Attachment I

## 6.10 Schedule 10 - Rate Mechanism for the Recovery of the Regulated Transmission Facilities Charge ("RTFC")

#### 6.10.1 Applicability

#### 6.10.1.1 Eligible Projects

This Schedule establishes the Regulated Transmission Facilities Charge ("RTFC") for the recovery of the costs of a regulated transmission project that is eligible for cost recovery in accordance with the Comprehensive System Planning Process requirements set forth in Attachment Y of the ISO OATT.<sup>1</sup> A Transmission Owner, Unregulated Transmitting Utility,<sup>2</sup> or Other Developer may recover through the RTFC the costs that it is eligible to recover pursuant to Attachment Y of the ISO OATT related to: (i) a regulated backstop transmission solution proposed by a Responsible Transmission Owner pursuant to Section 31.2.4.3.1 of Attachment Y of the ISO OATT and the ISO/TO Reliability Agreement or an Operating Agreement; (ii) an alternative regulated transmission solution that the ISO has selected pursuant to Section 31.2.6.5.2 of Attachment Y of the ISO OATT as the more efficient or cost-effective solution to a Reliability Need; or (iii) a regulated transmission Gap Solution proposed by a Responsible Transmission Owner pursuant to Section 31.2.11.4 of Attachment Y of the ISO OATT; (iv) an alternative regulated Transmission Gap Solution that has been determined by the appropriate state regulatory agency(ies) as the preferred solution to a Reliability Need pursuant to Section 31.2.11.5 of Attachment Y of the ISO OATT; (v) a Regulated Economic Transmission Project that has been approved pursuant to Section 31.5.4.6 of Attachment Y of the ISO OATT; (vi) a Designated Public Policy Project that is a Public Policy Transmission Project, or a part of a Public Policy Transmission Project, that the ISO has selected pursuant to Section 31.4.8.2 of Attachment Y of the ISO OATT as the more efficient or cost-effective solution to a Public Policy Transmission Need; (vii) a Public Policy Transmission Project proposed by a Developer in

response to a request by the NYPSC or Long Island Power Authority in accordance with Section

31.4.3.2 of Attachment Y of the ISO OATT; or (viii) the portion of an Interregional

Transmission Project selected by the ISO in the CSPP that is allocated to the NYISO region

pursuant to Section 31.5.7 of Attachment Y of the ISO OATT. For purposes of this Schedule,

such a transmission project is referred to as an "Eligible Project." The costs incurred for an

Eligible Project by LIPA or NYPA will be billed and collected under a separate LIPA RTFC or

NYPA RTFC, as applicable, as described in Section 6.10.5.

<sup>1</sup>Capitalized terms used in this Schedule that are not defined in this Schedule shall have the meaning set forth in Section 31.1.1 of Attachment Y of the ISO OATT and, if not therein, in Section 1 of the OATT.

<sup>2</sup>An "Unregulated Transmitting Utility" is a Transmission Owner, such as LIPA and NYPA, that, pursuant to Section 201(f) of the Federal Power Act, is not subject to the Commission's jurisdiction under Sections 205 and 206(a) of the Federal Power Act.

#### 6.10.1.2 **Projects Not Eligible for Cost Recovery Through the RTFC**

This Schedule does not apply to projects that are not eligible pursuant to Attachment Y of the ISO OATT for cost allocation and recovery under the ISO OATT, including, but not limited to: (i) projects undertaken by Transmission Owners through the Local Transmission Owner Planning Processes pursuant to Section 31.1.3 and Section 31.2.1 of Attachment Y of the ISO OATT; (ii) market-based solutions to transmission needs identified in the CSPP; (iii) any non-transmission components of an Eligible Project (e.g., generation, energy efficiency, or demand response resources); (iv) transmission Short-Term Reliability Process Solutions selected in the Short-Term Reliability Process pursuant to Attachment FF of the ISO OATT and eligible for cost recovery through Schedule 16 (Section 6.16) of the ISO OATT; (v) transmission facilities eligible for cost recovery through another rate schedule of the ISO OATT; and (vi) facilities for which costs are recovered through the Transmission Service Charge ("TSC") or the NYPA

Transmission Adjustment Charge ("NTAC") determined in accordance with Attachment H of the ISO OATT.

#### 6.10.2 **Revenue Requirement for RTFC**

The RTFC (including a LIPA RTFC or NYPA RTFC, as applicable) shall be calculated in accordance with the formula set forth in Section 6.10.3 using the revenue requirement of the Transmission Owner, Unregulated Transmitting Utility, or Other Developer, as applicable, necessary to recover the costs of an Eligible Project. The revenue requirement to be used in the calculation and recovery of the RTFC for a Transmission Owner or Other Developer, other than an Unregulated Transmitting Utility, is described in Section 6.10.4. The development of a revenue requirement and recovery of costs for an Eligible Project by an Unregulated Transmitting Utility through a NYPA RTFC or a LIPA RTFC, as applicable, is described in Section 6.10.5.

If an Eligible Project involves the construction of a facility identified as a Highway System Deliverability Upgrade in a completed Class Year Interconnection Facilities Study, the Project Cost Allocation for which has been accepted and Security posted by at least one Class Year Developer, the project cost and resulting revenue requirement will be reduced to the extent permitted by Section 25.7.12.3.3 of Attachment S of the ISO OATT.

#### 6.10.3 Calculation and Recovery of RTFC and Payment of Recovered Revenue

6.10.3.1 The ISO will calculate and bill an RTFC (or a LIPA RTFC or NYPA RTFC, as applicable) separately for each Eligible Project in accordance with this Section 6.10.3. The ISO shall collect the RTFC from LSEs. The LSEs, including Transmission Owners, competitive LSEs, municipal systems, and any other LSEs, serving Load in the Load Zones and/or Subzones to which the costs of the

Eligible Project have been allocated (each a "Responsible LSE") shall pay the RTFC. The cost of each Eligible Project shall be allocated as follows: (i) the costs of an Eligible Project that is eligible for cost allocation and recovery through the Reliability Planning Process shall be allocated in accordance with Section 31.5.3 of Attachment Y of the ISO OATT; (ii) the costs of an Eligible Project that is eligible for cost allocation and recovery through the Economic Planning Process shall be allocated in accordance with Section 31.5.4 of Attachment Y of the ISO OATT; (iii) the costs of an Eligible Project that is eligible for cost allocation and recovery through the Project that is eligible for cost allocation and recovery through the Public Policy Transmission Planning Process shall be allocated in accordance with Section 31.5.5 of Attachment Y of the ISO OATT; and (iv) the costs of an Eligible Project that is eligible for cost allocation and recovery as an Interregional Transmission Project shall be allocated in accordance with Section 31.5.7 of Attachment Y of the ISO OATT.

- 6.10.3.2 The revenue requirement established by the Transmission Owner or Other Developer pursuant to Section 6.10.4 and an Unregulated Transmitting Utility pursuant to Section 6.10.5 will be the basis for the applicable RTFC Rate (\$/MWh) that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.10.3.5.
- 6.10.3.3 The Developer shall request Incremental TCCs with respect to the Eligible Project in accordance with the requirements of Section 19.2.4 of Attachment M of the ISO OATT and receive any Incremental TCCs to the extent awarded by the ISO pursuant to such request. As it relates solely to the Eligible Project, the Developer shall not be a "Transmission Owner" for purposes of Section 20.2.5 or

Section 20.3.7 of Attachment N of the ISO OATT and accordingly shall not receive an allocation of Net Congestion Rents under Section 20.2.5 of Attachment N of the ISO OATT or Net Auction Revenues under Section 20.3.7 of Attachment N of the ISO OATT.

The Developer shall in relation to any Eligible Project exercise its right to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of Attachment M of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Sections 19.2.4.7 and 19.2.4.8 of Attachment M of the ISO OATT, Incremental TCCs created and awarded to the Developer as a result of implementation of an Eligible Project shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to the Developer as a result of the implementation of an Eligible Project, shall be offered by the Developer in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to the Developer. The total amount of the auction revenues disbursed to the Developer pursuant to this Section 6.10.3.3 shall be used in the calculation of the RTFC Rate, as set forth in Section 6.10.3.5. Incremental TCCs associated with an Eligible Project shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M of the ISO OATT.

The revenue offset discussed in this Section 6.10.3.3 shall commence upon the first payment of revenues related to Incremental TCCs associated with the implementation of an Eligible Project on or after the date the RTFC is implemented. The RTFC and the revenue offset related to Incremental TCCs associated with the implementation of an Eligible Project shall not require and shall not be dependent upon a reopening or review of: (i) the Developer's revenue requirements for the RTFC of another Eligible Project pursuant to this Section 6.10 of the ISO OATT, (ii) the Developer's revenue requirement for charges set forth in another rate schedule of the ISO OATT, or (iii) the Transmission Owners' revenue requirements for the TSCs or NTAC set forth in Attachment H of the ISO OATT.

- 6.10.3.3.1 With respect to the Eligible Project only, the Developer shall receive the settlements described in Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to an Expansion that is not subject to Section 20.2.5 of Attachment N to the ISO OATT. Unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT, the Developer, as it relates to the Eligible Project only, shall not be subject to payments and charges under Section 20.2.4 and Section 20.3.6 of Attachment N of the ISO OATT.
- 6.10.3.4 The billing units for the RTFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Load Zones and/or Subzones allocated the costs of the project in the manner described in Section 6.10.3.1.

## 6.10.3.5 Cost Recovery Methodology

The ISO shall calculate the RTFC for each Eligible Project for each Responsible LSE as

follows:

## Step 1: Calculate the \$ assigned to each Load Zone or Subzone (as applicable)

$$\begin{split} \text{RTFC}_{p,z,B} &= \left(\text{AnnualRR}_{p,B} - \text{IncrementalTransmissionRightsRevenue}_{p,B} + \text{CostAdjustment}_{p,B}\right) \\ &\times \left(\text{ZonalCostAllocation}_{z,p}\right) \end{split}$$

Step 2: Calculate a per-MWh Rate for each Load Zone or Subzone (as applicable)

 $RTFCRate_{p,z,B} = RTFC_{p,z,B}/MWh_{z,B}$ 

# Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Load Zone or Subzone (as applicable)

$$Charge_{B,l,z,p} = RTFCRate_{p,z,B} * MWh_{l,z,B}$$

# Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Load Zones or Subzones (as applicable)

$$Charge_{B,l,p} = \sum_{z \in Z} (Charge_{B,l,z,p})$$

Where,

l = the relevant Responsible LSE;

p = an individual Eligible Project;

z = an individual Load Zone or Subzone, as applicable;

Z = set of ISO Load Zones or Subzones as applicable;

B = the relevant Billing Period;

 $MWh_{z,B}$  = Actual Energy Withdrawals in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B;

 $MWh_{l,z,B}$  = Actual Energy Withdrawals for Responsible LSE 1 in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B;

Annual $RR_{p,B}$  = the pro rata share of the annual revenue requirement for each Eligible Project p as discussed in Section 6.10.2 above, allocated for Billing Period B;

IncrementalTransmissionRightsRevenue<sub>p,B</sub>= the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by the Developer pursuant to Section 20.2.3 of Attachment N of the ISO OATT for each Eligible Project p, as discussed in Section 6.10.3.3 above, allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

 $CostAdjustment_{p,B}$  = the settlements described in Section 6.10.3.3.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for each Eligible Project p, aggregated across all hours in Billing Period B; and

 $ZonalCostAllocation_{z,p}$  = the proportion of the cost of Eligible Project p allocated to Load Zone or Subzone, as applicable, z, in the manner described in Section 6.10.3.1 above;

6.10.3.6 The NYISO will collect the appropriate RTFC revenues each Billing

Period and remit those revenues to the appropriate Transmission Owner,

Unregulated Transmitting Utility, or Other Developer in accordance with the

NYISO's billing and settlement procedures; provided, however, that LIPA will be

responsible for billing and collecting the costs of an Eligible Project undertaken

by LIPA that are allocated to customers within the Long Island Transmission

District in accordance with Section 6.10.5.2.1.

## 6.10.4 Recovery of Costs Incurred by Transmission Owner or Other Developer

6.10.4.1 The RTFC shall be used as the cost recovery mechanism for the recovery of the costs of an Eligible Project undertaken by a Transmission Owner or Other Developer, other than an Unregulated Transmitting Utility, which project is authorized by the Commission to recover costs under this rate mechanism; *provided, however*, nothing in this cost recovery mechanism shall be deemed to create any additional rights for a Transmission Owner or Other Developer to proceed with a regulated transmission project that it does not otherwise have at law. Subject to the requirements in Section 6.10.6, the costs that may be included

in the revenue requirement for calculating the RTFC pursuant to Section 6.10.3 include all reasonably incurred costs, as determined by the Commission, related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Eligible Project, including those costs explicitly permitted for recovery pursuant to Attachment Y of the ISO OATT. These costs include, but are not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections.

6.10.4.2 The period for cost recovery will be determined by the Commission and will begin if and when the Eligible Project enters into service, is halted, or as otherwise determined by the Commission, including for the recovery of CWIP or other permissible cost recovery. The Transmission Owner/Other Developer, or, at its request, the ISO, shall either make a Section 205 filing with the Commission or make an informational filing under a formula rate to provide for the Commission's review and approval or acceptance of the project cost and resulting revenue requirement to be recovered through the RTFC. The filing may include all reasonably incurred costs specified in Section 6.10.4.1 of this Schedule that are related to the Transmission Owner's or the Other Developer's undertaking an Eligible Project. The filing must be consistent with the Transmission Owner's or the Other Developer's project proposal made to and evaluated by the ISO pursuant to Attachment Y. If the Eligible Project is a Designated Public Policy Project for which the Developer proposed a Cost Cap, the Developer must also

satisfy the requirements in Section 6.10.6 in its filing. The Transmission Owner or Other Developer shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding. The ISO will begin to calculate and bill the RTFC in accordance with the period for cost recovery determined by the Commission after the Commission has accepted or approved the filing or otherwise allowed the filing to go into effect pursuant to a formula rate.

## 6.10.5 Recovery of Costs by an Unregulated Transmitting Utility

6.10.5.1 Subject to the requirements in Section 6.10.6, the costs that may be included in the revenue requirement for an Eligible Project undertaken by an Unregulated Transmitting Utility include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Eligible Project, including those costs explicitly permitted for recovery pursuant to Attachment Y of the ISO OATT, as well as a reasonable return on investment. Except as otherwise provided in Section 6.10.5.2.1, for any recovery of a revenue requirement by an Unregulated Transmitting Utility under the RTFC, the period of cost recovery will be determined by the Commission and will begin if and when the Eligible Project enters into service, is halted, or as otherwise determined by the Commission, including for the recovery of CWIP or other permissible cost recovery. Except as otherwise provided in Section 6.10.5.2.1, the ISO will begin to calculate and bill the RTFC for an Unregulated Transmitting Utility pursuant to Section 6.10.3 in accordance with the period for cost recovery determined by the Commission after

the Commission has accepted or approved the filing of its revenue requirement or otherwise allowed the filing to go into effect pursuant to a formula rate.

#### 6.10.5.2 Cost Recovery for LIPA

Any costs incurred for an Eligible Project undertaken by LIPA, as an Unregulated Transmitting Utility, that are eligible for recovery under Section 6.10.5.1 under a LIPA RTFC shall be recovered over the period established by Long Island Power Authority's Board of Trustees as follows:

- 6.10.5.2.1 For costs to LIPA customers: Cost will be recovered pursuant to a rate recovery mechanism approved by the Long Island Power Authority'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. Upon approval of the rate recovery mechanism, LIPA shall provide to the ISO, for purposes of inclusion within the ISO OATT and filing with the Commission on an informational basis only, a description of the rate recovery mechanism, the costs of the Eligible Project, and the rate that LIPA will charge and collect from responsible entities within the Long Island Transmission District in accordance with the ISO COATT.
- 6.10.5.2.2 For Costs to Other Transmission Districts, As Applicable: Where the ISO determines that there are Responsible LSEs serving Load outside of the Long Island Transmission District that should be allocated a portion of the costs of the Eligible Project undertaken by LIPA, LIPA shall coordinate with and inform the ISO of the amount of such costs. Such costs will be an allocable amount of the cost base recovered through the recovery mechanism described in Section

6.10.5.2.1 in accordance with the formula set forth in Section 6.10.3.5. Such costs of the Eligible Project allocable to Responsible LSEs serving Load outside of the Long Island Transmission District shall constitute the "revenue requirement." The ISO shall file the revenue requirement with the Commission if requested to do so by LIPA, for Commission review under the same "comparability" standard as is applied to review of changes in LIPA's TSC under Attachment H of the ISO OATT. The filing must be consistent with LIPA's project proposal made to and evaluated by the ISO pursuant to Attachment Y. If the Eligible Project is a Designated Public Policy Project for which LIPA proposed a Cost Cap, LIPA must also satisfy the requirements in Section 6.10.6 in its filing. LIPA shall intervene in support of such filing at the Commission and shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding. Upon the Commission's acceptance for filing of LIPA's revenue requirement and using the procedures described in Sections 6.10.3.1 through 6.10.3.5 of this Schedule, the ISO shall calculate a separate LIPA RTFC based on the revenue requirement and shall bill for LIPA the LIPA RTFC as a separate line item to the Responsible LSEs serving Load in Transmission Districts located outside of the Long Island Transmission District. The ISO shall remit the revenues collected to LIPA in accordance with the ISO's billing and settlement procedures.

#### 6.10.5.3 Cost Recovery for NYPA

Any costs incurred for an Eligible Project undertaken by NYPA, as an Unregulated Transmitting Utility, that are eligible for recovery under Section 6.10.5.1 shall be recovered under a NYPA RTFC as described herein. A reasonable return on investment for an Eligible Project undertaken by NYPA may include any incentives for construction of transmission projects available under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

6.10.5.3.1 NYPA shall coordinate with and inform the ISO of the amount of the costs it incurred in undertaking an Eligible Project. Such costs shall constitute the revenue requirement. Either the ISO shall make a Section 205 filing with the Commission on behalf of NYPA or NYPA shall make an informational filing under a formula rate with the Commission, of the revenue requirement. The filing must be consistent with NYPA's project proposal made to and evaluated by the ISO pursuant to Attachment Y. If the Eligible Project is a Designated Public Policy Project for which NYPA proposed a Cost Cap, NYPA must also satisfy the requirements in Section 6.10.6 in its filing. NYPA shall intervene in support of such filing at the Commission and shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding, including being solely responsible for making any arguments or reservations regarding its status as a non-Commission-jurisdictional utility and the appropriate standard for Commission review of its revenue requirement. After the Commission has accepted or approved the filing or otherwise allowed the filing to go into effect pursuant to a formula rate, the ISO shall calculate in accordance with Sections 6.10.3.1 through 6.10.3.5 of this Schedule a separate NYPA RTFC based on the revenue requirement and bill for NYPA the NYPA RTFC to the Responsible

LSEs. The ISO shall remit the revenues collected to NYPA in accordance with the ISO's billing and settlement procedures.

6.10.5.4 Savings Clause. The inclusion in the ISO OATT or in a filing with the Commission pursuant to Section 6.10.5 of the revenue requirement for recovery of costs incurred by an Unregulated Transmitting Utility, including LIPA or NYPA, related to an Eligible Project undertaken pursuant to Attachment Y of the ISO OATT, as provided for in this Section 6.10.5, or the inclusion of such revenue requirement in the LIPA RTFC or NYPA RTFC, shall not be deemed to modify the treatment of such rates as non-jurisdictional pursuant to Section 201(f) of the FPA.

## 6.10.6 Designated Entity's Responsibility to Include Cost Cap in Rate Filing for Designated Public Policy Project.

6.10.6.1 If the Designated Entity of an Eligible Project is: (i) a Designated Entity for the Designated Public Policy Project that is a Public Policy Transmission Project, or part of a Public Policy Transmission Project, selected by the ISO pursuant to Sections 31.4.8.2 and 31.4.11 of Attachment Y to the ISO OATT and (ii) the Designated Entity submitted the Public Policy Transmission Project that resulted in the Designated Public Policy Project, the Designated Entity shall file with the Commission as part of its required rate filing for cost recovery under Sections 6.10.4 or 6.10.5, as applicable, any Cost Cap that it proposed for the Public Policy Transmission Project, including any excusing conditions described in Section 6.10.6.2. The Designated Entity shall not seek to recover through its transmission rates or through any other means costs for the Included Capital Costs

above its agreed-upon Cost Cap, except as permitted for excusing conditions in Section 6.10.6.2.

- 6.10.6.2 The Cost Cap that the Designated Entity files at the Commission may provide for the following excusing conditions, which shall be included in the Development Agreement for the Designated Entity's Designated Public Policy Project and which shall excuse the Designated Entity from the Cost Cap on recovering the Included Capital Costs of its Designated Public Policy Project only to the extent the costs arise from one of the following excusing conditions:
- A. Transmission Project changes, delays, or additional costs that are due to the actions or omissions of the ISO, Connecting Transmission Owner(s),
   Interconnecting Transmission Owner(s), Affected Transmission Owner(s), or other Designated Entity(ies) responsible for completing other parts of the Public Policy Transmission Project;
- B. A Force Majeure event as defined in the Development Agreement and subject to the Force Majeure requirements in Section 15.5 of the Development Agreement;
- C. Changes in laws or regulations, including but not limited to applicable taxes;
- D. Material modifications to scope or routing arising from siting processes under
   Public Service Law Article VII or applicable local laws as determined by the New
   York State Public Service Commission or local governments respectively; and
- E. Actions or inactions of regulatory or governmental entities, and court orders.
- 6.10.6.3 If the Designated Entity proposed a soft Cost Cap, the Designated Entity must achieve the percentage cost sharing that it submits to the ISO in its proposal either: (i) through foregoing rate recovery of that percentage of capital costs in

excess of the soft Cost Cap or (ii) through an alternative rate mechanism that may adjust rate recovery through only a reduction in the return on equity and any applicable incentives solely on the amount in excess of the soft Cost Cap. The alternative rate mechanism must achieve a rate recovery reduction for the percentage of Included Capital Costs in excess of the soft Cost Cap that is equal to or better for ratepayers in the total long run revenue requirement on a present value basis for the Designated Public Policy Project compared to that which would be achieved under option (i) based on the percentage cost sharing that the Designated Entity proposed to the ISO.

- 6.10.6.4 The Designated Entity's Cost Cap and the excusing conditions shall be included in the Development Agreement with the Designated Entity and will be implemented and enforced through rate proceedings at the Commission or the appropriate legal action initiated by the ISO.
- 6.10.6.5 Except as set forth in this Section 6.10.6, all matters concerning a
   Designated Entity's recovery of the costs of its Designated Public Policy Project
   shall be submitted to and decided at the Commission in accordance with the
   procedures set forth in Sections 6.10.4 and 6.10.5, as applicable.

## 6.12 Schedule 12 - Rate Mechanism for the Recovery of the Highway Facilities Charge ("HFC")

#### 6.12.1 Applicability

- 6.12.1.1 This Schedule establishes the Highway Facilities Charge ("HFC") for the recovery of that portion of the costs related to Highway System Deliverability Upgrades ("Highway SDUs") required for deliverability under Section 25.7.12 of Attachment S of the ISO OATT that are allocated to Load Serving Entities ("LSEs"). This Schedule shall not apply to: (i) the extent that a Highway SDU is addressed and funded as part of a transmission project undertaken in accordance with the Comprehensive System Planning Process pursuant to Attachment Y of the ISO OATT; (ii) costs for System Upgrade Facilities or System Deliverability Upgrades that are allocated to Developers or Interconnection Customers in accordance with Attachments S, X or Z of the ISO OATT; (iii) costs of transmission expansion projects undertaken in connection with an individual request for Transmission Service under Sections 3.7 or 4.5 of the ISO OATT; (iv) transmission facilities eligible for cost recovery pursuant to another rate schedule of the ISO OATT; and (v) transmission facilities for which costs are recovered through the Transmission Service Charge ("TSC") or the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Attachment H of the ISO OATT.
- 6.12.1.2 The HFC shall be calculated in accordance with the formula in Section
  6.12.3 using the revenue requirement related to each Highway SDU filed with the Commission by a Transmission Owner pursuant to Section 6.12.2 and approved or accepted by the Commission. The costs that may be included in the revenue

requirement for calculating the HFC include all reasonably incurred costs, as determined by the Commission, related to the development, construction, operation and maintenance of any Highway SDU undertaken pursuant to Attachment S of this tariff (including costs for a Highway SDU that is subsequently halted through no fault of the constructing Transmission Owner) that are allocated to LSEs. These costs include, but are not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections. The HFC established under this Schedule shall be separate from the TSC and the NTAC determined in accordance with Attachment H of the ISO OATT, and any charge for transmission facilities eligible for cost recovery through another rate schedule of the ISO OATT.

#### 6.12.2 Recovery of Transmission Owner's Costs Related to Highway SDUs

Each Transmission Owner shall file with the Commission the rate treatment, prior to the implementation of any HFC, that will be used to derive and determine the revenue requirement to be included in the HFC for Highway SDUs undertaken pursuant to a Class Year Deliverability Study and allocated to LSEs in accordance with Section 25.7.12 of Attachment S of the ISO OATT. The rate treatment will provide for the recovery of the full revenue requirement for that portion of a Highway SDU that is allocated to LSEs consistent with the provisions of Attachment S and this Rate Schedule. Pursuant to a determination by the ISO that the threshold for construction of a Highway SDU has been crossed in accordance with Section 25.7.12.3.1 of Attachment S of the ISO OATT, the Transmission Owner(s) responsible for constructing the

Highway SDU will proceed with the approval process for all necessary federal, state and local authorizations for the requested project to which this HFC applies.

- 6.12.2.1 Upon receipt of all necessary federal, state, and local authorizations, including Commission approval or acceptance of the rate treatment, the Transmission Owner(s) shall commence construction of the project.
- 6.12.2.2 The portion of the cost of the Highway SDU to be allocated to LSEs will be reduced by any Headroom payments made to the constructing Transmission Owner by a subsequent Developer or Interconnection Customer prior to the completion of the project.
- 6.12.2.3 The period for cost recovery will be determined by the Commission and will begin if and when the Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12 enters service, is halted, or as otherwise determined by the Commission. The Transmission Owner(s) will make a filing with the Commission to provide for its review and approval or acceptance of the final project cost and resulting revenue requirement to be recovered through the HFC pursuant to this Rate Schedule 12. The Transmission Owner(s) shall bear the burden of resolving all concerns about the content of the filing that might be raised in such proceeding. The ISO will begin to calculate and bill the HFC in accordance with the period for cost recovery determined by the Commission after the Commission has accepted or approved the filing.

## 6.12.3 Calculation and Recovery of HFC and Payment of Recovered Revenue

The HFC is to be invoiced by the ISO separately for each Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12 and paid by the LSEs

allocated in accordance with Section 25.7.12.3.2 of Attachment S of the ISO OATT. The ISO shall collect the HFC from LSEs. The LSEs,, including Transmission Owners, non-Transmission Owner LSEs, municipal systems, competitive LSEs and any other LSE, to which the costs of the Highway SDU have been allocated (each a "Responsible LSE") will be invoiced by the ISO and shall pay the HFC.

- 6.12.3.1 The revenue requirement filed by the Transmission Owner pursuant to this Schedule and approved or accepted by the Commission, as may be subsequently adjusted in accordance with Section 6.12.4.1.3 below, will be the basis for the HFC that shall be charged by the ISO to each Responsible LSE for the Billing Period based on the Responsible LSE's proportionate share of the ICAP requirement in the statewide capacity market, adjusted to subtract locational capacity requirements, as set forth in Section 25.7.12.3.2 of Attachment S of the ISO OATT.
- 6.12.3.2 The HFC for the Billing Period shall include operation and maintenance costs for the proportionate share of the Highway SDU funded by LSEs.
- 6.12.3.3 LSEs will not be responsible for actual costs in excess of their share of the final Class Year estimated cost of the Highway SDU if the excess results from causes within the control of a Transmission Owner(s) responsible for constructing the Highway SDU as described in Section 25.8.6.4 of Attachment S of the ISO OATT.
- 6.12.3.4 As described in Section 25.7.2.2 of Attachment S of the ISO OATT, the Transmission Owner(s) responsible for constructing a Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12 shall

request Incremental TCCs with respect to the Highway SDU in accordance with the requirements of Section 19.2.4 of Attachment M. As it relates solely to a Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12, the Transmission Owner(s) responsible for constructing the Highway SDU shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of Attachment N of the ISO OATT. Accordingly, the Transmission Owner(s) responsible for constructing the Highway SDU shall not receive Net Congestion Rents pursuant to Section 20.2.5 of Attachment N of the ISO OATT or Net Auction Revenues pursuant to Section 20.3.7 of Attachment N of the ISO OATT as it relates to a Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12.

6.12.3.4.1 The Transmission Owner(s) responsible for constructing a Highway SDU shall exercise its right to obtain and maintain in effect all Incremental TCCs they are awarded with respect to the Highway SDU, as further described in Section 25.7.2.2 of Attachment S of the ISO OATT. The Incremental TCCs awarded with respect to a Highway SDU may not be sold or transferred through a Centralized TCC Auction, Reconfiguration Auction or the Secondary Market. The Transmission Owner(s) responsible for constructing a Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12 shall receive congestion payments pursuant to Section 20.2.3 of Attachment N of the ISO OATT for any Incremental TCCs related to the Highway SDU for which it is the Primary Holder. The congestion payments received by the Transmission Owner(s) responsible for constructing a Highway SDU for any Incremental TCCs related to the Highway SDU for which it is the Primary Holder. The congestion payments received by the Transmission

TCCs it holds related to the Highway SDU will be used in the calculation of the HFC. The HFC and adjustments related to Incremental TCCs shall not require and shall not be dependent upon any reopening or any review of : (i) the Transmission Owner's revenue requirements for the HFC for another Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12; (ii) the Transmission Owner's revenue requirements for the TSCs and NTAC set forth in Attachment H of the ISO OATT; or (iii) the Transmission Owner's revenue requirements for the transmission facility eligible for cost recovery pursuant to another rate schedule of the ISO OATT.

