

Aggregation System Training

Intended for Distributed Energy Resource (DER)

Participation

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Market Training, NYISO

DER Participation Model

Q2 2024

eLearning Module

Presentation Topics

- **Introduction to the Agg System**
 - Access to the Agg System
- **Enrollment of new Aggregations and DER facilities**
 - Submission of DER facilities and Aggregation Enrollment
 - Initial NYISO Validation
 - Distribution Utility Review
 - NYISO Review
 - Post Enrollment Setup for Participation
- **Enrollment tasks for Installed Capacity Market Participation**
 - DMNC submission and validation
- **Management of Enrollments**
 - Separating an Aggregation/DER facility
 - ICAP Market related tasks
- **Additional References**

Introduction to the Agg System

Disclaimer

- A test organization has been used to illustrate Agg System features and functionalities and how market participants can use the interface
 - Aggregations, Aggregation ID, Facility ID etc. have been system generated exclusively for training use, and the information on the slides do not indicate any current Market Participant or organization

Introduction to the Agg System

- **NYISO's Agg System**
 - Objective and function: Online interface for enrollment of Aggregations and DER facilities for participation in NYISO's markets and management of enrollment of Aggregations
 - Designated personnel from the Aggregator organization will have access to the Aggregation System
 - Aggregation enrollments may be submitted on a monthly basis
- **Agg System User Roles:**
 - Agg System MP User
 - Agg System MP Read Only

Functionalities of the Agg System

- Enrollment for Energy and Ancillary Services Participation
- Enrollment for Installed Capacity Market Participation
- Management of Enrollments
 - Modification of DER facility/Aggregation level attributes
 - Separating DER facilities/Aggregations
 - DER facilities swapping between Aggregations
 - Transition of existing resources to the DER Participation Model
 - **Special Case Resources (SCRs)**
 - **Stand-alone Generators**

Pre-requisites for Agg System Access

- Completion of two-part Registration process
 - NYISO Customer Registration
 - Aggregator Registration



- For further understanding of these processes,
 - Refer to the [NYISO Customer and Aggregator Registration module of the DER Onboarding Education Suite on the Online Learning page of the NYISO website](#)
 - [Section 4 of the Aggregation Manual](#)

User Requirements

- MIS Privileges:
 - Organization level privileges set up after completion of Customer and Aggregator Registration process
 - Assigned by NYISO
 - User level privileges assigned to MIS account
 - Assigned by organization's MIS Administrator
- Digital Certificate:
 - Valid NAESB Digital Certificate Required
 - Installed on respective computer
 - For details on how to obtain the certificate, refer to the [NAESB Digital Certificate Tutorial on the Online Learning page of the NYISO Website](#)

User Requirements

Hardware Requirements

	Recommended	Optimal
Graphic Memory (GPU)	512 MB of GDDR4 or higher	2GB GDDR5 or higher
Processor	(4 MB cache, 4 cores, 4 threads) or higher	(6 MB cache, 4 cores, 8 threads) or higher
RAM	8 GB	16 GB
HDD	SSD	M.2 SSD

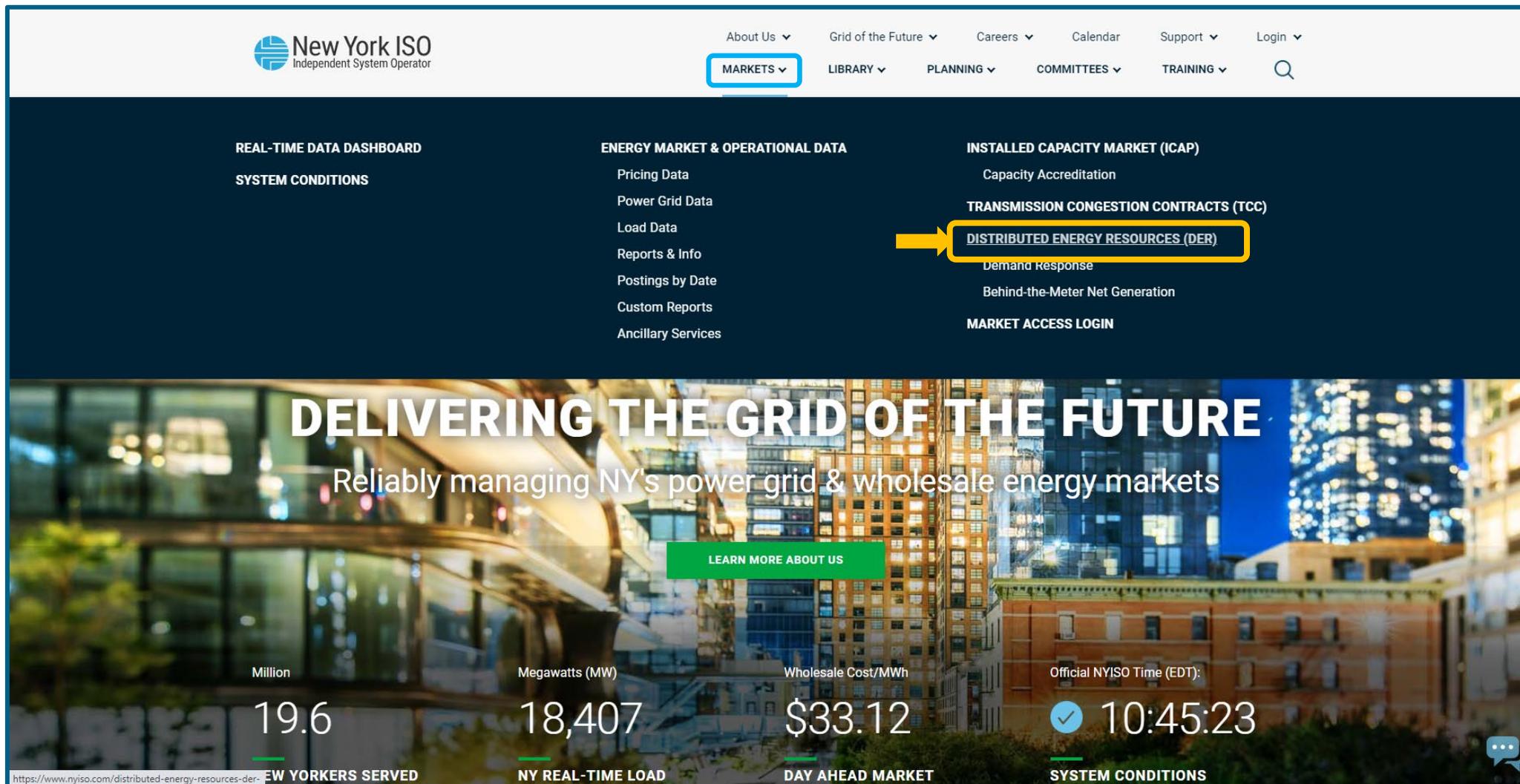
Software Requirements

Product	Recommended
Operating System	64-bit
Browser	<ul style="list-style-type: none"> - Up to date version of a common internet browser - Internet Explorer will not be supported
CSV/Excel	Spreadsheet application

Network Specifications

	Recommended	Optimal
Network Connectivity	T1 Internet connection	OATInet or other private network connection

Access to the Agg System



The screenshot shows the New York ISO website navigation menu. The 'MARKETS' dropdown is open, and 'DISTRIBUTED ENERGY RESOURCES (DER)' is highlighted with a yellow box and an arrow. Below the navigation menu, there are three main sections: REAL-TIME DATA DASHBOARD, ENERGY MARKET & OPERATIONAL DATA, and INSTALLED CAPACITY MARKET (ICAP). The 'DISTRIBUTED ENERGY RESOURCES (DER)' section is further divided into Demand Response, Behind-the-Meter Net Generation, and MARKET ACCESS LOGIN. Below the navigation menu, there is a banner with the text 'DELIVERING THE GRID OF THE FUTURE' and 'Reliably managing NY's power grid & wholesale energy markets'. A green button labeled 'LEARN MORE ABOUT US' is positioned below the banner. At the bottom of the page, there are four data points: Million (19.6), Megawatts (MW) (18,407), Wholesale Cost/MWh (\$33.12), and Official NYISO Time (EDT) (10:45:23). A small chat icon is visible in the bottom right corner.

MARKETS ▾

- LIBRARY ▾
- PLANNING ▾
- COMMITTEES ▾
- TRAINING ▾

REAL-TIME DATA DASHBOARD

SYSTEM CONDITIONS

ENERGY MARKET & OPERATIONAL DATA

- Pricing Data
- Power Grid Data
- Load Data
- Reports & Info
- Postings by Date
- Custom Reports
- Ancillary Services

INSTALLED CAPACITY MARKET (ICAP)

- Capacity Accreditation

TRANSMISSION CONGESTION CONTRACTS (TCC)

- DISTRIBUTED ENERGY RESOURCES (DER)**
- Demand Response
- Behind-the-Meter Net Generation

MARKET ACCESS LOGIN

DELIVERING THE GRID OF THE FUTURE
Reliably managing NY's power grid & wholesale energy markets

[LEARN MORE ABOUT US](#)

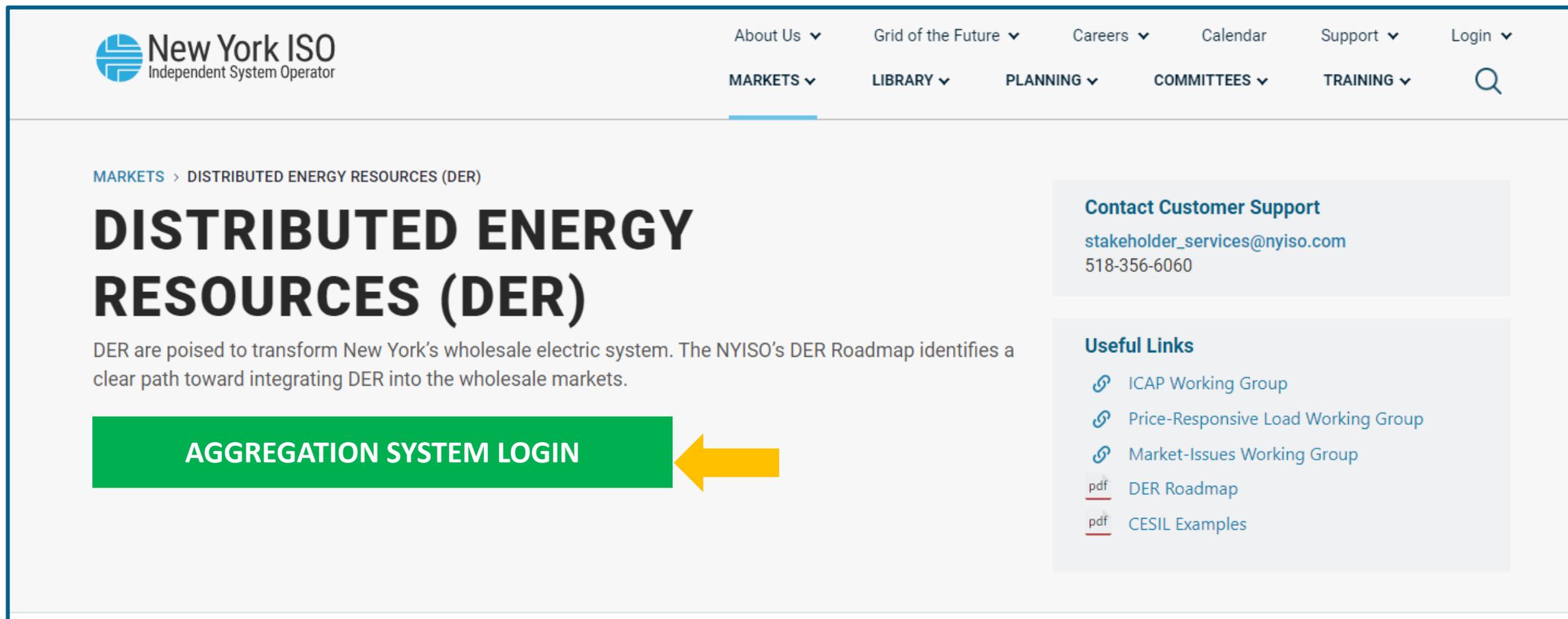
Million
19.6
NEW YORKERS SERVED

Megawatts (MW)
18,407
NY REAL-TIME LOAD

Wholesale Cost/MWh
\$33.12
DAY AHEAD MARKET

Official NYISO Time (EDT):
10:45:23
SYSTEM CONDITIONS

Access to the Agg System



 **New York ISO**
Independent System Operator

About Us ▾ Grid of the Future ▾ Careers ▾ Calendar Support ▾ Login ▾

MARKETS ▾ LIBRARY ▾ PLANNING ▾ COMMITTEES ▾ TRAINING ▾ 

MARKETS > DISTRIBUTED ENERGY RESOURCES (DER)

DISTRIBUTED ENERGY RESOURCES (DER)

DER are poised to transform New York's wholesale electric system. The NYISO's DER Roadmap identifies a clear path toward integrating DER into the wholesale markets.

AGGREGATION SYSTEM LOGIN ←

Contact Customer Support
stakeholder_services@nyiso.com
518-356-6060

Useful Links

-  [ICAP Working Group](#)
-  [Price-Responsive Load Working Group](#)
-  [Market-Issues Working Group](#)
-  [DER Roadmap](#)
-  [CESIL Examples](#)

Access to the Agg System

 **New York ISO**
Independent System Operator LOGIN 

Please login to continue to the Aggregation System
LOGIN 



**Please sign in
(customized)**

Username

Password

[Sign in](#)



 **New York ISO**
Independent System Operator **Aggregation System**  MPUSER_1
LOGOUT 

Welcome to the Aggregation System.

Agg System – General Navigation


New York ISO
Independent System Operator

Aggregation System ▾

MPUSER_1
LOGOUT 

Transmission Nodes

PTID	Name	TO	Start Date	Location Name	Load Pocket
355582	NHELSEA_115KV_TR2	CHG&E	01/01/2023	NHELSEA	
55870	HELLGATE_13_KV_LD	CONED	01/01/2023	HELLGATE	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23322 ASTORIA WEST - QUEENSBRIDGE,23323 ASTORIA WEST QUE
80602	PLSNTVLE_13_KV_13.8KVDIST	CONED	01/01/2023	PLSNTVLE	
355505	JAMAICA_27_KV_LOAD	CONED	01/01/2023	JAMAICA	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23321 ASTORIA EAST - COR- JAMAICA
355998	BENSHRST_27_KV_BENSHRST_1	CONED	01/01/2023	BENSHRST	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23325 VERNON - GREENWOOD,23332 GREENWOOD - STATEN ISLA
356117	W50THST_13_KV_LOAD	CONED	01/01/2023	W50THST	23320 DUNWOODIE SOUTH
356125	BROWNSV1_27_KV_LOAD	CONED	01/01/2023	BROWNSV1	23320 DUNWOODIE SOUTH
356172	GLENDALE_27_KV_LOAD	CONED	01/01/2023	GLENDALE	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23322 ASTORIA WEST - QUEENSBRIDGE,23325 VERNON - GR
356214	E179THST_13_KV_LOAD	CONED	01/01/2023	E179THST	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138
356215	WHITEPLN_13_KV_LOAD	CONED	01/01/2023	WHITEPLN	
356217	MILLWOOD_13_KV_LOAD	CONED	01/01/2023	MILLWOOD	
356241	CHERRYST_13_KV_LD	CONED	01/01/2023	CHERRYST	23320 DUNWOODIE SOUTH,23334 EAST RIVER
356247	N.QUEENS_27_KV_LOAD	CONED	01/01/2023	N.QUEENS	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23321 ASTORIA EAST - COR- JAMAICA
356253	FRESHKLS_33_KV_LOAD	CONED	01/01/2023	FRESHKLS	23320 DUNWOODIE SOUTH,23333 STATEN ISLAND
356306	ROCKVIEW_13_KV_LD	CONED	01/01/2023	ROCKVIEW	
55734	WATSON__69_KV_BK 1	LIPA	01/01/2023	WATSON	
55738	GREENLWN_69_KV_BK 3	LIPA	01/01/2023	GREENLWN	
55787	N.BELMOR_69_KV_BK1	LIPA	01/01/2023	N.BELMOR	
55790	BROOKVLE_69_KV_TB1	LIPA	01/01/2023	BROOKVLE	
55809	SOUTHOLD_69_KV_BK 2	LIPA	01/01/2023	SOUTHOLD	
55817	TIANA__69_KV_BK 1	LIPA	01/01/2023	TIANA	
55828	HEWLETT__69_KV_BK3	LIPA	01/01/2023	HEWLETT	

Full dataset Current page dataset

< > >> Page 1 of 2 | Go to page:

Click the down arrow icon to display the Search feature

Click here to Logout of the Agg System

Several reports and screens may need the scroll bar to access all the information

Current page data set or Full dataset can be exported for analysis

Several reports and screens may need the scroll bar to access all the information

Several reports have multiple pages, that can be accessed by clicking these navigation buttons

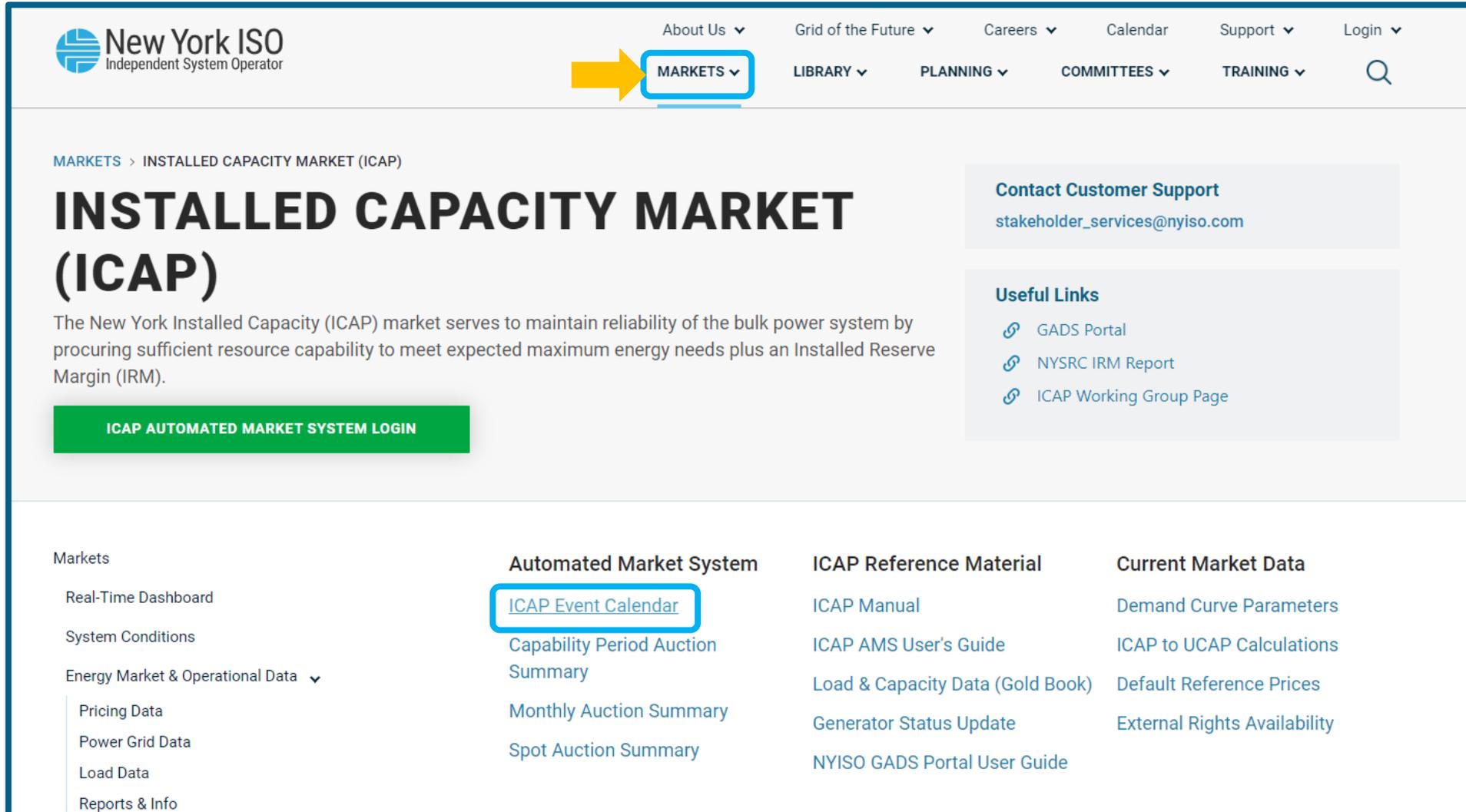
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FOR TRAINING PURPOSES ONLY

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ICAP Event Calendar for Agg System

Deadlines



The screenshot shows the New York ISO website's navigation menu with 'MARKETS' highlighted by a yellow arrow and a blue box. Below the navigation, the 'INSTALLED CAPACITY MARKET (ICAP)' page is displayed. The page features a green button for 'ICAP AUTOMATED MARKET SYSTEM LOGIN' and a 'Useful Links' section with links to 'GADS Portal', 'NYSRC IRM Report', and 'ICAP Working Group Page'. At the bottom, a grid of links is shown, with 'ICAP Event Calendar' highlighted in a blue box under the 'Automated Market System' category.

