

## 2.2 Definitions - B

**Back-Up Operation:** The procedures for operating the NYCA in a safe and reliable manner when the ISO's normal communication or computer systems are not fully functional as set forth in Section 5.3 of this ISO Services Tariff and Article 2.12 of the ISO OATT.

**Balance-of-Period Auction:** As defined in the ISO OATT.

**Base Point Signals:** Electronic signals sent from the ISO and ultimately received by Generators or Demand Side Resources specifying the scheduled MW output for the Generator. Real-Time Dispatch ("RTD") Base Point Signals are typically sent to Generators or Demand Side Resources on a nominal five (5) minute basis. AGC Base Point Signals are typically sent to Generators or Demand Side Resources on a nominal six (6) second basis.

**Basis Amount:** The amount owed to the ISO for purchases of Energy and Ancillary Services excluding External Transactions in the Basis Month, after applying the Price Adjustment, as further adjusted by the ISO to reflect material changes in the extent of the Customer's participation in the ISO-administered Energy and Ancillary Services markets.

**Basis Month:** The month during the Prior Equivalent Capability Period in which the amount owed by the Customer for purchases of Energy and Ancillary Services excluding External Transactions, after applying the Price Adjustment, was greatest.

Behind-the-Meter Net Generation Resource ("BTM:NG Resource"): A facility within a defined electrical boundary comprised of a Generator and a Host Load located at a single point identifier (PTID), where the Generator routinely serves, and is assigned to, the Host Load and has excess generation capability after serving that Host Load. The Generator of the BTM:NG Resource must be electrically located in the NYCA, have a minimum nameplate rating of 2 MW and a minimum net injection to the NYS Transmission System or distribution system of 1 MW. The Host Load of the BTM:NG Resource must also have a minimum ACHL of 1 MW. A facility that otherwise meets these eligibility requirements, but either (i) is an Intermittent Power resource, (ii) whose Host Load consists only of Station Power, or (iii) has made an election pursuant to Section 5.12.1.12, does not qualify to be a BTM:NG Resource. BTM:NG Resources cannot simultaneously participate as a BTM:NG Resource and in any ISO and/or Transmission Owner administered demand response or generation buy-back programs.

**Bid/Post System:** An electronic information system used to allow the posting of proposed transmission schedules and Bids for Energy and Ancillary Services by Market Participants for use by the ISO and to allow the ISO to post LBMPs and schedules.

**Bid:** Offer to sell or bid to purchase Energy, Demand Reductions or Transmission Congestion Contracts and an offer to sell Ancillary Services at a specified price that is duly submitted to the ISO pursuant to ISO Procedures. Bid shall mean a mitigated Bid where appropriate.

**Bid Price:** The price at which the Customer offering the Bid is willing to provide the product or service, or is willing to pay to receive such product or service, as applicable. In the case of a CTS Interface Bid, the Bid Price is a dollar value that indicates the bidder's willingness to purchase

Energy at a CTS Source and sell it at a CTS Sink across a CTS Enabled Interface if, at the time of scheduling, the forecasted CTS Sink Price minus the forecasted CTS Source Price is greater than, or equal to, the dollar value specified in the Bid.

**Bid Production Cost:** Total cost of the Generators required to meet Load and reliability Constraints based upon Bids corresponding to the usual measures of Generator production cost (e.g., running cost, Minimum Generation Bid, and Start-Up Bid).

**Bidder:** An entity that bids to purchase Unforced Capacity in an Installed Capacity auction.

**Bidding Requirement:** The credit requirement for bidding in certain ISO-administered auctions, calculated in accordance with Section 26.4.3 of Attachment K to this Services Tariff.

**Bilateral Transaction:** A Transaction between two or more parties for the purchase and/or sale of Capacity or Energy other than those in the ISO Administered Markets. A request to schedule a Bilateral Transaction in the Energy Market shall be considered a request to schedule Point-to-Point Transmission Service.

**Billing Period:** The period of time designated in Sections 7.2.2.1, 7.2.3.1, or 7.2.3.2 of this ISO Services Tariff over which the ISO will aggregate and settle a charge or a payment for services furnished under this ISO Services Tariff or the ISO OATT.

## 2.3 Definitions - C

**Capability Period:** Six-month periods which are established as follows: (i) from May 1 through October 31 of each year ("Summer Capability Period"); and (ii) from November 1 of each year through April 30 of the following year ("Winter Capability Period").

**Capability Period Auction:** An auction conducted no later than thirty (30) days prior to the start of each Capability Period in which Unforced Capacity may be purchased and sold in a sixmonth strip.

Capability Period SCR Load Zone Peak Hours: The top forty (40) coincident peak hours that, prior to the Summer 2014 Capability Period include hour beginning thirteen through hour beginning eighteen and beginning with the Summer 2014 Capability Period include hour beginning eleven through hour beginning nineteen. The Capability Period SCR Load Zone Peak Hours shall be determined by the NYISO from the Prior Equivalent Capability Period and shall be used by RIPs to report ACL values for the purpose of SCR enrollment. For a SCR enrolled with a Provisional ACL that requires verification data to be reported at the end of the Capability Period in which the SCR was enrolled, the Capability Period SCR Load Zone Peak Hours shall be determined from the Capability Period in which the SCR was enrolled. Such hours shall not include (i) hours in which Special Case Resources located in the specific Load Zone were called by the ISO to respond to a reliability event or test and (ii) hours for which the Emergency Demand Response Program resources were deployed by the ISO in each specific Load Zone. In addition, beginning with the Summer 2014 Capability Period, the NYISO shall not include, in descending rank order of NYCA Load up to a maximum of eight hours per Capability Period, a) the hour before the start time of a reliability event or performance test, in which SCRs located in the specific Load Zone were called by the ISO to respond to a reliability event or performance test, or b) the hour immediately following the end time of such reliability event or performance test.

**Capability Year:** A Summer Capability Period, followed by a Winter Capability Period (*i.e.*, May 1 through April 30).

**Capacity:** The capability to generate or transmit electrical power, or the ability to control demand at the direction of the ISO, measured in megawatts ("MW").

Capacity Limited Resource: A Resource that is constrained in its ability to supply Energy above its Normal Upper Operating Limit by operational or plant configuration characteristics. Capacity Limited Resources must register their Capacity limiting characteristics with, and justify them to, the ISO consistent with ISO Procedures. Capacity Limited Resources may submit a schedule indicating that their Normal Upper Operating Limit is a function depending on one or more variables, such as temperature or pondage levels, in which case the Normal Upper Operating Limit applicable at any time shall be determined by reference to that schedule.

**Capacity Reservation Cap:** As defined in the ISO OATT.

**CARL Data:** Control Area Resource and Load ("CARL") data submitted by Control Area System Resources to the ISO.

Centralized Transmission Congestion Contracts ("TCC") Auction ("Auction"): As defined in the ISO OATT.

**Code of Conduct:** The rules, procedures and restrictions concerning the conduct of the ISO directors and employees, contained in Attachment F to the ISO Open Access Transmission Tariff.

**Commission ("FERC"):** The Federal Energy Regulatory Commission, or any successor agency.

**Compensable Overgeneration:** A quantity of Energy injected over a given RTD interval in which a Supplier has offered Energy that exceeds the Real-Time Scheduled Energy Injection established by the ISO for that Supplier and for which the Supplier may be paid pursuant to this Section and ISO Procedures.

For Suppliers not covered by other provisions of this Section and Intermittent Power Resources depending on wind as their fuel for which the ISO has imposed a Wind Output Limit in the given RTD interval, Compensable Overgeneration shall initially equal three percent (3%) of the Supplier's Normal Upper Operating Limit which may be modified by the ISO if necessary to maintain good Control Performance.

For a Generator which is operating in Start-Up or Shutdown Periods, or Testing Periods, or which is an Intermittent Power Resource that depends on solar energy or landfill gas for its fuel and which has offered its Energy to the ISO in a given interval not using the ISO-committed Flexible or Self-Committed Flexible bid mode, Compensable Overgeneration shall mean all Energy actually injected by the Generator that exceeds the Real-Time Scheduled Energy Injection established by the ISO for that Generator. For a Generator operating in intervals when it has been designated as operating Out of Merit at the request of a Transmission Owner or the ISO, Compensable Overgeneration shall mean all Energy actually injected by the Generator that exceeds the Real-Time Scheduled Energy Injection up to the Energy level directed by the Transmission Owner or the ISO.

For Intermittent Power Resources that depend on wind as their fuel and Limited Control Run of River Hydro Resources not using the ISO-Committed Flexible or Self-Committed Flexible bid mode, that were in operation on or before November 18, 1999 within the NYCA, plus an additional 3,300 MW of such Resources, Compensable Overgeneration shall mean that quantity of Energy injected by a Generator, over a given RTD interval that exceeds the Real-Time Scheduled Energy Injection established by the ISO for that Generator and for which the Generator may be paid pursuant to ISO Procedures; provided however, this definition of Compensable Overgeneration shall not apply to an Intermittent Power Resource depending on wind as its fuel for any interval for which the ISO has imposed a Wind Output Limit.

For a Generator comprised of a group of generating units at a single location, which grouped generating units are separately committed and dispatched by the ISO, and for which Energy injections are measured at a single location, Compensable Overgeneration shall mean that quantity of Energy injected by the Generator, during the period when one of its grouped generating units is operating in a Start-Up or Shutdown Period, that exceeds the Real-Time Scheduled Energy Injection established by the ISO for that

period, for that Generator, and for which the Generator may be paid pursuant to ISO Procedures.

**Completed Application:** An Application that satisfies all of the information and other requirements for service under the ISO Services Tariff.

**Confidential Information:** Information and/or data that has been designated by a Customer to be proprietary and confidential, provided that such designation is consistent with the ISO Procedures, the ISO Services Tariff, and the ISO Code of Conduct.

**Congestion:** A characteristic of the transmission system produced by a constraint on the optimum economic operation of the power system, such that the marginal price of Energy to serve the next increment of Load, exclusive of losses, at different locations on the transmission system is unequal.

**Congestion Component:** The component of the LBMP measured at a location or the Transmission Usage Charge between two locations that is attributable to the cost of transmission Congestion as is more completely defined in Attachment B of the Services Tariff.

**Congestion Rent**: As defined in the ISO OATT.

**Congestion Rent Shortfall**: As defined in the ISO OATT.

**Constraint**: An upper or lower limit placed on a variable or set of variables that are used by the ISO in its SCUC, RTC, or RTD programs to control and/or facilitate the operation of the NYS Transmission System.

**Contingency:** An actual or potential unexpected failure or outage of a system component, such as a Generator, transmission line, circuit breaker, switch or other electrical element. A Contingency also may include multiple components, which are related by situations leading to simultaneous component outages.

Control Area: An electric system or combination of electric power systems to which a common Automatic Generation Control scheme is applied in order to: (1) match, at all times, the power output of the Generators within the electric power system(s) and Capacity and Energy purchased from entities outside the electric power system(s), with the Load within the electric power system(s); (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice; (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and (4) provide sufficient Capacity to maintain Operating Reserves in accordance with Good Utility Practice.

**Control Area System Resource:** A set of Resources owned or controlled by an entity within a Control Area that also is the operator of such Control Area. Entities supplying Unforced Capacity using Control Area System Resources will not designate particular Resources as the suppliers of Unforced Capacity.

**Control Performance:** A standard for measuring the degree to which a Control Area is providing Regulation Service in conformance with NERC requirements.

**Controllable Transmission:** Any Transmission facility over which power-flow can be directly controlled by power-flow control devices without having to re-dispatch generation.

**Commenced Repair:** A determination by the ISO that a Market Participant with a Generator i) has decided to pursue the repair of its Generator, and based on the ISO's technical/engineering evaluation ii) has a Repair Plan for the Generator that is consistent with a Credible Repair Plan, and iii) has made appropriate progress in pursuing the repair of its Generator when measured against the milestones of a Credible Repair Plan.

**Credible Repair Plan:** A Repair Plan that meets the requirements described in Section 5.18.1.4 of this Services Tariff and in ISO Procedures.

**Credit Assessment:** An assessment of a Customer's creditworthiness, conducted by the ISO in accordance with Section 26.5.3 of Attachment K to this Services Tariff.

**Cross-Sound Scheduled Line:** A transmission facility that interconnects the NYCA to the New England Control Area at Shoreham, New York and terminates near New Haven, Connecticut.

**CTS Enabled Interface:** An External Interface at which the ISO has authorized the use of Coordinated Transaction Scheduling ("CTS") market rules and which includes a CTS Enabled Proxy Generator Bus for New York and a CTS Enabled Proxy Generator Bus for the neighboring Control Area.

**CTS Enabled Proxy Generator Bus:** A Proxy Generator Bus at which the ISO either requires or permits the use of CTS Interface Bids for Import and Export Transactions in the Real-Time Market and requires the use of Decremental Bids for Wheels Through in the Real-Time Market. A CTS Enabled Proxy Generator Bus at which the ISO permits CTS Interface Bids will also permit Decremental and Sink Price Cap Bids.

**CTS Interface Bid:** A Real-Time Bid provided by an entity engaged in an External Transaction at a CTS Enabled Interface. CTS Interface Bids shall include a MW amount, a direction indicating whether the proposed Transaction is to Import Energy to, or Export Energy from, the New York Control Area, and a Bid Price.

**CTS Sink:** Representation of the location(s) within a Control Area where energy associated with a CTS Interface Bid is withdrawn. The NYCA CTS Sinks are Proxy Generator Buses.

**CTS Sink Price:** The price at a CTS Sink.

**CTS Source:** Representation of the location(s) within a Control Area where energy associated with a CTS Interface Bid is injected. The NYCA CTS Sources are Proxy Generator Buses.

**CTS Source Price:** The price at a CTS Source.

**Curtailment or Curtail**: A reduction in Transmission Service in response to a transmission Capacity shortage as a result of system reliability conditions.

**Curtailment Customer Aggregator:** A Curtailment Services Provider that produces real-time verified reductions in NYCA load of at least 100 kW through contracts with retail end-users. The procedure for qualifying as a Curtailment Customer Aggregator is set forth in ISO procedures.

**Curtailment Initiation Cost:** The fixed payment, separate from a variable Demand Reduction Bid, required by a qualified Demand Reduction Provider in order to cover the cost of reducing demand.

**Curtailment Services Provider:** A qualified entity that can produce real-time, verified reductions in NYCA Load of at least 100 kW in a single Load Zone, pursuant to the Emergency Demand Response Program and related ISO procedures. The procedure for qualifying as a Curtailment Services Provider is set forth in Section 3 below and in ISO Procedures.

**Curtailment Services Provider Capacity:** Capacity from a Demand Side Resource nominated by a Curtailment Services Provider for participation in the Emergency Demand Response Program.

**Customer**: An entity which has complied with the requirements contained in the ISO Services Tariff, including having signed a Service Agreement, and is qualified to utilize the Market Services and the Control Area Services provided by the ISO under the ISO Services Tariff; provided, however, that a party taking services under the Tariff pursuant to an unsigned Service Agreement filed with the Commission by the ISO shall be deemed a Customer.

# 2.4 Definitions - D

**DADRP Component:** The credit requirement for a Demand Reduction Provider to bid into the Day-Ahead Market, and a component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Day-Ahead:** Nominally, the twenty-four (24) hour period directly preceding the Dispatch Day, except when this period may be extended by the ISO to accommodate weekends and holidays.

**Day-Ahead LBMP:** The LBMPs calculated based upon the ISO's Day-Ahead Security Constrained Unit Commitment process.

**Day-Ahead Margin:** That portion of Day-Ahead LBMP, Operating Reserves settlement or Regulation Service settlement for an hour that represents the difference between the Supplier's accepted Day-Ahead offer price and the Day-Ahead LBMP, Operating Reserves settlement or Regulation Service settlement for that hour.

**Day-Ahead Margin Assurance Payment:** A supplemental payment made to an eligible Supplier that buys out of a Day-Ahead Energy, Regulation Service, or Operating Reserves schedule such that an hourly balancing payment obligation offsets its Day-Ahead Margin. Rules for calculating these payments, and for determining Suppliers' eligibility to receive them, are **set** forth in Attachment J to this ISO Services Tariff.

**Day-Ahead Market:** The ISO Administered Market in which Capacity, Energy and/or Ancillary Services are scheduled and sold Day-Ahead consisting of the Day-Ahead scheduling process, price calculations and Settlements.

**Day-Ahead Reliability Unit:** A Day-Ahead committed Resource which would not have been committed but for a request by a Transmission Owner that the unit be committed in the Day-Ahead Market in order to meet the reliability needs of the Transmission Owner's local system or as the result of the ISO's analysis indicating the unit was needed in order to meet the reliability requirements of the NYCA.

**Decremental Bid:** A monotonically increasing Bid curve provided by an entity engaged in a Bilateral Import, other than an entity submitting a CTS Interface Bid, or Internal Transaction to indicate the LBMP below which that entity is willing to reduce its Generator's output, and purchase Energy in the LBMP Markets, or by an entity engaged in a Wheel Through Transaction to indicate the Congestion Component cost at or below which that entity is willing to accept Transmission Service.

**Demand Reduction:** A quantity of reduced electricity demand from a Demand Side Resource that is bid, produced, purchased or sold over a period of time and measured or calculated in Megawatt hours. Demand Reductions offered by a Demand Side Resource as Energy in the LBMP Markets may only be offered in the Day-Ahead Market, and shall be offered only by a Demand Reduction Provider. The same Demand Reduction may not be offered by a Demand Reduction Provider and by a customer as Operating Reserves or Regulation Service.

**Demand Reduction Aggregator:** A Demand Reduction Provider, qualified pursuant to ISO Procedures, that bids Demand Side Resources of at least 1 MW through contracts with Demand Side Resources and is not a Load Serving Entity.

**Demand Reduction Incentive Payment:** A payment to Demand Reduction Providers that are scheduled to make Day-Ahead Demand Reductions. The payment shall be equal to the product of: (a) the Day-Ahead hourly LBMP at the applicable Demand Reduction bus; and (b) the lesser of the actual hourly Demand Reduction or the Day-Ahead scheduled hourly Demand Reduction in MW.

