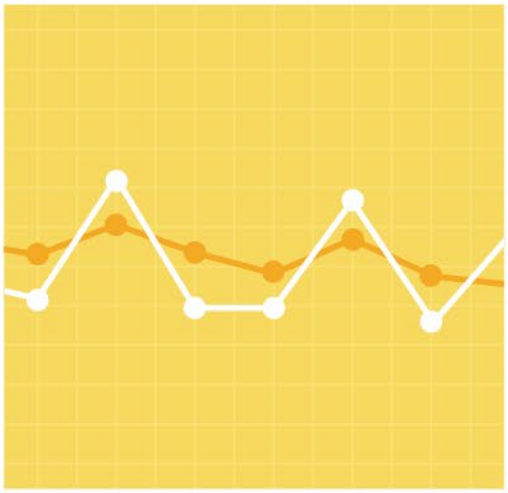
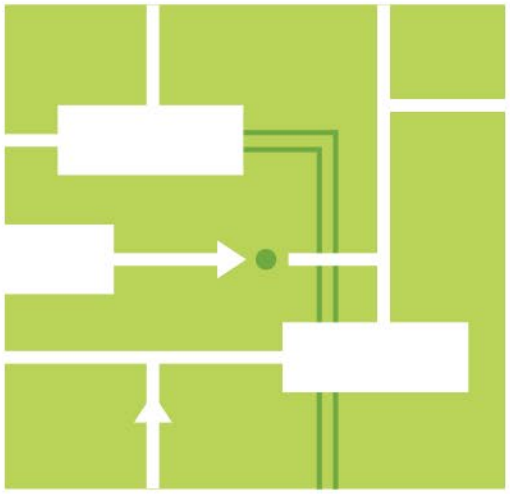
Monthly Market Operations Report August 2022

Market Analysis and Settlements

September 16, 2022





1. Introduction

1.1 About ISO New England

Created in 1997, ISO New England Inc. (the ISO) is the not-for-profit regional transmission organization (RTO) responsible for the day-to-day reliable operation of New England's bulk power generation and transmission system, oversight and administration of the region's wholesale ELECTRICITY markets, and management of a comprehensive regional bulk power system planning process.

1.2 Market Reporting

The ISO's FERC Electric Tariff No. 3, Section III – Market Rule 1 – Standard Market Design, Appendix A – Market Monitoring, Reporting and Market Power Mitigation Section III.A.11.2.1 requires the ISO to publish a monthly report, "which will be available to the public...containing an overview of the market's performance in the most recent period."

The ISO produces many reports that summarize the operations of New England's wholesale electricity markets. The weekly report provides summaries of key market activities for the trading week encompassing Monday-Sunday. This report, generally posted on Wednesdays, can be found on the ISO's web site here[1]. This report is also supplemented by a Mid-Week Market Update, generally posted on Fridays, that reports pricing and congestion highlights from Monday through Thursday. This update may be accessed here. There is also a summary of weekly Net Commitment Period Compensation (NCPC) credits posted here.

Monthly summaries of certain wholesale market concepts are reported monthly by the ISO's Chief Operating Officer at the NEPOOL Participants Committee Meeting. These summaries are posted on the ISO's web site here, under the heading entitled "Participants Committee Materials."

Additionally, in compliance with federal requirements, the ISO issues quarterly reports of key statistics for the region's wholesale electric power markets. These reports can be found on the ISO's web site here[2].

1.3 About This Report

This report summarizes aspects of New England's wholesale electricity markets that are generally not discussed in the first two reports noted above. There are many interrelationships between the various markets that the ISO administers – each of the concepts presented in this report may interact with others, and second order effects cannot be included here. Additional information can be found on the ISO's web site here.

[1] Select "Weekly Markets Reports" from the document type filter on the left hand side of the page.

[2] Select "Quarterly Markets Reports" from the document type filter on the left hand side of the page.

2. Table of Contents

3. Monthly Summary

Day-ahead and real-time LMPs at the New England Hub averaged $99.55/MWh and $95.99/MWh, respectively, during August 2022. Day-ahead and real-time prices at the Hub and in the Load Zones averaged 5% higher to 11% higher than July 2022 averages. In the aggregate, August 2022 day-ahead and real-time LMPs were approximately 98% higher during August 2022 than during August 2021. Average natural gas prices were 113% above the prior year's average prices, while residual fuel prices were up 29% over a year ago.

Overall, the average of the real-time LMPs at the Hub and in the Load Zones ranged between 3.7% lower than its day-ahead counterpart in the Southeastern Massachusetts (SEMA) Load Zone to 2.9% lower than its day-ahead counterpart in the Connecticut (CT) Load Zone. In the Day-Ahead Market, Load Zone average LMPs ranged between 2.1% lower than the Hub average LMPs in the Maine (ME) Load Zone to 0.9% higher than the Hub in the SEMA Load Zone. In the Real-Time Market, Load Zone average LMPs ranged between 1.8% lower than the Hub average LMPs in the ME Load Zone to 0.8% higher than the Hub in the Northeastern Massachusetts (NEMA) Load Zone. Price differentials between on-peak and off-peak hours at the Hub and in the Load Zones ranged between 25% and 41% in both the Day-Ahead and Real-Time Markets.

The New England Control Area was a net importer of electricity in the Real-Time Market during August. In the Day-Ahead Energy Market, there were approximately 506,000 MWh of total exports and 2,390,000 MWh of imports, yielding a net import of approximately 1,884,000 MWh. In the Real-Time Energy Market, there were approximately 920,000 MWh of total exports and 2,575,000 MWh of imports, yielding a net import of approximately 1,656,000 MWh. This was about 185,000 MWh lower than a year ago.

The Monthly or Prompt Month FTR Auction (August 2022) had 18 participants and the awarded value of FTRs in the auction totaled $403K. This represented a decline of $409K from the previous month and an addition of about $187K over the prior year's monthly FTR auction. The allocation of FTR Auction Revenue for August 2022 resulted in $1.35 million awarded to eligible entities, with $808K allocated to Incremental Auction Revenue Rights (IARR).

The Marginal Loss Revenue Fund totaled $8.74 million for August, up $3.92 million from its July 2022 total.

Total Forward Reserve Credits to eligible assets of $11.91 million were reduced by $59K in Failure to Reserve penalties and $3K in Failure to Activate Penalties during August 2022. The net Forward Reserve Payment of $11.85 million represented 99.1% of the maximum possible payment of $11.95 million. Real-Time Reserve Prices occurred in 224 separate hours during the month, and those yielded real-time payments to designated assets of $1.04 million. These payments were reduced by Forward Reserve Energy Obligation Charges totaling $183K, yielding a net compensation of $859K during the month.

Regulation Market Payments totaled $4.2 million during the month, an increase of $8K over the July 2022 value of $4.19 million.

For the month of August 2022, Forward Capacity payments were made to a total of 33,428 MW of eligible capacity and totaled $141.1 million.

Energy payments paid to Price Responsive Demand (PRD) assets during August 2022 totaled $785K for reduction obligations associated with Day Ahead, $105K for reduction deviations associated with the Real Time, yielding a total PRD payment for the month of approximately $890K. These resources received $0 in the Forward Reserve Market and $38K in the Real-Time Reserve Market.

For the month of August 2022, no payments were made under FCM Pay-for-Performance (PFP) due to there being no capacity scarcity conditions experienced during the month.

4. Locational Marginal Prices (LMPs)

For a discussion of LMPs in the New England markets, please visit the website here. The following tables summarize Hub, zonal, and external node hourly (DA) and 5-minute (RT) LMPs during the month on an overall, on-peak, and off-peak basis. On-peak hours are weekdays between 7:00 a.m. and 11:00 p.m. Off-peak hours are weekdays between 11:00 p.m. and 7:00 a.m., Saturdays, Sundays, and North American Electric Reliability Council (NERC) holidays.

4.1 LMP Summary Statistics

The following tables show summary statistics for hourly DA and 5-minute RT LMPs for the Hub, eight internal Load Zones, and five external nodes for both the Day-Ahead and Real-Time Markets:

4.1.1 *All Intervals, August 2022*

Hub/Zone/ Ext. Node	Avg DA LMP ($/MWh)	Avg RT LMP ($/MWh)	Min DA LMP ($/MWh)	Min RT LMP ($/MWh)	Max DA LMP ($/MWh)	Max RT LMP ($/MWh)	DA % of Hub	RT % of Hub	RT % of DA	DA Std Dev	RT Std Dev	RT Std / DA Std
Hub	$99.55	$95.99	$54.12	$48.37	$321.11	$430.93	100%	100%	96%	$39.81	$49.00	1.23
ME	$97.47	$94.27	$53.70	$43.50	$317.60	$421.04	98%	98%	97%	$38.97	$48.49	1.24
NH	$100.07	$96.78	$54.30	$48.61	$322.40	$434.33	101%	101%	97%	$39.91	$49.69	1.25
VT	$99.12	$95.83	$53.32	$47.38	$315.79	$428.65	100%	100%	97%	$39.64	$49.14	1.24
CT	$97.95	$95.12	$52.98	$47.99	$312.17	$427.93	98%	99%	97%	$39.28	$48.59	1.24
RI	$99.14	$95.53	$54.60	$48.55	$321.09	$430.18	100%	100%	96%	$39.72	$48.75	1.23
SEMA	$100.40	$96.68	$54.86	$48.99	$326.02	$433.35	101%	101%	96%	$40.17	$49.23	1.23
WCMA	$99.70	$96.20	$54.06	$48.39	$320.79	$432.34	100%	100%	96%	$39.83	$49.12	1.23
NEMA	$100.25	$96.79	$54.55	$48.95	$323.61	$433.10	101%	101%	97%	$39.77	$49.27	1.24
NB Ext	$94.75	$91.29	$52.03	-$94.27	$316.75	$411.35	95%	95%	96%	$39.05	$48.71	1.25
NYN Ext	$97.12	$93.66	$52.68	-$1,231.17	$306.28	$716.05	98%	98%	96%	$38.47	$54.39	1.41
HQ Ext	$97.84	$94.46	$53.34	$47.99	$315.61	$423.96	98%	98%	97%	$38.92	$48.26	1.24
HG Ext	$92.54	$89.55	$49.62	$38.15	$295.55	$402.09	93%	93%	97%	$37.28	$46.15	1.24
CSC Ext	$98.26	$96.74	$53.06	$48.57	$309.58	$434.77	99%	101%	98%	$39.23	$49.31	1.26
NNC Ext	$97.82	$95.38	$52.82	$48.22	$309.46	$426.11	98%	99%	98%	$38.95	$48.48	1.24

4.1.2 *On-Peak Intervals, August 2022*

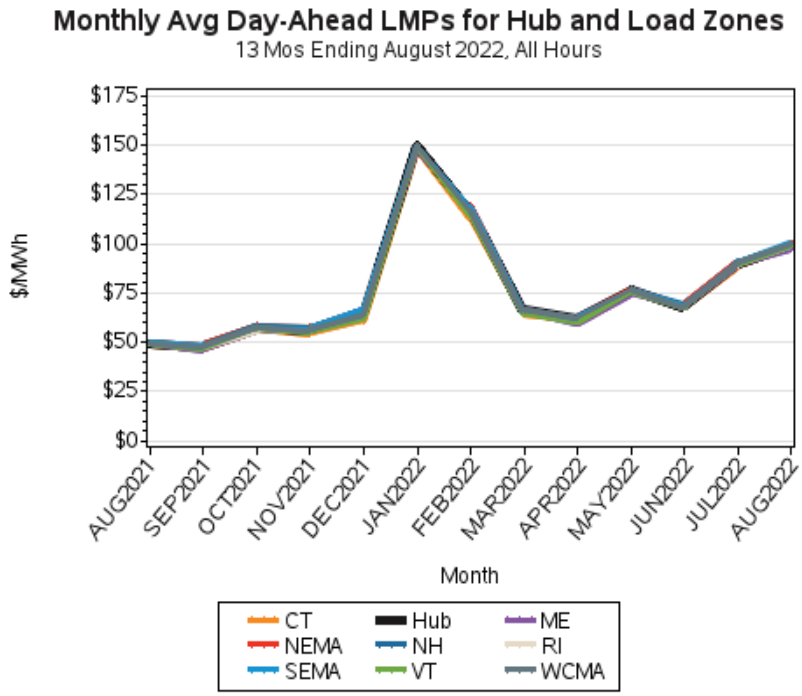
Hub/Zone/ Ext. Node	Avg DA LMP ($/MWh)	Avg RT LMP ($/MWh)	Min DA LMP ($/MWh)	Min RT LMP ($/MWh)	Max DA LMP ($/MWh)	Max RT LMP ($/MWh)	DA % of Hub	RT % of Hub	RT % of DA	DA Std Dev	RT Std Dev	RT Std /DA Std
Hub	$116.35	$107.32	$64.40	$51.87	$321.11	$430.93	100%	100%	92%	$47.21	$58.45	1.24
ME	$113.42	$104.96	$63.33	$50.13	$317.60	$419.42	97%	98%	93%	$46.36	$57.64	1.24
NH	$116.91	$108.26	$65.11	$51.88	$322.40	$434.33	100%	101%	93%	$47.17	$59.17	1.25
VT	$115.94	$107.38	$63.42	$51.47	$315.79	$428.65	100%	100%	93%	$46.78	$58.40	1.25
CT	$114.82	$106.80	$63.22	$51.58	$312.17	$427.93	99%	100%	93%	$46.36	$57.92	1.25
RI	$115.76	$106.67	$64.25	$51.68	$321.09	$430.18	99%	99%	92%	$47.29	$58.26	1.23
SEMA	$117.25	$107.98	$65.05	$52.29	$326.02	$433.35	101%	101%	92%	$47.75	$58.76	1.23
WCMA	$116.57	$107.61	$64.53	$51.98	$320.79	$432.34	100%	100%	92%	$47.19	$58.58	1.24
NEMA	$117.08	$108.15	$65.33	$52.24	$323.61	$433.10	101%	101%	92%	$47.11	$58.73	1.25
NB Ext	$110.56	$101.83	$61.28	-$50.52	$316.75	$406.90	95%	95%	92%	$46.41	$57.75	1.24
NYN Ext	$113.59	$105.43	$62.70	-$1,231.17	$306.28	$716.05	98%	98%	93%	$45.45	$68.52	1.51
HQ Ext	$114.24	$105.56	$63.60	$50.92	$315.61	$423.96	98%	98%	92%	$46.15	$57.56	1.25
HG Ext	$108.34	$100.49	$58.68	$38.15	$295.55	$402.09	93%	94%	93%	$43.93	$54.80	1.25
CSC Ext	$115.20	$108.66	$63.45	$52.55	$309.58	$434.77	99%	101%	94%	$46.18	$58.72	1.27
NNC Ext	$114.65	$107.20	$63.41	$52.03	$309.46	$426.11	99%	100%	93%	$45.87	$57.75	1.26

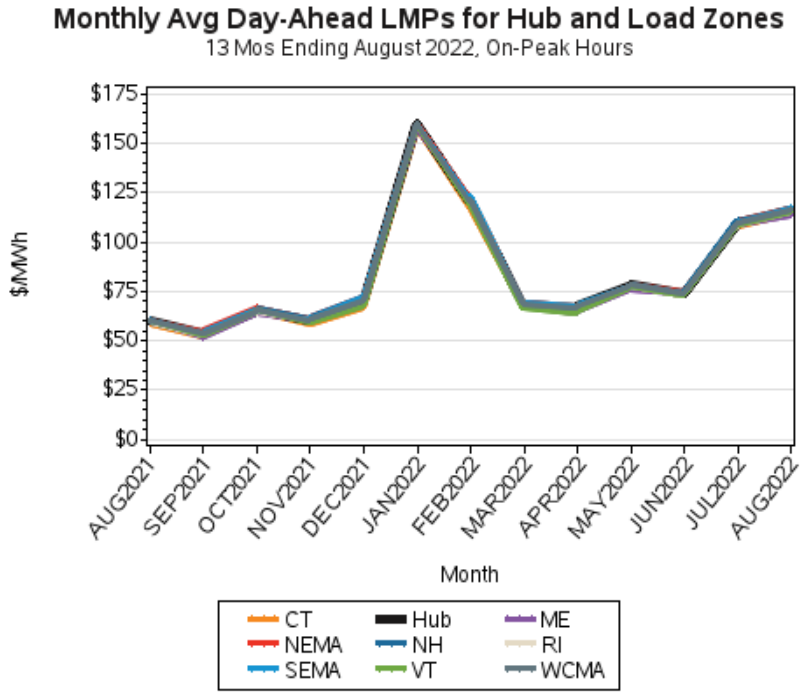
4.1.3 *Off-Peak Intervals, August 2022*

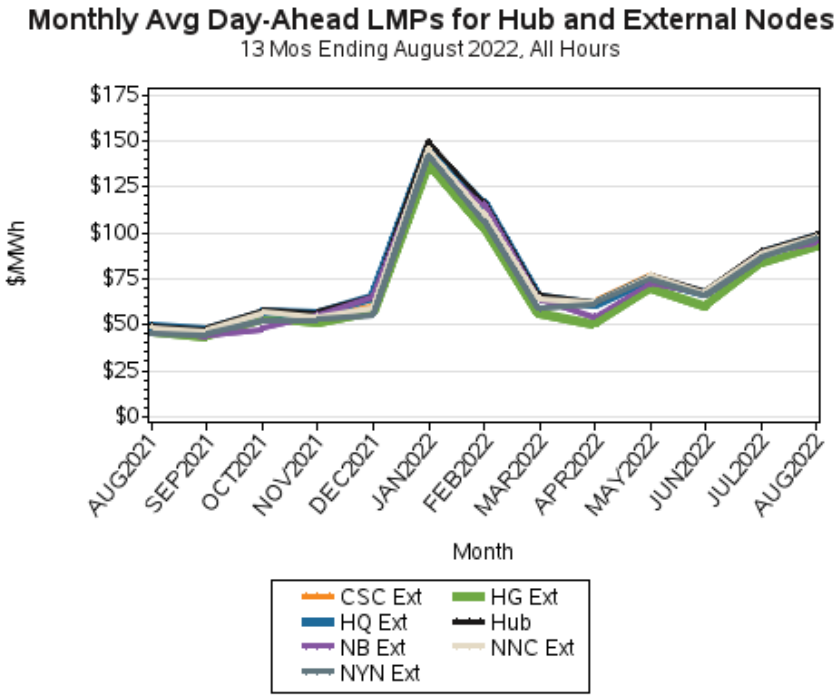
Hub/Zone/ Ext. Node	Avg DA LMP ($/MWh)	Avg RT LMP ($/MWh)	Min DA LMP ($/MWh)	Min RT LMP ($/MWh)	Max DA LMP ($/MWh)	Max RT LMP ($/MWh)	DA % of Hub	RT % of Hub	RT % of DA	DA Std Dev	RT Std Dev	RT Std /DA Std
Hub	$83.11	$84.90	$54.12	$48.37	$177.26	$416.76	100%	100%	102%	$20.25	$34.05	1.68
ME	$81.86	$83.81	$53.70	$43.50	$176.02	$421.04	99%	99%	102%	$20.29	$34.35	1.69
NH	$83.59	$85.54	$54.30	$48.61	$179.48	$419.70	101%	101%	102%	$20.67	$34.71	1.68
VT	$82.66	$84.53	$53.32	$47.38	$177.31	$416.42	99%	100%	102%	$20.57	$34.37	1.67
CT	$81.44	$83.69	$52.98	$47.99	$173.32	$409.99	98%	99%	103%	$20.02	$33.54	1.68
RI	$82.87	$84.63	$54.60	$48.55	$177.16	$413.37	100%	100%	102%	$20.03	$33.79	1.69
SEMA	$83.90	$85.63	$54.86	$48.99	$179.64	$416.36	101%	101%	102%	$20.35	$34.21	1.68
WCMA	$83.19	$85.04	$54.06	$48.39	$177.11	$417.71	100%	100%	102%	$20.28	$34.12	1.68
NEMA	$83.78	$85.67	$54.55	$48.95	$177.97	$417.52	101%	101%	102%	$20.31	$34.33	1.69
NB Ext	$79.27	$80.98	$52.03	-$94.27	$175.00	$411.35	95%	95%	102%	$20.69	$34.88	1.69
NYN Ext	$81.00	$82.14	$52.68	$44.67	$169.74	$389.70	97%	97%	101%	$19.59	$31.50	1.61
HQ Ext	$81.79	$83.60	$53.34	$47.99	$174.14	$410.24	98%	98%	102%	$19.87	$33.58	1.69
HG Ext	$77.07	$78.85	$49.62	$40.68	$167.76	$386.27	93%	93%	102%	$19.48	$32.31	1.66
CSC Ext	$81.69	$85.07	$53.06	$48.57	$173.86	$414.48	98%	100%	104%	$20.11	$34.06	1.69
NNC Ext	$81.34	$83.82	$52.82	$48.22	$171.18	$410.32	98%	99%	103%	$19.90	$33.41	1.68

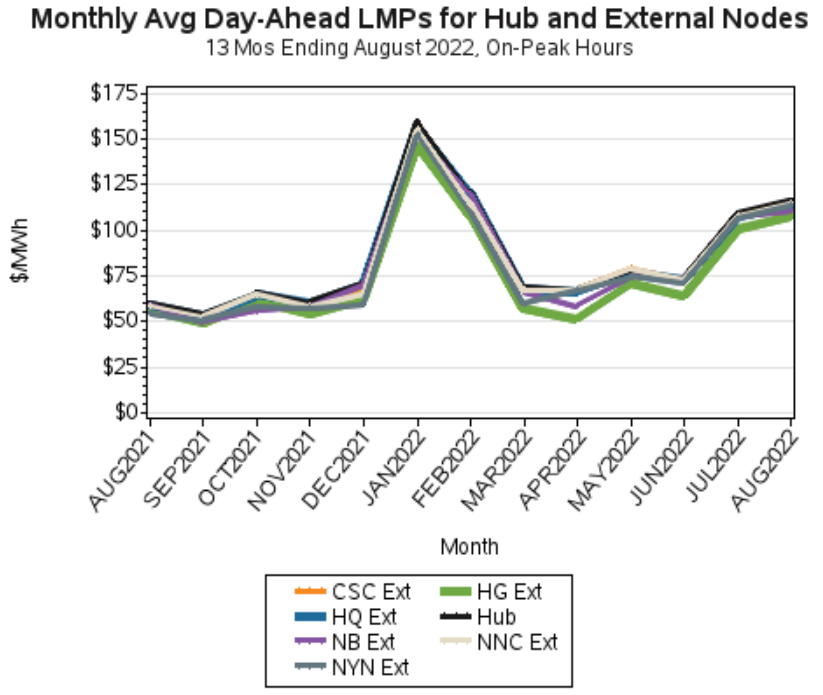
4.2 LMP Graphs, Day-Ahead Market, 13 Months Ending August 2022

The following four graphs show the 13 month history of average hourly Day-Ahead LMPs for the Hub, Load Zones, and External Nodes on an overall and on-peak basis.



