

Conceptual Details of MSEs Participation in NYISO Markets

Michael Ferrari

Associate Market Design Specialist

Market Issues Working Group (MIWG)

October 23, 2018, NYISO

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2018. ALL RIGHTS RESERVED



Agenda

- **MSE – Detailed Proposal**
- **Next Steps**
- **Q&A and Feedback**

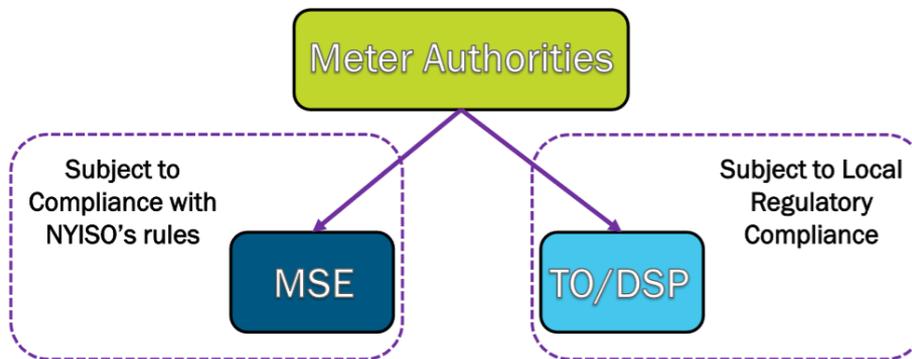
DRAFT – FOR DISCUSSION PURPOSES ONLY

Background

Date	Working Group	Discussion points and links to materials
02-02-17	Posted	Distributed Energy Resources Roadmap for New York's Wholesale Electricity Market
05-23-17	Market Issues Working Group (MIWG)	DER Measurement, Verification, Monitoring & Control, and Meter Data Study
09-29-17	Market Issues Working Group (MIWG)	DER Meter Data Study
10-30-17	Market Issues Working Group (MIWG)	DER Meter Data Study Initial Findings – E-Cubed Policy Associates, LLC (Dr. Paul Sotkiewicz)
12-13-17	Market Issues Working Group (MIWG)	NYISO Meter Data Study Report – E-Cubed Policy Associates, LLC (Dr. Paul Sotkiewicz)
09-11-18	Market Issues Working Group (MIWG)	DER Meter Service Constructs for NYISO Market Participation

DRAFT – FOR DISCUSSION PURPOSES ONLY

Review



- **NYISO is developing a new Metering Service Entity construct that will authorize qualified entities to provide meter services to DER Aggregations**
 - New rules will replace the existing MSP/MDSP constructs used for the NYISO's demand response programs
- **MSE rules will be included with the tariff revisions to integrate the DER participation model**

DRAFT – FOR DISCUSSION PURPOSES ONLY

MSE - Detailed Proposal

Tariff and Manual Revisions

- **NYISO is developing rules and procedures to implement the MSE market design**
 - NYISO is determining the tariff revisions that are necessary to implement the MSE market design, including the NYISO's and DER Aggregator's requirements
 - Additional procedures will be included in the NYISO Manuals
- **MSE Rate Schedule**
 - NYISO will develop a new Rate schedule to recover NYISO costs for the oversight of the MSEs
 - Structure:
 - Fixed annual amount per MSE
 - Variable amount per meter, potentially with a tiered structure for the MW size of the DER.
 - MP is responsible to the NYISO for these costs

DRAFT – FOR DISCUSSION PURPOSES ONLY

MSE Definition and Roles

- **A MSE is a third-party entity,¹ that is approved by NYISO, that provides metering and data services, including the provision of real-time telemetry data and revenue metering data, for a Aggregation for participation in the NYISO markets**
 - DER Aggregators will engage authorized MSEs to provide services for its Aggregations, and will be responsible for any financial compensation paid to the MSE for the services it provides
- **MSE may provide metering hardware or may utilize utility revenue metering hardware**
 - Metering configuration options will be set forth in ISO Procedures
 - All metering hardware must meet applicable NYISO and ANSI standards as specified in ISO Procedures
 - Meter hardware must meet installation requirements as specified in ISO Procedures
 - Must meet cyber security requirements for communications with NYISO in accordance with all applicable rules and procedures

1. An MSE may be a Market Participant if the MSE is a NYISO Customer

Eligibility Requirements: Business

- **Financial eligibility & Insurance Coverage**
 - Evaluating potential credit and collateral obligations for MSE authorization, as well as insurance coverage requirements
- **Eligible to do business in NY State**

Eligibility Requirements: Application Process

An entity seeking to be a MSE must submit the following to NYISO:

- Listing of utilities in whose service territories the MSE will provide services
- Listing of metering services to be provided
- Attestation that the MSE is qualified and employees have the necessary training and certification, to perform metering hardware installation, testing and other meter data services
- Acknowledgment that the services of the MSE will be subject to audits by NYISO and/or the utilities or other designated parties
- Agreement to Comply with NYISO Rules and Procedures as well as all applicable local, state and federal laws and regulations