New York ISO
Independent System Operator

About Us ▾ Grid of the Future ▾ Careers ▾ Calendar Support ▾ Login ▾

MARKETS ▾ LIBRARY ▾ PLANNING ▾ COMMITTEES ▾ TRAINING ▾

MARKETS > INSTALLED CAPACITY MARKET (ICAP)

INSTALLED CAPACITY MARKET (ICAP)

The New York Installed Capacity (ICAP) market serves to maintain reliability of the bulk power system by procuring sufficient resource capability to meet expected maximum energy needs plus an Installed Reserve Margin (IRM).

[ICAP AUTOMATED MARKET SYSTEM LOGIN](#)

Contact Customer Support
stakeholder_services@nyiso.com

Useful Links

- [GADS Portal](#)
- [NYSRC IRM Report](#)
- [ICAP Working Group Page](#)

Markets

- Real-Time Dashboard
- System Conditions
- Energy Market & Operational Data ▾
 - Pricing Data
 - Power Grid Data
 - Load Data
 - Reports & Info

Automated Market System

- [ICAP Event Calendar](#)
- Capability Period Auction Summary
- Monthly Auction Summary
- Spot Auction Summary

ICAP Reference Material

- ICAP Manual
- ICAP AMS User's Guide
- Load & Capacity Data (Gold Book)
- Generator Status Update
- NYISO GADS Portal User Guide

Current Market Data

- Demand Curve Parameters
- ICAP to UCAP Calculations
- Default Reference Prices
- External Rights Availability

ICAP Event Calendar for Agg System Events

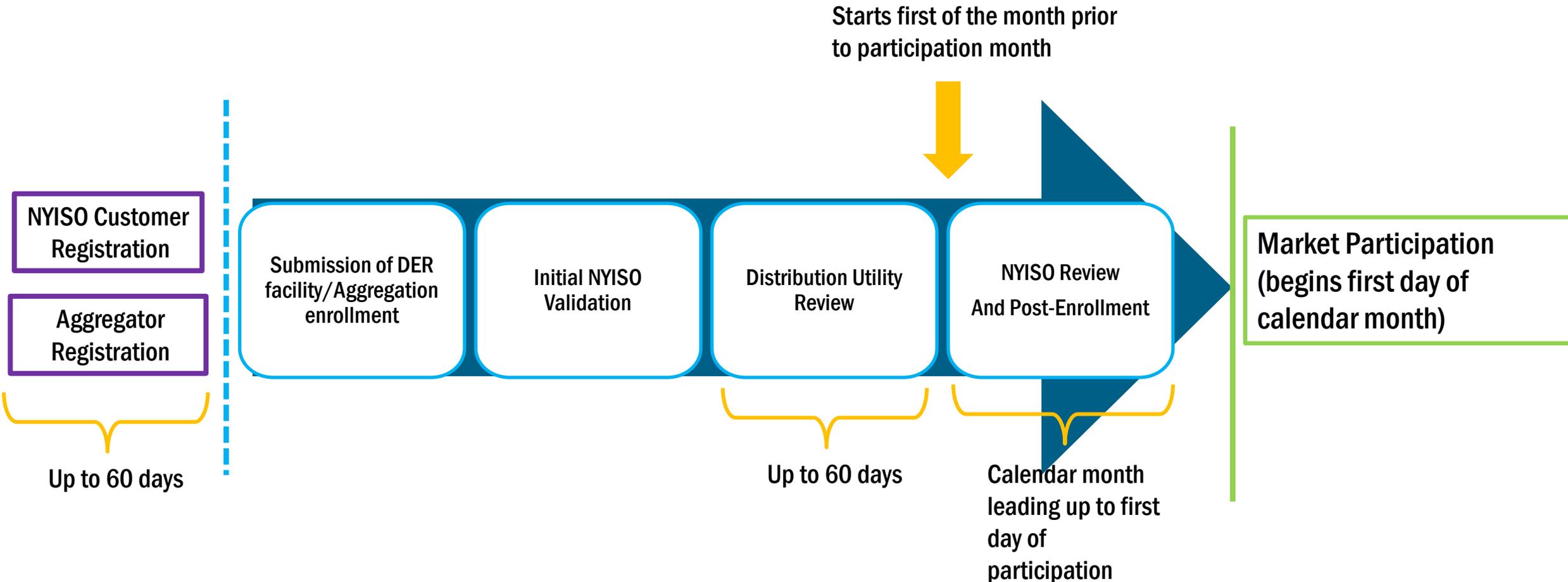
10:50 AM	test - GLOBAL_All Calendars - EvtResp INT-1
01:50 PM	test - GLOBAL_All Calendars - EvtResp INT-1
05:00 PM	IMPORT RIGHTS - ISO posts the remaining available Import Rights
05:00 PM	UCRs - ISO provides UCRs to LSEs
Wednesday Aug 09, 2023	
03:13 PM	CERTIFICATION - Deadline for Certification for LSEs and Suppliers for Jun
03:18 PM	CERTIFICATION - Deadline for Certification for LSEs and Suppliers for Apr
03:24 PM	CERTIFICATION - Deadline for Certification for LSEs and Suppliers for Apr
05:00 PM	AFFILIATES - Deadline to request additions/deletions to affiliate list of new org names for Sep
05:00 PM	SCR - Enrollment Period for auction month of May Closes
Thursday Aug 10, 2023	
08:00 AM	MONTHLY AUCTION - Offer period opens for Sep Monthly Auction
11:15 AM	AGG ENROLLMENT - Enrollment for Month - Sept 2023 Closes
12:10 PM	AGG ENROLLMENT - Enrollment for Month - Oct 2023 Opens
Friday Aug 11, 2023	
11:10 AM	CERTIFICATION - Certification Period begins for LSEs and Suppliers for Oct
05:00 PM	DMNC - Deadline to submit DMNC data for Existing Generators to ensure can be used for Oct
05:00 PM	MONTHLY AUCTION - Offer period closes for Sep Monthly Auction
Tuesday Aug 15, 2023	
10:38 AM	MONTHLY AUCTION - Bid period opens for Sep Monthly Auction
05:00 PM	IMPORT RIGHTS - ISO posts the remaining available Import Rights after Monthly auction
05:00 PM	MONTHLY AUCTION - ISO posts results of Sep Monthly Auction
Wednesday Aug 16, 2023	
08:00 AM	IMPORT RIGHTS - First Come First Serve - begin to submit requests
05:00 PM	AFFILIATES - Deadline to select or de-select affiliate names for Sep ICAP Market
05:00 PM	IMPORT RIGHTS - First Come First Serve - deadline to submit requests
Thursday Aug 17, 2023	
08:00 AM	IMPORT RIGHTS - First Come First Serve - begin to confirm requests
05:00 PM	IMPORT RIGHTS - First Come First Serve - deadline to confirm requests

Enrollment of New DER Facilities and Aggregations

Pre-Enrollment Checklist

<p>Interconnection Agreement</p>	<ul style="list-style-type: none"> • All individual DER facilities that will inject Energy onto a distribution system or the transmission system must have a signed Interconnection Agreement; either through: <ul style="list-style-type: none"> • NYISO’s Small Generator Interconnection Procedure (SGIP), or • Acceptable non-NYISO Interconnection procedure (<i>e.g.</i>, through the local distribution utility)
<p>Telemetry Communication</p>	<ul style="list-style-type: none"> • Aggregator must successfully establish telemetry infrastructure connection with the applicable Member System, and optionally to NYISO, prior to Enrollment in the Agg system • Aggregator to Member System connection is a pre-requisite to the Enrollment process
<p>Transmission node selection confirmation</p>	<ul style="list-style-type: none"> • Aggregator must obtain confirmation of their Transmission node selection from the applicable Transmission Owner, prior to enrollment, in order to submit proof to the NYISO
<p>Utility pre-enrollment/registration process</p>	<ul style="list-style-type: none"> • Aggregators may obtain information and data from their applicable distribution utility to support its enrollment of DER facilities with NYISO <ul style="list-style-type: none"> • Examples: Non-NYISO Interconnection Agreement information from DU records • The applicable DU must be contacted for details on potential access to information

Overview of Enrollment Process in Agg System



Note: Timelines on this slide are an estimate

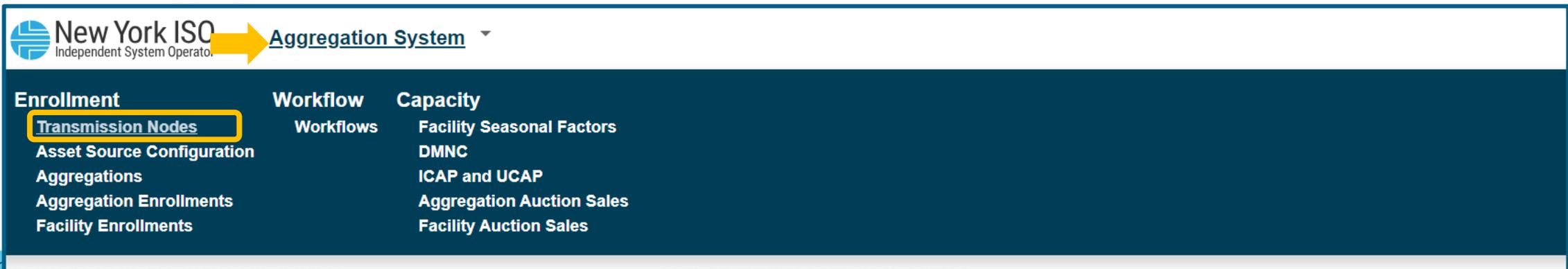
Enrollment and Participation Timeline

- **New DER facilities and Aggregations**
 - Energy and Ancillary Services market participation: 1st month after NYISO Review and successful enrollment
 - Installed Capacity Market Participation: 1 month after Energy market participation onwards
 - DMNC tests must be submitted and validated prior to participation start
- **Existing resources transitioning into the DER Aggregation participation model**
 - Energy and Ancillary Services market participation: 1st month after NYISO Review and successful enrollment
 - Installed Capacity Market Participation: Can start 1st month after NYISO Review and successful enrollment
 - If DMNC/provisional DMNC is submitted and validated during the month of NYISO Review

Submission of DER Facility/Aggregation Enrollment

Available Reports and Tables

- Aggregations can view the list of available Transmission Nodes in this report
- Transmission Node: Point on the NYS Transmission System at which LBMP will be calculated for the Aggregation
 - For an Aggregation, Transmission Nodes reflect a collection of designated load buses on which individual DERs are located and participate together in an Aggregation
- The Transmission Nodes Report contains a list of available and active Transmission Nodes
 - Contains TO, Zone, Subzone, load pocket and Station name information
 - Aggregations can select the Transmission Node that they will electrically map to
 - Aggregators must select PTIDs specific to their applicable Transmission nodes to obtain Aggregation ID



New York ISO Independent System Operator [Aggregation System](#)

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Asset Source Configuration		DMNC
Aggregations		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales

Transmission Nodes

PTID	Name	TO	Start Date	End Date	Station Name	Load Pocket
355582	NHELSEA_115KV_TR2	CHG&E	01/01/2023		NHELSEA	
55870	HELLGATE_13_KV_LD	CONED	01/01/2023		HELLGATE	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23322 ASTORIA WEST - QUEENSBRIDGE,23323 ASTORIA WEST QUE
80602	PLSNTVLE_13_KV_13.8KVDIST	CONED	01/01/2023		PLSNTVLE	
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355998	BENSHRST_27_KV_BENSHRST_1	CONED	01/01/2023		BENSHRST	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23325 VERNON - GREENWOOD,23332 GREENWOOD - STATEN ISLA
356117	W50THST__13_KV_LOAD	CONED	01/01/2023		W50THST	23320 DUNWOODIE SOUTH
356125	BROWNSV1_27_KV_LOAD	CONED	01/01/2023		BROWNSV1	23320 DUNWOODIE SOUTH
356172	GLENDALE_27_KV_LOAD	CONED	01/01/2023		GLENDALE	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23322 ASTORIA WEST - QUEENSBRIDGE,23325 VERNON - GREENW
356214	E179THST_13_KV_LOAD	CONED	01/01/2023		E179THST	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138
356215	WHITEPLN_13_KV_LOAD	CONED	01/01/2023		WHITEPLN	
356217	MILLWOOD_13_KV_LOAD	CONED	01/01/2023		MILLWOOD	
356241	CHERRYST_13_KV_LD	CONED	01/01/2023		CHERRYST	23320 DUNWOODIE SOUTH,23334 EAST RIVER
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356253	FRESHKLS_33_KV_LOAD	CONED	01/01/2023		FRESHKLS	23320 DUNWOODIE SOUTH,23333 STATEN ISLAND
356306	ROCKVIEW_13_KV_LD	CONED	01/01/2023		ROCKVIEW	
55734	WATSON__69_KV_BK 1	LIPA	01/01/2023		WATSON	
55738	GREENLWN_69_KV_BK 3	LIPA	01/01/2023		GREENLWN	
55787	N.BELMOR_69_KV_BK1	LIPA	01/01/2023		N.BELMOR	
55790	BROOKVLE_69_KV_TB1	LIPA	01/01/2023		BROOKVLE	
55809	SOUTHOLD_69_KV_BK 2	LIPA	01/01/2023		SOUTHOLD	
55817	TIANA__69_KV_BK 1	LIPA	01/01/2023		TIANA	
55828	HEWLETT_69_KV_BK3	LIPA	01/01/2023		HEWLETT	
55846	BELLMORE_69_KV_BK 2	LIPA	01/01/2023		BELLMORE	
56701	BRENTWOD_69_KV_BK_1	LIPA	01/01/2023		BRENTWOD	

Select applicable Transmission Node PTID to Obtain Aggregation ID

Use the scroll bar for complete information about each Transmission Node, and the complete list of Transmission Nodes

Transmission Nodes


Aggregation System ▼
MPUSER_1
LOGOUT 

Transmission Nodes

PTID	Name	TO	Start Date	End Date	Station Name	Load Pocket
355582		CHG&E	01/01/2023		NCHELSEA	
55870		CONED	01/01/2023		HELLGATE	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23322 ASTORIA WE
80602		CONED	01/01/2023		PLSNTVLE	
355505		CONED	01/01/2023		JAMAICA	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23321 ASTORIA EAS
355998		CONED	01/01/2023		BENSHRST	23320 DUNWOODIE SOUTH,23331 IN-CITY 345/138,23325 VERNON - GR
356117		CONED	01/01/2023		W50THST	23320 DUNWOODIE SOUTH
356125		CONED	01/01/2023		BROWNSV1	23320 DUNWOODIE SOUTH
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55787	N.BELMOR_69_KV_BK1	LIPA	01/01/2023		N.BELMOR	
55790	BROOKVLE_69_KV_TB1	LIPA	01/01/2023		BROOKVLE	
55809	SOUTHOLD_69_KV_BK 2	LIPA	01/01/2023		SOUTHOLD	
55817	TIANA__69_KV_BK 1	LIPA	01/01/2023		TIANA	
55828	HEWLETT__69_KV_BK3	LIPA	01/01/2023		HEWLETT	

[Full dataset](#)
[Current page dataset](#)

 Page 1 of 2 | Go to page:

Click the arrow icon to open up the Search query, to search report by functionality (TO name)

Click the "spyglass" button to open the Search tab, to search report by specific TO

Search

Select TO ▼

Active Only

Search

Clear Search

Asset Source Configuration

- This report displays information about the various types of assets that each individual DER facility can contain
- Aggregators can view the different types of assets based on their configuration (source type and source fuel)
- Aggregations must select Asset Source IDs specific to their assets that make up DER facilities in the Aggregation
- Each asset at each DER facility must be included in the enrollment data submitted to the NYISO during the enrollment process
 - Aggregations must enter Asset Source IDs in their Facility Enrollments import template



New York ISO Independent System Operator MPUSER_1 LOGOUT

Aggregation System

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Asset Source Configuration		DMNC
Aggregations		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales

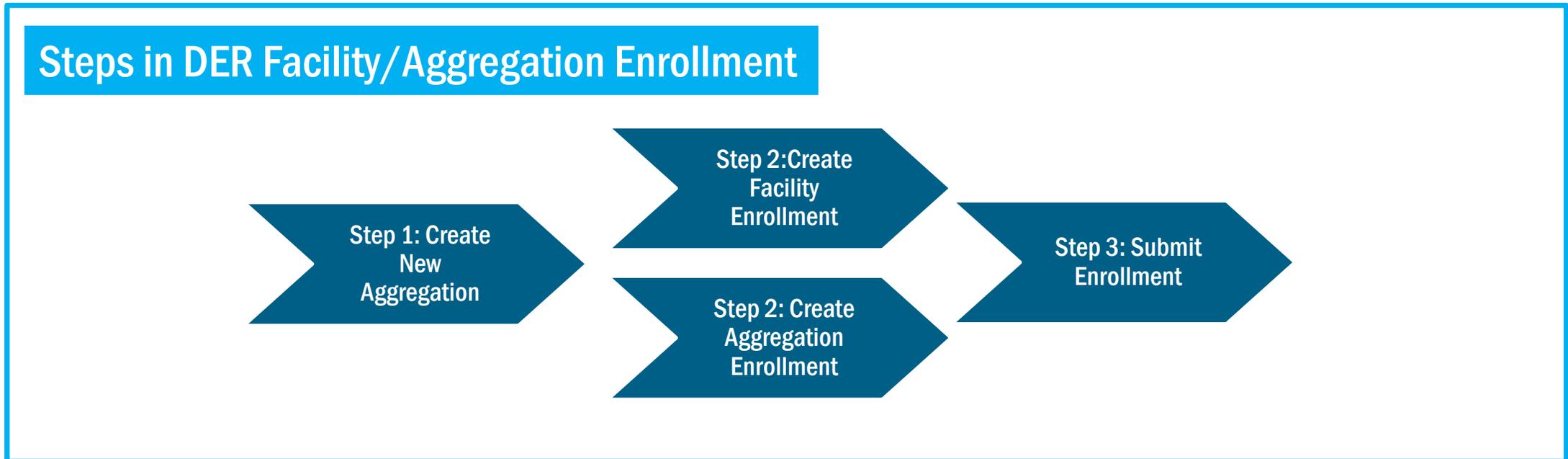
Asset Source Configuration

New York ISO Independent System Operator		Aggregation System		MPUSE LOGOUT			
Asset Source Configuration							
ID	Asset Type	Source Type	Source Fuel	Response Type	Active	Last Update Date	Last Updated By
Search... (94)	Search... (6)	Search... (18)	Search... (23)	Search... (5)	Search... (1)	mm/dd/yyyy	Search... (1)
101	Demand Reduction	Demand Reduction	Curtailment	C	✓	01/30/2023 16:00:29	NYISO
102	Demand Reduction	Demand Reduction	Curtailment	B	✓	01/30/2023 16:00:29	NYISO
103	Demand Reduction	Demand Reduction	Curtailment	I	✓	01/30/2023 16:00:29	NYISO
104	Demand Reduction	Demand Reduction	Curtailment	G	✓	01/30/2023 16:00:29	NYISO
201	Generator	Combined Cycle	Coal		✓	01/30/2023 16:00:29	NYISO
202	Generator	Combined Cycle	Butane		✓	01/30/2023 16:00:29	NYISO
203	Generator	Combined Cycle	Diesel		✓	01/30/2023 16:00:29	NYISO

