

### 2.7 Billing and Payment

# 2.7.1 ISO as Counterparty; Right to Net or Set Off; ISO Clearing Account

### 2.7.1.1 ISO as Counterparty

The ISO shall be for all purposes the contracting counterparty, in its own name and right, to each Transmission Customer for any purchase or sale of any product or service, or for any other transaction, that is financially settled by the ISO under the ISO Tariffs.

# 2.7.1.2 Right to Net or Set Off Obligations Owed

Unless otherwise specifically set forth in this ISO OATT, if for any settlement period the ISO is required to pay any amount to the Transmission Customer and the Transmission Customer is required to pay any amount to the ISO under this ISO OATT or the ISO Services Tariff, such amounts shall be netted, and the party owing the greater aggregate amount shall pay to the other party the difference between the amounts owed. Additionally, all outstanding payment obligations under this ISO OATT and the ISO Services Tariff between the ISO and the Transmission Customer may be netted, offset, set off, or recouped, and payment shall be owed as set forth above.

#### 2.7.1.3 ISO Clearing Account

The ISO will establish one or more accounts (the "ISO Clearing Account") at a bank or other financial institution, and Transmission Customers shall make payments to the ISO or receive payments from the ISO through the ISO Clearing Account in accordance with their settlement information provided by the ISO as described in Section 2.7.3 of this ISO OATT.

The funds held by the ISO in the ISO Clearing Account shall not be commingled with funds held by the ISO in any other ISO accounts.

## 2.7.1.4 ISO Liability for Payment

The obligation of the ISO to pay Transmission Customers for monies owed for a given settlement period shall be limited so that the aggregate liability of the ISO for such payments does not exceed the sum of (i) the aggregate amount paid to or recovered by the ISO from Transmission Customers (including by applying a defaulting Transmission Customer's financial security) for that settlement period, and (ii) the amount of funds held by the ISO in the Working Capital Fund. The process for declaring and recovering bad debt losses is set forth in Attachment U to this ISO OATT.

# 2.7.2 Determination and Payment of Charges Associated with Transmission Service

This Section 2.7.2 applies to all Transmission Services except Transmission Service pursuant to Grandfathered Agreements listed in Attachment L. Charges applicable to Grandfathered Agreements are described in Attachment K.

#### 2.7.2.1 Transmission Service Charge - General Applicability

The TSC charge is applied to all Actual Energy Withdrawals from the NYS Power System under Part 3 or Part 4 of this Tariff, except for withdrawals by a Transmission Owner to provide bundled retail service or scheduled withdrawals associated with grandfathered transactions as specified in Attachments K and L. The TSC charge also is applied to Transactions to destinations outside the NYCA (Export or Wheel-Through Transactions), except as provided for in Section 2.7.2.1.4 of this Tariff.

Subject to the foregoing, the TSC applies to all Actual Energy Withdrawals regardless of whether the withdrawals occur in conjunction with a Bilateral Transaction or through the purchase of Energy from an LBMP Market. The TSC is payable under this Section regardless of

whether the withdrawal is scheduled under Part 3 or Part 4 of this Tariff. Customers buying Energy from a Transmission Owner as part of a bundled retail rate will pay a portion of the Transmission Owner's transmission revenue requirement as part of their retail rates. Sales to these customers will be included in the billing units used to calculate each Transmission Owner's TSC under this Tariff in accordance with Attachment H.

Transmission Customers who are parties to grandfathered agreements specified in Attachment L will pay the applicable contract rate in those agreements. Revenues from these agreements will be credited against the Transmission Owners' individual revenue requirements in calculating the TSC.

- **2.7.2.1.1 Payable to Transmission Owners:** The TSC will be payable to Transmission Owners, in the manner described below in the remainder of Section 2.7.2.1.
- 2.7.2.1.2 Payable by Retail Access Customers: Retail access customers or LSEs scheduling on their behalf will pay a TSC to their respective Transmission

  Owners under the provisions described in Part 5 of this Tariff. The TSC is payable under Part 5 (Retail Access Service) regardless of whether the LSE takes service under Part 3 (Point-to-Point Service) or Part 4 (Network Integration Service) of this Tariff.

2.7.2.1.3 Payable by LSEs Serving Non-Retail Access Load in NYCA: LSEs serving NYCA Load that is not part of a retail access program, such as customers of municipal electric systems, will pay a TSC to the Transmission Owner in whose Transmission District the Load is located. The TSC shall apply to Actual Energy Withdrawals by the Load, regardless of whether such withdrawals are associated with Transmission Service under Part 3 or Part 4 of this Tariff or purchases from an LBMP Market, whether the withdrawals are scheduled or unscheduled, and regardless of whether the withdrawals were made on the Load's behalf by the LSE or by another Transmission Customer.

### 2.7.2.1.4 Payable by Transmission Customers Scheduling Export or

Wheel-Through Transactions: Transmission Customers scheduling
Transactions to destinations outside the NYCA (Export or Wheel-Through
Transactions) are subject to a TSC as calculated in Attachment H. The TSC
charge shall be eliminated on all Exports and Wheel-Through Transactions
scheduled with the ISO to destinations within the New England Control Area;
provided that the following conditions shall continue to be met: (1) a
Commission approved tariff provision is in effect that provides for unconditional
reciprocal elimination of charges on Exports and Wheel-Through Transactions
from the New England Control Area to the New York Control Area; (2) no
change in the provisions in this Tariff related to Local Furnishing Bonds and
Other Tax Exempt Financing shall be required for the reciprocal elimination of
charges on Export and Wheel-Through Transactions to the New York Control
Area; and (3) the New York Transmission Owners have the ability to fully

recover the revenues related to the charges on Export and Wheel-Through
Transactions that are eliminated. The ISO and the New York Transmission
Owners, jointly or separately, shall have the right to make a Section 205 filing
with the Commission to reimpose the charge on Exports and Wheel-Through
Transactions if at any time any of the foregoing conditions is no longer satisfied.
The ISO will perform the requisite calculation and inform the Transmission
Customer and the applicable Transmission Owner(s) of the TSC charge. The
TSC will be payable by the Transmission Customer directly to the Transmission
Owner(s).

2.7.2.1.5 Payable by Energy Storage Resources: Energy Storage Resources will pay a TSC directly to the Transmission Owner in whose Transmission District the Energy Storage Resource is located for Actual Energy Withdrawals by the Energy Storage Resource when it is not providing a service. An Aggregation containing one or more Energy Storage Resources shall pay a TSC directly to the Transmission Owner in whose Transmission District the Aggregation is located when (i) the Aggregation is not providing a service, and (ii) the sum of the Aggregation's Energy injections and Demand Reductions, less the Aggregation's Energy withdrawals, is negative. However, an Energy Storage Resource that participates as a Co-located Storage Resource will only pay a TSC for net Actual Energy Withdrawals by the combined Co-located Storage Resources. An Energy Storage Resource that participates as a Co-located Storage Resource will not pay a TSC when it receives charging Energy from its co-located Intermittent Power Resource behind the Co-located Storage Resources' shared Point of

Injection/Point of Withdrawal.

For purposes of this Section 2.7.2.1.5, an Energy Storage Resource, and an Aggregation containing one or more Energy Storage Resources, is providing a "service" when it is withdrawing Energy if it also: (1) receives a Real-Time Market schedule for Operating Reserves; or (2) receives a Real-Time Market schedule for Regulation Service; or (3) is a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff; or (4) is dispatched by the ISO as Out-of-Merit to meet NYCA or local system reliability in the same hour.

An Energy Storage Resource, and an Aggregation containing one or more Energy Storage Resources, that submits Bids utilizing the Self-Committed Fixed bidding mode shall pay a TSC for its Actual Energy Withdrawals unless the Energy Storage Resource or Aggregation is either: (a) committed or dispatched by the ISO as Out-of-Merit to withdraw Energy in the same hour to address NYCA or local system reliability concerns, or (b) a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff.

