## **Proposal Concerning Modifications to LIPA's Tariff for Electric Service**

### **Requested Action:**

The Long Island Power Authority ("the Authority") staff proposes to modify the Tariff for Electric Service ("Tariff") effective April 1, 2016 to authorize three dynamic load management programs: (1) a Direct Load Control program; (2) a Distribution Load Relief program; and (3) a Commercial System Relief program. These programs are proposed to conform to NY Public Service Commission ("PSC") policy for innovative demand response programs consistent with *Reforming the Energy Vision* ("REV").

### **Proposal:**

Staff proposes to introduce three dynamic load management programs into the Tariff. These programs are similar to programs that the PSC has authorized for each of the major regulated electric utilities in the State and have been designed to provide similar benefits to both participants and the electric system. Each program has been designed to be consistent with the objectives of REV by providing price signals to encourage innovative market-based solutions to transmission and distribution system needs. Staff proposes that the compensation payment rates be listed in Statements attached to the Tariff which can be updated by the Trustees from time to time through a resolution of the Board. Staff proposes to recover the payments to participants through a non-bypassable component of the Power Supply Charge (Fuel and Purchased Power Cost Adjustment).

#### Direct Load Control Program

The Direct Load Control ("DLC") program will pay customers to install devices that allow PSEG Long Island to turn off or limit the use of selected end uses, such as air conditioners and pool pumps. Consistent with programs elsewhere in the State, the customer would "bring their own thermostat", meaning that the customer would find a Control Device Provider that would provide and install the control device, which is often but not always connected to the home's thermostat. Consistent with REV, the role of the utility is limited to identifying Control Device Providers that offer equipment that can communicate with the utility's control system, choosing when and where to control customer loads, and make payments to the customer for the ability to control their load. In practice, staff expects that Control Device Providers will actively promote the program and sign up customers.

The Direct Load Control program as outlined above is virtually identical to the LIPA Edge program, which has been successfully deployed on Long Island for many years. This new program will replace the LIPA Edge program, with two key changes: (1) staff expects the vendors to offer new solutions to replace the outdated technology deployed by LIPA Edge; and (2) neither LIPA nor PSEG-Long Island will install or market the devices.

Staff anticipates that the program would be called only in the summer months when either Long Island or the NYISO anticipate reaching peak conditions, but load can be controlled at any time that Long Island or the State is experiencing generating capacity shortages, or as the situation requires. The payments would be structured as a one-time upfront payment and annual recurring payments for continued participation during the summer months (May through September) beginning in the second year of participation. The recurring payments would be guaranteed to each participant for five years, in exchange for that customer's continued participation in the program, and could continue beyond the fifth year if the program continues to meet its intended objectives in a cost-effective manner. The payments can be updated by Staff in future years for new enrollments based on the same parameters, upon resolution of the Board. Staff would present its updated payments to the Department of Public Service for review prior to instituting any change to the payments.

For the initial roll-out of this program, Staff proposes a one-time payment of \$85 and recurring annual payments of \$25 for continued participation in the program. For comparison, the table below compares LIPA's proposed payments to the other NY utilities that offer the "bring your own thermostat" program.

Utility	Upfront Payment	Recurring Annual Payment
LIPA (proposed)	\$85	\$25
Consolidated Edison	\$85	\$25
Orange & Rockland Utilities	\$85	\$25
Central Hudson Gas & Electric	\$85	\$25
Niagara Mohawk	\$30	\$20

Staff will present to the Trustees each year an updated analysis of performance to date and set of recommendations for the future that may include proposed new levels of payments that better incorporate the experience to date and projections of future costs and benefits going forward, and request the adoption of a resolution to implement any program changes including payments to participants which would then be incorporated into a "Statement of Direct Load Control Program Payments" that is appended to the Tariff memorializing that resolution.

#### Commercial System Relief Program

The Commercial System Relief Program creates the opportunity for market forces to identify and implement load relief measures that would allow LIPA to avoid building new distribution capacity at specific locations along the transmission and distribution system. The goal of the program is to have the market provide such solutions and for LIPA to pay less than it would have spent in remedying the situation using conventional utility solutions. Similar Commercial Load Relief programs have been approved by the PSC for the regulated utilities.

The Commercial System Relief Program offers a number of features to the directly participating customers and aggregators who assemble and coordinate a pool of customers that combine their resources to meet the performance standards of the program. The program offers:

- 1. Monthly reservation payments per kW for commitments to reduce load on 21 hours' notice.
- 2. Performance payments for each kWh of energy curtailed during a called event lasting up to 4 hours.
- 3. Bonus payments for each kWh of energy curtailed beyond the 4 hour limit of the performance payment.
- 4. Penalties for non-performance, in addition to reductions in the reservation payments, to ensure that participants are motivated to commit and achieve a realistic amount of load reduction into the program.
- 5. Locational premiums if and to the extent that specific areas of the distribution system that would benefit from this type of load relief are identified.

Staff also proposes a voluntary option for the LIPA program. Customers choosing the voluntary option will not receive monthly reservation payments, and are not subject to any penalties for non-performance associated with their voluntary participation. Under the proposed program, customers preferring the voluntary option can contract for 0 kW of load relief, thereby receiving no reservation payments and avoiding any penalties. These voluntary participants would be eligible to receive performance payments s based on their actual performance.

Customers and aggregators may participate by reducing or deferring load, or utilizing dispatchable on-site generation options, to meet their commitments to reduce their load on the distribution system. Generation options must meet strict emissions criteria in order to be eligible for inclusion in the program. Specific metering requirements are also imposed on the participants, including the installation of automated meter reading equipment with up-to-date communications capabilities (such as AMI), as load reductions will be quantified using a Customer Base Load ("CBL") methodology used throughout the State which requires detailed usage information made available on a timely basis.

Staff is proposing that the reservation and performance payments for the Commercial System Relief Program be established at levels that are consistent with the other New York State utilities and are also designed to achieve net benefits for ratepayers as compared to conventional transmission and distribution investment. When participants reduce their load during an event, the energy charges on their electric bills are lower when compared to the amount they otherwise would have paid. In addition, to ensure that customers are adequately incented to reduce their load, an energy payment of  $25\phi$  (\$0.25/kWh) is provided for every kWh that the customer would otherwise have used. These prices are comparable to values which were established by the PSC for the regulated utilities in the State as shown in the table below.

Utility	Reservation Payment \$/kW/mo.	Performance Payment \$/kWh
Consolidated Edison (Zone J)	\$10.00	\$1.00
LIPA (proposed)	\$5.00	\$0.25
Orange & Rockland Utilities	\$4.00	\$0.50
Central Hudson Gas & Electric	\$4.00	\$0.25
Niagara Mohawk (Kenmore Area)	\$3.00	\$0.10
Rochester Gas & Electric	\$3.25	\$0.15
New York State Electric & Gas	\$2.75	\$0.15

In addition to the benefits provided by LIPA under this program, participants are allowed to use their load reduction capabilities to participate in NYISO load reduction programs, but not LIPA's Direct Load Control Program. As a result, participants can also receive significant payments from the NYISO that will further their incentive to create and deploy such capabilities. However, LIPA will make no performance payments for distribution load relief during those hours when the NYISO programs are already being implemented, since there is no incremental benefit to LIPA's distribution system under those circumstances.

Staff will present to the Trustees each year an updated analysis of performance to date and a set of recommendations for the future that may include proposed new levels of payments that better incorporate the experience to date and projections of future costs and benefits going forward, and request the adoption of a resolution to implement any program changes including payments to participants which would then be incorporated into a "Statement of Commercial System Relief Payments" that is appended to the Tariff memorializing that resolution.

#### Distribution Load Relief Program

The Distribution Load Relief Program creates the opportunity for the market to identify and implement load relief measures that would allow LIPA to reduce the cost of maintaining distribution capacity or having customers experience involuntary load curtailment at specific locations along the transmission and distribution system. Similar Distribution Load Relief programs have been approved by the PSC for the regulated utilities.

As proposed by LIPA staff, the program offers a number of features to the directly participating customers and aggregators who assemble and coordinate a pool of customers that combine their resources to meet the performance standards of the program. The program offers:

- 1. Monthly reservation payments per kW for commitments to reduce load on two hours' notice.
- 2. Performance payments for each kWh of energy curtailed during a called event lasting up to 4 hours.
- 3. Additional payments for each kWh of energy curtailed beyond the 4 hour limit of the performance payment (at the same rate as the first four hours).
- 4. Locational premiums in the future, if and to the extent that specific areas of the distribution system that would particularly benefit from this type of load relief are identified.