Select applicable Asset Source ID based on asset configurations to use in facility Enrollment

Asset Source ID Combinations can also be found in Appendix E of the Agg System User's Guide

Steps in DER Facility/Aggregation Enrollment



- **Note: DER Facility and Aggregation Enrollment can be created in any order**
 - Each DER Facility must be linked to an Aggregation using the Aggregation ID to complete Step 3 in the graphic above
- **Every other step is sequential**

Step 1: Create New Aggregation

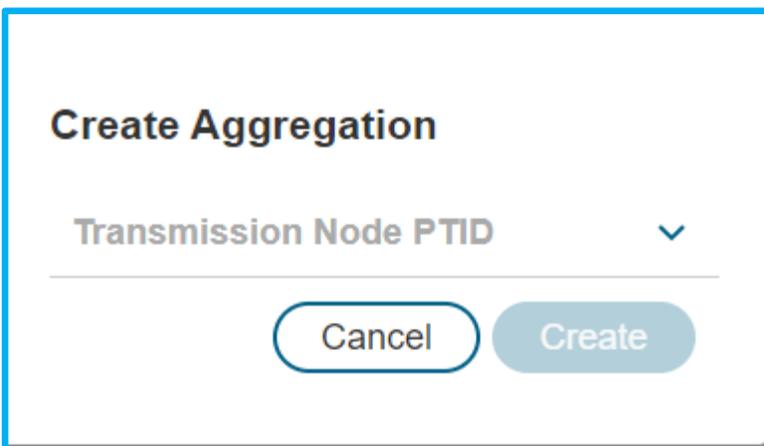
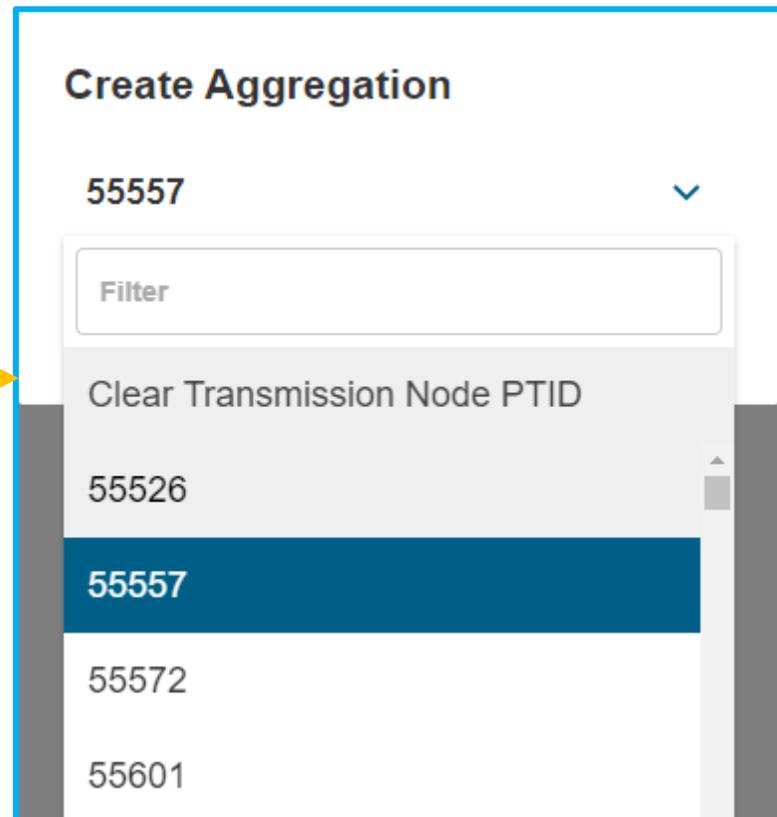
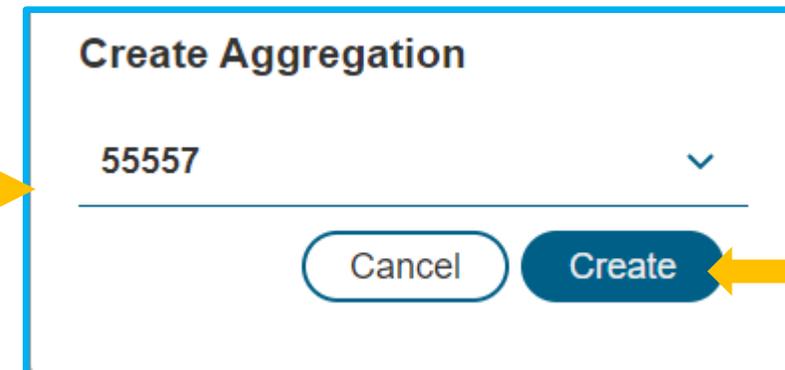
- Aggregator must first obtain an Aggregation ID to enroll an Aggregation
- Aggregator must have applicable Transmission Node ID to which Aggregation will be electrically mapped to, in order to request for an Aggregation ID and create a new Aggregation



The screenshot shows the New York ISO logo and the text "Independent System Operator" on the left. To the right is a yellow arrow pointing to a dropdown menu labeled "Aggregation System". The dropdown menu is open, showing three main categories: "Enrollment", "Workflow", and "Capacity". Under "Enrollment", the items are "Transmission Nodes", "Asset Source Configuration", "Aggregations" (highlighted with a yellow box), "Aggregation Enrollments", and "Facility Enrollments". Under "Workflow", the item is "Workflows". Under "Capacity", the items are "Facility Seasonal Factors", "DMNC", "ICAP and UCAP", "Aggregation Auction Sales", and "Facility Auction Sales".

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Asset Source Configuration		DMNC
Aggregations		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales

Step 1: Create New Aggregation

1. Click the Create Aggregation button
2. Select Applicable Transmission Node
3. Click "Create" to generate new Aggregation

Step 1: Create New Aggregation

Automated message upon successful creation of Aggregation

Info

Aggregation ID: The following Aggregation has been created: Aggregation ID = 800138

New York ISO Independent System Operator		Aggregation System						MPUSER_1 LOGOUT	
Aggregations								+ Create Aggregation	
Aggregation ID	MP	Transmission Node PTID	Telemetry ID	TO	Zone	Subzone	Last Update Date	Last Updated By	
800138	Test_Organization_1	55557		O&R	G - HUD VL	80729 - O&R HUDSON VLY	07/03/2023 22:56:46	MPUSER_1	

- Aggregation ID is automatically created by the Agg System
- Fields Automatically populated by the system:
 - Transmission Node PTID, TO name, Zone and Subzone
- One Telemetry ID and multiple Object IDs will be assigned by NYISO’s Distributed Resources Operations team
 - NYISO’s Power System Applications Engineering (PSAE) group predefines telemetry object IDs for each Member System (TO)
 - Includes range of points to be assigned to new Aggregations that enroll in the applicable Member System’s territory
 - A complete list of Object IDs that will apply to Aggregations can be found in the [NYISO Direct Communications Procedure](#) – this document is CEII and must be requested through the NYISO’s Stakeholder Services department

Step 2: Create Aggregation Enrollment

- Once an Aggregation ID has been created in the Agg system, Aggregators can enroll the Aggregation by importing Aggregation specific attributes
- On the Aggregation Enrollments screen, click on Create to download:
 - Blank Enrollment template for importing new data for an Aggregation, or
 - Enrollment template with data to update or make modifications to an existing file
- The required physical and operational Aggregation data that must be uploaded through the Import template includes:

Aggregation ID (From Step 1)	Aggregation Meter Authority	Qualified Ancillary services that Aggregation would like to participate in
Aggregator Contact info	Information about Aggregation Communication with NYISO	ELR/CLR classification
Aggregation Type	Registration parameters for Energy Market and Ancillary Services Participation	System populated information from applicable DER facility enrollment (that make up the Aggregation)
Transmission Node PTID	Installed Capacity market participation-based information	System populated information from the uploaded Aggregation data

The complete list of Aggregation data that must be uploaded through the Import template can be found in the Appendix A of the Agg System User's Guide

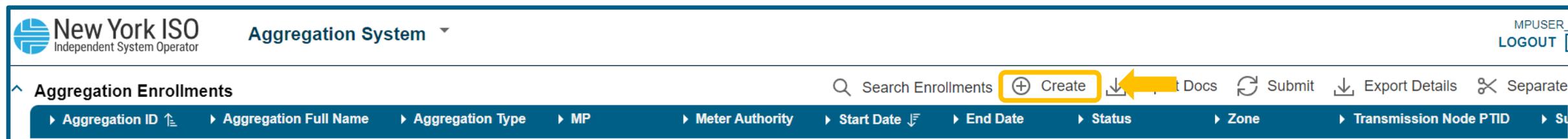
Step 2: Create Aggregation Enrollment



New York ISO
Independent System Operator

Aggregation System 

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Asset Source Configuration		DMNC
Aggregations		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales



New York ISO
Independent System Operator

Aggregation System

MPUSER_1
LOGOUT

Aggregation Enrollments

Search Enrollments **Create**  Docs Submit Export Details Separate

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID	St
----------------	-----------------------	------------------	----	-----------------	------------	----------	--------	------	------------------------	----

Step 2: Create Aggregation Enrollment

Create/Update Aggregation Enrollment

Download blank template

 Download blank enrollment template

Download template with data

Select Aggregation ▼

 Download enrollment template with data

Import template

Drop file here or [browse](#)

 Import File

Download template with data

Select Aggregation ▼

- 800059
- 800060
- 800032
- 800086
- 800135
- 800136
- 800137
- 800138

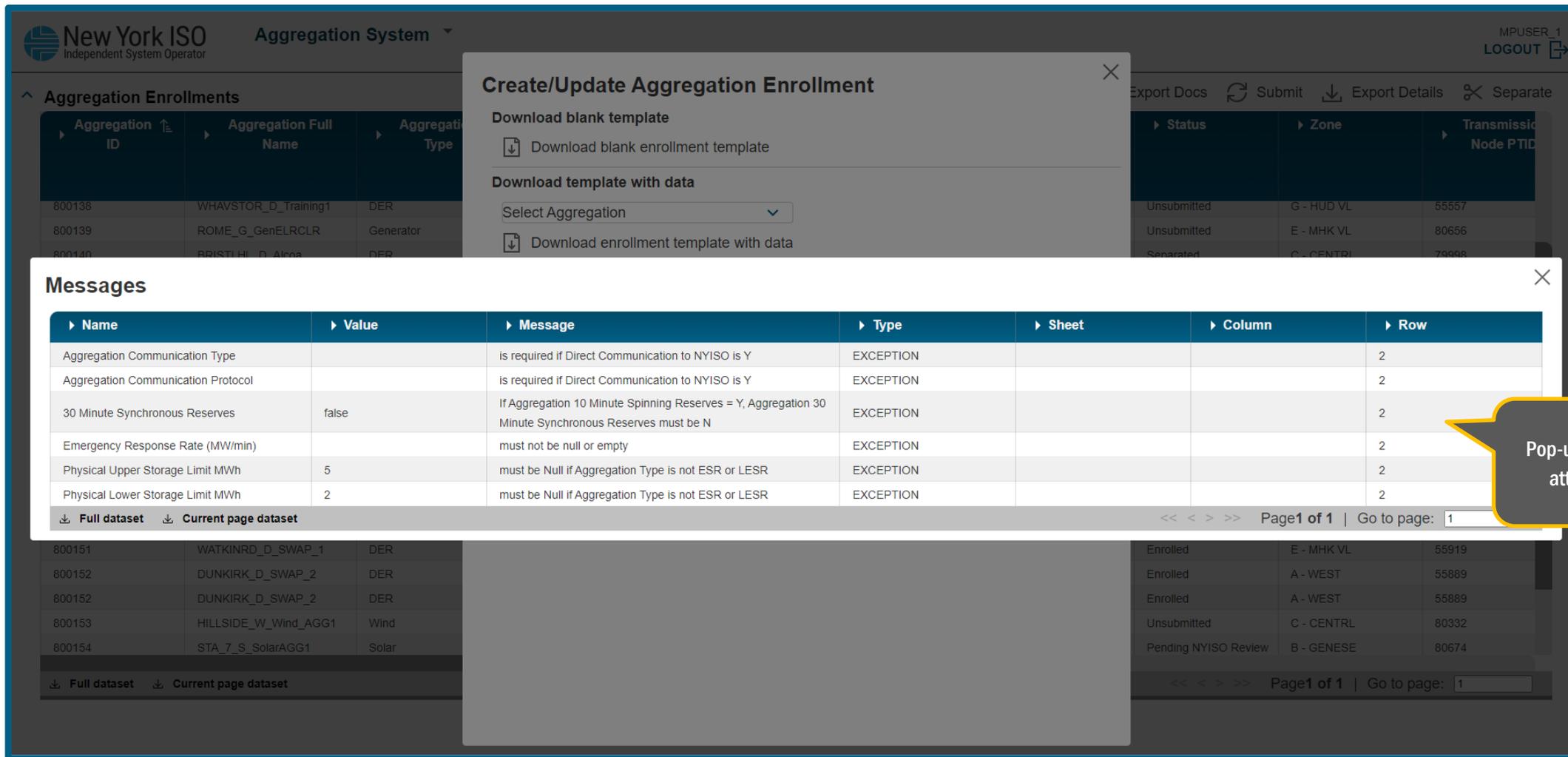
For New Aggregations with a blank import file

For New Aggregations with a existing import file that needs modifications, and For existing Aggregations, to update Enrollment data

Once completed, the downloaded Import template can be submitted here

Click on the pull-down menu to select Aggregation and download enrollment template with data

Step 2: Create Aggregation Enrollment



Create/Update Aggregation Enrollment

Download blank template

Download blank enrollment template

Download template with data

Select Aggregation

Download enrollment template with data

Messages

Name	Value	Message	Type	Sheet	Column	Row
Aggregation Communication Type		is required if Direct Communication to NYISO is Y	EXCEPTION			2
Aggregation Communication Protocol		is required if Direct Communication to NYISO is Y	EXCEPTION			2
30 Minute Synchronous Reserves	false	If Aggregation 10 Minute Spinning Reserves = Y, Aggregation 30 Minute Synchronous Reserves must be N	EXCEPTION			2
Emergency Response Rate (MW/min)		must not be null or empty	EXCEPTION			2
Physical Upper Storage Limit MWh	5	must be Null if Aggregation Type is not ESR or LESR	EXCEPTION			2
Physical Lower Storage Limit MWh	2	must be Null if Aggregation Type is not ESR or LESR	EXCEPTION			2

Full dataset | Current page dataset

Page 1 of 1 | Go to page: 1

Aggregation Enrollments

Aggregation ID	Aggregation Full Name	Aggregation Type	Status	Zone	Transmission Node PTID
800138	WHAVSTOR_D_Training1	DER	Unsubmitted	G - HUD VL	55557
800139	ROME_G_GenELRCLR	Generator	Unsubmitted	E - MHK VL	80656
800140	BRISTOL_D_Alcoa	DER	Separated	C - CENTRL	79998
800151	WATKINRD_D_SWAP_1	DER	Enrolled	E - MHK VL	55919
800152	DUNKIRK_D_SWAP_2	DER	Enrolled	A - WEST	55889
800152	DUNKIRK_D_SWAP_2	DER	Enrolled	A - WEST	55889
800153	HILLSIDE_W_Wind_AGG1	Wind	Unsubmitted	C - CENTRL	80332
800154	STA_7_S_SolarAGG1	Solar	Pending NYISO Review	B - GENESE	80674

Full dataset | Current page dataset

Page 1 of 1 | Go to page: 1

Pop-up message with a list of attribute specific errors

Step 2: Create Aggregation Enrollment

Messages ✕

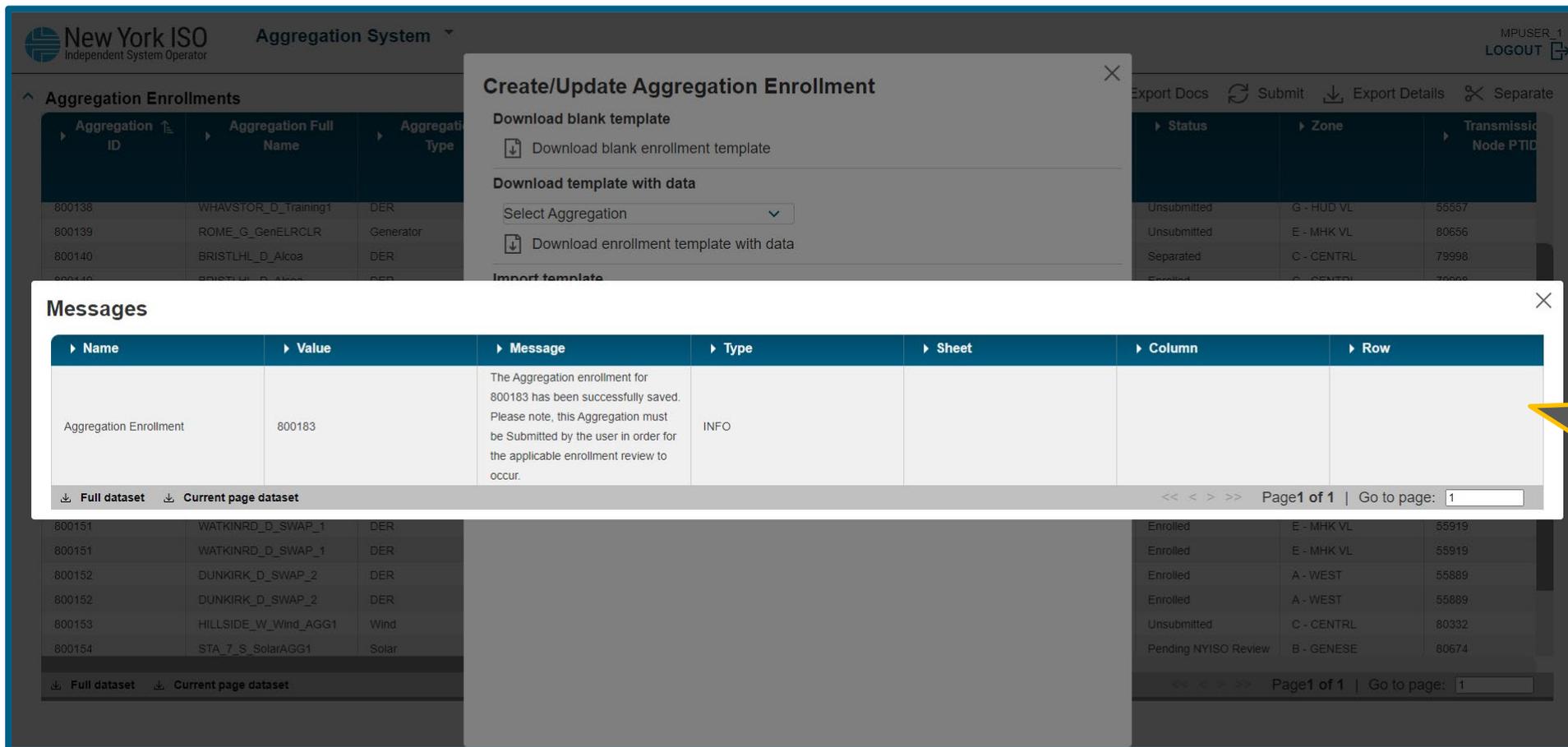
Name	Value	Message	Type	Sheet	Column	Row
		mismatched column: expected "Aggregation Short Name", but was "ELR"	EXCEPTION	Aggregation Enrollments	3	1
		mismatched column: expected "ELR", but was "CLR"	EXCEPTION	Aggregation Enrollments	4	1
		mismatched column: expected "CLR", but was "Charging At Retail"	EXCEPTION	Aggregation Enrollments	5	1
		mismatched column: expected "Charging At Retail", but was "LSE PTID - Aggregation"	EXCEPTION	Aggregation Enrollments	6	1
		mismatched column: expected "LSE PTID - Aggregation", but was "2 Year Outage Schedule Provided"	EXCEPTION	Aggregation Enrollments	7	1
		mismatched column: expected "2 Year Outage Schedule Provided", but was "Aggregation Meter Authority"	EXCEPTION	Aggregation Enrollments	8	1
		mismatched column: expected "Aggregation Meter Authority", but was "Direct Communication to NYISO"	EXCEPTION	Aggregation Enrollments	9	1
		mismatched column: expected "Direct Communication to NYISO", but was "Aggregation Communication Type"	EXCEPTION	Aggregation Enrollments	10	1
		mismatched column: expected "Aggregation Communication Type", but was "Aggregation Communication Protocol"	EXCEPTION	Aggregation Enrollments	11	1
		mismatched column: expected "Aggregation Communication Protocol", but was "Fixed Energy"	EXCEPTION	Aggregation Enrollments	12	1
		mismatched column: expected "Fixed Energy", but was "Dispatched Energy"	EXCEPTION	Aggregation Enrollments	13	1
		mismatched column: expected "Dispatched Energy", but was "Winter Regulation"	EXCEPTION	Aggregation Enrollments	14	1
		mismatched column: expected "Winter Regulation", but was "Summer Regulation"	EXCEPTION	Aggregation Enrollments	15	1
		mismatched column: expected "Summer Regulation", but was "10 Minute Spinning Reserves"	EXCEPTION	Aggregation Enrollments	16	1
		mismatched column: expected "10 Minute Spinning Reserves", but was "10 Minute Non - Spin Reserves"	EXCEPTION	Aggregation Enrollments	17	1
		mismatched column: expected "10 Minute Non - Spin Reserves", but was "30 Minute Synchronous Reserves"	EXCEPTION	Aggregation Enrollments	18	1
		mismatched column: expected "30 Minute Synchronous Reserves", but was "	EXCEPTION	Aggregation Enrollments	19	1

[Full dataset](#) | [Current page dataset](#)

 << < > >> Page 1 of 1 | Go to page:

Pop-up message with a list of formatting errors

Step 2: Create Aggregation Enrollment



The screenshot displays the 'New York ISO Aggregation System' interface. A 'Create/Update Aggregation Enrollment' dialog box is open, showing options to 'Download blank template' and 'Download template with data'. Below the dialog, a 'Messages' pop-up window is visible, containing a table with the following data:

Name	Value	Message	Type	Sheet	Column	Row
Aggregation Enrollment	800183	The Aggregation enrollment for 800183 has been successfully saved. Please note, this Aggregation must be Submitted by the user in order for the applicable enrollment review to occur.	INFO			

At the bottom of the messages window, there are navigation controls: 'Full dataset', 'Current page dataset', and 'Page 1 of 1 | Go to page: 1'.