When an Energy Storage Resource, or an Aggregation containing one or more Energy Storage Resources, is subjected to a TSC, the TSC shall be payable regardless of whether the withdrawals are scheduled or unscheduled. The ISO will determine the amount of Actual Energy Withdrawals subject to the TSC charge and provide this information to both the Energy Storage Resource (or, in the case of an Aggregation containing one or more Energy Storage Resources, the Aggregator) and the applicable Transmission Owner. The TSC will be payable

by the Energy Storage Resource (or, in the case of an Aggregation containing one or more Energy Storage Resources, the Aggregator) directly to the Transmission Owner.

### 2.7.2.2 Transmission Usage Charge (TUC)

- 2.7.2.2.1 Payable to the ISO: Transmission Usage Charges include CongestionRents and charges for Marginal Losses. They are payable directly to the ISO.Attachment J explains the calculation of the TUC.
- 2.7.2.2.2 Payable by Transmission Customers Scheduling Transmission
  Service: All Transmission Customers scheduling Transmission Service under
  Part 3 or Part 4 of this Tariff shall pay the applicable TUC charge as calculated in the Attachment J hereto.
- 2.7.2.2.3 Payable by Transmission Owners Scheduling Bilateral Transactions on Behalf of Bundled Retail Customers: Transmission Owners scheduling Transmission Service to supply bundled retail customers shall pay the applicable TUC charge.
- 2.7.2.2.4 Payable by Customers Scheduling Direct LBMP Purchases from the LBMP Market: Any Customer purchasing from the LBMP Market will pay the Congestion Rent and Marginal Losses charge applicable to its location. These Congestion Rent and Marginal Losses charges will be included in the calculation of the LBMP charged by the ISO for the purchase of Energy from the LBMP Market.

# 2.7.2.3 Ancillary Services

**2.7.2.3.1 Payable to the ISO:** All Ancillary Services charges are payable directly

to the ISO.

2.7.2.3.2 Payable by LSEs: All LSEs scheduling Transmission Service under Part 3 or Part 4 or purchases from the LMBP Market to supply Load in the NYCA shall pay Ancillary Services charges as described in Schedules 1 through 6. The charges will be assessed on the basis of all Actual Energy Withdrawals by the Load, regardless of whether such withdrawals are scheduled or unscheduled, and regardless of whether they are scheduled on the Load's behalf by the LSE or by another Transmission Customer. As explained in Schedule 1, in certain circumstances the Schedule 1 charge may vary depending upon the Transmission District in which the Load is located.

#### 2.7.2.3.3 Payable by Customers Scheduling External Transactions:

Transmission Customers scheduling Export or Wheel-Through Transactions to destinations outside the NYCA, or purchases from the LBMP Market to serve Load outside the NYCA shall pay Ancillary Services charges under Schedules 1, 2, 4, and 5 of this Tariff. The charges will be assessed on the basis of all Scheduled Energy Withdrawals from the NYCA.

# 2.7.2.3.4 Payable by Transmission Owners Serving Bundled Retail Customers:

Transmission Owners scheduling Transmission Service or purchases from the LBMP Market to serve of bundled retail customers shall pay the ISO Ancillary Services charges as described in Schedules 1 to 6 based on Actual Energy Withdrawals.

#### 2.7.2.4 NYPA Transmission Adjustment Charge (NTAC)

#### **2.7.2.4.1 Payable to the ISO:** NTAC charges are calculated in Attachment H. All

NTAC charges are payable to the ISO.

- 2.7.2.4.2 Payable by LSEs Serving Load in the NYCA: Each LSE serving Load in the NYCA shall pay an NTAC to the ISO based on the LSE's Actual Energy Withdrawals.
- 2.7.2.4.3 Payable by Transmission Customers Scheduling Export or Wheel-Through Transactions: Transmission Customers scheduling Export or Wheel-Through Transactions shall pay an NTAC based on their Transaction schedules. The NTAC charge shall not apply to Exports and Wheel-Through Transactions scheduled with the ISO to destinations within the New England Control Area provided that the conditions listed in Section 2.7.2.1.4 of this Tariff are satisfied.
- in the NYCA shall pay an NTAC to the ISO based on the Energy Storage
  Resource's Actual Energy Withdrawals when the Energy Storage Resource is not
  providing a service. An Aggregation containing one or more Energy Storage
  Resources shall pay an NTAC to the ISO when (i) the Aggregation is not
  providing a service, and (ii) the sum of the Aggregation's Energy injections and
  Demand Reductions, less the Aggregation's Energy withdrawals, is negative.
  However, an Energy Storage Resource that participates as a Co-located Storage
  Resource will only pay an NTAC for net Actual Energy Withdrawals by the
  combined Co-located Storage Resources. An Energy Storage Resource that
  participates as a Co-located Storage Resource will not pay an NTAC when it
  receives charging Energy from its co-located Intermittent Power Resource behind

the Co-located Storage Resources' shared Point of Injection/Point of Withdrawal.

For purposes of this Section 2.7.2.4.4, an Energy Storage Resource, and an Aggregation containing one or more Energy Storage Resources, is providing a "service" when it is withdrawing Energy if it also: (1) receives a Real-Time Market schedule for Operating Reserves; or (2) receives a Real-Time Market schedule for Regulation Service; or (3) is a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff; or (4) is dispatched by the ISO as Out-of-Merit to meet NYCA or local system reliability in the same hour.

An Energy Storage Resource, and an Aggregation containing one or more Energy Storage Resources, that submits Bids utilizing the Self-Committed Fixed bidding mode shall pay an NTAC for its Actual Energy Withdrawals unless the Energy Storage Resource or Aggregation is either: (a) committed or dispatched by the ISO as Out-of-Merit to withdraw Energy in the same hour to address NYCA or local system reliability concerns, or (b) a qualified Supplier of Voltage Support Service to the ISO in accordance with Section 15.2 of the ISO Services Tariff.

## 2.7.2.5 Reliability Facilities Charge ("RFC") and LIPA RFC

- **2.7.2.5.1 Payable through the ISO:** All RFC and LIPA RFC charges are calculated, collected and payable to the ISO pursuant to Rate Schedule 10.
- 2.7.2.6 CLCPA Facilities Charge ("CFC") and LIPA CFC
- **2.7.2.6.1 Payable to the ISO:** All CFC and LIPA CFC charges are calculated, collected, and payable to the ISO in accordance with the requirements of Rate Schedule 19.
- **2.7.2.6.2 Payable by LSEs Serving Load in the NYCA:** In accordance with the requirements of Rate Schedule 19, each LSE serving Load in the NYCA shall pay CFC and LIPA CFC charges.

# 2.7.3 Billing and Payment Procedures

For purposes of this Section 2.7.3:

- (i) the term "Complete Week Settlement Period" shall mean the seven day period between Saturday and Friday for which all of the days are in the same month; and
- (ii) the term "Stub Week Settlement Period" shall mean the six or fewer day period between Saturday and Friday for which all of the days are in the same month.

#### 2.7.3.1 Billing and Settlement Information

The ISO shall provide settlement and billing information to Transmission Customers.

The ISO shall inform each Transmission Customer that provides or is provided services furnished under this ISO OATT or the ISO Services Tariff of the payments due for such service. Such information shall be made electronically available to the Transmission Customer.

#### 2.7.3.2 Invoicing and Payment

#### 2.7.3.2.1 Weekly Invoice

On or about each Wednesday, as set forth in ISO Procedures, the ISO shall submit an invoice to a Transmission Customer that indicates the net amount owed by or owed to the Transmission Customer for those services furnished under this ISO OATT or the ISO Services

Tariff for the previous Complete Week Settlement Period or Stub Week Settlement Period that are designated as Weekly Invoice Components in ISO Procedures; *provided, however*, that the net amount owed by or owed to the Transmission Customer for those services furnished for a Stub Week Settlement Period that concludes a month shall be included in the next monthly invoice issued in accordance with Section 2.7.3.2.2 of this ISO OATT.