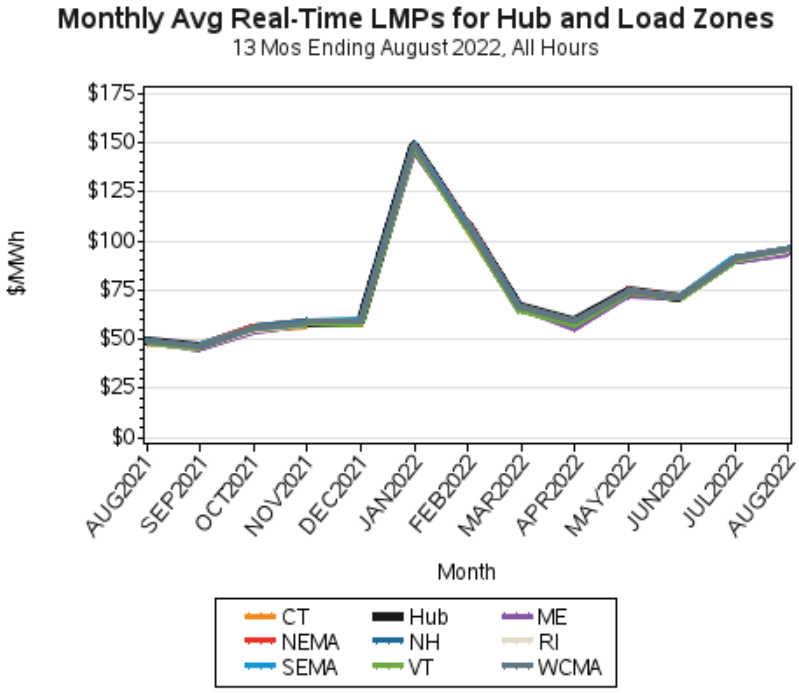


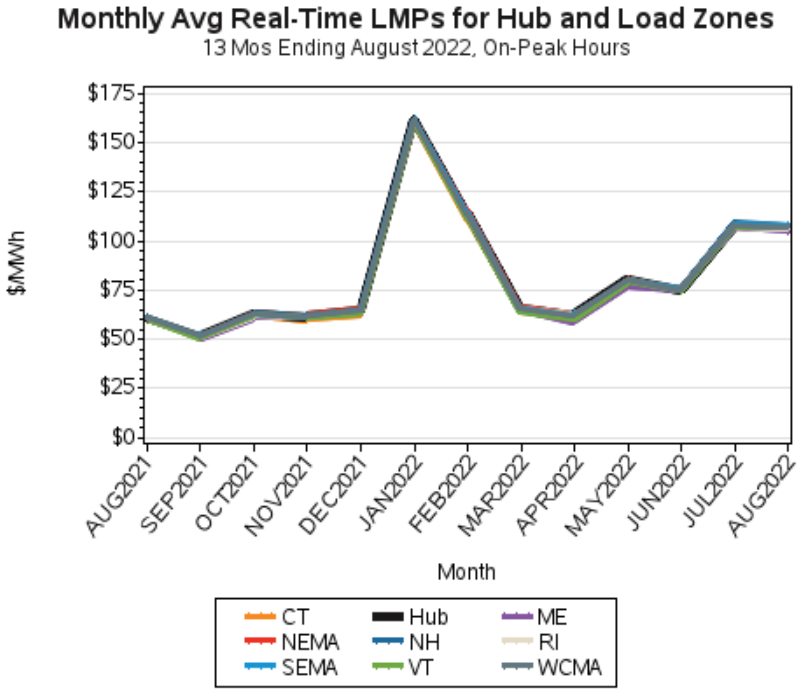


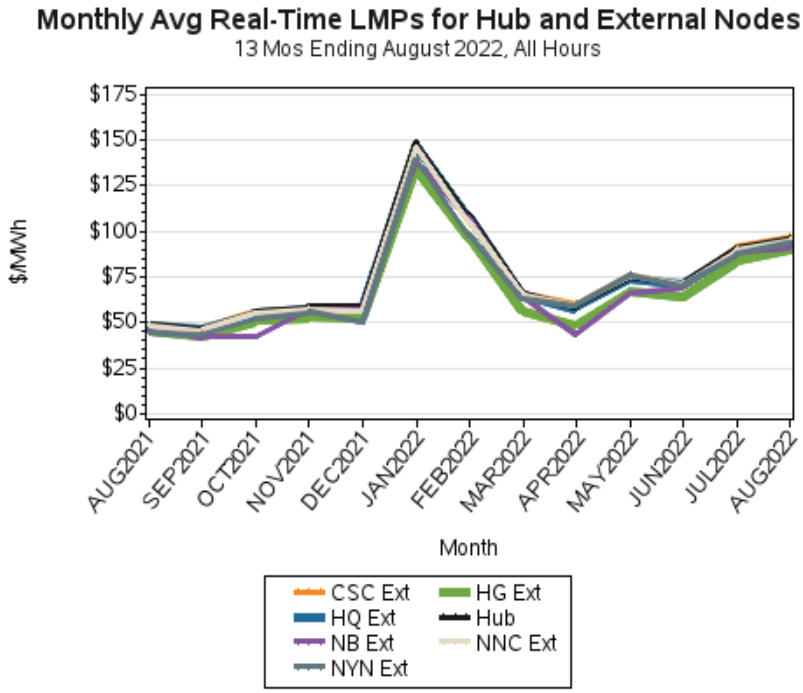


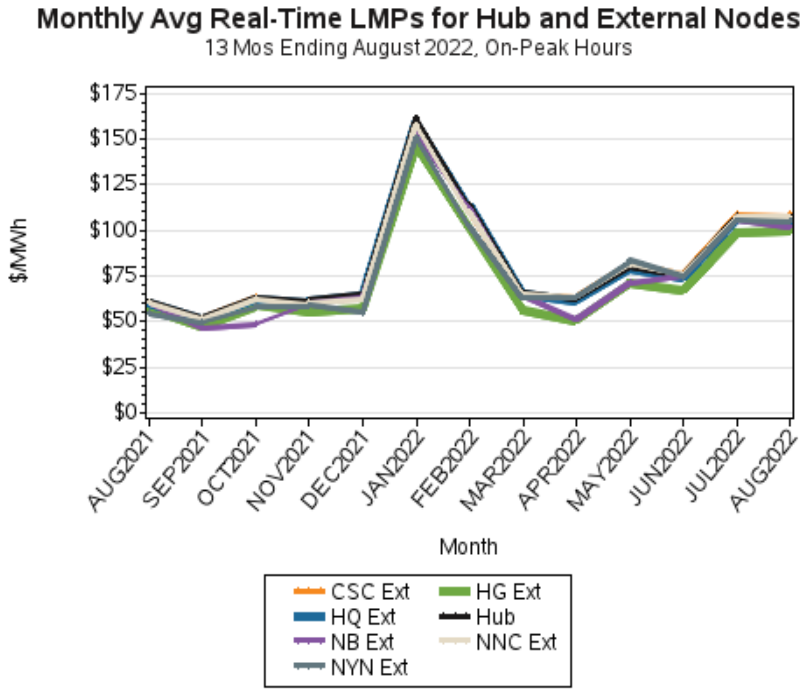
4.3 LMP Graphs, Real-Time Market, 13 Months Ending August 2022

The following four graphs show the 13 month history of average hourly (and 5-minute) Real-Time LMPs for the Hub, Load Zones, and External Nodes on an overall and on-peak basis.









4.4 For More Information

The ISO provides a discussion of LMP results on a weekly basis in its Weekly Market Performance Report, located here[3].

The ISO also provides a discussion of LMP results on an annual basis in its Annual Market Performance Reports, located here[4].

Downloadable Hub and Load Zone weekly and monthly LMP indices are located here.

Customizable downloads of Day-Ahead and Real-Time Hourly and 5-minute LMPs can be performed here.

Current Day-Ahead and Real-Time LMPs for the Hub and Load Zones can be monitored here.

A discussion of the calculation of LMPs can be found in the ISO's Market Rule 1 located here.

[3] Select "Weekly Markets Reports" from the document type filter on the left hand side of the page

[4] Select "Annual Markets Reports" from the document type filter on the left hand side of the page

5. Imports and Exports

For more information on import and export scheduling, visit the ISO website here.

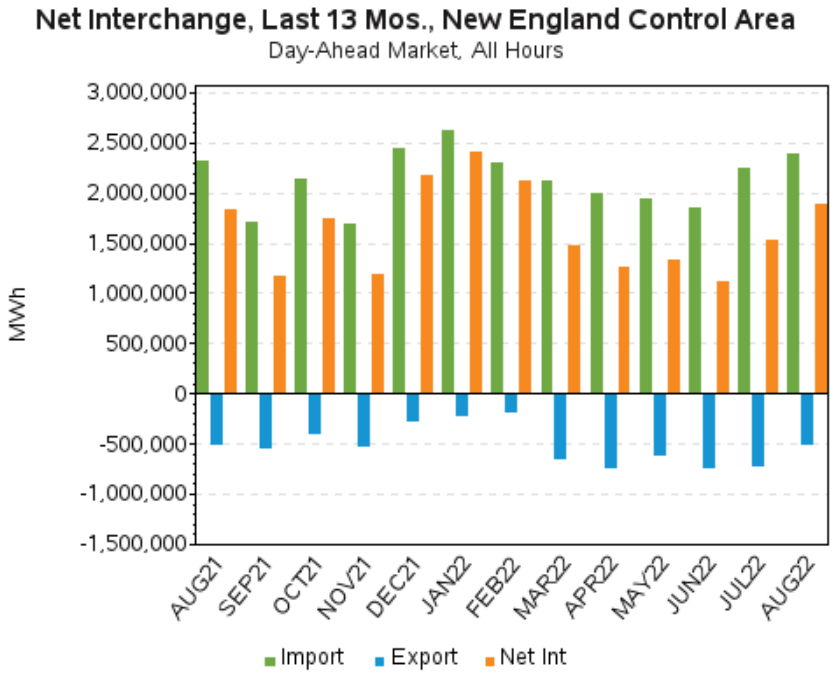
5.1 Net Interchange Summary, August 2022

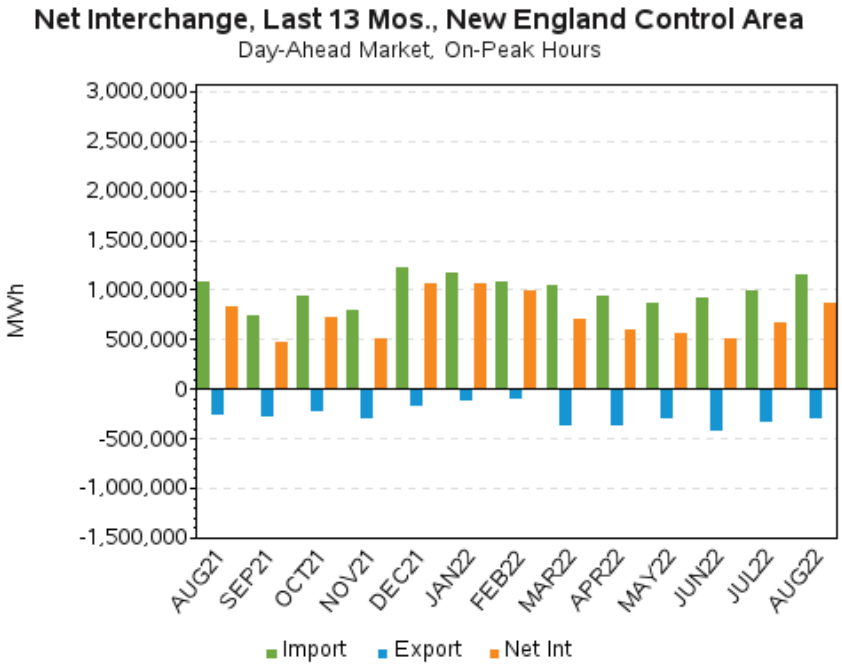
The following tables show summary statistics for imports and exports on the six external interfaces for both the Day-Ahead and Real-Time Markets:

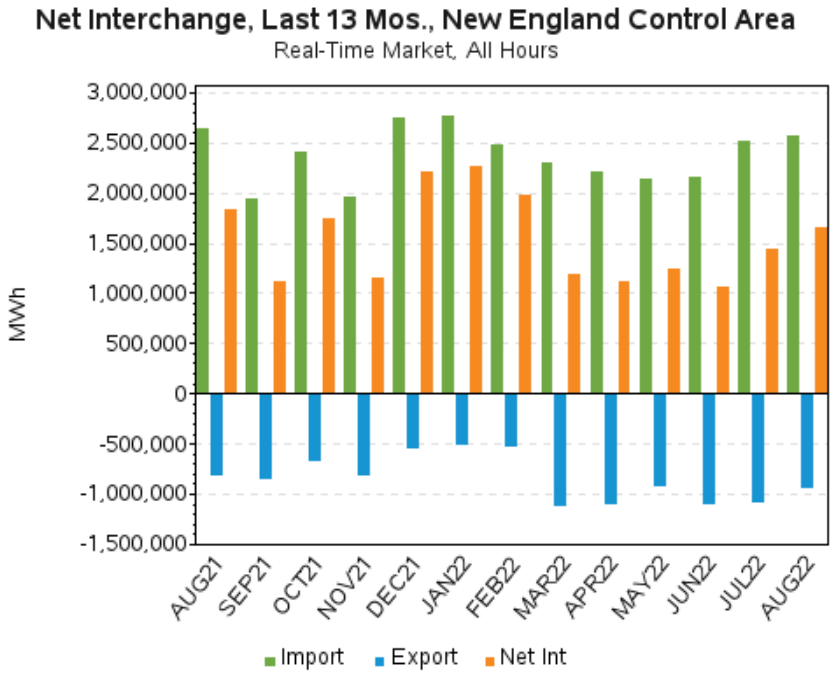
5.1.1 *Day-Ahead and Real-Time Market Summary by Interface*

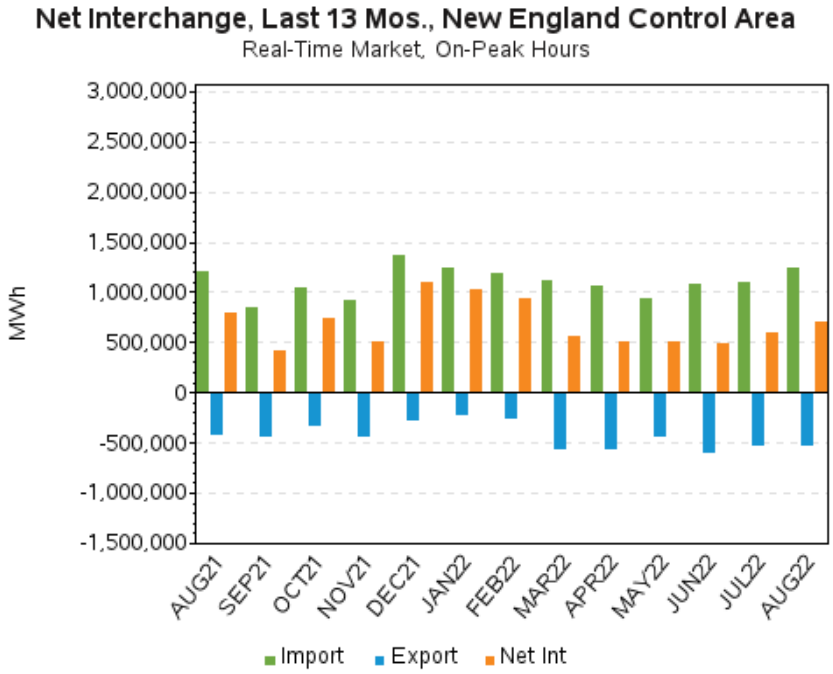
On/Off Peak	Interface	DA Total Exports (MWh)	DA Total Imports (MWh)	DA Net Int (MWh)	RT Total Exports (MWh)	RT Total Imports (MWh)	RT Net Int (MWh)
All Hours	NNC	-60,643	11,038	-49,605	-83,764	19,721	-64,043
	NY-CSC	-229,130	0	-229,130	-230,097	0	-230,097
	HQ HG	0	167,388	167,388	0	167,400	167,400
	HQ I/II	0	1,127,375	1,127,375	0	1,199,596	1,199,596
	NY-N AC	-183,229	760,306	577,077	-556,082	867,759	311,677
	NB	-32,909	323,618	290,709	-49,580	320,936	271,356
Total	**All Hours**	**-505,911**	**2,389,724**	**1,883,813**	**-919,523**	**2,575,412**	**1,655,889**
Off-Peak	NNC	-28,335	3,857	-24,478	-37,385	8,040	-29,345
	NY-CSC	-110,161	0	-110,161	-111,038	0	-111,038
	HQ HG	0	84,595	84,595	0	84,600	84,600
	HQ I/II	0	571,905	571,905	0	611,592	611,592
	NY-N AC	-79,597	391,709	312,113	-224,368	451,236	226,868
	NB	-12,669	189,064	176,394	-22,474	187,280	164,806
Total	**Off-Peak**	**-230,762**	**1,241,130**	**1,010,368**	**-395,265**	**1,342,748**	**947,483**
On-Peak	NNC	-32,308	7,180	-25,127	-46,379	11,681	-34,698
	NY-CSC	-118,969	0	-118,969	-119,059	0	-119,059
	HQ HG	0	82,793	82,793	0	82,800	82,800
	HQ I/II	0	555,470	555,470	0	588,004	588,004
	NY-N AC	-103,633	368,597	264,964	-331,714	416,523	84,809
	NB	-20,240	134,554	114,314	-27,106	133,656	106,550
Total	**On-Peak**	**-275,149**	**1,148,594**	**873,445**	**-524,258**	**1,232,663**	**708,406**