6.12.3.4.2 As it relates solely to a Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12, the Transmission Owner(s) responsible for constructing the Highway SDU shall receive the settlements described in Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to an Expansion that is not subject to Section 20.2.5 of Attachment N to the ISO OATT for any Incremental TCCs related to the Highway SDU it holds. Unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT, the Transmission Owner(s) responsible for constructing the Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12 shall not be subject to payments and charges under Section 20.2.4 and Section 20.3.6 of Attachment N of the ISO OATT.

## 6.12.3.5 **Cost Recovery Methodology**

The HFC for the Billing Period shall be based on the ICAP requirement in the statewide capacity market, adjusted to subtract locational capacity requirements for those LSEs determined to be allocated the costs of the project in accordance with Section 25.7.12 of Attachment S of the ISO OATT.

6.12.3.5.1 The ISO shall calculate each LSE's share of the HFC for each Billing

Period (*i.e.*, LSE HFC Allocation<sub>p,l,B</sub>) as follows:

 $\label{eq:LSE HFC Allocation_{p,l,B}} LSE \ HFC \ Allocation_{p,l,B} = (Billing \ Period \ HFC_{p,B} \ - \\ Incremental Transmission Rights Revenue_{p,B} + \ Cost \ Adjustment_{p,B}) \ x \ (LSE \ ICAP \ Allocation \ \%_{l,B})$ 

Where:

l = the relevant Responsible LSE;

p = an individual Highway SDU for which a portion of the costs thereof are recovered pursuant to this Rate Schedule 12;

B= the relevant Billing Period;

Billing Period HFC<sub>p, B</sub> = the pro-rata share of the annual HFC for Highway SDU p, as discussed in Section 6.12.2 above and as may be adjusted in accordance with Section 6.12.4.1.3 below, allocated for Billing Period B;

LSE ICAP Allocation  $\%_{l,B}$  = the LSE's proportionate share of the NYCA ICAP requirement for Billing Period B, adjusted to subtract Locational ICAP requirements for Billing Period B, which shall be calculated as:

(LSE total ICAP Requirement – Sum of LSE Locational ICAP Requirements for any Locality not located within another Locality)/(NYCA Minimum Installed Capacity Requirement – Sum of Locational Minimum Installed Capacity Requirements for any Locality not located within another Locality)

Such ICAP requirements shall be the ICAP equivalent of the LSE's UCAP requirements prior to any reduction for Locality Exchange MW;

IncrementalTransmissionRightsRevenue<sub>p,B</sub> = Congestion payments received by the applicable Transmission Owner for Billing Period B pursuant to Section 20.2.3 of Attachment N of the ISO OATT for any Incremental TCCs held by the Transmission Owner related to the Highway SDU p, as discussed in Section 6.12.3.4.1 above; and

Cost Adjustment<sub>p,B</sub> = the settlements for any Incremental TCCs held by the Transmission Owner

related to the Highway SDU p described in Section 6.12.3.4.2 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for the Highway SDU p, aggregated across all hours of Billing Period B.

- 6.12.3.5.2 The ISO will collect the appropriate HFC revenues each Billing Period and remit those revenues to the appropriate Transmission Owner(s) in accordance with the ISO's billing and settlement procedures.
- 6.12.3.5.3 Billing true-ups to account for load shifting between LSEs will be based upon the existing ICAP methodology, as appropriate. These true-ups will occur on a monthly basis pursuant to ISO procedures.

## 6.12.4 Headroom Accounting

As new generators and merchant transmission facilities come on line and use the Headroom created by a prior Highway SDU, the Developers or Interconnection Customers of those new facilities will reimburse prior Developers or Interconnection Customers or will compensate the LSEs who funded the Highway SDU Headroom in accordance with Sections 25.8.7 and 25.8.8 of Attachment S of the ISO OATT.

- 6.12.4.1 The Developer or Interconnection Customer of the subsequent project shall make a lump sum payment to the constructing Transmission Owner(s) proportional to the electrical use of the Headroom in the account by the Developer's or Interconnection Customer's project.
- 6.12.4.1.1 Payment shall be made as soon as the cost responsibilities of the subsequent Developer or Interconnection Customer are determined in accordance with Attachment S of the ISO OATT.
- 6.12.4.1.2 Payment to the constructing Transmission Owner(s) will be based upon the depreciated amount of the Highway SDU in the constructing Transmission

Owner's accounting records.

6.12.4.1.3 The constructing Transmission Owner(s) will adjust their revenue requirement under this Rate Schedule 12 to account for any payments received from subsequent Developers or Interconnection Customers to lower the HFC charged to LSEs going forward and notify the ISO of the adjusted revenue requirement.

## 6.13 Schedule 13 – Rate Mechanism for the Recovery of the Transco Facilities Charge ("TFC")

#### 6.13.1 Applicability

This Schedule establishes the Transco Facilities Charge ("TFC") for the recovery of costs related to the following New York Transco LLC ("NY Transco") projects, each of which is hereinafter referred to as an "Approved NYTP":

- The projects approved by the New York Public Service Commission ("NYPSC") on November 4, 2013, in Case No. 12-E-0503 (the "Transmission Owner Transmission Solutions" or "TOTS" projects): (1) the Ramapo-to-Rock Tavern Project; (2) the Marcy South Series Compensation Fraser-to-Coopers Corner Reconductoring Project; and (3) the Staten Island Unbottling Project.<sup>1</sup>[<sup>1</sup>Any costs incurred on the forced cooling portion of the Staten Island Unbottling Project after the date of the Commission's order approving the offer of partial settlement in Docket No. ER15-572, issued on March 17, 2016, shall not be recovered through the TFC without further order of the Commission.]
- The Segment B facilities the need for which was determined by the NYPSC on December 17, 2015, in Case No. 12-T-0502 ("AC Public Policy Transmission Need Order") and identified in Appendix A of the AC Public Policy Transmission Need Order, and selected by an ISO Board of Directors' decision and Public Policy Transmission Planning Report issued April 8, 2019 (and identified therein as "Project T019") pursuant to the Public Policy Transmission Planning Process set forth in Section 31.4 of Attachment Y of the ISO OATT, consisting of: (1) the Knickerbocker to Pleasant Valley project; and, (2) if applicable, the Segment B Additions, as defined in the settlement approved by the Federal Energy Regulatory Commission on

November 16, 2017, in Docket No. ER15-572-000, et al. (the "Segment B Facilities").

NY Transco may undertake an Approved NYTP and seek cost recovery through a TFC under this Schedule.<sup>2</sup>[<sup>2</sup> Capitalized terms used in this Schedule that are not defined in this Schedule shall have the same meaning set forth in Section 31.1.1 of Attachment Y of the ISO OATT.]

The TFC shall be separate from the Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Section 14 of Attachment H of the ISO OATT, and any Reliability Facilities Charge ("RFC") determined pursuant to Section 6.10 of the ISO OATT.

In addition, NY Transco shall request Incremental TCCs for each Approved NYTP as described in Section 6.13.3.2 below. With respect to an Approved NYTP, NY Transco shall receive the settlements described in Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to an Expansion that is not subject to Section 20.2.5 of Attachment N to the ISO OATT. Unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT. Unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT, NY Transco, as it relates to an Approved NYTP, shall not be subject to payments and charges under Section 20.2.4 and Section 20.3.6 of Attachment N to the ISO OATT. As it relates solely to an Approved NYTP, NY Transco shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of the ISO OATT and accordingly shall not receive an allocation of Net Congestion Rents under Section 20.2.5 of the ISO OATT or Net Auction Revenues under Section 20.3.7 of the ISO OATT.

## 6.13.2 Revenue Requirement for TFC

The TFC shall be calculated in accordance with the applicable formula set forth in Section 6.13.3 using the revenue requirement of NY Transco necessary to recover the costs of an Approved NYTP. The revenue requirement to be used in the calculation of the TFC is described in Section 6.13.4. The costs that may be included in the revenue requirement include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Approved NYTP, including, but not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

### 6.13.3 Calculation and Recovery of TFC and Payment of Recovered Revenue

The ISO will calculate and bill the TFC for each Approved NYTP in accordance with this Section 6.13.3. The ISO shall collect each TFC from the LSEs. The LSEs, including Transmission Owners, competitive LSEs, and municipal systems, serving Load located in Transmission Districts, Load Zones and/or Subzones to which the costs of the Approved NYTP have been allocated (each a "Responsible LSE") shall pay the applicable TFC. The costs of each Approved NYTP shall be allocated as set forth in the appropriate allocation table in Section 36.2 of Attachment 1 to Attachment DD. Solely with respect to the TOTS Projects, the portion of the costs of the Approved NYTP allocated to Responsible LSEs located in the NYPA North Subzone shall be calculated as part of the allocation percentage for Niagara Mohawk Power Corporation d/b/a National Grid set forth in Section 36.2.

6.13.3.1 The revenue requirement for each approved NYTP filed pursuant to this Schedule by NY Transco will be the basis for the TFC Rate (\$/MWh) for the Billing Period that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.13.3.4. The revenue requirement of the NY Transco for each Approved NYTP will be calculated according to the formula rate set forth in Section 36.3.1. of Attachment DD of the ISO OATT.

6.13.3.2 NY Transco shall in relation to any Approved NYTP reasonably exercise its right to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Section 19.2.4.7 and 19.2.4.8 of the ISO OATT, Incremental TCCs created and awarded to NY Transco as a result of implementation of an Approved NYTP shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to NY Transco as a result of the implementation of an Approved NYTP, shall be offered by the ISO in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to NY Transco. The total amount of the auction revenues disbursed to the NY Transco pursuant to this Section 6.13.3.2 shall be used in the calculation of the TFC Rate, as set forth in Section 6.13.3.4. Incremental TCCs associated with an Approved NYTP shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M.

The revenue offset discussed in this Section 6.13.3.2 shall commence upon the first payment of revenues related to Incremental TCCs associated with the implementation of an Approved NYTP on or after the date the TFC is implemented. The TFC and the revenue offset related to Incremental TCCs associated with the implementation of an Approved NYTP shall not require and shall not be dependent upon a reopening or review of NY Transco's revenue requirements for an RFC pursuant to Section 6.10 of the ISO OATT.

- 6.13.3.2.1 As described in Section 6.13.1 above, settlements pursuant to the provisions of Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to Expanders (as that term is defined in Section 19.2.4 of Attachment M to the ISO OATT) not subject to Section 20.2.5 of Attachment N to the ISO OATT, shall be applicable to an Approved NYTP.
- 6.13.3.3 The billing units for the TFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Transmission Districts, Load Zones and/or Subzones allocated the costs of the Approved NYTP in accordance with Attachment DD of the ISO OATT.

### 6.13.3.4 Cost Recovery Methodology

## 6.13.3.4.1 Cost Recovery Methodology Associated with the TOTS Projects for All Responsible LSEs in a Transmission District Except NYPA

The ISO shall calculate the TFC for each Responsible LSE as follows:

### Step 1: Calculate the \$ assigned to each Transmission District

 $TFC_{t,B} = \sum_{p \in P} \left( \left( AnnualRR_{p,B} - Incremental TCC Revenue_{p,B} + Cost Adjustment_{p,B} \right) \times \left( TransmissionDistrictCostAllocation_{t,p} \right) \right)$ 

## Step 2: Calculate a per-MWh Rate for each Transmission District

 $TFCRate_{t,B} = TFC_{t,B}/MWh_{t,B}$ 

# Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Transmission District

 $Charge_{B,l,t} = TFCRate_{t,B} \times MWh_{l,t,B}$ 

# Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Transmission Districts

$$Charge_{B,l} = \sum_{t \in T} (Charge_{B,l,t})$$

Where,

l = the relevant Responsible LSE;

P = the set of projects constituting the TOTS projects;

p = an individual project that is a component of the TOTS projects

T = set of ISO Transmission Districts;

- t = an individual Transmission District
- B = the relevant Billing Period;

 $MWh_{t,B} = Actual Energy Withdrawals in Transmission District t aggregated across all hours in Billing Period B;$ 

MWh<sub>1,t,B</sub>= Actual Energy Withdrawals for Responsible LSE l in Transmission District t aggregated across all hours in Billing Period B;

Annual  $RR_{p,B}$  = the pro rata share of the annual revenue requirement for each project p as discussed in Section 6.13.2 above allocated for Billing Period B;

Incremental TCC Revenue<sub>p,B</sub> = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by NY Transco pursuant to Section 20.2.3 of the ISO OATT for each project p as discussed in Section 6.13.3.2 above allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

Cost Adjustment<sub>p,B</sub> = the settlements described in Section 6.13.3.2.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for each project p, aggregated across all hours in Billing Period B;

Transmission District Cost Allocation<sub>t,p</sub> = the proportion of the cost of project p allocated to Transmission District t, as set forth in Section 36.2 of Attachment 1 to Attachment DD; *provided, however*, that the proportion of the cost of project p allocated to the NYPA North Subzone shall be included in the percentage for Niagara Mohawk Power Corporation d/b/a National Grid set forth in Section 36.2.

## 6.13.3.4.2 Cost Recovery Methodology Associated with the Segment B Facilities

The ISO shall calculate the TFC for each Responsible LSE as follows:

### Step 1: Calculate the \$ assigned to each Load Zone or Subzone (as applicable)

 $TFC_{p,t,B} = (AnnualRR_{p,B} - Incremental TCC Revenue_{p,B} + Cost Adjustment_{p,B})$  $\times (ZonalCostAllocation_{t,p})$ 

# Step 2: Calculate a per-MWh Rate for each Load Zone or Subzone (as applicable)

 $TFCRate_{p,t,B} = TFC_{p,t,B}/MWh_{t,B}$ 

## Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Load Zone or Subzone (as applicable)

 $Charge_{B,1,t,p} = TFCRate_{p,t,B} \times MWh_{1,t,B}$ 

## Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Load Zones or Subzone (as applicable)

Charge<sub>B,1,t</sub> = 
$$\sum_{t \in T} (Charge_{B,1,t,p})$$

Where,

l = the relevant Responsible LSE;

p = the Segment B Facilities;

T = set of ISO Load Zones or Subzones (as applicable);

t = an individual Load Zone or Subzone (as applicable);

B = the relevant Billing Period;

 $MWh_{t,B} = Actual Energy Withdrawals in Load Zone or Subzone (as applicable) t aggregated across all hours in Billing Period B;$ 

MWh<sub>l,t,B</sub>= Actual Energy Withdrawals for Responsible LSE l in Load Zone or Subzone (as applicable) t aggregated across all hours in Billing Period B;

Annual  $RR_{p,B}$  = the pro rata share of the annual revenue requirement for the Segment B Facilities (p), as discussed in Section 6.13.2 above, allocated for Billing Period B;

Incremental TCC Revenue<sub>p,B</sub> = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by NY Transco pursuant to Section 20.2.3 of Attachment N of the ISO OATT for the Segment B Facilities (p), as discussed in Section 6.13.3.2 above, allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

Cost Adjustment<sub>p,B</sub> = the settlements described in Section 6.13.3.2.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for the Segment B Facilities (p), aggregated across all hours in Billing Period B;

 $ZonalCostAllocation_{t,p}$  = the proportion of the cost of the Segment B Facilities (p) allocated to Load Zone or Subzone (as applicable) t, as set forth in Section 36.2 of Attachment 1 to Attachment DD of the ISO OATT.

- 6.13.3.5 With respect to the TOTS projects, for the initial Rate Year 2016, the ISO may begin billing and collecting NY Transco's projected TFC subsequent to January 1, 2016; however, once billing commences in 2016, the ISO shall bill and collect NY Transco's projected TFC in equal installments for each Billing Period over the balance of 2016.
- **6.13.3.6** The ISO will collect the appropriate TFC revenues each Billing Period and remit those revenues to NY Transco in accordance with the ISO's billing and settlement procedures.

#### 6.13.4 Recovery of Costs Incurred by NY Transco

- 6.13.4.1 The TFC shall be used as the cost recovery mechanism for the recovery of the costs of an Approved NYTP that is proposed, developed, or constructed by NY Transco under applicable federal, state and local law and authorized by the Commission to recover costs under this rate mechanism; *provided, however*, nothing in this cost recovery mechanism shall be deemed to create any additional rights for NY Transco to proceed with a regulated transmission project that NY Transco does not otherwise have at law.
- **6.13.4.2** The period for cost recovery will be determined by the Commission and will begin if and when the Approved NYTP is completed, or as otherwise determined by the Commission. NY Transco and/or the ISO, as applicable, will make a filing with the Commission to provide for its review and approval or acceptance, as appropriate, of the final project cost and resulting revenue requirement to be recovered through the TFC, which shall be reproduced in the form of Section 36.3 of Attachment 2 to Attachment DD of the ISO OATT. The filing may include all reasonably incurred costs related to NY Transco's undertaking an Approved NYTP as specified in Section 6.13.2 of this Schedule. NY Transco shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding.

## 6.15 Schedule 15 – Rate Mechanism for the Recovery of the Marcy South Series Compensation Facilities Charge ("MSSCFC")

#### 6.15.1 Applicability

This Schedule establishes the Marcy South Series Compensation Facilities Charge ("MSSCFC") for the recovery of costs related to NYPA's Marcy South Series Compensation ("MSSC") project.

The MSSCFC shall be separate from the Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Section 14 of Attachment H of the ISO OATT, and any Reliability Facilities Charge ("RFC") determined pursuant to Section 6.10 of the ISO OATT. In addition, with respect to the MSSC project only, NYPA shall receive the settlements described herein for the MSSC project and shall not be subject to payments and charges for the MSSC project under Section 20.2.4 and Section 20.3.6 of Attachment N to the ISO OATT unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT. NYPA shall be entitled to receive Incremental TCCs, as described in Section 19.2.4 of Attachment M to the ISO OATT, for the MSSC project to the extent requested by NYPA and awarded by the ISO. As it relates solely to the MSSC project, NYPA shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of the ISO OATT or Net Auction Revenues under Section 20.3.7 of the ISO OATT relating to the MSSC project.

### 6.15.2 Revenue Requirement for MSSCFC

The MSSCFC shall be calculated in accordance with the formula set forth in Section 6.15.3 using the revenue requirement of NYPA necessary to recover the costs of the MSSC project. The revenue requirement to be used in the calculation of the MSSCFC is determined using the Formula Rate Template included in Attachment H, Section 14.2.3.1 of the ISO OATT. The MSSC revenue requirement shall be stated separately on line 11a from NYPA's NTAC revenue requirement on line 11 of the NYPA Formula Rate Template's Transmission Revenue Requirement Summary, and there shall be no duplicative recovery of costs as between the NTAC revenue requirement, the MSSC revenue requirement or any other NYPA project-specific revenue requirement. The costs that may be included in the MSSC revenue requirement include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, the MSSC project, including, but not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

### 6.15.3 Calculation and Recovery of MSSCFC and Payment of Recovered Revenue

The ISO will calculate and bill the MSSCFC for the MSSC project in accordance with this Section 6.15.3. The ISO shall collect the MSSCFC from the LSEs. The LSEs, including Transmission Owners, NYPA, competitive LSEs, municipal systems, and any other LSE, serving Load located in Transmission Districts to which the costs of the MSSC project have been allocated (each a "Responsible LSE") shall pay the MSSCFC. The costs of the MSSC project shall be allocated as set forth in the allocation table presented herein in Section 6.15.3.7.

6.15.3.1 The MSSC revenue requirement developed pursuant to Attachment H, Section 14.2.3.1 of the ISO OATT by NYPA will be the basis for the MSSCFC Rate (\$/MWh) for the Billing Period that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.15.3.4. NYPA's revenue requirement for the MSSC project will be calculated according to the formula rate and protocols set forth in Section 14.2.3 of Attachment H to the ISO OATT.

NYPA shall in relation to the MSSC project reasonably exercise its right 6.15.3.2 to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Section 19.2.4.7 and 19.2.4.8 of the ISO OATT, Incremental TCCs created and awarded to NYPA as a result of the MSSC project shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to NYPA as a result of the MSSC project shall be offered by the ISO in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to NYPA. The total amount of the auction revenues disbursed to NYPA pursuant to this Section 6.15.3.2 shall be used in the calculation of the MSSCFC Rate, as set forth in Section 6.15.3.4. Incremental TCCs associated with the MSSC project shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M of the ISO OATT.

As described in Section 6.15.4.2, the revenue offset discussed in this Section 6.15.3.2 shall commence upon the first payment of revenues related to Incremental TCCs associated with the MSSC project, and shall be deferred to the extent necessary through the Formula Rate Template's true-up mechanism until the date the Formula Rate Template first produces a non-zero MSSC revenue requirement and the ISO begins to collect the MSSCFC from the LSEs. The MSSCFC and the revenue offset related to Incremental TCCs associated with the implementation of the MSSC project shall not require and shall not be dependent upon a reopening or review of NYPA's revenue requirement for an RFC pursuant to Section 6.10 of the ISO OATT.

- 6.15.3.2.1 With respect to the MSSC project, NYPA shall be subject to the settlements described in the provisions of Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to Expanders (as that term is defined in Section 19.2.4 of Attachment M to the ISO OATT) not subject to Section 20.2.5 of Attachment N to the ISO OATT.
- **6.15.3.3** The billing units for the MSSCFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Transmission Districts allocated the costs of the MSSC project in accordance with Section 6.15.3.7.

## 6.15.3.4 Cost Recovery Methodology

#### 6.15.3.4.1 Cost Recovery Methodology for All Responsible LSEs

The ISO shall calculate the MSSCFC for each Responsible LSE as follows:

### Step 1: Calculate the \$ assigned to each Transmission District

 $MSSCFC_{t,B} = (AnnualRR_B - Incremental TCC Revenue_B + Cost Adjustment_B)$  $\times (TransmissionDistrictCostAllocation_t)$ 

## Step 2: Calculate a per-MWh Rate for each Transmission District

 $MSSCFCRate_{t,B} = MSSCFC_{t,B}/MWh_{t,B}$ 

# Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Transmission District

 $Charge_{B,l,t} = MSSCFCRate_{t,B} \times MWh_{l,t,B}$ 

# Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Transmission Districts

$$Charge_{B,l} = \sum_{t \in T} (Charge_{B,l,t})$$

Where,

- l = the relevant Responsible LSE;
- T = set of ISO Transmission Districts;
- t = an individual Transmission District

B = the relevant Billing Period;

 $MWh_{t,B} =$  Actual Energy Withdrawals in Transmission District t aggregated across all hours in Billing Period B;

MWh<sub>1,t,B</sub>= Actual Energy Withdrawals for Responsible LSE l in Transmission District t aggregated across all hours in Billing Period B;

Annual  $RR_B$  = the *pro rata* share of the annual revenue requirement for the MSSC project allocated for Billing Period B;

Incremental TCC Revenue<sub>B</sub> = the auction revenue derived from the sale of Incremental TCCs related to the MSSC project plus Incremental TCC payments received by NYPA pursuant to Section 20.2.3 of the ISO OATT for the MSSC project allocated for Billing Period B. The revenues from the sale of Incremental TCCs related to the MSSC project in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

Cost Adjustment<sub>B</sub> = the settlements described in Section 6.15.3.2.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for the MSSC project, aggregated across all hours in Billing Period B;

Transmission District Cost Allocation $_{t}$  = the proportion of the cost of the MSSC project allocated to Transmission District t, as set forth below in Section 6.15.3.7.

- 6.15.3.5 NYPA anticipates that the MSSC project will achieve commercial operation during 2016. Because of the retrospective nature of NYPA's Formula Rate Template in Attachment H, Section 14.2.3.1 of the ISO OATT, the NYPA Formula Rate Template will not produce a revenue requirement for the MSSC project until the Annual Update scheduled for July 1, 2017. NYPA therefore anticipates that ISO will begin billing and collecting NYPA's MSSCFC for energy withdrawals occurring on and subsequent to July 1, 2017; but in any event the ISO shall not commence billing and collecting NYPA's MSSCFC until NYPA's Formula Rate Template produces a MSSC revenue requirement on Line 11a of the Transmission Revenue Requirement Summary.
- 6.15.3.6 The ISO will collect the appropriate MSSCFC revenues each Billing Period and remit those revenues to NYPA in accordance with the ISO's billing and settlement procedures.

## 6.15.3.7 Cost Allocation Table for the MSSC Project

Transmission District	Allocation of Project Costs (%)
Consolidated Edison Co. of NY, Inc. Orange and Rockland Utilities, Inc.	63.18
Long Island Power Authority	8.55
Niagara Mohawk Power Corp.	12.16*
New York Gas & Electric Corp. Rochester Gas and Electric Corp.	10.12
Central Hudson Gas & Electric Corp.	5.99
New York Power Authority	Load is treated the same as all other load serving entities ("LSEs") and NYPA will pay the same rate as the LSEs in each transmission district.

\* NYPA customers that are geographically located in the NYSEG and National Grid transmission districts but are connected directly to NYPA transmission facilities (identified by NYISO for billing purposes as 'NYPA North' customers) shall be included in the Niagara Mohawk Transmission District for purposes of the MSSCFC cost allocation and billing.

## 6.15.4 Recovery of Costs Incurred by NYPA

- 6.15.4.1 The MSSCFC shall be used as the cost recovery mechanism for the recovery of the costs of the MSSC project.
- 6.15.4.2 The period for cost recovery will begin if and when the MSSC project is completed and a MSSC revenue requirement is produced by NYPA's Formula Rate Template as discussed in Section 6.15.3.5, or as otherwise determined by the

Commission. The ISO will not begin to assess the MSSCFC solely because

NYPA receives incremental TCC revenue or is assessed Outage Charges related

to the MSSC project prior to the date NYPA's Formula Rate Template first

produces a non-zero MSSC revenue requirement. Instead any incremental TCC revenue received, or Outage Charge incurred, prior to that time will be reflected in the Formula Rate Template's true-up of calendar year revenue to calendar year costs for the calendar year when such revenue or charge was incurred. In any event, the ISO will not collect the MSSCFC from LSEs under this Schedule 15 unless and until the Commission issues an order approving a settlement in Docket No. ER15-572-000 that includes the cost allocation described in Section 6.15.3.7.

# 6.16 Schedule 16 - Rate Mechanism for the Recovery of the Short-Term Reliability Process Facilities Charge for a Regulated Transmission Solution in the Short-Term Reliability Process ("STRPFC").

## 6.16.1 Applicability.

This Schedule establishes the facilities charge for the recovery of the costs of a regulated transmission Short-Term Reliability Process Solution in connection with a Short-Term Reliability Process Need arising in the Short-Term Reliability Process set forth in Attachment FF of the ISO OATT ("STRPFC").<sup>1</sup> A Transmission Owner, an Unregulated Transmitting Utility.<sup>2</sup> or another Developer, may recover through the STRPFC the costs that it is eligible to recover pursuant to Attachment FF of the ISO OATT related to: (i) the transmission Short-Term Reliability Process Solution proposed by a Responsible Transmission Owner to address the Short-Term Reliability Process Need in accordance with Section 38.4.2.1, (ii) the conceptual permanent transmission Short-Term Reliability Process Solution, if applicable, submitted by a Responsible Transmission Owner in accordance with Section 38.4.2.1, or (iii) a regulated transmission Short-Term Reliability Process Solution proposed by a Developer that is selected by the ISO to address the Short-Term Reliability Process Need in accordance with Section 38.10, including the portion of an Interregional Transmission Project proposed pursuant to Section 38.4.2.5 of the ISO OATT and selected by the ISO pursuant to Section 38.10 of the ISO OATT. Such a project is referred to in this Schedule as an "Eligible Project." Any costs incurred for an Eligible Project by LIPA or NYPA will be collected under a separate LIPA STRPFC or NYPA STRPFC, as applicable, as described in Section 6.16.5.

<sup>&</sup>lt;sup>1</sup>Capitalized terms used in this Schedule that are not defined in this Schedule shall have the same meaning set forth in Section 38.1 of Attachment FF of the ISO OATT.

<sup>&</sup>lt;sup>2</sup> An "Unregulated Transmitting Utility" is a Transmission Owner, such as LIPA and NYPA, that, pursuant to Section 201(f) of the Federal Power Act, is not subject to the Commission's jurisdiction under Sections 205 and 206(a) of the Federal Power Act.

This Schedule does not provide for cost recovery related to: (i) projects undertaken by Transmission Owners through their Local Transmission Owner Planning Processes pursuant to Section 31.1.3 and 31.2.1 of Attachment Y of the ISO OATT, (ii) projects eligible for cost recovery through Schedule 10 of the ISO OATT in connection with the NYISO's Reliability Planning Process, (iii) a Generator operating under an RMR Agreement, or (iv) a market-based Short-Term Reliability Process Solution identified in accordance with Section 38.6 of the ISO OATT.

The STRPFC shall be separate from the Transmission Service Charge ("TSC") and the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Attachment H of the ISO OATT.