#### 2.7.3.2.2 Monthly Invoice

Within five (5) business days after the first day of each month, the ISO shall submit an invoice to a Transmission Customer that indicates the net amount owed by or owed to the Transmission Customer:

- (i) for those services furnished under this ISO OATT or the ISO Services Tariff for a

  Stub Week Settlement Period that concludes the previous month that are

  designated as Weekly Invoice Components in ISO Procedures;
- (ii) for any adjustments to amounts contained in the weekly invoices issued in the previous month pursuant to Section 2.7.3.2.1 of this ISO OATT;
- (iii) for those services furnished under this ISO OATT or the ISO Services Tariff in the previous month that are designated as Monthly Invoice Components in ISO Procedures;
- (iv) for any adjustments to amounts contained in a previously issued monthly invoice that was issued on or about one hundred twenty (120) days prior to the issuance of this invoice; and
- (v) for any adjustments to amounts contained in a previously issued monthly invoice as part of the Close-Out Settlement of that monthly invoice pursuant to Section 2.7.4.2.2 of this ISO OATT.

## 2.7.3.2.3 Payment by the Transmission Customer

A Transmission Customer owing payments on net in its weekly invoice or its monthly invoice shall make those payments to the ISO through the ISO Clearing Account by the second business day after the date on which the weekly invoice or monthly invoice is rendered by the ISO unless otherwise specified in ISO Procedures. In accordance with Section 2.7.1.2 of this ISO OATT, the ISO may net any overpayment by the Transmission Customer for past estimated charges against current amounts due from the Transmission Customer or, if the Transmission Customer has no outstanding amounts due, the ISO may pay to the Transmission Customer an amount equal to the overpayment.

# 2.7.3.2.4 Payment by the ISO

Except as provided in Section 2.7.1.4 of this ISO OATT, the ISO shall pay all net monies owed to a Transmission Customer in its weekly invoice or its monthly invoice from the ISO Clearing Account by the second business day after the due date for Transmission Customer payments set forth in Section 2.7.3.2.3 of this ISO OATT unless otherwise specified in ISO Procedures.

#### 2.7.3.3 Use of Estimated Data and Meter Data

The ISO may use estimates, including estimated meter data, in whole or in part to settle a weekly or monthly invoice in accordance with ISO Procedures. The ISO shall use meter data submitted to the ISO in accordance with Section 3.16 of this ISO OATT. Any charges based on estimates shall be subject to true-up in invoices subsequently issued by the ISO after the ISO has obtained the requisite actual information, provided that the ISO shall only true-up charges based on meter data prior to the deadline for finalizing the meter data established in Section 2.7.4.2 of this ISO OATT. A trued-up charge shall include interest amounts calculated at the rate set forth

in Section 2.7.4 of this ISO OATT from the weekly or monthly due date for the charge until the date of payment of the trued-up amount for that charge.

#### 2.7.3.4 Method of Payment

All payments by the Transmission Customer shall be made by either (i) wire transfer in immediately available funds payable to the ISO through the ISO Clearing Account or (ii) any other method set forth in ISO Procedures. All payments by the ISO shall be made either (i) by wire transfer in immediately available funds payable to the Transmission Customer by the ISO through the ISO Clearing Account or (ii) any other method set forth in ISO Procedures.

# 2.7.3.5 Verification of Payments

The ISO shall verify that all payments owed by Transmission Customers in accordance with this ISO OATT and the ISO Services Tariff have been paid to the ISO in a timely manner. If a Transmission Customer fails to make a payment within the time period established in Sections 2.7.3.2.1, 2.7.3.2.2, and 2.7.3.6 of this ISO OATT or pays less than the amount due, the ISO shall take measures pursuant to Section 2.7.5 of this ISO OATT. Except as provided in Section 2.7.1.4 of this ISO OATT, the ISO shall also ensure that monies owed to Transmission Customers in accordance with this ISO OATT and the ISO Services Tariff are paid through the ISO Clearing Account in a timely manner.

#### **2.7.3.6** TCC Auction Settlements

Notwithstanding Sections 2.7.3.2.1 and 2.7.3.2.2 of this ISO OATT, the ISO shall make settlements related to the Centralized TCC Auction and the Reconfiguration Auction as set forth in this Section 2.7.3.6.

2.7.3.6.1 The ISO shall submit invoices to, and make settlements with, Transmission

Owners in connection with the allocation of Net Auction Revenues in accordance with the timeline set forth in ISO Procedures.

2.7.3.6.2 Transmission Customers owing payments to the ISO as a result of their activity in or related to a Centralized TCC Auction or Reconfiguration Auction, pursuant to an award notice or a comparable invoice rendered by the ISO, shall make those payments to the ISO through the ISO Clearing Account in accordance with the timeline set forth in ISO Procedures.

2.7.3.6.3 Except as provided in Section 2.7.1.4 of this ISO OATT, the ISO shall pay all net monies owed to Transmission Customers as a result of their activity in or related to a Centralized TCC Auction or a Reconfiguration Auction, pursuant to an award notice or a comparable invoice rendered by the ISO, from the ISO Clearing Account in accordance with ISO Procedures.

2.7.3.6.4 Sections 2.7.3.1, 2.7.3.3, 2.7.3.4 and 2.7.3.5 of this ISO OATT and Section 19.9.6 of Attachment M of this ISO OATT shall apply to settlements calculated in accordance with this Section 2.7.3.6.

#### 2.7.3.7 Settlement Information and Billing Procedures for TSCs

The ISO shall provide each Member System with information to facilitate TSC billing.

Settlement information and billing procedures for payments of the TSC by retail access customers or LSEs serving retail access customers in accordance with Section 5 of this ISO OATT shall be separately issued, paid and collected in accordance with Section 5 of this ISO OATT. Settlement information and billing procedures for payments for TSCs for customers other than retail access customers and LSEs serving retail access customers shall be separately issued, paid and collected in accordance with the terms and conditions set forth in Attachment H of this ISO OATT in accordance with Section 5 of this ISO OATT.

# 2.7.3.8 Billing Procedures for Retail Access Programs

The billing procedures for customers participating in retail access programs shall be in accordance with Section 5 of this ISO OATT.

### 2.7.4 Interest on Unpaid Balances:

Interest on any unpaid amount whether owed to a Transmission Customer or to the ISO (including amounts placed in escrow) shall be calculated in accordance with the methodology specified for interest on refunds in the Commission's regulations at 18 C.F.R. § 35.19a (a)-(2) (iii). Interest on unpaid amounts shall be calculated from the due date of the bill to the date of payment. Invoices shall be considered as having been paid on the date of receipt of payment by the ISO.

If the ISO is unable to provide settlement information on time due to the actions or inactions of the Transmission Customer, in addition to any other remedies the ISO may have at law or in equity, the Transmission Customer shall pay interest on amounts due, as calculated above, from the first day of the Billing Period following the Billing Period in which charges are accrued, to the time of payment of those charges.

#### 2.7.4.1 Billing Disputes:

This Section 2.7.4.1 establishes the process and timeframe for review, challenge, and correction of Transmission Customer invoices. For purposes of this Section 2.7.4.1, any deadline that falls on a Saturday, Sunday, or holiday for which the ISO is closed shall be observed on the ISO's next business day.

For purposes of this Section 2.7.4.1, "finalized" data and invoices shall not be subject to further correction, including by the ISO, except as ordered by the Commission or a court of competent jurisdiction; *provided, however*, that nothing herein shall be construed to restrict any

stakeholder's right to seek redress from the Commission in accordance with the Federal Power Act.

