

Aggregation Manual Review

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Agenda

- **Background & Overview**
- **Aggregation Manual**
- **Next Steps**
- **DER Deployment Status**

Background & Overview

- **This presentation reviews manuals updated throughout 2022 and 2023 in preparation for a BIC vote in July.**
 - Manuals prepared for OC were reviewed at the June 8 CDAS and SOAS meetings

Background & Overview

- NYISO targets posting the complete Aggregation Manual draft and final versions of all draft manuals prepared for BIC and OC under the DER portlet web page: <https://www.nyiso.com/manuals-tech-bulletins-user-guides>

Aggregation Manual

Section Mapping

- Please refer to the following guide connecting draft sections from Parts 1, 2, and 3 of the Aggregation Manual to the draft sections in the consolidated draft:

Topic	Draft 'Part' Section	Draft Final Section
Background & Overview	Part 1, Section 1	1
Distributed Energy Resources & Aggregations	Part 2, Section 2	2
Interconnection	Part 2, Section 1	3
Registration & Enrollment	Part 2, Section 3	4
Transmission Nodes	Part 1, Section 3	5
Operational Coordination	Part 1, Section 2	6
Metering & Telemetry	Part 3, Section 1	7
Settlements	Part 3, Section 2	8
Market Monitoring & Mitigation	Part 2, Section 4	9
Appendix Materials	Part 3, Appendix A	Appendix A

Updates

- **The consolidated draft features the following updates 1) for further process clarification and/or 2) in response to Stakeholder feedback:**
 - Clarified ECBL Proxy Load calculation description
 - Clarified that non-controllable generation are not qualified to serve as Local Generators for Demand Side Resource participation
 - Clarified TO responsibilities for operational coordination with Aggregators
 - Included reference to Wind and Solar Plant Data User's Guide, applicable for Single Resource Type Aggregations of Wind or Solar
 - Clarified that an Aggregator must provide TO confirmation of the Transmission Node for each DER
 - Noted that Transmission Owner and DU may coordinate for safety and reliability review of DER
 - Added details to Provisional and Single Resource Type Transfer DMNC requirements – Aggregations containing at least one DER facility that does not contribute to the Aggregation's UCAP are ineligible to utilize a Provisional or SRT Transfer DMNC.
 - An Aggregation using a Provisional or SRT Transfer DMNC may not change its composition until the Aggregation establishes its DMNC through an in-period DMNC test
 - Added Appendix B including examples of 10 kW minimum requirement applications
 - Added DU review documentation results to NYISO enrollment review description
 - Clarified Transmission Node posting location
 - Additional ministerial edits throughout

Manuals Updates Review

DER Manuals Committee Approvals

■ Approved at BIC in May:

- Revenue Metering Requirements Manual
- Accounting & Billing Manual

■ For approval at BIC in June:

- Load Forecasting Manual

■ For approval at BIC in July:

- Aggregation Manual
- ICAP Manual
- Reference Level Manual
- Ancillary Services Manual
- Day-Ahead Scheduling Manual
- Emergency Demand Response Program Manual
- Transmission & Dispatch Operations Manual

■ Presented at CDAS/SOAS in June:

- Ancillary Services Manual
- Control Center Requirements Manual
- Outage Scheduling Manual
- Emergency Operations Manual
- Day-Ahead Scheduling Manual
- Transmission & Dispatch Operations Manual

■ For approval at OC in July:

- Ancillary Services Manual
- Control Center Requirements Manual
- Outage Scheduling Manual
- Emergency Operations Manual
- Day-Ahead Scheduling Manual
- Transmission & Dispatch Operations Manual

Reference Level Manual

- **All proposed updates reviewed at the May 8 ICAPWG.**
 - One ministerial edit has been incorporated since the initial presentation

