



Monthly Report

A Report by the
New York Independent System Operator

October 2023

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October 2023 Report

**Operations & Reliability Department
New York Independent System Operator**

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data collected on or before November 8, 2023.

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October 2023 Operations Performance Highlights

Monthly Peak Load	Monthly Minimum Load	Summer 2023 Peak	All-time Summer Peak
10/04/2023 HB 17 21,735 MW	10/08/2023 HB 04 11,890 MW	09/06/2023 HB 17 30,206 MW	07/19/2013 HB 16 33,956 MW

- 0.0 hours of Thunderstorm Alerts were declared
- 0.0 hours of NERC TLR level 3 curtailment
- Required regulatory work on Con Edison natural gas LDC system resulted in the need to run Astoria load pocket generation on liquid fuel for electric system reliability. While this work was coordinated to minimize the duration, it resulted in higher uplift than typical for October.
- An annular solar eclipse occurred on Saturday October 14th. Minimal impacts were observed due to significant obscuration from cloud cover. The estimated impact on BTM solar production over the peak of the eclipse was roughly 100MW.

Installed Wind, Solar and Energy Storage Resource Nameplate Values:

Land-Based Wind	Behind-the-Meter Solar	Front-of-the-Meter Solar	Energy Storage Resource (ESR)
2,521 MW	4,959 MW	174 MW	63 MW

Estimated production cost savings associated with the Broader Regional Market initiatives:

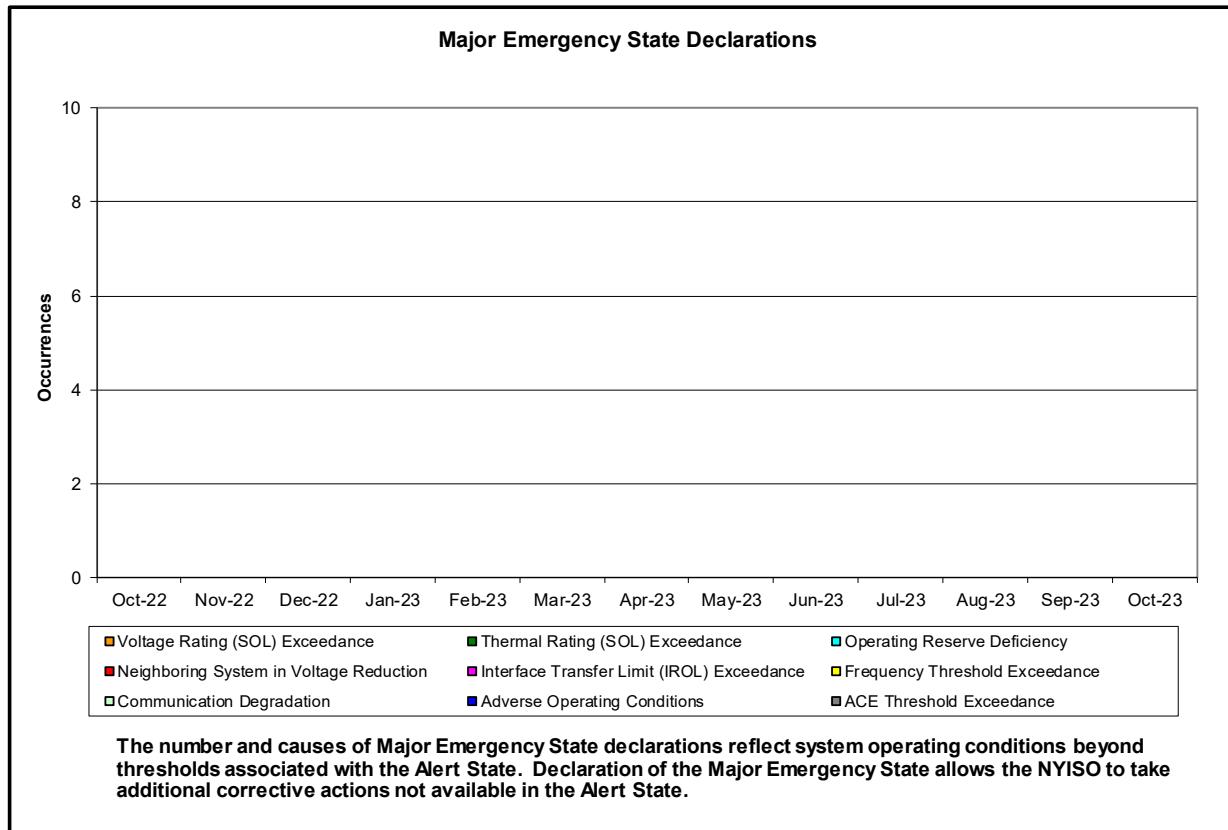
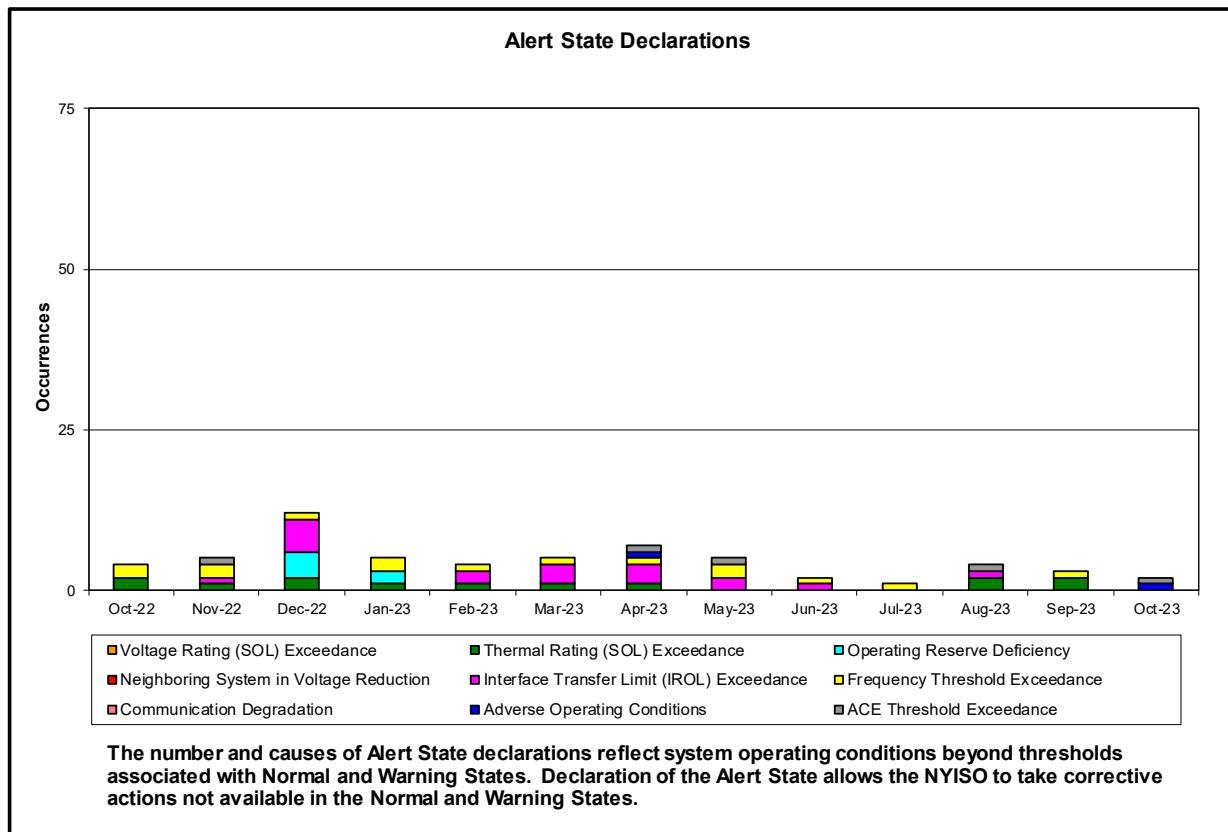
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$0.16	\$10.19
NY Savings from PJM-NY Coordinated Transaction Scheduling	(\$0.15)	(\$1.52)
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.07	(\$1.32)
Total NY Savings	\$0.08	\$7.35
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$1.14	\$6.46
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.11	\$1.01
Total Regional Savings	\$1.25	\$7.47

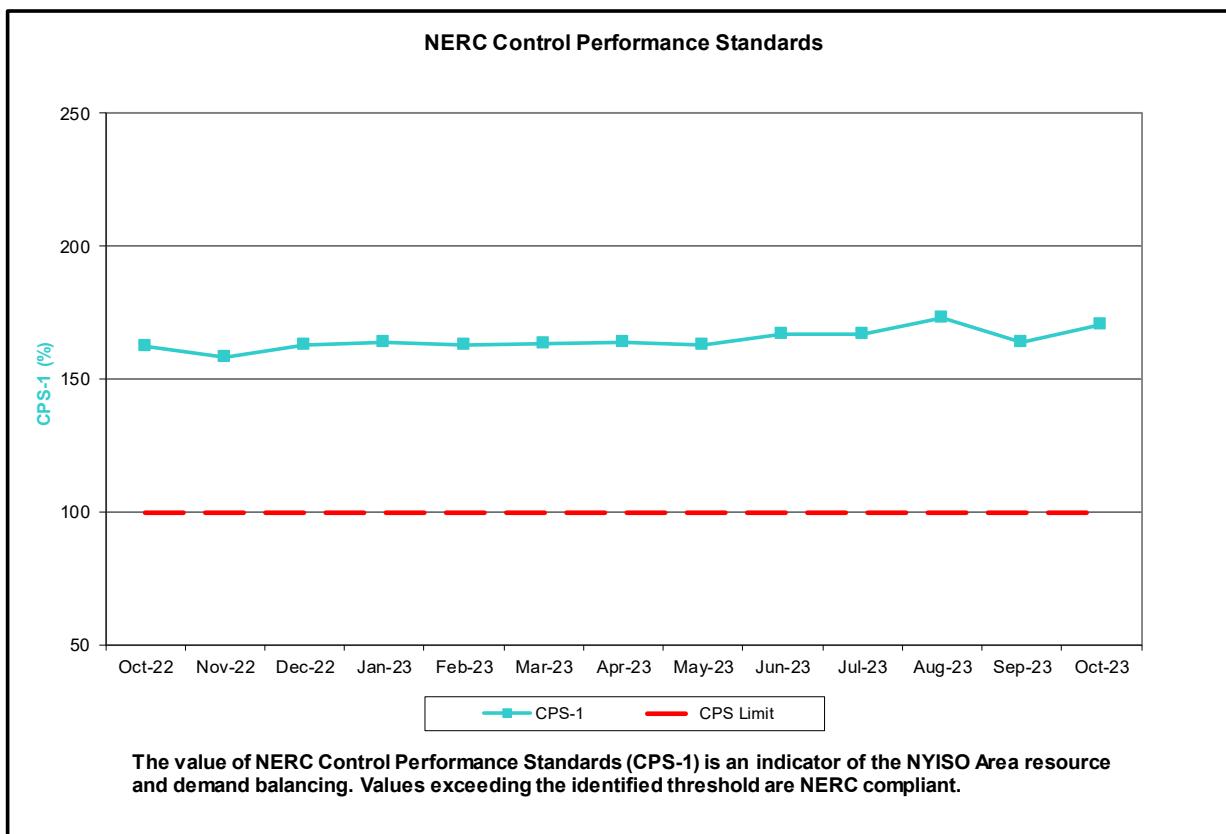
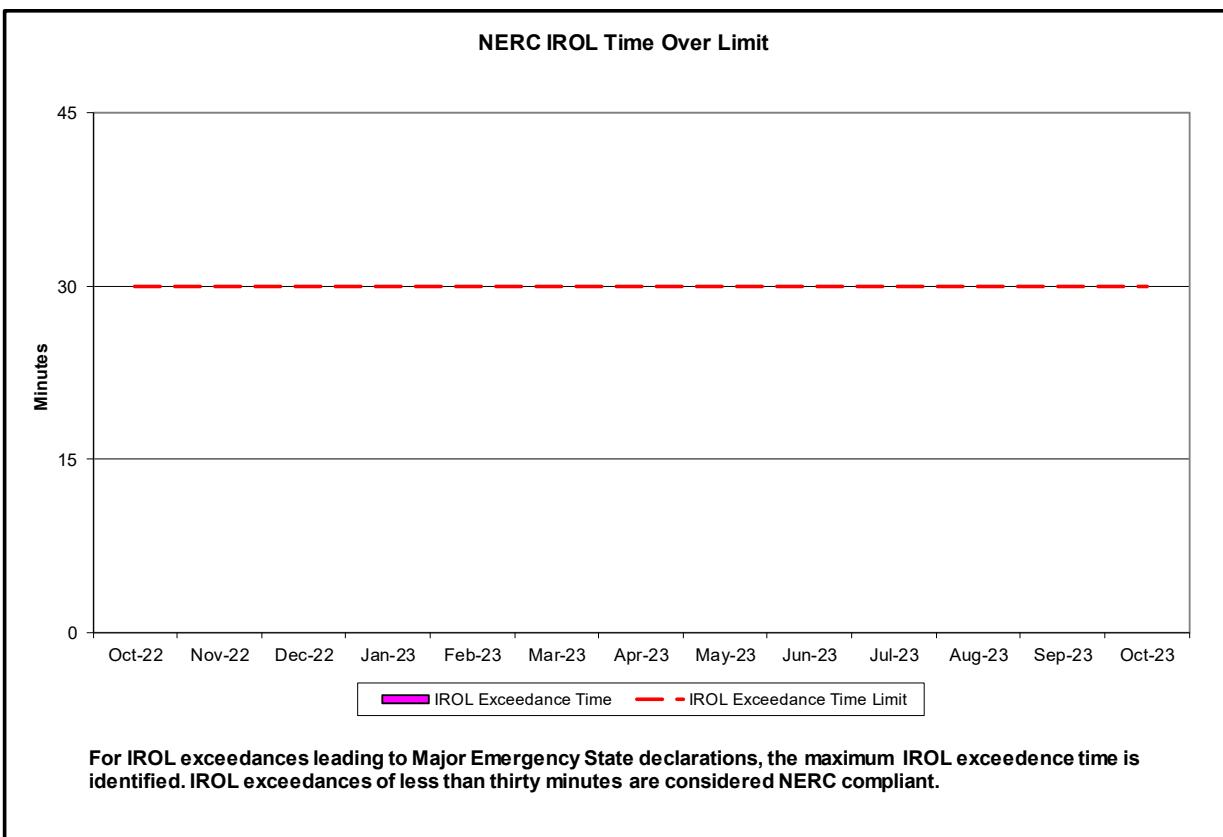
- Statewide uplift cost monthly average was (\$0.09)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

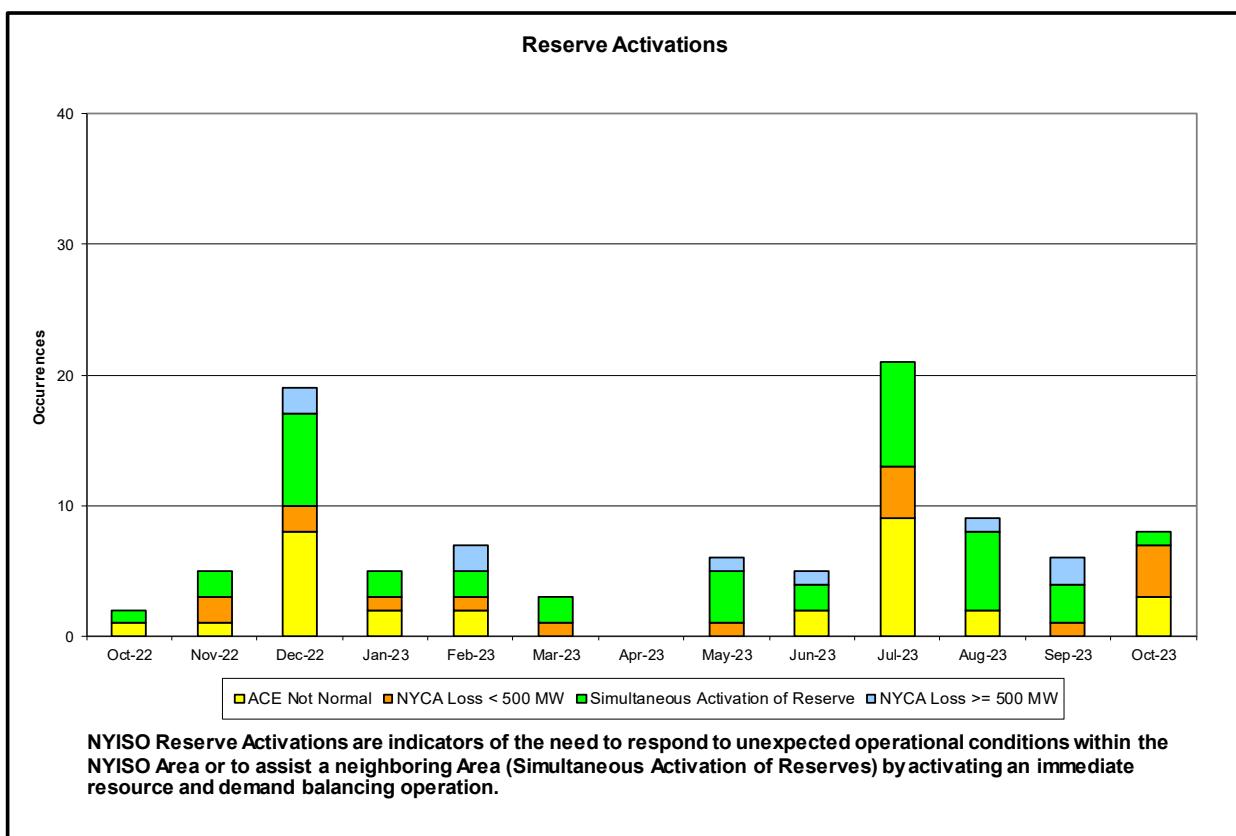
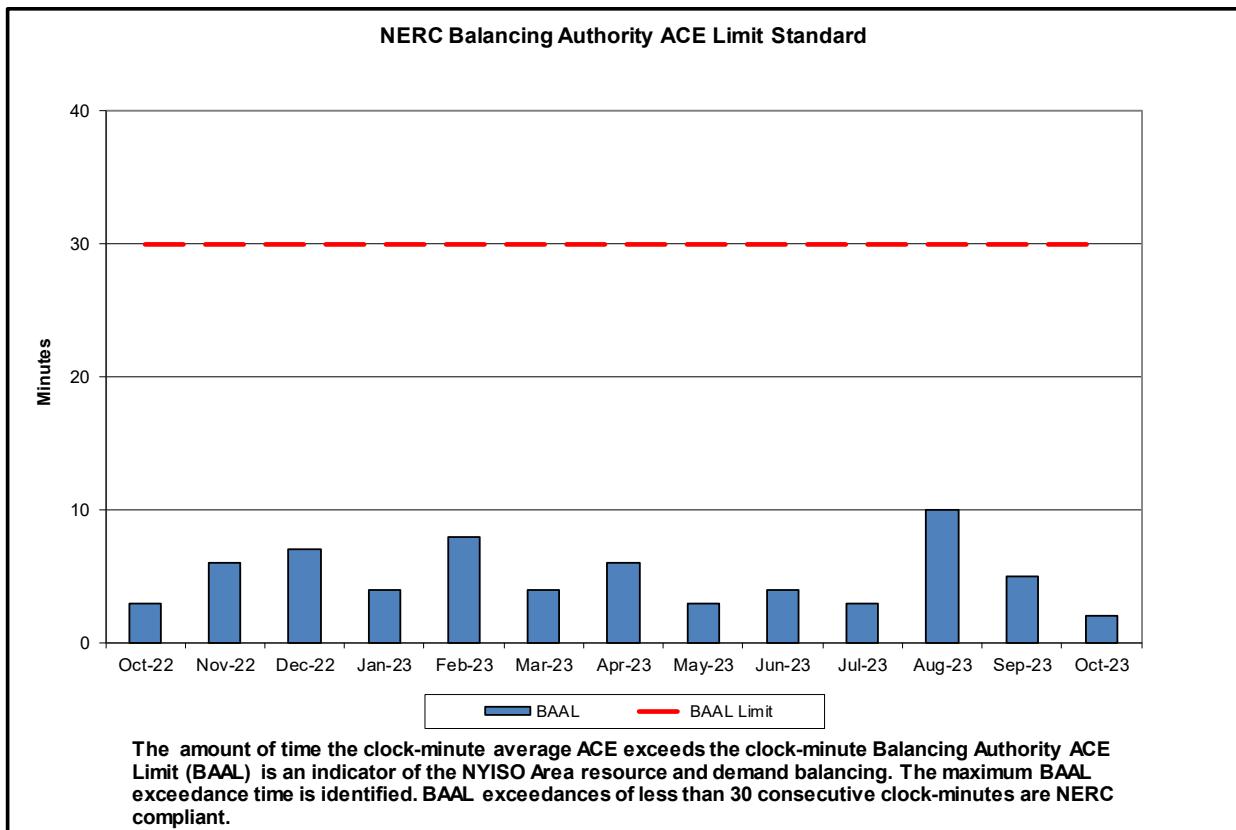
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
November 2023 Spot Price	\$0.95	\$1.28	\$12.83	\$0.95
April 2023 Spot Price	\$1.10	\$1.10	\$1.10	\$1.10
Delta	(\$0.15)	\$0.18	\$11.73	(\$0.15)

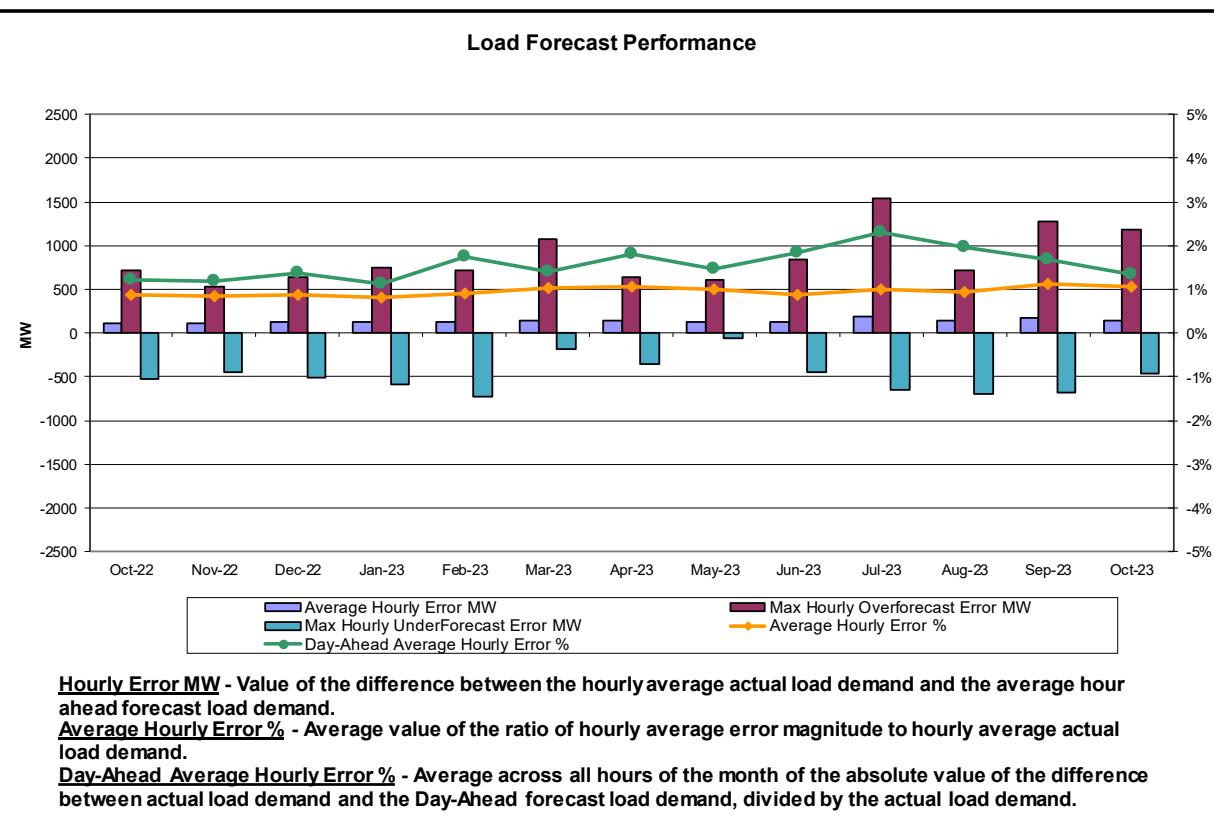
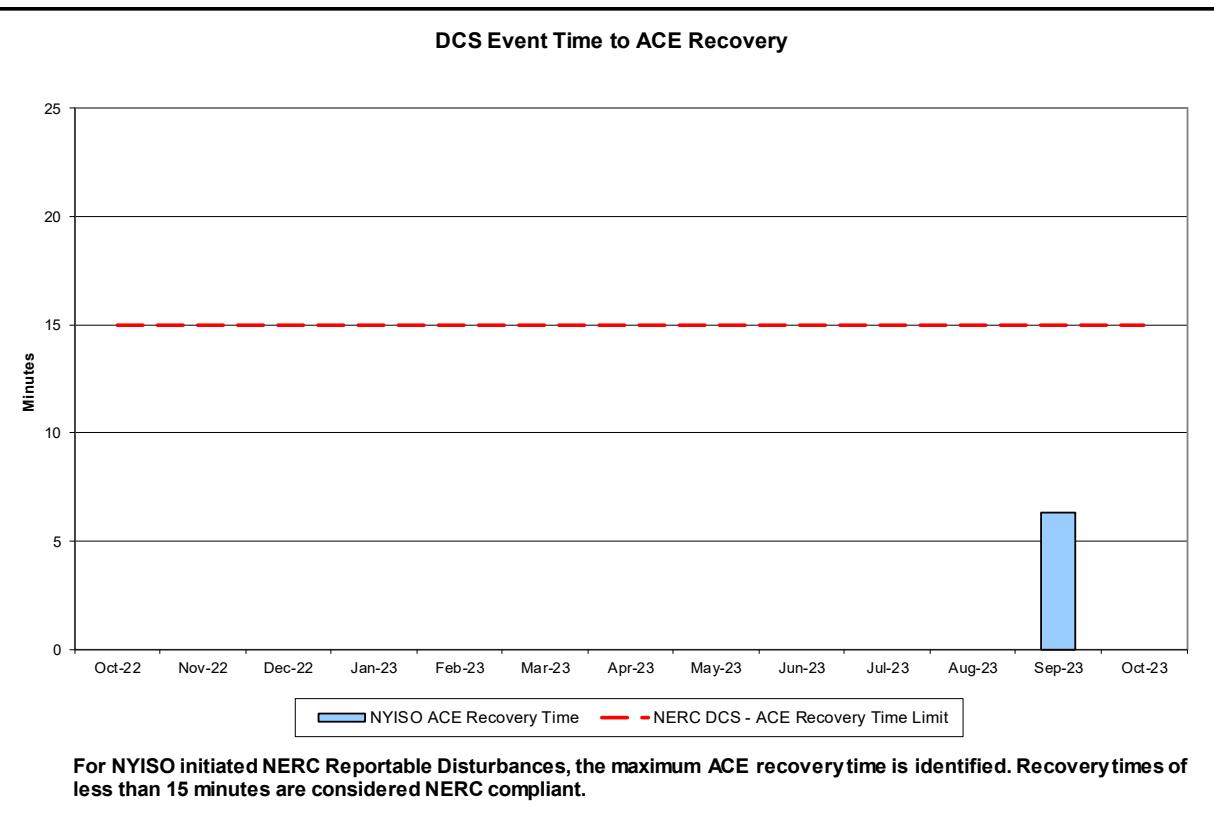
- Price changes from April 2023 to November 2023 are driven by changes in supply as well as Capability Year inputs such as demand curve parameters, Locational Capacity Requirements, the Installed Reserve Margin and the load forecast.

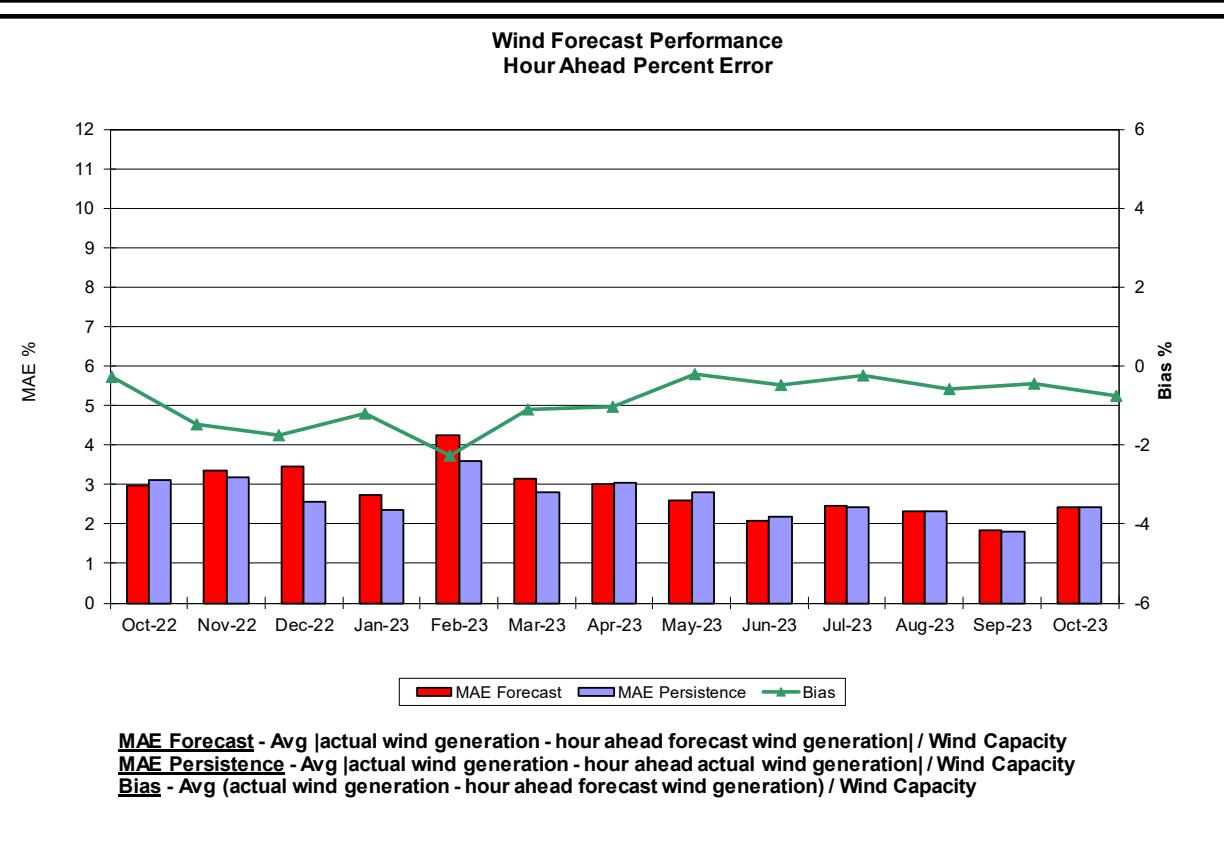
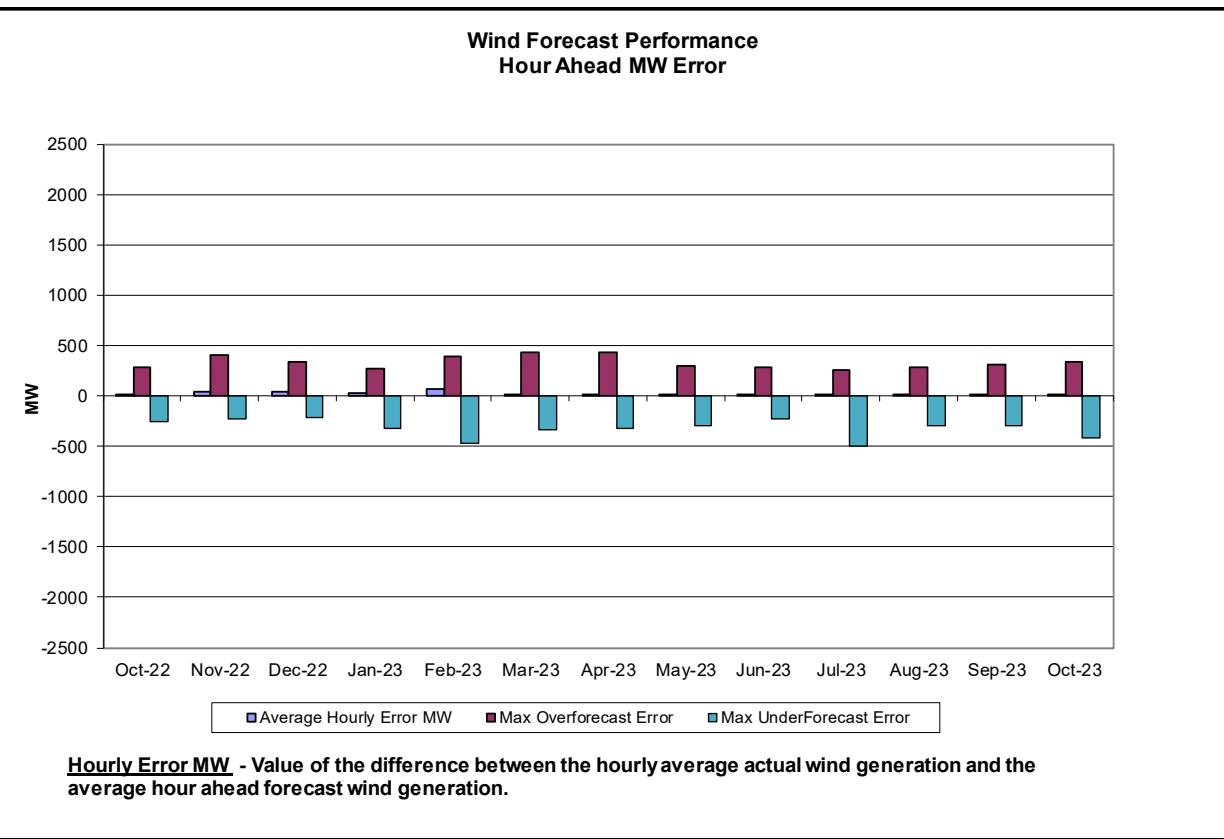
Reliability Performance Metrics

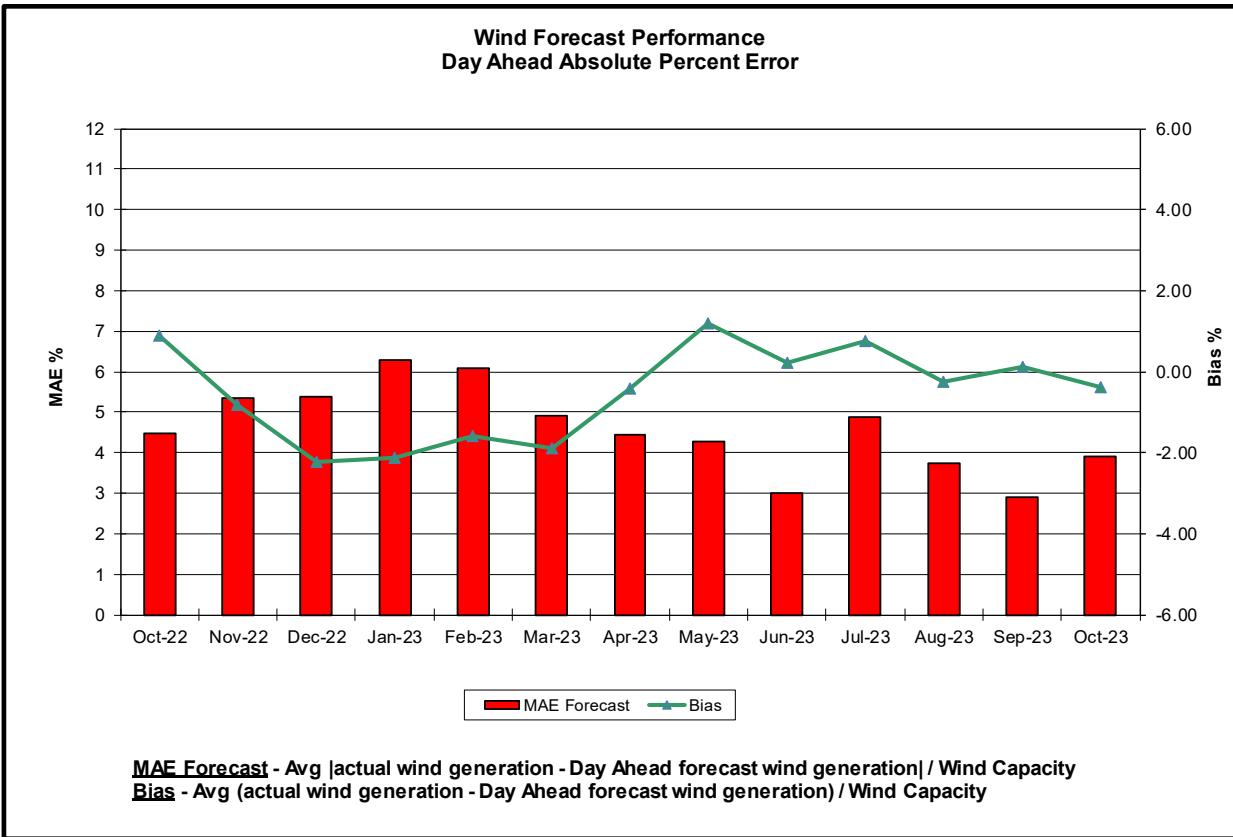
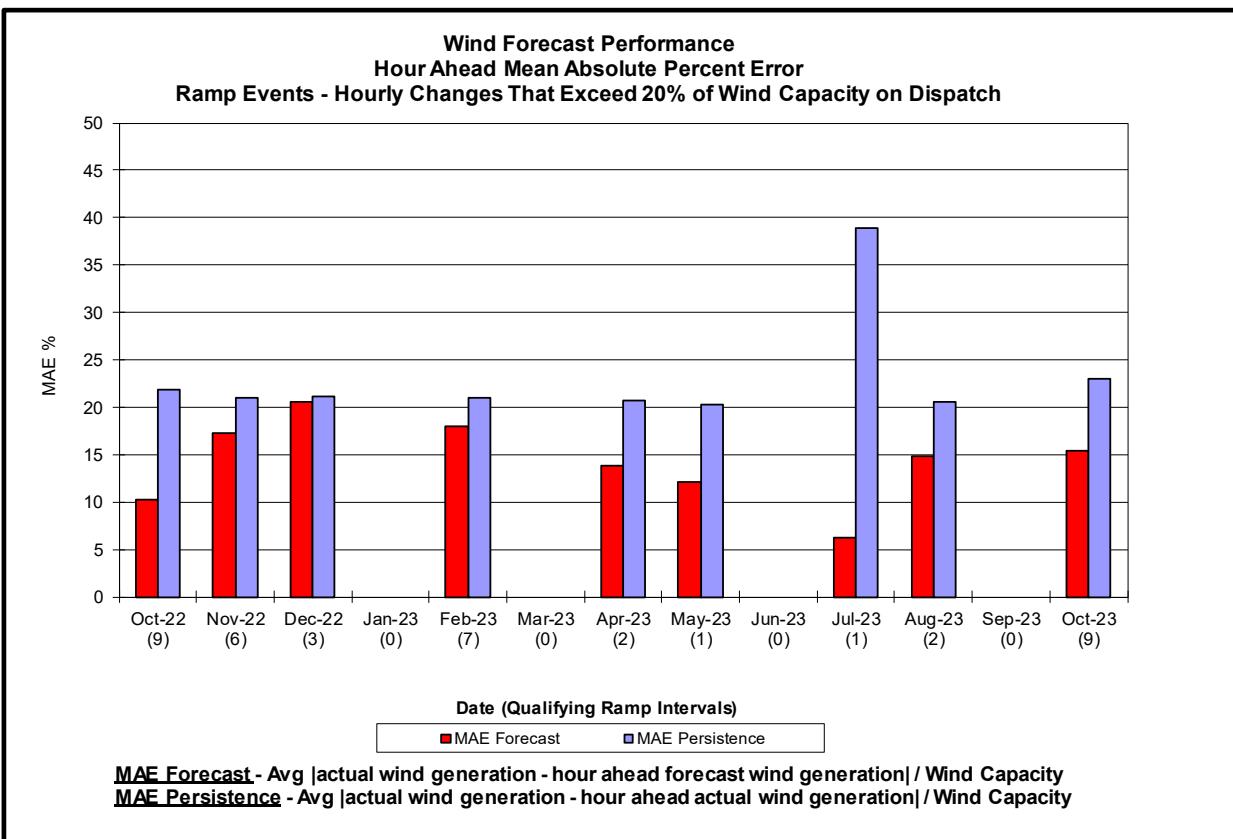