#### 2.7.4.2 Settlement Cycle for Services Furnished On and After January 1, 2009

# 2.7.4.2.1 ISO Corrections or Adjustments and Transmission Customer Challenges to the Accuracy of Settlement Information

Settlement information for services furnished beginning January 1, 2009, and thereafter shall be subject to review, comment, and challenge by a Transmission Customer and correction or adjustment by the ISO for errors at any time for up to five (5) months from the date of the initial invoice for the month in which service is rendered as set forth in Section 2.7.3.2.2 of this ISO OATT and as further provided in Section 2.7.4.2.2, subject to the following requirements and limitations:

- A Supplier or meter authority may review, comment on, and challenge

  Aggregation, Generator, tie-line, and sub-zone Load metering data for fifty-five

  (55) days from the date of the initial invoice for the month in which service is

  rendered. Following this review period, the ISO shall then have five (5) days to

  process and correct Aggregation, Generator, tie-line, and sub-zone Load metering

  data, after which time it shall be finalized.
- (ii) The meter authority shall provide to the ISO all LSE bus metering data then available within seventy (70) days from the date of the initial invoice and shall provide any necessary updates to the LSE bus metering data as soon as possible thereafter. The ISO shall post all available LSE bus metering data within approximately seventy-five (75) days from the date of the initial invoice and shall continue to post incoming LSE bus metering data as soon as practicable after it is received.

- (iii) The ISO shall post advisory settlement information, including available LSE bus metering data, within ninety (90) days from the date of the initial\_invoice.

  Transmission Customers may review, comment on, and challenge this settlement information, except for Aggregation, Generator, tie-line, and sub-zone Load metering data, after which the ISO shall process and correct the data and issue a corrected invoice with the regular monthly invoice issued on or about one hundred twenty (120) days from the date of the initial invoice. Following the ISO's issuance of a corrected invoice, Transmission Customers may continue to review, comment on, and challenge their settlement information, excepting Aggregation, Generator, tie-line, and sub-zone Load metering data, until the end of the five-month review period.
- LSE bus metering data within one hundred thirty (130) days from the date of the initial invoice. The ISO shall then post any updated and corrected LSE bus metering data within one hundred thirty-five (135) days from the date of the initial invoice. Transmission Customers may then review, comment on, and challenge the LSE bus metering data for an additional ten (10) days. Following this review period, the ISO shall have five (5) days to process and correct the LSE bus metering data, after which it shall be finalized.

The ISO shall use reasonable means to post metering revisions for review by

Transmission Customers and to notify Transmission Customers of the approaching expiration of
review periods. To challenge settlement information contained in an invoice, a Transmission

Customer shall first make payment in full, including any amounts in dispute. Transmission

Customer challenges to settlement information shall: (i) be submitted to the ISO in writing, (ii) be clearly identified as a settlement challenge, (iii) state the basis for the Transmission Customer's challenge, and (iv) include supporting documentation, if applicable. The ISO shall notify all Transmission Customers of errors identified and the details of corrections or adjustments made pursuant to this Section 2.7.4.2.1.

#### 2.7.4.2.2 Review and Correction of Challenged Invoices

The ISO shall evaluate a settlement challenge as soon as possible within two (2) months following the conclusion of the challenge period specified in Section 2.7.4.2.1; *provided, however,* the ISO may, upon notice to Transmission Customers within this time of extraordinary circumstances requiring a longer evaluation period, take up to six (6) months to evaluate a settlement challenge. The ISO shall not be limited to the scope of Transmission Customer challenges in its review of a challenged invoice and may, at its discretion, review and correct any other elements and intervals of a challenged invoice, except Load and meter data as specified in Section 2.7.4.2.1. Corrections to a challenged invoice shall be applied to all Transmission Customers that were or should have been affected by the original settlement and shall not be limited to the Transmission Customer challenging the invoice; *provided, however,* that the ISO may recover *de minimis* amounts or amounts that the ISO is unable to collect from individual Transmission Customers through Rate Schedule 1 of this ISO OATT.

Upon completing its evaluation, the ISO shall provide written notice to the challenging
Transmission Customer of the ISO's final determination regarding the Transmission Customer's
settlement challenge. If the ISO determines that corrections or adjustments to a challenged
invoice are necessary and can quantify them with reasonable certainty, the ISO shall provide all
Transmission Customers with the details of the corrections or adjustments within the timeframe

established in this Section 2.7.4.2.2. The ISO shall then provide a period of twenty-five (25) days for Transmission Customers to review the corrected settlement information and provide comments to the ISO regarding the implementation of those corrections or adjustments; *provided, however*, that in the event of a dispute resolution proceeding conducted in accordance with Section 2.7.4.3 of this ISO OATT, this twenty-five (25) day period shall not start or, if it has already started, shall be suspended until the conclusion of the dispute resolution proceeding. Following the conclusion of the dispute resolution proceeding, the ISO shall make any corrections to Transmission Customers' settlement invoices that it determines to be necessary and shall then start or re-start the twenty-five (25) day Transmission Customer comment period.

If no errors in the implementation of corrections or adjustments are identified during the twenty-five (25) day Transmission Customer comment period, the ISO shall issue a finalized close-out settlement ("Close-Out Settlement"), clearly identified as such, in the next regular monthly billing invoice. If an error in the implementation of a correction or adjustment is identified during the twenty-five (25) day Transmission Customer comment period, the ISO shall have one (1) month to make such further corrections as are necessary to address the error and provide Transmission Customers with one additional period of twenty-five (25) days to review and comment on the implementation of those further corrections. If an error in the implementation of those further corrections is identified, the ISO shall then have one (1) month to make any final corrections that are necessary and shall issue a finalized Close-Out Settlement in the next regular monthly billing invoice.

# 2.7.4.3 Expedited Dispute Resolution Procedures for Unresolved Settlement Challenges

#### 2.7.4.3.1 Applicability of Expedited Dispute Resolution Procedures

This Section 2.7.4.3 establishes expedited dispute resolution procedures applicable to

address any dispute between a Transmission Customer and the ISO regarding a Transmission Customer settlement that was not resolved in the ordinary settlement review, challenge, and correction process; *provided, however*, that nothing herein shall restrict a Transmission Customer or the ISO from seeking redress from the Commission in accordance with the Federal Power Act.

A Transmission Customer may request expedited dispute resolution if it has previously presented a settlement challenge consistent with the requirements of Section 2.7.4.2.1 of this ISO OATT and has received from the ISO a final, written determination regarding the settlement challenge pursuant to Section 2.7.4.2.2 of this ISO OATT. The scope of an expedited dispute resolution proceeding shall be limited to the subject matter of the Transmission Customer's prior settlement challenge. Transmission Customer challenges regarding Aggregation, Generator, tieline, sub-zone Load, and LSE bus metering data shall not be eligible for formal dispute resolution proceedings under this ISO OATT. To ensure consistent treatment of disputes, separate requests for expedited dispute resolution regarding the same issue and the same service month or months may be resolved on a consolidated basis, consistent with applicable confidentiality requirements.

# 2.7.4.3.2 Initiation of Expedited Dispute Resolution Proceeding

To initiate an expedited dispute resolution proceeding, a Transmission Customer shall submit a written request to the ISO Chief Financial Officer within eleven (11) business days from the date that the ISO issues a final, written determination regarding a Transmission Customer settlement challenge pursuant to Section 2.7.4.2.2 of this ISO OATT. A Transmission Customer's written request for expedited dispute resolution shall contain: (i) the name of the Transmission Customer making the request, (ii) an indication of other potentially affected parties, to the extent known, (iii) an estimate of the amount in controversy, (iv) a description of

the Transmission Customer's claim with sufficient detail to enable the ISO to determine whether the claim is within the subject matter of a settlement challenge previously submitted by the Transmission Customer, (v) copies of the settlement challenge materials previously submitted by the Transmission Customer to the ISO, and (vi) citations to the ISO Tariffs and other relevant materials upon which the Transmission Customer's settlement challenge relies.

The ISO Chief Financial Officer shall acknowledge in writing receipt of the Transmission Customer's request to initiate an expedited dispute resolution proceeding. If the ISO determines that the proceeding would be likely to aid in the resolution of the dispute, the ISO shall accept the Transmission Customer's request and provide written notice of the proceeding to all Transmission Customers through the ordinary means of communication for settlement issues. The ISO shall provide written notice to the Transmission Customer in the event that the ISO declines its request for expedited dispute resolution.

