

October 20, 2023

Submitted Electronically

Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

Re: *New York Independent System Operator, Inc.*, First Informational Report
Addressing NYISO Efforts to Improve Ability of Aggregations to Provide
Ancillary Services; Docket No. ER21-2460-00_

Dear Secretary Bose:

In accordance with the Federal Energy Regulatory Commission's ("Commission") April 20, 2023, *Order on Compliance Filing*¹ the New York Independent System Operator, Inc. ("NYISO") submits this informational filing updating the Commission on the NYISO's efforts to develop market rules related to the provision of Ancillary Services by heterogeneous Aggregations² of Distributed Energy Resources ("DER"). The NYISO and its stakeholders have made significant progress in developing a market design that will enable an Aggregator to qualify for one or more Operating Reserves products and, once qualified, to choose the product it provides.

I. Background

Order No. 2222 required the NYISO to establish a participation model that accommodates the physical and operational characteristics of DER and Aggregations, including the ability to provide Ancillary Services.³ On July 19, 2021, the NYISO submitted modifications to its Open Access Transmission Tariff ("OATT") and Market Administration and Control Area Services Tariff ("Services Tariff") in compliance with Order No. 2222 ("First Compliance

¹ *New York Indep. Sys. Operator, Inc.*, 183 FERC ¶ 61,035 at P 26 (Apr. 20, 2023) ("Second Order on Compliance").

² When the NYISO's Order No. 2222 compliance tariff revisions become effective, the NYISO will define an "Aggregation" as "[a] Resource, comprised of one or more individual Generators, Demand Side Resources, or Distributed Energy Resources, at separate points of interconnection and that are grouped and dispatched as a single unit by the ISO, and for which Energy injections, withdrawals and Demand Reductions are modeled at a single Transmission Node." Accepted Services Tariff Sec. 2.1.

³ *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 2222, 172 FERC 61,247 at P 130 (Sept. 17, 2020).

Filing”).⁴ Among other market reforms, that filing proposed that heterogeneous Aggregations be eligible to provide Operating Reserves only when each DER in an Aggregation is eligible to provide that service.⁵

In its June 17, 2022, *Order on Compliance Filing* (“First Order on Compliance”) the Commission found that the NYISO’s Ancillary Services proposals only partially complied with Order No. 2222, and stated that “so long as some of the DERs in the Aggregation can satisfy the relevant reliability requirements to provide certain ancillary services ..., we find that those DERs should be able to provide those ancillary services through aggregation.”⁶ The Commission therefore directed the NYISO to propose market rules that comply with the requirement to allow DER to provide all the ancillary services are technically capable of providing through aggregation.⁷

The NYISO thereafter sought rehearing of the First Order on Compliance concerning the Commission’s Ancillary Services directives.⁸ The Commission denied the NYISO’s rehearing request and sustained its directive to allow DER in heterogeneous Aggregations to provide all of the Ancillary Services that they are technically capable of providing but clarified that “the June 17 Order does not require NYISO to allow a heterogeneous Aggregation to simultaneously make available multiple operating reserve products,” after considering the NYISO’s explanation of how Operating Reserves are implemented in its markets.⁹

In its November 14, 2022, compliance filing (“Second Compliance Filing”) the NYISO proposed to develop market rules that permit DER participating in an Aggregation to provide the Ancillary Services they are technically capable of providing, review those market rules with its stakeholders, and submit them for Commission consideration in advance of the anticipated effective date for the market rules in compliance with Order No. 2222.¹⁰ The Commission’s Second Order on Compliance accepted the NYISO’s compliance plan and directed the NYISO to “make an additional filing following its stakeholder process ... no later than December 31, 2024” in compliance with the directives in the First Order on Compliance. The Commission further directed the NYISO to submit an informational filing within six months of the date of the Second Compliance Order (*i.e.*, by October 20, 2023), and every six months thereafter,¹¹ advising the

⁴ New York Indep. Sys. Operator, Inc., July 19, 2021 Compliance Filing and Request for Flexible Effective Date, Docket No. ER21-2460-000 (“First Compliance filing”).

⁵ First Compliance Filing at 18-19.

⁶ *New York Indep. Sys. Operator, Inc.*, 179 FERC ¶ 61,198 at 93 (2022) (“First Order on Compliance”).

⁷ First Order on Compliance at 93.

⁸ *New York Indep. Sys. Operator, Inc.*, July 18, 2022 Request for Clarification or, in the Alternative, Rehearing, Docket No. ER21-2460-002.