In addition, with respect to the Eligible Project only, the Developer shall receive the settlements described herein and shall not be subject to payments and charges under Section 20.2.4 and Section 20.3.6 of Attachment N of the ISO OATT unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT. The Developer shall request Incremental TCCs with respect to the Eligible Project in accordance with the requirements of Section 19.2.4 of Attachment M of the ISO OATT and receive any Incremental TCCs to the extent awarded by the ISO pursuant to such request. As it relates solely to the Eligible Project, the Developer shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of Attachment N of the ISO OATT and accordingly shall not receive an allocation of Net Congestion Rents under Section 20.2.5 of Attachment N of the ISO OATT or Net Auction Revenues under Section 20.3.7 of Attachment N of the ISO OATT.

## 6.16.2 Revenue Requirement for STRPFC

The STRPFC shall be calculated in accordance with the formula set forth in Section 6.16.3 using the revenue requirement of the Transmission Owner, Unregulated Transmitting Utility, or other Developer, as applicable, necessary to recover the costs of an Eligible Project. The revenue requirement to be used in the calculation and recovery of the STRPFC for a Transmission Owner or other Developer, other than an Unregulated Transmitting Utility, is described in Section 6.16.4. The development of a revenue requirement and recovery of costs for an Eligible Project by an Unregulated Transmitting Utility through the NYPA STRPFC or the LIPA STRPFC, as applicable, is described in Section 6.16.5.

If an Eligible Project involves construction of a facility identified as a Highway System Deliverability Upgrade in a completed Class Year Interconnection Facilities Study, the Project Cost Allocation for which has been accepted and Security posted by at least one Class Year Developer, the final project cost and resulting revenue requirement will be reduced to the extent permitted by Section 25.7.12.3.3 of Attachment S to the ISO OATT.

# 6.16.3 Calculation and Recovery of STRPFC and Payment of Recovered Revenue

The ISO will calculate and bill the STRPFC for each Eligible Project in accordance with this Section 6.16.3. The ISO shall collect the STRPFC from LSEs. The LSEs, including Transmission Owners, competitive LSEs, municipal systems, and any other LSE, serving Load in the Load Zones and/or Subzones to which the costs of the Eligible Project have been allocated (each a "Responsible LSE") shall pay the STRPFC. The costs of each Eligible Project shall be allocated as set forth in Section 38.22 of Attachment FF of the ISO OATT.

6.16.3.1 The revenue requirement filed pursuant to this Schedule by the Transmission Owner, Unregulated Transmitting Utility, or another Developer, as applicable, and approved or accepted by the Commission will be the basis for the STRPFC Rate (\$/MWh) that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.16.3.4.

6.16.3.2 The Developer shall in relation to any Eligible Project reasonably exercise its right to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of Attachment M of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Sections 19.2.4.7 and 19.2.4.8 of Attachment M of the ISO OATT, Incremental TCCs created and awarded to the Developer as a result of implementation of an Eligible Project shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to the Developer as a result of the implementation of an Eligible Project, shall be offered by the Developer in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to the Developer. The total amount of the auction revenues disbursed to the Developer pursuant to this Section 6.16.3.2 shall be used in the calculation of the STRPFC Rate, as set forth in Section 6.16.3.4. Incremental TCCs associated with an Eligible Project shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M of the ISO OATT. The revenue offset discussed in this Section 6.16.3.2 shall commence upon the first payment of revenues related to Incremental TCCs associated with the implementation of an Eligible Project on or after the date the STRPFC is

implemented. The STRPFC and the revenue offset related to Incremental TCCs associated with the implementation of an Eligible Project shall not require and shall not be dependent upon a reopening or review of the Developer's revenue requirements for an RFC pursuant to Section 6.10 of the ISO OATT or the Transmission Owners' revenue requirements for the TSCs and NTAC set forth in Attachment H of the NYISO OATT.

- 6.16.3.2.1 With respect to an Eligible Project, the Developer shall be subject to the settlements described in Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to an Expander not subject to Section 20.2.5 of Attachment N of the ISO OATT.
- 6.16.3.3 The billing units for the STRPFC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Load Zones and/or Subzones allocated the costs of the project in accordance with Section 38.22 of Attachment FF of the ISO OATT.

#### 6.16.3.4 Cost Recovery Methodology

The ISO shall calculate the STRPFC for each Responsible LSE as follows:

### Step 1: Calculate the \$ assigned to each Load Zone or Subzone (as applicable)

 $\begin{aligned} \text{STRPFC}_{z,B} &= \sum_{p \in P} \left( \left( \text{AnnualRR}_{p,B} - \text{IncrementalTransmissionRightsRevenue}_{p,B} + \text{CostAdjustment}_{p,B} \right) \\ &\times \left( \text{ZonalCostAllocation}_{z,P} \right) \end{aligned}$ 

# Step 2: Calculate a per-MWh Rate for each Load Zone or Subzone (as applicable)

 $STRPFCRate_{z,B} = STRPFC_{z,B}/MWh_{z,B}$ 

# Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Load Zone or Subzone (as applicable)

 $Charge_{B,l,z} = STRPFCRate_{z,B} * MWh_{l,z,B}$ 

# Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Load Zones or Subzones (as applicable)

$$Charge_{B,l} = \sum_{z \in Z} (Charge_{B,l,z})$$

Where,

l = the relevant Responsible LSE;

p = an individual Eligible Project;

P = set of Eligible Projects;

z = an individual Load Zone or Subzone, as applicable;

Z = set of ISO Load Zones or Subzones, as applicable;

B = the relevant Billing Period;

 $MWh_{z,B}$  = Actual Energy Withdrawals in Load Zone or Subzone, as applicable, *z* aggregated across all hours in Billing Period *B*;

 $MWh_{l,z,B}$  = Actual Energy Withdrawals for Responsible LSE *l* in Load Zone or Subzone, as applicable, *z* aggregated across all hours in Billing Period *B*;

AnnualRR<sub>p,B</sub> = the pro rata share of the annual revenue requirement for each Eligible Project *p*, as discussed in Section 6.16.2 above, allocated for Billing Period *B*;

IncrementalTransmissionRightsRevenue<sub>p,B</sub> = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by the Developer pursuant to Section 20.2.3 of Attachment N of the ISO OATT for each Eligible Project p, as discussed in Section 6.16.3.2 above, allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

CostAdjustment<sub>p,B</sub> = the settlements described in Section 6.16.3.2.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for each Eligible Project p, aggregated across all hours in Billing Period B;

ZonalCostAllocation<sub>z,p</sub> = the proportion of the cost of Eligible Project *p* allocated to Load Zone or Subzone, as applicable, *z*, as set forth in Section 38.22 of Attachment FF of the ISO OATT.

6.16.3.5 The ISO will collect the appropriate STRPFC revenues each Billing
Period and remit those revenues to the appropriate Transmission Owner,
Unregulated Transmitting Utility, or other Developer in accordance with the
ISO's billing and settlement procedures.

## 6.16.4 Recovery of Costs Incurred by Transmission Owner or Developer

- 6.16.4.1 The STRPFC shall be used as the cost recovery mechanism for the recovery of the costs of an Eligible Project undertaken by a Transmission Owner or Developer, other than an Unregulated Transmitting Utility, which project is authorized by the Commission to recover costs under this rate mechanism; provided, however, nothing in this cost recovery mechanism shall be deemed to create any additional rights for a Transmission Owner or Developer to proceed with a regulated transmission project that it does not otherwise have at law. The cost that may be included in the revenue requirement for calculating the STRPFC pursuant to Section 6.16.3 include all reasonably incurred costs, as determined by the Commission, related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Eligible Project. This cost includes, but is not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections.
- 6.16.4.2 The period for cost recovery will be determined by the Commission and will begin if and when the Eligible Project is completed or halted, or as otherwise

determined by the Commission. The Transmission Owner/Developer and/or the ISO, as applicable, will make a filing with the Commission to provide for its review and approval or acceptance, as appropriate, of the final project cost and resulting revenue requirement to be recovered through the STRPFC. The filing may include all reasonably incurred costs specified in Section 6.16.4.1 of this Schedule that are related to the Transmission Owner's or the Developer's undertaking an Eligible Project. The Transmission Owner or Developer shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding. The ISO will begin to calculate and bill the STRPFC after the Commission has accepted or approved the filing.

## 6.16.5 Recovery of Costs Incurred By Unregulated Transmitting Utility

6.16.5.1 The costs that may be included in the revenue requirement for an Eligible Project undertaken by an Unregulated Transmitting Utility include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, an Eligible Project as well as a reasonable return on investment. For any recovery of a revenue requirement by an Unregulated Transmitting Utility under the STRPFC, the period of cost recovery will be determined by the Commission and will begin if and when the Eligible Project is completed or halted, or as otherwise determined by the Commission. The ISO will begin to calculate and bill the STRPFC for an Unregulated Transmitting Utility pursuant to Section 6.16.3 after the Commission has accepted or approved the filing of its revenue requirement.

#### 6.16.5.2 Cost Recovery for LIPA

Any costs incurred for an Eligible Project undertaken by LIPA, as an Unregulated Transmitting Utility, that are eligible for recovery under Section 6.16.5.1 under the LIPA STRPFC shall be recovered over the period established by Long Island Power Authority's Board of Trustees as follows:

- 6.16.5.2.1 For Costs to LIPA Customers: Cost will be recovered pursuant to a rate recovery mechanism approved by the Long Island Power Authority'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. Upon approval of the rate recovery mechanism, LIPA shall provide to the ISO, for purposes of inclusion within the ISO OATT and filing with the Commission on an informational basis only, a description of the rate recovery mechanism, the costs of the Eligible Project, and the rate that LIPA will charge and collect from responsible entities within the Long Island Transmission District in accordance with the ISO cost allocation methodology pursuant to Section 38.22 of Attachment FF of the ISO OATT.
- 6.16.5.2.2 For Costs to Other Transmission Districts, As Applicable: Where the ISO determines that there are Responsible LSEs serving Load outside of the Long Island Transmission District that should be allocated a portion of the costs of the Eligible Project undertaken by LIPA, LIPA shall coordinate with and inform the ISO of the amount of such costs. Such costs will be an allocable amount of the cost base recovered through the recovery mechanism described in Section 6.16.5.2.1 in accordance with the formula set forth in Section 6.16.3.4. Such costs of the Eligible Project allocable to Responsible LSEs serving Load outside of the Long Island Transmission District shall constitute the "revenue"

requirement." The ISO shall file the revenue requirement with the Commission, to the extent requested to so by LIPA, for Commission review under the same "comparability" standard as is applied to review of changes in LIPA's TSC under Attachment H of the ISO OATT. LIPA shall intervene in support of such filing at the Commission and shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding. Using the procedures described in Sections 6.16.3 through 6.16.3.4 of this Schedule, the ISO shall calculate a separate LIPA STRPFC based on the revenue requirement and shall bill for LIPA the LIPA STRPFC as a separate line item to the Responsible LSEs serving Load in Transmission Districts located outside of the Long Island Transmission District. The ISO shall remit the revenues collected to LIPA in accordance with the ISO's billing and settlement procedures.

6.16.5.2.3 Developers, other than LIPA, that undertake an Eligible Project on Long Island may recover any costs pursuant to Section 6.16.4 of this Schedule.

#### 6.16.5.3 Cost Recovery for NYPA

Any costs incurred for an Eligible Project undertaken by NYPA, as an Unregulated Transmitting Utility, that are eligible for recovery under Section 6.16.5.1 shall be recovered under a NYPA STRPFC as described herein. A reasonable return on investment for an Eligible Project undertaken by NYPA may include any incentives for construction of transmission projects available under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

6.16.5.3.1 NYPA shall coordinate with and inform the ISO of the amount of the costs it incurred in undertaking an Eligible Project. Such costs shall constitute the

revenue requirement. The ISO shall file the revenue requirement with the Commission to the extent requested to do so by NYPA. NYPA shall intervene in support of such filing at the Commission and shall bear the burden of resolving all concerns about the contents of the filing that might be raised in such proceeding, including being solely responsible for making any arguments or reservations regarding its status as a non-Commission-jurisdictional utility and the appropriate standard for Commission review of its revenue requirement. In accordance with Sections 6.16.3 through 6.16.3.4 of this Schedule, the ISO shall calculate a separate NYPA STRPFC based on the revenue requirement and bill for NYPA the NYPA STRPFC to the Responsible LSEs. The ISO shall remit the revenues collected to NYPA in accordance with the ISO's billing and settlement procedures.

6.16.5.3.2 Developers, other than NYPA, that undertake an Eligible Project in the NYPA North Subzone may recover any costs pursuant to Section 6.16.4 of this Schedule.

## 6.16.5.4 Savings Clause

The inclusion in the ISO OATT or in a Commission filing of the revenue requirement for recovery of costs incurred by an Unregulated Transmitting Utility, including LIPA or NYPA, related to an Eligible Project undertaken pursuant to Attachment FF to the ISO OATT, as provided for in this Section 6.16.5, or the inclusion of such revenue requirement in the LIPA STRPFC or the NYPA STRPFC, shall not be deemed to modify the treatment of such rates as non-jurisdictional pursuant to Section 201(f) of the FPA.

## 6.17 Schedule 17 – Rate Mechanism for the Recovery of the Western New York Facilities Charge for Non-Bulk Transmission Facilities ("WNY-FC")

## 6.17.1 Applicability

## 6.17.1.1 Eligible Projects

This Schedule establishes the Western New York Facilities Charge ("WNY-FC") for the recovery of the costs of certain upgrades to non-bulk transmission facilities related to any Public Policy Transmission Project that are eligible for cost recovery in accordance with the Comprehensive System Planning Process requirements set forth in Attachment Y of the ISO OATT.<sup>1</sup> Niagara Mohawk Power Corporation ("NMPC") may recover through the WNY-FC the costs that it is eligible to recover pursuant to Attachment Y of the ISO OATT related to certain upgrades to NMPC non-bulk transmission facilities in connection with a Public Policy Transmission Project that the ISO has selected pursuant to Section 31.4.8.2 of Attachment Y of the ISO OATT as the more efficient or cost-effective solution to Western New York Public Policy Transmission Need. The "Western New York Public Policy Transmission Need" relates to congestion relief in Western New York identified by the NYPSC on July 20, 2015 and October 13, 2016, in NYPSC Case No. 14-E-0454.

The specific upgrades to NMPC non-bulk transmission facilities to address the Western New York Public Policy Transmission Need (the "WNY Ancillary Upgrades.") shall be identified by the ISO in the Public Policy Transmission Planning Report for those needs.

<sup>&</sup>lt;sup>1</sup> Capitalized terms used in this Schedule that are not defined in this Schedule shall have the meaning set forth in Section 31.1.1 of Attachment Y of the ISO OATT and, if not therein, in Section 1 of the OATT.

## 6.17.1.2 Projects Not Eligible for Cost Recovery Through the WNY-FC

This Schedule does not apply to projects that are not eligible pursuant to Attachment Y of the ISO OATT for cost allocation and recovery under the ISO OATT, including, but not limited to: (i) projects undertaken by Transmission Owners through the Local Transmission Owner Planning Processes pursuant to Section 31.1.3 and Section 31.2.1 of Attachment Y of the ISO OATT; (ii) market-based solutions to transmission needs identified in the CSPP; (iii) any non-transmission components of an Eligible Project (*e.g.*, generation, energy efficiency, or demand response resources); (iv) transmission Short-Term Reliability Process Solutions selected in the Short-Term Reliability Process pursuant to Attachment FF of the ISO OATT and eligible for cost recovery through Schedule 16 (Section 6.16) of the ISO OATT; (v) transmission facilities eligible for cost recovery through another rate schedule of the ISO OATT; and (vi) facilities for which costs are recovered through the Transmission Service Charge ("TSC") or the NYPA Transmission Adjustment Charge ("NTAC") determined in accordance with Attachment H of the ISO OATT.

## 6.17.2 Revenue Requirement for WNY-FC

The WNY-FC shall be calculated in accordance with the formula set forth in Section 6.17.3. The costs that may be included in the WNY-FC revenue requirement include all reasonably incurred costs related to the preparation of proposals for, and the development, financing, construction, operation, and maintenance of, the WNY Ancillary Upgrades, including, but not limited to, a reasonable return on investment and any incentives for the construction of transmission projects approved under Section 205 or Section 219 of the Federal Power Act and the Commission's regulations implementing those sections, as determined by the Commission.

### 6.17.3 Calculation and Recovery of WNY-FC and Payment of Recovered Revenue

- **6.17.3.1** The ISO will calculate and bill the WNY-FC separately for the WNY Ancillary Upgrades in accordance with this Section 6.17.3. The ISO shall collect the WNY-FC from LSEs. The LSEs, including Transmission Owners, competitive LSEs, municipal systems, and any other LSEs, serving Load in the Load Zones and/or Subzones to which the costs of the WNY Ancillary Upgrades have been allocated (each a "Responsible LSE") shall pay the WNY-FC. The costs of the WNY Ancillary Upgrades shall be allocated in accordance with the Commission-approved cost allocation methodology for the Public Policy Transmission Project selected to address Western New York Public Policy Transmission Need in accordance with Section 31.5.5 of Attachment Y of the ISO OATT.
- 6.17.3.2 The WNY-FC revenue requirement shall be calculated as follows: The annual WNY-FC revenue requirement shall equal the annual Historical Transmission Revenue Requirement ("HTRR") for NMPC's TSC divided by NMPC's gross transmission plant in service multiplied by the gross transmission plant in service for the WNY Ancillary Upgrades. For purposes of this calculation:

(a) NMPC's HTRR is equal to Attachment 1 to Attachment H, Schedule 1,line 17.

(b) NMPC's gross transmission plant is equal to Attachment 1 to AttachmentH, Schedule 6, page 2 of 2, line 3.

In addition, to the extent that the revenues received for the WNY Ancillary Upgrades in the prior year were greater (or less) than the annual WNY- FC revenue requirement for the year, the current year's WNY-FC revenue requirement will be decreased (or increased) by that difference. The annual WNY-FC revenue requirement will be the basis for the applicable WNY-FC Rate (\$/MWh) for the Billing Period that shall be charged by the ISO to each Responsible LSE based on its Actual Energy Withdrawals as set forth in Section 6.17.3.5.

6.17.3.3 NMPC shall request Incremental TCCs with respect to the WNY Ancillary Upgrades in accordance with the requirements of Section 19.2.4 of Attachment M of the ISO OATT and receive any Incremental TCCs to the extent awarded by the ISO pursuant to such request. As it relates solely to the WNY Ancillary Upgrades, NMPC shall not be a "Transmission Owner" for purposes of Section 20.2.5 or Section 20.3.7 of Attachment N of the ISO OATT and accordingly shall not receive an allocation of Net Congestion Rents under Section 20.2.5 of Attachment N of the ISO OATT or Net Auction Revenues under Section 20.3.7 of Attachment N of the ISO OATT.

NMPC shall in relation to the WNY Ancillary Upgrades exercise its right to obtain and maintain in effect all Incremental TCCs, including temporary Incremental TCCs, to which it has rights under Section 19.2.4 of Attachment M of the ISO OATT and shall take the actions required to do so in accordance with the procedures specified therein. Notwithstanding Sections 19.2.4.7 and 19.2.4.8 of Attachment M of the ISO OATT, Incremental TCCs created and awarded to NMPC as a result of implementation of the WNY Ancillary Upgrades shall not be eligible for sale in Secondary Markets. Incremental TCCs that may be created and awarded to NMPC as a result of the implementation of the WNY Ancillary Upgrades, shall be offered by NMPC in all rounds of the six month Sub-Auction of each Centralized TCC Auction conducted by the ISO. The ISO shall disburse the associated auction revenues to NMPC. The total amount of the auction revenues disbursed to NMPC pursuant to this Section 6.17.3.3 shall be used in the calculation of the WNY-FC Rate, as set forth in Section 6.17.3.5. Incremental TCCs associated with the WNY Ancillary Upgrades shall continue to be offered for the duration of the Incremental TCCs, established pursuant to the terms of Attachment M of the ISO OATT.

The revenue offset discussed in this Section 6.17.3.3 shall commence upon the first payment of revenues related to Incremental TCCs associated with the implementation of the WNY Ancillary Upgrades on or after the date the WNY-FC is implemented. The WNY-FC and the revenue offset related to Incremental TCCs associated with the implementation of the WNY Ancillary Upgrades shall not require and shall not be dependent upon a reopening or review of: (i) NMPC's revenue requirements for charges set forth in another rate schedule of the ISO OATT, or (ii) NMPC's revenue requirements for its TSC set forth in Attachment H of the ISO OATT.

6.17.3.3.1 With respect to the WNY Ancillary Upgrades only, NMPC shall receive the settlements described in Section 19.2.4.10 of Attachment M to the ISO OATT that are applicable to an Expansion that is not subject to Section 20.2.5 of Attachment N to the ISO OATT. Unless expressly provided for otherwise in Section 19.2.4.10 of Attachment M to the ISO OATT, NMPC, as it relates to the

WNY Ancillary Upgrades only, shall not be subject to payments and charges under Section 20.2.4 and Section 20.3.6 of Attachment N of the ISO OATT.

6.17.3.4 The billing units for the WNY-FC Rate for the Billing Period shall be based on the Actual Energy Withdrawals available for the current Billing Period for those Load Zones and/or Subzones allocated the costs of the project in the manner described in Section 6.17.3.1.

## 6.17.3.5 Cost Recovery Methodology

The ISO shall calculate the WNY-FC for each Responsible LSE as follows:

#### Step 1: Calculate the \$ assigned to each Load Zone or Subzone (as applicable)

 $WNYFC_{p,z,B} = (AnnualRR_{p,B} - IncrementalTransmissionRightsRevenue_{p,B} + CostAdjustment_{p,B}) \times (ZonalCostAllocation_{z,p})$ 

#### Step 2: Calculate a per-MWh Rate for each Load Zone or Subzone (as applicable)

$$WNYFCRate_{p,z,B} = WNYFC_{p,z,B}/MWh_{z,B}$$

Step 3: Calculate charge for each Billing Period for each Responsible LSE in each Load Zone or Subzone (as applicable)

$$Charge_{B,l,z,p} = WNYFCRate_{p,z,B} * MWh_{l,z,B}$$

Step 4: Calculate charge for each Billing Period for each Responsible LSE across all Load Zones or Subzones (as applicable)

$$Charge_{B,l,p} = \sum_{z \in \mathbb{Z}} (Charge_{B,l,z,p})$$

Where,

l = the relevant Responsible LSE;

p = the WNY Ancillary Upgrades;

z = an individual Load Zone or Subzone, as applicable;

Z = set of ISO Load Zones or Subzones, as applicable;

B = the relevant Billing Period;

 $MWh_{z,B}$  = Actual Energy Withdrawals in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B;

 $MWh_{l,z,B}$  = Actual Energy Withdrawals for Responsible LSE 1 in Load Zone or Subzone, as applicable, z aggregated across all hours in Billing Period B;

Annual $RR_{p,B}$  = the pro rata share of the annual revenue requirement for the WNY Ancillary Upgrades as set forth in 6.17.3.2 above, allocated for Billing Period B;

IncrementalTransmissionRightsRevenue<sub>p,B</sub> = the auction revenue derived from the sale of Incremental TCCs plus Incremental TCC payments received by NMPC pursuant to Section 20.2.3 of Attachment N of the ISO OATT for the WNY Ancillary Upgrades, as discussed in Section 6.17.3.3 above, allocated for Billing Period B. The revenues from the sale of Incremental TCCs in the ISO's six month Sub-Auctions of each Centralized TCC Auction shall be allocated uniformly across all hours of the Billing Period;

CostAdjustment<sub>p,B</sub> = the settlements described in Section 6.17.3.3.1 above and determined pursuant to Section 19.2.4.10 of Attachment M to the ISO OATT for the WNY Ancillary Upgrades, aggregated across all hours in Billing Period B; and

 $ZonalCostAllocation_{z,p}$  = the proportion of the cost of the WNY Ancillary Upgrades allocated to Load Zone or Subzone, as applicable, z, in the manner described in Section 6.17.3.1 above.

6.17.3.6 The ISO will collect the appropriate WNY-FC revenues each Billing

Period and remit those revenues to NMPC in accordance with the ISO's billing

and settlement procedures.

- 6.17.3.7 Payments received by NMPC for the WNY-FC will be treated as a revenue credit in the revenue requirement for NMPC's TSC. After considering the revenue credit from the WNY-FC, the net cost for the WNY Ancillary Upgrades recovered through the TSC will be deemed to be zero.
- 6.17.3.8 NMPC shall recalculate the WNY-FC revenue requirement each year as part of the Annual Update process set forth in Section 14.1.9.4 of Attachment H of the ISO OATT. The WNY-FC revenue requirement shall be separately stated

in that Annual Update, and the Annual Update shall provide supporting documentation for the calculation of the WNY-FC revenue requirement for the Update Year. Each Responsible LSE paying the WNY-FC shall be an "Interested Party" with respect to any portion of the Annual Update related to the WNY-FC. The WNY-FC revenue requirement for the first year after the WNY Ancillary Upgrades are placed in service will be calculated retroactively to the in-service date. The ISO shall commence charging the WNY-FC beginning with the first billing period for the next effective Update Year, as such term is defined in Section 14.1.9.1.66 of Attachment H of the ISO OATT, after the WNY Ancillary Upgrades are placed into service.

# **19.2** Award of TCCs Other Than Through TCC Auctions: Fixed Price TCCs and Incremental TCCs

# **19.2.1** Converting Transmission Capacity Associated with Expired, Terminated, or Expiring ETAs Into Historic Fixed Price TCCs

As each ETA in effect on November 19, 1999 that was listed in Table 1A of Attachment L to this OATT (as it may be amended), and that conferred transmission rights on an LSE, expires or terminates, the transmission Capacity associated with it may be used to create Historic Fixed Price TCCs, pursuant to Section 19.2.1 of this Attachment M (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of this Attachment M). When any other ETA terminates, the Grandfathered Rights or Grandfathered TCCs associated with it shall be converted into Residual Transmission Capacity. The revenues associated with the sale or conversion of TCCs created from capacity associated with expired or terminated ETAs (including revenues from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of this Attachment M) shall be allocated among the Transmission Owners as described in Attachment N. All references to "ETAs listed in Table 1A of Attachment L" in this Attachment M shall encompass both those agreements that were previously converted into Grandfathered TCCs and those that were not.

The ISO shall follow the procedures set forth in this Section 19.2.1 prior to the implementation of the End-State Auction process. For purposes of this Section 19.2.1, references to "expired" ETAs shall include ETAs that have been terminated. When determining the Points of Injection, Points of Withdrawal, and MW quantities associated with ETAs listed in Table 1A in effect on November 19, 1999, the ISO shall look to Attachment L of this OATT, as it may be amended, at the time of the conversion.

#### **19.2.1.1** Conversion Rules

Any LSE that had transmission rights under an ETA in effect on November 19, 1999 that was listed in Table 1A of Attachment L to this OATT (as it may be amended), but has since expired, shall have a right to obtain Historic Fixed Price TCCs with the same Point of Injection and Point of Withdrawal associated with that ETA.

Any LSE that currently has transmission rights under an ETA in effect on November 19, 1999 that was listed on Table 1A of Attachment L of the OATT (as it may be amended) but has not yet expired, shall likewise have a right to obtain Historic Fixed Price TCCs with the same Point of Injection and Point of Withdrawal as that ETA after its expiration.

LSEs that are eligible to obtain Historic Fixed Price TCCs shall be able to obtain them for a total duration of up to ten years, except as provided in the following paragraph; provided, however that LSEs that obtain Historic Fixed Price TCCs may be eligible to purchase extensions of their Historic Fixed Price TCCs pursuant to Section 19.2.1.4 of this Attachment M. The ISO shall offer eligible LSEs Historic Fixed Price TCCs with the same Points of Injection and Points of Withdrawal as shown on Table 1A of Attachment L, as it may be amended, associated with their expired or expiring ETAs and a duration of five or ten years (at the LSE's option) at a price to be determined in accordance with Section 19.2.1.2 below. Prior to the expiration of Historic Fixed Price TCCs with a duration of five years that are created pursuant to the preceding sentence, the ISO shall offer those LSEs that hold such Historic Fixed Price TCCs an option to obtain new Historic Fixed Price TCCs with the same Points of Injection and Points of Withdrawal for one additional five-year term, effective upon the expiration of the original Historic Fixed Price TCCs' five year term, at a new price calculated in accordance with Section 19.2.1.2 below. LSEs that certify to the ISO that they purchase Energy from the New York Power Authority ("NYPA") under agreements that will expire in 2025 and that have ETAs listed on Table 1A to Attachment L, as it may be amended, that will expire in 2013, which they will use to hedge the congestion costs associated with deliveries under their NYPA agreements, shall have the right to obtain Historic Fixed Price TCCs with the same Points of Injection and Points of Withdrawal as shown on Table 1A of Attachment L to the OATT, as it may be amended, associated with the expiring ETA for a total duration of twelve years. The ISO shall offer Historic Fixed Price TCCs with a duration of five years to LSEs that make the required certification (provided for in this paragraph) at a price to be determined in accordance with Section 19.2.1.2 below. Prior to, but effective upon, the expiration of those Historic Fixed Price TCCs, the ISO shall offer the LSE an option to obtain new Historic Fixed Price TCCs with the same Points of Injection and Points of Withdrawal for one additional seven-year term, effective upon the expiration of the original Historic Fixed Price TCCs, at a new price calculated in accordance with Section 19.2.1.2 below.

