Attachment II

New York Independent System Operator, Inc.

Semi-Annual Compliance Report on Demand Response Programs June 1, 2016

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 2016. As in previous semi-annual reports, 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 2015 Capability Period were reported in the NYISO's 2016 Demand Response Annual Report ("January 2016 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 four 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 customers in the NYISO's demand response programs.³

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

¹ Capitalized terms not otherwise defined herein have the meaning set forth in the NYISO's Market Administration and Control Area Services Tariff ("Services Tariff").

² New York Indep. Sys. Operator, Inc. Jan. 15, 2016 Annual Report on Demand Response Programs, Docket No. ER01-3001-021.

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 Services Provider solely in relation to the EDRP (see Services Tariff Section 2.3), which is narrower than as used in this report.

- Aggregator an entity that enrolls retail electricity consumers as individual resources within the same Load Zone that may be aggregated to form a single demand response resource;
- Competitive Load Serving Entity ("LSE") an entity authorized to supply Energy, Capacity and/or Ancillary Services to retail customers located within the New York Control Area ("NYCA"), and that are not also Transmission Owners;⁴
- Direct Customer an entity that registers as a Market Participant with the NYISO to participate on their own behalf in any of the NYISO's demand response programs; and
- Transmission Owner/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, and that provides service to retail customers.⁵

Provider Type	Number as of May 2016
Aggregator	15
Competitive LSE	6
Direct Customer	4
Transmission Owner/LSE	3
Total	28

 Table 1: Demand Response Service Providers by Provider Type

Since the NYISO's 2015 Semi-Annual Report on Demand Response ("June 2015 Report"),⁶ the number of demand response programs curtailment service providers participating in the NYISO's demand response programs has remained static.

Tables 2 and 3 present enrollment statistics by Load Zone for EDRP and ICAP/SCR program respectively, as of mid-May 2016. 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 2015 Report are shown by Load Zone.

Table 2 shows EDRP Enrollment and ICAP Unsold.⁷ Of the 64 end-use locations, 61 participated in the EDRP program and 3 were ICAP/SCRs with unsold capacity. Enrolled EDRP MW decreased 33.1% and end-use locations decreased 4.7% since May 2015. The largest decrease in enrolled MW occurred in Load Zone F (Capital) and the largest decrease in end-use locations occurred in Zone K (Long Island).

⁴ *See* Services Tariff Section 2.12.

⁵ See Services Tariff Section 2.20.

⁶ New York Indep. Sys. Operator, Inc. June 1, 2015 Semi-Annual Reports on Demand Response Programs and New Generation Projects, Docket No. ER03-647, *et al.*

⁷ "Unsold" capacity as used in this report includes capacity that is unoffered, and capacity that is offered but did not clear in the market.

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 2015	Change in Total MW from May 2015
А	8	3.9	0.0	3.9	0	0.0
В	*	0.6	0.0	0.6	*	-1.2
С	20	11.1	0.0	11.1	0	0.0
D	7	3.4	0.0	3.4	0	0.0
Е	11	5.4	0.0	5.4	*	-0.5
F	*	0.3	0.0	0.3	*	-10.4
G	0	0.0	0.0	0.0	0	0.0
Н	*	2.0	0.0	2.0	*	0.4
Ι	0	0.0	0.0	0.0	0	0.0
J	10	0.2	0.0	0.2	8	-0.4
K	0	0.0	0.0	0.0	*	-0.5
Total	64	26.9	0.0	26.9	0	-12.6

 Table 2: EDRP Enrollment and ICAP Unsold (as of May 2016)

* When the number of end-use locations is less than 5, the value has been masked in this public version of the table.

Table 3 reflects ICAP/SCR MW sold in the May 2016 ICAP Spot Market Auction (May is the first month of the Summer Capability Period).⁸ Historical data shows that enrollment in the ICAP/SCR program changes monthly throughout the Summer Capability Period. The data shows ICAP/SCR enrolled MW decreased 4.5% compared with the same period reported in the June 2015 Report and the number of end-use locations decreased 6.0%.

⁸ Capacity sold in the ICAP Spot Market Auction includes capacity certified in Bilateral Transactions.

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 2015	Change in Total MW from May 2015
А	302	271.4	13.3	284.7	-65	-26.5
В	236	55.8	17.5	73.4	10	-7.9
С	264	107.2	10.6	117.8	-23	4.9
D	23	58.4	4.3	62.7	-1	3.2
Е	137	31.3	6.4	37.7	-8	-1.3
F	183	82.2	8.6	90.8	-28	-3.0
G	155	33.9	21.5	55.4	-14	4.0
Н	32	2.0	5.5	7.5	11	4.0
Ι	105	14.0	9.9	23.9	16	3.9
J	1659	274.4	84.3	358.7	-151	-12.3
K	376	31.6	15.3	46.9	-36	-19.5
Total	3472	962.1	197.3	1159.3	-289	-50.7

Table 3: ICAP/SCR Sold (as of May 2016)

* 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).

For the majority of the analysis period of November 2015 through April 2016, there were three Demand Side Resources actively participating in the DSASP as providers of Operating Reserves. These resources totaled 126.5 MW of capability and had an average performance of 121.5% during this analysis period. One DSASP Resource left the program beginning in April 2016.

Tables 4 and 5, not presented in this public report, describe enrollment in the DSASP. Due to the limited participation in this program, these tables are provided only in Confidential Exhibit A.

Update on 2016 Demand Response Initiatives

This section provides an update on the projects that the NYISO has planned for its demand response programs for 2016.

Continued Development of the Demand Response Information System (DRIS)

The NYISO has two software deployments planned for DRIS in 2016.

A deployment in the second quarter of 2016 will enhance DRIS software to allow incorporation of new rules to support comprehensive scarcity pricing in the NYISO's markets.⁹

⁹See Docket No. ER16-425-000, *New York Indep. Sys. Operator, Inc.*, Proposed Revisions to Services Tariff and OATT to Implement Improved Scarcity Pricing (Nov. 30, 2015); and *New York Indep. Sys. Operator, Inc.*, 154 FERC ¶ 61,152 (2016).

An update in the fourth quarter of 2016 will incorporate certain aspects of the NYISO's Behind-the-Meter Net Generation initiative accepted by FERC on May 17, 2016. The DRIS will assist in calculating Host Load baselines for Behind-the-Meter Net Generation Resources.¹⁰ This deployment will also include an upgrade to the software version used by the DRIS to place automated phone calls for DR event notifications.

Demand Response in the Real-Time Energy Market

The NYISO has initiated a project to develop a roadmap to integrate distributed energy resources, including demand response, into its real-time energy markets.¹¹ The NYISO is currently developing a concept paper describing the NYISO's vision for integrating distributed energy resources in the wholesale markets, and intends to present the paper to stakeholders in Fall 2016. The NYISO intends to continue working with its stakeholders in 2016 and 2017 to develop a detailed market design and market rules.

¹⁰ On May 17, 2016 the Commission accepted a comprehensive set of tariff provisions for Behind-the-Meter Net Generation Resources. *See, New York Indep. Sys. Operator, Inc.*, 155 FERC ¶ 61,166 (2016).

¹¹ The NYISO's initiative to integrate distributed energy resources will also include concepts for participation in the NYISO's capacity and ancillary services markets.