5.2 Day-Ahead and Real-Time Net Interchange Summary, Last 13 Months

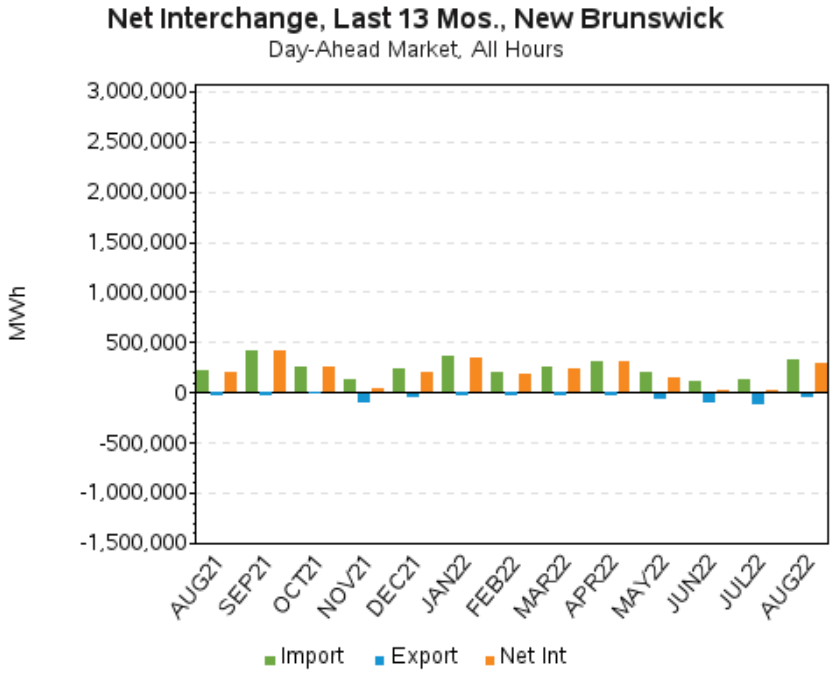


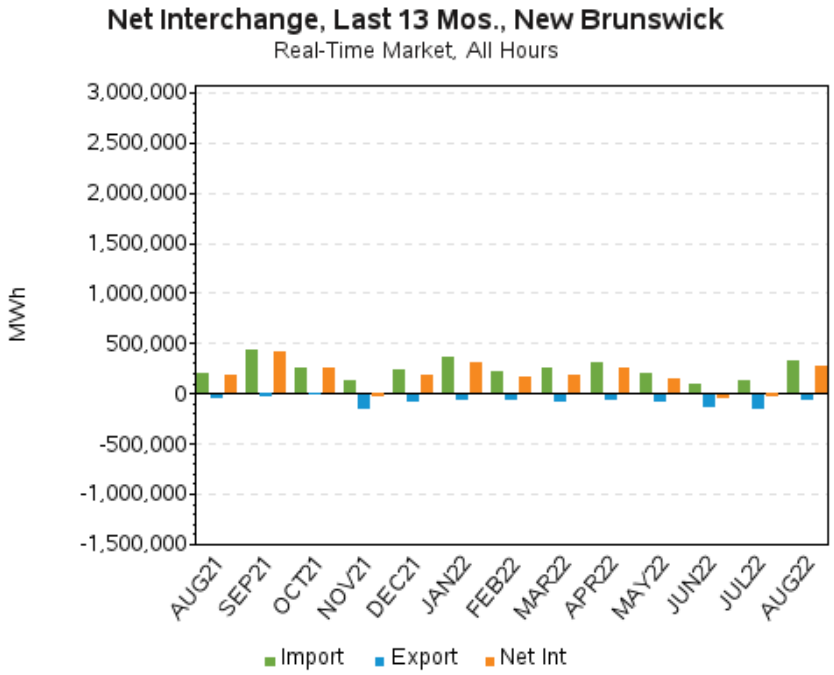


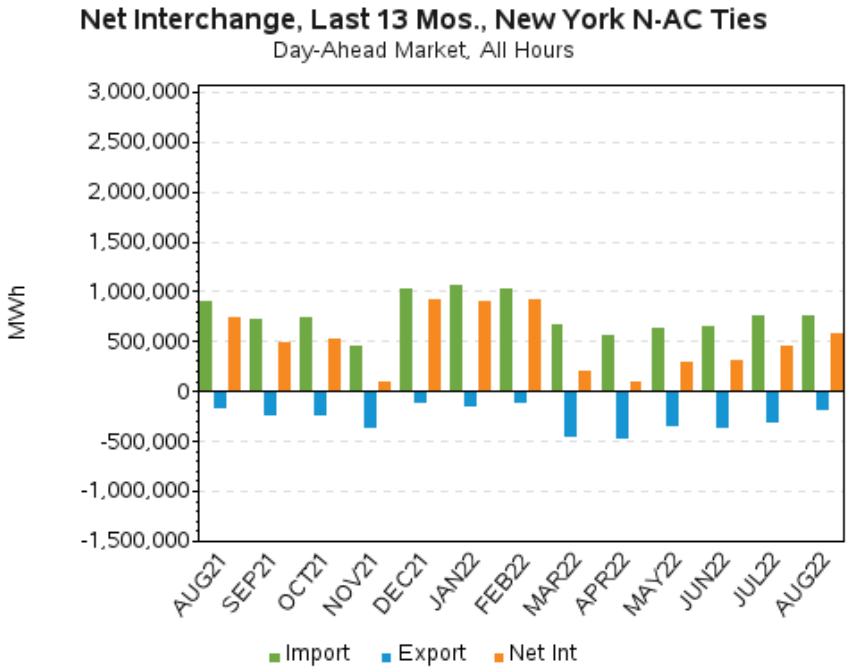


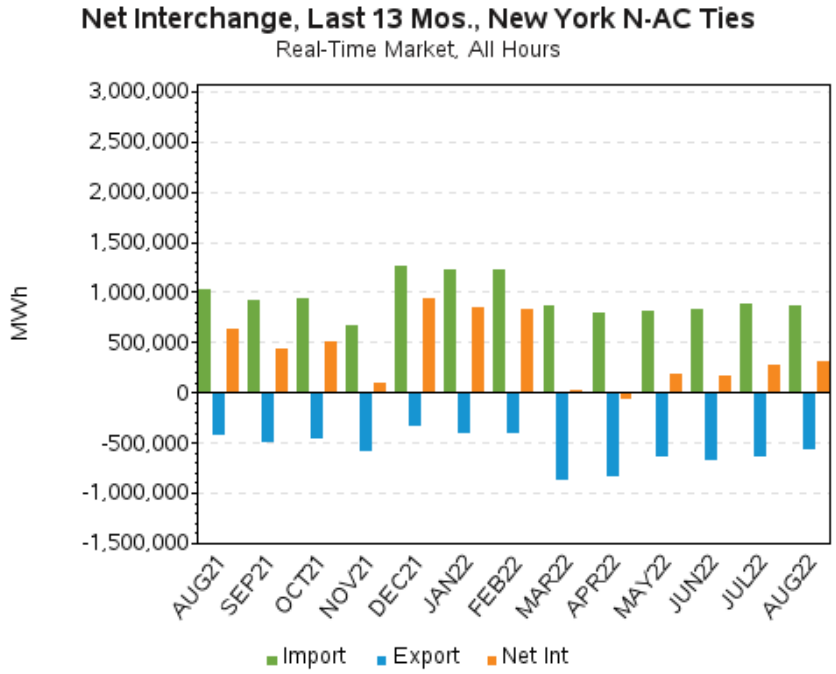


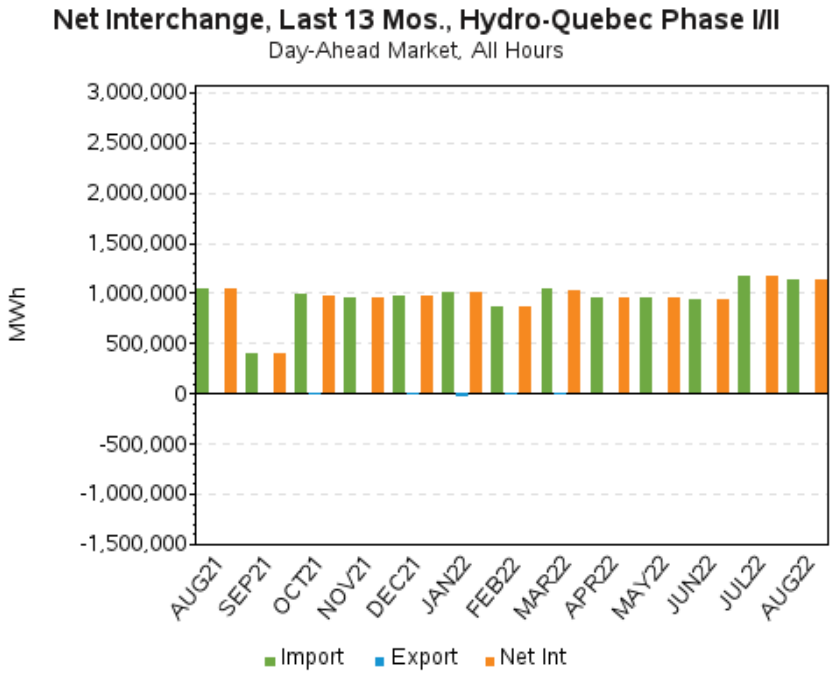
5.3 Net Interchange Summary by Interface, Last 13 Months

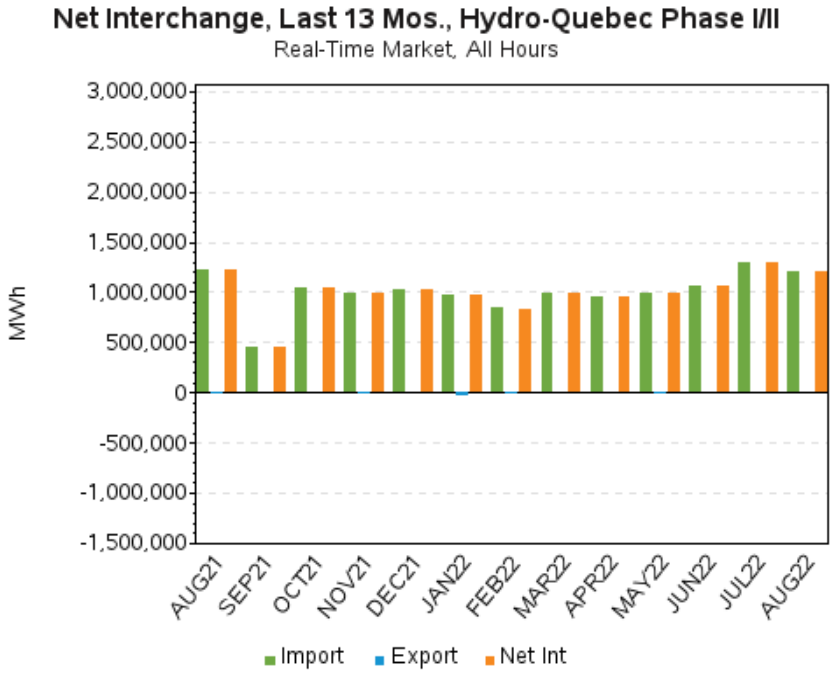


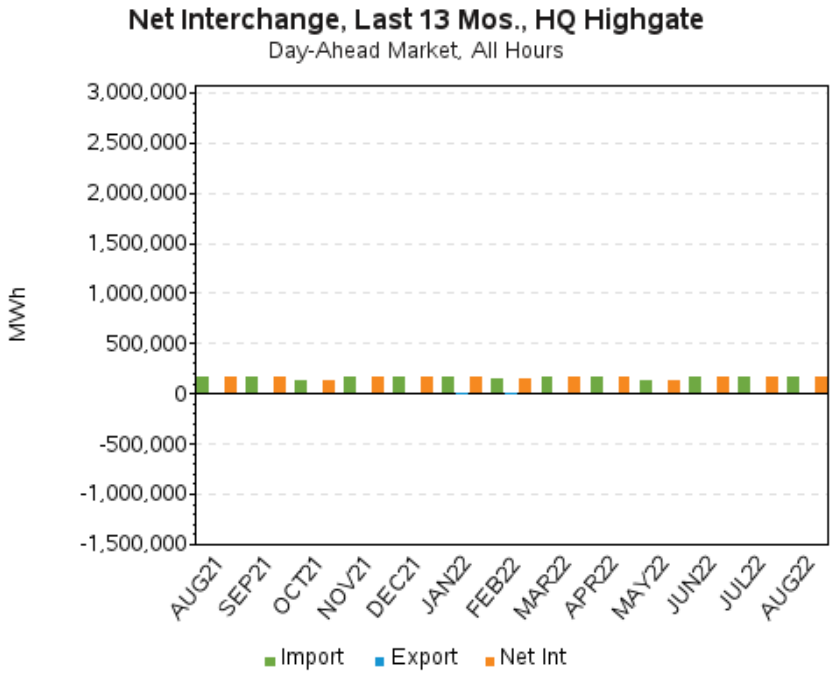


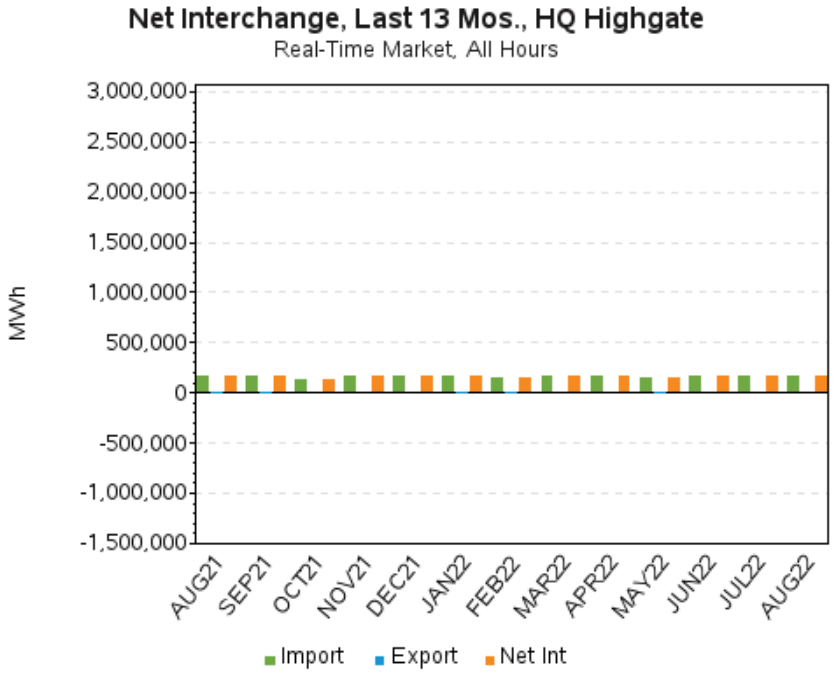


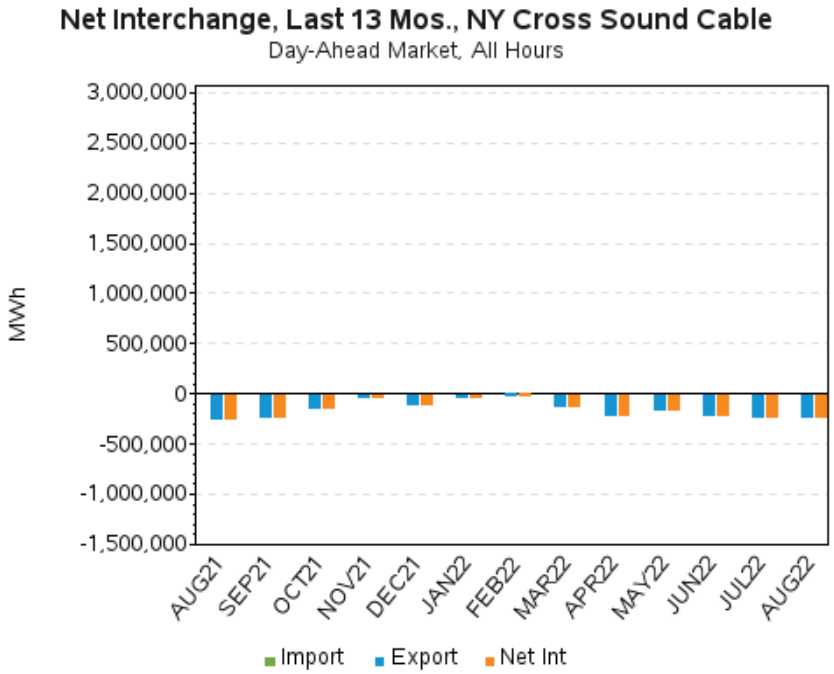


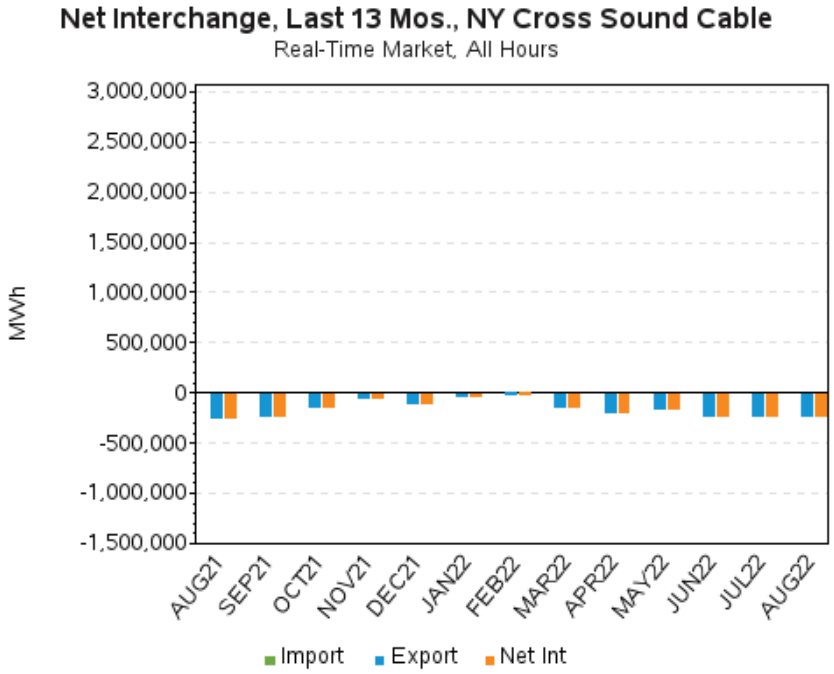


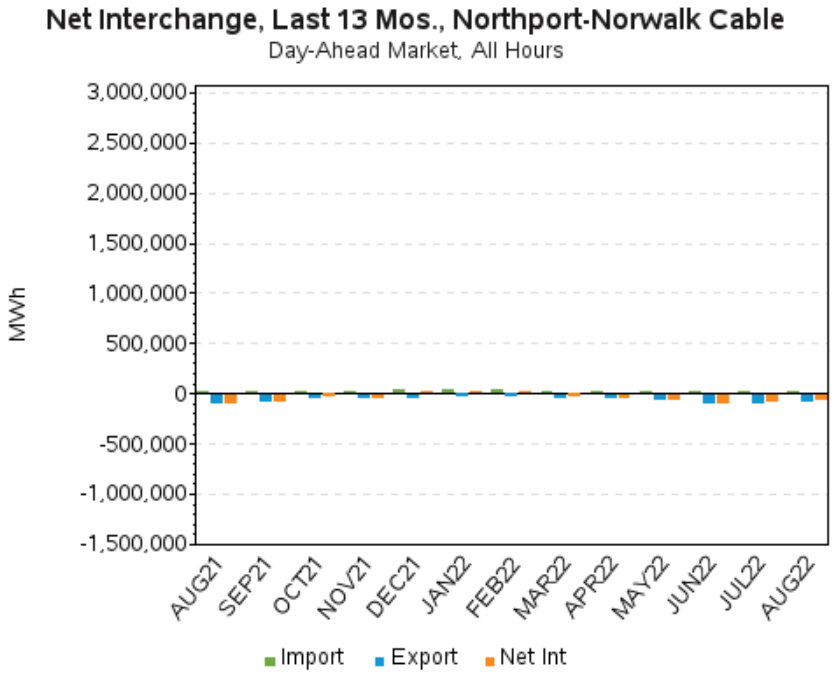


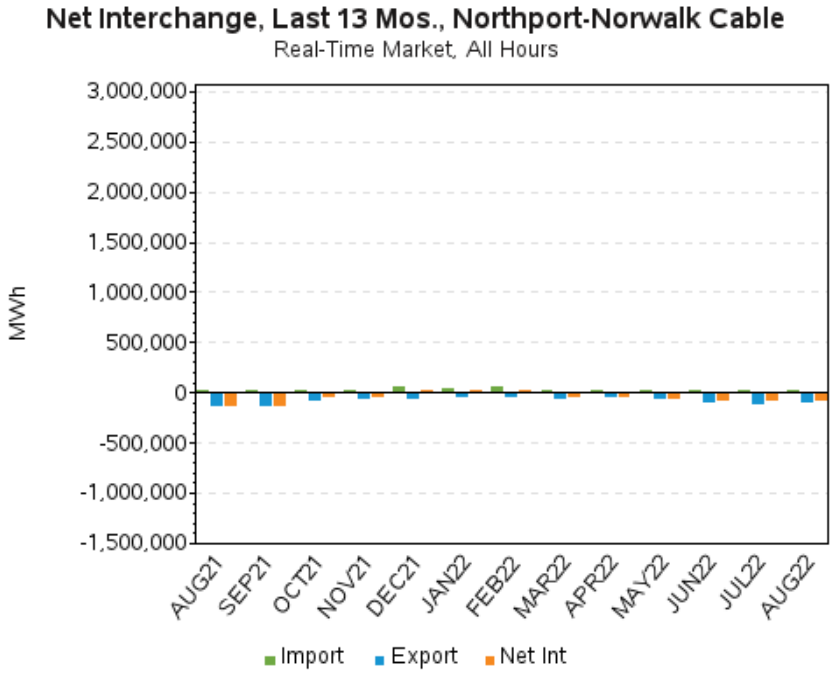












5.4 For More Information

Selectable historical hourly net interchange for the New England Control can be found on the ISO's website here.

Monthly, daily, and hourly summaries of New England Control Area net interchange can be found on the ISO's web site here.

The market rules governing the scheduling of external transactions can be found in Section III.1.10 "Scheduling" of the ISO's Market Rule 1 located here.

The business rules and procedures for external transactions can be found in Section 6.5, "External Transactions" in the ISO's Manual 11 – Market Operations located here.

A history of emergency purchases and sales from and to neighboring control areas can be found here.

6. Financial Transmission Rights (FTR) Auctions

FTRs are financial instruments that entitle the holder to a share of congestion collections in the Day-Ahead Market, and are awarded via auction.

Starting in October 2019, ISO New England implemented a Balance of Planning Period (BoPP) auction system within the FTR market. These auctions are intended to improve price discovery, and allow participants more opportunities to reconfigure their FTR portfolio. There are on-peak and off-peak auctions held for each month remaining in the annual period, and these auctions offer the same 50% of network capacity that was auctioned in the Long-Term auctions. The Monthly FTR Auction is now referred to as Prompt Month FTR auction in the following exhibits, despite the fact that the concept was implemented for the October auction.

6.1 FTR Auction Results

The results of the Prompt Month FTR auction and any applicable long-term FTR auction are shown below.

