

THIS FILING LETTER DOES NOT CONTAIN ANY PRIVILEGED OR CONFIDENTIAL INFORMATION. ATTACHMENT I - THE BODY OF REPORT, ALONG WITH THE REDACTED VERSIONS OF TABLES 2 THROUGH 5 (MARKED PUBLIC) DOES NOT CONTAIN ANY PRIVILEGED OR CONFIDENTIAL INFORMATION. ATTACHMENT II - CONFIDENTIAL TABLES AND DEMAND SIDE ANCILLARY SERVICES PROGRAM DETAILS, INCLUDES THE UNREDACTED TABLES, WHICH CONTAIN PRIVILEGED AND CONFIDENTIAL INFORMATION, AND IS SUBMITTED SEPARATELY.

January 13, 2017

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: Annual Report in Docket No. ER01-3001-000;
Request for Privileged Treatment of Attachment II**

Dear Ms. Bose:

Enclosed for filing in the above-referenced docket is the New York Independent System Operator Inc.'s ("NYISO") annual report to the Federal Energy Regulatory Commission ("Commission") on the NYISO's Demand Side Management programs. By Order dated February 19, 2010, the Commission directed the NYISO to file this report for informational purposes only.¹

I. List of Documents Submitted

The NYISO submits this filing letter, accompanied by: (i) Attachment I, the NYISO 2016 Annual Report on Demand Response Programs, which includes redactions in Tables 2 through 5 of confidential, commercially sensitive information, and (ii) Confidential Attachment II, which contains the unredacted versions of Tables 2 through 5. Confidential Attachment II also contains an update on the status of resources participating in the NYISO's Demand Side Ancillary Service Program.²

¹ *New York Indep. Sys. Operator, Inc.*, Letter Order, Docket Nos. ER01-3001-021, *et al.* (Feb. 19, 2010).

² Terms with initial capitalization not defined herein have the meaning set forth in the NYISO's Market Administration and Control Area Services Tariff.

II. Request for Confidential Treatment of Attachment II

In accordance with Sections 388.107 and 388.112 of the Commission's Regulations,³ Article 6 of the NYISO's Market Administration and Control Area Services Tariff, and Sections 12.1(4) and 12.4 of the NYISO's Code of Conduct in Attachment F of the NYISO Open Access Transmission Tariff, the NYISO requests Privileged and Confidential treatment of the contents of Attachment II to this filing letter. The NYISO also requests that the confidential Attachment II be exempted from public disclosure under the Freedom of Information Act ("FOIA"), 5 U.S.C. §552.⁴

Attachment II includes information regarding the number of demand response resources in a load zone that, when aggregated, are not greater than five (5). With such a small number of resources in the load zone, the NYISO's aggregation of the data reported for that load zone may not sufficiently mask confidential and commercially sensitive Market Participant information that the NYISO does not make public. Attachment II also includes a brief discussion of the status of enrollment and registration for the resources seeking to participate in the NYISO's Demand Side Ancillary Services Program. The number of resources described in this discussion similarly may not sufficiently mask confidential and commercially sensitive Market Participant information that the NYISO does not make public.

Attachment II, therefore, contains privileged, commercially sensitive, trade secret information that is exempt from disclosure under 5 U.S.C. §552(b)(4). Disclosure of such information could cause competitive harm to the affected Market Participants, and could adversely affect competition in the markets administered by the NYISO. For this reason, the NYISO requests that the contents of Attachment II receive Privileged and Confidential treatment and be exempt from FOIA disclosure. Attachment II is identified and marked in accordance with the Commission's regulations and rules published by the Secretary's Office for submitting Privileged information.

³ 18 C.F.R. §§ 388.107 and 388.112 (2015).

⁴ The information provided by the NYISO for which the NYISO claims an exemption from FOIA disclosure is labeled "Contains Privileged Information - Do Not Release."

III. Correspondence

Copies of correspondence concerning this filing should be addressed to:

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IV. Conclusion

WHEREFORE, the New York Independent System Operator, Inc. respectfully requests that the Commission accept this informational filing and treat the contents of Attachment II as Privileged and Confidential and exempt from FOIA disclosure.

Respectfully submitted,

/s/ Gregory J. Campbell

Attorney

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⁵ The NYISO respectfully requests waiver of 18 C.F.R. § 385.203(b)(3) (2011) to permit service on counsel for the NYISO in both Washington, D.C. and Richmond, VA.

Kimberley D. Bose, Secretary
January 13, 2017
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cc: Michael Bardee
Nicole Buell
Anna Cochrane
Kurt Longo
Max Minzner
Daniel Nowak
Larry Parkinson
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Douglas Roe
Kathleen Schnorf
Jamie Simler
Gary Will

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 13th day of January 2017.

/s/ Joy A. Zimmerlin

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Attachment I

NYISO 2016 Annual Report on Demand Response Programs

I. Program Descriptions

The New York Independent System Operator, Inc. (“NYISO”) administers four demand response programs for the dual purposes of enhancing system reliability and reducing overall production costs. The Emergency Demand Response Program (“EDRP”)¹ and the Installed Capacity - Special Case Resource (“ICAP/SCR”) program support the reliability of the NYISO system. Both programs are designed to reduce power consumption by directing demand response resources to reduce load or to use qualified Local Generators to remove load from the system during grid emergencies or when reserve shortages are anticipated or actually occur. All New York Control Area (“NYCA”) Loads are eligible to take part in these programs. Aggregators enroll Demand Side Resources and coordinate with the NYISO to notify resources when the NYISO deploys demand response.

The NYISO also offers two economic demand response programs: the Day-Ahead Demand Response Program (“DADRP”) in the Energy market, and the Demand-Side Ancillary Services Program (“DSASP”) in the Ancillary Services market. The DADRP allows NYCA Loads to offer their load reductions into the Day-Ahead Market (“DAM”) to supply Energy. This program allows flexible loads to effectively increase the amount of supply in the market and moderate Energy prices. The DSASP provides program participants with an opportunity to offer their load curtailment capability into the DAM and/or Real-Time Market (“RTM”) to provide Operating Reserves and Regulation Service. Each of these four programs is described in greater detail below.

Emergency Demand Response Program

The EDRP offers Demand Side Resources an opportunity to earn the greater of \$500/MWh or the prevailing Locational-Based Marginal Price (“LBMP”) for curtailing energy consumption when called upon to reduce Load by the NYISO. EDRP resources are enrolled by Curtailment Service Providers (“CSPs”), which serve as the interface between the NYISO and resource.² Load curtailment by EDRP resources during NYISO-called events is voluntary.

¹ Capitalized terms not defined herein have the meaning ascribed to them in the NYISO’s Market Administration and Control Area Services Tariff (“Services Tariff”).

² An individual EDRP resource may, if it meets the applicable registration requirements, act as its own CSP.

Installed Capacity - Special Case Resource Program

Special Case Resources (“SCRs”) are a type of Demand Side Resource that may offer Unforced Capacity (“UCAP”) into the NYISO’s ICAP market as ICAP Suppliers. SCRs are enrolled by Responsible Interface Parties (“RIPs”) which may aggregate multiple SCRs and which serve as the interface between the NYISO and the resources.³ Resources may be enrolled in either the EDRP or the ICAP/SCR program, but not both. SCRs that have sold ICAP are obligated to reduce their system load when called upon by the NYISO with two or more hours notice, when the NYISO provided Day-Ahead notice of a potential activation.

In addition to receiving a capacity payment for the SCRs they enroll, RIPs are eligible to receive Energy payments during an event or test, based on hourly market prices, plus a Bid Production Cost Guarantee (“BPCG”) payment to make up for any difference between the market price received and their block offer price across the day. Energy payments are calculated using the same performance calculation used by the NYISO to pay for the performance of EDRP resources.

Enrolled SCRs must verify their capability to achieve the amount of enrolled load reduction in each Capability Period through actual performance in an event or test. Failure of an SCR to reduce load during an event or test may result in penalties being assessed to the applicable RIP in accordance with the NYISO’s Services Tariff and the ICAP/SCR program rules and procedures.

Targeted Demand Response Program

The Targeted Demand Response Program (“TDRP”), introduced in July 2007, is a third NYISO reliability-based demand response program that deploys existing wholesale market EDRP resources and SCRs on a voluntary basis in targeted sub-load pockets to solve local reliability problems at the request of a Transmission Owner. The TDRP program is currently available only in Load Zone J (New York City). RIPs are eligible to receive Energy payments during an event or test based on hourly market prices plus a BPCG. Energy payments are calculated using the same performance calculation used by the NYISO to pay for the performance of EDRP resources.

Day-Ahead Demand Response Program

The DADRP allows Demand Side Resources to offer load curtailment into the DAM as an Energy supply resource. Resources participating in the DADRP submit offers by 5:00 a.m. specifying the hours and amount of load curtailment for the following day, and the price at which they are willing to curtail. The current offer floor price is \$75/MWh.

³ An individual SCR may, if it meets the applicable registration requirements, act as its own RIP.

DADRP offers are structured like those of generation resources: they specify minimum and maximum run times and the hours in which they are available. Demand Side Resources with Load reductions scheduled in the DAM are obligated to curtail the next day. DADRP resources are also eligible for BPCG payments. Failure of a DADRP resource to curtail its Load may result in penalties being assessed to the applicable resource in accordance with the NYISO's Services Tariff and the DADRP program rules and procedures.

Demand-Side Ancillary Services Program

The DSASP provides Demand Side Resources (that meet telemetry and other qualification requirements) an opportunity to offer their load curtailment capability into the DAM and/or RTM to provide Operating Reserves and Regulation Service. Resources must qualify through standard resource testing requirements in order to provide these services. Offers are submitted through the same process as generation resources: resources participating in the DAM submit offers by 5:00 a.m. specifying the Ancillary Service they are offering (Operating Reserves, and/or Regulation Service) along with the hours and amount of load curtailment for the following day, and the price at which they are willing to curtail. DSASP resources may also submit RTM offers up to 75 minutes before the hour of the offer.

The dispatch of the DSASP resources' Operating Reserves to Energy is determined in the RTM by the Real-Time Dispatch ("RTD") software. When RTD instructs a DSASP resource to provide Energy, the DSASP resource must decrease the Load being served by the NYISO. The dispatch of Regulation Service into Energy is issued in the RTM via an Automatic Generation Control ("AGC") signal. Depending on system needs, the AGC may instruct DSASP resources to either increase or decrease the NYISO-scheduled Energy they are consuming.

DSASP resources that are converted to Energy in real-time are not paid for that Energy. Instead, DSASP resources are eligible to receive a Day-Ahead Margin Assurance Payment ("DAMAP") to make up for any balancing differences between their Day-Ahead Operating Reserves or Regulation Service schedule and their real-time dispatch. Eligibility to receive DAMAP is subject to performance requirements. Performance indices are calculated on an interval basis for both Operating Reserves and Regulation Service. DAMAPs are adjusted by the performance index for the services provided.

II. 2016 Program Summary

EDRP and ICAP/SCR Program

As of July 31, 2016, a total of 28 CSPs and RIPs had eligible resources enrolled in the NYISO's EDRP and ICAP/SCR program.⁴ Participating CSPs and RIPs include:

- 4 Transmission Owners ("TOs");
- 6 Competitive Load Serving Entities ("LSEs") that are not TOs;
- 14 Aggregators that are not LSE or TO; and
- 4 EDRP or ICAP/SCR direct participation resources that both provide the service and perform the function of the CSP/RIP

These figures represent a decrease of a two CSPs/RIPs from 2015, both LSEs. There was no change in the number of TOs, aggregators, or direct customers from 2015.