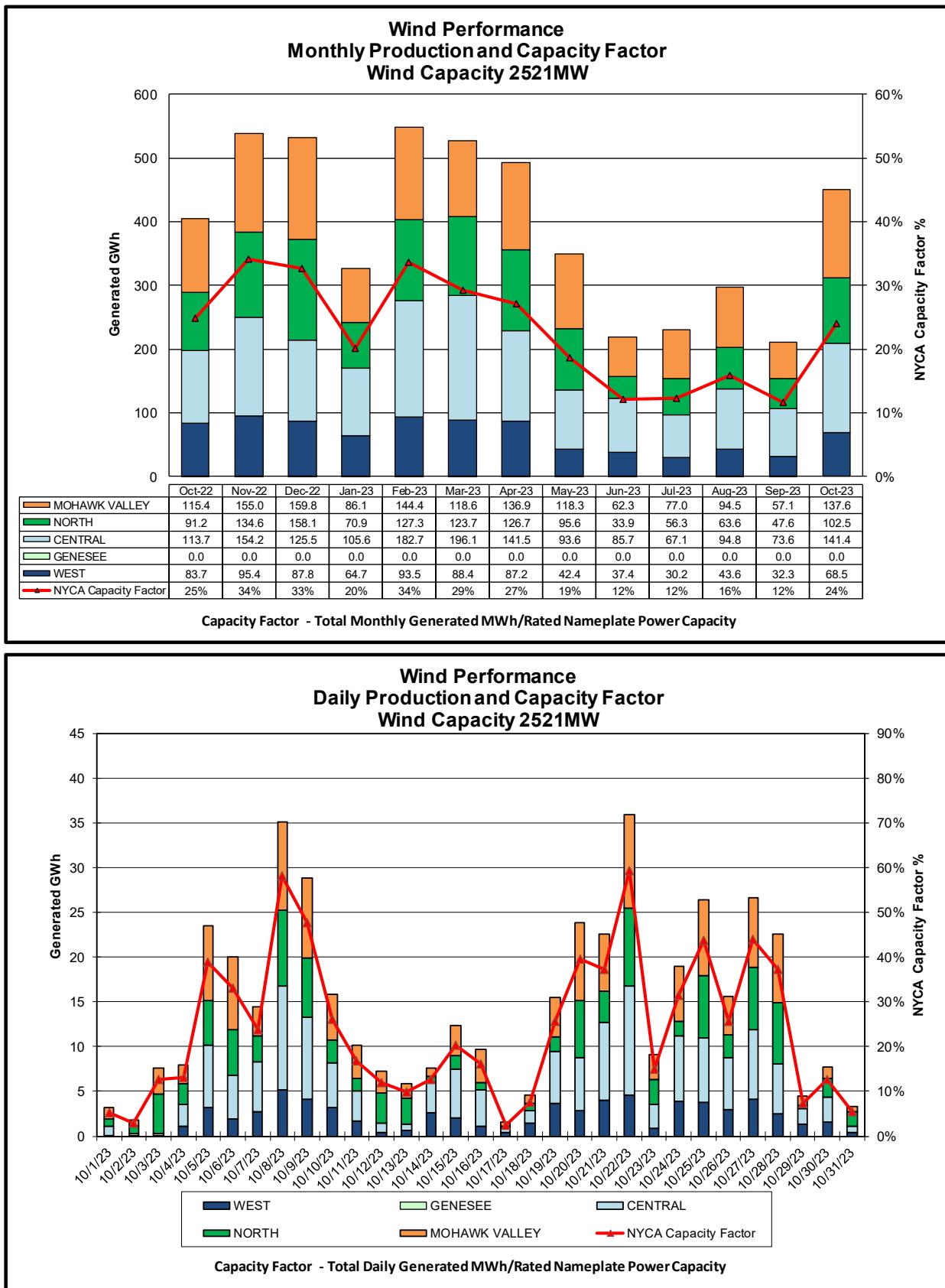


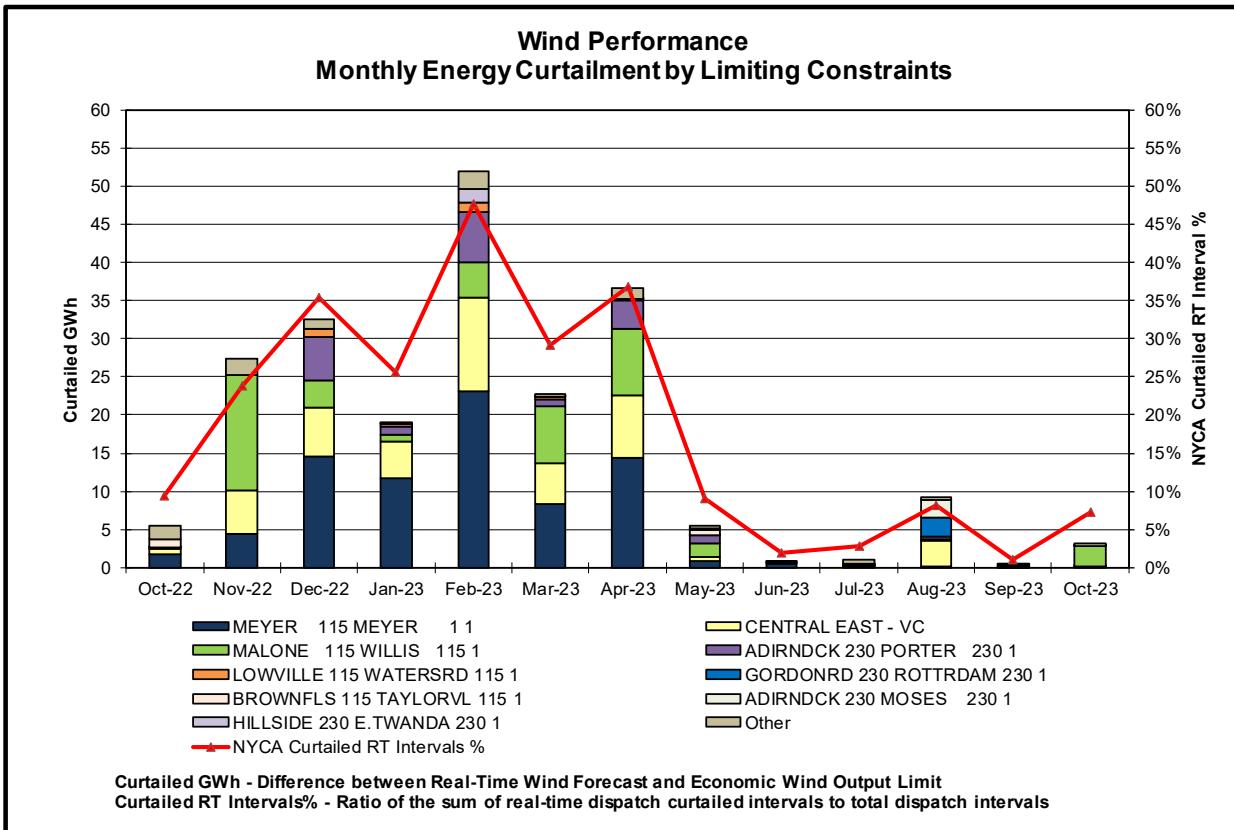
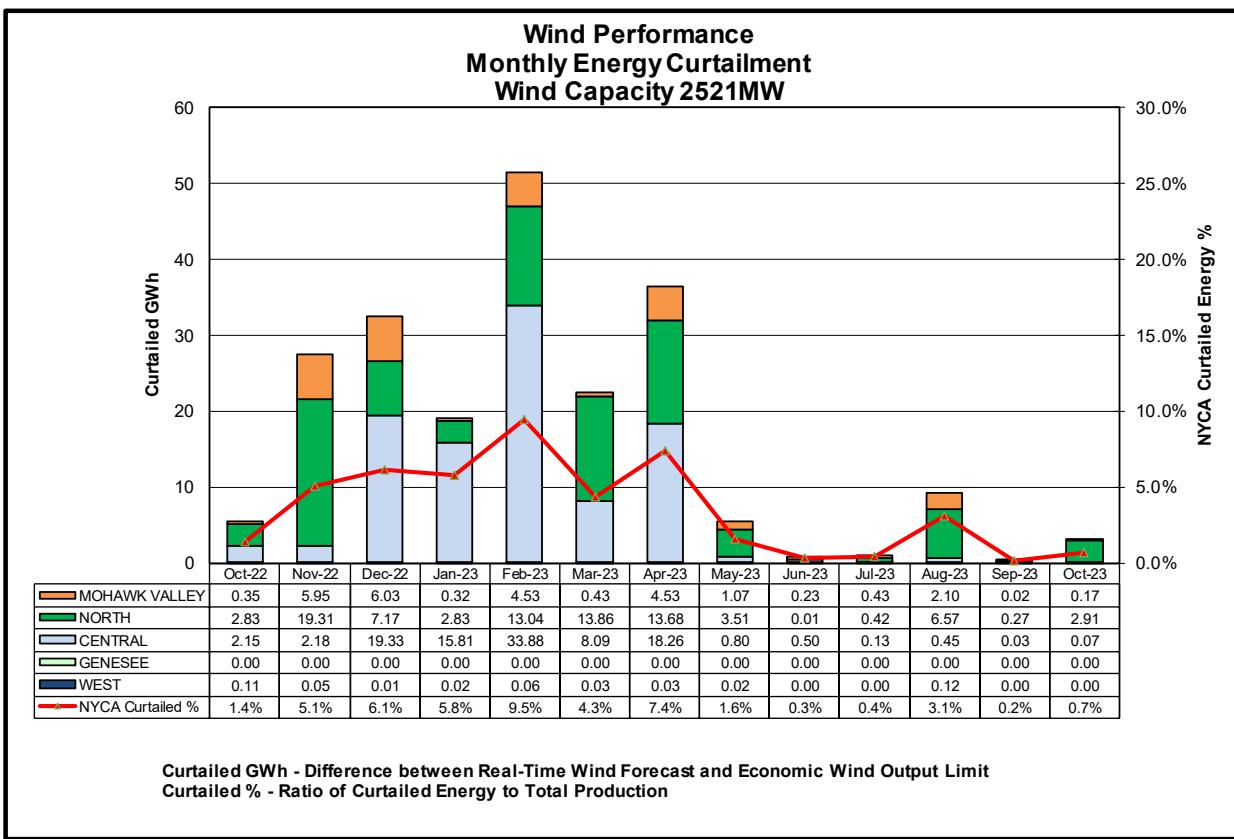


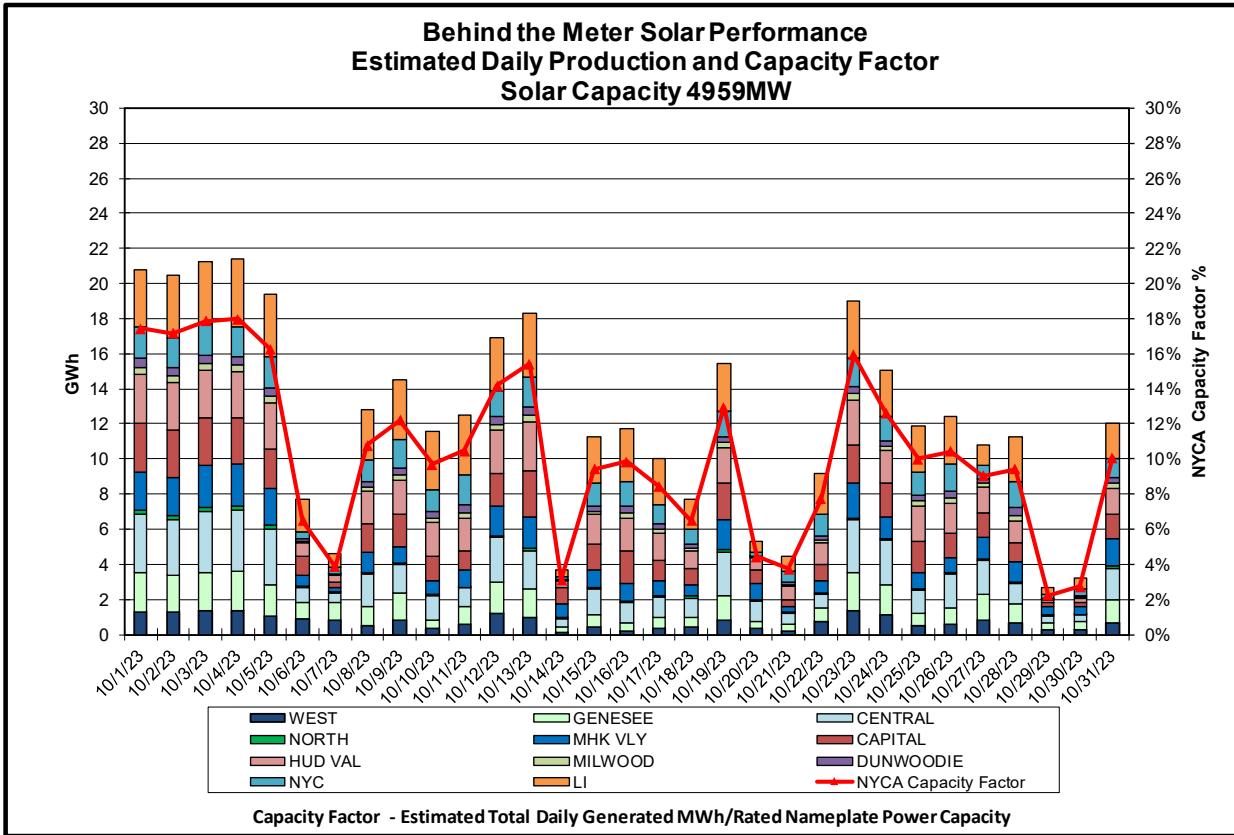
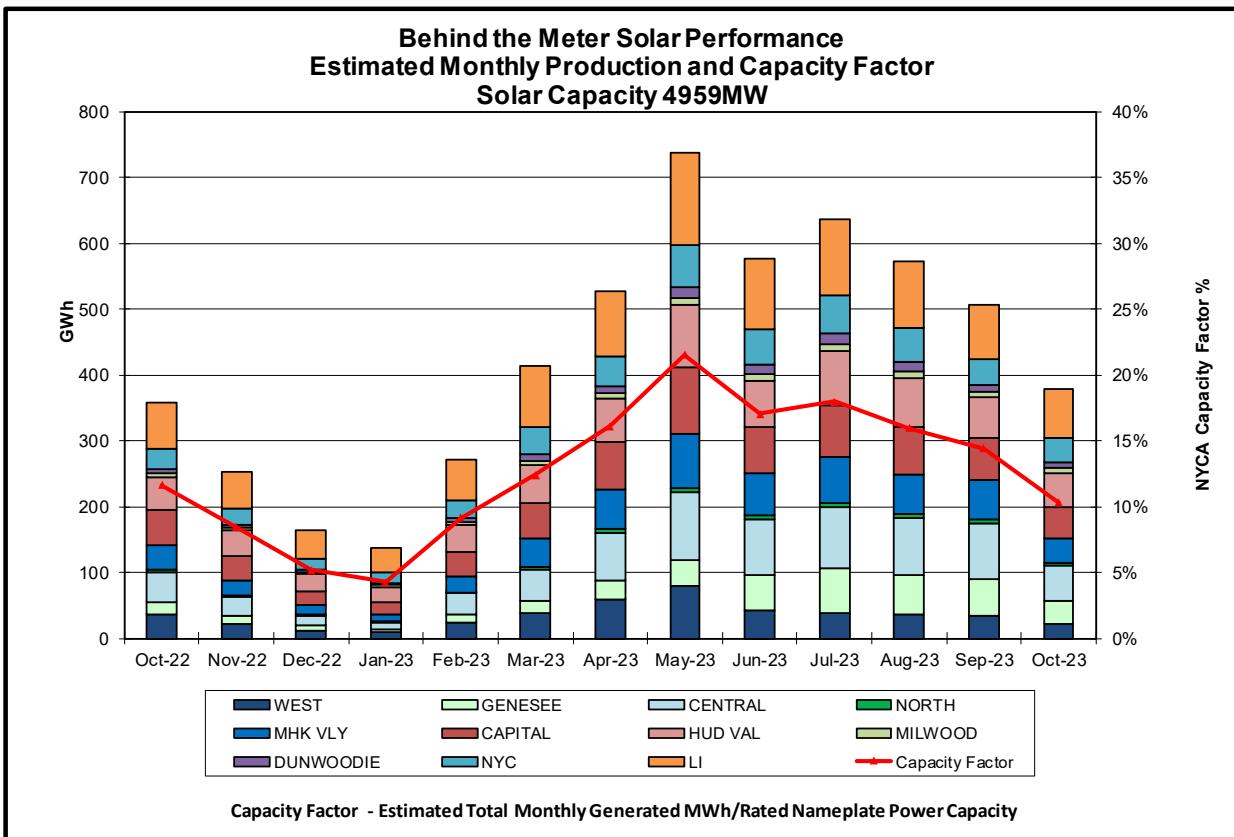


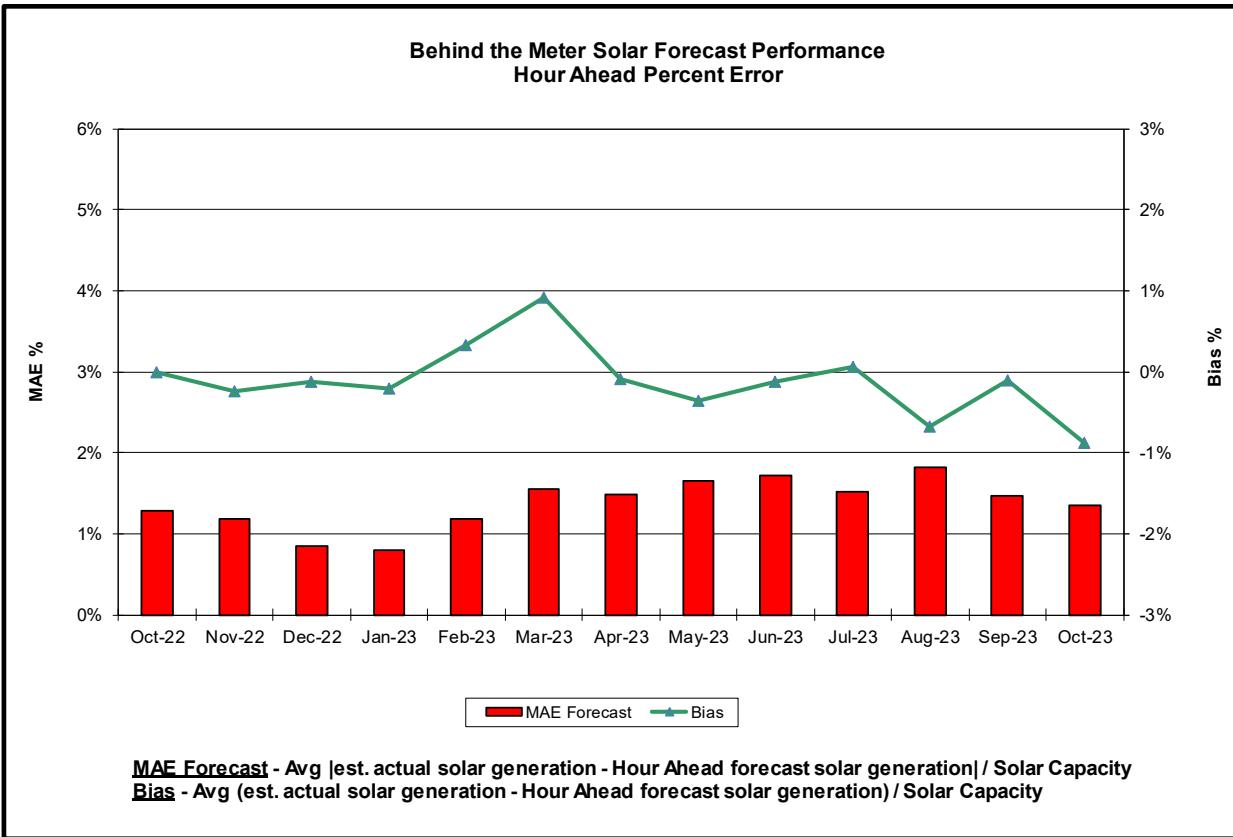
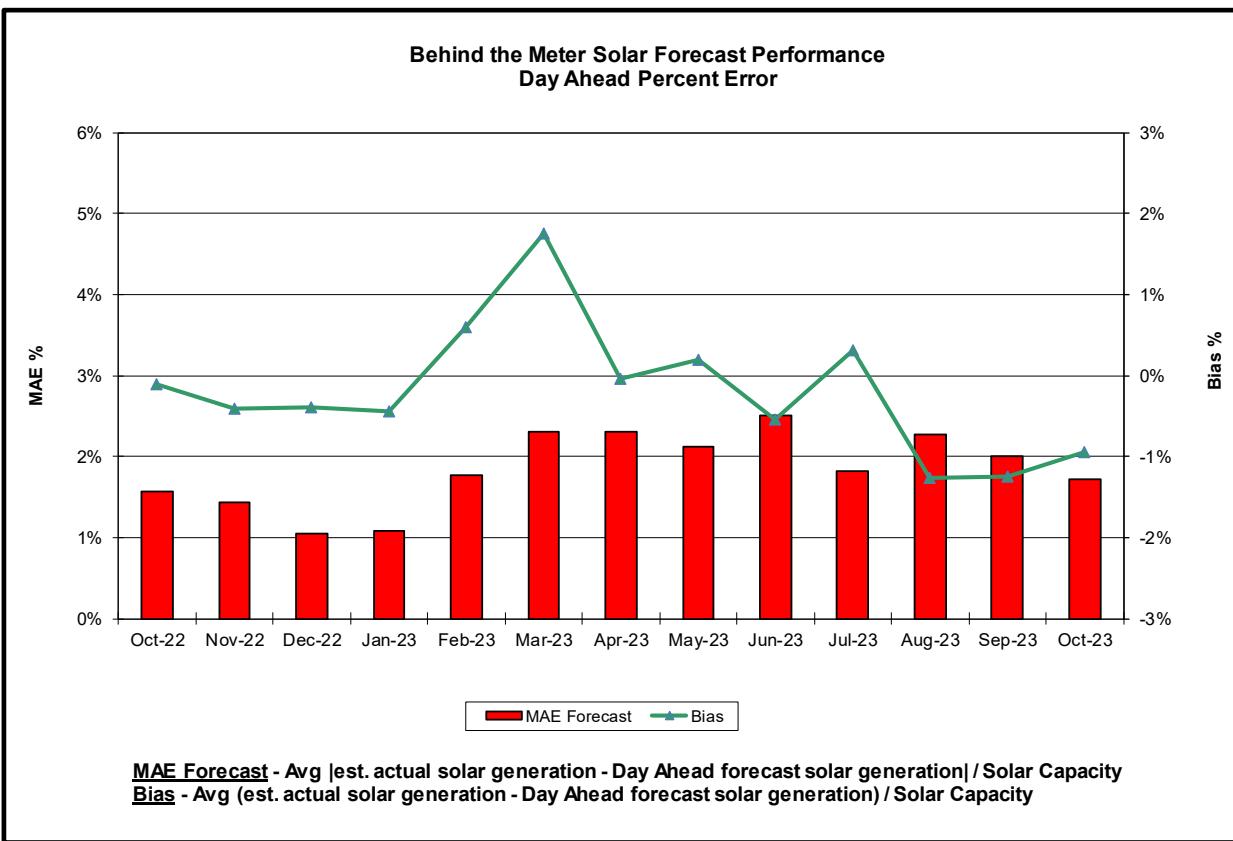


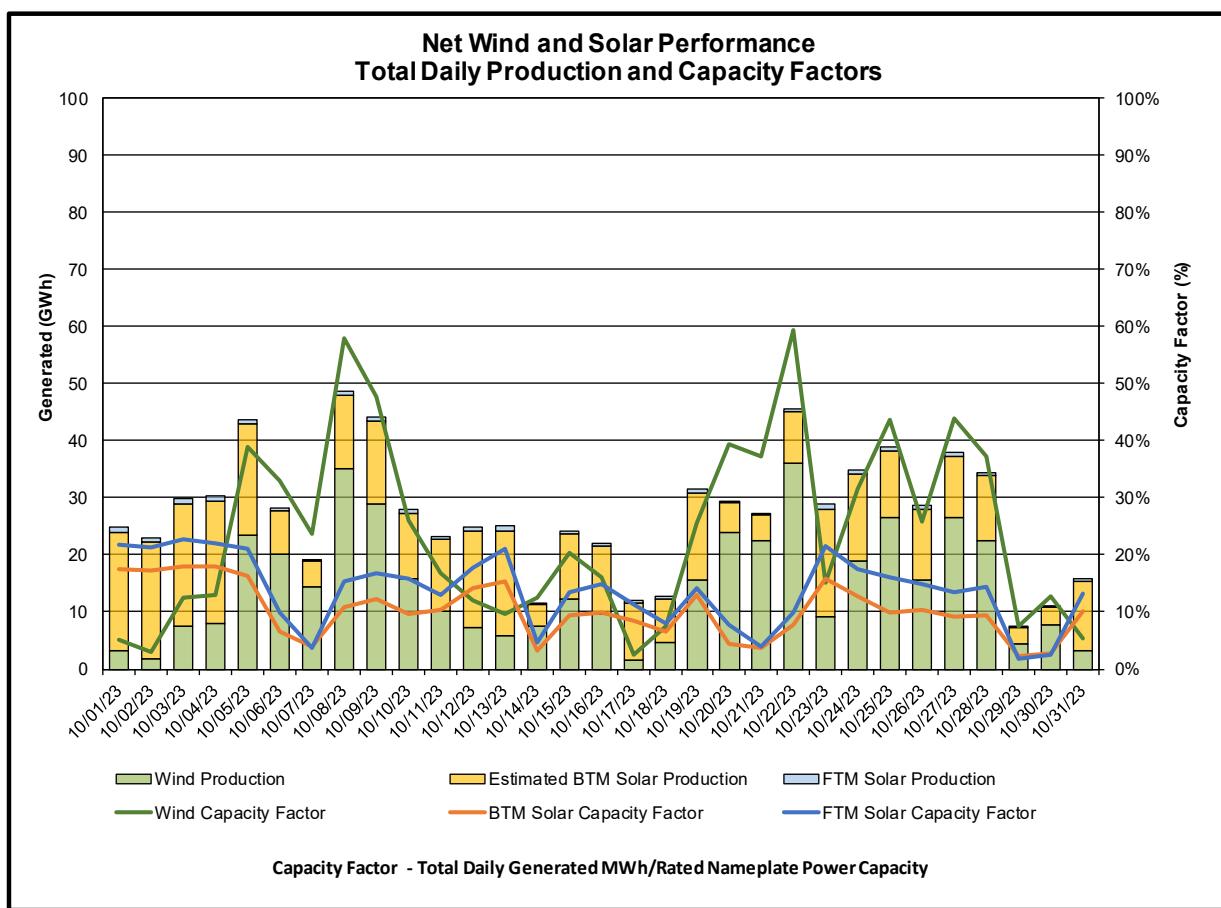
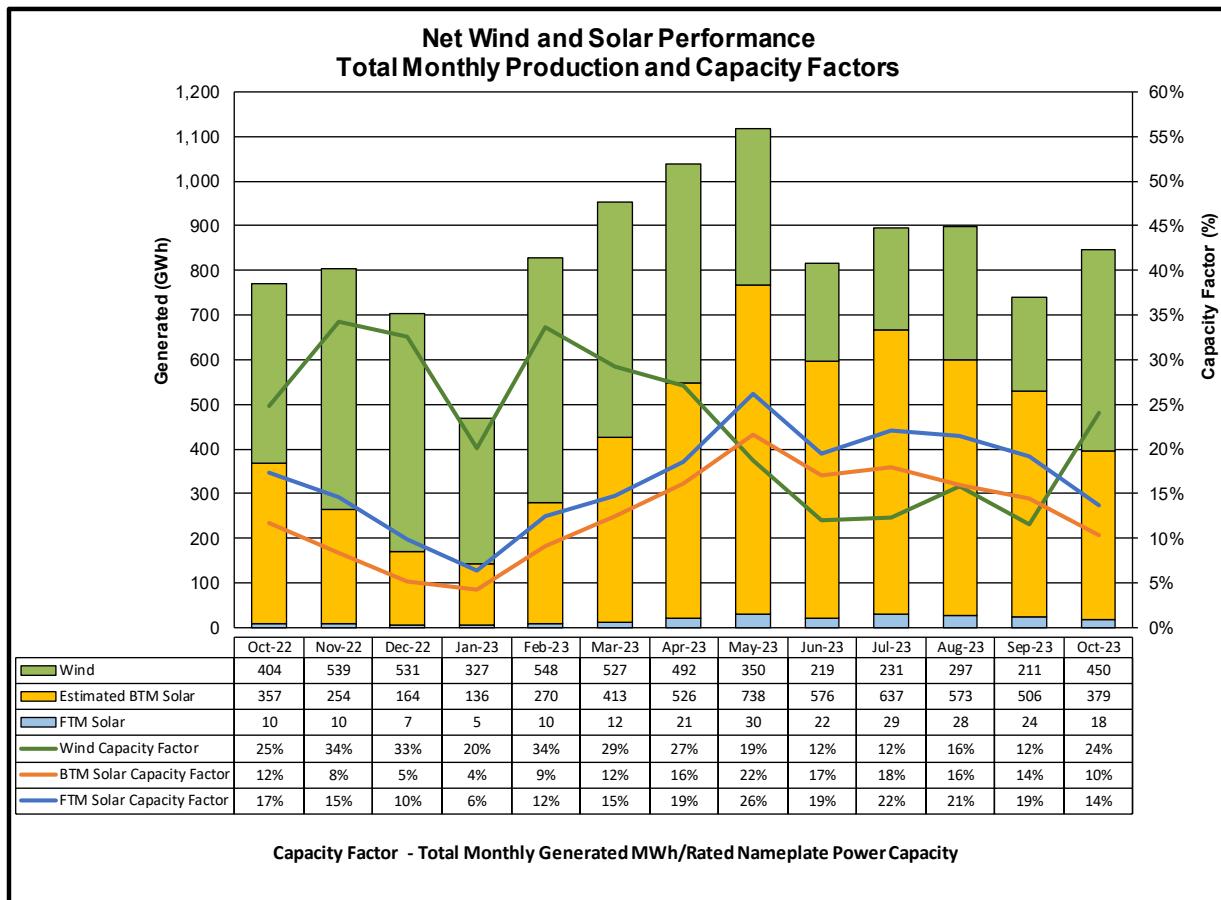


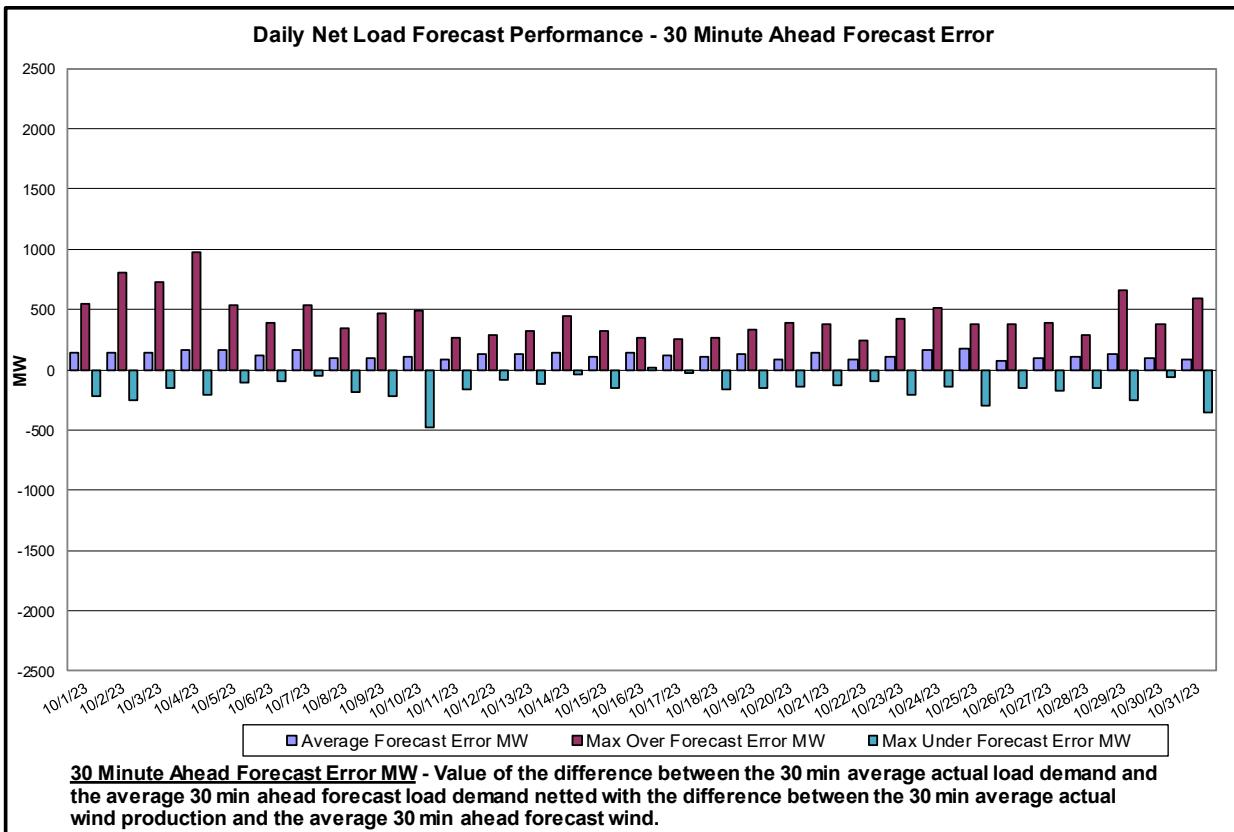
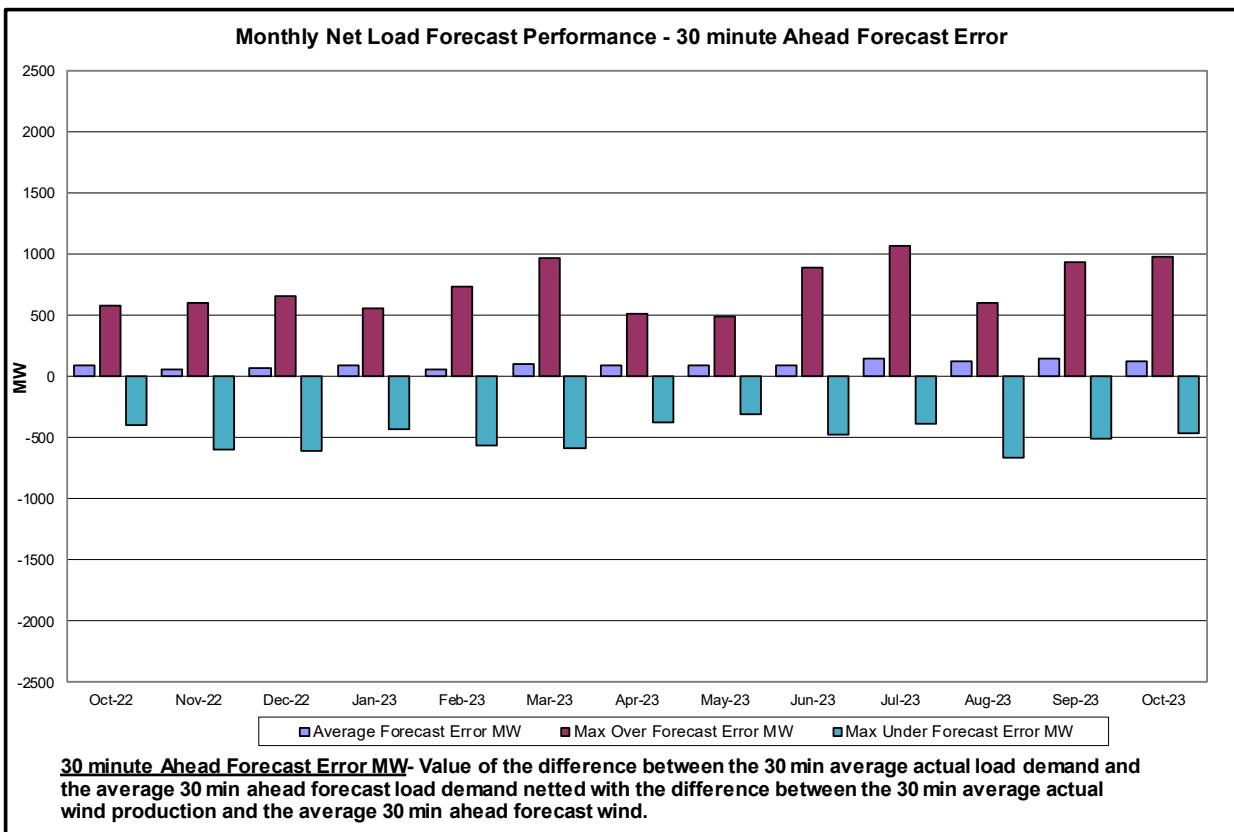