**Demand Reduction Provider:** A Customer that is eligible, pursuant to the relevant ISO Procedures, to bid Demand Side Resources of at least 1 MW as Energy into the Day-Ahead Market. A Demand Reduction Provider can be (i) a Load Serving Entity or (ii) a Demand Reduction Aggregator.

**Demand Side Ancillary Service Program (DSASP):** An ISO program that allows qualified DSASP Resources to participate in the ISO's Day-Ahead and Real-Time Markets for Operating Reserves and Regulation Service in accordance with the ISO Services Tariff and ISO Procedures.

**Demand Side Ancillary Service Program Resource (DSASP Resource):** A Demand Side Resource or an aggregation of Demand Side Resources located in the NYCA with at least 1 MW of load reduction that is represented by a point identifier (PTID) and is assigned to a Load Zone or Subzone by the ISO and that is:

- i. Capable of controlling demand in a responsive, measurable and verifiable manner within time limits prescribed by the ISO; and
- ii. Qualified to participate in the ISO's Ancillary Services market as a Supplier of Operating Reserves or Regulation Service pursuant to the ISO Services Tariff and ISO Procedures.

**Demand Side Ancillary Service Program Provider (DSASP Provider):** A Customer that is eligible, pursuant to the ISO Tariff and ISO Procedures, to offer DSASP Resource(s) as Operating Reserves or Regulation Service in the Day-Ahead or Real-Time Market. A DSASP Provider is responsible for enrolling its DSASP Resource(s), and, when communicating directly with the ISO via telemetry, is responsible for dispatching its DSASP Resource(s).

**Demand Side Resource:** A Resource located in the NYCA that: (i) is capable of controlling demand by either curtailing its Load or by operating a Local Generator to reduce Load from the NYS Transmission System and/or the distribution system at the direction of the ISO, in a responsive, measurable and verifiable manner within time limits, and (ii) is qualified to participate in competitive Energy, Capacity, Operating Reserves or Regulation Service markets, or in the Emergency Demand Response Program pursuant to this ISO Services Tariff and the ISO Procedures.

**Dennison Scheduled Line:** A transmission facility that interconnects the NYCA to the Hydro Quebec Control Area at the Dennison substation, located near Massena, New York and extends

through the province of Ontario, Canada (near the City of Cornwall) to the Cedars substation in Quebec, Canada.

**Dependable Maximum Gross Capability ("DMGC"):** The sustained maximum output of the Generator of a BTM:NG Resource, as demonstrated by the performance of a test or through actual operation in accordance with, and averaged over a continuous time period as defined in, ISO Procedures.

**Dependable Maximum Net Capability ("DMNC"):** The sustained maximum net output of a Generator, as demonstrated by the performance of a test or through actual operation, averaged over a continuous time period as defined in the ISO Procedures.

**Desired Net Interchange** ("**DNI**"): A mechanism used to set and maintain the desired Energy interchange (or transfer) between two Control Areas; it is scheduled ahead of time and can be changed manually in real-time.

**Direct Sale:** As defined in the ISO OATT.

**Dispatchable:** A bidding mode in which Generators or Demand Side Resources indicate that they are willing to respond to real-time control from the ISO. A Dispatchable Generator, not including the Generator of a BTM:NG Resource, may be either ISO-Committed Flexible or Self-Committed Flexible. A Dispatchable Generator that is the Generator serving a BTM:NG Resource must be Self-Committed Flexible. Dispatchable Demand Side Resources must be ISO-Committed Flexible. Dispatchable Resources that are not providing Regulation Service will follow five-minute RTD Base Point Signals. Dispatchable Resources that are providing Regulation Service will follow six-second AGC Base Point Signals.

**Dispatch Day:** The twenty-four (24) hour (or, if appropriate, the twenty-three (23) or twenty-five (25) hour) period commencing at the beginning of each day (0000 hour).

**Dispute Resolution Administrator ("DRA"):** An individual hired by the ISO to administer the Expedited Dispute Resolution Procedures in Section 5.17 of the ISO Services Tariff.

**DMNC Test Period:** The period within a Capability Period during which a Resource shall conduct a DMNC test, or a BTM:NG Resource shall conduct a DMGC test, if such a test is required. Such periods will be established pursuant to the ISO Procedures.

**DSASP Baseline MW**: The value of the Load level of a DSASP resource in the dispatch interval immediately preceding the interval with a non-zero Base Point Signal, where the status of the regulation flag is set to the off condition for either Operating Reserves or Regulation service.

**DSASP Component:** The credit requirement for a Demand Side Resource to offer Ancillary Services, and a component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Dynamically Scheduled Proxy Generator Bus:** A Proxy Generator Bus for which the ISO may schedule Transactions at 5 minute intervals in real time. Dynamically Scheduled Proxy Generator Buses are identified in Section 4.4.4 of the Services Tariff.

# 2.5 Definitions - E

**East of Central-East:** An electrical area comprised of Load Zones F, G, H, I, J, and K, as identified in the ISO Procedures.

**East of Central-East Excluding Long Island:** An electrical area comprised of Load Zones F, G, H, I, and J, as identified in the ISO Procedures.

**East of Central-East Excluding New York City and Long Island:** An electrical area comprised of Load Zones F, G, H, and I, as identified in the ISO Procedures.

**Economic Operating Point:** The megawatt quantity which is a function of: i) the real-time LBMP at the Resource bus; and ii) the Supplier's real-time eleven constant cost step Energy Bid, for the Resource, such that (a) the offer price associated with Energy offers below that megawatt quantity (if that megawatt quantity is not that Resource's minimum output level) must be less than or equal to the real-time LBMP at the Resource bus, and (b) the offer price associated with Energy offers above that megawatt quantity (if that megawatt quantity is not that Resource's maximum output level) must be greater than or equal to the real-time LBMP at the Resource bus. In cases where multiple megawatt values meet conditions (a) and (b), the Economic Operating Point is the megawatt value meeting these conditions that is closest to the Resource's real-time scheduled Energy injection. In cases where the Economic Operating Point would be less than the minimum output level, the Economic Operating Point will be set equal to the MW value of the first point on the Energy Bid curve and in cases where the Economic Operating Point would be greater than the maximum output level, the Economic Operating Point will be set equal to the MW value of the last point on the Energy Bid curve. When evaluating the Economic Operating Point of a BTM:NG Resource, only Energy offers corresponding to quantities in excess of its Host Load will be considered.

**Emergency:** Any abnormal system condition that requires immediate automatic or manual action to prevent or limit loss of transmission facilities or Generators that could adversely affect the reliability of an electric system.

**Emergency Demand Response Program ("EDRP"):** A program pursuant to which the ISO makes payments to Curtailment Service Providers that voluntarily take effective steps in real time, pursuant to ISO procedures, to reduce NYCA demand in Emergency conditions.

**Emergency State**: The state that the NYS Power System is in when an abnormal condition occurs that requires automatic or immediate, manual action to prevent or limit loss of the NYS Transmission System or Generators that could adversely affect the reliability of the NYS Power System.

Emergency Upper Operating Limit ( $UOL_E$ ): The upper operating limit that a Generator, except for the Generator of a BTM:NG Resource, indicates it expects to be able to reach, the upper operating limit that a BTM:NG Resource indicates it expects to be able to inject into the grid after serving its Host Load and subject to its Injection Limit, or the maximum amount of demand that a Demand Side Resource expects to be able to reduce, at the request of the ISO

during extraordinary conditions. Each Resource shall specify a UOL<sub>E</sub> in its bids that shall be equal to or greater than its stated Normal Upper Operating Limit.

**Energy ("MWh"):** A quantity of electricity that is bid, produced, purchased, consumed, sold, or transmitted over a period of time, and measured or calculated in megawatt hours.

**Energy and Ancillary Services Component:** A component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Energy Limited Resource:** Capacity resources, not including BTM:NG Resources, that, due to environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, are unable to operate continuously on a daily basis, but are able to operate for at least four consecutive hours each day. Energy Limited Resources must register their Energy limiting characteristics with, and justify them to, the ISO consistent with ISO Procedures.

**Equivalent Demand Forced Outage Rate:** The portion of time a unit is in demand, but is unavailable due to forced outages.

**Equivalency Rating:** A rating determined by the ISO, at a Customer's request, based on the ISO's financial evaluation of an Unrated Customer that shall serve as the starting point of the ISO's determination of an amount of Unsecured Credit to be granted to the Customer, if any, as provided in Table K-1 of Attachment K to this Services Tariff.

**ETA Agent:** As defined in the ISO OATT.

**ETCNL TCC:** As defined in the ISO OATT.

**Excess Amount:** The difference, if any, between the dollar amounts charged to purchasers of Unforced Capacity in an ISO-administered Unforced Capacity auction and the dollar amounts paid to sellers of Unforced Capacity in that ISO-administered Installed Capacity auction.

**Excess Congestion Rents:** As defined in the ISO OATT.

Existing Transmission Capacity for Native Load ("ETCNL"): As defined in the ISO OATT.

Existing Transmission Agreement ("ETA"): As defined in the ISO OATT.

**Expected EDRP/SCR MW:** The aggregate Load reduction (in MW) expected to be realized from EDRP and/or SCRs during the real-time intervals that the ISO has called upon EDRP and/or SCRs to provide Load reduction in a Scarcity Reserve Region, as determined based on the ISO's calculation of the historical performance of EDRP and SCRs. There will be separate values for voluntary and mandatory Load reductions. When determining the historical performance of SCRs, provision of Load reduction shall be deemed mandatory if the ISO has satisfied the notification requirements set forth in Section 5.12.11.1 of this ISO Services Tariff as it relates to the SCRs in the applicable Load Zone, otherwise provision of such Load reduction shall be deemed voluntary. When determining the historical performance of the EDRP, provision of Load reduction by EDRP shall be deemed voluntary.

**Expected Load Reduction:** For purposes of determining the Real-Time Locational Based Marginal Price, the reduction in Load expected to be realized in real-time from activation of the Emergency Demand Response Program and from Load reductions requested from Special Case Resources, as established pursuant to ISO Procedures.

**Expedited Dispute Resolution Procedures:** The dispute resolution procedures applicable to disputes arising out of the Installed Capacity provisions of this ISO Services Tariff (as set forth in Section 5.17) and the Customer settlements provisions of this ISO Services Tariff (as set forth in Section 7.4.3).

**Export**: A Bilateral Transaction or purchase from the LBMP Market where the Energy is delivered to an NYCA Interconnection with another Control Area.

**Export Credit Requirement:** A component of the External Transaction Component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**External**: An entity (<u>e.g.</u>, Supplier, Transmission Customer) or facility (<u>e.g.</u>, Generator, Interface) located outside the Control Area being referenced or between two or more Control Areas. Where a specific Control Area is not referenced, the NYCA is the intended reference.

**External Transaction Component**: A component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**External Transactions**: Purchases, sales or exchanges of Energy, Capacity or Ancillary Services for which either the Point of Injection ("POI") or Point of Withdrawal ("POW") or both are located outside the NYCA (<u>i.e.</u>, Exports, Imports or Wheels Through).

## 2.6 Definitions - F

**Facility Flow-Based Methodology**: As defined in the ISO OATT.

**Federal Power Act ("FPA")**: The Federal Power Act, as may be amended from time-to-time (<u>See</u> 16 U.S.C. § 796 et seq.).

**Firm Point-To-Point Transmission Service**: Transmission Service under this Tariff that is scheduled between specified Points of Receipt and Delivery pursuant to the ISO OATT. Firm Point-To-Point Transmission Service is service for which the Transmission Customer has agreed to pay the Congestion associated with its service. A Transmission Customer may fix the price of Congestion associated with its Firm Point-To-Point Transmission Service by acquiring sufficient TCCs with the same Points of Receipt and Delivery as its Transmission Service.

**Firm Transmission Service**: Transmission service requested by a Transmission Customer willing to pay Congestion Rent.

**First Settlement**: The process of establishing binding financial commitments on the part of Customers participating in the Day-Ahead Market based on Day-Ahead LBMP.

**Fixed Block Unit:** A unit that, due to operational characteristics, can only be dispatched in one of two states: either turned completely off, or turned on and run at a fixed capacity level.

**Fixed Price TCC**: As defined in the ISO OATT.

**Forced Outage:** An unscheduled inability of a Market Participant's Generator to produce Energy that does not meet the notification criteria to be classified as a scheduled outage or derate as established in ISO Procedures. If the Forced Outage of a Generator starts on or after May 1, 2015, the Forced Outage will expire at the end of the month which contains the 180<sup>th</sup> day of its Forced Outage but may be extended if the Market Participant has Commenced Repair of its Generator.

## 2.7 Definitions - G

**GADS Data**: Data submitted to the NERC for collection into the NERC's Generating Availability Data System ("GADS").

**Gap Solution**: This term shall have the meaning given in Attachment Y to the OATT.

**Generator**: A facility, including the Generator of a BTM:NG Resource, capable of supplying Energy, Capacity and/or Ancillary Services that is accessible to the NYCA. A Generator comprised of a group of generating units at a single location, which grouped generating units are separately committed and dispatched by the ISO, and for which Energy injections are measured at a single location, and each unit within that group, shall be considered a Generator.

**G-J Locality:** The Locality comprised of Load Zones G, H, I, and J collectively.

Good Utility Practice: Any of the practices, methods or acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods or acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to delineate acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act Section 215(a)(4).

**Grandfathered Rights**: As defined in the ISO OATT.

**Grandfathered TCCs**: As defined in the ISO OATT.

# 2.9 Definitions - I

**ICAP Demand Curve**: A series of prices which decline until reaching zero as the amount of Installed Capacity increases.

**ICAP Demand Curve Reset Filing Year:** A calendar year in which the ISO files ICAP Demand Curves, in accordance with Section 5.14.1.2.1.11 or Section 5.14.1.2.2.4.11.

**ICAP Ineligible Forced Outage**: The outage state of a Market Participant's Generator after: i) the expiration or termination of its Forced Outage pursuant to the provisions in Section 5.18.1.6 of this Services Tariff, which Forced Outage started on or after May 1, 2015; ii) the Market Participant voluntarily reclassified its Forced Outage pursuant to the provisions in Section 5.18.2.1 of this Services Tariff, which Forced Outage started on or after May 1, 2015; or iii) substantial actions have been taken, such as dismantling or disabling essential equipment, which actions are inconsistent with an intention to return the Generator to operation and the Energy market. A Generator in an ICAP Ineligible Forced Outage is subject to the return-to-service provisions in Section 5.18.4 of this Services Tariff and is ineligible to participate in the Installed Capacity market.

**ICAP Spot Market Auction**: An auction conducted pursuant to Section 5.14.1.1 of this Tariff to procure and set LSE Unforced Capacity Obligations for the subsequent Obligation Procurement Period, pursuant to the Demand Curves applicable to each respective LSE and the supply that is offered.

**Import Constrained Locality:** New York City and the G-J Locality.

**Import Credit Requirement:** A component of the External Transaction Component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Import Curtailment Guarantee Payment**: A payment made in accordance with Section 4.5.3.2 and Attachment J of this ISO Services Tariff to compensate a Supplier whose Import is Curtailed by the ISO.

**Imports**: A Bilateral Transaction or sale to the LBMP Market where Energy is delivered to a NYCA Interconnection from another Control Area.

**Imputed LBMP Revenue:** Revenue developed for calculating a Generator or Import Bid Production Cost guarantee, for any interval, which equals the product of (i) the Bilateral Transaction scheduled MW in the Day-Ahead Market or real-time market, as appropriate, from the Generator bus or Proxy Generator Bus, as appropriate, for the interval, (ii) the LBMP, in units of \$/MWh, either Day-Ahead or real-time as appropriate, at the Generator or Proxy Generator Bus for that interval and (iii) the length of the interval, in units of hours.

**Inactive Reserves:** The outage state in which a Market Participant's Generator is unavailable to produce Energy for a limited period of time not to exceed six months, for reasons that are not equipment related, which state does not meet the criteria to be classified as any other outage

pursuant to the provisions of this Services Tariff or of ISO Procedures. A Generator in Inactive Reserves is ineligible to participate in the Installed Capacity market.

**Inadvertent Energy Accounting**: The accounting performed to track and reconcile the difference between net actual Energy interchange and scheduled Energy interchange of a Control Area with adjacent Control Areas.

**In-City:** Located electrically within the New York City Locality (LBMP Load Zone J).

Incremental Average Coincident Load ("Incremental ACL"): Beginning with the Summer 2014 Capability Period, the amount of qualifying Load that may be added to the Average Coincident Load of a Special Case Resource. In order to qualify to use Incremental ACL the SCR must enroll with an ACL and report an increase in the Load of the facility that is supplied by the NYS Transmission System and/or distribution system that meets or exceeds the SCR Load Change Reporting Threshold in accordance with this Services Tariff. The Incremental ACL reported in a Capability Period cannot exceed one-hundred percent (100%) of the ACL that has been calculated for the SCR when it first enrolls in the Capability Period. For resources reporting an Incremental ACL, the Net Average Coincident Load shall equal the enrolled ACL plus the reported Incremental ACL less any applicable SCR Change of Status. Each resource for which a RIP reports an Incremental ACL is subject to verification subsequent to the Capability Period pursuant to reporting requirements and calculations using the SCR's metered Load values provided in Section 5.12.11.1.5 of this Services Tariff and ISO Procedures.

**Incremental Energy Bid**: A series of monotonically increasing constant cost incremental Energy steps that indicate the quantities of Energy for a given price that an entity is willing to supply to the ISO Administered Markets.

**Incremental TCC:** As defined in the ISO OATT.

**Independent System Operator** ("**ISO**"): The New York Independent System Operator, Inc., a not-for-profit corporation established pursuant to the ISO Agreement.

**Independent System Operator Agreement ("ISO Agreement")**: The agreement that establishes the New York ISO.

**Independent System Operator/New York State Reliability Council ("ISO/NYSRC Agreement")**: The agreement between the ISO and the New York State Reliability Council governing the relationship between the two organizations.

