

## Attachment IV

## 1.19 Definitions - S

**Safe Operations:** Actions which avoid placing personnel and equipment in peril with regard to the safety of life and equipment damage.

**Scarcity Reserve Demand Curve:** A series of quantity/price points that defines the maximum Shadow Price for Operating Reserves to meet a Scarcity Reserve Requirement for which the pricing rules established in Section 15.4.6.1.1(b) of Rate Schedule 4 of the NYISO Services Tariff apply corresponding to each possible quantity of Resources that the ISO's software may schedule to satisfy that requirement. A single Scarcity Reserve Demand Curve will apply to the Real-Time Market for each such Scarcity Reserve Requirement.

**Scarcity Reserve Region:** A Load Zone or group of Load Zones containing EDRP and/or SCRs that have been called by the ISO to address the same reliability need, as such reliability need is determined by the ISO.

**Scarcity Reserve Requirement:** A 30-Minute Reserve requirement established by the ISO for a Scarcity Reserve Region in accordance with Rate Schedule 4 of the NYISO Services Tariff.

**Scheduled Energy Injection:** Energy injections which are scheduled on a real-time basis by RTC.

**Scheduled Energy Withdrawal:** Energy Withdrawals which are scheduled on a real-time basis by RTC.

**Scheduled Line:** A transmission facility or set of transmission facilities: (a) that provide a distinct scheduling path interconnecting the ISO with an adjacent control area, (b) over which Customers are permitted to schedule External Transactions, (c) for which the NYISO separately posts TTC and ATC, and (d) for which there is the capability to maintain the Scheduled Line actual interchange at the DNI, or within the tolerances dictated by Good Utility Practice. Each Scheduled Line is associated with a distinct Proxy Generator Bus. Transmission facilities shall only become Scheduled Lines after the Commission accepts for filing revisions to the NYISO's tariffs that identify a specific set or group of transmission facilities as a Scheduled Line. The transmission facilities that are Scheduled Lines are identified in Section 4.4.4 of the Services Tariff.

**SCUC:** Security Constrained Unit Commitment, described in Attachment C of the Tariff.

**Second Contingency Design and Operation:** The planning, design and operation of a power system such that the loss of any two (2) facilities will not result in a service interruption to either native load customers or contracted firm Transmission Customers. Second Contingency Design and Operation criteria do not include the simultaneous loss of two (2) facilities, but rather consider the loss of one (1) facility and the restoration of the system to within acceptable operating parameters, prior to the loss of a second facility. These criteria apply to thermal, voltage and stability limits and are generally equal to or more stringent than NYPP, NPCC and NERC criteria.

**Second Settlement:** The process of: (1) identifying differences between Energy production, Energy consumption or NYS Transmission System usage scheduled in a First Settlement, and the actual production, consumption, or NYS Transmission System usage during the Dispatch Day; and (2) assigning financial responsibility for those differences to the appropriate Customers and Market Participants. Charges for Energy supplied (to replace Generation deficiencies or unscheduled consumption), and payments for Energy consumed (to absorb consumption deficiencies or excess Energy supply) or changes in transmission usage will be based on the Real-Time LBMPs.

**Secondary Holder:** Entities that purchase TCCs and have not been certified as a Primary Holder by the ISO.

**Secondary Market:** A market in which Primary and Secondary Holders sell TCCs by mechanisms other than through the Centralized TCC Auction, Reconfiguration Auction, or by Direct Sale.

**Security Coordinator:** An entity that provides the security assessment and Emergency operations coordination for a group of Control Areas. A Security Coordinator must not participate in the wholesale or retail merchant functions.

**Self-Committed Fixed:** A bidding mode in which a Generator is self-committed and opts not to be Dispatchable over any portion of its operating range.

**Self-Committed Flexible:** A bidding mode in which a dispatchable Generator follows Base Point Signals within a portion of its operating range, but self-commits.

**Self-Supply:** The provision of certain Ancillary Services, or the provision of Energy to replace Marginal Losses by a Transmission Customer using either the Transmission Customer's own Generators or generation obtained from an entity other than the ISO.

**Service Agreement:** The initial agreement and any amendments or supplements thereto entered into by the Transmission Customer and the ISO for service under the Tariff or any unexecuted Service Agreement, amendments on supplements thereto, that the ISO unilaterally files with the Commission.

**Service Commencement Date:** The date the ISO begins to provide service pursuant to the terms of an executed Service Agreement, or the date the ISO begins to provide service in accordance with Section 3.3.3 or Section 4.2.1 under the Tariff.

**Settlement:** The process of determining the charges to be paid to, or by a Transmission Customer to satisfy its obligations

**Shadow Price:** The marginal value of relieving a particular Constraint which is determined by the reduction in system cost that results from an incremental relaxation of that Constraint.

**Shift Factor ("SF"):** A ratio, calculated by the ISO, that compares the change in power flow through a transmission facility resulting from the incremental injection and withdrawal of power on the NYS Transmission System.

**Short-Term Firm Point-To-Point Transmission Service:** Firm Point-to-Point Service, the price of which is fixed for a short term by a Transmission Customer acquiring sufficient TCCs with the same Points of Receipt and Delivery as its Transmission Service.

**Sink Price Cap Bid:** A monotonically increasing Bid curve provided by an entity engaged in an Export to indicate the relevant Proxy Generator Bus LBMP below which that entity is willing to either purchase Energy in the LBMP Markets or, in the case of Bilateral Transactions, to accept Transmission Service, where the MW amounts on the Bid curve represent the desired increments of Energy that the entity is willing to purchase at various price points.

**Southeastern New York (“SENY”):** An electrical area comprised of Load Zones G, H, I, J, and K, as identified in the ISO Procedures.

**Special Test Transactions:** The revenues or costs from purchases and/or sales of Energy that may occur pursuant to virtual regional dispatch/intra-hour transaction pilot tests conducted by the ISO to analyze potential solutions for, or approaches to resolving inter-market “seams” issues with neighboring control area operators.

**Start-Up Bid:** A Bid parameter that may vary hourly and that identifies the payment a Supplier requires to bring a Generator up to its specified minimum operating level from an offline state or a Demand Side Resource from a level of no Demand Reduction to its specified minimum level of Demand Reduction. If the Supplier is a BTM:NG Resource, it shall not submit a Start-Up Bid.

Start-Up Bids submitted for a Generator that is not able to complete its specified minimum run time (of up to a maximum of 24 hours) within the Dispatch Day are expected to include expected net costs related to the hour(s) that a Generator needs to run on the day following the Dispatch Day in order to complete its minimum run time. The component of the Start-Up Bid that incorporates costs that the Generator expects to incur on the day following the Dispatch Day is expected to reflect the operating costs that the Supplier does not expect to be able to recover through LBMP revenues while operating to meet the Generator’s minimum run time, at the minimum operating level Bid for that Generator for the hour of the Dispatch Day in which the Generator is scheduled to start-up. Settlement rules addressing Start-Up Bids that incorporates costs related to the hours that a Generator needs to run on the day following the Dispatch Day on which the Generator is committed are set forth in Attachment C to the ISO Services Tariff.

**Storm Watch:** Actual or anticipated severe weather conditions under which region-specific portions of the NYS Transmission System are operated in a more conservative manner by reducing transmission transfer limits.

**Strandable Costs:** Prudent and verifiable expenditures and commitments made pursuant to a Transmission Owner’s legal obligations that are currently recovered in the Transmission Owner’s retail or wholesale rate that could become unrecoverable as a result of a restructuring of the electric utility industry and/or electricity market, or as a result of retail-turned-wholesale customers, or customers switching generation or transmission service suppliers.

**Stranded Investment Recovery Charge (“SIRC”):** A charge established by a Transmission Owner to recover Strandable Costs.

**Sub-Auctions:** The [round or](#) set of rounds in a given Centralized TCC Auction in which TCCs of a given [start date and](#) duration may be purchased.

**Subzone:** That portion of a Load Zone in a Transmission Owner's Transmission District.

**Supplier:** A Party that is supplying the Capacity, Energy and/or associated Ancillary Services to be made available under the ISO OATT or the ISO Services Tariff, including Generators, BTM:NG Resources, and Demand Side Resources that satisfy all applicable ISO requirements.

**Supplemental Event Interval:** Any RTD interval in which there is a maximum generation pickup or a large event reserve pickup or which is one of the three RTD intervals following the termination of the maximum generation pickup or the large event reserve pickup.

**Supplemental Resource Evaluation ("SRE"):** A determination of the least cost selection of additional Generators, which are to be committed, to meet: (i) changed or local system conditions for the Dispatch Day that may cause the Day-Ahead schedules for the Dispatch Day to be inadequate to meet the reliability requirements of the Transmission Owner's local system or to meet Load or reliability requirements of the ISO; or (ii) forecast Load and reserve requirements over the six-day period that follows the Dispatch Day.

**System Impact Study:** An assessment by the ISO of (i) the adequacy of the NYS Transmission System to accommodate a request to build facilities in order to create incremental transfer capability, resulting in incremental TCCs, in connection with a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service; and (ii) the additional costs to be incurred in order to provide the incremental transfer capability.