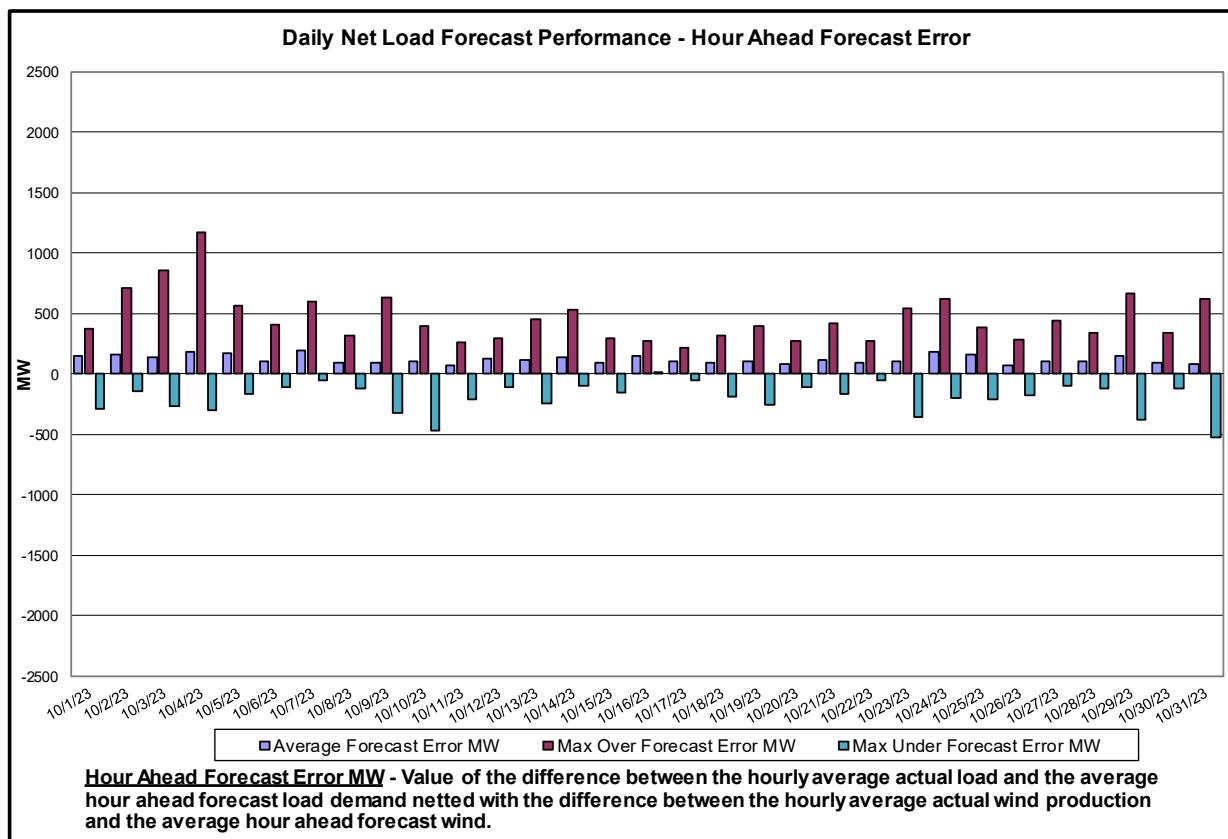
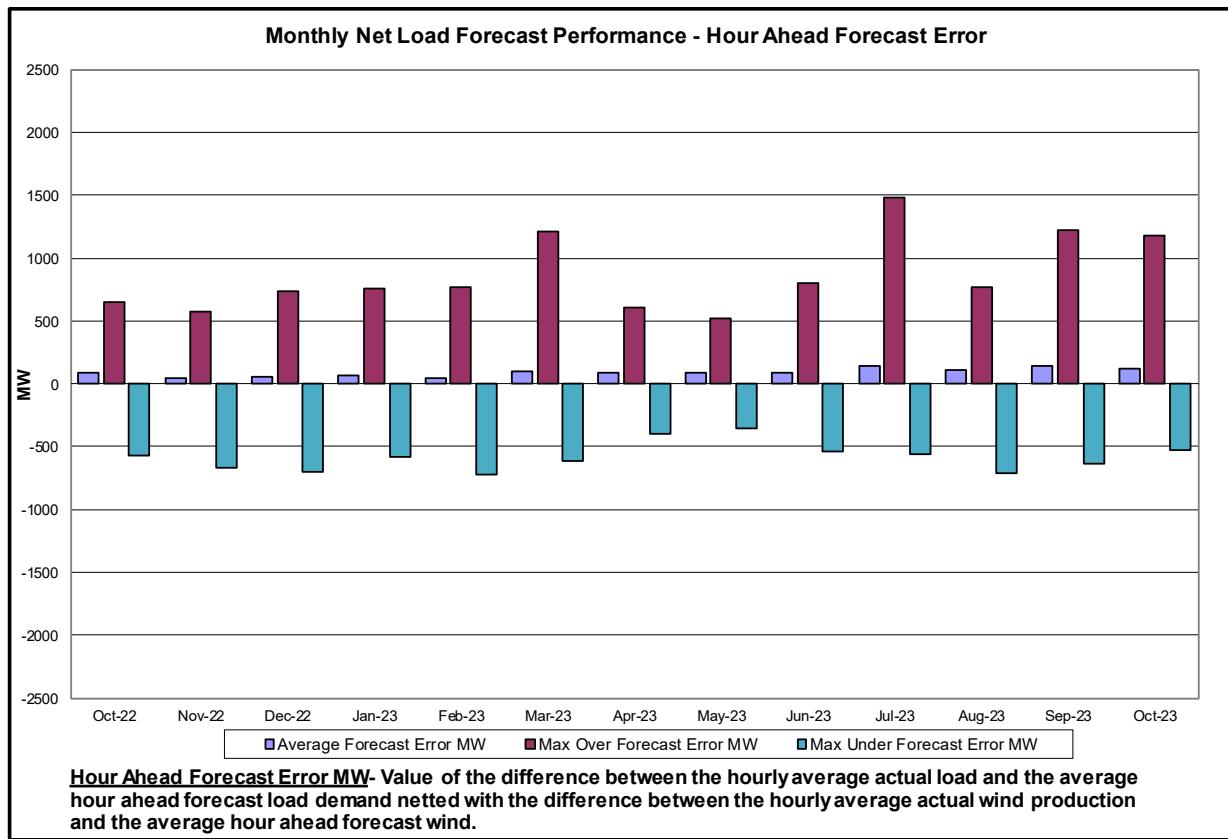


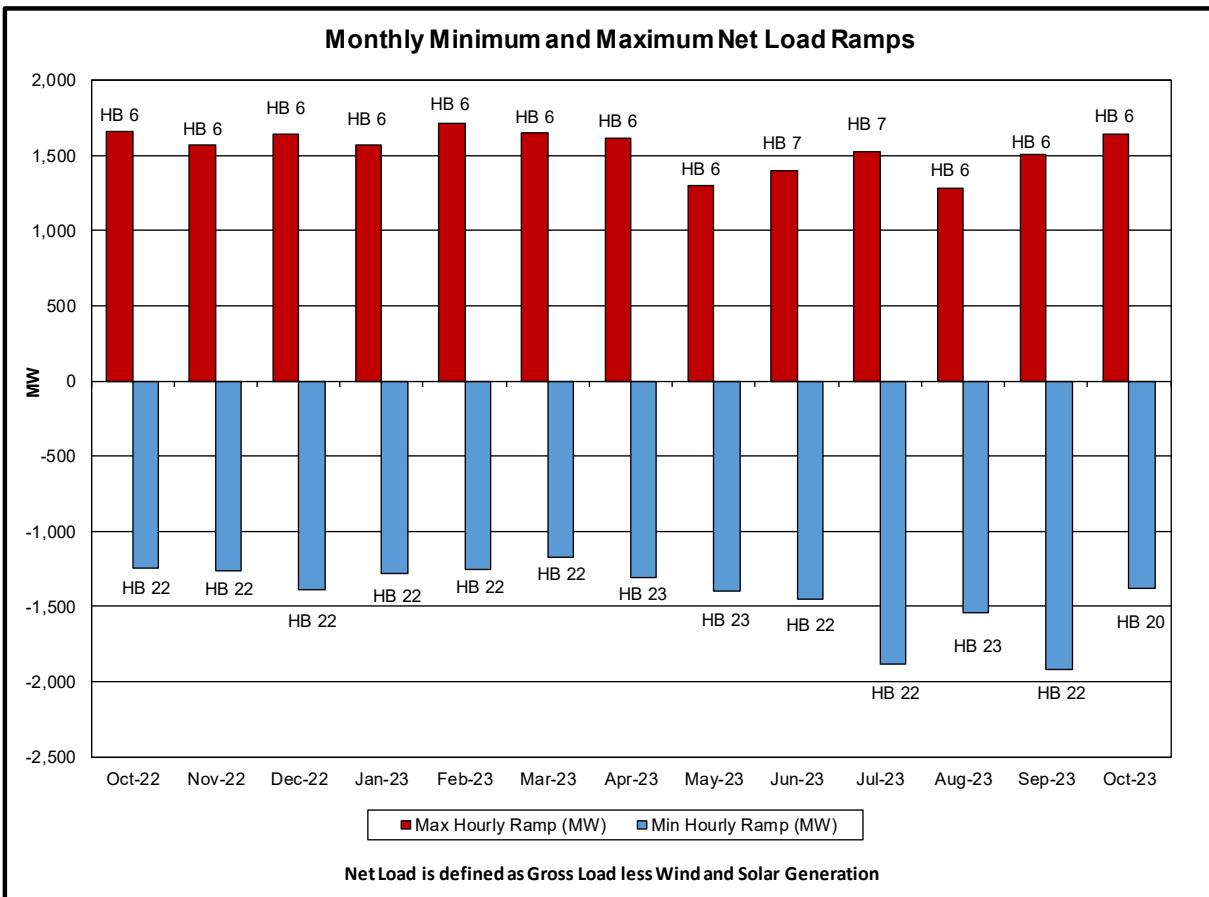
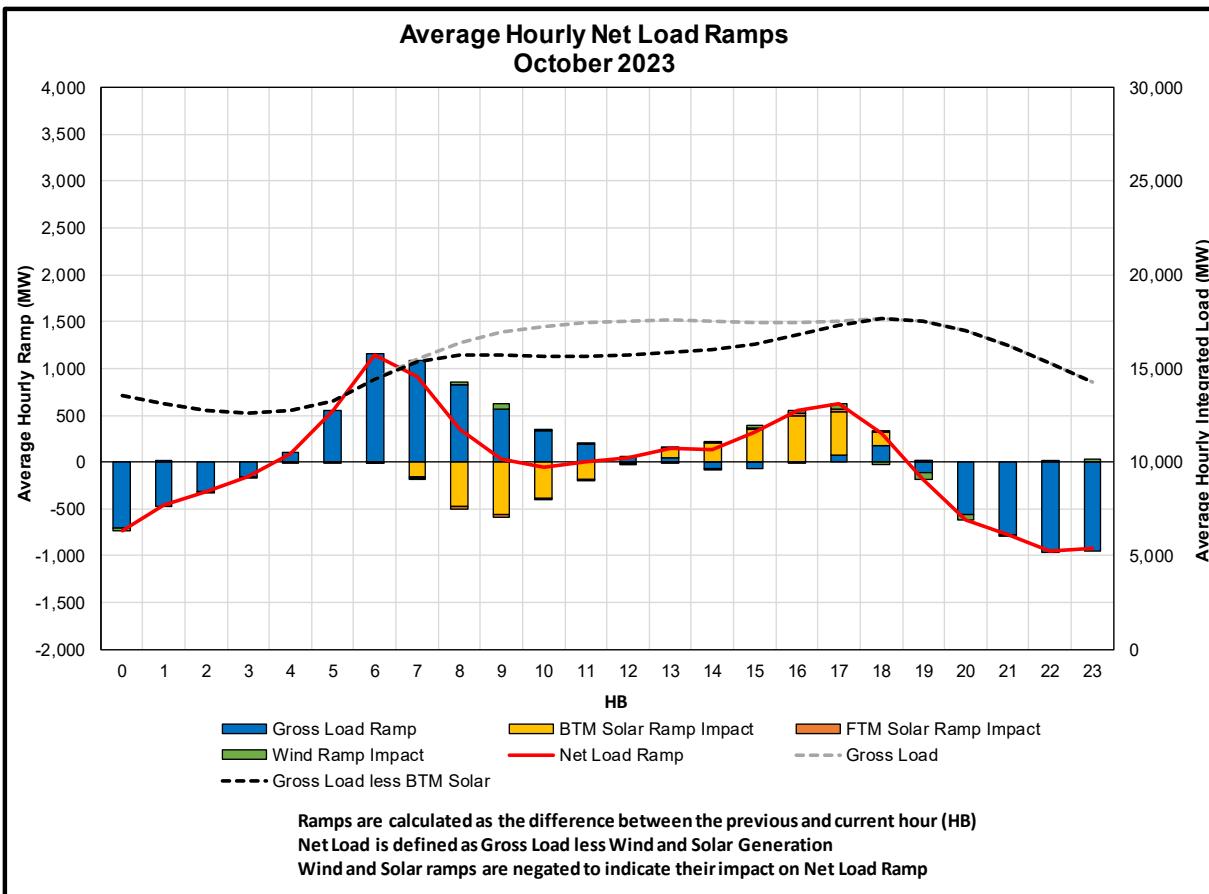


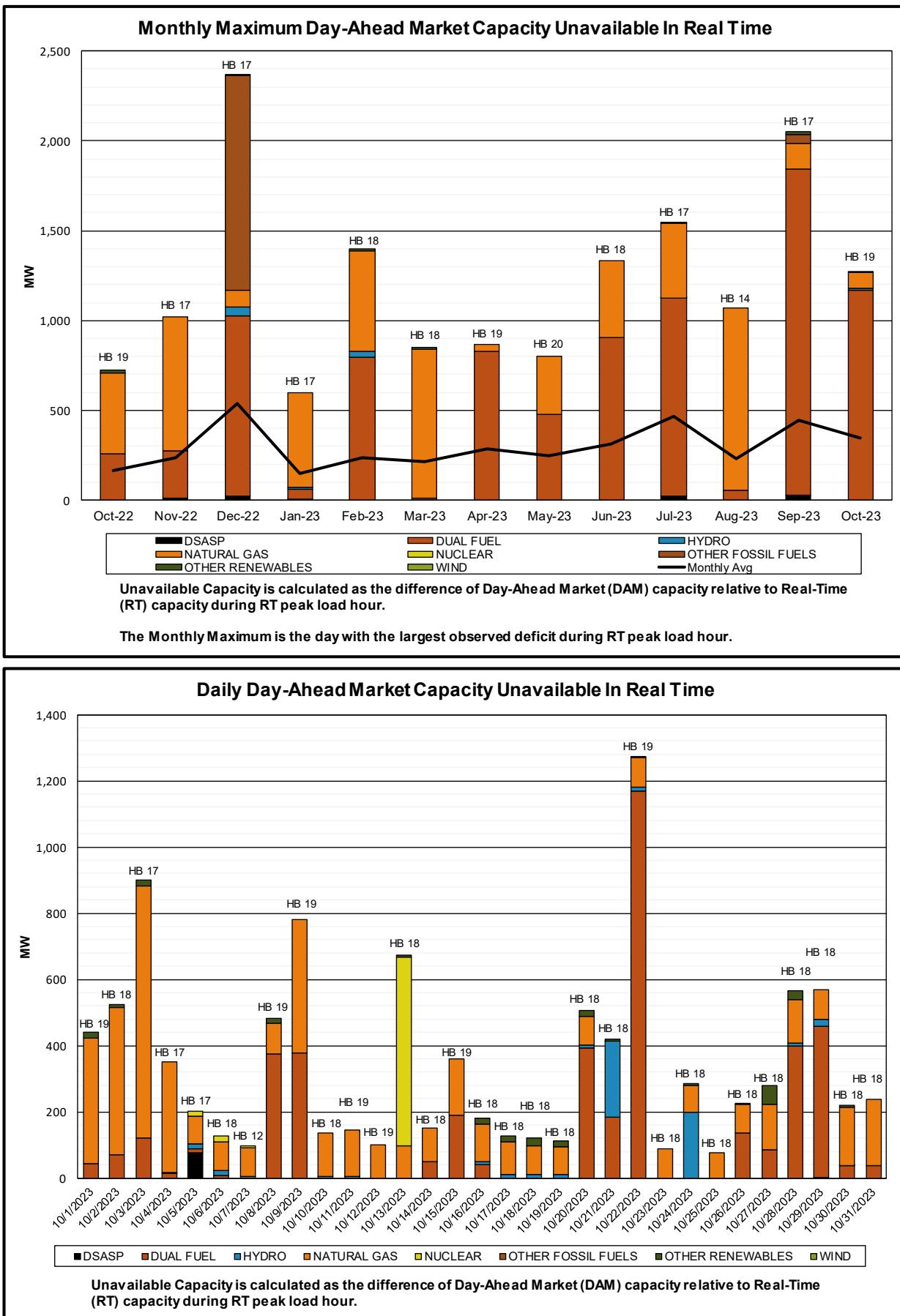


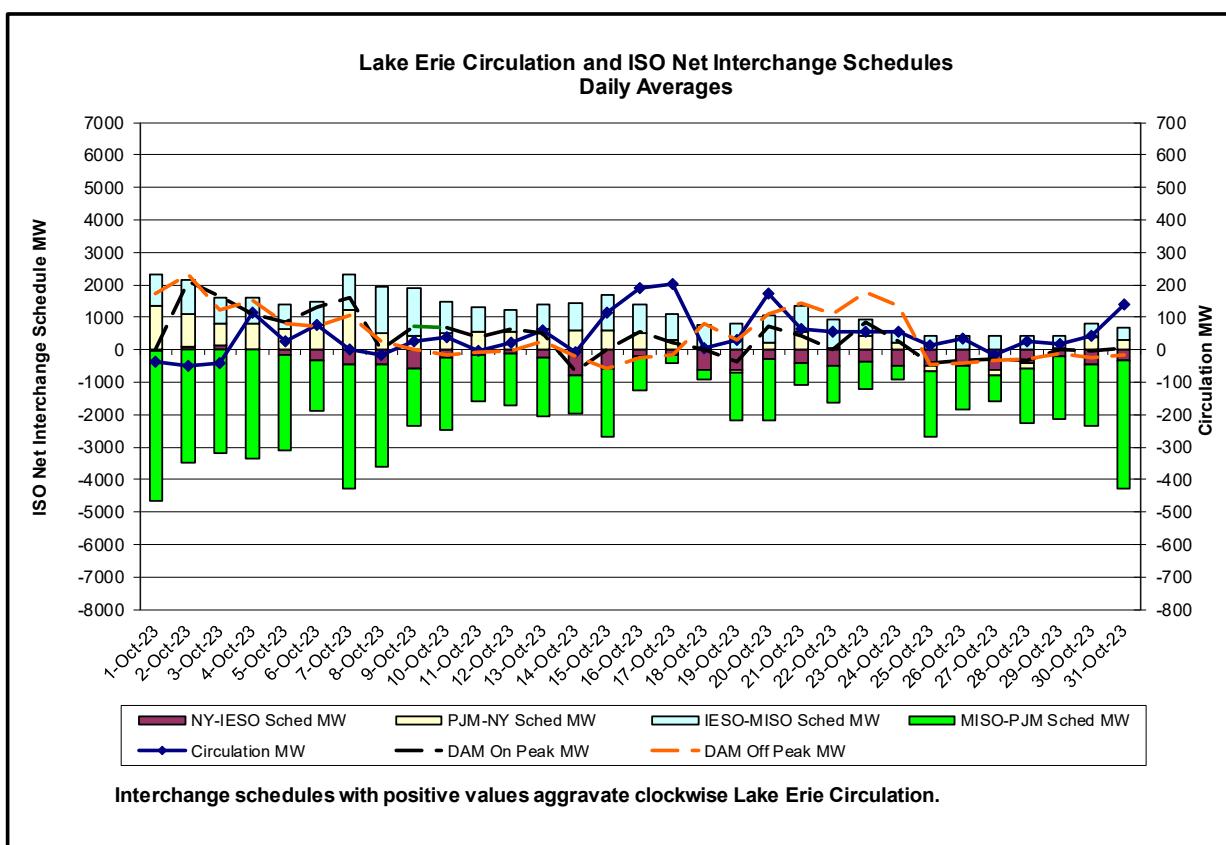
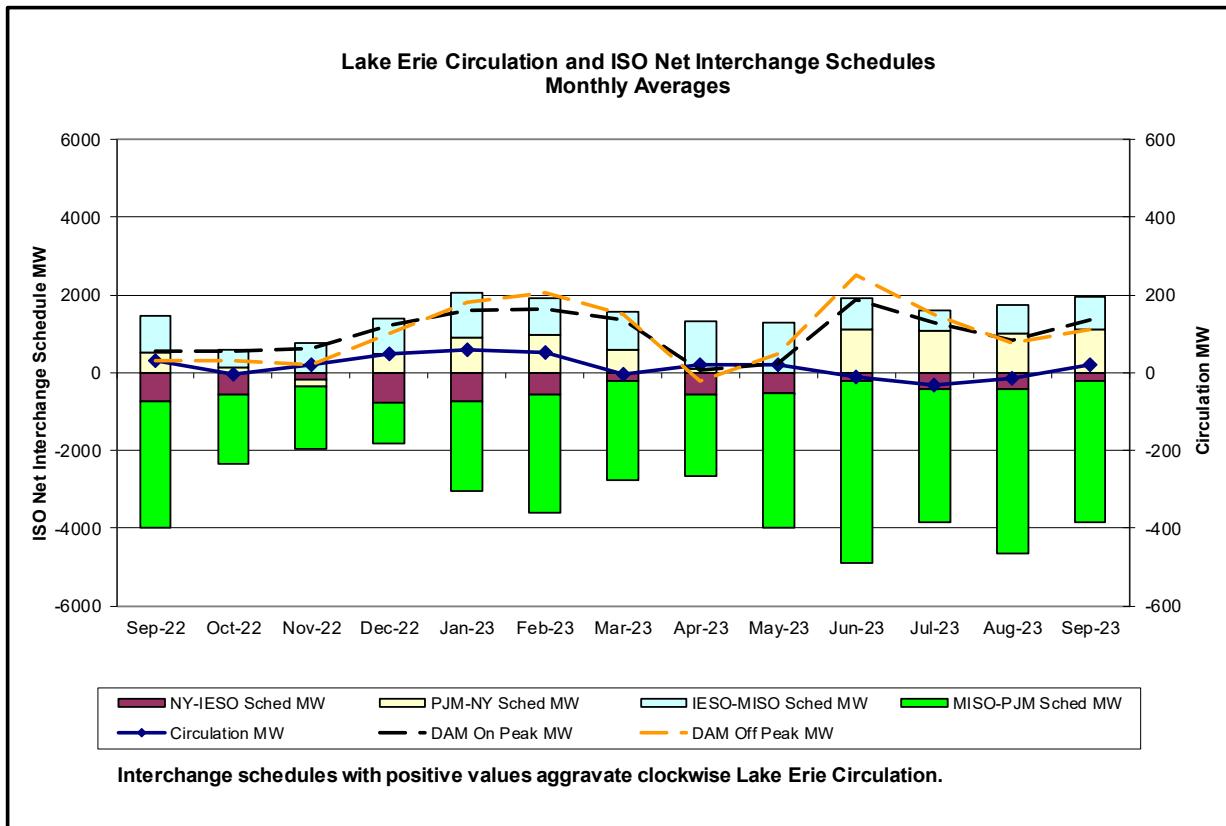




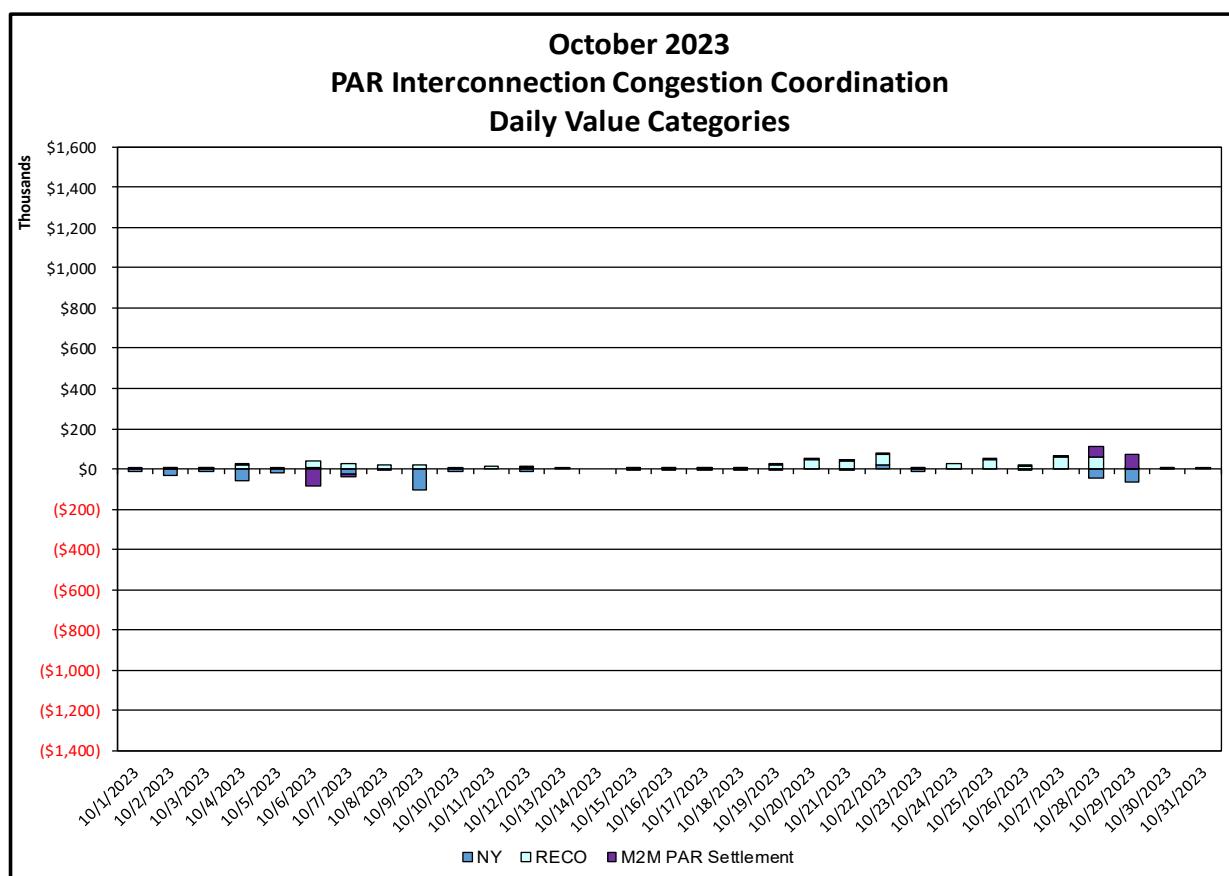
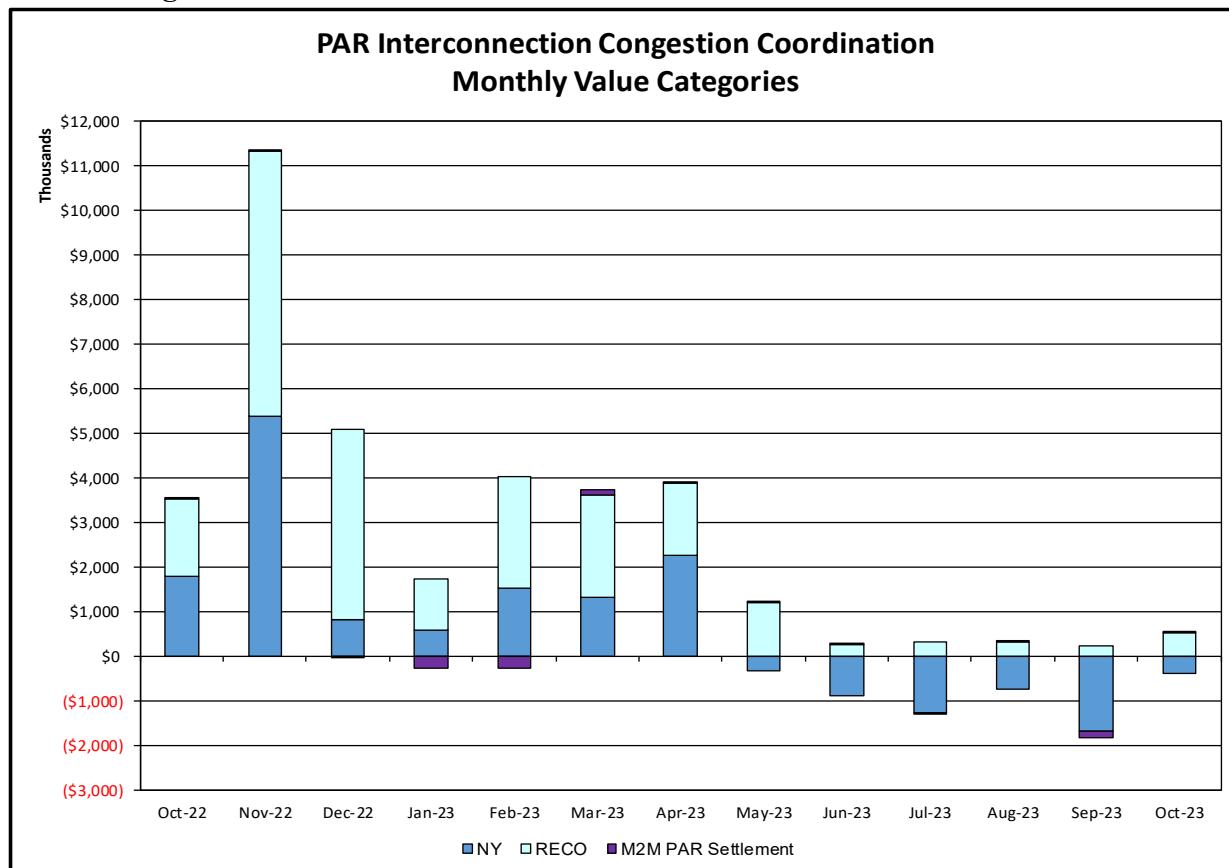




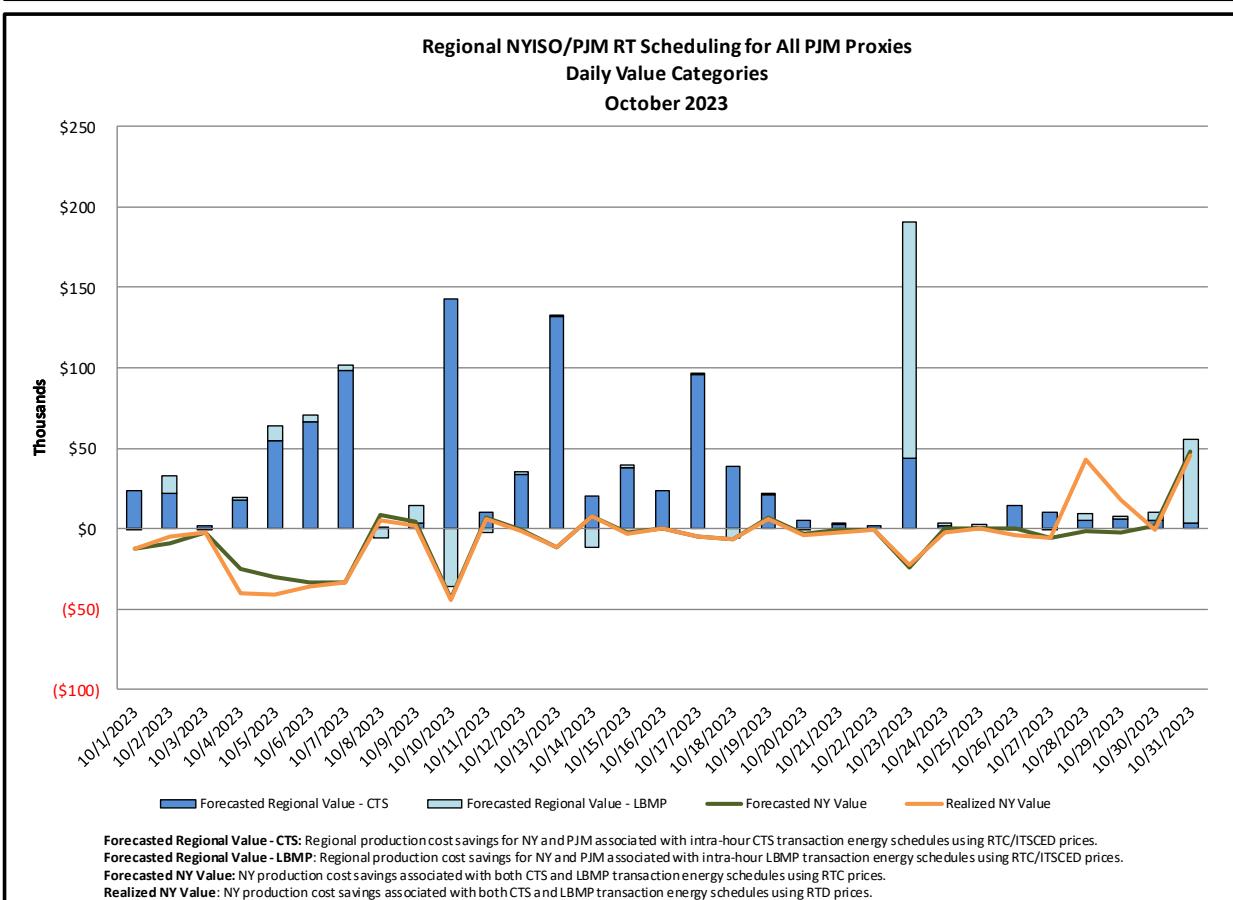
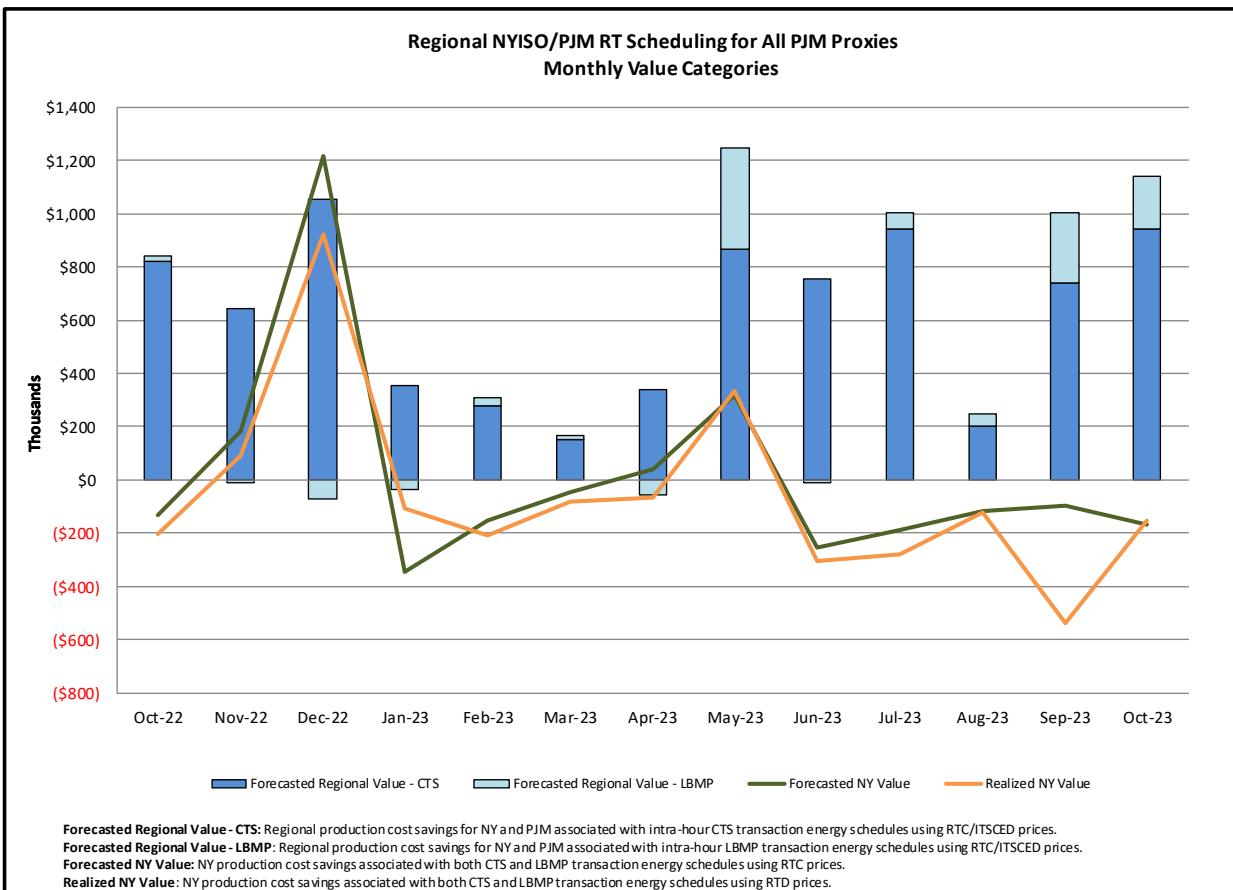