Staff also proposes a voluntary option for the LIPA program. Customers choosing the voluntary option will not receive monthly reservation payments, and are not subject to any penalties for non-performance associated with their voluntary participation. Under the proposed program, customers that prefer the voluntary option can contract for 0 kW of load relief, thereby receiving no reservation payments. These voluntary participants would be eligible to receive performance payments based on their actual performance.

Customers and aggregators may participate by reducing or deferring load, or utilizing dispatchable on-site generation options, to meet their commitments to reduce their load on the distribution system. Generation options must meet strict emissions criteria in order to be eligible for inclusion in the program. Specific metering requirements are also imposed on the participants, including the installation of automated meter reading equipment with up-to-date communications capabilities (such as AMI), as load reductions will be quantified using a Customer Base Load ("CBL") methodology used throughout the State which requires detailed usage information made available on a timely basis.

Staff is proposing that the reservation payments for distribution load relief be established at levels that are consistent with the other New York State utilities and are also designed to achieve net benefits for ratepayers as compared to conventional transmission and distribution investment. When participants reduce their load during an event, the energy charges on their electric bills are lower when compared to the amount they otherwise would have paid. In addition, to ensure that customers are adequately incented to reduce their load, an energy payment of  $25 \phi$  (\$0.25/kWh) is provided for every kWh that the customer would otherwise have used. These prices are comparable to values which were established by the PSC for the regulated utilities in the State as shown in the table below.

Utility	Reservation Payment \$/kW/mo.	Performance Payment \$/kWh
Consolidated Edison	\$6.00 <sup>1</sup>	\$1.00
Orange & Rockland Utilities	\$3.00	\$0.50
Niagara Mohawk	\$4.25	\$0.25
LIPA (proposed)	\$3.00	\$0.25
New York State Electric & Gas	\$2.75	\$0.15
Rochester Gas & Electric	\$3.25	\$0.15
Central Hudson Gas & Electric	No progr	am filed

In addition to the benefits provided by LIPA under this program, participants are allowed to use their load reduction capabilities to participate in NYISO load reduction programs. As a result, participants can also receive significant payments from the NYISO that will further their incentive to create and deploy such capabilities. However, LIPA will make no payments for distribution load relief during those hours when the NYISO programs are already being implemented, since there is no incremental benefit to LIPA's distribution system under those circumstances.

Staff will present to the Trustees each year an updated analysis of performance to date and set of recommendations for the future that may include proposed new levels of payments that better incorporate the experience to date and projections of future costs and benefits going forward, and request the adoption of a resolution to implement any program changes including payments to participants which would then be incorporated into a "Statement of Distribution Load Relief Program Payments" appended to the Tariff memorializing that resolution.

### Cost Recovery of the Dynamic Load Management Program Payments

Staff proposes to recover the cost of the payments for all three Dynamic Load Management program through the Power Supply Charge (also referred to as the Fuel and Purchased Power Cost Adjustment in the Tariff). This will provide for recovery of exactly the amount that is actually spent on the programs and avoids the need to make any projections regarding the amount to be included in rates. Only the amount actually spent on these programs will be recovered from customers: no more and no less. Staff is requesting a modification to the Tariff leaf specifically governing the costs recoverable through the Power Supply Charge, to avoid any confusion about this recovery. The Tariff already authorizes recovery of "The total actual cost of payments by the Authority to Customers who shed load during times of high system demands at the request of the Authority" (see Leaf 166, paragraph A.1.d) and Staff proposes to extend this definition to include "payments for participation in the Dynamic Load Management Programs contained in Section XIII".

<sup>&</sup>lt;sup>1</sup> Payment to participants in Tier 1. Tier 2 payment for areas with greater needs is \$15.00 per kW-month.

## **Financial Impacts:**

The financial impacts of the three proposed programs are expected to be favorable to ratepayers on a net present value basis. Each of the three programs involves payments that are less than the costs that can be avoided from their implementation, producing a net benefit to ratepayers. Staff estimates that the overall benefit/cost ratio to the Authority for these programs ranges from 1.31 to 1.35 based on LIPA's avoided costs and the proposed payments to avoid those costs, although as with many such programs, benefits tend to accumulate over time, while costs are often greatest up front.

The Direct Load Control program is estimated to avoid 1 kW of coincident peak demand per participant at a cost of \$185 per participant over 5 years. Assuming participation by 35,000 residential customers (which LIPA has historically achieved through its LIPA Edge program), that would represent a \$2.98 million expense in 2016 offset by avoided cost savings of \$1.3 million in that year, for a net impact of \$1.66 million in 2016 (0.1% of expected power supply costs). Savings in future years, once the first payment has been incurred will exceed the annual recurring payment.

The Commercial System Relief program provides payments for reductions in load anywhere in the system, with the option for higher localized payments for reductions in load targeted to specific locations as such areas are identified and evaluated. Assuming enrollment of 10 MW in the program, total annual payments are estimated to be \$210,000, consisting of \$250,000 in reservation payments and \$40,000 in performance payments for four events lasting four hours each..

The Distribution Load Relief program provides payments for reductions in load anywhere in the system in order to provide reliability benefits at specific locations that may be capacity constrained or facing outages due to system contingencies from time to time. Assuming enrollment of 10 MW in the program, total payments are estimated to be \$210,000, consisting of \$150,000 in annual reservation payments \$60,000 in performance payments for six events lasting four hours each.

#### **Proposed Tariff Changes:**

## 1. Implement a Direct Load Control Program.

## **Affected Tariff Leaves:**

327, 328 and Statement 1-DLCP

#### **Reason for Tariff Change**

To conform to recent NY PSC policy.

## 2. <u>Implement a Commercial System Relief Program</u>

### **Affected Tariff Leaves:**

329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339 and Statement 1-CSRP

## **Reason for Tariff Change**

To conform to recent NY PSC policy.

## 3. Implement a Distribution Load Relief Program

## **Affected Tariff Leaves:**

340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351 and Statement 1-DLRP

### **Reason for Tariff Change**

To conform to recent NY PSC policy.

## 4. Modify the Fuel and Purchased Power Cost Adjustment Clause

## **Affected Tariff Leaf:**

166

## **Reason for Tariff Change**

To explicitly authorize recovery of the three programs through the non-bypassable fuel and purchased power adjustment clause.

## **Summary of Proposed Changes:**

In summary, the proposed changes to LIPA's Tariff for Electric Service will implement Direct Load Control, Distribution Load Relief, and Commercial System Relief programs consistent with the programs offered by the investor owned utilities.

The revised Tariff Leaf No. 166 and proposed original Tariff Leaf Nos. 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 342, 333, 344, 345, 346, 347, 348, 349, 350, 351 and proposed Statements 1-DLCP, 1-CSRP and 1-DLRP are attached.

#### VII. ADJUSTMENTS TO RATES AND CHARGES OF SERVICE CLASSIFICATIONS:

#### A. Fuel and Purchased Power Cost Adjustment:

Cost of Fuel and Purchased Power

The Cost of Fuel and Purchased Power includes:

- a) The total actual cost of fossil and nuclear fuel purchased on behalf of the Authority to produce electricity, including nuclear fuel disposal costs and the Authority's share of the Nine Mile Point 2 nuclear generating plant decontamination and decommissioning costs paid to the operator, plus
- b) The total actual cost of all electric power purchased by or on behalf of the Authority from the New York Power Authority (NYPA), other utilities, and independent power producers, including qualifying facilities and customer-generators, net of revenues received from energy sold to other utilities, power marketers, or other brokers who are not agents for retail power supply customers of the Authority, plus
- c) The total actual cost of all transmission wheeling and other charges (including charges on any off-island transmission facilities which deliver power to the Authority's system), plus
- d) The total actual cost of payments by the Authority to Customers who shed load during times of high system demands at the request of the Authority including payments for participation in the Dynamic Load Management programs contained in Section XIII, plus
- e) The actual fuel costs and the value of foregone emissions credits that partially offset revenues credited from energy sold to other utilities, power marketers, or other brokers who are not agents for retail power supply customers of the Authority, plus
- f) The cost incurred under any system power supply management or fuel management services agreements, plus
- g) Charges for Capacity, Energy, Scheduling, System Control and Dispatch Service, and ancillary services paid by LIPA as a participant in any Independent System Operator (ISO) administered markets, plus
- h) Any other net charges (net of revenues) associated with TCCs, ancillary services and short term capacity received by the Authority as a participant in any Independent System Operator (ISO) administered markets, plus
- Bill Credit Adjustment (BCA) payments to ESCOs and DRCs under the LI Choice Program, plus
- j) Premiums and other costs associated with the Authority's fuel hedging program, including any gains or losses realized, plus
- k) Costs incurred to comply with the requirements of the New York State Renewable Portfolio Standards program.