### 2.7.4.3.3 Participation by Other Interested Transmission Customers

Any Transmission Customer with rights or interests that would be materially affected by the outcome of an expedited dispute resolution proceeding may participate; *provided, however*, that a Transmission Customer seeking or supporting a change to the NYISO's determination regarding a Transmission Customer settlement challenge must have previously raised the issue in a settlement challenge consistent with the requirements of Section 2.7.4.2.1 of this ISO OATT. To participate, such Transmission Customer shall submit to the ISO Chief Financial Officer a written request to participate that meets the requirements for an initiating request for expedited dispute resolution within eleven (11) business days from the date that the ISO issues notice of the expedited dispute resolution proceeding. If the ISO determines that the Transmission Customer has met the requirements of this Section 2.7.4.3.3, the ISO will accept the Transmission

Customer's request to participate in the dispute resolution proceeding.

#### 2.7.4.3.4 Selection of a Neutral

As soon as reasonably possible following the ISO's acceptance of a Transmission Customer's request for expedited dispute resolution under Section 2.7.4.3.2, the ISO shall appoint a neutral to preside over the proceeding by randomly selecting from a list (i) provided to the ISO by the American Arbitration Association or (ii) developed by the ISO with input from the appropriate stakeholder committee, until an available neutral is found. To the extent possible, the neutral shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues and the financial settlement of electric markets.

No person shall be eligible to act as a neutral who is a past or present officer, employee, or consultant to any of the disputing parties, or of an entity related to or affiliated with any of the disputing parties, or is otherwise interested in the matter in dispute except upon the express written consent of the parties. Any individual appointed as a neutral shall make known to the disputing parties any such disqualifying relationship or interest and a new neutral shall be appointed, unless express written consent is provided by each party.

#### 2.7.4.3.5 Conduct of the Expedited Dispute Resolution Proceeding

The neutral shall schedule the initial meeting of the disputing parties within five (5) business days of appointment. Except as otherwise provided in this Section 2.7.4.3, the neutral shall have discretion over the conduct of the dispute resolution process including, but not limited to: (i) requiring the disputing parties to meet for discussion, (ii) allowing or requiring written submissions, (iii) establishing guidelines for such written submissions, and (iv) allowing the participation of Transmission Customers that have requested an opportunity to be heard.

Within sixty (60) days of the appointment of the neutral, if the dispute has not been

resolved, the neutral shall provide the disputing parties with a written, confidential, and non-binding recommendation for resolving the dispute. The disputing parties shall then meet in an attempt to resolve the dispute in light of the neutral's recommendation. If the disputing parties have not resolved the dispute within ten (10) days of receipt of the neutral's recommendation, the dispute resolution process will be concluded.

Neither the recommendation of the neutral, nor statements made by the neutral or any party, including the ISO, or their representatives, nor written submissions prepared for the dispute resolution process, shall be admissible for any purpose in any proceeding.

#### 2.7.4.3.6 Allocation of Costs

Each party to a dispute resolution proceeding shall be responsible for its own costs incurred during the process and for a pro rata share of the costs of a neutral.

#### 2.7.5 Customer Default

#### 2.7.5.1 Events of Default

A Transmission Customer shall be in default, upon written notice from the ISO, in the event that: (i) the Transmission Customer fails to timely make a payment due to the ISO, regardless of whether such payment obligation is in dispute, (ii) the Transmission Customer fails to comply with the ISO's creditworthiness requirements, or (iii) the Transmission Customer fails to cure its default in another independent system operator/regional transmission organization market. In the event of a billing dispute between the ISO and the Transmission Customer, the ISO will continue to provide service under the Service Agreement as long as the Transmission Customer continues to make all payments.

#### 2.7.5.2 Cure

Unless otherwise provided in Attachment W to this OATT, a Transmission Customer

shall have one (1) business day to cure a default resulting from its failure to timely make a payment due to the ISO. A Transmission Customer shall have two (2) business days to cure a default resulting from its failure to comply with the ISO's creditworthiness requirements; provided, however, that a Transmission Customer shall have one (1) business day to cure a default resulting from its failure to comply with the ISO's creditworthiness requirements following termination of a Prepayment Agreement.

#### **2.7.5.3 ISO** Remedies

In addition to any and all other remedies available under the ISO Tariffs or pursuant to law or equity, the ISO shall have the following remedies:

- period, the ISO may terminate service to a Transmission Customer immediately upon notice to the Commission. In addition, in the event of a payment default, the ISO shall have the sole and exclusive right to initiate debt collection procedures against a Transmission Customer on account of any such default. The process for declaring and recovering bad debt losses is set forth in Attachment U to this OATT.
- (ii) Financial Distress. In the event of a reduction in the amount of a Transmission Customer's Unsecured Credit (a) by fifty percent (50%) or more as determined in accordance with Section 26.5 of Attachment K to the ISO Services Tariff, or (b) as a result of a material adverse change as determined in accordance with Section 26.14 of Attachment K to the ISO Services Tariff, then the ISO shall have the right to: (1) immediately issue an invoice to such Transmission Customer requiring payment within two (2) business days from the invoice date for initial

settlements representing the sum of that Billing Period's daily billing data available as of the invoice date, and/or (2) require such Transmission Customer to prepay estimated charges weekly for up to twelve months in accordance with ISO Procedures.

- (iii) Default in Another ISO/RTO. In the event a Transmission Customer fails to cure its default in another independent system operator/regional transmission organization market, then the ISO shall have the right to: (1) demand immediate payment by the Transmission Customer to the ISO for any amounts owed as of the date of the demand, and/or (2) require the Transmission Customer to prepay estimated charges weekly for a minimum of twelve months in accordance with ISO Procedures, and/or (3) reduce or eliminate the amount of the Transmission Customer's Unsecured Credit.
- (iv) Two Late Payments. In the event a Transmission Customer fails to pay its invoice when due on two occasions within a rolling twelve (12) month period, then the ISO shall have the right to: (1) require the Transmission Customer to prepay estimated charges weekly, based on the charges incurred by the Transmission Customer in the previous week, for up to twelve months, and/or (2) reduce or eliminate the amount of the Transmission Customer's Unsecured Credit for up to twelve (12) months.

#### 2.7.5.4 Notice to Transmission Customers

The ISO shall notify all Transmission Customers in the event that a Transmission

Customer is in default and shall also notify all Transmission Customers in the event that the

Transmission Customer subsequently cures the default or the ISO terminates the Transmission

Customer due to the default. In the event of a payment default or creditworthiness default, the ISO will disclose in its notice to Transmission Customers the approximate amount of the default as follows:

Default Amount	Type of Default	
Range	Payment	Creditworthiness
\$0 to \$100,000		
\$100,001 to \$500,000		
\$500,001 to \$1,000,000		
\$1,000,001 to \$5,000,000		
\$5,000,001 to \$10,000,000		
> \$10,000,000		

In addition, in the event of a payment default, unless otherwise precluded, the ISO will also disclose the amount and type of collateral, if any, held by the ISO to secure the defaulting Transmission Customer's obligations to the ISO.

#### 2.7.6 Stranded Costs

The Transmission Owners other than NYPA may seek to recover stranded costs from the Transmission Customer pursuant to this Tariff in accordance with the terms, conditions and procedures set forth in Commission Order No. 888. However, the Transmission Owners must separately file any proposal to recover stranded costs under Section 205 of the FPA. This provision shall not supersede or otherwise affect a Transmission Owner's right to recover stranded costs under other authority. To the extent that LIPA's rates for service are established by LIPA's Board of Trustees pursuant to Article 5, Title 1-A of the New York Public Authorities Law, Sections 1020-f(u) and 1020-s and are not subject to Commission and/or PSC jurisdiction, LIPA's recovery of stranded costs will not be subject to the foregoing requirements.