ICAP Manual

- **All proposed updates reviewed at the following ICAPWGs:**
 - March 31
 - April 27
 - May 23
 - June 7
- **Since June 7 ICAPWG, completed the following additional updates:**
 - Ministerial edits to Attachment J 3.9.11 and 6.9.11
 - Updated the following additional attachments:
 - D – ministerial updates, unrelated to DER
 - N – New; Procedure to Calculate Translation Factors for an Intermittent Power Resource or Limited Control Run of River Hydro Resource
 - Presented to Stakeholders as part of the Capacity Accreditation effort in 2022 – no changes since prior discussions
 - G – Previously Section HH of NYISO Customer Registration process, required for prospective ICAP Suppliers, including Aggregators.
 - Migrated to ICAP Manual attachment for accessibility, allowing Aggregators to download and submit to DER@nyiso.com as required during enrollment of DER and Aggregations.

Ancillary Services Manual

- **Aggregation and DER Ancillary Services eligibility and requirements addressed throughout.**
 - Clarified Verification Performance Testing requirements in Sections 4.11.2 and 6.12.2.
- **All other updates reviewed in prior Working Group meetings.**

Day-Ahead Scheduling Manual

- **Aggregations incorporated into day-ahead bidding and scheduling procedures.**
 - Removed 'DSO' from GOCP description in the Supplemental Resource Availability (SRA) section – currently anticipated for a future deployment of GOCP
- **All other updates reviewed in prior Working Group meetings.**

Transmission & Dispatch Operations Manual

- **Aggregations incorporated into energy market functions including scheduling, dispatch, and out of market actions as appropriate.**
 - Removed 'DSO' from GOCP description in the Supplemental Resource Availability (SRA) section – currently anticipated for a future deployment of GOCP
- **All other updates reviewed in prior Working Group meetings.**

Emergency Demand Response Program Manual

- Demand Side Resources participating in an Aggregation may not also simultaneously participate in the Emergency Demand Response Program.
- All updates reviewed in prior Working Group meetings.

Next Steps

Next Steps

- **The NYISO intends to pursue a vote at BIC and OC in July on the manuals updated to support deployment of the DER participation model.**
- **Manuals planned for July BIC & OC anticipated to become effective in parallel with tariff effective date and participation model deployment.**

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?

Appendix - DER Deployment Status

2023 DER Deployment Milestones

- **April 27: NYISO began accepting Customer Registration for Aggregators.**
- **Tariff is expected to become effective summer 2023– enrollment of DER and Aggregations begins**
- **Date of Enrollment + Workflow Reviews: Distribution Utility review and NYISO workflow begins upon submission of Aggregation and DER enrollment data to the Aggregation System; expected to take approximately 90 days.**

Manuals and Guides

- **User's Guides will be published on the NYISO's website at: Manuals, Tech Bulletins & Guides - NYISO.**
 - The NYISO intends to publish the following User's Guides throughout prior to deployment:
 - Aggregation System User's Guide
 - Market Participant User's Guide
 - GOCP User's Guide
 - Wind and Solar Plant Data User's Guide
 - RLS User's Guide
 - AMS Automated Market User's Guide
 - DRIS User's Guide
- **The Direct Communications Procedure (CELL) is updated to reflect the DER participation model and is available for stakeholder request via stakeholder services online form request:**
 - <https://nyiso.tfaforms.net/187>

NYISO DER Market Training Information

- **Current target training schedule – *Subject to change***

Training	Target Training Date(s)	Announcement target date
GOCP Market Trials Training for TO Users (Complete)	April 26 – May 03	Complete
GOCP Market Trials for TO Users (Complete)	May 09-11; May 16-18	Complete
GOCP Market Trials for Aggregator Users (Complete)	May 23 – 25	Complete
DER Onboarding Suite	June 16	June 16 – eLearning, fact sheets, infographics, FAQs available
GOCP Standalone Training (3 unique modules for Aggregator, DSO, TO)	June 16	June 16 – eLearning available
DER Bid-to-Bill Participation	June 29; August 14 – August 25	June 29 – eLearning overview available July 24 – August 10 – registration open for August WebEx training