Effective: January April 1, 2016

## XIII. Dynamic Load Management A. Direct Load Control Program

#### 1. Purpose and Applicability:

The Direct Load Control Program allows the Authority to remotely control the Participating Customer's Control Device to reduce the Customer's load during an Event. The program utilizes third-party Control Devices Providers to identify Participants and install and manage the Control Devices that meet the Authority's specifications for communications.

Participation is applicable to Customers in all locations within the Service Area served at Primary and Secondary voltage in the following Service Classifications and Rate Codes:

Service Classification No. 1 (Rate Codes 180, 380, 580, 880; excluding 480 and 481)

Service Classification No. 1-VMRP(L) (Rate Codes 181, 182, 184)

Service Classification No. 1-VMRP(S) (Rate Code 188)

Service Classification No. 2 (Rate Code 280)

Service Classification No. 2-VMRP (Rate Code 288)

Service Classification No. 2-L (Rate Codes 281, 291, 283)

Service Classification No. 2L-VMRP (Rate Codes 282, M282)

Service Classification No. 2-MRP (Rate Codes 284, 285, M284, M285)

Service Classification No. 16-AMI (Rate Codes M188, M288, M282, M284, M285)

#### 1. Eligibility:

To participate under this program, a Customer must have load controllable equipment and agree to the installation of a Control Device.

This program is not available to Customers who participate either directly or indirectly through a third party, under any other Authority or NYISO demand-response program.

#### 2. Definitions:

Control Device: A device installed on the Customer's load controllable equipment via a smart plug or embedded control that allows the Authority to remotely control the equipment when an Event is called. For purposes of this program, Control Device means one or more devices as may be required to control the equipment. Each Control Device contains a feature that allows the Customer to override the Authority's control of the Customer's equipment. The Control Device must be provided, installed, and connected to the Internet by the Customer or an approved Control Device Provider in a manner that ensures communications between the Authority and the Control Device.

<u>Event:</u> The Authority's determination to activate some or all of the participating Control Devices including but not limited to situations when: (a) the NYISO declares an emergency in conjunction with an in-day peak hour forecast response to an operating reserve peak forecast shortage; or (b) in response to a major state of emergency as defined in Section 3.2 of the NYISO Emergency Operations Manual; or (c) at the NYISO's discretion to relieve system or zonal emergencies; or (d) the Authority determines that a NYISO or Authority peak may occur; or the Authority at its discretion identifies a need to reduce load throughout the Authority's system generally or at specific locations.

## XIII. Dynamic Load Management A. Direct Load Control Program

#### **Definitions (continued)**

<u>Control Device Provider:</u> A provider registered with the Authority to develop, maintain, and operate a communications portal that enables Internet-connected Control Devices to participate under this program. A list of Control Device Providers is available on the Manager's website.

#### 3. Applications:

Applications to participate under this program may be made throughout the year either electronically or in writing.

## 4. Payments to Participating Customers

- a. Payments to Participating Customers will be established on a Statement of Direct Load Control Payments to be updated by the Authority following the adoption of a resolution by the Authority's Board of Trustees. The Authority reserves the right to modify this Statement, and to terminate payments at any time, as qualified below.
- b. Customers enrolling in the program through a Control Device Provider will receive a one-time sign-up payment as established on the Statement of Direct Load Control Program Payments, either by check or bill credit at the Authority's discretion, after the Authority and/or Control Device Provider has confirmed the Authority's ability to communicate with the Control Device.
- c. Starting with the second Summer Period (defined hereunder as May 1 through September 30) in which the Customer participates, the Customer will be eligible for an annual incentive payment as established on the Statement of Direct Load Control Program Payments, payable by check or bill credit at the Authority's discretion, after each Summer Period in which the Authority can verify that the Customer allowed the Authority to control the Control Device for no less than 80 percent of the aggregate number of Event hours declared by the Authority during each year's Summer Period.
- d. Failure to qualify for the annual incentive payment in one year does not affect the participating Customer's eligibility to receive annual incentive payments in subsequent years.
- e. The Authority may discontinue annual incentive payments to Customers after the fifth year of participation if the Authority determines that the program should be discontinued or significantly modified. Upon making such a determination, Customers that have participated for less than five years will remain eligible to receive annual incentive payments until they have completed their fifth year of participation.

#### 5. Load Controllable Equipment

The Authority reserves the right to specifically identify, or designate the criteria for identifying, the types of equipment that qualify as load controllable equipment for purposes of this program. Load controllable equipment includes central air conditioning units and pool pumps, and any other device or combination of devices attached to a single Customer's meter that have the ability to reduce load by 1.0 kW when an Event is called by the Authority. The specific equipment or criteria for identifying specific equipment will be developed by the Authority's staff with input from the Department of Public Service and posted on the Manager's website.

## **B.** Commercial System Relief Program

#### 1. Purpose and Availability

The Commercial System Relief Program is being offered by the Authority to enable participating eligible customers to be compensated for reducing their load under certain conditions when called upon by the Authority to do so.

The program is available to any Customer served at primary or secondary voltage and taking service under one of the Service Classifications shown below; and to any Aggregator that meets the requirements of this Rider.

Service Classification No. 1 (Rate Codes 180, 380, 580, 880; excluding 480, 481)

Service Classification No. 1-VMRP(L) (Rate Codes 181, 182, 184)

Service Classification No. 1-VMRP(S) (Rate Codes 188)

Service Classification No. 2 (Rate Code 280)

Service Classification No. 2-VMRP (Rate Code 288)

Service Classification No. 2-L (Rate Codes 281, 291, 283)

Service Classification No. 2L-VMRP (Rate Codes 282, M282)

Service Classification No. 2-MRP (Rate Codes 284, 285, M284, M285)

Service Classification Nos. 11, 12, and 13 (Rate Codes 289, 680, 681, 278)

Service Classification No. 16-AMI (Rate Code M188, M282, M284, M285, M288)

Customers who take service pursuant to a Net Metering option or the Direct Load Control Program are not eligible to participate in this program.

The Metropolitan Transportation Authority for Traction Power Service to the Long Island Rail Road and Brookhaven National Laboratories pursuant to a Sale for Resale agreement between the Authority and the New York Power Authority (both as referenced on Leaf 271) are not eligible to participate.

### 2. <u>Definitions:</u>

<u>Aggregator:</u> A party other than the Authority that represents and aggregates the load of Customers who collectively have a Load Relief potential of 100 kW or greater in an Authority Designated Area and is responsible for the actions of the Customers it represents, including performance and, as applicable, repayments to the Authority.

<u>Authority Designated Area:</u> An electrically defined area determined by the Authority to be approaching system capacity limits during peak periods. A current list of the Authority Designated Areas will be listed on the Manager's website and payments by area are listed on the Statement of Commercial System Relief Program Payments.

<u>Capability Period:</u> The period during which the Authority can request Load Relief. The Capability Period will be from May 1 through September 30.

# B. Commercial System Relief Program Definitions (continued)

<u>CBL</u>: Customer baseline load as calculated under the Authority's Customer Baseline Load methodology, using either the weather-sensitive adjustment option (the "weather adjusted CBL") or the average-day CBL. The Customer Baseline Load methodology will be described in the Authority's operating procedure, which will be published on the Manager's website.