**Independent System Operator-Transmission Owner Agreement ("ISO/TO Agreement")**: The agreement that establishes the terms and conditions under which the Member Systems transferred to the ISO Operational Control over designated transmission facilities.

**Indicative NCZ Locational Minimum Installed Capacity Requirement:** The amount of capacity that must be electrically located within a New Capacity Zone, or possess an approved Unforced Capacity Deliverability Right, in order to ensure that sufficient Energy and Capacity are available in that NCZ and that appropriate reliability criteria are met.

**Injection Limit:** The maximum injection of a BTM:NG Resource, in MW, into the NYS Transmission System or distribution system at the BTM:NG Resource's Point of Injection. The Injection Limit for a BTM:NG Resource must be at least 1 MW.

**Installed Capacity** ("**ICAP**"): External or Internal Capacity, in increments of 100 kW, that is made-available pursuant to Tariff requirements and ISO Procedures.

**Installed Capacity Equivalent**: The Resource capability that corresponds to its Unforced Capacity, calculated in accordance with ISO Procedures.

**Installed Capacity Marketer:** An entity which has signed this Tariff and which purchases Unforced Capacity from qualified Installed Capacity Suppliers, or from LSEs with excess Unforced Capacity, either bilaterally or through an ISO-administered auction. Installed Capacity Marketers that purchase Unforced Capacity through an ISO-administered auction may only resell Unforced Capacity purchased in such auctions in the NYCA.

**Installed Capacity Supplier**: An Energy Limited Resource, Generator, Installed Capacity Marketer, Responsible Interface Party, Intermittent Power Resource, Limited Control Run of River Hydro Resource, municipally-owned generation, BTM:NG Resource, System Resource or Control Area System Resource that satisfies the ISO's qualification requirements for supplying Unforced Capacity to the NYCA.

**Interconnection or Interconnection Points** ("**IP**"): The point(s) at which the NYCA connects with a distribution system or adjacent Control Area. The IP may be a single tie line or several tie lines that are operated in parallel.

**Interface**: A defined set of transmission facilities that separate Load Zones and that separate the NYCA from adjacent Control Areas.

**Interface MW - Mile Methodology:** As defined in the ISO OATT.

**Interim Service Provider ("ISP")**: As defined in Attachment FF to the OATT.

**Intermittent Power Resource:** A device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator. In New York, resources that depend upon wind, solar energy or landfill gas for their fuel have been classified as Intermittent Power Resources. Each Intermittent Power Resource that depends on wind as its fuel shall include all turbines metered at a single scheduling point identifier (PTID).

**Internal**: An entity (<u>e.g.</u>, Supplier, Transmission Customer) or facility (<u>e.g.</u>, Generator, Interface) located within the Control Area being referenced. Where a specific Control Area is not referenced, internal means the NYCA.

**Internal Transactions**: Purchases, sales or exchanges of Energy, Capacity or Ancillary Services where the Generator and Load are located within the NYCA.

**Investment Grade Customer**: A Customer that meets the criteria set forth in Section 26.3 of Attachment K to this Services Tariff.

**Investor-Owned Transmission Owners**: At the present time these include: Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation.

**ISO Administered Markets**: The Day-Ahead Market and the Real-Time Market (collectively the "LBMP Markets") and any other market or auction administered by the ISO.

**ISO-Committed Fixed**: In the Day-Ahead Market, a bidding mode in which a Generator requests that the ISO commit and schedule it. In the Real-Time Market, a bidding mode in which a Generator, with ISO approval, requests that the ISO schedule it no more frequently than every 15 minutes. A Generator scheduled in the Day-Ahead Market as ISO-Committed Fixed will participate as a Self-Committed Fixed Generator in the Real-Time Market unless it changes bidding mode, with ISO approval, to participate as an ISO-Committed Fixed Generator. A BTM:NG Resource is not permitted to utilize the ISO-Committed Fixed bidding mode.

**ISO-Committed Flexible**: A bidding mode in which a Dispatchable Generator or Demand Side Resource follows Base Point Signals and is committed by the ISO. A BTM:NG Resource is not permitted to utilize the ISO-Committed Flexible bidding mode.

**ISO Market Power Monitoring Program**: The monitoring program approved by the Commission and administered by the ISO and the Market Monitoring Unit that is designed to monitor the possible exercise of market power in ISO Administered Markets.

**ISO OATT**: The ISO Open Access Transmission Tariff.

**ISO Procedures**: The procedures adopted by the ISO in order to fulfill its responsibilities under the ISO OATT, the ISO Services Tariff and the ISO Related Agreements.

**ISO Related Agreements**: Collectively, the ISO Agreement, the ISO/TO Agreement, the NYSRC Agreement, the ISO/NYSRC Agreement, and the Operating Agreements.

**ISO Services Tariff (the "Tariff")**: The ISO Market Administration and Control Area Services Tariff.

**ISO Tariffs**: The ISO OATT and the ISO Services Tariff, collectively.

**ISP UCAP MW:** The quantity of Unforced Capacity determined by the ISO in accordance with Section 5.14.1.1 of this Services Tariff.

# 2.14 Definitions - N

**Native Load Customers**: The wholesale and retail power customers of the Transmission Owners on whose behalf the Transmission Owners, by statute, franchise, regulatory requirement, or contract, have undertaken an obligation to construct and operate the Transmission Owners' systems to meet the reliable electric needs of such customers.

**NCZ Locational Minimum Installed Capacity Requirement:** The amount of Capacity that must be electrically located within an NCZ, or possess an approved Unforced Capacity Deliverability Right, designed to ensure that sufficient Energy and Capacity are available in that NCZ and that appropriate reliability criteria are met.

**NCZ Study Capability Period:** The Summer Capability Period that begins five years from May 1 in a calendar year including an NCZ Study Start Date.

**NCZ Study Start Date:** September 1 or the next business day thereafter in the calendar year prior to an ICAP Demand Curve Reset Filing Year.

**Neptune Scheduled Line:** A transmission facility that interconnects the NYCA to the PJM Interconnection LLC Control Area at Levittown, Town of Hempstead, New York and terminates in Sayerville, New Jersey.

**NERC**: The North American Electric Reliability Council or, as applicable, the North American Electric Reliability Corporation.

**Net Auction Revenue**: As defined in the ISO OATT.

**Net Average Coincident Load ("Net ACL"):** The effective Average Coincident Load calculated and used by the ISO for a Special Case Resource during a specific month in which a SCR Change of Status was reported for the resource or, beginning with the Summer 2014 Capability Period, an Incremental Average Coincident Load was reported for the resource.

**Net Benefits Test:** The monthly calculations performed by the ISO in accordance with Section 4.2.1.9 of the ISO Services Tariff and ISO Procedures to determine the Monthly Net Benefit Offer Floor, the threshold price at which the dispatch of demand response resources meets the test required by Commission Order No. 745.

**Net Congestion Rent:** As defined in the ISO OATT.

**Net Installed Capacity ("Net-ICAP"):** The amount of Installed Capacity that a BTM:NG Resource has demonstrated (in accordance with ISO Procedures) it is capable of supplying in accordance with Section 5.12.6.1 of this Tariff, used to determine its Net Unforced Capacity.

**Net Unforced Capacity ("Net-UCAP"):** The amount of Unforced Capacity a BTM:NG Resource can offer in the ISO's Installed Capacity market.

**Network Integration Transmission Service**: The Transmission Service provided under Part 4 of the ISO OATT.

**New Capacity Zone** ("NCZ"): A single Load Zone or group of Load Zones that is proposed as a new Locality, and for which the ISO shall establish a Demand Curve.

**New York City**: The electrical area comprised of Load Zone J, as identified in the ISO Procedures.

**New York Control Area** ("NYCA"): The Control Area that is under the control of the ISO which includes transmission facilities listed in the ISO/TO Agreement Appendices A-1 and A-2, as amended from time-to-time, and generation located outside the NYS Power System that is subject to protocols (e.g., telemetry signal biasing) which allow the ISO and other Control Area operator(s) to treat some or all of that generation as though it were part of the NYS Power System.

New York Power Pool ("NYPP"): An organization established by agreement (the "New York Power Pool Agreement") made as of July 21, 1966, and amended as of July 16, 1991, by and among Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Lighting Company, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., Rochester Gas and Electric Corporation, and the Power Authority of the State of New York. LIPA became a Member of the NYPP on May 28, 1998 as a result of the acquisition of the Long Island Lighting Company by the Long Island Power Authority.

**New York State Bulk Power Transmission Facility:** This term shall have the meaning given in Attachment Y to the OATT.

**New York State Power System ("NYS Power System")**: All facilities of the NYS Transmission System, and all those Generators located within the NYCA or outside the NYCA, some of which may from time-to-time be subject to operational control by the ISO.

**New York State Reliability Council ("NYSRC")**: An organization established by agreement among the Member Systems to promote and maintain the reliability of the NYS Power System.

New York State Reliability Council Agreement ("NYSRC Agreement"): The agreement which established the NYSRC.

New York State Transmission System ("NYS Transmission System"): The entire New York State electric transmission system, which includes: (1) the Transmission Facilities Under ISO Operational Control; (2) the Transmission Facilities Requiring ISO Notification; and (3) all remaining transmission facilities within the NYCA.

**Non-Competitive Proxy Generator Bus**: A Proxy Generator Bus for an area outside of the New York Control Area that has been identified by the ISO as characterized by non-competitive Import or Export prices, and that has been approved by the Commission for designation as a Non-Competitive Proxy Generator Bus. Non-Competitive Proxy Generator Buses are identified in Section 4.4.4 of the Services Tariff., as set forth in Section 4.4.2.2 of the MST

**Non-Firm-Point-To-Point Transmission Service:** Point-To-Point Transmission Service for which a Transmission Customer is not willing to pay Congestion. Such service is not available in the markets that the NYISO administers.

**Non-Investment Grade Customer**: A Customer that does not meet the criteria necessary to be an Investment Grade Customer, as set forth in Section 26.3 of Attachment K to this Services Tariff.

**Non-Utility Generator** ("NUG," "Independent Power Producer" or "IPP"): Any entity that owns or operates an electric generating facility that is not included in an electric utility's rate base. This term includes, but is not limited to, cogenerators and small power producers and all other non-utility electricity producers, such as exempt wholesale Generators that sell electricity.

**Normal State**: The condition that the NYS Power System is in when the Transmission Facilities Under ISO Operational Control are operated within the parameters listed for Normal State in the Reliability Rules. These parameters include, but are not limited to, thermal, voltage, stability, frequency, operating reserve and Pool Control Error limitations.

**Normal Upper Operating Limit (UOL**<sub>N</sub>): The upper operating limit that a Generator, except for the Generator of a BTM:NG Resource, indicates it expects to be able to reach, or the upper operating limit a BTM:NG Resource indicates it expects to be able to inject into the grid after serving its Host Load and subject to its Injection Limit, or the maximum amount of demand that a Demand Side Resource expects to be able to reduce, during normal conditions. Each Resource will specify its  $UOL_N$  in its Bids which shall be reduced when the Resource requests that the ISO derate its Capacity or the ISO derates the Resource's Capacity. A Normal Upper Operating Limit may be submitted as a function depending on one or more variables, such as temperature or pondage levels, in which case the Normal Upper Operating Limit applicable at any time shall be determined by reference to that schedule.

**Northport-Norwalk Scheduled Line**: A transmission facility that originates at the Northport substation in New York and interconnects the NYCA to the ISO New England Control Area at the Norwalk Harbor substation in Connecticut.

**Notice of Intent to Return:** The notice a Supplier with a Generator that is in a Mothball Outage or ICAP Ineligible Forced Outage provides to the ISO, pursuant to ISO Procedures, that gives the date by which it intends to return to the Energy market, which proposed return date shall be no later than the expiration date of the Generator's Mothball Outage or ICAP Ineligible Forced Outage.

**NPCC**: The Northeast Power Coordinating Council.

**NRC**: The Nuclear Regulatory Commission or any successor thereto.

**NYCA Installed Reserve Margin**: The ratio of the amount of additional Installed Capacity required by the NYSRC in order for the NYCA to meet NPCC reliability criteria to the forecasted NYCA upcoming Capability Year peak Load, expressed as a decimal.

**NYCA Minimum Installed Capacity Requirement:** The requirement established for each Capability Year by multiplying the NYCA peak Load forecasted by the ISO by the quantity one plus the NYCA Installed Reserve Margin.

**NYCA Minimum Unforced Capacity Requirement**: The Unforced Capacity equivalent of the NYCA Minimum Installed Capacity Requirement.

**NYPA**: The Power Authority of the State of New York.

**NYPA Tax-Exempt Bonds**: Obligations of the New York Power Authority, the interest on which is not included in gross income under the Internal Revenue Code.

## 2.15 Definitions - O

**Obligation Procurement Period**: The period of time for which LSEs shall be required to satisfy their Unforced Capacity requirements. Starting with the 2001-2002 Winter Capability Period, Obligation Procurement Periods shall be one calendar month in duration and shall begin on the first day of each calendar month.

**Off-Peak**: The hours between 11 p.m. and 7 a.m., prevailing Eastern Time, Monday through Friday, and all day Saturday and Sunday, and NERC-defined holidays, or as otherwise decided by the ISO.

**Offeror**: An entity that offers to sell Unforced Capacity in an auction.

**On-Peak**: The hours between 7 a.m. and 11 p.m. inclusive, prevailing Eastern Time, Monday through Friday, except for NERC-defined holidays, or as otherwise decided by the ISO.

**Open Access Same-Time Information System ("OASIS")**: The information system and standards of conduct contained in Part 37 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

**Operating Agreement**: An agreement between the ISO and a non-incumbent owner of transmission facilities in the New York Control Area concerning the operation of the transmission facilities in the form of the agreement set forth in Appendix H (Section 31.11) of Attachment Y of the OATT.

**Operating Capacity**: Capacity that is readily converted to Energy and is measured in MW.

**Operating Committee**: A standing committee of the ISO created pursuant to the ISO Agreement, which coordinates operations, develops procedures, evaluates proposed system expansions and acts as a liaison to the NYSRC.

**Operating Data**: Pursuant to Section 5.12.5 of this Tariff, Operating Data shall mean GADS Data, data equivalent to GADS Data, CARL Data, metered Load data, or actual system failure occurrences data, all as described in the ISO Procedures.

**Operating Requirement**: The amount calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Operating Reserves**: Capacity that is available to supply Energy or reduce demand and that meets the requirements of the ISO. The ISO will administer Operating Reserves markets, in the manner described in this Article 4 and Rate Schedule 4 of this ISO Services Tariff, to satisfy the various Operating Reserves requirements, including locational requirements, established by the Reliability Rules and other applicable reliability standards. The basic Operating Reserves products that will be procured by the ISO on behalf of the market are classified as follows:

(1) Spinning Reserve: Operating Reserves provided by Generators and Demand Side Resources that meet the eligibility criteria set forth in Rate Schedule 4 of this ISO

Services Tariff that are already synchronized to the NYS Power System and can respond to instructions to change their output level, or reduce their Energy usage, within ten (10) minutes. Spinning Reserves may not be provided by Demand Side Resources that are Local Generators or by Behind-the-Meter Net Generation Resources that are comprised of more than one generating unit that are dispatched as a single aggregate unit;

- (2) 10-Minute Non-Synchronized Reserve: Operating Reserves provided by Generators Behind-the-Meter Net Generation Resources that are comprised of more than one generating unit that are dispatched as a single aggregate unit,, or Demand Side Resources, including Demand Side Resources using Local Generators, that meet the eligibility criteria set forth in Rate Schedule 4 of this ISO Services Tariff and that can be started, synchronized and can change their output level within ten (10) minutes; and
- (3) 30-Minute Reserve: Synchronized Operating Reserves provided by Generators, except Behind-the-Meter Net Generation Resources that are comprised of more than one generating unit and dispatched as a single aggregate unit, and Demand Side Resources that are not Local Generators; or non-synchronized Operating Reserves provided by Generators, Behind-the-Meter Net Generation Resources that are comprised of more than one generating unit and dispatched as a single aggregate unit, or Demand Side Resources that meet the eligibility criteria set forth in Rate Schedule 4 of this ISO Services Tariff and that can respond to instructions to change their output level within thirty (30) minutes, including starting and synchronizing to the NYS Power System.

**Operating Reserve Demand Curve**: A series of quantity/price points that defines the maximum Shadow Price for Operating Reserves meeting a particular Operating Reserve requirement corresponding to each possible quantity of Resources that the ISO's software may schedule to meet that requirement. A single Operating Reserve Demand Curve will apply to both the Day-Ahead Market and the Real-Time Market for each of the ISO's twelve Operating Reserve requirements.

**Operating Study Power Flow**: A Power Flow analysis that is performed at least once before each Capability Period that is used to determine each Interface Transfer Capability for the Capability Period (See Attachment M to the ISO OATT).

Operational Control: Directing the operation of the Transmission Facilities Under ISO Operational Control to maintain these facilities in a reliable state, as defined by the Reliability Rules. The ISO shall approve operational decisions concerning these facilities, made by each Transmission Owner before the Transmission Owner implements those decisions. In accordance with ISO Procedures, the ISO shall direct each Transmission Owner to take certain actions to restore the system to the Normal State. Operational Control includes security monitoring, adjustment of generation and transmission resources, coordination and approval of changes in transmission status for maintenance, determination of changes in transmission status for reliability, coordination with other Control Areas, voltage reductions and Load Shedding, except that each Transmission Owner continues to physically operate and maintain its facilities, including those facilities that it has agreed to operate and maintain in accordance with an operation and maintenance agreement.

**Optimal Power Flow ("OPF")**: As defined in the ISO OATT.

Order Nos. 888 et seq.: The Final Rule entitled Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, issued by the Commission on April 24, 1996, in Docket Nos. RM95-8-000 and RM94-7-001, as modified on rehearing, or upon appeal. (See FERC Stats. & Regs. [Regs. Preambles January 1991 - June 1996] ¶ 31,036 (1996) ("Order No. 888"), on reh'g, III FERC Stats. & Regs. ¶ 31,048 (1997) ("Order No. 888-A"), on reh'g, 81 FERC ¶ 61,248 (1997) ("Order No. 888-B"), order on reh'g, 82 FERC ¶ 61,046 (1998) ("Order No. 888-C")).

