13 Metering

13.1 General Requirements

Existing metering in the NYCA provides revenue-quality metering information among the currently designated electrical zones separated by the designated transmission Interfaces. In addition, sufficient metering information will be made available by the ISO to calculate Load for the individual Transmission Owners within each Load Zone. The ISO will require adequate metering for all Generators, Aggregations (including each individual resource within an Aggregation), and Loads within the NYCA to ensure the reliable operation of the NYS Power System.

13.2 Requirements Pertaining to Customers

Customers shall provide to the ISO such information and data as the ISO reasonably deems necessary in order to perform its functions and fulfill its responsibilities under the ISO Services Tariff and in accordance with the ISO Market Power Monitoring Program. Such information will be provided on a timely basis and in the formats prescribed in the ISO Procedures. The ISO shall establish metering and real-time telemetry specifications and standards for all metering and telemetry that is used as a data source by the ISO, which specifications and standards will be set forth in ISO Procedures. Customers shall install and maintain such-metering and telemetry hardware and infrastructure at their own expense, and deliver data to the ISO without charge.

A Customer taking service under the ISO Services Tariff will make available to the ISO metered data that meets ISO requirements by one of the following means: (i) direct transmission to the ISO; (ii) direct transmission to the ISO through Transmission Owner communications

equipment, or (iii) indirectly through metering provided by the Transmission Owner in whose Load Zone it is located.

Customers shall provide real-time telemetry for Generators and Aggregations, nominally every six (6) seconds, in accordance with the specifications set forth in the ISO Procedures. Real-time telemetry data errors and transmission disruptions shall be remedied in accordance with ISO Procedures.

The Customer also shall provide its metered data to the Transmission Owner in whose Load Zone it is located, to the extent that the Transmission Owner determines that the metered data provided to the ISO is required for its system operation and planning functions, for the billing of services it provides to the Customer, or to perform calculations required as part of the ISO Settlement procedures.

13.2.1 Load Serving Entities

Any Load that is not directly metered, as described above, will have its Load determined by the Transmission Owner in whose Load Zone it is located in accordance with the Transmission Owner's retail access plan on file with the PSC or otherwise authorized.

13.2.2 Ancillary Service Suppliers

Suppliers shall ensure that adequate metering data is made available to the ISO as described above. Additionally, for operational purposes, metered data provided to the ISO must also simultaneously be provided to the Transmission Owner, which will handle such information in conformity with the OASIS standards of conduct as specified in Order No. 889.

13.2.3 Third Party Metering Services

Customers whose metering services are provided by third parties qualified under rules,

regulations and procedures of applicable state regulatory authorities shall be responsible to ensure that all data described in this section are satisfactorily made available to the ISO and applicable Transmission Owner(s) by those third parties.

13.2.34 Estimation of Metering

In the event of a meter malfunction or inadequate metering data, the ISO may use estimates to determine Customer's rights and responsibilities under the ISO Services Tariff.

13.3 Metering Requirements for DER Aggregations and Demand Side Resources

13.3.1 Responsibility for Metering and Meter Data Services for DER Aggregations and Demand Side Resources

<u>13.3.1.1</u> A DER Aggregator, Responsible Interface Party, <u>(e.g., a DER Aggregator</u> or Responsible Interface Party) or Curtailment Service Provider shall obtain metering and meter data services, as these services are defined in ISO Procedures, from: (i) the Member System in which Transmission District the DER Aggregation or Demand Side Resource is located, and/or (ii) an authorized Meter Services Entity that the ISO has determined complies with the eligibility requirements pursuant to Section 13.3.2.1. A DER Aggregator, Responsible Interface Party, or Curtailment Service Provider that meets the eligibility requirements in Section 13.3.2.1 may serve as its own Meter Services Entity.