CBL Verification Methodology: The methodology used by the Authority to verify the actual Load Relief provided (kW and kWh) during each hour of each designated Load Relief Period and Test Event. Actual load levels are compared to the customer baseline loads to verify whether the Direct Participant or Aggregator provided the kW of contracted Load Relief; provided, however, that the Authority may estimate the data pursuant to the Authority's operating procedure if data is not available for all intervals. When the weather-adjusted CBL methodology is used and the calculated weather adjustment falls outside of the Authority defined ranges (i.e., the Authority deems the weather to be atypical on the day of a Load Relief Period or Test Event when compared to the baseline period), the Authority may review and revise a participant's baseline based on the Customer's historical load data. When the weather-adjusted CBL methodology is used, the Authority, at its own discretion, may select alternate hours for the adjustment period to calculate the weather adjustment in order to accurately reflect the customer's typical usage.

<u>Contracted Hours</u>: The four-hour period within a weekday, Monday through Friday during the Capability Period excluding federal holidays, during which the Direct Participant or Aggregator contracts to provide Load Relief in an Authority Designated Area whenever the Authority designates a Planned Event. The Load Relief Period will be identified for each Authority Designated Area on the Manager's website.

<u>Direct Participant:</u> A Customer who enrolls under this Program directly with the Authority for a single account and agrees to provide at least 50 kW of Load Relief.

<u>Electric Generating Equipment:</u> (a) electric generating equipment that is served under Service Classification Nos. 11 or 12 and used to provide Load Relief under this Program; or (b) emergency electric generating equipment that is interconnected and operated in compliance with Authority rules governing Emergency Generating Facilities used for self supply and used to provide Load Relief under this Program.

<u>Load Relief:</u> Power (kW) and energy (kWh): (a) ordinarily supplied by the Authority that is displaced by use of Electric Generating Equipment and/or reduced by the Direct Participant or Aggregator at the Customer's premises; or (b) that is produced by use of Electric Generating Equipment by a customer taking service pursuant to Service Classification No. 11 and delivered by that Customer to the Authority's distribution system during a Load Relief Period.

<u>Load Relief Period:</u> The hours for which the Authority requests Load Relief when it designates a Planned Event or an Unplanned Event.

<u>Performance Adjusted kW</u>: The kW level that a Direct Participant or Aggregator requests to provide subsequent to the imposition of a penalty.

# B. Commercial System Relief Program Definitions (continued)

<u>Performance Factor</u>: When a Planned Event or Test Event is called, is the ratio of: (i) the average hourly kW of Load Relief provided by the Direct Participant or Aggregator during the requested hours, up to the kW of contracted Load Relief to (ii) the kW of contracted Load Relief. The Performance Factor is subject to certain adjustments and limitations as described in Section B.9.d below.

<u>Planned Event</u>: The Authority's request, on not less than 21 hours' advance notice, for Load Relief during the Contracted Hours. Planned Events will be called when the Authority's dayahead forecasted load level is at least 96 percent of the forecasted summer system-wide peak. Day-ahead and summer peak forecast information for the system will be posted to the Manager's website.

<u>Test Event</u>: The Authority's request for Direct Participants and Aggregators to provide one hour of Load Relief on not less than 21 hours' advance notice.

<u>Unplanned Event</u>: The Authority's request for Load Relief: (a) on less than 21 hours' advance notice; or (b) for hours outside of the Contracted Hours.

### 3. Contracting for Commercial System Relief Program Service

This Program is applicable to Direct Participants and Aggregators who agree in writing to provide Load Relief in an Authority Designated Area during all Contracted Hours in such Authority Designated Area, whenever the Authority designates a Planned Event during a Capability Period. Direct Participants and Aggregators may also agree to voluntarily provide Load Relief if an Unplanned Event is called. Authority Designated Areas will be posted on the Manager's website.

A Direct Participant must contract to provide at least 50 kW of Load Relief. An Aggregator must contract to provide at least 100 kW of Load Relief. Direct Participants or Aggregators that wish to participate on a voluntary basis may request a value of 0 kW of contracted Load Relief.

If other requirements for service under this Program are met, Electric Generating Equipment may be used to participate under this Program subject to the provisions set forth in section XIII.B.7 below. The participating Direct Participant or Aggregator is responsible for ensuring that the operation of generating equipment under this Program will be in conformance with any governmental limitations on operation.

Participation under this Program is permitted to participants in other programs that provide payment for capacity, such as the NYISO's Special Case Resources ("SCR") Program (or any successor Authority program to the NYISO's SCR Program).

Direct Participants and all customers of an Aggregator must meet the metering requirements specified in Section XIII.B.6.

An Aggregator is responsible for the compliance of all customers it enrolls and will be liable for performance, including, as applicable, repayments to the Authority.

The Authority reserves the right to establish operating procedures and various forms for the implementation of this program. Direct Participants and Aggregators must abide by such operating procedures and utilize such forms to be eligible for participation.

### **B.** Commercial System Relief Program

#### 4. Applications for Participation

- a) Applications for participation under this program must be made electronically. Direct Participants and Aggregators may participate after the Authority's receipt and approval of a completed application. The Authority will accept an application by April 1 for a May 1 commencement date or by May 1 for a June 1 commencement date. However, if the application is received by April 1 and the Authority does not bill the participant monthly using interval metering at the time of application, participation may commence on July 1 provided all conditions in section XIII.B.6. are satisfied.
- b) The desired commencement month must be specified in the application. Applications will not be accepted after the specified date for participation during the current Capability Period. If the first of the month falls on a weekend or holiday, applications will be accepted until the first business day thereafter.
- c) The weather-adjusted CBL will be used as the CBL Verification Methodology for each account number enrolled, unless the application specifies that the average-day CBL is to be used for verification of performance. A single CBL Verification Methodology will be used for each customer to assess both energy (kWh) and demand (kW) Load Relief.
- d) A Direct Participant or Aggregator may apply in writing to change the CBL Verification Methodology, to change the kW of pledged Load Relief, or to terminate service under this Program for the upcoming Capability Period provided the request is received prior to commencing participation for that Capability Period. In order for a Direct Participant or Aggregator to increase its kW of contracted Load Relief in an Authority Designated Area, the Direct Participant's or Aggregator's most recent Performance Factor in that Authority Designated Area must be no less than 1.00.
- e) Each application must state the kW of Load Relief that the Direct Participant or Aggregator contracts to provide for the Load Relief Period. Load Relief of an Aggregator will be measured on a portfolio basis separately for each Authority Designated Area.

### 5. Notification by the Authority and Required Response

- a) The Authority will notify Direct Participants and Aggregators by phone, e-mail, or machine-readable electronic signal, or a combination thereof, in advance of the commencement of a Load Relief Period or Test Event. The Direct Participant or Aggregator will designate in writing an authorized representative and an alternate representative, and include an electronic address if applicable, to receive the notice. If an Aggregator is served under this Program, only the Aggregator will be notified of the Load Relief Period or Test Event. The Aggregator is responsible for notifying all of the customers within its respective aggregation group.
- b) If the Authority designates a Planned Event or a Test Event, the Authority will provide advance notice at least 21 hours in advance of the event. The Authority will again provide advance notice on the day of the event, usually two or more hours in advance.
- c) If the Authority designates an Unplanned Event, notice will be given as soon as practicable. Participants are requested to provide Load Relief as soon as they are able.

# B. Commercial System Relief Program Notification by the Authority and Required Response

d) Participants are required to participate during all Contracted Hours for all Planned Events called by the Authority during the Capability Period, and all Test Events called by the Authority. The Test Event period will not exceed one hour.

#### 6. Metering

- a) Participation under this program requires that each participant's entire service be measured by interval metering with communications capability which will also be used by the Authority for monthly billing. All participants designated by an Aggregator must meet the metering and telecommunications requirements specified herein.
- b) If, at the time of application for service under this Program, the Authority does not bill the participant monthly using interval metering, the Customer will arrange with the Authority for the furnishing and installation of interval metering with communications capability to be used for billing, at the participant's expense.
- c) For participation under this program, the metering equipment and communications service must be installed and made operational prior to the Authority's acceptance of a completed application. Participation under this program will commence the first day of the first month within the Capability Period that occurs at least 30 days after both the interval metering and communications service become operational.
- d) The Authority will install interval metering with communications capability within 21 business days. If the Authority misses the installation time frame for a participant, it will make a "Lost Reservation Payment" to the Direct Participant or Aggregator, unless the meter delay was caused by a condition such as a major outage or storm.
- e) A Lost Reservation Payment will be calculated by determining the number of months between the earliest month in which the customer could have begun participation had the meter been installed within the required timeframe (assuming the Authority's acceptance of a completed application and receipt of payment for the meter upgrade) and the first month following the completed installation, and multiplying that number by the pledged kW and associated per-kW Reservation Payment Rate.