Message indicates that the Aggregation Enrollment file has been successfully saved with no errors

Step 2: Create Aggregation Enrollment

New York ISO Independent System Operator Aggregation System MPUSER LOGOUT

Aggregation Enrollments Search Enrollments Create Export Docs Submit Export Details Separate

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800138	WHAVSTOR_D_Training1	DER	Test_Organization_1	O&R	08/01/2023		Unsubmitted		

Status of Aggregation Enrollment:

Clicking on the row of the Aggregation displays the Details section containing Aggregation level and DER facility level information

Details

Agg Enrollment Details Workflow Services Facilities

Aggregation Short Name: Training1
 Aggregation ID: 800138
 Status: Unsubmitted
 Enrollment Action: Create
 Start Date: 08/01/2023
 End Date:
 Aggregation Type: DER
 ELR (Aggregation): N
 CLR (Aggregation): N
 TO: O&R
 Zone: G - HUD VL
 Subzone: O&R HUDSON VLY
 Charging At Retail - Aggregation: N
 LSE PTID - Aggregation:

Step 2: Create Aggregation Enrollment



New York ISO
Independent System Operator

Aggregation System ▾

MPUSER_1
LOGOUT 

^ Aggregation Enrollments

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800138	WHAVSTOR_D_Training1	DER			08/01/2023				
800139	ROME_G_GenELRCLR	Generator			09/01/2023				

+ Create

↓ Export Docs

↻ Submit

↓ Export Details

✂ Separate

Search ✕

Select MP ▾

Select Aggregation ID ▾

Select Aggregation Type ▾

Select TO ▾

Select Zone ▾

Select Transmission Node PTID ▾

Bidding Privileges/Services ▾

Select Status ▾

Select Capability Year ▾

Select Capability Period ▾

Select Capability Month ▾

mm/dd/yyyy 

mm/dd/yyyy 

Search

Clear Search

Click here to export preview of required documentation applicable to selected Aggregation and assigned facilities

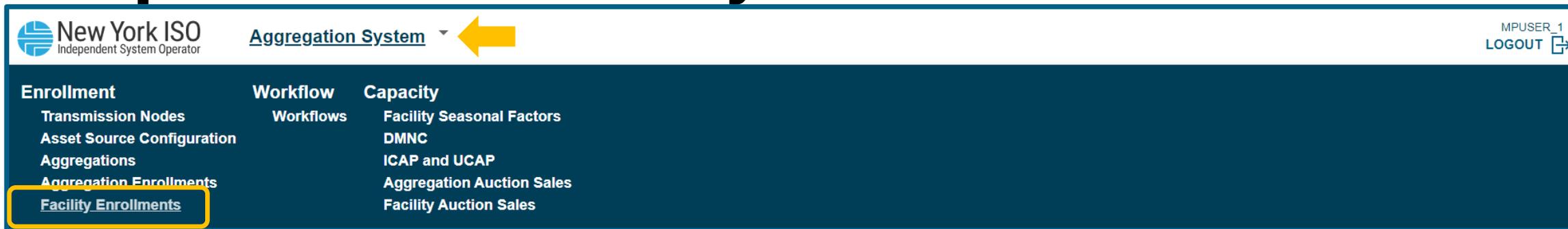
Click here to export enrollment details for selected Aggregation

Click here to select enrollment based on the different fields displayed here

Step 2: Create Facilities Enrollment

- Aggregators must import DER facility level attributes for DER facilities that make up the Aggregation they want to enroll for market participation
- DER Facilities may contain a single asset or multiple assets: asset level information must also be submitted as part of the facilities enrollment upload
- DER facility enrollment can be done before or after uploading the Aggregation enrollment template, but prior to “Submitting” the completed Aggregation enrollment
 - If the DER facility enrollment data import is completed prior to Aggregation enrollment data import:
 - Any applicable updates/modifications to the Aggregation enrollment data must be reflected in the DER facility enrollment import file as well
 - Aggregation ID must be updated in the facility data import template to link the Aggregation and DER facility enrollment
- On the Facility Enrollments screen, click on Create to download:
 - Blank Enrollment template for importing new data for facility/facilities, or
 - Enrollment template with data to update or make modifications to an existing file

Step 2: Create Facility Enrollment

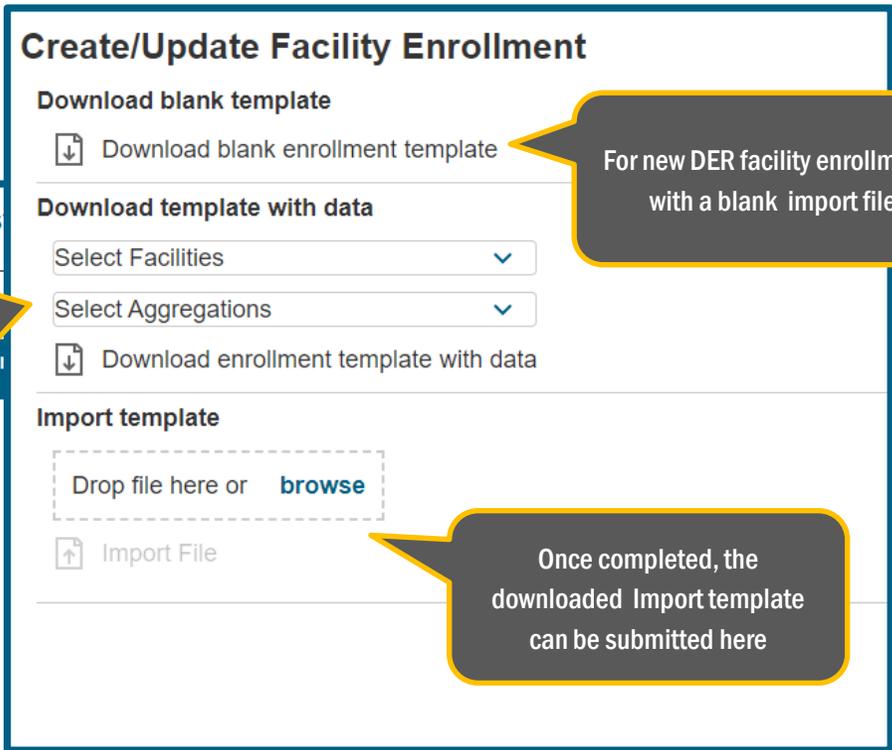


New York ISO Independent System Operator

Aggregation System 

MPUSER_1 LOGOUT 

- Enrollment**
 - Transmission Nodes
 - Asset Source Configuration
 - Aggregations
 - Aggregation Enrollments
 - Facility Enrollments**
- Workflow**
 - Workflows
- Capacity**
 - Facility Seasonal Factors
 - DMNC
 - ICAP and UCAP
 - Aggregation Auction Sales
 - Facility Auction Sales



Create/Update Facility Enrollment

Download blank template

 Download blank enrollment template

Download template with data

Select Facilities

Select Aggregations

 Download enrollment template with data

Import template

Drop file here or [browse](#)

 Import File

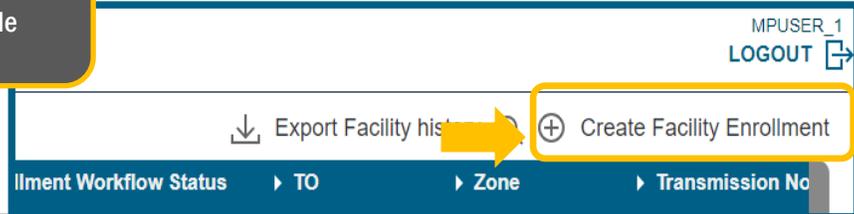
For new DER facility enrollments with an existing import file that needs modifications, and

For existing facility enrollments, to update enrollment data

Use the drop-down menu to select specific DER facilities or Aggregation enrollment file(s) to modify

For new DER facility enrollments with a blank import file

Once completed, the downloaded Import template can be submitted here



MPUSER_1 LOGOUT 

 Export Facility history 

 Create Facility Enrollment

Enrollment Workflow Status ▶ TO ▶ Zone ▶ Transmission No

Step 2: Create Facility Enrollment

- The required physical and operational DER facility data that must be uploaded through the Import template includes:
 - Facility ID – A unique ID assigned by NYISO to the facility
 - For new facilities, Aggregators must use “New 1”, “New 2” etc. when uploading data using a blank template
 - Once enrollment data is imported, the system will create actual Facility IDs
 - Aggregation ID, from Step 1 (Create Aggregation ID)
 - DER Facility owner contact information
 - Meter ID number
 - Meter Authority
 - Transmission Owner (TO)
 - Transmission Node PTID (identified initially to request Aggregation ID)
 - Interconnection information and Interconnection queue number for Non-Demand Side Facilities
 - NYISO or approved non-NYISO Interconnection

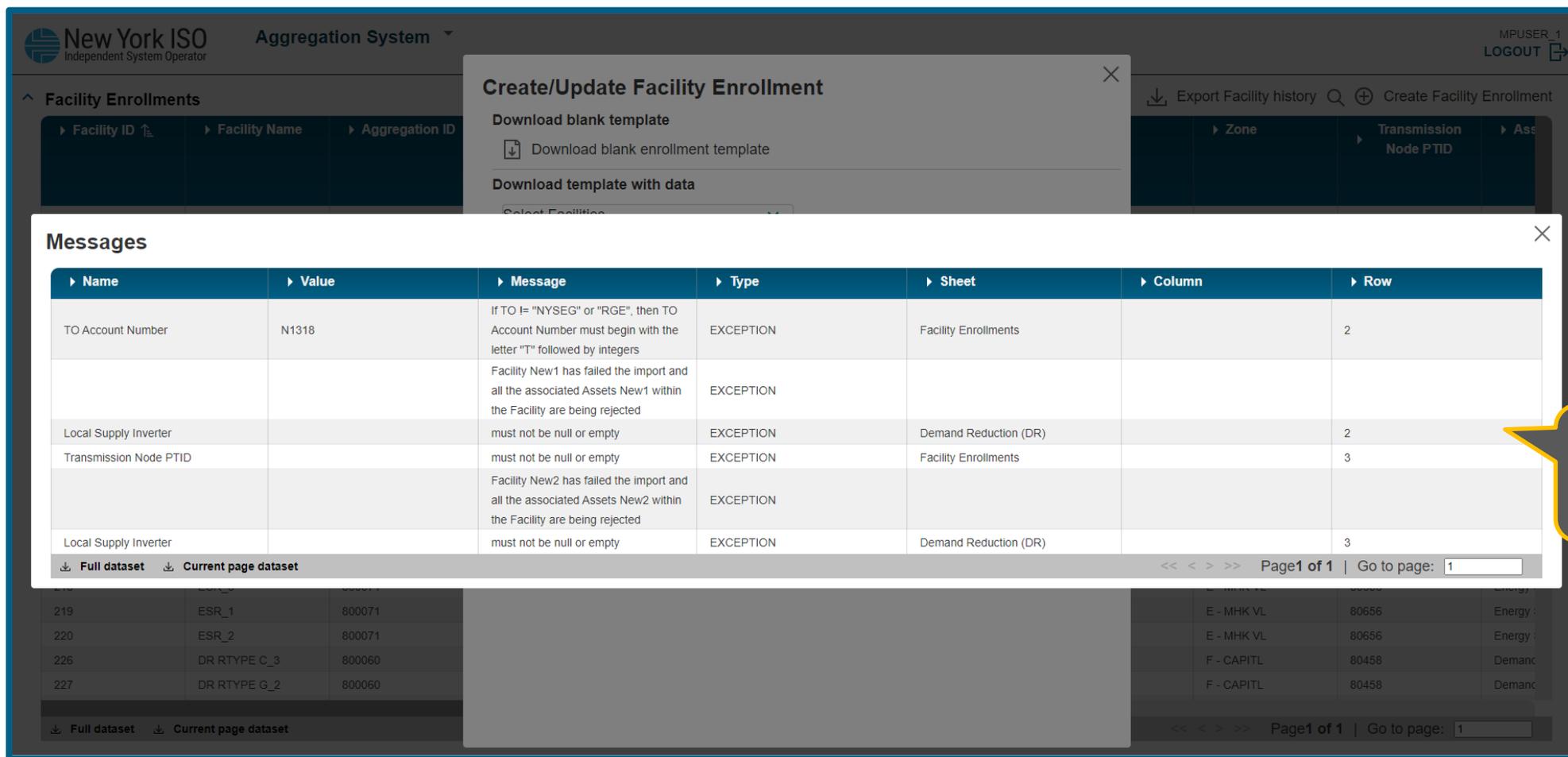
Cont.

Step 2: Create Facility Enrollment

- ERIS or ERIS equivalent MW (Summer and Winter)
- CRIS MW (Summer and Winter)
- Summer and Winter Declared MW values
 - **Injection, withdrawal, demand reduction**
- Information about qualified Ancillary Services that the DER facility can offer
- Enrollment parameters for Energy and Ancillary Service participation
- Installed Capacity market related information
- Asset based information
 - Use the Asset Source Configuration report for applicable fields
 - For new assets, Aggregators must use “New 1”, “New 2” etc. for Asset ID when uploading data using a blank template
 - Once enrollment data is imported, the system will create actual Asset IDs, according to asset type
 - » Example: for a Demand Reduction asset, Asset ID = D followed by system assigned number

The complete list of DER facility and asset data that must be uploaded through the Import template can be found in the [Appendix B of the Agg System User’s Guide](#)

Step 2: Create Facility Enrollment



The screenshot displays the 'New York ISO Aggregation System' interface. A modal window titled 'Create/Update Facility Enrollment' is open, showing options to 'Download blank template', 'Download blank enrollment template', and 'Download template with data'. Below this, a 'Messages' pop-up window is visible, containing a table of error messages. A yellow callout bubble points to the table with the text 'Pop-up message with a list of attribute specific errors'.

Name	Value	Message	Type	Sheet	Column	Row
TO Account Number	N1318	If TO != "NYSEG" or "RGE", then TO Account Number must begin with the letter "T" followed by integers	EXCEPTION	Facility Enrollments		2
		Facility New1 has failed the import and all the associated Assets New1 within the Facility are being rejected	EXCEPTION			
Local Supply Inverter		must not be null or empty	EXCEPTION	Demand Reduction (DR)		2
Transmission Node PTID		must not be null or empty	EXCEPTION	Facility Enrollments		3
		Facility New2 has failed the import and all the associated Assets New2 within the Facility are being rejected	EXCEPTION			
Local Supply Inverter		must not be null or empty	EXCEPTION	Demand Reduction (DR)		3

Pop-up message with a list of attribute specific errors

Step 2: Create Facility Enrollment

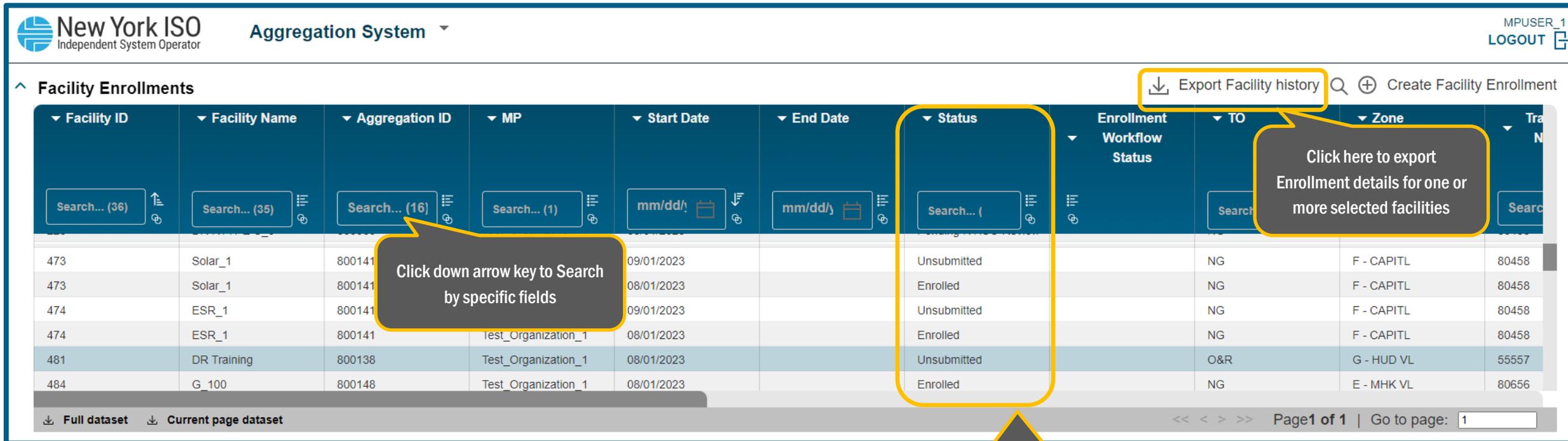
Messages

Name	Value	Message	Type	Sheet	Column	Row
		mismatched column: expected "Responsible Party Attestation", but was "Facility Owner Name"	EXCEPTION	Facility Enrollments	6	1
		mismatched column: expected "Facility Owner Name", but was "Facility Owner Phone"	EXCEPTION	Facility Enrollments	7	1
		mismatched column: expected "Facility Owner Phone", but was "Facility Owner Phone Extension"	EXCEPTION	Facility Enrollments	8	1
		mismatched column: expected "Facility Owner Phone Extension", but was "Facility Owner Email"	EXCEPTION	Facility Enrollments	9	1
		mismatched column: expected "Facility Owner Email", but was "Transmission Node PTID"	EXCEPTION	Facility Enrollments	10	1
		mismatched column: expected "Transmission Node PTID", but was "DER within Municipality"	EXCEPTION	Facility Enrollments	11	1
		mismatched column: expected "DER within Municipality", but was "Municipality Name"	EXCEPTION	Facility Enrollments	12	1
		mismatched column: expected "Municipality Name", but was "Charging At Retail - Facility"	EXCEPTION	Facility Enrollments	13	1
		mismatched column: expected "Charging At Retail - Facility", but was "LSE PTID - Facility"	EXCEPTION	Facility Enrollments	14	1
		mismatched column: expected "LSE PTID - Facility", but was "Former PTID Exists"	EXCEPTION	Facility Enrollments	15	1
		mismatched column: expected "Former PTID Exists", but was "Former PTID #"	EXCEPTION	Facility Enrollments	16	1
		mismatched column: expected "Former PTID #", but was "Former Dris Resource Exists"	EXCEPTION	Facility Enrollments	17	1
		mismatched column: expected "Former Dris Resource Exists", but was "Former Dris Resource ID #"	EXCEPTION	Facility Enrollments	18	1
		mismatched column: expected "Former Dris Resource ID #", but was "Street Address"	EXCEPTION	Facility Enrollments	19	1
		mismatched column: expected "Street Address", but was "City"	EXCEPTION	Facility Enrollments	20	1
		mismatched column: expected "City", but was "State"	EXCEPTION	Facility Enrollments	21	1