As of July 31, 2016, a total of 3,593 end-use locations were enrolled in the NYISO's EDRP and ICAP/SCR programs. These locations were capable of providing a total of 1,266.7 MW of demand response. This corresponded to a 4.4% decrease in the enrolled MW versus 2015, and represents 3.9% of the 2016 Summer Capability Period peak demand of 32,046 MW. Of the 3,593 end-use locations, 112 participated in the EDRP program, five were ICAP/SCR resources with unsold capacity,⁵ and the remaining 3,476 end-use locations participated in the NYISO's ICAP/SCR program. The ICAP/SCR program represents 96.9% of the total resources enrolled in the NYISO's reliability-based demand response programs and 94.1% of the total MW enrolled in those programs.

Aggregators, competitive LSEs, and direct customers currently represent 82.3% of enrolled MW in EDRP and ICAP/SCR, down from 82.7% of enrolled MW in 2015. The remaining 17.7% of MW are enrolled by TOs. In 2016, three non-TO market participants enrolled resources in the EDRP (out of seven total EDRP participants), all other EDRP resources were enrolled through their TO. In the ICAP/SCR program, two participants enrolled through their TO, while all other

⁴ For several years, the date customarily used for reporting the NYISO's demand response program participation statistics was August 31. In 2011, the NYISO changed its reporting date from August 31 to July 31 to better align with several other reliability and planning reporting requirements. A July 31 reporting date also provides better transparency with other reporting requirements for the NYISO's demand response programs. The NYISO has evaluated the difference in enrollment between July and August and found it to be *de minimis* (2-3%). The data provided herein is based on a snapshot of the programs on July 31, 2016.

⁵ ICAP/SCR Resources with unsold capacity are those resources that did not sell their full available capacity.

ICAP/SCR resources were enrolled through other sources. Direct customers represented 3.6% of total MW in the ICAP/SCR program.

The TDRP, which deploys EDRP and ICAP/SCR resources in the various sub-load pockets in Zone J for local reliability, includes 32.1% of the total New York Control Area (“NYCA”) EDRP end-use locations and 18.2% of total NYCA EDRP MW. The TDRP also includes 49.4% of total NYCA ICAP/SCR end-use locations, representing 31.2% of the total NYCA ICAP/SCR MW.

Since 2003, when participation in EDRP and ICAP/SCR became mutually exclusive, EDRP end-use locations and enrolled MWs have declined, though EDRP enrolled MW increased by 0.1 MW from 2015 to 2016. ICAP/SCR aggregations by RIPS now account for 98.4 % of ICAP/SCR resources and 81.4% of enrolled MW in the program.

During the 2016 Summer Capability Period, the NYISO deployed its EDRP and ICAP/SCR reliability demand response programs on one occasion. Transmission Owners requested deployment of TDRP six times during this period.

Day-Ahead Demand Response Program

DADRP enrollment has been static for several years and enrolled resources have not submitted demand reduction offers for more than four years. DADRP enrollment remained unchanged since the January 2016 Report.

Demand-Side Ancillary Service Program

There are three Demand Side Resources actively participating in the DSASP as providers of Operating Reserves. The resources represent 106.5 MW of capability and had an average performance of 97.1% during the analysis period of May 2016 through October 2016.

Additional detailed information on participation in the DSASP is found in confidential Attachment II.

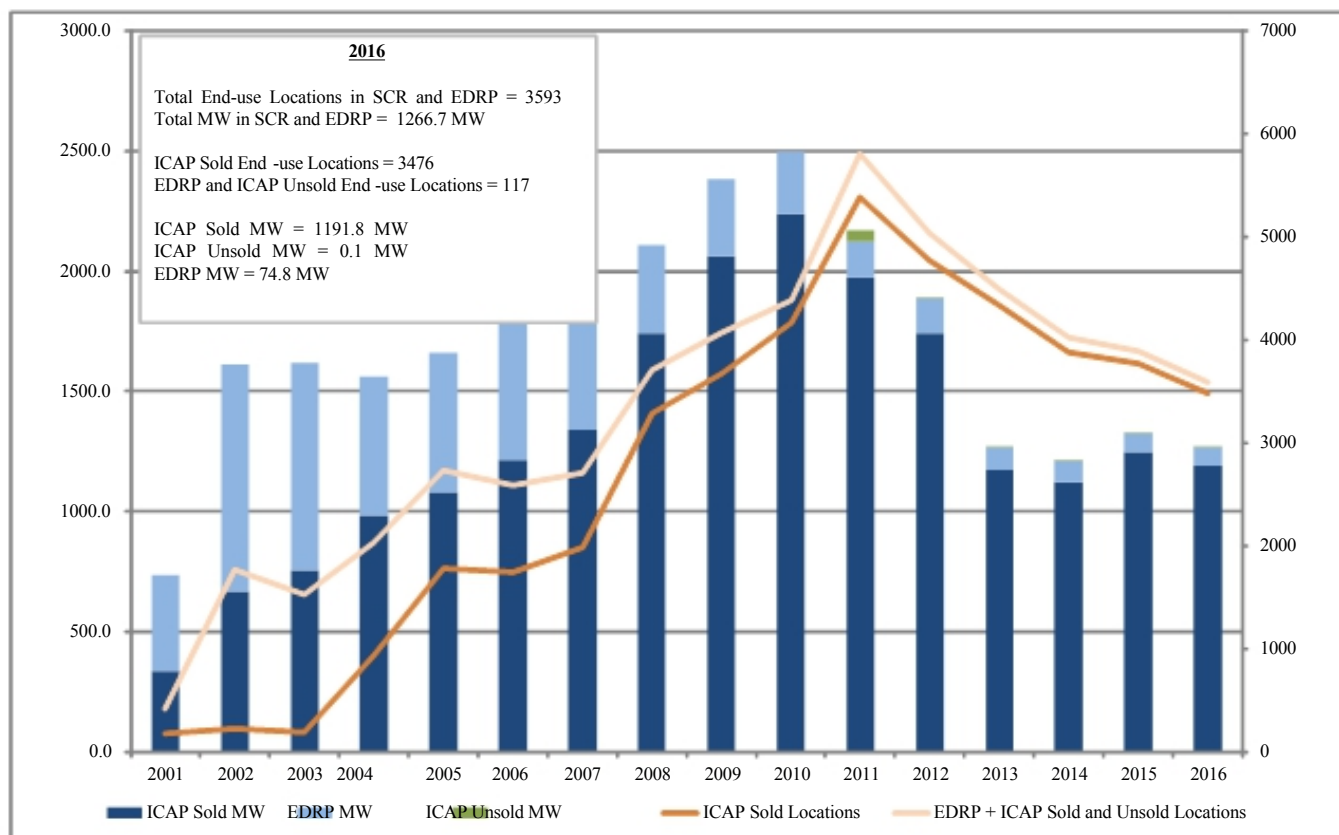
III. Reliability Program Participation Detail

Historical Enrollment Data

Historical enrollment data for the NYISO’s reliability demand response programs is presented in Figure 1. The figure plots the enrollment in the NYISO’s reliability-based programs from inception through July 2016. The stacked bar charts plot enrolled MW by program and year, and the lines plot the number of end-use locations by program and year.

From May 2001 through July 2016, combined enrollment in EDRP and ICAP/SCR has grown from approximately 200 MW to 1266.7 MW. The total number of end-use locations has increased from approximately 200 in March 2001 to 3,593 in July 2016. Since participation in EDRP and ICAP/SCR program became mutually exclusive in 2003, the number of participating EDRP resources, and the MW they contribute, has decreased.

**Figure 1: Historical Enrollment of
End-use Locations and MW in NYISO Reliability Programs**



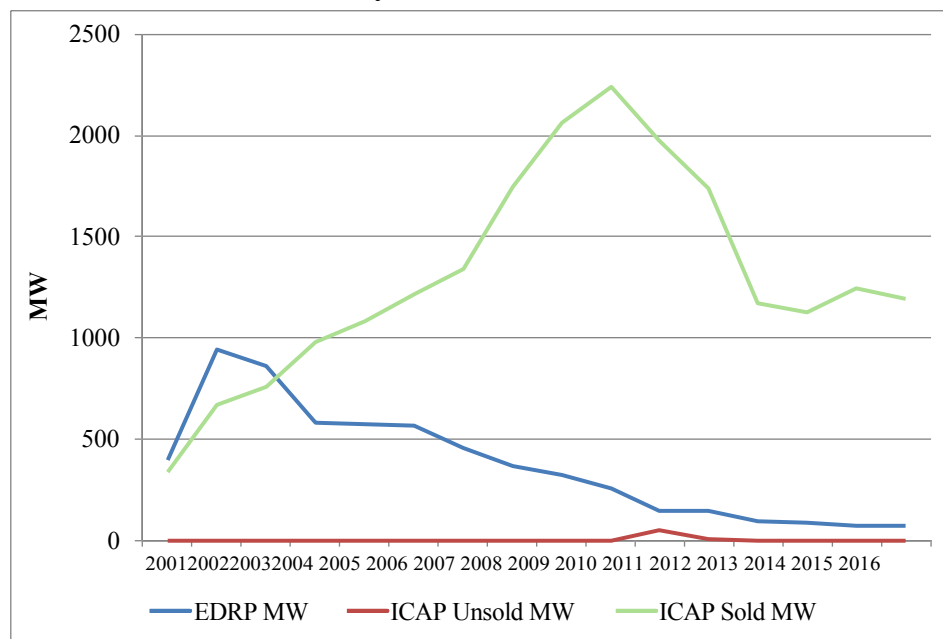
Changes in Program Enrollment - 2015-2016

Enrollment data for the NYISO's reliability-based demand response programs in 2015 and 2016 is provided in Table 1. The number of ICAP/SCR end-use locations and the enrolled MW have declined in the ICAP/SCR program since the 2015 report. The number of EDRP end-use locations also declined, but enrolled MW increased by .1 MW.

