

October 21, 2024

Submitted Electronically

Honorable Debbie-Anne A. Reese
Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

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

Dear Secretary Reese:

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 has completed its market design and associated tariff revisions, and is in the process of validating its planned software design. The NYISO expects to present the final market design and draft tariff revisions to its stakeholders in early November 2024. The market design and tariff revisions will enable an Aggregator to choose the Operating Reserves product its Aggregation provides based on the capabilities of the individual DER participating in the Aggregation.

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 they 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 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.

The NYISO submitted its second informational report on April 22, 2024. This filing constitutes the NYISO's third and final 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 completed development of its market design to enhance the ability of Aggregations to provide Operating Reserves. The NYISO's market design builds off the rules developed for Hybrid Storage Resources and will tailor the market rules to accommodate the physical and operational characteristics of heterogeneous Aggregations.

As described in the NYISO's previous informational reports, an Aggregation comprised of DER of differing individual capabilities will be able to qualify to provide the services that the individual DER within the Aggregation are technically able to provide, within the bounds of the NYISO's software capabilities and consistent with the applicable reliability requirements. The ability for Aggregations of DER to submit an Operating Reserve Limit ("ORL"), as well as revisions to the NYISO's originally accepted Ancillary Services framework for Aggregations, will comprise the majority of tariff revisions necessary to achieve compliance.

The NYISO is developing the expected software requirements needed to support the market design and business process infrastructure associated with the proposal. The software requirements address enabling the NYISO to effectuate its market design within the existing system construct include, but are not limited to:

- Enabling an Aggregator to select a single Operating Reserve product upon enrollment of an Aggregation and on a monthly basis as an Aggregation's composition and/or capability changes.
- Incorporation of an ORL, which is a Market Participant-declared upper limit on the amount of Operating Reserves an Aggregation is able to provide, on applicable displays for use by Aggregators during enrollment and bidding.
- Cross-functional system updates to incorporate an Aggregation's ORL into optimization and mitigation processes.

Expanding the use of ORL to Aggregations introduces additional complexity as compared to the ORL's original intended use by Hybrid Storage Resources. For example, Hybrid Storage Resources are made up entirely of Generators. An Aggregation that contains one or more Demand Side Resources must reflect the Ancillary Service capabilities of those facilities after application of the Net Benefits Test, consistent with the requirements of Order No. 745.

The NYISO's proposed market design will enable an Aggregator to update an Aggregation's maximum Ancillary Services capability(ies) on a monthly basis as individual DER enter or leave the Aggregation, or as DER capabilities evolve. The NYISO will not permit intra-month changes to the Operating Reserve Products an Aggregation is eligible to provide, or

to the upper limit of the Aggregation's capability (MW). Derates to reflect reduced Operating Reserve capability are always permitted. Allowing intra-month changes would significantly increase the complexity of the NYISO's software and would delay the NYISO's ability to implement the proposed market rules.

The NYISO has completed its market design and drafted the accompanying tariff revisions, and is in the process of validating the planned software design. The NYISO expects to present the final market design and tariff revisions in early November 2024. The NYISO is on track to submit the required tariff revisions by the end of 2024, after considering stakeholder feedback. In 2025, the NYISO intends to work to complete its internal software specifications, which will allow for development and deployment of this and all applicable functionality to support compliance with Order No. 2222 by the end of 2026.

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

Gregory J. Campbell, Senior Attorney
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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 21st day of October 2024.

/s/ Alexander Morse

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