To exercise this conversion right, an LSE must notify the ISO, and the Transmission Owner that was (or is) a party to the ETA, in writing, of its decision to obtain Historic Fixed Price TCCs under this provision. That notice must also specify the ETA's expiration or termination date. The LSE must provide this notice prior to a deadline to be established by the ISO. In the case of an ETA that has already expired or been terminated as of the effective date of this Section 19.2.1, or that will expire or be terminated prior to the end of the Winter 2008 Capability Period, the ISO shall set the deadline on a date prior to the beginning of the Autumn 2008 Centralized TCC Auction. In the case of an ETA that will expire or terminate after the end of the 2008 Winter Capability Period, the ISO shall set the deadline to a date prior to the beginning of the Centralized TCC Auction for the Capability Period in which the ETA expires or terminates. The specific deadlines shall be set forth in the ISO Procedures.

When an LSE elects to convert an ETA that: (i) has expired; (ii) is scheduled to expire, prior to November 1, 2008; or (iii) is scheduled to expire later but that is terminated before November 1, 2008, the term of the Historic Fixed Price TCCs that LSE obtains shall begin on November 1, 2008. When an LSE elects to convert any other ETA it may choose to have the term of the Historic Fixed Price TCCs that it obtains begin either on the day after the ETA's expiration or termination, or at the start of the Capability Period following its expiration or termination. If the LSE chooses the latter option, the ISO shall make the transmission Capacity associated with the expired ETA available to support the sale of TCCs in any Reconfiguration Auction(s) held for TCCs valid between the ETA's expiration and the start of the next Capability Period. Nothing in this Section 19.2.1 shall be construed as authorizing the early termination of ETAs before their scheduled expiration dates or as excusing the parties to ETAs of their obligations thereunder.

An LSE that exercises its conversion rights under this Section 19.2.1 may elect to receive a number of Historic Fixed Price TCCs up to one hundred percent of the MW quantity specified for the ETA in Table 1A of Attachment L as it may be amended. In the case of ETAs for which more than one MW quantity is listed in Attachment L, the LSE may elect to receive the higher quantity.

The LSE must submit a written certification to the ISO stating that it expects to: (i) be legally obligated to serve the Load that it historically served under the ETA (or a portion of that Load at least equal to the number of Historic Fixed Price TCCs that it plans to obtain under this Section 19.2.1); and (ii) need the transmission Capacity between the Point of Injection and Point of Withdrawal specified in the ETA to serve that Load. The LSE will not be allowed to obtain Historic Fixed Price TCCs under this Section to the extent that it cannot satisfy either or both of these requirements. That is, the LSE's conversion rights may be wholly or partially terminated to the extent that it anticipates losing all or part of the historic Load, or no longer needing all or part of the transmission Capacity associated with the expired ETA to serve it. Additional information regarding the ISO's certification process shall be set forth in the ISO Procedures.

In addition, if the ISO concludes that an LSE's requested conversion would make existing and valid TCCs infeasible, it will reduce the number of Historic Fixed Price TCCs that the LSE may obtain to the extent necessary to avoid the infeasibility. The reduction procedure will use the same optimization model as the Centralized TCC Auctions, except that the expired or expiring transmission rights subject to conversion will not be represented as fixed injections and withdrawals but will be represented by a bid curve. Additional details shall be specified in the ISO Procedures.

## 19.2.1.1.1 Special Rules Applicable to LSEs That Were Eligible to Obtain Historic Fixed Price TCCs with a Duration Commencing on November 1, 2008

LSEs that obtained Historic Fixed Price TCCs with a duration of five years commencing on November 1, 2008 shall have a one-time opportunity to elect to replace those Historic Fixed Price TCCs, at no additional cost, with Historic Fixed Price TCCs with a duration of ten years. The ten year duration shall be deemed to have commenced on November 1, 2008. LSEs that elect to replace Historic Fixed Price TCCs under this paragraph shall not be eligible to obtain additional Historic Fixed Price TCCs for an additional five year term at the time that their replacement Historic Fixed Price TCCs expire. LSEs that were eligible to obtain Historic Fixed Price TCCs with a duration of five years commencing on November 1, 2008, but that opted not to obtain them, shall have a one-time opportunity to obtain Historic Fixed Price TCCs with a duration of ten years. If an LSE makes this election the duration of the Historic Fixed Price TCCs that it obtains will commence at the beginning of a subsequent Capability Period, as specified in the ISO Procedures. An LSE that elects to obtain Historic Fixed Price TCCs under this paragraph shall pay the same price that the ISO originally offered for the same Historic Fixed Price TCCs with a duration of five years, *i.e.*, the price that the ISO calculated under Section 19.2.1.2 for Historic Fixed Price TCCs commencing on November 1, 2008 (including the original historic inflation adjustment) for the LSE in advance of the Autumn 2008 Centralized TCC Auction.

All elections under this Section 19.2.1.1.1 shall be made during an election period specified in the ISO Procedures and shall be subject to all of the notification, certification, feasibility and other requirements established under Section 19.2.1 and the ISO Procedures.

#### **19.2.1.2** Calculating Prices for Historic Fixed Price TCCs

Except as is specifically noted in Section 19.2.1.2 (iii) and Section 19.2.1.4, if an LSE chooses to obtain Historic Fixed Price TCCs pursuant to this Section 19.2.1 it shall pay a base price per MW/year equal to the average of:

(i) the average of the inflation-adjusted market-clearing prices calculated for TCCs with the POI and POW associated with the Historic Fixed Price TCC in the one-year Sub-Auction rounds of each of the four previous Centralized TCC Auctions. The average adjusted market-clearing price will be determined by first calculating the average market-clearing price in the one-year Sub-Auction rounds for each Centralized TCC Auction. Notwithstanding anything to the contrary herein, if a

Centralized TCC Auction includes a single round one-year Sub-Auction for TCCs with a start date that is after the first day of the Capability Period that commences immediately following the completion of such Centralized TCC Auction, the market-clearing prices from such single round one-year Sub-Auction shall not be considered for purposes of this Section 19.2.1.2. One-year Sub-Auction-round market-clearing prices from Centralized TCC Auctions conducted before May 1, 2010 are those from the Stage 1 one-year rounds of the Centralized TCC Auctions. The average market-clearing price for the first, second, and third of the four previous Centralized TCC Auctions will then be adjusted for inflation between: (a) the date that TCCs sold in them went into effect, and (b) the start of the Capability Period during which the TCCs sold in the fourth Centralized Auction went into effect; and

(ii) the inflation-adjusted average annual difference between the Day-Ahead Market Congestion Component at the POW and the POI associated with the TCCs, summed over the hours of the four most recently concluded Capability Periods. The inflation-adjusted average annual difference for a given Historic Fixed Price TCC would be calculated by summing the Day-Ahead Market Congestion Component for the POW associated with that Historic Fixed Price TCC minus the Day-Ahead Market Congestion Component for the POI associated with that Historic Fixed Price TCC over the hours of each month of the four most recently concluded Capability Periods; adjusting each monthly total for inflation between the end of the month in question and the start of the most recently concluded Capability Period; summing those inflation-adjusted monthly totals over those four Capability Periods; and dividing by two.

All inflation calculations referenced in this Section 19.2.1.2 shall be made using the most recently published inflation rates specified in the Personal Consumption Expenditures Implicit Price Deflator published by the Bureau of Economic Analysis of the United States Department of Commerce. A Historic Fixed Price TCC shall not have a price of less than zero. To the extent that the formula in this Section 19.2.1.2 produces a price for a Historic Fixed Price TCC of less than zero, the price shall be zero.

(iii) If an LSE chooses to obtain a Historic Fixed Price TCC with a POW at or inside of Load Zone K (Long Island) pursuant to this Section 19.2.1 and bidding to or from Load Zone K was not permitted in any of the one-year Sub-Auctions of the four previous Centralized TCC Auctions at the time of the price calculation, it shall pay a base price per MW/year equal to the value calculated pursuant to Section 19.2.1.2 (ii).

## 19.2.1.3 Payment

An LSE that obtains Historic Fixed Price TCCs pursuant to Section 19.2.1 shall be required to pay the ISO the total amount specified in equal annual payments for each year of the Historic Fixed Price TCC's duration. Each annual payment shall entitle the LSE to extend the term of the Historic Fixed Price TCC for an additional year, subject to the provisions of Section 19.2.1.1. Billing for Historic Fixed Price TCCs shall be in accordance with ISO Procedures. To challenge settlement information contained in an invoice, a purchaser of Historic Fixed Price TCCs shall first make payment in full, including any amounts in dispute. An LSE that fails to make any required annual payment for its Historic Fixed Price TCCs shall permanently surrender those Historic Fixed Price TCCs for that year and for all subsequent years (and shall not have a right to renew for additional term(s) or be eligible to purchase extensions of its Historic Fixed Price TCCs pursuant to Section 19.2.1.4 of this Attachment M), provided however that the ISO shall provide a one week cure period to an LSE that has failed to make the required annual payment for its Historic Fixed Price TCCs before the LSE has its Historic Fixed Price TCCs permanently surrendered, pursuant to ISO Procedures.

Notwithstanding anything to the contrary herein, this Section 19.2.1.3 shall not apply to extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of this Attachment M. The applicable billing and payment requirements for extensions of Historic Fixed Price TCCs are set forth in Section 19.2.1.4 of this Attachment M.

#### **19.2.1.4** Extensions of Historic Fixed Price TCCs

LSEs that converted expired or terminated ETAs to Historic Fixed Price TCCs pursuant to Section 19.2.1 of this Attachment M and continued to purchase Historic Fixed Price TCCs throughout the entire full term for which the LSE initially had the right to purchase and renew Historic Fixed Price TCCs (*i.e.*, 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) shall be eligible to purchase extensions of their Historic Fixed Price TCCs for one year at a time in accordance with the requirements of this Section 19.2.1.4. A qualifying LSE shall not be eligible to purchase extensions of Historic Fixed Price TCCs until the entire full term for which the LSE initially had the right to purchase and renew its Historic Fixed Price TCCs (*i.e.*, 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) has expired. For a qualifying LSE that was awarded: (1) sets of Historic Fixed Price TCCs associated with more than one expired or terminated ETA; or (2) as a result of the requirements of Section 19.2.1.1.1 of this Attachment M, two sets of Historic Fixed Price TCCs related to the same expired or terminated ETA with different initial start dates following the termination or expiration of such ETA, the LSE's eligibility to purchase extensions of Historic Fixed Price TCCs shall be determined, and the requirements related to purchasing extensions hereunder shall be applied, separately for each set of Historic Fixed Price TCCs held by the qualifying LSE. Notwithstanding the foregoing, LSEs that: (i) converted expired or terminated ETAs to Historic Fixed Price TCCs pursuant to Section 19.2.1 of this Attachment M and purchased Historic Fixed Price TCCs for a portion of the entire full term for which the LSE initially had the right to purchase and renew Historic Fixed Price TCCs (i.e., 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M); and (ii) elected to terminate their Historic Fixed Price TCCs early and such early termination occurred prior to June 1, 2018, shall be eligible to purchase extensions of their prior Historic Fixed Price TCCs for one year at a time in accordance with the requirements of this Section 19.2.1.4; provided, however, that such LSEs shall not be eligible to purchase extensions of Historic Fixed Price TCCs until the entire full term for which the LSE initially had the right to purchase and renew its prior Historic Fixed Price TCCs (i.e., 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) has expired.

For purposes of each one-year extension period, a qualifying LSE shall be eligible to purchase an extension of its Historic Fixed Price TCCs for any number of Historic Fixed Price TCCs equal to or lesser than the highest MW quantity specified in Table 1A of Attachment L of the ISO OATT for the expired or terminated ETA associated with the Historic Fixed Price TCCs that the LSE seeks to extend, subject to the requirements of this Section 19.2.1.4; provided, however, that for a qualifying LSE that, as a result of the requirements of Section 19.2.1.1.1 of this Attachment M, has two sets of Historic Fixed Price TCCs related to the same expired or terminated ETA eligible for extension: (i) the total number of Historic Fixed Price TCCs the LSE may seek to extend for the set of Historic Fixed Price TCCs that first becomes eligible for the purchase of extensions pursuant to this Section 19.2.1.4 shall not exceed the highest number of Historic Fixed Price TCCs that the LSE purchased for such set of Historic Fixed Price TCCs during the entire full term for which the LSE initially had the right to purchase and renew such Historic Fixed Price TCCs (i.e., 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M); and (ii) the total aggregate number of Historic Fixed Price TCCs the qualifying LSE may seek to extend for all such eligible sets of Historic Fixed Price TCCs shall not exceed the highest MW quantity specified in Table 1A of Attachment L of the ISO OATT for the applicable expired or terminated ETA. Notwithstanding the foregoing, if the ISO concludes that the number of Historic Fixed Price TCCs a qualifying LSE seeks to extend for a given one-year extension period would make existing and valid TCCs infeasible, it will reduce the number of Historic Fixed Price TCCs that the LSE may extend for that one-year extension period to the extent necessary to avoid the infeasibility. The reduction procedure will be conducted in a manner consistent with the procedure described in Section 19.8.2 of this Attachment M, except that the Historic Fixed Price TCCs that the qualifying LSE seeks to extend will not be represented as fixed injections and withdrawals but will, instead, be represented by a bid curve. If the LSE declines to purchase an extension of its Historic Fixed Price TCCs for any given one-year period, it shall remain eligible to purchase extensions of its Historic Fixed Price TCCs for subsequent years, subject to the requirements of this Section 19.2.1.4.

The ISO shall offer each qualifying LSE the option to purchase an extension of its Historic Fixed Price TCCs only once per year at a price determined in accordance with this Section 19.2.1.4 for the applicable one-year extension period. Such offers by the ISO shall be provided to each qualifying LSE during the Capability Period immediately prior to: (i) in the case of initial eligibility to purchase an extension of its Historic Fixed Price TCCs, the last Capability Period of the entire full term for which the LSE initially had the right to purchase and renew its Historic Fixed Price TCCs (i.e., 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) in which the LSE's Historic Fixed Price TCCs are (or, absent early termination by the qualifying LSE, would have been) valid; or (ii) in the case of all subsequent years for which the LSE is eligible to purchase an extension of its Historic Fixed Price TCCs, the last Capability Period in which the prior Historic Fixed Price TCC extension right is valid (regardless of whether the LSE purchased an extension of its Historic Fixed Price TCCs for such one-year period). A qualifying LSE must provide notice to the ISO, in accordance with ISO Procedures, of its decision to purchase or decline to purchase an extension of its Historic Fixed Price TCCs for the one-year period at issue by the deadline established by the ISO, as set forth in ISO Procedures. The deadline for qualifying LSEs to provide notice of such decision to the ISO shall be a date prior to the commencement of the Centralized TCC Auction in which the six-month Sub-Auction will make transmission capacity available to support the sale of TCCs for the first Capability Period in which the applicable Historic Fixed Price TCC extension would be valid. Notice by a qualifying LSE of a decision to purchase an extension of its Historic Fixed Price TCCs for a given one-year period shall also: (1) specify the number of Historic Fixed Price TCCs that the LSE seeks to extend; and (2) include the certification required by this Section 19.2.1.4. Notwithstanding anything to the contrary in this Section 19.2.1.4, if an otherwise qualifying LSE does not provide notice of a decision to purchase or decline to purchase an extension of its Historic Fixed Price TCCs for a given one-year period by the applicable deadline to provide notice of such decision to the ISO, the LSE shall become ineligible to purchase any

future extensions of its Historic Fixed Price TCCs and the ISO shall cease providing Historic Fixed Price TCC extension offers to such LSE.

The one-year term of each Historic Fixed Price TCC extension shall commence: (i) in the case of initial eligibility of a qualifying LSE to purchase an extension of its Historic Fixed Price TCCs, on the first day of the Capability Period following the last Capability Period of the entire full term for which the LSE initially had the right to purchase and renew its Historic Fixed Price TCCs (*i.e.*, 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) in which the LSE's Historic Fixed Price TCCs are (or, absent early termination by the qualifying LSE, would have been) valid; or (ii) in the case of all subsequent years for which a qualifying LSE is eligible to purchase an extension of its Historic Fixed Price TCCs, on the first day of the Capability Period following the last Capability Period in which the prior Historic Fixed Price TCC extension right is valid (regardless of whether the LSE purchased an extension of its Historic Fixed Price TCCs for such one-year period). The term of each Historic Fixed Price TCC extension shall expire after the last day of the Capability Period immediately following the Capability Period in which the Historic Fixed Price TCC extension becomes effective. If the entire full term for which a qualifying LSE initially had the right to purchase and renew its Historic Fixed Price TCCs (*i.e.*, 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) expires on a date other than following the last day of a Capability Period and the LSE elects to purchase an extension of its Historic Fixed Price TCCs for the first available one-year period, the ISO shall make the transmission capacity associated with the prior Historic Fixed Price TCCs available to support the sale of TCCs in any Reconfiguration Auction(s) held for TCCs valid between the expiration of the prior Historic Fixed Price TCCs and the start date of the extension of the Historic Fixed Price TCCs.

To purchase an extension of its Historic Fixed Price TCCs, a qualifying LSE must certify to the ISO that for the one-year term of the Historic Fixed Price TCC extension, the LSE expects to: (i) be legally obligated to serve the Load it historically served under the ETA associated with the Historic Fixed Price TCCs that the LSE seeks to extend (or a portion of that Load at least equal to the number of Historic Fixed Price TCCs that the LSE seeks to extend for the applicable one-year period); and (ii) need transmission capacity between the Point of Injection and Point of Withdrawal specified in such ETA to serve that Load. The ISO may request that a qualifying LSE submit additional information to verify the accuracy of any such certification its provides to the ISO, and the qualifying LSE shall provide any such additional information requested by the ISO. A qualifying LSE shall not be eligible to purchase an extension of its Historic Fixed Price TCCs for a given one-year period for any MW quantity that exceeds its ability to make these required certifications.

The purchase price (in \$/MW-year) for each one-year period of a Historic Fixed Price TCC extension shall be equal to the weighted average of the market-clearing prices from the most recently completed one-year Sub-Auction rounds of a Centralized TCC Auction at the time the Historic Fixed Price TCC extension offer is made by the ISO, for a TCC with the same Point of Injection and Point of Withdrawal as the Historic Fixed Price TCCs that the qualifying LSE seeks to extend. Notwithstanding anything to the contrary herein, if a Centralized TCC Auction includes a single round one-year Sub-Auction for TCCs with a start date that is after the first day of the Capability Period that commences immediately following the completion of such Centralized TCC Auction, such single round one-year Sub-Auction shall not be considered for purposes of this Section 19.2.1.4. The weighting assigned to the market-clearing prices from each applicable round shall be determined based on the ratio of (i) the percentage of transmission capacity made available in the applicable round to support the sale of one-year TCCs; to (ii) the total percentage of transmission capacity made available to support the sale of one-year TCCs with the same start date as TCCs for the applicable round in the relevant Centralized TCC Auction. In no event shall the purchase price for an extension of Historic Fixed Price TCCs be less than zero. If the calculation described above produces a value less than zero for a particular extension of Historic Fixed Price TCCs, the purchase price for such Historic Fixed Price TCC extension shall be set to zero.

A qualifying LSE that seeks to purchase extensions of its Historic Fixed Price TCCs shall be required to pay the ISO the total amount specified for each one-year Historic Fixed Price TCC extension the LSE seeks to purchase. Billing for extensions of Historic Fixed Price TCCs shall be in accordance with ISO Procedures. To challenge settlement information contained in an invoice, the qualifying LSE shall first make payment in full, including any amounts in dispute. If a qualifying LSE fails to make any required payment for an extension of its Historic Fixed Price TCCs, the LSE shall surrender those Historic Fixed Price TCCs for the one-year period at issue; provided, however, that the ISO shall provide a one week cure period for the LSE to make the required payment before its Historic Fixed Price TCCs are surrendered for the one-year period at issue.

Notwithstanding the foregoing, with respect to qualifying LSEs with Historic Fixed Price TCCs for which the last Capability Period of the entire full term for which the LSE initially had the right to purchase and renew its Historic Fixed Price TCCs (*i.e.*, 10 or 12 years as set forth in Section 19.2.1.1 of this Attachment M) in which the LSE's Historic Fixed Price TCCs are (or, absent early termination by the qualifying LSE, would have been) valid is the 2018 Summer Capability Period: (i) the ISO shall offer each such LSE the right to purchase an extension of its

Historic Fixed Price TCCs promptly after the effective date of this Section 19.2.1.4; and (ii) each such LSE shall provide the required notice of its decision to purchase or decline to purchase an extension of its Historic Fixed Price TCCs for the one-year period commencing November 1, 2018 by a deadline to be established by the ISO. The purchase price for the initial one-year extension of such Historic Fixed Price TCCs shall be calculated in the manner described above, using the market-clearing prices from the one-year Sub-Auction rounds of the Centralized TCC Auction conducted prior to the 2018 Summer Capability Period (*i.e.*, the 2018 spring Centralized TCC Auction). If a qualifying LSE elects to purchase an extension of such Historic Fixed Price TCCs shall be an extension of such Historic Fixed Price State and the start date of such a Historic Fixed Price TCC extension shall be November 1, 2018.

### **19.2.2** Awards of Non-Historic Fixed Price TCCs

# 19.2.2.1 Initial Purchase of Non-Historic Fixed Price TCCs

LSEs may be eligible to purchase Non-Historic Fixed Price TCCs, at prices established pursuant to Section 19.2.2.3.1 below if, pursuant to ISO Procedures, they submit a completed Notice of Intent to Purchase specifying the quantity of Non-Historic Fixed Price TCCs they intend to obtain under this Section 19.2.2.1 by Load Zone Point of Withdrawal. The LSE shall also indicate for each Load Zone potential Points of Injection for their Non-Historic Fixed Price TCCs. The LSE must provide its completed Notice of Intent to Purchase prior to the deadline established by the ISO. The LSE's completed Notice of Intent to Purchase shall also include a written certification. The written certification shall state that the LSE: (i) expects to be legally obligated to serve Load in each identified Load Zone in an amount and for a term that equals or exceeds the sum of the number of Non-Historic Fixed Price TCCs that it intends to obtain under this Section 19.2.2.1 with a Point of Withdrawal in that Load Zone and the number of Grandfathered TCCs, Grandfathered Rights and Historic Fixed Price TCCs, in effect for the same term, that are held by or on behalf of the LSE with Points of Withdrawal in that Load Zone; and (ii) has served Load in the identified Load Zone in the most recently concluded Capability Period. The LSE will not be allowed to obtain Non-Historic Fixed Price TCCs under this Section to the extent that it does not satisfy either or both of these requirements prior to the deadline established by the ISO for this submittal. Additional information regarding the Notice of Intent to Purchase, including the written certification included therein, shall be set forth in the ISO Procedures.

The NYISO shall notify each LSE requesting a Notice of Intent to Purchase of the number of Non-Historic Fixed Price TCCs which the LSE is eligible to purchase by Load Zone Point of Withdrawal.

## 19.2.2.1.1 Availability

A percentage of the transmission Capacity that is available, pursuant to Section 19.8.3 of this Attachment M, to support the purchase of TCCs in any Centralized TCC Auction during which Non-Historic Fixed Price TCCs may be obtained shall be available to support the purchase of Non-Historic Fixed Price TCCs. The final decision concerning the percentage of the transmission Capacity that will be available to support the purchase of Non-Historic Fixed Price TCCs will be made by the ISO and shall not exceed five percent. The scaling factor for the allocation of Non-Historic Fixed Price TCCs during the period of any Centralized TCC Auction shall equal the percentage of available transmission Capacity that has not yet been made available to support the sale of TCCs in previous rounds of that Centralized TCC Auction, divided by the percentage of available transmission Capacity that will be made available to support Non-Historic Fixed Price TCCs that may be purchased during the period of the Centralized TCC Auction.

# **19.2.2.1.2** Limits on Availability

The ISO may limit the availability of Non-Historic Fixed Price TCCs for initial purchase, by Load Zone, based on each LSE's average hourly load in that Load Zone and number of Grandfathered Rights and TCCs, Historic Fixed Price TCCs and other Non-Historic Fixed Price TCCs with POWs in that Load Zone held by or on behalf of the LSE.

In no event shall an LSE be eligible to purchase new Non-Historic Fixed Price TCCs with a Point of Withdrawal in a Load Zone for which the number of Grandfathered TCCs, Grandfathered Rights, Non-Historic and Historic Fixed Price TCCs held by or on behalf of the LSE with a Point of Withdrawal in that Load Zone equals or exceeds the average hourly load of the LSE in that Load Zone. Additional details shall be specified in the ISO Procedures.

Non-Historic Fixed Price TCCs may be offered by the ISO periodically, but no less frequently than every other year. They will be offered, if at all, with an initial term of two years. Renewal terms for Non-Historic Fixed Price TCCs shall be one year.

### 19.2.2.2 Renewal

LSEs may be eligible to renew Non-Historic Fixed Price TCCs at a new price calculated in accordance with Section 19.2.2.3.1 below if, pursuant to ISO Procedures, they submit a completed Notice of Intent to Renew specifying the Non-Historic Fixed Price TCC they intend to renew (by Point of Injection, Point of Withdrawal and quantity). The LSE must provide this notice prior to a deadline to be established by the ISO. The LSE's Notice of Intent to Renew shall also include a written certification stating that the LSE: (i) expects to be legally obligated to serve Load in each identified Load Zone in an amount and for a term that equals or exceeds the number of Non-Historic Fixed Price TCCs that it intends to renew under this Section 19.2.2.2 with a Point of Withdrawal in that Load Zone given the number of Grandfathered TCCs, Grandfathered Rights and Historic Fixed Price TCCs, in effect for the same term, that are held by or on behalf of the LSE with Points of Withdrawal in that Load Zone; and (ii) needs the transmission Capacity between the Point of Injection and Point of Withdrawal specified in the Non-Historic Fixed Price TCC to serve its Load. In no event shall an LSE be eligible to renew Non-Historic Fixed Price TCCs with a Point of Withdrawal in a Load Zone if the number of these Non-Historic Fixed Price TCCs when added to the number of Grandfathered TCCs, Grandfathered Rights, Historic Fixed Price TCCs and Non-Historic Fixed Price TCCs held by or on behalf of the LSE with a Point of Withdrawal in that Load Zone equals or exceeds the average hourly load of the LSE in that Load Zone.

In no event shall the ISO offer renewals that would extend a Non-Historic Fixed Price TCC for a total term of more than ten years.

# **19.2.2.3** Provisions affecting the Initial Purchase and the Renewal of Non-Historic Fixed Price TCCs

# 19.2.2.3.1 Pricing

Non-Historic Fixed Price TCCs intended to be purchased or renewed shall be priced for the initial or renewal term based on the market-clearing price calculated in the first round of the Sub-Auction of the Centralized TCC Auction conducted immediately subsequent to receipt of the completed Notice of Intent to Purchase or Notice of Intent to Renew in which TCCs with the same term as the Non-Historic Fixed Price TCCs being purchased or renewed were offered for sale, as established in ISO procedures. Such market-clearing prices shall have been calculated for a TCC with the same purchase or renewal term respectively (in years), and POI and POW, that is associated with the Non-Historic Fixed Price TCC. A Non-Historic Fixed Price TCC shall not have a purchase or renewal price of less than zero. To the extent that the formula in this Section 19.2.2.3.1 produces a purchase or renewal price for a Non-Historic Fixed Price TCC of less than zero, the price shall be zero.

### **19.2.2.3.2** Purchase or Renewal

The ISO shall provide to each LSE, that submitted a completed Notice of Intent to Purchase or a Notice of Intent to Renew, the purchase or renewal price of the Non-Historic Fixed Price TCCs identified in the LSE's completed Notice of Intent or Purchase or completed Notice of Intent to Renew, as appropriate. Within a period to be established by the ISO, following this notification, the purchasing or renewing LSE shall nominate the Non-Historic Fixed Price TCCs by Point of Injection and Point of Withdrawal that it has chosen to purchase or renew, provided that the availability of Non-Historic Fixed Price TCCs with a Point of Withdrawal in a Load Zone shall be limited by the lesser of the number of Non-Historic Fixed Price TCCs indicated as available by the ISO for that LSE with a Point of Withdrawal in that Load Zone or the number of Non-Historic Fixed Price TCCs identified in the LSE's completed Notice of Intent to Purchase or Notice of Intent to Renew with a Point of Withdrawal in that Load Zone. The ISO may establish a deadline by which the ISO must receive the LSE's nominations of which Non-Historic Fixed Price TCCs it wishes to purchase or renew. An LSE that chooses not to renew its Non-Historic Fixed Price TCCs forfeits its entitlement to further renewals of that Non-Historic Fixed Price TCC.

If the ISO concludes that awarding the Non-Historic Fixed Price TCCs nominated by LSEs for purchase would make existing and valid TCCs infeasible, it will reduce the number of Non-Historic Fixed Price TCCs that an LSE can purchase to the extent necessary to avoid infeasibility. Such reduction shall use the same optimization model as the Centralized TCC Auctions, except that the nominated TCCs will not be represented as fixed injections and withdrawals but will be represented by a bid curve, pursuant to ISO Procedures.

Non-Historic Fixed Price TCCs shall become effective with the first day of the Capability Period immediately following their purchase or renewal.

#### 19.2.2.3.3 Payment

An LSE that obtains Non-Historic Fixed Price TCCs pursuant to Section 19.2.2 shall be required to pay the ISO the total amount specified in annual payments for each year of the initial term of the Non-Historic Fixed Price TCC's and for each year of the renewal term of the Non-Historic Fixed Price TCC. Billing for Non-Historic Fixed Price TCCs shall be in accordance with ISO Procedures. To challenge settlement information contained in an invoice, a purchaser of Non-Historic Fixed Price TCCs shall first make payment in full, including any amounts in dispute.

