

Emergency Demand Response Program Manual

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NYISO ERROR! REFERENCE SOURCE NOT FOUND.

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Revision History

Version	Date	Revisions
7.0 6.3	04/0429 07/9/2013	Global > Updated format, punctuation, terminology and links. > Capitalized defined terms. > Replaced: • "Load Curtailment" with "Load Reduction" • "Emergency Generation" with "Emergency Generator" • "On-site generator" and "Local Generation" with "Local Generator" • "Subscribe" with "Enroll" • "Usage" with "Load"
		Section 1.1 ➤ Added Tariff definition "Day-Ahead Market" ➤ Added Tariff definition "Demand Side Ancillary Service Program Resource (DSASP Resource)" ➤ Added Tariff definition "Load"
		Section 1.2 ➤ Clarified definition of: • Curtailment Program End User Customer (EUC) • Load Reduction ➤ Added term "Day Ahead Demand Side Response Program (DADRP)" ➤ Removed term "NYS DEC"
		Section 2. ➤ Changed title
		Section 2.1 ➤ Clarified description of "Who Can Participate" in the EDRP
		Section 2.2 > Clarified minimum qualification for CSPs and removed footnote
		Section 2.3 ➤ Further defined qualifications of Local Generators in the EDRP
		Section 2.4 ➤ Clarified definition for CSPs with a Local Generator to participate in the EDRP ➤ Replaced "NYCA" with "NYISO"
		Section 2.5 ➤ Further defined "other program eligibility" requirements for SCRs in ICAP Market
		Section 2.6 ➤ Added language regarding Demand Side Resources participating in both the EDRP and the DSASP
		Section 3.1 ➤ Clarified enrollment requirements for CSPs
		Section 4.2 > Clarified definition of CSP customer demand reduction and added "and RIPs"

Section 4.2.1

- Changed title
- Updated language for clarification, including removal of generator examples

Section 4.3

- > Revised description of the notification communication media
- Updated reference to NYISO Stakeholder Services and removed email address
- > Updated names of notification types

Section 4.4

Updated Notification message examples

Section 5.

Added language to clarify that the CSP Metering and Data Requirements in Section 5.1, 5.2 and 5.3 also apply to RIPs with SCRs in the ICAP SCR Program

Section 5.1

Clarified the CSP metering requirements

Section 5.1.2

Clarified the CSP configuration requirements

Section 5.1.3

- Clarified requirements for providing historical metering and operation data for CSPs and RIPs
- > Redefined minimum requirement of hourly interval data
- Redefined the retention period of interval meter readings to be three (3) years

Section 5.2

> Changed title

Section 5.2.1.

Clarified that the CSP selects CBL method when enrolling a resource in the EDRP

Section 5.2.2

- > Changed the title
- > Added clarification on what Load may be included in metered Load
- Added clarification on which CBL calculation is to be used when a resource is enrolled as a Response Type G
- Updated
 - I. The Average Day CBL for Weekdays
 - II. The Average Day CBL for Weekends
 - III. Elective Weather-Sensitive CBL Formulation

Section 5.2.3

Changed title and clarified Steps 1 and 2

Section 5.2.4

Changed title

Section 5.3

- Changed title
- > Clarified equations and metering configurations
- > Added DRIS Response Type for each configuration

Section 5.3.2

> Removed Compliance" section

		Section 5.4.1 ➤ Removed duplicate Data Receipt language			
		Section 5.4.2			
		➤ Renumbered			
		Section 5.4.3			
		➤ Renumbered and added explanation of Settlement procedures			
		5.4.4			
		 Renumbered and clarified that all data related to EDRP participation are subject to audit by the NYISO 			
		Section 5.5			
		Changed title			
		➤ Eliminated duplicate information			
		Updated reference to Attachment G of the NYISO Services Tariff			
		Section 6.1			
		Removed reference to cost allocation methodology			
6.2	12/02/2010	Global			
		Updated tariff citations to reflect section renumbering secondary to e-			
		Tariff implementation.			
		➤ Implemented various ministerial changes.			
		Section 3.2			
		Specified that timing of EDRP Enrollment is per the Demand Response Information System (DRIS) event calendar.			
		Section 5.2.2			
		 Clarified means of calculating weekday Average Day CBLs. Replace screenshots for figures 5-2, 5-3, and 5-4. 			
		Section 5.4			
		 Clarified means and timing of CSP reporting energy payment data, 			
		which will be accomplished in DRIS.			
		Section 5.4.1			
		Clarified receipt requirements for Load reduction data.			
		Section 5.4.2			
		Clarified format of reporting Load reduction data as being that outlined in the NYISO Demand Response Information System User's Guide.			
		Section 5.4.3			
		Clarified calculations and payments for a resource that performs in either the DADRP or DSASP concurrent with an EDRP deployment.			
		Section 5.6			
		➤ Removed in total, including Figure 5-5, Timeline for Settlement.			
6.1	05/05/2010	Global			
		Updated links/instructions for accessing external documents secondary to NYISO Web site redesign.			
		Updated internal references to EDRP Manual sections and figures.			
		➤ Incorporated changes to reflect terminology used in the Demand			
		Response Information System (DRIS), including <i>enroll</i> instead of register and deploy instead of activate.			

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		➤ Removed references to Attachments A, B, C, and D.
		Section 1
		➤ Revised definition titles to match Market Services Tariff.
		Section 2
		➤ Separated classifications of CSPs and eligibility for resource
		participation.
		Removed NYISO verification of restrictions for participation.
		Section 3
		Clarified CSP enrollment procedures.
		Clarified Demand Resource enrollment procedures, which will be accomplished in DRIS.
		Section 4
		Referenced Emergency Operations Manual for conditions indicating deployment.
		Clarified notification procedures.
		Section 5
		Corrected references to PRL program.
		Clarified examples. Removed 45-day deadline for reporting event performance
		 Removed 45-day deadline for reporting event performance. Removed payment and cost allocation details and referred to
		Attachment G of the NYISO Market Services Tariff for cost allocation rules.
6.0	07/20/2008	Global
0.0	0112012000	➤ Reformatted per new template to standardize presentation
		Corrected figure and table cross-references.
		Updated NYISO Website references
		Front Matter
		➤ Removed What's New page.
		Revision History Table
		➤ Changed column headings as follows:
		"Revision" changed to "Version" ""
		 "Changes" changed to "Revisions" Standardized date format to mm/dd/yyyy.
		Section 1
		Revised definitions to align with Market Services Tariff definitions. Included reference to Market Services Tariff, where applicable.
		Section 2
		➤ Removed Program Summary.
		Section 3.1
		NEW 2.1: Removed effective period of the program; program is permanent.
		Section 3.3 ➤ NEW 2.3: Tariff reference to permit sharing of data with Transmission
		Owners for planning and system operation. Added statement about compliance with DEC rules and regulations.
		Section 3.7
		NEW 2.7: Added statement restricting resources included in small customer aggregations to one NYISO reliability program. Other minor wording changes.

Section 4.1

NEW 3.1: Removed automatic registration after 30 days – NYISO will notify the LSE of approved registration. Also added annual reregistration each spring.

Section 4.2

NEW 3.2: Removed automatic registration after 30 days – NYISO will notify the entity that takes service directly from the ISO to supply its own Load in the NYCA of approved registration. Also added annual reregistration each spring.

Section 4.3

NEW 3.3: Removed automatic registration after 30 days – NYISO will notify the Curtailment Customer Aggregator of approved registration. Also added annual re-registration each spring.

Section 4.4

NEW 3.4: Removed automatic registration after 30 days – NYISO will notify the Curtailment Program End Use Customer of approved registration. Also added annual re-registration each spring.

Sections 4.3 and 4.4

> Modified Notification Procedures to update messages.

Section 5.2.1

NEW 4.2.1: Revised program limitation language and removed references to NYSERDA's reimbursement of expenses.

Section 5.2.2

- > Removed references to NYSERDA's reimbursement of expenses.
- NEW 4.4: Added new sub-section titled "Notification Message Examples"

Section 5.2.3

> Reformatted tables in Example Customer Baseline Calculation.

Section 5.4

Corrected typographical error related to the time frame by which verification of load reduction must received by the NYISO in order for compensation to be provided, from 45 days to 75 days.

Section 6.1

➤ NEW 5.1: Added sentence: "Transmission Owner or MDSP certification is required to read the revenue grade meter on load."

Section 6.1.2

NEW 5.1.2: Added descriptions of identifiers in Metering Configuration diagrams

Section 6.2

NEW 5.2: CBL Section completely revised to make it easier to follow, including better examples: Single weekday event, Multiple weekday events, Weekend event.

Section 6.3.1

> NEW 5.3.1: "load" changed to "load reduction" in several places.

Section 6.4.3

Removed section titled: Demand Side Resource Reduction Data. Specified requirements for billing data for entire bill period surrounding an event.

Section 6.4.4

> NEW 5.4.3: Added statement requiring one file per day with meter and

		CBL data for the event period. Updated contact information and
		Website links.
		Section 6.4.5
		NEW 5.4.4: Revised statement to align with tariff language (Attachment G, article 10).
		Section 6.5.1
		NEW 5.5.1: Changes to wording of subsection: Objectives of Cost Allocation.
		Section 6.5.2
		NEW 5.5.2: Changes to wording of subsection: Causes for EDRP Being Invoked – now references section 4.4 of NYISO Emergency Operations manual.
		Section 6.5.3
		NEW 5.5.3: Reworded reference to previous section and removed last line of table 6.5.3 regarding an external control condition.
		Section 6.6 ➤ NEW 5.6: Redrawing and relabeling of Timeline for Settlement.
		Section 7
		NEW 6: Added Targeted Demand Response Program information from Technical Bulletin 164.
		Attachments
		Removed registration form attachments and file format attachments, which are available on Demand Response page of NYISO Website (http://www.nyiso.com/public/products/demand_response/edrp.jsp).
5.0	04/02/2004	
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources.
5.0	04/02/2004	Section 3.3 (2)
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources.
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources.
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days.
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5 ➤ Remove 2-day notification requirement for LSE.
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5 ➤ Remove 2-day notification requirement for LSE. Section 4.3.6
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5 ➤ Remove 2-day notification requirement for LSE. Section 4.3.6 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.4.5
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5 ➤ Remove 2-day notification requirement for LSE. Section 4.3.6 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.4.5 ➤ Remove 2-day notification requirement for LSE. Section 4.4.5 ➤ Remove 2-day notification requirement for LSE. Section 4.4.6
5.0	04/02/2004	Section 3.3 (2) ➤ Footnote removes host load size restriction on DG resources. Section 3.5 ➤ Removed host load size restriction on DG resources. Section 4.1.3 ➤ Remove 2-day notification requirement for LSE. Section 4.1.4 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.3.5 ➤ Remove 2-day notification requirement for LSE. Section 4.3.6 ➤ Change deemed approved time limit from 14 to 30 days. Section 4.4.5 ➤ Remove 2-day notification requirement for LSE. Section 4.4.5 ➤ Remove 2-day notification requirement for LSE. Section 4.4.6 ➤ Change deemed approved time limit from 14 to 30 days.
5.0	04/02/2004	Section 3.3 (2) Footnote removes host load size restriction on DG resources. Section 3.5 Removed host load size restriction on DG resources. Section 4.1.3 Remove 2-day notification requirement for LSE. Section 4.1.4 Change deemed approved time limit from 14 to 30 days. Section 4.3.5 Remove 2-day notification requirement for LSE. Section 4.3.6 Change deemed approved time limit from 14 to 30 days. Section 4.4.5 Remove 2-day notification requirement for LSE. Section 4.4.6 Change deemed approved time limit from 14 to 30 days. Section 4.4.6 Change deemed approved time limit from 14 to 30 days. Section 5.2.1 Clarify that CSP, not NYISO, is responsible for 200 hour per year DG operating limit. Remove requirement that DG units submit permits to
		Section 3.3 (2) Footnote removes host load size restriction on DG resources. Section 3.5 Removed host load size restriction on DG resources. Section 4.1.3 Remove 2-day notification requirement for LSE. Section 4.1.4 Change deemed approved time limit from 14 to 30 days. Section 4.3.5 Remove 2-day notification requirement for LSE. Section 4.3.6 Change deemed approved time limit from 14 to 30 days. Section 4.4.5 Remove 2-day notification requirement for LSE. Section 4.4.6 Change deemed approved time limit from 14 to 30 days. Section 5.2.1 Clarify that CSP, not NYISO, is responsible for 200 hour per year DG operating limit. Remove requirement that DG units submit permits to NYISO.

