

# ICAP Manual – DER Updates

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# Agenda

- **Background & Overview**
- **Draft Manual Language for Discussion**
- **Next Steps**

# Background & Overview

- **To support the deployment of the DER Participation Model, NYISO seeks stakeholder feedback of key concepts that will be included in NYISO Manuals, Guides, & Technical Bulletins.**

# Background & Overview

- **Today's discussion will review the concepts pertaining to participation of Aggregations & DER in the NYISO-administered Capacity markets**
  - This presentation will not review the entirety of revisions necessary for the ICAP Manual – subsequent presentations will address the remainder of the language

# Approach to Manuals

- **NYISO will post redlined documents prior to working groups in the ‘DER Project Documents Under Review’ folder.**
- **Documents will be discussed at working groups until a general consensus is reached.**
- **All updates will be tracked and visible in the manuals portion of the NYISO website – NYISO will summarize all updates for a collective BIC/OC vote.**

# Draft Manual Language for Discussion

# ICAP Manual – Introduction & Overview

## ■ 1.1. Introduction

- Added General statement about Resource definition and Single type of Resource participation model whose rules are applicable to Aggregations classified under the same model. These rules apply throughout the Manual accordingly.

## ■ 4.1. Overview

- Added General statement about Aggregations participating as ICAP Suppliers and the rules that apply based on the composition of an Aggregation.
  - For example:
    - Single Resource type participation model rules are also applicable to Aggregations classified under the same model
    - DER Aggregations are subject to specific rules defined under the DER Participation Model
    - An Aggregation comprised of a heterogenous mix of IPRs of differing technologies (E.g., Wind, Solar, and Landfill Gas in an Aggregation) shall be treated as a DER Aggregation

# Energy Duration Limitations

## ■ 4.1.1. Energy Duration Limitations and Duration Adjustment Factors for Installed Capacity Suppliers

- Added Time-Stacking concept and eligibility for Resources participating in an Aggregation that is an Installed Capacity Supplier with an Aggregation with Energy Duration Limitation, which is applicable through the Capability Year beginning May 1, 2023; and the Capability Year that begins May 1, 2024.
- Added rule around changing the value of an Aggregation EDL and the need to coordinate with the NYISO to administer a new DMNC test if the EDL value increases. This rule applies starting with the Capability Year beginning May 1, 2023; and the Capability Year that begins May 1, 2024.



# DER & Aggregation-specific Rules

## ■ 4.1.3. DERs and Aggregations

- New subsection describing rules and procedures applicable to Aggregations of DER seeking to participate as ICAP Suppliers:
  - An Aggregation must have a minimum injection capability of 0.1 MW to participate as an ICAP Supplier. The Aggregation capability will be based on the DERs comprising the Aggregation that are eligible for the ICAP Market.
  - DER entering Aggregations:
    - When an existing DER enters an Aggregation, the ICAP associated with the DER will be assigned to the Aggregation on the first day of the month.
    - When a new DER enters an Aggregation, it will only be permitted to participate in the Energy & Ancillary Services market for the first month while it completes a DMNC test in order to enter the Capacity market the next month.
  - DER changing Aggregations:
    - A DER changing from an Aggregation using a specific participation model to an Aggregation using a different participation model will be treated as a 'new' DER; and will be able to do so prior to the start of the Capability Year and must notify the NYISO of this change prior to August 1 of the year preceding the Capability Year.
    - A DER participating in a Single Resource Type Aggregation can switch its participation to another Single Resource Type Aggregation on a monthly basis. For example, an ESR participating in a Single Resource Type Aggregation of ESRs can switch its participation to another Single Resource Type Aggregation of ESRs on a monthly basis.
    - A DER participating in a heterogeneous DER Aggregation can switch its participation to another heterogeneous DER Aggregation on a monthly basis. The NYISO will retain its historic availability data for calculating UCAP in the new Aggregation.

# Energy Duration Limitation & Reporting

- **4.2.2.1 Installed Capacity Suppliers without an Energy Duration Limitation**
  - Added a sub-section for DER Aggregations without an EDL to describe DMNC requirements:
    - DER Aggregation's sustained maximum net output averaged over consecutive hour period depending on its elected duration (2, 4, 6, or 8).
- **4.2.2.2 Installed Capacity Suppliers with an Energy Duration Limitation**
  - Updated language to expand requirements for Aggregations with an EDL in alignment with treatment of standalone ELRs and ESRs.
  - Included provision to address DMNC requirements for DER Aggregations with an EDL and time-stacking.
- **4.4.9 Injection Resources that Participate in a DER Aggregation**
  - Newly added section describing Operating Data Reporting Requirements for injection-capable Resources that are part of a DER Aggregation.
    - Injection-capable Resources shall submit GADS Data, or data equivalent to GADS Data, in accordance with Attachment K of the ICAP Manual

# UCAP & Equipment Failures

- **4.5. Calculation of the Amount of Unforced Capacity each Resource may Supply to the NYCA**
  - Added language at the end of subsection *(b) Calculation Procedure* about specific requirements for DER Aggregations when calculating UCAP values.
    - UCAP value for a Capability Period a DER Aggregation is qualified to supply is based on the average of the previous two like-Capability Period Unavailability Factors calculated for that Resource. Calculations are in accordance with Attachment J
  
- **4.6.2 Exception for Certain Equipment Failures**
  - Updated language to expand rules and requirements for DER participating in an Aggregation in alignment with Generator, Energy/Capacity Limited Resource, System Resource, Intermittent Power Resource or Control Area System Resource requirements.

# Miscellaneous Updates

- **4.8.1 Generators and System Resources**
  - Expanded language to incorporate Aggregations in existing bidding rules in alignment with other types of existing Resources (e.g., conventional generators)
- **4.9.1 External Resources, Imports, Exports and Wheels Through**
  - Added rule precluding External Resources from participation in an Aggregation
- **4.12.2 General Requirements (SCRs)**
  - Removed subsection ‘New SCR in a Mitigated Capacity Zone’
- **7.1.1 Assignment of Installed Capacity Suppliers to Capacity Accreditation Resource Classes**
  - Incorporated Aggregations of DER.

# Next Steps

# Next Steps

- **NYISO will return to discuss concepts and supporting language for the remainder of the ICAP Manual and accompanying attachments in April.**
- **NYISO will post any subsequent revisions based on feedback to redlined documents on the website.**
- **Please send any questions, comments, or feedback that were not addressed during this presentation to: [DER\\_Feedback@nyiso.com](mailto:DER_Feedback@nyiso.com)**
  - Comments/feedback submitted to the NYISO will be posted publicly unless the NYISO is specifically asked not to do so.

# 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?