6.1.1 *Prompt Month Auction Summary, August 2022*

Bids to Buy or Offers to Sell	On-Peak or Off-Peak	No. of Bids or Offers	Bid or Offered MW-Mos.	Bid or Offered Dollars	No. of Awards	Awarded MW-Mos.	Awarded Dollars
Buy	Off	2,956	16,729	$1,071,705	1,407	8,733	$179,595
Buy	On	3,180	18,417	$1,893,729	1,549	9,485	$432,975
Buy	Buy Total	6,136	35,146	$2,965,434	2,956	18,218	$612,570
Sell	Off	413	1,675	$185,345	17	76	-$50,941
Sell	On	422	1,696	$725,409	49	186	-$158,949
Sell	Sell Total	835	3,370	$910,754	66	262	-$209,890
Grand Total	Grand Total	6,971	38,516	$3,876,188	3,022	18,480	$402,680

6.1.2 *Number of Auction Participants, August 2022*

Auction Period	Monthly, Long-Term, or BoPP	No. of Auctions	No. of Bidders
August 2022	MO	1	18
2022	BOPP	7	59

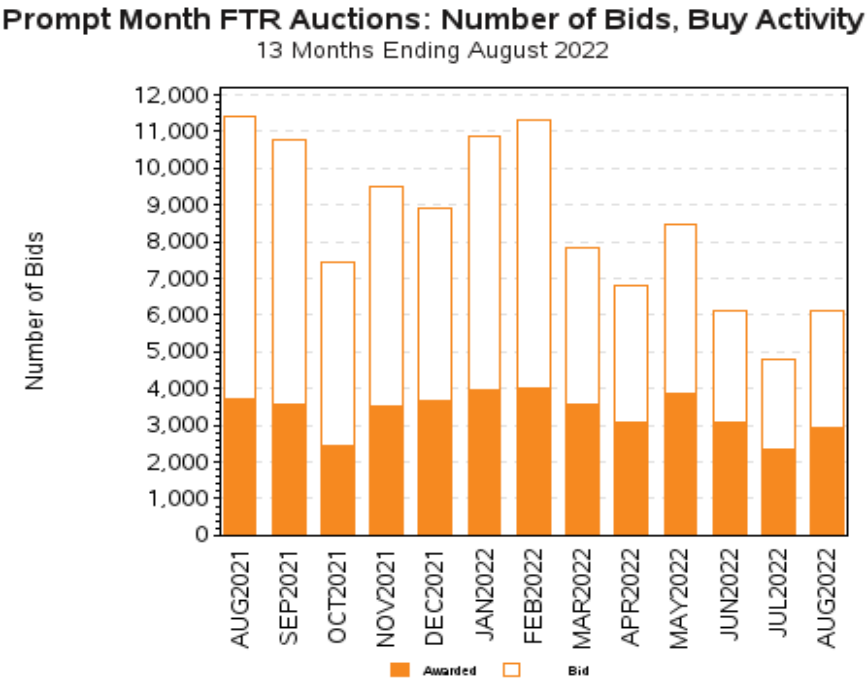
6.1.3 *Prompt Month FTR Auction Results, Last 13 Months*

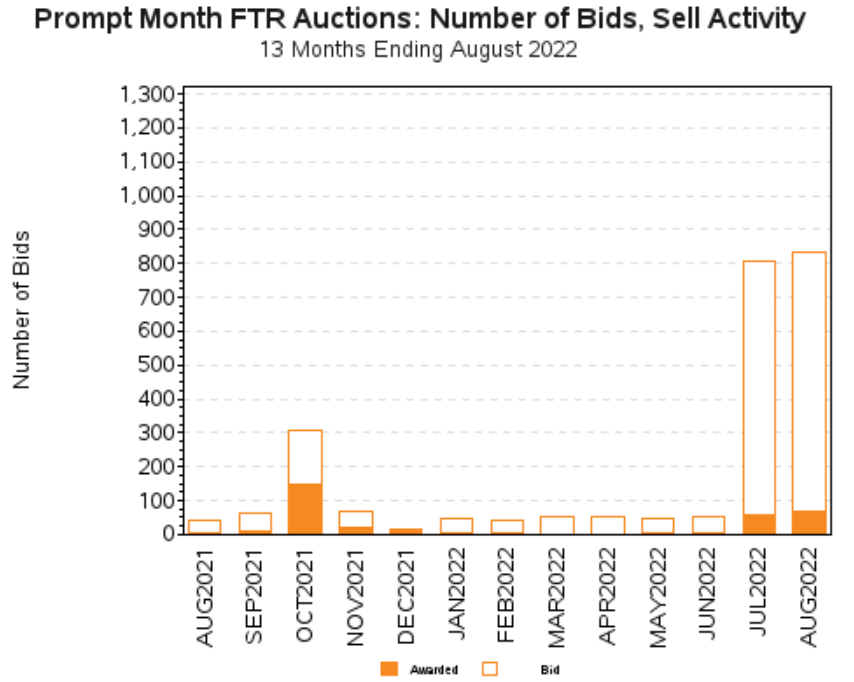
Auction Month	Bids to Buy or Offers to Sell	No. of Bids or Offers	Bid or Offered MW-Mos.	Bid or Offered Dollars	No. of Awards	Awarded MW-Mos.	Awarded Dollars
AUG 2021	Buy	11,395	106,201	-$378,712	3,733	29,530	$216,112
AUG 2021	Sell	40	933	$157,296	03	45	-$389
AUG 2021	Tot	11,435	107,134	-$221,417	3,736	29,576	$215,723
SEP 2021	Buy	10,760	57,536	$1,037,336	3,558	21,452	$366,010
SEP 2021	Sell	62	1,230	$292,604	10	185	-$12,209
SEP 2021	Tot	10,822	58,766	$1,329,939	3,568	21,637	$353,800
OCT 2021	Buy	7,457	48,970	$3,066,007	2,458	17,911	$602,806

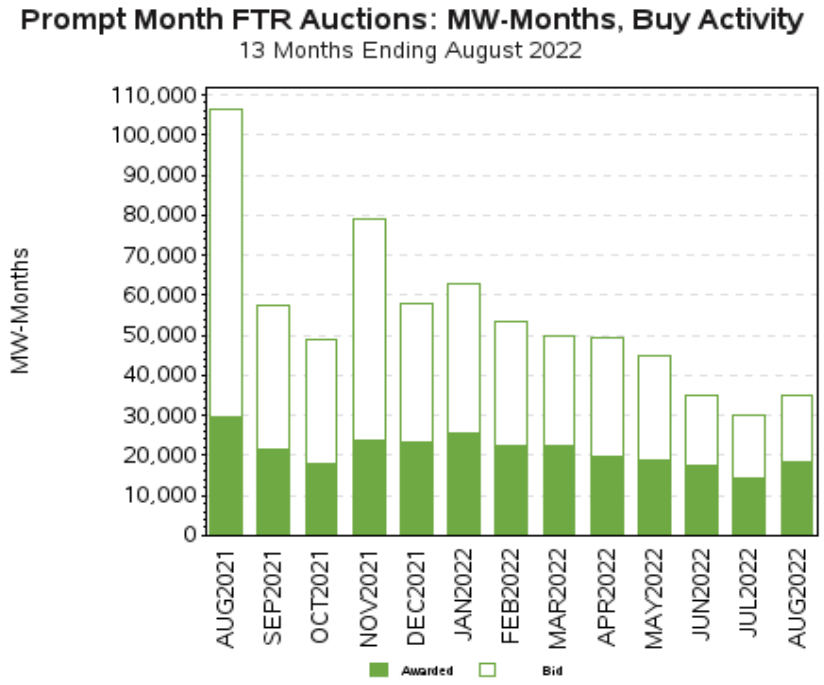
Auction Month	Bids to Buy or Offers to Sell	No. of Bids or Offers	Bid or Offered MW-Mos.	Bid or Offered Dollars	No. of Awards	Awarded MW-Mos.	Awarded Dollars
OCT 2021	Sell	309	1,719	$124,492	147	743	-$95,786
OCT 2021	Tot	7,766	50,689	$3,190,499	2,605	18,654	$507,020
NOV 2021	Buy	9,491	78,846	$5,061,556	3,517	23,960	$1,695,026
NOV 2021	Sell	68	940	$205,699	22	195	-$4,393
NOV 2021	Tot	9,559	79,786	$5,267,255	3,539	24,154	$1,690,633
DEC 2021	Buy	8,890	57,917	$4,192,859	3,654	23,123	$826,399
DEC 2021	Sell	17	73	$38,542	13	25	-$133
DEC 2021	Tot	8,907	57,990	$4,231,400	3,667	23,147	$826,267
JAN 2022	Buy	10,870	62,706	$20,750,711	3,982	25,398	$2,873,456
JAN 2022	Sell	45	698	$2,323,600	02	30	-$9,750
JAN 2022	Tot	10,915	63,403	$23,074,311	3,984	25,427	$2,863,705
FEB 2022	Buy	11,308	53,302	$9,610,632	3,993	22,218	$2,754,906
FEB 2022	Sell	40	457	$211,392	04	16	-$954
FEB 2022	Tot	11,348	53,759	$9,822,024	3,997	22,235	$2,753,952
MAR 2022	Buy	7,812	49,726	$6,160,579	3,597	22,429	$1,510,378
MAR 2022	Sell	50	743	$705,700	00	00	$00
MAR 2022	Tot	7,862	50,469	$6,866,279	3,597	22,429	$1,510,378
APR 2022	Buy	6,802	49,575	$3,442,234	3,096	19,554	$601,559
APR 2022	Sell	53	796	$858,629	00	00	$00
APR 2022	Tot	6,855	50,371	$4,300,863	3,096	19,554	$601,559
MAY 2022	Buy	8,458	45,057	$2,739,915	3,888	18,719	$573,731
MAY 2022	Sell	47	589	$796,284	02	03	-$211
MAY 2022	Tot	8,505	45,646	$3,536,198	3,890	18,722	$573,520
JUN 2022	Buy	6,141	35,082	$2,342,051	3,067	17,681	$532,509
JUN 2022	Sell	50	629	$824,341	02	14	-$2,221
JUN 2022	Tot	6,191	35,711	$3,166,392	3,069	17,694	$530,289
JUL 2022	Buy	4,787	30,058	$2,859,408	2,337	14,489	$856,614
JUL 2022	Sell	806	3,087	$359,036	59	256	-$44,921
JUL 2022	Tot	5,593	33,144	$3,218,444	2,396	14,744	$811,693
AUG 2022	Buy	6,136	35,146	$2,965,434	2,956	18,218	$612,570
AUG 2022	Sell	835	3,370	$910,754	66	262	-$209,890
AUG 2022	Tot	6,971	38,516	$3,876,188	3,022	18,480	$402,680

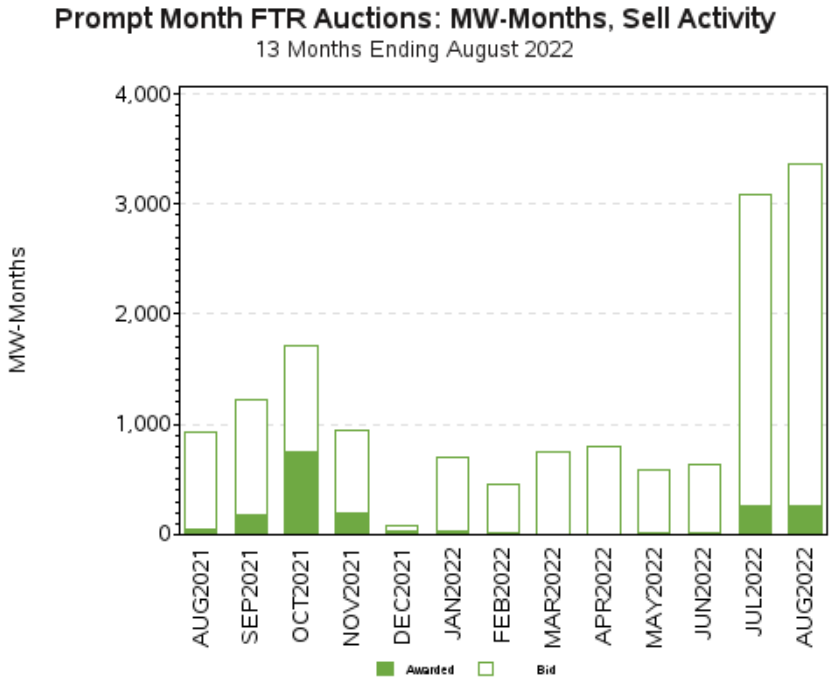
6.2 Prompt Month FTR Auction Results, Last 13 Months

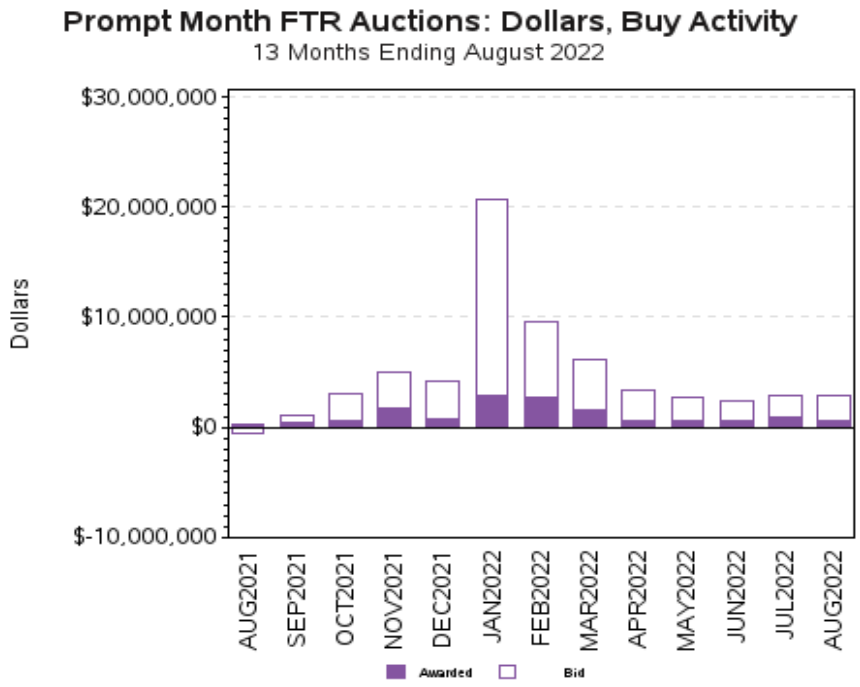
The next series of graphs show summaries of FTR Auction activity over the last 13 months, including bids to buy Prompt Month FTRs and offers to sell long-term FTRs into each Prompt Month auction.

