



Updates to 2019 DER and Aggregation Participation Model – Key Concepts and Draft Tariff Language Planning

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Agenda

- **Background & Overview**
- **Concepts for Review**
 - DER Minimum Capability
 - Dual Participation
- **Next Steps**

Background & Overview

- The NYISO filed its DER Market Design on June 27, 2019.
- FERC accepted the NYISO's proposed DER Market Design in January 2020.
- The NYISO has since worked towards deployment of the market design, in tandem with its FERC Order No. 2222 compliance initiative.
- Throughout the implementation process, the NYISO has identified areas in its previously accepted tariff where revisions are necessary to:
 - Clarify previously accepted concepts
 - Align the tariff with the NYISO's software implementation
- NYISO will submit a FPA 205 filing to FERC containing these revisions to become effective on deployment of DER in 2023.
- Today's presentation will provide an update on key items that necessitate additional discussion prior to the NYISO's anticipated FPA 205 filing.
- The NYISO will present the full suite of draft tariff revisions at the December 13 ICAPWG, including applicable content from today's presentation.
 - The NYISO introduced tariff language update concepts at the [October 7, 2022, ICAPWG](#) and [November 8, 2022, ICAPWG](#)

Concepts for Review

DER Minimum Capability

- **Given the NYISO's current technical resources and capabilities for initial DER deployment, allowing small (<10 kW) DER will require a substantial amount of additional manual work in order to complete tasks that are core to the timely participation of DER, including but not limited to:**
 - Review of DER enrollment physical characteristics for accuracy,
 - Verification of operational proposals of DER, and
 - Coordination with distribution utilities to review DER for safety and reliability
- **The NYISO expects that it will be responsible for auditing the Aggregators' stated capabilities similar to how other wholesale market suppliers are treated. The requirements of FERC Order 2222 reinforce this expectation, and the NYISO believes it will be important to establish a reasonable limit on the individual capability of the DER.**
- **For example, the NYISO staff expect more hours/effort spent to review an Aggregation comprised of 100, 1 kW DER than an Aggregation comprised of 10, 10 kW DER – these Aggregations ultimately deliver an identical 0.1 MW service to the grid.**

DER Minimum Capability

- **The NYISO proposes including the minimum capability requirement for individual DER of 10 kW in its forthcoming FPA 205 filing.**
 - Enabling this requirement will allow for a smooth deployment of the DER participation model and will not necessitate software updates that could delay the target go-live date
- **The NYISO appreciates the desire to allow DERs smaller than 10kW to participate in the wholesale market and will initiate discussions during 2023 to explore proposed use cases for these types of DER to participate in the wholesale market**
 - The NYISO is hoping to better understand stakeholder expectations and capabilities of these small DER
- **The goal of discussing this requirement in 2023 (Engaging the Demand Side Project):**
 - Document and analyze use cases of small DER (<10kW) proposed by NYISO stakeholders
 - Assess implications for potential process changes, design changes, and/or additional NYISO staff in order to sufficiently prepare for the identified use cases
 - Set a clear timeline for any future revisions to the 10-kW minimum, based on the outcome of these discussions

DER Minimum Capability Draft Tariff

- **The NYISO proposes to add the following paragraph to Services Tariff Sec. 4.1.10.1**
 - The minimum capability of each individual Resource participating in an Aggregation shall be 10 kW. For the purposes of this Services Tariff Section 4.1.10.1, (i) the capability of a Demand Side Resource is the Resource's enrolled one-hour Demand Reduction capability, and (ii) the capability of a Generator is its nameplate capability.

DER Minimum Capability Draft Tariff

- The NYISO proposes to modify the definition of “Energy Storage Resource” as follows:

Energy Storage Resource (“ESR”): Generators that receive Energy from the grid at a specified location, and are capable of storing that Energy, for later injection back onto the grid at the same location. Resources that cannot inject Energy onto the grid cannot be Energy Storage Resources. In order to qualify for wholesale market participation, Energy Storage Resources must be able to inject at a rate of at least 0.1 MW for a period of at least one hour-, except that Energy Storage Resources operating as part of an Aggregation need only be able to inject at a rate of at least 0.01 MW for a period of at least one hour. Energy Storage Resources are Withdrawal-Eligible Generators.

Dual Participation

- **Services Tariff Section 4.1.11 permits Generators and Demand Side Resources electrically located in the NYCA to simultaneously participate in the ISO-administered wholesale markets and in programs or markets operated to meet the needs of distribution systems located in the NYCA.**
 - FERC accepted the tariff revisions on January 23, 2020
- **Order No. 2222 directed RTOs/ISOs to allow DER to dual participate in retail markets or programs and in the wholesale markets and include narrowly designed tariff restrictions on DER dual participation to prevent double counting of services.**
 - The NYISO's Order No. 2222 compliance tariff revisions propose such narrowly-constructed restrictions
 - Provided that FERC accepts the NYISO's dual participation restrictions and grants the NYISO's Motion to extend the effective date for our Order No. 2222 compliance filing, these restrictions will become effective in 2026
- **The NYISO is aware of at least one ongoing initiative by members of the Joint Utilities to revise retail compensation structures for Distributed Energy Resources participating in the wholesale markets and retail programs or markets.**
 - The NYISO understands the purpose of these proposed revisions is to define and appropriately restrict duplicative compensation for the same service provided both in the wholesale and retail markets
 - Market Participants with Resources seeking to dual participate in the NYISO markets and retail markets or programs should consult with the applicable Member System regarding retail tariff frameworks when evaluating participation options

Next Steps

DER 205 Tariff Language Working Group Approach – December 13 ICAPWG

- **NYISO will proceed with drafting tariff to support the following:**
 - NYISO provision of DER data to the Distribution Utility
 - Telemetry Data channels
 - Station Power
 - Meter Data Submission
 - References to DSASP/DADRP
 - MST 4.5.2.4
 - MST 2.13
 - MST 13.3
 - Resources Swapping Aggregations
 - Energy Storage Resources in an Aggregation Charging at a Retail Rate
 - TSC/NTAC applicability to Aggregations
 - Uplift Reporting
 - Aggregations Metering
 - Wind and Solar Output Limit Definition
 - DER/Aggregation Separation from Wholesale Market Participation
 - Aggregation Reference Levels
 - BPCG and DAMAP Equations
 - ECBL Proxy Load Calculation
 - Interconnection Agreement Compliance
 - SCR Transition
 - DER Minimum Capability (Covered at today's presentation)

Next Steps

- **The NYISO will present draft tariff language at the December 13 ICAPWG in preparation to seek approval from the January 18 BIC and January 25 MC.**
- **NYISO intends to seek Board of Directors approval in February.**
- **NYISO anticipates filing the tariff with FERC in March with an effective date that aligns with the effective date for the 2019 Aggregation model.**
 - NYISO will seek an effective date for the tariff changes that is consistent with the implementation schedule for the 2019 market design, except for the tariff revisions related to DADRP and DSASP, which changes will align with the planned retirement of those programs.
- **Please send any questions that were not addressed during this presentation to: DER_Feedback@nyiso.com**

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

Questions?