[Full dataset](#)
[Current page dataset](#)
Page 1 of 1 | Go to page:

Pop-up message with a list of formatting errors

Step 2: Create Facility Enrollment



New York ISO Independent System Operator | **Aggregation System** | MPUSER_1 | LOGOUT

Facility Enrollments | Export Facility history | Create Facility Enrollment

Facility ID	Facility Name	Aggregation ID	MP	Start Date	End Date	Status	Enrollment Workflow Status	TO	Zone	Tran
473	Solar_1	800141		09/01/2023		Unsubmitted		NG	F - CAPITL	80458
473	Solar_1	800141		08/01/2023		Enrolled		NG	F - CAPITL	80458
474	ESR_1	800141		09/01/2023		Unsubmitted		NG	F - CAPITL	80458
474	ESR_1	800141	Test_Organization_1	08/01/2023		Enrolled		NG	F - CAPITL	80458
481	DR Training	800138	Test_Organization_1	08/01/2023		Unsubmitted		O&R	G - HUD VL	55557
484	G_100	800148	Test_Organization_1	08/01/2023		Enrolled		NG	E - MHK VL	80656

Full dataset | Current page dataset | Page 1 of 1 | Go to page: 1

Click down arrow key to Search by specific fields

Status of Aggregation Enrollment for selected DER facility

Click here to export Enrollment details for one or more selected facilities

Step 2: Assigning Facilities to an Aggregation

- **Prior to “submitting” an Enrollment, the Aggregator must ensure that each DER facility is assigned to its respective Aggregation**
 - For each DER facility that makes up an Aggregation, the system assigned Aggregation ID must be entered in the DER facility’s enrollment record when importing the data template
 - By linking the applicable Aggregation ID to the facility enrollment record, the Aggregation enrollment record and DER facility enrollment record are mapped together for initial validation by the Agg system
 - Important to note that only DER type Aggregations can have one facility assigned to it, as long as the DER facility is a Demand Side Resource
 - **All other types of Aggregations must have at least two DER facilities assigned to it, to be able submit the enrollment**

Step 3: Submit Enrollment

New York ISO Independent System Operator | Aggregation System | MPUSER_1 LOGOUT

Aggregation Enrollments

Search Enrollments | Create | Export Docs | **Submit** | Export Details | Separate

Aggregation Enrollments are submitted on the Aggregation Enrollments screen

Aggregation ID	Aggregation Name	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800071	ROME_E_ESR_AGG1	ESR	Test_Organization_1	04/01/2023		Pending NYISO Review	E - MHK VL	80656
800086	BENSHRST_G_Gen_AGG1	Generator	Test_Organization_1	07/01/2023		Enrolled	J - N.Y.C.	355998
800138	WHAVSTOR_D_Training1	DER	Test_Organization_1	08/01/2023		Unsubmitted	G - HUD VL	55557

Click on the Submit button, then select Aggregation using radio button, and click Submit

New York ISO Independent System Operator | Aggregation System | MPUSER_1 LOGOUT

Aggregation Enrollments

Search Enrollments | Cancel | **Submit**

Select	Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone
<input type="checkbox"/>	800071	ROME_E_ESR_AGG1	ESR	Test_Organization_1	NG	04/01/2023		Pending NYISO Review	E - MHK VL
<input type="checkbox"/>	800086	BENSHRST_G_Gen_AGG1	Generator	Test_Organization_1	CONED	07/01/2023		Enrolled	J - N.Y.C.
<input checked="" type="checkbox"/>	800138	WHAVSTOR_D_Training1	DER	Test_Organization_1	O&R	08/01/2023		Unsubmitted	G - HUD VL

Step 3: Submit Enrollment



New York ISO
Independent System Operator

Aggregation System

MPUSER_1
LOGOUT 

^ Aggregation Enrollments

Cancel Submit

▶ Select	▶ Aggregation ID ↑	▶ Aggregation Full Name	▶ Aggregati Type	▶ Start Date ↓	▶ End Date	▶ Status	▶ Zone
<input type="checkbox"/>	800071	ROME_E_ESR_AGG1	ESR	04/01/2023		Pending NYISO Review	E - MHK VL
<input type="checkbox"/>	800086	BENSHRST_G_Gen_AGG1	Generator	07/01/2023		Enrolled	J - N.Y.C.
<input checked="" type="checkbox"/>	800138	WHAVSTOR_D_Training1	DER	08/01/2023		Unsubmitted	G - HUD VL

Submit Enrollments

Please submit required supporting documentation to complete enrollment. Please email the documents to NYISO's DRO Department

Cancel
Confirm

Prompt to submit required documentation by email to DER@nyiso.com to complete the enrollment

Step 3: Submit Enrollment

New York ISO Independent System Operator		Aggregation System		MPUSER_1 LOGOUT					
^ Aggregation Enrollments									
Search Enrollments Create Export Docs Submit Export Details Separate									
Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800071	ROME_E_ESR_AGG1	ESR	Test_Organization_1	NG	04/01/2023		Pending NYISO Review	E - MHK VL	80656
800086	BENSHRST_G_Gen_AGG1	Generator	Test_Organization_1	CONED	07/01/2023		Enrolled	J - N.Y.C.	355998
800138	WHAVSTOR_D_Training1	DER	Test_Organization_1	O&R	08/01/2023		Submitted	G - HUD VL	55557

Status of Aggregation Enrollment: Submitted

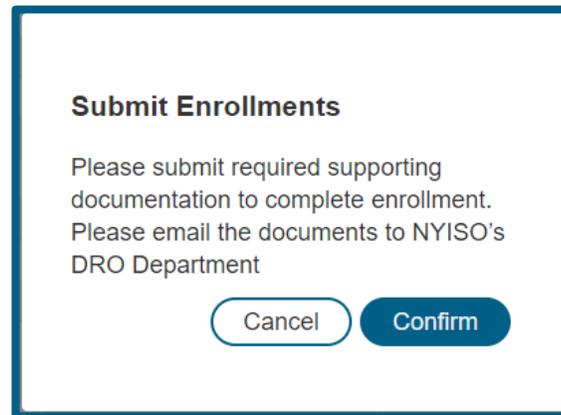
Initial NYISO Validation

Initial NYISO Validation

- Once the Aggregation enrollment has been submitted, the NYISO's Distributed Resources Operations (DRO) team will perform an initial validation
- Includes a high-level DER composition check
- If the Aggregation enrollment passes validation:
 - NYISO will send the Aggregation/DER facility Enrollment data package to applicable Distribution Utility for their review
 - **Status in the Aggregations Enrollment screen: Submitted**
- If the Aggregation enrollment fails validation:
 - NYISO will notify the Aggregator via email, so the Aggregator can re-submit their enrollment with the required modifications
 - **Status in the Aggregations enrollment screen: Unsubmitted**

Request for Upfront Documentation

- Aggregators must submit all required upfront documentation before a submitted enrollment goes into the NYISO review period
 - There will also be a pop-up message on the Agg System screen upon submission as a reminder to submit the required documentation



- A complete list of upfront documentation required to be submitted can be found in the [Appendix C of the Agg System User's Guide](#)

Distribution Utility Review

Distribution Utility DER Review

- The NYISO will facilitate a review process to allow the applicable Distribution Utility (DU) to review DER enrollments that are interconnected to its electric facilities for safety and reliability
 - Takes place once Initial NYISO validation has been completed
 - NYISO transfers DER facility and Aggregation enrollment data
- **DU Review:**
 - Verifies that operating characteristics of the DER facilities and Aggregations are not in violation of existing Interconnection agreements, metering configurations or other pertinent safety and reliability considerations
 - Can take up to 60 days to be completed (timelines subject to change)

Distribution Utility DER Review

- **Successful DU review:**
 - DU will notify the NYISO that the Aggregation does not pose safety or reliability risk
 - **The Aggregator will receive an email from the NYISO confirming the DER and Aggregation will move on to the next step in the enrollment process**
 - **NYISO Review typically starts on the 1st of the month following completion of successful DU review**

Distribution Utility DER Review

- DU identifies safety and/or reliability concerns:
 - The DU will provide the NYISO with an explanation of the identified safety and reliability issues
 - NYISO will provide this information to the Aggregator via email
 - NYISO will “unsubmit” the Aggregation enrollment from the Agg System
 - Status in the Agg System Enrollment screen for the applicable Aggregation: Unsubmitted
 - Once the Aggregator addresses the applicable safety and/or reliability concerns identified by the DU, they can re-submit the enrollment data record for each DER facility and Aggregation
 - NYISO will re-send the enrollment data package back to the DU
 - Upon successful completion of DU review, the Aggregation enrollment can proceed to the next step

NYISO Review

NYISO Review

- NYISO Review typically begins on the 1st of the month following a successful DU review
 - NYISO Review will take approximately 15-25 days
 - An Aggregation may begin participation in the NYISO markets on the 1st of the month, following completion of NYISO review
- At the start of the NYISO review month:
 - **Status of the Aggregation on the Aggregation Enrollments screen changes to: Pending NYISO Review**
- During this period, NYISO performs a series of validations and reviews to check that the DER facilities and Aggregation enrollment data appreciably conform to market rules
- NYISO tasks include:
 - Enrollment data review
 - Aggregation, DER facility and asset level
 - Verification of ERIS and ERIS equivalent MW values (Summer and Winter)
 - Verification of CRIS MW value (Summer and Winter)
 - Confirmation of ELR/CLR resource status

NYISO Review

- Coordination with the Aggregator on end-to-end communications testing
 - NYISO emails Aggregator, (as well as the applicable Member System) the Telemetry ID and Object ID(s) assigned by NYISO
 - Aggregator coordinates with the NYISO and respective Member System to complete end-to-end communications testing
 - Completing the end-to-end communications test within the first 5 days of the NYISO review month supports timely market entry and mitigates some risk of delay
 - Refer to the [End-to-end communications testing fact sheet of the DER Onboarding Educational Suite](#) for detailed information on this process
- Review for duplicate enrollment of DER facilities
 - If NYISO finds duplicate enrollment of DER facilities in more than one Aggregation, or if the DER facility is enrolled in any other NYISO programs such as SCR
 - NYISO will email the applicable Aggregator(s)
 - NYISO will review contract and other information submitted for the applicable DER facility by the Aggregator(s)
 - Duplicate enrollments will be resolved according to NYISO procedures

NYISO Review

- If all steps in the NYISO review are successfully completed
 - Status in the Aggregations Enrollment screen: Enrolled
 - NYISO notifies the Aggregator via email of successful enrollment of aggregation
- If the Aggregation fails any of the steps during the NYISO's Review
 - NYISO will reject the enrollment of the Aggregation and the associated DER facilities
 - NYISO emails Aggregator details on why the Aggregation enrollment was rejected
 - Status in the Aggregations Enrollment screen: Rejected
 - The Aggregator can resubmit its enrollment materials after modifying the DER facility/Aggregation enrollment data to address NYISO's concerns

NYISO Review



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Aggregation System

MPUSER_1
LOGOUT

^ Aggregation Enrollments

+ Create
 ↓ Export Docs
 ↻ Submit
 ↓ Export Details
 ✂ Separate

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800183	WATKINRD_D_Train_1	DER	Test_Organization_1	NG	10/01/2023		Pending NYISO Review	E - MHK VL	55919

Full dataset
Current page dataset
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^ Details

Agg Enrollment Details
Workflow
Services
Facilities

Facility ID	Facility Name	Status	Asset Type(s)	Summer Total Supply Declared MW	Winter Total Supply Declared MW	Last Update Date	Last Updated By
663	Train_01	Pending NYISO Review	Demand Reduction	150	150	08/14/2023 07:13:43	NYISO
664	Train_02	Pending NYISO Review	Demand Reduction	120	120	08/14/2023 07:13:43	NYISO

Full dataset
Current page dataset
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Status of the enrollment, at the start of the NYISO review month

NYISO Review


Aggregation System
MPUSER_1
LOGOUT

Aggregation Enrollments
[Search Enrollments](#)
[Create](#)
[Export Docs](#)
[Submit](#)
[Export Details](#)
[Separate](#)

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800183	WATKINRD_D_Train_1	DER	Test_Organization_1	NG	10/01/2023		Enrolled	E - MHK VL	55919

[Full dataset](#)
[Current page dataset](#)
Page 1 of 1 | Go to page:

Details
[Facility Details](#)
[Workflow](#)
[Services](#)
[Facilities](#)

Facility ID	Facility Name	Status	Asset Type(s)	Summer Total Supply Declared MW	Winter Total Supply Declared MW	Last Update Date	Last Updated By
663	Train_01	Enrolled	Demand Reduction	150	150	08/14/2023 07:21:37	NYISO
664	Train_02	Enrolled	Demand Reduction	120	120	08/14/2023 07:21:37	NYISO

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Status of enrollment that has passed successful NYISO review

NYISO Review

New York ISO Independent System Operator Aggregation System MPUSER_1 LOGOUT

Aggregation Enrollments Search Enrollments Create Export Docs Submit Export Details Separate

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800168	CHATEAUG_G_MSM_TG	Generator	Test_Organization_1	NYPA	09/01/2023	09/30/2023	Rejected	D - NORTH	355732

Full dataset Current page dataset Page 1 of 1 | Go to page: 1

Details Enrollment Details Workflow Services Facilities

Facility ID	Facility Name	Status	Asset Type	Summer Total Supply Declared MW	Winter Total Supply Declared MW	Last Update Date	Last Updated By
586	G_TY	Rejected	Generator	10	10	08/09/2023 10:53:02	NYISO
587	G_TN	Rejected	Generator	8	8	08/09/2023 10:53:02	NYISO
588	G_TY2	Rejected	Generator	4	4	08/09/2023 10:53:02	NYISO

Full dataset Current page dataset Page 1 of 1 | Go to page: 1

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Status of the enrollment, if it fails NYISO review

Post enrollment Setup for 1st month of Participation

- Once the Aggregation has been enrolled in the Agg system, there will be an automatic transfer of Aggregation and facility specific information to the MIS and other NYISO Internal systems
- Based on the market services that the Aggregation is qualified to participate in:
 - Flags for Energy, Operating Reserves and Regulation will be set in MIS
- NYISO's Market Mitigation and Analysis (MMA) group will communicate with the Aggregator to establish Reference levels for the Aggregation for Energy and Ancillary Services market participation
 - [Refer to the DER MMA Energy Market Reference Levels infographic of the DER Onboarding educational suite and Aggregation Manual for more details](#)
- Verification testing for Operating reserves and Regulation must be coordinated between the NYISO's Grid Operations group and the Aggregator for each applicable Aggregation
 - Must be completed within the first 14 days of the 1st month of Energy and ancillary services participation

Enrollment Actions for Installed Capacity Market Participation

Participation in the Installed Capacity Market

- New DER facilities and Aggregations
 - Installed Capacity Market Participation: From the 2nd month of participation onwards
 - Aggregations must be in the **Status: Enrolled** in the Aggregations Enrollment screen prior to submitting DMNC test data
 - To begin participating in the Installed Capacity market in a month, DMNC test data for DER facilities and Aggregations must be conducted and submitted within the first 7 days of the prior month
 - In alignment with the applicable Agg monthly DMNC calendar event
 - Aggregator must submit DMNC data for all DER facilities that constitute the Aggregation, even if one or more DER facilities do not provide capacity in the Installed Capacity market

Market

- Existing resources transitioning into the DER Aggregation participation model
 - Installed Capacity Market Participation: Can start 1st month after NYISO Review and successful enrollment
 - Resources must be existing capacity suppliers
 - Aggregations that these resources will be a part of can be in the **Status: Pending NYISO Review or Enrolled** in the Aggregations Enrollment screen when submitting the applicable DMNC test data
 - All DER facilities within the Aggregation must provide capacity and must participate in the Installed Capacity market
 - Two types:
 - **Special Case Resources (SCRs):** Provided provisional DMNC is submitted and validated during the month of NYISO Review
 - **Single Resource Type (SRT) stand-alone Generators:** Provided SRT transfer DMNC is submitted and validated during the month of NYISO Review

* Refer to Section 4 of the Aggregation Manual for more details

DMNC for Resources Transitioning to the DER Participation Model

- **Provisional DMNC for SCRs**: Equivalent to the declared value, maximum allowed is the ACL value for the SCR
 - Enables uninterrupted capacity market participation for resources switching from SCR capacity market participation into the DER participation model
- **SRT Transfer for stand-alone Generators**: Previously approved DMNC value being currently used for Installed Capacity market participation
 - Enables uninterrupted capacity market participation for resources switching from stand-alone generator capacity market participation into the DER participation model
- **A provisional DMNC/SRT Transfer record must be validated with a regular in-period DMNC test for the applicable Capability Period**
 - Dates and deadlines for submission of in-period DMNC testing for Summer and Winter Capability Periods can be found in the ICAP Event Calendar

Creating and Submitting DMNC in the Agg System



New York ISO Independent System Operator

Aggregation System

MPUSER_1 LOGOUT

- Enrollment
 - Transmission Nodes
 - Asset Source Configuration
 - Aggregations
 - Aggregation Enrollments
 - Facility Enrollments
- Workflow
 - Workflows
- Capacity
 - Facility Seasonal Factors
 - DMNC**
 - ICAP and UCAP
 - Aggregation Auction Sales
 - Facility Auction Sales