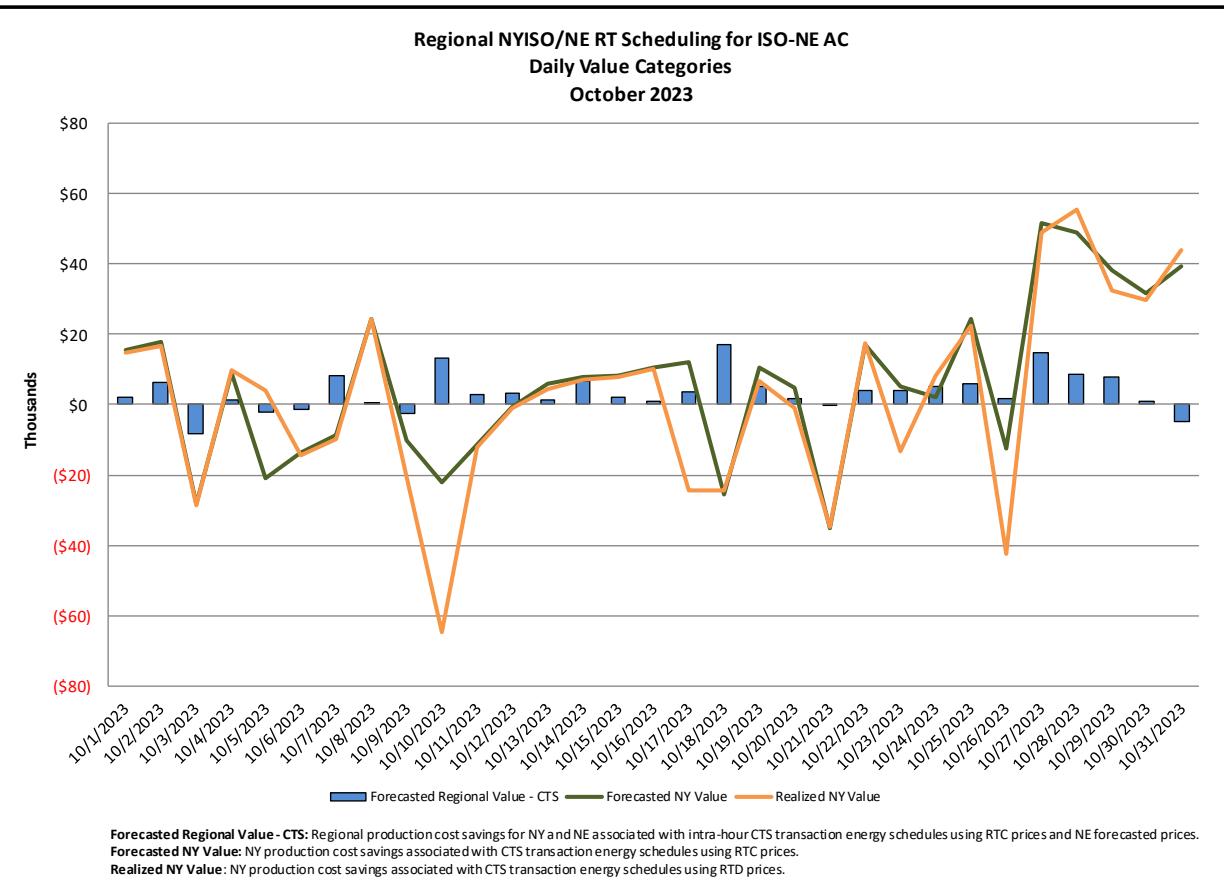
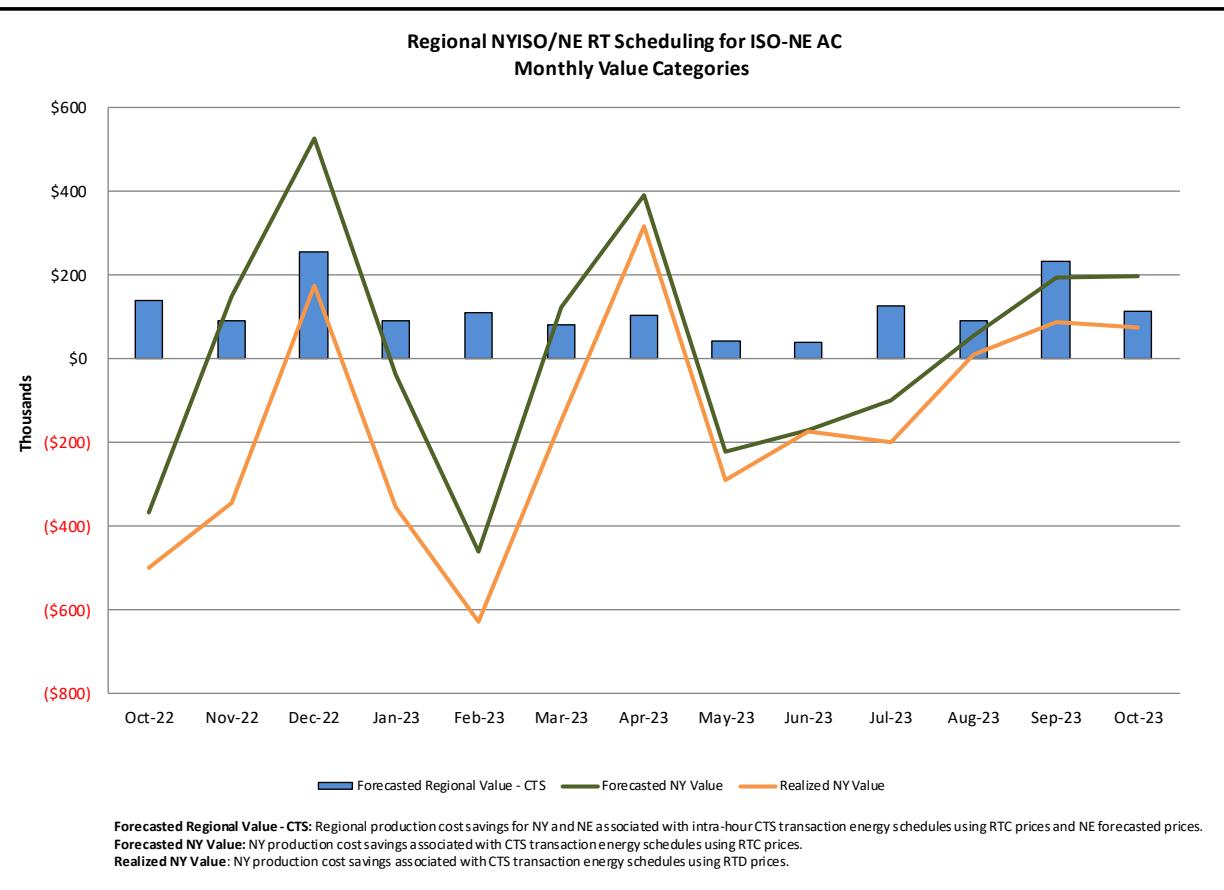


Broader Regional Market Performance Metrics

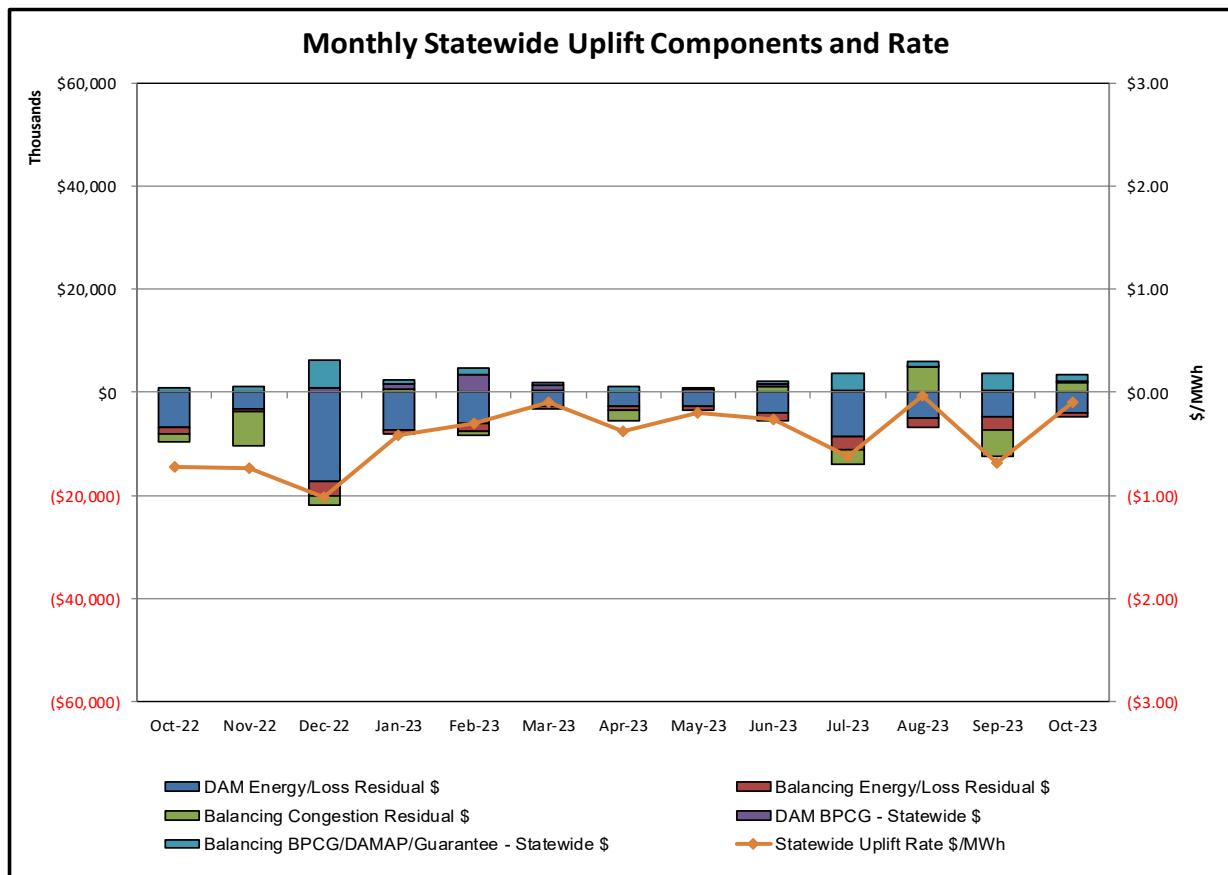


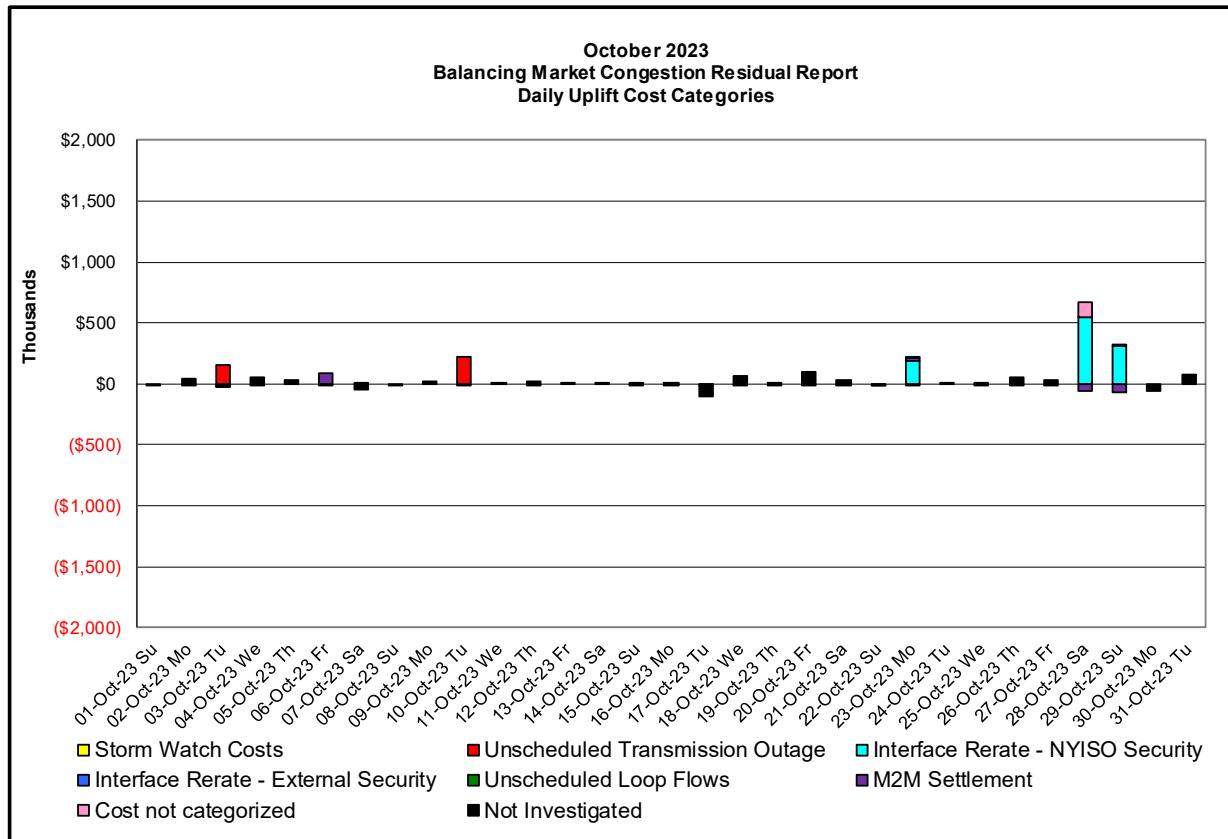
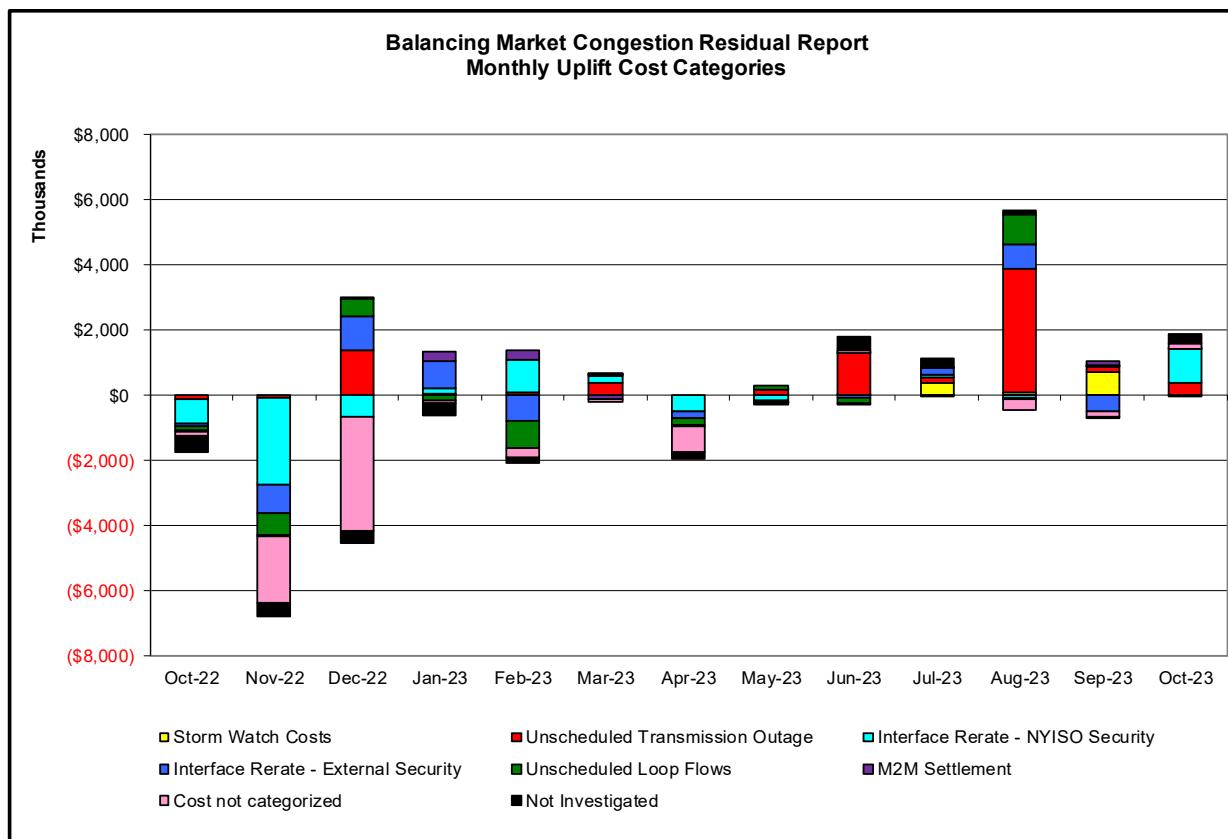
<u>PAR Interconnection Congestion Coordination</u>	
<u>Category</u>	<u>Description</u>
NY	Represents the value NY realizes from Market-to-Market PAR Coordination when experiencing congestion. This is the estimated savings to NY for additional deliveries into NY.
RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 5018. This is the estimated reduction in NYCA congestion due to the PJM delivery of RECO over Ramapo 5018.
M2M PAR Settlement	Market-to-Market PAR Coordination settlement on coordinated flowgates. Through April 2017 this value was included in the NY and RECO categories. The positive sign convention indicates settlement to NY while the negative indicates settlement to PJM.





Market Performance Metrics





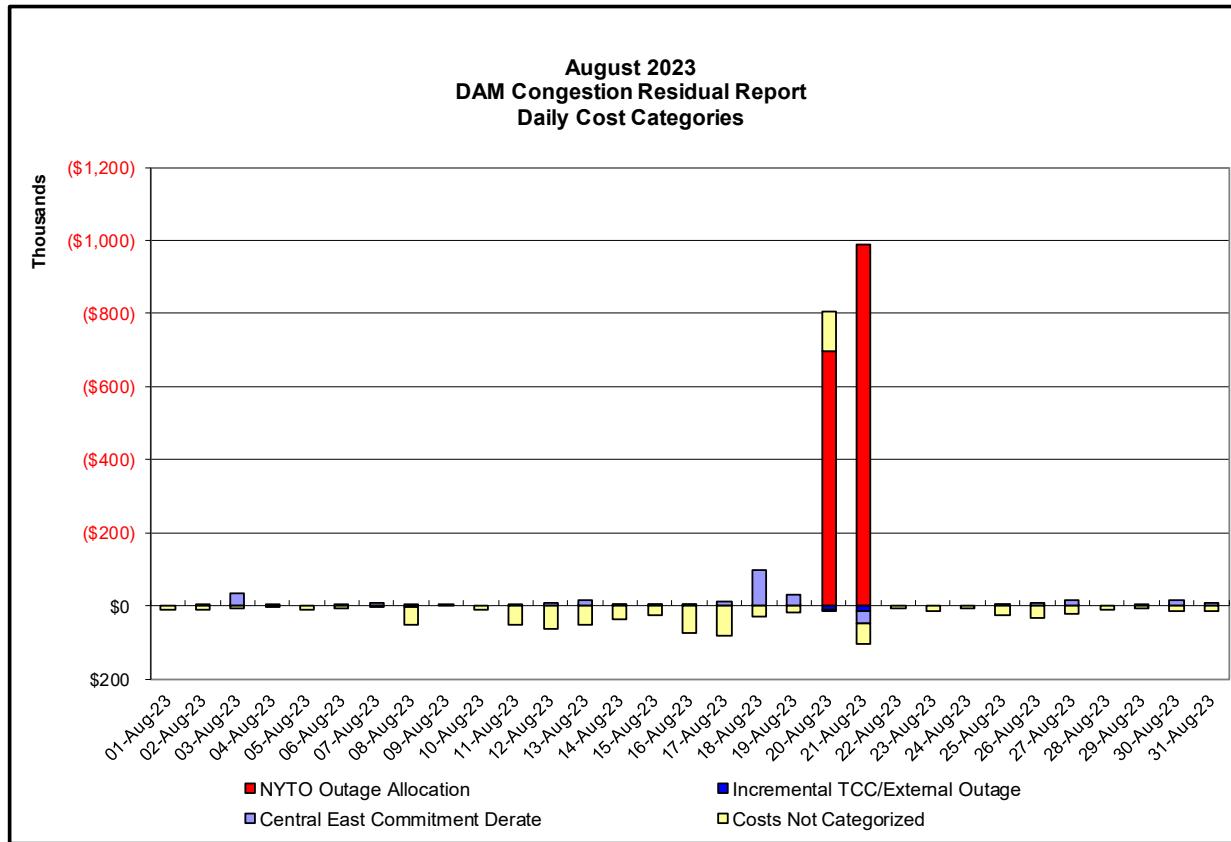
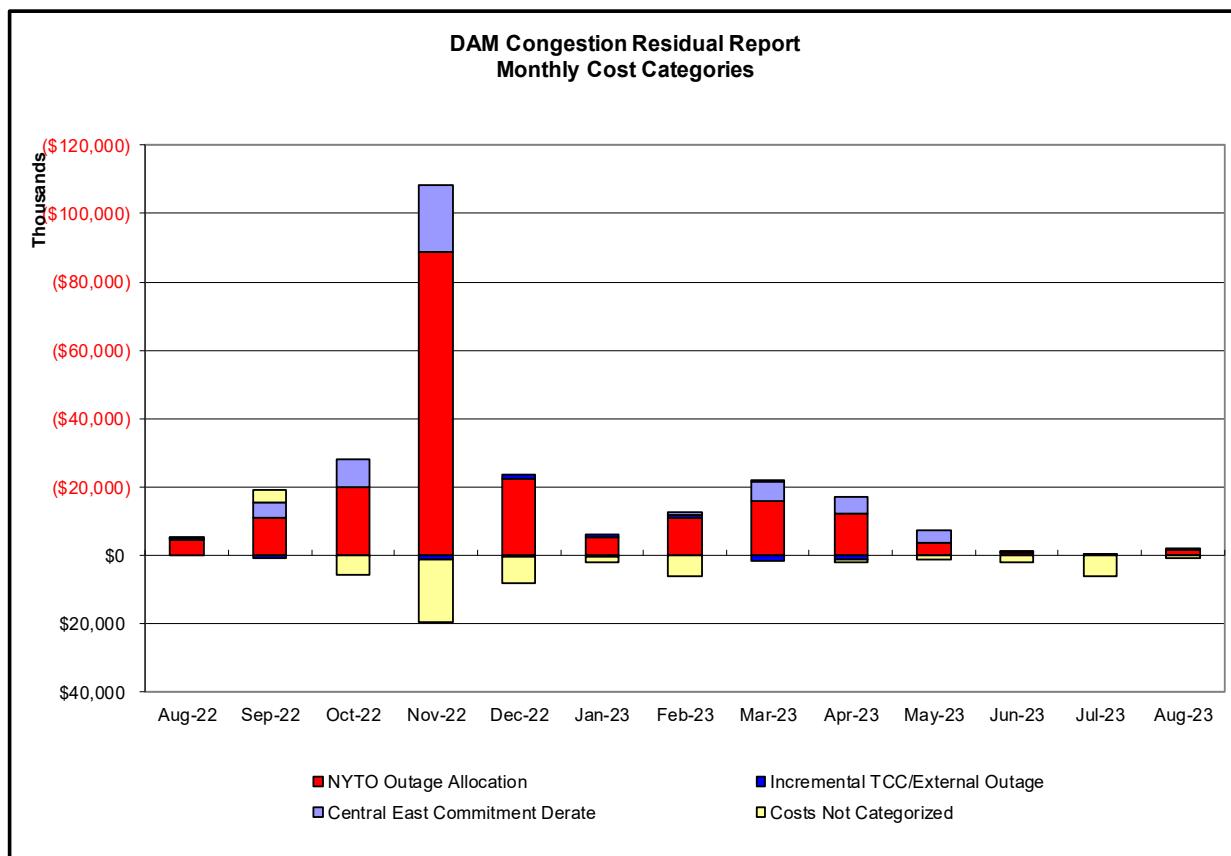
Day's investigated in October: 3,10,23,28,29			
Event	Date (yyyymmdd)	Hours	Description
	10/3/2023	15,19	Forced Outage Dunwoodie-Shore Road 345kV (#Y50)
	10/3/2023	12	Uprate East 179th St-Hellgate 138kV (#15055)
	10/3/2023	12	Uprate Freshkills-Willowbrook 138kV (#29212)
	10/3/2023	12	Uprate Gowanus-Greenwood 138kV (#42231)
	10/3/2023	12	Uprate Mothaven-Dunwoodie 345kV (#72)
	10/3/2023	12	Uprate Rainey-Vernon 138kV (#36311)
	10/10/2023	8-10	Forced Outage Nine Mile-Clay 345kV (#8)
	10/10/2023	16	Uprate Foxhills-Greenwood 138kV (#29232) I/o SCB: GOWANUS(14):42&42232&R14
	10/10/2023	16	Uprate Gowanus-Greenwood 138kV (#42231)
	10/23/2023	8	NYCA DNI Ramp Limit
	10/23/2023	0-5,7,8	Derate Deposit-IndianHead 69kV (#675) I/o TWR: HOLBROOK 880 & 882
	10/23/2023	18	Uprate Foxhills-Greenwood 138kV (#29232) I/o TWR: GOETHALS 22 & 21
	10/23/2023	18	NE AC ACTIVE DNI Ramp Limit
	10/23/2023	8	NE AC-NY Scheduling Limit
	10/28/2023	23	NYCA DNI Ramp Limit
	10/28/2023	23	Derate Mott Haven-Dunwoodie 345kV (#71)
	10/28/2023	23	Derate Sprainbrook-West 49th Street 345kV (#M51)
	10/28/2023	23	Derate Sprainbrook-West 49th Street 345kV (#M52)
	10/29/2023	0,1	Derate Mott Haven-Dunwoodie 345kV (#71)
	10/29/2023	0	Derate Mott Haven-Dunwoodie 345kV (#72)
	10/29/2023	0	Derate Sprainbrook-West 49th Street 345kV (#M51)
	10/29/2023	0	Derate Sprainbrook-West 49th Street 345kV (#M52)
	10/29/2023	9	Derate Sprainbrook/Dunwoodie South

Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories

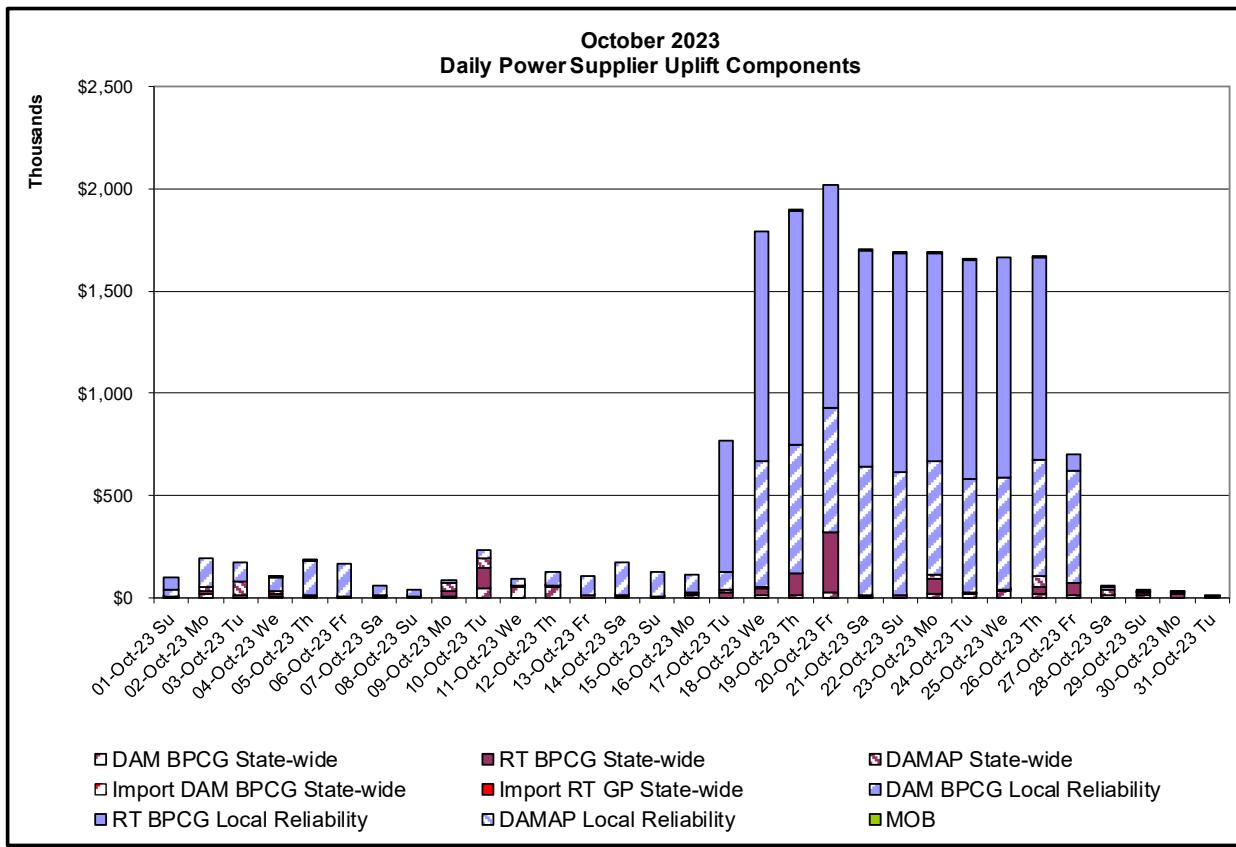
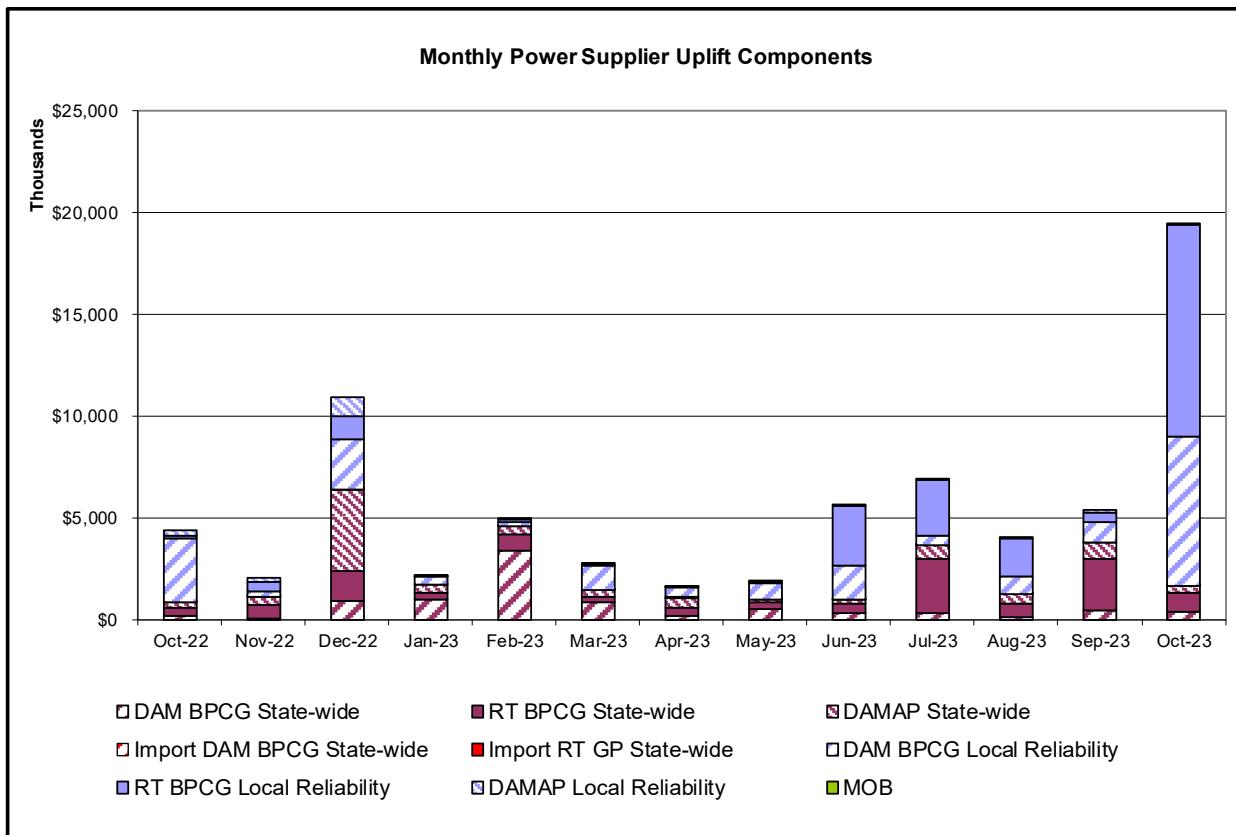
<u>Category</u>	<u>Cost Assignment</u>	<u>Events Types</u>	<u>Event Examples</u>
Storm Watch	Zone J	Thunderstorm Alert (TSA)	TSA Activations
Transmission Outage Mismatch	Market-wide	Changes in DAM to RTM transfers related to transmission outage mismatch	Forced Line Outage, Unit AVR Outages Early Line Return from Outage
Interface/Facility Rerate - NYISO Security	Market-wide	Changes in DAM to RTM transfers not related to transmission outage	Interface/Facility Rates due to RTM voltages
Interface Rerate - External Security	Market-wide	Changes in DAM to RTM transfers related to External Control Area Security Events	TLR Events, External Transaction Curtailments
Unscheduled Loop Flows	Market-wide	Changes in DAM to RTM unscheduled loop flows impacting NYISO Interface transmission constraints	DAM to RTM Lake Erie Loop Flows exceeding +/- 125 MW
M2M Settlement	Market-wide	Settlement result inclusive of coordinated redispatch and Ramapo flowgates	

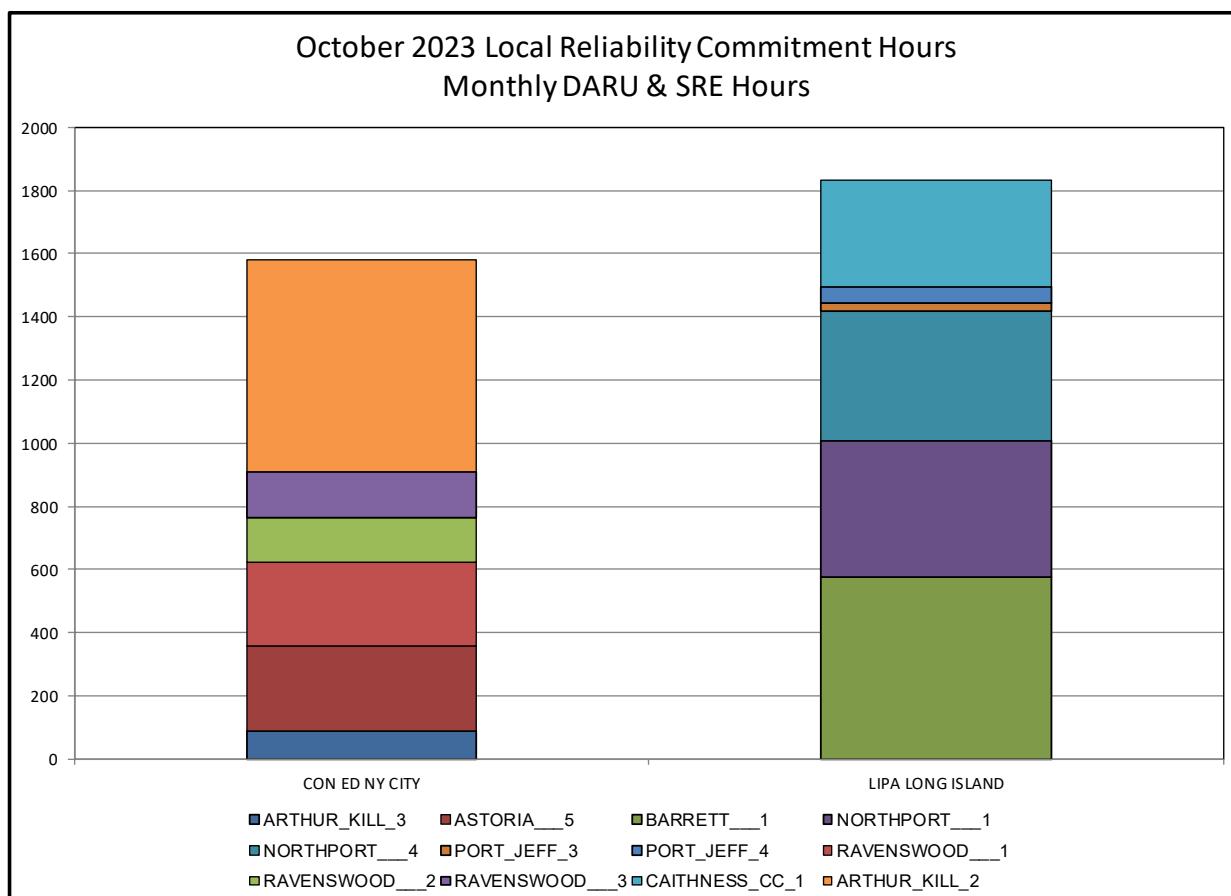
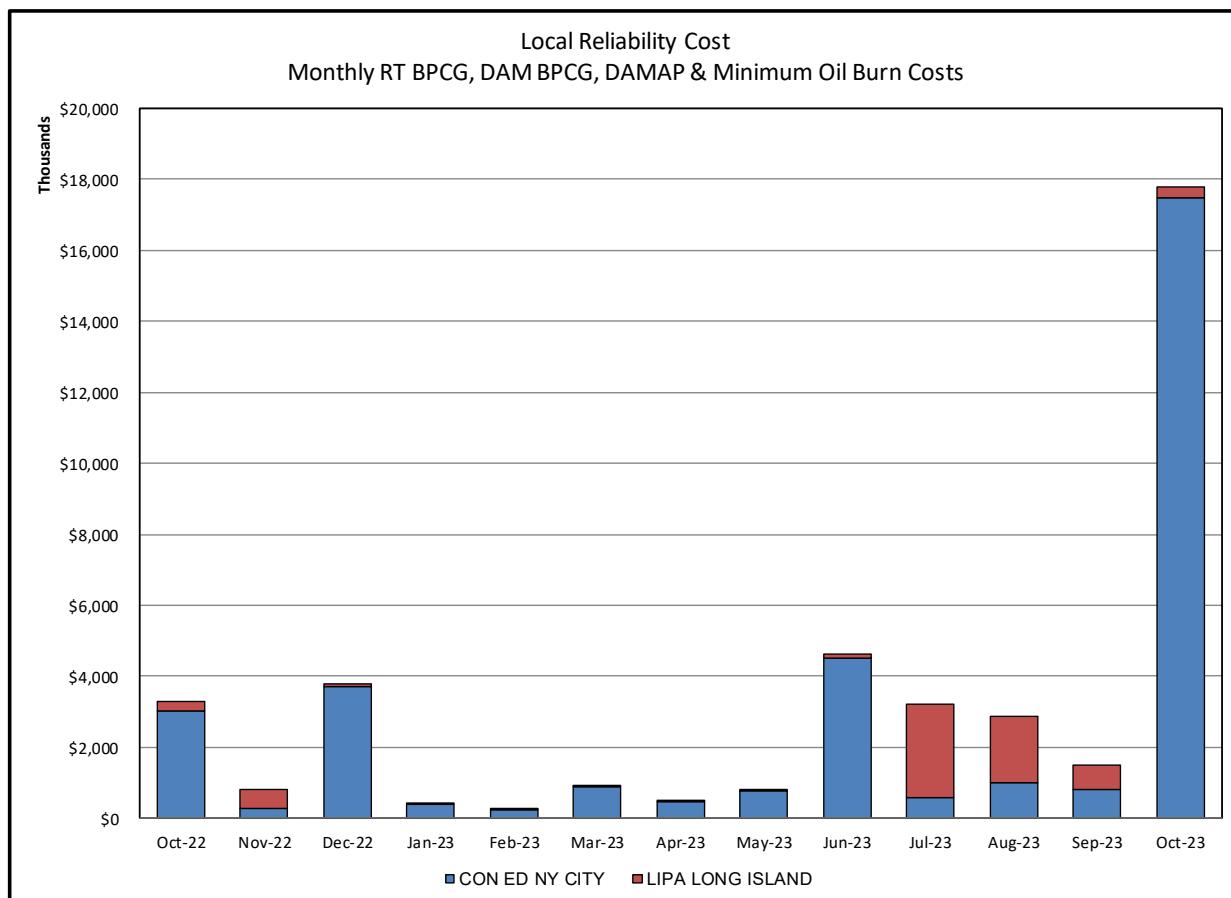
Monthly Balancing Market Congestion Report Assumptions/Notes

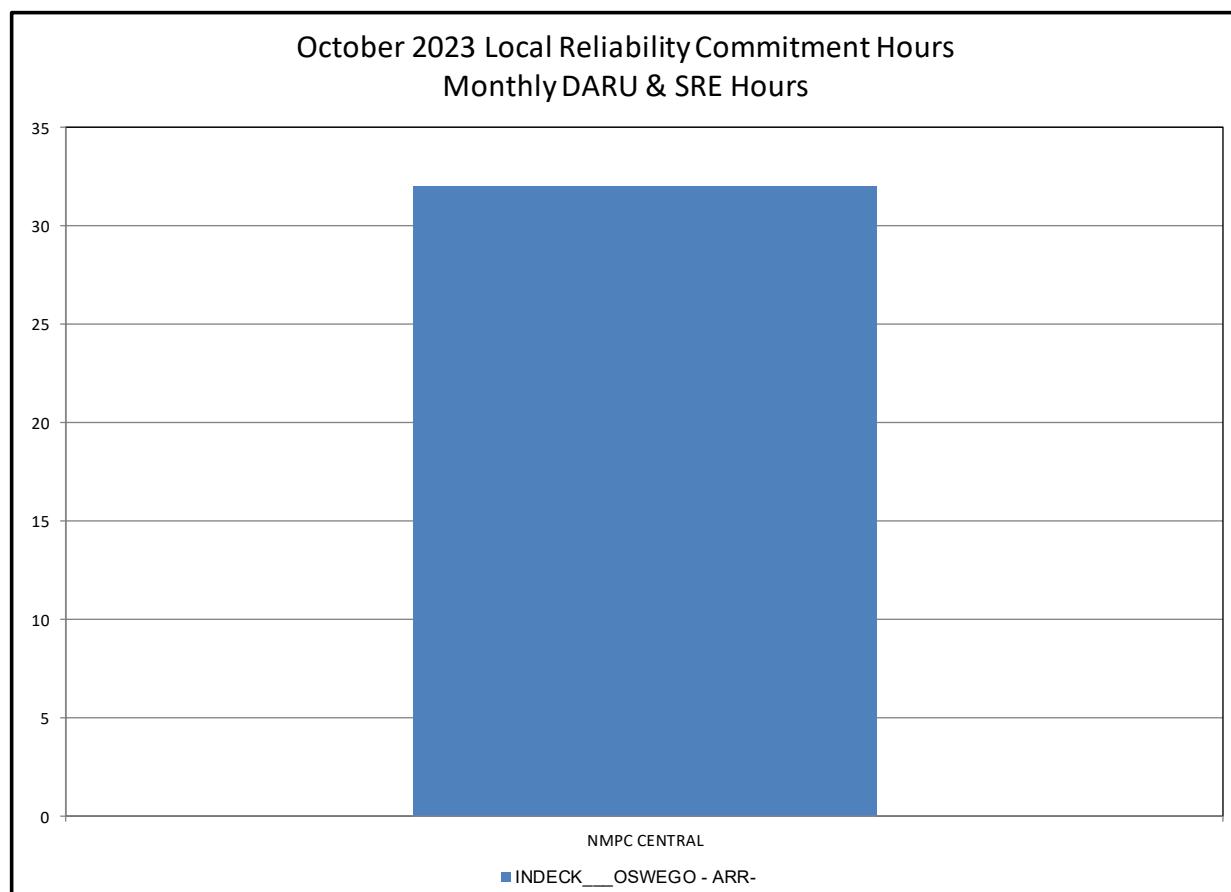
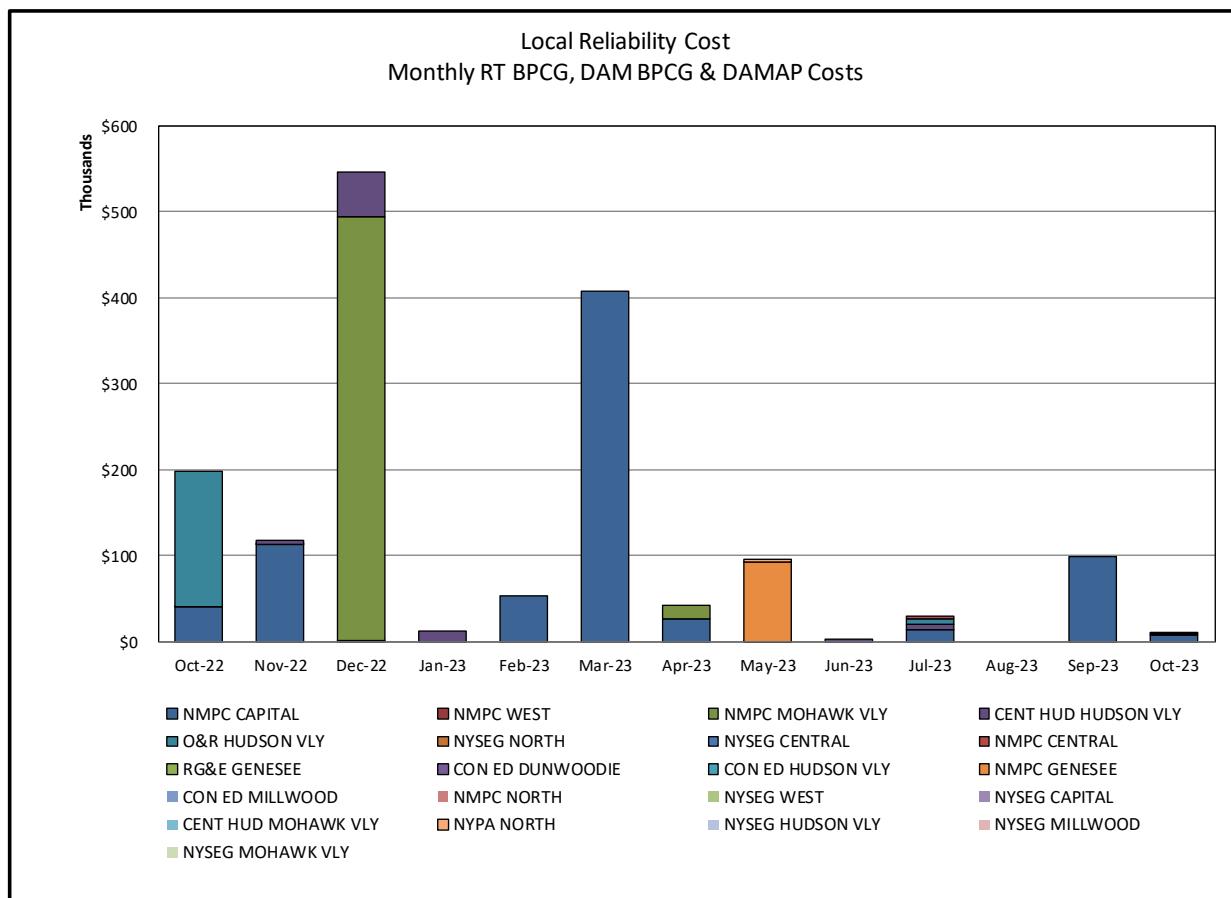
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour



<u>Day-Ahead Market Congestion Residual Categories</u>			
<u>Category</u>	<u>Cost Assignment</u>	<u>Events Types</u>	<u>Event Examples</u>
NYTO Outage Allocation	Responsible TO	Direct allocation to NYTO's responsible for transmission equipment status change.	DAM scheduled outage for equipment modeled in-service for the TCC Auction.
Incremental TCC/External Outage Impacts	All TO by Monthly Allocation Factor	Allocation associated with transmission equipment status change caused by change in status of external equipment or change in status of equipment associated with Incremental TCC.	Tie line required out-of-service by TO of neighboring control area.
Central East Commitment Derate	All TO by Monthly Allocation Factor	Reductions in the DAM Central East_VC limit as compared to the TCC Auction limit, which are not associated with transmission line outages.	