**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 on 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 for the initial one-year period, 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. 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 non-binding 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 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 pursuant to this paragraph; ii) with the Expander's assignment 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 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:

$$\text{Outage charge} = A - B$$

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.

#### **19.2.4.11 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 TCC awards for each System Deliverability Upgrade, including any Partial Outage 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 the payment of any outage charges 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.

## **19.4 Reservation of Transmission Capacity in a Centralized TCC Auction through ETCNL TCCs**

**19.4.1** Subject to the limitations set forth in Section 19.4.2 of this Attachment M, a Transmission Owner with a set of ETCNL designated from a Point of Injection to a Point of Withdrawal, as detailed in Table 2 of this Attachment M, shall have a right prior to each Centralized TCC Auction to convert into an ETCNL TCC each megawatt of transmission Capacity of that set of ETCNL not used to support the sale of existing TCCs that are valid for any part of the ~~duration of any~~ first Capability Period in which TCCs to be sold in the Centralized TCC Auction would be valid and that remains after any reduction pursuant to Section 19.8.2 of this Attachment M.

Each ETCNL TCC will have a duration of 6 months and will have the same POI and POW as the original set of ETCNL converted into ETCNL TCCs.

If a Transmission Owner fails to exercise its right to convert a megawatt of ETCNL into an ETCNL TCC in the manner and by the date specified in this Section 19.4, the Transmission Owner shall forfeit its right to convert ETCNL into ETCNL TCCs for the Centralized TCC Auction. Any ETCNL not converted to ETCNL TCCs shall remain valid as ETCNL, and shall be released for the Centralized TCC Auction pursuant to the provisions of this Attachment M.

**19.4.2** Notwithstanding any other provisions of this Section 19.4, a Transmission Owner shall not convert into ETCNL TCCs an amount greater than the Capacity Reservation Cap of the transmission Capacity of each set of the Transmission Owner's ETCNL; *provided, however*, that if (i) a Transmission Owner has a set of ETCNL from one POI and one or more sets of ETCNL from another POI, each of which are in the same Load Zone, and (ii) each of these sets of ETCNL has the same POW, then there shall be no maximum amount of transmission Capacity from a single set of ETCNL that a Transmission Owner shall have a right to convert into ETCNL TCCs, but a Transmission Owner shall not convert into ETCNL TCCs an amount greater than

the Capacity Reservation Cap of the total transmission Capacity of all of the Transmission Owner's sets of ETCNL with that POW.

ETCNL may be converted only into whole ETCNL TCCs. If the Capacity Reservation Cap multiplied by the transmission Capacity of a set of ETCNL or by the total transmission Capacity of multiple sets of ETCNL, as the case may be pursuant to this Section 19.4.2, does not yield a whole number, then the number of ETCNL TCCs that a Transmission Owner may convert from ETCNL will be reduced to the nearest integer and the number of megawatts of ETCNL that a Transmission Owner may not convert to ETCNL TCCs will be increased to the nearest integer.

**19.4.3** The ISO shall determine the Capacity Reservation Cap prior to each Centralized TCC Auction, and shall post the Capacity Reservation Cap on its website. The Capacity Reservation Cap shall be any amount less than or equal to five percent (5%).

**19.4.4** Before each Centralized TCC Auction, the ISO shall, subsequent to performing the reduction process pursuant to Section 19.8.2 of this Attachment M, determine the number of megawatts of transmission Capacity from each of the Transmission Owner's sets of ETCNL that the Transmission Owner shall have a right to convert into ETCNL TCCs. The ISO shall notify each Transmission Owner of the ISO's determination with regard to its ETCNL in a written notice to be received by the Transmission Owner on or before the date specified in the timeline for the relevant Centralized TCC Auction posted on the ISO's website, as that timeline may be revised from time to time.

**19.4.5** A Transmission Owner may exercise its right to convert its ETCNL into ETCNL TCCs by notifying the ISO of the number of megawatts of transmission Capacity from each of the Transmission Owner's sets of ETCNL that the Transmission Owner elects to convert to ETCNL TCCs. The Transmission Owner shall make the notification in a written notice to be received by the ISO on or before the date specified in the timeline for the relevant Centralized

TCC Auction posted on the ISO's website, as that timeline may be revised from time to time.

After receipt by the ISO, the Transmission Owner's notification shall not be modified or revoked, except by permission of the ISO.

## **19.5        Reservation of Transmission Capacity in a Centralized TCC Auction through RCRR TCCs**

**19.5.1** Before each Centralized TCC Auction, the ISO shall, subsequent to performing the reduction process pursuant to Section 19.8.2 of this Attachment M, determine the number of RCRRs between each of the following contiguous pairs of Load Zones within the NYCA that the ISO shall allocate to each Member System: West – Genesee; Genesee – Central; North – Mohawk Valley; Central - Mohawk Valley; Mohawk Valley – Capital; Capital - Hudson Valley; Hudson Valley – Millwood; Millwood – Dunwoodie; Dunwoodie - New York City; Dunwoodie - Long Island.

The ISO shall determine the number of RCRRs that the ISO shall allocate for each of these Load Zone pairs by maximizing the number of RCRRs between each Load Zone pair that are simultaneously feasible with all TCCs and Grandfathered Rights listed in Section 19.8.2 (i), and Table 1 ETCNL/TCCs that remains after reduction pursuant to Section 19.8.2 of this Attachment M.

To do so, the ISO will use the same optimization model that is used in determining the award of TCCs in a Centralized TCC Auction, and will represent each TCC and Grandfathered Right listed in Section 19.8.2 (i), Table 1 ETCNL/TCCs remaining after reduction pursuant to Section 19.8.2, and a large number of RCRRs in the model as fixed injections and withdrawals. The Centralized TCC Auction software will determine the maximum number of RCRRs for each Load Zone pair by maximizing the area under the bid curve Bids<sub>j</sub> as expressed by the following formula, subject to the constraint that the injections and withdrawals corresponding to the TCCs, Grandfathered Rights listed in Section 19.8.2 (i) and Table 1 ETCNL/TCCs remaining after reduction pursuant to Section 19.8.2, and potential RCRRs must correspond to a simultaneously feasible Power Flow:

$$\sum_{j \in N} \int_0^{A_j} Bids_j$$

Where,

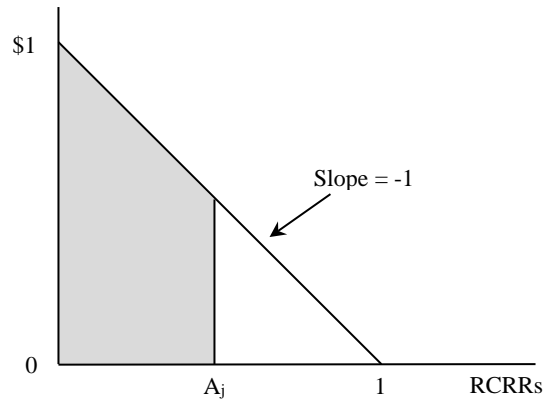
$j$  = A Load Zone pair

$N$  = The set of all Load Zone pairs for which the ISO shall calculate RCRRs

$A_j$  = The number of RCRRs defined between Load Zone pair  $j$

$Bids_j$  = The line that intersects the y-axis at \$1/TCC and which intersects the x-axis at 1 MW, as illustrated in the bid curve illustrated below.

**Bid Curve  $Bids_j$  for RCRR $_j$**



The ISO shall determine the POI and POW of each RCRR by assigning the POI and POW that the ISO expects, based on the ISO's review of historical and other information available to the ISO, to produce positive Congestion payments to a Member System that converts the RCRR into an RCRR TCC for the majority of the Capability Period that commences immediately following the completion of ~~duration, in hours, of the longest duration TCCs to be sold in~~ the relevant Centralized TCC Auction.

**19.5.2** The ISO shall allocate RCRRs between each Load Zone pair to each Member System in an amount equal to the product of (i) the number of RCRRs between the Load Zone pair for the Centralized TCC Auction as calculated pursuant to Section 19.5.1 of this Attachment M, and (ii) the Member System's allocation factor for that Load Zone pair, which shall be calculated pursuant to the following formula:



$$\text{Allocation Factor}_{t,j} = \frac{\sum_{a \in A} (\text{Interface Revenue}_{t,j,a})}{\sum_{t \in T} \sum_{a \in A} (\text{Interface Revenue}_{t,j,a})}$$

Where,

Allocation Factor<sub>t,j</sub> = The allocation factor used by the ISO to allocate a share of RCRRs between Load Zone pair *j* to Member System *t* for a Centralized TCC Auction

Interface Revenue<sub>t,j,a</sub> = The revenue from the sale of TCCs (excluding those TCCs for which revenue is allocated to a Member System pursuant to Sections 20.3.3 through 20.3.5 of Attachment N) associated with the Interface between Load Zone pair *j* in Centralized TCC Auction *a* assigned to Member System *t*

*t* = A Member System

*T* = The set of all Member Systems

*a* = A Centralized TCC Auction

*A* = The set of Centralized TCC Auctions beginning with the Centralized TCC Auction held for the 2000 Summer Capability Period and ending with the Centralized TCC Auction held for the 2003-2004 Winter Capability Period

*j* = A Load Zone pair.

