

DER Timeline & Key Topic Update

Harris Eisenhardt

Market Design Specialist, New Resource Integration

ICAPWG/MIWG

February 24, 2022

Agenda

- **Background & Overview**
- **Timeline Discussion**
- **Demand Side Ancillary Services Program (DSASP)
Transition Discussion**
- **DER MP Survey Results Discussion**
- **Next Steps**

Background & Overview

Background & Overview

- **The NYISO is tracking several key items that require decision and guidance for Market Participants before the deployment of DER.**
 - NYISO reviewed its 2022 DER strategy at the January 27, 2022, ICAPWG meeting, including the approach to update NYISO Manuals and User Guides to prepare for Q4 2022 DER deployment.¹
 - On slides 7 – 13 NYISO provides an in-depth overview of the draft schedule of NYISO documentation updates throughout 2022.
- **Stakeholders have identified the transition of existing DSASP resources into the DER program as a key DER implementation issue.**
 - The NYISO intends to limit impact to DSASP resources during the transition to the DER model, while meeting the operational needs of NYISO and TOs.

¹ For more information, please refer to the NYISO's January 27th, 2022, presentation:
<https://www.nyiso.com/documents/20142/28052110/NYISO%20DER%202022%20-%20Overview%20&%20Strategy%20Presentation.pptx.pdf/c542a36e-ad6f-69b2-0798-f15b68ab9247>

Background & Overview

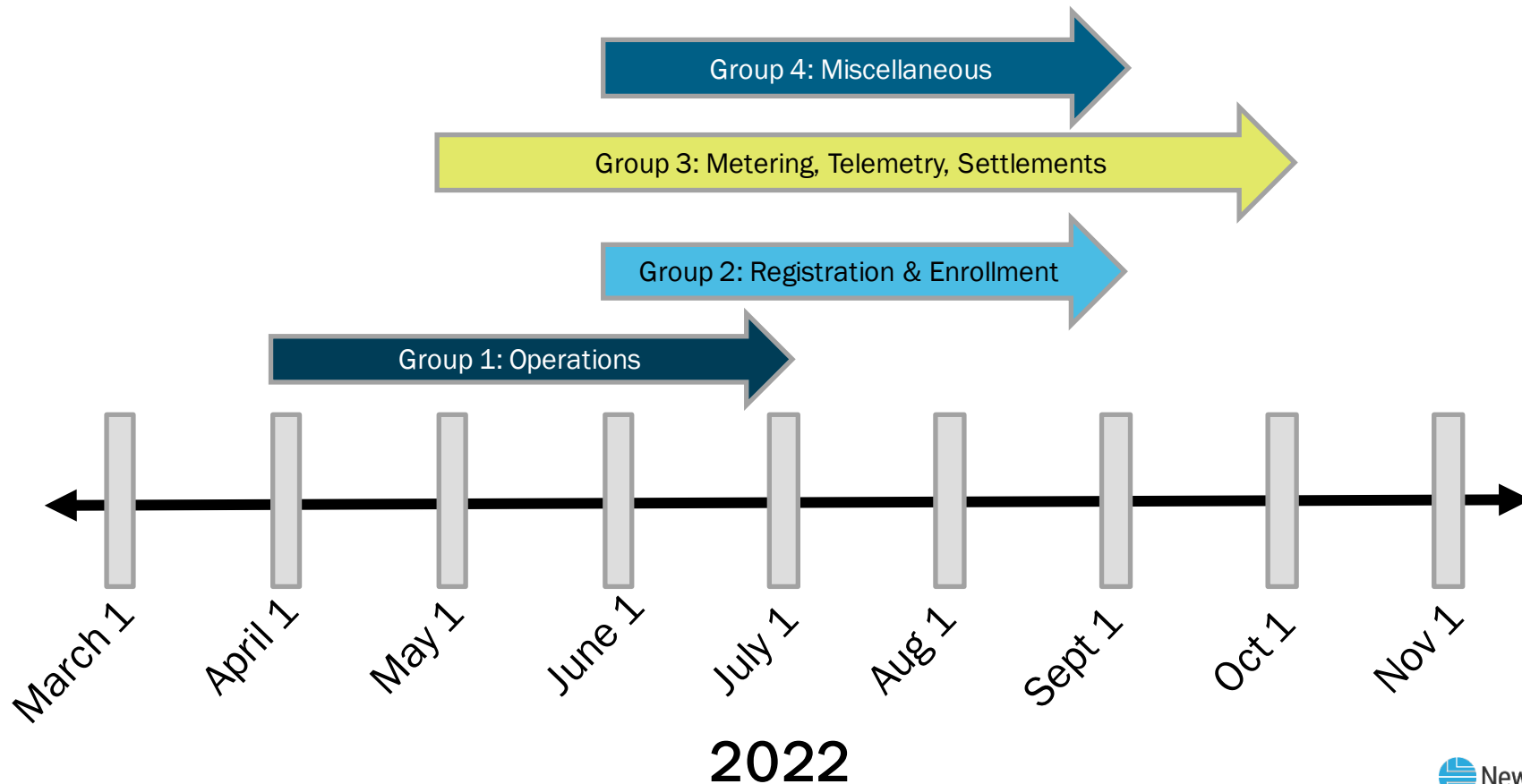
- **The NYISO administered a DER Survey to Market Participants in 2021, to gather information about the prospective penetration of DER participation from existing MPs.**
 - Finally, NYISO will provide a brief description of the DER MP Survey Results received in 2021.