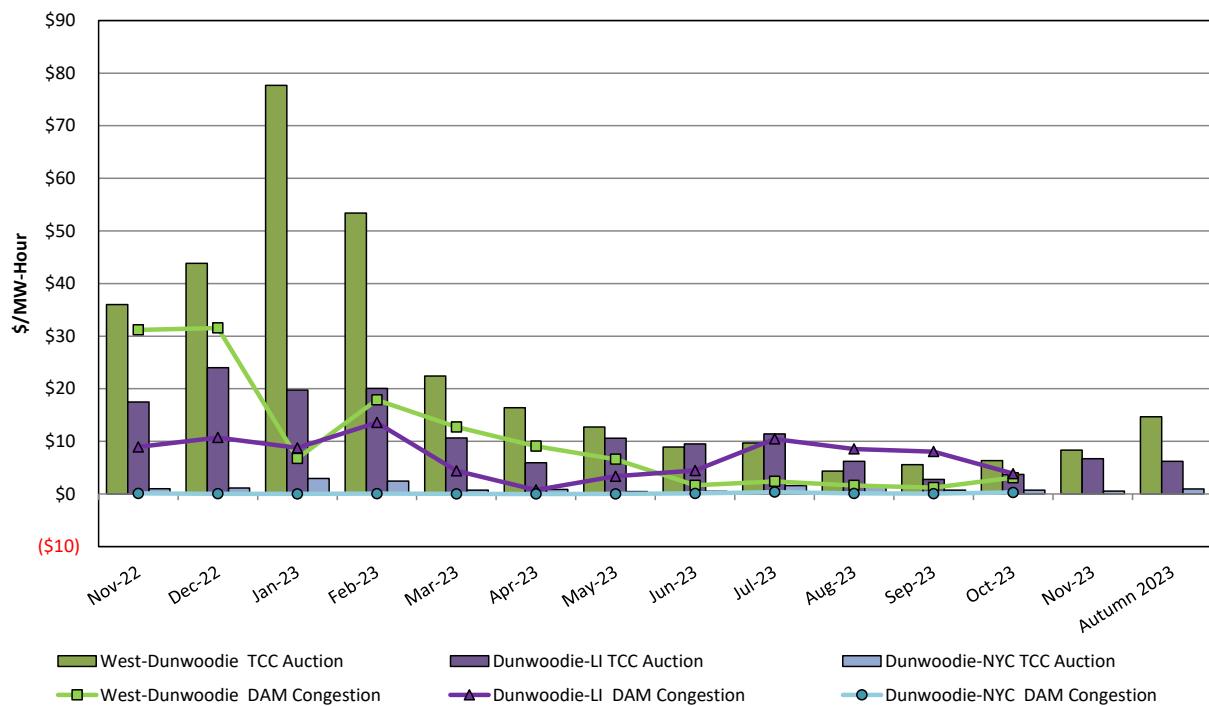






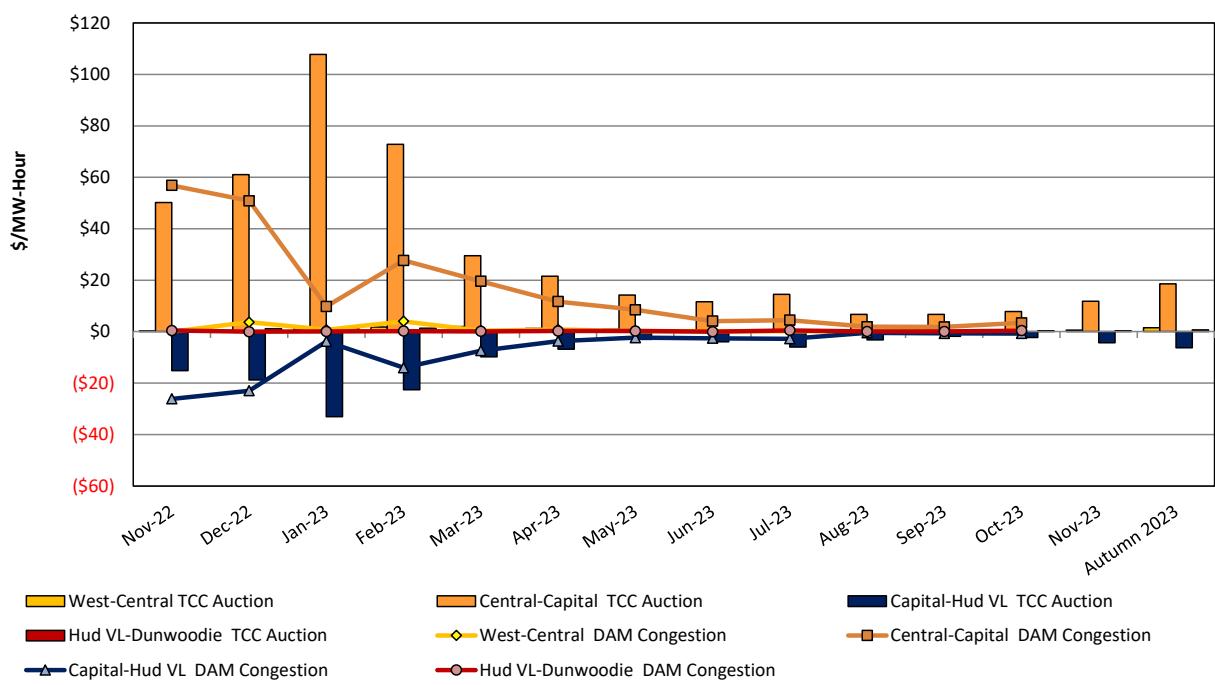
TCC & Day Ahead Market Selected Internal Path Congestion

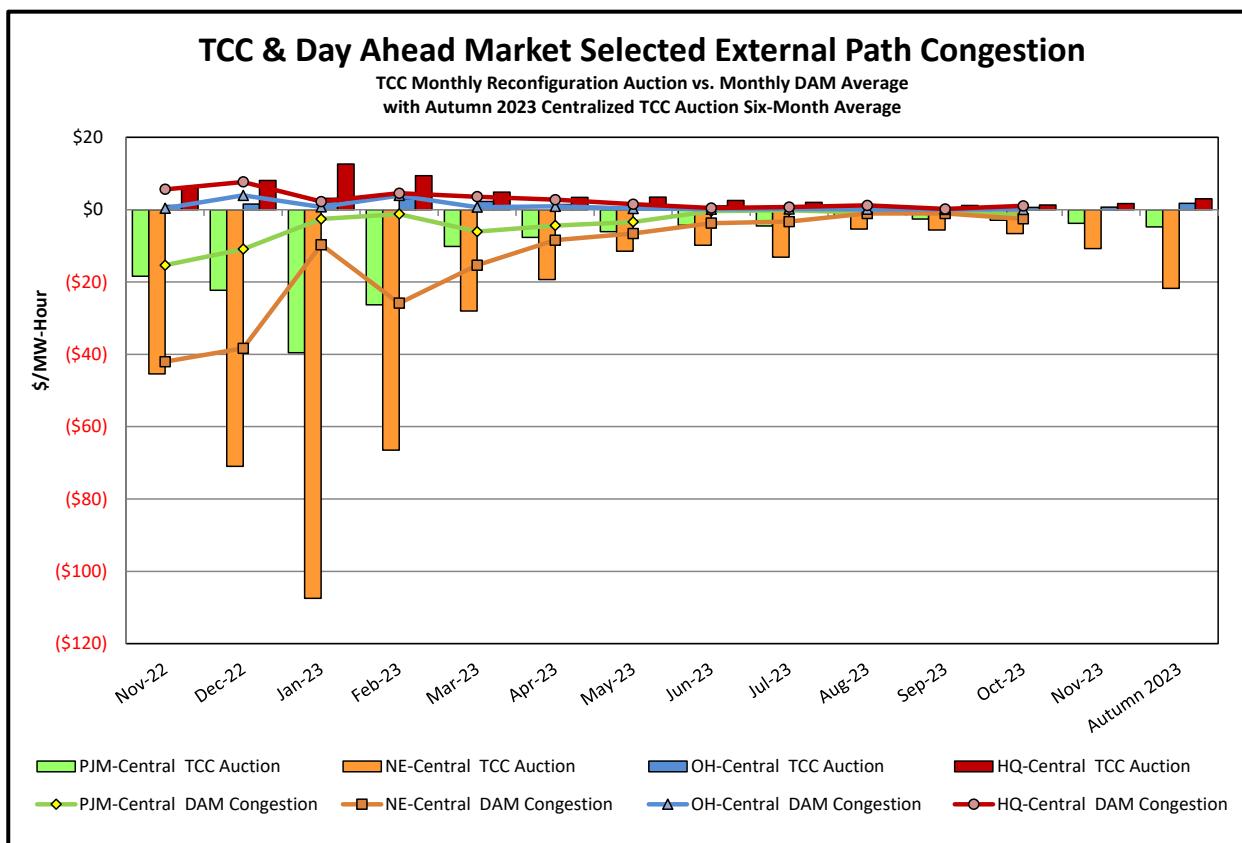
TCC Monthly Reconfiguration Auction vs. Monthly DAM Average
with Autumn 2023 Centralized TCC Auction Six-Month Average



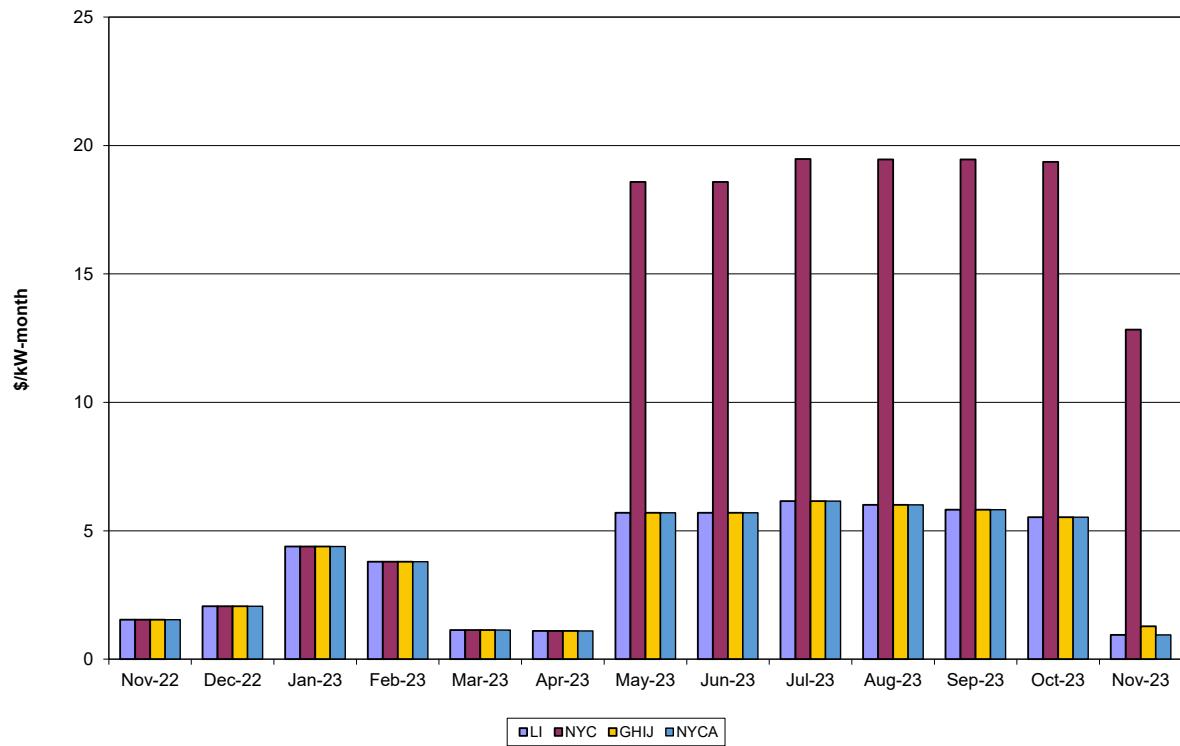
TCC & Day Ahead Market West to Dunwoodie Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average
with Autumn 2023 Centralized TCC Auction Six-Month Average

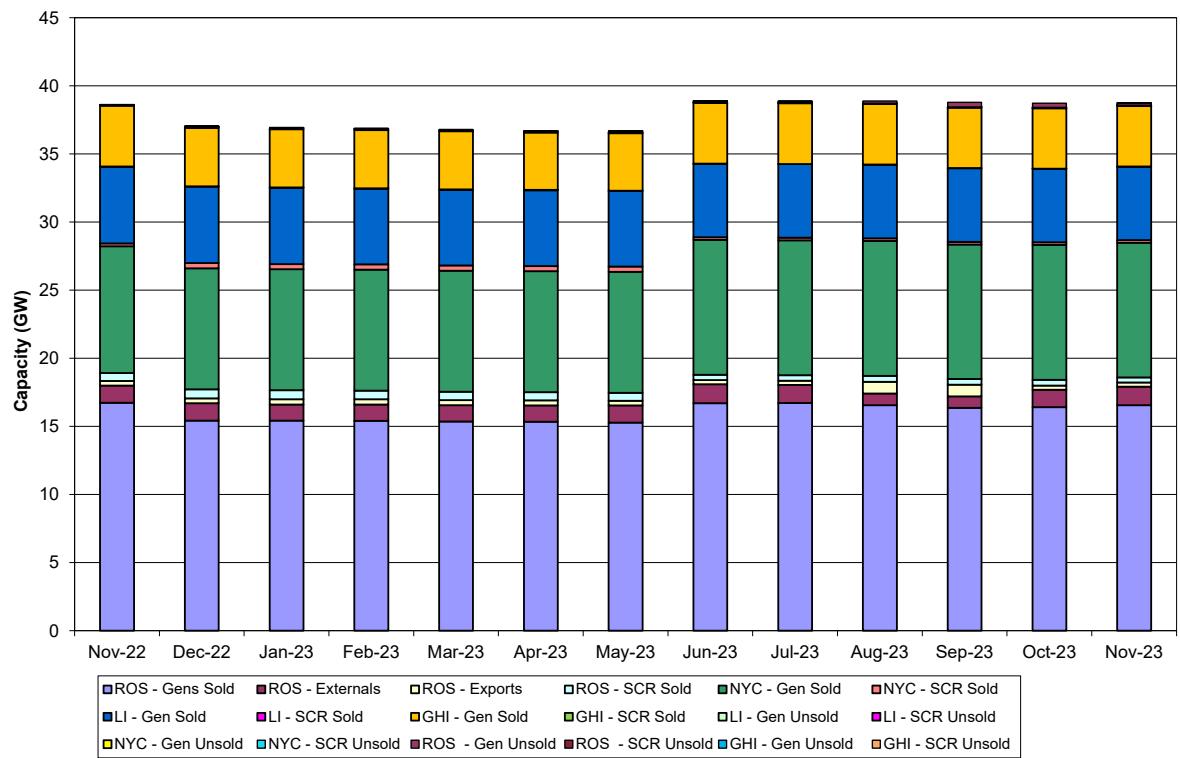




ICAP Spot Market Clearing Price



UCAP Sales

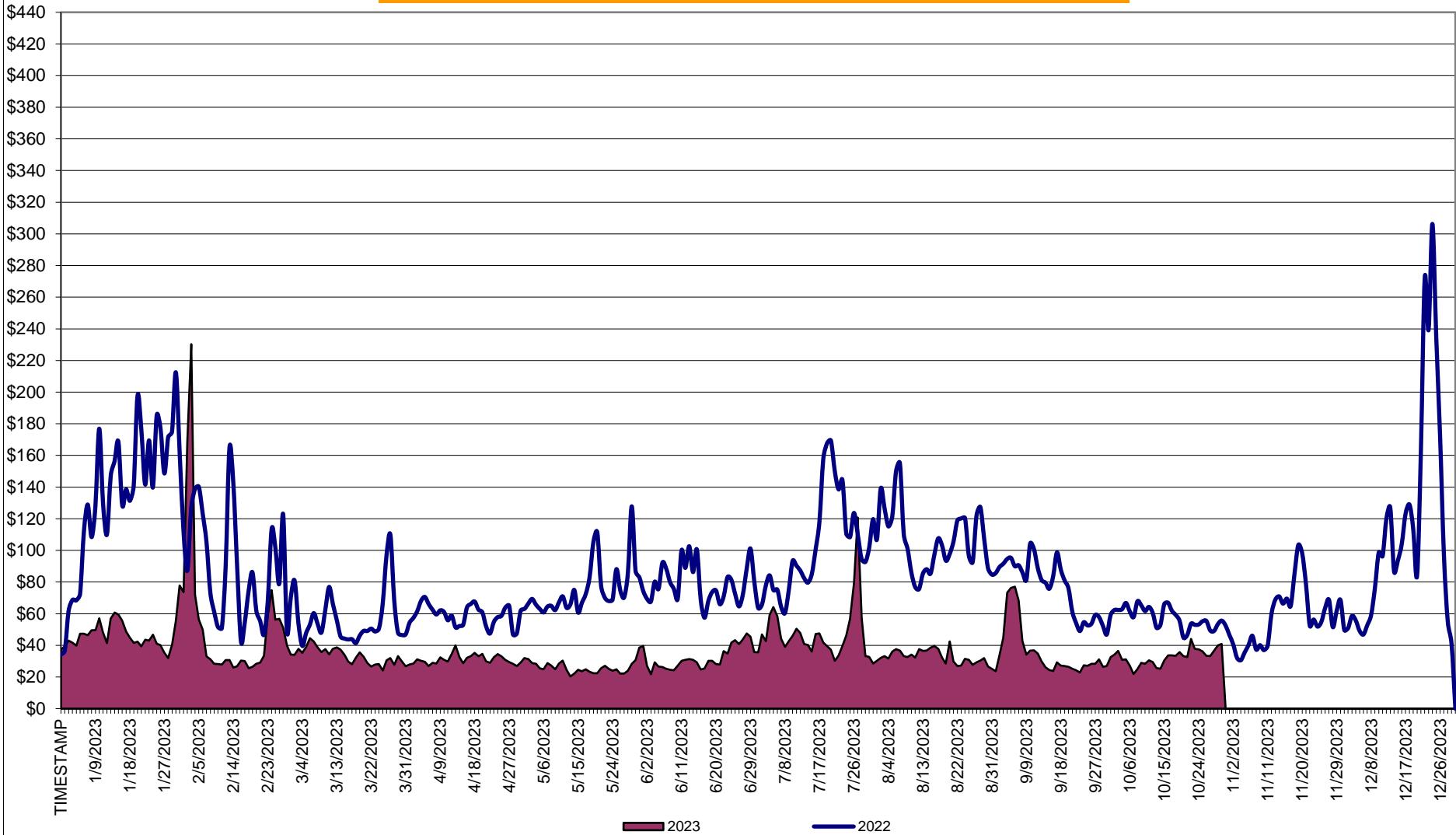


Market Performance Highlights

October 2023

- LBMP for October is \$28.10/MWh; lower than the \$36.92/MWh in September 2023 and lower than \$53.11/MWh in October 2022.
 - Day Ahead Load Weighted LBMPs and Real Time Load Weighted LBMPs are lower compared to September.
- October 2023 average year-to-date monthly cost of \$39.44/MWh is a 56% decrease from \$89.47/MWh in October 2022.
- Average daily send out is 367 GWh/day in October; lower than 419 GWh/day in September 2023 and higher than 359 GWh/day in October 2022.
- Natural gas and distillate prices are lower compared to the previous month.
 - Natural Gas (Transco Z6 NY) was \$1.30/MMBtu, down from \$1.42/MMBtu in September.
 - Natural gas prices (Transco Z6 NY) are down 72.2% year-over-year.
 - Jet Kerosene Gulf Coast was \$21.41/MMBtu, down from \$23.03/MMBtu in September.
 - Ultra Low Sulfur No.2 Diesel NY Harbor was \$22.32/MMBtu, down from \$23.64/MMBtu in September.
 - Distillate prices are down 27.2% year-over-year.
- Uplift per MWh is higher compared to the previous month.
 - Uplift (not including NYISO cost of operations) is \$1.35/MWh; higher than (\$0.58)/MWh in September.
 - Local Reliability Share is \$1.44/MWh, higher than \$0.11/MWh in September.
 - Statewide Share is (\$0.09)/MWh, higher than (\$0.68)/MWh in September.
 - TSA \$ per NYC MWh is \$0.00/MWh.
 - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than September.

Daily NYISO Average Cost/MWh (Energy & Ancillary Services)*
2022 Annual Average \$89.23/MWh
October 2022 YTD Average \$89.47/MWh
October 2023 YTD Average \$39.44/MWh



* Excludes ICAP payments.

NYISO Average Cost/MWh (Energy and Ancillary Services) *
from the LBMP Customer point of view

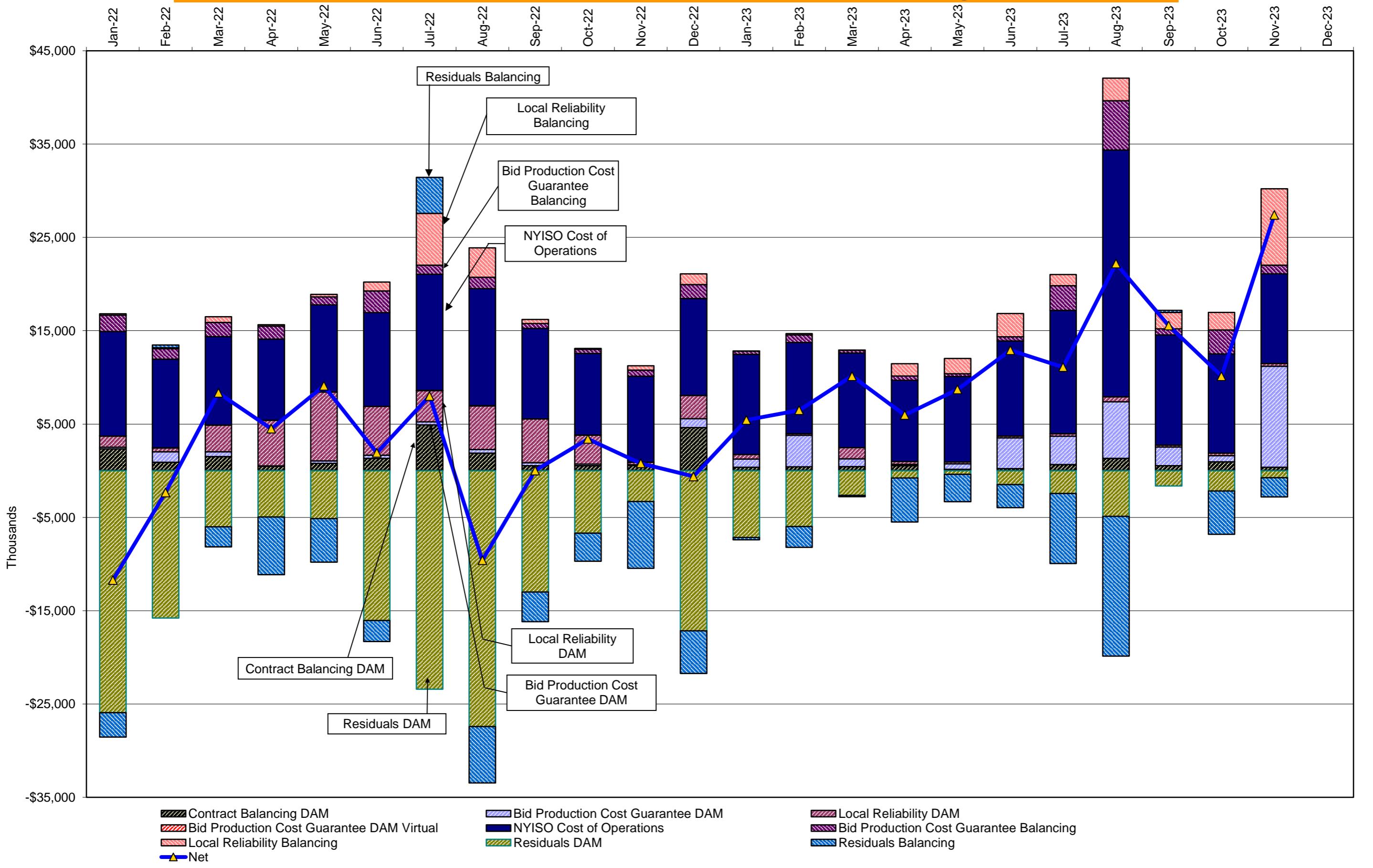
2023		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
	LBMP	42.10	55.47	31.11	28.07	23.13	29.85	45.70	29.95	36.92	28.10		
	NTAC	2.82	1.15	1.39	1.72	1.38	1.62	1.79	1.74	1.19	1.43		
	Reserve	0.72	0.90	0.73	0.85	0.81	0.69	0.76	0.56	0.50	0.77		
	Regulation	0.09	0.13	0.13	0.15	0.12	0.10	0.10	0.09	0.08	0.18		
	NYISO Cost of Operations	0.77	0.77	0.77	0.78	0.78	0.78	0.80	0.80	0.80	0.79		
	FERC Fee Recovery	0.08	0.09	0.09	0.10	0.10	0.09	0.06	0.07	0.08	0.09		
	Uplift	(0.38)	(0.27)	(0.00)	(0.34)	(0.13)	0.09	(0.43)	0.16	(0.58)	1.35		
	Uplift: Local Reliability Share	0.03	0.03	0.09	0.04	0.07	0.35	0.20	0.19	0.11	1.44		
	Uplift: Statewide Share	(0.41)	(0.30)	(0.10)	(0.38)	(0.20)	(0.26)	(0.62)	(0.03)	(0.68)	(0.09)		
	Voltage Support and Black Start	0.42	0.42	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44		
	Avg Monthly Cost	46.56	58.58	34.58	31.67	26.55	33.60	49.17	33.76	39.38	33.07		
	Avg YTD Cost	46.64	52.36	46.65	43.45	40.45	39.27	41.18	40.13	40.06	39.44		
	TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.08	0.74	0.07	1.27	0.00		
2022		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
	LBMP	134.79	94.06	56.78	56.46	70.60	76.72	99.47	108.85	78.91	53.11	52.47	110.17
	NTAC	1.43	0.95	1.48	1.17	2.46	2.07	3.65	1.69	1.44	3.21	3.91	2.23
	Reserve	1.26	1.21	0.83	0.81	0.74	0.66	0.87	0.65	0.86	1.02	0.89	0.49
	Regulation	0.27	0.19	0.17	0.12	0.13	0.15	0.12	0.13	0.18	0.18	0.15	0.12
	NYISO Cost of Operations	0.73	0.72	0.74	0.74	0.74	0.75	0.76	0.76	0.76	0.73	0.74	0.73
	FERC Fee Recovery	0.07	0.08	0.09	0.10	0.09	0.08	0.06	0.06	0.09	0.10	0.09	0.08
	Uplift	(1.50)	(1.73)	(0.09)	(0.36)	(0.05)	(0.61)	(1.58)	(1.91)	(0.78)	(0.45)	(0.68)	(0.77)
	Uplift: Local Reliability Share	0.09	0.04	0.27	0.43	0.60	0.46	0.54	0.47	0.39	0.27	0.06	0.25
	Uplift: Statewide Share	(1.59)	(1.77)	(0.36)	(0.79)	(0.65)	(1.07)	(2.12)	(2.38)	(1.18)	(0.72)	(0.74)	(1.02)
	Voltage Support and Black Start	0.42	0.41	0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.42	0.42	0.42
	Avg Monthly Cost	137.41	95.82	60.34	59.38	75.07	80.17	103.73	110.61	81.81	58.26	57.91	113.40
	Avg YTD Cost	137.49	118.36	100.65	91.92	88.82	87.37	90.31	93.42	92.27	89.47	86.97	89.23
	TSA \$ per NYC MWh	0.00	2.98	0.00	0.00	0.11	0.00	3.98	1.70	0.06	0.00	0.00	0.01

* Excludes ICAP payments.

Market Mitigation and Analysis
Prepared: 11/8/2023 3:55 PM

As of Jan. 2016, the annual FERC fee is recovered separately from Cost of Ops.

NYISO Dollar Flows - Uplift - OATT Schedule 1 components - Data through October 31, 2023



DAM Contract Balancing amounts are for payments made to generating units to make them whole for being dispatched below their Day-Ahead schedule, as a result of out-of-merit dispatches.

DAM Bid Production Cost Guarantees for Virtual Transactions are included in the chart and are shown from the inception of Virtual Transactions. These values are small and cannot be identified on the chart.

DAM residuals consist of both energy and loss revenue collections and payments. By design, there is a net over collection of revenues due to the difference between the marginal losses paid to generation and the average losses charged to loads.

NYISO Markets Transactions

2023		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Day Ahead Market MWh</u>		13,662,137	12,355,489	12,651,083	11,058,870	11,601,426	12,934,709	16,199,282	14,407,179	12,745,161	11,638,707		
DAM LSE Internal LBMP Energy Sales		55%	55%	56%	55%	55%	57%	63%	62%	63%	58%		
DAM External TC LBMP Energy Sales		7%	7%	4%	4%	4%	6%	4%	3%	4%	3%		
DAM Bilateral - Internal Bilaterals		28%	29%	30%	30%	31%	29%	25%	28%	27%	30%		
DAM Bilateral - Import/Non-LBMP Market Bilaterals		5%	5%	6%	6%	6%	6%	5%	4%	4%	5%		
DAM Bilateral - Export/Non-LBMP Market Bilaterals		2%	2%	2%	2%	2%	2%	1%	2%	2%	2%		
DAM Bilateral - Wheel Through Bilaterals		3%	2%	2%	2%	2%	2%	2%	1%	2%	2%		
<u>Balancing Energy Market MWh</u>		328,840	397,488	420,170	303,381	-77,279	-40,037	235,270	217,374	455,261	491,286		
Balancing Energy LSE Internal LBMP Energy Sales		65%	38%	53%	43%	-157%	37%	118%	79%	98%	79%		
Balancing Energy External TC LBMP Energy Sales		68%	68%	58%	69%	223%	143%	47%	72%	19%	38%		
Balancing Energy Bilateral - Internal Bilaterals		2%	1%	2%	-1%	-5%	28%	5%	8%	2%	-1%		
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals		0%	0%	0%	0%	7%	0%	0%	0%	0%	0%		
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals		7%	6%	6%	5%	10%	18%	5%	5%	2%	3%		
Balancing Energy Bilateral - Wheel Through Bilaterals		-43%	-13%	-18%	-16%	-178%	-326%	-75%	-64%	-21%	-19%		
<u>Transactions Summary</u>													
LBMP		63%	63%	62%	61%	60%	63%	69%	67%	68%	64%		
Internal Bilaterals		28%	28%	29%	29%	31%	29%	25%	27%	26%	28%		
Import Bilaterals		5%	5%	6%	6%	6%	6%	4%	4%	4%	4%		
Export Bilaterals		2%	2%	2%	3%	2%	2%	1%	2%	2%	2%		
Wheels Through		2%	1%	1%	2%	1%	0%	0%	0%	1%	1%		
<u>Market Share of Total Load</u>													
Day Ahead Market		97.6%	96.9%	96.8%	97.3%	100.7%	100.3%	98.6%	98.5%	96.6%	95.9%		
Balancing Energy +		2.4%	3.1%	3.2%	2.7%	-0.7%	-0.3%	1.4%	1.5%	3.4%	4.1%		
Total MWH		13,990,977	12,752,977	13,071,253	11,362,252	11,524,147	12,894,671	16,434,552	14,624,553	13,200,422	12,129,993		
Average Daily Energy Sendout/Month GWh		410	408	387	349	350	401	503	450	419	367		

2022		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Day Ahead Market MWh</u>		14,327,101	12,477,485	12,137,757	10,992,578	12,176,102	12,945,740	15,905,937	15,770,210	12,467,212	11,527,745	11,952,855	13,768,799
DAM LSE Internal LBMP Energy Sales		57%	56%	59%	56%	55%	60%	64%	63%	62%	58%	56%	56%
DAM External TC LBMP Energy Sales		7%	8%	3%	5%	6%	3%	3%	3%	2%	3%	4%	6%
DAM Bilateral - Internal Bilaterals		28%	28%	29%	31%	31%	29%	26%	26%	27%	30%	31%	29%
DAM Bilateral - Import/Non-LBMP Market Bilaterals		4%	4%	4%	5%	4%	4%	4%	5%	6%	5%	5%	5%
DAM Bilateral - Export/Non-LBMP Market Bilaterals		2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
DAM Bilateral - Wheel Through Bilaterals		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
<u>Balancing Energy Market MWh</u>		942,823	742,449	758,386	772,666	378,503	464,231	567,602	785,464	361,883	379,932	519,117	528,939
Balancing Energy LSE Internal LBMP Energy Sales		88%	83%	76%	60%	65%	66%	72%	86%	66%	45%	38%	45%
Balancing Energy External TC LBMP Energy Sales		16%	19%	24%	33%	32%	36%	23%	14%	34%	55%	58%	56%
Balancing Energy Bilateral - Internal Bilaterals		1%	2%	2%	0%	5%	2%	1%	0%	1%	0%	2%	2%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals		0%	0%	0%	0%	2%	2%	2%	0%	0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals		4%	9%	8%	7%	9%	8%	6%	3%	5%	7%	7%	5%
Balancing Energy Bilateral - Wheel Through Bilaterals		-9%	-13%	-10%	-1%	-12%	-14%	-4%	-3%	-5%	-7%	-5%	-8%
<u>Transactions Summary</u>													
LBMP		67%	66%	65%	62%	63%	64%	68%	68%	65%	62%	62%	64%
Internal Bilaterals		26%	27%	27%	29%	30%	28%	25%	25%	27%	29%	29%	28%
Import Bilaterals		3%	4%	4%	4%	4%	4%	3%	4%	6%	5%	5%	5%
Export Bilaterals		2%	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%
Wheels Through		1%	1%	2%	2%	2%	2%	1%	1%	2%	1%	2%	2%
<u>Market Share of Total Load</u>													
Day Ahead Market		93.8%	94.4%	94.1%	93.4%	97.0%	96.5%	96.6%	95.3%	97.2%	96.8%	95.8%	96.3%
Balancing Energy +		6.2%	5.6%	5.9%	6.6%	3.0%	3.5%	3.4%	4.7%	2.8%	3.2%	4.2%	3.7%
Total MWH		15,269,924	13,219,933	12,896,143	11,765,244	12,554,605	13,409,971	16,473,538	16,555,674	12,829,095	11,907,677	12,471,972	14,297,738
Average Daily Energy Sendout/Month GWh		451	429	390	359	372	422	509	514	411	359	382	421

+ Balancing Energy: Load(MW) purchased at Real Time LBMP.