## **B.** Commercial System Relief Program

#### 7. Operation of Electric Generating Equipment

- a) Participation by diesel-fired Electric Generating Equipment will be permitted only if the engine for the equipment is model year 2000 or newer. Participation by diesel-fired Electric Generating Equipment will be limited to 20 percent of the total kW enrolled under this Program for the Capability Period. Enrollment by such generators will be accepted on a first come, first served basis. No limit or cap will be placed on the following: natural gasfired rich burn Electric Generating Equipment that incorporates three-way catalyst emission controls; natural gas lean-burn Electric Generating Equipment with an engine of model year of 2000 or newer; or Electric Generating Equipment that has a NOx emission level of no more than 2.96 lb/MWh.
- If a Direct Participant or Aggregator requests to operate Electric Generating Equipment for Load Relief purposes under this program and the Authority has approved the interconnection of such equipment, the application must state generator information, including the unit's serial number, nameplate rating, manufacturer, date of manufacture. fuel type or energy source, the kW enrolled using this equipment, and identification as to whether the unit incorporates three-way catalyst emission controls (natural gas-fired rich burn), a natural gas lean-burn engine of model year 2000 or newer, or a diesel-fired engine of model year 2000 or newer, or whether it has a NOx emission level of no more than 2.96 lb/MWh. If the generating equipment has a NOx emission level of no more than 2.96 lb/MWh, but is not natural gas-fired rich burn generating equipment that incorporates threeway catalyst emission controls, a natural gas lean-burn engine of model year 2000 or newer, or a diesel-fired engine of model year 2000 or newer, written certification by a professional engineer must be contained in the application, including the NOx emission level. Copies of all New York State Department of Environmental Conservation ("DEC") permits must be included with the application. By applying for service under this Program, Direct Participants and Aggregators (on behalf of their customers) agree to permit the Authority to provide information regarding the Electric Generating Equipment to the DEC for its review, subject to the DEC's agreement to keep this information confidential. Furthermore, participants enrolled in a NYISO market-based program offered by the Authority, NYPA or other entity, such as the Day-ahead Demand Response Program or the Demand-Side Ancillary Service Program, must provide the Authority with their NYISO generator identification number, under a confidentiality agreement, and give the Authority the ability to view their market participation activity. This information will be used to verify the times of participation in these other programs to prevent double-payment during concurrent events.

#### **B.** Commercial System Relief Program

#### 8. Data Review

- a) The Authority reserves the right to review records and/or operations of any Direct Participant, Aggregator, and customer of an Aggregator, to verify enrollment information and performance associated with any designated Load Relief Period or Test Event called by the Authority.
  - Once the Authority initiates a data review, all payments will be suspended pending the outcome of the review.
  - (2) The Authority will complete its review within 30 days of receipt of all requested data, but no later than December 31 of the calendar year of the Capability Period under review.
  - (3) Any suspended payments will be reinstated if the Authority's review of the data results in a finding that the enrollment and performance information are correct.
- b) If the Authority determines that a Direct Participant, Aggregator, or customer of an Aggregator failed to cooperate fully and promptly with the review and/or did not fully comply with the provisions of this Program and/or provided inaccurate data, the Direct Participant Aggregator or the customer of the Aggregator will be deemed ineligible to participate in the Program until the issue is rectified. In addition, the Direct Participant or Aggregator will be required to make prompt repayment to the Authority of any overpayments that were made to such Direct Participant or Aggregator, on behalf of its customer, for the Capability Period that was reviewed as well as the current Capability Period, if different.

## **B.** Commercial System Relief Program

#### 9. Reservation Payment

- a) Direct Participants and Aggregators will receive a Reservation Payment for each month during the Capability Period in which they are enrolled for a maximum of five payments per calendar year. Reservation Payments will be calculated on a monthly basis. Payments will be made by bill credit, check, or wire transfer.
- b) The Reservation Payment rate per kW is based on the number of cumulative Planned Events for which the Direct Participant or Aggregator was asked to provide Load Relief during the Capability Period, as follows:
  - (1) The Reservation payment rate varies by location and by the number of times the Direct Participant or Aggregator is asked to provide Load Relief.
  - (2) The Authority reserves the right to identify additional locations and establish corresponding rates for Reservation Payments from time to time based on reports and recommendations from the Authority's staff which will be provided at least annually.
  - (3) The identification of applicable locations and corresponding rates for Reservation Payments will be provided on a Statement of Commercial System Relief Program Payments to be updated by the Authority following the adoption of a resolution by the Authority's Board of Trustees.
- c) The Reservation Payment per month is equal to the applicable Reservation Payment rate per kW per month multiplied by the kW of contracted Load Relief multiplied by the Performance Factor.
- d) Voluntary Option: Direct Participants or Aggregators that wish to participate on a Voluntary Basis may establish 0 kW of contracted Load Relief.
- e) Direct Participants and Aggregators receiving reservation payments under this program will not be eligible for reservation payments under the Distribution Load Relief Program.

#### f) Performance Factor

- (1) The Performance Factor for each participant is initially set at 1.00 when the participant enrolls in the program.
- (2) In each subsequent month, the achieved average kW load reduction during a Planned Event (not to exceed the first 4 hours) and Test Event is divided by the contract kW to calculate a new ratio. When more than one Planned Event and/or Test Event is called during the month, the average of the Performance Factors of all events for a Direct Participant or Aggregator in each Authority Designated Area is the Performance Factor for that month. If the new monthly ratio is lower than the Performance Factor from the prior month, the Performance Factor is lowered to the new value. If the ratio is higher than the Performance Factor from the prior month, or no Planned or Test events are called in the month, then the Performance Factor continues unchanged from the prior month.
- (3) The Performance Factor is rounded to two decimal places (e.g., 0.99).

- B. Commercial System Relief Program Reservation Payment (continued)
  - (4) Direct Participants and Aggregators can increase their Performance Factor and corresponding Reservation Payment prospectively by requesting a Performance Adjusted kW. The Performance Adjusted kW must be:
    - (a) No higher than the average hourly kW of Load Relief that was provided during the most recent single event (i.e., Test Event, Planned Event, or Unplanned Event);
    - (b) No lower than the kW of Load Relief on which the last payment was based; and
    - (c) It cannot exceed the kW of contracted Load Relief.
  - (5) The Performance Factor will be recalculated as the Performance Adjusted kW divided by the Contract kW and will become effective on the first of the month following the date the request is received. If the request is received late due to the Authority's delay in providing interval meter data, the Performance Adjusted kW will be applied retroactively, effective as of the first of the month after the event on which the Performance Adjusted kW calculation is based occurred.
  - (6) The new Performance Factor will remain in effect until the earlier of:
    - (a) The month in which a new Performance Adjusted kW is requested and approved pursuant to (4) above; or
    - (b) A new lower Performance Factor is calculated based on the results of monthly performance; or
    - (c) the term of service under this Program ends.
  - (7) Once a Performance Adjustment is in effect, a Direct Participant or Aggregator may request subsequent increases to the Performance Adjusted kW if the updated kW level meets the requirements for Performance Adjusted kW. No more than one request will be accepted per month to increase the Performance Adjusted kW. The Performance Adjustment will become effective commencing the first day of the first calendar month that follows the Authority's receipt of the request to initiate or update the Performance Adjusted kW.
  - (8) Requests for Performance Adjusted kW cannot be used to lower the Performance Factor, or for the avoidance of penalties under this Program.

#### g) Penalties

If the average kW of Load Relief provided for Planned Events in the current month is lower than the prior month's average kW of Load Relief for Planned Events or the contracted kW, whichever is lower, the Direct Participant or Aggregator will be subject to a penalty. The penalty is equal to the Reservation Payment rate times the difference between the prior month's average kW or the contracted kW, whichever is lower, and the current (lower) average kW performed. If the current average kW performed is negative, 0 kW will be set as the current month's average kW performance. Customers participating on a voluntary basis are not subject to penalties.

