

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

NRG Curtailment Solutions, Inc.)	
Complainant,)	
)	
v.)	Docket No. EL18-188-___
)	
New York Independent System Operator, Inc.)	
Respondent.)	

REPLY BRIEF OF NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

The Initial Briefs and Comments submitted in this proceeding reflect a shared belief that accurate and reliable metering services—whether provided by the incumbent utility or a third party—are necessary to operate efficient and competitive wholesale markets. The New York Independent System Operator, Inc.’s (“NYISO”) Initial Brief described a proposed meter services framework consisting of (i) rules to authorize Meter Services Entities (“MSEs”), (ii) metering standards and technical requirements for the installation, testing, and maintenance of meters and the provision of meter data, and (iii) a cost recovery mechanism to address the NYISO’s costs of administering those rules (“MSE Proposal”).¹

NRG Curtailment Solutions, Inc. (“NRG”) in its Initial Brief,² and Advanced Energy Management Alliance (“AEMA”) in its Comments,³ argue that accurate and reliable metering is achieved by application of industry-accepted standards with after-the-fact auditing to confirm compliance. Both entities argue that pre-authorization to provide metering services is

¹ *Initial Brief of the New York Indep. Sys. Operator, Inc.*, Docket No. EL18-188-000 (Feb. 4, 2019) (NYISO Initial Brief).

² *Initial Brief of NRG Curtailment Solutions, Inc.*, Docket No. EL18-188-000 (Jan. 31, 2019) at 7 (NRG Initial Brief).

³ *Comments of Advanced Energy Management Alliance*, Docket No. EL18-188-000 (Feb. 4, 2019) at 3-4 (AEMA Comments).

unnecessary. The NYISO agrees with NRG and AEMA that application of industry-accepted standards will help achieve accurate and reliable metering, which in turn helps improve situational awareness for grid operators and provides reliable settlement data. Those standards, however, must be implemented by an entity possessing the necessary technical competence. Therefore, the NYISO's MSE Proposal requires an entity to meet basic eligibility criteria before it is authorized to provide metering services. The NYISO's MSE Proposal is just and reasonable, and the Commission should reject NRG's and AEMA's recommendations to strike the NYISO's proposed MSE pre-authorization requirement.⁴

I. Overview

The MSE Proposal described in the NYISO's Initial Brief would allow third parties (*i.e.*, entities other than the applicable incumbent utility) to provide metering services (including meter installation and testing, and meter data reporting) for Responsible Interface Parties ("RIPs"),⁵ Curtailment Service Providers ("CSPs"), and, in the future, distributed energy resource ("DER") aggregators, upon demonstration that the MSE meets basic eligibility criteria.⁶ NYISO's MSE Proposal will, if accepted, replace the NYISO's existing rules that require third party meter service providers to be authorized as a Meter Service Provider ("MSP") or Meter Data Service Provider ("MDSP") by the New York State Public Service Commission ("NYPSC").⁷

⁴ This Reply Brief is submitted pursuant to the *Order on Complaint, Denying Tariff Waiver, and Establishing Paper Hearing* issued by the Federal Energy Regulatory Commission ("Commission"). *NRG Curtailment Solutions, Inc., v. New York Indep. Sys. Operator, Inc.*, 165 FERC ¶ 61,247 (2018) ("December 2018 Order").

⁵ Capitalized terms not defined in this Reply Brief shall have the meaning set forth in the NYISO Open Access Transmission Tariff ("OATT") and Market Administration and Control Area Services Tariff ("Services Tariff").

⁶ NYISO Initial Brief at 5.

⁷ *See, NYISO Emergency Demand Response Program Manual* at § 5.1.

NRG challenged three components of the proposed framework: (i) the technical metering requirements; (ii) the cost recovery mechanism by which the Market Participants that use and benefit from MSEs pay the costs of administration of those rules; and (iii) the application of minimum eligibility requirements to the entities seeking to provide metering services.⁸

II. NYISO Response

A. Technical Metering Requirements

As an initial matter, the NYISO agrees with NRG that the technical metering requirements should be based on existing standards established by groups such as the American National Standards Institute (“ANSI”) and the North American Energy Standards Board (“NAESB”). Technical requirements based on these established standards will, as NRG states, “keep the market rules transparent, robust and fair,”⁹ and will reduce the burden on the NYISO to update its requirements as technology evolves. The NYISO commits to identifying in its tariffs and manuals the appropriate metering and meter data services standards applicable to wholesale market service providers.¹⁰

B. Cost Recovery Mechanism

In its Initial Brief, the NYISO described only that it proposes to assess the costs of administering the MSE program to those entities that use and benefit from the program. At that time, the NYISO’s cost recovery proposal was not sufficiently developed to provide the

⁸ NRG Initial Brief at 6-7. In the interest of limiting the scope of this Reply Brief, the NYISO does not address all issues raised in NRG’s Initial Brief and AEMA’s Comments. The fact that the NYISO is not responding to all issues raised should not be construed as agreement therewith.