New York ISO Independent System Operator

Aggregation System

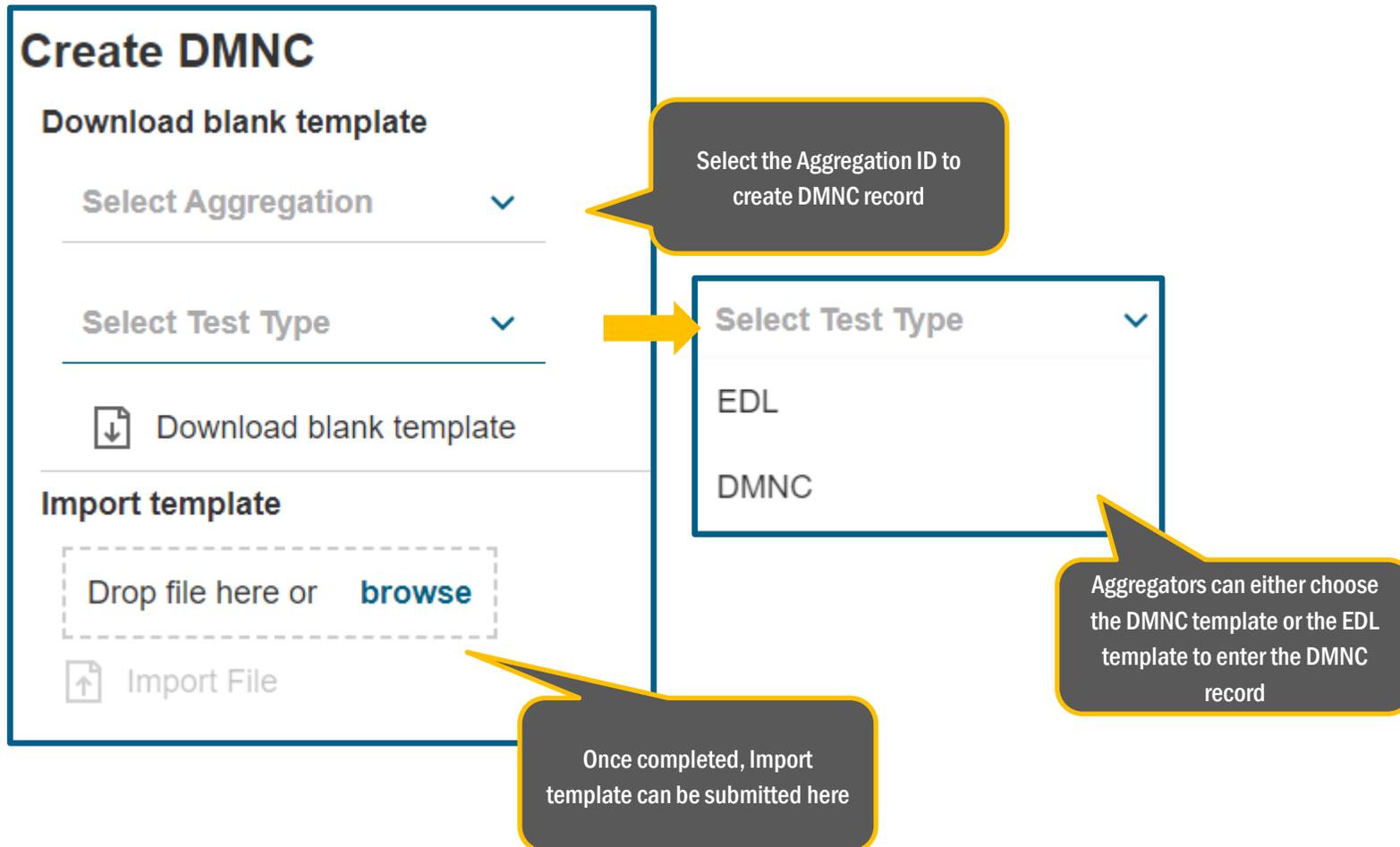
MPUSER_1 LOGOUT

DMNC

+ Create DMNC Export DMNC

Aggregation ID	Aggregation Name	Aggregation Enrollment Status	Aggregation Type	Time Stacking	Aggregation Temperature Sensitivity	SRT Transfer	Provisional DMNC	Aggregation
----------------	------------------	-------------------------------	------------------	---------------	-------------------------------------	--------------	------------------	-------------

Creating and Submitting DMNC in the Agg System



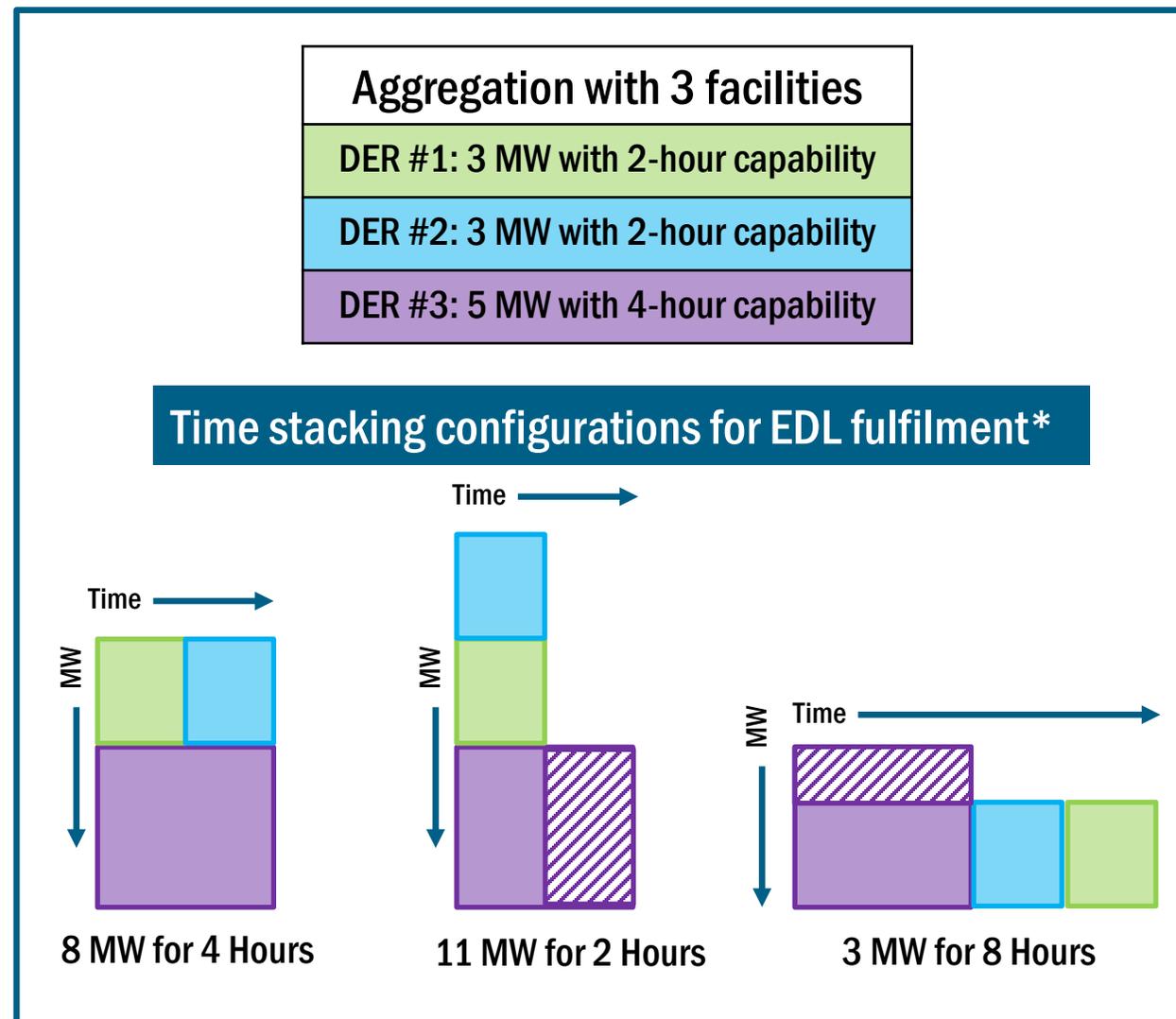
The screenshot shows the 'Create DMNC' form with the following sections:

- Download blank template**: Includes a 'Select Aggregation' dropdown and a 'Select Test Type' dropdown. A callout points to the 'Select Aggregation' dropdown with the text: "Select the Aggregation ID to create DMNC record".
- Import template**: Includes a 'Download blank template' button and a file upload area with the text "Drop file here or browse" and an "Import File" button. A callout points to the file upload area with the text: "Once completed, Import template can be submitted here".
- Select Test Type dropdown**: A callout points to this dropdown, which shows 'EDL' and 'DMNC' options. The callout text is: "Aggregators can either choose the DMNC template or the EDL template to enter the DMNC record".

- If the Aggregation has an Energy Duration Limitation (EDL) and has indicated that in their Aggregation Enrollment file, the EDL Test template should be chosen for initial DMNC submission
 - For subsequent Capability Periods, either the DMNC template or EDL template can be chosen according to rules set forth in the [ICAP Manual, Section 4.2.2.2](#)
- This template also allows for time-stacking information to be submitted

Creating and Submitting DMNC

- Time stacking: Available to an Aggregation with Energy Duration Limitation (EDL), where DER facilities that can provide a minimum of 1 hour of Energy, can be grouped up with other DER facilities in the Aggregation through sequential Time-Stacking, to sum up to the Aggregation's EDL election
 - Available EDL elections are 2,4,6, and 8 hours
 - The Aggregator can configure the individual facilities' duration and capacity to meet the elected EDL
 - Once selected, EDL elections remain the same for a capability year
 - EDL elections for an Aggregation can be modified during the Annual election every August for the upcoming Capability Year

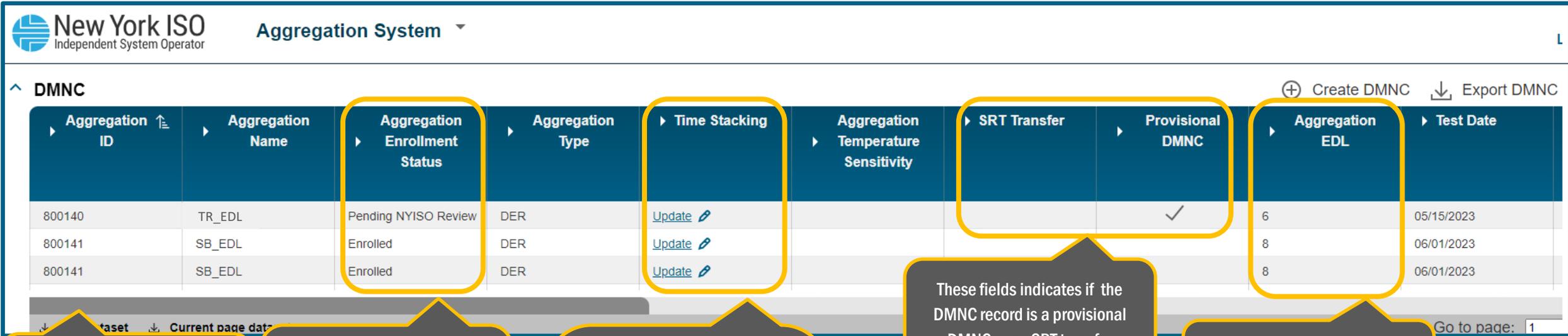


*For details refer to Section 4.1.3 of the ICAP Manual

Creating and Submitting DMNC in the Agg system

- **DMNC and DMNC Time Stacking attributes to be submitted:**
 - **Aggregation level attributes:** Aggregator indicates here if provisional DMNC or SRT transfer DMNC is being submitted
 - If the Aggregation is enrolled with an EDL, the EDL will be auto-populated in the Aggregation's template export
 - **Aggregation Hourly Attributes:** Includes DMNC test information that is repeated every hour
 - **DER facility hourly level attributes:** Includes DER facility level DMNC test information that is repeated every hour
 - DER facility time stacking elections
- For a full list of the attributes to be submitted, refer to the [Appendix D of the Agg System User's Guide](#)

Creating and Submitting DMNC in the Agg New York ISO System



New York ISO Independent System Operator Aggregation System

DMNC + Create DMNC ↓ Export DMNC

Aggregation ID	Aggregation Name	Aggregation Enrollment Status	Aggregation Type	Time Stacking	Aggregation Temperature Sensitivity	SRT Transfer	Provisional DMNC	Aggregation EDL	Test Date
800140	TR_EDL	Pending NYISO Review	DER	Update				6	05/15/2023
800141	SB_EDL	Enrolled	DER	Update				8	06/01/2023
800141	SB_EDL	Enrolled	DER	Update			✓	8	06/01/2023

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Use the scroll bar to view all the populated fields on this screen

This field indicates the current status the Aggregation enrollment, when submitting the DMNC

By clicking here, Aggregators can update their hourly time-stacking values for applicable Aggregations and facilities, after the DMNC record has been reviewed and approved by NYISO at the Aggregation level

Time stacking updates can be performed up to Certification close for the following month

These fields indicates if the DMNC record is a provisional DMNC or an SRT transfer

These fields indicates the EDL election for the Aggregation



Continued on next slide

Creating and Submitting DMNC in the Agg System

▶ Start Date ↑	▶ Test Start HB	▶ Test Duration	▶ Electing To Time Stack	▶ End Date	▶ Capability Period Type	▶ In/Out of Period	▶ MP Aggregation Demonstrated Capability MW	▶ Aggregation Pre-Test Rating MW
08/01/2023	11	6		10/31/2023	Summer	OUT	90.5	
08/01/2023	10	8	✓	10/31/2024	Summer	IN	0.874	
09/01/2023	10	8	✓	10/31/2024	Summer	IN	0.874	

[Full dataset](#) [Current page dataset](#) << < > >> Page 1 of 1

This field indicates when the DMNC test was submitted
 Out of period DMNC test submissions must be validated by an in-period test
 DMNC test period information can be found on the ICAP Event calendar



Continued on next slide

Creating and Submitting DMNC in the Agg New York ISO System

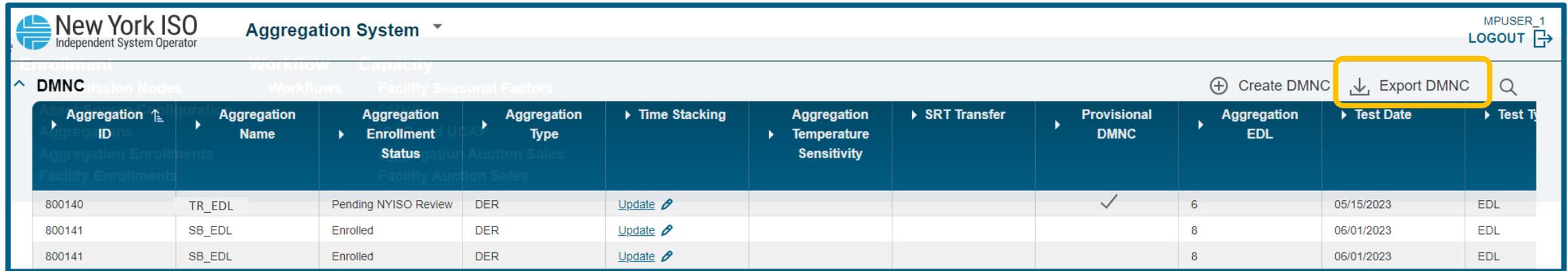
▶ Aggregation Post-Test Rating MW	▶ DMNC Status	▶ Reason	▶ Created Date	▶ Created By	▶ Last Update Date	▶ Last Updated By
90.5	Approved		07/10/2023 12:19:50	MPUSER_1	07/11/2023 16:16:36	NYISO
0.874	Pending Review	Waiting MMA Review	07/10/2023 15:46:03	MPUSER_1	07/11/2023 08:46:39	NYISO
0.874	Withdrawn	Waiting MMA Review	07/10/2023 15:39:32	MPUSER_1	07/10/2023 15:46:03	MPUSER_1

<< < > >> Page 1 of 1 | Go to page:

The Aggregator can view the status of their submitted DMNC record here

Once submitted, DMNC test data will need to be reviewed and validated by NYISO's Market Mitigation and Analysis (MMA) team to be approved

Creating and Submitting DMNC in the Agg System



New York ISO Aggregation System

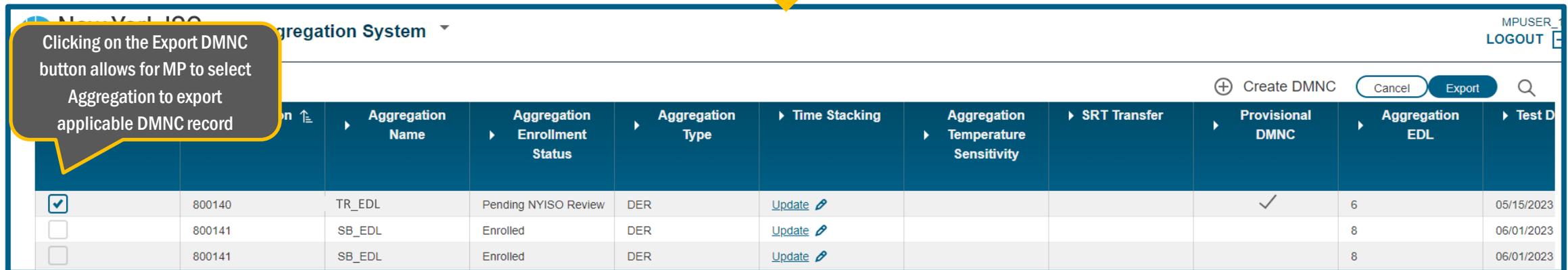
MPUSER_1 LOGOUT

Enrollment Workflow Capacity

DMNC Mission Nodes Workflows Facility Seasonal Factors

⊕ Create DMNC ↓ Export DMNC

Aggregation ID	Aggregation Name	Aggregation Enrollment Status	Aggregation Type	Time Stacking	Aggregation Temperature Sensitivity	SRT Transfer	Provisional DMNC	Aggregation EDL	Test Date	Test T
800140	TR_EDL	Pending NYISO Review	DER	Update			✓	6	05/15/2023	EDL
800141	SB_EDL	Enrolled	DER	Update				8	06/01/2023	EDL
800141	SB_EDL	Enrolled	DER	Update				8	06/01/2023	EDL

New York ISO Aggregation System

MPUSER_1 LOGOUT

Enrollment Workflow Capacity

DMNC Mission Nodes Workflows Facility Seasonal Factors

⊕ Create DMNC Cancel Export

Clicking on the Export DMNC button allows for MP to select Aggregation to export applicable DMNC record

Aggregation ID	Aggregation Name	Aggregation Enrollment Status	Aggregation Type	Time Stacking	Aggregation Temperature Sensitivity	SRT Transfer	Provisional DMNC	Aggregation EDL	Test Date	Test T
<input checked="" type="checkbox"/>	800140	TR_EDL	Pending NYISO Review	DER	Update		✓	6	05/15/2023	EDL
<input type="checkbox"/>	800141	SB_EDL	Enrolled	DER	Update			8	06/01/2023	EDL
<input type="checkbox"/>	800141	SB_EDL	Enrolled	DER	Update			8	06/01/2023	EDL

Creating and Submitting DMNC in the Agg System



New York ISO
Independent System Operator

Aggregation System ▾

MPUSER_1
LOGOUT ↗

DMNC ⊕ Create DMNC ⊘ Export DMNC 🔍

Aggregation ID	Aggregation Name	Aggregation Enrollment Status	Aggregation Type	Time Stacking	Aggregation Temperature Sensitivity	SRT Transfer	Provisional DMNC	Aggregation EDL	Test Date	Test T
800140	<input type="text" value="Search... (4)"/>	<input type="text" value="Search... ()"/>								
800141		Pending NYISO Review	DER	Update			✓	6		
800141			DER	Update				8		
800141			DER	Update				8		

Clicking on the down arrow key for searching all DMNC records by specific field

Clicking the "spy glass" Search icon allows MP to search DMNC records by Capability Period, year and month