An LSE that fails to make the required annual payment for the initial or any renewal term of its Non-Historic Fixed Price TCC shall, notwithstanding any provision in this OATT to the contrary, permanently surrender its right to future renewals of those Non-Historic Fixed Price TCCs and shall not have a right to renew for additional term(s), pursuant to ISO Procedures.

# 19.2.3 Miscellaneous Provisions Affecting Historic and Non-Historic Fixed Price TCCs

The ISO shall post the following information promptly after awarding Fixed Price TCCs: (i) the quantity of TCCs awarded (in MW); (ii) the Point of Injection and Point of Withdrawal for each Fixed Price TCC awarded; and (iii) the price paid for each Fixed Price TCC.

If an LSE acquires Load from another LSE that holds Fixed Price TCCs, it may request that the Fixed Price TCCs be reassigned to follow the transferred Load. In such case, the quantity of the Fixed Price TCCs that transfers to the assignee shall be equal to: (i) the amount of transferred Load divided by total Load associated with those Fixed Price TCCs, (ii) multiplied by the quantity of the Fixed Price TCCs held by the LSE losing Load between the same Point of Injection and Point of Withdrawal; provided however, that no Fixed Price TCC will transfer under this paragraph if the calculation above indicates that less than one Fixed Price TCC will transfer fransfer. If at least one Fixed Price TCC would transfer pursuant to this paragraph, the quantity of reassigned Fixed Price TCCs shall be rounded down to the nearest whole number of Fixed Price TCCs. An LSE that is reassigned Fixed Price TCCs under this paragraph shall hold such Fixed Price TCCs for the remainder of their term, and have rights of renewal as provided in Section 19.2.1 (including Section 19.2.1.4) and Section 19.2.2, provided it makes all required payments.

An LSE that has met all required payment and collateral obligations for its Fixed Price TCC, including LSEs that have transferred Load to a new LSE, may reassign, reconfigure, or sell its Fixed Price TCCs for any period of time for which its Fixed Price TCC is valid. Such assignment, reconfiguration, or sale shall not include renewal rights otherwise associated with the Fixed Price TCC, which renewal rights will remain with the LSE to which the Fixed Price TCCs were originally awarded, provided however that renewal rights associated with Fixed Price TCCs that are reassigned to follow the transferred Load shall be reassigned to follow the transferred Load. To the extent that Fixed Price TCCs are created pursuant to Section 19.2.1 (including Section 19.2.1.4) or Section 19.2.2, the transmission Capacity that supports them shall not be available for sale in the Centralized TCC Auctions until those Fixed Price TCCs expire.

All rights and obligations that apply to an LSE in connection with obtaining and holding Fixed Price TCCs as provided for in Section 19.2.1 (including Section 19.2.1.4), Section 19.2.2 and Section 19.2.3, shall also be applicable to an ETA Agent, except as the context otherwise requires (for example, an ETA Agent cannot obtain Fixed Price TCCs on its own behalf).

The ISO shall establish a dispute period following the conclusion of the Centralized TCC Auction during the conduct of which Fixed Price TCCs are awarded, challenges to awards of Fixed Price TCCs may be made and mistakes in the calculation of Fixed Price TCC prices may be corrected. Notice of the dispute period established by the ISO and of procedures to be employed in bringing a dispute or correcting a Fixed Price TCC price shall be provided by the ISO on its OASIS.

Following the resolution of challenges, if any, to the award of Fixed Price TCCs, or mistakes in the calculation of Fixed Price TCC prices, raised during the dispute period, charges and payments for Fixed Price TCCs awarded shall be final as provided in the award notices provided by the ISO and shall not be subject to revision.

#### **19.2.3.1** Responsibilities of LSEs that Obtain Fixed Price TCCs

To obtain a Fixed Price TCC under Section 19.2.1 (including Section 19.2.1.4) or Section 19.2.2 of this Attachment M an LSE must submit such information to the ISO regarding its creditworthiness as the ISO may require. Each such LSE must also: (i) comply with the applicable deadlines established by the ISO under Sections 19.2.1, 19.2.2 and 19.2.3; (ii) satisfy all ISO credit requirements; and (iii) pay the price determined pursuant to Section 19.2.1.2, Section 19.2.1.4 or Section 19.2.2.3.1, as appropriate.

# **19.2.4** Awards of Incremental TCCs

#### **19.2.4.1** Overview

The ISO shall follow the procedures set forth in this Section 19.2.4 to determine awards of Incremental TCCs to any person or entity that requests them in connection with the funding or

construction of new transmission facilities or transmission facility improvements that increase the Transfer Capability of the New York State Transmission System.

These procedures shall only apply to requests for awards that are submitted on or after November 1, 2008 and not to: (i) requests for awards that are pending as of that date; (ii) or to Incremental TCC award determinations that were made by the ISO on or prior to that date; neither shall these procedures interfere with the completion of requests for awards that are pending as of that date or require that award determinations made by the ISO prior to that date be reopened. Award determinations that were made prior to November 1, 2008 or that were pending as of that date shall remain effective as described in the ISO's Automated Market System.

Throughout this Section 19.2.4: (i) any change to, reconfiguration of, and/or construction of new transmission facilities or other transmission facility improvements that are potentially eligible for an award of Incremental TCCs shall be referred to as an "Expansion;" and (ii) a person or entity that is pursuing an Expansion and requesting Incremental TCCs shall be referred to as an "Expander."

The ISO shall not award Incremental TCCs: (i) when the ISO cannot calculate the effect on Transfer Capability associated with an Expansion in the Day-Ahead Market with reasonable certainty; (ii) for Expansions that involve controllable transmission facilities that are under the operational control of a Control Area operator other than the ISO; or (iii) to the extent that an Expansion's impact on Transfer Capability is solely dependent on a Generator's operating state. Additional information concerning eligibility for Incremental TCC awards shall be set forth in the ISO Procedures. The ISO shall not award Incremental TCCs before the provisions of Section 19.2.4.5.2 have all been fulfilled. The ISO shall also follow the procedures in this Section 19.2.4 to determine whether "Partial Outage Incremental TCCs" should be created in connection with final awards of Incremental TCCs.

#### **19.2.4.2** Requests for Incremental TCC Awards

An Expander pursuing an Expansion and seeking an Incremental TCC award shall submit a request for an award to the ISO. A request for an Incremental TCC award must be submitted prior to the associated Expansion's expected commercial operation date. A request for an Incremental TCC award shall not be deemed to be complete, and shall not be considered by the ISO, unless it includes all of the information and satisfies all of the technical requirements required by this Section 19.2.4 and by the ISO Procedures. Prior to submitting its request for a non-binding estimate, an Expander must have: (i) completed all of the engineering studies that are required under the ISO OATT, including Attachments X, S, and Z; and (ii) obtained all permits and regulatory approvals necessary to commence construction. If an Expansion is subject to the Class Year study requirements under Attachment S of the ISO OATT then the Expander must have accepted its Class Year cost allocation and posted the security required under Attachment S.

As part of its request for an award, an Expander shall request that the ISO prepare one or more non-binding estimates of an Expansion's impact on Transfer Capability between one or more POI/POW combinations. The ISO shall be required to prepare up to three non-binding estimates with respect to an Expansion. Additional rules governing requests for non-binding estimates shall be set forth in the ISO Procedures.

An Expander that is not subject to Section 20.2.5 of Attachment N to the ISO OATT that requests an Incremental TCC award associated with an Expansion that will consist of multiple

transmission facilities that might separately be taken out of service or derated in connection with the outage of an External transmission facility must provide additional information regarding partial outage states, as specified in the ISO Procedures, as part of its request. The ISO will use this information to analyze the creation of Partial Outage Incremental TCCs.

#### **19.2.4.3** Non-Binding Estimates

The ISO shall provide non-binding estimates of Incremental TCCs that might be awarded between different POI/POW combinations that are identified in a complete request for a nonbinding estimate. The ISO shall only prepare non-binding estimates if the associated Expansion is expected to enter commercial operation within the current or next like Capability Period.

The ISO shall estimate whether, and to what extent, Incremental TCCs may be created by analyzing whether an Expansion will actually increase Transfer Capability with respect to the entire set of POI/POW combinations included in a request for a non-binding estimate. Incremental TCCs shall not be created for Transfer Capability that the ISO determines would exist on the system even in the absence of an Expansion. The ISO shall make these determinations using an Optimal Power Flow model that is updated and modified as necessary to represent the state of the New York State Transmission system both with and without the Expansion associated with the request for a non-binding estimate. If an Expansion is intended to increase voltage or transient stability limits the ISO shall conduct transfer limit studies as necessary to confirm the Expansion's impact on interface limits as specified in the ISO Procedures. Additional detail concerning the Optimal Power Flow model to be used by the ISO shall be set forth in the ISO Procedures. The ISO shall not be bound by the findings of previous engineering studies, conducted under the ISO OATT or otherwise, regarding the impact of an Expansion on Transfer Capability when preparing non-binding estimates (or when determining awards under Section 19.2.4.5).

If the ISO estimates that Incremental TCCs would be created by an Expansion it shall separately estimate the quantity of Incremental TCCs that would be created for both the Summer and Winter Capability Periods.

### 19.2.4.4 Partial Outage Incremental TCCs

The ISO shall use the additional information submitted by certain Expanders regarding partial outage states pursuant to Section 19.2.4 to determine whether Partial Outage Incremental TCCs shall be created. Partial Outage Incremental TCCs shall not be awarded. They shall only be used to determine day-ahead outage charges, implemented through settlements for Day-Ahead Market Congestion Rents associated with Expansions that are partially out of service, or that are derated due to the outage of an External transmission facility, in connection with the calculation of outage charges under Section 19.2.4.9.

Partial Outage Incremental TCCs shall be created to the extent that the ISO finds, as part of its determination of final Incremental TCC awards pursuant to Section 19.2.4.5, that a revised set of Incremental TCCs would exist between a given POI/POW combination regardless of whether a portion of the associated Expansion is out of service or derated as a result of the outage of an External transmission facility. Partial Outage Incremental TCCs may be created between POI/POW combinations that differ from those for which the ISO may determine that Incremental TCCs would be available in a non-binding estimate or in any award of Incremental TCCs. If the ISO determines that Partial Outage Incremental TCCs may be created as the result of an Expansion it shall separately calculate the number that would be created for the Summer and Winter Capability Periods.

#### **19.2.4.5** Incremental TCC Awards

The ISO shall respond to complete requests for Incremental TCC awards by determining: (i) whether, and to what extent, Incremental TCCs should be awarded for the POI/POW combinations selected by the Expander; and (ii) whether, and to what extent, Partial Outage Incremental TCCs should be created. An Expander may select all of the POI/POW combinations that were analyzed in any one of the non-binding estimates prepared by the ISO under Section 19.2.4.3 to be included in the award determination. It may not select the POI/POW combinations from more than one non-binding estimate or select fewer than all of the POI/POW combinations that were analyzed in any one non-binding estimate.

The ISO shall determine both temporary and final awards using an Optimal Power Flow model that is updated and modified as necessary to represent the state of the New York State Transmission system both with and without the Expansion, and to represent any of the Expansion's partial outage states, at the time that an award is determined. The ISO shall determine whether, and to what extent, Incremental TCCs shall be awarded by analyzing whether an Expansion will actually increase Transfer Capability with respect to the entire set of POI/POW combinations included in a request for an award. Incremental TCCs shall not be awarded for Transfer Capability that the ISO determines would exist on the system even in the absence of an Expansion. If an Expansion is intended to increase voltage or transient stability limits the ISO shall conduct transfer limit studies as necessary to confirm the Expansion's impact on interface limits as specified in the ISO Procedures. The ISO shall make separate determinations for temporary and final awards of Incremental TCCs.

The ISO shall only determine or make an Incremental TCC award if the associated Expansion is expected to enter commercial operation within the current or next like Capability Period.

The ISO shall only determine, award, or create Incremental TCCs (including, for purposes of this paragraph, Partial Outage Incremental TCCs) in whole number MW quantities. If the ISO determines that an Expansion will create one or more non-whole number quantity Incremental TCCs, the ISO shall round each non-whole number Incremental TCC to a whole number in a manner that minimizes the risk of infeasibility caused by rounding with respect to the entire Incremental TCC award.

If the ISO determines that Incremental TCCs should be awarded, it shall make separate awards for the Summer and Winter Capability Periods.

# **19.2.4.5.1** Temporary Awards

If the ISO determines that Incremental TCCs should be awarded in connection with an Expansion and the Expansion goes into commercial operation during a Capability Period, the ISO shall make a temporary award of Incremental TCCs as soon as reasonably possible after notice that the Expansion has entered commercial operation has been provided in writing to the ISO pursuant to the ISO Procedures. Temporary awards of Incremental TCCs shall terminate at the end of the last day before a final award of Incremental TCCs becomes effective. In the case of an Expansion that enters commercial operation less than 90 days before the beginning of a Capability Period, the temporary award that is effective during the Summer Capability Period (or any portion thereof) may differ from the temporary award that is effective during the Winter

Capability Period (or any portion thereof). The quantity of Incremental TCCs included in a temporary award may differ from the quantity included in any of the non-binding estimate(s) associated with the Expansion and/or in the final award.

## 19.2.4.5.2 Final Awards

Awards of Incremental TCCs shall be final on the date by which the following are fulfilled: (i) an Expansion has actually entered commercial operation; (ii) written notice has been provided to the ISO pursuant to the ISO Procedures; and (iii) the ISO has determined the final award using an Optimal Power Flow analysis that reflects the results of the most recently completed Centralized TCC Auction. The quantity of Incremental TCCs included in a final award may differ from the quantity included in the temporary award, or in the non-binding estimate(s), associated with the Expansion.

Incremental TCCs included in final awards shall become effective on the first day of the first Capability Period following the date that the award became final. If, however: (i) the associated Expansion enters commercial operation fewer than ninety days before the end of a Capability Period then the Incremental TCCs included in a final award shall become effective on the first day of the next like Capability Period after the associated Expansion enters commercial operation; or (ii) the associated Expansion results in an increase to a limit that must be approved by the Operating Committee, and the Operating Committee's approval is granted fewer than ninety days before the end of a Capability Period, then the final award shall become effective on the first day of the next like Capability Period, then the final award shall become effective on the first day of the next like Capability Period following the Operating Committee's approval.

If more than one Expansion enters commercial operation in the same Capability Period, the ISO shall make its final award determinations, and shall make final Incremental TCC awards, in the same order as the Expansions actually enter commercial operation.

### **19.2.4.6** Acceptance of Incremental TCC Awards

An Expander may elect to accept or reject a temporary or final award of Incremental TCCs in its entirety. Partial acceptances shall not be permitted. Deadlines for confirming the acceptance or rejection of an award shall be specified in the ISO Procedures.

An Expander that elects to accept a final award of Incremental TCCs shall inform the ISO, no later than the time that it accepts its final award, of the awarded Incremental TCCs' duration. Incremental TCCs shall have a duration of no less than twenty and no more than fifty years, starting on the date that the final award becomes effective, provided that their duration may not exceed the expected operating life of the associated Expansion. The ISO shall record the existence and duration of the Incremental TCCs in the Automated Market System.

If an Expander fails to accept a final award of Incremental TCCs and to specify the award's duration by the deadline established in the ISO Procedures it will forfeit its right to collect Day-Ahead Market Congestion Rent payments in connection with the Incremental TCCs until it confirms its acceptance in the manner specified in the ISO Procedures.

# **19.2.4.7** Attributes of Incremental TCCs

Incremental TCCs, but not partial outage Incremental TCCs, shall have the same attributes as other TCCs and shall be subject to the same rules under the ISO Tariffs, except as specifically provided in this Section 19.2.4.

# 19.2.4.8 Restrictions on Transfers of Incremental TCCs

19.2.4.8.1 Secondary Market transfers of fewer than all of the Incremental TCCs associated with a given Expansion that were included in a final award shall not be allowed with the exception of allowable Secondary Market transfers as provided in Section 19.2.4.8.2; an Expander may only make Secondary Market transfers of

all of the Incremental TCCs for all of the POI/POW combinations that were included in a final award for a given Expansion. This restriction shall not prohibit the sale of fewer than all of the Incremental TCCs included in a final award through a Centralized TCC Auction or a Reconfiguration Auction. Secondary Market transfers of Incremental TCCs shall be made pursuant to the provisions of OATT Section 19.6.2. Transferees of Incremental TCCs that choose to become Primary Holders shall be subject to all existing ISO credit requirements and may be subject to any future credit requirements that may be applied to TCCs with a duration longer than one year.

19.2.4.8.2 An Expander may make a Secondary Market transfer pursuant to OATT Section 19.6.2 of fewer TCCs than all of the Incremental TCCs finally awarded for a given Expansion for which it is the Primary Holder provided that the Expander received a single final award of Incremental TCCs for the Expansion which award specified the same POI and the same POW combination. To comply with the requirement of a single final award with the same POI and POW, POIs or POWs that represent individual units of a Generator comprised of a group of generating units shall be deemed the same POI or POW.

A Secondary Market transfer by an Expander of all or a portion of its Incremental TCCs awarded for a given Expansion, pursuant to Sections 19.2.4.8.2 and 19.6.2, that is an assignment of the Incremental TCCs shall also operate as an assignment of the annual option to terminate the assigned Incremental TCCs, available pursuant to Section 19.2.4.9. Incremental TCCs that are awarded pursuant to a temporary award may not be sold or transferred through a Secondary Market transfer, through a Centralized TCC Auction, through a Reconfiguration Auction, or otherwise.

#### **19.2.4.9** Early Termination of Incremental TCCs

An Expander or its assignee shall have an annual option to terminate Incremental TCCs for which it is the Primary Holder and which were finally awarded to the Expander for a given Expansion. This annual option extends only to the entire portfolio of Incremental TCCs held by the Expander or its assignee for a given Expansion; early termination of a partial award of Incremental TCCs for a given Expansion held by a Expander or its assignee shall not be permitted. The annual option to terminate Incremental TCCs shall expire: i) with the early termination of those Incremental TCCs; or iii) with a Secondary Market transfer of all or a portion of those Incremental TCCs, which expiration would apply only to the transferred portion of the Incremental TCCs and only for the duration of the Secondary market transfer.

To terminate its Incremental TCCs, the Expander, or the Expander's assignee, shall provide a notice of early termination and a proposed expiration date by Certified, Return-Receipt U.S. Mail, or by a reputable commercial courier service employing a parcel tracking system to the ISO at least one year in advance of the proposed early termination date which notice shall be irrevocable. The termination date for Incremental TCCs that were subject to a notice of early termination shall be the last day of a Capability Period which date occurs no earlier than one year after the notice of proposed early termination has been received by the ISO.

19.2.4.9.1 Upon receiving the notice of an early termination, the ISO shall promptly notice the market of the effective date of the early termination. To ensure that

Centralized TCC Auctions following a notice of early termination start with a simultaneously feasible security constrained Power Flow, the ISO may: i) update its ISO Procedures to include prohibited bid points or combinations of prohibited bid points at which TCCs with durations of longer than one year may not be available in a future Centralized TCC Auction or Reconfiguration Auction, as a result of the notice of early termination; and / or ii) rather than effectuate the termination date, require that the Incremental TCC award proposed for early termination be apportioned such that the Incremental TCCs terminate in portions over as many as 12 months, beginning with the initial termination date. To terminate Incremental TCCs in portions over as many as 12 months, the ISO shall establish up to two additional termination dates following the initial termination date, and assign Incremental TCCs to each termination date, which additional termination dates shall fall at the end of the Capability Period(s) that follow the initial termination date.

Any prohibition on bid points resulting from a notice of early termination of Incremental TCCs in order to avoid infeasibility shall expire as of the first Capability Period following the last termination date of the Incremental TCCs.

#### **19.2.4.10** Settlements for Operational Status Impacts

### **19.2.4.10.1** Outage Charges

Any person or entity that is not subject to Section 20.2.5 of Attachment N to the ISO OATT and that owns an Expansion (or a portion of an Expansion) associated with a temporary or final award of Incremental TCCs, or has been assigned Incremental TCCs by an Expander, shall pay an outage charge to the ISO for any hour in the Day-Ahead Market during which the

Expansion associated with the Incremental TCCs is modeled to be wholly or partially out of service. All outage charges shall be implemented through the billing of Day-Ahead Market Congestion Rents to the person or entity responsible for paying the outage charge and, as such, will be credits to Day-Ahead Market Congestion Rents in the ISO settlement system.

Outage charges shall be determined as follows:

- If the entire Expansion is modeled as out of service in the Day-Ahead Market; the outage charge shall be equal to the Day-Ahead Market Congestion Rent payment for all of the Incremental TCCs associated with the entire Expansion.
- If one or more portions of an Expansion are modeled as out of service in the Day-Ahead Market, or derated by the outage of an External Transmission facility, and Partial Outage Incremental TCCs have not been created, the outage charge shall be equal to the Day-Ahead Market Congestion Rent payment for all of the Incremental TCCs associated with the entire Expansion.
- If one or more portions of an Expansion are modeled as out of service in the Day-Ahead Market or are caused to be out of service or derated by the outage of an External transmission facility, and Partial Outage Incremental TCCs have been created for such an out-of-service state or derating, the outage charge shall be calculated as follows:

Outage charge = A - B

where:

• "A" is the sum, over all different POI and POW combinations associated with the Incremental TCCs for an Expansion, of the product of (i) the Congestion Component at the POW minus the Congestion Component at the POI; and (ii) the number of Incremental TCCs between that POI and POW associated with the Expansion, and • "B" is the sum, over all different POI and POW combinations associated with the Partial Outage Incremental TCCs for that out-of-service state or derating of the Expansion, of the product of: (i) the Congestion Component at the POW minus the Congestion Component at the POI; and (ii) the number of Partial Outage Incremental TCCs between that POI and POW associated with that out-of-service state or derating of the Expansion.

# **19.2.4.10.2** Settlements for Certain Line Rating Impacts

With respect to Incremental TCCs associated with an Expansion that is not subject to Section 20.2.5 of Attachment N to the ISO OATT, the transmission facilities composing such Expansion shall be considered in the calculations conducted by the ISO pursuant to Section 20.2 of Attachment N of the ISO OATT for the limited purpose of determining whether any such facilities have been subject to an event that satisfies the requirements of clause 2 of the respective definitions of the terms "Actual Qualifying DAM Derating" or "Actual Qualifying DAM Uprating" (as such terms are defined in Section 20.2.4.3.1 of Attachment N of the ISO OATT) and, if so, the applicable payments or charges to be assessed for such an event.

Payments or charges, as determined in accordance with the calculations set forth in Section 20.2.4.3, for such a qualifying event shall be assessed to the Primary Holder of the Incremental TCCs associated with the Expansion comprised of the transmission facilities that experience the qualifying event. If there is more than one Primary Holder for the Incremental TCCs associated with the affected Expansion, such payments or charges shall be allocated and assessed to each Primary Holder in proportion to the percentage of the total Incremental TCC award for the Expansion at issue that is held by each applicable Primary Holder. The payments and charges assessed to Primary Holders hereunder shall, as applicable, be deemed to be paid from, or credited to, Day-Ahead Market Congestion Rents in the ISO settlement system.

#### **19.2.4.11** Incremental TCCs for System Deliverability Upgrades

In accordance with Section 25.7.2 of Attachment S of the ISO OATT, the Transmission Owner(s) responsible for constructing a System Deliverability Upgrade shall be the entity(ies) to submit requests for awards of Incremental TCCs pursuant to this Section 19.2.4 for each System Deliverability Upgrade, which will constitute the Expansion for purposes of each such request. The ISO shall evaluate each such request in accordance with the requirements of this Section 19.2.4 to determine any applicable temporary and/or final Incremental TCCs relating thereto. Unless otherwise specified herein, Incremental TCCs resulting from System Deliverability Upgrades will be subject to the same requirements as Incremental TCCs awarded to any other Expansion pursuant to this Section 19.2.4, including settlements pursuant to Section 19.2.4.10 of this Attachment M.

If the ISO determines that a System Deliverability Upgrade is eligible to receive an award of Incremental TCCs, including any Partial Outage Incremental TCCs relating thereto, the ISO will allocate the determined award among the applicable Developers eligible to receive Incremental TCCs related to the System Deliverability Upgrade and/or the Transmission Owner(s) responsible for constructing the System Deliverability Upgrade in accordance with the requirements of Section 25.7.2 of Attachment S of the ISO OATT. Each Developer eligible to receive Incremental TCCs related to the System Deliverability Upgrade shall be provided the right to elect to receive its respective portion of such Incremental TCCs pursuant to Section 19.2.4.6 of this Attachment M. To the extent necessary to facilitate the potential for transfers to subsequent Developers that pay for the use of Headroom pursuant to Attachment S of the ISO OATT on a System Deliverability Upgrade that has been awarded Incremental TCCs, Incremental TCCs that are declined by a Developer will be deemed reserved. Incremental TCCs that are declined by a Developer and not otherwise deemed reserved will be deemed permanently terminated.

If subsequent Developers pay for the use of Headroom pursuant to Attachment S of the ISO OATT on a System Deliverability Upgrade that has been awarded Incremental TCCs, such subsequent Developers will be provided a right to elect to receive any applicable Incremental TCCs to which they may be eligible to receive in accordance with Sections 25.7.2 and 25.7.12 of Attachment S of the ISO OATT. Incremental TCCs to be made available to subsequent Developers will, as applicable, be obtained by the ISO by reducing the Incremental TCCs related to the System Deliverability Upgrade that were previously: (i) awarded to the Developers that initially paid for the System Deliverability Upgrade; (ii) awarded to the Transmission Owner(s) responsible for constructing the System Deliverability Upgrade; and/or (iii) deemed reserved as a result of prior declination and/or termination, in accordance with the requirements of Section 25.7.2 of Attachment S of the ISO OATT. Incremental TCCs that were previously deemed reserved and are transferred to a subsequent Developer will become effective on the first day of the Capability Period that commences following the next Centralized TCC Auction conducted after the subsequent Developer makes the necessary Headroom payment and elects to receive its proportionate share of Incremental TCCs. Incremental TCCs that are declined by a subsequent Developer will be deemed permanently terminated.

Any Developer that elects to receive Incremental TCCs related to a System Deliverability Upgrade shall have the right to terminate its Incremental TCCs in accordance with Section 19.2.4.9 of this Attachment M. Incremental TCCs terminated by a Developer that initially paid for a System Deliverability Upgrade will, to the extent necessary to facilitate the potential for transfers to subsequent Developers that pay for the use of Headroom pursuant to Attachment S of the ISO OATT on a System Deliverability Upgrade that has been awarded Incremental TCCs, be deemed reserved. Incremental TCCs that are terminated by a Developer that initially paid for a System Deliverability Upgrade and not otherwise deemed reserved will be deemed permanently terminated. Incremental TCCs terminated by a subsequent Developer that paid for the use of Headroom on a System Deliverability Upgrade will be deemed permanently terminated.

Notwithstanding anything to the contrary in this Section 19.2.4, Incremental TCCs awarded as a result of System Deliverability Upgrades may not be sold or transferred through a Centralized TCC Auction, Reconfiguration Auction or the Secondary Market. Incremental TCCs related to a System Deliverability Upgrade that are deemed reserved as a result of prior declination or termination will not be considered as active or valid for the period during which they remain deemed reserved. Incremental TCCs related to a System Deliverability Upgrade that were previously deemed reserved as a result of prior declination or termination will be deemed permanently terminated when the Headroom on the System Deliverability Upgrade ceases to exist or is otherwise reduced to zero in accordance with Section 25.8.7.4 of Attachment S of the ISO OATT.

# 20.1 **Overview and Definitions**

#### 20.1.1 Overview

This Attachment N describes the Congestion settlements related to the Day-Ahead Market and the settlements related to Centralized TCC Auctions and Reconfiguration Auctions. Congestion Rent settlements for Real-Time Market Energy Transactions or Bilateral Transactions scheduled in the Real-Time Market are not addressed in this Attachment N.

Section 20.2 addresses the Congestion settlements related to each hour of the Day-Ahead Market. These settlements include, as applicable pursuant to this Attachment N, charges or payments for Congestion Rents for Energy Transactions in the Day-Ahead Market and for Bilateral Transactions scheduled in the Day-Ahead Market, and settlements with Primary Holders of TCCs. In addition, these settlements include, as applicable pursuant to this Attachment N, O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments. The ISO shall allocate to Transmission Owners the net of all of these settlements as Net Congestion Rents as described in this Attachment N.

Section 20.3 addresses the settlements in each round of each Centralized TCC Auction and in each Reconfiguration Auction. These settlements include, as applicable pursuant to this Attachment N, charges or payments to purchasers of TCCs, charges or payments to Primary Holders selling TCCs, payments to Transmission Owners in a Centralized TCC Auction for ETCNL released into the Centralized TCC Auction, and payments to Transmission Owners for Original Residual TCCs that are released into the Centralized TCC Auction. In addition, these settlements include, as applicable pursuant to this Attachment N, O/R-t-S Auction Revenue Shortfall Charges, U/D Auction Revenue Shortfall Charges, O/R-t-S Auction Revenue Surplus Payments, and U/D Auction Revenue Surplus Payments. The ISO shall allocate to Transmission Owners the net of all of these settlements as Net Auction Revenue as described in this Attachment N.

Section 20.4 addresses the allocation of revenue from the initial award and annual renewals of Historic Fixed Price TCCs (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT). The ISO shall allocate such revenues to Transmission Owners as described in this Attachment N.