⁹ NRG Initial Brief at 4.

¹⁰ The NYISO’s rules already include such standards. *See, e.g.*, NYISO Revenue Metering Requirements Manual § 2.2 (providing detailed requirements for revenue metering equipment), *available at*: https://www.nyiso.com/documents/20142/2923231/rev_mtr_req_mnl.pdf. The NYISO will revise and add to these rules as necessary to implement the MSE framework.

Commission with additional information. The NYISO had, however, informed stakeholders that it was considering developing a Rate Schedule consisting of a “[f]ixed annual amount per MSE,” and a “[v]ariable amount per meter, potentially with a tiered structure for the MW size of the DER.”¹¹ The NYISO later revised the initial proposal such that charges to Market Participants using a MSE would pay a fixed annual fee and an annual per-meter fee (independent of the MW size of the DER), and entities seeking MSE authorization would pay an Application Fee.¹²

NRG argued in its Initial Brief that the cost recovery mechanism’s variable per-meter component would create unnecessary barriers to entry because each individual resource “could be required to install, at a minimum three meters” imposing a “significant financial burden on each CSP.”¹³ During its continuing review of the cost recovery mechanism, the NYISO recognized that the variable component might initially pose a barrier to entry if a small number of Market Participants choose to use MSEs. The NYISO, therefore, has revised its proposed cost recovery mechanism.

¹¹ *Conceptual Details of MSEs Participation in NYISO Markets*, Market Issues Working Group Presentation at 6 (Oct. 23, 2018), available at: <https://www.nyiso.com/documents/20142/3698895/DER%20Market%20Design%20-%20Conceptual%20details%20of%20MSE%20Participation%20in%20NYISO.pdf>.

¹² *Meter Service Entity Design Updates*, Market Issues Working Group Presentation at 6 (Nov. 30, 2018), available at: <https://www.nyiso.com/documents/20142/3759319/DER%20Market%20Design%20-%20Meter%20Service%20Entity%20Design%20Updates.pdf>.

¹³ NRG Initial Brief at 6-7. NRG asserts that a single DER may be required to install and provide data from three meters for wholesale participation. It is not clear to the NYISO under what circumstances a single facility would be required to install and provide data from three meters. Under the NYISO’s existing rules, Demand Side Resources represented by CSPs and RIPS are only required to have a single interval billing meter measuring the customer’s Load. Services Tariff § 5.12.11. While the NYISO’s DER participation model contemplates the existence of more complex facility configurations where Load and generation would need to be separately metered, the NYISO has previously provided its stakeholders with acceptable metering configurations that require data from only two of the following meters: (i) facility gross Load meter, (ii) facility gross generation meter, and (iii) facility net meter. See, *DER Market Design Updates & Energy Market Bid to Bill Examples*, Market Issues Working Group Presentation (Jul. 26, 2018) at 25-30, available at: https://www.nyiso.com/documents/20142/2548045/DER%20Market%20Design%20-%20Updates%20and%20Energy%20Market%20Bid%20to%20Bill_V9.pdf.

The NYISO's revised proposal continues to assess the NYISO's costs for the administration of the MSE program (*i.e.*, the NYISO's initial costs to authorize an entity to become a MSE, and the NYISO's ongoing costs of data verification, auditing, and administration) to those entities that make use of the MSE program. The revised proposal consists of a fixed Application Fee component and a variable component assessed to Market Participants that use a MSE.

The Application Fee will be a one-time fee that recovers the costs of reviewing and verifying each entity's qualifications to be a MSE. The Application Fee amount will be based on the NYISO's evaluation of the expected resources needed to process each application and determine an entity's MSE eligibility. The variable component will reflect the actual ongoing administrative costs incurred by the NYISO for auditing physical metering infrastructure and for meter data validation and auditing of a Market Participant's resources.¹⁴

The NYISO intends to reevaluate the cost recovery mechanism from time to time to determine whether it continues to accurately reflect the costs of administering the MSE program. Such reevaluation may include revising the variable component to be a per-meter fee if sufficient market penetration exists. Any future changes to the cost recovery mechanism would be proposed through the NYISO's shared governance process consistent with Article 19 of the ISO Agreement prior to filing the with the Commission.¹⁵

C. MSE Eligibility Determination

The NYISO's MSE Proposal would require an entity seeking MSE authorization to submit sufficient information to show that it meets basic eligibility requirements to provide

¹⁴ The NYISO currently employs standard data validation processes for all settlement data. The costs to the Market Participant for its use of a MSE will not include the costs of these standard data validation processes.