Search

✕

Select Capability Year ▾

Select Capability Period ▾

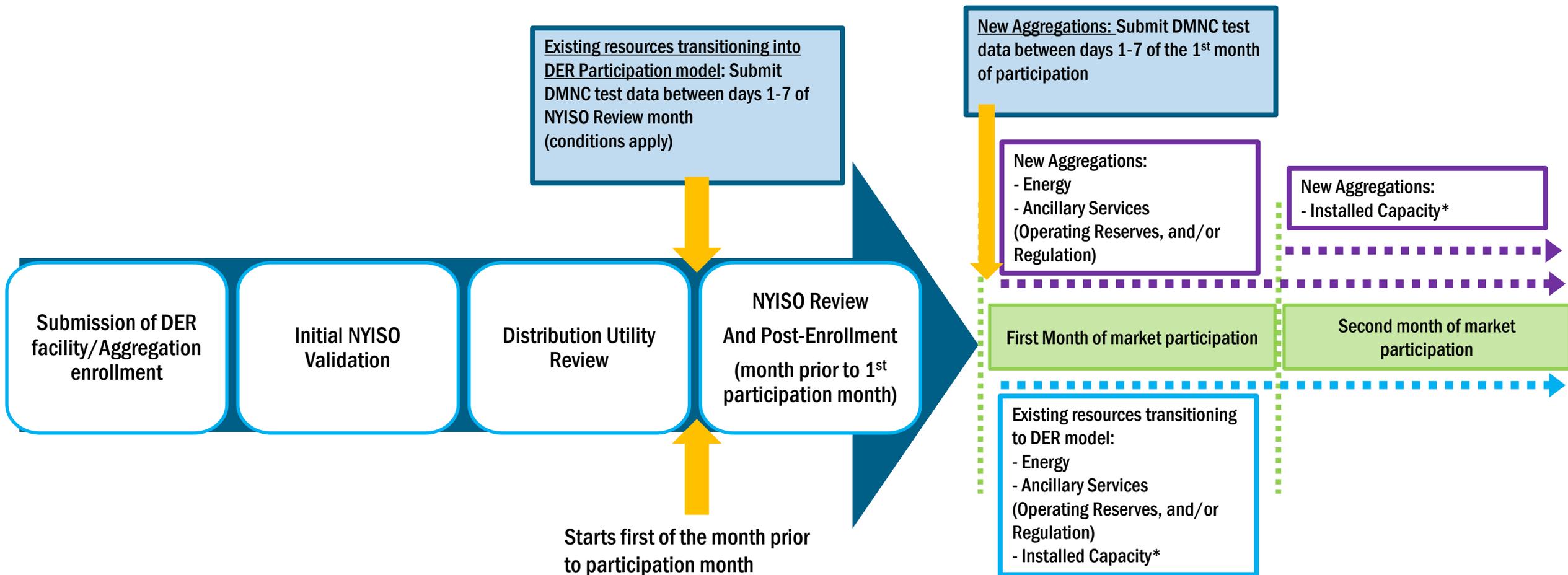
Select Capability Month ▾

mm/dd/yyyy

Search

Clear Search

Summary: Energy and Installed Capacity Market Participation for DER Aggregations



Management of Enrollments

Aggregation and DER Facility Management

- An Aggregator who has one or more Aggregations enrolled in the Agg System and is participating in NYISO markets must re-submit all Enrollment data if:
 - There are any physical or operational changes in the Aggregation or any of the DER facilities that make up the Aggregation, and/or
 - If the Aggregation wishes to add/remove one or more DER facilities to their Aggregation
- If the Aggregator needs to make a change to the Aggregation, then the Aggregator must request the current submission be unsubmitted by reaching out via email to DER@nyiso.com
- The Aggregator will update the Aggregation and DER facilities enrollment template by choosing the applicable Aggregation ID and facility ID

Aggregation and Facility Management

- The updated enrollment will then go through the DU review and NYISO review, as described previously
 - DU review: The applicable DU will review enrollment information for any changes in safety and reliability due to the change in the composition of the Aggregation or due to changes to existing facilities
 - NYISO Review: DRO and other internal teams in the NYISO will review and validate the updated characteristics of the Aggregation and/or DER facilities
- The Aggregator must submit all relevant documentation that reflect the modified composition of the Aggregation
- NYISO will end-date the Aggregation's old record to the end of the NYISO review month, so the Aggregation can continue to participate in the NYISO's markets and services without a break

Participation Model Transitions

- Resources that participate in other NYISO markets that wish to transition to the DER participation model, or DER facilities that wish to transition out of the DER participation model must follow the requirements and deadlines that may vary depending on the participation model it currently belongs to
 - Examples:
 - SCR transitioning to the DER Participation model, or Demand Reduction facilities that wish to participate as an SCR
 - Stand-alone generator transitioning to the DER Participation model, or DER facilities in an Aggregation that wish to participate as stand-alone generator under participation models based on their technology type

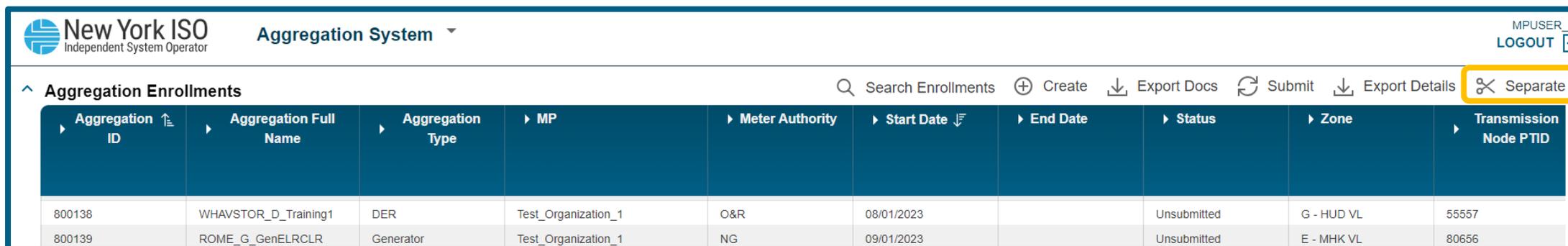
Participation Model Transitions

- Resources that transition to the DER participation model must utilize the enrollment process as described in this presentation, in order to enroll in the Agg System and be able to participate in NYISO markets and services
 - The Aggregation and facilities enrollment import template have specific fields that will identify these as existing resources
 - Resources will also need to complete ICAP market tasks like submission and validation of DMNC in order to participate in the ICAP market; see relevant section in this presentation
- DER facilities that wish to transition out of the DER participation model will need to separate from the Aggregation
 - See following slides for details
- For a detailed description of all the rules, please also refer to the Aggregation Manual – Section 4, Participation Model Transitions to and from DER

Separating an Aggregation/DER Facility

Separating an Aggregation

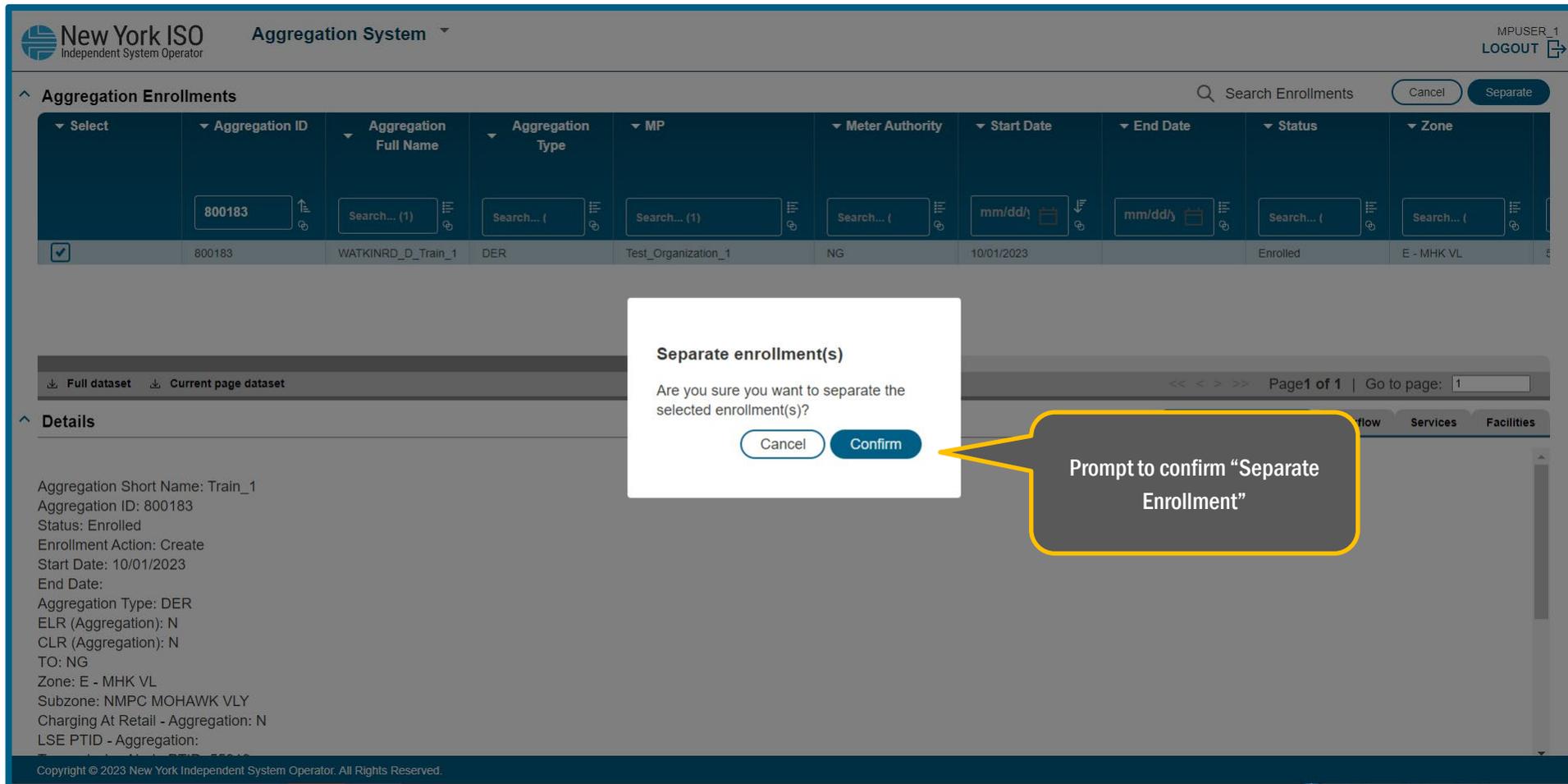
- Aggregation separated by the MP: Aggregators who wish to withdraw an Aggregation from the market, can do so using the “Separate Enrollment” feature in the Agg System
 - Example reasons for withdrawing from the market include long term outages or transitioning out of the DER Participation model
 - Is effective beginning 2 months from the date of action
 - If the “Separate Enrollment” is performed in April, the Aggregation will be withdrawn from the DER participation effective June 1st
 - Effective end date for the Aggregation and its DER facilities in the Agg system: last day of May
 - **Status of the Aggregation Enrollments screen: “Submitted for Separate” which then changes to “Separated”**



The screenshot shows the 'Aggregation System' interface. At the top left is the New York ISO logo and 'Independent System Operator'. The page title is 'Aggregation System'. On the right, it shows 'MPUSER_1' and a 'LOGOUT' button. Below the header is a navigation bar with 'Aggregation Enrollments' (expanded), 'Search Enrollments', 'Create', 'Export Docs', 'Submit', 'Export Details', and a highlighted 'Separate' button. The main table has the following data:

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node P/TID
800138	WHAVSTOR_D_Training1	DER	Test_Organization_1	O&R	08/01/2023		Unsubmitted	G - HUD VL	55557
800139	ROME_G_GenELRCLR	Generator	Test_Organization_1	NG	09/01/2023		Unsubmitted	E - MHK VL	80656

Separating an Aggregation



The screenshot shows the 'New York ISO Aggregation System' interface. At the top, there is a search bar for 'Search Enrollments' and a 'Separate' button. Below this is a table of enrollment records. One record is selected, and a confirmation dialog is displayed over it.

Select	Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone
<input checked="" type="checkbox"/>	800183	WATKINRD_D_Train_1	DER	Test_Organization_1	NG	10/01/2023		Enrolled	E - MHK VL

Separate enrollment(s)

Are you sure you want to separate the selected enrollment(s)?

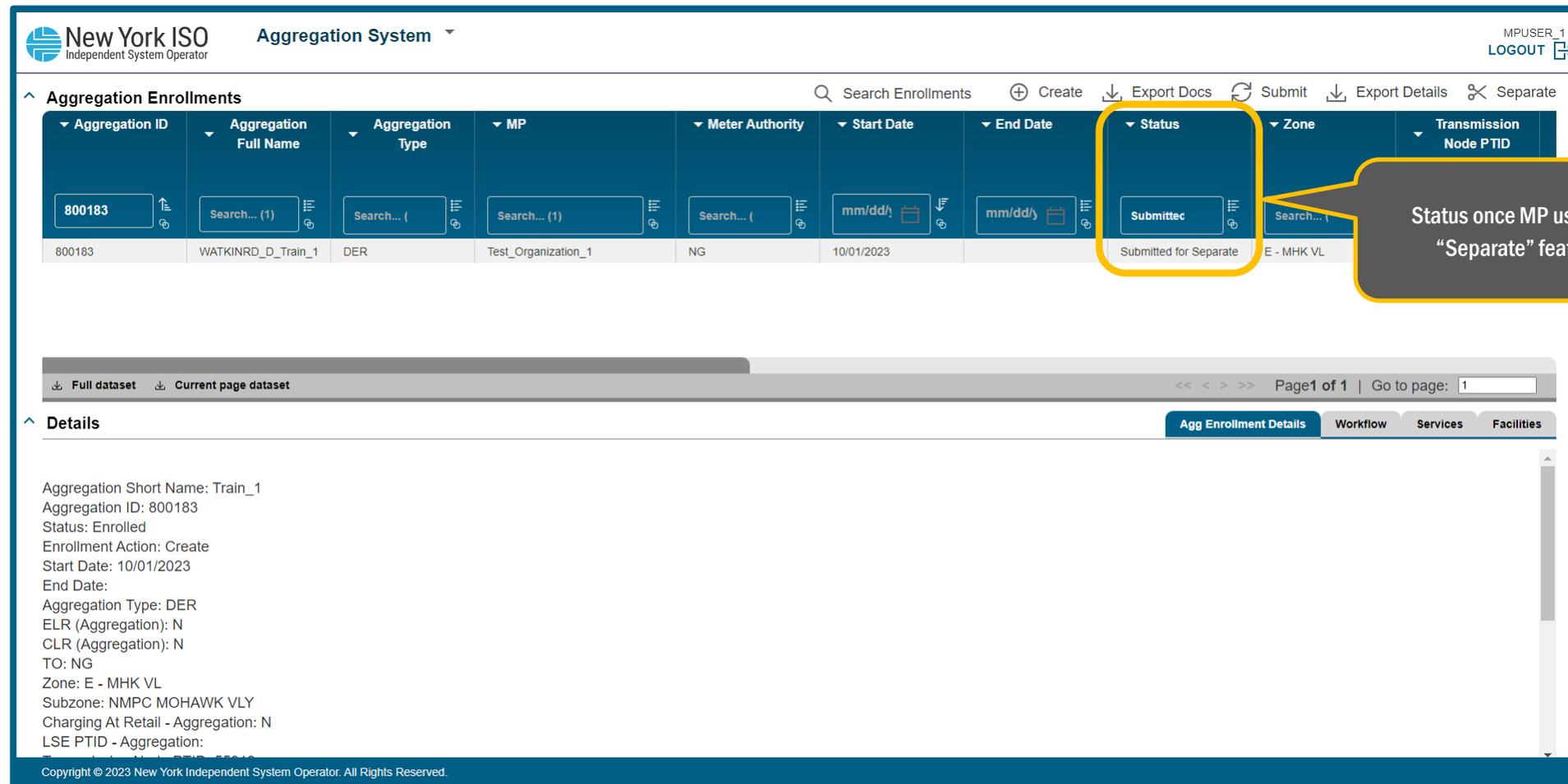
Prompt to confirm "Separate Enrollment"

Details

Aggregation Short Name: Train_1
 Aggregation ID: 800183
 Status: Enrolled
 Enrollment Action: Create
 Start Date: 10/01/2023
 End Date:
 Aggregation Type: DER
 ELR (Aggregation): N
 CLR (Aggregation): N
 TO: NG
 Zone: E - MHK VL
 Subzone: NMPC MOHAWK VLY
 Charging At Retail - Aggregation: N
 LSE PTID - Aggregation:

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Separating an Aggregation



New York ISO Aggregation System MPUSER_1 LOGOUT

Aggregation Enrollments Search Enrollments Create Export Docs Submit Export Details Separate

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Zone	Transmission Node PTID
800183	WATKINRD_D_Train_1	DER	Test_Organization_1	NG	10/01/2023		Submitted for Separate	E - MHK VL	

Full dataset | Current page dataset | Page 1 of 1 | Go to page: 1

Details Agg Enrollment Details Workflow Services Facilities

Aggregation Short Name: Train_1
 Aggregation ID: 800183
 Status: Enrolled
 Enrollment Action: Create
 Start Date: 10/01/2023
 End Date:
 Aggregation Type: DER
 ELR (Aggregation): N
 CLR (Aggregation): N
 TO: NG
 Zone: E - MHK VL
 Subzone: NMPC MOHAWK VLY
 Charging At Retail - Aggregation: N
 LSE PTID - Aggregation:

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Status once MP uses the "Separate" feature

Separating an Aggregation


Aggregation System

Aggregation Enrollments Search Enrollments Create Export Docs Submit

Aggregation ID	Aggregation Full Name	Aggregation Type	MP	Meter Authority	Start Date	End Date	Status	Facility	Zone	Subzone
800032	MAPLEWOD_D_DER_AGG1	DER	Test_Organization_1	NG	09/01/2023		Separated	F - CAPITL	E - MHK VL	80458
800032	MAPLEWOD_D_DER_AGG1	DER	Test_Organization_1	NG	08/01/2023	08/31/2023	Enrolled	F - CAPITL	E - MHK VL	80458
800059	CHATEAUG_D_DER_AGG3	DER	Test_Organization_1	NYPA	08/01/2023		Pending NYISO Review	D - NORTH	E - MHK VL	355732
800059	CHATEAUG_D_DER_AGG3	DER	Test_Organization_1	NYPA	06/01/2023		Unsubmitted	D - NORTH	E - MHK VL	355732
800060	MAPLEWOD_D_DER_AGG2	DER	Test_Organization_1	NG	06/01/2023		Pending NYISO Review	F - CAPITL	E - MHK VL	80458
800071	ROME_E_ESR_AGG1	ESR	Test_Organization_1	NG	07/01/2023		Unsubmitted	E - MHK VL	E - MHK VL	80656

Full dataset Current page dataset Page 1 of 1 | Go to page: 1

Details Agg Enrollment Details Workflow Services Facilities

Aggregation Short Name: Train_1
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 Status: Enrolled
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 Start Date: 10/01/2023
 End Date:
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 ELR (Aggregation): N
 CLR (Aggregation): N
 TO: NG
 Zone: E - MHK VL
 Subzone: NMPC MOHAWK VLY
 Charging At Retail - Aggregation: N
 LSE PTID - Aggregation:

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Info

All separations: The successful Separate of an Aggregation enrollment requires that bids for the Aggregations [800183] be removed from the System, and furthermore prohibits telemetry from being transmitted to or from the NYISO for the Separated Aggregation beginning on 2023-10-01.