13.3.1.2 The DER Aggregator, Responsible Interface Party, or Curtailment Service Provider shall be responsible for ensuring that all of the metering and meter data services that are required for it to perform its functions and fulfill its responsibilities under the ISO Tariffs and ISO Procedures are provided by the Member System and/or Meter Services Entity in accordance with the requirements in this Section 13 and ISO Procedures. The DER Aggregator, Responsible Interface Party, or Curtailment Service Provider shall be responsible for any applicable penalties

issued as a result of metering or meter data services that do not comply with the ISO Tariffs and

ISO Procedures. See, e.g., Services Tariff Sections 5.12 and 5.14.

13.3.1.3 A DER Aggregator, Responsible Interface Party, or Curtailment Service

Provider shall be responsible for any required compensation to the Member System and/or Meter

Services Entity concerning the provision of metering and/or meter data services. In accordance

with Rate Schedule 10, DER Aggregators, Responsible Interface Parties, and Curtailment

Service Providers shall be responsible for the ISO's costs of of overseeing auditing conducting

audits pursuant to section 13.3.2.3. the use of Meter Services Entities in accordance with Rate

Schedule 9. The ISO may Audit the use of a Meter Service Entity by an Aggregator or

Curtailments Service Provider when Resources are initially enrolled in the Aggregation or

otherwise begin to participate in the NYISO Markets and periodically.

13.3.2 Meter Services Entity Requirements

13.3.2.1 Eligibility Determination for Meter Services Entity

To be authorized as a Meter Services Entity, an entity must complete, to the NYISO's satisfaction, the application requirements specified in Services Tariff Section 13.3.2.1.2 below. Once authorized, a Meter Services Entity must meet the obligations set forth in Services Tariff Section 13.3.2.1.3 and 13.3.2.1.4. All physical metering infrastructure and meter data communications infrastructure used by a Meter Services Entity must comply with the requirements set forth in the ISO Tariffs and ISO Procedures.

<u>13.3.2.1.1</u> An entity, including a DER Aggregator, Responsible Interface Party, or Curtailment Service Provider, seeking to be a Meter Services Entity must submit to the ISO an application containing the eligibility information required pursuant to Section 13.3.2.1.2, and

payaccompanied by a <u>thenon-refundable</u> application fee of \$1,000 required by Rate Schedule 9. The ISO shall review the application within thirty (30) calendar days of its receipt of the application and fee_<u>submitted by each applicant</u>, and notify the <u>entityapplicant</u> whether the application is sufficient to register the applicant as a Meter Services Entity or otherwise requires additional information. <u>The ISO shall receive a</u> Any <u>required</u> additional information required shall be received by the ISO within the timeframe deadline specified by the ISO in its request for additional information. The ISO shall reject the application of an entity seeking to become a Meter Services Entity if it does not submit the required information is not received within the specified timeframe or an alternative, mutually agreed to timeframe.

Upon the ISO's affirmative determination of an entity's eligibility, the entity will be registered with the ISO and authorized to serve as a Meter Services Entity in order to provide metering and/or meter data services, as applicable, to a DER Aggregator, Responsible Interface Party, or Curtailment Service Provider. The ISO shall post on its website a list of all authorized Meter Services Entities.

If the ISO determines an entity is not eligible to serve as a Meter Services Entity, the ISO shall provide the entity with the reasons for such determination. An entity may re apply to be a Meter Services Entity once it is able to resolve the ISOs concerns. An entity that seeks to reapply to be a Metering Services Entity shall also be required to pay the applicable Rate Schedule 9\$1,000 application fee for each re Application.

<u>13.3.2.1.2</u> An entity seeking to be a Meter Services Entity must provide, at a minimum, the following eligibility information, as detailed in ISO Procedures: (i) financial eligibility and insurance coverage information; (ii) proof of eligibility to do business in New York State; (iii) a list of the Transmission Owner(s) service territory(ies) in which it will provide

