

# Attachment I

## 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 six-month 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: (i) which is operating in Start-Up or Shutdown Periods, or Testing Periods; or (ii) which is a Limited Control Run of River Hydro Resource that has offered its Energy to the ISO in a given interval not using the ISO-committed Flexible or Self-Committed Flexible bid mode; or (iii) which is an Intermittent Power Resource that depends on solar energy or landfill gas for its fuel and has offered its Energy to the ISO in a given interval not using the ISO-committed Flexible or Self-Committed Flexible bid mode; or (iv) which is an Intermittent Power Resource that depends on wind for its fuel, 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; 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 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 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.

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

**Curtailed 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.

**Curtailement 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.

**Curtailement 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 Curtailement Services Provider is set forth in Section 3 below and in ISO Procedures.

**Curtailement Services Provider Capacity:** Capacity from a Demand Side Resource nominated by a Curtailement 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.

## **5.8 Communication and Metering Requirements for Control Area Services**

The ISO shall arrange for and maintain reliable communications and metering facilities between the ISO and the Transmission Owners in the NYCA and the Control Area operators of all neighboring interconnected Control Areas. Such facilities may consist of data circuits, voice lines, meters and other facilities deemed necessary by the ISO to maintain reliable communication links for the sole purpose of transmitting operations and reliability data and instructions. The ISO shall be responsible for the specification, installation and maintenance of the required facilities according to ISO Procedures. The costs incurred by the ISO to establish communications facilities between the ISO and a Security Coordinators of a neighboring Control Area shall be borne by the Control Area that requested the establishment of the communications facilities unless a different arrangement is agreed to by both Control Areas. The total cost of the communications facilities between the ISO and the Transmission Owners and the portion of the cost of inter-Control Area communication facilities assigned to the ISO shall be collected from all Customers in accordance with Rate Schedule 15.1 of the ISO Services Tariff. Transmission Owners with communications requirements which exceed those required by the ISO shall procure and maintain such additional facilities at their own expense.

Generators, Suppliers and Loads are required to exchange certain operating and reliability data with the ISO and the Transmission Owners' Control Centers in accordance with the ISO Agreement and the ISO/TO Agreement, applicable ISO operating and reliability requirements, and in conjunction with any requirements for interconnection with the Transmission Owner.

In addition, Suppliers wishing to submit Bids in the RTC for Energy or Regulation Service must make provision to receive command and control information from the ISO. Those Generators or Suppliers currently providing this capability via a Transmission Owner may

continue to do so. Those requiring installation of this capability must contract with the ISO or with the interconnected Transmission Owner and must comply with applicable ISO or Transmission Owner data and other technical requirements.

Suppliers with multiple units at a single location must maintain a consistent representation of the plant with the ISO with respect to aggregation of units for purposes of bidding. If an aggregate Bid is to be provided for a group of units and those units are bidding in the RTC, or providing Regulation Service, then the ISO shall model those units as a group for purposes of dispatch, control and security modeling. The ISO will provide a single aggregate Base Point Signal and unit control error. If, however, the Supplier wishes to dispatch units individually, then it must configure both its bidding and data interfaces accordingly. Each Supplier must initially specify the configuration of the plant for purposes of bidding aggregation and must then maintain bidding and data interfaces consistent with that configuration. Similar modeling, control and bidding Constraints apply to an LSE that bids Load that is dispatchable by the ISO.

#### **5.8.1 Collection and Communication of Energy Forecasting Data by Intermittent Power Resources that Depend on Wind or Solar Energy as Their Fuel**

Pursuant to ISO Procedures, Intermittent Power Resources that depend on wind or solar energy as their fuel shall maintain in good working order equipment to collect data required for energy forecasting and shall provide the ISO, or its agent, with this data in the manner identified by the ISO, provided however this requirement shall not apply to any Intermittent Power Resource in commercial operation as of January 1, 2002 with nameplate capacity of 12 MWs or fewer. An Intermittent Power Resource that depends on wind as its fuel shall, in accordance with ISO Procedures, provide the ISO with wind speed and wind direction data for its site, and

maximum available megawatt data. An Intermittent Power Resource that depends on solar energy as its fuel shall, in accordance with ISO Procedures, provide the ISO with plane of array irradiance and back panel temperature data for its site, and maximum available megawatt data. Each Intermittent Power Resource subject to this Section shall be responsible for the cost of installing and maintaining such equipment at its site, as well as the cost of installing and maintaining the software and hardware necessary to provide the required data described above, in accordance with ISO Procedures.

The ISO may impose financial sanctions for failure to provide the required data described above.

Upon a determination of failure to provide the required data, the ISO shall take the following actions. The ISO shall notify the Intermittent Power Resource by written notice of its determination of failure to provide the required data and that the ISO may impose financial sanctions if the failure is not corrected. The ISO shall offer a reasonable opportunity to correct the failure to provide the required data. If, following such reasonable opportunity to cure, such failure is not cured, the ISO may impose daily sanctions of the greater of \$500 or \$20/MW of nameplate capacity until such failure is cured. The ISO shall offer the Intermittent Power Resource an opportunity to be heard by senior officers of the ISO prior to imposing sanctions.