¹⁵ ISO Agreement at Art. 19.

metering services. As described in the NYISO's Initial Brief, those eligibility requirements focus on three main areas: (i) general business competency, (ii) the ability to perform specific meter service functions, and (iii) the entity's willingness to comply with NYISO rules and procedures. Upon a satisfactory showing that it meets these basic requirements (and payment of the Application Fee), an entity will be authorized to be a MSE.

NRG suggests that the proposed eligibility determination is unnecessary administrative overreach, and not needed "for market participants who are willing to invest in, or who already possess technology, infrastructure, processes and procedures that meet or exceed widely accepted industry standards as outlined in NIST, ANSI and NAESB."¹⁶ The NYISO's rules, however, must ensure the basic competency of all entities seeking to provide metering services. The sophisticated market participants described by NRG should be able to easily demonstrate that they satisfy the NYISO's requirements.

The proposed eligibility determination is comparable to existing NYISO rules, which require tests to provide services in the NYISO-administered markets. For example, the NYISO requires entities to establish their ability to provide a service before grid operators rely on the resource to meet system needs. Before being permitted to provide Regulation Service, Suppliers must: (i) have appropriate resource control equipment; (ii) post applicable collateral requirements; and (iii) successfully complete the pre-qualification performance test.¹⁷ Similarly, Voltage Support Service suppliers must successfully complete Reactive Power testing before being eligible to provide the service.¹⁸ These pre-qualification requirements establish that a

¹⁶ NRG Initial Brief at 9.

¹⁷ NYISO Ancillary Services Manual § 4.11.1-2.

¹⁸ Services Tariff § 15.2. The ISO Procedures also require a Supplier to submit a VSS Qualification Form providing detailed information about the Generator being qualified (and specific components necessary to provide

Supplier can provide Regulation Service and Voltage Support Service prior to grid operators relying on those Suppliers to meet reliability needs. The pre-qualification requirements in the NYISO's MSE Proposal, like the rules described above, are intended to determine an entity's fitness to provide metering services before Market Participants and the NYISO rely on that entity to submit meter information that will be used to settle the NYISO's markets.

Both NRG in its Initial Brief, and AEMA in its Comments, recommend that the NYISO adopt substantive metering requirements and identify the processes that the NYISO intends to evaluate, and provide examples of those requirements and processes.¹⁹ NRG recommends that: (i) the NYISO require the meter service provider to attest to following metering standards defined by the NYISO tariffs,²⁰ (ii) meter service providers "develop and implement quality assurance protocols" via validation, editing and estimation, and measurement and verification plans,²¹ (iii) the NYISO could "develop a process that documents metering equipment, metering installation date(s), and testing of such installed metering equipment,"²² and (iv) the metering rules "include procedures to measure, verify, validate, and deliver accurate interval meter data."²³ These recommended requirements are substantively similar to the NYISO's proposed requirements that an MSE provide (i) its agreement to comply with the metering requirements identified in the NYISO's tariffs and procedures, (ii) a meter data validation, editing, and

Voltage Support Service), and successfully perform capability tests in accordance with the NYISO's testing procedures. *See*, NYISO Ancillary Services Manual § 3.2.

¹⁹ NRG's recommended requirements and the NYISO's proposed eligibility criteria do not completely overlap, but the requirements discussed represent several of the substantive meter service functions identified by the NYISO as promoting accurate and reliable meter data.

²⁰ NRG Initial Brief at 6.

²¹ NRG Initial Brief at 5.

²² NRG Initial Brief at 6.

²³ NRG Initial Brief at 7.

estimation methodology, (iii) a description of how and where meter data will be kept, and (iv) settlement meter and real-time telemetry data plans.