Section 20.5 addresses the allocation of revenue from initial awards and renewals of Non-Historic Fixed Price TCCs. The ISO shall allocate such revenues to Transmission Owners as described in this Attachment N.

Provisions of this Attachment N applicable to a transmission facility outage or return-toservice shall not apply to a transmission facility derating or uprating. Charges and payments under this Attachment N shall be made to a Transmission Owner for a transmission facility derating or uprating only as specified in Sections 20.2.4.3 and 20.3.6.3.

This Attachment N shall not apply to the obligation to pay an outage charge which obligation attaches to persons or entities not otherwise subject to Section 20.2.5 of this Attachment N that own an Expansion (or a portion of an Expansion) associated with a temporary or final award of Incremental TCCs or which has been assigned Incremental TCCs related to an Expansion which Expansion is modeled as wholly or partially out of service for any hour in the Day-Ahead Market which obligation to pay to the ISO an outage charge shall be determined pursuant to Attachment M to the ISO OATT.

Unless expressly provided for otherwise in the ISO Tariffs, such as in a rate schedule, this Attachment N shall apply to the Member Systems. Unless expressly provided for otherwise in the ISO Tariffs, this Attachment N shall only apply to Transmission Owners other than the Member Systems to the extent that the ISO Tariffs, such as in a rate schedule, do not provide otherwise.

# 20.1.2 Defined Terms Used in Attachment N

Capitalized terms used in this Attachment N shall have the meaning specified below in this Section 20.1.2, and capitalized terms used in this Attachment N but not defined below shall have the meaning given to them in Section 1 of the ISO OATT:

Actual Qualifying Auction Derating: As defined in Section 20.3.6.3.1.

Actual Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Actual Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Actual Qualifying Auction Uprating: As defined in Section 20.3.6.3.1.

Actual Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Actual Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Actual Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Actual Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

**Auction Constraint Residual:** The dollar value associated with a Constraint that is binding for a round of a 6-month Sub-Auction of a Centralized TCC Auction or a given month covered by a Reconfiguration Auction, which is calculated pursuant to Section 20.3.6.1.

Auction Status Change: Any of the following: Qualifying Auction Outage, Qualifying Auction Derating, Qualifying Auction Return-to-Service, or Qualifying Auction Uprating.

**Centralized TCC Auction Interface Uprate/Derate Table:** The interface derate table posted on the ISO website prior to a given Centralized TCC Auction specifying the impact on transfer limits of Qualifying DAM Outages and Qualifying DAM Returns-to-Service for a Sub-Auction of a Centralized TCC Auction.

**DAM Constraint Residual:** The dollar value associated with a Constraint that is binding for an hour of the Day-Ahead Market, which is calculated pursuant to Section 20.2.4.1.

**DAM Status Change:** Any of the following: Qualifying DAM Outage, Qualifying DAM Derating, Qualifying DAM Return-to-Service, or Qualifying DAM Uprating.

**DCR Allocation Threshold:** Five thousand dollars (\$5,000), except that this amount shall be reduced for any given month to the extent necessary so that the sum of all DAM Constraint Residuals for the month (for all binding constraints and for all hours of the month) that are less than the DCR Allocation Threshold is not greater than either two hundred and fifty thousand dollars (\$250,000) or five percent (5%) of the sum of all DAM Constraint Residuals for the month (for all binding constraints and for all hours of the month) that would have been calculated if the DCR Allocation Threshold were set equal to zero.

**Deemed Qualifying Auction Derating:** As defined in Section 20.3.6.3.1.

Deemed Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Deemed Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Deemed Qualifying Auction Uprating: As defined in Section 20..3.6.3.1.

Deemed ISO-Directed Auction Status Change: Any of the following: (1) an Actual Qualifying Auction Return-to-Service for a given month covered by a Reconfiguration Auction that occurs for a transmission facility that, in the last Reconfiguration Auction held for TCCs valid during the relevant month (or if no Reconfiguration Auction was held for TCCs valid during the relevant month, then the last 6-month Sub-Auction held for TCCs valid during the relevant month), was a Qualifying Auction Outage that qualified as an ISO-Directed Auction Status Change; (2) an Actual Qualifying Auction Uprating for a given month covered by a Reconfiguration Auction that occurs as a result of an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service of a transmission facility that, in the last Reconfiguration Auction held for TCCs valid during the relevant month (or if no Reconfiguration Auction was held for TCCs valid during the relevant month, then the last 6month Sub-Auction held for TCCs valid during the relevant month), qualified as a Qualifying Auction Outage or Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change; or (3) an Actual Qualifying Auction Derating for a given month covered by a Reconfiguration Auction that occurs as a result of an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service of a transmission facility that, in the last Reconfiguration Auction held for TCCs valid during the relevant month (or if no Reconfiguration Auction was held for TCCs valid during the relevant month, then the last 6month Sub-Auction held for TCCs valid during the relevant month), qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change.

**Deemed ISO-Directed DAM Status Change:** Any of the following: (1) an Actual Qualifying DAM Return-to-Service for an hour of the Day-Ahead Market that occurs for a transmission facility that, for the month that contains the relevant hour in the last Reconfiguration Auction held for TCCs valid for the relevant hour (or if no Reconfiguration Auction was held for TCCs valid during the relevant hour, then the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour), was an Actual Qualifying Auction Outage that

qualified as an ISO-Directed Auction Status Change; (2) an Actual Qualifying DAM Uprating for an hour of the Day-Ahead Market that occurs for a transmission facility that, for the month that contains the relevant hour in the last Reconfiguration Auction held for TCCs valid for the relevant hour (or if no Reconfiguration Auction was held for TCCs valid during the relevant hour, then the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour), qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change; or (3) an Actual Qualifying DAM Derating for an hour of the Day-Ahead Market that occurs for a transmission facility that, for the month that contains the relevant hour in the last Reconfiguration Auction held for TCCs valid for the relevant hour (or if no Reconfiguration Auction was held for TCCs valid during the relevant hour, then the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour), qualified as an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service that was an ISO-Directed Auction Status Change. (The terms "Actual Qualifying Auction Outage" and "ISO-Directed Auction Status Change" shall, if not defined in this Section 20.1.2, have the meaning given in the ISO's March 17, 2006, filing.)

Deemed Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Deemed Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Deemed Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Deemed Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

**ISO-Directed Auction Status Change:** Either of the following: (1) an Actual Qualifying Auction Outage for a given month covered by a Reconfiguration Auction or a round of a Centralized TCC Auction that is directed by the ISO or results from an Actual Qualifying Auction Outage or an Actual Qualifying Auction Return-to-Service directed by the ISO; or (2) an Actual Qualifying Auction Derating or an Actual Qualifying Auction Uprating for a given month covered by a Reconfiguration Auction or a round of a Centralized TCC Auction that results from an Actual Qualifying Auction Outage directed by the ISO.

**ISO-Directed DAM Status Change:** Either of the following: (1) an Actual Qualifying DAM Outage for an hour of the Day-Ahead Market that is directed by the ISO or results from an Actual Qualifying DAM Outage or an Actual Qualifying DAM Return-to-Service directed by the ISO; or (2) an Actual Qualifying DAM Derating or an Actual Qualifying DAM Uprating for an hour of the Day-Ahead Market that results from an Actual Qualifying DAM Outage directed by the ISO.

**Normally Out-of-Service Equipment:** Transmission facilities that are normally operated as out-of-service by mutual agreement of the transmission facility owner and the ISO and that appear on the list of such equipment posted on the ISO website.

**Outage/Return-to-Service Auction Constraint Residual ("O/R-t-S Auction Constraint Residual"):** The portion of an Auction Constraint Residual that is deemed to be attributable to Qualifying Auction Outages or Qualifying Auction Returns-to-Service, which O/R-t-S Auction Constraint Residual shall be calculated pursuant to Section 20.3.6.1.

**Outage/Return-to-Service Auction Revenue Shortfall Charge ("O/R-t-S Auction Revenue Shortfall Charge"):** A charge to a Transmission Owner that is created as a result of the allocation of an O/R-t-S Auction Constraint Residual pursuant to Section 20.3.6.2.

**Outage/Return-to-Service Auction Revenue Surplus Payment ("O/R-t-S Auction Revenue Surplus Payment"):** A payment to a Transmission Owner that is created as a result of the allocation of an O/R-t-S Auction Constraint Residual pursuant to Section 20.3.6.2.

**Outage/Return-to-Service Congestion Rent Shortfall Charge ("O/R-t-S Congestion Rent Shortfall Charge"):** A charge to a Transmission Owner that is created as a result of the allocation of an O/R-t-S DAM Constraint Residual pursuant to Section 20.2.4.2.

**Outage/Return-to-Service Congestion Rent Surplus Payment ("O/R-t-S Congestion Rent Surplus Payment"):** A payment to a Transmission Owner that is created as a result of the allocation of an O/R-t-S DAM Constraint Residual pursuant to Section 20.2.4.2.

**Outage/Return-to-Service DAM Constraint Residual ("O/R-t-S DAM Constraint Residual"):** The portion of a DAM Constraint Residual that is deemed to be attributable to Qualifying DAM Outages or Qualifying DAM Returns-to-Service, which O/R-t-S DAM Constraint Residual shall be calculated pursuant to Section 20.2.4.1.

Qualifying Auction Derating: As defined in Section 20.3.6.3.1.

Qualifying Auction Outage: As defined in Section 20.3.6.2.1.

Qualifying Auction Return-to-Service: As defined in Section 20.3.6.2.1.

Qualifying Auction Uprating: As defined in Section 20.3.6.3.1.

Qualifying DAM Derating: As defined in Section 20.2.4.3.1.

Qualifying DAM Outage: As defined in Section 20.2.4.2.1.

Qualifying DAM Return-to-Service: As defined in Section 20.2.4.2.1.

Qualifying DAM Uprating: As defined in Section 20.2.4.3.1.

**Reconfiguration Auction Interface Uprate/Derate Table:** The interface derate table posted on the ISO website prior to a Reconfiguration Auction specifying the impact on transfer limits of Qualifying DAM Outages and Qualifying DAM Returns-to-Service for the month(s) covered by the Reconfiguration Auction.

**Uprate/Derate Auction Constraint Residual ("U/D Auction Constraint Residual"):** The portion of an Auction Constraint Residual that is deemed to be attributable to Qualifying Auction Deratings or Qualifying Auction Upratings, which U/D Auction Constraint Residual shall be calculated pursuant to Section 20.3.6.1.

**Uprate/Derate Auction Revenue Shortfall Charge ("U/D Auction Revenue Shortfall Charge"):** A charge to a Transmission Owner that is created as a result of the allocation of a U/D Auction Constraint Residual pursuant to Section 20.3.6.3.

**Uprate/Derate Auction Revenue Surplus Payment ("U/D Auction Revenue Surplus Payment"):** A payment to a Transmission Owner that is created as a result of the allocation of a U/D Auction Constraint Residual pursuant to Section 20.3.6.3.

**Uprate/Derate Congestion Rent Shortfall Charge ("U/D Congestion Rent Shortfall Charge"):** A charge to a Transmission Owner that is created as a result of the allocation of a U/D DAM Constraint Residual pursuant to Section 20.2.4.3.

**Uprate/Derate Congestion Rent Surplus Payment ("U/D Congestion Rent Surplus Payment"):** A payment to a Transmission Owner that is created as a result of the allocation of a U/D DAM Constraint Residual pursuant to Section 20.2.4.3.

**Uprate/Derate DAM Constraint Residual ("U/D DAM Constraint Residual"):** The portion of a DAM Constraint Residual that is deemed to be attributable to a Qualifying DAM Derating or a Qualifying DAM Uprating, which U/D DAM Constraint Residual shall be calculated pursuant to Section 20.2.4.1.

For purposes of this Attachment N, the term "transmission facility" shall mean any

transmission line, phase angle regulator, transformer, series reactor, circuit breaker, or other type

of transmission equipment.

For the purposes of this Attachment N, a "constraint" shall refer to a monitored

transmission facility and a transmission facility that is out of service in the contingency being

evaluated (including the base case).

For purposes of this Attachment N: (i) a set of injections and withdrawals corresponds to

a set of TCCs and Grandfathered Rights if the quantity of Energy injected at each location

matches the number of TCCs and Grandfathered Rights specifying that location as a POI, and the

quantity of Energy withdrawn at each location matches the number of TCCs and Grandfathered

Rights specifying that location as a POW; and (ii) a TCC corresponds to ETCNL if it has the

same POI and POW as the ETCNL.

All references in this Attachment N to sections shall be construed to be references to a

section of this Attachment N.

# 20.2 Congestion Settlements Related to the Day-Ahead Market

# 20.2.1 Overview of Congestion Settlements Related to the Day-Ahead Market; Calculation of Net Congestion Rents

Overview of DAM Related Congestion Settlements. For each hour h of the Day-Ahead

Market, the ISO shall settle all Congestion settlements related to the Day-Ahead Market. These Congestion settlements include, as applicable pursuant to the provisions of this Attachment N: (i) Congestion Rent charges or payments for Energy Transactions in the Day-Ahead Market and Bilateral Transactions scheduled in the Day-Ahead Market; (ii) Congestion payments or charges to Primary Holders of TCCs; (iii) O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges; and (iv) O/R-t-S Congestion Rent Surplus Payments and U/D Congestion Rent Surplus Payments. Each of these settlements is represented by a variable in Formula N-1.

# Calculation of Net Congestion Rents for an Hour. In each hour h of the Day-Ahead

Market, the ISO shall calculate Net Congestion Rents pursuant to Formula N-1.

#### Formula N-1

 $NetCongestionRents_h = (Congestion Rents_h - TCC Payments_h - O/R-t-S&U/D CRSC&CRSP_h)$ 

Where,

NetCongestionRentsh	= The total Net Congestion Rents for hour <i>h</i> of the Day-Ahead Market
Н	= An hour of the Day-Ahead Market
Congestion Rentsh	<ul> <li>The sum of Congestion Rents for (i) Energy Transactions scheduled in hour <i>h</i> of the Day-Ahead Market, and (ii) Bilateral Transactions scheduled in hour <i>h</i> of the Day-Ahead Market, each as calculated pursuant to Section 20.2.2</li> </ul>
TCC Paymentsh	The sum for all TCCs of all payments and charges made pursuant to Section 20.2.3 to Primary Holders of TCCs in hour h

O/R-t-S&U/D	= The sum of all O/R-t-S Congestion Rent Shortfall Charges
CRSC&CRSPh	(O/R-t-S CRSC <sub>a,t,h</sub> ), U/D Congestion Rent Shortfall Charges
	(U/D CRSC <sub>a,t,h</sub> ), O/R-t-S Congestion Rent Surplus Payments
	(O/R-t-S CRSP <sub>a,t,h</sub> ), and U/D Congestion Rent Surplus
	Payments (U/D CRSP <sub>a,t,h</sub> ) for all Transmission Owners or, as
	applicable pursuant to Section 19.2.4.10.2 of Attachment M to
	the ISO OATT, Primary Holders of Incremental TCCs t (which
	sum is calculated for each Transmission Owner or, as
	applicable pursuant to Section 19.2.4.10.2 of Attachment M to
	the ISO OATT, Primary Holder of Incremental TCCs as
	NetDAMAllocationst,h pursuant to Formula N-14), reduced by
	any zeroing out of such charges or payments pursuant to
	Section 20.2.4.5

The ISO shall allocate the Net Congestion Rents calculated in each hour to Transmission Owners pursuant to Section 20.2.5.

# 20.2.2 Congestion Rents Charged in the Day-Ahead Market

In each hour of the Day-Ahead Market, the ISO shall collect or pay Congestion Rents through Energy Transactions in the Day-Ahead Market and through Bilateral Transactions scheduled in the Day-Ahead Market.

*Day-Ahead Market Energy Transactions*. The ISO shall charge or pay Congestion Rents as part of the Congestion Component of the LBMP applicable to Energy injections and withdrawals scheduled in the Day-Ahead Market, as described in Attachment J of this Tariff. The total Congestion Rents for all Energy Transactions scheduled in the Day-Ahead Market in hour *h* are calculated pursuant to Formula N-2.

## Formula N-2

$$\sum_{W} MWh_{W,h} * CCPOW_{W,h} - \sum_{I} MWh_{I,h} * CCPOI_{I,h}$$

Where,

MWh <sub>W,h</sub>	=	Energy, in MWh, scheduled to be withdrawn in hour <i>h</i>
		pursuant to Day-Ahead Market schedule W
CCPOW <sub>W,h</sub>	=	Congestion Component, in \$/MWh, at the Point of

		Withdrawal for Energy withdrawn in hour $h$ pursuant to schedule $W$
MWh <sub>I,h</sub>	=	Energy, in MWh, scheduled to be injected in hour h
		pursuant to Day-Ahead Market schedule <i>I</i>
CCPOI <sub>I,h</sub>	=	Congestion Component, in \$/MWh, at the Point of Injection
		for Energy injected in hour h pursuant to schedule I.

*Bilateral Transactions*. The ISO shall charge or pay Congestion Rents as part of the Transmission Usage Charge applied to Bilateral Transaction *B* scheduled in the Day-Ahead Market, as described in Section 2.7.2.2 of this Tariff. Total Congestion Rents for all Bilateral Transactions scheduled in the Day-Ahead Market in hour *h* are calculated pursuant to Formula N-3.

# Formula N-3

$$\sum_{B} MWh_{B,h} * CCTUC_{B,h}$$

Where,

MWh <sub>B,h</sub>	_=	Energy, in MWh, of Bilateral Transaction $B$ scheduled in the Day-Ahead Market in hour $h$
CCTUC <sub>B,h</sub>	_	Congestion Component of the TUC, in $MWh$ , for scheduled Bilateral Transaction <i>B</i> , in hour <i>h</i> , which is equal to CCPOW <sub>B,h</sub> - CCPOI <sub>B,h</sub> .
CCPOW <sub>B,h</sub>	_=	Congestion Component, in $MWh$ , at the Point of Withdrawal for Energy withdrawn in hour <i>h</i> pursuant to Bilateral Transaction <i>B</i>
CCPOI <sub>B,h</sub>		= Congestion Component, in $MWh$ , at the Point of Injection for Energy injected in hour <i>h</i> pursuant to Bilateral Transaction <i>B</i> .

# 20.2.3 Congestion Payments Made To Primary Holders

For each hour h of the Day-Ahead Market, the ISO shall charge or pay Congestion

payments to the Primary Holders, as follows:

# Formula N-4

*Congestion Payment* (\$/hr)=(*CCPOW* - *CCPOI*) \* *TCCMW* 

Where,

CCPOW	=	Congestion Component (\$/MWh) at the Point of Withdrawal (POW)
CCPOI	=	Congestion Component (\$/MWh) at the Point of Injection (POI)
TCCMW	=	The number of TCCs in MW from POI to POW.
(See Attachment J for the calculation of the Congestion Component of the LBMP price at		

either the POI or the POW.)

The ISO shall pay Primary Holders for the Congestion payments from revenues collected from: (i) Congestion Rents, (ii) O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges, and (iii) Net Congestion Rents in accordance with Section 20.2.5.

# 20.2.4 Charges and Payments to Transmission Owners for DAM Outages and Returns-to-Service

The ISO shall charge O/R-t-S Congestion Rent Shortfall Charges and U/D Congestion Rent Shortfall Charges and pay O/R-t-S Congestion Rent Surplus Payments and U/D Congestion Rent Surplus Payments pursuant to this Section 20.2.4. To do so, the ISO shall calculate the DAM Constraint Residual for each binding constraint for each hour of the Day-Ahead Market and then determine the amount of each DAM Constraint Residual that is O/R-t-S DAM Constraint Residual and the amount that is U/D DAM Constraint Residual, as specified in Section 20.2.4.1. The ISO shall use the O/R-t-S DAM Constraint Residual to allocate O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments to Transmission Owners pursuant to Sections 20.2.4.2 and 20.2.4.4, each of which shall be subject to being reduced to zero pursuant to Section 20.2.4.5. The ISO shall use the U/D DAM Constraint Residual to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments to Transmission Owners pursuant to Sections 20.2.4.3 and 20.2.4.4, each of which shall be subject to being reduced to zero pursuant to Section Surplus Payments 20.2.4.4, each of which shall be subject to being reduced to zero pursuant to Sections 20.2.4.5. 20.2.4.1 Measuring the Impact of DAM Outages and Returns-to-Service: Calculation of DAM Constraint Residuals and Division of DAM Constraint Residuals into O/R-t-S DAM Constraint Residuals and U/D DAM Constraint Residuals

For each hour *h* of the Day-Ahead Market, the ISO shall identify all constraints that are binding in the Power Flow solution for the final schedules for hour *h* of the Day-Ahead Market. For each binding constraint *a* identified for each hour *h*, the ISO shall calculate the DAM Constraint Residual, DCR<sub>a,h</sub>, using Formula N-5; *provided, however*, where DCR<sub>a,h</sub> calculated using Formula N-5 is not greater than the DCR Allocation Threshold or less than the negative of the DCR Allocation Threshold, then DCR<sub>a,h</sub> shall be set equal to zero.

	Formula N-5
	$(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction})$
$DCR_{a,h} = ShadowPrice_{a,h} *$	$+(UprateDerate_{a,h} * SCUCSignChange_{a,h})$
	+(UnsoldCapacity_{a,h,RA} * SCUCSignChange_{a,h})
Where	

Where,

DCR <sub>a,h</sub> =	The DAM Constraint Residual, in dollars, for binding constraint $a$ in hour $h$ of the Day-Ahead Market
ShadowPrice <sub>a,h</sub> =	The Shadow Price, in dollars/MWh, of binding constraint $a$ in hour $h$ of the Day-Ahead Market, which Shadow Price is calculated in a manner so that if relaxation of constraint $a$ would permit a reduction in the associated Bid Production Cost, ShadowPrice <sub>a,h</sub> is negative
FLOW <sub>a,h,DAM</sub> =	The Energy flow, in MWh, on binding constraint $a$ for hour $h$ for a set of injections and withdrawals that corresponds (as described in Section 20.1.2 of this Attachment N) to the set of TCCs and Grandfathered Rights represented for the month that contains hour $h$ in the solution to the most recent auction in which TCCs valid in hour $h$ were sold (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction), which Energy flow will be determined using Shift Factors produced in scheduling hour $h$ of the Day-Ahead Market applied to these injections and withdrawals and the phase angle regulator schedules fixed for the month that contains hour $h$ in the last auction held for TCCs valid for hour $h$
FLOW <sub>a,h,TCC</sub> Auction =	The Energy flow, in MWh, on binding constraint $a$ for hour $h$ determined as described in the definition of FLOW <sub>a,h,DAM</sub> above, except that the Shift Factors applied will be those produced in a simulated run of SCUC (run

using the Transmission System model for the month that contains hour *h* used in the most recent auction in which TCCs valid in hour *h* were sold);

*provided, however*, special rules (1) through (3) below shall instead be used to calculate FLOW<sub>a,h,TCC</sub> Auction if they apply, and rule (4) below shall be used to calculate FLOW<sub>a,h,TCC</sub> Auction if FLOW<sub>a,h,TCC</sub> Auction cannot be calculated using any other rule set forth in this definition of FLOW<sub>a,h,TCC</sub> Auction because a simulated run of SCUC does not produce Shift Factors to calculate FLOW<sub>a,h,TCC</sub> Auction:

- (1) in the event that a maintenance contingency is binding in the Day-Ahead Market but was not applied for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold, FLOW<sub>a,h,TCC</sub> Auction shall be equal to the Energy flow in MWh on the monitored transmission facility of binding constraint *a* for the contingency resulting in the highest flows on constraint *a* for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold, which Energy flow shall be calculated using the set of injections and withdrawals that corresponds (as described in Section 20.1.2 of this Attachment N) to the set of TCCs and Grandfathered Rights represented for the month that contains hour *h* in the solution to that auction (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction) and using Shift Factors from a simulated run of SCUC as first set forth in this definition of FLOW<sub>a,h,TCC</sub> Auction
- (2) in the event that the monitored transmission facility for constraint *a* was modeled as out-of-service for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold and that transmission facility returns to service for hour *h* of the Day-Ahead Market, FLOW<sub>a,h,TCC</sub> Auction shall be equal to:
- (i) the rating limit, in MWh, for the monitored transmission facility of binding constraint *a* applicable in hour *h* of the Day-Ahead Market, <u>multiplied</u> by

- (ii) negative SCUCSignChange<sub>a,h</sub>
- (3) in the event that the transmission facility that is the contingency element for constraint a was modeled as out-of-service for the month that contains hour h in the most recent auction in which TCCs valid in hour *h* were sold and that transmission facility returns to service for hour h of the Day-Ahead Market, FLOW<sub>a,h,TCC</sub> Auction shall be equal to the Energy flow, in MWh, on the monitored transmission facility of binding constraint *a* for the contingency resulting in the highest flows on the monitored transmission facility of constraint *a* for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold, which Energy flow shall be calculated using the set of injections and withdrawals that corresponds (as described in Section 20.1.2 of this Attachment N) to the set of TCCs and Grandfathered Rights represented for the month that contains hour h in the solution to that auction (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction) and using Shift Factors from a simulated run of SCUC as first set forth in this definition of FLOW<sub>a,h,TCC</sub> Auction
- (4) in the event that a simulated run of SCUC does not produce Shift Factors to calculate FLOW<sub>a,h,TCC</sub> Auction, FLOW<sub>a,h,TCC</sub> Auction shall be equal to:
- (i) the Energy flow on constraint a as determined for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold, <u>multiplied</u> by
- (ii) OPF/SCUCAdjust<sub>a</sub>

UprateDerate<sub>a,h</sub> = Zero, except that in the event of:

(1) For a Qualifying DAM Uprating or Qualifying DAM Derating other than an event that satisfies the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating: a Qualifying DAM Uprating or Qualifying DAM Derating for constraint a in hour h that is included for the month that contains hour h in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour h were sold (or if no Reconfiguration Auction was held for TCCs valid in hour h, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour h), UprateDerate<sub>a,h</sub> shall equal the interface uprating or derating impact reflected in such table. Notwithstanding the definition above, UprateDerate<sub>a,h</sub> shall always equal zero in the event that the monitored transmission facility for binding constraint a in the Day-Ahead Market was modeled as out-of-service for the month that contains hour h in the most recent auction in which TCCs valid in hour h; or

(2) For a Qualifying DAM Uprating or Qualifying DAM Derating that satisfies the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying <u>DAM Derating</u>: UprateDerate<sub>a,h</sub> shall equal the rating limit for the monitored transmission facility of constraint *a* in hour *h* in the Day-Ahead Market, minus the rating limit modeled for such transmission facility for month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold.

UnsoldCapacity<sub>a,h,RA</sub> = Zero, except that if ShadowPrice<sub>a,h</sub> \* [(FLOW<sub>a,h,DAM</sub> – FLOW<sub>a,h,TCCAuction</sub>) + (UprateDerate<sub>a,h</sub> \* SCUCSignChange<sub>a,h</sub>)] is less than zero, then UnsoldCapacity<sub>a,h,RA</sub> shall be equal to the lesser of (1) the amount of transmission Capacity for constraint *a* that was available for sale for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold but which transmission Capacity was not sold; or (2) the absolute value of (FLOW<sub>a,h,DAM</sub> – FLOW<sub>a,h,TCCAuction</sub>) +

(UprateDerate<sub>a,h</sub> \* SCUCSignChange<sub>a,h</sub>).

SCUCSignChange<sub>a,h</sub> = 1 if ShadowPrice<sub>a,h</sub> is greater than zero; otherwise, -1.

 $OPF/SCUCAdjust_a = 1$  if the directional orientation of constraint *a* used by the ISO in SCUC is the same as that used by the ISO in the Optimal Power Flow program used to select winning Bids for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold; otherwise, -1.

Following calculation of the DAM Constraint Residual for each constraint a for each hour h, the ISO shall calculate the amount of each O/R-t-S DAM Constraint Residual and the amount of each U/D DAM Constraint Residual for each constraint a for each hour h. The amount of each O/R-t-S DAM Constraint Residual for hour h and for constraint a shall be determined by applying Formula N-6. The amount of each U/D DAM Constraint Residual for hour h and for constraint Residual for hour h and for constraint Residual for hour h and for constraint Residual for hour h.

## Formula N-6

$$O/R-t-S DCR_{a,h} = DCR_{a,h} \left[ \frac{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction})}{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) + (UprateDerate_{a,h} * SCUCSignChange_{a,h})} \right]$$

Where,

O/R-t-S DCR<sub>a,h</sub> = The amount of the O/R-t-S DAM Constraint Residual, in dollars, for hour *h* and for constraint *a* 

and each of the other variables are as defined in Formula N-5.

## Formula N-7

$$U/D \ DCR_{a,h} = DCR_{a,h} \left[ \underbrace{(UprateDerate_{a,h} * SCUCSignChange_{a,h})}_{*} \left[ \underbrace{(FLOW_{a,h,DAM} - FLOW_{a,h,TCCAuction}) + (UprateDerate_{a,h} * SCUCSignChange_{a,h})}_{*} \right] \right]$$

Where,

U/D DCR<sub>a,h</sub> = The amount of the U/D DAM Constraint Residual for hour 
$$h$$
 for constraint  $a$ 

and each of the other variables are as defined in Formula N-5.

# 20.2.4.2 Charges and Payments for the Direct Impact of DAM Outages and Returns-to-Service

The ISO shall use O/R-t-S DAM Constraint Residuals to allocate O/R-t-S Congestion

Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments, as the case may be,

among Transmission Owners pursuant to this Section 20.2.4.2. Each O/R-t-S Congestion Rent

Shortfall Charge and each O/R-t-S Congestion Rent Surplus Payment allocated to a

Transmission Owner pursuant to this Section 20.2.4.2 is subject to being set equal to zero

pursuant to Section 20.2.4.5.

