

New York Independent System Operator, Inc.
Semi-Annual Report on Demand Response Programs
June 21, 2023

This report summarizes the status of demand response participation in the New York Independent System Operator Inc.’s (“NYISO’s”) markets as of the Installed Capacity (“ICAP”) auction month of May 2023. As in previous years, this report focuses on enrolled demand response participation in preparation for the Summer Capability Period.¹ An overview of the status of the NYISO’s several demand response initiatives is provided below.

Deployments of the NYISO’s two reliability-based programs (the Emergency Demand Response Program (“EDRP”) and the Installed Capacity – Special Case Resource program (“ICAP/SCR”)) during the Summer 2022 Capability Period were reported in the NYISO’s 2021 Annual Report on Demand Response Programs posted on January 31, 2023 (“January 2023 Report”).²

The NYISO also has two economic programs (the Day-Ahead Demand Response Program (“DADRP”) and the Demand-Side Ancillary Services Program (“DSASP”)). DADRP enrollment has been static for several years and enrolled resources have not participated in the energy market for more than seven years. Given the lack of activity during the analysis period, there is no market participation to report.

Demand Response Enrollment

This report presents statistical data on demand response enrollment. Demand response providers include individual retail electricity consumers that participate directly in the NYISO’s market as a customer, as well as curtailment service providers, which is a general term used to identify the NYISO Customers that represent retail consumers in the NYISO’s demand response programs.³

¹ Capitalized terms not otherwise defined herein have the meaning set forth in Section 2 of the NYISO’s Market Administration and Control Area Services Tariff (“Services Tariff”).

² New York Indep. Sys. Operator, Inc. Jan. 31, 2023 Annual Report on Demand Response Programs available at: <https://www.nyiso.com/documents/20142/36044924/NYISO-2022-Annual-Report-on-Demand-Response-Programs-FINAL-V2-CLEAN.pdf>.

³ The term “curtailment service providers” as used in this report refers to Responsible Interface Parties (RIPs) as defined in Services Tariff Section 2.18 and as used therein and in the *Installed Capacity Manual*, Demand Reduction Providers (DRPs) as defined in Services Tariff Section 2.4 and used in the *DADRP Manual*, and the four types of Market Participants identified in the *EDRP Manual*. A retail customer participating directly in a NYISO demand response program with its own Load must be a NYISO Customer, and it acts as its own curtailment service provider. The Services Tariff defines Curtailment Service Provider solely in relation to the EDRP (*see* Services Tariff Section 2.3), which is narrower than as used in this report.

Table 1 identifies the number of curtailment service providers by the following organizational categories:⁴

- Aggregator - an entity that enrolls individual retail electricity consumers within the same Load Zone that may be aggregated to form a single demand response resource;
- Competitive Load Serving Entity⁵ (“LSE”) - an entity authorized to supply Energy, Capacity and/or Ancillary Services to retail customers located within the New York Control Area (“NYCA”);
- Transmission Owner⁶/LSE - the public utility or authority that owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the Services Tariff.

Table 1: Demand Response Service Providers by Provider Type

Provider Type	Number as of May 2023
Aggregator	13
Competitive LSE*	12
TO LSE	1
Total	26

Provider Type	Number as of May 2022
Aggregator	14
Competitive LSE*	14
TO LSE	1
Total	29

* Competitive LSEs are LSEs that are not also TOs.

⁴ Until 2018, the NYISO’s Semi-Annual Demand Response Report identified four categories of curtailment service providers. In addition to the three categories described in this report, the NYISO identified an additional organizational category called “Direct Customer” for entities that registered as a Market Participant with the NYISO to participate on their own behalf in any of the NYISO’s demand response programs. The NYISO is able to distinguish between the categories of curtailment service provider based on provider name and certain data provided by the Market Participant. The NYISO does not require Market Participants to identify the category of provider in which they fit. Over time, it became increasingly difficult to identify Direct Customers based on the information provided to the NYISO and to provide the Commission with an accurate accounting of such providers. To maintain better consistency of reporting and accuracy, the NYISO has removed the “Direct Customer” organizational category, and merged those providers into the Aggregator or Competitive LSE category as appropriate.

⁵ See Services Tariff Section 2.12.

⁶ See Services Tariff Section 2.20.

Since the NYISO’s 2022 Semi-Annual Demand Response Report (“June 2022 Report”),⁷ the number of curtailment service providers participating in the NYISO’s demand response programs has decreased by three.

Tables 2 and 3 present enrollment statistics by Load Zone for EDRP and ICAP/SCR respectively. Each table presents the total number of resources, total MW enrolled, and the enrolled MW of eligible Local Generators, or other behind-the-meter supply sources, facilitating load reduction. In addition, changes in the number of resources and enrolled MW since the June 2022 Report are shown by Load Zone.

Table 2 shows EDRP Enrollment and ICAP Unsold. Of the 57 end-use locations, all were ICAP/SCRs with unsold capacity.⁸ Enrolled EDRP MW and ICAP Unsold decreased 3.8 MWs and end-use locations decreased by 12 since the June 2022 Report. The largest decrease in enrolled MW occurred in Load Zone J (NYC) and largest increase in end-use locations occurred in Load Zone I.