Separating an Aggregation

- Aggregation separated by the NYISO:
 - Example reasons: Poor performance by Aggregations, done after NYISO’s Grid Operations team’s recommendation and communication between the DRO team and the Aggregator

If performed before Certification close for the following month	If performed after Certification close for the month
Withdrawal from the DER Participation model will be effective for the following month	Withdrawal from the DER Participation model will be effective for 2 months from then
Example: If performed during the Certification open period in April, withdrawal from the DER Participation model will be effective May 1 st	Example: If performed after the Certification open period in April, withdrawal from the DER Participation model will be effective June 1 st

- Certification period details for a month can be found on the ICAP Event Calendar found on the NYISO website
- NYISO will separate the Aggregation enrollment and email the Aggregator
- Status of the Aggregation Enrollments screen: Separated

Separating a DER Facility

- **DER facility separated by the MP: Aggregators who wish to withdraw one or more DER facilities from their currently enrolled Aggregation can use the process described here**
 - Example reasons to separate one or more DER facilities may be poor performance of the DER facility in the Aggregation, the DER facility contract with the Aggregation is over or the DER facility is switching to another Aggregation or transitioning to another participation model
- **Aggregator will use the “Create Facility Enrollment”, download the template with data for the applicable Aggregation, and upload an updated file with the Aggregation ID removed from the facility that should be separated**
- **Aggregator will need to re-submit the Aggregation enrollment for the applicable Aggregation with the updated facilities enrollment template**
 - Changes will become effective at the beginning of the month that is 2 months from the date of action
 - For example, if a DER Facility separation documentation is submitted in the month of April, separation would be effective June 1

Separating a DER Facility

- DER facility separated by NYISO: In instances when Aggregators request NYISO to separate a DER facility
- Is effective beginning 1 month from the date of action, but can be requested only before Certification closes
 - If the Aggregation requests for a facility to separate in April before Certification closes, the separation would be effective May 1st
- The Agg System and the NYISO will again verify that the Aggregation appreciably conforms to market rules without the separated DER facility

If it is still valid:	If it is not valid:
System sets enrollment end date for the Aggregation and applicable DER facilities to the end of May	NYISO will email the Aggregator that the Aggregation is no longer valid and must be separated
System creates new enrollment for the Aggregation and remaining DER facilities based on system calculated attributes for the 1 st of June	NYISO will initiate Aggregation Separation (as per process on slide 66)
Status in the Agg System Aggregation Enrollment screen : Unsubmitted	
MP must resubmit the Aggregation Enrollment and it will go through the rest of the steps in the Enrollment process under the new Aggregation composition	

ICAP Market Related Tasks

Submitting DMNC in the Agg System

- Aggregations participating in the Installed Capacity markets must submit their DMNC test data once every Capability Period (Summer and Winter)
 - Similar process to when initial DMNC test data is submitted during enrollment
- The time period and deadlines for DMNC test data submissions in the Agg System can be found in the ICAP Event Calendar
 - Similar to deadlines for other resource types
 - Out of period DMNC test data must be validated by in-period testing, in accordance with rules set forth in the tariff and the ICAP Manual
 - For more details, Refer to [Section 4.2 of the Installed Capacity manual: DMNC and DMGC Procedures](#)
- After the initial submission of DMNC for Aggregations with EDLs, DMNC submissions in subsequent Capability Period must be for a minimum of either
 - I. Its elected Energy Duration Limitation
 - II. Duration required by its technology type according to rules set forth in the ICAP Manual
 - Refer to the [ICAP Manual Section 4.2.2.2](#) for more details

ICAP and UCAP Screen in the Agg System

- Read-only screen that has a summary of Aggregation level and DER facility level ICAP and UCAP calculations for selected timeframes
- This includes:
 - Aggregation Declared Value
 - DMNC Status and MW amount
 - Duration Adjustment Factor
 - Aggregation CRIS MW
 - Aggregation Derating Factor
 - Aggregation ICAP
 - Aggregation UCAP



The screenshot shows the New York ISO Aggregation System interface. The top navigation bar includes the New York ISO logo and the text 'New York ISO Independent System Operator' on the left, and 'MPUSER_1 LOGOUT' on the right. Below this is a dark blue navigation menu with three main categories: 'Enrollment', 'Workflow', and 'Capacity'. Under 'Enrollment', there are links for 'Transmission Nodes', 'Create Aggregations', 'Asset Source Configuration', 'Aggregation Enrollments', and 'Facility Enrollments'. Under 'Workflow', there is a link for 'Workflows'. Under 'Capacity', there are links for 'Facility Seasonal Factors', 'DMNC', 'ICAP and UCAP' (highlighted with a yellow box), 'Aggregation Auction Sales', and 'Facility Auction Sales'. A yellow arrow points from the 'New York ISO' logo to the 'Aggregation System' dropdown menu.

ICAP and UCAP

ICAP and UCAP

Calculated Date	MP	Zone	Aggregation ID	Aggregation Name	Month	Capability Period	Capacity
08/16/2023 16:00:20	Test_Organization_1	J - N.Y.C.	800086	AGG1	October 2023	Summer 2023	✓
08/15/2023 16:00:47	Test_Organization_1	C - CENTRL	800140		23	Summer 2023	✓
08/14/2023 17:13:16	Test_Organization_1	C - CENTRL	800140		23	Summer 2023	✓
08/14/2023 17:13:11	Test_Organization_1	F - CAPITL	800141		23	Summer 2023	✓
08/16/2023 16:00:48	Test_Organization_1	F - CAPITL	800141		23	Summer 2023	✓

Clicking on the teal panel displays the feature to Search by specific fields

Search

Select Capability Year

Select Capability Period

Select Capability Month

mm/dd/yyyy mm/dd/yyyy

Facilities

Facility ID	Facility Name	Capacity	Facility Enrollment Status	DMNC Test Type	Has Response Type I Demand Reduction	Facility Time Stacked Hours	Facility Declared Reduction MW	Average EDL D
251	Gen_01	✓	Enrolled	DMNC		10		
252	Gen_02	✓	Enrolled	DMNC		15	15	

Clicking the "spy glass" Search icon allows MP to search the records by Capability period, year and month

Clicking on the row of an Aggregation displays DER facility level information for all the DER facilities that make up an Aggregation

Aggregation Auction Sales

- Read-only screen that has a summary of Aggregation level Auction sales for selected timeframes, mirroring values available in the ICAP AMS
- This includes:
 - Auction month
 - Available ICAP
 - Available UCAP for Sale
 - Auction and Bilateral Sales
 - Spot Market Auction Sales
 - Unsold MW
 - ICAP Sold for DAM MW



New York ISO
Independent System Operator

Aggregation System ▼

MPUSER_1
LOGOUT 

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Create Aggregations		DMNC
Asset Source Configuration		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales

Aggregation Auction Sales

Aggregation Auction Sales

Aggregation ID	Aggregation Name	MP	Location	Zone	Auction Month	CRIS Market Activity Indicator	Available ICAP	Available UCAP for Sale	Auction and Bilateral Sales
800140		organization_1	ROS	CENTRL	August 2023		60		
800141		organization_1	ROS	CAPITL	August 2023		0.5		
800141		organization_1	ROS	CAPITL	September 2023	✓	0.428		
800148		organization_1	ROS	MHK VL	August 2023		25		
800148		organization_1	ROS	MHK VL	September 2023	✓	25		

Clicking on the teal panel displays the feature to Search by specific fields

Search

Select Capability Year

Select Capability Period

Select Capability Month

mm/dd/yyyy

mm/dd/yyyy

Clicking the "spy glass" Search icon allows MP to search the records by Capability Period, year and month

Facility Auction Sales

- Read-only screen that has information about the awarded UCAP MW per DER facility for selected timeframes, mirroring values available in the ICAP AMS

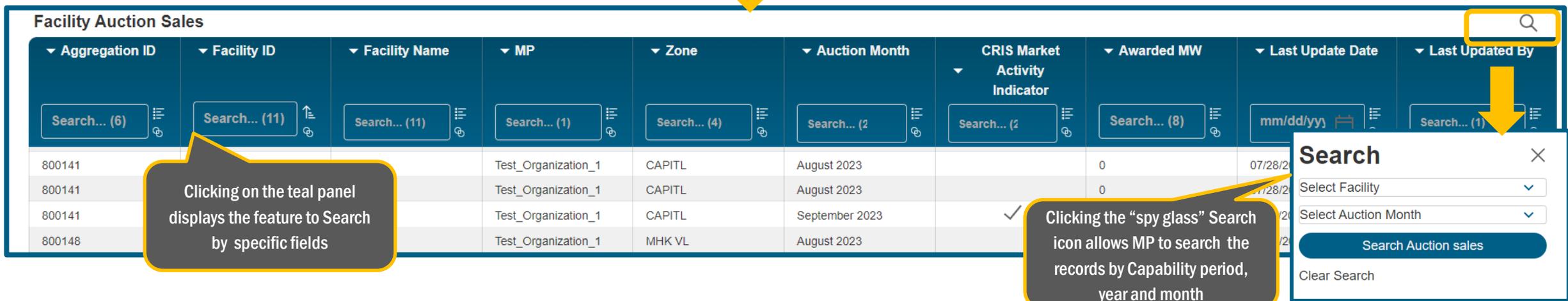


New York ISO Independent System Operator

Aggregation System

MPUSER_1 LOGOUT

- Enrollment
 - Transmission Nodes
 - Create Aggregations
 - Asset Source Configuration
 - Aggregation Enrollments
 - Facility Enrollments
- Workflow
 - Workflows
- Capacity
 - Facility Seasonal Factors
 - DMNC
 - ICAP and UCAP
 - Aggregation Auction Sales
 - Facility Auction Sales**



Facility Auction Sales

Aggregation ID	Facility ID	Facility Name	MP	Zone	Auction Month	CRIS Market Activity Indicator	Awarded MW	Last Update Date	Last Updated By
800141			Test_Organization_1	CAPITL	August 2023		0	07/28/23	
800141			Test_Organization_1	CAPITL	August 2023		0	07/28/23	
800141			Test_Organization_1	CAPITL	September 2023	✓			
800148			Test_Organization_1	MHK VL	August 2023				

Search... (6) Search... (11) Search... (11) Search... (1) Search... (4) Search... (2) Search... (2) Search... (8) mm/dd/yy Search... (1)

Clicking on the teal panel displays the feature to Search by specific fields

Clicking the "spy glass" Search icon allows MP to search the records by Capability period, year and month

Search [X]

Select Facility [v]

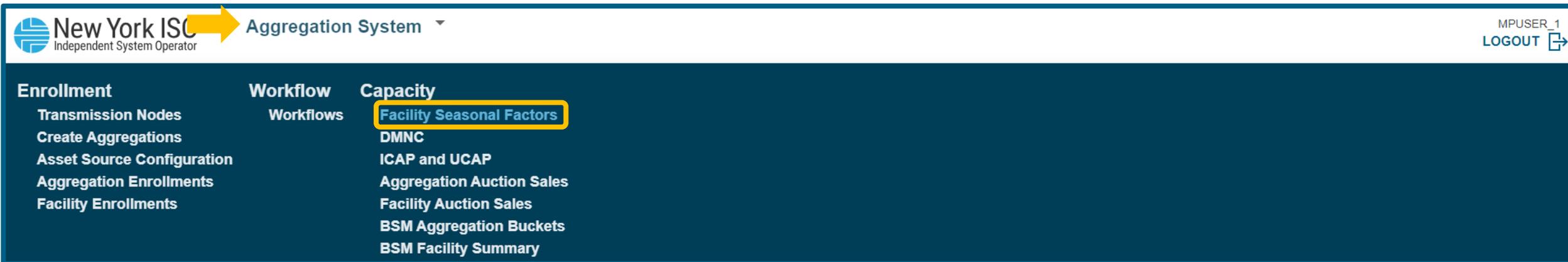
Select Auction Month [v]

Search Auction sales

Clear Search

Facility Seasonal Factors

- Read-only screen that contains the Seasonal Availability factors for each facility that has been enrolled
 - Seasonal Availability factors are seasonal enrollment-based calculations required for ICAP/UCAP calculations for Installed Capacity market participation
 - Availability factors for each facility can be viewed at the Capability period level, and for every month contained within the Capability Period



New York ISO Independent System Operator

Aggregation System ▾

MPUSER_1
LOGOUT

Enrollment	Workflow	Capacity
Transmission Nodes	Workflows	Facility Seasonal Factors
Create Aggregations		DMNC
Asset Source Configuration		ICAP and UCAP
Aggregation Enrollments		Aggregation Auction Sales
Facility Enrollments		Facility Auction Sales
		BSM Aggregation Buckets
		BSM Facility Summary

Facility Seasonal Factors



New York ISO
Independent System Operator

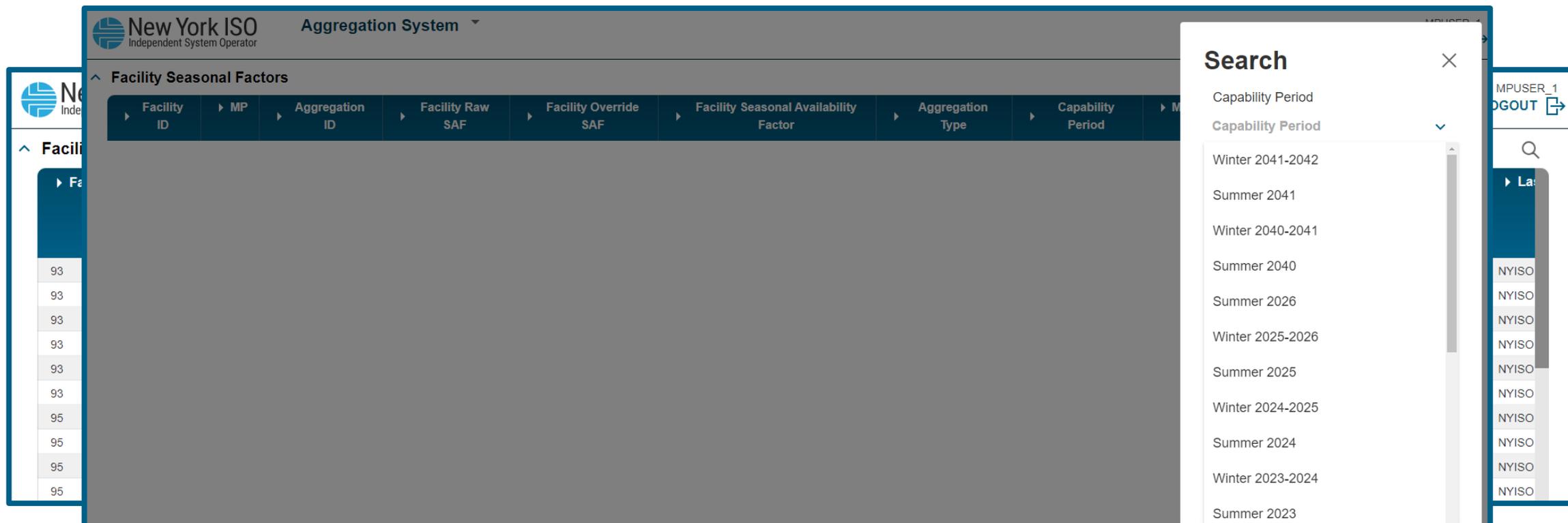
Aggregation System

MPUSER_1
LOGOUT

Facility Seasonal Factors

Facility ID MP Aggregation ID Facility Raw SAF Facility Override SAF Facility Seasonal Availability Factor Aggregation Type Capability Period

Clicking the “spy glass” Search icon allows MP to select the Capability Period to display corresponding Facility Seasonal Factors



New York ISO
Independent System Operator

Aggregation System

MPUSER_1
LOGOUT

Facility Seasonal Factors

Facility ID MP Aggregation ID Facility Raw SAF Facility Override SAF Facility Seasonal Availability Factor Aggregation Type Capability Period

Search

Capability Period

Capability Period

- Winter 2041-2042
- Summer 2041
- Winter 2040-2041
- Summer 2040
- Summer 2026
- Winter 2025-2026
- Summer 2025
- Winter 2024-2025
- Summer 2024
- Winter 2023-2024
- Summer 2023

Facility Seasonal Factors

The Availability Factor values for each facility that will be used in ICAP/UCAP calculations for the applicable Aggregation

Facility ID	MP	Aggregation ID	Facility Raw SAF	Facility Override SAF	Facility Seasonal Availability Factor	Aggregation Type	Capability Period	Month	Last Update Date	Last Update By
93	Test_Organization_1	800032			89.86	DER	Summer 2023	July 2023	11/15/2023 14:31:07	NYISO
93	Test_Organization_1	800032			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO
93	Test_Organization_1	800032			89.86	DER	Summer 2023	September 2023	11/15/2023 14:31:07	NYISO
93	Test_Organization_1	800032			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO
93	Test_Organization_1	800032			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO
93	Test_Organization_1	800032			89.86	DER	Summer 2023	October 2023	11/15/2023 14:31:07	NYISO
95	Test_Organization_1	800060			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO
95	Test_Organization_1	800060			89.86	DER	Summer 2023	July 2023	11/15/2023 14:31:07	NYISO
95	Test_Organization_1	800060			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO
95	Test_Organization_1	800060			89.86	DER	Summer 2023	August 2023	11/15/2023 14:31:07	NYISO

Raw SAF: System calculated
 Override SAF: DRO entered values

Buyer Side Mitigation

- Certain DER facilities (that can provide greater than 2MW injection on to the grid) located in NYISO's Mitigated Capacity Zones (New York City and Zones G-J) may be subject to Buyer Side Mitigation, pursuant to NYISO tariff and procedures
 - DER facilities that satisfy the goals specified in New York State Climate Leadership and Community Protection Act (CLCPA) are excluded from Buyer Side Mitigation evaluations
 - For example, Energy Storage Resources (ESRs), Demand Response, Wind and Solar Intermittent Power Resources are all excluded from BSM evaluations
- Two read-only screens in the Agg system that pertain to Buyer Side Mitigation:
 - BSM Facility Summary: Facility offer floor records for facilities that are subject to BSM
 - BSM Aggregation Buckets: Facilities grouped together by Offer floor within an Aggregation
- [Refer to Section 6.2.1 of the Aggregation Manual for more details on rules of BSM evaluations for DER facilities](#)



BSM Facility Summary

- This screen contains Summer and Winter offer floor records and exempt/non-exempt MW data for DER facilities for a selected Auction month
 - Screen is populated once Aggregation and facility's enrollment is submitted
 - By NYISO's Market Mitigation and Analysis team and the Distributed Resources Operations team

BSM Facility Summary Auction Month: **November 2023** 🔍

MP	Facility ID	Facility Name	Capability Period	Auction Month	Facility UCAP MW	Capacity	Summer Offer Floor \$	Winter Offer Floor \$	Start Month	End M
Test_Organization_1	251	Gen_01	Winter 2023-2024	November 2023	9.374	✓	\$7.00	\$23.00	November 2023	
Test_Organization_1	252	Gen_02	Winter 2023-2024	November 2023	14.123	✓	\$0.00	\$12.00	November 2023	

Summer and Winter offer floors for DER facilities, if they are subject to BSM
 If not, system will create a \$0 value
 Excluded facilities will have a \$0 offer floor

System calculated value from the Enrollment file

Auction Month: **November 2023** 🔍

End Month	Initial Exempt MW	Exempt MW	Non-Exempt MW	Clearing History Month Count	Last Update Date	Last Updated By
	3.7					
	6.45					

Values entered by NYISO based on BSM evaluations for the corresponding Auction month

Iterative count from 1-12
 Total number of months that a DER facility with non-zero Offer floor has cleared the ICAP Auction market clearing price

BSM Aggregation Buckets

- This screen displays, for a selected Auction month,
 - Offer floor data at the Aggregation level
 - Aggregations buckets that contain DER facilities within an Aggregation that are grouped together by offer floors
 - Auction awards MW from exempt and non-exempt MWs

BSM Aggregation Buckets									
Version	MP	Aggregation ID	Aggregation Name	Offer Floor \$	Non-Exempt MW	Exempt MW	Auction Month	Published Exempt MW	Published Non-Exempt MW
2	Test_Organization_1	800175	wind_MPU1	0	0	0	December 2023	0	0
1	Test_Organization_1	800175	wind_MPU1	0	0	0	December 2023	0	0
1	Test_Organization_1	800177	Test_MPU2	0	0	14	October 2023	0	0
2	Test_Organization_1	800177	Test_MPU2	0	0	14	November 2023	14	0

The various Aggregation buckets grouped by offer floor values for DER facilities within an Aggregation

Awards from Exempt MW	Awards from Non-Exempt MW	Total Bucket Awards MW	Last Update Date	Last Updated By
		0	11/21/2023 14:10:40	NYISO
			11/17/2023 13:51:49	NYISO
			09/29/2023 16:44:40	NYISO
		0	10/06/2023 10:54:00	NYISO

Auction awards for Exempt and Non-Exempt MWs for each Aggregation bucket, for selected Auction month

Summary: Presentation Topics

- Introduction to the Agg System
 - Access to the Agg System
- Enrollment of new Aggregations and DER facilities
 - Submission of DER facilities and Aggregation enrollment
 - Initial NYISO Validation
 - Distribution Utility Review
 - NYISO Review
 - Post Enrollment Set up for Participation
- Enrollment actions for Installed Capacity Market Participation
 - DMNC submission and validation
- Management of Enrollments
 - Separating an Aggregation/DER facility
 - ICAP Market related tasks
- Additional References

Additional References

- **Tariff:**
 - Market Administration and Control Area Services Tariff
- **Manuals:**
 - Aggregation Manual
 - Installed Capacity Manual
 - Control Center Requirements Manual
- **User's Guides:**
 - Aggregation System User's Guide
- **Market Training materials:**
 - DER Onboarding Educational Suite

Questions?

For any future assistance, please contact NYISO Stakeholder Services at stakeholder_services@nyiso.com or by phone at (518) 356-6060