### **15.3A Rate Schedule “3-A” -Charges Applicable to Suppliers That Are Not Providing Regulation Service**

#### **15.3A.1 Persistent Undergeneration Charges**

A Supplier, other than a Supplier included in Section 15.3A.2 of this Rate Schedule, that is not providing Regulation Service and that persistently operates at a level below its Energy schedule shall pay a persistent undergeneration charge to the ISO, unless its operation is within a tolerance described below, provided, however, no persistent undergeneration charges shall apply to a Fixed Block Unit that has reached a percentage of its Normal Upper Operating Limit, which percentage shall be set pursuant to ISO Procedures and shall be initially set at seventy percent (70%). Persistent undergeneration charges per interval shall be calculated as follows:

$$\text{Persistent undergeneration charge} = \text{Energy Difference} \times \text{Max} (\text{MPRC}_{\text{DAM}}, \text{MPRC}_{\text{RT}}) \times \text{Length of Interval in seconds}/3600 \text{ seconds}$$

Where:

Energy Difference in (MW) is determined by subtracting the actual Energy provided by the Supplier from its RTD Base Point Signal for the dispatch interval. The Energy Difference shall be set at zero for any Energy Difference that is otherwise negative or that falls within a tolerance, set pursuant to ISO Procedures, and which shall contain a steady-state and a dynamic component. The steady-state component shall initially be 3% of the Supplier’s Normal Upper Operating Limit or Emergency Upper Operating Limit, as applicable, and the dynamic component shall be a time constant that shall initially be set at fifteen minutes;

$\text{MPRC}_{\text{DAM}}$  is the Regulation Capacity Market Price in the Day-Ahead Market; and

$\text{MPRC}_{\text{RT}}$  is the Regulation Capacity Market Price in the Real-Time Market.

### **15.3A.1.1 Overgeneration Charges**

An Intermittent Power Resource that depends on wind as its fuel, for which the ISO has imposed a Wind Output Limit after October 31, 2009, or after February 1, 2010 for an Intermittent Power Resource that depends on wind as its fuel in commercial operation before 2006 with nameplate capacity of 30 MWs or less, that operates at a level above its schedule shall pay an overgeneration charge to the ISO, unless its operation is within a tolerance described below.

Overgeneration charges per interval shall be calculated as follows:

$$\text{Overgeneration charge} = \text{Energy Difference} \times \text{Max} (\text{MPRC}_{\text{DAM}}, \text{MPRC}_{\text{RT}}) \times \text{Length of Interval} \\ \text{in seconds}/3600 \text{ seconds}$$

Where:

Energy Difference in (MW) is determined by subtracting the RTD Base Point Signal for the dispatch interval from the actual Energy provided by the Intermittent Power Resource for the same interval. The Energy Difference shall be set at zero for any Energy Difference that is otherwise negative or that falls within a tolerance, set pursuant to ISO Procedures, which shall initially be set at 3% of the Supplier's Normal Upper Operating Limit or Emergency Upper Operating Limit, as applicable;

$\text{MPRC}_{\text{DAM}}$  is the Regulation Capacity Market Price in the Day-Ahead Market; and

$\text{MPRC}_{\text{RT}}$  is the Regulation Capacity Market Price in the Real-Time Market

### **15.3A.2 Exemptions**

The following types of Generator shall not be subject to persistent undergeneration charges:

15.3A.2.1 Generators, except for the Generator of a Behind-the-Meter Net

Generation Resource, providing Energy under contracts (including PURPA

contracts), executed and effective on or before November 18, 1999, in which the power purchaser does not control the operation of the supply source but would be responsible for payment of the persistent undergeneration or performance charge;

- 15.3A.2.2 Existing topping turbine Generators and extraction turbine Generators producing electric Energy resulting from the supply of steam to the district steam system in operation on or before November 18, 1999 and/or topping or extraction turbine Generators utilized in replacing or repowering existing steam supplies from such units (in accordance with good engineering and economic design) that cannot follow schedules, up to a maximum total of 523 MW of such units;
- 15.3A.2.3 Limited Control Run of River Hydro Resources;
- 15.3A.2.4 Intermittent Power Resources that depend on wind, landfill gas, or solar energy as their fuel;
- 15.3A.2.5 Capacity Limited Resources and Energy Limited Resources to the extent that their real-time Energy injections are equal to or greater than their bid-in upper operating limits but are less than their Real-Time Scheduled Energy Injections;
- 15.3A.2.6 Generators operating in their Start-Up Period or their Shutdown Period and, for Generators 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, each of the grouped generating units when one of the grouped generating units is operating in its Start-Up or Shutdown Period; and
- 15.3A.2.7 Generators operating during a Testing Period.

For Generators and Resources described in Sections 15.3A.2.1, 15.3A.2.2, 15.3A.2.3, and 15.3A.2.4 above, this exemption shall not apply in an hour if the Generator or Resource has bid in that hour as ISO-Committed Flexible or Self-Committed Flexible.

## **15.7 Rate Schedule 7 - Charges for Intermittent Power Resource Forecasting Services**

The ISO shall charge each Intermittent Power Resource that depends on wind or solar energy as its fuel that is interconnected in the New York Control Area in order to provide Energy to the LBMP Market or bilaterally to a Load internal or external to the NYCA, pursuant to this ISO Services Tariff or the NYISO OATT, and that has entered commercial operation, for forecasting service pursuant to this Rate Schedule, provided however no charge shall be assessed against any Intermittent Power Resource in commercial operation as of January 1, 2002 with nameplate capacity of 12 MWs or fewer.

The ISO shall calculate and assess such charges each Billing Period.

### **15.7.1 Responsibilities**

The ISO shall calculate a forecasting service charge which shall include a fixed component and a component that varies by the nameplate capacity of the Intermittent Power Resource subject to this charge (“Forecasting Service Charge”). Such charge shall be based upon the costs the NYISO incurs in producing a forecast of the expected generation output of each Intermittent Power Resource subject to this charge.

### **15.7.2 Charges**

Each Billing Period, the ISO shall assess to each Intermittent Power Resource subject to this charge the portion of the following monthly Forecasting Service Charge allocated to that Billing Period:

- \$500.00 as a fixed fee; and
- \$6.20 / MW of name plate capacity.