

FERC Order No. 2222

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Today's Presentation

- **The NYISO has been asked to provide a short overview of NYISOs takeaways and impressions of FERC Order No. 2222**
- **This presentation will additionally indicate the parts of the DER Participation Model that the NYISO may need to modify**
- **The NYISO is still evaluating the Order and how the NYISO intends to comply with the all provisions of the Order**
 - Specific questions or comments can be sent to the NYISO Distributed Resource Integration team at: DER_Feedback@nyiso.com

Agenda

- **FERC Order No. 2222**

- Background
- Summary
- NYISO Requirements

- **Key Areas of Potential Variance with NYISO DER Participation Model**

- Distribution Utility Coordination
- Dual Participation
- Interconnection
- Miscellaneous

Background

- **The NYISO proposed a comprehensive participation model for DER and Aggregation in June 2019.**
 - FERC accepted the NYISO's tariff revisions in January 2020.¹
- **FERC subsequently issued Order No. 2222 (Participation of Distributed Energy Resource Aggregations in Markets Operated by RTOs and ISOs) on September 17, 2020.²**

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

² 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 DER Participation Model and FERC Order No. 2222

DER Definition

■ NYISO DER Participation Model

- (i) a facility comprising two or more Resource types behind a single point of interconnection with an Injection Limit of 20 MW or less; or (ii) a Demand Side Resource; or (iii) a Generator with an Injection Limit of 20 MW or less, that is electrically located in the NYCA.

■ FERC Order No. 2222

- A resource located on the distribution system, any subsystem thereof or behind a customer meter
 - However, ISOs can propose their own definitions as long as the scope and applicability of the proposed definitions are consistent with the Commission's definition of distributed energy resource

Distribution Utility Coordination

■ NYISO DER Participation Model

- The NYISO has worked extensively with the Joint Utilities to develop operating procedures that will address transmission and distribution system needs, as well as DER that participate in the wholesale markets and retail programs (*i.e.*, Dual Participation)
- The NYISO has previously described these processes in its DER participation model market design, and in certain market rules (e.g., that the ISO has the final authority to determine schedules for resources engaged in Dual Participation)

■ FERC Order No. 2222

- Requires each RTO/ISO to revise its tariff to include coordination protocols and processes for the operating day that allow distribution utilities to override RTO/ISO dispatch of a distributed energy resource aggregation in circumstances where such override is needed to maintain the reliable and safe operation of the distribution system

Dual Participation

■ NYISO DER Participation Model

- NYISO's DER Participation Model requires any Resource engaged in Dual Participation to schedule all service through the wholesale market, including services provided for the distribution utility
- Resources engaged in Dual Participation are compensated by the wholesale market for the services provided, even when the Resource is directed to provide the service by the distribution utility
- The NYISO's tariffs do not restrict-wholesale market compensation for services provided at the distribution utility's direction

■ FERC Order No. 2222

- A single DER can participate in both retail and wholesale programs and be compensated in each for providing distinctly different services.
- 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

Interconnection

■ NYISO DER Participation Model

- NYISO's interconnection requirements apply to individual DER, rather than the Aggregation
- DER are subject to the NYISO, NYS Standardized Interconnection Requirements process, or utility interconnection procedures, depending on the unit's particular facts and circumstances

■ FERC Order No. 2222

- The DER aggregation registration process and the interconnection of DERs to the distribution facility are separate.
- The Commission declined to exercise its jurisdiction over DERs connecting to distribution facilities for the purpose of participating exclusively as a part of a DER aggregation in a RTO/ISO wholesale market, and did not require, among other things, standard interconnection procedures and agreements for such interconnections.
- DERs that already interconnected under Commission-jurisdictional procedures are not required to convert to state or local interconnection agreements.
- DERs that interconnect to distribution facilities for the purpose of exclusively participating as a part of DER aggregation would not constitute a first interconnection for the purpose of making wholesale sales under the "first use" test.