Notes: Percent totals may not equal 100% due to rounding.

* The signs for the detail section intuitively reflect the direction of power flow eliminating the use of double negatives when Balancing Energy is negative.

Virtual Transactions are not reflected in this chart.

NYISO Markets 2023 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>DAY AHEAD LBMP</u>												
Price *	\$40.60	\$47.82	\$29.84	\$26.91	\$22.41	\$27.67	\$41.75	\$28.18	\$30.79	\$27.05		
Standard Deviation	\$10.32	\$47.20	\$7.42	\$6.50	\$6.46	\$9.25	\$24.21	\$8.54	\$17.49	\$8.78		
Load Weighted Price **	\$41.37	\$50.55	\$30.37	\$27.38	\$23.02	\$28.99	\$44.71	\$29.28	\$34.09	\$27.86		
<u>RTC LBMP</u>												
Price *	\$38.28	\$42.67	\$28.02	\$26.93	\$21.13	\$27.94	\$40.11	\$30.37	\$37.36	\$27.23		
Standard Deviation	\$31.37	\$39.75	\$11.53	\$9.23	\$7.61	\$12.06	\$25.96	\$12.80	\$48.96	\$10.57		
Load Weighted Price **	\$39.04	\$44.80	\$28.49	\$27.39	\$21.62	\$29.24	\$42.24	\$31.41	\$44.14	\$27.97		
<u>REAL TIME LBMP</u>												
Price *	\$38.76	\$43.99	\$28.15	\$27.41	\$20.76	\$27.44	\$37.88	\$30.75	\$36.50	\$28.44		
Standard Deviation	\$45.06	\$43.54	\$15.02	\$13.08	\$9.13	\$12.38	\$23.42	\$21.44	\$52.32	\$23.62		
Load Weighted Price **	\$39.68	\$46.75	\$28.72	\$27.97	\$21.27	\$28.66	\$39.88	\$32.06	\$43.32	\$29.27		
Average Daily Energy Sendout/Month GWh	410	408	387	349	350	401	503	450	419	367		

NYISO Markets 2022 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>DAY AHEAD LBMP</u>												
Price *	\$124.39	\$85.98	\$52.41	\$55.23	\$66.11	\$72.43	\$90.42	\$100.71	\$74.23	\$51.77	\$49.08	\$98.20
Standard Deviation	\$51.94	\$39.56	\$18.64	\$11.05	\$21.60	\$19.84	\$40.00	\$33.52	\$22.13	\$11.85	\$20.31	\$64.21
Load Weighted Price **	\$128.16	\$88.17	\$53.69	\$55.96	\$69.05	\$75.15	\$96.74	\$105.93	\$77.41	\$52.79	\$50.77	\$101.90
<u>RTC LBMP</u>												
Price *	\$127.16	\$85.48	\$57.58	\$57.33	\$68.27	\$78.66	\$92.25	\$104.69	\$70.59	\$48.87	\$45.91	\$109.15
Standard Deviation	\$77.62	\$55.20	\$38.62	\$21.09	\$42.87	\$49.85	\$49.28	\$51.96	\$28.06	\$13.16	\$24.06	\$190.04
Load Weighted Price **	\$130.45	\$88.33	\$59.03	\$58.49	\$72.67	\$82.33	\$98.61	\$111.42	\$73.81	\$49.76	\$47.58	\$115.16
<u>REAL TIME LBMP</u>												
Price *	\$130.43	\$83.85	\$57.00	\$54.45	\$65.07	\$74.01	\$90.23	\$105.61	\$71.11	\$49.26	\$48.62	\$114.54
Standard Deviation	\$93.35	\$57.99	\$44.52	\$20.46	\$33.01	\$41.27	\$54.20	\$69.83	\$30.72	\$17.89	\$37.20	\$216.43
Load Weighted Price **	\$133.98	\$86.99	\$58.64	\$55.57	\$68.60	\$77.40	\$96.79	\$113.16	\$74.57	\$50.30	\$50.78	\$122.49
Average Daily Energy Sendout/Month GWh	451	429	390	359	372	422	509	514	411	359	382	421

* Average zonal load weighted prices.

** Average zonal load weighted prices, load weighted in each hour.

NYISO Monthly Average Internal LBMPs
2022 - 2023

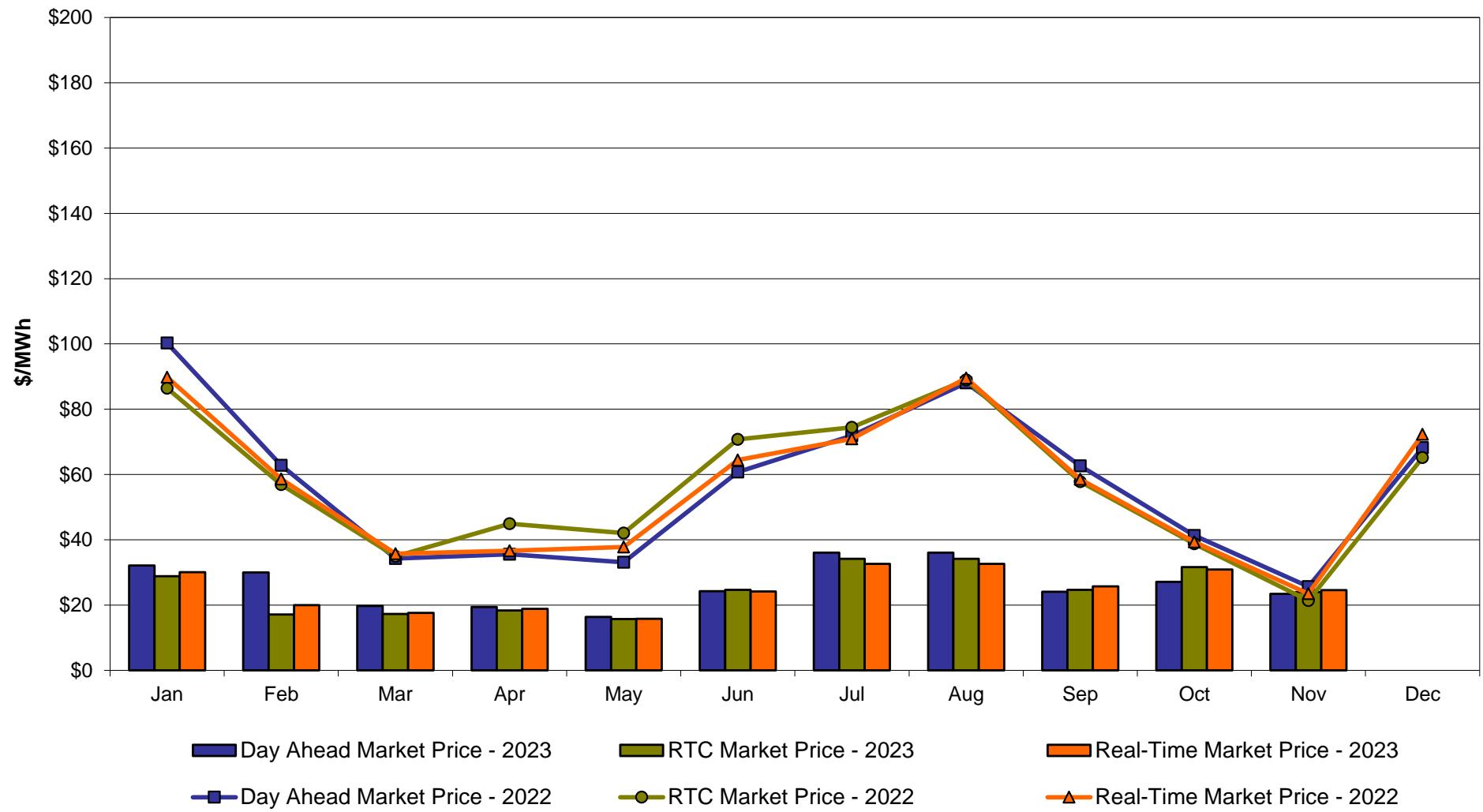


October 2023 Zonal LBMP Statistics for NYISO (\$/MWh)

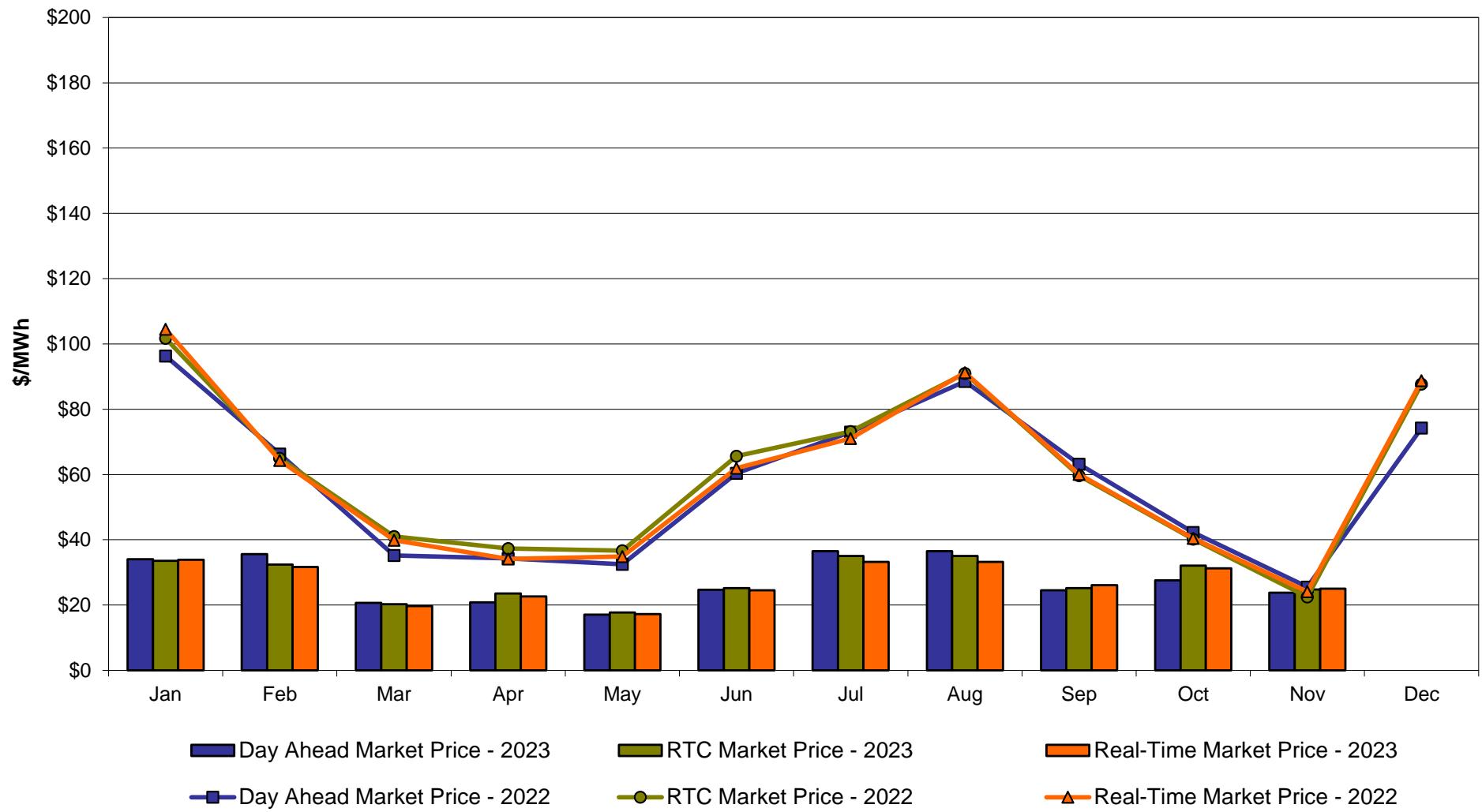
	WEST <u>Zone A</u>	GENESEE <u>Zone B</u>	NORTH <u>Zone D</u>	CENTRAL <u>Zone C</u>	MOHAWK VALLEY <u>Zone E</u>	CAPITAL <u>Zone F</u>	HUDSON VALLEY <u>Zone G</u>	MILLWOOD <u>Zone H</u>	DUNWOODIE <u>Zone I</u>	NEW YORK CITY <u>Zone J</u>	LONG ISLAND <u>Zone K</u>
DAY AHEAD LBMP											
Unweighted Price *	23.46	23.30	21.36	23.79	24.16	27.84	27.38	27.99	28.10	28.43	32.53
Standard Deviation	7.77	7.69	9.04	7.76	7.98	9.12	8.62	8.96	9.00	9.01	15.88
RTC LBMP											
Unweighted Price *	24.01	24.17	23.80	24.78	25.12	26.33	26.70	27.04	27.13	27.83	34.26
Standard Deviation	8.96	8.95	10.44	9.47	9.12	8.63	9.16	9.33	9.38	10.63	35.33
REAL TIME LBMP											
Unweighted Price *	24.55	24.55	23.98	25.02	25.46	26.76	27.12	27.86	28.01	30.78	34.18
Standard Deviation	18.09	18.11	18.46	18.50	18.83	19.01	19.55	19.70	19.83	44.49	38.70
	ONTARIO IESO	HYDRO QUEBEC (Wheel)	HYDRO QUEBEC (Import/Export)	PJM	NEW ENGLAND	CROSS SOUND CABLE <u>Controllable</u>	NORTHPORT- NORWALK <u>Controllable</u>	NEPTUNE <u>Controllable</u>	LINDEN VFT <u>Controllable</u>	HUDSON <u>Controllable</u>	Dennison <u>Controllable</u>
DAY AHEAD LBMP											
Unweighted Price *	22.93	21.99	21.99	25.58	26.92	38.50	28.82	29.19	27.77	28.20	21.37
Standard Deviation	7.49	8.01	8.01	7.92	8.19	37.17	8.88	9.36	8.55	9.02	8.75
RTC LBMP											
Unweighted Price *	23.29	23.67	23.67	25.78	25.75	39.24	30.91	29.84	26.86	26.98	23.82
Standard Deviation	8.50	8.84	8.84	12.88	8.62	54.60	32.35	24.66	9.08	9.67	8.82
REAL TIME LBMP											
Unweighted Price *	24.81	24.04	24.04	26.48	25.50	38.28	30.87	30.14	29.63	30.25	24.33
Standard Deviation	18.14	17.56	17.56	26.48	23.65	52.50	36.85	25.37	43.23	44.00	18.12

* Straight LBMP averages

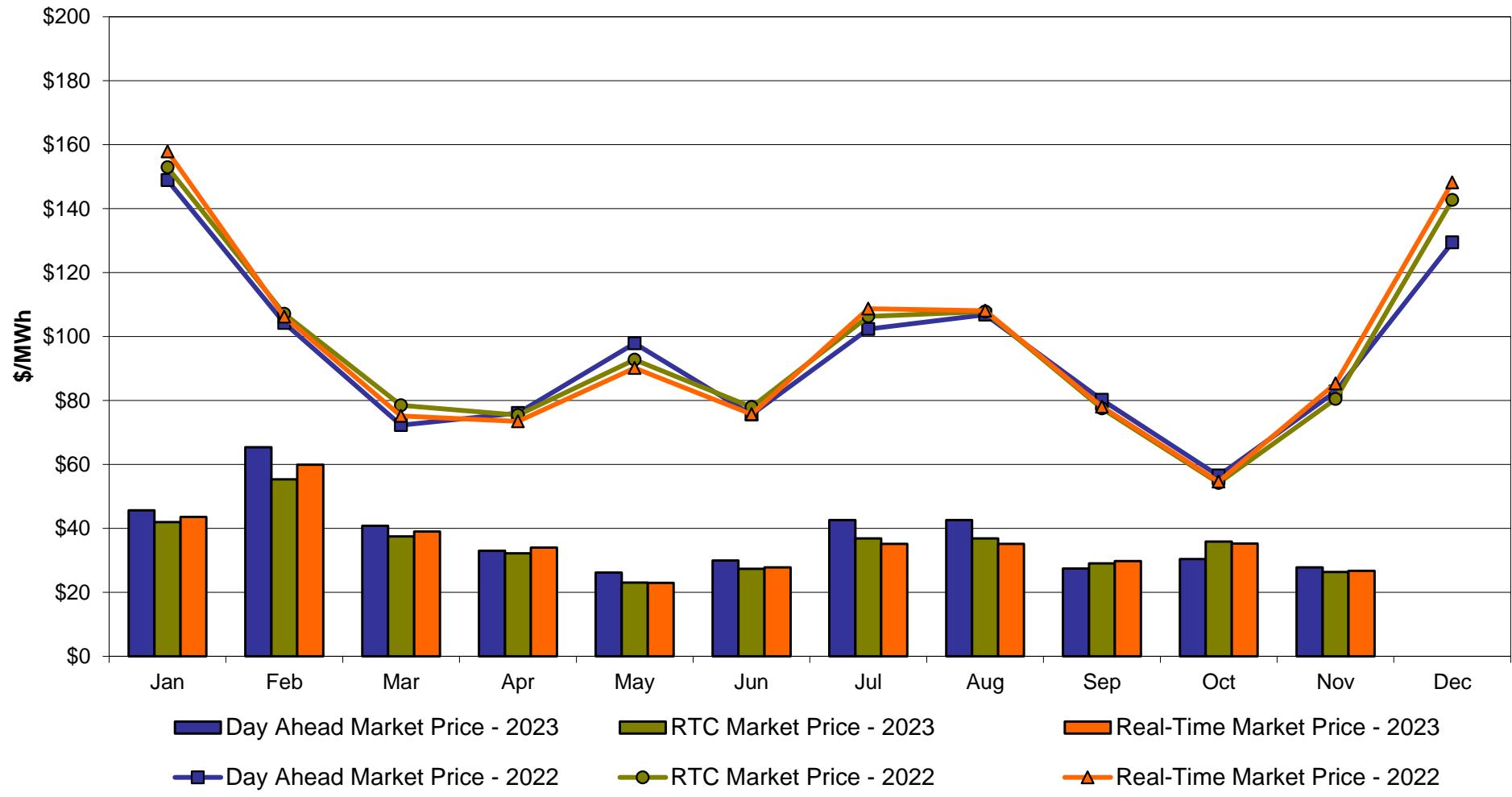
West Zone A
Monthly Average LBMP Prices 2022 - 2023



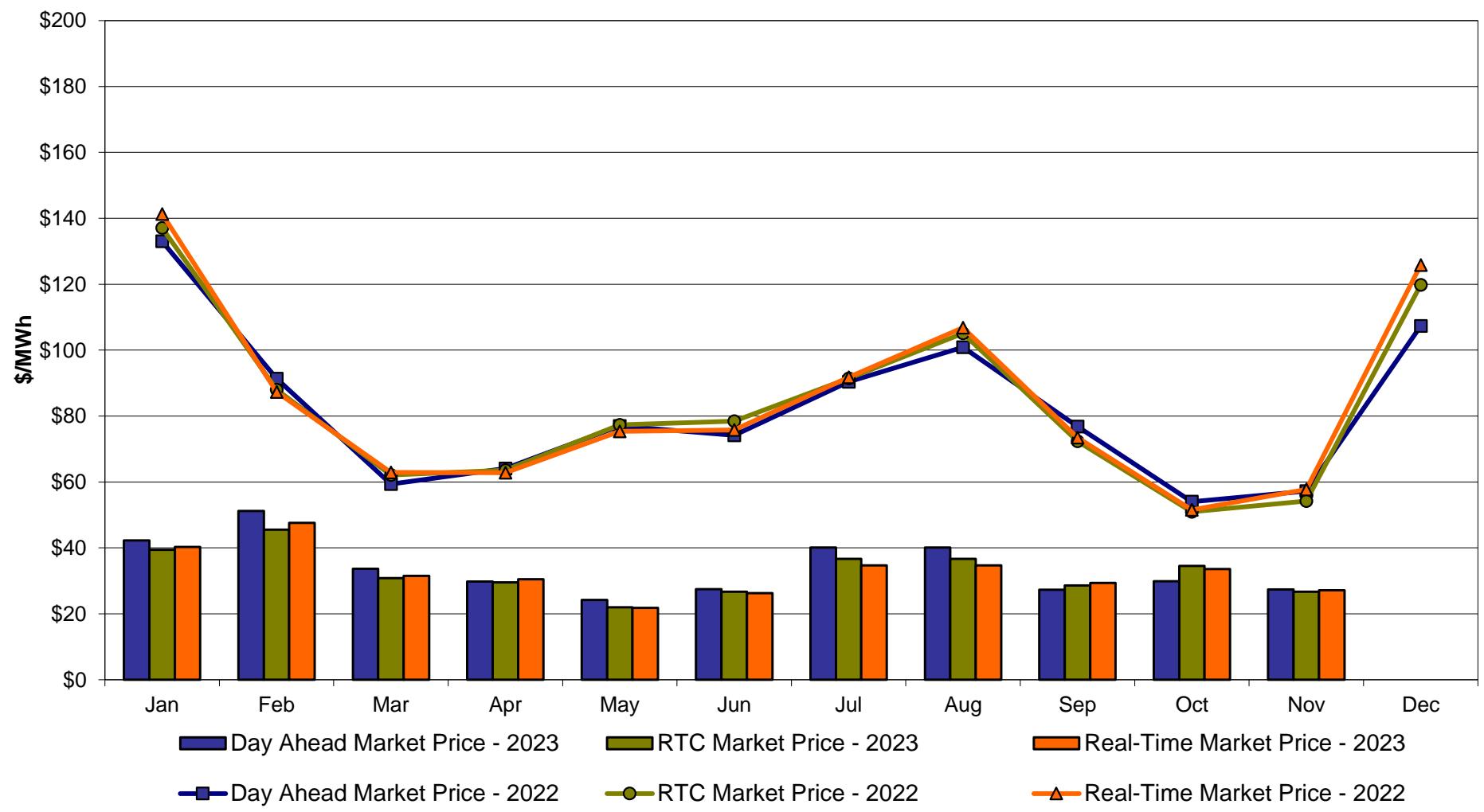
Central Zone C
Monthly Average LBMP Prices 2022 - 2023



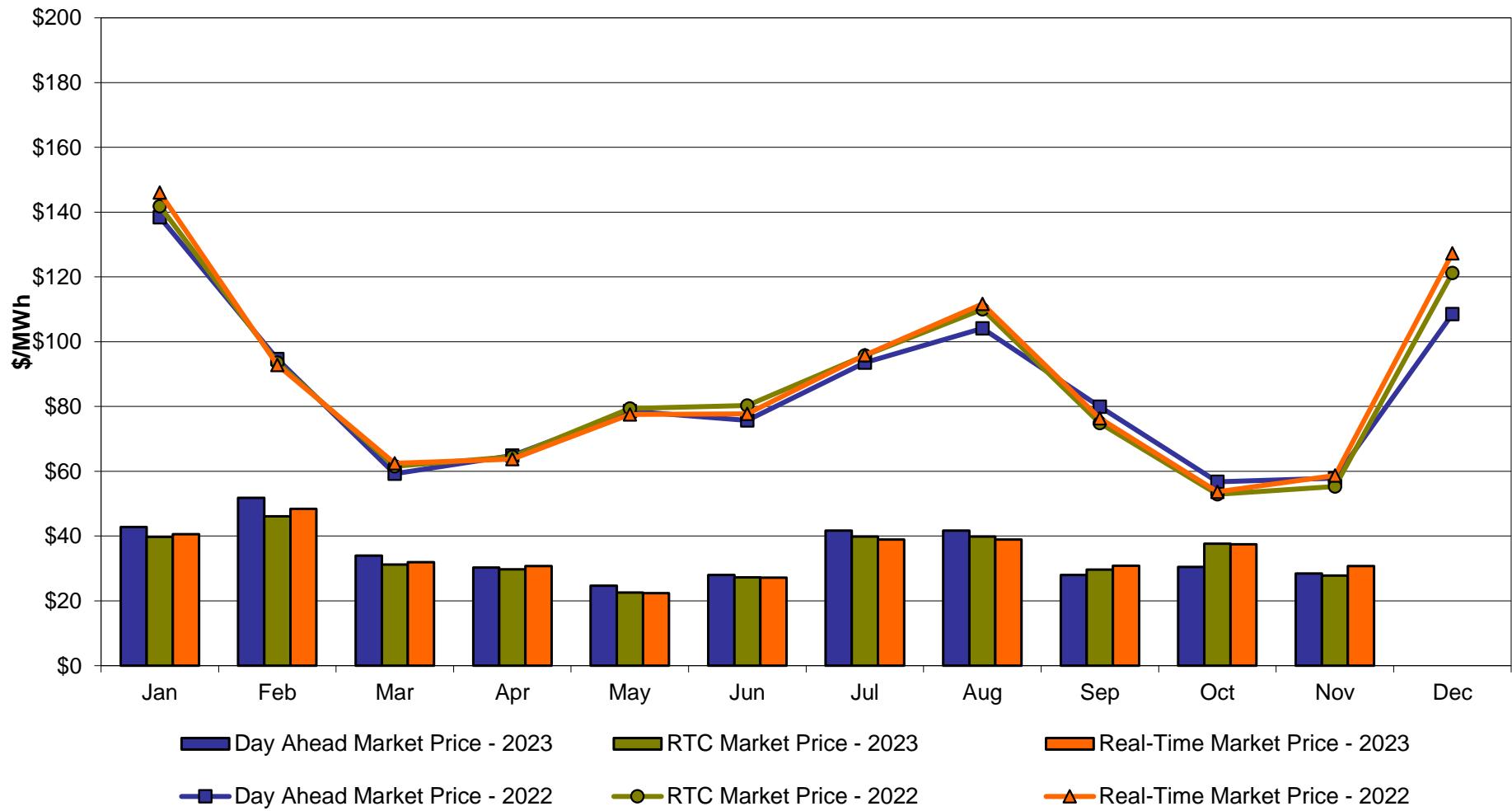
Capital Zone F
Monthly Average LBMP Prices 2022 - 2023



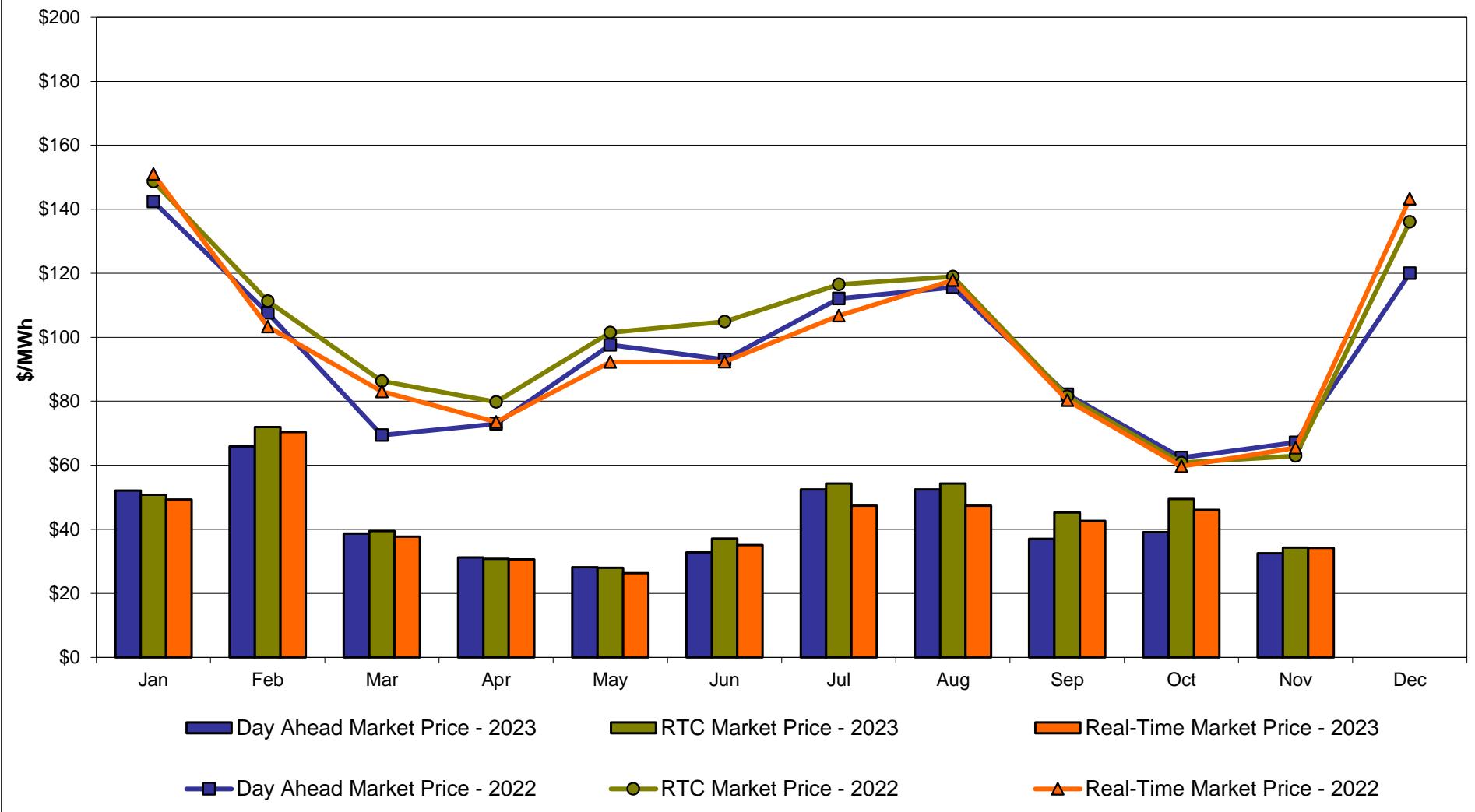
Hudson Valley Zone G
Monthly Average LBMP Prices 2022 - 2023



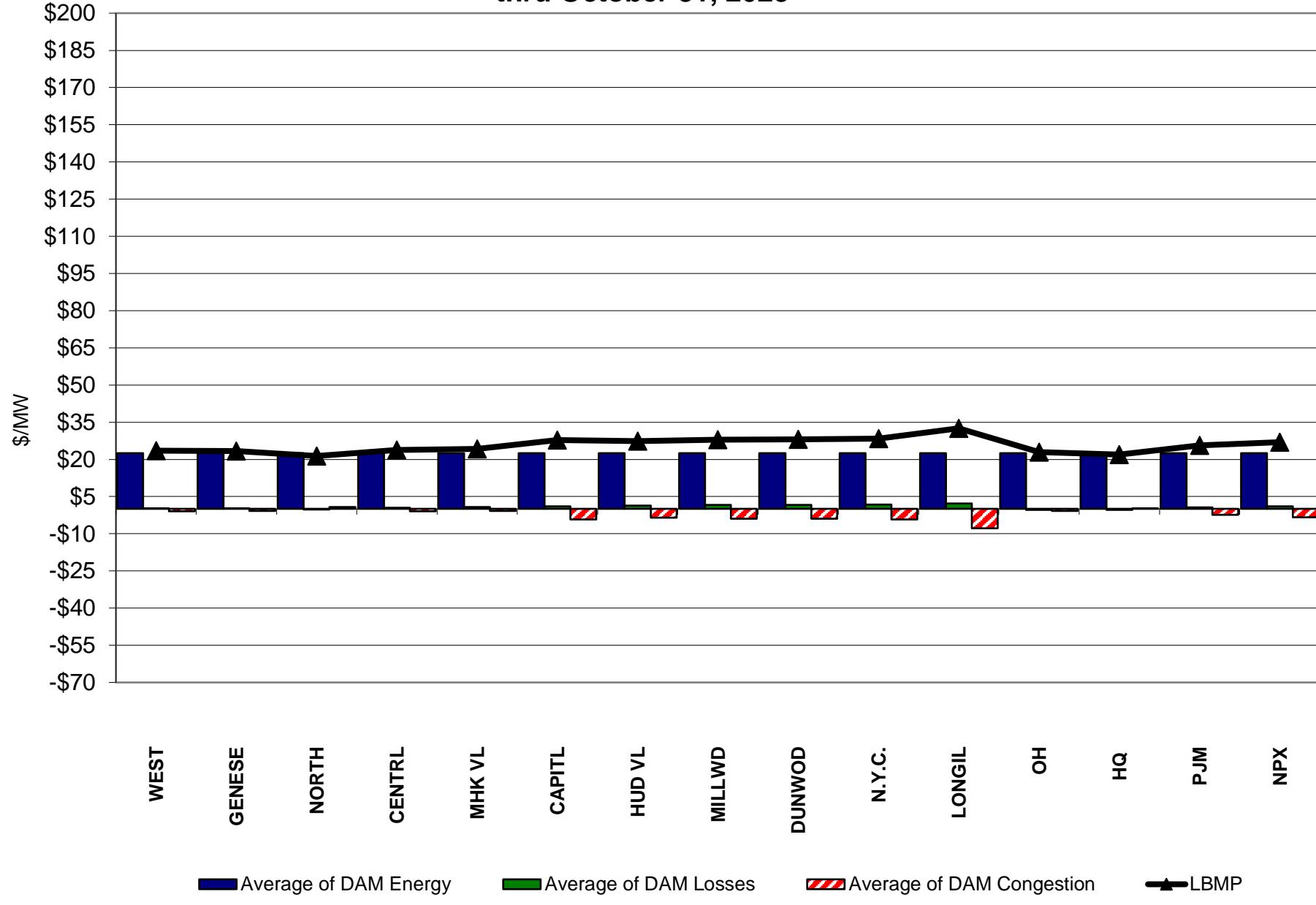
NYC Zone J
Monthly Average LBMP Prices 2022 - 2023



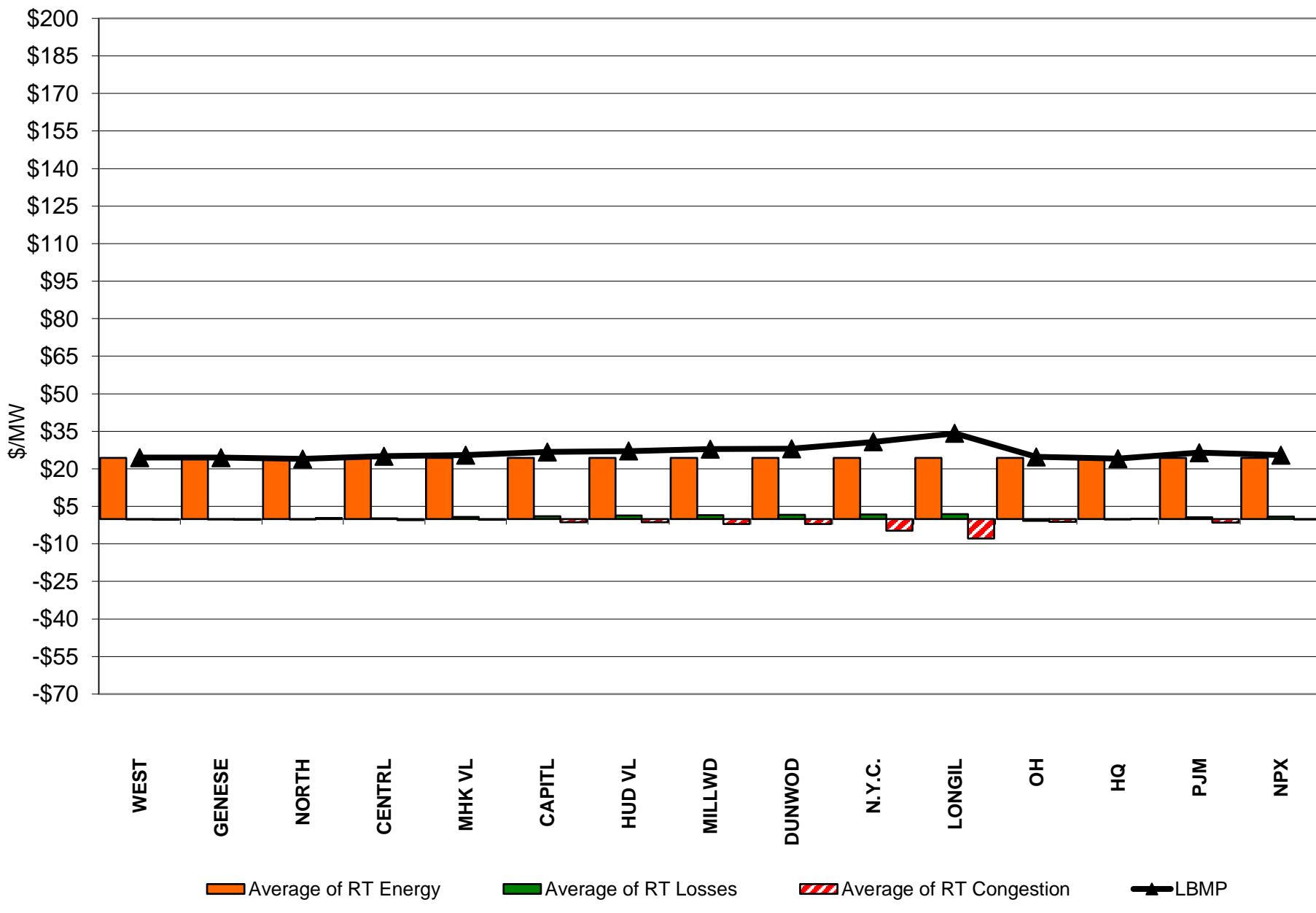
Long Island Zone K
Monthly Average LBMP Prices 2022 - 2023