Table 1: Program Enrollment by End-use Location - 2015-2016

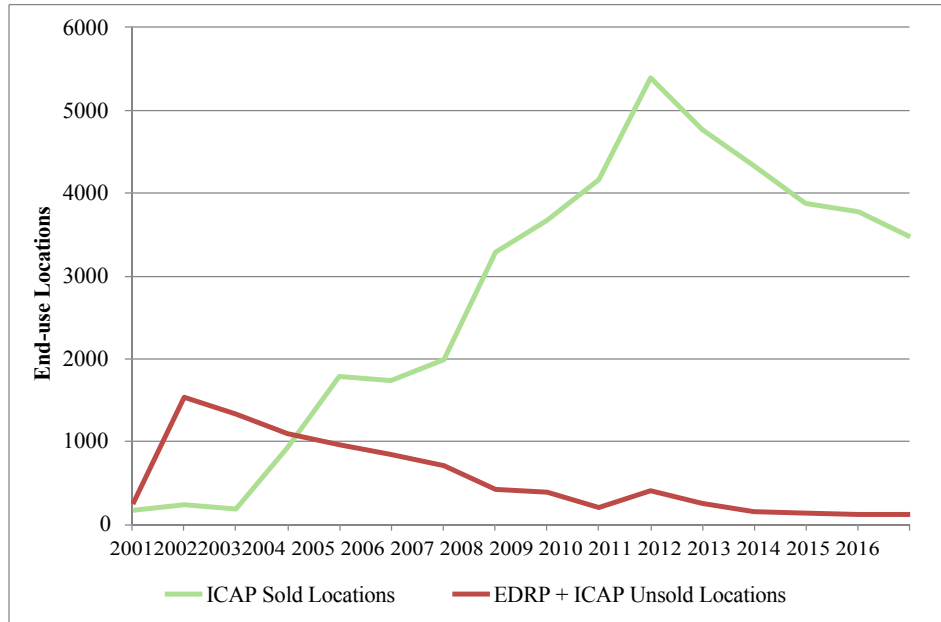
	2016		2015		MW Change	Percent Change From 2015 to 2016		MW per End-use Location		
	Count	MW	Count	MW		End-Use Location Count	Enrolled MW	2016	2015	Percent Change
EDRP	112	74.8	116	74.7	0.1	-3%	0%	0.7	0.64	3.8%
ICAP Unsold	5	0.1	11	2.3	-2.2	-55%	-96%	0.02	0.21	-90.5%
ICAP Sold	3476	1191.8	3769	1248.3	-56.5	-8%	-5%	0.3	0.33	3.5%

Figures 2 and 3 present enrollment statistics in the EDRP and ICAP/SCR program from 2001 - 2016. Figure 2 presents the data by MW enrolled, while Figure 3 presents the data by number of end-use locations.⁶ The reductions in enrolled MW and in end-use locations in recent years are due, in part, to changes in market rules designed to better estimate the demand response capability available to the NYISO under peak conditions. Since making the EDRP and ICAP/SCR program mutually exclusive, there has been a general decline in the number of enrolled MW and resources in the EDRP.

Figure 2: Enrollment in the NYISO's EDRP and ICAP/SCR Program by MW, 2001-2016

⁶ ICAP/SCR program enrollment of individual end-use locations began in 2004. In 2001 and 2002 end-use locations could enroll in both the EDRP and ICAP/SCR program, but beginning in 2003, resources were prohibited from simultaneously enrolling in both programs.

Figure 3: Enrollment in the NYISO's EDRP and ICAP/SCR Program by End-use Location, 2001-2016



2015-2016 EDRP and ICAP/SCR Program Enrollments

At the end of July 2016, 3,593 end-use locations, with a total of 1,266.7 MW of demand response capability, were enrolled in NYISO's EDRP and ICAP/SCR program. This represents a 4.4% decrease from the total enrolled demand response capability in 2015. Of the 3,593 end-use locations, 112 were enrolled in the EDRP and 3,476 were enrolled in the ICAP/SCR program. ICAP/SCR resources represent 96.9% of the total reliability program end-use locations and 94.1% of the total reliability program MW. Table 2, below, provides summary data for the EDRP and ICAP/SCR program.

Table 2: 2016 Program Enrollment Summary by CSP and RIP Type

No. of Unique MPs	Agent Type	EDRP			ICAP Unsold			ICAP Sold		
		No. of CSPs	No. of End-use Locations	MW	No. of RIPs	No. of End-use Locations	MW	No. of RIPs	No. of End-use Locations	MW
14	Aggregator	*	8	0.1	*	*	0.10	13	3331	916.9
4	Direct Customer	0	0	0.0	0	0	0.00	*	8	43.1
6	Competitive Load Serving Entity	*	*	4.6	0	0	0.00	6	111	78.0
4	Transmission Owner/LSE	*	101	70.1	0	0	0.00	*	26	153.9
28	Total	7	112	74.8	*	*	0.10	25	3476	1191.8

*Entries in this category have been masked for confidentiality in the public version of this table. The unredacted values are presented in the confidential appendix submitted as Attachment II.

2016 EDRP enrollments were predominantly through TOs, contrasted with the ICAP/SCR program where non-TOs provided 99.3% of participating end-use locations and 87.1% of the enrolled MW.

Table 3 provides additional program enrollment details by Load Zone. Although the NYISO does not collect specific resource class data, demand response resources in Load Zones A through E are typically industrial and retail resources, while those in Load Zones J and K include commercial office, retail, and multi-family residential resources.

Table 3: 2016 Program Enrollment by Load Zone

Zone	EDRP		ICAP Unsold		ICAP Sold	
	No. of End-use Locations	MW	No. of End-use Locations	MW	No. of End-use Locations	MW
A	12	13.4	0	0.00	311	301.7
B	*	0.6	0	0.00	233	73.9
C	22	11.3	0	0.00	258	116.6
D	7	3.4	0	0.00	22	62.4
E	12	5.9	0	0.00	123	37.5
F	18	25.0	0	0.00	182	91.3
G	0	0.0	0	0.00	149	53.9
H	*	1.6	0	0.00	31	7.4
I	*	0.0	0	0.00	110	25.0
J	36	13.6	*	0.10	1716	372.0
K	0	0.0	0	0.00	341	50.3
Total	112	74.8	*	0.10	3476	1191.8

*Entries in this category have been masked for confidentiality in the public version of this table. The unredacted values are presented in the confidential appendix submitted as Attachment II.

ICAP/SCR Resource Aggregations

ICAP/SCR resource enrollments are identified by the NYISO by end-use location, and may represent either individually enrolled end-use locations or aggregations of end-use locations that are enrolled as a single demand response resource. Table 4 contains data on ICAP/SCR program participation. As of July 31, 2016, 3,423 end-use locations were enrolled in aggregations. These aggregations provided 970.4 MW of the 1,191.8 MW enrolled in the ICAP/SCR program. The remaining 221.4 MW of demand response capacity in the ICAP/SCR program came from 53 individually enrolled resources.

Table 4: Detail of 2016 ICAP/SCR Program Participation Level by Resource Type

Resource Type	ICAP Sold		ICAP Unsold	
	No. of End-use Locations	MW	No. of End-use Locations	MW
Individual Resources	53	221.4	*	0.10
Aggregated Resources	3423	970.4	*	0.00
Total	3476	1191.8	*	0.10

*Entries in this category have been masked for confidentiality in the public version of this table. The unredacted values are presented in the confidential appendix submitted as Attachment II.

Table 4 also provides information for ICAP/SCR resources that did not sell any capacity in the July 2016 capacity market auctions. This information is included because when an ICAP/SCR resource offers its load reduction in a NYISO auction and that load reduction is not sold (or when a resource's derated MW value is zero), the resource's enrolled capacity is automatically included in the EDRP.⁷

TDRP Enrollment

Load Zone J is currently the only Load Zone with resources participating in the TDRP. This Load Zone has been divided into sub-load pockets designated by Consolidated Edison Company of New York, Inc. ("Con Edison"). Resources enrolled in the EDRP and ICAP/SCR program are assigned to one of the various sub-load pockets based on their location.⁸ Resources that are not

⁷ The resource will remain in the EDRP until it clears in a subsequent auction, or the resource confirms a bilateral transaction with an LSE. The EDRP enrollment totals and event response data included in this report include the offered, but unsold, MW of enrolled ICAP/SCR resources.

⁸ The Load Zone J sub-load pockets are: J1 - Sherman Creek/Parkchester/E 179th; J2 - Astoria West/Queensbridge; J3 - Vernon/Greenwood; J4 - Staten Island; J5 - Astoria East/Corona/Jamaica; J6 - W 49th; J7 - East 13th/East River; J8 - Farragut/Rainey; and J9 - Shared sub-load pocket.

assigned to a particular sub-load pocket remain in the general Zone J category. Tables 5 and 6 provide EDRP and ICAP/SCR end-use locations and MW enrolled in the TDRP by sub-load pocket.

Table 5: EDRP End-use Locations Enrolled in TDRP

Zone/sub-load pocket	J	J1	J2	J3	J4	J5	J6	J7	J8	J9	Total
MW	0.0	0.4	0.2	0.3	0.2	0.2	0.1	0.0	0.3	12.0	13.6
No. of End-use Locations	0	6	*	7	*	7	*	*	*	*	36

*Entries in this category have been masked for confidentiality in the public version of this table. The unredacted values are presented in the confidential appendix submitted as Attachment II.

Table 6: ICAP/SCR End-use Locations Enrolled in TDRP

Zone/sub-load pocket	J	J1	J2	J3	J4	J5	J6	J7	J8	J9	Total
MW	1.3	24.9	32.1	47.7	30.7	30.0	67.3	57.6	80.5	0.0	372.1
No. of End-use Locations	17	137	140	316	80	185	224	253	369	0	1721

Analysis of ICAP/SCR Strike Prices

Starting in 2003, resources participating in the ICAP/SCR program were required to provide a curtailment strike price - between \$0 and \$500/MWh - to the NYISO at the time of enrollment. Strike Prices are used by the NYISO in the calculation of Energy payments.

The NYISO has analyzed strike price curves for all resources enrolled as of July 2016 and compared the most recent strike price curves to prior years. Figures 4 and 5 below map the percentage of enrolled ICAP/SCR MW at a given strike price. Figure 4 illustrates the strike price curves for the period 2003 to 2016, the entire period in which resources were required to provide strike prices. The steep slope of the strike price curves indicate that strike prices are clustered close to the offer ceiling of \$500/MWh. The data indicates that, as the program has evolved since 2003, the number of resources providing strike prices at or near \$500/MWh has increased, with greater than 97% of enrolled ICAP/SCR MW submitting a strike price at the \$500/MWh limit.