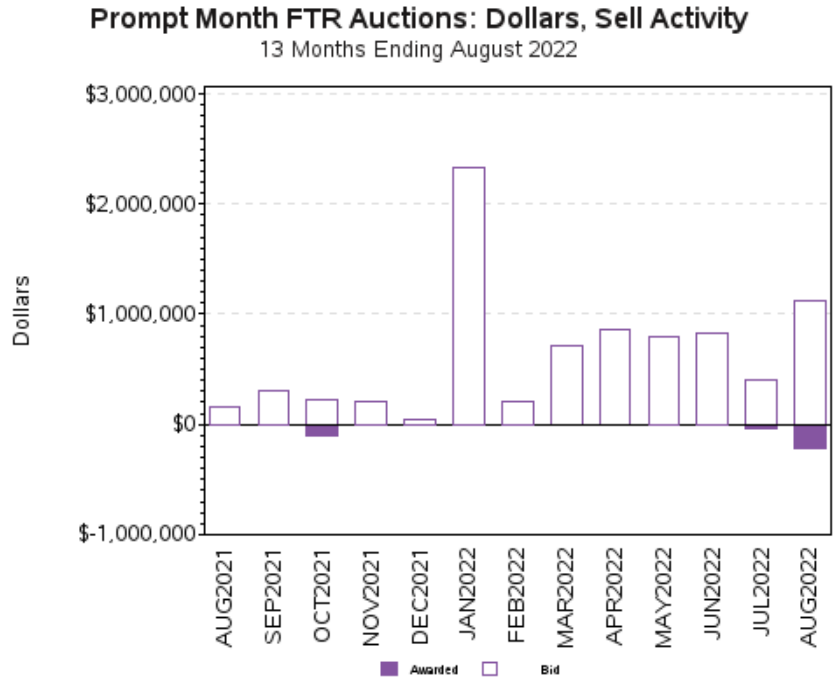






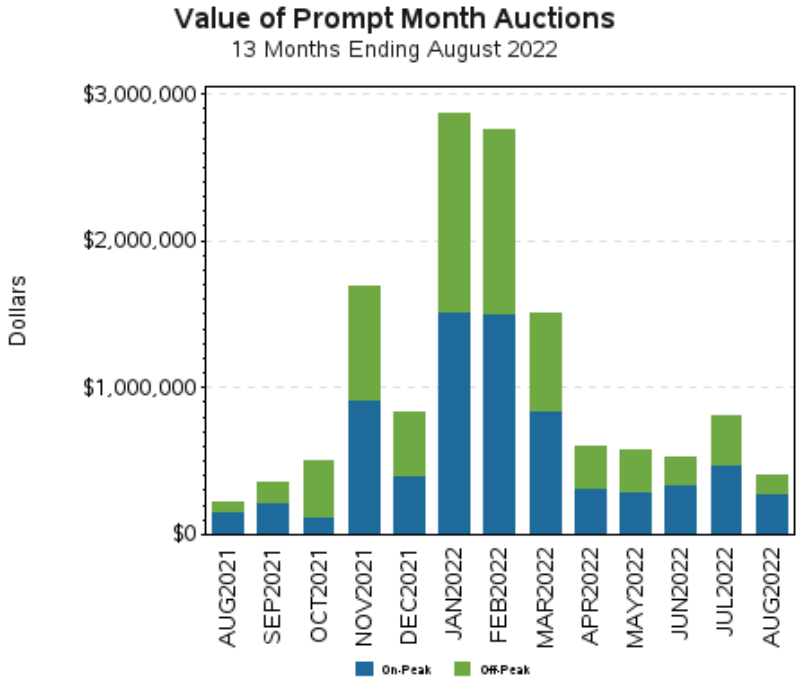


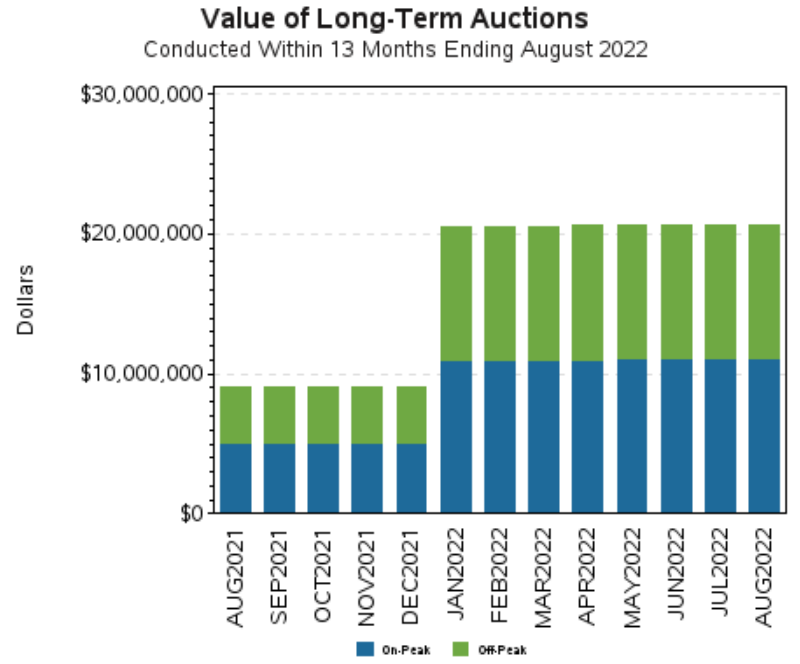


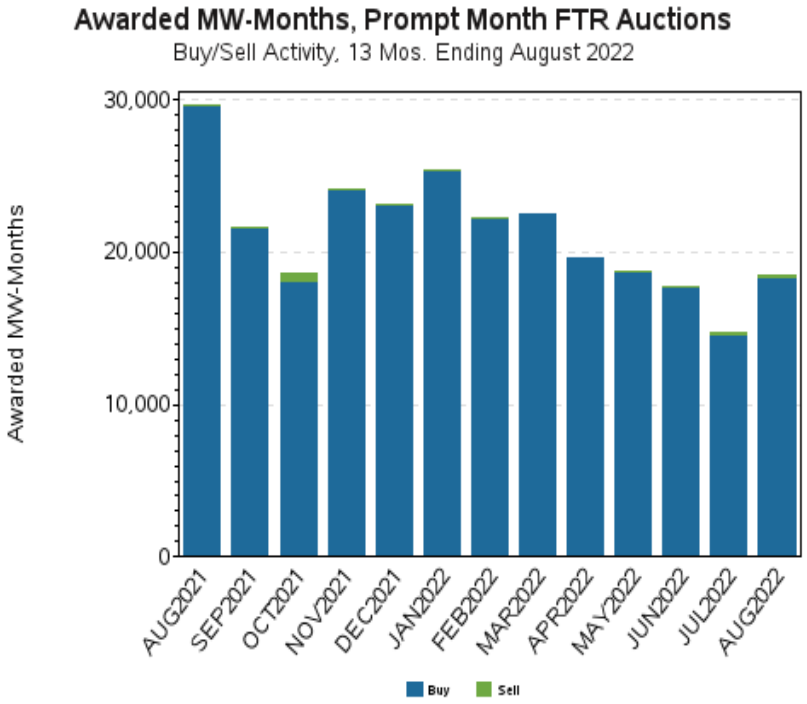


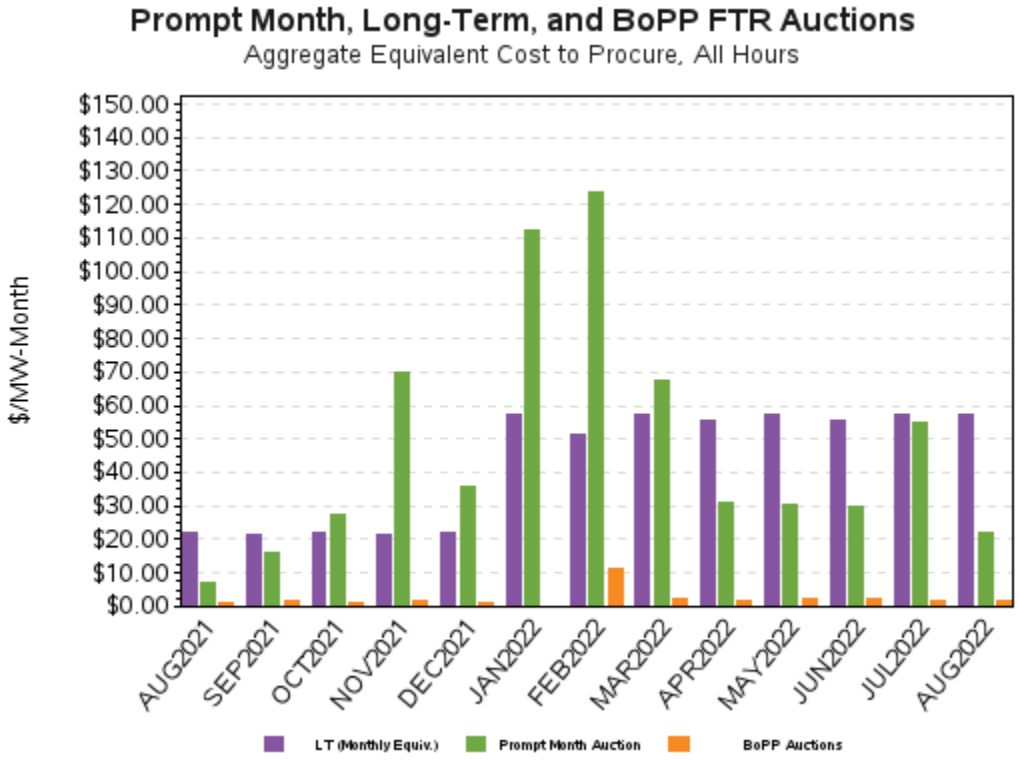
6.3 Auction Value, Last 13 Months

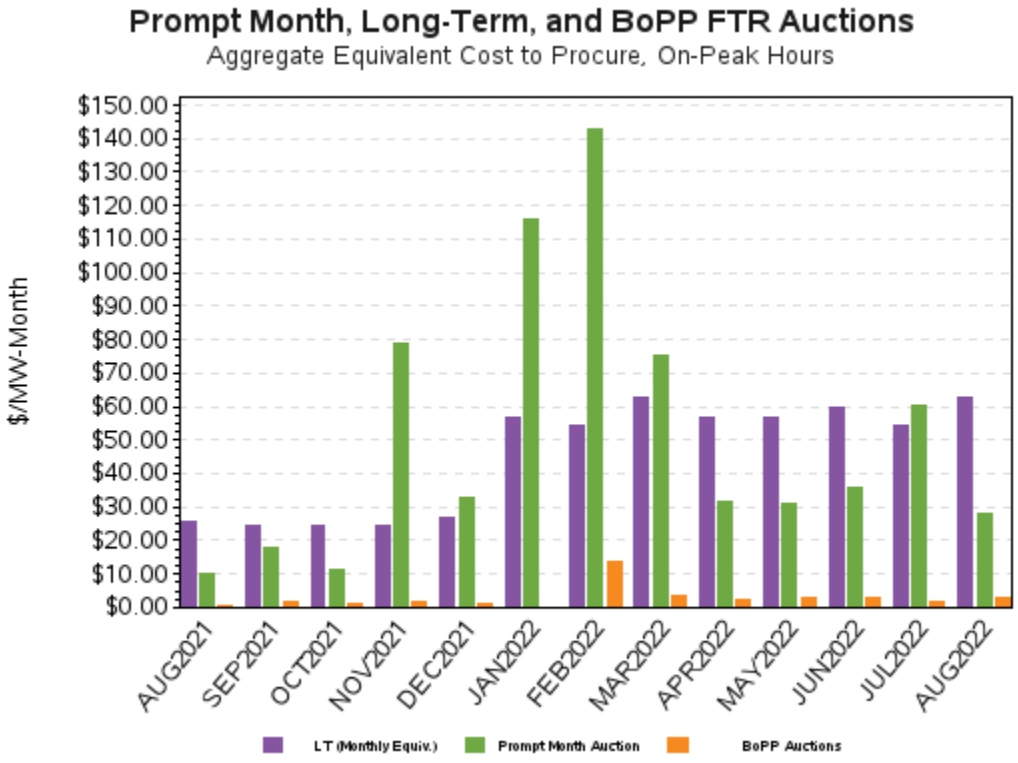
The next series of graphs show summaries of FTR Auction value and on/off-peak activity over the last 13 months.

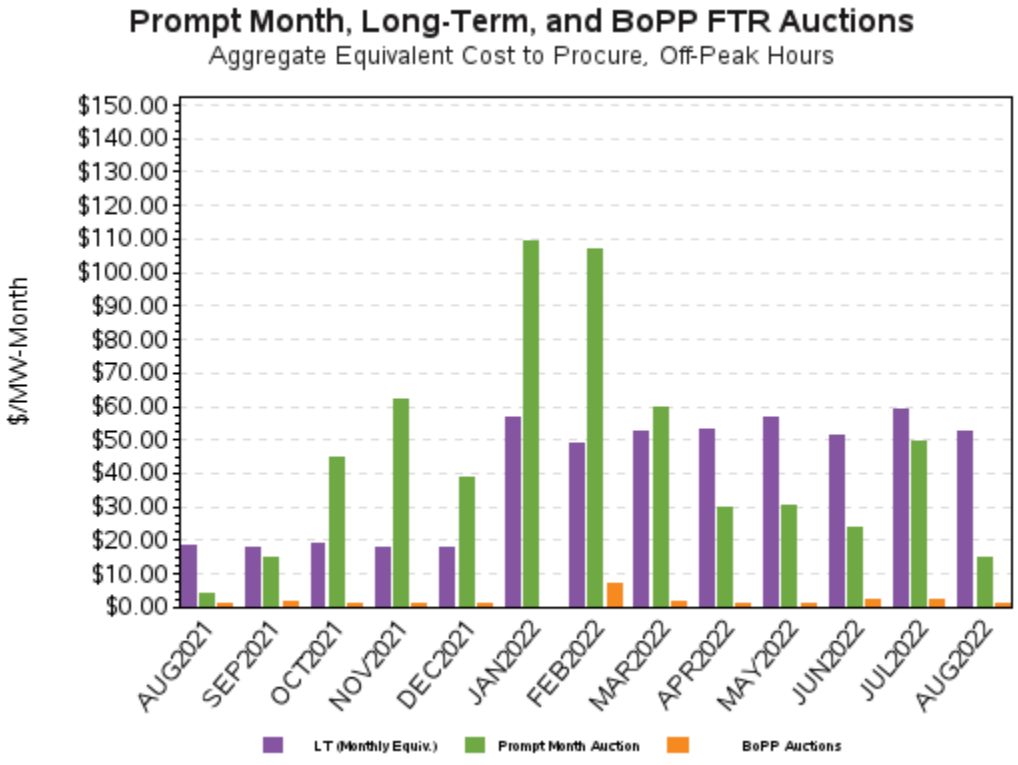












6.4 For More Information

The market rules governing the FTR auctions can be found in Section III.7 "Financial Transmission Rights Auctions" of the ISO's Market Rule 1 located here.

The business rules and procedures for FTRs can be found in Section 6.5, "External Transactions" in the ISO's Manual 6 – Financial Transmission Rights located here.

Information about the Prompt Month, Long-Term, and BoPP FTR auctions can be found on the ISO's web site here.

7. Auction Revenue Rights

Auction Revenue is allocated to two main categories. First, it is allocated in the form of Incremental Auction Revenue Rights (IARRs) to entities, which, by paying for transmission upgrades, have increased the transfer capability of the NEPOOL transmission system and have enabled more FTRs to be available in the FTR auction. Second, it is allocated through the Auction Revenue Rights (ARR) process, where it is primarily received by congestion paying load-serving entities (LSEs). The majority of auction revenue is allocated through the ARR process.

The ARR process allocates dollars to:

- *Excepted Transactions* – special grandfathered transactions (listed in Attachment G of NEPOOL Tariff)
- *NEMA Contracts* – other long-term contracts having delivery in Northeastern Massachusetts.
- *Long-Term Firm Through or Out Service*.
- *Load Share* – the proportional Real-Time Load Obligation share of Congestion paying entities at the time of the pool's coincident peak for the month.

The following table provides a more detailed view of how auction revenues are allocated through the ARR and IARR process by including the dollars allocated to each component of the ARR process for each of the last 13 months.

Month	Net FTR Auction Revenue	NEMA Contracts	Load Share	Total ARR Allocation	IARR Allocation	Total Auction Distribution
Aug-21	-$985,241	$12,098	$890,549	$902,647	$82,594	$985,241
Sep-21	-$1,109,465	$14,681	$1,016,654	$1,031,335	$78,130	$1,109,465
Oct-21	-$1,280,763	$12,704	$1,196,665	$1,209,369	$71,394	$1,280,763
Nov-21	-$2,443,731	$63,291	$2,319,418	$2,382,710	$61,021	$2,443,731
Dec-21	-$1,603,202	$31,264	$1,450,263	$1,481,527	$121,675	$1,603,202
Jan-22	-$4,606,048	$131,722	$4,341,438	$4,473,161	$132,887	$4,606,048
Feb-22	-$4,353,989	$130,990	$4,110,211	$4,241,201	$112,788	$4,353,989
Mar-22	-$3,263,592	$69,643	$3,110,042	$3,179,685	$83,907	$3,263,592
Apr-22	-$2,299,081	$47,056	$2,169,082	$2,216,138	$82,943	$2,299,081
May-22	-$2,329,420	$35,202	$2,199,408	$2,234,610	$94,810	$2,329,420
Jun-22	-$2,228,799	$36,953	$2,058,910	$2,095,863	$132,936	$2,228,799
Jul-22	-$2,567,634	$28,732	$2,280,417	$2,309,148	$258,486	$2,567,634
Aug-22	-$2,159,911	$20,866	$1,330,845	$1,351,710	$808,201	$2,159,911

The following tables display the total distribution of On- and Off-Peak ARR dollars to the various Load Zones for each of the last 13 months. The sum across zones totals to the 'Total ARR Allocation' column in the preceding table.

On Peak								
Month	ME	NH	VT	CT	RI	SEMA	WCMA	NEMA
Aug-21	$34,409	$34,514	$12,888	$101,832	$34,042	$106,588	$45,710	$146,009
Sep-21	$35,198	$36,426	$12,238	$100,841	$43,484	$119,135	$51,973	$179,725
Oct-21	$33,117	$31,353	$12,578	$102,527	$32,445	$103,785	$46,899	$138,257
Nov-21	$57,987	$57,504	$24,425	$147,167	$68,327	$177,211	$102,267	$646,302
Dec-21	$45,875	$46,579	$15,977	$113,029	$47,014	$135,534	$64,961	$298,450
Jan-22	$267,127	$247,755	$35,992	$333,229	$187,551	$353,259	$254,128	$678,414
Feb-22	$259,609	$236,037	$36,602	$325,575	$180,613	$342,913	$247,416	$664,240
Mar-22	$175,723	$163,321	$38,331	$337,326	$121,618	$233,789	$189,121	$463,071
Apr-22	$108,106	$104,049	$26,515	$264,660	$79,295	$149,738	$126,471	$313,982
May-22	$81,248	$87,270	$25,921	$269,142	$74,076	$146,254	$115,874	$367,942
Jun-22	$104,403	$105,704	$26,369	$266,621	$79,073	$148,677	$121,306	$301,283
Jul-22	$88,854	$100,476	$30,405	$309,153	$80,792	$155,953	$127,827	$356,634
Aug-22	$65,073	$67,294	$22,635	$222,454	$52,776	$101,247	$90,328	$220,589

Off Peak								
Month	ME	NH	VT	CT	RI	SEMA	WCMA	NEMA
Aug-21	$35,025	$28,813	$11,413	$74,204	$25,524	$81,335	$39,595	$90,745
Sep-21	$35,336	$29,998	$12,117	$83,667	$36,349	$91,008	$46,413	$117,426
Oct-21	$64,829	$57,409	$17,011	$136,398	$55,741	$131,785	$79,933	$165,301
Nov-21	$94,424	$89,305	$26,785	$191,557	$77,372	$183,122	$116,621	$322,334
Dec-21	$73,028	$66,671	$16,519	$100,319	$51,427	$135,238	$76,766	$194,140
Jan-22	$238,953	$227,236	$38,876	$335,743	$159,555	$305,546	$237,492	$572,307
Feb-22	$219,200	$208,081	$34,588	$303,620	$150,585	$284,548	$213,030	$534,547
Mar-22	$154,790	$146,581	$35,033	$322,502	$99,742	$190,546	$163,272	$344,918
Apr-22	$103,767	$100,596	$25,126	$243,955	$69,690	$130,123	$115,117	$254,948
May-22	$90,847	$98,508	$25,789	$259,605	$70,059	$132,312	$115,212	$274,552
Jun-22	$85,669	$91,674	$24,290	$240,911	$61,017	$114,784	$102,343	$221,739
Jul-22	$91,839	$102,460	$28,563	$283,509	$66,423	$125,175	$115,446	$245,639
Aug-22	$45,869	$40,527	$13,423	$153,396	$29,337	$55,554	$49,890	$121,319

7.1 For More Information

The market rules governing the FTR auctions can be found in Section III.7 "Financial Transmission Rights Auctions" of the ISO's Market Rule 1 located here.

The business rules and procedures for FTR Auction Revenue Settlement can be found in Section 7 and the Incremental Auction Revenue Rights procedures can be found in Section 8 of the ISO's Manual 6 – Financial Transmission Rights located here.

The methodology for and details of ARR Contracts can be found here.

8. Reserve Markets

The Forward Reserve Market Auction, covering the Summer 2022 Procurement Period (June - September) cleared on April 26, 2022. The results may be found on the ISO's website here. For the month of August 2022, the threshold price ranged between $166.31/MWh and $209.43/MWh, and averaged $182.75/MWh.

8.1 Forward Reserve Market Results

Each month, the ISO calculates an individual hourly Forward Reserve Payment Rate for each reserve product and reserve zone. Payments will be reduced by any Failure-to-Reserve or Failure-to-Activate Penalties[5]. FRM payments by reserve zone made during the month are shown in the following table. These figures are preliminary and subject to revision during the Settlement process.

8.1.1 *FRM Payment Summary by Reserve Zone, August 2022*

Reserve Zone	Reserve Product	Max FRM Payment	Final FRM Credits	Failure to Reserve Penalties	Failure to Activate Penalties	Total FRM Performance	Pct. of Max.
SYSTEM	TMNSR	$11,551,329	$11,515,745	-$53,394	-$196	$11,462,156	99%
SYSTEM	TMOR	$396,380	$392,503	-$6,007	-$3,191	$383,305	97%
SYSTEM	TOTAL	$11,947,709	$11,908,248	-$59,401	-$3,387	$11,845,460	99%
ROS	TMNSR	$8,417,034	$8,394,352	-$34,034	-$196	$8,360,123	99%
ROS	TMOR	$329,116	$326,739	-$3,758	$0	$322,982	98%
ROS	TOTAL	$8,746,149	$8,721,092	-$37,792	-$196	$8,683,104	99%
SWCT	TMNSR	$0	$0	$0	$0	$0	n/a
SWCT	TMOR	$45,544	$44,143	-$2,101	$0	$42,042	92%
SWCT	TOTAL	$45,544	$44,143	-$2,101	$0	$42,042	92%
CT	TMNSR	$3,019,816	$3,007,353	-$18,700	$0	$2,988,653	99%
CT	TMOR	$21,721	$21,620	-$148	-$3,191	$18,281	84%
CT	TOTAL	$3,041,537	$3,028,973	-$18,848	-$3,191	$3,006,934	99%
NEMABSTN	TMNSR	$114,479	$114,041	-$660	$0	$113,380	99%
NEMABSTN	TMOR	$0	$0	$0	$0	$0	n/a
NEMABSTN	TOTAL	$114,479	$114,041	-$660	$0	$113,380	99%

[5] Prior to market rule changes effective on June 1, 2016, the auction clearing price was reduced by the Forward Capacity Auction clearing price for the capacity zone associated with the reserve zone in question which was in effect for that month. After June 1, 2016, the FCM clearing price is not subtracted from the FRM clearing price.

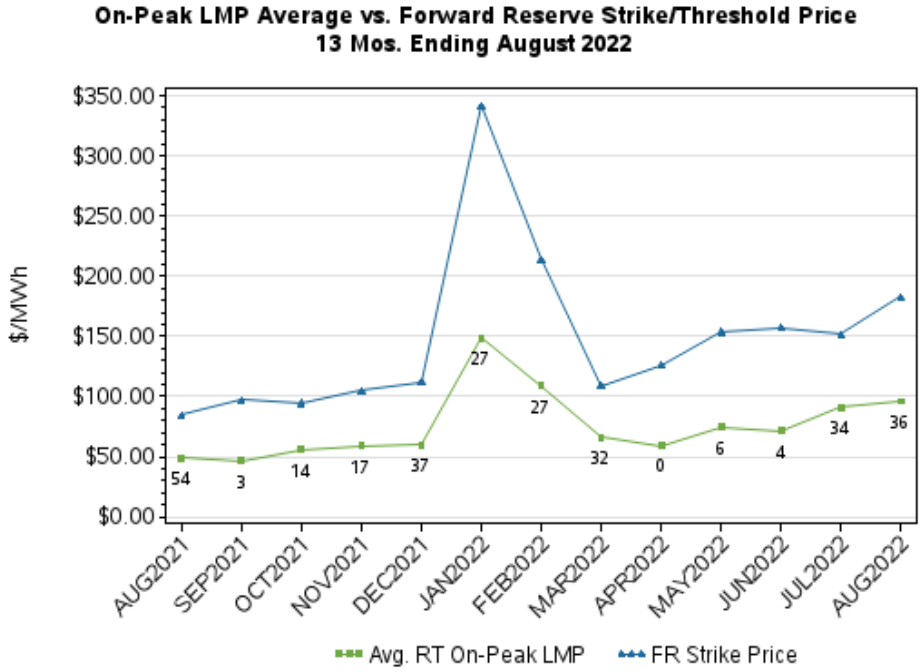
The ISO allocates Forward Reserve Credits, net of Forward Reserve Failure-to-Reserve Penalties and Forward Reserve Failure-to-Activate Penalties, to each Load Zone. Forward Reserve Credits are allocated based upon System Requirements (Step 1) and Remaining Forward Reserve Credit (Step 2), if applicable. The System Requirements include the cost of procuring TMNSR and TMOR to meet the minimum requirements for the New England Control Area (Market Rule 1, Section III.9.2.1). The remaining Forward Reserve Credit includes the Incremental Cost associated with procuring Forward Reserves above the System Requirements. See Market Rule 1, Section III.9.9 Forward Reserve Charges and Manual 28, Section 2.6.2 Forward Reserve Charges for details on the two-step cost allocation approach.

FRM charges allocated to each Load Zone during the prior month are shown in the following table. These figures are also preliminary and subject to revision during the Settlement process.

8.1.2 *FRM Charge Summary by Load Zone, August 2022*

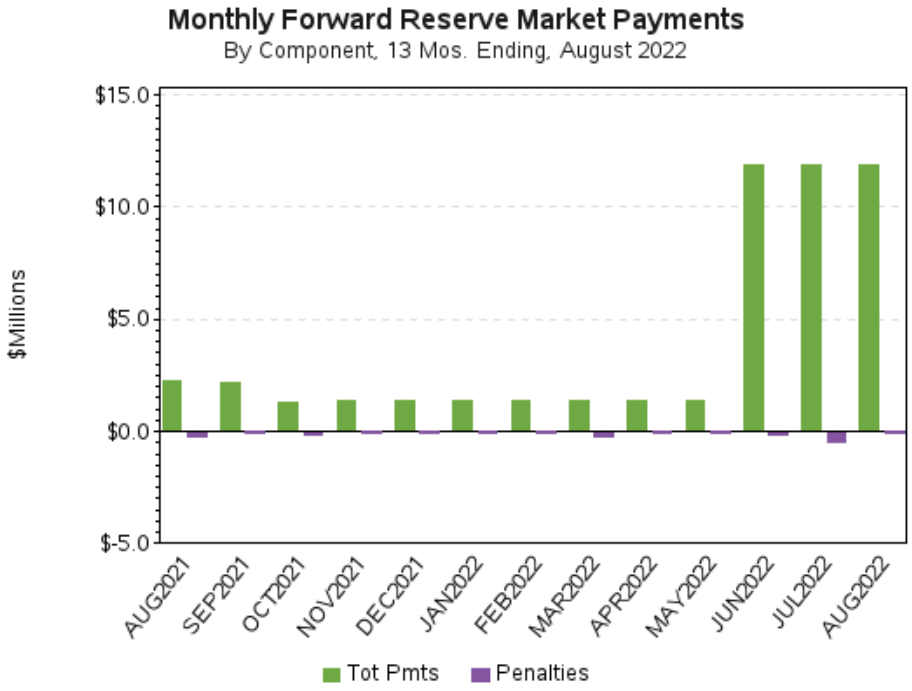
Load Zone	FRM Charge
ME	$1,040,336
NH	$1,128,790
VT	$414,729
CT	$2,930,121
RI	$850,956
SEMA	$1,528,968
WCMA	$1,572,968
NEMA	$2,378,592
ALL	$11,845,460

8.2 Real-Time On-Peak LMP vs. Forward Reserve Threshold Price, Last 13 Mos.



Number of times hourly RT LMP exceeded strike/threshold price during on-peak hours noted

8.3 Composition of Forward Reserve Market Payments, Last 13 Mos.



8.4 Real-Time Reserve Markets

Resources that are providing Real-Time Reserves are designated in the ISO's Energy Management System. When reserves are ample, the Real-Time Reserve price is $0. However, if there is a shortage of available reserves in a reserve zone or system-wide or reserve requirements are met through a re-dispatch of the system, non-zero Real-Time Reserve prices can result.

