J), and Long Island (Zone K). For the period May-September 2002, the percentages of time when the specific interfaces were constrained are:

- No constraints: 24.7%
- Central-East: 12.9%
- Con Ed – Long Island: 53.3%
- Sprainbrook – Dunwoodie: 9.1%

The equations used to allocate costs to individual LSEs are as follows:

For LSE m in Zones A-E:

$a_1 * (cost_A+\ldots+cost_K) * load_m / (load_A+\ldots+load_K) +$ **'no constraints**
$a_2 * (cost_A+\ldots+cost_E) * load_m / (load_A+\ldots+load_E) +$ **'above Central-East const**
$a_3 * (cost_A+\ldots+cost_I+cost_k) * load_m / (load_A+\ldots+load_I+load_k) +$ **'above S-D constraint**
$a_4 * (cost_A+\ldots+cost_J) * load_m / (load_A+\ldots+load_J)$ **'above CE-LI constraint**

For LSE m in Zones F-I:

$a_1 * (cost_A+\ldots+cost_K) * load_m / (load_A+\ldots+load_K) +$ **'no constraints**
$a_2 * (cost_F+\ldots+cost_K) * load_m / (load_F+\ldots+load_K) +$ **'below Central-East const**
$a_3 * (cost_A+\ldots+cost_I+cost_k) * load_m / (load_A+\ldots+load_I+load_k) +$ **'above S-D constraint**
$a_4 * (cost_A+\ldots+cost_J) * load_m / (load_A+\ldots+load_J)$ **'above CE-LI constraint**

For LSE m in Zone J:

$a_1 * (cost_A+\ldots+cost_K) * load_m / (load_A+\ldots+load_K) +$ **'no constraints**
$a_2 * (cost_F+\ldots+cost_K) * load_m / (load_F+\ldots+load_K) +$ **'below Central-East const**
$a_3 * cost_J * load_m / load_J +$ **'below S-D constraint**

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Attachment A – DADRP Demand Response Provider (DRP) Registration

Upon completion of program registration the ISO will model each accepted Demand Side Resource/Aggregate in the Day-Ahead Commitment software. Each accepted Demand Side Resource/Aggregate will be assigned a unique Point Identifier. As a condition of enrollment, the DRP accepts that the NYISO will provide a copy of the Demand Side Resource Registration Form, and the Aggregated Bid Reporting Form to the relevant Meter Data Service Provider (MDSP). Additionally the DRP accepts that the NYISO will provide the relevant MDSP with the unique Point Identifier used to model the Demand Side Resource/Aggregate.

This form must be faxed to **518-356-6146, attention: Manager DADRP or e-mailed to abreidenbaugh@nyiso.com.**

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All inquiries, notices and communications by the NYISO will be sent to the address provided below.

Name: _____
Organization: _____
Address: _____
_____
_____
Phone: _____
Cellphone: _____
Pager: _____
Fax: _____
E-mail: _____

Is your organization a current NYISO Customer? (check one) Yes ❒ No ❒
(If no, you must become a NYISO Customer to participate in this program)

Meter Data Services Provider contact information:
Name: _____
Organization: _____
Address: _____
_____
_____
Phone: _____
Cellphone: _____
Pager: _____
Fax: _____
E-mail: _____

Please check all the LBMP zone(s) in which you plan to submit DADRP bids:

West ❒	Genesee ❒	Central ❒
North ❒	Mohawk Valley ❒	Capital ❒
Hudson Valley ❒	Millwood ❒	Dunwoodie ❒
NYC ❒	Long Island ❒	

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Attachment B – DADRP Demand Side Resource Registration

This form must be faxed to **518-356-6146, attention: Manager DADRP or e-mailed to abreidenbaugh@nyiso.com.**

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Use one form for each Demand Side Resource Registered by the Demand Reduction Provider (DRP).

Organization: _____
Address: _____
_____
_____

Name of Local Distribution Company (LDC): _____

LDC's Electric Account Number (s) for Demand Side Resource: _____

LBMP Zone of Demand Side Resource: _____

Bus or substation name where DSR will be modeled: _____

Interruptible Load Rating of Demand Side Resource _____.__ MW (rounded to nearest 0.1 MW)

(Note: as of 2003, only interruptible load resources will be allowed to participate in DADRP)

Type of metering:

❒ Existing utility interval meter Meter ID #: _____

If new meter, date installed or to be installed _____ Meter ID #: _____

Attach certification if new meter

Identify dates of any planned Demand Side Resource shutdown periods in 2003:

DRP supplying Demand Side Resource: _____

I HEREBY CERTIFY that the information contained in this form and its attachments is complete and correct.

_____ _____

Authorized Representative of Demand Response Provider Date

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