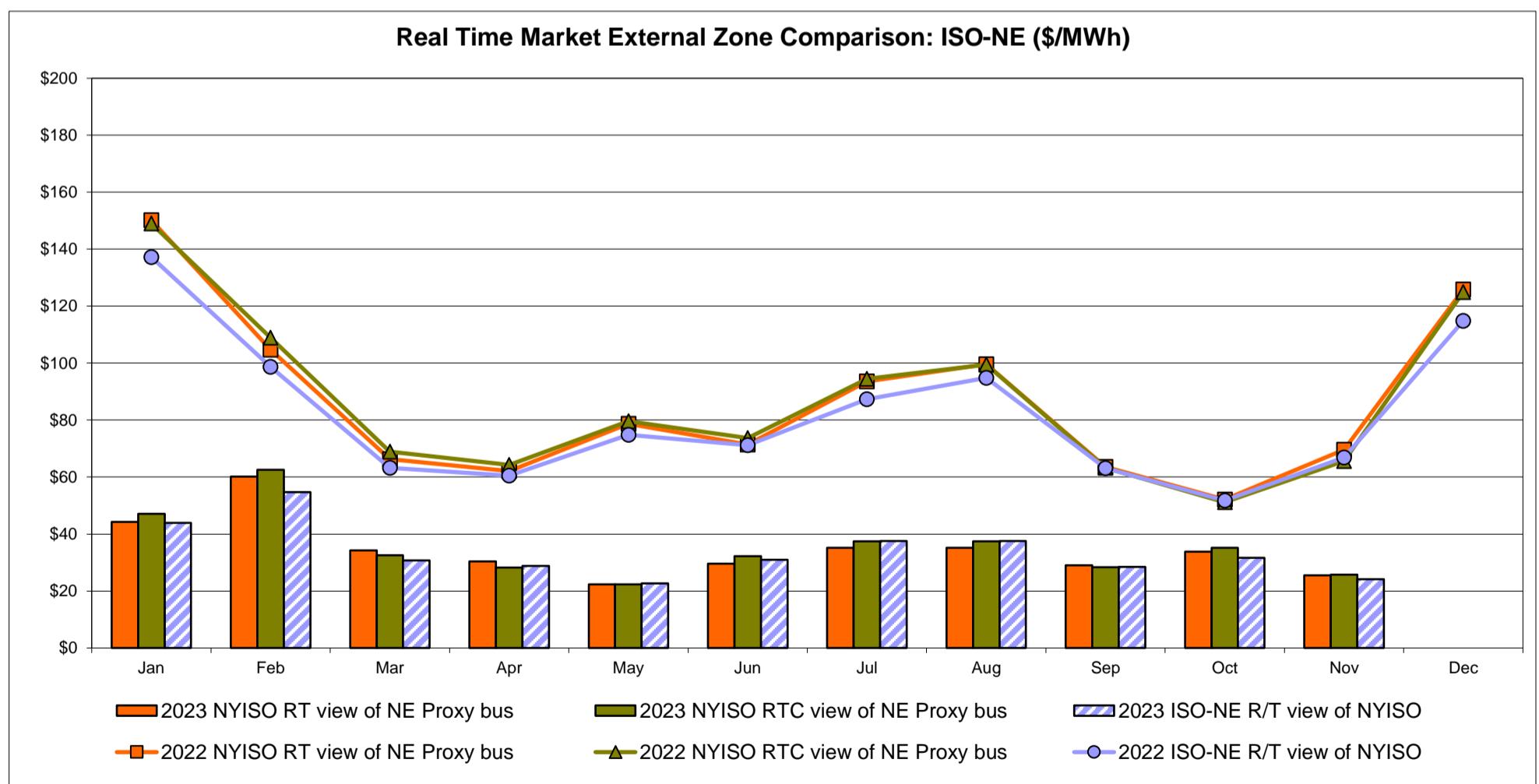
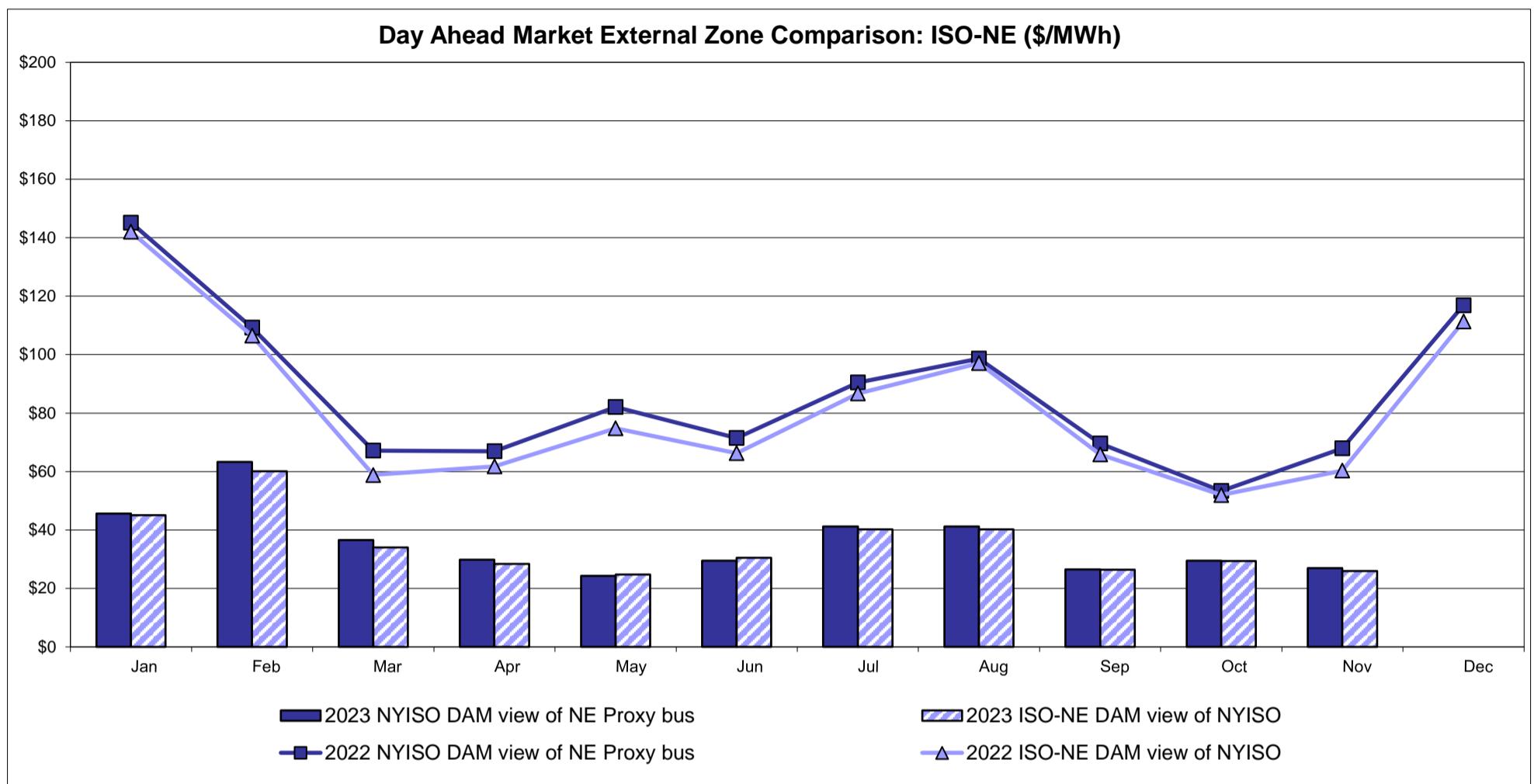
DAM Zonal Unweighted Monthly Average LBMP Components
thru October 31, 2023



RT Zonal Unweighted Monthly Average LBMP Components
thru October 31, 2023

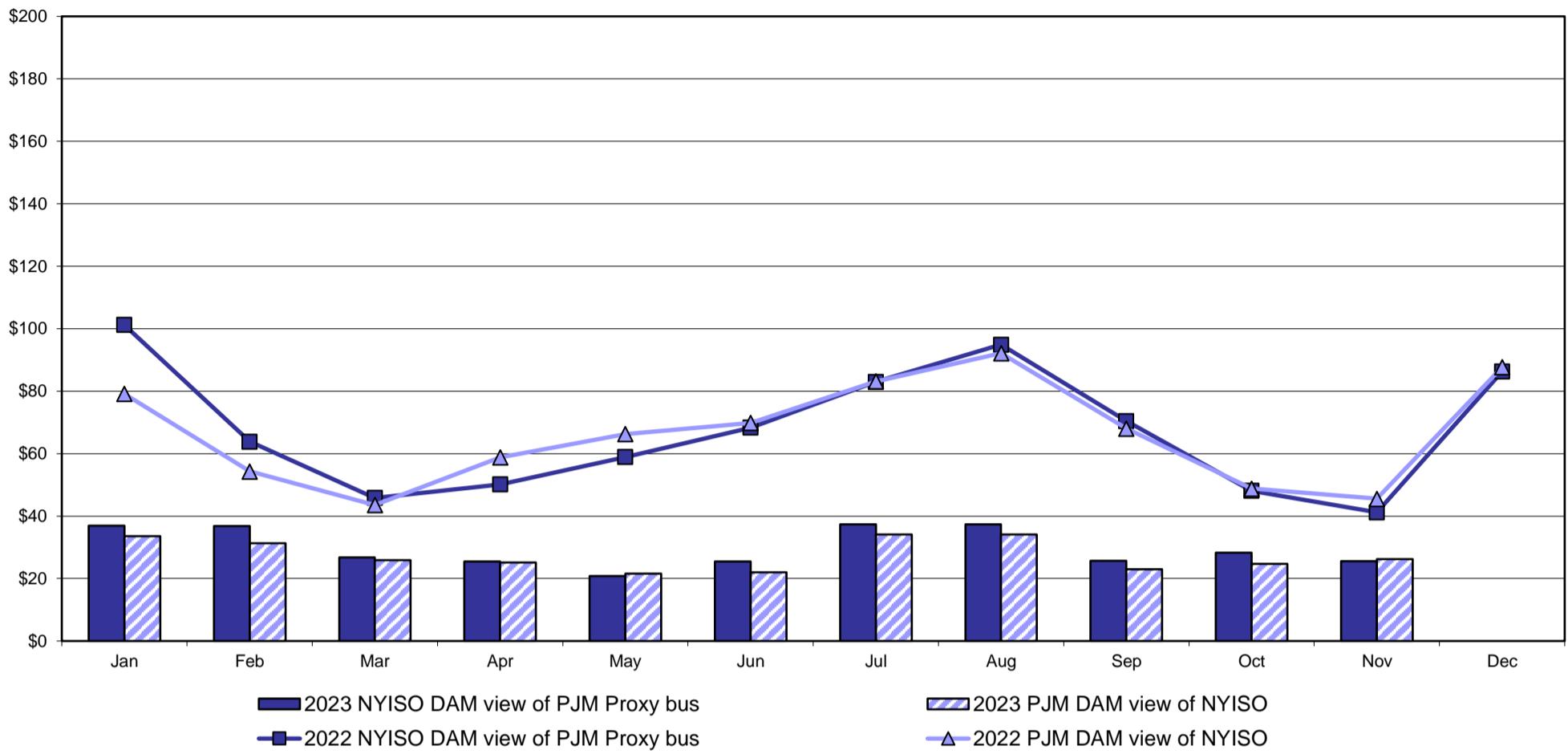


External Comparison ISO-New England

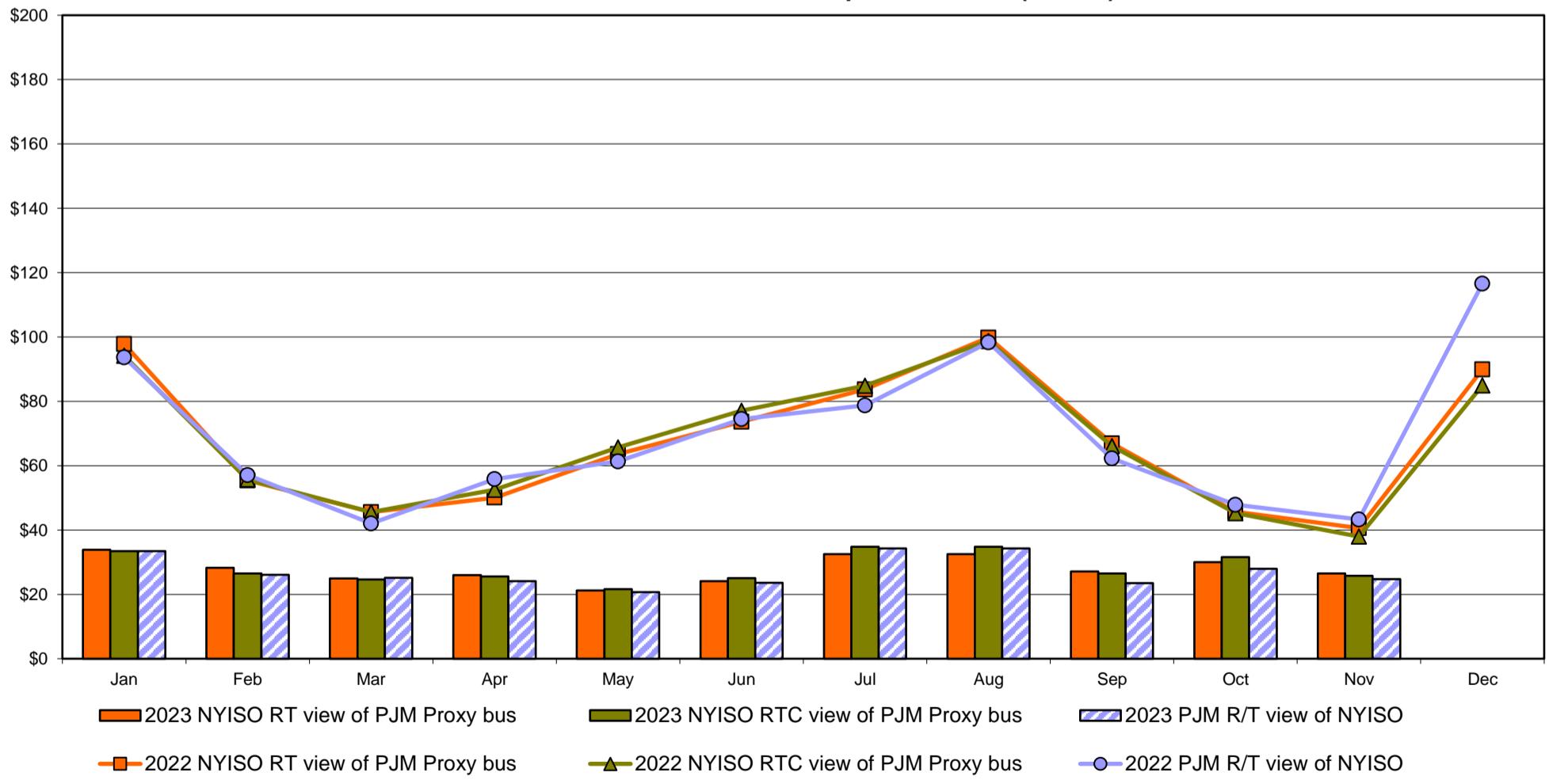


External Comparison PJM

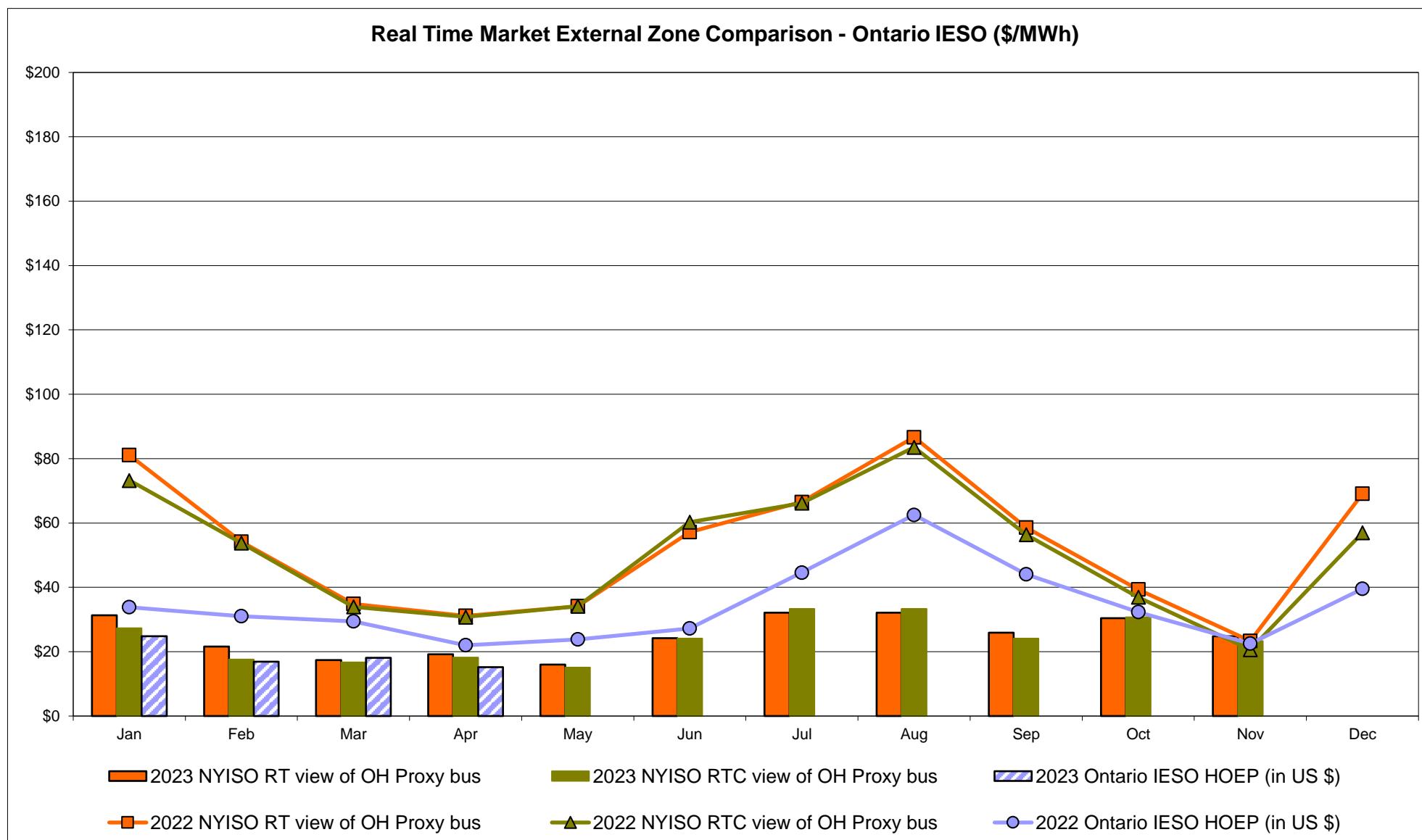
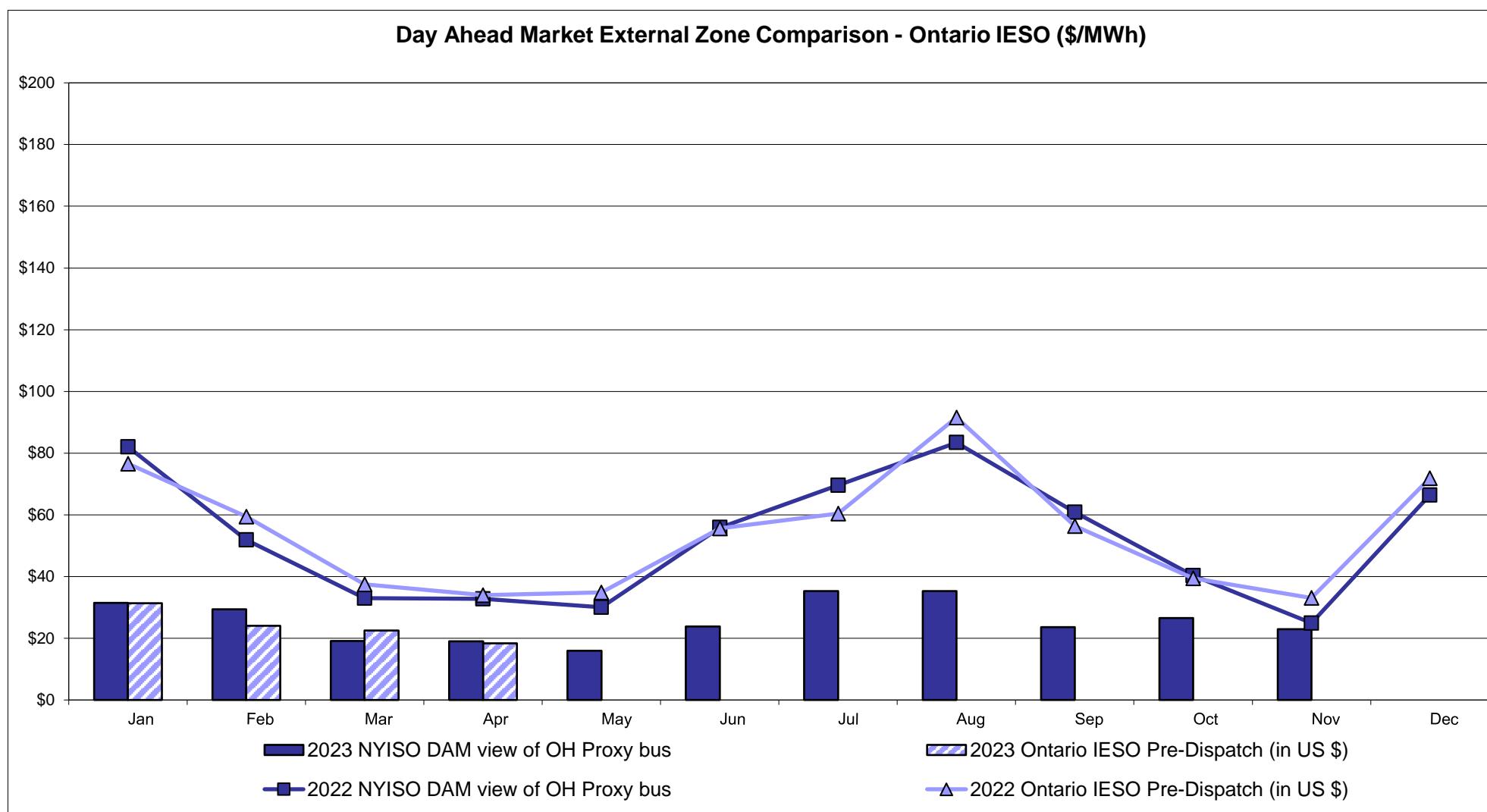
Day Ahead Market External Zone Comparison - PJM (\$/MWh)



Real Time Market External Zone Comparison - PJM (\$/MWh)

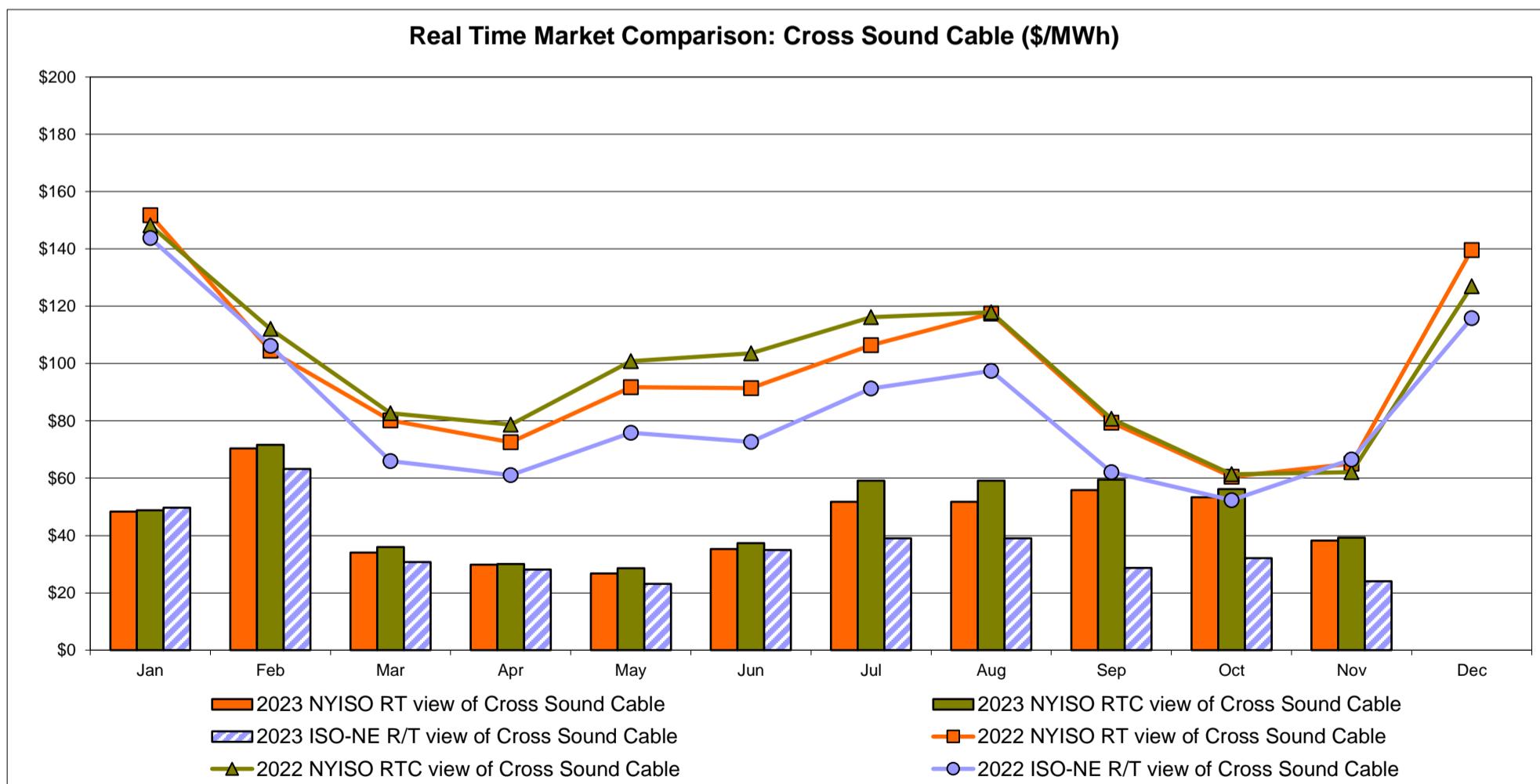
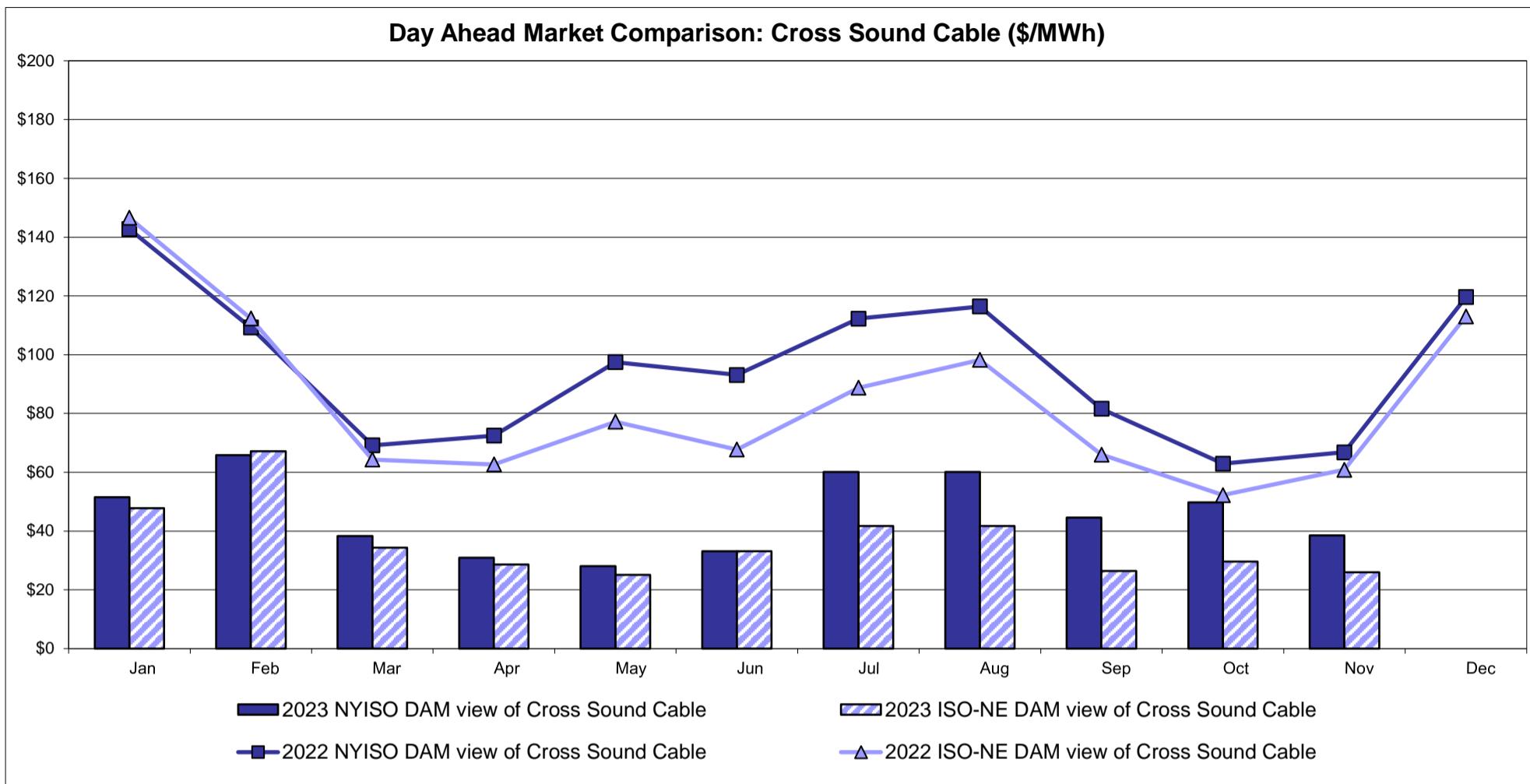


External Comparison Ontario IESO



Notes: Exchange factor used for October 2023 was to US
HOEP: Hourly Ontario Energy Price
Pre-Dispatch: Projected Energy Price

External Controllable Line: Cross Sound Cable (New England)



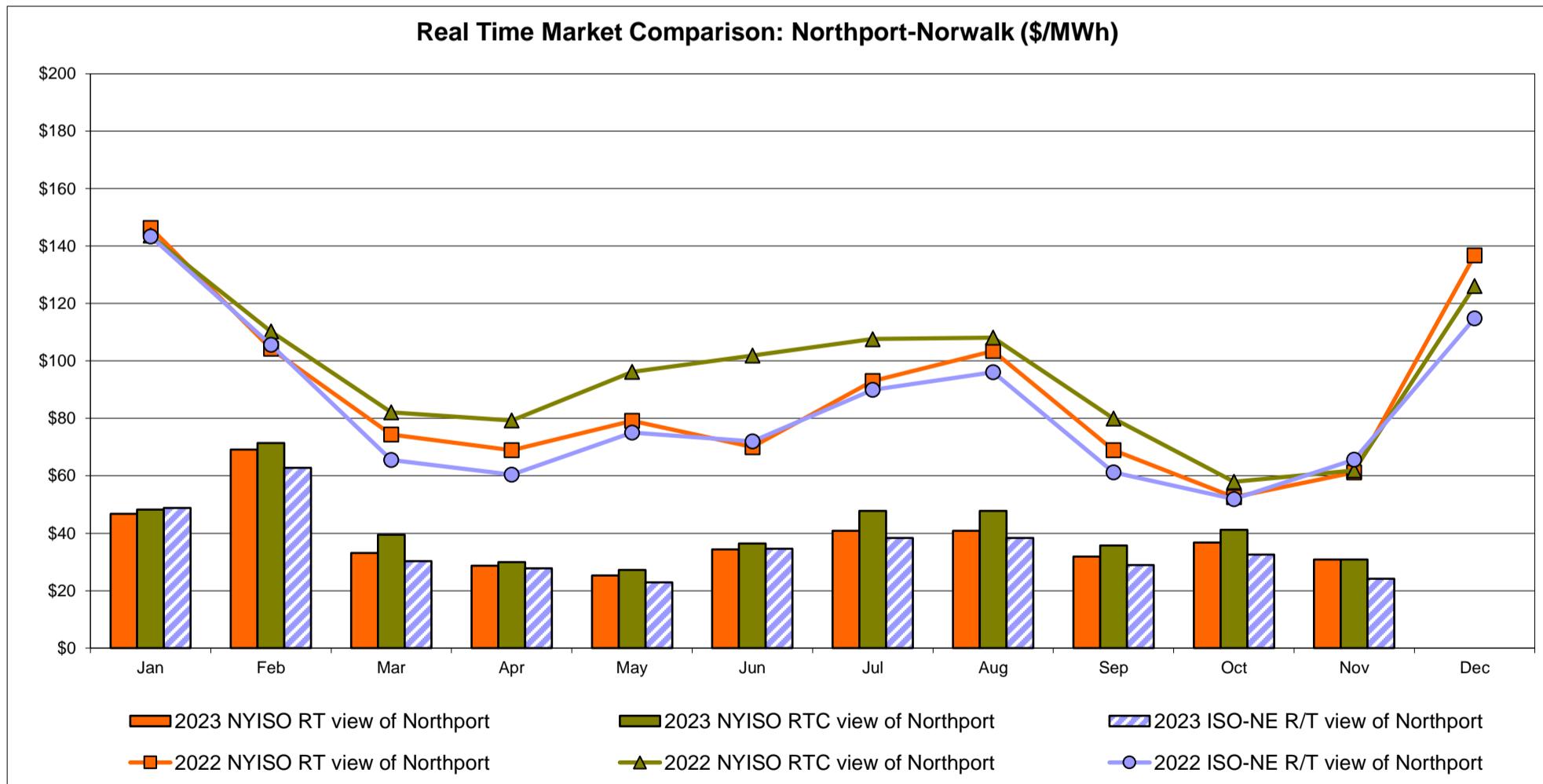
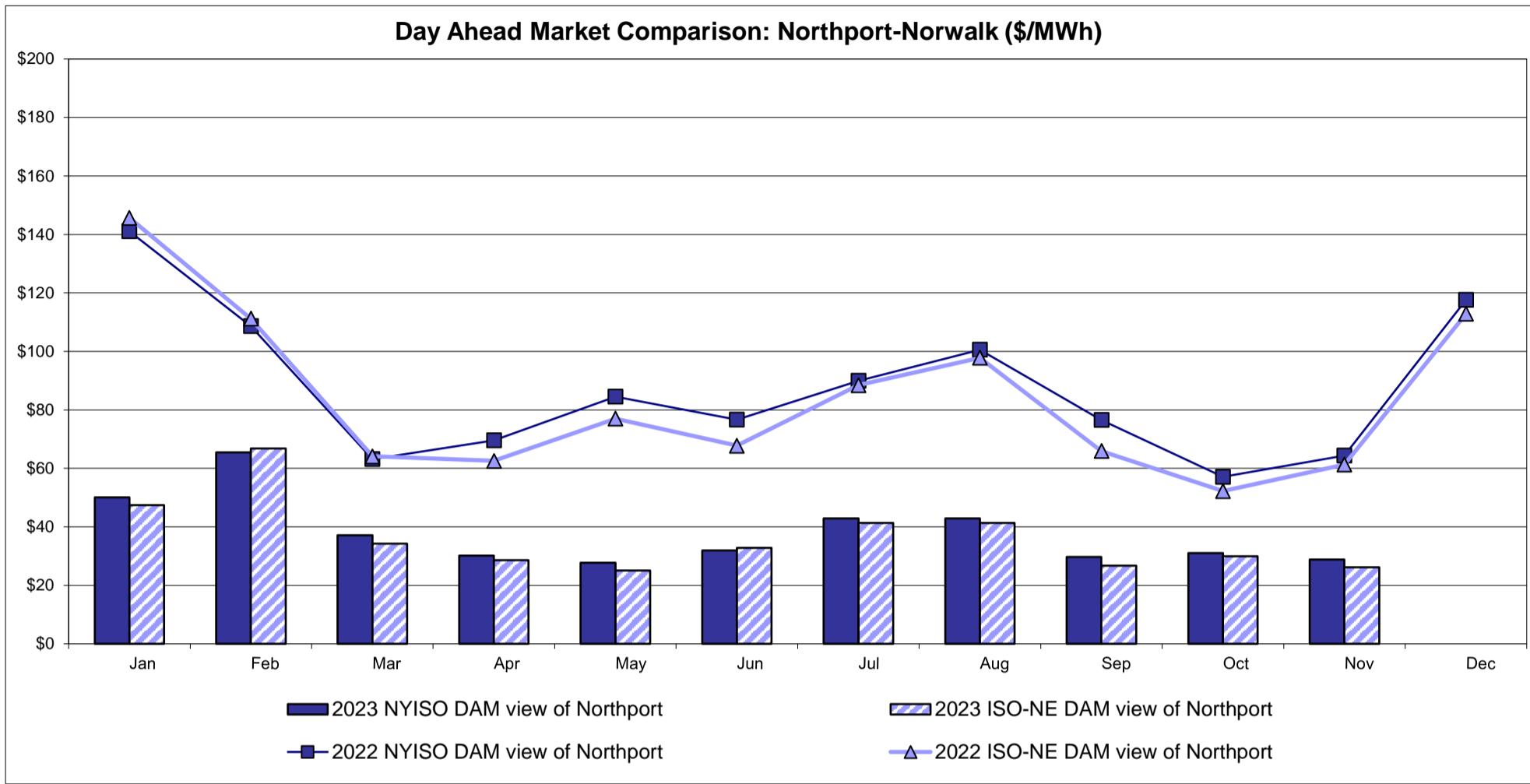
Note:

ISO-NE Forecast is an advisory posting @ 18:00 day before.

The DAM and R/T prices at the Shorham 13899 interface are used for ISO-NE.

The DAM and R/T prices at the CSC interface are used for NYISO.