# B. Commercial System Relief Program Reservation Payment (continued)

#### h) Adjustments to the Contract kW

 Direct Participants and Aggregators may increase the kW of contracted Load Relief in subsequent Capability Periods above their previously contracted kW of Load Relief, provided their most recent Performance Factor was 1.00.

#### 10. Performance Payments for Load Relief

- a) Except as specified in section XIII.B.10.d below, the Authority will make a payment to a
  Direct Participant or Aggregator who provides Load Relief during a Planned Event, Test
  Event, or Unplanned Event.
- b) The Performance payment rate may vary by location, type of event, duration of the event, number of times the Direct Participant or Aggregator is asked to provide Load Relief, and whether the Customer is participating on a voluntary basis.
  - (1) The Performance Payment rate is specified on the Statement of Commercial System Relief Program Payments.
  - (2) The Authority reserves the right to identify additional locations and establish corresponding rates for Performance Payments from time to time based on reports and recommendations from the Authority's staff which will be provided at least annually.
  - (3) The identification of applicable locations and corresponding rates for Reservation Payments will be provided on a Statement of Commercial System Relief Program Payments to be updated by the Authority following the adoption of a resolution by the Authority's Board of Trustees.
- c) The Performance Payment amount paid per event is equal to the Performance Payment rate per kWh multiplied by the average hourly kWh of Load Relief provided during the event multiplied by the number of event hours.
- d) Performance Payments will not be made under this Program if the Direct Participant or Aggregator (on behalf of its customer) receives payment for energy during concurrent Load Relief hours under any other demand response program (e.g., NYISO's Day-ahead Demand Reduction Program or NYISO's Special Case Resources Program) in which the Customer is enrolled. Direct Participants or Aggregators who also participate in the Distribution System Relief Program during concurrent Load Relief hours will only receive Performance Payments under this program.
- e) If an S.C. No. 11 Customer participates in the NYISO market and receives payment for energy during concurrent Load Relief hours, Performance Payments will be made under this Program only for Load Relief in excess of the Customer's CBL, expressed in kWh

## **B.** Commercial System Relief Program

## 11. Testing

- a) The Authority may require a Direct Participant or Aggregator to participate in one or more Test Events, each for a period not to exceed one hour, commencing at a time determined solely at Authority's discretion, but within the Contracted Hours.
- b) The Authority will make a payment for one hour of energy for the Load Relief achieved up to the contracted amount, as specified above.
- c) For Direct Participants or Aggregators that receive Reservation Payments, results of the Test are subject to the Penalties described above.

## C. Distribution Load Relief Program

#### 1. Purpose and Availability

The Distribution Load Relief Program is being offered by the Authority to enable participating eligible customers to be compensated for reducing their load under certain conditions when called upon by the Authority to do so.

The program is available to any Customer served at primary or secondary voltage and taking service under one of the Service Classifications shown below; and to any Aggregator that meets the requirements of this Rider.

Service Classification No. 1 (Rate Codes 180, 380, 580, 880; excluding 480, 481)

Service Classification No. 1-VMRP(L) (Rate Codes 181, 182, 184)

Service Classification No. 1-VMRP(S) (Rate Codes 188)

Service Classification No. 2 (Rate Code 280)

Service Classification No. 2-VMRP (Rate Code 288)

Service Classification No. 2-L (Rate Codes 281, 291, 283)

Service Classification No. 2L-VMRP (Rate Codes 282, M282)

Service Classification No. 2-MRP (Rate Codes 284, 285, M284, M285)

Service Classification Nos. 11, 12, and 13 (Rate Codes 289, 680, 681, 278)

Service Classification No. 16-AMI (Rate Code M188, M282, M284, M285, M288)

Customers who take service pursuant to a Net Metering option or the Direct Load Control Program are not eligible to participate in this program.

The Metropolitan Transportation Authority for Traction Power Service to the Long Island Rail Road and Brookhaven National Laboratories pursuant to a Sale for Resale agreement between the Authority and the New York Power Authority (both as referenced on Leaf 271) are not eligible to participate.

#### 2. Definitions:

<u>Aggregator:</u> A party other than the Authority that represents and aggregates the load of Customers who collectively have a Load Relief potential of 100 kW or greater in an Authority Designated Area and is responsible for the actions of the Customers it represents, including performance and, as applicable, repayments to the Authority.

<u>Authority Designated Area:</u> An electrically defined area determined by the Authority to be approaching system capacity limits during peak periods. A current list of the Authority Designated Areas will be listed on the Manager's website and reservation payments by area are listed on the Statement of Distribution Load Relief Program Payments.

<u>Capability Period:</u> The period during which the Authority can request Load Relief. The Capability Period will be from May 1 through September 30.

## C. Distribution Load Relief Program Definitions (continued)

<u>CBL</u>: Customer baseline load as calculated under the Authority's Customer Baseline Load methodology, using either the weather-sensitive adjustment option (the "weather adjusted CBL") or the average-day CBL. The Customer Baseline Load methodology will be described in the Authority's operating procedure, which will be published on the Manager's website.

CBL Verification Methodology: The methodology used by the Authority to verify the actual Load Relief provided (kW and kWh) during each hour of each designated Load Relief Period and Test Event. Actual load levels are compared to the customer baseline loads to verify whether the Direct Participant or Aggregator provided the kW of contracted Load Relief; provided, however, that the Authority may estimate the data pursuant to the Authority's operating procedure if data is not available for all intervals. When the weather-adjusted CBL methodology is used and the calculated weather adjustment falls outside of the Authority defined ranges (i.e., the Authority deems the weather to be atypical on the day of a Load Relief Period or Test Event when compared to the baseline period), the Authority may review and revise a participant's baseline based on the Customer's historical load data. When the weather-adjusted CBL methodology is used, the Authority, at its own discretion, may select alternate hours for the adjustment period to calculate the weather adjustment in order to accurately reflect the customer's typical usage.

<u>Contingency Event:</u> a Load Relief Period lasting four or more hours for which the Authority provides two or more hours of advance notice.

<u>Direct Participant:</u> A Customer who enrolls under this Program directly with the Authority for a single account and agrees to provide at least 50 kW of Load Relief.

<u>Electric Generating Equipment:</u> (a) electric generating equipment that is served under Service Classification Nos. 11 or 12 and used to provide Load Relief under this Program; or (b) emergency electric generating equipment that is interconnected and operated in compliance with Authority rules governing Emergency Generating Facilities used for self supply and used to provide Load Relief under this Program.

<u>Immediate Event:</u> a Load Relief Period lasting six or more hours for which the Authority provides less than two hours of advance notice.

<u>Load Relief:</u> Power (kW) and energy (kWh): (a) ordinarily supplied by the Authority that is displaced by use of Electric Generating Equipment and/or reduced by the Direct Participant or Aggregator at the Customer's premises; or (b) that is produced by use of Electric Generating Equipment by a customer taking service pursuant to Service Classification No. 11 and delivered by that Customer to the Authority's distribution system during a Load Relief Period.

<u>Load Relief Period:</u> The hours for which the Authority requests Load Relief when it designates a Contingency Event or an Immediate Event. Load Relief will not be required between the hours of 12:00 AM and 6:00 AM.

## C. Distribution Load Relief Program Definitions (continued)

<u>Performance Factor</u>: When a Contingency Event, Immediate Event or Test Event is called, is the ratio of: (i) the average hourly kW of Load Relief provided by the Direct Participant or Aggregator during the requested hours, up to the kW of contracted Load Relief to (ii) the kW of contracted Load Relief. The Performance Factor is subject to certain adjustments and limitations as described in Section XIII.C.10.d below.

<u>Test Event</u>: The Authority's request for Direct Participants and Aggregators to provide one hour of Load Relief on not less than 2 hours of advance notice.

#### 3. Contracting for Distribution Load Relief Program Service

This Program is applicable to Direct Participants and Aggregators who agree in writing to provide Load Relief for no less than four consecutive hours in an Authority Designated Area whenever the Authority designates a Load Relief Period for up to six designated Load Relief Periods during the Capability Period. For seven or more Load Relief Periods during the Capability Period, participation by the Direct Participant or Aggregator will be optional. Authority Designated Areas will be posted on the Manager's website.