Figure 4: ICAP/SCR Curtailment Strike Price Bid Curves, 2003-2016

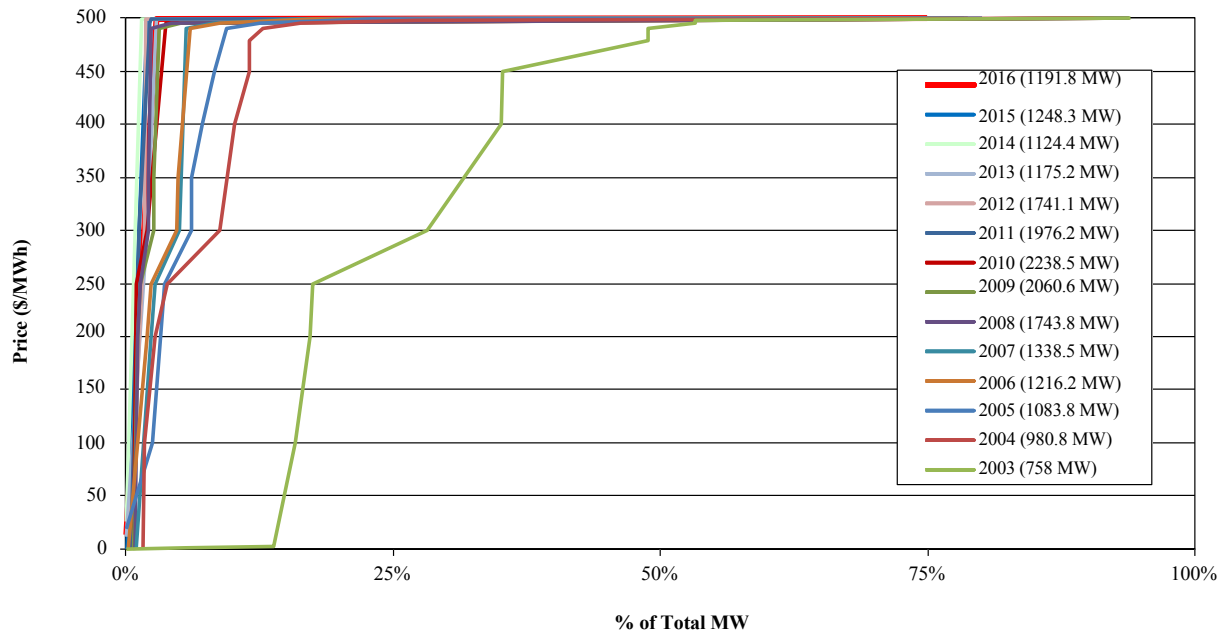
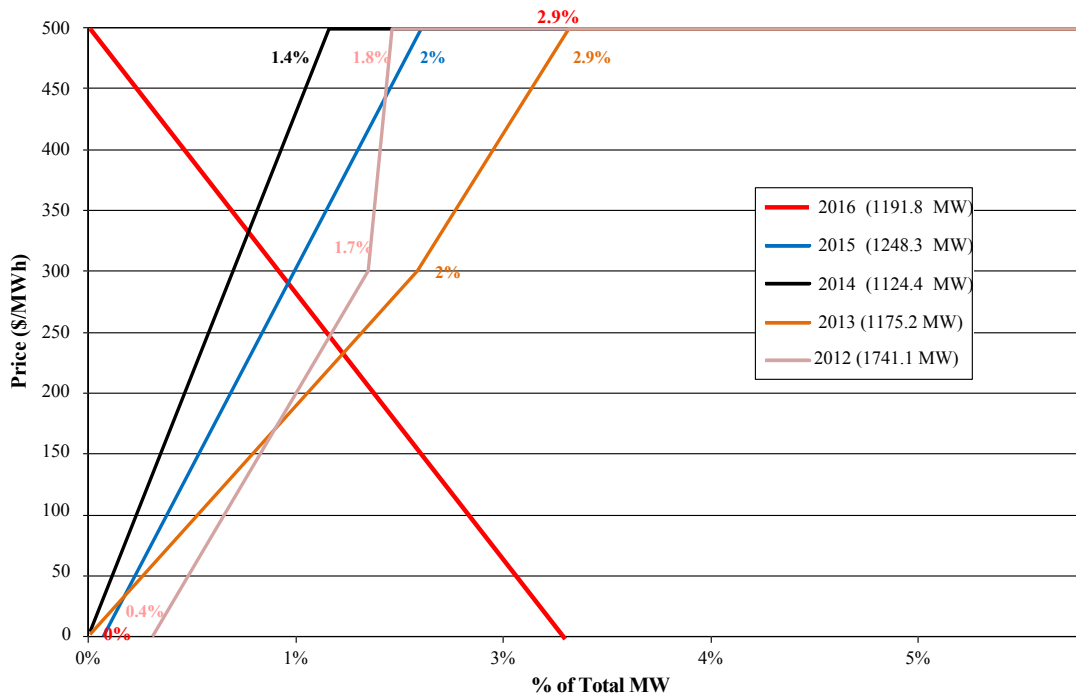


Figure 5 provides a detailed view of the strike price curves for 2012 through 2016, and shows the percentage of offers made below the \$500/MWh ceiling.

Figure 5: ICAP/SCR Curtailment Strike Price Bid Curves, 2012-2016



IV. 2016 Event and Test Performance: EDRP and ICAP/SCR Program

During the Summer 2016 Capability Period, the NYISO deployed its EDRP and ICAP/SCR programs one time. The TDRP was activated six times in response to Transmission Owner requests. The NYISO also conducts two SCR performance tests in each Capability Period.

Table 7 below lists the performance tests and events during the Winter 2015-2016 and Summer 2016 Capability Periods. Details regarding performance during these activations are described in subsequent sections.

Table 7: ICAP/SCR SCR Performance Tests and Events

Capability Period	Deployment Type	Program	Event/Test Start Time	Event/Test End Time	Zones/sub-load pockets
Winter 2015-2016	First Performance Test	SCR	3/2/2016 16:00	3/2/2016 17:00	A, B
Winter 2015-2016	First Performance Test	SCR	3/2/2016 17:00	3/2/2016 18:00	C, D, E, F, G, H, I
Winter 2015-2016	First Performance Test	SCR	3/2/2016 18:00	3/2/2016 19:00	J, K
Winter 2015-2016	Second Performance Test	SCR	4/14/2016 18:00	4/14/2016 19:00	D, J
Summer 2016	TDRP Event	SCR/EDRP	7/25/2016 13:00	7/25/2016 19:00	J1, J2, J3, J4, J5, J6, J7, J8, J9
Summer 2016	NYISO Event	SCR/EDRP	8/12/2016 13:00	8/12/2016 18:00	A, B, C, D, E, F, G, H, I, J, K
Summer 2016	TDRP Event	SCR/EDRP	8/13/2016 14:00	8/13/2016 20:00	J4
Summer 2016	TDRP Event	SCR/EDRP	8/13/2016 15:00	8/13/2016 22:00	J8
Summer 2016	TDRP Event	SCR/EDRP	8/13/2016 16:00	8/13/2016 20:00	J3
Summer 2016	TDRP Event	SCR/EDRP	8/14/2016 14:00	8/14/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9
Summer 2016	TDRP Event	SCR/EDRP	8/15/2016 14:00	8/15/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9
Summer 2016	First Performance Test	SCR	8/25/2016 13:00	8/25/2016 14:00	F, G, H, I, K
Summer 2016	First Performance Test	SCR	8/25/2016 14:00	8/25/2016 15:00	J
Summer 2016	First Performance Test	SCR	8/25/2016 15:00	8/25/2016 16:00	B, C, D, E
Summer 2016	First Performance Test	SCR	8/25/2016 16:00	8/25/2016 17:00	A
Summer 2016	Second Performance Test	SCR	10/6/2016 13:00	10/6/2016 14:00	F, J

a) Test Performance

Each resource participating in the ICAP/SCR program is required to demonstrate its ability to meet its obligated MW once in each Capability Period. The NYISO therefore schedules a one-hour performance test in which all SCRs are called to demonstrate their ability (the “First Performance Test”). RIPs have the option to use a SCR’s performance in a mandatory event as a proxy for its test value in certain circumstances; otherwise, participation in the First Performance Test is mandatory. The NYISO also schedules a Second Performance Test for resources that change certain operational characteristics within a Capability Period (*e.g.*, a Change of Load).

Measurement of performance test response is based on the ICAP/SCR reporting rules contained in the NYISO’s ICAP Manual.

For SCRs that meet their Load reduction obligation solely through curtailment or through a combination of curtailment and the use of a Local Generator, ICAP/SCR response is determined by comparing the actual hourly interval metered load with the Average Coincident Load (“ACL”):

$$\text{ICE_RED_MW}_{\text{gn}} = (\text{ACL}_{\text{gm}} - \text{METER_MW}_{\text{gn}}) * (1 + \text{TLF}_{\text{gm}})$$

Load reduction response for SCRs that meet their Load reduction obligation solely through the use of a Local Generator is determined by the actual hourly interval metered load:

$$\text{ICE_RED_MW}_{\text{gn}} = \text{METER_MW}_{\text{gn}} * (1 + \text{TLF}_{\text{gm}})$$

where:

- $\text{ICE_RED_MW}_{\text{gn}}$ is the Installed Capacity Equivalent of Response MW that Resource g supplies during hour n of an SCR event or test;
- ACL_{gm} is the ACL for Resource g applicable to month m , using data submitted in its Special Case Resource certification;
- $\text{METER_MW}_{\text{gn}}$ is the metered hourly-integrated load for Resource g in hour n of an SCR event or test; and
- TLF_{gm} is the Transmission Loss Factor for Resource g applicable to month m , using data submitted in its Special Case Resource certification

The resource's Installed Capacity Equivalent response is then compared with the resource's Installed Capacity Equivalent of the maximum registered megawatt value to determine the resource's performance.

Tables 8 and 9 provide a summary of ICAP/SCR program performance test response compared to the Obligated MW for the zones deployed during the tests; Table 8 summarizes response on a NYCA-wide basis, and Table 9 summarizes response by Zone. Obligated MW is defined as the Installed Capacity Equivalent of the maximum registered MW value that each SCR is required to demonstrate once in every Capability Period. ICAP Equivalent of Response MW, reported for each Capability Period, includes MW responses for both First and Second Performance Tests if data is available. For resources that are required to demonstrate performance in both the First and Second Performance Tests, the maximum MW response is reported.⁹

Because there was a mandatory event in Summer 2016 RIPs had the option to substitute a SCR's performance during the event as a proxy for its test value. The information reported includes SCR event performance that was used as a proxy for the performance test.

⁹ If Verified ACL data is not available at the time of reporting for a resource enrolled with either a Provisional ACL or an Incremental ACL, the ACL with which the resource enrolled in the SCR program is used for reporting performance data.

**Table 8: Summary of ICAP/SCR Program Performance Test MW Response
Based on ACL Baseline - NYCA Wide**

Program	Capability Period	Zone	ICAP Equivalent of Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
SCR (ICAP)	Winter (2015-2016)	A,B,C,D,E,F,G,H,I,J,K	1101.8	916.6	120.2%
SCR (ICAP)	Summer (2016)	A,B,C,D,E,F,G,H,I,J,K	1590.2	1297.6	122.6%

**Table 9: ICAP/SCR Program Performance Test MW Response
Based on ACL Baseline - By Zone**

Program	Capability Period	Zone	ICAP Equivalent of Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
SCR (ICAP)	Winter (2015-2016)	A	287.7	243.6	118.1%
		B	54.0	46.6	116.0%
		C	108.3	95.8	113.1%
		D	67.8	63.9	106.1%
		E	38.7	31.1	124.7%
		F	78.2	66.2	118.2%
		G	36.0	32.7	109.9%
		H	5.9	5.3	111.9%
		I	18.0	17.6	102.5%
		J	364.7	266.7	136.8%
		K	42.3	47.2	89.7%
		Total	1101.8	916.6	120.2%

Program	Capability Period	Zone	ICAP Equivalent of Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
SCR (ICAP)	Summer (2016)	A	335.6	312.7	107.3%
		B	94.5	80.5	117.3%
		C	149.1	125.1	119.2%
		D	74.1	65.0	114.0%
		E	51.6	44.0	117.4%
		F	137.1	109.9	124.7%
		G	65.9	59.9	110.1%
		H	8.2	9.4	86.9%
		I	42.6	33.4	127.4%
		J	570.3	400.0	142.6%
		K	61.2	57.7	106.2%
		Total	1590.2	1297.6	122.6%

In addition to receiving a capacity payment for committing to reduce energy consumption, RIPS with resources enrolled in the ICAP/SCR program are eligible to receive Energy payments for reductions made by those resources during a performance test or event provided that the RIPS submit the required performance data. The amount of load reduction eligible for an Energy payment is computed using a Customer Baseline Load (“CBL”). Unlike the ACL baseline which uses a SCR’s Load data from a prior like Capability Period, the CBL uses data from the previous 30 days to establish a baseline which is likely to be a more accurate representation of the resource’s Load during a performance test or event but for the resource’s response to the NYISO’s deployment directive. The Energy payment is the difference between the hourly CBL and the corresponding interval meter readings during performance test hours, multiplied by the applicable LBMP.

