



# FERC Order No. 2222 – NYISO Compliance Discussion

---

Francesco Biancardi & Harris Eisenhardt

Market Design Specialists, New Resource Integration

**ICAPWG/MIWG/PRLWG**

June 17, 2021

# Agenda

- **FERC Order No. 2222**
  - Background
  - Summary
  - NYISO Requirements
- **NYISO Compliance Summary**
- **Next Steps**

# FERC Order No. 2222

# Background

- **The NYISO proposed a comprehensive participation model for DER and Aggregation in June 2019.**
  - FERC accepted the NYISO's tariff revisions in January 2020.<sup>1</sup>
- **FERC subsequently issued Order No. 2222 (Participation of Distributed Energy Resource Aggregations in Markets Operated by RTOs and ISOs) on September 17, 2020.<sup>2</sup>**

<sup>1</sup> New York Indep. Sys. Operator, Inc., Order Accepting Tariff Revisions and Directing Compliance Filing and Informational Report, 170 FERC ¶ 61,033 (Jan. 23, 2020).

<sup>2</sup> Participation of Distributed Energy Resource Aggregations in Market Operated by Regional Transmission Organizations and Independent System Operators, Order No. 2222, 172 FERC ¶ 61,247 (Sept. 17, 2020).

# FERC Order No. 2222 Summary

- **The rule requires ISOs and RTOs to permit DER participation alongside traditional resources in the organized wholesale markets through aggregations.**
  - Order No. 2222 anticipates DER will provide a variety of benefits including: lower costs for consumers through enhanced competition, more grid flexibility and resilience, and more innovation within the electric power industry.
- **DER must be permitted to aggregate in order to satisfy minimum size and performance requirements that each may not be able to meet individually.**

# FERC Order No. 2222 Summary (Cont.)

- **Each RTO/ISO must have market rules that:**
  - allow DER aggregations to participate directly in RTO/ISO markets and establish DER aggregators as a type of market participant
  - allow DER aggregators to register DER aggregations under one or more participation models that accommodate the physical and operational characteristics of the DER aggregations
  - establish a minimum size requirement for DER aggregations that does not exceed 100 kW
  - address locational requirements for DER aggregations

# FERC Order No. 2222 Summary (Cont.)

- **Each RTO/ISO must have market rules that address:**
  - distribution factors and bidding parameters for DER aggregations
  - information and data requirements for DER aggregations
  - metering and telemetry requirements for DER aggregations
  - coordination between the RTO/ISO, the DER aggregator, the distribution utility, and the relevant electric retail regulatory authorities
  - modifications to the list of resources in a DER aggregation
  - market participation agreements for DER aggregators

# NYISO Requirements

- **The NYISO must submit a compliance filing by July 19, 2021, that:**
  - describes how its DER participation model complies with Order No. 2222, and
  - proposes additional tariff revisions as necessary.



# NYISO Compliance Summary

# NYISO Compliance

- **The NYISO has identified FERC Order No. 2222 directives that necessitate updates to the previously approved NYISO DER market design**
- **On the following slides, specific directives will be discussed**
  - Example text is provided, but does not represent full breadth of each topic under review
- **The NYISO will identify in its compliance filing:**
  - How the NYISO's approved DER market design complies with the requirements of the Order, and, where necessary
  - Tariff modifications address the additional compliance directives

# Double Counting of Services– FERC Order 2222

- **FERC Order No. 2222 Paragraphs 159 - 164:**
  - RTO/ISOs may limit participation of resources in the wholesale markets through an aggregator that receive compensation for the same service as part of another program
  - RTO/ISOs are required to:
    - Allow DER that participate in one or more retail programs to participate in the wholesale markets;
    - Allow DER to provide multiple wholesale services; and
    - Develop any appropriate restrictions on DER participation in the wholesale markets, if narrowly designed to avoid counting more than once the services provided by DER.
  - “It is appropriate for RTOs/ISOs to place narrowly designed restrictions on the RTO/ISO market participation of DER through aggregations, if necessary, to prevent double counting of services”

# Double Counting of Services– NYISO Tariff

- **NYISO Dual Participation compensates a Resource for any performance properly bid into the NYISO market software, including retail/non-wholesale performance:**
  - “Generators, Demand Side Resources, and Distributed Energy Resources engaged in dual participation must meet all applicable rules and obligations set forth in the ISO Tariffs. Generators, Demand Side Resources, and Distributed Energy Resources operating to meet an obligation outside of the ISO Administered Markets must Bid in a manner that ensures they will be dispatched by the ISO for the market intervals consistent with the manner in which the Resource operates to meet such obligation(s).”<sup>1</sup>

<sup>1</sup> <https://www.nyiso.com/regulatory-viewer>

# Double Counting of Services – NYISO Compliance

- NYISO anticipates modest revisions to the existing tariff
- The NYISO and Joint Utilities are working to identify potential retail programs and wholesale revenue streams that may cause double counting of services

# Utility Review – FERC Order 2222

- **FERC Order No. 2222 Paragraphs 292 - 299:**
  - “...each RTO/ISO must coordinate with distribution utilities to develop a distribution utility review process that includes criteria by which the distribution utilities would determine whether (1) each proposed distributed energy resource is capable of participation in a distributed energy resource aggregation; and (2) the participation of each proposed distributed energy resource in a distributed energy resource aggregation will not pose significant risks to the reliable and safe operation of the distribution system.”