Upon filing of a proposal to recover stranded costs under the FPA, the Transmission

Owner shall immediately provide the ISO with a copy of the appropriate rate schedule which

will be incorporated as a new Stranded Service and Point-to-Point Service Customers and remit the collected amounts to the applicable Transmission Owner(s). Any SIRC rate schedule developed by LIPA under this Tariff will be effective upon receipt by the ISO, subject to any applicable laws and orders.

# 24 Attachment R - Cost Allocation and Measurement and Verification Methodologies for Demand Reductions by Distributed Energy Resources in a DER Aggregation

# 24.1 Cost Allocation Methodology for Demand Reductions Recovered Pursuant to Schedule 1

The "Schedule 1 Program Costs" for verified Actual Demand Reductions by DER Aggregations participating in the Energy and Ancillary Services Markets shall be equal to the Supplier payments for Demand Reductions calculated in accordance with ISO Services Tariff Section 4.5.2.

The "Schedule 1 Program Costs" for verified Demand Reductions by DER Aggregations participating in the Energy and Ancillary Services Markets shall be allocated to Transmission Customers, pursuant to the methodology set forth below, on the basis of their Load Ratio Shares and in proportion to the probability, given historical transmission congestion patterns, that a particular Demand Reduction will benefit them by reducing Energy costs in their Load Zones or "Composite Load Zones" (see below).

More specifically, Schedule 1 Program Costs shall be allocated to Transmission Customers each Billing Period as follows:

- Schedule 1 Program Costs shall initially be attributed to the Load Zone where the
   Transmission Node used to Bid the associated Demand Reduction is located.
- In determining whether and how Transmission Customers located in particular

  Load Zones, or Composite Load Zones, have benefited from the Energy provided

  by Demand Reduction, and how much they shall be required to pay a share of the

  associated Schedule 1 Program Costs, the ISO shall account for the effects of

  congestion at the most frequently constrained NYCA interfaces. When none of

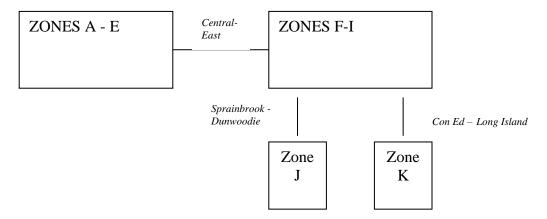
  these interfaces are constrained Transmission Customers in all Load Zones shall

be deemed to have benefited from the Energy provided by Demand Reduction and shall pay a share of the associated Schedule 1 Program Costs. When one or more of the most frequently constrained NYCA interfaces is constrained, then Transmission Customers located in a Load Zone, or Composite Load Zone, that is upstream of the constrained interface, shall be deemed to have benefited from the upstream Energy provided by Demand Reduction and shall be required to pay a share of the associated Schedule 1 Program Costs. Similarly, when one or more of the interfaces is congested, Transmission Customers located in a Load Zone, or Composite Load Zone, that is downstream of a constrained interface, shall be deemed to have benefited from the downstream Energy Provided by Demand Reduction and shall be required to pay a share of the associated Schedule 1 Program Costs. By contrast, Transmission Customers that are "separated" from the Energy provided by Demand Reduction by a constrained interface shall be deemed not to have benefited from it and shall not be required to pay a share of the associated Schedule 1 Program Costs.

c) The ISO shall determine the extent of congestion at the most frequently constrained interfaces using a series of equations that calculate the static probability that: (i) no constraints existed in the transmission system serving the Load Zone or Composite Load Zone; (ii) the Composite Load Zone was upstream of a constraint and Energy provided by Demand Reduction occurred upstream, and (iii) the Composite Load Zone was downstream of a constraint and Energy provided by Demand Reduction occurred downstream.

- Costs shall be allocated to each Transmission Customer that is deemed to have benefited from the verified Demand Reduction on a Load Ratio Share basis, using Real-Time metered hourly Load data.
- d) The three interfaces that will be used for this cost allocation are the "Central-East" interface, which divides western from eastern New York State, the Sprainbrook-Dunwoodie interface, which divides New York City and Long Island from the rest of New York State, and the Consolidated Edison Company ("ConEd") Long Island interface (including the Y49/Y50 lines), which divides New York City from Long Island Given these limiting interfaces, four Composite Load Zones currently exist, *i.e.*, West of Central-East (Load Zones A, B, C, D, E,), East Upstate Excluding New York City and Long Island (Load Zones F, G, H, I), New York City (Load Zone J), and Long Island (Load Zone K). The geographic configuration of these Composite Load Zones is depicted in the illustration below.

#### Relationship Between Frequently Constrained Interfaces and Composite Load Zones



Based on these factors, Schedule 1 Program Costs shall be allocated to Transmission Customers as follows:

For Transmission Customer m in Load Zones A-E:

```
a_1 * (cost_A + ... + cost_K) * load_m / (load_A + ... + load_K) +
                                                                                       'no constraints
a_2 * (cost_A + ... + cost_E) * load_m / (load_A + ... + load_E) +
                                                                                'Central East const
a_3 * (cost_A + ... + cost_I + cost_K) * load_m / (load_A + ... + load_I + load_K) +
                                                                                      'NYC constraint
a_4 * (cost_A + ... + cost_J) * load_m / (load_A + ... + load_J) +
                                                                                       'LI constraint
a_5 * (cost_A + ... + cost_E) * load_m / (load_A + ... + load_E) +
                                                                                   'Cent East + NYC
a_6 * (cost_A + ... + cost_E) * load_m / (load_A + ... + load_E) +
                                                                                      'Cent East + LI
a_7 * (cost_A + ... + cost_I) * load_m / (load_A + ... + load_I) +
                                                                                            'NYC + LI
a_8 * (cost_A + ... + cost_E) * load_m / (load_A + ... + load_E)
                                                                              'Cent East + NYC + LI
```

#### For Transmission Customer m in Load Zones F-I:

```
a_1 * (cost_A + ... + cost_K) * load_m / (load_A + ... + load_K) +
                                                                                             'no constraints
a_2 * (cost_F + ... + cost_K) * load_m / (load_F + ... + load_K) +
                                                                                          'Central East const
a_3 * (cost_A + ... + cost_I + cost_K) * load_m / (load_A + ... + load_I + load_K) + ... + load_I + load_K) + ... + load_I + load_K
                                                                                              'NYC constraint
a_4 * (cost_A + ... + cost_J) * load_m / (load_A + ... + load_J) +
                                                                                               'LI constraint
a_5 * (cost_F + ... + cost_I + cost_K) * load_m / (load_F + ... + load_I + load_K) +
                                                                                             'Cent East + NYC
a_6 * (cost_F + ... + cost_J) * load_m / (load_F + ... + load_J) +
                                                                                             'Cent East + LI
a_7 * (cost_A + ... + cost_I) * load_m / (load_A + ... + load_I) +
                                                                                                  'NYC + LI
a_8 * (cost_F + ... + cost_I) * load_m / (load_F + ... + load_I)
                                                                                      'Cent East + NYC + LI
```

#### For Transmission Customer m in Load Zone J:

```
a_1 * (cost_A + ... + cost_K) * load_m / (load_A + ... + load_K) +
                                                                                          'no constraints
a_2 * (cost_F + ... + cost_K) * load_m / (load_F + ... + load_K) +
                                                                                      'Central East const
a_3 * cost_J * load_m / load_J +
                                                                                     'NYC constraint
a_4 * (cost_A + ... + cost_J) * load_m / (load_A + ... + load_J) +
                                                                                            'LI constraint
a_5 * cost_J * load_m / load_J +
                                                                                 'Cent East + NYC
a_6 * (cost_F + ... + cost_J) * load_m / (load_F + ... + load_J) +
                                                                                         'Cent East + LI
a_7 * cost_J * load_m / load_J +
                                                                                            'NYC + LI
a<sub>8</sub> * cost<sub>J</sub> * load<sub>m</sub> / load<sub>J</sub>
                                                                              'Cent East + NYC + LI
```

#### For Transmission Customer m in Load Zone K:

```
a_1 * (cost_A + ... + cost_K) * load_m / (load_A + ... + load_K) +
                                                                                                'no constraints
a_2 * (cost_F + ... + cost_K) * load_m / (load_F + ... + load_K) +
                                                                                          'Central East const
a_3 * (cost_A + ... + cost_I + cost_K) * load_m / (load_A + ... + load_I + load_K) +
                                                                                                   'NYC constraint
a_4 * cost_K * load_m / load_K +
                                                                                                  'LI constraint
a_5 * (cost_F + ... + cost_I + cost_K) * load_m / (load_F + ... + load_I + load_K) +
                                                                                                 'Cent East + NYC
a_6 * cost_K * load_m / load_K +
                                                                                               'Cent East + LI
a<sub>7</sub> * cost<sub>K</sub> * load<sub>m</sub> / load<sub>K</sub> +
                                                                                                   'NYC + LI
a<sub>8</sub> * cost<sub>K</sub> * load<sub>m</sub> / load<sub>K</sub>
                                                                                    'Cent East + LI + NYC
```

#### In all cases, the variables are:

- $a_1 =$  fraction of time when no constraints exist
- a<sub>2</sub> = fraction of time when Central East interface alone is constraining
- a<sub>3</sub> = fraction of time when Sprainbrook-Dunwoodie interface alone is constraining
- a<sub>4</sub> = fraction of time when Con Ed-Long Island (including the Y49/Y50 lines) interfaces are constraining, but Central East and Sprainbrook-Dunwoodie

- interfaces are not constraining
- as = fraction of time when Central East and Sprainbrook-Dunwoodie interfaces are constraining but Con Ed-Long Island (including the Y49 and Y50 lines) interfaces are not constraining
- a<sub>6</sub> = fraction of time when Central East, Con Ed-Long Island interfaces (including the Y49/Y50 lines) are constraining but the Sprainbrook-Dunwoodie interface is not constraining
- a<sub>7</sub> = fraction of time when Sprainbrook-Dunwoodie, Con Ed-Long Island interfaces (including the Y49/Y50 lines) are constraining but the Central East interface is not constraining
- a<sub>8</sub> = fraction of time when Central East, Sprainbrook-Dunwoodie, Con Ed-Long Island interfaces (including the Y49/Y50 lines) are constraining
- cost<sub>A...K</sub> = revenue deficiencies due toDER Aggregation Demand Reductions in Load Zones A...K, calculated on a hourly basis
- $load_m =$  real-time Load for Transmission Customer m, calculated on an hourly basis  $load_{A...K} =$  real-time Loads for all Transmission Customers in Load Zones A...K, calculated on an hourly basis

# 24.2 Measurement of Actual Demand Reduction of Individual Distributed Energy Resources within a DER Aggregation

For the purposes of Demand Reduction calculations described in this Section, the metered load values of Distributed Energy Resources shall be zero or greater. The measured amount of Demand Reduction for each 6-second interval by an individual Distributed Energy Resource within a DER Aggregation which is dispatched for Energy with no Regulation Service shall be the greater of: (i) the Distributed Energy Resource's adjusted Economic Customer Baseline Load ("ECBL") for each five-minute interval, which shall be calculated in accordance with section 24.2.1 and ISO Procedures, minus the telemetered load for each 6-second interval and (ii) zero.

The measured amount of Demand Reduction for each 6-second interval by an individual Distributed Energy Resource within a DER Aggregation which is dispatched for Regulation Service shall be the greater of: (i) the Distributed Energy Resource's Baseline Load for each 6-second interval of Regulation Service, which shall be calculated in accordance with section

24.2.2 and ISO Procedures, minus the Distributed Energy Resource's telemetered load for each 6-second interval and (ii) zero.

The amount of Demand Reduction supplied by a DER Aggregation shall be the sum of Demand Reductions from each individual Distributed Energy Resource within the DER Aggregation. Aggregators shall provide to the ISO DER Aggregation Demand Reductions for (i) each 6-second interval using real-time telemetry in accordance with Services Tariff Section 13 and the ISO Procedures, and (ii) each hour using revenue-quality meter data pursuant to this section 24.2, and in accordance with the ISO Procedures.

# 24.2.1 Methodology for the Calculating the Economic Customer Baseline Load for a Distributed Energy Resource within a DER Aggregation during Intervals with no Regulation Service Dispatch

The ISO shall employ two different calculation methodologies of the Economic Customer Baseline Load ("ECBL") for Demand Reductions, depending on whether the Demand Reduction is on a weekend or a weekday, during the intervals with no Regulation Service dispatch for the DER Aggregation. A Demand Side Resource's six-second telemetry data, normalized into five-minute intervals, shall be used in each ECBL calculation methodology.

#### **24.2.1.1 Definitions**

**Adjusted Weekday ECBL**: For each five-minute interval, the Adjusted Weekday ECBL shall be equal to the sum of the ECBL and the ECBL In-Day Adjustment Factor.

**ECBL In-Day Adjustment Factor**: The ECBL In-Day Adjustment shall be an adjustment that is applied to the ECBL for each five-minute interval.

a) Calculate the ECBL In-Day Adjustment by subtracting the average of the ECBL over the three five-minute intervals of the ECBL In-Day Adjustment Period from

the average of the telemetered load for the same three five-minute intervals, provided that (i) the DER Aggregation was not dispatched for Energy and/or Regulation Service during any of three five-minute intervals of the ECBL In-Day Adjustment Period, or (ii) the DER Aggregation was dispatched for Energy and/or Regulation Service during one or more of the three five-minute intervals of the ECBL In-Day Adjustment Period, but the LBMP for each of those intervals was less than the applicable Monthly Net Benefits Threshold.

- b) If the DER Aggregation was dispatched for Energy and/or Regulation Service during one or more of the three five-minute intervals of the ECBL In-Day Adjustment Period and the LBMP for the interval(s) was equal to or exceeded the applicable Monthly Net Benefits Threshold, calculate the ECBL In-Day Adjustment in step (a) above and add the measured Demand Reduction to the metered Load as the Proxy Load value for one or more of the three five-minute intervals of the ECBL In-Day Adjustment Period in which the DER Aggregation was dispatched for Energy and/or Regulation Service.
- c) The ECBL In-Day Adjustment shall be limited to  $\pm$  20% of the ECBL value for the five-minute interval it is applied to.

ECBL In-Day Adjustment Period: The ECBL Adjustment Period is the time prior to the Demand Reduction period that is used to determine the ECBL In-Day Adjustment. The intervals to be used in the ECBL Adjustment Period shall be the three consecutive five-minute intervals starting 60 minutes prior to the first operating interval of dispatch and ending 45 minutes prior to the operating interval of dispatch. All the subsequent intervals of uninterrupted dispatch following the first interval of dispatch shall use the same ECBL In-Day Adjustment Period. The

ECBL In-Day Adjustment Period shall be recalculated for every interval of dispatch which is preceded by an interval of non-dispatch.

**ECBL Weekday Window**: The ECBL Weekday Window is the time period reviewed in determining the ECBL for any five-minute interval that takes place on a weekday. It shall consist of the like-kind-five-minute intervals from the previous ten weekdays that correspond to each five-minute interval that is being calculated. Treatment of NERC holidays that occur on weekdays shall be equivalent to all intervals that take place on the weekend.

ECBL Weekend Window: The ECBL Weekend Window is the time period reviewed in determining the ECBL for any five-minute interval that takes place on a weekend. It shall consist of the like-kind intervals from the previous three weekend days of the same type (Saturday or Sunday) that correspond to each five-minute-interval. Treatment of NERC holidays that occur on weekend days shall be equivalent to all intervals that take place on the weekend.

**Proxy Load:** The Proxy Load for a five-minute interval is the telemetered Load plus measured Demand Reductions.

# 24.2.1.2 Methodology for the Calculating the Economic Customer Baseline Load for Demand Reductions on a Weekday

To determine the ECBL for a five-minute interval (a "Target Interval") that occurs on a weekday:

- a) Select the five-minute intervals that comprise the ECBL Weekday Window for that Target Interval.
- b) Select the telemetered load value for each five-minute interval in the ECBL Weekday Window where the DER Aggregation was not dispatched for Energy and/or Regulation Service.