A Direct Participant in the Reservation Payment Option must contract to provide at least 50 kW of Load Relief. An Aggregator in the Reservation Payment Option must contract to provide at least 100 kW of Load Relief. Direct Participants or Aggregators that wish to participate on a voluntary basis may request a value of 0 kW of contracted Load Relief.

If all other requirements for service under this Program are met, Electric Generating Equipment may be used to participate under this Program subject to the provisions set forth in section XIII.C.8 below. The participating Direct Participant or Aggregator is responsible for ensuring that the operation of generating equipment under this Program will be in conformance with any governmental limitations on operation.

Participation under this Program is permitted to participants in other programs that provide payment for capacity, such as the NYISO's Special Case Resources ("SCR") Program (or any successor Authority program to the NYISO's SCR Program).

Direct Participants and all customers of an Aggregator must meet the metering requirements specified in Section XIII.C.7.

An Aggregator is responsible for the compliance of all customers it enrolls and will be liable for performance, including, as applicable, repayments to the Authority.

The Authority reserves the right to establish operating procedures and various forms for the implementation of this program. Direct Participants and Aggregators must abide by such operating procedures and utilize such forms to be eligible for participation.

## XIII. Dynamic Load Management C. Distribution Load Relief Program

#### 4. Applications for Participation

- a) Applications for participation under this program must be made electronically. Direct Participants and Aggregators may participate after the Authority's receipt and approval of a completed application. The Authority will accept an application by April 1 for a May 1 commencement date or by May 1 for a June 1 commencement date. However, if the application is received by April 1 and the Authority does not bill the participant monthly using interval metering at the time of application, participation may commence on July 1 provided all conditions in section XIII.C.7. are satisfied.
- b) The desired commencement month must be specified in the application. Applications will not be accepted after the specified date for participation during the current Capability Period. If the first of the month falls on a weekend or holiday, applications will be accepted until the first business day thereafter.
- c) The weather-adjusted CBL will be used as the CBL Verification Methodology for each account number enrolled, unless the application specifies that the average-day CBL is to be used for verification of performance. A single CBL Verification Methodology will be used for each customer to assess both energy (kWh) and demand (kW) Load Relief.
- d) A Direct Participant or Aggregator may apply in writing to change the CBL Verification Methodology, to change the kW of pledged Load Relief, or to terminate service under this Program for the upcoming Capability Period provided the request is received prior to commencing participation for that Capability Period. In order for a Direct Participant or Aggregator to increase its kW of contracted Load Relief in an Authority Designated Area, the Direct Participant's or Aggregator's most recent Performance Factor in that Authority Designated Area must be no less than 1.00.
- e) Each application must state the kW of Load Relief that the Direct Participant or Aggregator contracts to provide for the Load Relief Period. Load Relief of an Aggregator will be measured on a portfolio basis separately for each Authority Designated Area.

#### 5. Load Relief Period Criteria

a. Criteria for Designating a Load Relief Period: If the Authority declares a need for emergency or non-emergency relief, within the limitations described by 40 CFR 63.6640 subparts (f) (2)and (f)(4,) or if a voltage reduction of five percent or greater has been ordered, the Authority may designate such period as a Load Relief Period. The Authority may designate specific feeders or geographical areas in which Load Relief shall be requested.

## C. Distribution Load Relief Program

- 6. Notification by the Authority and Required Response
  - a) The Authority will notify Direct Participants and Aggregators by phone, e-mail, or machine-readable electronic signal, or a combination thereof, of the commencement of a Load Relief Period or Test Event. The Direct Participant or Aggregator will designate in writing an authorized representative and an alternate representative, and include an electronic address if applicable, to receive the notice. If an Aggregator is served under this Program, only the Aggregator will be notified of the Load Relief Period or Test Event. The Aggregator is responsible for notifying all of the customers within its respective aggregation group.
  - b) If the Authority designates a Contingency Event or a Test Event, the Authority will provide advance notice at least 2 hours in advance of the event.
  - c) If the Authority designates an Immediate Event, notice will be given as soon as practicable. Participants are requested to provide Load Relief as soon as they are able.
  - d) Participants are required to participate during all Contracted Hours for all Contingency Events and Immediate Events called by the Authority during the Capability Period, and all Test Events called by the Authority. The Test Event period will not exceed one hour and will not be called between the hours of 12:00 AM and 6:00 AM.

## XIII. Dynamic Load Management C. Distribution Load Relief Program

#### 7. Metering

- a) Participation under this program requires that each participant's entire service be measured by interval metering with communications capability which will also be used by the Authority for monthly billing. All participants designated by an Aggregator must meet the metering and telecommunications requirements specified herein.
- b) If, at the time of application for service under this Program, the Authority does not bill the participant monthly using interval metering, the Customer will arrange with the Authority for the furnishing and installation of interval metering with communications capability to be used for billing, at the participant's expense.
- c) For participation under this program, the metering equipment and communications service must be installed and made operational prior to the Authority's acceptance of a completed application. Participation under this program will commence the first day of the first month within the Capability Period that occurs at least 30 days after both the interval metering and communications service become operational.
- d) The Authority will install interval metering with communications capability within 21 business days. If the Authority misses the installation time frame for a participant, it will make a "Lost Reservation Payment" to the Direct Participant or Aggregator, unless the meter delay was caused by a condition such as a major outage or storm.
- e) A Lost Reservation Payment will be calculated by determining the number of months between the earliest month in which the customer could have begun participation had the meter been installed within the required timeframe (assuming the Authority's acceptance of a completed application and receipt of payment for the meter upgrade) and the first month following the completed installation, and multiplying that number by the pledged kW and associated per-kW Reservation Payment Rate.

## XIII. Dynamic Load Management C. Distribution Load Relief Program

#### 8. Operation of Electric Generating Equipment

- a) Participation by diesel-fired Electric Generating Equipment will be permitted only if the engine for the equipment is model year 2000 or newer. Participation by diesel-fired Electric Generating Equipment will be limited to 20 percent of the total kW enrolled under this Program for the Capability Period. Enrollment by such generators will be accepted on a first come, first served basis. No limit or cap will be placed on the following: natural gasfired rich burn Electric Generating Equipment that incorporates three-way catalyst emission controls; natural gas lean-burn Electric Generating Equipment with an engine of model year of 2000 or newer; or Electric Generating Equipment that has a NOx emission level of no more than 2.96 lb/MWh.
- If a Direct Participant or Aggregator requests to operate Electric Generating Equipment for Load Relief purposes under this program and the Authority has approved the interconnection of such equipment, the application must state generator information, including the unit's serial number, nameplate rating, manufacturer, date of manufacture. fuel type or energy source, the kW enrolled using this equipment, and identification as to whether the unit incorporates three-way catalyst emission controls (natural gas-fired rich burn), a natural gas lean-burn engine of model year 2000 or newer, or a diesel-fired engine of model year 2000 or newer, or whether it has a NOx emission level of no more than 2.96 lb/MWh. If the generating equipment has a NOx emission level of no more than 2.96 lb/MWh, but is not natural gas-fired rich burn generating equipment that incorporates threeway catalyst emission controls, a natural gas lean-burn engine of model year 2000 or newer, or a diesel-fired engine of model year 2000 or newer, written certification by a professional engineer must be contained in the application, including the NOx emission level. Copies of all New York State Department of Environmental Conservation ("DEC") permits must be included with the application. By applying for service under this Program, Direct Participants and Aggregators (on behalf of their customers) agree to permit the Authority to provide information regarding the Electric Generating Equipment to the DEC for its review, subject to the DEC's agreement to keep this information confidential. Furthermore, participants enrolled in a NYISO market-based program offered by the Authority, NYPA or other entity, such as the Day-ahead Demand Response Program or the Demand-Side Ancillary Service Program, must provide the Authority with their NYISO generator identification number, under a confidentiality agreement, and give the Authority the ability to view their market participation activity. This information will be used to verify the times of participation in these other programs to prevent double-payment during concurrent events.