DRAFT – FOR DISCUSSION PURPOSES ONLY

MSE's Responsibilities: Plans

As part of application, the entity seeking to be an MSE shall provide:

- **Description of the metering site and meter testing facilities including attestation that meter test programs are compliant with the NYISO procedures.**
- **Settlement Meter and Real-Time Telemetry Data Plan in accordance to ISO Procedures.**
 - Meter type, programming and configuration
 - Data collection, validation, retention, data aggregation, and data submission to NYISO
- **Meter data Validation, Editing, and Estimation (VEE) plan in accordance to ISO Procedures.**
- **Physical security plan and description of how the MSE will protect meter equipment and/or meter data from unauthorized physical or electronic entry or tampering.**
 - Including standards governing security and confidentiality for its employees.
- **Description of how and where records of meter installations and/or meter data will be kept**
 - Plans for disaster recovery of those records.
 - Means of ensuring that those records will be available to the NYISO in event the MSE leaves the NYISO market or becomes unable to meet minimum eligibility requirements.

DRAFT – FOR DISCUSSION PURPOSES ONLY

MSE's Responsibilities: Operations

The MSE shall:

- Conduct or have conducted yearly audits and testing of Metering Facilities.
- Ensure that appropriate inspections, if any, are completed by the local utility and/or regulatory authorities prior to meter installation.
- Perform meter data Validation, Estimation, and Editing (VEE) in accordance with VEE plan and ISO Procedures.
- Maintain electrical and schematic diagrams and other documentation associated with metering systems and components in accordance with ISO Procedures.
- Maintain all data and information associated with billing and operational data, (including but not limited to real-time telemetry, periodic calibration and test data of metering devices) for 6 years in accordance with ISO Procedures.

DRAFT – FOR DISCUSSION PURPOSES ONLY

MSE's Responsibilities: Operations (Cont'd)

MSE shall:

- Collect real-time telemetry and revenue meter data from DER participating in wholesale markets
- Provide the real-time telemetry and revenue meter data to the NYISO according to applicable timing and accuracy requirements
- Support meter data processing and analytics in accordance to ISO Procedures.
- Support the NYISO settlements and dispute resolution procedures.
- Verification of meter accuracy and compliance with applicable standards
- Provide written notice to the NYISO and the applicable MP of any defective meters, technical issue(s) or condition that may prevent the collection or reporting of accurate meter data, or loss of meter data
- Take actions to rectify meters failing to meet standards, either on an individual meter or a programmatic basis
- Establish the data collection devices or metering for telemetry data (RTUs, transformers, IEDs, etc.) to NYISO and TO in accordance with ISO Procedures.
- Report meter data issues to the NYISO in accordance with ISO Procedures.

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2018. ALL RIGHTS RESERVED

MSE's Responsibilities: Updating Information

- **Amendments to Application Filings:**
 - An MSE shall submit an amendment to its application for eligibility within 5 days of any changes to any of the information included on its application or any subsequent amendment.
 - Eligible MSEs filing amended applications will continue to be eligible unless otherwise directed by the NYISO.
- **Maintain compliance with MSE rules and eligibility requirements in response to changes in the tariff, other NYISO procedures, or other changes affecting MSE eligibility and responsibilities as may be developed by the NYISO, within the deadline specified by NYISO.**

NYISO Responsibilities

- **Review applications and authorize entities to be MSEs**
 - Including the review of all MSE plans; and
 - approve, request more information, conditionally approve or deny MSE applications
- **Perform audits and request information**
- **Settlements**
 - According to NYISO settlement procedure
- **Dispute resolution**
 - According to NYISO meter data dispute resolution procedure

DRAFT – FOR DISCUSSION PURPOSES ONLY



Compliance

- **If the NYISO determines that an MSE is not in compliance with the conditions of eligibility and/or performance standards and rules, the NYISO reserves the right take corrective actions**
- **Revocation and suspension for repeated non-compliance:**
 - DER using MSE services would be ineligible to participate in the NYISO market till the MSE is re-authorized by the NYISO
 - DCE will have the option to choose another MSE that is authorized by the NYISO
 - Any penalties associated with market rule violations or settlements issues arising from MSE failures are the responsibility of the MP contracting the MSE

Non-Compliance Examples

- Failure to maintain eligibility and registration requirements as an approved MSE
- Failure to meet performance standards
- Non-compliance with the market rules
- Failure to provide adequate information in response to any request by NYISO.
- Failure to provide valid estimated and edited data pursuant to a VEE audit.

Next Steps

Timeline

- **Tariff details development**
- **MIWG Meeting – Draft Tariff (11/05/18)**
- **MIWG Meeting – Final Tariff (11/19/18)**

DRAFT – FOR DISCUSSION PURPOSES ONLY

Feedback?

- Email additional feedback to:
DER_Feedback@nyiso.com

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



www.nyiso.com

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2018. ALL RIGHTS RESERVED