		➤ Revise to say that these sections of the Registration Packet should be			
		completed: Å, B, G, H, I, L, N and O.			
		Section 5.2.1			
		Notes that program participants are responsible for ensuring compliance with the ultra-low sulfur fuel requirements and for the emissions testing requirements for model 1994 and older generators.			
		Section 5.2.2			
		Clarifies NYSERDA's rules for program expense reimbursement.			
		Section 6.1			
		Clarifies meter installation and reading language.			
		Section 6.1.1			
		 Clarifies that meter certification data is required only for non-revenue grade meters. 			
		Section 6.2.1			
		Notes that the CSP is responsible for CBL calculation.			
		Section 6.6.4			
		Clarifies that the NYISO provides hourly payment information by customer to CSPs separate from the consolidated invoice.			
3.0	02/28/2003	Section 2.0			
		➤ Removed 25 MW cap on small customer aggregation program.			
		Section 5.2.1			
		Notes that program participants are responsible for ensuring			
		compliance with the ultra-low sulfur fuel requirements and for the emissions testing requirements for model 1994 and older generators.			
		Section 5.2.2			
		Clarifies NYSERDA's rules for program expense reimbursement.			
		Section 6.1			
		Clarifies meter installation and reading language.			
		Section 6.1.1			
		Clarifies that meter certification data is required only for non-revenue grade meters.			
		Section 6.2.1			
		Notes that the CSP is responsible for CBL calculation.			
		Section 6.6.4			
		Clarifies that the NYISO provides hourly payment information by customer to CSPs separate from the consolidated invoice.			
2.0	03/20/2002	Section 3.8			
		Alternative Performance Measures for Small Customer Aggregations can be submitted for approval to the NYISO.			
		Section 3.9			
		Curtailment Service Providers must participate in NYISO sponsored EDRP program evaluations.			
		Section 5.2			
		➤ On-site generators must supply evidence that they have applied for or			
		received from the NYS Dept. of Environmental Conservation (DEC) one of the following permits (i) Title V, (ii) State Facility, or (iii) Registration.			
		Section 5.3			

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		Updated EDRP Notification Procedures to reflect the procedures put in place during the summer 2001.	
		Section 6.1 ➤ Updated Metering Requirements.	
	Section 6.2.1.1 ➤ Alternative weather-sensitive Customer Base Line (CBL) options.		
		Section 6.7 ➤ Updated Settlement Payment timeline.	
		Att. A, B	
		Att. D ➤ Added .csv event data reporting format description.	
1.0	07/11/2001	Initial Release	

1. DEFINITIONS AND ACRONYMS

1.1 Tariff Definitions

Definitions for terms used in this manual can be found in the NYISO Market Administration and Control Area Services Tariff (Services Tariff) (available from the NYISO Web site at

http://www.nyiso.com/public/markets_operations/documents/tariffs/index.jsp\(\frac{1}{2}\) as follows:

Section 2.3: Definitions - C

Capability Period

Curtailment Customer Aggregator

Curtailment Services Provider (CSP)

Section 2.4: Definitions - D

Day-Ahead LBMP

Day-Ahead Market

Demand Side Ancillary Service Program Resource (DSASP Resource)

Demand Side Resources

Section 2.5: Definitions - E

EDRP

Emergency State

Section 2.9: Definitions - I

Installed Capacity (ICAP)

Section 2.12: Definitions - L

Load

Load Serving Entity (LSE)

Load Zone

Local Generator

Locational Based Marginal Price (LBMP)

Section 2.14: Definitions - N

New York Control Area (NYCA)

NYISO Customer

NYISO Limited Customer

Section 2.18: Definitions - R

Real-Time LBMP

Section 2.19: Definitions - S

Special Case Resource

1.2 Additional Terms Relevant to the Emergency Demand Response Program

Curtailment Program End Use Customer (EUC) – A retail end-user that qualified as a CSP and can either interrupt loadLoad= or start up a Local GenerationGenerator or both and mimic a Load Reduction to reduce Load from the NYS Transmission System or the distribution system at the direction of the ISO or both under the EDRP.

Customer Baseline Load (CBL) – Average hourly energy consumption as calculated in Section 5, used to determine the level of load curtailment Load Reduction provided.

Day-Ahead Demand Response Program (DADRP) - The DADRP program provides Demand Side Resources with an opportunity to offer their load curtailment capability into the Day-Ahead Market ("DAM") as an energy resource.

Direct Customer – An entity that takes or provides service directly from or to the NYISO, and is responsible for bidding, scheduling, and billing functions for their facilities. Also referred to as a type 2 LSE: an entity that takes service directly from the NYISO to supply its own loadLoad in the NYCA.

EDRP Loads – Retail end-users that provide load reductionLoad Reduction and have been enrolled through a CSP to participate in the Emergency Demand Response Program.

Emergency Generator – An electrical generator installed to handle emergency outages at a facility for short periods of time.

In-Day Peak Hour Forecast – Forecasted morning and evening peak loads loads as determined by the NYISO Shift Supervisor or assignee, used to evaluate total operating capacity.

Interval Meter – An approved metering device that records electricity usage for each fifteen-minute period during a billing period.

Load Bank – An electric resistance coil or similar device that creates an electric loadLoad which is used for testing generators under load.

Load Curtailment (or Reduction) – A reduction in energy usage at a retail end user's facility that is the result of the retail end user either reducing the energy consumed or operating an on-site generator. Local Generator to cause a Load Reduction from the NYS Transmission System and/or local distribution system at the direction of the NYISO.

Meter Service Provider (MSP) – An entity that provides meter services, consisting of the installation, maintenance, testing, and removal of meters and related equipment.

Meter Data Service Provider (MDSP) – An entity providing meter data services, consisting of meter reading, meter data translation and customer association, validation, editing, and estimation.

NYISO Services Tariff – The FERC-approved document that sets forth the provisions applicable to the services provided by the NYISO related to its administration of markets for the sale and purchase of Energy, Ancillary Services, and Capacity.

NYS DEC - New York State Department of Environmental Conservation

Operating Reserve Shortage – Failure to maintain the Minimum Operating Reserve Requirement as defined in the *NYISO Emergency Operations Manual* (available from http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp

by activating the **Operations** option in the navigation pane and choosing the **Emergency Operations** link in the display pane).

Remote Metering – Metering equipment that allows for remote collection of metering data.

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2. ELIGIBILITY CRITERIA / PARTICIPANT QUALIFICATION

2.1 Who Can Participate?

The EDRP allows wholesale electricity market participants to subscribe retail end users able to provide Load Reduction (Demand Side Resources) by curtailing Load or by shifting Load onto a Local Generator when called upon by the NYISO during emergency conditions. Wholesale market participants are grouped into four broad classes of Curtailment Service Providers (CSPs):

- Load-Serving Entities (LSEs) as defined in the NYISO Services Tariff that
 currently serve retail end users capable of load-Load reduction-Reduction or an
 LSE that subscribes another LSE's load solely for the purpose of participating
 in the NYISO EDRP.
- An individual retail customer taking service as an LSE and enrolled to take service directly from the NYISO to supply its own Load in the NYCA as defined in the NYISO Services Tariff.
- NYISO-approved Curtailment Customer Aggregators (Aggregators) of retail end users capable of load-Load reduction Reduction. Aggregators may claim load-Load reductions Reductions from Demand Side Resources with which they have a contractual arrangement. An Aggregator may join the NYISO as a NYISO Limited Customer.
- NYISO-approved Curtailment Program End Use Customers (EUC), end-use customers whose load load is normally served by an LSE but who wish to participate directly with the NYISO solely for purposes of the EDRP. Curtailment Program End Use Customers (EUCs) must be capable of reducing at least 100 kW of load load. An EUC is required to join the NYISO as a NYISO Limited Customer.

Participation in the EDRP is voluntary. The EDRP program imposes no penalties upon CSPs or Demand Side Resources for not responding to load-Load reduction-Reduction requests; other load-Load reduction-Reduction programs to which the EDRP customer may be simultaneously enrolled, may impose penalties for failure to reduce. Demand Side Resources participating in the NYISO Energy Market or the Ancillary Services Market may also participate in EDRP.

2.2 Minimum Qualifications for CSPs

To serve as a CSP, youan entity must:

1. Be a NYISO Customer (in the case of LSEs and individual retail customers enrolled as LSEs that take service directly from the NYISO to supply their own

Load in the NYCA) or a NYISO Limited Customer (in the case of Aggregators and EUCs) and be able to pledge Load Reduction in the NYCA.

- 2. Be able to completely disconnect ause a Load Reduction from the NYS

 Transmission System and/or local distribution system and supply required load via local generators or to reduce a measurable and verifiable portion at the direction of the load NYISO.
 - 3. Be capable of reducing at least 100 kW of loadLoad per zone.
 - Be capable of responding within two hours of notice from the NYISO.

4

- 5. Follow the enrollment procedures defined in Section 3 of this manual.
- 6. Provide hourly interval metering data to validate performance. Specific metering requirements are given in Section 5 of this manual.

2.3 Restrictions

An individual Demand Side Resource can subscribe to either EDRP or the ICAP SCR program, but not both. Special Case Resources (SCRs) that have enrolled with the NYISO but have not sold their capacity will be added to the list of EDRP participants resources for that period of time when their capacity is unsold, and will be called with EDRP participants resources if an EDRP event is deployed.