**19.5.3** Subject to the limitations set forth in Section 19.5.4 of this Attachment M, a Member System allocated an RCRR pursuant to Section 19.5.2 of this Attachment M shall have a right prior to each Centralized TCC Auction to convert each RCRR into an RCRR TCC. Each RCRR TCC will have a duration of 6 months and will have the same POW and POI as the RCRR from which it was converted. If a Member System fails to exercise its right to convert an RCRR into an RCRR TCC in the manner and by the date specified in this Section 19.5.0, the Member System shall forfeit the RCRR. Each RCRR shall be valid only for the Centralized TCC Auction for which it was allocated.

**19.5.4** Notwithstanding any other provisions of this Section 19.5.0, a Member System shall not convert an amount greater than the Capacity Reservation Cap of the Member System's RCRRs into RCRR TCCs.

RCRRs may be converted only into whole RCRR TCCs. If the Capacity Reservation Cap multiplied by the number of RCRR does not yield a whole number, then the number of RCRR TCCs that a Member System shall have a right to convert from RCRRs will be reduced to the nearest integer and the number of RCRRs that a Member System shall not have a right to convert to RCRR TCCs will be increased to the nearest integer.

**19.5.5** Before each Centralized TCC Auction, the ISO shall, subsequent to performing the reduction process pursuant to Section 19.8.2 of this Attachment M, determine the number of RCRRs that each Member System shall have a right to convert to RCRR TCCs. The ISO shall notify each Member System of the ISO's determination with regard to its RCRRs in a written notice to be received by the Member System on or before the date specified in the timeline for the relevant Centralized TCC Auction posted on the ISO's website, as that timeline may be revised from time to time.

**19.5.6** A Member System may exercise its right to convert its RCRRs into RCRR TCCs by notifying the ISO of the number of the Member System's RCRRs that the Member System elects to convert to RCRR TCCs. The Member System shall make the notification in a written notice, in accordance with ISO Procedures, to be received by the ISO on or before the date specified in the timeline for the relevant Centralized TCC Auction posted on the ISO's website, as that timeline may be revised from time to time. After receipt by the ISO, the Member System's notification shall not be modified or revoked, except by permission of the ISO.

**19.5.7** A Member System shall not transfer (by sale or otherwise) its RCRR TCCs except through a Centralized TCC Auction or Reconfiguration Auction, and shall not sell its RCRR TCCs through Direct Sales or through Secondary Markets.

## **19.8 Auctions for TCCs**

### **19.8.1 Overview**

The ISO will conduct Centralized TCC Auctions before each Capability Period. Winning bidders in each such auction will purchase TCCs that will be valid for one or more Capability Periods, beginning with the first Capability Period that begins after the conclusion of the auction. The ISO will also conduct Reconfiguration Auctions each month. Winning bidders in each such auction will purchase TCCs valid for one or more calendar months within the same Capability Period, beginning with the calendar month that begins after the conclusion of the auction.

### **19.8.2 Description of the Reduction Process For Reducible ETCNL/GFTCCs**

Before each Centralized TCC Auction, the ISO shall ensure that all of the following correspond to a simultaneously feasible security constrained Power Flow: (i) existing TCCs and Grandfathered Rights that are valid for any part of the duration of any TCCs to be sold in the Centralized TCC Auction, including but not limited to Fixed Price TCCs that were created pursuant to Section 19.2.1 (including Section 19.2.1.4) or Section 19.2.2. of this Attachment M and Incremental TCCs awarded pursuant to Section 19.2.4 of this Attachment M; Grandfathered TCCs not subject to reduction and Original Residual TCCs to the extent not previously used to support the purchase of TCCs that are valid for any part of the duration of any TCCs to be sold in the Centralized TCC Auction (henceforth “TCCs and Grandfathered Rights listed in Section 19.8.2 (i)”); and (ii) ETCNL (to the extent not previously used to support the purchase of TCCs that are valid for any part of the duration of any TCCs to be sold in the Centralized TCC Auction) and Grandfathered TCCs subject to reduction as listed in Table 1 of this Attachment M (henceforth “Table 1 ETCNL/TCCs”). In some cases, the total set of all the TCCs, Grandfathered Rights, and Table 1 ETCNL/TCCs listed in (i) through (ii) above may not

correspond to a simultaneously feasible Power Flow in some period of time. In such cases, Table 1 ETCNL/TCCs, will be reduced for that period in order to make the total set of TCCs and Grandfathered Rights listed in Section 19.8.2 (i), and Table 1 ETCNL/TCCs remaining after reduction correspond to a simultaneously feasible Power Flow.

This reduction procedure will use the same optimization model that will be used in the Centralized TCC Auction to determine the amount by which Table 1 ETCNL/TCCs will be reduced. Each of the TCCs and Grandfathered Rights listed in Section 19.8.2 (i) above will be represented in the Centralized TCC Auction model by a fixed injection of 1 MW at its Point of Injection, and a fixed withdrawal of 1 MW at its Point of Withdrawal. In addition, Table 1 ETCNL/TCCs will be represented in the model, but they will be represented in such a way as to allow their reduction. To do so, bids for each Table 1 ETCNL/TCC will consist of a line which intersects the y-axis at \$1/TCC (or any other value selected by the ISO, so long as that value is constant for each bid curve for all of these Table 1 ETCNL/TCCs) and which intersects the x-axis at 1 MW. An example of the bid curve  $B_j$  for a representative Table 1 ETCNL/TCC is illustrated in the diagram below.

The TCC auction software will determine the amount of each Table 1 ETCNL/TCC that will remain after reduction, which is designated as  $A_j$  in the diagram. The objective function that the TCC auction software will use to determine these coefficients  $A_j$  will be to maximize:

$$\sum_{j \in N} \int_0^{A_j} B_j$$

Where:

$N$  = The set of Table 1 ETCNL/TCCs

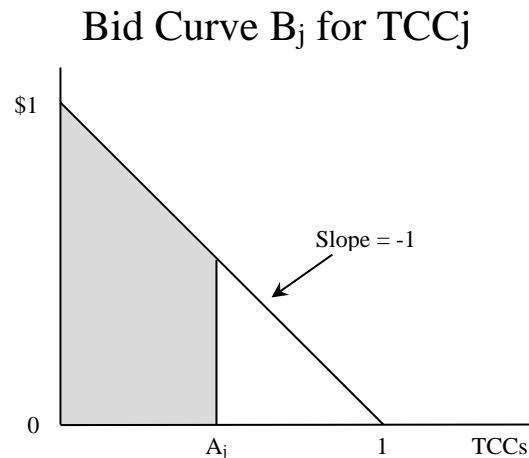
$j$  = Any individual Table 1 ETCNL/TCC

$A_j$  = Any amount of each Table 1 ETCNL/TCC(j) remaining

$B_j$  = As defined by the diagram

subject to the constraint that injections and withdrawals corresponding to the TCCs and Grandfathered Rights listed in Section 19.8.2(i) and Table 1 ETCNL/TCCs remaining after reduction must be simultaneously feasible in a Power Flow.

As a result, the objective function will maximize the area under the bid curve for each Table 1 ETCNL/TCC that remains after reduction, summed over all Table 1 ETCNL/TCCs, subject to the simultaneous feasibility constraint. This area for one Table 1 ETCNL/TCC is illustrated in the following diagram:



The ISO shall apply this methodology as follows:

19.8.2.1 first, on the Table 1 ETCNL/TCCs (prior to the conversion of any ETCNL to ETCNL TCCs), and

19.8.2.2 second, on the Table 1 ETCNL/TCCs remaining after conversion into ETCNL TCCs of ETCNL included in such Table 1 ETCNL/TCCs.

For purpose of the second reduction, a holder of ETCNL may elect to disaggregate the ETCNL in accordance with ISO Procedures prior to conducting the reduction process. If a

Transmission Owner elects to have its ETCNL disaggregated, the number of MW of ETCNL allocated to that Transmission Owner specifying each Load Zone as its POW shall be replaced by the same number of MW of ETCNL, specifying the same POI as the original ETCNL, but specifying various buses within that Load Zone as the POWs, as determined in accordance with ISO Procedures.

To the extent more than one model is used in a given Centralized TCC Auction (*e.g.*, to reflect different summer / winter ratings), the ISO shall retest the Table 1 ETCNL/TCCs remaining after reduction so as to avoid reducing the Table 1 ETCNL/TCCs more than is necessary to prevent infeasibility in a given Sub-Auction. However, any Table 1 ETCNL/TCC that is deemed infeasible in one Centralized TCC Auction may be deemed reduced and not eligible for retesting in a subsequent Centralized TCC Auction.

### **19.8.3 Transmission Capacity Sold in Centralized Auctions for TCCs**

Transmission Owners with ETCNL will release that transmission Capacity to support the sale of TCCs in each Centralized TCC Auction, unless the Transmission Owner has converted the ETCNL into ETCNL TCCs pursuant to Section 19.4 of this Attachment M. Transmission Owners which have not sold their Original Residual TCCs through a Direct Sale on the OASIS prior to the Centralized TCC Auction, shall sell them through the Centralized TCC Auction. Transmission Owners may retain their Grandfathered TCCs. If it sells Grandfathered TCCs, a Transmission Owner shall do so either through Direct Sales or through Centralized TCC Auctions or Reconfiguration Auctions.