# 20.2.4.2.1 Identification of Outages and Returns-to-Service Qualifying for Charges and Payments

For each hour of the Day-Ahead Market, the ISO shall identify each Qualifying DAM Outage and each Qualifying DAM Return-to-Service, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for a Qualifying DAM Outage or Qualifying DAM Return-to-Service shall be allocated an O/R-t-S Congestion Rent Shortfall Charge or an O/R-t-S Congestion Rent Surplus Payment pursuant to Sections 20.2.4.2.2 or 20.2.4.2.3.

# 20.2.4.2.1.1 Definition of Qualifying DAM Outage

A "Qualifying DAM Outage" shall be defined to mean either an Actual Qualifying DAM Outage or a Deemed Qualifying DAM Outage. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying DAM Outage.

An "Actual Qualifying DAM Outage" shall be defined as a transmission facility that, for a given hour h of the Day-Ahead Market, meets each of the following requirements:

- (i) the facility exists but is not modeled as in-service for the Day-Ahead Market for hour *h*;
- (ii) the facility existed and was modeled as in-service for the month that contains hour*h* in the last auction held for TCCs valid for hour *h*; and
- (iii) the facility was not Normally Out-of-Service Equipment for the month that contains hour h at the time of the last auction held for TCCs valid for hour h.

A "Deemed Qualifying DAM Outage" shall be defined as a transmission facility that, for a given hour h of the Day-Ahead Market, meets each of the following requirements:

(i) the facility existed but was not modeled as in-service for the month that contains hour *h* in the last auction held for TCCs valid for hour *h*;

- (ii) the facility existed but was not modeled as in-service in the Day-Ahead Market in hour h as a result of a DAM Status Change or external event described in Section 20.2.4.4.3 for which responsibility was assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner assigned responsibility for the facility not being modeled as in-service for the month that contains hour h in the last auction held for TCCs valid for hour h;
- (iii) the facility was not Normally Out-of-Service Equipment for the month that contains hour h at the time of the last auction held for TCCs valid for hour h.

A transmission facility shall not qualify as an Actual Qualifying DAM Outage if the facility is modeled as in-service for hour h of the Day-Ahead Market as a result of a Transmission Owner's use of spare or alternative transmission equipment to bring the facility back in-service so long as the Transmission Owner has notified the ISO in advance of or contemporaneously with the use of such spare or alternative equipment and the estimated duration of its use.

## 20.2.4.2.1.2 Definition of Qualifying DAM Return-to-Service

A "Qualifying DAM Return-to-Service" shall be defined to mean either an Actual Qualifying DAM Return-to-Service or a Deemed Qualifying DAM Return-to-Service. For purposes of this Attachment N, "*o*" shall refer to a single Qualifying DAM Return-to-Service.

An "Actual Qualifying DAM Return-to-Service" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

- (i) the facility exists and is modeled as in-service in the Day-Ahead Market for hour
   *h*;
- (ii) the facility existed but was not modeled as in-service for the month that contains hour *h* in the last auction held for TCCs valid for hour *h*; and
- (iii) the facility was not Normally Out-of-Service Equipment for the month that contains hour h at the time of the last auction held for TCCs valid for hour h.

A "**Deemed Qualifying DAM Return-to-Service**" shall be defined as a transmission facility that, for a given hour *h* of the Day-Ahead Market, meets each of the following requirements:

- (i) the facility existed but was not modeled as in-service for the month that contains hour *h* in the last auction held for TCCs valid for hour *h*;
- (ii) the facility existed but was not modeled as in-service in the Day-Ahead Market for hour h as a result of a DAM Status Change or external event described in Section 20.2.4.4.3 for which responsibility is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner assigned responsibility for the facility not being modeled as in-service for the month that contains hour h in the last auction held for TCCs valid for hour h; and
- (iii) the facility was not Normally Out-of-Service Equipment for the month thatcontains hour *h* at the time of the last auction held for TCCs valid for hour *h*.

# 20.2.4.2.2 Allocation of an O/R-t-S DAM Constraint Residual When Only One Transmission Owner is Responsible for All of the Relevant Outages and Returns-to-Service

This Section 20.2.4.2.2 describes the allocation of an O/R-t-S DAM Constraint Residual for a given hour and a given constraint when only one Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for all of the Qualifying DAM Outages and all of the Qualifying DAM Returns-to-Service for that hour that contribute to that constraint.

If the same Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for all of the Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* for hour *h* that contribute to constraint *a*, then the ISO shall allocate the O/R-t-S DAM Constraint Residual for that hour and that constraint, O/R-t-S DCR<sub>a,h</sub>, to that Transmission Owner in the form of either: (i) an O/R-t-S Congestion Rent Shortfall Charge in the amount of O/R-t-S DCR<sub>a,h</sub> is negative, or (ii) an O/R-t-S Congestion Rent Surplus Payment in the amount of O/R-t-S DCR<sub>a,h</sub> if O/R-t-S DCR<sub>a,h</sub> is positive.

# 20.2.4.2.3 Allocation of an O/R-t-S DAM Constraint Residual When More Than One Transmission Owner is Responsible for the Relevant Outages and Returns-to-Service

This Section 20.2.4.2.3 describes the allocation of an O/R-t-S DAM Constraint Residual for a given hour and a given constraint when more than one Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Outages and the Qualifying DAM Returns-to-Service for that hour that contribute to that constraint.

If more than one Transmission Owner is responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Outages and the Qualifying DAM Returns-to-Service for hour h that contribute to constraint a, the ISO shall allocate the O/R-t-S DAM Constraint Residual for constraint a for hour h, O/R-t-S DCR<sub>a,h</sub>, in the form of an O/R-t-S Congestion Rent Shortfall

Charge or O/R-t-S Congestion Rent Surplus Payment to the Transmission Owners responsible for the Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* for hour *h* by first determining the net total impact on the constraint for hour *h* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* with an impact on the Energy flow across that constraint of 1 MWh or more by applying Formula N-8, and then applying either Formula N-9 or Formula N-10, as specified herein, to assess O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S Congestion Rent Surplus Payments.

#### Formula N-8

$$O/R-t-S\,NetDAMImpact_{a,h} = \left(\sum_{for \ all \ o \in O_h} FlowImpact_{a,h,o} * ShadowPrice_{a,h}\right) * OPF/SCUCAdjust_{a,h,o} + ShadowPrice_{a,h}$$

Where,

- O/R-t-S NetDAMImpact<sub>a,h</sub> = The net impact, in dollars, on constraint *a* in hour *h* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour *h* having an impact of more than 1 MWh on Energy flow across constraint *a*; *provided*, *however*, O/R-t-S NetDAMImpact<sub>a,h</sub> shall be subject to recalculation as specified in the paragraph immediately following this Formula N-8
- FlowImpact<sub>a,h,o</sub> = The Energy flow impact of a Qualifying DAM Outage o or Qualifying DAM Return-to-Service o, in MWh, on binding constraint adetermined for hour h, which shall either:
  - (a) if Qualifying DAM Outage *o* is a Deemed Qualifying DAM Outage, be equal to the negative of FlowImpact<sub>a,h,o</sub> calculated for the corresponding Deemed Qualifying DAM Return-to-Service as described in part (b) of this definition of FlowImpact<sub>a,h,o</sub>; or
    - (b) if Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* is an
       Actual Qualifying DAM Outage, an Actual Qualifying DAM Return-to-Service,

or a Deemed Qualifying DAM Return-to-Service, be calculated pursuant to the

following formula:

 $FlowImpact_{a,h,o} = One-OffFlow_{a,h,o} - BaseCaseFlow_{a,h}$ 

Where,

BaseCaseFlow<sub>a,h</sub> = The Energy flow on binding constraint *a* resulting from a Power Flow or similar analysis using (1) the set of injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the TCCs and Grandfathered Rights represented for the month that contains hour *h* in the solution to the most recent auction in which TCCs valid in hour *h* were sold (including those pre-existing TCCs and Grandfathered Rights represented as fixed injections and withdrawals in that auction); (2) the phase angle regulator schedules determined in the Optimal Power Flow solution for the month that contains hour *h* for the final round of the last auction held for TCCs valid in hour *h*; and (3) the Transmission System model for the month that contains hour *h* in the last auction held for TCCs valid in hour *h*;

 $One-OffFlow_{a,h,o} = Either$ 

(1) if Qualifying DAM Outage *o* or Qualifying DAM Return-to-Service *o* is an Actual Qualifying DAM Outage or an Actual Qualifying DAM Return-to-Service, the Energy flow on binding constraint *a* resulting from a Power Flow or similar analysis using each element of the base case data set used in the calculation of BaseCaseFlow<sub>a,h</sub> above (*provided, however*, if a transmission facility was modeled as free-flowing in hour *h* of the Day-Ahead Market because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedules and related variables to model the transmission facility as free flowing), but in each case with the Transmission System model modified so as to, as the case may be, either (i) model as out-of-service Actual Qualifying DAM Outage *o*, or (ii) model as in-service Actual Qualifying DAM Return-to-Service *o*; or

(2) if Qualifying DAM Return-to-Service o is a Deemed Qualifying DAM Return-to-Service, the Energy flow on binding constraint a resulting from a Power Flow or similar analysis using each element of the base case data set used in the calculation of BaseCaseFlow<sub>a,h</sub> above (*provided, however*, if a transmission facility was modeled as free-flowing in hour h of the Day-Ahead Market because of the outage of any transmission facility, the ISO shall appropriately adjust the phase angle regulator schedules and related variables to model the transmission facility as free flowing), but with the Transmission System model modified so as to model as in-service the transmission facility that is Deemed Qualifying DAM Return-to-Service o

*provided, however*, where the absolute value of FlowImpact<sub>a,h,o</sub> calculated using the procedures set forth above is less than 1 MWh, then *FlowImpact*<sub>a,h,o</sub> shall be set equal to zero;

*provided further*, FlowImpact<sub>a,h,o</sub> shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-8

 $O_{h}$ 

= The set of all Qualifying DAM Outages *o* and Qualifying DAM Returns-to-Service *o* in hour *h* 

and the variables ShadowPrice<sub>a,h</sub> and OPF/SCUCAdjust<sub>a</sub> are defined as set forth in

Formula N-5.

After calculating O/R-t-S NetDAMImpact<sub>a,h</sub> pursuant to Formula N-8, the ISO shall

determine whether O/R-t-S NetDAMImpact<sub>a,h</sub> for constraint a in hour h has a different sign than

O/R-t-S DCR<sub>a,h</sub> for constraint *a* in hour *h*. If the sign is different, the ISO shall (i) recalculate

O/R-t-S NetDAMImpact<sub>a,h</sub> pursuant to Formula N-8 after setting equal to zero each

FlowImpact<sub>a,h,o</sub> for which FlowImpact<sub>a,h,o</sub> \* ShadowPrice<sub>a,h</sub> \* OPF/SCUCAdjust<sub>a</sub> has a different

sign than O/R-t-S DCR<sub>a,h</sub>, and then (ii) use this recalculated O/R-t-S NetDAMImpact<sub>a,h</sub> and reset

value of FlowImpacta,h,o to allocate O/R-t-S Congestion Rent Shortfall Charges and O/R-t-S

Congestion Rent Surplus Payments pursuant to Formula N-9 or Formula N-10, as specified below.

If the absolute value of the net impact (O/R-t-S NetDAMImpact<sub>a,h</sub>) on constraint *a* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour h as calculated using Formula N-8 (or recalculated pursuant to Formula N-8 using a reset value of FlowImpact<sub>a,h,o</sub> as described in the prior paragraph) is greater than the absolute value of the O/Rt-S DAM Constraint Residual (O/R-t-S DCR<sub>a,h</sub>), in dollars, for constraint a in hour h, then the ISO shall allocate the O/R-t-S DAM Constraint Residual in the form of an O/R-t-S Congestion Rent Shortfall Charge, O/R-t-S CRSCa,t,h, or O/R-t-S Congestion Rent Surplus Payment, O/R-t-S CRSP<sub>a,t,h</sub>, by using Formula N-9. If the absolute value of the net impact (O/R-t-S NetDAMImpact<sub>a,h</sub>) on constraint *a* of all Qualifying DAM Outages and Qualifying DAM Returns-to-Service for hour h as calculated using Formula N-8 (or recalculated pursuant to Formula N-8 using a reset value of FlowImpact<sub>a,h,o</sub> as described in the prior paragraph) is less than or equal to the absolute value of the O/R-t-S DAM Constraint Residual (O/R-t-S DCR<sub>a,h</sub>), in dollars, for constraint a in hour h, then the ISO shall allocate the O/R-t-S DAM Constraint Residual in the form of an O/R-t-S Congestion Rent Shortfall Charge or O/R-t-S Congestion Rent Surplus Payment by using Formula N-10.

$$O/R-t-SAllocation_{a,t,h} = \left( \begin{array}{c} \sum_{\substack{o \in O_h \\ and \ q = t}} (FlowImpact_{a,h,o} * Responsibility_{h,q,o}) \\ \underline{and \ q = t} \\ \hline \sum_{for \ all \ o \in O_h} FlowImpact_{a,h,o} \end{array} \right) * O/R-t-SDCR_{a,h}$$

Where,

O/R-t-S Allocation<sub>a,t,h</sub> = Either an O/R-t-S Congestion Rent Shortfall Charge or an O/R-t-S Congestion Rent Surplus Payment, as specified in (a) and (b) below:

	(a) If O/R-t-S Allocation <sub>a,t,h</sub> is negative, then O/R-t-S Allocation <sub>a,t,h</sub> shall be an O/R-t-S Congestion Rent Shortfall Charge, O/R-t-S CRSC <sub>a,t,h</sub> , charged to Transmission Owner <i>t</i> for binding constraint <i>a</i> in hour <i>h</i> of the Day-Ahead Market; or
	(b) If O/R-t-S Allocation <sub>a,t,h</sub> is positive, then O/R-t-S Allocation <sub>a,t,h</sub> shall be an O/R-t-S Congestion Rent Surplus Payment, O/R-t-S CRSP <sub>a,t,h</sub> , paid to Transmission Owner <i>t</i> for binding constraint <i>a</i> in hour <i>h</i> of the Day-Ahead Market
Responsibility <sub>h,q,o</sub>	<ul> <li>The amount, as a percentage, of responsibility borne by Transmission Owner q (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4) for Qualifying DAM Outage o or Qualifying DAM Return-to-Service o in hour h, as determined pursuant to Section 20.2.4.4</li> </ul>

and the variable O/R-t-S DCR<sub>a,h</sub> is defined as set forth in Formula N-6 and the variables

FlowImpact<sub>a,h,o</sub> and O<sub>h</sub> are defined as set forth in Formula N-8.

## Formula N-10

$$O/R-t-SAllocation_{a,t,h} = \left(\sum_{\substack{o \in O_h \\ and \ q = t}} FlowImpact_{a,h,o} * ShadowPrice_{a,h} * Responsibility_{h,q,o}\right) * OPF/SCUCAdjust_{a,h,o} + ShadowPrice_{a,h} * Responsibility_{h,q,o}$$

Where,

the variables ShadowPrice<sub>a,h</sub> and OPF/SCUCAdjust<sub>a</sub> are defined as set forth in Formula N-5, the variables O/R-t-S Allocation<sub>a,t,h</sub> and Responsibility<sub>h,q,o</sub> are defined as set forth in Formula N-9, and the variables FlowImpact<sub>a,h,o</sub> and O<sub>h</sub> are defined as set forth in Formula N-8.

# 20.2.4.3 Charges and Payments for Upratings and Deratings

The ISO shall use U/D DAM Constraint Residuals to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments, as the case may be, among Transmission Owners pursuant to this Section 20.2.4.3. Each U/D Congestion Rent Shortfall Charge and each U/D Congestion Rent Surplus Payment allocated to a Transmission Owner pursuant to this Section 20.2.4.3 is subject to being set equal to zero pursuant to Section 20.2.4.5.

# 20.2.4.3.1 Identification of Upratings and Deratings Qualifying for Charges and Payments

For each hour of the Day-Ahead Market and for each constraint, the ISO shall identify each Qualifying DAM Derating and each Qualifying DAM Uprating, as described below. The Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Derating shall be allocated a U/D Congestion Rent Shortfall Charge and the Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Uprating shall be allocated a U/D Congestion Rent Shortfall Charge and the Transmission Owner responsible, as determined pursuant to Section 20.2.4.4, for the Qualifying DAM Uprating shall be allocated a U/D Congestion Rent Surplus Payment pursuant to Section 20.2.4.3.2.

# 20.2.4.3.1.1 Definition of Qualifying DAM Derating

A "Qualifying DAM Derating" shall be defined to mean either an Actual Qualifying DAM Derating or a Deemed Qualifying DAM Derating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying DAM Derating.

## An "Actual Qualifying DAM Derating" shall be defined as:

(1) a change in the rating of a constraint that, for a given constraint a and hour h of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint has a lower rating in hour h than it would have if all transmission facilities were modeled as in-service in hour h,
- (ii) this lower rating is in whole or in part the result of an Actual Qualifying DAMOutage *o* or an Actual Qualifying DAM Return-to-Service *o* for hour *h*,
- (iii) this lower rating resulting from Actual Qualifying DAM Outage *o* or ActualQualifying DAM Return-to-Service *o* for hour *h* was not modeled for the monththat contains hour *h* in the last auction held for TCCs valid for hour *h*,

(iv) this lower rating is included for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*), and

(v) the constraint is binding in the Day-Ahead Market for hour *h*; or

(2) a change in the rating limit for the monitored transmission facility of a constraint that, for a given constraint a and hour h of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint's monitored transmission facility has a lower rating limit in hour h in the Day-Ahead Market than the rating limit that was modeled for such transmission facility for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold,
- (ii) this lower rating limit in hour *h* in the Day-Ahead Market for the constraint's monitored transmission facility is solely the result of utilizing rating limits based on the requirements set forth in Attachment GG of the ISO OATT,
- (iii) the constraint's monitored transmission facility was modeled as in-service in hour*h* in the Day-Ahead Market,
- (iv) the constraint's monitored transmission facility was modeled as both in-service and secured for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold, and
- (v) the constraint is binding in the Day-Ahead Market for hour h.

A "**Deemed Qualifying DAM Derating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and hour *h* of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint has a lower rating in hour *h* than it would have if all transmission facilities were modeled as in-service in hour *h*;
- (ii) this lower rating is in whole or in part the result of a Deemed Qualifying DAMOutage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h*;
- (iii) the lower rating resulting from Deemed Qualifying DAM Outage o or Deemed Qualifying DAM Return-to-Service o for hour h was modeled for the month that contains hour h in the last auction held for TCCs valid for hour h, but responsibility for Qualifying DAM Outage o or Qualifying DAM Return-to-Service o resulting in the lower rating for hour h is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner pursuant to Section 20.2.4.4) other than the Transmission Owner responsible for the lower rating for the month that contains hour h in the last auction held for TCCs valid for hour h;
- (iv) this lower rating is included for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and
- (v) the constraint is binding in the Day-Ahead Market for hour h.

### 20.2.4.3.1.2 Definition of Qualifying DAM Uprating

A "**Qualifying DAM Uprating**" shall be defined to mean either an Actual Qualifying DAM Uprating or a Deemed Qualifying DAM Uprating. For purposes of this Attachment N, "*r*" shall refer to a single Qualifying DAM Uprating.

## An "Actual Qualifying DAM Uprating" shall be defined as:

(1) a change in the rating of a constraint that, for a given constraint a in hour h of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint has a higher rating for hour *h* than it would have absent an Actual
   Qualifying DAM Outage *o* or Actual Qualifying DAM Return-to-Service *o* for
   hour *h*,
- (ii) this higher rating resulting from Actual Qualifying DAM Outage o or Actual Qualifying Return-to-Service o for hour h was not modeled for the month that contains hour h in the last auction held for TCCs valid for hour h,
- (iii) this higher rating is included for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*), and

(iv) the constraint is binding in the Day-Ahead Market for hour h; or

(2) a change in the rating limit for the monitored transmission facility of a constraint that, for a given constraint *a* in hour *h* of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint's monitored transmission facility has a higher rating limit for hour *h* in the Day-Ahead Market than the rating limit that was modeled for such transmission facility for the month that contains hour *h* in the most recent auction in which TCCs valid in hour *h* were sold,
- (ii) this higher rating limit in hour h in the Day-Ahead Market for the constraint's monitored transmission facility is solely the result of utilizing rating limits based on the requirements set forth in Attachment GG of the ISO OATT,
- (iii) the constraint's monitored transmission facility was modeled as in-service in hour*h* in the Day-Ahead Market,
- (iv) the constraint's monitored transmission facility was modeled as both in-service and secured for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold, and
- (v) the constraint is binding in the Day-Ahead Market for hour *h*.

A "**Deemed Qualifying DAM Uprating**" shall be defined as a change in the rating of a constraint that, for a given constraint *a* and hour *h* of the Day-Ahead Market, meets each of the following requirements:

- (i) the constraint has a lower rating in hour *h* than it would have if all transmission facilities were modeled as in-service in hour *h*;
- (ii) this lower rating is in whole or in part the result of a Deemed Qualifying DAMOutage *o* or Deemed Qualifying DAM Return-to-Service *o* for hour *h*;
- (iii) this lower rating resulting from Deemed Qualifying DAM Outage *o* or DeemedQualifying DAM Return-to-Service *o* for hour *h* was modeled for the month thatcontains hour *h* in the last auction held for TCCs valid for hour *h*, but

responsibility for Qualifying DAM Outage o or Qualifying DAM Return-to-Service o resulting in the lower rating for hour h is assigned pursuant to Section 20.2.4.4 to a Transmission Owner (including the ISO when it is deemed a Transmission Owner for the purpose of applying Section 20.2.4.4) other than the Transmission Owner responsible for the lower rating for the month that contains hour h in the last auction held for TCCs valid for hour h;

- (iv) this lower rating for hour *h* is included for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); and
- (v) the constraint is binding in the Day-Ahead Market for hour *h*.

## 20.2.4.3.2 Allocation of U/D DAM Constraint Residuals

This Section 20.2.4.3.2 describes the allocation of U/D DAM Constraint Residuals to Qualifying DAM Deratings and Qualifying DAM Upratings.

When there are Qualifying DAM Deratings or Qualifying DAM Upratings for constraint a in hour h, the ISO shall allocate a U/D DAM Constraint Residual in the form of a U/D Congestion Rent Shortfall Charge, U/D CRSC<sub>a,t,h</sub>, or U/D Congestion Rent Surplus Payment, U/D CRSP<sub>a,t,h</sub>, by first determining the net total impact on the constraint for hour h of all Qualifying DAM Upratings r and Qualifying DAM Deratings r for constraint a in hour h pursuant to Formula N-11 and then applying either Formula N-12 or Formula N-13, as specified

herein, to assess U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments.

Formula N-11

$$U/D \ NetDAMImpact_{a,h} = \left(\sum_{for \ all \ r \in R_{a,h}} RatingChange_{a,h,r} * ShadowPrice_{a,h}\right) * SCUCSignChange_{a,h}$$

Where,

U/D NetDAMImpact<sub>a,h</sub> = The net impact, in dollars, on constraint *a* of all Qualifying DAM Upratings and Qualifying DAM Deratings for constraint *a* in hour *h*; *provided, however*, U/D NetDAMImpact<sub>a,h</sub> shall be subject to recalculation as specified in the paragraph immediately following this Formula N-11

 $RatingChange_{a,h,r} = Either$ 

- (a) If Qualifying DAM Derating *r* or Qualifying DAM Uprating *r* is a Deemed Qualifying DAM Derating or a Deemed Qualifying DAM Uprating,
  RatingChange<sub>a,h,r</sub> shall be equal to the amount, in MWh, of the decrease or increase in the rating of binding constraint *a* in hour *h* resulting from a Deemed Qualifying DAM Return-to-Service or Deemed Qualifying DAM Outage for constraint *a* in hour *h*, as shown for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); or
- (b) (1) If Qualifying DAM Derating *r* or Qualifying DAM Uprating *r* is an Actual
   Qualifying DAM Derating or an Actual Qualifying DAM Uprating for an event
   other than one that satisfies the requirements of clause 2 within the respective

definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating, RatingChange<sub>a,h,r</sub> shall be equal to the amount, in MWh, of the decrease or increase in the rating of binding constraint *a* in hour *h* resulting from an Actual Qualifying DAM Return-to-Service or an Actual Qualifying DAM Outage for constraint *a* in hour *h*, as shown for the month that contains hour *h* in the Reconfiguration Auction Interface Uprate/Derate Table in effect for the last Reconfiguration Auction in which TCCs valid in hour *h* were sold (or if no Reconfiguration Auction was held for TCCs valid in hour *h*, then the Centralized TCC Auction Interface Uprate/Derate Table in effect for the last Centralized TCC Auction held for TCCs valid in hour *h*); *provided, however*, RatingChange<sub>a,h,r</sub> shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-11, or

(2) If Qualifying DAM Derating r or Qualifying DAM Uprating r is an Actual Qualifying DAM Derating or an Actual Qualifying DAM Uprating for an event that satisfies the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating, RatingChange<sub>a,h,r</sub> shall be equal to the rating limit for the monitored transmission facility of constraint a in hour h in the Day-Ahead Market, minus the rating limit that was modeled for such transmission facility for the month that contains hour h in the most recent auction in which TCCs valid in hour h were sold; *provided, however*, RatingChange<sub>a,h,r</sub> shall be subject to being set equal to zero as specified in the paragraph immediately following this Formula N-11

 $R_{a,h}$  = The set of all Qualifying DAM Deratings *r* or Qualifying DAM Upratings *r* for binding constraint *a* in hour *h* 

and the variables SCUCSignChange<sub>a,h</sub> and ShadowPrice<sub>a,h</sub> are defined as set forth in Formula N-5.

After calculating U/D NetDAMImpact<sub>a,h</sub> pursuant to Formula N-11, the ISO shall determine whether U/D NetDAMImpact<sub>a,h</sub> for constraint *a* in hour *h* has a different sign than U/D DCR<sub>a,h</sub> for constraint *a* in hour *h*. If the sign is different, the ISO shall (i) recalculate U/D NetDAMImpact<sub>a,h</sub> pursuant to Formula N-11 after setting equal to zero each RatingChange<sub>a,h,r</sub> for which RatingChange<sub>a,h,r</sub> \* ShadowPrice<sub>a,h</sub> \* SCUCSignChange<sub>a,h</sub> has a different sign than U/D DCR<sub>a,h</sub>, and then (ii) use this recalculated U/D NetDAMImpact<sub>a,h</sub> and reset value of RatingChange<sub>a,h,r</sub> to allocate U/D Congestion Rent Shortfall Charges and U/D Congestion Rent Surplus Payments pursuant to Formula N-12 or Formula N-13, as specified below.

If the absolute value of the net impact (U/D NetDAMImpact<sub>a,h</sub>) on constraint *a* of all Qualifying DAM Deratings and Qualifying DAM Upratings for constraint *a* in hour *h* as calculated using Formula N-11 (or recalculated pursuant to Formula N-11 using a reset value of RatingChange<sub>a,h,r</sub> as described in the prior paragraph) is greater than the absolute value of the U/D DAM Constraint Residual (U/D DCR<sub>a,h</sub>) for constraint *a* in hour *h*, then the ISO shall allocate the U/D DAM Constraint Residual in the form of a U/D Congestion Rent Shortfall Charge, U/D CRSC<sub>a,t,h</sub>, or U/D Congestion Rent Surplus Payment, U/D CRSP<sub>a,t,h</sub>, by using Formula N-12. If the absolute value of the net impact (U/D NetDAMImpact<sub>a,h</sub>) on constraint *a* of all Qualifying DAM Deratings and Qualifying DAM Upratings for constraint *a* in hour *h* as calculated using Formula N-11 (or recalculated pursuant to Formula N-11 using a reset value of RatingChange<sub>a,h,r</sub> as described in the prior paragraph) is less than or equal to the absolute value of the U/D DAM Constraint Residual (U/D DCR<sub>a,h</sub>) for constraint *a* in hour *h*, then the ISO shall allocate the U/D DAM Constraint Residual in the form of a U/D Congestion Rent Salue value of RatingChange<sub>a,h,r</sub> as described in the prior paragraph) is less than or equal to the absolute value Charge, U/D CRSC<sub>a,t,h</sub>, or U/D Congestion Rent Surplus Payment, U/D CRSP<sub>a,t,h</sub>, by using Formula N-13.

# Formula N-12

Where,

U/D Allocation <sub>a,t,h</sub>		<ul> <li>Either a U/D Congestion Rent Shortfall Charge or a U/D</li> <li>Congestion Rent Surplus Payment, as specified in (a) and (b) below:</li> </ul>
		(a) If U/D Allocation <sub>a,t,h</sub> is negative, then U/D Allocation <sub>a,t,h</sub> shall be a U/D Congestion Rent Shortfall Charge, U/D CRSC <sub>a,t,h</sub> , charged to Transmission Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs <i>t</i> for binding constraint <i>a</i> in hour <i>h</i> of the Day-Ahead Market; or
		(b) If U/D Allocation <sub>a,t,h</sub> is positive, then U/D Allocation <sub>a,t,h</sub> shall be a U/D Congestion Rent Surplus Payment, U/D CRSP <sub>a,t,h</sub> , paid to Transmission Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs $t$ for binding constraint $a$ in hour $h$ of the Day-Ahead Market
Responsibility <sub>h,q,r</sub>	=	The amount, as a percentage, of responsibility borne by Transmission Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs $q$ (which shall include the ISO when it is deemed a Transmission Owner for the purpose of applying Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4) for Qualifying DAM Derating $r$ or Qualifying DAM Uprating $r$ in hour $h$ , as determined pursuant to Section 20.2.4.4; provided, however, that the percentage responsibility in the case of a Primary Holder of Incremental TCCs shall be determined pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT

and the variable U/D  $DCR_{a,h}$  is defined as set forth in Formula N-7 and the variables

RatingChange<sub>a,h,r</sub> and R<sub>a,h</sub> are defined as set forth in Formula N-11.