To participate in the Program, an individual Demand Side Resource cannot subscribe the same metered loadLoad with more than one CSP.

Information provided by CSPs may be shared with their local Transmission Owner for planning or system operation. Retail end users under a contract that prevents them from curtailing energy are prohibited from participating in the program.

Local generators that are base-loaded do not qualify for the EDRP.

Local Generators that are operating to fully serve their Load do not qualify for the EDRP. A Local Generator that is normally operating to partially serve its Load may participate in the program with any additional generation that is available to operate at the direction of the NYISO in order to reduce the remaining Load being supplied from the NYS Transmission System and/or distribution system.

Demand Side Resources using distributed generationa Local Generator to provide load relief through EDRP are subject to all DECenvironmental rules and regulations. Demand Side Resources determined not to be complying with DECenvironmental requirements will not be permitted to participate in the EDRP.

¹-These generators can be either non synchronized to the grid or synchronized to the grid.

2.4 Requirements for Curtailment Customers with a Local Generation Generator

Owners of on-site and emergency generators Local Generators including, but not limited to, hospitals, data centers, office buildings, warehouses, and industrial locations are eligible to participate in the EDRP. A Local Generation Generator will-can serve all or part of what otherwise would be NYISO load (i.e., the retail end user's specific load Load delivered from their LSE), thereby reducing the total NYISO load during declared emergencies. The requirements for participation are as follow:

- 1. Be capable of responding within 2 hours of a request to reduce load.cause a Load Reduction from the NYS Transmission System and/or local distribution system at the direction of the NYISO.
- 2. Have an integrated hourly or permanent recording meter as described in Section 5.1, Metering Requirements.
- 3. Be capable of receiving notification from a Curtailment Service Provider (CSP).
- 4. Demand Side Resources that will use on-site generators Local Generators to reduce load Load and that have Load Banks for testing purposes must ensure that the Load Bank is not operating during the hours required by the EDRP.

Nothing in the EDRP expands or reduces the rights, obligations, or restrictions a Local Generator may have to buy or sell energy in the <a href="https://www.nylso.com/nylso.com

2.5 Compatibility with ICAP Special Case Resources

The EDRP pays for energy during times of emergency, but does not pay for capacity. The NYISO has a separate program called Special Case Resources (SCR) within the Installed Capacity (ICAP) market that pays for capacity and energy. SCR is available to generators and load reduction Load Reduction providers that meetmeets testing, metering and other program eligibility requirements. While there are no penalties for non-performance as an EDRP provider, the SCR program will reduce future capacity payments if the NYISO calls for operation and the SCR does not perform. There may also be penalties imposed for non-performance by other programs in which the SCR resource is simultaneously enrolled. In the event that the NYISO deploys an SCR resource to reduce its consumption of energy in accordance with the criteria set forth in Section 4, the NYISO may deploy the EDRP. SCRs that have enrolled with the NYISO but not sold their capacity will be added to the list of EDRP participants resources for that the period of time when their capacity is unsold and will be called with EDRP participants resources if an EDRP event is deployed. For more details on SCR, see the ICAP Manual, available from

http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp

by activating the **Operations** option in the navigation pane and choosing the **Installed Capacity Manual** link in the display pane.

2.6 Compatibility with LSE-Sponsored Curtailment Programs

There are curtailment programs in New York State both currently in place and under development that are designed to help the local utility with distribution load management. Each program is aimed at enhancing the reliability of the local electric system during times of high usage or outages.

Demand Side Resources may participate in both the EDRP and the Day-Ahead Demand ReductionResponse Program (DADRP) offered by the NYISO. If an EDRP event is called and a Demand Side Resource is participating in both programs, payments will be made as follows:

- 1. If the Demand Side Resource has not had a demand reduction bid accepted in the Day-Ahead Market for the day of the EDRP event, demand reduction provided as a result of the EDRP event call will be paid in accordance with the rules set forth in this manual.
- 2. If the Demand Side Resource is responding to the schedule determined from the bid accepted in the Day-Ahead Market, payments will be made in accordance with the DADRP rules up to the demand reduction scheduled in the Day-Ahead Market. Additional verified demand reduction above that scheduled in the Day-Ahead Market will be paid in accordance with the rules set forth in this manual.

Demand Side Resources may participate in both the EDRP and the Demand Side Ancillary Services Program (DSASP) offered by the NYISO. If an EDRP event is called and a Demand Side Resource is participating in both programs, the Demand Side Resource's dispatch schedule in the DSASP program will be terminated for the duration of the demand response event to permit the Demand Side Resource to participate as an EDRP resource.

2.7 Small Customer Aggregation

- 1. Aggregations must be at least 0.5 MW for EDRP. The NYISO will establish an up-front means of certifying that the aggregation has an expectation of meeting this requirement. This will 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. Resources included in the aggregation may only participate in one NYISO reliability program. The NYISO may request confirmation that all resources are enrolled only for participation in the Emergency Demand Response Program. The aggregation can be comprised of two or more different sampling methods, provided that such a super aggregation was allowed by the NYISO.
- 2. Aggregators will be held responsible and liable for payments to and penalties levied against the members of the aggregation.
- 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 participantsresources

- b. The deployment of approved end-use device or process kW metering devices on a sample of participants resources that elect to limit EDRP 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 sufficient, indicating the load level the customer otherwise would have consumed, but for the EDRP event participation
- d. Other measurement systems that indicate the load level the customer otherwise would have consumed, but for the EDRP event participation
- 4. Small Customer Aggregation: 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 CSPs and LSEs. Each initial proposal (or significant revision thereof) 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. The Small Customer Aggregator is responsible for all costs associated with developing and administering the alternative performance methodology. Applications for approval of alternative methodologies must include an 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 NYISO for developing and administrating the alternative methodology. The NYISO may, at its discretion, require that some or all of such costs be reimbursed by the applicant upon approval of the methodology, or deduct all costs from payments for curtailments by participants resources, or a combination of the two methods of cost recovery.
- 6. End-use electricity customers may subscribe loadLoad at a given premise to EDRP only under a single performance methodology, either the standard method or an approved alternative methodology.
- 7. 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 its obligation under the aggregation agreement. Customers belonging to such an aggregation may henceforth participate by signing up under any approved means of participation.

2.8 EDRP Program Evaluation

Curtailment Service Providers shall participate in all NYISO-sponsored EDRP program evaluations for which NYISO requires their participation.

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3. EDRP ENROLLMENT PROCEDURES

3.1 Requirements for CSP Enrollment

To qualify as a Curtailment Service Provider (CSP), an organization must be one of the following:

- 1. An LSE serving retail loadLoad,
- 2. An individual customer taking service from an LSE and registered to take service directly from the NYISO to supply its own Load in the NYCA,
- 3. A Curtailment Customer Aggregator (a NYISO Limited Customer that works with owners of Demand Side Resources generation and load to make it easier to participate in the NYISO Emergency Demand Response program), or
- 4. A Curtailment Program End Use Customer (a NYISO Limited Customer that is a retail end user capable of interrupting loadLoad or using a localLocal generationgGenerator =that can reduce at least 100kW in a load zone).

In order to become a CSP, an organization must complete the CSP enrollment form, which can be accessed from the NYISO web site at

http://www.nyiso.com/public/markets_operations/market_data/demand_response/index.jsp

by activating the **Emergency Demand Response Program** option in the navigation pane and choosing the **EDRP CSP Enrollment Form** link in the display pane.

For information on becoming a NYISO Customer, see the NYISO web site at <a href="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration/index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration-index.jsp="http://www.nyiso.com/public/markets_operations/services/nyiso_registration-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.com/public/markets_operation-index.jsp="http://www.nyiso.co

3.2 Procedures for Enrolling Demand Side Resources in EDRP

CSPs are required to obtain authorization from each EDRP resource allowing the CSP to enroll the resource in the EDRP. Upon request, the CSP shall provide such authorization to the NYISO. It is the responsibility of the CSP to ensure compatibility with other curtailment programs before enrolling resources in the EDRP.

Demand Side Resources must be enrolled for participation in the EDRP through the NYISO Demand Response Information System (DRIS) according to the DRIS Event Calendar. Information on the type of data that is required in DRIS is provided in the DRIS User's Guide, posted on the NYISO web site at

http://www.nyiso.com/public/markets_operations/market_data/demand_response/index.jsp=

Resources must be reenrolled each capability Capability period Period for participation in the EDRP.

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4. OPERATING MECHANISM / IMPLEMENTATION

4.1 When Will the Program be Deployed?

The NYISO will deploy the EDRP as one of its emergency procedures in conjunction with the In-day Peak Hour Forecast response to an Operating Reserve Peak Forecast Shortage, as defined in, or in response to, the Major Emergency state—State as defined in the NYISO Emergency Operations Manual (available from the NYISO Web site at

http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp

Operations link in the display pane). Day-ahead notice of a potential operating reserve shortage shall be provided to CSPs when possible. The program is intended to support the New York State power system during emergency periods and the NYISO reserves the right to use its discretion in deploying EDRP resources to relieve system or zonal emergencies. The EDRP may be deployed in conjunction with Special Case Resources.

4.2 NYISO Protocol for Local Generator Participation

This section describes the circumstances under which the NYISO and its market participants have agreed that CSPs and RIPs may contract with customers who agree to reduce demand on the electricity grid by offloading all or a portion of their own power needs through the operation of emergency generators ("self generation"). Local Generators to cause a load reduction Load Reduction from the NYS Transmission System and/or local distribution system at the direction of the NYISO.

4.2.1 **Program Limitations**Compliance with Federal, State and Local Laws

Program participants informed by state or local rule, regulation, or policy that annual hours of operation for generation facilities they intend to offer as EDRP resources are limited or that they are required to use specified diesel fuel in their emergency generators, for instance ultra-low sulfur fuel, shall limit their hours of generation operation accordingly or use such fuel in deployments in response to a call as well as for testing purposes. Program participants are responsible for ensuring compliance with the operating requirements of their units and will report to the NYISO all instances where these requirements exist.

In addition to the above limitations, program participants informed by state or local rule, regulation, or policy that operation of generation facilities they intend to offer to the EDRP is limited to certain vintages, such as:

a. Model year 1995 or newer generators; or

b. Model 1994 and older generators that demonstrate, either by generator-specific manufacturer's data or through emissions testing, their NOx emissions do not exceed 35 pounds per megawatt-hour (lb/MWh);

shall comply with such rule, regulation, or policy.

Participants with generation that requires emissions testing shall use emissions testing methods for "test and tune" purposes and should be conducted consistent with industry-established protocols (such as the American Society of Testing and Materials [ASTM] D6522-00) and applicable DEC regulations.

Program participants are responsible for ensuring compliance with the emissions testing requirements for their units.

Participants shall not offer to the EDRP generation units that do not comply with any limitation or requirement established for their respective generation units.

CSPs and RIPs with program resources subject to any federal, state or local law or regulation must maintain compliance with all such laws and regulations during its participation in the NYISO's demand response programs. CSPs and RIPs are responsible for ensuring that program resources are in compliance with any and all operating requirements for their resources and upon request will report to the NYISO all instances where such requirement exist, including but not limited to: permitting, licensing and registration requirements; emissions and operational limitations; and mandatory testing requirements. CSPs and RIPs shall not enroll program resources in a NYISO program that are not in compliance with such requirements at the time of enrollment or cannot maintain compliance with such laws and regulations while fulfilling the performance requirements of the NYISO program.

By enrolling a resource that is a Local Generator, CSPs and RIPs certify that the resource complies with all federal, state, and local laws and regulatory requirements with respect to operation of the Local Generator used to reduce Load on the NYCA system during a demand response event. RIPs and CSPs will provide documentation of compliance with these requirements upon request of the NYISO.

4.3 Notification Procedures

When the NYISO deploys the Emergency Demand Response Program (EDRP), a specific set of messages will be sent to Curtailment Service Providers (CSPs). A CSP will be asked to take certain actions in response to the NYISO notification. This section describes the contact procedures and actions that will be requested of CSPs.

The time frame for advisory and deployment notices will be a function of the degree of warning the NYISO has in identifying and responding to operating reserve shortages / major emergencies.

Notification from the NYISO will take place via two communications media:

Burst e-mail messages to all listed CSP email addresses. CSP Event-Responder e-mail contacts specified in DRIS.

 Automated phone call to each CSP's main contactall CSP Event-Responder phone number-contacts specified in DRIS.

After receiving an EDRP notification, the CSP should shall take the following steps:

- 1. The CSP should assess Assess whether or not he/shethe CSP has resources that can respond, and the MW level of response by zone.
- 2. Provide the expected MW response by load zone in accordance with the instructions in the notification.
- 3. If for some reason, the CSP cannot follow the response instructions, he/she should the CSP is advised to contact NYISO MarketStakeholder Services at 518-356-6060-or edrp-ser@nyiso.com with the information.

If the NYISO does not receive the automated response in a reasonable amount of time, it may call additional CSP eell phone and pagercontact numbers in an attempt to make a connection. In this case, NYISO staff will identify themselves by name and indicate that the NYISO has deployed the EDRP program, followed by the specific requests below.

Several types of notifications may be distributed. The notification types include: Day-Ahead Advisory, In-Day Advisory, Activation (2- Hour Deployment Notification, Notice), Immediate Deployment, Extending Activation, Extension of an Event, or Early Termination of an Event, or Test.

The email and phone messages specify the type of notification, hours of event or advisory, and zones called. The exact wording of the notices is subject to change and may include additional information.

Listed below are examples of the type of notices that may be received for a Day-Ahead Advisory and Activation (2-Hour Deployment Notification Notice).

4.4 Notification Message Examples

4.4.1 **EDRP Day-Ahead Advisory**

This notice applies to Curtailment Services Providers (CSPs) participating in the NYISO Emergency Demand Response Program (EDRP).

EDRP resources may be needed tomorrow between the hours-starting at hh:mm and ending at hh:mm. Zones included EDRP resources located in this notification are:zones A,B,C,D,E,F,G,H,I,J,K are subject to this notice. Please reply respond within one hour indicating:

- If you expect to have resources participating,
- **■** by logging into the NYISO Demand Response Information System (DRIS) and MWsentering the load reduction Reduction levels (kWs) expected to be achieved on the system in each zone. This data is used for reliability purposes.

Day-ahead notice does not constitute deployment of the EDRP program, and is only meant to be advisory.

Deploying EDRP -A confirmation and final request to perform will be distributed at least two hours prior to the specified starting time of this event.

This constitutes an official EDRP Event Day-Ahead Advisory. If any questions arise concerning this EDRP Event Day-Ahead Advisory notice please contact NYISO Stakeholder Services at 518-356-6060.

4.4.2 EDRP Activation (2= Hour NotificationNotice)

EDRP resources are needed fromtoday starting at hh:mm to-and ending at hh:mm. Zones included in this notification are:EDRP resources located in zones A,B,C,D,E,F,G,H,I,J,K are subject to this notice. Please respond within one hour by logging into the NYISO Demand Response Information System (DRIS) and entering the load reductionLoad Reduction levels (kWs) expected to be achieved on the system in each zone. This data is used for reliability purposes.

This constitutes an official EDRP Event Activation Two Hour notice. If any questions arise concerning this EDRP Event Day-Ahead Advisory notice please contact NYISO Stakeholder Services at 518-356-6060.

NYISO	EMERGENCY	DEMAND	RESPONSE	PROGRAM	MANUAL
DRA	AFT - For Discuss	ion Purposes	s Only		

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5. METERING, VERIFICATION, BILLING, AND SETTLEMENT

As provided in ICAP Manual Section 4.12.2, the CSP Metering and Meter Data Requirements provided in Sections 5.1, 5.2 and 5.3 also apply to Responsible Interface Parties (RIPs) with SCR resources in the ICAP SCR Program.

5.1 Metering Requirements

CSPs must use PSC-certified Meter Service Providers (MSP) or Transmission Owners (TOs) to install, and PSC-certified Meter Data Service Providers (MDSP) to read, revenue-grade interval meters. Installation of any devices directly connected to the revenue meter, such as totalizers, must be performed by PSC-certified MSPs or TOs. Non-revenue-grade meters meeting the 2% accuracy requirement as defined in Section 5.1.1 may be installed by CSPs as long as they are certified by a Professional Engineer as meeting ANSI C12 standards and are periodically tested and calibrated in accordance with the standards applicable to MSPs. Transmission Owner or MDSP certification is required to read the meter-on-load. CSPs must use a PSC-certified MDSP to read such meters. Acceptable interval metering for Demand Side Resources for-participating in the EDRP, whether with load-reductionLoad Reduction-or, local-a Local generation-gGenerator or a combination of both, is described below in Section 5.1.1.

5.1.1 Metering Device Requirements

Meters installed under the 2001 EDRP rules prior to March 20, 2002 earnmay be used as the source of EDRP event reporting data.

Hourly interval metering data is required to validate performance. Demand Side Resources may use non-revenue interval metering devices with an overall accuracy of $\pm 2\%$ as the source of performance data. For each non-revenue interval meter design used, the CSP will submit certification from the meter manufacturer that the model in use meets the $\pm 2\%$ accuracy threshold, recognizing errors in:

- Current measurement
- Voltage measurement
- A/D conversion
- Calibration

Such meters shall be periodically tested and calibrated in accordance with the standards applicable to MSPs and MDSPs.

Where a revenue meter exists, losses in secondary/service circuits between the revenue meter and the non-revenue interval meter may be compensated for to bring the reading within $\pm 2\%$ of the revenue meter. The CSP must demonstrate compliance through comparison of the revenue and non-revenue meters, or show calculation of losses between the revenue and non-revenue meters.

5.1.2 Metering Configuration Requirements

Premises-Resources participating in the EDRP shall subscribe under enroll in DRIS with one of three configurations: Local Generator Only, load-Load only, or local-Local generator and load-Load. Integrated hourly metering devices shall be required as follows:

- 1. When a premises subscribes enrolls only a Local Generation Generator, either an hourly interval meter shall be installed to measure the generator's output, or interval metering of the total net load-Load shall be used (configuration a or b, below).
- 2. When a premises subscribes enrolls only Lload reduction Reduction, the hourly interval meter shall be installed to meter the entire facility or, in the case of totalized load Load, an hourly interval meter is required for each participating load Load (configuration b or c, below).

3. When a premises subscribes enrolls both a Local Generation Generator and load Load reduction, metering shall be configured to measure only the load Load or combined load Local generation Generator (configuration a or b, below).

Figure 5-1 illustrates examples of acceptable configurations.

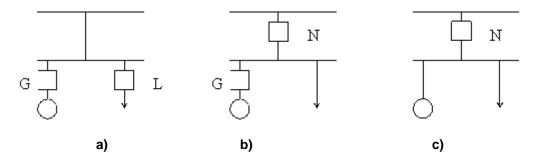


Figure 5-1 Eligible Metering Configurations

G= Generator Meter, L= Load Meter, N= Net Meter

5.1.3 **Historical Operating Data**

Upon request of the NYISO, CSPs and RIPs shall provide historical metering and operating data for each load or on-site generator upon enrollment for participation in the

EDRP resource enrolled that is consistent with the enrolled meter configuration. These requirements may be met by, but not limited to, the following types of data requests:

- 1. For a resource with Local Generation that is participating in the EDRP, the generator meter ID and MSP ID certifying meter installation;
- 2. For loadsresources with existing interval meters, a minimum of one complete billing period 30 days of hourly interval data immediately preceding the first month of the Capability Period the loadresource will participate in;
- 3. For resources that are eligible to report totalized loads with existing interval meters, hourly interval data for a minimum of one complete billing period 30 days of hourly interval data for all participating loads at the premise.

For newly installed load Consistent with Attachment O of the MST Section 4.12.7 of the ICAP Manual, RIPs and CSPs shall retain all interval meters, provide the prior three months summary of monthly MWh consumption and demand values, if available. If less than three months meter readings upon which it bases its certification of data are available, compliance for a minimum period of one month is required. three (3) years.

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5.2 Calculation of Customer Baseline Load (CBL)CBL

5.2.1 Select a CBL method

- 1. The participantCSP selects the CBL formula when it enrolls, or is enrolled by its LSE or CSP, a resource with the NYISO for program participation in the EDRP. The choice of CBL becomes effective when the NYISO accepts the enrollment.
- 2. At the initial enrollment in the EDRP-participants, the CSP may elect either the Average Day CBL or the Adjusted CBL formula.
- 3. A change in the CBL formula can be made when resources reenroll the CSP reenrolls the resource in the EDRP each capability period in the next Capability Period.

5.2.2 Baseline-CBL Calculation Method (Interruptible Load Reduction or Both Local Generation Generation and Interruptible Load Reduction) Based on DRIS Metering Configuration

It is the responsibility of the CSP to provide the Customer Baseline Load (CBL) calculation to the NYISO and ensure that calculations are complete and accurate.

Section 5.2.3 provides a complete example of the CBL calculation process including the weather adjustment.

Any Load supported by generation produced from a Local Gene#rator, other behind-the-meter generator, or other supply source located behind the resource's meter under configurations 5.1b or 5.1c may not be included in the metered Load used to calculate the resource's CBL when the resource is enrolled in DRIS with a Response Type B or C. Resources enrolled in DRIS with a Response Type G are required to use the CBL Calculation Method in Section 5.2.4 for calculation of the CBL of the Local Generator to calculate energy response during a demand response event.