# Utility Review – NYISO Tariff

## ■ NYISO Enrollment:

- “The Aggregator will also be responsible for registering Aggregations with the NYISO and enrolling the individual facilities in each Aggregation in accordance with ISO Procedures. The NYISO will provide those processes and procedures to stakeholders prior to implementing the new rules for Aggregations.”

# Utility Review – NYISO Compliance

- **The NYISO is developing a utility review process with the Joint Utilities that will enable each TO to:**
  - Conduct reviews of DER intending to participate in the NYISO markets
  - Recommend that the NYISO prohibit a particular DER from participating in the wholesale markets due to distribution – level reliability concerns
- **The results of this effort will be described in NYISO’s compliance filing, and detailed in NYISO tariff and manuals**



# Operational Coordination - FERC Order 2222

## ■ FERC Order No. 2222 Paragraphs 310 - 312

- RTO/ISOs are required to (i) establish a process for ongoing coordination among the RTO/ISO, the DER, the Aggregator, and the Utility, (ii) require the Aggregator to report modifications to capabilities due to distribution system-related issues, and (iii) include coordination protocols and processes that permit a distribution utility to override RTO/ISO dispatch of a DER Aggregation when necessary to maintain the reliable and safe operation of the distribution system.
- “These processes that allow distribution utilities to override RTO/ISO dispatch must be contained in the tariff and must be non-discriminatory and transparent but still address distribution utility reliability and safety concerns. We find these operational coordination requirements will maximize the availability of the distributed energy resource aggregation consistent with the reliable and safe operation of the distribution system.”

# Operational Coordination – NYISO Tariff

- **The NYISO’s approved DER market design defined a real-time operational coordination procedure to support compliance with these directives:**
  - “The ISO and Transmission Owners shall coordinate scheduling and dispatch for all Generators, Demand Side Resources, and Distributed Energy Resources engaged in Dual Participation giving priority to minimizing the magnitude of reliability impacts and to resolving actual impacts over predicted impacts. The ISO has the final authority to determine schedules for resources engaged in Dual Participation.”
  - Additional details can be found in NYISO manuals.

# Operational Coordination – NYISO Compliance

- **NYISO will continue working with the JU to refine tariff language regarding Operational Coordination to meet Order 2222 Requirements:**
  - NYISO tariff requires operational coordination between Transmission Owners and the ISO to ensure both Transmission and Distribution System reliability
    - ISO maintains control of Aggregations, but entity (TO or NYISO) with the larger need will be allowed control of said Resources

# Small LSE Opt – In – FERC Order 2222

- **FERC Order No. 2222 Paragraphs: 8, 56 - 67**
  - LSE's serving <4 million MWh of load annually will be required to opt – in to NYISO DER program
  - Order 2222 Paragraph 64: “Specifically, we determine that customers of utilities that distributed 4 million MWh or less in the previous fiscal year may not participate in distributed energy resource aggregations unless the relevant electric retail regulatory authority affirmatively allows such customers to participate in distributed energy resource aggregations.”

# Small LSE Opt – In – NYISO Compliance

- NYISO's Compliance Filing will include language supporting FERC's LSE Opt – In directive

# Interconnection – FERC Order 2222

## ■ FERC Order No. 2222 Paragraphs 90-104

- The Commission declined “to exercise jurisdiction over the interconnections of distributed energy resources to distribution facilities for those distributed energy resources that seek to participate in RTO/ISO markets exclusively as part of a distributed energy resource aggregation”
  - Therefore, the interconnection of a DER for the exclusive purpose of participating in a DER aggregation will not constitute a “first interconnection” under the “first use” test.

# Interconnection – NYISO Tariff

- **NYISO will amend its tariff to support the FERC Order No. 2222 requirement that a DER intending to participate solely in the Energy market via Aggregation does not constitute a ‘first use’ of the distribution facility**

# Interconnection – NYISO Compliance

- **The NYISO understands the following from FERC Order 2222:**
  - NYISO interconnection studies are not required for DER seeking to participate solely in the Energy markets by way of Aggregation
    - Distribution-level DER interconnection for this purpose does not constitute a “first use” (i.e., a facility participating solely as part of a DER Aggregation does not make the facility/line “FERC jurisdictional” for interconnection purposes)
  - DER seeking to provide Capacity via Aggregation (i.e. seeking CRIS rights) will still be required to obtain CRIS through the NYISO interconnection procedures, including a deliverability evaluation for units larger than 2 MW
- **If a DER seeks to participate *outside* the context of an Aggregation, and the resource is interconnecting to a facility/line on which there is already a wholesale generator, the resource will be subject to the NYISO Interconnection procedures NYISO is in the process of amending existing interconnection tariff requirements for compliance**



# Aggregation of One – FERC Order 2222

- **FERC Order No. 2222 Clause(s): 185, 186**
  - “Each RTO/ISO [must] revise its tariff to allow a single qualifying distributed energy resource to avail itself of the proposed distributed energy resource aggregation rules by serving as its own distributed energy resource aggregator”

# Aggregation of One – NYISO Tariff

- NYISO presently allows Demand Response Facilities to form DER Aggregations of One, and ESR Participation down to 100 kW

# Aggregation of One – NYISO Compliance

- NYISO will continue to analyze impact of expanding Aggregation of One eligibility to other Resource Types
- Will include updates in Compliance Filing and updated Tariff language

# Next Steps

# Next Steps

- Answer follow – up questions from today’s discussion
- **NYISO FERC Order No. 2222 Compliance Filing Due Date:  
July 19<sup>th</sup>, 2021**

# Questions?

# Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit 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 policymakers, stakeholders and investors in the power system