Table 10 presents a summary of voluntarily reported CBL data by zone and hour for ICAP/SCR resources for the Winter 2015-2016 and Summer 2016 Capability Period performance tests. The information reported in Table 10 only includes the CBL performance during the performance test that is used for Energy payments. Since the ICAP/SCR ACL values described above are based on the prior like Capability Period, and the CBL is determined from data up to 30 days prior to performing the tests, the NYISO expects that the CBL’s use of different data will result in different resource response rates. Contributing to the difference between the ICAP/SCR ACL response and the CBL response is the fact that not all RIPS submit CBL energy performance data. The NYISO has observed that some RIPS report CBL data only for their larger resources, and they are more likely to report CBL data for resources in Load Zone J, where energy prices are typically higher than in the rest of the NYCA.

**Table 10: ICAP/SCR Program Performance Test MW Response
Based on CBL Baseline**

Program	Capability Period	Zone	ICAP Equivalent of Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
SCR (ICAP)	Winter (2015-2016)	A	250.3	236.3	105.9%
		B	46.9	43.4	108.0%
		C	93.4	89.5	104.4%
		D	58.1	63.9	90.9%
		E	38.1	31.0	123.0%
		F	61.2	64.3	95.2%
		G	31.6	31.9	99.0%
		H	5.2	5.0	102.5%
		I	12.2	14.3	84.8%
		J	192.3	210.9	91.2%
		K	23.2	33.2	69.7%
		Total	812.5	823.8	98.6%

Program	Capability Period	Zone	ICAP Equivalent of Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
SCR (ICAP)	Summer (2016)	A	26.8	24.7	108.4%
		B	19.2	21.6	88.8%
		C	19.8	15.4	128.5%
		D	0.2	0.2	82.1%
		E	10.3	13.6	75.4%
		F	46.9	36.0	130.5%
		G	31.4	31.5	99.5%
		H	1.8	2.2	82.5%
		I	6.8	7.6	89.2%
		J	99.2	127.8	77.6%
		K	14.7	15.9	92.0%
		Total	277.0	296.6	93.4%

b) Event Performance

On August 12, 2016, the NYISO activated SCRs and EDRP resources for state-wide capacity needs and to maintain operating reserve margins. SCR response was mandatory for this event. The NYISO's scarcity pricing logic was activated for a total of 18 five minute intervals during the 5 hour event.

In 2016 the NYISO activated TDRP six times in response to Transmission Owner requests:

- On July 25, 2016 SCR and EDRP resources were deployed in sub-load pockets J1-J9 from 1 pm to 7 pm
- On August 13, 2016 SCR and EDRP resources were deployed in sub-load pockets:
 - J4 from 2 pm to 8 pm
 - J8 from 3 pm to 10 pm
 - J3 from 4 pm to 8 pm
- On August 14, 2016 SCR and EDRP resources were deployed in sub-load pockets J1-J9 from 2 pm to 10 pm
- On August 15, 2016 SCR and EDRP resources were deployed in sub-load pockets J1-J9 from 2 pm to 10 pm

Response from SCRs and EDRP resources to these events was voluntary. Scarcity pricing is not applicable for TDRP.

Table 11 summarizes SCR and EDRP response based on ACL and CBL, respectively, for all 2016 Summer Capability Period events. Obligated MW is defined as the Installed Capacity Equivalent of the UCAP sold by SCRs in a Load Zone during the calendar month in which the event occurred. When the amount of Obligated MW differs from enrolled MW, it indicates that a portion of a Load Zone's enrolled SCR UCAP went unsold for the month of the event. As explained in Section III, SCRs enrolled during a particular month in a Capability Period that did not sell UCAP are treated as EDRP resources for that particular month. Available EDRP MW is defined as the amount of demand response reduction nominated by the EDRP resources in a Load Zone.

Table 12 presents a summary of reported CBL data by zone and hour for ICAP/SCR resources during the Summer 2016 Capability Period. Since the ICAP/SCR ACL values described above are based on the prior like Capability Period, and the CBL is determined from data that ranges up to 30 days prior to the event, the NYISO expects different resource response rates. Contributing to the difference between the ICAP/SCR ACL response and the CBL response is the fact that not all RIPS submit CBL energy performance data. The NYISO has observed that some RIPS report CBL data only for their larger resources, and they are more likely to report CBL data for resources in Load Zone J, where energy prices are typically higher than in the rest of the NYCA.

Table 11: Summary of 2016 Event Performance using ACL for SCRs and CBL for EDRP resources

Deployment Type	Event Day	Event Start Time	Event End Time	Zone/sub-load pockets	SCR (using ACL as baseline)			EDRP (using CBL as baseline)			Reliability Program-wide		
					ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW	Average Hourly Response MW	Available EDRP MW	% Response of Available EDRP MW	Total Response MW	Obligated ICAP MW and Available EDRP MW	% Response of Obligated ICAP MW and Available EDRP MW
TDRP Event	7/25/2016	7/25/2016 13:00	7/25/2016 19:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	187.5	372.0	50.4%	0.3	13.7	2.0%	187.8	385.7	48.7%
NYISO Event	8/12/2016	8/12/2016 13:00	8/12/2016 18:00	A, B, C, D, E, F, G, H, I, J, K	1216.4	1200.8	101.3%	12.6	75.5	16.7%	1219.3	1276.3	95.5%
TDRP Event	8/13/2016	8/13/2016 14:00	8/13/2016 22:00	J3, J4, J8	J3: 30.1 J4: 8.9 J8: 42.7	159.4	51.2%	J3: 0.1 J4: 0.0 J8: 0.1	0.8	23.9%		160.2	51.1%
TDRP Event	8/14/2016	8/14/2016 14:00	8/14/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	240.0	373.6	64.2%	0.2	13.7	1.6%	240.2	387.3	62.0%
TDRP Event	8/15/2016	8/15/2016 14:00	8/15/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	129.6	373.6	34.7%	0.3	13.7	2.1%	129.9	387.3	33.5%

NOTE: EDRP resource performance is calculated using the CBL baseline only. The data presented in Tables 11 and 12, therefore, contains the same information for EDRP resources.

Table 12: Summary of 2016 Event Performance using CBL for SCRs and EDRP resources

Deployment Type	Event Day	Event Start Time	Event End Time	Zone/sub-load pockets	SCR (using CBL as baseline)				EDRP (using CBL as baseline)				Reliability Program-wide			
					ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated	Total Payment	Average Hourly Response MW	Available EDRP MW	% Response of Available EDRP MW	Total Payment	Total Response MW	Obligated ICAP MW and Available EDRP MW	% Response of Obligated ICAP MW and Available EDRP MW	Total Payment
TDRP Event	7/25/2016	7/25/2016 13:00	7/25/2016 19:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	99.2	239.4	41.5%	\$ 285,998.5	0.3	13.7	2.0%	\$ 887.7	99.2	253.1	39.3%	\$ 286,886.3
NYISO Event	8/12/2016	8/12/2016 13:00	8/12/2016 18:00	A, B, C, D, E, F, G, H, I, J, K	969.4	1174.4	82.5%	\$ 2,355,223.7	12.6	75.5	16.7%	\$ 31,729.9	982.0	1249.3	78.6%	\$ 2,386,953.6
TDRP Event	8/13/2016	8/13/2016 14:00	8/13/2016 22:00	J3, J4, J8	J3: 2.7 J4: 2.6 J8: 2.9	36.4	22.7%	\$ 22,369.9	J3: 0.1 J4: 0.0 J8: 0.1	0.8	23.9%	\$ 560.8		37.2	22.7%	\$ 22,930.6
TDRP Event	8/14/2016	8/14/2016 14:00	8/14/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	27.0	107.2	25.2%	\$ 103,507.4	0.2	13.7	1.6%	\$ 882.2	27.3	120.9	22.5%	\$ 104,389.6
TDRP Event	8/15/2016	8/15/2016 14:00	8/15/2016 22:00	J1, J2, J3, J4, J5, J6, J7, J8, J9	50.2	115.8	43.4%	\$ 193,427.2	0.3	13.7	2.1%	\$ 1,165.6	50.5	129.5	39.0%	\$ 194,592.8

V. Economic Demand Response Programs

Day-Ahead Demand Response Program

There have been no offers submitted by DADRP Resources since December 2010. There is, therefore, nothing to report for this period.

Demand Side Ancillary Services Program

Detailed information on the DSASP is provided in Confidential Attachment II.

VI. Update on 2016 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 (“DRIS”); and
- Enhancing Demand Response in the Real-Time Energy Market by developing a Distributed Energy Resources Roadmap for New York’s Wholesale Electricity Markets

Continued Development of the Demand Response Information System

The NYISO successfully deployed several software improvements to DRIS in 2016.

A Q2 2016 deployment enhanced DRIS software to allow incorporation of new rules to support comprehensive scarcity pricing in the NYISO’s markets.¹⁰ This deployment also included an upgrade to the software version used by the DRIS to place automated phone calls for demand response event notifications.

A Q4 2016 deployment incorporated certain aspects of the NYISO’s Behind-the-Meter Net Generation initiative that was accepted by FERC on May 17, 2016. The DRIS improvements will assist NYISO’s efforts to accurately calculate Host Load baselines for Behind-the-Meter Net Generation Resources.¹¹

¹⁰ See 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).

¹¹ 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).

Demand Response in the Real-Time Energy Market via the NYISO's Distributed Energy Resources Roadmap for New York's Wholesale Electricity Markets

The NYISO initiated a project in 2016 to develop a roadmap to integrate Distributed Energy Resources (DER), including demand response, into its real-time Energy markets. The primary outcome of this initiative will be the integration of dispatchable DER.¹² The NYISO has developed a draft DER Roadmap describing NYISO's vision for integrating these resources into the wholesale markets and made the draft Roadmap available to stakeholders in August 2016.¹³ The NYISO conducted a workshop with its stakeholders on September 22, 2016 to discuss the draft DER Roadmap and obtain feedback. The NYISO solicited additional feedback from its stakeholders through its shared governance process and has further refined the DER concepts it is developing. The NYISO expects to issue a final DER Roadmap in Q1 of 2017.

VII. 2017 Demand Response Initiatives

This section provides an overview of the projects that the NYISO has planned for its demand response programs for 2017.

Demand Response in the Real-Time Energy Market via the Distributed Energy Resources Roadmap 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 2017. The NYISO intends to work with its stakeholders to develop a detailed market design and market rules.

¹² The NYISO's initiative to integrate distributed energy resources will also include concepts for participation in the NYISO's capacity and ancillary services markets.

¹³ New York Indep. Sys. Operator, Inc., *Draft Distributed Resources Roadmap for New York's Wholesale Electricity Markets* (Aug. 2017), http://www.nyiso.com/public/webdocs/markets_operations/market_data/demand_response/Distributed_Energy_Resources/DRAFT%20Distributed%20Energy%20Resources%20Roadmap%20-NYISO%208-17.pdf.

Appendix A: Detailed Event Response for Summer 2016 Demand Response Events

This Appendix A includes additional data on event response for the one activation of the NYISO's wholesale SCR Program and EDRP, as well as the six TDRP activations. The following tables are presented for each event:

- Event Summary - average hourly response compared to Obligated or Available MW by program and event energy payments by program.
- SCR MW Response Based on ACL - hourly response detail by zone and average hourly response compared to Obligated MW for the zone.
- SCR Energy Response Based on CBL - response detail by zone and average hourly response compared to Obligated MW of SCRs that reported CBL data in the zone.
- SCR Energy Payments - hourly energy payments, daily BPCG payments by zone for SCRs that reported CBL data.
- Energy Response of EDRP Resources and SCRs treated as EDRP - detailed hourly response by zone, average hourly response, and comparison of average hourly response to enrolled (also referred to as Available) MW.
- Energy Payments to EDRP Resources and SCRs treated as EDRP - hourly and total event energy payments by zone.