# Formula N-13

$$U/D Allocation_{a,t,h} = \left(\sum_{\substack{r \in R_{a,h} \\ and \ q = t}} RatingChange_{a,h,r} * ShadowPrice_{a,h} * Responsibility_{h,q,r}\right) * SCUCSignChange_{a,h,r}$$

Where,

the variables ShadowPrice<sub>a,h</sub> and SCUCSignChange<sub>a,h</sub> are defined as set forth in Formula N-5, the variables U/D Allocation<sub>a,t,h</sub> and Responsibility<sub>h,q,r</sub> are defined as set forth in Formula N-12, and the variables RatingChange<sub>a,h,r</sub> and  $R_{a,h}$  are defined as set forth in Formula N-11.

# 20.2.4.4 Assigning Responsibility for Outages, Returns-to-Service, Deratings, and Upratings

#### **20.2.4.4.1** General Rule for Assigning Responsibility; Presumption of Causation

Unless the special rules set forth in Sections 20.2.4.4.2 through 20.2.4.4.4 apply, a

Transmission Owner shall for purposes of this Section 20.2.4 be deemed responsible for a DAM Status Change to the extent that the Transmission Owner has caused the DAM Status Change by changing the in-service or out-of-service status of its transmission facility; *provided, however*, that where a DAM Status Change results from a change to the in-service or out-of-service status of a transmission facility owned by more than one Transmission Owner, responsibility for such DAM Status Change shall be assigned to each owning Transmission Owner based on the percentage of the transmission facility that is owned by the Transmission Owner (as determined in accordance with Section 20.2.4.6.1) during the hour for which the DAM Status Change occurred. For the sake of clarity, a Transmission Owner may, by changing the in-service or out-of-service status of its transmission facility if the Transmission Gowner's change in the in-service or out-of-service status of its transmission facility or as a result of Good Utility Practice) a change in the in-service or out-of-service status of the other transmission facility.

The Transmission Owner that owns a transmission facility that qualifies as a DAM Status Change shall be deemed to have caused the DAM Status Change of that transmission facility unless (i) the Transmission Owner that owns the facility informs the ISO that another Transmission Owner caused the DAM Status Change or that responsibility is to be shared among Transmission Owners in accordance with Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4, and no party disputes such claim; (ii) in case of a dispute over the assignment of responsibility, the ISO determines a Transmission Owner other than the owner of the transmission facility caused the DAM Status Change or that responsibility is to be shared among Transmission Owners in accordance with Sections 20.2.4.4.2, 20.2.4.4.3, or 20.2.4.4.4; or (iii) FERC orders otherwise.

Notwithstanding anything to the contrary herein, for an event that satisfies the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating, the Transmission Owner that owns the transmission facility at issue shall be deemed responsible for such event. If the transmission facility at issue is owned by more than one Transmission Owner, responsibility for such an event shall be assigned to each owning Transmission Owner based on the percentage of the transmission facility that is owned by each Transmission Owner during the hour for which such event occurred (as determined in accordance with Section 20.2.4.6.1 of this Attachment N of the ISO OATT).

# 20.2.4.4.2 Shared Responsibility For Outages, Returns-to-Service, and Ratings Changes Directed by the ISO or Caused by Facility Status Changes Directed by the ISO

A Transmission Owner shall not be responsible for any DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change. Instead, the ISO shall allocate any revenue impacts resulting from a DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change as part of Net Congestion Rents for hour *h*. To do so, the ISO shall be treated as a Transmission Owner when allocating DAM Constraint Residuals pursuant to Section 20.2.4.2 and Section 20.2.4.3, and any DAM Status Change that qualifies as an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change shall be attributed to the ISO when performing the calculations described in Section 20.2.4.2 and Section 20.2.4.3; *provided*, *however*, any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocable to the ISO pursuant to this Section 20.2.4.2 shall ultimately be allocated to the Transmission Owners as Net Congestion Rents pursuant to Section 20.2.5.

Responsibility for a Qualifying DAM Return-to-Service or Qualifying DAM Uprating that is directed by the ISO but does not qualify as a Deemed ISO-Directed DAM Status Change shall be assigned to the Transmission Owner that was responsible for the Qualifying Auction Outage or Qualifying Auction Derating for the month that contains the relevant hour in the last Reconfiguration Auction held for TCCs valid for the relevant hour (or if no Reconfiguration Auction was held for TCCs valid in the relevant hour, the last 6-month Sub-Auction of a Centralized TCC Auction held for TCCs valid for the relevant hour).

## 20.2.4.4.3 Shared Responsibility for External Events

A Transmission Owner shall not be responsible for a DAM Status Change occurring inside the NYCA that is caused by a change in the in-service or out-of-service status or rating of a transmission facility located outside the NYCA. Instead, the ISO shall allocate any revenue impacts resulting from a DAM Status Change caused by such an event outside the NYCA as part of Net Congestion Rents for hour h. To do so, the ISO shall be treated as a Transmission Owner when allocating DAM Constraint Residuals pursuant to Section 20.2.4.2 and Section 20.2.4.3 and any DAM Status Change caused by such an event outside the NYCA shall be attributed to the ISO when performing the calculations described in Section 20.2.4.2 and Section 20.2.4.3; *provided, however*, any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocable to the ISO pursuant to this Section 20.2.4.3 shall ultimately be allocated to the Transmission Owners as Net Congestion Rents pursuant to Section 20.2.5.

### 20.2.4.5 Exceptions: Setting Charges and Payments to Zero

# 20.2.4.5.1 Zeroing Out of Charges and Payments When Outages and Deratings Lead to Net Payments or Returns-to-Service and Upratings Lead to Net Charges

The ISO shall use Formula N-14 to calculate the total O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments, NetDAMAllocations<sub>t,h</sub>, for Transmission Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs *t* in hour *h*. Based on this calculation (and as each of the following variables is defined in Formula N-14), the ISO shall set equal to zero all O/R-t-S CRSC<sub>a,t,h</sub>, U/D CRSC<sub>a,t,h</sub> (excluding any U/D CRSC<sub>a,t,h</sub> related to events that satisfy the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating), O/R-t-S CRSP<sub>a,t,h</sub>, and U/D CRSP<sub>a,t,h</sub> (excluding any U/D CRSP<sub>a,t,h</sub> related to events that satisfy the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating) for Transmission Owner *t* for all constraints for hour *h* if (i) NetDAMAllocations<sub>t,h</sub> (excluding consideration of any U/D CRSC<sub>a,t,h</sub> and U/D CRSP<sub>a,t,h</sub> related to events that satisfy the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating) is positive and Transmission Owner t is not responsible (as determined pursuant to Section 20.2.4.4) for any Qualifying DAM Returns-to-Service or Qualifying DAM Upratings (excluding consideration of any events that satisfy the requirements of clause 2 within the definition of the term Actual Qualifying DAM Uprating) during hour h, or (ii) NetDAMAllocations<sub>t,h</sub> (excluding consideration of any U/D CRSC<sub>a,t,h</sub> and U/D CRSP<sub>a,t,h</sub> related to events that satisfy the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating) is negative and Transmission Owner t is not responsible (as determined pursuant to Section 20.2.4.4) for any Qualifying DAM Outages or Qualifying DAM Deratings (excluding consideration of any events that satisfy the requirements of clause 2 within the definition of the term Actual Qualifying DAM Derating) during hour h; provided, however, the ISO shall not set equal to zero pursuant to this Section 20.2.4.5.1 any O/R-t-S CRSC<sub>a,t,h</sub>, U/D CRSC<sub>a,t,h</sub>, O/R-t-S CRSP<sub>a,t,h</sub>, or U/D CRSP<sub>a,t,h</sub> arising from: (i) an ISO-Directed DAM Status Change or Deemed ISO-Directed DAM Status Change described in Section 20.2.4.4.2; (ii) an external event described in Section 20.2.4.4.3; (iii) an event occurring during a transitional period as described in Section 20.2.4.4.4; or (iv) an event that satisfies the requirements of clause 2 within the respective definitions of the terms Actual Qualifying DAM Uprating or Actual Qualifying DAM Derating.

#### Formula N-14

$$NetDAMAllocations_{t,h} = \sum_{for \ all \ a} \left( O/R-t-S \ CRSC_{a,t,h} + U/D \ CRSC_{a,t,h} + O/R-t-S \ CRSP_{a,t,h} + U/D \ CRSP_{a,t,h} \right)$$

Where,

NetDAMAllocations<sub>t,h</sub> = The total of the O/R-t-S Congestion Rent Shortfall Charges, U/D Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, and U/D Congestion Rent Surplus Payments allocated to Transmission Owner or, as applicable pursuant to Section 19.2.4.10.2

of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs *t* in hour *h* An O/R-t-S Congestion Rent Shortfall Charge allocated to O/R-t-S CRSC<sub>a,t,h</sub> = Transmission Owner t for binding constraint a in hour h of the Day-Ahead Market, calculated pursuant to Section 20.2.4.2 U/D CRSC<sub>a,t,h</sub> A U/D Congestion Rent Shortfall Charge allocated to Transmission = Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs t for binding constraint a in hour h of the Day-Ahead Market, calculated pursuant to Section 20.2.4.3 O/R-t-S CRSP<sub>a,t,h</sub> An O/R-t-S Congestion Rent Surplus Payment allocated to = Transmission Owner t for binding constraint a in hour h of the Day-Ahead Market, calculated pursuant to Section 20.2.4.2 A U/D Congestion Rent Surplus Payment allocated to Transmission U/D CRSP<sub>a,t,h</sub> = Owner or, as applicable pursuant to Section 19.2.4.10.2 of Attachment M to the ISO OATT, Primary Holder of Incremental TCCs t for binding constraint a in hour h of the Day-Ahead Market,

# 20.2.4.5.2 Zeroing Out of Charges and Payments Resulting from Formula Failure

calculated pursuant to Section 20.2.4.3.

Notwithstanding any other provision of this Attachment N, the ISO shall set equal to zero

any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S

Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment allocated to a

Transmission Owner for an hour of the Day-Ahead Market if either:

- (i) data necessary to compute such a charge or payment, as specified in the formulas set forth in Section 20.2.4, is not known by the ISO and cannot be computed by the ISO (in interpreting this clause, equipment failure shall not preclude computation by the ISO unless necessary data is irretrievably lost); or
- (ii) both (a) the charge or payment is clearly and materially inconsistent with cost causation principles; and (b) this inconsistency is the result of factors not taken into account in the formulas used to calculate the charge or payment;

*provided, however*, if the amount of charges or payments set equal to zero as a result of the unknown data or inaccurate formula is greater than twenty five thousand dollars (\$25,000) in any given month or greater than one hundred thousand dollars (\$100,000) over multiple months, the ISO will inform the Transmission Owners of the identified problem and will work with the Transmission Owners to determine if an alternative allocation method is needed and whether it will apply to all months for which the intended formula does not work. Alternate methods would be subject to market participant review and subsequent filing with FERC, as appropriate.

For the sake of clarity, the ISO shall not pursuant to this Section 20.2.4.5.2 set equal to zero any O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment that fails to meet these conditions, even if another O/R-t-S Congestion Rent Shortfall Charge, U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment, or U/D Congestion Rent Shortfall Charge, O/R-t-S Congestion Rent Surplus Payment, or U/D Congestion Rent Surplus Payment is set equal to zero pursuant to this Section 20.2.4.5.2 in the same hour of the Day-Ahead Market.

### 20.2.4.6 Information Requirements

## 20.2.4.6.1 Information Regarding Facility Ownership

A Transmission Owner shall be responsible for informing the ISO of any change in the ownership of a transmission facility. The ISO shall allocate responsibility for DAM Status Changes based on the transmission facility ownership information available to it at the time of initial settlement.

# 20.2.4.6.2 Calculation of Settlements Without DCR Allocation Threshold

Upon request from any Transmission Owner subject to Net Congestion Rent settlements pursuant to this Attachment N, but no more frequently than once every twelve months, the ISO shall, for informational purposes only, calculate the DAM Constraint Residuals for each constraint for each hour without applying the DCR Allocation Threshold and shall calculate all O/R-t-S Congestion Rent Shortfall Charges, O/R-t-S Congestion Rent Surplus Payments, U/D Congestion Rent Shortfall Charges, and U/D Congestion Rent Surplus Payments. The calculation shall be performed using a month selected from among the most recent twelve months for which a Close-Out Settlement has been issued. Before choosing the month for which it will perform these calculations, the ISO will consult with the Transmission Owners.

# 20.2.5 Allocation of Net Congestion Rents to Transmission Owners

The Net Congestion Rents for each hour of month m shall be summed over the month, so that positive and negative values net to a monthly total, NCR<sub>m</sub>. The ISO shall allocate NCR<sub>m</sub> each month to the Transmission Owners by allocating to each Transmission Owner t an amount equal to the product of (i) NCR<sub>m</sub>, and (ii) the allocation factor for Transmission Owner t for month m, as calculated pursuant to Formula N-15.

## Formula N-15

	$\begin{pmatrix} OriginalResidual_{t,m} + ETCNL_{t,m} + NARs_{t,m} \\ + GFR & GFTCC_{t,m} + HFPTCC_{t,m} + NHFPTCC_{t,m} \end{pmatrix}$
$AllocationFactor_{t,m} =$	$\sum_{q \in T} \begin{pmatrix} OriginalResidual_{q,m} + ETCNL_{q,m} + NARs_{q,m} \\ +GFR\&GFTCC_{q,m} + HFPTCC_{q,m} + NHFPTCC_{q,m} \end{pmatrix}$
Where,	
Allocation Factor <sub>t,m</sub>	The allocation factor used by the ISO to allocate a share of the Net Congestion Rents to Transmission Owner t for month m
Original Residual <sub>q,m</sub>	The sum of the one-month portion of the revenue imputed to the Direct Sale and the sale in any Centralized TCC Auction Sub-Auction of Original Residual TCCs held by Transmission Owner q that are valid in month m. The one-month portion of the revenue imputed to the Direct Sale of these Original Residual TCCs shall be the market-clearing price of the TCCs valid in month m in the last Reconfiguration Auction held for TCCs valid in month m (or one-

	<ul> <li>sixth of the average market-clearing price in the rounds of the 6-month Sub-Auction of the last Centralized TCC Auction if no</li> <li>Reconfiguration Auction was held for TCCs valid in month <i>m</i>). The one-month portion of the revenue imputed to the sale in any</li> <li>Centralized TCC Auction Sub-Auction of these Original Residual</li> <li>TCCs shall be calculated by dividing the revenue received from the sale of these Original Residual TCCs in the Centralized TCC</li> <li>Auction Sub-Auction by the duration in months of the TCCs sold in that Centralized TCC Auction Sub-Auction.</li> </ul>
ETCNL <sub>q,m</sub>	= The sum of the one-month portion of the revenue imputed to the Direct Sale of Transmission Owner $q$ 's ETCNL or for its ETCNL released in the Centralized TCC Auction Sub-Auction held for TCCs valid for month $m$ . The one-month portion of the revenue imputed for ETCNL released in any Centralized TCC Auction shall be calculated by dividing the revenue received in a Centralized TCC Auction Sub-Auction from the sale of the ETCNL by the duration in months of the TCCs corresponding (as described in Section 20.1.2 of this Attachment N) to the ETCNL sold in the Centralized TCC Auction Sub-Auction. The one-month portion of the revenue imputed to the Direct Sale of ETCNL shall be the market-clearing price of the TCCs valid in month $m$ corresponding (as described in Section 20.1.2 of this Attachment N) to that ETCNL in the last Reconfiguration Auction held for TCCs valid in month $m$ (or one-sixth of the average market-clearing price of such TCCs in the rounds of the 6-month Sub-Auction of the last Centralized TCC Auction if no Reconfiguration Auction was held for TCCs valid in month $m$ ).
NARs <sub>q,m</sub>	= The one-month portion of the Net Auction Revenues Transmission Owner $q$ has received in Centralized TCC Auction Sub-Auctions and all Reconfiguration Auctions held for TCCs valid for month $m$ (which shall not include any revenue from the sale of Original Residual TCCs). The one-month portion of the revenues shall be calculated by summing (i) the revenue Transmission Owner $q$ received from the allocation of Net Auction Revenue pursuant to Section 20.3.7 in each Centralized TCC Auction Sub-Auction for TCCs valid in month $m$ , divided in each case by the duration in months of the TCCs sold in the Centralized TCC Auction Sub- Auction and the sum of the revenue Transmission Owner $q$ received from the allocation of that portion of Net Auction Revenue pursuant to Section 20.3.7 related to month $m$ for all Reconfiguration Auctions held for TCCs valid in month $m$ (or, to the extent TCC auction revenues were allocated pursuant to a different methodology, the amount of such revenues allocated to Transmission Owner $q$ ), minus (ii) the sum of NetAuctionAllocations <sub>t,n</sub> as calculated pursuant to Formula N-27 (as adjusted for any charges or payments that are zeroed out) for

	Transmission Owner $q$ for all 6-month Sub-Auction rounds $n$ of all Centralized TCC Auctions held for TCCs valid in month $m$ , divided in each case by the duration in months of the TCCs sold in each Centralized TCC Auction Sub-Auction (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner $q$ ), minus (iii) the sum of the portion of NetAuctionAllocations <sub>t,n</sub> as calculated pursuant to Formula N-27 and as adjusted for any charges or payments that are zeroed out for Transmission Owner $q$ for month $m$ for all Reconfiguration Auctions held for TCCs valid in month $m$ (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner $q$ for month $m$ for all Reconfiguration Auctions held for TCCs valid in month $m$ (or, to the extent that the revenue impact of transmission facility outages, returns-to-service, upratings, and deratings were settled pursuant to a different methodology, the net of such revenue impacts for Transmission Owner $q$ ).
GFR&GFTCC <sub>q,m</sub>	= The one-month portion of the imputed value of Grandfathered TCCs and Grandfathered Rights held by Transmission Owner $q$ , valued at their market-clearing prices for month $m$ in the last Reconfiguration Auction for TCCs valid in month $m$ (or one-sixth of the average market clearing price for rounds in the 6-month Sub- Auction of the last Centralized TCC Auction if no Reconfiguration Auction was held for TCCs valid in month $m$ ), provided that Transmission Owner $q$ is the selling party and the Existing Transmission Agreement related to each Grandfathered TCC and Grandfathered Right remains valid in <i>month</i> $m$ .
HFPTCC <sub>q,m</sub>	= The one-month portion of the Historic Fixed Price TCC revenues (including revenues from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) that Transmission Owner $q$ has received for Historic Fixed Price TCCs (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) valid for month $m$ , valued at the sum of the share of revenues received by Transmission Owner $q$ pursuant to Section 20.4 of this Attachment N for all Historic Fixed Price TCCs (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) valid for month $m$ , divided by twelve; provided, however that the value shall be zero for all Historic Fixed Price TCCs that took effect on or before November 1, 2016.
NHFPTCC <sub>q,m</sub>	The one-month portion of the Non-Historic Fixed Price TCC revenues that Transmission Owner q has received for Non-Historic Fixed Price TCCs valid for month m, valued at the sum of the share of revenues received by Transmission Owner q pursuant to Section 20.5 of this Attachment N for all Non-Historic Fixed Price TCCs

	<ul> <li>valid for month <i>m</i>, divided by: (i) twenty-four in the case of Non-Historic Fixed Price TCC revenues received by Transmission</li> <li>Owner <i>q</i> related to initial awards of Non-Historic Fixed Price TCCs</li> <li>valid for month <i>m</i>; or (ii) twelve in the case of Non-Historic Fixed</li> <li>Price TCC revenues received by Transmission Owner <i>q</i> related to</li> <li>renewals of Non-Historic Fixed Price TCCs valid for month <i>m</i>;</li> <li>provided, however that the value shall be zero for all Non-Historic</li> <li>Fixed Price TCCs that took effect on or before May 1, 2017.</li> </ul>
t	= Transmission Owner <i>t</i>
Т	= The set of all Transmission Owners $q$ .

For purposes of Formula N-15, variables subscripted by t shall be calculated for Transmission Owner t in the same manner as variables subscripted by q are calculated for Transmission Owner q.

Each Transmission Owner's share of Net Congestion Rents allocated pursuant to this Section 20.2.5 shall be incorporated into, or otherwise accounted for as part of, its TSC, NTAC, or other applicable rate mechanism under the ISO Tariffs used to assess charges for Transmission Service provided by the Transmission Owner pursuant to this Tariff, as the case may be.

# **39** Attachment GG – Transmission Facility Ratings

## **39.1** Overview and Definitions

## **39.1.1 Overview**

The ISO will implement Transmission Facility Ratings, as described in this Attachment GG, on the Transmission Facilities Under ISO Operational Control and the Transmission Facilities Requiring ISO Notification, as those terms are defined in Section 1.20 of the ISO OATT.

# **39.1.2 Definitions**

Capitalized terms used in this Attachment GG shall have the meaning specified below in this Section 39.1.2, and capitalized terms used in this Attachment GG but not defined below shall have the meaning given to them in Section 1 of the ISO OATT:

**Transmission Facility Rating**: The quantity of Energy (as measured in MW) that can be transmitted over a transmission facility, computed by the Transmission Owner in accordance with a written Transmission Facility Rating methodology and consistent with Good Utility Practice, considering the technical limitations on conductors and relevant transmission equipment (such as thermal flow limits). Relevant transmission equipment may include, but is not limited to, transmission lines, phase angle regulators, transformers, series reactors, and circuit breakers. Transmission Facility Ratings shall consist of Normal Ratings, Long-Term Emergency Ratings, and Short-Term Emergency Ratings.

# Ambient-Adjusted Rating ("AAR"): A Transmission Facility Rating that:

- (a) Reflects an up-to-date forecast of ambient air temperature across the time period to which the rating applies;
- (b) Reflects the absence of solar heating during nighttime periods, where the local

sunrise/sunset times used to determine daytime and nighttime periods are updated at least monthly, if not more frequently;

- (c) Applies to a time period of not greater than one hour;
- (d) Is calculated at least each hour, if not more frequently; and
- (e) If a transmission facility is impacted by an outage, reflects the up-to-date status of transmission equipment and accounts for transmission equipment that is out of service or derated as a result of an outage across the time period to which the rating applies.

## Seasonal Facility Rating: A Transmission Facility Rating that:

- (a) Applies to a specified season, as described in ISO Procedures;
- (b) Reflects forecasted or historical temperatures across the relevant season over which the rating applies; and

(c) Is calculated at least annually, if not more frequently.

**Normal Rating:** A Transmission Facility Rating that reflects operation for continuous twentyfour-hour cycles.

**Long-Term Emergency Rating ("LTE Rating")**: A Transmission Facility Rating that reflects operation for infrequent, non-consecutive periods of up to four hours, rather than reflecting continuous operation. A Long-Term Emergency Rating may assume an acceptable loss of transmission equipment life or other physical or safety limitations for the transmission facilities involved.

**Short-Term Emergency Rating ("STE Rating"):** A Transmission Facility Rating that reflects operation for infrequent, non-consecutive periods of fifteen minutes or less, rather than reflecting continuous operation. A Short-Term Emergency Rating may assume an acceptable loss of transmission equipment life or other physical or safety limitations for the transmission facilities

involved.

#### **39.2** Obligations of the ISO

#### **39.2.1** Use of Transmission Facility Ratings

Unless otherwise provided for in this Attachment, the ISO shall use AARs as the relevant Transmission Facility Ratings when performing any of the following functions: (1) employing Security Constrained Unit Commitment ("SCUC"), Real-Time Commitment ("RTC") and Real-Time Dispatch ("RTD") to evaluate requests for Transmission Service; or (2) responding to requests for Firm Point-To-Point Transmission Service.

The ISO shall use AARs as the relevant Transmission Facility Ratings when determining whether to curtail Firm Point-To-Point Transmission Service (under Section 3.1.6 of this ISO OATT).

The ISO will use Seasonal Facility Ratings as a recourse rating in the event that an AAR otherwise required to be used under this Attachment is unavailable for any reason or invalid. For purposes of this Attachment, an AAR will be classified as invalid if it is not within the AAR tolerance defined in ISO Procedures.

The ISO shall use LTE Ratings or STE Ratings, as prescribed in the Reliability Rules, for contingency analysis in the operations and dispatch horizon, as needed to maintain reliability of the NYS Power System. LTE Ratings and STE Ratings must also reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies.

#### **39.2.2 ISO OASIS Postings**

The ISO shall post records of Transmission Facility Ratings and Transmission Facility Rating methodologies on its OASIS, subject to any restrictions on the disclosure of Confidential Information or Critical Energy Infrastructure Information. If necessary, the ISO may post the data on a password-protected website. The ISO shall use reasonable means to post the records in a timely manner as described in ISO Procedures.

The posted records will include the Transmission Facility Ratings provided by the Transmission Owners, as used in the Day-Ahead Market and the Real-Time Market. The posted records will also include any alternate ratings or exceptions pursuant to Section 39.3 and/or Section 39.4.3 of this Attachment. The posted records will include which Transmission Facility Ratings and Transmission Facility Rating methodologies were in effect at which times over the previous five years, including records of which alternate ratings or exceptions were in effect at which times during the previous five years. The posted records will indicate which transmission facility a rating applies to, and the date and time the record was posted. The posted records will be provided in a manner such that the data can be viewed, downloaded, and queried as described in ISO Procedures.

#### **39.3** System Reliability

If the ISO or a Transmission Owner reasonably determines, consistent with Good Utility Practice, that the temporary use of a Transmission Facility Rating different than would otherwise be required by this Attachment (the otherwise applicable rating referred to in this Attachment as a "standard rating" and the rating that differs therefrom referred to in this Attachment as an "alternate rating") is necessary to ensure the safety and reliability of the NYS Power System, then the ISO may use a Seasonal Facility Rating or an alternate rating provided by the Transmission Owner. The ISO will post, pursuant to Section 39.2.2 of this Attachment, the date and time that an alternate rating was initiated in place of a standard rating, and (if applicable) the date and time that the alternate rating was withdrawn and the standard rating became effective again.

## **39.4 Obligations of the Transmission Owners**

## **39.4.1** Calculation of Ratings

Transmission Owners shall calculate and provide the following Transmission Facility Ratings, and associated rating methodology, to the ISO in accordance with ISO Procedures:

AARs:

- Normal Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies,
- 2. LTE Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies, and
- 3. STE Ratings that reflect an up-to-date forecast of ambient air temperature across the time period to which the rating applies.

Seasonal Facility Ratings:

- 1. Normal Ratings that apply to a specified season,
- 2. LTE Ratings that apply to a specified season, and
- 3. STE Ratings that apply to a specified season.

Each Transmission Owner shall calculate all Transmission Facility Ratings in accordance with this Attachment, applicable reliability standards, its rating methodology, and Good Utility Practice.

In developing any forecasts of ambient air temperature for determining ratings in accordance with this Attachment, the Transmission Owner must develop such forecasts consistent with Good Utility Practice and on a non-discriminatory basis.

## **39.4.2 Sharing Transmission Facility Ratings**

A Transmission Owner shall share in a timely manner, upon request by another

Transmission Owner, the ISO or a transmission provider other than the ISO, the following information:

 (a) Transmission Facility Ratings for each period for which Transmission Facility Ratings are calculated and provided to the ISO, including any updated Transmission Facility Ratings that are calculated and provided to the ISO, and

(b) written Transmission Facility Rating methodologies used by the Transmission Owners to calculate the Transmission Facility Ratings in (a) above.

#### **39.4.3 Exceptions**

Where the Transmission Owner determines, consistent with Good Utility Practice, that the Transmission Facility Rating of a transmission facility subject to this Attachment is not affected by ambient air temperature or solar heating, the Transmission Owner may provide a Transmission Facility Rating to the ISO for that transmission facility that is not an AAR. The Transmission Facility Rating may be a Seasonal Facility Rating or a uniquely determined Transmission Facility Rating that is not an AAR or a Seasonal Facility Rating. Examples of such a transmission facility may include (but are not limited to): (1) a transmission facility for which the technical transfer capability of the limiting conductors and/or limiting transmission equipment is not dependent on ambient air temperature or solar heating; or (2) a transmission facility whose transfer capability is limited by a NYS Power System limit (such as a system voltage or stability limit) which is not dependent on ambient air temperature or solar heating. The ISO will include in the posted records required by Section 39.2.2 of this Attachment any exceptions to the requirements contained in this Attachment initiated pursuant to this Section 39.4.3, including the nature of and basis for each exception, the date(s) and time(s) that the exception was initiated, and (if applicable) the date(s) and time(s) that each exception was

withdrawn and a standard rating became effective again. If the technical basis for an exception under this paragraph changes, then the Transmission Owner must notify the ISO in a timely manner and the ISO shall update the relevant Transmission Facility Rating(s) in a timely manner. Each Transmission Owner must reevaluate any exceptions taken pursuant to this Section 39.4.3 at least every five years and notify the ISO of any changes in a timely manner.