Order Nos. 889 et seq.: The Final Rule entitled Open Access Same-Time Information System (formerly Real- Time Information Networks) and Standards of Conduct, issued by the Commission on April 24, 1996, in Docket No. RM95-9-000, as modified on rehearing, or upon appeal. (See FERC Stats. & Regs. [Regs. Preambles 1991-1996] ¶ 31,035 (1996) ("Order No. 889"), on reh'g, III FERC Stats. & Regs. ¶ 31,049 (1997) ("Order No. 889-A"), on reh'g, 81 FERC ¶ 61,253 (1997) ("Order No. 889-B")).

**Original Residual TCC:** As defined in the ISO OATT.

**Out-of-Merit**: The designation of Resources committed and/or dispatched by the ISO at specified output limits for specified time periods to meet Load and/or reliability requirements that differ from or supplement the ISO's security constrained economic commitment and/or dispatch.

## 2.16 Definitions - P

**Performance Index**: An index, described in ISO Procedures, that tracks a Generator's response to AGC signals from the ISO.

**Performance Tracking System:** A system designed to report metrics for Generators and Loads which include but are not limited to actual output and schedules. This system is used by the ISO to measure compliance with criteria associated with the provision of Energy and Ancillary Services.

**Point-to-Point Transmission Service**: The reservation and transmission of Capacity and Energy on a firm basis from the Point(s) of Receipt to the Point(s) of Delivery under the ISO Tariffs.

**Point(s) of Delivery:** Point(s) on the NYS Transmission System or Proxy Generator Buses where Energy transmitted by the ISO will be made available to the Transmission Customer under the OATT. The Point(s) of Delivery shall be specified pursuant to ISO Procedures.

**Point(s) of Injection ("POI" or "Point of Receipt")**: The point(s) on the NYS Transmission System or Proxy Generator Buses where Energy, Capacity and Ancillary Services will be made available to the ISO by the delivering party under the ISO OATT or the ISO Services Tariff. (May be referred to as "Point of Receipt" or similar in some Existing Transmission Agreements.)

**Point(s) of Receipt:** Point(s) of interconnection on the NYS Transmission System or Proxy Generator Buses where Energy will be made available to the ISO by the Transmission Customer under the OATT. The Point(s) of Receipt shall be specified pursuant to ISO Procedures.

**Point(s) of Withdrawal ("POW" or "Point of Delivery")**: The point(s) on the NYS Transmission System or Proxy Generator Buses where Energy, Capacity and Ancillary Services will be made available to the receiving party under the ISO OATT or the ISO Services Tariff. (May be referred to as "Point of Delivery" or similar in some Existing Transmission Agreements.)

**Pool Control Error** ("PCE"): The difference between the actual and scheduled interchange with other Control Areas, adjusted for frequency bias.

**Post Contingency**: Conditions existing on a system immediately following a Contingency.

**Power Exchange** ("**PE**"): A commercial entity meeting the requirements for service under the ISO OATT or the ISO Services Tariff that facilitates the purchase and/or sale of Energy, Unforced Capacity and/or Ancillary Services in a New York Wholesale Market. A PE may transact with the ISO on its own behalf or as an agent for others.

**Power Factor**: The ratio of real power to apparent power (the product of volts and amperes, expressed in megavolt-amperes, MVA).

**Power Factor Criteria**: Criteria to be established by the ISO to monitor a Load's use of Reactive Power.

**Power Flow**: A simulation which determines the Energy flows on the NYS Transmission System and adjacent transmission systems.

**Price Adjustment**: For each month in the Prior Equivalent Capability Period, the Price Adjustment equals the quotient of dividing (a) the Henry Hub futures gas price for the like month in the succeeding same-season Capability Period by (b) the average Henry Hub spot gas price for that month in the Prior Equivalent Capability Period.

**Primary Holder**: As defined in the ISO OATT.

**Prior Equivalent Capability Period**: The previous same-season Capability Period.

Provisional Average Coincident Load ("Provisional ACL"): Prior to the Summer 2014 Capability Period, the value that may be used in lieu of Average Coincident Load for an eligible Special Case Resource for a maximum duration no greater than three consecutive Capability Periods and only where the SCR (i) has not previously been enrolled with the ISO and (ii) never had interval metering Load data available from the Prior Equivalent Capability Period.

Beginning with the Summer 2014 Capability Period, the value that may be used in lieu of ACL for an eligible SCR as provided in Section 5.12.11.1.2 of this Services Tariff. A SCR's Provisional ACL is verified subsequent to each eligible Capability Period pursuant to calculations using the SCR's metered Load values in accordance with Sections 5.12.11.1.1 and 5.12.11.1.2 of this Services Tariff and ISO Procedures. Any Load supported by generation produced from a Local Generator, other behind-the-meter generator, or other supply source located behind the SCR's meter operating during the applicable Capability Period SCR Load Zone Peak Hours may not be included in the SCR's metered Load values reported for the verification of its Provisional ACL.

**Proxy Generator Bus**: A proxy bus located outside the NYCA that is selected by the ISO to represent a typical bus in an adjacent Control Area and at which LBMP prices are calculated. The ISO may establish more than one Proxy Generator Bus at a particular Interface with a neighboring Control Area to enable the NYISO to distinguish the bidding, treatment and pricing of products and services at the Interface.

**PSC**: The Public Service Commission of the State of New York or any successor agency thereto.

**PSL**: The New York Public Service Law, Public Service Law § 1 et seq. (McKinney 1989 & Supp. 1997-98).

**Public Power Entity**: An entity which is either (i) a public authority or corporate municipal instrumentality, including a subsidiary thereof, created by the State of New York that owns or operates generation or transmission and that is authorized to produce, transmit or distribute electricity for the benefit of the public, or (ii) a municipally owned electric system that owns or controls distribution facilities and provides electric service, or (iii) a cooperatively owned electric system that owns or controls distribution facilities and provides electric service.

# 2.18 Definitions - R

**Ramp Capacity**: The amount of change in the Desired Net Interchange that generation located in the NYCA can support at any given time. Ramp capacity may be calculated for all Interfaces between the NYCA and neighboring Control Areas as a whole or for any individual Interface between the NYCA and an adjoining Control Area.

**RCRR TCC**: As defined in the ISO OATT.

**Reactive Power (MVAr)**: The product of voltage and the out-of-phase component of alternating current. Reactive Power, usually measured in MVAr, is produced by capacitors (synchronous condensers), Qualified Non-Generator Voltage Support Resources, and over-excited Generators and absorbed by reactors or under-excited Generators and other inductive devices including the inductive portion of Loads.

**Real Power Losses**: The loss of Energy, resulting from transporting power over the NYS Transmission System, between the Point of Injection and Point of Withdrawal of that Energy.

**Real-Time Bid**: A Bid submitted into the Real-Time Commitment before the close of the Real-Time Scheduling Window. A Real-Time Bid shall also include a CTS Interface Bid.

**Real-Time Commitment ("RTC"):** A multi-period security constrained unit commitment and dispatch model that co-optimizes to solve simultaneously for Load, Operating Reserves and Regulation Service on a least as-bid production cost basis over a two hour and fifteen minute optimization period. The optimization evaluates the next ten points in time separated by fifteen minute intervals. Each RTC run within an hour shall have a designation indicating the time at which its results are posted; "RTC<sub>00,</sub>" "RTC<sub>15,</sub>" "RTC<sub>30,</sub>" and "RTC<sub>45</sub>" post on the hour, and at fifteen, thirty, and forty-five minutes after the hour, respectively. Each RTC run will produce binding commitment instructions for the periods beginning fifteen and thirty minutes after its scheduled posting time and will produce advisory commitment guidance for the remainder of the optimization period. RTC<sub>15</sub> will also establish hourly External Transaction schedules, while all RTC runs may establish 15 minute External Transaction schedules at Variably Scheduled Proxy Generator Buses. Additional information about RTC's functions is provided in Section 4.4.2 of this ISO Services Tariff.

Real-Time Dispatch ("RTD"): A multi-period security constrained dispatch model that cooptimizes to solve simultaneously for Load, Operating Reserves, and Regulation Service on a
least-as-bid production cost basis over a fifty, fifty-five or sixty-minute period (depending on
when each RTD run occurs within an hour). The Real-Time Dispatch dispatches, but does not
commit, Resources, except that RTD may commit, for pricing purposes, Resources meeting
Minimum Generation Levels and capable of starting in ten minutes. RTD may also establish 5
minute External Transaction schedules at Dynamically Scheduled Proxy Generator Buses. RealTime Dispatch runs will normally occur every five minutes. Additional information about
RTD's functions is provided in Section 4.4.3 of this ISO Services Tariff. Throughout this ISO
Services Tariff the term "RTD" will normally be used to refer to both the Real-Time Dispatch
and to the specialized Real-Time Dispatch Corrective Action Mode software.

**Real-Time Dispatch—Corrective Action Mode ("RTD-CAM")**: A specialized version of the Real-Time Dispatch software that will be activated when it is needed to address unanticipated system conditions. RTD-CAM is described in Section 4.4.4 of this ISO Services Tariff.

**Real-Time LBMP**: The LBMPs established through the ISO Administered Real-Time Market.

**Real-Time Market**: The ISO Administered Markets for Energy and Ancillary Services resulting from the operation of the RTC and RTD.

**Real-Time Minimum Run Qualified Gas Turbine**: One or more gas turbines, offered in the Real-Time Market, which, because of their physical operating characteristics, may qualify for a minimum run time of two hours in the Real-Time Market. Characteristics that qualify gas turbines for this treatment are established by ISO Procedures and include using waste heat from the gas turbine-generated electricity to make steam for the generation of additional electricity via a steam turbine.

**Real-Time Scheduled Energy**: The quantity of Energy that a Supplier is directed to inject or withdraw in real-time by the ISO. Injections are indicated by positive Base Point Signals and withdrawals are indicated by negative Base Point Signals. Unless otherwise directed by the ISO, Dispatchable Supplier's Real-Time Scheduled Energy is equal to its RTD Base Point Signal, or, if it is providing Regulation Service, to its AGC Base Point Signal, and an ISO Committed Fixed or Self-Committed Fixed Supplier's Real-Time Scheduled Energy is equal to its bid output level in real-time.

**Real-Time Scheduling Window**: The period of time within which the ISO accepts offers and bids to sell and purchase Energy and Ancillary Services in the Real-Time Market for a given hour which period closes seventy-five (75) minutes before the start of that hour, or eighty-five (85) minutes before the start of that hour for Bids to schedule External Transactions at the Proxy Generator Buses associated with the Cross-Sound Scheduled Line, the Neptune Scheduled Line, the Linden VFT Scheduled Line, or the HTP Scheduled Line.

**Reconfiguration Auction**: As defined in the ISO OATT.

**Reference Bus:** The location on the NYS Transmission System relative to which all mathematical quantities, including Shift Factors and penalty factors relating to physical operation, will be calculated. The NYPA Marcy 345 kV transmission substation is designated as the Reference Bus.

**Regulation Capacity**: The Energy or Demand Reduction capability, measured in MW, that a Regulation Service provider offers and/or which it is scheduled to provide for Regulation Service.

**Regulation Capacity Market Price**: The price for Regulation Capacity determined by the ISO pursuant to section 15.3 of this Services Tariff.

**Regulation Capacity Response Rate:** The Regulation Capacity a Resource is capable of providing over five minutes, measured in MW/minute which shall not exceed the lowest normal energy response rate provided for the Resource and which must be sufficient to permit that

Resource to provide the Regulation Capacity (in MW) offered within a five-minute RTD interval. Reference to a Regulation response rate shall be a reference to the Regulation Capacity Response Rate.

**Regulation Movement**: The absolute value of the change in Energy or Demand Reduction over a six second interval, measured in MW, that a Regulation Service provider is instructed to deliver for the purpose of providing Regulation Service.

**Regulation Movement Market Price**: The price for Regulation Movement as determined by the ISO pursuant to section 15.3 of this Services Tariff.

**Regulation Movement Multiplier**: A factor with the value of thirteen (13), used with the Regulation Movement Bids, to schedule Regulation Service providers in both the Day-Ahead and Real-Time Energy markets. The ISO calculates the Regulation Movement Multiplier based on the historical relationship between the number of MW of Regulation Capacity that the ISO seeks to maintain in each hour and the number of Regulation Movement MW instructed by AGC in each hour.

**Regulation Movement Response Rate**: The amount of Regulation Movement a Regulation Service provider is capable of delivering in six seconds which shall not be less than, but can be equal to or greater than, the Regulation Capacity Response Rate equivalent.

**Regulation Service:** The Ancillary Service defined by the Commission as "frequency regulation" and that is instructed as Regulation Capacity in the Day-Ahead Market and as Regulation Capacity and Regulation Movement in the Real-Time Market as is further described in Section 15.3 of the Services Tariff. Day-Ahead and Real-Time Bids to provide Regulation Service shall include a Bid for Regulation Capacity and a Bid for Regulation Movement. The Regulation Service requirement or target level shall be for MW of Regulation Capacity.

**Regulation Service Demand Curve**: A series of quantity/price points that defines the maximum Shadow Price for Regulation Service corresponding to each possible quantity of Resources that the ISO's software may schedule to satisfy the ISO's Regulation Service constraint. A single Regulation Service Demand Curve will apply to both the Day-Ahead Market and the Real-Time Market for Regulation Service. The Shadow Price for Regulation Service shall be used to calculate Regulation Service payments under Rate Schedule 3 of this ISO Services Tariff.

**Regulation Revenue Adjustment Charge ("RRAC")**: A charge that will be assessed against certain Generators that are providing Regulation Service under Section 15.3.6 of Rate Schedule 3 to this ISO Services Tariff.

**Regulation Revenue Adjustment Payment ("RRAP")**: A payment that will be made to certain Generators that are providing Regulation Service under Section 15.3.6 of Rate Schedule 3 to this ISO Services Tariff.

**Reliability Rules**: Those rules, standards, procedures and protocols developed and promulgated by the NYSRC, including Local Reliability Rules, in accordance with NERC, NPCC, FERC,

PSC and NRC standards, rules and regulations and other criteria and pursuant to the NYSRC Agreement.

**Repair Plan**: A work plan, set of actions, and time frame for such actions, that is necessary to repair a Generator and return it to service as described in Section 5.18.1 of this Services Tariff.

**Required System Capability**: Generation capability required to meet an LSE's peak Load plus Installed Capacity Reserve obligation as defined in the Reliability Rules.

**Reserve Performance Index**: An index created by the ISO for the purpose of calculating the Day Ahead Margin Assurance Payment pursuant to Attachment J of this Services Tariff made to Demand Side Resources scheduled to provide Operating Reserves in the Day-Ahead Market.

**Residual Adjustment**: The adjustment made to ISO costs that are recovered through Schedule 1 of the OATT. The Residual Adjustment is calculated pursuant to Schedule 1 of the OATT.

**Residual Capacity Reservation Right ("RCRR")**: As defined in the ISO OATT.

**Residual Transmission Capacity**: As defined in the ISO OATT.

**Resource**: An Energy Limited Resource, Generator, Installed Capacity Marketer, Special Case Resource, Intermittent Power Resource, Limited Control Run of River Hydro Resource, municipally-owned generation, System Resource, BTM:NG Resource, Demand Side Resource or Control Area System Resource.

**Responsible Interface Party ("RIP")**: A Customer that is authorized by the ISO to be the Installed Capacity Supplier for one or more Special Case Resources and that agrees to certain notification and other requirements as set forth in this Services Tariff and in the ISO Procedures.

**Rest of State**: The set of all non-Locality NYCA LBMP Load Zones. As of the 2014/2015 Capability Year, Rest of State includes all NYCA LBMP Load Zones other than LBMP Load Zones G, H, I, J and K.

**Retired**: A Generator that has permanently ceased operating on or after May 1, 2015 either: i) pursuant to applicable notice; or ii) as a result of the expiration of its Mothball Outage or of its ICAP Ineligible Forced Outage.

**RMR Agreement**: shall have the meaning specified in Section 1.18 of the ISO's Open Access Transmission Tariff.

**RMR Avoidable Costs**: shall have the meaning specified in Section 1.18 of the ISO's Open Access Transmission Tariff.

**RMR Generator**: shall have the meaning specified in Section 1.18 of the ISO's Open Access Transmission Tariff.

**Rolling RTC**: The RTC run that is used to schedule a given 15-minute External Transaction. The Rolling RTC may be an RTC00, RTC15, RTC30 or RTC45 run.

# 2.19 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 this ISO 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 this ISO Services Tariff.

**Scheduled Energy Injections:** As defined in the ISO OATT.

Scheduled Energy Withdrawals: As defined in the ISO OATT.

**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 ISO 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.

**SCR Aggregation:** One or more Special Case Resources registered by the Responsible Interface Party at a single PTID, with the Load of each Special Case Resource electrically located within the same single Load Zone and the total of all Loads at the PTID greater than or equal to 0.1 MW.

SCR Change of Load: A decrease in the Load of the SCR that meets the criteria of a Qualified Change of Load Condition and the SCR Load Change Reporting Threshold in accordance with this Services Tariff and results in a total Load reduction, within the range of hours that corresponds with the Capability Period SCR Load Zone Peak Hours, and the total Load reduction persists for more than seven (7) and less than or equal to sixty (60) continuous days from the first date of the reduction of the Load.

SCR Change of Status: The decrease to be treated as an adjustment to the applicable Average Coincident Load of a Special Case Resource when the SCR meets the criteria of a Qualified Change of Status Condition and the SCR Load Change Reporting Threshold in accordance with this Services Tariff and results in a total Load reduction, within the range of hours that corresponds with the Capability Period SCR Load Zone Peak Hours, and the total Load reduction persists for more than sixty (60) continuous days from the first date of the reduction of the Load.