Part 1 - NYISO SCR and EDRP Activation

August 12, 2016: SCR Response was Mandatory for all deployed zones; EDRP Response also requested

Table A-1: Event Summary - August 12, 2016

	Zones	ICAP Equivalent of Average Hourly Response MW or Average Hourly Response MW	Obligated ICAP MW or Available EDRP MW	% Response of Obligated ICAP MW or Available EDRP MW	Total Payment
SCR (ICAP)	A B C D E F G H I J K	1216.4	1200.8	101.3%	\$ 2,355,223.7
EDRP and SCRs treated as EDRP A	B C D E F G H I J K	12.6	75.5	16.7%	\$ 31,729.9
Total		1229.0	1276.3	96.3%	\$ 2,386,953.6

Table A-2: SCR MW Response Based on ACL - August 12, 2016

Zone	HB 13	HB 14	HB 15	HB 16	HB 17	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
A	290.3	303.7	314.4	318.9	320.0	309.4	301.0	102.8%
B	67.0	72.1	77.2	80.8	82.7	76.0	75.9	100.0%
C	117.3	125.6	130.0	137.2	136.4	129.3	116.7	110.8%
D	72.0	69.8	67.9	28.8	21.3	52.0	64.6	80.4%
E	33.7	39.9	43.3	45.3	47.8	42.0	37.5	111.9%
F	94.7	98.1	98.9	100.1	101.4	98.6	92.1	107.1%
G	44.2	53.0	54.2	56.6	56.9	53.0	55.1	96.1%
H	5.8	6.4	6.5	7.1	6.5	6.5	7.6	84.7%
I	30.4	34.0	35.1	36.4	33.6	33.9	27.1	125.1%
J	275.8	359.0	376.0	401.0	442.2	370.8	373.6	99.3%
K	40.3	44.6	47.3	50.0	42.6	45.0	49.5	90.8%
Total	1071.4	1206.2	1250.8	1262.1	1291.4	1216.4	1200.8	101.3%

Table A-3: SCR MW Response Based on CBL - August 12, 2016

Zone	HB 13	HB 14	HB 15	HB 16	HB 17	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
A	264.7	280.3	278.9	278.7	268.3	274.2	299.5	91.5%
B	55.2	62.2	64.6	58.9	54.0	59.0	69.1	85.4%
C	120.0	126.9	124.9	120.8	107.5	120.0	115.0	104.4%
D	59.3	57.0	54.7	15.2	8.3	38.9	64.1	60.7%
E	33.0	40.1	39.2	38.7	36.3	37.5	37.3	100.5%
F	91.6	96.6	93.0	90.0	85.4	91.3	91.5	99.8%
G	39.7	50.3	49.1	47.5	41.2	45.6	53.8	84.6%
H	5.3	6.1	5.9	6.3	4.7	5.7	7.6	74.3%
I	14.4	18.1	18.7	18.3	12.7	16.4	26.9	61.1%
J	180.7	263.3	273.6	273.4	246.2	247.4	362.1	68.3%
K	32.8	36.7	37.6	36.2	23.8	33.4	47.4	70.5%
Total	896.8	1037.6	1040.3	984.0	888.4	969.4	1174.4	82.5%

Table A-4: SCR Energy Payments - August 12, 2016

Zone	HB 13	HB 14	HB 15	HB 16	HB 17	Sum of LBMP Payments	Sum of BPCG Payments	Total Payments
A	\$24,172.4	\$ 45,830.0	\$ 52,104.7	\$ 15,487.9	\$ 74,264.2	\$ 211,859.2	\$ 453,433.3	\$ 665,292.5
B	\$ 3,542.3	\$ 10,243.0	\$ 12,140.9	\$ 3,288.4	\$ 15,040.2	\$ 44,254.7	\$ 95,602.2	\$ 139,856.9
C	\$ 8,387.2	\$ 21,017.2	\$ 23,527.4	\$ 6,769.2	\$ 29,995.2	\$ 89,696.3	\$ 200,859.6	\$ 290,555.9
D	\$ 3,733.1	\$ 8,805.2	\$ 9,520.2	\$ 773.8	\$ 2,080.9	\$ 24,913.1	\$ 69,509.0	\$ 94,422.1
E	\$ 2,240.4	\$ 6,991.5	\$ 9,451.1	\$ 4,199.2	\$ 10,573.5	\$ 33,455.8	\$ 55,198.1	\$ 88,653.9
F	\$ 6,465.5	\$ 17,282.4	\$ 21,668.2	\$ 8,464.7	\$ 25,641.0	\$ 79,521.9	\$ 139,404.5	\$ 218,926.4
G	\$ 2,888.7	\$ 12,913.0	\$ 34,427.6	\$ 26,275.7	\$ 16,826.3	\$ 93,331.2	\$ 16,773.4	\$ 110,104.6
H	\$ 378.0	\$ 1,609.2	\$ 4,525.8	\$ 3,914.2	\$ 1,952.6	\$ 12,379.8	\$ 1,150.6	\$ 13,530.5
I	\$ 1,033.0	\$ 4,852.1	\$ 14,524.8	\$ 11,543.8	\$ 5,375.1	\$ 37,328.8	\$ 2,834.2	\$ 40,163.0
J	\$12,966.0	\$ 70,207.6	\$213,568.3	\$171,683.9	\$104,020.4	\$ 572,446.2	\$ 36,743.9	\$ 609,190.1
K	\$ 5,837.2	\$ 13,780.7	\$ 28,725.7	\$ 24,405.0	\$ 11,121.7	\$ 83,870.3	\$ 657.5	\$ 84,527.8
Total	\$71,643.9	\$213,531.9	\$424,184.7	\$276,805.6	\$296,891.2	\$1,283,057.4	\$1,072,166.3	\$2,355,223.7

Table A-5: Energy Response of EDRP Resources and SCRs treated as EDRP - August 12, 2016

Zone	HB 13	HB 14	HB 15	HB 16	HB 17	Average Hourly Response MW	Available EDRP MW	% Response of Available MW
A	0.5	0.9	1.5	1.2	1.0	1.0	13.4	7.7%
B	1.5	1.4	1.7	1.8	1.6	1.6	0.6	270.9%
C	1.3	1.0	0.5	0.5	0.6	0.8	11.9	6.6%
D	0.6	0.7	0.1	0.7	0.7	0.6	3.4	16.8%
E	4.0	4.1	4.1	4.1	4.1	4.1	5.9	69.4%
F	4.0	3.9	4.4	4.3	4.3	4.2	25.0	16.6%
G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
H	0.0	0.0	0.0	0.019	0.0	0.0	1.6	0.4%
I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
J	0.4	0.3	0.3	0.4	0.4	0.4	13.7	2.6%
K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	12.3	12.4	12.6	13.1	12.7	12.6	75.5	16.7%

Table A-6: Energy Payments to EDRP Resources and SCRs treated as EDRP - August 12, 2016

Zone	HB 13	HB 14	HB 15	HB 16	HB 17	Sum of LBMP Payments	Average \$/MWh
A	\$ 265.8	\$ 461.5	\$ 741.1	\$ 619.6	\$ 487.1	\$ 2,575.0	\$ 500.0
B	\$ 767.2	\$ 724.6	\$ 846.8	\$ 906.4	\$ 818.9	\$ 4,063.9	\$ 500.0
C	\$ 633.2	\$ 497.8	\$ 269.5	\$ 269.1	\$ 280.4	\$ 1,950.0	\$ 500.0
D	\$ 324.7	\$ 338.2	\$ 64.4	\$ 351.9	\$ 349.0	\$ 1,428.0	\$ 500.0
E	\$ 2,014.1	\$ 2,062.3	\$ 2,042.7	\$ 2,052.8	\$ 2,071.7	\$ 10,243.6	\$ 500.0
F	\$ 1,983.5	\$ 1,950.6	\$ 2,182.0	\$ 2,127.4	\$ 2,148.6	\$ 10,392.0	\$ 500.0
G	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
H	\$ -	\$ -	\$ -	\$ 12.7	\$ 5.9	\$ 18.6	\$ 594.8
I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ 176.5	\$ 159.4	\$ 273.5	\$ 274.0	\$ 175.7	\$ 1,059.0	\$ 595.4
K	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 6,164.9	\$ 6,194.3	\$ 6,420.0	\$ 6,613.7	\$ 6,337.2	\$ 31,729.9	\$ 502.7

Part 2 - TDRP Activations

July 25, 2016: SCR and EDRP Response was Voluntary for all deployed zones/sub-load pockets

Table A-7: Event Summary - July 25, 2016

	Zones/sub-load pockets	ICAP Equivalent of Average Hourly Response MW or Average Hourly Response MW	Obligated ICAP MW or Available EDRP MW	% Response of Obligated ICAP MW or Available EDRP MW	Total Payment
SCR (ICAP)	J1, J2, J3, J4, J5, J6, J7, J8, J9	187.5	372.0	50.4%	\$ 285,998.5
EDRP and SCR treated as EDRP	J1, J2, J3, J4, J5, J6, J7, J8, J9	0.3	13.7	2.0%	\$ 887.7
Total		187.8	385.7	48.7%	\$ 286,886.3

Table A-8: SCR MW Response Based on ACL - July 25, 2016

Zones/ sub-load pockets	HB 13	HB 14	HB 15	HB 16	HB 17	HB 18	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
I1	5.6	6.8	7.8	10.4	13.2	15.3	9.9	24.9	39.6%
I2	14.1	13.4	13.2	14.1	19.1	29.5	17.2	32.1	53.8%
I3	18.1	19.3	20.3	22.8	31.1	49.3	26.8	47.6	56.3%
I4	5.4	5.4	7.7	9.9	11.3	11.9	8.6	30.7	28.1%
I5	8.3	16.3	17.2	19.7	23.9	21.8	17.9	30.0	59.6%
I6	35.0	38.0	35.5	35.8	41.9	65.5	41.9	67.3	62.3%
I7	25.4	25.5	23.2	25.1	31.1	44.4	29.1	57.6	50.5%
I8	22.9	23.1	21.7	39.2	47.5	62.0	36.1	80.5	44.8%
I9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0%
Total	134.9	147.8	146.7	176.9	219.2	299.7	187.5	372.0	50.4%

Table A-9: SCR MW Response Based on CBL - July 25, 2016

Zones/ sub-load pockets	HB 13	HB 14	HB 15	HB 16	HB 17	HB 18	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
J1	3.9	5.1	5.6	6.1	6.3	6.2	5.5	12.6	43.8%
J2	7.3	7.0	6.0	4.9	5.0	3.6	5.6	18.8	30.0%
J3	14.3	14.8	14.2	12.5	12.7	10.9	13.2	29.6	44.7%
J4	2.6	2.8	5.0	6.9	7.2	7.9	5.4	25.8	20.9%
J5	4.8	12.9	13.3	14.1	14.0	9.3	11.4	19.2	59.5%
J6	25.2	28.7	25.1	20.6	17.9	12.3	21.6	47.1	46.0%
J7	21.6	22.4	18.5	17.9	17.6	14.1	18.7	37.4	50.0%
J8	12.7	13.3	10.6	23.3	24.0	22.3	17.7	49.0	36.2%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	92.4	107.0	98.3	106.2	104.8	86.7	99.2	239.4	41.5%