Capacity associated with the termination of ETAs in effect on November 19, 1999, listed in Table 1A of Attachment L to this OATT (as it may be amended), that conferred transmission rights on an LSE and is not 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) shall be converted into Residual Transmission Capacity.

In each Centralized TCC Auction, the following transmission Capacity not required to support already-outstanding TCCs or Grandfathered Rights and not withheld pursuant to Section 19.1.1 of this Attachment M shall be available to support TCCs that can be purchased in that Centralized TCC Auction:

- 19.8.3.1 following any reduction pursuant to Section 19.8.2 of this Attachment M, all of the transmission Capacity associated with ETCNL (a) that the Transmission Owners do not sell through a Direct Sale in advance of the Centralized TCC Auction, (b) that the Transmission Owners do not convert to ETCNL TCCs, and (c) that has not been used to support the sale of existing TCCs that are valid for any part of the duration of any TCCs sold in the Centralized TCC Auction;
- 19.8.3.2 all of the transmission Capacity associated with Original Residual TCCs, that the Transmission Owners do not sell through a Direct Sale in advance of the Centralized TCC Auction and that has not been used to support the sale of existing TCCs that are valid for any part of the duration of any TCCs sold in the Centralized TCC Auction;
- 19.8.3.3 all of the transmission Capacity associated with TCCs offered for sale by TCC Primary Holders; and
- 19.8.3.4 any Residual Transmission Capacity.

#### 19.8.4 Centralized TCC Auctions

TCCs with durations of 6 months and 1 year shall be available in each Centralized TCC Auction. TCCs with durations of 2 years, 3 years, 4 years, or 5 years may also be available in the Centralized TCC Auction, at the ISO's discretion.

The final decision concerning the percentage of the transmission Capacity that will be available in the Centralized TCC Auction to support TCCs of different durations will be made by the ISO. The ISO will conduct a polling process to assess the market demand for TCCs with different durations, which it will take into consideration when making this determination. The ISO may elect not to sell any TCCs with one or more of the above durations. However, all transmission Capacity not associated with ETAs or outstanding TCCs or not reserved through conversion of ETCNL to ETCNL TCCs or RCRRs to RCRR TCCs must be available to support TCCs of some duration sold in the Centralized TCC Auction [that have a start date of the first day of the Capability Period that commences immediately following the completion of such Centralized TCC Auction.](#)

The Centralized TCC Auction will consist of a series of Sub-Auctions, ~~which.~~ [For TCCs with the same start date, such Sub-Auctions](#) will be conducted consecutively. In each Sub-Auction, TCCs of a single duration will be available (*e.g.*, only TCCs with a five-year duration might be available in one Sub-Auction). Sub-Auctions [for TCCs with the same start date](#) will be conducted in decreasing order of the length of the period for which TCCs sold in the Sub-Auction are valid. Therefore, if the ISO were to determine that five years would be the maximum length of TCCs available in the Centralized TCC Auction [for TCCs with a particular start date](#), then the Sub-Auction for TCCs with a duration of five years would be held first. All TCCs sold in the 5-year TCC Sub-Auction (other than those offered for sale in the next Sub-Auction, as described in Section 19.9.1) would then be modeled as fixed injections and



withdrawals in the next Sub-Auction, in which TCCs with the same start date of the next longest duration, as determined by the ISO (*e.g.*, four years), would be available for purchase.

Following that Sub-Auction, TCCs with the same start date sold in either of the first two Sub-Auction (other than those offered for sale in the next Sub-Auction) would then be modeled as fixed injections and withdrawals in the third Sub-Auction for TCCs with the same start date (*e.g.*, a Sub-Auction for three-year TCCs with ~~a duration of three years~~the same start date), etc.

Each Sub-Auction shall normally consist of at least four rounds unless the Transmission Owners that are subject to Attachment N of this Tariff unanimously consent to fewer rounds. The ISO shall have the authority to determine the percentage of the available transmission Capacity that will be available to support TCCs sold in each round of each Sub-Auction such that all of the transmission Capacity offered for sale in that Sub-Auction shall be offered by the last round of that Sub-Auction. The ISO shall announce these percentages before the Sub-Auctions. The “scaling factor” for each round shall equal the percentage of available transmission Capacity that has not yet been made available to support the sale of TCCs in previous rounds, divided by the percentage of available transmission Capacity that will be made available to support the sale of TCCs in that round.

The ISO shall also determine the maximum duration of TCCs sold in the Centralized TCC Auction, and whether the TCCs sold in the Centralized TCC Auction shall be separately available for purchase as on-peak and off-peak TCCs. (For purposes of this Attachment, the on-peak period will include the hours from 7 a.m. to 11 p.m. Prevailing Eastern Time Monday through Friday. The remaining hours in each week will be included in the off-peak period.)

Notwithstanding anything to the contrary herein, for the Centralized TCC Auction that immediately follows a Centralized TCC Auction in which the ISO has sold two-year TCCs, the

ISO may conduct a single round one-year Sub-Auction for TCCs with a start date that is the same as the second year of the previously sold two-year TCCs; provided, however, that the amount of transmission Capacity made available to support the sale of one-year TCCs in such single round one-year Sub-Auction shall not exceed the lesser of: (a) five percent of the transmission Capacity not otherwise required to support already-outstanding Grandfathered Rights, Grandfathered TCCs, Fixed Price TCCs, Incremental TCCs, ETCNL TCCs, and RCRR TCCs; and (b) the amount of transmission Capacity that the ISO made available to support the sale of two-year TCCs in the prior Centralized TCC Auction. The remaining transmission Capacity to be made available by the ISO to support the sale of one-year TCCs with a start date that is the same as the one-year TCCs offered for sale during such single round one-year Sub-Auction shall be made available to support the sale of one-year TCCs in the next Centralized TCC Auction conducted after the Centralized TCC Auction including such single round one-year Sub-Auction.

#### **19.8.5 Reconfiguration Auctions**

A Reconfiguration Auction is an auction in which TCCs with a duration of one or more months within the same Capability Period may be offered and purchased. This will allow Market Participants to purchase and sell short-term TCCs. Reconfiguration Auctions will also capture short-term changes in transmission Capacity. The ISO will conduct Reconfiguration Auctions monthly and TCCs purchased in Reconfiguration Auctions will be valid for the applicable month or months following the Reconfiguration Auction. A Reconfiguration Auction will consist of a single round. Any Primary Holder of a TCC that is valid for a month in which TCCs are being sold in the Reconfiguration Auction, including a purchaser of a TCC in a Centralized TCC Auction that has not sold that TCC and a Transmission Owner that is the

Primary Holder of an ETCNL TCC or a Member System that is the Primary Holder of a RCRR TCC, may offer that TCC for sale in a Reconfiguration Auction; provided however that the sale of TCCs in a Reconfiguration Auction shall be subject to the limitations and prohibitions set forth in this ISO OATT including the limitation on the sale or transfer of Fixed Price TCCs and the limitation on the sale or other transfer of Incremental TCCs. The transmission Capacity used to support these TCCs, as well as any other transmission Capacity not required to support already-outstanding TCCs or Grandfathered Rights, will be available to support TCCs purchased in the Reconfiguration Auction.

Transmission Capacity made available for transmission rights in durations of no more than one month pursuant to Section 19.1.1 shall be released in Reconfiguration Auctions.

## **19.9 Procedures for Sales of TCCs in Each Auction**

### **19.9.1 Auction Structure**

TCCs may be offered for sale in each Sub-Auction round of the Centralized TCC Auction.

TCCs purchased in any round of any Sub-Auction may be resold in a subsequent round of that Centralized TCC Auction ~~for TCCs with the same start date.~~ For example, the purchaser of a 5-year TCC purchased in the 5 year Sub-Auction may release a 4-year TCC with the same Point of Injection and Point of Withdrawal for sale in the 4-year Sub-Auction ~~for TCCs with the same start date.~~ Similarly, that purchaser could instead release a corresponding 3-year TCC for sale in the 3-year Sub-Auction ~~for TCCs with the same start date.~~

The following holders of TCCs may offer to sell TCCs in any round of a Sub-Auction appropriate to their duration: (i) Primary Holders who did not sell those TCCs in a Direct Sale or in a previous round of the Centralized TCC Auction; (ii) purchasers of TCCs in previous rounds of that Centralized TCC Auction or in previous auctions who have not subsequently sold those TCCs through an auction; and (iii) purchasers of TCCs through a Direct Sale who qualify to become Primary Holders and have not already sold those TCCs through an auction or through a Direct Sale, provided however that the sale of TCCs shall be subject to the limitations and prohibitions set forth in this ISO OATT including the limitation on the sale or transfer of Fixed Price TCCs and the limitation on the sale or other transfer of Incremental TCCs.

#### **19.9.1.1 Bid Requirements**

Bidders shall submit Bids into the Centralized TCC Auction in accordance with this Attachment M and ISO Procedures. Bidders shall submit Bids such that the sum of the value of its Bids shall not exceed that bidder's ability to pay for TCCs, as determined by ISO Procedures.