**SCR Load Change Reporting Threshold:** For a Special Case Resource with an applicable ACL greater than or equal to 500 kW, a reduction or increase in total Load not attributable to fluctuations in Load due to weather as described in ISO Procedures, that is equal to or greater than (i) thirty (30) percent of the applicable ACL for any month within the Capability Period, or (ii) five (5) MW in the NYC Locality or ten(10) MW if in any other Load Zone; whichever is less. For SCRs that elect to enroll with an Incremental ACL and do not increase the eligible Installed Capacity associated with the SCR, the RIP may enroll the SCR with a lower percentage change to its total Load increase as specified in Section 5.12.11.1.5 of this Services Tariff.

**SCUC**: Security Constrained Unit Commitment, described in Section 4.2.4 of this ISO Services Tariff.

**Secondary Holder**: As defined in the ISO OATT.

**Second Settlement**: The process of: (1) identifying differences between Energy production, Energy consumption or NYS Transmission System usage scheduled in a First Settlement and actual production, consumption, or 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 Market**: As defined in the ISO OATT.

**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 agreement, in the form of Attachment A to the Tariff, and any amendments or supplements thereto entered into by a Customer and the ISO of service under the

Tariff, or any unexecuted Service Agreement, amendments or supplements thereto, that the ISO unilaterally files with the Commission.

**Service Commencement Date**: The date that the ISO begins to provide service pursuant to the terms of a Service Agreement, or in accordance with the Tariff.

**Settlement**: The process of determining the charges to be paid to, or by, a 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.

**Shutdown Period**: An ISO approved period of time immediately following a shutdown order, such as a zero base point, that has been designated by the Customer, during which unstable operation prevents the unit from accurately following its base points.

**Sink Price Cap Bid**: A monotonically increasing Bid curve provided by an entity engaged in an Export, other than an entity submitting a CTS Interface Bid, to indicate the relevant Proxy Generator Bus LBMP at or 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 Case Resource** ("SCR"): Demand Side Resources whose Load is capable of being interrupted upon demand at the direction of the ISO, and/or Demand Side Resources that have a Local Generator, which is not visible to the ISO's Market Information System and is rated 100 kW or higher, that can be operated to reduce Load from the NYS Transmission System or the distribution system at the direction of the ISO. Special Case Resources are subject to special rules, set forth in Section 5.12.11.1 of this ISO Services Tariff and related ISO Procedures, in order to facilitate their participation in the Installed Capacity market as Installed Capacity Suppliers. SCRs that do not use Local Generators may be offered as synchronized Operating Reserves and Regulation Service and Energy in the Day-Ahead Market. SCRs, using Local Generators rated 100 kW or higher, that are not visible to the ISO's Market Information System may also be offered as non-synchronized Operating Reserves.

**Special Case Resource Capacity**: The Installed Capacity Equivalent of the Unforced Capacity which has been sold by a Special Case Resource in the Installed Capacity market during the current Capability Period.

**Start-Up Period**: An ISO approved period of time immediately following synchronization to the Bulk power system, which has been designated by a Customer and bid into the Real-Time

Market, during which unstable operation prevents the unit from accurately following its base points. The Start-Up Period shall be set to zero for a BTM:NG Resource.

**Station Power**: Station Power shall mean the Energy used by a Generator:

- 1. for operating electric equipment located on the Generator site, or portions thereof, owned by the same entity that owns the Generator, which electrical equipment is used by the Generator exclusively for the production of Energy and any useful thermal energy associated with the production of Energy; and
- 2. for the incidental heating, lighting, air conditioning and office equipment needs of buildings, or portions thereof, that are: owned by the same entity that owns the Generator; located on the Generator site; and
- 3. used by the Generator exclusively in connection with the production of Energy and any useful thermal energy associated with the production of Energy.

Station Power does not include any Energy: (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility or for charging a Limited Energy Storage Resource; or (iii) provided during a Black Start restoration by Generators that provide Black Start Capability Service.

**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 this 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**: A charge established by a Transmission Owner to recover Strandable Costs.

**Study Month**: The calendar month for which the ISO calculates the Monthly Net Benefit Offer Floor, in accordance with Section 4.2.1.9 of the ISO Services Tariff and ISO Procedures.

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

**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.

**Supplier**: A Party that is supplying the Capacity, Demand Reduction, 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.

**System Resource**: A portfolio of Unforced Capacity provided by Resources located in a single ISO-defined Locality, the remainder of the NYCA, or any single External Control Area, that is owned by or under the control of a single entity, which is not the operator of the Control Area where such Resources are located, and that is made available, in whole or in part, to the ISO.

#### 2.20 Definitions - T

**Tangible Net Worth**: The value, determined by the ISO, of all of a Customer's assets less both: (i) the amount of the Customer's liabilities and (ii) all of the Customer's intangible assets, including, but not limited to, patents, trademarks, franchises, intellectual property, and goodwill.

**Testing Period**: An ISO approved period of time during which a Generator is testing equipment and during which unstable operation prevents the unit from accurately following its base points.

Third Party Transmission Wheeling Agreements ("Third Party TWAs"): A Transmission Wheeling Agreement, as amended, between Transmission Owners or between a Transmission Owner and an entity that is not a Transmission Owner. Third Party TWAs are associated with the purchase (or sale) of Energy, Capacity, and/or Ancillary Services for the benefit of an entity that is not a Transmission Owner. All Third Party TWAs are listed in Table 1 A of Attachment L to the ISO OATT, and are designated in the "Treatment "column of Table 1A, as "Third Party TWA."

**Total Transfer Capability ("TTC")**: The amount of electric power that can be transferred over the interconnected transmission network in a reliable manner.

**Trading Hub**: A virtual location in a given Load Zone, modeled as a Generator bus and/or Load bus, for scheduling Bilateral Transactions in which both the POI and POW are located within the NYCA.

**Trading Hub Energy Owner**: A Customer who buys energy in a Bilateral Transaction in which the POW is a Trading Hub, or who sells energy in a Bilateral Transaction in which the POI is a Trading Hub.

**Transaction**: The purchase and/or sale of Energy or Capacity, or the sale of Ancillary Services. A Transaction bid into the Energy market to sell or purchase Energy or to schedule a Bilateral Transaction includes a Point of Injection and a Point of Withdrawal.

**Transfer Capability**: The measure of the ability of interconnected electrical systems to reliably move or transfer power from one area to another over all transmission facilities (or paths) between those areas under specified system conditions.

**Transmission Congestion Contract Component ("TCC Component")**: A component of the Operating Requirement, calculated in accordance with Section 26.4.2 of Attachment K to this Services Tariff.

**Transmission Congestion Contracts** ("TCCs"): As defined in the ISO OATT.

**Transmission Customer**: Any entity (or its designated agent) that requests or receives Transmission Service pursuant to a Service Agreement and the terms of the ISO OATT.

**Transmission District**: The geographic area in which a Transmission Owner, including LIPA, is obligated to serve Load, as well as the customers directly interconnected with the transmission facilities of the Power Authority of the State of New York.

**Transmission Facilities Under ISO Operational Control**: The transmission facilities of the Transmission Owners listed in Appendix A-1 of the ISO/TO Agreement ("Listing of Transmission Facilities Under ISO Operational Control") and listed in Appendix A-1 of an Operating Agreement ("NTO Transmission Facilities Under ISO Operational Control") that are subject to the Operational Control of the ISO. This listing may be amended from time-to-time as specified in the ISO/TO Agreement and Operating Agreements.

**Transmission Facilities Requiring ISO Notification**: The transmission facilities of the Transmission Owners listed in Appendix A-2 of the ISO/TO Agreement ("Listing of Transmission Facilities Requiring ISO Notification") and listed in Appendix A-2 of an Operating Agreement ("NTO Transmission Facilities Requiring ISO Notification") whose status of operation must be provided to the ISO by the Transmission Owners (for the purposes stated in the ISO Tariffs and in accordance with the ISO Tariffs, ISO/TO Agreement, and/or Operating Agreements) prior to the Transmission Owners making operational changes to the state of these facilities. This listing may be amended from time-to-time as specified in the ISO/TO Agreement and Operating Agreements.

**Transmission Facility Agreement ("TFA")**: Agreements governing the use of specific or designated transmission facilities charges to cover all, or a portion, of the costs to install, own, operate, or maintain transmission facilities, to the customer under the agreement and that have provisions to provide Transmission Service utilizing said transmission facilities. All Transmission Facility Agreements are listed in Attachment L. Table 1A, and are designated in the "Treatment" column as "Facility Agmt. – MWA."

**Transmission Fund ("T-Fund")**: The mechanism used under the current NYPP Agreement to compensate the Member Systems for providing Transmission Service for economy Energy Transactions over their transmission systems. Each Member System is allocated a share of the economy Energy savings in dollars assigned to the fund that is based on the ratio of their investment in transmission facilities to the sum of investments in transmission and generation facilities.

**Transmission Owner**: The public utility or authority (or its designated agent) that owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Tariff.

**Transmission Owner's Monthly Transmission System Peak**: The maximum hourly firm usage as measured in megawatts ("MW") of the Transmission Owner's transmission system in a calendar month.

**Transmission Reliability Margin ("TRM")**: The amount of TTC reserved by the ISO to ensure the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

**Transmission Service**: Point-To-Point Network Integration or Retail Access Transmission Service provided under the ISO OATT.

**Transmission Service Charge ("TSC")**: A charge designed to ensure recovery of the embedded cost of a transmission system owned by a Member System.

**Transmission Shortage Cost**: A series of quantity/price points that defines the maximum Shadow Price of a particular Constraint that will be used in calculating LBMP. The Transmission Shortage Costs are set at \$350/MWh for shortages above zero and less than or equal to 5MW, \$2350/MWh for shortages above 5MW and less than or equal to 20MW, and \$4000/MWh for shortages above 20MW.

**Transmission System**: The facilities operated by the ISO that are used to provide Transmission Services under the ISO OATT.

**Transmission Usage Charge ("TUC")**: Payments made by the Transmission Customer to cover the cost of Marginal Losses and, during periods of time when the transmission system is constrained, the marginal cost of Congestion. The TUC is equal to the product of: (1) the LBMP at the POW minus the LBMP at the POI (in \$/MWh); and (2) the scheduled or delivered Energy (in MWh).

**Transmission Wheeling Agreement ("TWA")**: The Agreements listed in Table 1A of Attachment L to the ISO OATT governing the use of specific or designated transmission facilities that are owned, controlled or operated by an entity for the transmission of Energy in interstate commerce. TWAs between Transmission Owners have been modified such that all TWAs between Transmission Owners are now MWAs.

# 7.2 Billing and Payment Procedures

For purposes of this Section 7.2:

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

# 7.2.1 Billing and Settlement Information

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

# 7.2.2 Invoicing and Payment

#### 7.2.2.1 Weekly Invoice

On or about each Wednesday, as set forth in ISO Procedures, the ISO shall submit an invoice to a Customer that indicates the net amount owed by or owed to the Customer for those services furnished under this ISO Services Tariff or the ISO OATT for the previous Complete Week Settlement Period or Stub Week Settlement Period that are designated as Weekly Invoice Components in ISO Procedures; *provided, however*, that the net amount owed by or owed to the Customer for those services furnished for a Stub Week Settlement Period that concludes a month shall be included in the next monthly invoice issued in accordance with Section 7.2.2.2 of this ISO Services Tariff.

# 7.2.2.2 Monthly Invoice

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

- for those services furnished under this ISO Services Tariff or the ISO OATT for a Stub
   Week Settlement Period that concludes the previous month that are designated as Weekly
   Invoice Components in ISO Procedures;
- (ii) for any adjustments to amounts contained in the weekly invoices issued in the previous month pursuant to Section 7.2.2.1 of this ISO Services Tariff;
- (iii) for those services furnished under this ISO Services Tariff or the ISO OATT in the previous month that are designated as Monthly Invoice Components in ISO Procedures;
- (iv) for any adjustments to amounts contained in a previously issued monthly invoice that was issued on or about one hundred twenty (120) days prior to the issuance of this invoice; and
- (v) for any adjustments to amounts contained in a previously issued monthly invoice as part of the Close-Out Settlement of that monthly invoice pursuant to Section 7.4.1.2 of this ISO Services Tariff.

# 7.2.2.3 Payment by the Customer

A Customer owing payments on net in its weekly invoice or its monthly invoice shall make those payments to the ISO through the ISO Clearing Account by the second business day after the date on which the weekly invoice or monthly invoice is rendered by the ISO unless otherwise specified in ISO Procedures. In accordance with Section 7.1.2 of this ISO Services

Tariff, the ISO may net any overpayment by the Customer for past estimated charges against current amounts due from the Customer or, if the Customer has no outstanding amounts due, the ISO may pay to the Customer an amount equal to the overpayment.

# 7.2.2.4 Payment by the ISO

Except as provided in Section 7.1.4 of this ISO Services Tariff, the ISO shall pay all net monies owed to a Customer in its weekly invoice or its monthly invoice from the ISO Clearing Account by the second business day after the due date for Customer payments set forth in Section 7.2.2.3 of this ISO Services Tariff unless otherwise specified in ISO Procedures.

# 7.2.3 Use of Estimated Data and Meter Data

The ISO may use estimates, including estimated meter data, in whole or in part to settle a weekly or monthly invoice in accordance with ISO Procedures. The ISO shall use meter data submitted to the ISO in accordance with Article 13 of this ISO Services Tariff. Any charges based on estimates shall be subject to true-up in invoices subsequently issued by the ISO after the ISO has obtained the requisite actual information, provided that the ISO shall only true-up charges based on meter data prior to the deadline for finalizing meter data established in Section 7.4 of this ISO Services Tariff. A trued-up charge shall include interest amounts calculated at the rate set forth in Section 7.3 of this ISO Services Tariff from the weekly or monthly due date for the charge until the date of payment of the trued-up amount for that charge.

# 7.2.4 Method of Payment

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

immediately available funds payable to the Customer by the ISO through the ISO Clearing Account or (ii) any other method set forth in ISO Procedures.

#### 7.2.5 TCC Auction Settlements

Notwithstanding Sections 7.2.2.1 and 7.2.2.2 of this ISO Services Tariff, the ISO shall make settlements related to the Centralized TCC Auction and the Reconfiguration Auction as set forth in this Section 7.2.5.

- 7.2.5.1 The ISO shall submit invoices to, and make settlements with, Transmission Owners in connection with the allocation of Net Auction Revenues in accordance with the timeline set forth in ISO Procedures.
- 7.2.5.2 Customers owing payments to the ISO as a result of their activity in or related to a Centralized TCC Auction or Reconfiguration Auction, pursuant to an award notice or a comparable invoice rendered by the ISO, shall make those payments to the ISO through the ISO Clearing Account in accordance with the timeline set forth in ISO Procedures.
- 7.2.5.3 Except as provided in Section 7.1.4 of this ISO Service Tariff, the ISO shall pay all net monies owed to Customers as a result of their activity in or related to a Centralized TCC Auction or a Reconfiguration Auction, pursuant to an award notice or a comparable invoice rendered by the ISO, from the ISO Clearing Account in accordance with ISO Procedures.
- 7.2.5.4 Sections 7.2.1, 7.2.3, 7.2.4, and 7.2.6 of this ISO Services Tariff and Section 19.9.6 of Attachment M of the ISO OATT shall apply to settlements calculated in accordance with this Section 7.2.5.

# 7.2.6 Verification of Payments

The ISO shall verify that all payments owed by Customers in accordance with this ISO Services Tariff and the ISO OATT have been paid to the ISO in a timely manner. If a Customer fails to make a payment within the time period established in Sections 7.2.2.1, 7.2.2.2, and 7.2.5 of this ISO Services Tariff or pays less than the amount due, the ISO shall take measures pursuant to Section 7.5 of this ISO Services Tariff. Except as provided in Section 7.1.4 of this ISO Services Tariff, the ISO shall also ensure that monies owed to Customers in accordance with this ISO Services Tariff and the ISO OATT are paid through the ISO Clearing Account in a timely manner.

# 7.2.7 Payments for TSCs

Bills and payments for TSCs shall be issued in accordance with the ISO OATT.

Accordingly, this Section 7 shall not apply to TSCs.

# 17.5 Congestion Settlements Related To the Day-Ahead Market and TCC Auction Settlements

See Attachment N of the ISO OATT for provisions regarding the Congestion settlements related to the Day-Ahead Market and the settlements related to Centralized TCC Auctions and Reconfiguration Auctions.

# **26.4** Operating Requirement and Bidding Requirement

# **26.4.1** Purpose and Function

The Operating Requirement is a measure of a Customer's expected financial obligations to the ISO based on the nature and extent of that Customer's participation in ISO-Administered Markets. A Customer shall be required to allocate Unsecured Credit, where allowed, and/or provide collateral in an amount equal to or greater than its Operating Requirement. Upon a Customer's written request, the ISO will provide a written explanation for any changes in the Customer's Operating Requirement.

The Bidding Requirement is a measure of a Customer's potential financial obligation to the ISO based upon the bids that Customer seeks to submit in an ISO-administered TCC or ICAP auction. A Customer shall be required to allocate Unsecured Credit, where allowed, and/or provide collateral in an amount equal to or greater than its Bidding Requirement prior to submitting bids in an ISO-administered TCC or ICAP auction.