The NYISO's MSE Proposal includes additional business and other requirements that are necessary because MSEs will not be Market Participants.²⁴ In the course of developing the MSE framework the NYISO considered whether MSEs should be full Market Participants, or a type of limited participant. The NYISO determined that, in light of the limited service MSEs will provide to the wholesale market, it is not appropriate to subject MSEs to all of the rules and requirements applicable to full Market Participants. Therefore, in lieu of requiring MSEs to register as Market Participants, the NYISO will review information in order to establish MSE eligibility that would have been evaluated if the entity applied to be a Market Participant (*e.g.*, minimum capitalization and insurance requirements). Finally, it is important to note that the application process envisioned by the NYISO is not intended as a "one-shot" opportunity. The NYISO expects to collaborate with potential MSEs to permit them to amend or re-submit their application in order to satisfy NYISO's minimum qualification criteria and to further the entity's understanding of the NYISO's rules and standards. The goal is to ensure that MSEs will provide accurate and reliable metering services to NYISO's Market Participants.

III. Update on New York Public Service Commission Meter Service Provider and Meter Data Service Provider Rules and Status of NYISO Stakeholder Process

On February 8, 2019, the NYPSC issued an Order terminating its Meter Service Provider and Meter Data Service Provider programs effective immediately, and cancelling all

²⁴ MSEs will, however, be subject to certain limited provisions of the ISO's tariffs, in addition to the specific MSE provisions, such as its Code of Conduct (Open Access Transmission Tariff Att. F), recordkeeping requirements, and auditing provisions.

certifications granted through those programs.²⁵ The NYISO's Emergency Demand Response Program Manual requires RIPs and CSPs to use (i) a NYPSC-certified Meter Service Provider or Transmission Owner to install revenue-grade interval meters, and (ii) a NYPSC-Certified Meter Data Service Provider or Transmission Owner to read the meters. In response to the NYPSC's Order, and to avoid sudden disruption to the NYISO's Installed Capacity market and to RIPs and CSPs, the NYISO published a Technical Bulletin permitting RIPs and CSPs that were using a previously certified MSP or MDSP as of February 8, 2019, to continue using those entities until the earlier of October 31, 2019, and the effective date for the NYISO's proposed MSE tariff revisions.²⁶

The NYISO addressed the NYPSC's Order at the February 15, 2019 joint meeting of the Installed Capacity, Market Issues, and Price Responsive Load Working Groups, and posted the Technical Bulletin to the NYISO's public website for stakeholder review and comment.

The NYISO also presented to stakeholders draft tariff language to implement its MSE proposal at the February 15 joint meeting.²⁷ The presentation included the complete market design and a full set of draft tariff revisions to Services Tariff Section 13 that detail the metering

²⁵ Case No. 18-E-0595, *et al.*, *In re Meter Service Provider/Meter Data Service Provider Programs*, Order Terminating Metering Programs (Feb. 8, 2019).

²⁶ *Technical Bulletin No. 247: Responsible Interface Party (RIP) and Curtailment Service Provider (CSP) Meter Data Submission* (Feb. 27, 2019), available at: <https://www.nyiso.com/documents/20142/2931465/TB-247-v2019-02-27-Final.pdf>. Although the NYISO has routinely been in contact with the New York State Department of Public Service ("NYDPS") staff regarding its Meter Service Provider and Meter Data Service Provider rules during the course of this proceeding (including on February 8), it was not aware that the NYPSC was considering terminating the programs at this time and effective immediately, necessitating the issuance of the Technical Bulletin.

²⁷ *Metering, LBMP Calculation, and Creditworthiness Tariff Amendments for DER*, Market Issues Working Group Presentation (Feb. 15, 2019), available at: <https://www.nyiso.com/documents/20142/5020603/Metering%20LBMP%20Calculation%20and%20Creditworthiness%20DER%20Tariff%20Amendments%20021519.pdf>. Services Tariff § 13 Draft Tariff Revisions, available at: <https://www.nyiso.com/documents/20142/5020603/MST%2013%20-%20Metering%20-%20DER%20Tariff%20Amendments%20021519.pdf>.

requirements for Demand Side Resources and Aggregations.²⁸ The NYISO did not present a proposed revised cost allocation methodology to stakeholders at that meeting, as those provisions were still under development by NYISO staff.

IV. Conclusion

For the reasons set forth above, the NYISO respectfully requests that the Commission reject NRG's and AEMA's recommendations to strike the NYISO's proposed MSE pre-authorization rules and instead accept the NYISO's proposed MSE qualification requirements as described in its Initial Brief.

Respectfully submitted,

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²⁸ NRG claims in its Reply Brief that “there has been no recent progress on fleshing out the MSE rules by developing the NYISO procedures and reviewing them with stakeholders.” *Reply Brief of NRG Curtailment Solutions, Inc.*, Docket No. EL18-188-000 (Mar. 5, 2019) at 3. As described above the NYISO presented draft tariff language to stakeholders at the February 15 joint meeting, which was Chaired by NRG staff.