#### **19.9.1.2 Bidding Rounds**

Bidders shall be awarded TCCs in each round of the Centralized TCC Auction and shall be charged the market-clearing price for that round, as determined by the ISO in accordance with Section 19.9.5 of this Attachment M, for all TCCs they purchase.

#### **19.9.1.3 Reconfiguration Auctions**

All rules stated in this Section 19.9 for the auction rounds of a Centralized TCC Auction shall also apply to Reconfiguration Auctions unless otherwise stated or the context otherwise requires it. The scaling factor for the single round of a Reconfiguration Auction shall be one.

### **19.9.2 Responsibilities of the ISO**

The ISO shall establish the auction rules and procedures consistent with this Tariff. The ISO shall conduct the Optimal Power Flows in each round of the Centralized TCC Auction. The ISO will verify that the Optimal Power Flows calculated in each round of the Centralized TCC Auction corresponds to a simultaneously feasible Power Flow as described in Section 19.9.7 of this Attachment M. The ISO shall notify the Transmission Owners if: (1) the Optimal Power Flow results calculated are inaccurate; or (2) the Optimal Power Flow is not calculated in accordance with the correct procedure.

Additionally, the ISO will determine the information pertaining to the auction to be made available to Centralized TCC Auction participants over the OASIS and publish information on its OASIS accordingly. The ISO may develop a list of POIs and POWs between which TCCs may not be purchased and shall post such list on its OASIS. The ISO will identify the details to be included in development of the auction software and arrange for development of the software.

The ISO will apply the credit requirements established in this ISO OATT and Attachment K of the NYISO Services Tariff to Primary Holders of TCCs and to bidders in the Centralized TCC Auctions and Reconfiguration Auctions.

The ISO shall not reveal the Bid Prices submitted by any bidder in the Centralized TCC Auction until three months after the Bids were submitted. When these Bid Prices are posted, the names of the bidders shall not be publicly revealed, but the data shall be posted in a way that permits third parties to track each individual bidder's Bids over time.

The ISO will settle all Centralized TCC Auctions and Reconfiguration Auctions, and will settle all Congestion settlements related to the Day-Ahead Market, pursuant to Attachment N.

### **19.9.3 Additional Responsibilities of the ISO**

The ISO shall be capable of completing the Centralized TCC Auction within the time frame specified in this Attachment M.

The ISO will establish an auditable information system to facilitate analysis and acceptance or rejection of Bids, and to provide a record of all Bids and the award of Fixed Price TCCs. The ISO shall also provide all necessary assistance in the resolution of disputes that arise from questions regarding the acceptance, rejection, award and recording of Bids, or the award of Fixed Price TCCs, pursuant to Section 19.2.1 (including Section 19.2.1.4) or Section 19.2.2.above. The ISO will establish a system to communicate auction-related information to all auction participants between rounds of the Centralized TCC Auction. (This last requirement will not apply to single-round auctions.)

The ISO will receive Bids to buy TCCs from any entity that meets the eligibility criteria established in this ISO OATT and will implement the auction bidding rules previously established by the ISO. In accordance with ISO Procedures, the ISO shall unbundle TCCs in

accordance with a request made by a Transmission Customer awarded a TCC. Unbundling TCCs shall consist of replacing that TCC with an equivalent set of TCCs. In all cases, the amount payable to (or by) the Primary Holder of such a set of TCCs will be equal to the amount payable to (or by) the Primary Holder of the original TCC.

The ISO will be required to solve Optimum Power Flows for the NYS Transmission System; properly utilize an Optimum Power Flow program to determine the set of winning Bids for each round of the Centralized TCC Auction; and calculate the market-clearing price of all TCCs at the conclusion of each round of the Centralized TCC Auction, in the manner described in this Attachment M.

#### **19.9.4 Responsibilities of each Bidder**

To qualify to submit Bids and offers in a Centralized TCC Auction, a party shall register as a Customer or Transmission Customer and shall otherwise comply with all applicable registration requirements established in ISO Procedures. All Customers and Transmission Customers seeking to submit Bids and offers in a Centralized TCC Auction shall comply with all applicable credit requirements as set forth in Attachment K of the NYISO Services Tariff.

Each bidder shall submit Bids to purchase and sell TCCs into the Centralized TCC Auction in accordance with this Attachment M and ISO Procedures. Each bidder shall submit the following information with its Bids to purchase TCCs: (i) the number of TCCs for which an offer to purchase is made, (ii) the Bid Price (in \$/TCC) which represents the maximum amount the bidder is willing to pay for the TCC (Bid Prices may be negative, indicating that a bidder would have to be paid in order to accept a TCC); (iii) the location of the Point of Injection and the Point of Withdrawal for the TCC to which the Bid applies (these locations may be any locations for which the ISO calculates an LBMP and which is otherwise available as a TCC POI

or POW); and (iv) if the auction is a Balance-of-Period, the month(s) for which the bidder is bidding. Additionally, if the ISO offers TCCs for sale that are valid in sub-periods (e.g., on-peak or off-peak TCCs), this information must also be provided by the Bidder.

Each bidder must submit such information to the ISO regarding the bidder's or LSE's creditworthiness as the ISO may require, along with a statement signed by the bidder, or LSE representing that the bidder or LSE is financially able and willing to pay for the TCCs for which it is bidding. The aggregate value of the Bids submitted by any bidder into the Centralized TCC Auction shall not exceed that bidder's ability to pay or the maximum value of Bids that bidder is permitted to place, as determined by the ISO (based on an analysis of that bidder's creditworthiness).

#### **19.9.5 Selection of Winning Bids and Determination of the Market-Clearing Price**

The ISO shall determine the winning set of Bids in each round of the Centralized TCC Auction as follows: (i) the ISO shall use an Optimal Power Flow program with the initial assumptions identified by the ISO; (ii) the Optimal Power Flow shall use the same Reference Bus and system security constraints assumptions as used by the ISO subject to ISO Procedures; (iii) the ISO shall select the set of Bids that maximizes the value of the TCCs awarded to the winning bidders; (iv) the aggregate market value of the TCCs awarded to each bidder shall not exceed that bidder's ability to pay, since each bidder is not allowed to Bid more than its ability to pay as determined by the ISO; and (v) the selected set of Bids must be simultaneously feasible as described in this Attachment M.

In the Centralized TCC Auction, if the ISO elects to perform separate auctions for on-peak and off-peak TCCs, the procedure used to select winning Bids in an on-peak auction will not depend on winning Bids selected in an off-peak auction; nor shall the procedure used to



select winning Bids in an off-peak auction depend on winning Bids selected in an on-peak auction.

The market-clearing price for each TCC in each round of a Centralized TCC Auction shall be determined using a similar algorithm to that used to determine LBMPs (refer to Attachment J and ISO Procedures). For a Balance-of-Period Auction, if an awarded TCC has a duration of more than one month, the market-clearing price for such multi-month TCC will equal the sum of the market-clearing prices for one-month TCCs with the same Point of Injection and Point of Withdrawal, which in aggregate cover the same period for which the multi-month TCC is valid.

#### **19.9.6 Settlements, Billing, Payment, and Disputes**

Each bidder must pay the market-clearing price for each TCC it is awarded in the Centralized TCC Auction.

Charges for TCCs awarded in an auction, shall be billed upon completion of the Centralized TCC Auction or Reconfiguration Auction process through the delivery of an award notice by the ISO. The ISO shall establish a dispute period which follows the conclusion of the Centralized TCC Auction or Reconfiguration Auction during which challenges to awards may be made and mistakes in the calculation of market-clearing 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 market-clearing price shall be provided by the ISO on its OASIS.

Following the resolution of challenges, if any, to Centralized TCC Auction or Reconfiguration Auction awards, or mistakes in the calculation of market-clearing prices, raised during the dispute period, charges and payments for TCCs awarded or sold in the Centralized

TCC Auction and Reconfiguration Auction shall be final as provided in the award notices provided by the ISO and shall not be subject to revision.

#### **19.9.7 Simultaneous Feasibility**

The set of winning Bids selected in each round of a Sub-Auction shall correspond to a simultaneously feasible Power Flow.

The Power Flow must be able to accommodate in each round injections and withdrawals corresponding to each of the following TCCs and Grandfathered Rights: (i) TCCs not offered for sale in that round, including Grandfathered TCCs, Original Residual TCCs, or any other existing TCCs whether purchased in a previous auction, an earlier round of the current Centralized TCC Auction or otherwise acquired that are valid for any part of the duration of any TCCs to be sold in that round (or in the case of a Balance-of-Period Auction are valid for the relevant month at issue), as well as TCCs offered for sale in that round but not awarded that are valid for any part of the duration of any TCCs to be sold in that round (or in the case of a Balance-of-Period Auction are valid for the relevant month at issue); (ii) Grandfathered Rights; and (iii) TCCs awarded in the current round. Each injection and withdrawal associated with Bids for TCCs will be multiplied by a scaling factor which apportions the transmission Capacity available among each of the rounds.

A set of injections and withdrawals shall be judged simultaneously feasible if it would not cause any thermal, voltage, or stability violations within the NYCA for base case conditions or any monitored contingencies.