- c) For each five-minute interval of the ECBL Weekday Window where (i) the DER Aggregation was dispatched for Energy and/or Regulation Service, and (ii) the LBMP for the five-minute interval was greater than or equal to the Monthly Net Benefits Threshold, select the Proxy Load values for that five-minute interval and day in place of the actual metered load for that interval.
- d) Rank in descending order the metered load and Proxy Load values determined in steps b and c.
- e) Calculate the average of the fifth and sixth ranked values. The value as so calculated shall be the ECBL for the Target Interval.
- f) Apply the ECBL In-Day Adjustment to the ECBL to determine the Adjusted Weekday ECBL for the Target Interval.

# 24.2.1.3 Methodology for the Calculating the Economic Customer Baseline Load for a Resource's Demand Reduction on a Weekend

To determine the ECBL for a Target Interval that occurs on a weekend:

- Select the five-minute intervals that comprise the ECBL Weekend Window for the Target Interval.
- b) Select the metered load value for each interval in the ECBL Weekend Window where the DER Aggregation was not dispatched for Energy and/or Regulation Service.
- C) For each five-minute interval of the ECBL Weekend Window where (i) the DER Aggregation was dispatched for Energy and/or Regulation Service, and (ii) the LBMP for the five-minute interval was greater than or equal to the Monthly Net Benefits Threshold, select the Proxy Load Value for that hour and day in place of the actual metered load for the interval.

- d) Calculate the average of the metered load and ECBL Proxy Load values. The value so calculated is the ECBL for the Target Interval.
- e) Apply the ECBL In-Day Adjustment Factor to the ECBL to calculate the Adjusted Weekend ECBL for the Target Interval.

# 24.2.2 Methodology for the Calculating the Baseline Load for a Distributed Energy Resource within a DER Aggregation during Intervals with Regulation Service Dispatch

For each 6-second interval during which a DER Aggregation is dispatched to provide Regulation Service, the Aggregator shall calculate the individual Distributed Energy Resource's Baseline Load as the Distributed Energy Resource's 6-second telemetered Load prior to the start of dispatch for Regulation Service. If the Aggregation was dispatched to provide Energy and no Regulation Service in the interval prior to being dispatched for Regulation Service, the Aggregator shall use the Proxy Load value corresponding to the five-minute interval immediately preceding the dispatch instruction as the Distributed Energy Resource's Baseline Load.

### **24.3** Verification of Actual Demand Reduction from DER Aggregations

Demand Reduction calculated using the methodology described in Section 24.2 is subject to verification by the ISO. Aggregators shall report the data at the time and in the format required by the ISO pursuant to Section 24.4. If an Aggregator fails to report the required data to the ISO in accordance with Section 24.4, the Aggregator will be subject to penalties associated with a failure to supply the Demand Reductions and may lose its eligibility to participate in a DER Aggregation. All Demand Reduction data are subject to audit by the ISO. If the ISO determines that it has made an erroneous payment to an Aggregator, it shall have the right to recover it either by reducing other payments to that Aggregator or by any other lawful means.

### **24.4** Data Reporting Requirements for Aggregators

Upon request, the Aggregator must submit to the ISO the information specified in this Section 24.4 for each Distributed Energy Resource in a DER Aggregation. The Aggregator must submit this information for the purpose of enrolling, registering, making settlements, and verifying the participation of each Distributed Energy Resource in the ISO's Energy market. If the Distributed Energy Resource has a Local Generator at its site, it must also have a meter, compliant with ISO standards and procedures, that measures the total output of the Local Generator, regardless of whether at initial enrollment the Local Generator is intended to be used to provide Demand Reduction in the DER Participation Model, provided that if the Local Generator is an Intermittent Power Resource, a meter that measures the total output of the Local Generator is not required..

# 24.4.1 Data Reporting Requirements for Enrollment of Distributed Energy Resources Participating within a DER Aggregation

The Aggregator shall provide to the ISO the following information for each Distributed Energy Resource that is seeking to enroll, either individually or collectively with other Distributed Energy Resources, as a DER Aggregation participating in the ISO's Energy market, which shall include providing information regarding each of the Distributed Energy Resource's interval meters required under Section 24.4:

- Meter test criteria, as described in the Services Tariff Section 13 and the ISO
   Procedures;
- b. Documentation to validate installation of interval meter equipment;
- c. Interval metering installation individual, company, and professional engineering license information;
- d. Make and model of installed interval metering device(s);

- e. Accuracy of installed interval metering device(s);
- f. Interval meter Current Transformer (CT) and Potential Transformer (PT) type designation, if applicable;
- g. CT Ratio, if applicable;
- h. Use of pulse data recorder as an interval metering device, if applicable;
- i. Pulse data recorder multiplier, if applicable;
- j. Any other type of meter multiplier used in the translation of data collected by the device for measuring demand, kWh, and/or MWh, if applicable;
- k. Its service address;
- 1. Its Load Serving Entity;
- m. Its Transmission Owner;
- n. Its meter authority/Meter Services Entity;
- o. Distributed Energy Resource's maximum Winter and Summer reduction MW;
- p. Business classification of the Distributed Energy Resource (based on ISO-defined categories or national standards for business classification); and
- q. A description of any Local Generator at its site, including the Local Generator's system, its primary fuel type, the year in which it was built, the year of any retrofit, its nameplate capacity, and its horsepower, if applicable.

# 24.4.2 Data Reporting Requirements for Verification of Demand Reductions of Distributed Energy Resources in the ISO's Energy and Ancillary Services Market

The Aggregator shall retain for purposes of an audit, and provide the ISO with the following required data from each interval meter required under Section 24.4 for each Distributed Energy Resource that is registered, either individually or collectively with other

Distributed Energy Resources, as a DER Aggregation, to verify the calculated Demand Reduction of a Distributed Energy Resource in the ISO's Energy and Ancillary Services market:

- a) Totalized net interval Demand Reduction data of the Distributed Energy Resource (*i.e.*, the net interval Demand Reduction data totalized across all Distributed Energy Resources that are registered, either individually or collectively with other Distributed Energy Resources, as a DER Aggregation) for the period of the Demand Reduction of the Distributed Energy Resource in the format required for reporting to the ISO's Settlement Data Exchange application;
- b) Five-minute-interval metered Load data for each of the individual Distributed

  Energy Resources that is registered as part of a single DER Aggregation, for all

  intervals of Demand Reduction for the period for which it was enrolled; and
- c) Five-minute interval metered Load data for each of the individual Distributed

  Energy Resources that is registered as part of a single DER Aggregation, for all
  intervals of the period for which it was enrolled..

The Aggregator shall comply with the following when providing metering data to verify energy reductions of Distributed Energy Resources:

- a) Section 7.4.1 of the ISO Services Tariff;
- b) Section 13 of the ISO Services Tariff; and
- c) The ISO's Meter Data Management Protocols as provided on the ISO's website.

#### 24.4.3 Additional Data Required Upon Request

To verify the participation of each Distributed Energy Resource that is enrolled, either individually or collectively with other Distributed Energy Resources, as a DER Aggregation in the ISO's Energy market, Aggregators and/or their meter authority/Meter Services Entity shall

provide the ISO upon the ISO's request such additional information that may be required, including, but not limited, to the following:

- Any data reporting requirements of Attachments H and O to the ISO Services
   Tariff;
- b) Any data reporting requirements of Section 3.4 of the ISO Services Tariff;
- c) Historical Load documentation;
- d) Load data history for Pre- and Post-Validation, Edit and Estimation (VEE);
- e) Up to three months of historical Load data when enrolling a Demand Side

  Resource to participate in the ISO's Energy market;
- f) New and existing metering documentation, including, but not limited to:
- 1. Calibration records;
- 2. Time check;
- 3. Sum check;
- 4. High/Low check; and
- 5. Zero value check.