I.—The Average Day CBL

LA.I. Average Day CBLs for Weekdays

- I.A.1. I.A. Step 1. Establish the CBL Window. Establish a set of days that will serve as representative of participant's typical usage for Weekdays.
- **LA.1.aI.A.1.** Determine the participant's resource's peak hourly load over the pasthour within, but not to exceed, the last 30 days or the period covered by the that corresponds to the hours that cover the event for which the CBL is being developed. Multiply the peak load data file, whichever is lower. This value becomes hour value by 25% to calculate the initial seed value for the average event period usage level. (Figure 5-2)
- **I.A.1.bI.A.2.** Beginning with the weekday that is two days day prior to the event for which the CBL is being calculated, exclude the following:
 - I.A.1.b.(1)I.A.2.a Eliminate any Any holidays within the last 30 days, as specified by the NYISO.
 - *I.A.1.b.*(2) Eliminate any Any days within the last 30 days when the NYISO declared an SCR, EDRP or TDRP event for which the participant resource was eligible for payment for a curtailment.
 - *I.A.1.b.(3)* Eliminate any days in which the participant's DADRP curtailment bid was accepted in the DAM, whether or not the participant actually curtailed.
 - *I.A.1.b.(4)I.A.2.b* Eliminate the The day prior to any other week-day when the NYISO declared an SCR, EDRP or TDRP event within the last 30 days for which the participant resource was eligible for payment for a curtailment.
 - I.A.1.b.(5)I.A.2.c Eliminate any Any days within the last 30 days in which the resource's DADRP curtailment bid was accepted in the DAM, whether or not the resource actually curtailed. Any day prior to the day in which the participant's resource's DADRP curtailment bid was accepted in the DAM, whether or not the participant resource actually curtailed.
 - *I.A.1.b.*(6) Create the average daily event period usage For each remaining weekday within the last 30 days, create the Average Daily Event Period Usage for that day, defined as the simple average of the participant's resource's

actual usage over the hours that define the event for which the CBL is being developed.

Eliminate low usage days. If the average daily event period usage is less than 25% of the average event period usage level, eliminate. For each day that day.

- I.A. 1.b. (8)I.A.3. If the day has not been eliminated, update excluded within the average event period last 30 days compute the low usage level value by including the average multiplying the Average Daily Event Period Usage by 25%. Compare the resulting daily event period ou usage for this day. If this is the first day added value to the CBL Window, replace the average event period usage level (which was the initial seed value) with the average daily event period usage. Add this day to the CBL Window. If the Average Daily Event Period Usage low usage value is less than the initial seed value, exclude that day. If, after all exclusions, fewer than 10 days, but no less than 5 days, remain within the 30 day period, continue the calculation of the CBL using the number of days remaining. If fewer than five days remain, please contact NYISO Stakeholder Services at 518-356-6060.
- **LA.1.e**I.A.4. Move back one day and loop to step I.A.1.b.(1) to step I.A.2.a and repeat for all remaining weekdays within the 30 days prior to the event for which the CBL is being calculated.
- **I.A.5.** Final Weekday Continue with I.B. the calculation of CBL Basis for Weekdays.

Figure 5-2 shows the determination and calculation of the initial seed value.

SUN	MON	TUE	WED	THU	FRI	SAT
JUN 8	JUN 9	JUN 10	JUN 11	JUN 12	JUN 13	JUN 14
	Day 30	Day 29	Day 28	Day 27	Day 26	Day 25
	Maximum Load	Maximum Load				
	Value during Event Hours: 9	Value during Event Hours: 9	Value during Event Hours: 8	Value during Event Hours: 8	Value during Event Hours: 10	Value during Event Hours: 7
JUN 15	JUN 16	JUN 17	JUN 18	JUN 19	JUN 20	JUN 21
Day 24	Day 23	Day 22	Dav 21	Day 20	Day 19	Day 18
Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load
Value during	Value during	Value during	Value during	Value during	Value during	Value during
Event Hours: 5	Event Hours: 8	Event Hours: 9	Event Hours: 10	Event Hours: 13	Event Hours: 11	Event Hours: 6
JUN 22	JUN 23	JUN 24	JUN 25	JUN 26	JUN 27	JUN 28
Day 17	Day 16	Day 15	Day 14	Day 13	Day 12	Day 11
Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load	Maximum Load
Value during	Value during	Value during	Value during	Value during	Value during	Value during
Event Hours: 5	Event Hours: 10	Event Hours: 7	Event Hours: 8	Event Hours: 8	Event Hours: 12	Event Hours: 7
JUN 29	JUN 30	JUL 1	JUL 2	JUL 3	JUL 4	JUL 5
Day 10	Day 9 Maximum	Day 8 Maximum	Day 7 Maximum	Day 6 Maximum	HOLIDAY	Day 4 Maximum
Maximum Load	Load Value	Load Value	Load Value	Load Value	Day 5 Maximum	Load Value
Value during	during Event	during Event	during Event	during Event	Load Value	during Event
Event Hours: 5	Hours: 11	Hours: 8	Hours: 12	Hours: 9	during Event	Hours: 6
					Hours: 5	
JUL 6	JUL 7	JUL 8	JUL 9	JUL 10	JUL 11	JUL 12
Day 3 Maximum	Dav 2 Maximum	INELIGIBLE DAY	SCR/EDRP			
Load Value	Load Value	(DAY BEFORE)	EVENT			
during Event	during Event	Day 1 Maximum	LVEIVI			
Hours: 5	Hours: 11	Load Value				
		during Event				
		Hours: 11				
KEY:						Maximum Load
						Value During
						Event Hours -
	NON-EVENT	SCR/EDRP	DADRP	INELIGIBLE DAY		over past 30
	DAY	EVENT	SCHEDULE	(DAY BEFORE)	HOLIDAY	days

Maximum Load Value During Event Hours - over past 30 days	Initial Seed Value	Exclude the CBL Day if Average Event Period Usage is lower than 25% of Initial Seed Value (Maximum Load * 0.25):
13	13	3.25

Figure 5-2 Example of Determining a Resource's Peak Load Hour that Occurred During Event Hours Over the Past 30 Days and the Calculation of the Initial Seed Value

- I.B. Establish the CBL Basis for Weekdays.
- **I.B.1.** Identify the five days from the CBL Window must contain (up to 10 days) to be used to develop CBL values for each hour of the event. (Figure 5-3)
- **I.B.1.aI.B.2.** Rank the days from the CBL Window according to their Average Daily Event Period Usage level, and eliminate the days with the lowest Average Daily Event Period Usage, so that a maximum of five weekdays days.remain.
- I.C. Figure 5-2 Calculate hourly Average Day CBL values for the event.

I.C.1. For each hour of the event, compute the CBL as the simple average of the corresponding hourly Loads from the CBL Basis for Weekdays.

Figure 5-3 below shows CBL window Window selection for a single weekday event. The calendar view illustrates the reverse order selection of the 10 days of the CBL window Window. The table calendar view shows the dates of the CBL window Window for the the event.

event..

SUN	MON	TUE	WED	THU	FRI	SAT
JUN 15	JUN 16	JUN 17	JUN 18	JUN 19	JUN 20	JUN 21
JUN 22	JUN 23 CBL DAY 10 FOR	JUN 24 CBL DAY 9 FOR	JUN 25 CBL DAY 8 FOR	JUN 26 CBL DAY 7 FOR	JUN 27 CBL DAY 6 FOR	JUN 28
	7/9	7/9	7/9	7/9	7/9	
JUN 29	JUN 30	JUL 1	JUL 2	JUL 3	JUL 4	JUL 5
	CBL DAY 5 FOR 7/9	CBL DAY 4 FOR 7/9	CBL DAY 3 FOR	CBL DAY 2 FOR 7/9	HOLIDAY	
JUL 6	JUL 7 CBL DAY 1 FOR	JUL 8 INELIGIBLE DAY	JUL 9 SCR/EDRP	JUL 10	JUL 11	JUL 12
	7/9	(DAY BEFORE)	EVENT			

KEY:					
		SCR/EDRP	DADRP	INELIGIBLE DAY	
	NON-EVENT DAY	EVENT	SCHEDULE	(DAY BEFORE)	HOLIDAY

SUN	MON	TUE	WED	THU	FRI	SAT
JUN 15	JUN 16	JUN 17	JUN 18	JUN 19	JUN 20	JUN 21
JUN 22	JUN 23	JUN 24	JUN 25	JUN 26	JUN 27	JUN 28
	CBL DAY 10 FOR		CBL DAY 8 FOR	CBL DAY 7 FOR	CBL DAY 6 FOR	
JUN 29	7/9 JUN 30	7/9 JUL 1	7/9 JUL 2	7/9 JUL 3	7/9 JUL 4	JUL 5
JUN 29	JUN 30	JUL I	JUL Z	JUL 3	JUL 4	JUL 5
	CBL DAY 5 FOR	CBL DAY 4 FOR	CBL DAY 3 FOR	CBL DAY 2 FOR	HOLIDAY	
	7/9	7/9	7/9	7/9	I IOLIDA(I	
JUL 6	JUL 7	JUL 8	JUL 9	JUL 10	JUL 11	JUL 12
	CBL DAY 1 FOR	INELIGIBLE DAY	SCR/EDRP			
	7/9	(DAY BEFORE)	EVENT			
14574						1
KEY	•	000/5000	5.555			
	NON EVENT DAY	SCR/EDRP	DADRP	INELIGIBLE DAY	HOLIDAY	
	NON-EVENT DAY		SCHEDULE	(DAY BEFORE)	HOLIDAY	j
	* indicates CBL w	<u>⁄indow days that e</u>	xceed the 30-day	<u>limit</u>		

	CBL WINDOW FOR SINGLE WEEKDAY EVENT EXAMPLE										
EVENT DATE	EVENT DATE PROGRAM DAY 1 DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 DAY 7 DAY 8 DAY 9 DAY 10										
9-Jul	SCR/EDRP	7-Jul	3-Jul	2-Jul	1-Jul	30-Jun	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun

Figure 5-3 Example of CBL Window Selection - Single Weekday Event

Figure 5-4 below shows the CBL windows Windows when multiple weekday events occur, including DADRP schedules. The calendar view illustrates the reverse order selection of the 10 days of the CBL window Window for each event. For example, June 27 will be used as

- Day 1 for the June 30th event
- Day 2 for the July 3rd event, and
- Day 4 for both the July 10th and July 11th events.

The table view shows the dates of the CBL window for each event.