Table A-10: SCR Energy Payments - July 25, 2016

Zones/ sub-load pockets	HB 13	HB 14	HB 15	HB 16	HB 17	HB 18	Sum of LBMP Payments	Sum of BPCG Payments	Total Payments
J1	\$ 355.3	\$ 1,073.0	\$ 4,306.6	\$ 761.2	\$ 550.6	\$ 237.1	\$ 7,283.7	\$ 8,580.9	\$ 15,864.6
J2	\$ 669.8	\$ 1,459.6	\$ 4,651.7	\$ 599.9	\$ 439.4	\$ 139.7	\$ 7,960.1	\$ 8,192.2	\$ 16,152.3
J3	\$ 1,315.1	\$ 3,102.5	\$ 10,933.4	\$ 1,541.0	\$ 1,106.7	\$ 417.2	\$ 18,416.0	\$ 19,821.0	\$ 38,237.0
J4	\$ 241.1	\$ 577.4	\$ 3,889.5	\$ 848.0	\$ 629.2	\$ 301.7	\$ 6,486.9	\$ 9,124.6	\$ 15,611.5
J5	\$ 450.5	\$ 2,734.9	\$ 10,425.3	\$ 1,758.2	\$ 1,232.3	\$ 361.1	\$ 16,962.3	\$ 16,105.7	\$ 33,068.0
J6	\$ 2,317.6	\$ 6,007.7	\$ 19,375.8	\$ 2,547.3	\$ 1,560.7	\$ 472.8	\$ 32,281.9	\$ 29,707.3	\$ 61,989.2
J7	\$ 1,986.9	\$ 4,699.2	\$ 14,263.1	\$ 2,216.0	\$ 1,532.1	\$ 542.0	\$ 25,239.2	\$ 28,368.5	\$ 53,607.7
J8	\$ 1,172.4	\$ 2,784.2	\$ 8,243.0	\$ 2,938.4	\$ 2,136.8	\$ 872.8	\$ 18,147.7	\$ 33,320.5	\$ 51,468.2
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 8,508.6	\$ 22,438.5	\$ 76,088.5	\$ 13,210.0	\$ 9,187.8	\$ 3,344.5	\$ 132,777.8	\$ 153,220.7	\$ 285,998.5

Table A-11: Energy Response of EDRP Resources and SCRs treated as EDRP - July 25, 2016

Zones/ sub-load pockets	HB 13	HB 14	HB 15	HB 16	HB 17	HB 18	Average Hourly Response MW	Available EDRP MW	% Response of Available MW
J1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	7.7%
J2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	28.1%
J3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4	18.2%
J4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0%
J5	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.2	20.5%
J6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	8.4%
J7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5%
J8	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.3	23.2%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	0.3	0.3	0.3	0.2	0.3	0.2	0.3	13.7	2.0%

Table A-12: Energy Payments to EDRP Resources and SCRs treated as EDRP - July 25, 2016

Zones/ sub-load pockets	HB 13	HB 14	HB 15	HB 16	HB 17	HB 18	Sum of LBMP Payments
J1	\$ 13.1	\$ 24.5	\$ 21.7	\$ 15.1	\$ 18.6	\$ 2.5	\$ 95.3
J2	\$ 30.9	\$ 29.8	\$ 47.4	\$ 15.7	\$ 15.9	\$ 16.2	\$ 155.7
J3	\$ 38.1	\$ 41.7	\$ 67.2	\$ 39.0	\$ 38.1	\$ 14.7	\$ 238.7
J4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J5	\$ 0.5	\$ 4.1	\$ 22.9	\$ 35.7	\$ 36.7	\$ 31.7	\$ 131.5
J6	\$ 3.2	\$ 0.9	\$ 4.8	\$ 4.0	\$ 9.9	\$ 13.6	\$ 36.2
J7	\$ 2.5	\$ 2.8	\$ 8.0	\$ 6.3	\$ 4.1	\$ 5.9	\$ 29.6
J8	\$ 61.1	\$ 52.8	\$ 49.9	\$ 6.5	\$ 20.5	\$ 10.0	\$ 200.6
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 149.3	\$ 156.4	\$ 221.8	\$ 122.2	\$ 143.7	\$ 94.5	\$ 887.7

August 13, 2016: SCR and EDRP Response was Voluntary for all deployed zones/sub-load pockets

Table A-13: Event Summary - August 13, 2016

	Zone	ICAP Equivalent of Average Hourly Response MW or Average Hourly Response MW	Obligated ICAP MW or Available EDRP MW	% Response of Obligated ICAP MW or Available EDRP MW	Total Payment
SCR (ICAP)	J3, J4, J8	J3: 30.1 MW J4: 8.9 MW J8: 42.7 MW	159.4	51.2%	\$ 22,369.9
EDRP and SCR's treated as EDRP	J3, J4, J8	J3: 0.1 MW J4: 0.0 MW J8: 0.1 MW	0.8	23.9%	\$ 560.8
Total			160.2	51.1%	\$ 22,930.7

Table A-14: SCR MW Response Based on ACL - August 13, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
J3			27.6	28.6	31.9	32.2			30.1	47.7	63.0%
J4	7.1	8.7	9.0	9.9	9.6	8.9			8.9	30.7	29.0%
J8		39.6	40.9	41.9	42.8	43.3	44.5	46.0	42.7	81.0	52.7%
Total	7.1	48.3	77.4	80.4	84.2	84.3	44.5	46.0		159.4	51.2%

Table A-15: SCR MW Response Based on CBL - August 13, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCR's Reporting CBL Data	% Response of Obligated ICAP MW
J3			3.0	2.7	2.7	2.6			2.7	10.3	26.7%
J4	2.1	3.4	3.0	2.7	2.5	2.1			2.6	6.3	42.0%
J8		3.1	3.0	3.1	3.5	2.7	2.5	2.2	2.9	19.8	14.4%
Total	2.1	6.5	9.0	8.4	8.7	7.4	2.5	2.2		36.4	22.7%

Table A-16: SCR Energy Payments - August 13, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments	Sum of BPCG Payments	Total Payments
J3			\$ 1,544.5	\$ 756.7	\$ 200.5	\$ 141.7			\$ 2,643.4	\$ 2,609.5	\$ 5,252.9
J4	\$ 136.4	\$ 1,372.3	\$ 1,544.6	\$ 769.2	\$ 182.7	\$ 113.0			\$ 4,118.4	\$ 3,443.1	\$ 7,561.5
J8		\$ 1,222.6	\$ 1,571.5	\$ 869.5	\$ 257.4	\$ 146.3	\$ 244.1	\$ 144.8	\$ 4,456.2	\$ 5,099.2	\$ 9,555.4
Total	\$ 136.4	\$ 2,594.9	\$ 4,660.7	\$ 2,395.4	\$ 640.6	\$ 401.0	\$ 244.1	\$ 144.8	\$ 11,218.0	\$11,151.9	\$22,369.9

Table A-17: Energy Response of EDRP Resources and SCRs treated as EDRP - August 13, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Average Hourly Response MW	Available EDRP MW	% Response of Available MW
J3			0.1	0.1	0.1	0.1			0.1	0.4	19.3%
J4	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.2	8.2%
J8		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	39.9%
Total	0.0	0.1	0.2	0.2	0.2	0.2	0.1	0.1		0.8	23.9%

Table A-18: Energy Payments to EDRP Resources and SCRs treated as EDRP - August 13, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments
J3			\$ 43.0	\$ 39.4	\$ 38.5	\$ 33.2			\$ 154.0
J4	\$ 5.8	\$ 7.3	\$ 8.1	\$ 6.8	\$ 6.4	\$ 3.0			\$ 37.4
J8		\$ 61.0	\$ 62.6	\$ 48.0	\$ 47.7	\$ 46.5	\$ 45.7	\$ 57.9	\$ 369.3
Total	\$ 5.8	\$ 68.3	\$ 113.8	\$ 94.2	\$ 92.6	\$ 82.7	\$ 45.7	\$ 57.9	\$ 560.8

August 14, 2016: SCR and EDRP Response was Voluntary for all deployed zones/sub-load pockets

Table A-19: Event Summary - August 14, 2016

	Zones/sub-load pockets	ICAP Equivalent of Average Hourly Response MW or Average Hourly Response MW	Obligated ICAP MW or Available EDRP MW	% Response of Obligated ICAP MW or Available EDRP MW	Total Payment
SCR (ICAP)	I1, I2, I3, I4, I5, I6, I7, I8, I9	240.0	373.6	64.2%	\$ 103,507.4
EDRP and SCRs treated as EDRP I1, I2, I3, I4, I5, I6, I7, I8, I9		0.2	13.7	1.6%	\$ 882.2
Total		240.2	387.3	62.0%	\$ 104,389.6

Table A-20: SCR MW Response Based on ACL - August 14, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
I1	15.1	16.0	16.7	17.2	17.4	18.3	18.7	18.8	17.3	24.6	70.2%
I2	18.5	18.2	18.5	18.7	19.1	20.2	20.6	20.7	19.3	32.8	58.9%
I3	35.4	35.3	36.2	40.0	40.8	41.0	42.2	42.1	39.1	47.7	81.9%
I4	7.7	8.1	8.2	8.1	7.8	7.8	8.0	8.0	7.9	30.7	25.9%
I5	16.9	16.7	15.9	16.1	17.0	17.8	18.4	18.8	17.2	30.1	57.2%
I6	55.2	55.8	55.9	56.3	58.4	59.4	60.7	60.3	57.8	68.1	84.8%
I7	37.5	38.1	38.4	37.7	38.3	39.2	40.6	40.9	38.8	57.3	67.8%
I8	40.1	40.2	41.5	42.6	42.6	43.5	44.6	45.7	42.6	81.0	52.6%
I9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0%
Total	226.4	228.3	231.2	236.6	241.3	247.2	253.8	255.3	240.0	373.6	64.2%

Table A-21: SCR MW Response Based on CBL - August 14, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
I1	1.4	1.5	1.5	1.2	1.1	1.4	1.6	1.6	1.4	8.3	17.0%
I2	1.4	1.5	1.7	1.4	1.2	1.0	1.1	1.1	1.3	5.5	23.3%
I3	1.5	1.5	1.2	1.1	1.9	3.2	3.5	2.5	2.0	13.0	15.8%
I4	0.8	0.9	0.5	0.5	0.7	1.1	0.6	0.6	0.7	6.3	11.4%
I5	3.6	3.3	2.5	2.4	2.1	2.4	2.1	2.2	2.6	11.5	22.4%
I6	6.4	7.0	6.4	6.1	5.2	3.8	3.9	3.4	5.3	21.1	25.0%
I7	9.5	10.4	11.0	10.7	10.7	10.6	12.2	12.2	10.9	21.8	50.1%
I8	1.8	1.5	2.5	3.2	3.4	4.0	3.3	2.8	2.8	19.7	14.3%
I9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
I	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	26.4	27.6	27.3	26.6	26.3	27.5	28.3	26.4	27.0	107.2	25.2%