#### **26.4.2** Calculation of Operating Requirement

The Operating Requirement shall be equal to the sum of (i) the Energy and Ancillary Services Component; (ii) the External Transaction Component; (iii) the UCAP Component; (iv) the TCC Component; (v) the WTSC Component; (vi) the Virtual Transaction Component; (vii) the DADRP Component; (viii) the DSASP Component; (ix) the Projected True-Up Exposure Component; and (x) the Former RMR Generator Component, where:

# **26.4.2.1** Energy and Ancillary Services Component

The Energy and Ancillary Services Component shall be equal to:

(a) For Customers without a prepayment agreement, the greater of either:

$$\frac{\textit{Basis Amount for Energy and Ancillary Services}}{\textit{Days in Basis Month}}*16$$

- or -

$$\frac{\textit{Ancillary Services for Previous Ten (10)Days}}{10}*16$$

(b) For Customers that qualify for a prepayment agreement, subject to the ISO's credit analysis and approval, and execute a prepayment agreement in the form provided in Appendix K-1, the greater of either:

$$\frac{\textit{Basis Amount for Energy and Ancillary Services}}{\textit{Days in Basis Month}}*3$$

-or-

$$\frac{\textit{Ancillary Services for Previous Ten (10)Days}}{10}*3$$

(c) For new Customers, the ISO shall determine a substitute for the Basis Amount for Energy and Ancillary Services for use in the appropriate formula above equal to:

$$EPL * 720 * AEP$$

where:

EPL = estimated peak Load for the Capability Period; and

AEP = average Energy and Ancillary Services price during the Prior Equivalent Capability Period after applying the Price Adjustment.

# **26.4.2.2** External Transaction Component

The External Transaction Component shall equal the sum of the Customer's (i) Import Credit Requirement, (ii) Export Credit Requirement, (iii) Wheels Through Credit Requirement, and (iv) the net amount owed to the ISO for the settled External Transaction Component Transactions.

# 26.4.2.2.1 Import Credit Requirement

For a given month, the Import Credit Requirement shall apply to any Customer that Bids to Import in the Day-Ahead Market ("DAM") unless (i) the Customer has at least 50 scheduled Day-Ahead Import Bids in the three-month period ending on the 15<sup>th</sup> day of the preceding month (or the six-month period ending on the 15<sup>th</sup> day of the preceding month if the Customer has fewer than 50 scheduled Day-Ahead Import Bids in the immediately preceding three-month period), and (ii) fewer than 25% of the MWhs of such scheduled Day-Ahead Import Bids were settled at a loss to the Customer.

The Import Credit Requirement shall equal the sum of the amounts calculated for each Bid in accordance with the appropriate formulas below:

# (1) Upon submission of a DAM Import Bid until posting of the applicable DAM schedule/price.

The ISO will calculate the required credit support for pending DAM Import Bids for a market day three days prior to the DAM close for that market day. The ISO will calculate the required credit support for DAM Import Bids that are submitted after the commencement of the initial credit evaluation upon Bid submission. The ISO will categorize each Import Bid into one of the 18 Import Price Differential (IPD) groups set forth in the IPD chart in Section 26.4.2.2.5 below, as appropriate, based upon the season and time-of-day of the Import Bid. The amount of credit support required in \$/MWh that applies to an Import Bid shall equal the 97<sup>th</sup> percentile level of the following: the hourly average Energy price calculated in the Real-Time Market at the location associated with the Import Bid, minus the Energy price calculated in the DAM at the same location and time, with the dataset used to perform this calculation consisting of all hours that are in the

same IPD group as the hour to which the Import Bid applies, and that occurred no earlier than April 1, 2005 nor later than the end of the calendar month preceding the month to which the Import Bid applies. The amount of credit support required in \$/MWh shall not be less than \$0/MWh.

The credit requirement for each Import Bid shall be calculated as follows:

$$Bid_{MWhB} * Max (IPD_{CS}, 0)$$

Where:

 $Bid_{MWhB}$  = the total quantity of MWhs that a Customer Bids to Import in a

particular hour and at a particular location.

IPD<sub>CS</sub> = the amount of credit support required, in \$/MWh, for an Import Bid as

described above, for the location associated with the Import Bid and for the IPD group that contains the hour to which the Import Bid

applies.

(2) Upon posting of the applicable DAM schedule/price until completion of the hour Bid in real-time for a DAM Import Bid.

The credit requirement for each Import Bid shall be calculated as follows:

$$SchBid_{MWhI} * Max(IPD_{CS}, 0)$$

Where:

SchBid<sub>MWhI</sub> = the total quantity of MWhs that is scheduled in the DAM in a

particular hour and at a particular location as a result of the Customer's

Import Bid.

 $IPD_{CS}$  = the amount of credit support required, in \$/MWh, for an Import Bid as

described above, for the location associated with the Import Bid and for the IPD group that contains the hour to which the Import Bid

applies.

(3) Upon completion of the hour Bid in real-time for a DAM Import Bid until the net amount owed to the ISO is determined for settled External Transactions.

The credit requirement for each Import Bid shall be calculated as follows:

$$Max((BalPay_{\$} - DAMPay_{\$}), 0)$$

Where:

 $BalPay_{\$} = (SchBid_{MWhI} - Actual_{MWhI}) * RT LBMP_{I}$ 

 $DAMPay_{\$} = SchBid_{MWhI} * DAM LBMP_{I}$ 

SchBid<sub>MWhI</sub> = the total quantity of MWhs that is scheduled in the DAM in a

particular hour at a particular location as a result of the Customer's

Import Bid.

 $Actual_{MWhI}$  = the total quantity of MWhs that is scheduled in real-time associated

with the Customer's Import Bid in a particular hour and at a particular

location for the hour completed.

DAM LBMP<sub>I</sub> = the Day-Ahead LBMP in a particular hour and at a particular location

associated with the Customer's Import Bid.

RT LBMP<sub>I</sub> = the Real-Time LBMP in a particular hour and at a particular location

associated with the Customer's Import Bid.

### 26.4.2.2.2 Export Credit Requirement

The Export Credit Requirement shall apply to any Customer that Bids to Export from the DAM or Hour-Ahead Market ("HAM").

The Export Credit Requirement shall equal the sum of the amounts calculated for each Bid in accordance with the appropriate formulas below:

# (1) Upon submission of a DAM Export Bid until posting of the applicable DAM schedule/price.

The ISO will calculate the required credit support for pending DAM Export Bids for a market day three days prior to the DAM market close for that market day. The ISO will calculate the required credit support for DAM Export Bids that are submitted after the commencement of the initial credit evaluation upon Bid submission. The ISO will categorize each Export Bid into one of the 18 Export Price Differential (EPD) groups set forth in the EPD chart in Section 26.4.2.2.5 below, as appropriate, based upon the season and time-of-day of the Export Bid. The amount of credit support required in \$/MWh that applies to an Export Bid

shall equal the 97<sup>th</sup> percentile level of the following: the Energy price calculated in the DAM at the location associated with the Export Bid, minus the hourly average Energy price calculated in the Real-Time Market at the same location and time, with the dataset used to perform this calculation consisting of all hours that are in the same EPD group as the hour to which the Export Bid applies, and that occurred no earlier than April 1, 2005 nor later than the end of the calendar month preceding the month to which the Export Bid applies. The amount of credit support required in \$/MWh shall not be less than \$0/MWh.

The credit requirement for all DAM Export Bids with the same hour/date and location shall be calculated as follows:

$$\left(Max\left(\left(Max_N(Bid_{MWh}*Bid_{\$E})\right),\left(BidMax_{MWhB}*EPD_{CS}\right)\right)\right)$$

Where:

 $Bid_{MWh}$  = the total quantity of MWhs that a Customer Bids to Export in the

DAM in a particular hour and at a particular location at or below each

Bid Price.

Bid<sub>SE</sub> = the Bid Price in \$/MWh at which the Customer Bids to purchase the

Bid<sub>MWh</sub> of Exports in a particular hour and at a particular location.

N = the set of hourly Export Bid Prices in a particular hour and at a

particular location.

BidMax<sub>MWhB</sub> = the total quantity of MWhs that a Customer Bids to Export in the

DAM in a particular hour and at a particular location.

 $EPD_{CS}$  = the amount of credit support required, in \$\frac{MWh}{n}\$, for an Export Bid as

described above, for the location associated with the Export Bid and for the EPD group that contains the hour to which the Export Bid

applies.

(2) Upon posting of the applicable DAM schedule/price until completion of hour Bid in real-time for a DAM Export Bid.

The credit requirement for each Export Bid shall be calculated as follows:

$$\left(SchBid_{MWhE} * \left(Max(EPD_{CS}, DAM LBMP_{E})\right)\right)$$

Where:

 $SchBid_{MWhE}$  = the total quantity of MWhs that is scheduled in the DAM in a

particular hour at a particular location as a result of the Customer's

Export Bid.

EPD<sub>CS</sub> = the amount of credit support required, in \$/MWh, for an Export Bid as

described above, for the location associated with the Export Bid and for the EPD group that contains the hour to which the Export Bid

applies.

DAM LBMP<sub>E</sub> = the Day-Ahead LBMP in a particular hour and at a particular location

associated with the Customer's Export Bid.

(3) From submission of a HAM Export Bid until completion of the hour Bid in real-time.

i. Non-CTS Interface Bids to Export.

The ISO will calculate the required credit support for pending HAM non-CTS

Interface Bids to Export for a market day three days prior to the DAM close for

that market day. The ISO will calculate the required credit support for HAM non-

CTS Interface Bids to Export that are submitted after the commencement of the

initial credit evaluation upon Bid submission. The amount of credit support

required in \$/MWh that applies to HAM non-CTS Interface Bids Export in the

same hour/date and at the same location shall equal the maximum amount of the

payment potentially due to the ISO based on the MWhs of Exports Bid for

purchase at each bid price in a particular hour and at a particular location.

The credit requirement for all HAM non-CTS Interface Bids to Export with the

same hour/date and location shall be calculated as follows:

$$\left(Max_N\left(\left(Max(Bid_{MWhE},0)\right)*Bid_{\$E}\right)\right)$$

Where:

Bid<sub>MWhE</sub> = the total quantity of MWhs that a Customer Bids to

Export in the HAM in a particular hour and at a particular location at or below each bid price minus the MWhs of Exports scheduled in the DAM in the

same hour at the same location.

 $Bid_{SE}$  = the bid price in \$/MWh at which the Customer Bids

to purchase the Bid<sub>MWhE</sub> of Exports in a particular

hour and at a particular location.

N = the set of hourly Export bid prices in a particular

hour and at a particular location.

# ii. CTS Interface Bids to Export.

For CTS Interface Bids to Export credit support will be calculated at HAM close. The amount of credit support required in \$/MWh that applies to such bid shall equal the sum of the time-weighted hourly RTC price for each of the 15-minute intervals within the bid hour, not to be less than zero.

The credit requirement for each CTS Interface Bid to Export shall be calculated as follows:

$$Max\left(\sum_{N} (RTC_{\$/MWhcts} * Bid_{MWhscts} * Hourly Weight), 0\right)$$

Where:

N = each 15-minute interval within the bid hour.

RTC<sub>\$/MWhcts</sub> = most recently available RTC price for N in \$/MWh at the location

associated with the CTS Interface Bid to Export

Bid<sub>MWhscts</sub> = the total quantity of MWhs in a Customer's CTS Interface Bid to

Export for N in a particular hour and at a particular location minus the MWhs of Exports scheduled in the DAM in same hour at the same

location.

Hourly Weight = 0.25

(4) Upon completion of the hour Bid in real-time for an Export Bid until the net amount owed to the ISO is determined for settled External Transactions.

The amount of credit support required will equal the sum of the Day-Ahead

Credit Calculation and Real-Time Credit Calculation for each completed hour.

The credit requirement for each Export Bid shall be calculated as follows:

Day-Ahead Credit Calculation + Real-Time Credit Calculation

The Day-Ahead Credit Calculation only applies to DAM Export Bids and the

Real-Time Credit Calculation applies to all HAM Export Bids including HAM

Bids associated with a DAM Bid.

#### Where:

Day-Ahead Credit Calculation = Max (Adjusted Export Day-Ahead Credit Calculation, 0)

Adjusted Export Day-Ahead Credit Calculation = the credit requirement calculated in accordance with section 26.4.2.2.2(2) minus the Balancing Payment.

 $Balancing\ Payment = Max((SchBid_{MWhE} - Actual_{MWhE}), 0) * RT\ LBMP_E$ 

SchBid<sub>MWhE</sub> = the total quantity of MWhs that is scheduled in the DAM in a particular hour and at a particular location as a result of the Customer's Export Bid.

Actual<sub>MWhE</sub> = the total quantity of MWhs that is scheduled in real-time associated with the Customer's Export Bid in a particular hour and at a particular location for the hour completed.

RT LBMP<sub>E</sub> = the Real-Time LBMP in a particular hour and at a particular location associated with the Customer's Export Bid.

 $Real\text{-}Time\ Credit\ Calculation = Max\left(\left(Max\left((Actual_{MWhE} - SchBid_{MWhE}), 0\right) * RT\ LBMP_E\right), 0\right)$ 

Actual<sub>MWhE</sub> = the total quantity of MWhs that is scheduled in real-time associated with the Customer's Export Bid in a particular hour and at a particular location for the hour completed.

SchBid<sub>MWhE</sub> = the total quantity of MWhs that is scheduled in the DAM in a particular hour and at a particular location as a result of the Customer's Export Bid.

RT LBMP<sub>E</sub> = the Real-Time LBMP in a particular hour and at a particular location associated with the Customer's Export Bid.

# 26.4.2.2.3 Wheels Through Credit Requirement

The Wheels Through Credit Requirement shall apply to any Customer that Bids to Wheel Through in the DAM or HAM.

The Wheels Through Credit Requirement shall equal the sum of the amounts calculated for each Bid in accordance with the appropriate formulas below:

# (1) Upon submission of a DAM Wheels Through Bid until posting of the applicable DAM schedule/price.

The ISO will calculate the required credit support for pending DAM Wheels Through Bids for a market day three days prior to the DAM close for that market day. The ISO will calculate the required credit support for DAM Wheels Through Bids that are submitted after the commencement of the initial credit evaluation upon Bid submission. The amount of credit support required in \$/MWh that applies to the DAM Wheels Through Bid shall equal the maximum payment potentially due to the ISO based on the Customer's Bid Prices on the Bid curve. The credit requirement for each Wheels Through Bid shall be calculated as follows:

$$Max(Max_N(BidPt_{MWhN} * Bid\$_{\$/MWhN}), 0)$$

Where:

N = each Bid Price on the Bid curve.

BidPt<sub>MWbN</sub> = the MWhs associated with the Bid Price on the Bid curve.

Bid\$<sub>\$/MWhN</sub> = the amount that the customer is willing to pay for congestion in \$/MWh on the Bid curve associated with the Customer's Wheels Through Bid.

# (2) Upon posting of the applicable Wheels Through DAM schedule/price until completion of the hour Bid in real-time.

The credit requirement for each DAM Wheels Through Bid shall be calculated as follows:

$$Max(SchBid_{MWhW} * (DAM LBMP_{POW} - DAM LBMP_{POI}), 0)$$

Where:

SchBid<sub>MWhW</sub> = the total quantity of MWhs scheduled in the DAM as a result of

the Customer's Bid to schedule Wheels Through.

DAM LBMP<sub>POI</sub> = the Day-Ahead LBMP in the hour and at the Point of Injection

associated with the Wheels Through Bid.

DAM LBMP<sub>POW</sub> = the Day-Ahead LBMP in the hour and at the Point of Withdrawal

associated with the Wheels Through Bid.

(3) Upon creation of a HAM Wheels Through Bid until the completion of the hour Bid in real-time.

The ISO will calculate the required credit support for pending HAM Wheels
Through Bids for a market day three days prior to the DAM close for that market
day. The ISO will calculate the required credit support for HAM Wheels Through
Bids that are submitted after the commencement of the initial credit evaluation
upon Bid submission. The amount of credit support required in \$/MWh that
applies to HAM Wheels Through Bid shall equal the price of the maximum value
of exposure based on bid prices on the Bid curve.

The credit requirement for each Wheels Through Bid shall be calculated as follows:

$$Max(Max_N(Max(BidPt_{MWhW}, 0) * Bid\$_{\$/MWhN}), 0)$$

Where:

N = each bid price on the Bid curve.

BidPt<sub>MWhW</sub> = the MWhs associated with the bid price on the Bid curve minus the

MWhs of the DAM Bid with same hour/date, location and Bid

transaction ID.

Bid\$<sub>\$\text{MWbN}</sub> = the amount that the customer is willing to pay for congestion in

\$/MWh on the Bid curve associated with the Customer's Wheels

Through Bid.

# (4) Upon completion of the hour Bid in real-time for a Wheels Through Bid until the net amount owed to the ISO is determined for settled External Transactions.

The amount of credit support required will equal the sum of the Day-Ahead

Credit Calculation and Real-Time Credit Calculation for each completed hour.

The credit requirement for each Wheels Through Bid shall be calculated as follows:

Day-Ahead Credit Calculation + Real-Time Credit Calculation

The Day-Ahead Credit Calculation only applies to DAM Wheels Through Bids and the Real-Time Credit Calculation applies to all HAM Wheels Through Bids including HAM Bids associated with a DAM Bid.

#### Where:

Day-Ahead Credit Calculation = Max (Adjusted Wheels Through Day-Ahead Credit Calculation, 0)

Adjusted Wheels Through Day-Ahead Credit Calculation = the credit requirement calculated in section 26.4.2.2.3(2) minus the Balancing Payment.

 $Balancing\ Payment = Max ((SchBid_{MWhW} - Actual_{MWhW}), 0) * (RT\ LBMP_{POW} - RT\ LBMP_{POI})$ 

SchBid<sub>MWhW</sub> = the total quantity of MWhs that is scheduled in the DAM as a result of the Customer's Wheels Through Bid.

Actual<sub>MWhW</sub> = the total quantity of MWhs that is scheduled in real-time associated

with the Customer's Wheels Through Bid for the hour completed.

 $RT LBMP_{POI}$  = the Real-Time LBMP in the hour and at the Point of Injection

associated with the Wheels Through Bid.

RT LBMP<sub>POW</sub> = the Real-Time LBMP in the hour and at the Point of Withdrawal associated with the Wheels Through Bid.

 $Real-Time\ Credit\ Calculation = Max\big(Max\big((Actual_{MWhW} - SchBid_{MWhW}), 0\big) * (RT\ LBMP_{POW} - RT\ LBMP_{POI}), 0\big)$ 

 $SchBid_{MWhW}$  = the total quantity of MWhs that is scheduled in the DAM as a result of the Customer's Bid to Wheel Through Energy.