SUN	MON	TUE	WED	THU	FRI	SAT
JUN 15	JUN 16	JUN 17	JUN 18	JUN 19	JUN 20	JUN 21
	CBL DAY 10 FOR 6/30	CBL DAY 9 FOR 6/30 CBL DAY 10 FOR 7/3	CBL DAY 8 FOR 6/30 CBL DAY 9 FOR 7/3	CBL DAY 7 FOR 6/30 CBL DAY 8 FOR 7/3	CBL DAY 6 FOR 6/30 CBL DAY 7 FOR 7/3	
		CBL DAY 10 FOR 1/3	CBL DAT 9 FOR 1/3	CBL DAY 10 FOR 7/10 CBL DAY 10 FOR 7/11	CBL DAY 7 FOR 7/3 CBL DAY 9 FOR 7/10 CBL DAY 9 FOR 7/11	
JUN 22	JUN 23	JUN 24	JUN 25	JUN 26	JUN 27	JUN 28
	CBL DAY 5 FOR 6/30 CBL DAY 6 FOR 7/3 CBL DAY 8 FOR 7/10	CBL DAY 4 FOR 6/30 CBL DAY 5 FOR 7/3 CBL DAY 7 FOR 7/10	CBL DAY 3 FOR 6/30 CBL DAY 4 FOR 7/3 CBL DAY 6 FOR 7/10	CBL DAY 2 FOR 6/30 CBL DAY 3 FOR 7/3 CBL DAY 5 FOR 7/10	CBL DAY 1 FOR 6/30 CBL DAY 2 FOR 7/3 CBL DAY 4 FOR 7/10	
	CBL DAY 8 FOR 7/11	CBL DAY 7 FOR 7/11	CBL DAY 6 FOR 7/11	CBL DAY 5 FOR 7/11	CBL DAY 4 FOR 7/11	
JUN 29	JUN 30	JUL 1	JUL 2	JUL 3	JUL 4	JUL 5
	DADRP SCHEDULE	CBL DAY 1 FOR 7/3 CBL DAY 3 FOR 7/10 CBL DAY 3 FOR 7/11	INELIGIBLE DAY (DAY BEFORE)	DADRP SCHEDULE	HOLIDAY	
JUL 6	JUL 7	JUL 8	JUL 9	JUL 10	JUL 11	JUL 12
	CBL DAY 2 FOR 7/10 CBL DAY 2 FOR 7/11	CBL DAY 1 FOR 7/10 CBL DAY 1 FOR 7/11	INELIGIBLE DAY (DAY BEFORE)	SCR/EDRP EVENT	DADRP SCHEDULE	
				INCLIGIOLE DAY		_
KEY:	NON-EVENT DAY	SCR/EDRP EVENT	DADRP SCHEDULE	INELIGIBLE DAY (DAY BEFORE)	HOLIDAY	
	* indicates CBL window	days that exceed the 30	l-day limit	•		<u> </u>

	CBL WINDOW FOR MULTIPLE WEEKDAY EVENT EXAMPLE													
EVENT DATE PROGRAM DAY 1 DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 DAY 7 DAY 8 DAY 9 DAY 10														
30-Jun	DADRP	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun	18-Jun	17-Jun	16-Jun			
3-Jul	DADRP	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun	18-Jun	17-Jun			
10-Jul	SCR/EDRP	8-Jul	7-Jul	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Ju <mark>n</mark>			
11-Jul	DADRP	8-Jul	7-Jul	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun			

SUN	MON	TUE	WED	THU	FRI	SAT
JUN 15	JUN 16	JUN 17	JUN 18	JUN 19	JUN 20	JUN 21
	CBL DAY 10 FOR 6/30	CBL DAY 9 FOR 6/30	CBL DAY 8 FOR 6/30	CBL DAY 7 FOR 6/30	CBL DAY 6 FOR 6/30	
		CBL DAY 10 FOR 7/3	CBL DAY 9 FOR 7/3	CBL DAY 8 FOR 7/3	CBL DAY 7 FOR 7/3	
				CBL DAY 10 FOR 7/10	CBL DAY 9 FOR 7/10	
				CBL DAY 10 FOR 7/11	CBL DAY 9 FOR 7/11	
JUN 22	JUN 23	JUN 24	JUN 25	JUN 26	JUN 27	JUN 28
	CBL DAY 5 FOR 6/30	CBL DAY 4 FOR 6/30	CBL DAY 3 FOR 6/30	CBL DAY 2 FOR 6/30	CBL DAY 1 FOR 6/30	
	CBL DAY 6 FOR 7/3	CBL DAY 5 FOR 7/3	CBL DAY 4 FOR 7/3	CBL DAY 3 FOR 7/3	CBL DAY 2 FOR 7/3	
	CBL DAY 8 FOR 7/10	CBL DAY 7 FOR 7/10	CBL DAY 6 FOR 7/10	CBL DAY 5 FOR 7/10	CBL DAY 4 FOR 7/10	
	CBL DAY 8 FOR 7/11	CBL DAY 7 FOR 7/11	CBL DAY 6 FOR 7/11	CBL DAY 5 FOR 7/11	CBL DAY 4 FOR 7/11	
JUN 29	JUN 30	JUL 1	JUL 2	JUL 3	JUL 4	JUL 5
	DADRP SCHEDULE	CBL DAY 1 FOR 7/3	INELIGIBLE DAY	DADRP SCHEDULE	HOLIDAY	
		CBL DAY 3 FOR 7/10 CBL DAY 3 FOR 7/11	(DAY BEFORE)			
JUL 6	JUL 7	JUL 8	JUL 9	JUL 10	JUL 11	JUL 12
	CBL DAY 2 FOR 7/10	CBL DAY 1 FOR 7/10	INELIGIBLE DAY	SCR/EDRP EVENT	DADRP SCHEDULE	
	CBL DAY 2 FOR 7/11	CBL DAY 1 FOR 7/11	(DAY BEFORE)	SCRIEDRE EVENT	DADRE SCHEDULE	
	ODE DATE ON WITH	ODE DAT TOK ITT	(DAT DETONE)			
KE				INELIGIBLE DAY		Ī
	NON-EVENT	SCR/EDRP EVENT	DADRP SCHEDULE	(DAY	HOLIDAY	l

	CBL WINDOW FOR MULTIPLE WEEKDAY EVENT EXAMPLE													
EVENT DATE	EVENT DATE PROGRAM DAY 1 DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 DAY 7 DAY 8 DAY 9 DAY 10													
30-Jun	DADRP	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun	18-Jun	17-Jun	16-Jun			
3-Jul	DADRP	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun	18-Jun	17-Jun			
10-Jul	SCR/EDRP	8-Jul	7-Jul	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun			
11-Jul	DADRP	8-Jul	7-Jul	1-Jul	27-Jun	26-Jun	25-Jun	24-Jun	23-Jun	20-Jun	19-Jun			

Figure 5-4 Example of CBL Window Selection – Multiple Weekday Events

I.B.2. Step 2. Establish the CBL Basis. Identify the five days from the 10 day CBL Window to be used to develop CBL values for each hour of the event.

Order the 10 days in the CBL Window according to their average daily event period usage level, and eliminate the five days with the lowest average daily event period usage.

LC. II. The Average Day CBL for Weekends

LC.1. II.A. Step 1. Establish the CBL Window for Weekends

L.C.1.a II.A.1. The CBL Window is comprised of the most recent three like (Saturday or Sunday) weekend days. There are no exclusions for Holidays or event days.

LC.2.II.A.2. Step 2. Establish the CBL Basis.

I.C.2.aII.A.2.a Calculate the average daily event period usage Average Daily Event Period Usage value for each of the three days in the CBL Window. (Figure 5-5)

L.C.2.b II.A.2.b Order the three days according to their average daily event period usage Average Daily Event Period Usage level.

I.C.2.eII.A.2.c Eliminate the day with the lowest average value.

LC.2.dII.A.2.d The Weekend CBL Basis contains 2 days.

LC.3. II.A.3. Step 3. Calculate Weekend Average Day CBL values for the event.

I.C.3.a11.A.3.a For each hour of the event, the CBL value is average of usageLoad in that hour in the two days that comprise the CBL basis.

Figure 5-5 below shows the CBL Window when a weekend event occurs, including DADRP schedule. The calendar view illustrates the reverse order selection of the 3 days of the CBL Window for the weekend event. The table view shows the dates of the CBL Window for the weekend event.

SUN	MON	TUE	WEI		THU	FRI		SAT			
JUN 29	JUN 30	JUL 1	JUL 2	JUI	_ 3	JUL 4	JUL	5			
						HOLIDAY	CBI	DAY 3 FO	R		
JUL 6	JUL 7	JUL 8	JUL 9	JUI	_ 10	JUL 11	JUL	12			
							CBI 7/26	DAY 2 FO	R		
JUL 13	JUL 14	JUL 15	JUL 16	JUI	_ 17	JUL 18	JUL	19			
							CBI 7/26	DAY 1 FO	R		
JUL 20	JUL 21	JUL 22	JUL 23	JUI	_ 24	JUL 25	JUL	26			
							DAI	ORP HEDULF			
KEY	: [1
				INI	ELIGIBLE						i
	NON-			IIN	DAY						
	EVENT	SCR/EDRF	DADE	RP	(DAY						
	DAY	EVENT	SCHED	ULE E	BEFORE)	HOLIDA	Y_MPL	Ε			
EVENT DAT	E PROGRAM	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
26-Jul	DADRP	19-Jul	12-Jul	5-Ju	Weel	kend CBL W	indow us	es only 3 wee	kend days	of same day	type

Figure 5-5 Example of CBL Window Selection – Weekend Event

IIII. Elective Weather-Sensitive CBL Formulation

H.A.III.A. Step 1. Calculate the Average Day CBL values for each hour of the event period described in (I) above.

H.B.III.B. Step 2. Calculate the Event Final Adjustment Factor. This factor is applied to each of the individual hourly values of the Average Day CBL.

H.B.1. III.B.1. Calculate the Adjustment Basis Average CBL

H.B.1.a Establish the adjustment period, the two-hour period beginning with the start of the hour that is four hours prior to the commencement of the event through the end of the hour three hours prior to the event.

H.B.1.b III.B.1.b Calculate the Adjustment Basis Average CBL.

H.B.1.e III.B.1.c Apply the Average Day CBL formula as described in I

The Average Day CBL (page 5-3), for Weekdays to the
adjustment period hours as though it were an event period two
hours in duration, but using the five days selected for use in the
Average CBL Basis (i.e., average the Loads of all ten hours).

H.B.1.d III.B.1.d Calculate the average of the two usageload values derived in III.B.1.c, which is the Adjustment Basis Average CBL.

H.B.2.III.B.2. Calculate the Adjustment Basis Average Usage Load

H.B.2.a III.B.2.a The adjustment basis average usage Adjustment Basis Average Load is the simple average of the participant's usage resource's Load over the two-hour adjustment period on the event day.

H.B.3. Calculate the gross adjustment factor Gross Adjustment Factor

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H.B.3.aIII.B.3.a The gross adjustment factor Gross Adjustment Factor is equal to the Adjustment Basis Average Usage Load divided by the Adjustment Basis Average CBL

H.B.4. Determine the Final adjustment factor Adjustment Factor. The final adjustment factor Final Adjustment Factor is as follows:

H.B.4.a III.B.4.a If the gross adjustment factor Gross Adjustment Factor is greater than 1.00, then the final adjustment factor Final Adjustment Factor is the smaller lesser of the gross adjustment factor Gross Adjustment Factor or 1.20

H.B.4.b III.B.4.b If the gross adjustment factor Gross Adjustment Factor is less than 1.00, the final adjustment factors are Final Adjustment Factors is the greater of the gross adjustment factor Gross Adjustment Factor or .80.