⁹ *New York Indep. Sys. Operator, Inc.*, 181 FERC ¶ 61,054 at PP 13-15 (2022).

¹⁰ *New York Indep. Sys. Operator, Inc.*, November 14, 2022 Compliance Filing, Docket No. ER21-2460-003 at 8-9.

¹¹ Second Order on Compliance at P 26.

Commission on the progress of the NYISO's stakeholder process and compliance with the directive from the First Compliance Order.

This filing constitutes the NYISO's first informational report addressing its efforts to enhance the ability of Aggregations to provide Ancillary Services (more specifically, Operating Reserves).

II. Informational Filing

The NYISO has begun working with stakeholders to develop a market design that enhances the ability of Aggregations to provide Operating Reserves. The NYISO's draft market design builds off existing rules developed for Hybrid Storage Resources and will tailor the market rules to accommodate the physical and operational characteristics of heterogeneous Aggregations.

While the NYISO's market design is unfinished, several key components addressing the Commission's directives have been identified. First, the NYISO plans to enable a heterogeneous Aggregation, comprising multiple DER with differing individual capabilities, to provide the services that the individual DER within the Aggregation are technically capable to provide, within the bounds of the NYISO's software capabilities and consistent with applicable reliability requirements. Consistent with the treatment of qualified Generators and Demand Side Resources, an Aggregation will only be permitted to offer a single Operating Reserves product. An Aggregation's Operating Reserves award will be a function of its operating characteristics and the NYISO's Operating Reserves procurement process, co-optimized unit commitment and economic dispatch, and system needs.

The current draft market design will allow an Aggregator to declare the Ancillary Services it will provide at the time of the Aggregation's enrollment, which Ancillary Services will be based on the individual capabilities of the DER participating in the Aggregation. Once enrolled, an Aggregator will be able to modify the services the Aggregation can provide on at least a monthly basis. Once the market design fundamentals are completed the NYISO intends to investigate whether it can permit an Aggregation to change the type of services it provides on a more frequent basis (*e.g.*, daily).

An Aggregation's Operating Reserves capability will be based on an "Operating Reserve Limit" which will allow Aggregators to declare, upon enrollment of the Aggregation and in the Aggregation's Bids, the uppermost amount of Operating Reserves the Aggregation will be able to supply in a given interval. An Aggregation's Operating Reserve Limit will be a function of the Aggregation's composition, its Energy schedule (and Regulation Service schedule, if applicable), and its Upper Operating Limit. An Aggregator will have the ability to modify an Aggregation's Operating Reserve Limit in real-time to adjust the Aggregation's capability as conditions change.

The NYISO has presented these market design concepts to stakeholders at Installed Capacity/Market Issues Working Group meetings held on August 24, and September 26, 2023,¹² and will continue to present material to stakeholders as the design is finalized. The NYISO has already received, and will continue to receive feedback from its stakeholders, and modify the market design if necessary.

The NYISO intends to spend the rest of 2023 refining its market design. The NYISO anticipates presenting the completed market design and related tariff to stakeholders in 2024. The NYISO is simultaneously identifying the software requirements to enable the market design.

III. Service

The NYISO will send an electronic copy of this filing to the official representative of each party to this proceeding, to the New York Public Service Commission, and to the New Jersey Board of Public Utilities. In addition, a complete copy of this filing will be posted on the NYISO's website at www.nyiso.com, and the NYISO will send an electronic link to this filing to the official representative of each of its customers and to each participant on its stakeholder committees.

IV. Conclusion

The New York Independent System Operator, Inc. respectfully submits this informational filing in compliance with the Commission's April 20, 2023, *Order on Compliance Filing*.

Respectfully submitted,

/s/ Gregory J. Campbell

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¹² *Order 2222 DER Aggregation Operating Reserves – Market Design Concept Proposed Introduction*, Installed Capacity Working Group Presentation (Aug. 24, 2023), available at: <https://www.nyiso.com/documents/20142/39593642/6%20Introduction%20to%20Market%20Design%20Concept%20Proposed%20-%20DER%20Aggregation%20Ancillary%20Service%20Capabilities.pdf/>; *Operating Reserves from DER Aggregations – Market Design Concept Proposed: Operating Reserve Limit*, Installed Capacity Working Group Presentation (Sept. 26, 2023), available at: <https://www.nyiso.com/documents/20142/40204141/5%20DER%20Aggregations%20%20Order%202222%20Operating%20Reserves%20MDCP.pdf/>.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 20th day of October 2023.

/s/ Stephanie Amann

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