services; (iv) a description of the metering and/or meter data services that it will provide; (v) its attestation of its employees' qualifications, training, and certification to perform the listed services; (vi) a description of the meter testing laboratory facilities, including its attestation that its meter testing programs comply with ISO Procedures and Good Utility Practice; (vii) its agreement that its services will be subject to audit by the ISO, the Transmission Owners, and/or their designated agents, as applicable; (viii) its agreement to comply with the metering requirements in the ISO Tariffs and ISO Procedures, as such requirements may be amended from time to time; (ix) a revenue-grade settlement meter and real-time telemetry data plan; (x) a meter data validation, editing, and estimation plan; (xi) a security plan and description of how it will protect meter equipment and/or meter data from unauthorized physical or electronic entry or tampering; (xii) a description of how and where records of meter installations and/or meter data will be kept, and its agreement to retain these records in accordance with the ISO's records equipments; and (xiii) any other information required by ISO Procedures or requested by the ISO.

<u>13.3.2.1.3</u> A Meter Services Entity shall promptly inform the ISO, in accordance with ISO procedures, within five (5) days of any material change to the eligibility information it has previously submitted to the ISO pursuant to Section <u>13.3.2.1.2</u>. The ISO shall review all such material changes and determine whether the Meter Services Entity complies with all eligibility requirements. If the NYISO determines that the Meter Services Entity does not comply with the eligibility requirements, it may suspend the Meter Services Entity's eligibility until such time that it complies with those eligibility requirements.

<u>13.3.2.1.4</u> The ISO shall inform registered Meter Services Entities of changes related to Meter Services Entity eligibility requirements via posting to the ISO's public website and

electronic mail. A Meter Services Entity has a continuing obligation to comply with the eligibility requirements in this Section 13 and ISO Procedures and the metering and meter data requirements in the ISO Tariffs and ISO Procedures, as the requirements may be amended from time to time. Each Meter Services Entity shall inform the ISO, in accordance with ISO Procedures, and received by a date specified in the ISO's posting, of its compliance with the identified changes to eligibility criteria. If the Meter Services Entity is unable to comply with the changes by the specified date, it shall provide the ISO with a detailed plan to comply. The ISO shall review all such plans and determine whether to extend the compliance deadline, or to suspend the Meter Service Entity's eligibility until such time that it complies with all eligibility requirements.

13.3.2.2 Standards of Conduct for Meter Services Entities

A Meter Services Entity must treat all customers, Affiliated and non-Affiliated, on a nondiscriminatory basis, and must not make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage with respect to the provision of metering services authorized by Services Tariff Section 13.3.

13.3.2.3 ISO Audits and Corrective Actions

<u>13.3.2.3.1</u> The ISO or its designated entity may, upon reasonable notice, perform an audit, inspection, and/or test of the Meter Services Entity's metering facilities, meters, and/or meter data records to ensure they comply with the ISO Tariffs and ISO Procedures and with the Meter Services Entity's plans submitted to the ISO. Meter Services Entities must comply with, **:** i) periodic audits of meter data records and meter data collection and retention services and

protocols provided to the Market Participant by the Meter Services Entity; and ii) audits of the

metering facilities, meter data records and meter data collection and retention services and

protocols utilized by the Market Participant and the Meter Services Entity when the Market

Participant enrolls new resources or modifies the metering scheme of existing resources.

The ISO audit of a MSE's services may involve, but is not limited to, the ISO review,

inspection, performance testing and review of corrective actions taken in the following

categories:

A) Validation, Estimation, & Editing (VEE) methodology

B) Site meter configurations

C) Meter compliance with ISO rules and procedures

D) Meter Services Entity operational protocols, procedures, and record keeping, and compliance with ISO rules and procedures

E) Telemetry and communication data and records

13.3.2.3.2 If the ISO determines, at any time, that a Meter Services Entity does not comply with the eligibility requirements or does not comply with the metering or meter data requirements set forth in the ISO Tariffs and ISO Procedures, the ISO may suspend or revoke the eligibility of the Meter Services Entity.

13.3.3 Metering Requirements for Aggregated Resources

Aggregators shall ensure that all measurements for metering and telemetry for the individual DER they represent, derive from either directly measured or calculated values, or a combination thereof, in accordance with the requirements set forth in ISO procedures.