Timeline Discussion

Timeline Discussion

- NYISO has examined the scope of key concepts and has grouped topics and the supporting documents (Manuals, Guides, Technical Bulletins) by topic area.
- Each group will include discussions of key concepts and supporting manual language:
 - Group 1 – Operations
 - Group 2 – Registration & Enrollment
 - Group 3 – Metering, Telemetry, Settlements
 - Group 4 – Miscellaneous
- **Process:**
 - Each group area will include a discussion of key concepts, accompanied by manual language updates as needed.
 - NYISO will gather feedback from stakeholders on concepts and draft language.
 - NYISO will return to subsequent working groups until a consensus is reached.
 - NYISO will provide a review of all concepts/draft language to stakeholders.
 - NYISO will save completed language reflecting concepts and decisions for a collective BIC/OC vote in November 2022.
- The following slides reflect the schedule and high-level concepts to be reviewed.

Timeline Discussion



Group 1 – Operations

■ Topics for review

- Outage procedures for Aggregations
- Emergency Operations requirements for Aggregations
- Coordination roles and responsibilities
- Removal of DSASP/DADRP requirements

■ Supporting Manuals

- Aggregation Manual Part I
- Day Ahead Scheduling Manual
- Emergency Operations Manual
- Transmission & Dispatch Operations Manual
- Ancillary Services Manual

Group 1 – Operations cont'd

■ Topics for review

- User information for Grid Operations Coordination Portal (GOCP)
- Direct communications for Aggregations
- Outage scheduling procedures for Aggregations
- Removal of DSASP/DADRP requirements

■ Supporting Manuals

- Grid Operations Coordination Portal User's Guide
- Control Center Requirements Manual
- Outage Scheduling Manual
- Outage Scheduler User's Guide

Group 2 – Registration & Enrollment

■ Topics for review

- Registration processes for Aggregators
- Enrollment processes for DER & Aggregations
- User information for Aggregation System
- Removal of DSASP/DADRP requirements

■ Supporting Manuals

- Aggregation Manual
- Aggregation System User's Guide
- Market Participant User's Guide

Group 3 – Metering, Telemetry, Settlements

■ Topics for review

- Aggregation metering & settlements
- Aggregation telemetry requirements
- Aggregations & intermittent power resource data
- Removal of DSASP/DADRP requirements

■ Supporting Manuals

- Aggregation Manual Part III
- Revenue Metering Requirements Manual
- Wind and Solar Plant Data Manual
- Accounting & Billing Manual

Group 4 – Miscellaneous

■ Topics for review

- Aggregations & load forecasting
- Capacity market requirements for Aggregations & DER
- Reference levels & Aggregations
- Transmission Congestion Contracts & Aggregations
- User information for AMS
- Removal of DSASP/DADRP requirements

■ Supporting Manuals

- Day Ahead Demand Response Program Manual
- Emergency Demand Response Program Manual
- Demand Response Information System User's Guide
- Load Forecast Manual
- Installed Capacity Manual
- Reference Level Manual
- AMS User's Guide