When performing Power Flows for the purpose of determining simultaneous feasibility, injections for TCCs that specify a Load Zone as the Point of Injection will be modeled as a set of injections at each Load bus in the Load Zone containing the Point of Injection equal to the

product of the number of TCCs and the ratio of Load served at each bus to Load served in the Load Zone, based on the bus Loads used in calculating zonal LBMPs.

When performing the above Power Flows, withdrawals for TCCs that specify a Load Zone as the Point of Withdrawal will be modeled as a set of withdrawals at each Load bus in the Load Zone containing the Point of Withdrawal equal to the product of the number of TCCs and the ratio of the Load served at each bus to the total Load served in the Load Zone based on the ISO's estimate of the bus Loads used in calculating the Zonal LBMPs.

The Power Flow simulations shall take into consideration the effects of parallel flows on the transmission Capacity of the NYS Transmission System when determining which sets of injections and withdrawals are simultaneously feasible.

#### **19.9.8 Information to be Made Available to Bidders**

The ISO shall provide over the ISO's OASIS the expected non-simultaneous Total Transfer Capability for each Interface (as displayed on the OASIS).

The ISO shall make the following information available before each Centralized TCC Auction or Reconfiguration Auction:

19.9.8.1 for each Generator bus, external bus and Load Zone for the previous ten (10) Capability Periods, if available, (a) the monthly average Congestion Component of the Day-Ahead LBMP, relative to the Reference Bus, and (b) the monthly average Marginal Losses Component of the Day-Ahead LBMP, relative to the Reference Bus;

19.9.8.2 for the previous two Capability Periods, data from which the following can be determined: (a) the flow for each of the closed Interfaces in the Day-Ahead

Market, and (b) the number of hours that the most limiting facilities were physically constrained in the Day-Ahead;

19.9.8.3 subject to a Transmission Customer's completion of a non-disclosure agreement in the form required by ISO procedures: (a) Power Flow data to be used as the starting point for the Centralized TCC Auction or Reconfiguration Auction, including all assumptions, (b) all limits associated with transmission facilities, contingencies, thermal, voltage and stability to be monitored as constraints in the Optimum Power Flow determination;

19.9.8.4 (a) assumptions made by the ISO relating to transmission maintenance outage schedules, and (b) the ISO summer and winter operating study results (non-simultaneous Interface Transfer Capabilities); and

19.9.8.5 on its website no fewer than five (5) business days prior to the date on which a Centralized TCC Auction will begin, the number of megawatts of each set of ETCNL that each Transmission Owner has elected to convert to ETCNL TCCs for the Centralized TCC Auction and the RCRRs that each Member System has elected to convert to RCRR TCCs for the Centralized TCC Auction.

The ISO shall make the following information available with respect to each Centralized TCC Auction or Reconfiguration Auction:

19.9.8.6 between each round of bidding during the Centralized TCC Auction, for all bidders bidding in subsequent rounds, the market-clearing price, stated relative to the Reference Bus for each Generator bus, External bus and Load Zone; and

19.9.8.7 for each TCC awarded in each round: (a) the number of TCCs awarded, (b) the Point of Injection and Point of Withdrawal for that TCC, (c) the market-

clearing price for the TCC, (d) the auction participant awarded the TCC, and (e) if the auction is a Balance-of-Period Auction, the month(s) for which the awarded TCCs are valid.

Items 19.9.8.1, 19.9.8.2, 19.9.8.3, 19.9.8.4(b), and 19.9.8.6 above shall be made available separately for on-peak and off-peak periods, if on-peak and off-peak TCCs will be separately available for purchase in the upcoming auction.

If the auction is a Balance-of-Period Auction, items 19.9.8.4(a) and 19.9.8.6 above shall be made available separately for each month covered by the auction.

The ISO will make available information about Secondary Market transactions, and all sales of TCCs by Direct Sale, to the extent received by the ISO.

## **20.4 Allocation of Historic Fixed Price TCC Revenues**

### **20.4.1 Defined Terms and Overview**

#### **20.4.1.1 Defined Terms**

1. **Set of Historic Fixed Price TCCs (HFPTCCs):** 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) that have the same POI and POW and which take, or took, effect in the same Capability Period.

For purposes of this Section 20.4, references to when a particular Historic Fixed Price TCC takes (or took) effect shall be meant to refer to, as appropriate, the initial start date of a particular Historic Fixed Price TCC following the expiration or termination of the associated ETA, the start date of an annual renewal of a particular Historic Fixed Price TCC, or the start date of a one-year extension of a particular Historic Fixed Price TCC.

#### **20.4.1.2 Overview**

The ISO shall allocate the revenues from the initial award and renewal 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) as follows:

1. following the effective date of this Section 20.4, the ISO shall allocate to the Transmission Owners the revenue paid by LSEs for Historic Fixed Price TCCs that took effect on or before November 1, 2016 by using the methodology described in this Section 20.4 and by using the data and results of the last Centralized TCC Auction completed prior to the respective Capability Period in which each such Historic Fixed Price TCC took effect; and
2. following the completion of each Centralized TCC Auction after the effective date of

this Section 20.4, the ISO shall allocate to the Transmission Owners the revenue paid by LSEs 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) that take effect in the Capability Period immediately following such Centralized TCC Auction using the methodology described in this Section 20.4 and by using the data and results of the last Centralized TCC Auction completed prior to the respective Capability Period in which each such Historic Fixed Price TCC (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) takes effect.

To do so, for each Set of HFPTCCs, the ISO shall:

1. determine the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) deemed to be associated with each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.4.2 of this Attachment N;
2. determine the applicable Historic Fixed Price TCC facility flow-based methodology coefficient for each Transmission Owner for each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.4.3 of this Attachment N; and
- [3.](#) allocate, among the Transmission Owners, the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) deemed to be associated with each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC

Auction in accordance with Section 20.4.4 of this Attachment N.

Notwithstanding anything to the contrary herein, if a relevant 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 20.4.

#### **20.4.2 Calculation of Historic Fixed Price TCC Revenue Deemed to be Associated with a Round of a One-Year Sub-Auction**

For each Set of HFPTCCs, the ISO shall calculate the revenue deemed to be associated with a round of the applicable one-year Sub-Auction for the relevant Centralized TCC Auction in accordance with Formula N-30.

#### **Formula N-30**

$$HFPTCCRevenue_{s,n} = \left[ \sum_{k \in s} HFPTCCPmt_{k,s} \right] * RoundPct_n$$

Where,

$HFPTCCRevenue_{s,n}$  = For Set of HFPTCCs  $s$ , the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) that is deemed to be associated with round  $n$  of the applicable one-year Sub-Auction of the relevant Centralized TCC Auction

$s$  = A Set of HFPTCCs

$HFPTCCPmt_{k,s}$  = The revenue received for each Historic Fixed Price TCC (including extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT)  $k$  that is part of Set of HFPTCCs  $s$ , as payable by an LSE in accordance with Section 19.2.1.3 of Attachment M of this Tariff

$RoundPct_n$  = The percentage of transmission capacity made available for round  $n$  of the relevant Centralized TCC Auction to support the sale of one-year TCCs, calculated as the ratio of (i) the percentage of transmission capacity made available to support the sale of one-year



TCCs in round  $n$  of the relevant Centralized TCC Auction; to (ii) the percentage of transmission capacity made available to support the sale of one-year TCCs ~~in~~with the same start date as one-year ~~Sub-Auction of~~TCCs in round  $n$  in the relevant Centralized TCC Auction, each as determined by the ISO prior to the relevant Centralized TCC Auction.

#### 20.4.3 Calculation of Historic Fixed Price TCC Facility Flow-Based Methodology Coefficient

For each Set of HFPTCCs, the ISO shall use the Historic Fixed Price TCC facility flow-based methodology coefficient to allocate, among the Transmission Owners, the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) deemed to be associated with a round of the applicable one-year Sub-Auction for the relevant Centralized TCC Auction. The applicable coefficient for each Set of HFPTCCs and each round  $n$  of the applicable one-year Sub-Auction of the relevant Centralized TCC Auction shall be calculated in accordance with Formula N-31.