H.B.4.eIII.B.4.c If the gross adjustment factor Gross Adjustment Factor is equal to 1.00, the final adjustment factor Final Adjustment Factor is equal to the gross adjustment factor Gross Adjustment Factor

II.C. Step 3. Calculate the Adjusted CBL values.

H.C.1. The Event Adjusted CBL value for each hour of an event is the product of the Final Adjustment Factor and the Average CBL value for that hour.

HB 8 HB 9 HB 10 HB 11 HB 12 HB 13 HB 14 HB 15 Avg Event | Total Event | Rank

5.2.3 Example Customer Baseline CBL Calculation

As an example, Assume a 4-hour EDRP event was called from 12 noon to 4 pm; notice was sent out at 10 a.m. The past 10 days MWh consumption for similar hours, along with the four hours prior to event initiation, was:

70	,,,,,		112 10		112.12	7.2.70	112.14	112 10	Period Usage	Period Usa	
CBL DAY 1	5	5	7	8	10	11	7	5	8.33	33	4
CBL DAY 2	4	3	5	6	8	6	9	6	7.25	29	7
CBL DAY 3	4	5	6	8	9	12	9	7	9.30	37	1
CBL DAY 4	4	4	5	6	7	8	6	6	6.75	27	8
CBL DAY 5	3	4	5	7	10	11	9	7	9.25	37	2
CBL DAY 6	6	2	5	8	12	8	9	7	9.00	36	3
CBL DAY 7	2	3	4	5	5	8	8	6	6.75	27	8
CBL DAY 8	3	3	4	6	7	8	8	7	7.50	30	6
CBL DAY 9	3	2	4	6	7	6	6	5	6.00	24	10
CBL DAY 10	4	4	5	7	8	10	9	6	8.25	33	5
Time	HB 8	HB 9	HB 10	HB 11	HB 12	HB 13	HB 14	HB 15	Avg Event Period Usage	Total Event Period Usage	Rank
CBL DAY 1	5	5	7	8	10	11	7	5	8.33	33	4
CBL DAY 2	4	3	5	6	8	6	9	6	7.25	29	7
CBL DAY 3	4	5	6	8	9	12	9	7	9.30	37	1
CBL DAY 4	4	4	5	6	7	8	6	6	6.75	27	8
CBL DAY 5	3	4	5	7	10	11	9	7	9.25	37	2
CBL DAY 6	6	2	5	8	12	8	9	7	9.00	36	3
CBL DAY 7	2	3	4	5	5	8	8	6	6.75	27	8
CBL DAY 8	3	3	4	6	7	8	8	7	7.50	30	6
CBL DAY 9	3	2	4	6	7	6	6	5	6.00	24	10

Time

Steps 1 and 2: sum the MWh for the hours 12-4 each day and select the 5 highest total average event period usage days.

Time	HB 8	HB 9	HB 10	HB 11	HB 12	HB 13	HB 14	HB 15	Avg Event Period Usage	Total Event Period Usage	Rank
CBL DAY 1	5	5	7	8	10	11	7	5	8.33	33	4
CBL DAY 3	4	5	6	8	9	12	9	7	9.30	37	1
CBL DAY 5	3	4	5	7	10	11	9	7	9.25	37	2
CBL DAY 6	6	2	5	8	12	8	9	7	9.00	36	3
CBL DAY 10	4	4	5	7	8	10	9	6	8.25	33	5

Time	HB 8	HB 9	HB 10	HB 11	HB 12	HB 13	HB 14	HB 15	Avg Event Period Usage	Total Event Period Usage	Rank
CBL DAY 1	5	5	7	8	10	11	7	5	8.33	33	4
CBL DAY 3	4	5	6	8	9	12	9	7	9.30	37	1
CBL DAY 5	3	4	5	7	10	11	9	7	9.25	37	2
CBL DAY 6	6	2	5	8	12	8	9	7	9.00	36	3
CBL DAY 10	4	4	5	7	8	10	9	6	8.25	33	5

Step 3: Calculate the CBL for each hour using the five highest days selected:

Time	HB 12	HB 13	HB 14	HB 15
Avg Day CBL	9.8	10.4	8.6	6.5
		-		

Time	HB 12	HB 13	HB 14	HB 15
Avg Day CBL	9.8	10.4	8.6	6.5

To calculate the hourly load reductionLoad Reduction, for each hour, subtract the actual loadLoad from the CBL.

Time	HB 12	HB 13	HB 14	HB 15
Avg Day CBL	9.8	10.4	8.6	6.5
EVENT DAY - Actual				
Load	2	3	3	4
Load Reduction using				
Average Day CBL	7.8	7.4	5.6	2.5

Time	HB 12	HB 13	HB 14	HB 15
Avg Day CBL	9.8	10.4	8.6	6.5
EVENT DAY - Actual				
Load	2	3	3	4
Load Reduction using				
Average Day CBL	7.8	7.4	5.6	2.5

The CBL shown in Step 3 above is the non-weather—adjusted value. If this customer signed up with the weather-sensitive calculation option, the CBL would be adjusted upward or downward based on the actual usage in the two hours prior to event notification. In this example, the Adjustment Basis Average CBL will be the average of the MWh for hours beginning 8 and 9 over the five days chosen for the CBL:

Time	HB 8	HB 9	Adjustment Basis Average CBL
Avg Day CBL - Adjustment Hours	4.4	4.0	4.2

Time	HB 8	HB 9	Adjustment Basis Average CBL
Avg Day CBL - Adjustment Hours	4.4	4.0	4.2

On the day of the event (day N), assume the actual metered load-Load consumption Reduction is as shown in the following table:

Time	HB 8	HB 9	HB 10	HB 11	HB 12	HB 13	HB 14	HB 15	Adjustment Basis Average Usage
EVENT DAY -	4	5	4	3	2	3	3	4	
Actual Load									4.50
								-	
T:	110.0	110.0	UD 40	110.44	LID 40	UD 43	UD 44	UD 45	Adimeters of Desig

Time	HB 8	HB 9	HB 10	HB 11	HB 12	HB 13	HB 14	HB 15	Adjustment Basis Average Usage
EVENT DAY - Actual Load	4	5	4	3	2	3	3	4	4.50

In this case, the Adjustment Basis Average Usage is the average of the MWh in hours 8 and 9, or 4.5 MWh.

The Gross Adjustment Factor is the ratio of the Adjustment Basis Average Usage to the Adjustment Basis Average CBL, 4.5/4.2 or 1.07.

Adjustment Basis Average Usage	Adjustment Basis Average CBL	Gross Adjustment Factor
4.50	4.2	1.07

Adjustment Basis Average Usage	Adjustment Basis Average CBL	Gross Adjustment Factor
4.50	4.2	1.07

The CBL will therefore be adjusted upward by seven percent. The following table shows the resulting weather-adjusted CBL and the computed load reductionLoad Reduction for the four-hour event period.

Time	HB 12	HB 13	HB 14	HB 15
Weather-Adjusted CBL	10.5	11.1	9.2	7.0
EVENT DAY - Actual				
Load	2	3	3	4
Load Reduction using Weather-Adjusted CBL				
	8.5	8.1	6.2	3.0

Time	HB 12	HB 13	HB 14	HB 15
Weather-Adjusted CBL	10.5	11.1	9.2	7.0
EVENT DAY - Actual				
Load	2	3	3	4
Load Reduction using				
Weather-Adjusted CBL				
	8.5	8.1	6.2	3.0

It is important to note that if the actual usage in the two hours prior to notification was *lower* than the Adjustment Basis Average CBL, the CBL curve would have been shifted *downward* and would result in load reductionLoad Reduction performance that was lower than would have been determined using the Average Day CBL (without weather adjustment).

5.2.4 Baseline Calculation CBL Calculation Method (when metering a Local Generation Generator Only)

For a resource providing load reduction load Reduction with a Local Generation using separate metering Generator metered separately, a similar CBL calculation is used to eliminate any base--load portion of generation from the actual performance during the event.

- 1.4. Calculate the Local Generation Generator's output during similar hours over the past 10 weekdays, beginning two days prior to the curtailment event and excluding days where curtailment due to participation in the EDRP occurred.
- $\frac{2}{6}$ 5. MWh(k) = sum(h(i)...h(j)) for each day k = d(n-2)...d(n-11)
- 3=6. Select the 5 lowest values of MWh(k) and use those days d(l), l = 1...5 to calculate the CBL.
- 4.7. Calculate the CBL for each hour h(i) as the average of the five h(i) values for days d(l), l = 1...5.

5.3 Performance Measurements and Compliance for Energy Payments

5.3.1 Performance

Performance The equations are given for the various metering configurations where load reduction is included is measured as the difference between the Customer Baseline and the actual metered usage by hour during the eventshown below. The Customer Baseline CBL

type used for computing performance shall be the same day-type as the day-type of the EDRP event. For a Local GenerationGenerator metering configuration, the generator output as metered will be used for performance as defined below. The equations are given for the alternative metering configurations shown in Figure 5-1, Eligible Metering Configurations.

Load Reduction Only Configuration (DRIS Response Type C)

For premises subscribing only the load-Load reductionReduction, performance for each hour shall be calculated as:

$$P_h = (CB-xx)_h - AL_h$$
 (Meter configuration Figure 5-1a)

Of

 $P_h = (CB-xx)_h - AN_h$ (Meter configuration 5-1b or Figure 5-1c)

 P_h = performance for the hour

CB-xx_h = Customer Baseline day-type (weekday – CB-WD, Saturday CB-SA, or Sunday-CB-SU) for the hour as calculated using the simple average method described above in Section 5.2.2

 AL_h = actual load load for the hour using meter L in configuration 5-1a

 AN_h = actual loadnet Load for the hour using meter N in configuration 5-1b and 5-1c

Local Generation Generator Only Configuration (DRIS Response Type G)

For premises subscribing with a only a Local Generation Generator only a Generator only of the calculated as:

$$Ph = OG_h - (GCB-xx)_h$$

 P_h = performance for the hour

 OG_h = Metered $\frac{On\text{-site generator}}{Configuration}$ Figure 5-1a or Figure 5-1b

GCB-xx_h = Customer Baseline day-type (weekday – GCB-WD, Saturday – GCB-SA or Sunday GCB-SU) for the hour h as determined for Local GenerationGenerator output =described in Section 5.2.4.