During the month, there were non-zero real-time reserve prices in 224 separate hours. On a reserve zone basis, non-zero prices occurred thus: CT-224 hours; NEMABSTN-224 hours; ROS-224 hours; SWCT-224 hours. The total compensation paid to assets providing real-time reserves during August 2022, and reductions in those payments for the Forward Reserve Obligation Charge are shown in the following table:

Reserve Zone	Real-Time Reserve Credits	Fwd Reserve Obligation Charges	Net Real-Time Reserve Payments
SYSTEM	$1,041,468	-$182,527	$858,941
ROS	$664,064	-$126,910	$537,154
SWCT	$129,508	-$3,725	$125,783
CT	$175,095	-$49,908	$125,187
NEMABSTN	$72,801	-$1,984	$70,818

Asset Related Demand, Generator, and Demand Response Resource assets all participate in the in the Real-Time Reserve market. Here is a breakdown of the payments by type:

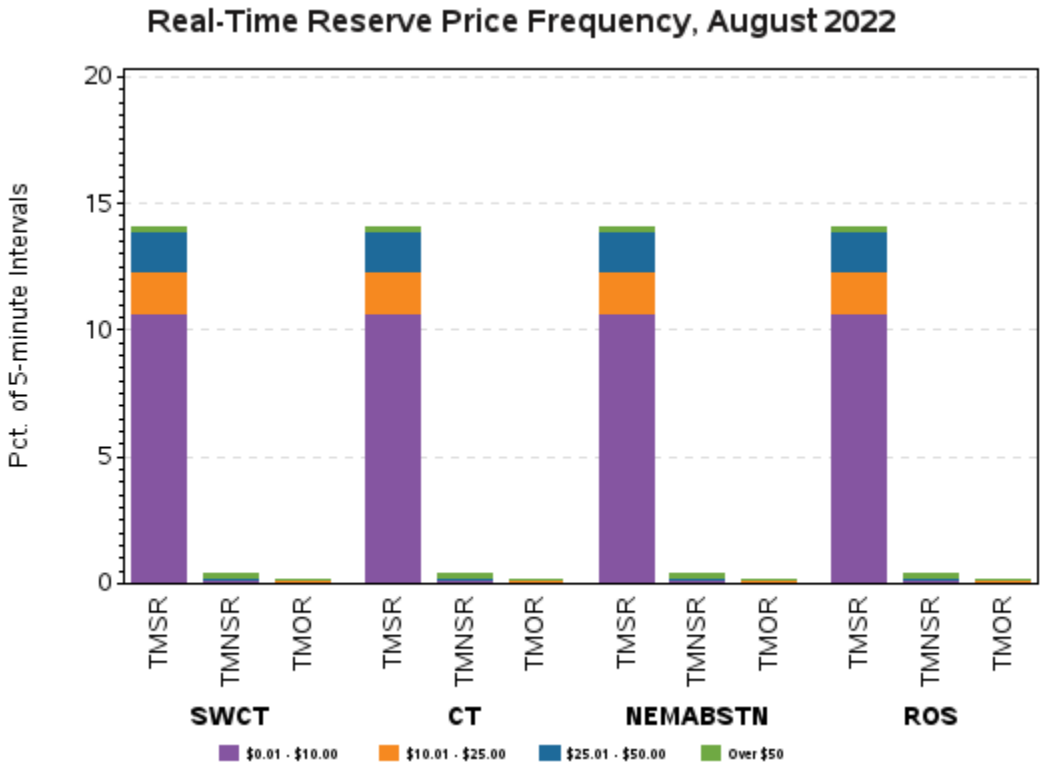
Asset Type	Real-Time TMSR Credits	Real-Time TMNSR Credits	Real-Time TMOR Credits
Asset Related Demand	$15,288	$0	$0
Demand Response Resource	$0	$296	$38,058
Generator	$669,514	$229,717	$88,596

The ISO allocates Real Time Reserve Credits, net of Forward Reserve Energy Obligation Charges, to each Load Zone. The Real Time Reserve charges allocated to each Load Zone during the month are shown in the following table. These figures are also preliminary and subject to revision during the Settlement process.

Load Zone	Reserve Product	RT Reserve Charge
ME	TMSR	$57,196
ME	TMNSR	$7,477
ME	TMOR	$7,046
ME	ALL	$71,720
NH	TMSR	$64,787
NH	TMNSR	$8,322
NH	TMOR	$7,993
NH	ALL	$81,102

Load Zone	Reserve Product	RT Reserve Charge
VT	TMSR	$22,927
VT	TMNSR	$3,023
VT	TMOR	$2,914
VT	ALL	$28,864
CT	TMSR	$170,691
CT	TMNSR	$21,586
CT	TMOR	$21,114
CT	ALL	$213,391
RI	TMSR	$49,468
RI	TMNSR	$6,466
RI	TMOR	$6,177
RI	ALL	$62,111
SEMA	TMSR	$91,497
SEMA	TMNSR	$12,370
SEMA	TMOR	$11,805
SEMA	ALL	$115,672
WCMA	TMSR	$91,491
WCMA	TMNSR	$11,530
WCMA	TMOR	$11,518
WCMA	ALL	$114,540
NEMA	TMSR	$136,744
NEMA	TMNSR	$18,041
NEMA	TMOR	$16,756
NEMA	ALL	$171,542

The following chart shows the frequency (in percent of total hours in the month) that there were non-zero reserve market prices by reserve zone and market product.



8.5 For More Information

The market rules governing the Forward Reserve Market can be found in Section III.9 "Forward Reserve Market" of the ISO's Market Rule 1 located here.

The market rules governing Real-Time Reserve can be found in Section III.10 "Real-Time Reserve" of the ISO's Market Rule 1 located here.

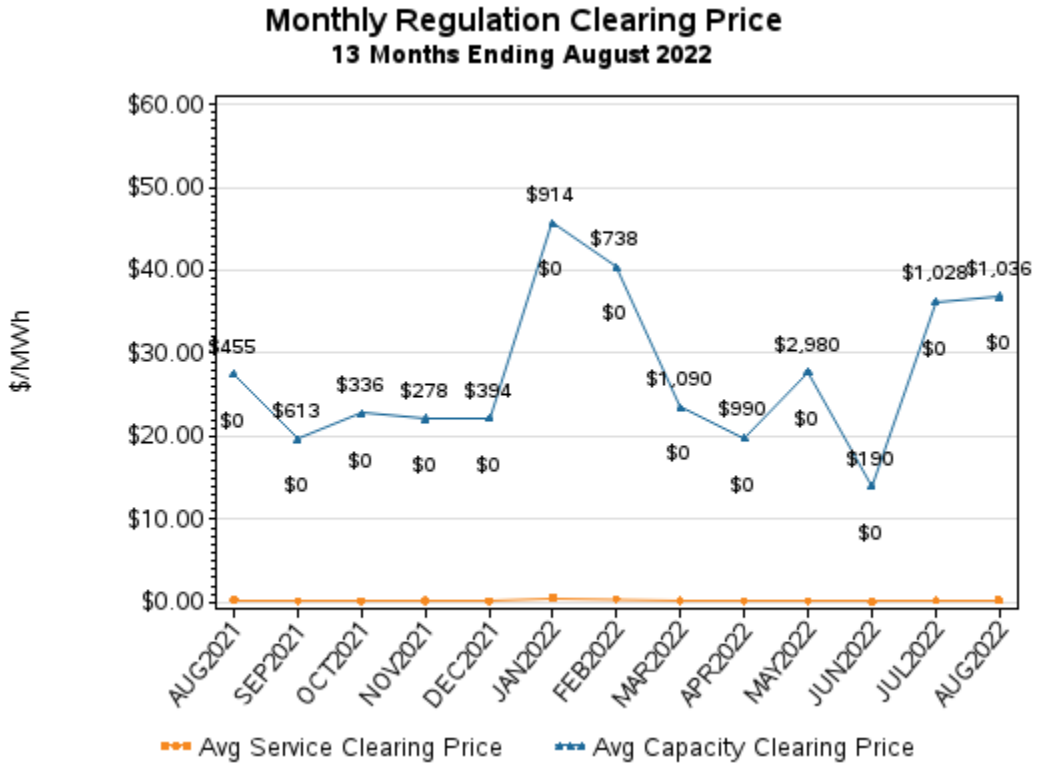
The business rules and procedures for forward and real-time reserve can be found in the ISO's Manual 28 –Market Rule 1 Accounting located here.

Information about the monthly forward reserve auctions and assumptions can be found on the ISO's web site located here.

9. Regulation Market

Regulation, or Automatic Generation Control (AGC), is necessary to balance supply levels against second-to-second variations in demand. Effective December 1, 2017, ISO New England moved from hourly to sub-hourly (5-minute) settlements for both the service and capacity components of regulation. [6]

9.1 Monthly Average of Regulation Market Clearing Price, Last 13 Months



NOTE: Starting on December 1, 2017, Average Clearing Prices above, along with the Min and Max Capacity Clearing Price Labels are calculated based on 5-minute settlement values.

[6] To accommodate the change from hourly to sub-hourly settlements for Regulation, clearing price statistics shown in these exhibits prior to the December 1, 2017 boundary reflect the average of hourly prices, while price averages subsequent to that are derived from 5-minute values.

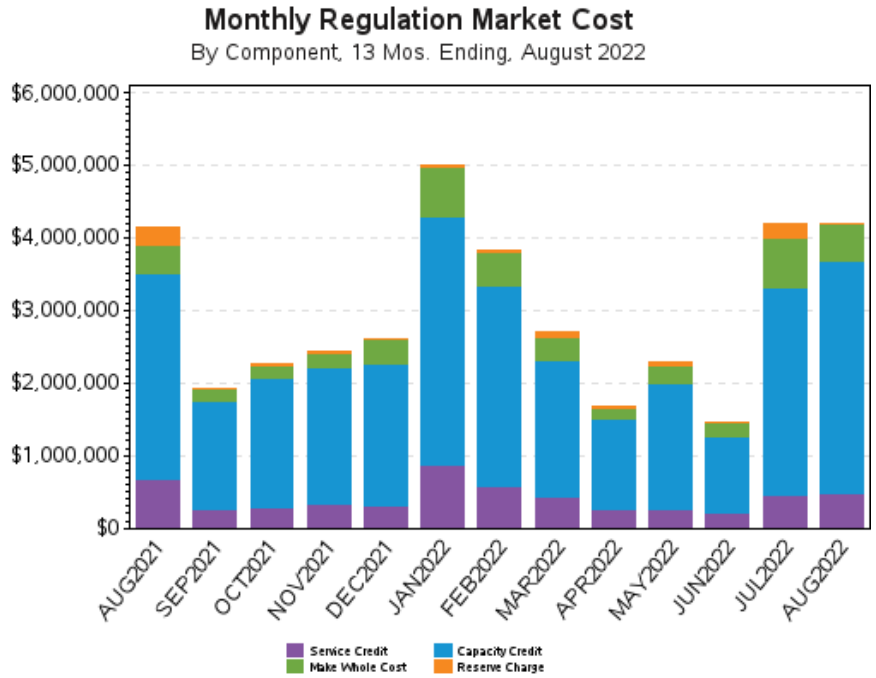
9.2 Monthly Regulation Market Clearing Price Statistics, Last 13 Months

	On-Peak Service Clearing Price Statistics				Off-Peak Service Clearing Price Statistics			
Month	Mean	Max	Min	StdDev	Mean	Max	Min	StdDev
Aug-21	$0.45	$10.00	$0.00	$1.71	$0.17	$10.00	$0.00	$0.65
Sep-21	$0.17	$1.50	$0.00	$0.24	$0.16	$1.50	$0.00	$0.22
Oct-21	$0.18	$10.00	$0.00	$0.32	$0.15	$1.50	$0.00	$0.21
Nov-21	$0.23	$1.99	$0.00	$0.29	$0.17	$1.99	$0.00	$0.20
Dec-21	$0.19	$1.99	$0.00	$0.32	$0.15	$1.99	$0.00	$0.29
Jan-22	$0.76	$5.99	$0.00	$1.31	$0.40	$10.00	$0.00	$1.11
Feb-22	$0.41	$10.00	$0.00	$1.20	$0.40	$10.00	$0.00	$1.15
Mar-22	$0.20	$10.00	$0.00	$0.66	$0.28	$10.00	$0.00	$1.01
Apr-22	$0.17	$1.50	$0.00	$0.25	$0.15	$10.00	$0.00	$0.32
May-22	$0.16	$5.00	$0.00	$0.27	$0.15	$10.00	$0.00	$0.35
Jun-22	$0.13	$1.50	$0.00	$0.21	$0.12	$2.00	$0.00	$0.21
Jul-22	$0.27	$10.00	$0.00	$0.84	$0.26	$10.00	$0.00	$0.86
Aug-22	$0.29	$10.00	$0.00	$0.69	$0.29	$9.99	$0.00	$0.67

	On-Peak Capacity Clearing Price Statistics				Off-Peak Capacity Clearing Price Statistics			
Month	Mean	Max	Min	StdDev	Mean	Max	Min	StdDev
Aug-21	$38.01	$454.90	$0.00	$58.26	$18.11	$289.87	$0.00	$28.22
Sep-21	$24.40	$227.46	$0.00	$29.42	$15.58	$612.63	$0.00	$22.99
Oct-21	$30.63	$335.52	$0.00	$36.89	$16.29	$192.40	$0.00	$22.28
Nov-21	$24.16	$278.17	$0.00	$33.26	$20.41	$196.95	$0.00	$27.38
Dec-21	$23.34	$217.63	$0.00	$33.39	$21.15	$393.70	$0.00	$29.61
Jan-22	$55.70	$736.14	$0.00	$61.08	$37.59	$913.56	$0.00	$51.76
Feb-22	$48.44	$408.13	$0.00	$57.03	$33.18	$737.58	$0.00	$49.64
Mar-22	$28.05	$1089.75	$0.00	$57.47	$19.09	$872.90	$0.00	$37.83
Apr-22	$23.29	$990.30	$0.00	$42.32	$16.82	$300.63	$0.00	$29.55
May-22	$36.29	$2979.80	$0.00	$73.31	$20.78	$706.51	$0.00	$41.66
Jun-22	$15.85	$186.23	$0.00	$20.41	$12.31	$189.94	$0.00	$19.03
Jul-22	$48.25	$1027.91	$0.00	$98.66	$27.18	$472.97	$0.00	$46.54
Aug-22	$47.46	$1036.35	$0.00	$70.48	$26.49	$345.13	$0.00	$33.49

*Starting on December 1, 2017, statistics based on 5-minute settlement values

9.3 Components of Monthly Regulation Market Cost, Last 13 Months



Month	Regulation Service Cost	Regulation Capacity Cost	Regulation Make Whole Cost	Regulation Up Reserve Charge	Total Regulation Cost
Aug-21	$650,627	$2,840,010	$373,848	$282,580	$4,147,065
Sep-21	$239,685	$1,475,157	$173,686	$20,888	$1,909,416
Oct-21	$267,236	$1,770,060	$182,806	$44,627	$2,264,730
Nov-21	$304,867	$1,894,240	$196,001	$50,073	$2,445,180
Dec-21	$292,919	$1,955,344	$320,660	$32,646	$2,601,568
Jan-22	$845,645	$3,430,472	$682,910	$48,671	$5,007,698
Feb-22	$558,123	$2,762,499	$450,468	$54,642	$3,825,732
Mar-22	$411,325	$1,887,590	$303,612	$96,905	$2,699,431
Apr-22	$243,689	$1,225,932	$161,529	$41,978	$1,673,128
May-22	$242,118	$1,729,814	$232,189	$89,298	$2,293,420
Jun-22	$195,428	$1,039,907	$188,899	$24,587	$1,448,821
Jul-22	$422,237	$2,864,797	$688,272	$216,277	$4,191,584
Aug-22	$462,122	$3,181,251	$516,133	$40,079	$4,199,586

9.4 For More Information

The market rules governing the Regulation Market can be found in Section III.1.11.5 "Regulation" of the ISO's Market Rule 1 located here.

The business rules and procedures for the Regulation Market can be found in the ISO's Manual 11 – Market Operations located here.

Information about current regulation clearing prices can be found on the ISO's web site here.

Selectable hourly historical regulation clearing prices can be found on the ISO's web site here.

10. Marginal Loss Revenue Fund

The Marginal Loss Revenue Fund is allocated back to customers hourly in a pro-rata format based on customer share of the Pool's RT Adjusted Load Obligation. It consists of six components, as displayed in the following formula:

*Monthly Marginal Loss Revenue = (-1) * [Loss Revenue (DA+RT) + Energy Settlement (DA+RT) + RT Inadvertent Energy Cost + RT Emergency Energy Sales]*

The following table shows the contribution of each component to the Marginal Loss Revenue Fund and the fund total for last thirteen months.

10.1 Marginal Loss Revenue Fund by Month, 13 Mos. Ending August 2022

Month	Day-Ahead Energy Stlmnt	Real-Time Energy Stlmnt	Day-Ahead Loss Rev	Real-Time Loss Rev	Real-Time Inadvrt Energy	Real-Time Emergency Energy	Day-Ahead Marginal Loss Total	Real-Time Marginal Loss Total	Marg Loss Rev Fund Total
Aug-21	$9,425,260	$1,434,633	-$13,150,684	-$462,869	-$152,804	$0	$3,725,424	-$818,960	$2,906,465
Sep-21	$7,608,813	$1,462,823	-$11,584,498	-$162,086	-$199,967	$0	$3,975,685	-$1,100,770	$2,874,915
Oct-21	$7,203,997	$2,119,247	-$10,852,256	-$399,182	-$69,857	$0	$3,648,258	-$1,650,208	$1,998,051
Nov-21	$8,322,432	$979,901	-$12,317,335	-$338,820	-$124,851	$0	$3,994,902	-$516,230	$3,478,672
Dec-21	$10,988,408	$1,899,573	-$17,001,175	-$688,554	-$418,104	$0	$6,012,767	-$792,915	$5,219,853
Jan-22	$23,698,609	$1,812,746	-$34,887,582	-$1,333,446	$623,164	$0	$11,188,973	-$1,102,464	$10,086,509
Feb-22	$18,261,001	$1,415,825	-$27,493,659	-$365,470	$140,674	$79,087	$9,232,658	-$1,270,116	$7,962,542
Mar-22	$10,372,297	$852,824	-$15,178,000	-$390,993	$276,154	$0	$4,805,702	-$737,985	$4,067,717
Apr-22	$7,669,886	$1,819,312	-$11,261,413	-$374,120	-$9,225	$0	$3,591,527	-$1,435,968	$2,155,559
May-22	$9,143,585	$1,767,847	-$12,937,997	-$409,316	-$19,228	$0	$3,794,412	-$1,339,303	$2,455,109
Jun-22	$9,135,178	$1,645,859	-$13,169,384	-$615,524	$291,630	$0	$4,034,206	-$1,321,965	$2,712,241
Jul-22	$16,910,838	$2,178,054	-$22,947,759	-$1,424,558	$464,827	$0	$6,036,921	-$1,218,323	$4,818,598
Aug-22	$19,866,808	-$541,120	-$27,629,192	-$444,887	$4,995	$0	$7,762,384	$981,012	$8,743,396

10.2 For More Information

Rules governing the calculation of the Marginal Loss Revenue Fund can be found in Section III.3.2.1 Accounting and Billing of the ISO's Market Rule 1 located here.

11. Forward Capacity Market

The Forward Capacity Market (FCM) is an auction based approach to meeting New England's forecasted capacity requirements for a future year. A portfolio of supply and demand resources is selected to provide this capacity through a competitive Forward Capacity Auction (FCA) process. Resources clearing in the FCA are paid the market clearing price for capacity and acquire a capacity supply obligation (CSO), a financially binding obligation to provide the cleared amount of capacity.

For the 2022-23 capacity commitment period (CCP), the capacity zones consist of Rest-of-Pool (ROP), Northern New England, and Southeast New England. The relationship between capacity zones to load zones are described in the table below:

Capacity Zone	Load Zones
Rest-of-Pool	Western/Central Massachusetts (WCMA) Connecticut (CT)
Northern New England	New Hampshire (NH) Vermont (VT) Maine (ME)
Southeast New England	Northeastern Massachusetts (NEMA) Southeastern Massachusetts (SEMA) Rhode Island (RI)

11.1 FCM Auction Results and Monthly Modifications

The outcome of the Forward Capacity Auction (FCA) determines the initial CSO for resources. In the event that the capacity clearing price floor condition is reached in the FCA, the ISO will adjust (prorate) the per-MW rate of each CSO to adjust the over-purchased capacity. After the FCA is finalized, lead participants of obligated resources may have the option to leave the CSO of these resources based upon the default proration (full CSO with a reduced payment rate - referred to as 'price proration') or opt to prorate the CSO MW and receive the full CCP (described as 'MW proration'). The proration elections chosen by resources will not have an effect on the total amount of charges to load. The following table shows the aggregated CSO values by resource type from FCA 13, the 2022-2023 commitment period, with prorated amounts and changes from the FCA for each resource type.

Each month, CSO values can change for a variety of reasons, which are referred to below as CSO modifications. Typically, changes result from the monthly or annual Reconfiguration Auctions. Additional examples of CSO modifications include ISO participation in annual Reconfiguration Auctions and termination of Resource capacity supply obligations. The table below displays the CSO modifications for the current month.