##### Formula N-31

$$HFPTCCFFB_{t,s,n} = \frac{\sum_{L \in L_{t,n}} |(1YrFlow_{L,n} - Mod1YrFlow_{L,n,s})(Price_{y,L,n} - Price_{x,L,n}) * Share_{n,t,L}|}{\sum_{L \in L_n} |(1YrFlow_{L,n} - Mod1YrFlow_{L,n,s})(Price_{y,L,n} - Price_{x,L,n})|}$$

Where,

$HFPTCCFFB_{t,s,n}$  = For Set of HFPTCCs  $s$ , the Historic Fixed Price TCC facility flow-based methodology coefficient for Transmission Owner  $t$  for round  $n$  of the applicable one-year Sub-Auction of the relevant Centralized TCC Auction

$s$  = As defined in Formula N-30

$L_n$  = The set of all transmission facilities owned by Transmission Owners that are modeled in the Transmission System model for round  $n$  of the applicable one-year Sub-Auction of the relevant Centralized TCC Auction

$L_{t,n}$	= The set of all transmission facilities owned by Transmission Owner $t$ that are modeled in the Transmission System model for round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction
$L$	= A transmission facility from bus $x$ to bus $y$
$1YrFlow_{L,n}$	= The Energy flow on transmission facility $L$ in the Optimal Power Flow solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in such Optimal Power Flow
$Mod1YrFlow_{L,n,s}$	= The Energy flow on transmission facility $L$ in a Power Flow that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in the solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction, except for the injections and withdrawals corresponding to Set of HFPTCCs $s$ . For purposes of this Power Flow: (i) the phase angle settings for optimized phase angle regulators, as identified in ISO Procedures, will be set equal to the phase angle settings for such phase angle regulators as determined in the Optimal Power Flow solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction, but the schedules for such phase angle regulators will be allowed to vary from the schedules determined in the Optimal Power Flow solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction; and (ii) for all other phase angle regulators internal to the NYCA or on external borders, as identified in ISO Procedures, the schedules for such phase angle regulators will be set equal to the schedules as determined in the Optimal Power Flow solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction, but the phase angle settings for such phase angle regulators will be allowed to vary from the phase angle settings determined in the Optimal Power Flow solution to round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction. Notwithstanding anything to the contrary herein, if the Power Flow results in Energy flow on transmission facility $L$ that violates any limit applicable to the amount of Energy that may flow on transmission facility $L$ for round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction, the ISO shall adjust the resulting value of the Energy flow on transmission facility $L$ , as determined by the Power Flow, to avoid consideration of such incremental flows above the applicable limit for transmission facility $L$ and use such adjusted Energy flow value for purposes of calculating $HFPTCCFFB_{t,s,n}$

$Price_{y,L,n}$

= The market-clearing price at bus  $y$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction.

Notwithstanding anything to the contrary herein, for Historic Fixed Price TCCs with a POW on Long Island that took effect on November 1, 2013 and remained valid through October 31, 2014, the applicable market-clearing price at bus  $y$  on transmission facility  $L$  shall be the sum of (i) the market-clearing prices at bus  $y$  on transmission facility  $L$  determined in the Optimal Power Flow solution for each of the Reconfiguration Auctions for November 2013 through April 2014; and (ii) the weighted average market-clearing price at bus  $y$  on transmission facility  $L$  determined from the Optimal Power Flow solution for each of the six-month Sub-Auction rounds for the Centralized TCC Auction that included six-month TCCs valid for the Summer 2014 Capability Period (*i.e.*, May 1, 2014 through October 31, 2014)

$Price_{x,L,n}$

= The market-clearing price at bus  $x$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction.

Notwithstanding anything to the contrary herein, for Historic Fixed Price TCCs with a POW on Long Island that took effect on November 1, 2013 and remained valid through October 31, 2014, the applicable market-clearing price at bus  $x$  on transmission facility  $L$  shall be the sum of (i) the market-clearing prices at bus  $x$  on transmission facility  $L$  determined in the Optimal Power Flow solution for each of the Reconfiguration Auctions for November 2013 through April 2014; and (ii) the weighted average market-clearing price at bus  $x$  on transmission facility  $L$  determined from the Optimal Power Flow solution for each of the six-month Sub-Auction rounds for the Centralized TCC Auction that included six-month TCCs valid for the Summer 2014 Capability Period (*i.e.*, May 1, 2014 through October 31, 2014)

$Share_{n,t,L}$

= The percentage of transmission facility  $L$  owned by Transmission Owner  $t$  on the effective date of the TCCs sold in round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction

#### **20.4.4 Allocation of Historic Fixed Price TCC Revenue Deemed to be Associated with a Round of a One-Year Sub-Auction**

For each Set of HFPTCCs, each Transmission Owner's share of the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) deemed to be associated with a

round of the [applicable](#) one-year Sub-Auction for the relevant Centralized TCC Auction shall be calculated in accordance with Formula N-32.

### Formula N-32

$$HFPTCCRevAlloc_{t,s,n} = HFPTCCRevenue_{s,n} * HFPTCCFFB_{t,s,n}$$

Where,

$HFPTCCRevAlloc_{t,s,n}$	= For Set of HFPTCCs $s$ , the Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) deemed to be associated with round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction that is allocated to Transmission Owner $t$
$s$	= As defined in Formula N-30
$HFPTCCRevenue_{s,n}$	= As defined in Formula N-30
$HFPTCCFFB_{t,s,n}$	= As defined in Formula N-31.

Each Transmission Owner's share of Historic Fixed Price TCC revenue (including revenue from extensions of Historic Fixed Price TCCs awarded pursuant to Section 19.2.1.4 of Attachment M of the OATT) allocated pursuant to this Section 20.4 shall be incorporated into, or otherwise accounted for as part of, its TSC, or 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.

## **20.5 Allocation of Non-Historic Fixed Price TCC Revenues**

### **20.5.1 Defined Terms and Overview**

#### **20.5.1.1 Defined Terms**

**Set of Non-Historic Fixed Price TCCs (“NHFPTCCs”):** Non-Historic Fixed Price TCCs that have the same POI and POW, same duration and which take, or took, effect in the same Capability Period.

#### **20.5.1.2 Overview**

The ISO shall allocate the revenues from the initial award and renewal of Non-Historic Fixed Price TCCs as follows:

1. following the effective date of this Section 20.5, the ISO shall allocate to the Transmission Owners the revenue paid by LSEs for Non-Historic Fixed Price TCCs that took effect on or before May 1, 2017 by using the methodology described in this Section 20.5 and by using the applicable data and results of the last Centralized TCC Auction completed prior to the respective Capability Period in which each such Non-Historic Fixed Price TCC took effect; and
2. following the completion of each Centralized TCC Auction after the effective date of this Section 20.5, the ISO shall allocate to the Transmission Owners any revenue paid by LSEs for Non-Historic Fixed Price TCCs that take effect in the Capability Period immediately following such Centralized TCC Auction using the methodology described in this Section 20.5 and by using the applicable data and results of such Centralized TCC Auction.

To do so, for each Set of NHFPTCCs, the ISO shall:

1. determine the Non-Historic Fixed Price TCC revenue deemed to be associated with: (i) the applicable rounds of the two-year Sub-Auction of the relevant

Centralized TCC Auction pursuant to Section 20.5.2 of this Attachment N in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.5.2 of this Attachment N in the case of revenue related to renewals of Non-Historic Fixed Price TCCs;

2. determine the applicable Non-Historic Fixed Price TCC facility flow-based methodology coefficient for each Transmission Owner for: (i) the applicable rounds of the two-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.5.3 of this Attachment N in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.5.3 of this Attachment N in the case of revenue related to renewals of Non-Historic Fixed Price TCCs; and
3. allocate, among the Transmission Owners, the Non-Historic Fixed Price TCC revenue deemed to be associated with: (i) the applicable rounds of the two-year Sub-Auction of the relevant Centralized TCC Auction pursuant to Section 20.5.4 of this Attachment N in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction in accordance with Section 20.5.4 of this Attachment N in the case of revenue related to renewals of Non-Historic Fixed Price TCCs.

[Notwithstanding anything to the contrary herein, in the case of revenue related to renewals of Non-Historic Fixed Price TCCs, if a relevant 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 20.5.

## **20.5.2 Calculation of Non-Historic Fixed Price TCC Revenue Deemed to be Associated with Sub-Auction Rounds**

For each Set of NHFPTCCs, the ISO shall calculate the revenue deemed to be associated with: (i) an applicable round of the two-year Sub-Auction of the relevant Centralized TCC Auction in accordance with Formula N-33 in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the applicable one-year Sub-Auction for the relevant Centralized TCC Auction in accordance with Formula N-33 in the case of revenue related to renewals of Non-Historic Fixed Price TCCs.

### **Formula N-33**

$$NHFPTCCRevenue_{s,n} = \left[ \sum_{k \in s} NHFPTCCPmt_{k,s} \right] * RoundPct_n$$

Where,

$NHFPTCCRevenue_{s,n}$  = (a) For Initial Awards: For Set of NHFPTCCs  $s$ , the Non-Historic Fixed Price TCC revenue that is deemed to be associated with round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that no such revenue shall be deemed to be associated with the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction

(b) For Renewals: For Set of NHFPTCCs  $s$ , the Non-Historic Fixed Price TCC revenue that is deemed to be associated with round  $n$  of the applicable one-year Sub-Auction of the relevant Centralized TCC Auction

$s$  = A Set of NHFPTCCs

$NHFPTCCPmt_{k,s}$  = The revenue received for each Non-Historic Fixed Price TCC  $k$  that is part of Set of NHFPTCCs  $s$ , as payable by an LSE in accordance with Section 19.2.2.3.3 of Attachment M of this Tariff

RoundPct<sub>*n*</sub>

= (a) For Initial Awards: The percentage of transmission capacity made available for round *n* of the relevant Centralized TCC Auction to support the sale of two-year TCCs, calculated as the ratio of (i) the percentage of transmission capacity made available to support the sale of two-year TCCs in round *n* of the relevant Centralized TCC Auction; to (ii) the total percentage of transmission capacity made available to support the sale of two-year TCCs in all rounds other than the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction, each as determined by the ISO prior to the relevant Centralized TCC Auction. Notwithstanding anything to the contrary herein, the NYISO shall not include the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction or the percentage of transmission capacity made available to support the sale of two-year TCCs in such round in conducting the calculations described above