Miscellaneous

■ Aggregation Size

- NYISO DER Participation Model defines an Aggregation as two or more individual DER (unless the DER is a Demand Side Resource)
- FERC Order No. 2222 permits a single qualifying DER (*i.e.*, one that can, by itself, meet all applicable requirements for an aggregation) to be an “aggregation”

■ Coordination Procedures

- The NYISO intended to locate much of the coordination protocols between the NYISO, utilities, and aggregators in manuals and procedures. Order No. 2222 requires RTOs and ISOs to include some of that coordination in the tariffs

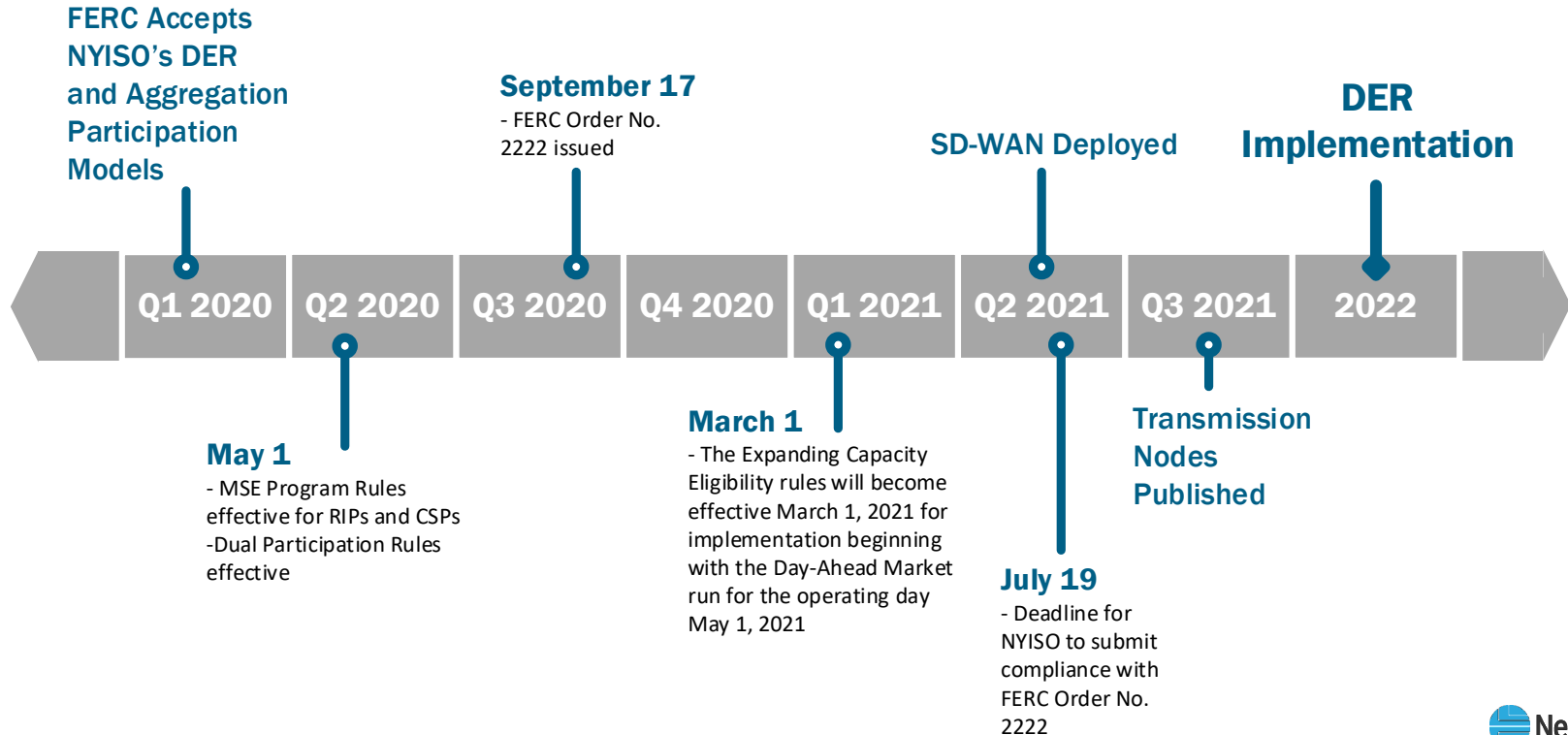
■ Retail Regulatory Authority

- Order No. 2222 requires the RTOs/ISOs to include how they will accommodate and incorporate “voluntary electric retail regulatory authority involvement in coordinating the participation of aggregated” DER

■ Ancillary Services

- Order 2222 may permit the Aggregation to provide services that the individual resources may not qualify to provide

NYISO DER and Aggregation Participation Models Deployment Timeline



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