CSO Modifications for August 2022

Capacity Zone	Resource Type	Existing Capacity Obligation MW	Multi-Year Existing Capacity Obligation MW	New Capacity Obligation MW	Retained for Reliability Capacity Obligation MW	Self-Supply Capacity Obligation MW	Reconfig /Bilateral MW	Total
Rest-of-Pool	Demand Resource	-0.81	0.00	-13.99	0.00	0.00	125.60	110.80
Northern New England	Demand Resource	-1.45	-4.05	-5.00	0.00	0.00	36.82	26.32
Southeast New England	Demand Resource	-16.05	0.00	-9.33	0.00	0.00	140.25	114.87

Capacity Zone	Resource Type	Existing Capacity Obligation MW	Multi-Year Existing Capacity Obligation MW	New Capacity Obligation MW	Retained for Reliability Capacity Obligation MW	Self-Supply Capacity Obligation MW	Reconfig /Bilateral MW	Total
Rest-of-Pool	Generator	-0.24	0.00	0.00	0.00	0.00	-1,600.86	-1,601.10
Northern New England	Generator	-2.59	-0.20	-8.10	0.00	0.00	433.30	422.41
Southeast New England	Generator	-6.08	0.00	0.00	0.00	0.00	-379.52	-385.60
Rest-of-Pool	Import	0.00	0.00	0.00	0.00	0.00	-99.19	-99.19
Northern New England	Import	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	-27.22	-4.25	-36.42	0.00	0.00	-1,343.61	-1,411.50

The table below displays a summary of the prorated CSO MW and dollars from the FCA, along with the CSO modifications for the current month. The CSO modification MWs are totaled for each Resource and Capacity Zone from the table above. These CSO modifications are used in the calculation of the final CSO MW and Dollars.

Final CSO MW and Dollars for August 2022

Capacity Zone	Resource Type	CSO MW	CSO Dollars	CSO Modification MW	CSO Modification Dollars	Final CSO MW	Final CSO Dollars
Rest-of-Pool	Demand Resource	1,565	$6,233,332	111	$36,930	1,676	$6,270,262
Northern New England	Demand Resource	676	$2,773,708	26	-$37,512	702	$2,736,196
Southeast New England	Demand Resource	1,799	$7,988,518	115	-$4,965	1,914	$7,983,552
Rest-of-Pool	Generator	14,016	$60,004,479	-1,601	-$1,518,002	12,414	$58,486,477
Northern New England	Generator	6,357	$21,667,160	422	$785,658	6,779	$22,452,817
Southeast New England	Generator	9,239	$39,266,313	-386	-$329,880	8,854	$38,936,432
Rest-of-Pool	Import	953	$3,502,517	-99	$32,003	854	$3,534,520
Northern New England	Import	235	$687,104	0	$0	235	$687,104
	Total	34,839	$142,123,130	-1,411	-$1,035,769	33,428	$141,087,362

11.2 FCM Cost Allocation

Effective June 1, 2022, ISO New England introduced a new cost allocation methodology for Forward Capacity Market (FCM) costs, and moved to daily settlements and twice-weekly billing for most monthly charges.

Currently, FCM costs are allocated using a single monthly charge rate for each capacity zone which reflects all of the costs associated with resources located in the zone. This calculation of a single charge rate, referred to as the net regional clearing price (NRCP), makes it difficult to determine the individual cost of each component that contributes to the rate. Additionally, the current cost allocation methodology is not aligned with use of the Marginal Reliability Impact (MRI) based demand curves that were introduced for the 2020-2021 capacity commitment period.

The existing rules also have a mechanism, the Capacity Transfer Rights fund, to reconcile settlement imbalances that arise from differences in the amount of capacity supply obligations (CSOs) of resources associated with a zone, and the share of capacity market payment obligations assigned to the zone. This further obscures the overall calculation and the allocation of capacity costs.

The new cost allocation charges allocate capacity market costs that are determined using the MRI-based demand curves and a marginal value approach. Under this approach, the zonal charge rates are calculated based on the marginal value of the capacity located in each zone, as reflected in the zonal clearing prices determined using the MRI-based demand curves. FCM costs that are not associated with the locational value of capacity are allocated to the capacity load obligation (CLO) across the total region on a pro rata basis rather than using the marginal value approach. The costs for specifically allocated CTRs associated with transmission upgrades will be allocated pro rata to CLO in the affected capacity zone.

The following tables show the August 2022 Capacity Zone level charge rates for each component of the FCM Cost Allocation Settlement, along with the values used to calculate the Zonal Capacity Obligation (ZCO) MW and CLO MW for each Capacity Zone.

Concept	Rest-of-Pool	Northern New England	Southeast New England
FCA	3.841	3.841	3.841
IPR Seasonal Variance	0.000	0.000	0.000
ARA	-0.022	-0.022	-0.022
MRA	0.000	0.000	0.000
MRECO	0.713	0.028	0.486
CTR PPU	0.000	0.000	0.000
CTR TU	0.000	0.000	0.000
Self-Supply	0.021	0.021	0.021
HQICC	0.131	0.131	0.131
FTC	0.000	0.000	0.000
Total CLO Charge Rate	**4.684**	**3.999**	**4.457**

ZCO = (Pool CSO MW + Pool Level HQICC MW – Pool Level IPR MW) * Peak Contribution Ratio * -1

Month	Capacity Zone	Pool Level CSO MW	Pool Level HQICC MW	Pool Level IPR Seasonal Variance MW	Peak Contribution Ratio	ZCO MW
June 2022	Rest-of-Pool	33,428.525	919.000	0.000	38.10%	-13,086.086
June 2022	Northern New England	33,428.525	919.000	0.000	21.06%	-7,232.202
June 2022	Southeast New England	33,428.525	919.000	0.000	40.84%	-14,029.237
July 2022	Rest-of-Pool	33,427.235	919.000	0.000	38.10%	-13,085.594
July 2022	Northern New England	33,427.235	919.000	0.000	21.06%	-7,231.930
July 2022	Southeast New England	33,427.235	919.000	0.000	40.84%	-14,028.710
August 2022	Rest-of-Pool	33,427.729	919.000	0.000	38.10%	-13,085.782
August 2022	Northern New England	33,427.729	919.000	0.000	21.06%	-7,232.034
August 2022	Southeast New England	33,427.729	919.000	0.000	40.84%	-14,028.912

CLO MW = ZCO MW + HQICC MW + Self-Supply MW

Month	Capacity Zone	ZCO MW	HQICC MW	Self-Supply MW	CLO MW
June 2022	Rest-of-Pool	-13,086.086	919.000	322.907	-11,844.179
June 2022	Northern New England	-7,232.202	0.000	602.562	-6,629.640
June 2022	Southeast New England	-14,029.237	0.000	769.903	-13,259.334
July 2022	Rest-of-Pool	-13,085.594	919.000	322.907	-11,843.687
July 2022	Northern New England	-7,231.930	0.000	602.562	-6,629.368
July 2022	Southeast New England	-14,028.710	0.000	769.903	-13,258.807
August 2022	Rest-of-Pool	-13,085.782	919.000	322.907	-11,843.875
August 2022	Northern New England	-7,232.034	0.000	602.562	-6,629.472
August 2022	Southeast New England	-14,028.912	0.000	769.903	-13,259.009

Monthly Bilateral transactions and ARTs (which replaced annual bilateral contracts starting in CCP 2020-21) are not included in the supply credit total for the month. The following table shows the supply credits and the final monthly Capacity Zone credits after accounting for these concepts.

Month	Capacity Zone	CSO MW	Net CSO Bilateral MW	Net ART MW	FCM Credits	Net Bilateral Dollars	Net ART Payment Dollars	Final Payment Dollars
June 2022	Rest-of-Pool	14,974.037	-16.216	-611.108	$68,301,563.07	$558.6	-$1,658,210.07	$66,643,911.60
June 2022	Northern New England	7,594.107	0	617.482	$25,753,855.99	$0.00	$1,677,670.53	$27,431,526.52
June 2022	Southeast New England	10,860.381	16.216	-6.374	$46,960,778.79	-$558.6	-$19,460.46	$46,940,759.73
July 2022	Rest-of-Pool	14,990.618	-14.353	-611.108	$68,325,214.41	$300.2	-$1,658,210.07	$66,667,304.54
July 2022	Northern New England	7,667.548	100	617.482	$25,823,209.19	$50,000	$1,677,670.53	$27,550,879.72
July 2022	Southeast New England	10,769.069	-85.647	-6.374	$46,931,783.54	-$50,300.2	-$19,460.46	$46,862,022.88
August 2022	Rest-of-Pool	14,943.918	-14.353	-611.108	$68,290,823.91	$300.2	-$1,658,210.07	$66,632,914.04
August 2022	Northern New England	7,716.269	0.000	617.482	$25,876,094.99	$0.00	$1,677,670.53	$27,553,765.52
August 2022	Southeast New England	10,767.542	14.353	-6.374	$46,915,731.14	-$300.2	-$19,460.46	$46,895,970.48

Under FCM Cost Allocation, for each month and capacity zone, Load Serving Entities (LSE) have capacity obligations which are calculated as their share of the total CSO purchased, based on each zone's pro-rata share of the peak contributions to the system peak load from the previous year. Customers pay for capacity based on CLO. A customer's CLO is equal to its ZCO adjusted for any Hydro-Quebec Installed Capacity Credits (HQICC) and self-supply MW. ZCO MW are equal to the sum of (Pool Level CSO MW + Pool Level HQICC MW – Pool Level IPR MW) multiplied by the Peak Contribution Ratio assigned to the Capacity Zone. The Peak Contribution Ratio is equal to the sum of the peak contributions from load assets in the Capacity Zone divided by the sum of the Peak Contribution MW for the pool during the previous year's peak load hour.

The following table provides details on the monthly FCM charges to load.

Month	Capacity Zone	ZCO MW	HQICC MW	Self-Supply MW	CLO MW	Effective Charge Rate	FCM Charges
June 2022	Rest-of-Pool	-13086.086	919	322.907	-11844.179	4.682	-$55,452,815.69
June 2022	Northern New England	-7232.202	0	602.562	-6629.64	3.997	-$26,497,380.88
June 2022	Southeast New England	-14029.237	0	769.903	-13259.334	4.455	-$59,066,001.30
July 2022	Rest-of-Pool	-13085.594	919	322.907	-11843.687	4.684	-$55,477,156.10
July 2022	Northern New England	-7231.93	0	602.562	-6629.368	3.999	-$26,510,860.90
July 2022	Southeast New England	-14028.71	0	769.903	-13258.807	4.457	-$59,092,190.14
August 2022	Rest-of-Pool	-13085.782	919	322.907	-11843.875	4.684	-$55,478,104.74
August 2022	Northern New England	-7232.034	0	602.562	-6629.472	3.999	-$26,511,374.35
August 2022	Southeast New England	-14028.912	0	769.903	-13259.009	4.457	-$59,093,170.95

11.3 FCM Payments and Charges

For the capacity commitment period (CCP) 2022-2023, the ISO implemented FCM Cost Allocation to support payments and charges related to the FCM. The table below reflects the methodology prior to implementation.

Supply Credit is the total credit paid to customer resources for incurring a CSO and is the sum of the following types of CSO-related payments: Forward Capacity Auction (FCA) Credits, Bilateral Dollars, and Reconfiguration Auction (RA) Dollars. The following table shows total Supply Credit and its aforementioned components by Capacity Zone for the remainder of the last thirteen month period through May 2022.

Month	Capacity Zone	FCA Credit	Bilateral Dollars	Reconfiguration Auction Dollars	Supply Credit
Aug-21	Rest-of-Pool	$76,420,989	$0	$753,655	$77,174,644
Aug-21	Northern New England	$33,617,805	-$10,800	$657,157	$34,264,162
Aug-21	Southeast New England	$63,225,926	$10,800	$1,284,265	$64,520,991
Sep-21	Rest-of-Pool	$76,420,989	$72	$728,016	$77,149,077
Sep-21	Northern New England	$33,616,485	$0	$725,004	$34,341,489
Sep-21	Southeast New England	$63,225,926	-$72	$1,242,059	$64,467,912
Oct-21	Rest-of-Pool	$76,381,741	$1,389	$736,313	$77,119,443
Oct-21	Northern New England	$34,672,117	-$1,389	$532,310	$35,203,038
Oct-21	Southeast New England	$63,221,482	$0	$1,426,455	$64,647,937
Nov-21	Rest-of-Pool	$76,381,741	$1,389	$498,895	$76,882,025
Nov-21	Northern New England	$34,672,117	-$1,389	$969,672	$35,640,400
Nov-21	Southeast New England	$63,221,482	$0	$1,226,444	$64,447,926
Dec-21	Rest-of-Pool	$76,456,263	-$58,611	$982,071	$77,379,723
Dec-21	Northern New England	$34,597,660	-$1,389	$142,760	$34,739,031
Dec-21	Southeast New England	$63,223,707	$60,000	$1,570,179	$64,853,886
Jan-22	Rest-of-Pool	$76,456,263	-$429,958	$1,042,142	$77,068,447
Jan-22	Northern New England	$34,597,660	-$1,389	$969,672	$35,565,942

Month	Capacity Zone	FCA Credit	Bilateral Dollars	Reconfiguration Auction Dollars	Supply Credit
Jan-22	Southeast New England	$63,223,707	$431,348	$683,197	$64,338,251
Feb-22	Rest-of-Pool	$76,456,157	-$429,958	$1,188,590	$77,214,788
Feb-22	Northern New England	$34,597,530	-$1,389	$969,674	$35,565,815
Feb-22	Southeast New England	$63,223,707	$431,348	$536,749	$64,191,803
Mar-22	Rest-of-Pool	$76,456,157	$1,389	$865,845	$77,323,391
Mar-22	Northern New England	$34,597,530	-$1,389	$850,184	$35,446,325
Mar-22	Southeast New England	$63,223,707	$0	$978,982	$64,202,689
Apr-22	Rest-of-Pool	$76,381,634	$1,389	$602,817	$76,985,841
Apr-22	Northern New England	$34,671,988	-$1,389	$969,672	$35,640,270
Apr-22	Southeast New England	$63,220,743	$0	$1,122,522	$64,343,265
May-22	Rest-of-Pool	$76,381,634	$1,389	$561,870	$76,944,893
May-22	Northern New England	$34,671,988	-$1,389	$969,672	$35,640,270
May-22	Southeast New England	$63,220,743	$0	$1,163,469	$64,384,212

For the 2021-2022 commitment period, the initial supply credit paid for the CSO is the same pool of money called the Net Regional Clearing Price (NRCP) Credit, which is the basis for charges for capacity allocated to real-time load obligation. Additional credits may be earned by resources that were retained for reliability with their cost allocated to Regional Network Load through the Open-Access Transmission Tariff rather than to Capacity Load Obligation (CLO). Beginning June 1, 2019, FCM participants with resources unable to fulfill their CSO during each month within a capacity commitment period (CCP), will be subject to a failure to cover charge.

The following table shows the various credit adjustments and total payments in the FCM made over the remainder of the last 13 obligation months through May 2022.

Month	Capacity Zone	CSO MW	Supply Credit (A)	Art Credit (B)	Reliability Credit (C)	Failure to Cover Charge (D)	Total Payment (E=A+B+C+D)
Aug-21	Rest-of-Pool	15,774	$77,174,644	$100,496	$0	-$37,099	$77,238,042
Aug-21	Northern New England	8,095	$34,264,162	-$60,000	$0	$0	$34,204,162
Aug-21	Southeast New England	10,854	$64,520,991	-$40,496	$822,493	-$18,005	$65,284,983
Sep-21	Rest-of-Pool	15,769	$77,149,077	$100,496	$0	-$37,099	$77,212,474
Sep-21	Northern New England	8,116	$34,341,489	-$60,000	$0	$0	$34,281,489
Sep-21	Southeast New England	10,837	$64,467,912	-$40,496	$822,493	-$8,933	$65,240,976
Oct-21	Rest-of-Pool	15,751	$77,119,443	$100,496	$0	-$27,721	$77,192,218
Oct-21	Northern New England	8,276	$35,203,038	-$60,000	$0	-$6,817	$35,136,221
Oct-21	Southeast New England	10,970	$64,647,937	-$40,496	$817,042	-$21,900	$65,402,583
Nov-21	Rest-of-Pool	15,610	$76,882,025	$100,496	$0	-$36,983	$76,945,538
Nov-21	Northern New England	8,464	$35,640,400	-$60,000	$0	-$6,817	$35,573,583
Nov-21	Southeast New England	10,924	$64,447,926	-$40,496	$817,042	-$10,054	$65,214,418
Dec-21	Rest-of-Pool	15,912	$77,379,723	$100,496	$0	-$36,983	$77,443,236

Month	Capacity Zone	CSO MW	Supply Credit (A)	Art Credit (B)	Reliability Credit (C)	Failure to Cover Charge (D)	Total Payment (E=A+B+C+D)
Dec-21	Northern New England	8,015	$34,739,031	-$60,000	$0	-$7,720	$34,671,311
Dec-21	Southeast New England	11,071	$64,853,886	-$40,496	$817,042	-$9,832	$65,620,601
Jan-22	Rest-of-Pool	15,829	$77,068,447	$100,496	$0	-$73,823	$77,095,120
Jan-22	Northern New England	8,448	$35,565,942	-$60,000	$0	-$8,785	$35,497,157
Jan-22	Southeast New England	10,722	$64,338,251	-$40,496	$817,042	-$9,832	$65,104,966
Feb-22	Rest-of-Pool	15,870	$77,214,788	$100,496	$0	-$73,716	$77,241,568
Feb-22	Northern New England	8,448	$35,565,815	-$60,000	$0	-$5,997	$35,499,818
Feb-22	Southeast New England	10,680	$64,191,803	-$40,496	$817,042	-$9,832	$64,958,518
Mar-22	Rest-of-Pool	16,045	$77,323,391	$100,496	$0	-$97,371	$77,326,515
Mar-22	Northern New England	8,307	$35,446,325	-$60,000	$0	-$11,309	$35,375,016
Mar-22	Southeast New England	10,645	$64,202,689	-$40,496	$817,042	-$11,031	$64,968,204
Apr-22	Rest-of-Pool	15,745	$76,985,841	$100,496	$0	-$12,133	$77,074,204
Apr-22	Northern New England	8,464	$35,640,270	-$60,000	$0	-$9,980	$35,570,290
Apr-22	Southeast New England	10,789	$64,343,265	-$40,496	$817,042	-$9,832	$65,109,980
May-22	Rest-of-Pool	15,669	$76,944,893	$100,496	$0	-$13,120	$77,032,270
May-22	Northern New England	8,464	$35,640,270	-$60,000	$0	-$8,628	$35,571,642
May-22	Southeast New England	10,864	$64,384,212	-$40,496	$817,042	-$18,033	$65,142,725

For each month and capacity zone, Load Serving Entities (LSE) have capacity requirements which are calculated as their share of the total CSO purchased, based on their contribution to the system peak load from the previous year. Customers pay for capacity based on capacity load obligation (CLO). A customer's CLO is equivalent to its capacity requirement, adjusted for any Hydro-Quebec Installed Capacity Credits (HQICC), self-supply MW, and CLO bilateral contracts. CLO bilateral contracts provide a means of transferring a capacity load obligation between two customers. Note that any customer, not just LSEs, can take on or shed CLO through a CLO bilateral contract.

The Net Regional Clearing Price is the rate at which load pays for capacity. It is calculated as:

NRCP ($/kW-month) = NRCP Credit / (CLO MW * 1000)

Where: CLO MW = CSO MW – Self Supply MW

Charges are calculated as the product of a customer's CLO and the NRCP.

The following table provides details on aggregate FCM charges to load through May 2022.

Month	CSO MW (A)	CLO Bilat MW	HQICC MW (B)	Self Supply MW (C)	Capacity Req MW (D=A+B)	Peak Contrib MW	CLO MW (E=A-C)	Net Regional Clearing Price ($/kW-month)	Capacity Load Obligation Charge
Aug-21	34,722	1,741	854	1,644	35,576	24,727	33,078	$5.319598	$179,859,774
Sep-21	34,722	1,937	854	1,644	35,576	24,727	33,077	$5.319604	$179,907,970

Month	CSO MW (A)	CLO Bilat MW	HQICC MW (B)	Self Supply MW (C)	Capacity Req MW (D=A+B)	Peak Contrib MW	CLO MW (E=A-C)	Net Regional Clearing Price ($/kW-month)	Capacity Load Obligation Charge
Oct-21	34,997	1,903	854	1,644	35,851	24,727	33,353	$5.305927	$180,711,817
Nov-21	34,997	1,955	854	1,644	35,851	24,727	33,353	$5.305932	$180,829,570
Dec-21	34,998	1,961	854	1,644	35,852	24,727	33,354	$5.305912	$180,405,337
Jan-22	34,998	1,939	854	1,644	35,852	24,727	33,354	$5.305912	$181,359,739
Feb-22	34,998	1,958	854	1,644	35,852	24,727	33,354	$5.305913	$181,454,183
Mar-22	34,998	1,939	854	1,644	35,852	24,727	33,354	$5.305913	$181,862,826
Apr-22	34,997	1,939	854	1,644	35,851	24,727	33,353	$5.305926	$181,318,821
May-22	34,997	1,966	854	1,644	35,851	24,727	33,353	$5.305926	$181,031,452

The calculations below describe how the Capacity Requirement and the Capacity Load Obligations are calculated for each Capacity Zone.

Capacity Requirement $_{\text{Capacity Zone}}$ = (Peak Contribution MW (CCP-2) $_{\text{Capacity Zone}}$ / Peak Contribution (CCP-2) $_{\text{Pool}}$) * (CSO $_{\text{Pool}}$ + HQICC MW $_{\text{pool}}$ - Excess RTEG MW $_{\text{pool}}$) * (-1)

CLO $_{\text{Capacity Zone}}$ = Capacity Requirement $_{\text{Capacity Zone}}$ - HQICC MW $_{\text{Capacity Zone}}$ - CLO Self-Supply MW $_{\text{Capacity Zone}}$

There are two aspects to a self-supply agreement – the generator supplying the MW and the entity using the MW to reduce its capacity requirement. For example, during the 2019/2020 commitment period, a generator in Southeast New England can have self-supply designations in the Rest-of-Pool (ROP). (The detailed requirements for self-supplied FCA resources are available here in III.13.1.6.2). The NRCP is the per MW cost of capacity in a capacity zone. Self-supply MW used in the NRCP calculation are based on where the generator supplying the MWs resides and is presented in that manner below.