Load and Local Generator Configuration (DRIS Response Type B)

For premises subscribing both with the Local Generation Local Generator and load reduction Load Reduction participating in the same EDRP event-, performance for each hour shall be the net of generation-Local Generator output and load Load as defined below:

$$P_h = [OG_h - (GCB - xx)_h] + [(CB - xx)_h - AL_h]$$
 (Meter configuration 5-1a)

or

$$P_h = (CB-xx)_h - AN_h$$
 (Meter configuration 5-1b or 5-1c)

 P_h = performance for the hour

 $OG_h = Metered \frac{On-site generator}{Cocal Generator} = Metered \frac{On-site gen$

GCB-xx_h = Customer Baseline day-type (weekday – GCB-WD, Saturday – GCB-SA or Sunday GCB-SU) for the hour h as determined for generation-Local Generator output described in Section 5.2.4.

 $CB-xx_h = Customer Baseline day-type (weekday - CB-WD, Saturday CB-SA, or Sunday-CB-SU)$ for the hour as calculated using the simple average method described above in Section 5.2.2

 AL_h = actual $\frac{load}{Load}$ for the hour using meter L in configuration 5-1a AN_h = actual $\frac{load}{Load}$ for the hour using meter N in configuration 5-1b and 5-1c

5.3.2 Compliance

Initial Compliance

Initial Compliance (IC) is measured as the first event hour in which performance in the hour is greater than zero (actual load is less than baseline).

Final Compliance (Rostored Load)

Final Compliance (FC) is measured as the last hour in which performance is greater than zero, or the last hour of the EDRP event, whichever is earlier.

Compliance Period

The Compliance Period includes every hour in the EDRP event in which performance was greater than zero, beginning with the Initial Compliance hour and ending with the Final Compliance hour or the end of the EDRP event, whichever is earlier.

Table 5.1 illustrates examples of Initial Compliance and Final Compliance for an event starting at noon and lasting for five hours.

NYISO EDRP Event 10 - 1111-12 12-1 1 -2 PM 2 -3 PM 3-4-PM 4-5 PM 5-6 PM 6 -7 DM ΔM ΛM PM Customer 1 125 150 BL 125 125 125 150 150 150 125 130 120 110 100 100 125 150 160 140 15 0 **Performance** 5 25 50 25 IC P Compliance Period Customer 2 BL 200 200 250 250 250 200 200 200 200 250 ΑL 200 200 225 200 175 175 175 200 0 **Performance** 25 50 25 25 25 15 P EC Compliance Period Customer 3 300 BL 300 300 350 350 350 300 300 300 ΑL 300 300 350 325 325 275 275 300

Table 5.1 Examples of Performance during an EDRP event

Performa	nce		0	25	25	0	25	25	
				IC	P	P	FC		
Complian	ce Period			7777]]]]	- 	 		
Legend	BL - Bac	seline		IC = Initial Compliance		P = Porfe	ormance		
	AL - Act	ual Load		FC = Final Compliance					

5.4 Settlement Procedures

Load reductionLoad Reductions for which all required settlement and performance data are not uploaded by the CSP into the Demand Response Information System (DRIS) by 5:00:00 P.M. on the date that is 75 days after (but not including) the date of deployment shall not be compensated pursuant to this program. Load reductionLoad Reduction settlement and performance data is subject to NYISO audit and Market Mitigation and Analysis review and verification. The NYISO is responsible for calculating settlement payment.

5.4.1 Data Receipt

The NYISO will not accept Load reduction performance data received in any manner other than uploaded in the Demand Response Information System (DRIS) and will not accept Load reduction performance data uploaded after 5:00:00 P.M. on the date that is 75 days after the deployment. The NYISO shall not pay a CSP for claimed Load reductions that are not supported by performance data provided by the CSP in accordance with NYISO Procedures.

The NYISO may subsequently review the data through Market Mitigation and Analysis.

5.4.25.4.1 EDRP Reporting and Data Format

Curtailment Services Provider

CSPs shall upload data directly into the Demand Response Information System (DRIS), adhering to the format specified in the NYISO Demand Response Information System User's Guide (available from the NYISO Web site at

http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp)

http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp

Deployment response and Energy Payment data will be accepted into the DRIS until but not after 5:00:00 P.M. on the date that is 75 days after the deployment.

5.4.35.4.2 Calculation and Payments

The NYISO shall pay CSPs that cause a verified Load R*eduction in demand-in response to the deployment of the EDRP program in accordance with Section 22.10 of Attachment G of the NYISO Services Tariff.

The Settlement procedures below also apply to Responsible Interface Parties (RIPs) with SCR resources in the ICAP SCR Program that submit the required settlement and performance data.

EDRP resources and SCRs that are scheduled to perform in either the Day-Ahead Demand Response Program (DADRP) or Demand Side Ancillary Services Program (DSASP) during an EDRP or SCR event will have their EDRP or SCR energy payments adjusted to reflect the payments made for performance under the DADRP or DSASP.

If a Demand Side Resource in EDRP or an SCR provides required evidence of a verified Load Reduction in response to an event or test and is concurrently scheduled in the Day-Ahead Market as a DADRP resource, or as part of a DADRP aggregation, or as a DSASP Resource, the Demand Side Resource in EDRP or SCR will be paid for response to such program only if and to the extent that the resource performed above its commitment to the DADRP schedule or DSASP DAM schedule. The resource shall be paid for its contribution to the performance required by the scheduled Load Reduction in the DAM in accordance with the DADRP program. The resource shall be paid for its Load Reduction up to its DAM schedule in accordance with the DSASP program. Any verified Load Reduction in excess of its contribution in the DADRP or in excess of its DSASP DAM schedule shall be eligible for payment in the EDRP or SCR programs.

In order to determine the contribution of a specific resource in a DADRP aggregation or DSASP aggregation, the NYISO will first calculate a value for each resource's contribution to the aggregation, expressed as the ratio of each resource's Load Reduction potential (kWh) to the total modeled value of the Load Reduction potential attributed to the DADRP aggregation (kWh) or DSASP aggregation (kWh) ("Contribution Fraction"). For a single EDRP or SCR resource enrolled as a single DADRP resource or DSASP Resource, the Contribution Fraction is 100%. Second, the NYISO will multiply each resource's Contribution Fraction by the DADRP schedule or DSASP DAM schedule for each hour of concurrence to determine the resource's contribution to the DADRP schedule or DSASP DAM schedule. Third, the NYISO will deduct from the verified Load Reduction performance data reported by that resource its DADRP or DSASP contribution, using the Contribution Fraction, and calculated by the NYISO for the same hour to determine the performance of that resource that is eligible for payment in the EDRP and SCR programs. The Bid Production Cost Guarantee for resources in the SCR program will be based on the net verified Load Reduction after adjustment for any DADRP schedule or DSASP DAM schedule.

5.4.45.4.3 Verification, Errors and Fraud

All load reduction datadata related to EDRP participation are subject to audit by the NYISO and its Market Mitigation & Analysis department.

5.5 Assessment of Program Charges to Load

5.5.15.5 Objectives of Cost Allocation

Payments made to CSPs for EDRP events will be allocated to load in conformance with the provisions of the NYISO Services Tariff. Attachment G.

5.5.2 Conditions under Which EDRP Will Be Deployed

EDRP will be deployed as described in the NYISO Emergency Operations Manual (available from the NYISO Web site at

http://www.nyiso.com/public/markets_operations/documents/manuals_guides/index.jsp by activating the **Operations** option in the navigation pane and choosing the **Emergency Operations** link in the display pane).

5.5.3 Cost Allocation Formula

The cost of EDRP payments will be recovered from all Transmission Customers in accordance with Section XI22.11 of Attachment G of the *NYISO Services Tariff*.

LSEs shall also be required to pay the monthly charges calculated above for Transmission Customers, which the LSE serves as retail access customers.

This charge will appear as a distinct line item labeled as Demand Response Statement on the Consolidated Invoice. A breakout of payment by hour by resource will also be separately provided outside the settlement and invoice process.

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NYISO EMERGENCY DEMAND RESPONSE PROGRAM MANUAL

6. TARGETED DEMAND RESPONSE PROGRAM

6.1 Program Overview

The NYISO will deploy the Emergency Demand Response Program (EDRP)EDRP resources in targeted areas within load zone J under certain specific conditions and in response to a request for TDRP Targeted Demand Response Program (TDRP) assistance from the Transmission Owner.

Details

The NYISO will respond to requests for assistance from the Transmission Owner in load zone J (New York City) by deploying EDRP resources in one or more of eight sub-load pockets in load zone J. Notifications will be made through the NYISO's EDRP/SCR notification system; events will clearly be identified as Targeted Demand Response TDRP advisories or deployments.

The sub-load pockets correspond to the following Transmission Owner network area substation groupings:

Sub-load Pocket Identification	Area Substation Grouping
J1	Sherman Creek/Parkchester/E 179th
J2	Astoria West/Queensbridge
J3	Vernon/Greenwood
J4	Staten Island
J5	Astoria East/Corona/Jamaica
J6	W 49th
J7	E13th/East River
J8	Farragut/Rainey
J9	Shared Subzone

There will be no changes to the cost allocation methodology for payment of energy reduction achieved by participating EDRP resources under a TDRP deployment.

6.2 Conditions for Deploying Targeted Demand ResponseTDRP

6.2.1 Transmission and Sub--Transmission System (69kV or higher)

CSPs with resources in sub-load pockets will be notified of the possibility of program deployment. The notification process is the same used for an EDRP advisory and will specify that the advisory is part of the Targeted Demand Response Program TDRP.

6.2.16.2.1.1 Day-Ahead Advisory Conditions

Transmission Owner may request the NYISO to send an advisory notice day ahead if the following conditions exist in load zone J:

- After all other available resources are committed, a shortfall is identified whereby normal feeder ratings or Transmission Owner 300-hour bank ratings will be exceeded following a contingency in a sub-load pocket, unless load relief measures are enacted.
- After all other available resources are committed, a reactive power shortfall is identified whereby post-contingency low voltage will exist in a sub-load pocket unless load relief measures are enacted.

6.2.26.2.1.2 In-Day Advisory/Deployment Conditions

Transmission Owner may request the NYISO to deploy the Targeted Demand Response ProgramTDRP if the following conditions exist in load zone J:

- If, after the next contingency, a Transmission Owner Long-Term Emergency (LTE) or 3-hour bank rating violation will exist that cannot be cleared with available resources and without load-Load relief measures.
- If an anticipated or real-time violation of Normal feeder ratings or 300-hour bank ratings exists and cannot be cleared through available resources and without load Load relief measures.
- If an anticipated, real-time or post- contingency low voltage condition exists and cannot be cleared through available resources and without load-Load relief measures.

6.2.2 Lower Voltage Systems (33kV or Below)

■ The TDR programTDRP will be deployed if it is anticipated that a network or load area could experience significant service interruptions following the loss of two additional feeders and secondary problems exist, such as low voltage and localized service interruptions.

6.3 Verification, Billing and Settlement

All phases of meter verification, billing, and settlement will be handled in the same manner as an EDRP event. <u>Section 5</u> of this manual has further details.