Table 2: EDRP Enrollment and ICAP Unsold (as of May 2023)

EDRP and ICAP Unsold						
Zone	No. of End-Use Locations	MW of Load Reduction	MW of Local Generators	Total MW	Change in No. of End-Use Locations from May 2022	Change in Total MW from May 2022
A	0	0.0	0.0	0.0	0	0.0
B	0	0.0	0.0	0.0	0	0.0
C	0	0.0	0.0	0.0	0	0.0
D	*	0.2	0.0	0.2	*	0.2
E	0	0.0	0.0	0.0	*	-0.1
F	0	0.0	0.0	0.0	0	0.0
G	0	0.0	0.0	0.0	0	0.0
H	41	0.0	0.0	0.0	34	0.0
I	8	0.5	0.0	0.5	-26	0.4
J	*	0.3	*	0.4	-19	-4.3
K	0	0.0	0.0	0.0	0	0.0
Total	57	1.1	*	1.1	-12	-3.8

* Entries in this category have been masked for confidentiality in this table

⁷ New York Indep. Sys. Operator, Inc. June 24, 2022 Semi-Annual Report on Demand Response Programs available at <https://www.nyiso.com/documents/20142/28052158/2022-Semi-Annual-Demand-Response-Report-FINAL.pdf>.

⁸ ICAP/SCRs with unsold capacity are those resources that did not sell their full available capacity.

Table 3 reflects ICAP/SCR MW sold in the May 2023 ICAP Spot Market Auction (May is the first month of the Summer Capability Period). Historical data shows that enrollment in the ICAP/SCR program changes monthly throughout the Summer Capability Period. The data shows ICAP/SCR enrolled MW increased 5.0% compared with the same period reported in the June 2022 Report and the number of end-use locations increased 86.6%. The increase to ICAP Sold end-use locations from the prior reporting period is due to new participation of facilities between 1 and 5 kW, and therefore had a low impact on the total program MW relative to the increase in end-use locations.

Table 3: ICAP/SCR Sold (as of May 2023)

ICAP Sold						
Zone	No. of End-Use Locations	MW of Load Reduction	MW of Local Generators	Total MW	Change in No. of End-Use Locations from May 2022	Change in Total MW from May 2022
A	158	197.9	*	198.4	48	-12.1
B	123	27.3	*	28.3	36	1.6
C	150	78.0	*	79.6	20	2.5
D	19	224.8	0.0	224.8	-6	7.0
E	67	28.8	0.0	28.8	6	7.5
F	125	115.8	8.0	123.8	*	21.2
G	78	28.0	12.4	40.4	*	5.5
H	28	9.1	*	11.2	*	0.7
I	318	17.3	14.6	31.9	203	0.2
J	4140	373.8	61.1	434.8	2202	22.0
K	279	27.1	8.0	35.1	25	2.6
Total	5485	1128.0	109.2	1237.1	2546	58.7

* Depending upon the meter configuration of an individual resource the MW available from Local Generators may be greater than the MW of Load Reduction (i.e., curtailment).

During the analysis period of November 2022 through April 2023, there were up to nine Demand Side Resources in the DSASP providing of Operating Reserves. The resources represented up to 276.9 MW of capability and had an average performance of 161.4% during this analysis period.

Update on 2023 Demand Response Initiatives

This section provides an update on the status of initiatives that the NYISO has been working on with its stakeholders to improve the administration of its demand response programs and to address regulatory directives to facilitate market participation. In particular, the NYISO has focused on:

- Continued Development of the Demand Response Information System
- Enhancing Demand Response in the Real-Time Energy market by completing development and deploying the 2019 Distributed Energy Resource participation model.
- Developing and initiating the transition of DSASP and DADRP resources to the Distributed Energy Resource participation model.
- FERC Order No. 2222 Compliance.

Continued Development of the Demand Response Information System (“DRIS”)

The NYISO continues updating its DRIS software as necessary to improve user experience.

Demand Response in the Real-Time Energy Market via the NYISO’s Distributed Energy Resource Participation Model for New York’s Wholesale Electricity Markets

The integration of DER into the NYISO’s markets will continue to be the main driver in demand response innovation for 2023. The NYISO anticipates implementing its market design in the third quarter of 2023, on or after August 1. The DER participation model will offer demand response resources a single, streamlined, participation model under which they may offer all of the wholesale market services they are technically capable of providing, enhancing wholesale market participation opportunities. The NYISO is in the process of updating its business practice manuals with stakeholders, including the creation of a new Aggregation Manual. The Aggregation Manual provides information on Aggregation participation in the NYISO-administered markets, including the processes by which existing Resources, including participants in the NYISO’s DSASP, DADRP, EDRP and SCR program, are able to transition to the DER participation model.

FERC Order No. 2222 Compliance

Since the June 2022 Report, the FERC issued a second Order on Compliance on June 17, 2022, and a third Order on Compliance on April 20, 2023. The NYISO submitted responsive tariff revisions on November 14, 2022, and May 22, 2023, respectively. The NYISO intends to implement its Order No. 2222 compliance tariff revisions and associated software in 2026.