(b) For Renewals: The percentage of transmission capacity made available for round *n* of the relevant Centralized TCC Auction to support the sale of one-year TCCs, calculated as the ratio of (i) the percentage of transmission capacity made available to support the sale of one-year TCCs in round *n* of the relevant Centralized TCC Auction; to (ii) the total percentage of transmission capacity made available to support the sale of one-year TCCs with the same start date as one-year TCCs in round *n* in the relevant Centralized TCC Auction, each as determined by the ISO prior to the relevant Centralized TCC Auction

### **20.5.3 Calculation of Non-Historic Fixed Price TCC Facility Flow-Based Methodology Coefficient**

For each Set of NHFPTCCs, the ISO shall use the Non-Historic Fixed Price TCC facility flow-based methodology coefficient to allocate, among the Transmission Owners, the Non-Historic Fixed Price TCC revenue deemed to be associated with: (i) an applicable round of the two-year Sub-Auction of the relevant Centralized TCC Auction (*i.e.*, round *n*) in accordance with Formula N-34 in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the applicable one-year Sub-Auction for the relevant Centralized TCC Auction (*i.e.*, round *n*) in accordance with Formula N-34 in the case of revenue related to renewals of Non-Historic Fixed Price TCCs.



### Formula N-34

$$NHFPTCCFFB_{t,s,n} = \frac{\sum_{L \in L_{t,n}} |(AuctionFlow_{L,n} - ModAuctionFlow_{L,n,s})(Price_{y,L,n} - Price_{x,L,n}) * Share_{n,t,L}|}{\sum_{L \in L_n} |(AuctionFlow_{L,n} - ModAuctionFlow_{L,n,s})(Price_{y,L,n} - Price_{x,L,n})|}$$

Where,

$NHFPTCCFFB_{t,s,n}$	= (a) <u>For Initial Awards</u> : For Set of NHFPTCCs $s$ , the Non-Historic Fixed Price TCC facility flow-based methodology coefficient for Transmission Owner $t$ for round $n$ of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not determine coefficient values for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction  (b) <u>For Renewals</u> : For Set of NHFPTCCs $s$ , the Non-Historic Fixed Price TCC facility flow-based methodology coefficient for Transmission Owner $t$ for round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction
$s$	= As defined in Formula N-33
$L_n$	= (a) <u>For Initial Awards</u> : The set of all transmission facilities owned by Transmission Owners that are modeled in the Transmission System model for round $n$ of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction  (b) <u>For Renewals</u> : The set of all transmission facilities owned by Transmission Owners that are modeled in the Transmission System model for round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction
$L_{t,n}$	= (a) <u>For Initial Awards</u> : The set of all transmission facilities owned by Transmission Owner $t$ that are modeled in the Transmission System model for round $n$ of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction  (b) <u>For Renewals</u> : The set of all transmission facilities owned by Transmission Owner $t$ that are modeled in the Transmission System model for round $n$ of the <a href="#">applicable</a> one-year Sub-Auction of the relevant Centralized TCC Auction
$L$	= A transmission facility from bus $x$ to bus $y$
$AuctionFlow_{L,n}$	= (a) <u>For Initial Awards</u> : The Energy flow on transmission facility $L$

in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in such Optimal Power Flow; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction

(b) For Renewals: The Energy flow on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in such Optimal Power Flow

ModAuctionFlow $_{L,n,s}$

= (a) For Initial Awards: The Energy flow on transmission facility  $L$  in a Power Flow that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in the solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction, except for the injections and withdrawals corresponding to Set of NHFPTCCs  $s$ ; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction. For purposes of this Power Flow: (i) the phase angle settings for optimized phase angle regulators, as identified in ISO Procedures, will be set equal to the phase angle settings for such phase angle regulators as determined in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction, but the schedules for such phase angle regulators will be allowed to vary from the schedules determined in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction; and (ii) for all other phase angle regulators internal to the NYCA or on external borders, as identified in ISO Procedures, the schedules for such phase angle regulators will be set equal to the schedules as determined in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction, but the phase angle settings for such phase angle regulators will be allowed to vary from the phase angle settings determined in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction. Notwithstanding anything to the contrary herein, if the Power Flow results in Energy flow on transmission facility  $L$  that violates any limit applicable to the amount of Energy that may flow on transmission facility  $L$  for round  $n$  of the two-year Sub-Auction of

the relevant Centralized TCC Auction, the ISO shall adjust the resulting value of the Energy flow on transmission facility  $L$ , as determined by the Power Flow, to avoid consideration of flows that would otherwise violate the applicable limit for transmission facility  $L$  and use such adjusted Energy flow value for purposes of calculating  $\text{NHFPTCCFFB}_{t,s,n}$

(b) For Renewals: The Energy flow on transmission facility  $L$  in a Power Flow that includes all injections and withdrawals corresponding (as described in Section 20.1.2 of this Attachment N) to the set of TCCs (including Fixed Price TCCs) and Grandfathered Rights represented in the solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction, except for the injections and withdrawals corresponding to Set of NHFPTCCs  $s$ . For purposes of this Power Flow: (i) the phase angle settings for optimized phase angle regulators, as identified in ISO Procedures, will be set equal to the phase angle settings for such phase angle regulators as determined in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction, but the schedules for such phase angle regulators will be allowed to vary from the schedules determined in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction; and (ii) for all other phase angle regulators internal to the NYCA or on external borders, as identified in ISO Procedures, the schedules for such phase angle regulators will be set equal to the schedules as determined in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction, but the phase angle settings for such phase angle regulators will be allowed to vary from the phase angle settings determined in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction. Notwithstanding anything to the contrary herein, if the Power Flow results in Energy flow on transmission facility  $L$  that violates any limit applicable to the amount of Energy that may flow on transmission facility  $L$  for round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction, the ISO shall adjust the resulting value of the Energy flow on transmission facility  $L$ , as determined by the Power Flow, to avoid consideration of flows that would otherwise violate the applicable limit for transmission facility  $L$  and use such adjusted Energy flow value for purposes of calculating  $\text{NHFPTCCFFB}_{t,s,n}$

Price<sub>y,L,n</sub>

= (a) For Initial Awards: The market-clearing price at bus  $y$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of

the relevant Centralized TCC Auction

(b) For Renewals: The market-clearing price at bus  $y$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction

$Price_{x,L,n}$

= (a) For Initial Awards: The market-clearing price at bus  $x$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction

(b) For Renewals: The market-clearing price at bus  $x$  on transmission facility  $L$  in the Optimal Power Flow solution to round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction

$Share_{n,t,L}$

= (a) For Initial Awards: The percentage of transmission facility  $L$  owned by Transmission Owner  $t$  on the effective date of the TCCs sold in round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction; provided, however, that the NYISO shall not utilize data and information for the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction

(b) For Renewals: The percentage of transmission facility  $L$  owned by Transmission Owner  $t$  on the effective date of the TCCs sold in round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction

#### **20.5.4 Allocation of Non-Historic Fixed Price TCC Revenue**

For each Set of NHFPTCCs, each Transmission Owner's share of the Non-Historic Fixed Price TCC revenue deemed to be associated with: (i) an applicable round of the two-year Sub-Auction of the relevant Centralized TCC Auction shall be calculated in accordance with Formula N-35 in the case of revenue related to initial awards of Non-Historic Fixed Price TCCs; or (ii) each round of the [applicable](#) one-year Sub-Auction for the relevant Centralized TCC Auction shall be calculated in accordance with Formula N-35 in the case of revenue related to renewals of Non-Historic Fixed Price TCCs.

#### **Formula N-35**

$$NHFPTCCRevAlloc_{t,s,n} = NHFPTCCRevenue_{s,n} * NHFPTCCFFB_{t,s,n}$$

Where,

$NHFPTCCRevAlloc_{t,s,n}$  = (a) For Initial Awards: For Set of NHFPTCCs  $s$ , the Non-Historic Fixed Price TCC revenue deemed to be associated with round  $n$  of the two-year Sub-Auction of the relevant Centralized TCC Auction that is allocated to Transmission Owner  $t$ ; provided, however, that no such revenue shall be deemed to be associated with the first round of the two-year Sub-Auction of the relevant Centralized TCC Auction

(b) For Renewals: For Set of NHFPTCCs  $s$ , the Non-Historic Fixed Price TCC revenue deemed to be associated with round  $n$  of the [applicable](#) one-year Sub-Auction of the relevant Centralized TCC Auction that is allocated to Transmission Owner  $t$

$s$  = As defined in Formula N-33

$NHFPTCCRevenue_{s,n}$  = As defined in Formula N-33

$NHFPTCCFFB_{t,s,n}$  = As defined in Formula N-34.

Each Transmission Owner's share of Non-Historic Fixed Price TCC revenue allocated pursuant to this Section 20.5 shall be incorporated into, or otherwise accounted for as part of, its TSC, or 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.