The following table provides details on FCM charges to load at the Capacity Zone level through May 2022.

Month	Capacity Zone	CSO MW	HQICC MW	Self Supply MW	Capacity Req MW	Peak Contrib MW	CLO MW	Net Regional Clearing Price ($/kW-month)	Capacity Load Obligation Charge
Aug-21	Rest-of-Pool	15,774	854	602	13,396	9,467	12,232	$5.086726	$62,218,587
Aug-21	Northern New England	8,095	0	736	7,414	5,167	6,761	$4.657583	$31,490,336
Aug-21	Southeast New England	10,854	0	307	14,766	10,093	14,085	$6.116495	$86,150,851
Sep-21	Rest-of-Pool	15,769	854	602	13,396	9,467	12,231	$5.086697	$62,217,690
Sep-21	Northern New England	8,116	0	736	7,414	5,167	6,761	$4.653086	$31,459,653
Sep-21	Southeast New England	10,837	0	307	14,766	10,093	14,085	$6.122210	$86,230,627
Oct-21	Rest-of-Pool	15,751	854	602	13,499	9,467	12,335	$5.090544	$62,793,722
Oct-21	Northern New England	8,276	0	736	7,472	5,167	6,819	$4.668691	$31,833,690
Oct-21	Southeast New England	10,970	0	307	14,880	10,093	14,199	$6.062525	$86,084,404
Nov-21	Rest-of-Pool	15,610	854	602	13,499	9,467	12,335	$5.122643	$63,189,593
Nov-21	Northern New England	8,464	0	736	7,472	5,167	6,819	$4.611888	$31,446,330

Month	Capacity Zone	CSO MW	HQICC MW	Self Supply MW	Capacity Req MW	Peak Contrib MW	CLO MW	Net Regional Clearing Price ($/kW-month)	Capacity Load Obligation Charge
Nov-21	Southeast New England	10,924	0	307	14,880	10,093	14,199	$6.070226	$86,193,647
Dec-21	Rest-of-Pool	15,912	854	602	13,500	9,467	12,336	$5.058045	$62,393,821
Dec-21	Northern New England	8,015	0	736	7,472	5,167	6,819	$4.772542	$32,542,316
Dec-21	Southeast New England	11,071	0	307	14,880	10,093	14,200	$6.019109	$85,469,201
Jan-22	Rest-of-Pool	15,829	854	602	13,500	9,467	12,336	$5.089647	$62,783,654
Jan-22	Northern New England	8,448	0	736	7,472	5,167	6,819	$4.611848	$31,446,595
Jan-22	Southeast New England	10,722	0	307	14,880	10,093	14,200	$6.136033	$87,129,490
Feb-22	Rest-of-Pool	15,870	854	602	13,500	9,467	12,336	$5.085488	$62,732,250
Feb-22	Northern New England	8,448	0	736	7,472	5,167	6,819	$4.611847	$31,446,544
Feb-22	Southeast New England	10,680	0	307	14,880	10,093	14,200	$6.146317	$87,275,389
Mar-22	Rest-of-Pool	16,045	854	602	13,500	9,467	12,336	$5.006733	$61,760,763
Mar-22	Northern New England	8,307	0	736	7,472	5,167	6,819	$4.681690	$31,922,777
Mar-22	Southeast New England	10,645	0	307	14,880	10,093	14,200	$6.209974	$88,179,286
Apr-22	Rest-of-Pool	15,745	854	602	13,499	9,467	12,335	$5.083870	$62,711,036
Apr-22	Northern New England	8,464	0	736	7,472	5,167	6,819	$4.611888	$31,446,188
Apr-22	Southeast New England	10,789	0	307	14,880	10,093	14,199	$6.138421	$87,161,596
May-22	Rest-of-Pool	15,669	854	602	13,499	9,467	12,335	$5.106613	$62,991,576
May-22	Northern New England	8,464	0	736	7,472	5,167	6,819	$4.611888	$31,446,188
May-22	Southeast New England	10,864	0	307	14,880	10,093	14,199	$6.098425	$86,593,688

11.4 Capacity Transfer Rights

For the capacity commitment period (CCP) 2022-2023, the ISO implemented FCM Cost Allocation to support payments and charges related to the FCM. The table below reflects the methodology prior to implementation.

CTRs are a mechanism to distribute excess revenue that results from differences in payment rates between Capacity Zones; a CTR fund will be calculated for each constrained capacity zone. There are two types of CTRs: Specifically Allocated CTRs (defined in Market Rule 1 and always paid), and Residual CTRs (remaining funds or shortfall of funds after Specifically Allocated CTRs are paid). Residual CTRs will be allocated to the load serving entities with CLO on the import-constrained side of the interface. For the 2021-2022 Capacity Commitment Period (CCP), Southeast New England is import-constrained. Payments from the import-constrained zone will be made to the Rest-of-Pool Capacity Zone. The FCM Charge above can change depending on the CTRs associated with the Capacity Zone. The Specifically Allocated Capacity Transfer Rights Fund consists of the following:

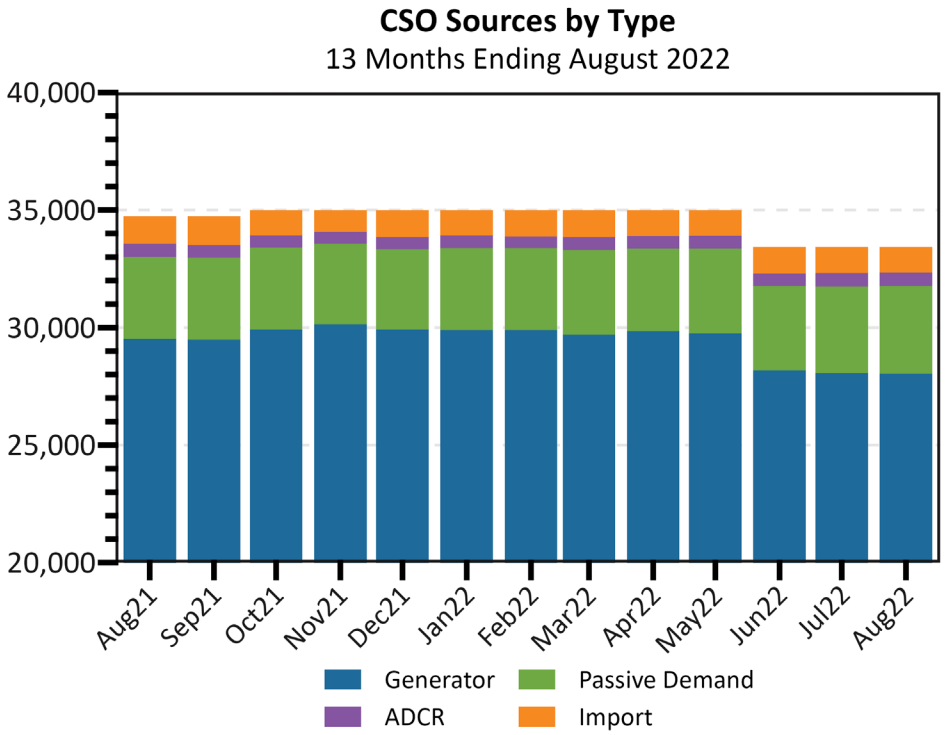
- Pool Planned Unit CTRs for certain municipal utilities
- Provisions for Transmission Upgrade CTRs

The following table provides detail, by month and capacity zone, of the Capacity Transfer Rights Dollars, the Specifically Allocated CTR MW and Dollars, along with the Residual CTR MW and Dollars through May 2022.

Month	Capacity Zone	CTR Fund Dollars	Specifically Allocated CTR MW	Specifically Allocated CTR Dollars	Residual CTR MW	Residual CTR Dollars
Aug-21	Northern New England	$256,572	0	$0	-26,317	$256,572
Aug-21	Southeast New England	$3,643,405	0	$0	-14,085	$3,643,405
Sep-21	Northern New England	$268,553	0	$0	-26,316	$268,553
Sep-21	Southeast New England	$3,680,940	0	$0	-14,085	$3,680,940
Oct-21	Northern New England	$304,572	0	$0	-26,535	$304,572
Oct-21	Southeast New England	$3,436,827	0	$0	-14,199	$3,436,827
Nov-21	Northern New England	$464,636	0	$0	-26,535	$464,636
Nov-21	Southeast New England	$3,394,583	0	$0	-14,199	$3,394,583
Dec-21	Northern New England	$131,495	0	$0	-26,535	$131,495
Dec-21	Southeast New England	$3,301,202	0	$0	-14,200	$3,301,202
Jan-22	Northern New England	$426,919	0	$0	-26,535	$426,919
Jan-22	Southeast New England	$3,960,179	0	$0	-14,200	$3,960,179
Feb-22	Northern New England	$423,195	0	$0	-26,535	$423,195
Feb-22	Southeast New England	$4,058,581	0	$0	-14,200	$4,058,581
Mar-22	Northern New England	$244,731	0	$0	-26,535	$244,731
Mar-22	Southeast New England	$4,645,691	0	$0	-14,200	$4,645,691
Apr-22	Northern New England	$429,366	0	$0	-26,535	$429,366
Apr-22	Southeast New England	$3,920,079	0	$0	-14,199	$3,920,079
May-22	Northern New England	$450,055	0	$0	-26,535	$450,055
May-22	Southeast New England	$3,612,021	0	$0	-14,199	$3,612,021

11.5 Sources of Capacity

The following graph shows, in MW, the amount of capacity procured by type in New England for each of the last 13 months. The subsequent table displays the data underlying the graph.



Month	Active Demand Capacity Resource MW (ADCR)	Passive Demand Resource MW	Generation MW	Import MW	Total MW
Aug-21	543	3,493	29,527	1,160	34,722
Sep-21	531	3,488	29,493	1,210	34,722
Oct-21	531	3,480	29,918	1,068	34,997
Nov-21	514	3,409	30,157	917	34,997
Dec-21	511	3,423	29,921	1,143	34,998
Jan-22	530	3,485	29,907	1,077	34,998
Feb-22	485	3,478	29,909	1,126	34,998
Mar-22	549	3,611	29,702	1,137	34,998
Apr-22	526	3,507	29,860	1,105	34,997
May-22	531	3,625	29,754	1,087	34,997
Jun-22	552	3,583	28,181	1,113	33,429
Jul-22	570	3,683	28,070	1,103	33,427
Aug-22	573	3,720	28,047	1,089	33,428

11.6 Capacity Imports

The following table shows the monthly CSO MW resulting from imports for each of the last 13 months.

Month	Capacity Zone	NY AC Ties	New Brunswick	HQ Phase I/II	HQ Highgate	Total
Aug-21	Rest-of-Pool	467	0	442	0	909
Aug-21	Northern New England	0	194	0	57	251
Sep-21	Rest-of-Pool	517	0	442	0	959
Sep-21	Northern New England	0	194	0	57	251
Oct-21	Rest-of-Pool	448	0	397	0	845
Oct-21	Northern New England	0	166	0	57	223
Nov-21	Rest-of-Pool	297	0	397	0	694
Nov-21	Northern New England	0	166	0	57	223
Dec-21	Rest-of-Pool	523	0	397	0	920
Dec-21	Northern New England	0	166	0	57	223
Jan-22	Rest-of-Pool	523	0	397	0	920
Jan-22	Northern New England	0	100	0	57	157
Feb-22	Rest-of-Pool	523	0	442	0	965
Feb-22	Northern New England	0	104	0	57	161
Mar-22	Rest-of-Pool	472	0	442	0	914
Mar-22	Northern New England	0	166	0	57	223
Apr-22	Rest-of-Pool	440	0	442	0	882
Apr-22	Northern New England	0	166	0	57	223
May-22	Rest-of-Pool	422	0	442	0	864
May-22	Northern New England	0	166	0	57	223
Jun-22	Rest-of-Pool	447	0	431	0	878
Jun-22	Northern New England	0	184	0	51	235
Jul-22	Rest-of-Pool	437	0	431	0	868
Jul-22	Northern New England	0	184	0	51	235
Aug-22	Rest-of-Pool	423	0	431	0	854
Aug-22	Northern New England	0	184	0	51	235

11.7 Pay for Performance

Under Pay for Performance (PFP), a Capacity Scarcity Condition (CSC) exists in a Capacity Zone in any five-minute interval when the real-time energy price includes a Reserve Constraint Penalty Factor triggered by (1) a violation of the system minimum 30-minute reserve requirement, (2) a violation of the system 10-minute reserve requirement, or (3) a violation of the zonal 30-minute reserve requirements.

A balancing ratio, equal to the required capacity divided by the total Capacity Supply Obligation on the system (or in a capacity zone), is computed for each CSC. A Performance Score, equal to the

Actual Capacity Provided (MW) – (Balancing Ratio (MW) x CSO (MW)), is then calculated for each Resource. Resources are required to provide an amount of capacity equal to their CSO multiplied by the Balancing Ratio. Resources that provide more than that value during the CSC are eligible to receive a payment, while those that provide less than that value will incur a charge. This payment/charge is determined by multiplying the Resources Performance Score by the Performance Payment Rate in effect for the Capacity Commitment Period (CCP) when the CSC occurs. Units that do not have a CSO are eligible to receive a payment for the capacity that they provide during a CSC, but do not incur a charge.

PFP includes both a monthly and an annual Stop-Loss mechanism to limit losses a Resource may incur during a given month, or over the course of the CCP. Once the total credits and charges are calculated, including any values associated with Stop Loss, any over collection or under collection, referred to as the Balancing Fund Dollars, is distributed/charged to all suppliers with a CSO (pro rata) at the end of each month.

A Resource with a positive Performance Score in an interval may sell all or part of its score to any Resource impacted by the same CSC. This mechanism replaces the Supplemental Availability Bilateral agreements in place prior to PFP.

Local Thirty-Minute Operating Reserve Constraint Violation

Capacity Zone	CSC Interval	CSO	Balancing Ratio	Actual Capacity Provided	Capacity Performance Score	Performance Payment Rate	Performance Payment Dollars	Not Charged Due to Stop Loss Dollars	Balancing Fund Dollars
There were no Local Thirty-Minute Operating Reserve Violations over the previous 13 months.									

System-Wide Reserve Constraint Violation

CSC Interval Begin Date	10-min Reserve Constraint Violation	30-min Reserve Constraint Violation	Balancing Ratio	CSO	Actual Capacity Provided	Capacity Performance Score	Capacity Performance Payment
There were no Operating Reserve Violations over the previous 13 months.							

Resource Type	Capacity Performance Payment [7]	Not Charged Due to Stop Loss Dollars	Balancing Fund Dollars [8]	Total PFP Payment [9]
There were no Operating Reserve Violations over the previous 13 months.				

11.8 For More Information

Detailed information on the FCM, including information on the qualification process, auction results, and FERC filings and orders can be found here.

Detailed information about FCM Charge calculation summaries can be found here.

Detailed information about charges to Network Load can be found here.

[7] Positive values in this table represent a credit, while negative values represent a charge.

[8] If the funds collected from under-performing resources during a CSC exceed the amount needed to compensate the over-performing resources, the balancing fund balance will be positive. At the end of the month, these funds are then distributed pro rata to all suppliers with a CSO. If the funds collected from under-performing resources are less than the amount needed to compensate the over-performing resources, the balancing fund balance will be negative. At the end of the month, the funds needed to complete the payments will be collected pro rata from all suppliers with a CSO.

[9] This column reflects the sum of the Capacity Performance Payment and the Balancing Fund dollars.

12. Mystic Cost of Service

The ISO has entered into a Cost of Service Agreement with Constellation Mystic Power, LLC and Exelon Generation Company, LLC for the Mystic generating units 8 and 9. The agreement is in effect for two Forward Capacity Market commitment periods, starting June 1, 2022 and ending May 31, 2024.

The Mystic Cost of Service (COS) charge is the allocation of the supplemental capacity payments paid to Mystic resources retained for fuel security. Mystic cost of service charges are allocated to Real-Time Load Obligation, excluding Real-Time Load Obligation associated with Dispatchable Asset Related Demand (DARD) and Real-Time Load Obligation associated with Coordinated External Transactions.

12.1 Mystic Cost of Service Payments

The following table shows the monthly Supplemental Capacity Payments associated with the Mystic Cost of Service settlement.

Month	Supplemental Capacity Payment
Jun-22	$13,793,713
Jul-22	$48,062,983

12.2 For More Information

Detailed information for market participants on invoice line items for charges can be found here.

Detailed information for market participants on invoice line items for credits can be found here.

13. Price Responsive Demand Full Integration

Price Responsive Demand will expand opportunities for demand response in the energy and reserves markets. All Demand Response Resources (DRRs) can participate in the Day-Ahead and Real-Time Energy Market and Real-Time Reserve Market via offers made in the eMarket system. DRRs can also participate in the Forward Reserves Market.

13.1 Demand Response participation in the Energy Market

All Demand Response Resources can participate in the Day-Ahead and Real-Time Energy Market.

13.1.1 *Price Responsive Demand Payments*

- A DRR Asset with an offer that clears in the Day-Ahead Energy Market will receive a payment for its Day-Ahead Demand Reduction Obligation at the applicable Day-Ahead Locational Marginal Price (LMP) and will be paid or charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation in Real-Time at the applicable Real-Time LMP. Day-Ahead cleared and Real-Time reduction MWh are subject to a gross up due to avoided distribution losses.

The following table includes Day-Ahead Demand Reduction Obligation megawatt-hours MWh (Day-Ahead Cleared MWh, plus 5.5% gross up), Real-Time Demand Reduction Energy Quantity MWh, Real-Time Demand Reduction Supply Energy Quantity MWh, RT Demand Reduction Obligation MWh, Real-Time Demand Reduction Deviation MWh, Average Pool Demand Response Charge Allocation MWh, and the Audit Demand Reduction MWh (Also adjusted for gross up of 5.5%).

*DA Demand Reduction Obligation MWh = DA Cleared MWh * 1.055*

RT Demand Reduction Obligation MWh = RT Demand Reduction Energy Quantity MWh 1.55 + RT Demand Reduction Net Supply Energy Quantity MW*

RT Demand Reduction Deviation MW = RT Demand Reduction Obligation MWh - DA Demand Reduction Obligation MWh

Month	DA Cleared Demand Reduction MWh (A)	DA Demand Reduction Obligation MWh (B)=(A)*1.055	RT Reduction Energy Quantity MWh (C)	RT Net Supply Energy Quantity MWh (D)	RT Demand Reduction Obligation MWh (E)=(C)*1.055+(D)	RT Demand Reduction Deviation MWh (F)=(E)-(B)
Aug-21	3,134	3,306	3,378	183	3,746	440
Sep-21	2,880	3,038	3,467	115	3,772	734
Oct-21	2,775	2,927	2,595	86	2,824	-103
Nov-21	1,982	2,090	1,774	194	2,065	-25
Dec-21	2,217	2,338	2,152	240	2,510	172
Jan-22	7,880	8,313	4,667	8,337	13,261	4,947
Feb-22	3,794	4,003	2,814	2,700	5,668	1,666
Mar-22	2,270	2,395	1,426	1,290	2,794	399
Apr-22	968	1,021	415	312	750	-271
May-22	1,268	1,338	872	442	1,362	24
Jun-22	1,707	1,801	2,046	506	2,664	863
Jul-22	3,647	3,847	3,339	1,034	4,557	709
Aug-22	5,505	5,808	4,614	1,458	6,327	518

The following table displays Day-Ahead payments, Real-Time Payment Dollars, Total Payment (sum of total Day-Ahead and Real-Time Payments).

Month	DA Payment Dollars	RT Payment Dollars	Total Payment Dollars
Aug-21	$237,637	$56,647	$294,284
Sep-21	$157,153	$35,600	$192,752
Oct-21	$201,752	-$111	$201,641
Nov-21	$141,459	$16,683	$158,142
Dec-21	$237,090	$12,707	$249,796
Jan-22	$1,403,764	$891,309	$2,295,074
Feb-22	$659,714	$354,946	$1,014,661
Mar-22	$231,590	$124,406	$355,997
Apr-22	$68,348	-$14,464	$53,884
May-22	$129,321	$16,634	$145,955
Jun-22	$154,021	$89,970	$243,991
Jul-22	$619,834	$114,147	$733,982
Aug-22	$784,844	$105,039	$889,883

13.2 Demand Response participation in the Reserve Market

A DRR may be designated for reserves based on its registration and offer parameters as well as its past performance. For more statistics about DRR performance in the Reserve Markets, see "Section 9. Reserve Markets."

13.3 Demand Response participation in the Forward Capacity Market

DRRs support an obligation in the Forward Capacity Market's base payment if they are mapped to an Active Demand Capacity Resource (ADCR) with a CSO. DRRs mapped to an ADCR with a non-zero CSO are required to offer in the Day-Ahead and Real-Time Energy Market at the minimum of their availability or net CSO. DRRs support a pay for performance incentive or charge for its associated ADCR based on the energy and/or reserves provided by a DRR during a scarcity condition. If a DRR is not associated with an ADCR, it can earn FCM incentives through pay for performance. For more statistics about DRR performance in the Forward Capacity Market, see "Section 12. Forward Capacity Market".

13.4 For More Information:

Rules governing the calculation of the Price Responsive Demand – Full Integration can be found in Section III.13 Market Rule 1 and Section III, Appendix E located here.

14. Document History

Date	Version	Description
9/16/2022	Original Posting	