Table A-22: SCR Energy Payments - August 14, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments	Sum of BPCG Payments	Total Payments
J1	\$ 185.6	\$ 129.5	\$ 108.2	\$ 94.8	\$ 79.9	\$ 90.1	\$ 98.3	\$ 61.3	\$ 847.8	\$ 4,563.0	\$ 5,410.8
J2	\$ 184.2	\$ 128.0	\$ 123.6	\$ 105.5	\$ 89.3	\$ 66.1	\$ 64.8	\$ 39.4	\$ 800.8	\$ 4,097.1	\$ 4,897.9
J3	\$ 195.6	\$ 124.4	\$ 91.9	\$ 82.8	\$ 143.2	\$ 210.7	\$ 212.4	\$ 92.5	\$ 1,153.3	\$ 6,663.7	\$ 7,817.0
J4	\$ 110.4	\$ 75.6	\$ 37.7	\$ 36.1	\$ 53.2	\$ 71.8	\$ 36.5	\$ 22.6	\$ 443.9	\$ 2,286.1	\$ 2,730.0
J5	\$ 477.5	\$ 291.8	\$ 186.1	\$ 190.2	\$ 156.4	\$ 158.0	\$ 129.5	\$ 83.8	\$ 1,673.4	\$ 8,318.6	\$ 9,992.0
J6	\$ 842.8	\$ 602.9	\$ 473.3	\$ 473.7	\$ 380.6	\$ 254.4	\$ 234.3	\$ 125.1	\$ 3,387.2	\$16,777.8	\$ 20,165.1
J7	\$ 1,245.8	\$ 889.8	\$ 818.6	\$ 825.0	\$ 784.1	\$ 703.3	\$ 738.8	\$ 453.3	\$ 6,458.6	\$35,212.5	\$ 41,671.1
J8	\$ 234.9	\$ 129.5	\$ 190.1	\$ 246.7	\$ 251.2	\$ 267.9	\$ 202.1	\$ 104.6	\$ 1,626.9	\$ 9,196.7	\$ 10,823.6
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 3,476.8	\$ 2,371.4	\$ 2,029.7	\$ 2,054.7	\$ 1,937.9	\$ 1,822.3	\$ 1,716.7	\$ 982.6	\$ 16,392.0	\$87,115.4	\$103,507.4

Table A-23: Energy Response of EDRP Resources and SCRs treated as EDRP - August 14, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Average Hourly Response MW	Available EDRP MW	% Response of Available MW
J1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1%
J2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.4%
J3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	27.4%
J4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8%
J5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0%
J6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3%
J7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2%
J8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	36.3%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	13.7	1.6%

Table A-24: Energy Payments to EDRP Resources and SCRs treated as EDRP - August 14, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments
J1	\$ 0.2	\$ 3.1	\$ 3.9	\$ 4.4	\$ 5.0	\$ -	\$ -	\$ -	\$ 16.6
J2	\$ 3.1	\$ 2.5	\$ 4.5	\$ 3.1	\$ 1.5	\$ 2.5	\$ 4.5	\$ 0.3	\$ 21.9
J3	\$ 77.3	\$ 59.1	\$ 49.0	\$ 50.5	\$ 47.4	\$ 47.4	\$ 47.4	\$ 50.7	\$ 428.7
J4	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ 1.0	\$ 2.0	\$ 1.6	\$ 4.6
J5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J6	\$ -	\$ 7.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7.1
J7	\$ 5.6	\$ 4.3	\$ 2.5	\$ 0.9	\$ 3.2	\$ 4.4	\$ 2.5	\$ 1.4	\$ 24.6
J8	\$ 52.9	\$ 53.1	\$ 53.0	\$ 57.7	\$ 55.4	\$ 34.1	\$ 34.9	\$ 38.2	\$ 379.0
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 139.0	\$ 129.0	\$ 112.9	\$ 116.5	\$ 112.4	\$ 89.3	\$ 91.1	\$ 92.1	\$ 882.2

August 15, 2016: SCR and EDRP Response was Voluntary for all deployed zones/sub-load pockets

Table A-25: Event Summary - August 15, 2016

	Zones/sub-load pockets	ICAP Equivalent of Average Hourly Response MW or Average Hourly Response MW	Obligated ICAP MW or Available EDRP MW	% Response of Obligated ICAP MW or Available EDRP MW	Total Payment
SCR (ICAP)	J1, J2, J3, J4, J5, J6, J7, J8, J9	129.6	373.6	34.7%	\$ 193,427.2
EDRP and SCRs treated as EDRP	J1, J2, J3, J4, J5, J6, J7, J8, J9	0.3	13.7	2.1%	\$ 1,165.6
Total		129.9	387.3	33.5%	\$ 194,592.8

Table A-26: SCR MW Response Based on ACL - August 15, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW	% Response of Obligated ICAP MW
J1	3.7	4.9	6.3	8.6	10.9	13.7	14.8	17.3	10.0	24.6	40.8%
J2	2.6	2.7	3.1	3.8	6.6	7.5	7.9	7.9	5.2	32.8	16.0%
J3	7.7	8.5	10.8	14.6	18.5	24.4	26.4	27.7	17.3	47.7	36.3%
J4	3.4	6.1	8.4	8.9	9.1	9.4	7.1	6.9	7.4	30.7	24.2%
J5	11.3	11.9	13.3	16.5	14.4	17.7	19.1	20.4	15.6	30.1	51.8%
J6	15.1	13.7	13.9	14.9	17.4	20.1	22.9	26.2	18.0	68.1	26.5%
J7	19.5	17.3	17.1	19.9	24.4	27.4	29.4	29.9	23.1	57.3	40.3%
J8	14.4	15.9	29.9	34.4	42.9	47.1	38.1	40.3	32.9	81.0	40.6%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0%
Total	77.7	81.0	102.9	121.6	144.1	167.3	165.5	176.6	129.6	373.6	34.7%

Table A-27: SCR MW Response Based on CBL - August 15, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	ICAP Equivalent of Average Hourly Response MW	Obligated ICAP MW of SCRs Reporting CBL Data	% Response of Obligated ICAP MW
J1	0.7	1.2	1.4	2.1	2.4	3.1	2.7	2.6	2.0	7.4	27.3%
J2	1.1	1.3	1.4	0.8	1.5	2.2	2.0	1.5	1.5	5.2	28.5%
J3	4.5	4.4	4.7	5.7	5.5	7.2	6.1	5.5	5.4	11.9	45.6%
J4	1.8	4.2	6.1	6.0	5.7	5.4	2.6	1.2	4.1	7.1	58.4%
J5	8.0	8.3	8.5	8.5	5.0	7.0	6.6	6.2	7.3	15.9	45.8%
J6	6.7	5.4	5.0	4.5	3.0	2.6	1.9	2.1	3.9	15.4	25.2%
J7	14.3	12.8	12.5	12.5	11.7	12.3	11.3	9.7	12.1	21.9	55.5%
J8	5.1	6.6	19.5	19.8	21.5	22.1	9.1	7.3	13.9	31.0	44.8%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	42.2	44.2	59.0	59.9	56.3	62.0	42.4	36.0	50.2	115.8	43.4%

Table A-28: SCR Energy Payments - August 15, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments	Sum of BPCG Payments	Total Payments
J1	\$ 25.2	\$ 45.2	\$ 42.5	\$ 66.9	\$ 70.9	\$ 96.2	\$ 87.4	\$ 90.7	\$ 525.0	\$ 7,228.3	\$ 7,753.3
J2	\$ 40.5	\$ 50.5	\$ 42.7	\$ 27.4	\$ 44.4	\$ 69.9	\$ 65.8	\$ 53.6	\$ 394.9	\$ 5,377.7	\$ 5,772.7
J3	\$ 163.2	\$ 164.6	\$ 143.1	\$ 182.7	\$ 163.9	\$ 221.1	\$ 198.9	\$ 195.5	\$ 1,432.9	\$ 19,493.0	\$ 20,926.0
J4	\$ 63.2	\$ 159.0	\$ 186.8	\$ 192.6	\$ 168.3	\$ 166.4	\$ 82.1	\$ 41.4	\$ 1,059.9	\$ 14,666.5	\$ 15,726.4
J5	\$ 289.6	\$ 315.0	\$ 260.8	\$ 274.3	\$ 148.7	\$ 219.5	\$ 216.4	\$ 220.6	\$ 1,945.0	\$ 26,084.7	\$ 28,029.7
J6	\$ 242.5	\$ 201.9	\$ 152.8	\$ 145.1	\$ 88.3	\$ 79.2	\$ 61.8	\$ 72.1	\$ 1,043.9	\$ 13,829.0	\$ 14,872.9
J7	\$ 516.4	\$ 482.3	\$ 384.3	\$ 401.3	\$ 344.1	\$ 376.9	\$ 361.5	\$ 339.0	\$ 3,205.9	\$ 43,153.4	\$ 46,359.3
J8	\$ 184.1	\$ 250.1	\$ 613.9	\$ 651.4	\$ 649.4	\$ 690.8	\$ 293.3	\$ 256.6	\$ 3,589.5	\$ 50,397.7	\$ 53,987.2
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 1,524.7	\$ 1,668.6	\$ 1,827.0	\$ 1,941.9	\$ 1,678.1	\$ 1,920.0	\$ 1,367.1	\$ 1,269.5	\$ 13,197.0	\$180,230.2	\$193,427.2

Table A-29: Energy Response of EDRP Resources and SCRs treated as EDRP - August 15, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Average Hourly Response MW	Available EDRP MW	% Response of Available MW
J1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.4	18.8%
J2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	35.6%
J3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	31.7%
J4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0%
J5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.7%
J6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.9%
J7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2%
J8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	11.0%
J9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0%
J	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Total	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	13.7	2.1%

Table A-30: Energy Payments to EDRP Resources and SCRs treated as EDRP - August 15, 2016

Zones/ sub-load pockets	HB 14	HB 15	HB 16	HB 17	HB 18	HB 19	HB 20	HB 21	Sum of LBMP Payments
J1	\$ 25.4	\$ 43.1	\$ 40.4	\$ 46.6	\$ 40.9	\$ 30.6	\$ 30.6	\$ 24.2	\$ 281.5
J2	\$ 30.1	\$ 28.1	\$ 30.1	\$ 31.8	\$ 32.6	\$ 33.0	\$ 29.5	\$ 16.8	\$ 231.8
J3	\$ 70.6	\$ 123.7	\$ 45.7	\$ 47.1	\$ 46.2	\$ 63.6	\$ 47.4	\$ 51.1	\$ 495.2
J4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.5	\$ 3.4	\$ -	\$ 5.9
J5	\$ 2.3	\$ -	\$ 3.8	\$ 0.7	\$ 1.6	\$ 2.3	\$ 2.1	\$ 0.7	\$ 13.4
J6	\$ 2.0	\$ 7.8	\$ -	\$ -	\$ 2.8	\$ 3.2	\$ 0.3	\$ -	\$ 16.1
J7	\$ 3.1	\$ -	\$ 1.8	\$ -	\$ 0.2	\$ 1.1	\$ -	\$ 1.1	\$ 7.2
J8	\$ 18.1	\$ 19.9	\$ 19.7	\$ 11.3	\$ 13.5	\$ 15.9	\$ 8.0	\$ 8.3	\$ 114.6
J9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
J	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 151.5	\$ 222.5	\$ 141.4	\$ 137.4	\$ 137.8	\$ 152.1	\$ 121.1	\$ 102.1	\$ 1,165.6