

# FERC Order 2222 Compliance: Provision of Ancillary Services by DER Aggregations

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# Agenda

- **Background**
- **Market Design & Tariff Revisions**
- **Next Steps**

# Background

# DER Participation Model (2019)

- **The NYISO's 2019 market design allows an Aggregation to provide an Ancillary Services product only if each DER comprising an Aggregation is eligible to provide the product.**
  - For example, an Aggregation with 3 Energy Storage Resources each capable of providing spinning reserves, and 2 solar facilities (which are ineligible to provide any Operating Reserve product) would be ineligible as an Aggregation to provide spinning reserves, because the NYISO would be unable to confirm that the spinning reserves are being provided by a qualified supplier of that service.
- **The NYISO's 2019 DER and Aggregation market design and associated tariff revisions were accepted by FERC in 2020.**

# NYISO Order No. 2222 Compliance: Ancillary Services

- Order No. 2222 sought to lower barriers to entry for DER and ensure that any resource that is technically capable of providing wholesale market services is eligible to do so.
- In its initial Order No. 2222 compliance filing, the NYISO proposed to comply with the Commission's requirements related to the provision of Ancillary Services via its 2019 DER and Aggregation market design as proposed and accepted.
- In June 2022 FERC issued an Order on Compliance that required NYISO to modify the market rules regarding the provision of Ancillary Services by heterogeneous DER Aggregations:
  - "...we find that any DERs that an Aggregator uses to satisfy NYISO's relevant technical, operational, and/or performance requirements should be allowed to provide ancillary services through aggregation."
  - "...so long as some of the DERs in the Aggregation can satisfy the relevant requirements to provide certain ancillary services (e.g., the one-hour sustainability requirement), we find that those DERs should be able to provide those ancillary services through aggregation, in accordance with the goal of Order No. 2222 to allow distributed energy resources to provide all services that they are technically capable of providing through aggregation."

# Market Design & Tariff Revisions

# Heterogeneous Aggregation Eligibility to Provide Ancillary Services

- **A heterogeneous Aggregation will be eligible to offer an Ancillary Services product so long as one DER in the Aggregation is technically capable of providing the product.**
  - The Aggregator must declare which service(s) the Aggregation will provide during the initial enrollment and will be permitted to change those services on a monthly basis with advance notice to the NYISO.
    - Aggregations will be required to establish its eligibility to provide a particular service consistent with the existing market rules.
    - Aggregations will remain subject to applicable Ancillary Services eligibility rules, and some Aggregations will not be eligible to provide any Ancillary Service (e.g., an Aggregation containing only Solar and Wind units).

MDCP Presentations:

[Order 2222 DER Aggregation Operating Reserves – Market Design Concept Proposed Introduction](#)

[Operating Reserves from DER Aggregations – Market Design Concept Proposed: Operating Reserve Limit](#)

# Operating Reserve Limit

- **An Operating Reserve Limit (“ORL”) is the capability, in MW, of an Aggregation to produce Energy for at least one hour if its Operating Reserve schedule is converted to Energy.**
- **Each Aggregation intending to provide Operating Reserves must submit the Aggregation’s ORL during the Aggregation enrollment process.**
  - The Aggregation’s ORL may be adjusted with each DAM and RTM offer, as well as intra-hour if needed to address unanticipated conditions or changes in Operating Reserve availability.
  - ORL updates may be facilitated through the Grid Operations Coordination Portal.
- **Any Operating Reserves-eligible Aggregation that seeks to provide Operating Reserves except single resource type ESR Aggregations must use the ORL**
  - The ORL is not available for use by Aggregations that are ineligible to provide Operating Reserves
  - Energy Storage Resource Aggregations shall provide Operating Reserves consistent with the methodology used by stand-alone ESRs, which does not include the use of an ORL.



# Aggregation Operating Reserve Limit

- **Aggregators will be responsible for maintaining an accurate ORL for each market interval accounting for conditions that alter the Aggregation's ability to provide Operating Reserves.**
  - E.g., demand reduction capabilities, Reserve pickup event, unexpected system outage.
- **NYISO will monitor the ORL to verify that an Aggregation is not withholding MW of Operating Reserve capability.**
- **Operating Reserve performance will be verified through a test during the first month of an Aggregation's participation.**
  - Refer to the Ancillary Services Manual updates completed for the DER and Aggregation participation model, Section 6.12.

# Proposed Tariff Revisions

- The NYISO has posted draft tariff revisions with today's meeting materials that are necessary to comply with the remaining provisions of Order 2222.
- The NYISO must submit its final compliance filing to FERC addressing Ancillary Services for Aggregations by the end of 2024 – all tariff modifications posted directly support the compliance effort.
- Please provide any additional feedback by November 11

# Proposed Tariff Revisions

- **The proposed revisions to the Services Tariff Sections identified below will:**
  - a) incorporate revised Aggregation Ancillary Services rules, allowing a heterogeneous Aggregation with one technically capable DER to provide a given service, and
  - b) extend the use of the Operating Reserve Limit, and accompanying mitigation and performance requirements, to applicable Aggregations.
- **Tariff Sections:**
  - MST 2.12
  - MST 2.14
  - MST 2.15
  - MST 4.2
  - MST 4.4
  - MST 15.3
  - MST 15.4
  - MST 23.3
  - MST 23.4
  - MST 30.6

# Next Steps

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- **Comments on draft tariff due by November 11, 2024.**
  - Please send feedback to [heisenhardt@nyiso.com](mailto:heisenhardt@nyiso.com)
- **Compliance Filing due by December 31, 2024.**
- **Submission of Compliance Filing satisfies the Market Design Complete goal.**
- **NYISO will continue development of software and related applications to effectuate the proposed market rules.**
- **NYISO anticipates implementing all Order No. 2222-compliant market rules by the end of 2026.**

# Our Mission & Vision



## Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



## Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation