



DRAFT for Discussion Purposes Only

NYISO Aggregator Registration Packet



Aggregator Registration Packet

Version: 0.1

Revision Date: 2023

This document was prepared by:

NYISO

New York Independent System Operator

10 Krey Boulevard

Rensselaer, NY 12144

(518) 356-6060

www.nyiso.com

Disclaimer

The information contained in this Registration Packet is not a substitute for professional advice that the Applicants would receive from an accountant, attorney, or qualified tax preparer and does not constitute legal or professional advice. Applicants should seek the advice of an accountant, attorney, or qualified tax preparer prior to making decisions as a result of the information contained in this Registration Packet or provided by the Customer Registration Department.

©Copyright 1999-2023 New York Independent System Operator

Member Relations Department

i

Aggregator Registration Packet

Introduction

This registration packet contains forms and information required by the NYISO for registration as an Aggregator in the Distributed Energy Resource (DER) program. The Aggregator is the party who represents one or more DER facilities as an Aggregation participating in the NYISO wholesale market. An Aggregator is required to become a NYISO Customer. To become a NYISO Customer, complete the NYISO Customer Registration Packet in addition to this DER Aggregator Registration Packet. For further information regarding the registration process, please see the Aggregation Manual at the following link: <link>

Instructions for Completing this Word Form

This document is a Word Form. The fields may be completed in Word to permit saving a completed electronic version of this form. Data may only be entered into the fields indicated by gray boxes. The Status Bar, located in the lower left corner of the screen, will display help text that describes the data required in the field.

Text fields, indicated by a small gray box like this: will expand as text is entered into the field. To enter data in a text field, type as you normally would, including carriage returns for new lines within the box. Empty text fields will not show a gray box when the form document is printed.

Checkboxes, indicated by a small gray outlined box like this: will display a check mark when the box is clicked. To remove the check mark, click the box a second time.

Please complete all sections and check the Not Applicable if a section does not apply.

Upon completion of the form, save, print, and, if applicable, sign the form. Send this form to the NYISO as directed on the form.

Form-Specific Instructions

Who May Sign Documents

All documents submitted as part of the Application must be signed, to the extent a signature is required, by an authorized representative of the Applicant. The Applicant's resolution, which the Applicant submits with its NYISO Customer Application must list the individuals authorized to sign the Service Agreements on behalf of the Applicant. The NYISO reserves the right to seek assurance at any time that any person signing documents on behalf of an Applicant (or an existing Customer) is authorized to do so.

Delivery

The NYISO Customer Registration Packet must be submitted through the Salesforce NYISO member community: <https://nyiso.force.com/MemberCommunity/s/>

For further information regarding the Distributed Energy Resource (DER) program, please see the Aggregation Manual at the following link: <link>

Aggregator Registration Packet

1. DER Aggregator Applicant Information

1.1. General Information

Enter the company name and contact information for the organization enrolling DER facilities.

1.1.1. Applicant Name and Application Date

Organization Name	
Application Date	

1.1.2. Contact Name and Address

Contact Name			
Address Line 1			
Address Line 2			
City		State/Province	
Zip/Postal Code		Country	
Web Site URL			
Primary Phone			
E-Mail Address			

Note: Any change to the above contact information is required to be immediately submitted to the NYISO

1.2. Aggregator Operational Contacts

Include primary and alternate contacts for all Aggregator Operations. Operational contacts are required to be available on a 24/7/365 basis. If a primary contact cannot be reached, the alternate contact is required to be available. The NYISO Power System Operations (aka Grid Operations) group will reach out to these contacts directly, or via the Transmission Owner, to request specific actions related to (but not limited to) the operational performance of Aggregations. The operational contact(s) must have access to and be authorized to provide all information requested by NYISO Power System Operations as well as the ability to control the Aggregator's Aggregations when directed to do so by the NYISO or Transmission Owner.

1.2.1. Primary Operations Contact

First Name		Last Name	
Title			
Address Line 1			
Address Line 2			
City		State/Province	
Zip/Postal Code		Country	
Primary Phone		Secondary Phone	
Mobile Phone			
E-Mail Address	The e-mail address may be a generic address (e.g., deragggregator@xyz.com) that will go to any and all Operations Contacts on duty.		

1.2.2. Alternate Operations Contact

First Name		Last Name	
Title			
Address Line 1			
Address Line 2			
City		State/Province	
Zip/Postal Code		Country	
Primary Phone		Secondary Phone	
Mobile Phone			

E-Mail Address	The e-mail address may be a generic address (e.g., deraggregator@xyz.com) that will go to any and all Operations Contacts on duty.
-----------------------	--

Note: Any change to the above contact information is required to be immediately submitted to the NYISO.

1.3. Transmission Owner Telemetry Acknowledgement

An Aggregator is required to establish a telemetry communications connection with the applicable Transmission Owner prior to submitting an Aggregation in the Transmission Owner’s service area to the NYISO. An Aggregator’s control center must be connected to the applicable Transmission Owner in order to meet the NYISO’s requirements for NYCA Interim Control Operation (ICO) in the event of an emergency. Please read and acknowledge the statement below:

Please Acknowledge:	Acknowledgment
The Aggregator must establish a telemetry connection between its Control Center and the applicable Transmission Owner(s) before submitting an Aggregation to the NYISO. If an Aggregation is submitted to the NYISO without a telemetry connection established between the Aggregator’s Control Center and the applicable Transmission Owner, then market entry of the Aggregation may be delayed as a result.	<input type="checkbox"/>

2. Infrastructure and Technology Plan

2.1. Plan requirements

Only applicants seeking to register as Aggregators that directly communicate with the NYISO are required to provide an Infrastructure and Technology Plan. This is due to the complexities involved and the importance of these communications to NYISO markets and power system reliability. Documents provided under this section shall be endorsed and meet the minimum requirements specified.

An Aggregator assumes full responsibility for accepting NYISO Dispatch and providing telemetry back to the NYISO. The Aggregator is also responsible for the dispatch signals it sends to its DER facilities as well as the telemetry it obtains from those resources.

Please note: An updated Infrastructure and Technology Plan is required to be submitted to the NYISO prior to the implementation of any significant or material changes are made by the Aggregator. This does not satisfy the obligation to contact the NYISO when there are changes to the systems used to communicate with the NYISO or changes to DER facilities.

All documents provided shall be properly endorsed by an authorized representative of the applicant. All documents submitted as part of this Plan shall be approved and endorsed by a person authorized to sign on behalf of the Applicant.

Acceptable format for Information submitted includes:

- System diagrams
- Wiring diagrams
- Schematics
- Block Diagrams
- Text documentation

2.2. Describe the Aggregator Operations/ Control Center configuration

- 2.2.1. Physical/Cyber Security
- 2.2.2. System Operations Management
- 2.2.3. Power Infrastructure
- 2.2.4. Environmental Controls
- 2.2.5. Redundancy of Infrastructure
- 2.2.6. Scalability
- 2.2.7. Backup Process
- 2.2.8. Disaster Recovery Process

2.3. Describe the overall system architecture

- 2.3.1. The system architecture shall include the Energy Management System to be employed for resource management
 - 2.3.1.1. If the solution is purchased as a product or service, identify the product/service and provide company contact information for the product/service
 - 2.3.1.2. If the system is developed internally, provide documentation of system functionality
 - 2.3.1.3. Minimum Requirement: A system diagram is required with every major component/functionality identified regardless of whether it is a third party product/service or if it is developed internally

2.4. Describe the communications architecture

- 2.4.1. The communication architecture shall include the communication components utilized between the Aggregator systems and the DER facilities system and/or devices (e.g. RTU, instantaneous meters)
 - 2.4.1.1. Minimum Requirement: A block diagram or a schematic is required with the components identified and their relationships to each other from the resource meter to the Energy Management System
- 2.4.2. Describe the communications with DER facilities demand side resources
 - 2.4.2.1. Circuit type and bandwidth
 - 2.4.2.2. Identify if it is shared for other applications or dedicated
 - 2.4.2.3. Identify any redundancies
- 2.4.3. Identify communication protocol used for communicating with the DER facilities
- 2.4.4. Identify NYS PSC approved meter(s) utilized

2.5. Describe the Data Management Practices:

- 2.5.1. Describe any meter totalization methodology used for reporting instantaneous data
- 2.5.2. Minimum Requirement: The Process, including timing of activities and any calculations used for the instantaneous data sent via telemetry shall be provided using text and diagram format
- 2.5.3. Validation, Estimation, & Editing
 - 2.5.3.1. Describe the process and rules to be used for meter data

2.5.3.2. If using any industry standards, provide a reference of the load research or business practice standard

2.5.4.Data Retention

2.5.4.1. Describe data retention practices

2.5.4.1.1. The types of data and retention schedule

2.6. Infrastructure and Technology Plan usage by NYISO

2.6.1.NYISO will review the information to assess for completeness.

2.6.1.1. The NYISO's acceptance of an Infrastructure and Technology Plan is not indicative of the plan's merit or a Aggregator's ability to comply with NYISO Tariffs or procedures.

2.7. Aggregator Responsibilities

2.7.1. The Aggregator is responsible for Aggregation performance and all its market obligations.

2.7.2. An updated Infrastructure and Technology Plan is required to be submitted to the NYISO prior to the implementation of any significant or material changes to the Plan is made by the Aggregator.

2.7.3. A Aggregator is required to contact the NYISO when there are anticipated changes to the systems used to communicate with the NYISO.

2.8. Infrastructure and Technology Plan Checklist

To Be Completed by the DER Aggregator			NYISO Review
Document Name	Document Endorsed	Document Complete	Received [NYISO use only]
2.8.1. Describe the Aggregator Operations/ Control Center configuration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8.2. Describe the overall system architecture Minimum Requirement: A system diagram is required with every major component/ functionality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8.3. Describe the communications architecture Minimum Requirement: A block diagram or a schematic is required with the components identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.8.4. Aggregator Data Management Practices Minimum Requirement: The Process, including timing of activities and any calculations used for the instantaneous data sent via telemetry shall be provided using text and diagram format	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>