Actual<sub>MWhW</sub> = the total quantity of MWhs that is scheduled in real-time associated with the Customer's Wheels Through Bid for the hour completed.

 $RT LBMP_{POI}$  = the Real-Time LBMP in the hour and at the Point of Injection associated with the Wheels Through Bid.

RT LBMP<sub>POW</sub> = the Real-Time LBMP in the hour and at the Point of Withdrawal associated with the Wheels Through Bid.

# **26.4.2.2.4** Calculation of Price Differentials

# **Import Price Differential (IPD) Groups**

Summer	For each Proxy Generator Bus
HB07-10	IPD-1
HB11–14	IPD-2
HB15–18	IPD-3
HB19–22	IPD-4
Weekend/ Holiday (HB07–22)	IPD-5
Night (HB23–06)	IPD-6
Winter	
HB07-10	IPD-7
HB11–14	IPD-8
HB15–18	IPD-9
HB19–22	IPD-10
Weekend/ Holiday (HB07–22)	IPD-11
Night (HB23–06)	IPD-12
Rest-of-Year	
HB07-10	IPD-13
HB11-14	IPD-14
HB15–18	IPD-15
HB19–22	IPD-16
Weekend/ Holiday (HB07–22)	IPD-17
Night (HB23–06)	IPD-18

Where:

Summer = May, June, July, and August

Winter = December, January, and February

Rest-of-Year = March, April, September, October, and November

HB07–10 = weekday hours beginning 07:00–10:00

HB11–14 = weekday hours beginning 11:00–14:00

HB15–18 = weekday hours beginning 15:00–18:00

HB19–22 = weekday hours beginning 19:00– 22:00

Weekend/Holiday = weekend and holiday hours beginning 07:00–22:00

Night = all hours beginning 23:00–06:00

# **Export Price Differential (EPD) Groups**

Summer	For each Proxy Generator Bus
HB07–10	EPD-1
HB11–14	EPD-2
HB15–18	EPD-2 EPD-3
HB19–22	EPD-4
Weekend/ Holiday (HB07–22)	EPD-5
Night (HB23–06)	EPD-6
Winter	EFD-0
HB07–10	EPD-7
HB11–14	EPD-7 EPD-8
HB15-18	EPD-9
HB19–22	EPD-10
Weekend/ Holiday (HB07–22)	EPD-11
Night (HB23–06)	EPD-12
Rest-of-Year	
HB07–10	EPD-13
HB11–14	EPD-14
HB15–18	EPD-15
HB19-22	EPD-16
Weekend/ Holiday (HB07–22)	EPD-17
Night (HB23-06)	EPD-18

# Where:

Summer = May, June, July, and August

Winter = December, January, and February

Rest-of-Year = March, April, September, October, and November

HB07–10 = weekday hours beginning 07:00–10:00

HB11–14 = weekday hours beginning 11:00–14:00

HB15–18 = weekday hours beginning 15:00–18:00

HB19–22 = weekday hours beginning 19:00– 22:00

Weekend/Holiday = weekend and holiday hours beginning 07:00–22:00

Night = all hours beginning 23:00–06:00

# 26.4.2.3 UCAP Component

The UCAP Component shall be equal to the total of all amounts then-owed (billed and unbilled) for UCAP purchased in the ISO-administered markets.

# **26.4.2.4** TCC Component

The TCC Component shall be equal to the greater of either (a) the amount calculated in accordance with Section 26.4.2.4.1 (Auction TCC Holding Requirement) or Section 26.4.2.4.2 (Fixed Price TCC Holding Requirement), as appropriate, or (b) Section 26.4.2.4.3 (Mark-to-Market Calculation) below; *provided however*, that upon initial award of a TCC until the ISO receives payment for the TCC (or payment for the first year of a two-year TCC), the ISO will hold the greater of the payment obligation for the TCC or the credit requirement for the TCC calculated in accordance with this Section 26.4.2.4.

# **26.4.2.4.1** Auction TCC Holding Requirement

This Section 26.4.2.4.1 applies to TCCs awarded in the Centralized TCC Auction and Balance-of-Period Auction.

The credit requirement pursuant to this Section 26.4.2.4.1 shall equal the sum of the amounts calculated in accordance with the appropriate per TCC term-based formulas listed below. The ISO will not impose a credit requirement on TCCs that have been sold by a Market Participant in the Centralized TCC Auction or Balance-of-Period Auction.

### **26.4.2.4.1.1** Two-Year TCCs:

(1) upon initial award of a two-year TCC until completion of the final round of the current two-year Sub-Auction, the sum of the first year and second year amounts, which will be calculated as follows:

#### First Year:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

 $P_{ijt}$ 

market clearing price of a one-year TCC in the final round of the one-year Sub-Auction in the prior Capability Period Centralized TCC
 Auction with the same POI and POW combination as the two-year TCC.

# Second Year:

$$+1.909\sqrt{e^{10.9729+.6514\left(ln(|P_{ijt}|+e)\right)+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

 $P_{ijt}$ 

- = market clearing price of that two-year TCC minus the market clearing price of a one-year TCC in the final round of the one-year Sub-Auction in the prior Capability Period Centralized TCC Auction with the same POI and POW combination as the two-year TCC
- upon completion of the final round of the current two-year Sub-Auction until completion of the final round of the current one-year Sub-Auction, the sum of the first year and second year amounts, which will be calculated as follows:

#### First Year:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

 $P_{ijt}$ 

market clearing price of a one-year TCC in the final round of the one-year Sub-Auction in the prior Capability Period Centralized TCC
 Auction with the same POI and POW combination as the two-year TCC

# Second Year:

$$+1.909\sqrt{e^{10.9729+.6514(ln(|P_{ijt}|+e))+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

 $P_{ijt}$ 

- = market clearing price of a two-year TCC in the final round of the current two-year Sub-Auction with the same POI and POW combination as the two-year TCC minus the market clearing price of a one-year TCC in the final round of the one-year Sub-Auction in the prior Capability Period Centralized TCC Auction with the same POI and POW combination as the two-year TCC
- upon completion of the final round of the current one-year Sub-Auction until completion of the Balance-of-Period Auction for the first month of the two-year TCC, the sum of the first year and second year amounts, which will be calculated as follows:

#### First Year:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

 $P_{ijt}$ 

= market clearing price of a one-year TCC in the final round of the current one-year Sub-Auction with the same POI and POW combination as the two-year TCC

#### Second Year:

$$+1.909\sqrt{e^{10.9729+.6514\left(ln(|P_{ijt}|+e)\right)+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

P<sub>ijt</sub>

= market clearing price of a two-year TCC in the final round of the current two-year Sub-Auction with the same POI and POW combination as the two-year TCC minus the market clearing price of a one-year TCC in the final round of the current one-year Sub-Auction with the same POI and POW combination as the two-year TCC

(4) upon completion of the Balance-of-Period Auction for the first month of the twoyear TCC until completion of the final round of the six-month Sub-Auction in the next Centralized TCC Auction, the sum of the first year and second year amounts, which will be calculated as follows:

First Year:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formulas set forth in Section 26.4.2.4.1.6 below Second Year:

$$+1.909\sqrt{e^{10.9729+.6514(ln(|P_{ijt}|+e))+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

Pijt

- = market clearing price of a two-year TCC in the final round of the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC minus the market clearing price of a one-year TCC in the final round of the one-year Sub-Auction that directly followed the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC
- upon completion of the final round of the six-month Sub-Auction for the final six months of the first year of the two-year TCC until completion of the Balance-of-Period Auction immediately preceding the final six months of the first year of the two-year TCC, the sum of the first year and second year amounts, which will be calculated as follows:

First Year:

the amount calculated in accordance with the six-month TCC formula set forth in Section 26.4.2.4.1.5 below

where:

Pijt

= market clearing price of a six-month TCC in the final round of the sixmonth Sub-Auction with the same POI and POW combination as the one-year TCC

Second Year:

$$+1.909\sqrt{e^{10.9729+.6514\left(ln(|P_{ijt}|+e)\right)+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

Pijt

- = market clearing price of a two-year TCC in the final round of the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC minus the market clearing price of a one-year TCC in the final round of the one-year Sub-Auction that directly followed the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC
- (6) upon completion of the Balance-of-Period Auction immediately preceding the final six months of the first year of the two-year TCC until ISO receipt of payment for the second year of the two-year TCC, the sum of the first year and second year amounts, which will be calculated as follows:

First Year:

the amount calculated in accordance with the appropriate Balance-of-Period TCC Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below

Second Year:

$$+1.909\sqrt{e^{10.9729+.6514\left(ln(|P_{ijt}|+e)\right)+.6633*Zone\ J+1.1607*Zone\ K}}$$

where:

Pijt

= market clearing price of a two-year TCC in the final round of the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC minus the market clearing price of a one-year TCC in the final round of the one-year Sub-Auction that directly followed the two-year Sub-Auction in which the TCC was purchased with the same POI and POW combination as the two-year TCC

(7) upon ISO receipt of payment for the second year of the two-year TCC until completion of the final round of the one-year Sub-Auction in the next Centralized TCC Auction, the sum of the first year and second year amounts, which will be calculated as follows:

### First Year:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below

# Second Year:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

- $P_{ijt}$
- market clearing price of a one-year TCC in the final round of the one-year Sub-Auction in the prior equivalent Capability Period Centralized TCC Auction with the same POI and POW combination as the two-year TCC
- (8) upon completion of the final round of the one-year Sub-Auction for the second year of the two-year TCC until completion of the Balance-of-Period Auction for the first month of the second year of the two-year TCC, the sum of the first year and second year amounts, which will be calculated as follows::

#### First Year:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below

#### Second Year:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

 $P_{ijt}$ 

= market clearing price of a one-year TCC in the final round of the most recently completed one-year Sub-Auction with the same POI and POW combination as the two-year TCC

(9) upon completion of the Balance-of-Period Auction for the first month of the second year of the two-year TCC until completion of the final round of the sixmonth Sub-Auction in the next Centralized TCC Auction, the sum of the first year and second year amounts, which will be calculated as follows:

# First Year:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below

#### Second Year:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below

upon completion of the final round of the six-month Sub-Auction for the final six months of the two-year TCC until completion of the Balance-of-Period Auction immediately preceding the final six months of the two-year TCC:

the amount calculated in accordance with the six-month TCC formula set forth in Section 26.4.2.4.1.5 below

where:

- P<sub>ijt</sub> = market clearing price of a six-month TCC in the final round of the most recently completed six-month Sub-Auction with the same POI and POW combination as the two-year TCC
- (11) upon completion of the Balance-of-Period Auction for the first month of the final six months of a two-year TCC:

the amount calculated in accordance with the Balance-of-Period TCC formulas set forth in Section 26.4.2.4.1.5 below

#### **26.4.2.4.1.2** One-Year TCCs:

- (1) upon initial award of a one-year TCC until completion of the final round of the current one-year Sub-Auction:
  - the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below
- upon completion of the final round of the current one-year Sub-Auction until completion of the Balance-of-Period Auction for the first month of the one-year TCC:

the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.4.1.5 below

where:

- $P_{ijt}$  = market clearing price of a one-year TCC in the final round of the current one-year Sub-Auction with the same POI and POW combination as the one-year TCC
- upon completion of the Balance-of-Period Auction for the first month of the oneyear TCC until completion of the final round of the six month Sub-Auction in the next Centralized TCC Auction:
  - the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirement formula set forth in Section 26.4.2.4.1.6 below
- (4) upon completion of the final round of the six-month Sub-Auction for the final six months of a one-year TCC until completion of the Balance-of-Period Auction immediately preceding the final six months of a one-year TCC:

the amount calculated in accordance with the six-month TCC formula set forth in Section 26.4.2.4.1.5 below

where:

- P<sub>ijt</sub> = market clearing price of a six-month TCC in the final round of the most recently completed six-month Sub-Auction with the same POI and POW combination as the one-year TCC
- upon completion of the Balance-of-Period Auction for the first month of the final six months of a one-year TCC:

the amount calculated in accordance with the appropriate Balance-of-Period Auction holding requirementformula set forth in Section 26.4.2.4.1.6 below

#### **26.4.2.4.1.3** Six-Month TCCs:

- (1) upon initial award of a six-month TCC until completion of the final round of the current six-month Sub-Auction:
  - the amount calculated in accordance with the six-month TCC formula set forth in Section 26.4.2.4.1.5 below
- (2) upon completion of the final round of the current six-month Sub-Auction until completion of the Balance-of-Period Auction for the first month of a six-month TCC:

the amount calculated in accordance with the six-month TCC formula set forth in Section 26.4.2.4.1.5 below

where:

- $P_{ijt}$  = market clearing price of a six-month TCC in the final round of the current six-month Sub-Auction with the same POI and POW combination as the one-year TCC
- upon completion of the Balance-of-Period Auction for the first month of a sixmonth TCC:

the amount calculated in accordance with the Balance-of-Period Auction formula set forth in Section 26.4.2.4.1.6.1 below

#### **26.4.2.4.1.4** One-Month TCCs:

upon initial award of a one-month TCC:

the amount calculated in accordance with the Balance-of-Period TCC Auction holding requirementformula set forth in Section 26.4.2.4.1.6.1 below

### **26.4.2.4.1.5** Centralized TCC Auction – Holding Requirement Formulas:

for one-year TCCs, representing a 5% probability curve:

$$+1.909\sqrt{e^{10.9729+.6514\left(ln(|P_{ijt}|+e)\right)+.6633*Zone\,J+1.1607*Zone\,K}}-1\,P_{ijt}$$

for six-month TCCs, representing a 3% probability curve:

$$+2.565\sqrt{e^{11.6866+.4749\left(ln(|P_{ijt}|+e)\right)+.4856*Zone\ J+.8498*Zone\ K-.0373\ Summer}}-1\ P_{ijt}$$

where:

P<sub>ijt</sub> = market clearing price of i to j TCC in round t of the auction in which the TCC was purchased;

Zone J = 1 if TCC sources or sinks but not both in Zone J, zero otherwise;

Zone K = 1 if TCC sources or sinks but not both in Zone K and does not source or

sink in Zone J, 0 otherwise;

Summer = 1 for six-month TCCs sold in the spring auction, 0 otherwise; and

Further, when calculating "Pijt" in Section 26.4.2.4.1, in the event there is no market clearing price for a two-year, one-year, or six-month TCC in the appropriate prior Capability Period Centralized TCC Auction with the same POI and POW combination as the awarded two-year, one-year, or six-month TCC, as appropriate, then the market clearing price shall equal a proxy price, assigned by the ISO, for a TCC with like characteristics.

Further, the NYISO may adjust any of the Zone K multipliers in Section 26.4.2.4.1 if, for TCCs of the same duration, the percentage ratio between collateral and congestion rents for Zone K TCCs deviates from the percentage ratio for Zone J TCCs by more than ten percent (10.0%).

### **26.4.2.4.1.6** Balance-of-Period Auction – Holding Requirement Formulas:

During the Balance-of-Period Auction, a TCC awarded in the Centralized TCC Auction (or the remaining segments of a TCC awarded in a prior Centralized TCC Auction) is segmented, as appropriate, into (i) a monthly segment, corresponding to the months within the current Capability Period, (ii) a future six-month segment, corresponding to the next Capability Period, and (iii) a one-year segment, corresponding to the next Capability Year, such that the sum of segments (i), (ii), and (iii) covers the entire remaining duration of the TCC. The credit holding requirement for the monthly segments and the future six-month segment are calculated in accordance with the formulas below.

### **26.4.2.4.1.6.1** Monthly Segment

**Monthly Segment (\$)** = [(Monthly Margin (\$) ×Monthly Index Ratio×Monthly Factor) –TCC Price (\$)]×MWs

where:

**Monthly Margin** is calculated based on a methodology approved by Market Participants and posted to the ISO's website

**Monthly Index Ratio** as determined from time to time by the ISO based on historical data and a methodology approved by Market Participants and posted to the ISO's website

**Monthly Factor** as determined from time to time by the ISO based on historical data and a methodology approved by Market Participants and posted to the ISO's website

**TCC Price** is the market clearing price for the respective Capability Period month in the most recent Balance-of-Period Auction

MWs is the number of awarded TCC MWs

#### 26.4.2.4.1.6.2 Future Six-Month Segment

Future Six-Month Segment (\$) = (Six-Month Margin (\$)-TCC Price (\$))×MWs

where:

**Six-Month Margin** is calculated based on a methodology approved by Market Participants and posted on the ISO's website

**TCC Price** is the market clearing price, using the same POI/POW combination, resulting from the

- (1) Market clearing price from the final round of the most recent one-year TCC Sub-Auction, less the
- (2) Market clearing price from the second round of the most recent six-month TCC Sub-Auction

**MWs** is the number of awarded TCC MWs

# **26.4.2.4.2** Fixed Price TCC Holding Requirement:

Upon award of a Fixed Price TCC, and for the duration of the Fixed Price TCC, the credit holding requirement will equal the amount calculated in accordance with the one-year TCC formula set forth in Section 26.4.2.1.5; provided, however, the market clearing price (P<sub>ijt</sub>) shall be replaced by the fixed price associated with that Fixed Price TCC, as determined in accordance with, as appropriate, OATT Section 19.2.1 or OATT Section 19.2.2.

#### 26.4.2.4.3 Mark-to-Market Calculation

The projected amount of the Primary Holder's payment obligation to the NYISO, if any, considering the net mark-to-market value of all TCCs in the Primary Holder's portfolio, as defined for these purposes, according to the formula below:

$$\sum_{n \in N} \left\{ \frac{NAP_n}{90} * RD_n \right\} + \sum_{n \in N} ACR_n$$

where:

NAP = the net amount of Congestion Rents between the POI and POW composing each TCC<sub>n</sub> during the previous ninety days

RD = the remaining number of days in the life of TCC<sub>n</sub>; *provided, however*, that in the case of Grandfathered TCCs, RD shall equal the remaining number of days in the life of the longest duration TCC sold in an ISO-administered auction then outstanding;

N = the set of TCCs held by the Primary Holder; and

ACR = the net amount owed to the ISO for Congestion Rents between the POI and POW composing each  $TCC_n$ .