#### C. Distribution Load Relief Program

#### 9. Data Review

- a) The Authority reserves the right to review records and/or operations of any Direct Participant, Aggregator, and customer of an Aggregator, to verify enrollment information and performance associated with any designated Load Relief Period or Test Event called by the Authority.
  - 1) Once the Authority initiates a data review, all payments will be suspended pending the outcome of the review.
  - 2) The Authority will complete its review within 30 days of receipt of all requested data, but no later than December 31 of the calendar year of the Capability Period under review.
  - 3) Any suspended payments will be reinstated if the Authority's review of the data results in a finding that the enrollment and performance information are correct.
- b) If the Authority determines that a Direct Participant, Aggregator, or customer of an Aggregator failed to cooperate fully and promptly with the review and/or did not fully comply with the provisions of this Program and/or provided inaccurate data, the Direct Participant, Aggregator or the customer of the Aggregator will be deemed ineligible to participate in the Program until the issue is rectified. In addition, the Direct Participant or Aggregator will be required to make prompt repayment to the Authority of any overpayments that were made to such Direct Participant or Aggregator, on behalf of its customer, for the Capability Period that was reviewed as well as the current Capability Period, if different.

## XIII. Dynamic Load Management C. Distribution Load Relief Program

#### 10. Reservation Payment

- a) Direct Participants and Aggregators will receive a Reservation Payment for each month during the Capability Period in which they are enrolled, for a maximum of five monthly payments per calendar year. Reservation Payments will be calculated on a monthly basis. Payments will be made by bill credit, check, or wire transfer.
- b) The Reservation Payment rate per kW is based on the number of cumulative Contingency Events and Immediate Events for which the Direct Participant or Aggregator was asked to provide Load Relief during the Capability Period, as follows:
  - (1) The Reservation payment rate varies by location and by the number of times the Direct Participant or Aggregator is asked to provide Load Relief.
  - (2) The Authority reserves the right to identify additional locations and establish corresponding rates for Reservation Payments from time to time based on reports and recommendations from the Authority's staff which will be provided at least annually.
  - (3) The identification of applicable locations and corresponding rates for Reservation Payments will be provided on a Statement of Distribution Load Relief Program Payments to be updated by the Authority following the adoption of a resolution by the Authority's Board of Trustees.
- c) The Reservation Payment per month is equal to the applicable Reservation Payment rate per kW per month multiplied by the kW of contracted Load Relief multiplied by the Performance Factor.
- d) Voluntary Option: Direct Participants or Aggregators that wish to participate on a Voluntary Basis may establish 0 kW of contracted Load Relief.
- e) Direct Participants and Aggregators enrolled in the Commercial System Relief Program will not receive a reservation payment under this program.

### f) Performance Factor

- (1) The Performance Factor for each participant is initially set at 1.00 when the participant enrolls in the program.
- (2) In each subsequent month, the achieved average kW load reduction during a Contingency Event (not to exceed the first 4 hours), an Immediate Event (the highest consecutive 4 hours within the first 6 hours) and Test Event is divided by the contract kW to calculate a new ratio. When more than one Contingency Event, Immediate Event and/or Test Event is called during the month, the average of the Performance Factors of all events for a Direct Participant or Aggregator in each Authority Designated Area is the Performance Factor for that month. If the new monthly ratio is lower than the Performance Factor from the prior month, the Performance Factor is lowered to the new value. If the ratio is higher than the Performance Factor from the prior month, or no Contingency, Immediate or Test events are called in the month, then the Performance Factor continues unchanged from the prior month.
- (3) The Performance Factor is rounded to two decimal places.

# C. Distribution Load Relief Program Reservation Payment (continued)

(4) If the Direct Participant or Aggregator is asked to respond to more than six Contingency Events and/or Immediate Events in a Authority Designated Area during the Capability Period, performance during each event after the sixth event will only be included in the Performance Factor calculation if this would result in a higher Performance Factor.

#### g) Adjustments to the Contract kW

 Direct Participants and Aggregators may increase the kW of contracted Load Relief in subsequent Capability Periods above their previously contracted kW of Load Relief, provided their most recent Performance Factor was 1.00.

#### 11. Performance Payments for Load Relief

- a) Except as specified in section XIII.C.11.d below, the Authority will make a payment to a
  Direct Participant or Aggregator who provides Load Relief during a Contingency Event,
  Immediate Event, or Test Event.
- b) The Performance payment rate may vary by location, type of event, duration of the event, the number of times the Direct Participant or Aggregator is asked to provide Load Relief, and whether the Customer is participating on a voluntary basis.
  - (a) The Performance Payment rate is specified on the Statement of Distribution Load Relief Program Payment.
  - (b) The Authority reserves the right to identify additional locations and establish corresponding rates for Performance Payments from time to time based on reports and recommendations from the Authority's staff which will be provided at least annually.
  - (c) The identification of applicable locations and corresponding rates for Reservation Payments will be provided on a Statement of Distribution Load Relief Program Payments to be updated by the Authority following the adoption of a resolution by the Authority's Board of Trustees.
- c) The Performance Payment amount paid per event is equal to the Performance Payment rate per kWh multiplied by the average hourly kWh of Load Relief provided during the event multiplied by the number of event hours.
- Performance Payments will not be made under this Program if the Direct Participant or Aggregator (on behalf of its customer) receives payment for energy during concurrent Load Relief hours under any other demand response program (e.g., NYISO's Day-ahead Demand Reduction Program or NYISO's Special Case Resources Program). Direct Participants or Aggregators who also participate in the Commercial System Relief Program during concurrent Load Relief hours will not receive Performance Payments under this program.
- e) If an S.C. No. 11 Customer participates in the NYISO market and receives payment for energy during concurrent Load Relief hours, Performance Payments will be made under this Program only for Load Relief in excess of the Customer's CBL, expressed in kWh

## C. Distribution Load Relief Program

#### 12. Testing

- a) The Authority may require a Direct Participant or Aggregator to participate in one or more Test Events, each for a period not to exceed one hour, commencing at a time determined solely at Authority's discretion, but not between the hours of 12:00 AM and 6:00 AM.
- b) The Authority will make a payment for one hour of energy for the Load Relief achieved up to the contracted amount.
- c) For Direct Participants or Aggregators that receive Reservation Payments, results of the Test may affect the Performance Factor and Reservation Payments.

#### LIPA Statement No. 1 DLCP

## **Long Island Power Authority**

## Statement of Direct Load Control Program Payments

Applicable to Participants in the Direct Load Control Program
As set forth in the Tariff for Electric Service

One Time Sign-up Payment	\$85.00
Annual Incentive Payment (applicable after the first year of participation)	\$25.00

Effective: April 1, 2016

## **Long Island Power Authority**

## Statement of Commercial System Relief Program Payments

# Applicable to Participants in the Commercial System Relief Program As set forth in the Tariff for Electric Service

Authority Designated Areas: all locations in the Service Territory except where specified below:

## Reservation Payment (per kW per Month)

Up to four (4) Planned or Test Events per Capability Period More than four (4) Planned or Test Events per Capability Period	\$5.00 \$5.00
Payment for Performance for Load Relief (per kWh)	
For Load Relief provided during the first four (4) hours of a Planned or Test Event	\$0.25

Tot Load Renet provided during the most roat (1) hours of a harmed of rest Event	¥0. <b>2</b> 3
For Load Relief provided beyond the first four (4) hours of a Planned or Test Event	\$0.25
For Load Relief provided during an Unplanned Event	\$0.25
For Load Relief provided on a Voluntary Basis during Planned or Unplanned Events	\$0.25

## Payments in Specifically Designated Areas

The Authority reserves the right to offer different payments for load relief in specifically designated areas of the Service Territory. No such specific areas have been designated at this time.

Effective: April 1, 2016

#### **Long Island Power Authority**

## Statement of Distribution Load Relief Program Payments

Applicable to Direct Participants and Aggregators in the Distribution Load Relief Program

As set forth in the Tariff for Electric Service

Authority Designated Areas: all locations in the Service Territory except where specified below:

### Reservation Payment (per kW per Month)

Up to six (6) Events per Capability Period	\$3.00
Between seven (7) and nine (9) Events per Capability Period	\$3.00
Ten (10) or more Events per Capability Period	\$3.00
Payment for Performance for Load Relief (per kWh)	
For Load Relief provided during the first four (4) hours of an Event	\$0.25

## For Load Relief provided beyond the first four (4) hours of an Event \$0.25 For Load Relief provided on a voluntary basis for all hours of an Event \$0.25

## Payments in Specifically Designated Areas

The Authority reserves the right to offer different payments for load relief in specifically designated areas of the Service Territory. No such specific areas have been designated at this time.

Effective: April 1, 2016