Demand Side Ancillary Services Program (DSASP) Transition Discussion

DSASP Transition Discussion

- **DSASP permits up to 200 MW of DSASP Resources to directly communicate with NYISO.**
 - 200 MW is NYCA-wide
 - Directly communicating DSASP Resources do not send operating information to the applicable Transmission Owner.¹
 - NYISO maintains this maximum MW value in order to limit the exposure of the amount of Operating Reserves that is not under Transmission Owner control during Interim Control Operations.¹

¹ NYISO Ancillary Services Manual Section 6.2.3.9 “Limit on Direct Communication for DSASP Resources” available here: <https://www.nyiso.com/documents/20142/2923301/ancserv.pdf/df83ac75-c616-8c89-c664-99dfea06fe2f>

DSASP Transition Discussion

- **The NYISO’s 2019 FERC approved DER market design¹ requires that Aggregations of DER transmit telemetry either:**
 - 1) To/from the applicable Transmission Owner only, who then transmits telemetry to/from NYISO, OR
 - 2) Simultaneously to/from the applicable Transmission Owner and the NYISO.
- **These options afford Market Participants with flexibility to configure the telemetry communication framework in a manner that best suits available resources and telecommunication preferences.**

¹ NYISO BIC Presentation “DER Energy & Capacity Market Design,” slide 32:

<https://www.nyiso.com/documents/20142/6006612/BIC%20DER%20Market%20Design%20Presentation.pdf/9cdc8700-ab90-d741-c28d-0c29b3468807>

DSASP Transition Discussion

- **The NYISO is aware Market Participants intend to transition resources from DSASP in the DER model when DER is deployed in Q4 2022.**
 - The NYISO understands Market Participant concerns regarding establishment of the telemetry connection with the applicable TO in time for the Q4 2022 deployment of DER.
- **The NYISO is developing a transition mechanism for existing DSASP Resources that are directly communicating with the NYISO.**
 - DSASP Resources would move to the DER model but would be permitted to continue direct communication with the NYISO until the sooner of (i) when the DER is able to establish the required communication infrastructure, or (ii) a date certain after the DER model is implemented.
 - NYISO is still working through details, including the future date to establish “existing” DSASP Resources that may be included in the transition and the date certain on which the opportunity for direct communication to the NYISO would be terminated.
- **The NYISO encourages Market Participants to continue working with the applicable TO to establish the required connection while NYISO continues to develop a transition plan for DSASP Resources to the DER participation model.**

DER MP Survey Results Discussion

Purpose

- **At the end of 2021, the NYISO sent stakeholders a DER participation model survey.**
 - This survey included questions to gauge anticipated interest in the DER model.
- **The following slides will summarize the survey results, focusing on the number of facilities anticipated to enter the market Q4 2022 when the NYISO intends to implement the model.**

Estimated DER Participation

- There are currently five DSASP resources that are transition candidates for the DER model on or near go-live.
- After reviewing the survey results, the following estimates indicate potential participation in the DER model:
 - Short-term: Up to 15 facilities (including DSASP) represented by multiple MPs within different Aggregation Types (Estimated as around 10 Aggregations)
 - Short to medium-term: Up to 70 facilities (including DSASP) entering DER by multiple MPs within different Aggregation Types (Estimated as around 30 Aggregations)

Estimated DER Participation – Short-term

- Some stakeholders indicated intent to participate in the DER participation model either immediately or shortly after implementation.

Aggregation Type	# of Respondents
DER	3
ESR	3
LESR	1
Generator Only	1

DER Participation – Short to Medium-Term

- Some stakeholders indicated intent to participate in the DER participation model but are unsure of the timeline.

Aggregation Type	# of Respondents
DER	9
ESR	9
LESR	4
Generator Only	5
Solar	6
Wind	1
Landfill Gas	2

Next Steps

Next Steps

- NYISO will return to discuss concepts and supporting language for Group 1 – Operations at an ICAPWG in April.
- NYISO will continue to work with stakeholders to develop guidance for the transition of DSASP to DER as soon as practical, targeting by the end of Q2.
- Please send any questions, comments, or feedback 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?