#### 26.4.2.5 WTSC Component

The WTSC Component shall be equal to the greater of either:

$$\frac{\textit{Greatest Amount Owed for WTSC During Any}}{\textit{Single Month in the Prior Equivalent Capability Period}}*50$$

- or -

$$\frac{\textit{Recent Monthly Data Provided by the Transmission Owner}}{\textit{Days in Month}}*50$$

# **26.4.2.6** Virtual Transaction Component

The Virtual Transaction Component shall be equal to the sum of the Customer's

(i) Virtual Supply credit requirement ("VSCR") for all outstanding Virtual Supply Bids, plus (ii)

Virtual Load credit requirement ("VLCR") for all outstanding Virtual Load Bids, plus (iii) net

amount owed to the ISO for settled Virtual Transactions.

Where:

 $VSCR = \sum (VSG_{MWh} * VSG_{CS})$ 

 $VLCR = \sum (VLG_{MWh} * VLG_{CS})$ 

Where:

VSG<sub>MWh</sub> = the total quantity of MWhs of Virtual Supply that a Customer Bids for all

Virtual Supply positions in the Virtual Supply group

 $VSG_{CS}$  = the amount of credit support required in \$/MWh for the Virtual Supply

group

 $VLG_{MWh} =$  the total quantity of MWhs of Virtual Load that a Customer Bids for all

Virtual Load positions in the Virtual Load group

 $VLG_{CS}$  = the amount of credit support required in \$/MWh for the Virtual Load

group

The ISO will categorize each Virtual Supply Bid into one of the 72 Virtual Supply groups set forth in the Virtual Supply chart below, as appropriate, based upon the season, Load Zone, and time-of-day of the Virtual Supply Bid. The amount of credit support required in \$/MWh for a Virtual Transaction in a particular Virtual Supply group shall equal the price differential between the Energy price in the Day-Ahead Market and the Energy price in the Real-Time Market, at the 97<sup>th</sup> percentile, based upon all possible Virtual Supply positions in the Virtual Supply group for the period of time from April 1, 2005, through the end of the preceding calendar month.

The ISO will categorize each Virtual Load Bid into one of the 30 Virtual Load groups set forth in the Virtual Load chart below, as appropriate, based upon the season, Load Zone, and time-of-day of the Virtual Load Bid. The amount of credit support required in \$/MWh for a Virtual Transaction in a particular Virtual Load group shall equal the price differential between the Energy price in the Day-Ahead Market and the Energy price in the Real-Time Market, at the 97<sup>th</sup> percentile, based upon all possible Virtual Load positions in the Virtual Load group for the period of time from April 1, 2005, through the end of the preceding calendar month.

If a Customer submits Bids for both Virtual Load and Virtual Supply for the same day, hour, and Load Zone, then for those Bids, until such time as those Bids have been evaluated by SCUC, only the greater of the Customer's (i) VLCR for the total MWhs Bid for Virtual Load, or (ii) VSCR for the total MWhs Bid for Virtual Supply will be included when calculating the Customer's Virtual Transaction Component. After evaluation of those Bids by SCUC, then only the credit requirement for the net position of the accepted Bids (in MWhs of Virtual Load or

Virtual Supply) will be included when calculating the Customer's Virtual Transaction Component.

# **Virtual Supply Groups**

	<b>Load Zones</b>	<b>Load Zones</b>		
Summer	A–F	G–I	Load Zone J	Load Zone K
HB07–10	VSG-1	VSG-7	VSG-13	VSG-19
HB11–14	VSG-2	VSG-8	VSG-14	VSG-20
HB15–18	VSG-3	VSG-9	VSG-15	VSG-21
HB19–22	VSG-4	VSG-10	VSG-16	VSG-22
Weekend/ Holiday (HB07–22)	VSG-5	VSG-11	VSG-17	VSG-23
Night (HB23–06)	VSG-6	VSG-12	VSG-18	VSG-24
Winter				
HB07-10	VSG-25	VSG-31	VSG-37	VSG-43
HB11–14	VSG-26	VSG-32	VSG-38	VSG-44
HB15–18	VSG-27	VSG-33	VSG-39	VSG-45
HB19–22	VSG-28	VSG-34	VSG-40	VSG-46
Weekend/ Holiday (HB07–22)	VSG-29	VSG-35	VSG-41	VSG-47
Night (HB23–06)	VSG-30	VSG-36	VSG-42	VSG-48
Rest-of-Year				
HB07–10	VSG-49	VSG-55	VSG-61	VSG-67
HB11–14	VSG-50	VSG-56	VSG-62	VSG-68
HB15–18	VSG-51	VSG-57	VSG-63	VSG-69
HB19–22	VSG-52	VSG-58	VSG-64	VSG-70
Weekend/ Holiday (HB07–22)	VSG-53	VSG-59	VSG-65	VSG-71
Night (HB23–06)	VSG-54	VSG-60	VSG-66	VSG-72

#### Where:

Summer = May, June, July, and August

Winter = December, January, and February

Rest-of-Year = March, April, September, October, and November

HB07–10 = weekday hours beginning 07:00–10:00

HB11–14 = weekday hours beginning 11:00–14:00

HB15–18 = weekday hours beginning 15:00–18:00

HB19–22 = weekday hours beginning 19:00– 22:00

Weekend/Holiday = weekend and holiday hours beginning 07:00–22:00

# **Virtual Load Groups**

	<b>Load Zones</b>	<b>Load Zones</b>		
Summer	A–F	G–I	Load Zone J	Load Zone K
HB07–10	VLG-1	VLG-4	VLG-8	VLG-12
HB11–14	VLG-2	VLG-5	VLG-9	VLG-13
HB15–18	VLG-2	VLG-6	VLG-10	VLG-14
HB19–22	VLG-1	VLG-4	VLG-8	VLG-15
Weekend/ Holiday (HB07–22)	VLG-3	VLG-4	VLG-8	VLG-16
Night (HB23-06)	VLG-1	VLG-7	VLG-11	VLG-12
Winter				
HB07–10	VLG-17	VLG-19	VLG-21	VLG-23
HB11–14	VLG-17	VLG-20	VLG-21	VLG-23
HB15–18	VLG-18	VLG-19	VLG-22	VLG-24
HB19–22	VLG-17	VLG-20	VLG-21	VLG-24
Weekend/ Holiday (HB07–22)	VLG-17	VLG-20	VLG-21	VLG-23
Night (HB23-06)	VLG-17	VLG-20	VLG-21	VLG-23
Rest-of-Year				
HB07–10	VLG-25	VLG-26	VLG-27	VLG-29
HB11–14	VLG-25	VLG-26	VLG-28	VLG-29
HB15–18	VLG-25	VLG-26	VLG-28	VLG-30
HB19–22	VLG-25	VLG-26	VLG-27	VLG-30
Weekend/ Holiday (HB07–22)	VLG-25	VLG-26	VLG-27	VLG-30
Night (HB23–06)	VLG-25	VLG-26	VLG-27	VLG-29

#### Where:

Summer = May, June, July, and August

Winter = December, January, and February

Rest-of-Year = March, April, September, October, and November

HB07–10 = weekday hours beginning 07:00–10:00

HB11–14 = weekday hours beginning 11:00–14:00

HB15–18 = weekday hours beginning 15:00–18:00

HB19–22 = weekday hours beginning 19:00– 22:00

Weekend/Holiday = weekend and holiday hours beginning 07:00–22:00

Night = all hours beginning 23:00–06:00

### 26.4.2.7 DADRP Component

The DADRP Component shall be equal to the product of: (i) the Demand Reduction Provider's monthly average of MWh of accepted Demand Reduction Bids during the prior summer Capability Period or, where the Demand Reduction Provider does not have a history of accepted Demand Reduction bids, a projected monthly average of the Demand Reduction Provider's accepted Demand Reduction bids; (ii) the average Day-Ahead LBMP at the NYISO Reference Bus during the prior summer Capability Period; (iii) twenty percent (20%); and (iv) a factor of four (4). The ISO shall adjust the amount of Unsecured Credit and/or collateral that a Demand Reduction Provider is required to provide whenever the DADRP Component increases or decreases by ten percent (10%) or more.

#### 26.4.2.8 DSASP Component

The DSASP Component is calculated every two months based on the Demand Side Resource's Operating Capacity available for the scheduling of such services, the delta between the Day-Ahead and hourly market clearing prices for such products in the like two-month period of the previous year, and the location of the Demand Side Resource. Resources located East of Central-East shall pay the Eastern reserves credit support requirement and Resources located West of Central-East shall pay the Western reserves credit support requirement. The DSASP Component shall be equal to:

(a) For Demand Side Resources eligible to offer only Operating Reserves, the product of (i) the maximum hourly Operating Capacity (MW) for which the Demand Side Resource may be scheduled to provide Operating Reserves, (ii) the amount of Eastern or Western reserves credit support, as appropriate, in \$/MW per day, and (iii) three (3) days.

#### Where:

The amount of Eastern reserves credit support (\$/MW/day) for each two-month period

= Eastern Price Differential for the same two-month period in the previous year \* the higher of two (2) or the maximum number of daily Reserve Activations for the same two-month period in the previous year

The amount of Western reserves credit support (\$/MW/day) for each two-month period

Western Price Differential for the same two-month period in the previous year \* the higher of two (2) or the maximum number of daily Reserve Activations for the same two-month period in the previous year

Two-month periods:

January and February
March and April
May and June
July and August
September and October
November and December

 $MCP_{SRh}$ 

 Hourly, time-weighted Market Clearing Price for Spinning Reserves

Eastern Price Differential

The hourly differential at the 97<sup>th</sup> percentile of all hourly differentials between the Day-Ahead and Real-Time MCPSRh for Eastern Spinning Reserves for hours in the two-month period of the previous year when the Real-Time MCPSRh for Eastern Spinning Reserves exceeded the Day-Ahead MCPSRh for Eastern Spinning Reserves

Western Price Differential

The hourly differential at the 97<sup>th</sup> percentile of all hourly differentials between the Day-Ahead and Real-Time MCPsSRh for Western Spinning Reserves for hours in the two-month period of the previous year when the Real-Time MCPSRh for Western Spinning Reserves exceeded the Day-Ahead MCPSRh for Western Spinning Reserves

**Reserve Activations** 

= The number of reserve activations at the 97th percentile of daily reserve activations for days in each two month period of the previous year that had reserve activations.

(b) For Demand Side Resources eligible to offer only Regulation Service, or

Operating Reserves and Regulation Service, the product of (i) the maximum

hourly Operating Capacity (MW) for which the Demand Side Resource may be
scheduled to provide Regulation Service and Operating Reserves, (ii) the amount
of regulation credit support, as appropriate, in \$/MW per day, and (iii) three (3)

days.

Where:

The amount of regulation credit support (\$/MW/day) for each two-month period

Price Differential for the same two-month period in the previous year \* 24 hours

Two-month periods: = January and February

March and April May and June July and August

September and October November and December

MCP<sub>Regh</sub> = Hourly, time-weighted Market Clearing

Price for Regulation Services

Price Differential = The hourly differential at the 97<sup>th</sup> percentile

of all hourly differentials between the Day-Ahead and Hour-Ahead MCPRegh for hours in the two-month period of the previous year when the Real-Time MCP exceeded the Day-

Ahead MCP

# 26.4.2.9 Projected True-Up Exposure Component

The Projected True-Up Exposure Component shall apply to any Customer whose fourmonth true-ups over the most recently invoiced four months average percentage credit exposure to the NYISO is greater than ten percent of the initial invoice settlements for the associated months. Customers subject to the Projected True-Up Exposure Component shall be required to provide secured credit to satisfy the requirement. The Projected True-Up Exposure Component shall be determined according to the following formula:

$$PTE = \left[ \sum_{N4} (Avg4TrueUp * Initial4Month) \right] + \left[ \sum_{NF} (AvgFinalTrueUp * InitialFinal) \right]$$

Where:

PTE = The amount of secured credit support required for the Projected True-Up

**Exposure Component** 

N4 = Each month with an initial settlement without an associated 4 month

settlement

NF = Each month with an initial settlement without an associated final bill

close-out

Avg4TrueUp = Most recent six month rolling average percentage credit exposure of 4

month settlements to associated initial settlements, not to exceed a market-

wide maximum percentage reasonably determined by the ISO

AvgFinalTrueUp = Most recent six month rolling average percentage credit exposure of final

bill close-outs to associated 4 month settlements, not to exceed a market-

wide maximum percentage reasonably determined by the ISO

Initial 4 Month = Initial settlement for the month N4

Initial Final = Initial settlement for the month NF

#### **26.4.2.10** Former RMR Generator Component

The Former RMR Generator Component shall apply to any Customer that is the financially responsible party under the ISO Tariffs for a former RMR Generator or former Interim Service Provider that is subject to a Monthly Repayment Obligation. The Former RMR Generator Component will apply until either (a) the Monthly Repayment Obligation associated with the former RMR Generator or former Interim Service Provider is paid in full, or (b) the former RMR Generator or former Interim Service Provider is not subject to a Monthly Repayment Obligation. Customers subject to the Former RMR Generator Component shall be required to provide collateral to satisfy the requirement.

The Former RMR Generator Component shall be calculated as follows:

$$\sum_{G \in S} MRO_G \times Term_G$$

- S = the set of former RMR Generators and former Interim Service Providers for which Customer is the financially responsible party under the ISO Tariffs
- G = a former RMR Generator or former Interim Service Provider in set S
- $MRO_G$  = the Monthly Repayment Obligation (as defined in Section 15.8.7 of Rate Schedule 8 to the Services Tariff) for Generator G
- $Term_{G}$  = the lesser of 8 or the number of months remaining in the repayment term that the ISO determines in accordance with Rate Schedule 8 to the Services Tariff for Generator G

# **26.4.3** Calculation of Bidding Requirement

The Bidding Requirement shall be an amount equal to the sum of:

- the amount of bidding authorization that the Customer has requested for use in or during, as appropriate, an upcoming ISO-administered TCC auction, which shall at least cover the sum of all positive bids to purchase TCCs, plus the absolute value of the sum of all negative offers to sell TCCs; *provided, however*, that the amount of credit required for each TCC that the Customer bids to purchase, whether positive, negative, or zero shall not be less than (a) \$3,000 per MW for two-year TCCs, (b) \$1,500 per MW for one-year TCCs, (c) \$2,000 per MW for six-month TCCs, (d) \$1,800 per MW for five-month TCCs, (e) \$1,500 per MW for four-month TCCs, (f) \$1,200 per MW for three-month TCCs, (g) \$900 per MW for two-month TCCs, and (h) \$600 per MW for one-month TCCs;
- (ii) the approximate amount that the Customer may owe following an upcoming TCC auction as a result of converting expired ETAs into Historic Fixed Price TCCs pursuant to Section 19.2.1 of Attachment M to the OATT, which shall be

- calculated in accordance with the provisions of Section 19.2.1 regarding the purchase of TCCs with a duration of ten years;
- (iii) the amount of bidding authorization that the Customer has requested for use in an upcoming ISO-administered ICAP auction; and
- (iv) five (5) days prior to any ICAP Spot Market Auction, the amount that the Customer may be required to pay for UCAP in the auction, calculated as follows:

$$\sum_{L \in \mathcal{C}} \left[ \left( ICPM_L * 1000 * \ Deficiency_L \right) + \left( ICPM_L * 1000 * \left( ZDOMW_L * -1 \right) \right) + \\ \left( ICPM_L * 1000 * \left( \frac{ZCP_L - 1}{2} \right) * \ RQT_L \right) \right]$$

Where:

S equals a set containing the following locations: each Locality and Rest of State,

L equals a location in the set S,

 $ICPM_L$  equals the lesser of  $UBRP_L$  or  $LM_L$ ,

 $UBRP_L$  equals the UCAP based reference point (in \$/kW-Month) for location L, as determined on the ICAP Demand Curve for that location (or for NYCA, if L is Rest of State) for the applicable Obligation Procurement Period,

 $LM_L$  equals (1) for any Locality L that is contained within another Locality X, the greater of  $CPM_L$  or  $CPM_X$ , or (2) for any other Locality or Rest of State,  $CPM_L$ ,

 $CPM_L$  equals for location L,  $(1 + Margin_L)*MCP_L$ ,

 $CPM_X$  equals for location X,  $(1 + Margin_X)*MCP_X$ ,

 $Margin_L$  equals 25% if location L is New York City and 100% if location L is G-J Locality, Long Island or Rest of State,

equals the Market-Clearing Price for location *L* in the most recent Monthly Auction that established such a price for the month covered by the ICAP Spot Market Auction, measured in dollars per kilowatt-month,

 $Deficiency_L$  equals the number of megawatts of Unforced Capacity that are to be procured in location L on behalf of that Customer in the ICAP Spot Market Auction in order to cover any deficiency for that Customer that exists in that location after the certification deadline for that ICAP Spot Market Auction less any deficiency

calculated for that Customer for any Localities contained within location L, such value not to be less than zero,

- $ZDOMW_L$  equals the number of megawatts of unsold Unforced Capacity in location L that the Customer committed as zero dollar offered megawatts for that ICAP Spot Market Auction,
- equals the percentage determined in accordance with Services Tariff Section
   5.14.1.2 for the applicable ICAP Demand Curves as established at the \$0.00 point for the appropriate Capability Year, and
- equals (1) if *L* is New York City or Long Island, that Customer's share of the Locational Minimum Unforced Capacity Requirement for location *L* or (2) if *L* is G-J Locality, that Customer's share of the Locational Minimum Unforced Capacity Requirement for the G-J Locality that remains after reducing this amount by its share of the Locational Minimum Unforced Capacity Requirements for New York City or, (3) if *L* is Rest of State, that Customer's share of the NYCA Minimum Unforced Capacity Requirement that remains after reducing this amount by (a) its share of the Locational Minimum Unforced Capacity Requirements for New York City and Long Island and (b) that Customer's share of the Locational Minimum Unforced Capacity Requirement for the G-J Locality remaining after accounting for New York City, as calculated in (2) above; such value not to be less than zero.