External Controllable Line: Northport - Norwalk (New England)



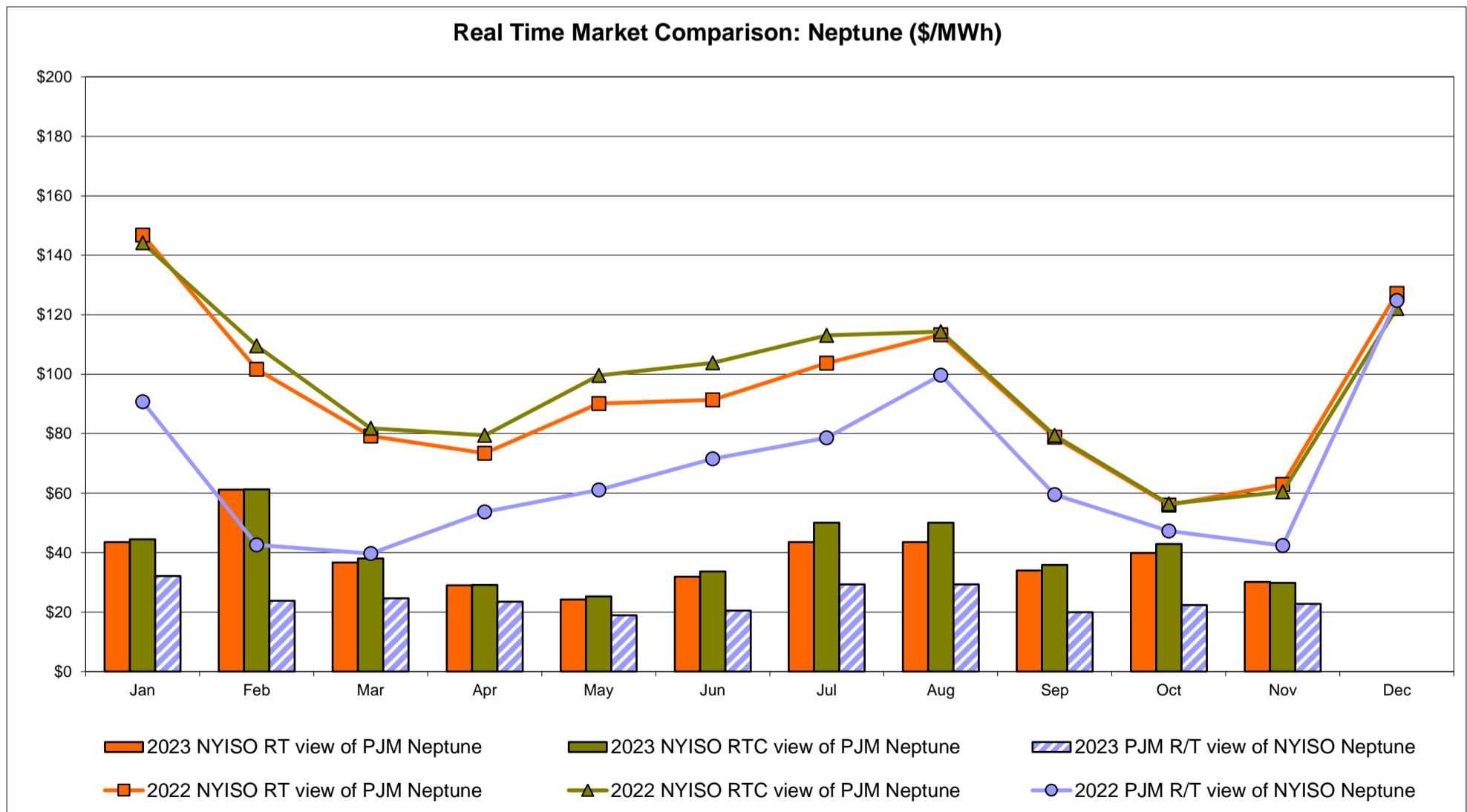
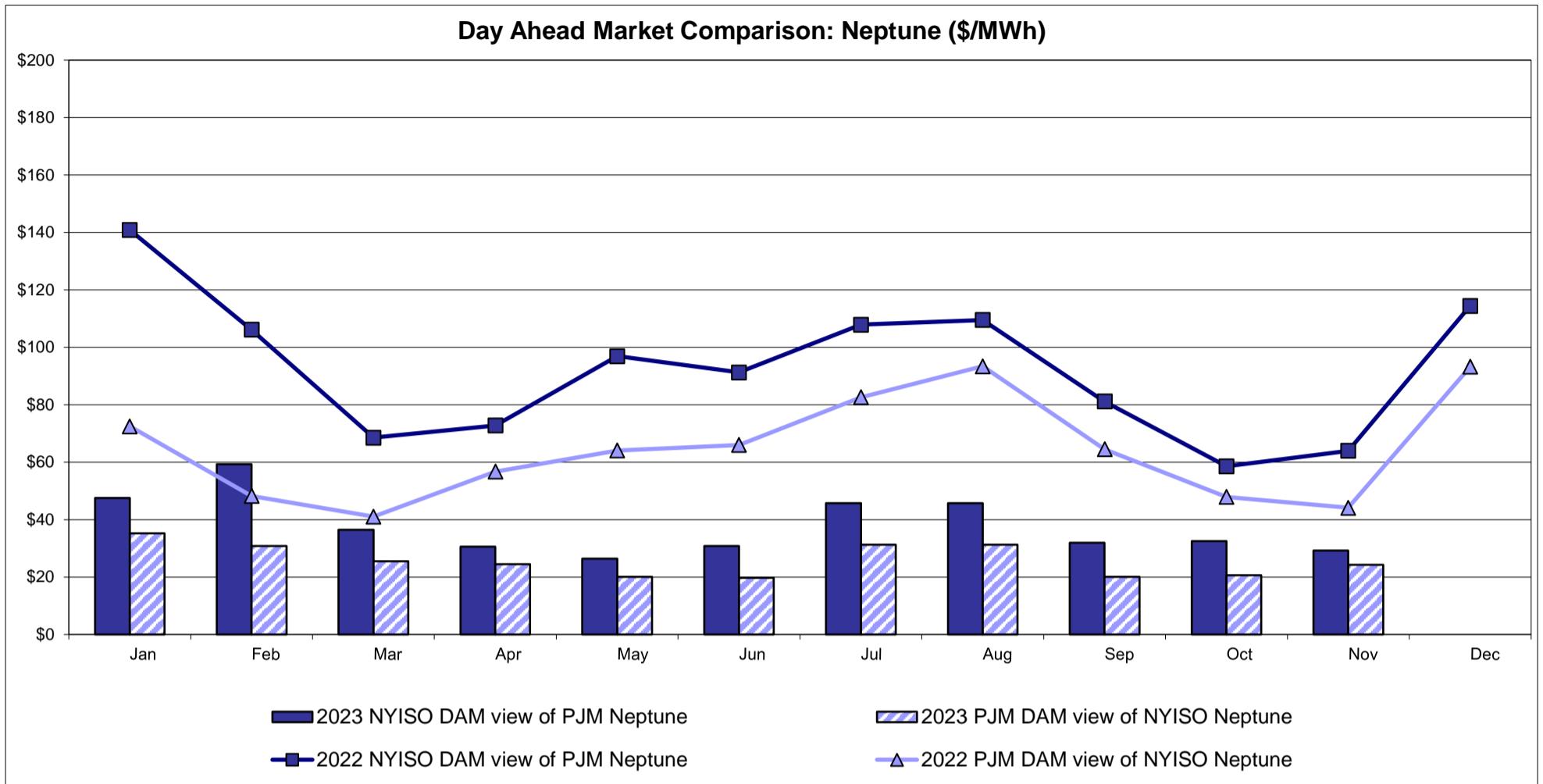
Note:

ISO-NE Forecast is an advisory posting @ 18:00 day before.

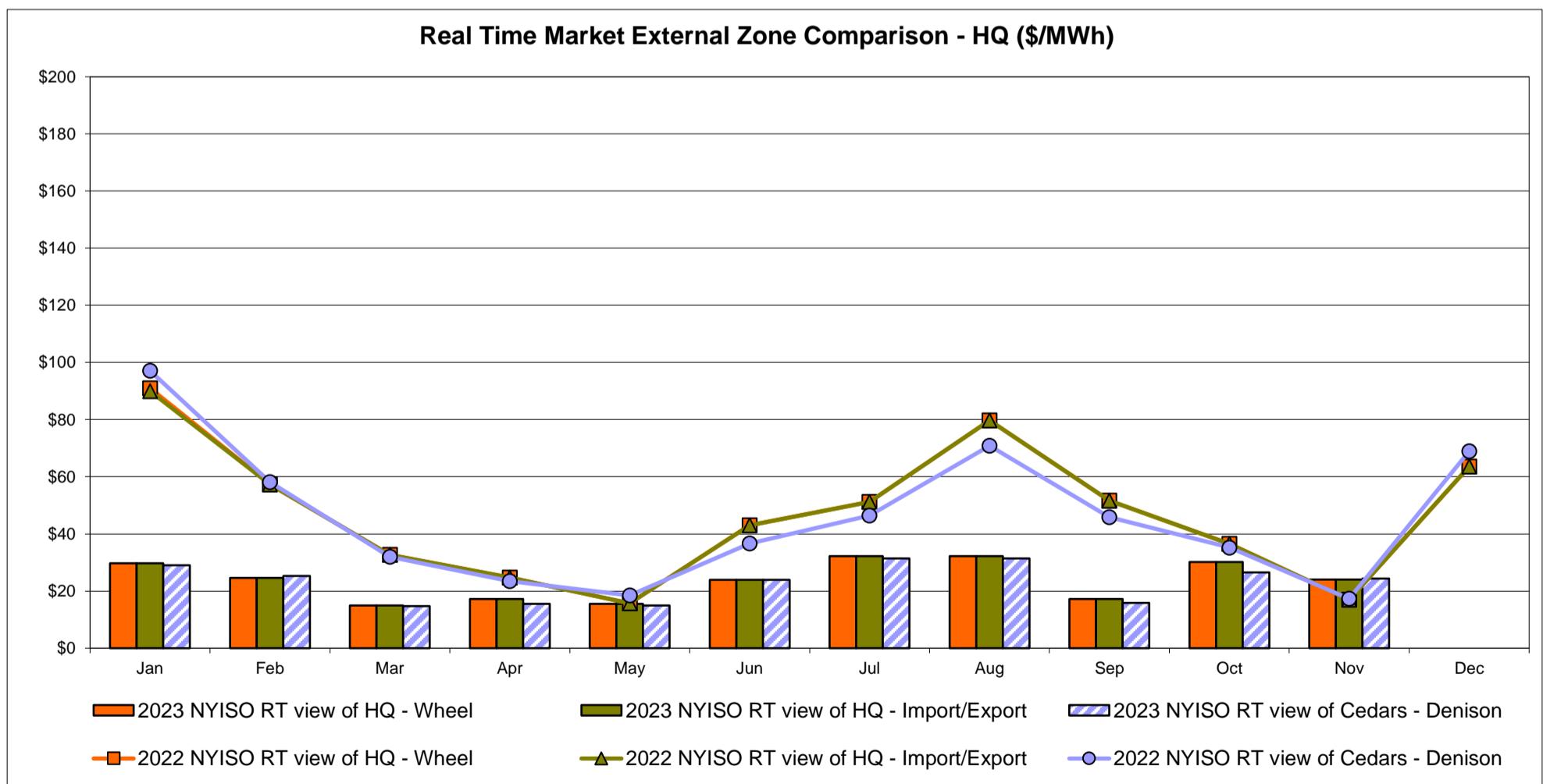
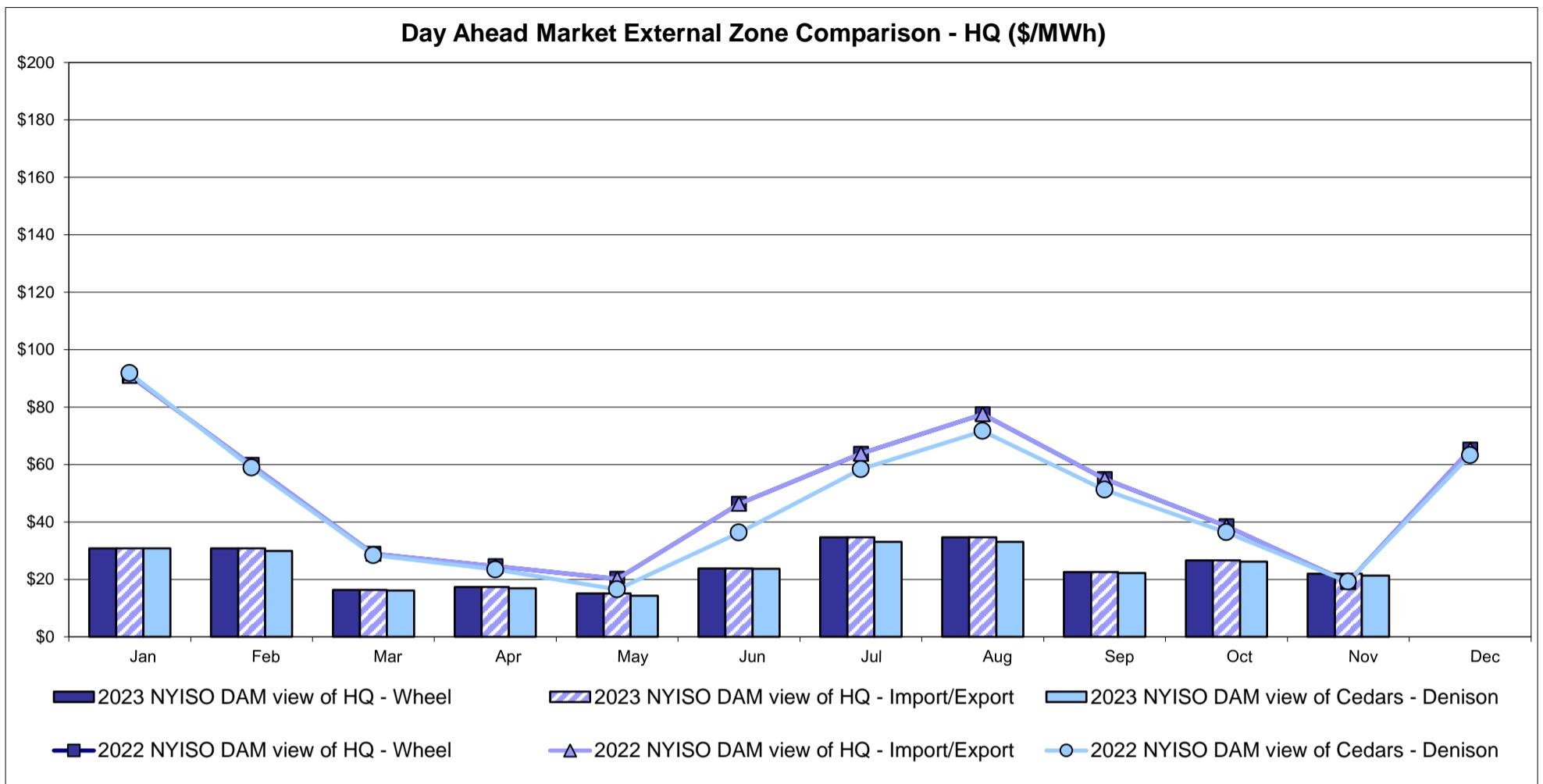
The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.

The DAM and R/T prices at the 1385 interface are used for NYISO.

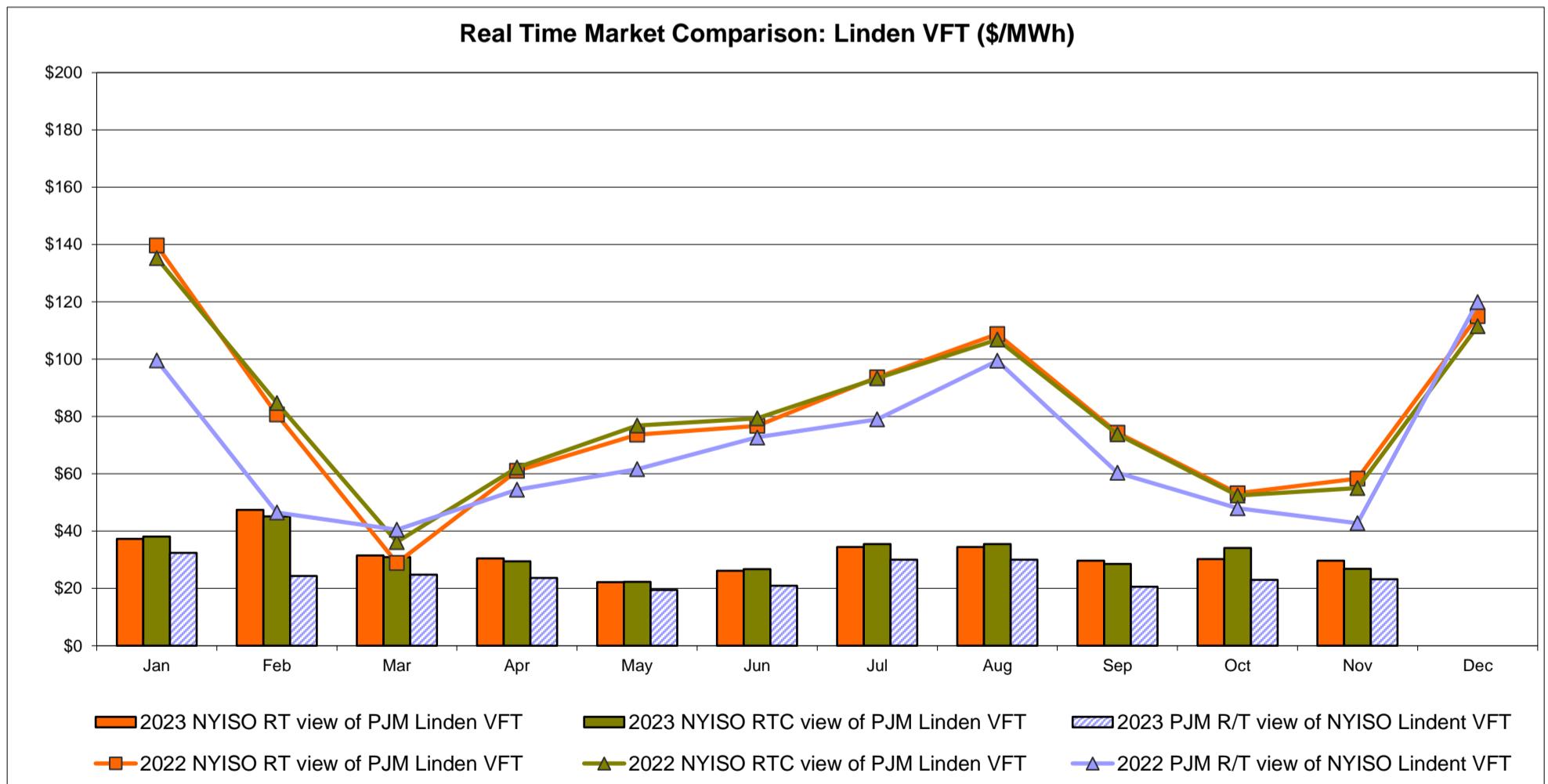
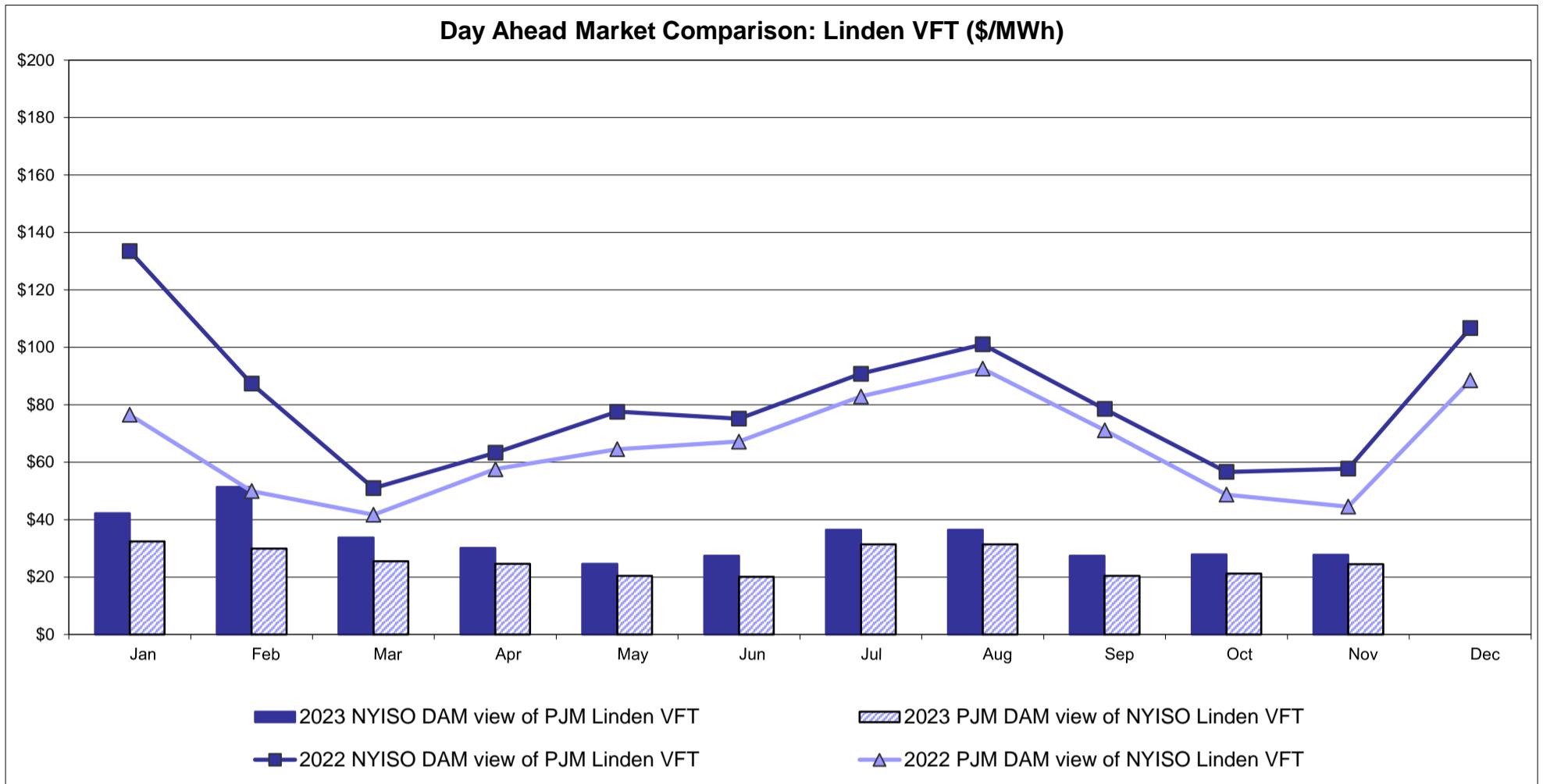
External Controllable Line: Neptune (PJM)



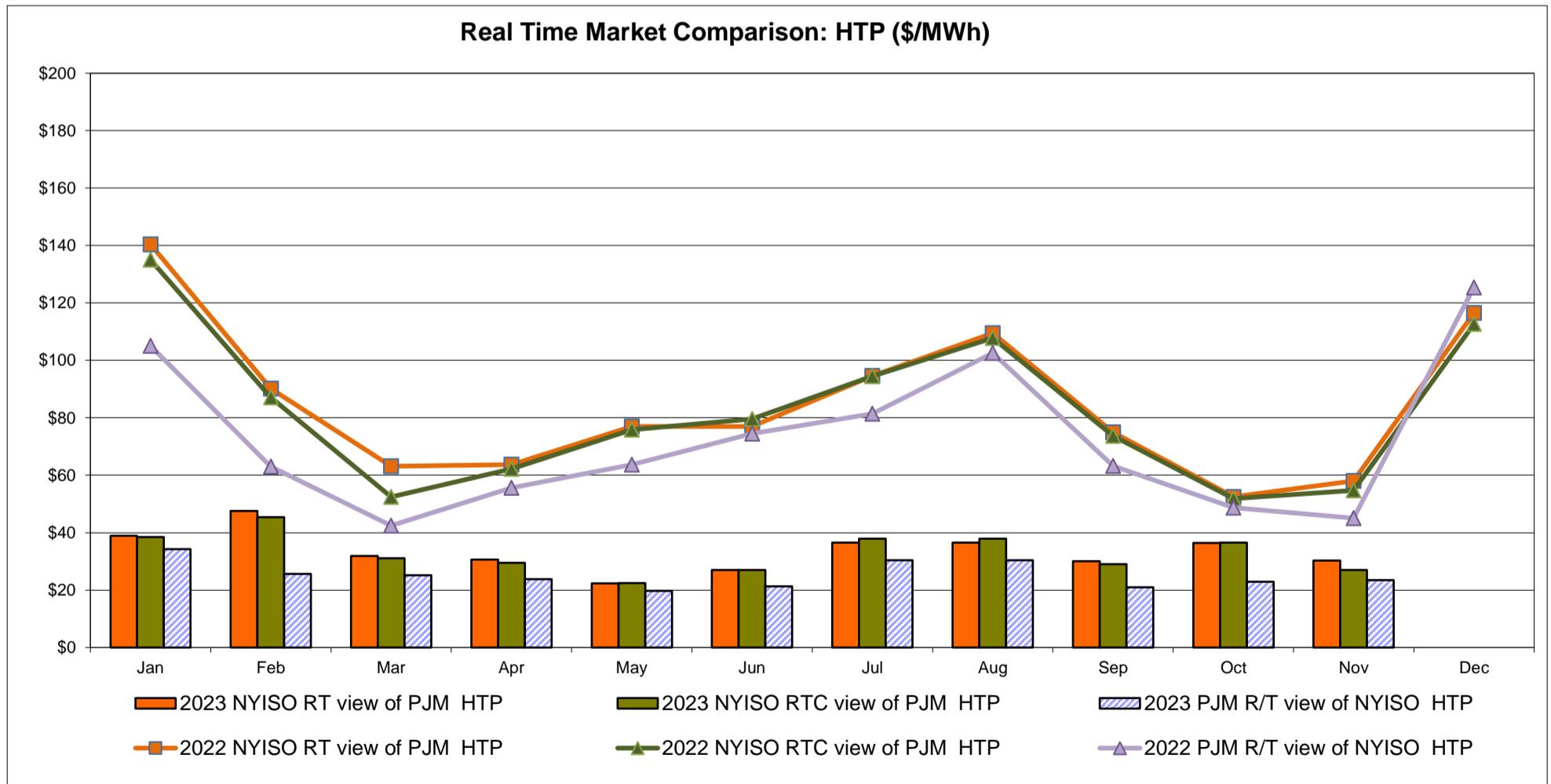
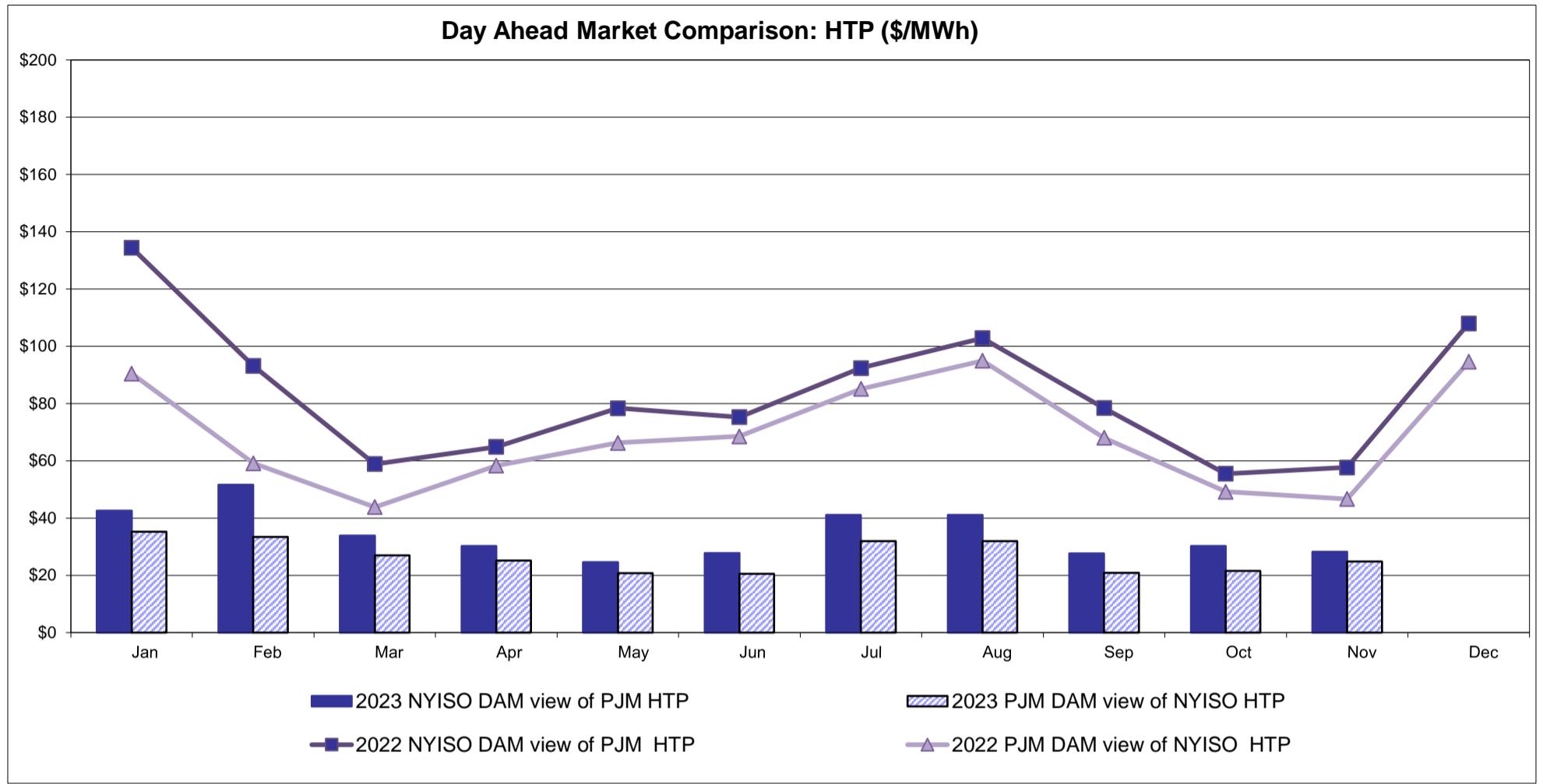
External Comparison Hydro-Quebec



External Controllable Line: Linden VFT (PJM)



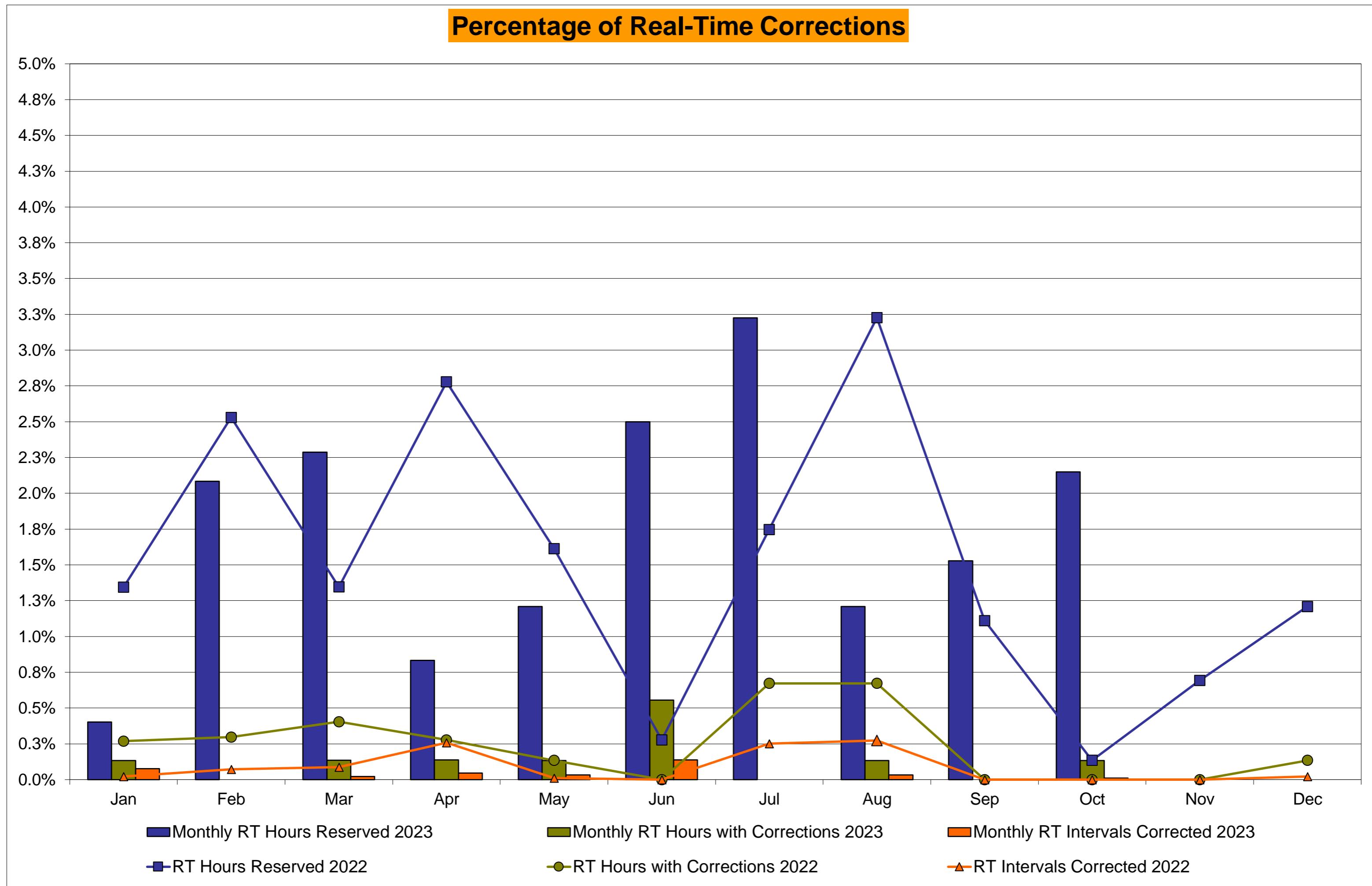
External Controllable Line: Hudson (PJM)



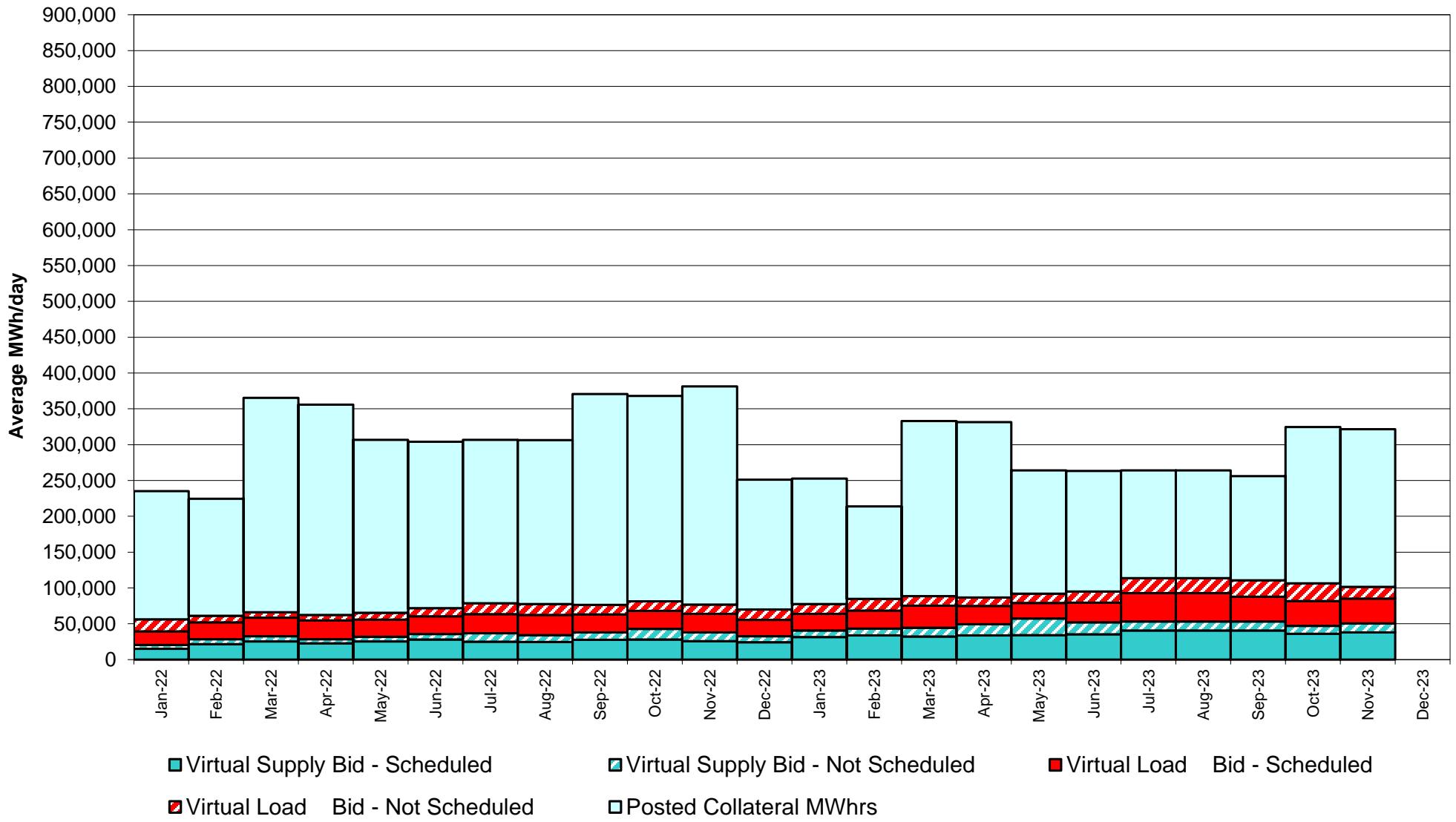
NYISO Real Time Price Correction Statistics

		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>2023</u>													
<u>Hour Corrections</u>													
Number of hours with corrections	in the month	1	0	1	1	1	4	0	1	0	1		
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744		
% of hours with corrections	in the month	0.13%	0.00%	0.13%	0.14%	0.13%	0.56%	0.00%	0.13%	0.00%	0.13%		
% of hours with corrections	year-to-date	0.13%	0.07%	0.09%	0.10%	0.11%	0.18%	0.16%	0.15%	0.14%	0.14%		
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	7	0	2	4	3	12	0	3	0	1		
Number of intervals	in the month	9,082	8,373	9,171	8,890	9,160	8,733	9,085	9,107	8,790	9,069		
% of intervals corrected	in the month	0.08%	0.00%	0.02%	0.04%	0.03%	0.14%	0.00%	0.03%	0.00%	0.01%		
% of intervals corrected	year-to-date	0.08%	0.04%	0.03%	0.04%	0.04%	0.05%	0.04%	0.04%	0.04%	0.04%		
<u>Hours Reserved</u>													
Number of hours reserved	in the month	3	14	17	6	9	18	24	9	11	16		
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744		
% of hours reserved	in the month	0.40%	2.08%	2.29%	0.83%	1.21%	2.50%	3.23%	1.21%	1.53%	2.15%		
% of hours reserved	year-to-date	0.40%	1.20%	1.57%	1.39%	1.35%	1.54%	1.79%	1.71%	1.69%	1.74%		
<u>Days to Correction *</u>													
Avg. number of days to correction	in the month	3.00	0.00	2.00	2.00	2.00	3.00	0.00	3.00	0.00	3.00		
Avg. number of days to correction	year-to-date	3.00	3.00	2.50	2.33	2.20	2.33	2.33	2.43	2.43	2.50		
<u>Days Without Corrections</u>													
Days without corrections	in the month	30	28	30	29	29	29	31	30	30	30		
Days without corrections	year-to-date	30	58	88	117	146	175	206	236	266	296		
<u>2022</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Hour Corrections</u>													
Number of hours with corrections	in the month	2	2	3	2	1	0	5	5	0	0	0	1
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours with corrections	in the month	0.27%	0.30%	0.40%	0.28%	0.13%	0.00%	0.67%	0.67%	0.00%	0.00%	0.00%	0.13%
% of hours with corrections	year-to-date	0.27%	0.28%	0.32%	0.31%	0.28%	0.23%	0.29%	0.34%	0.31%	0.27%	0.25%	0.24%
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	2	6	8	23	1	0	23	25	0	0	0	2
Number of intervals	in the month	9,258	8,338	9,118	8,908	9,181	8,864	9,140	9,145	8,825	9,097	8,857	9,317
% of intervals corrected	in the month	0.02%	0.07%	0.09%	0.26%	0.01%	0.00%	0.25%	0.27%	0.00%	0.00%	0.00%	0.02%
% of intervals corrected	year-to-date	0.02%	0.05%	0.06%	0.11%	0.09%	0.07%	0.10%	0.12%	0.11%	0.10%	0.09%	0.08%
<u>Hours Reserved</u>													
Number of hours reserved	in the month	10	17	10	20	12	2	13	24	8	1	5	9
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours reserved	in the month	1.34%	2.53%	1.35%	2.78%	1.61%	0.28%	1.75%	3.23%	1.11%	0.13%	0.69%	1.21%
% of hours reserved	year-to-date	1.34%	1.91%	1.71%	1.98%	1.90%	1.63%	1.65%	1.85%	1.77%	1.60%	1.52%	1.50%
<u>Days to Correction *</u>													
Avg. number of days to correction	in the month	3.00	2.00	2.50	3.00	2.00	0.00	2.67	2.75	0.00	0.00	0.00	3.00
Avg. number of days to correction	year-to-date	3.00	2.50	2.50	2.60	2.50	2.50	2.56	2.62	2.62	2.62	2.62	2.64
<u>Days Without Corrections</u>													
Days without corrections	in the month	30	27	29	29	30	30	28	27	30	31	30	30
Days without corrections	year-to-date	30	57	86	115	145	175	203	230	260	291	321	351

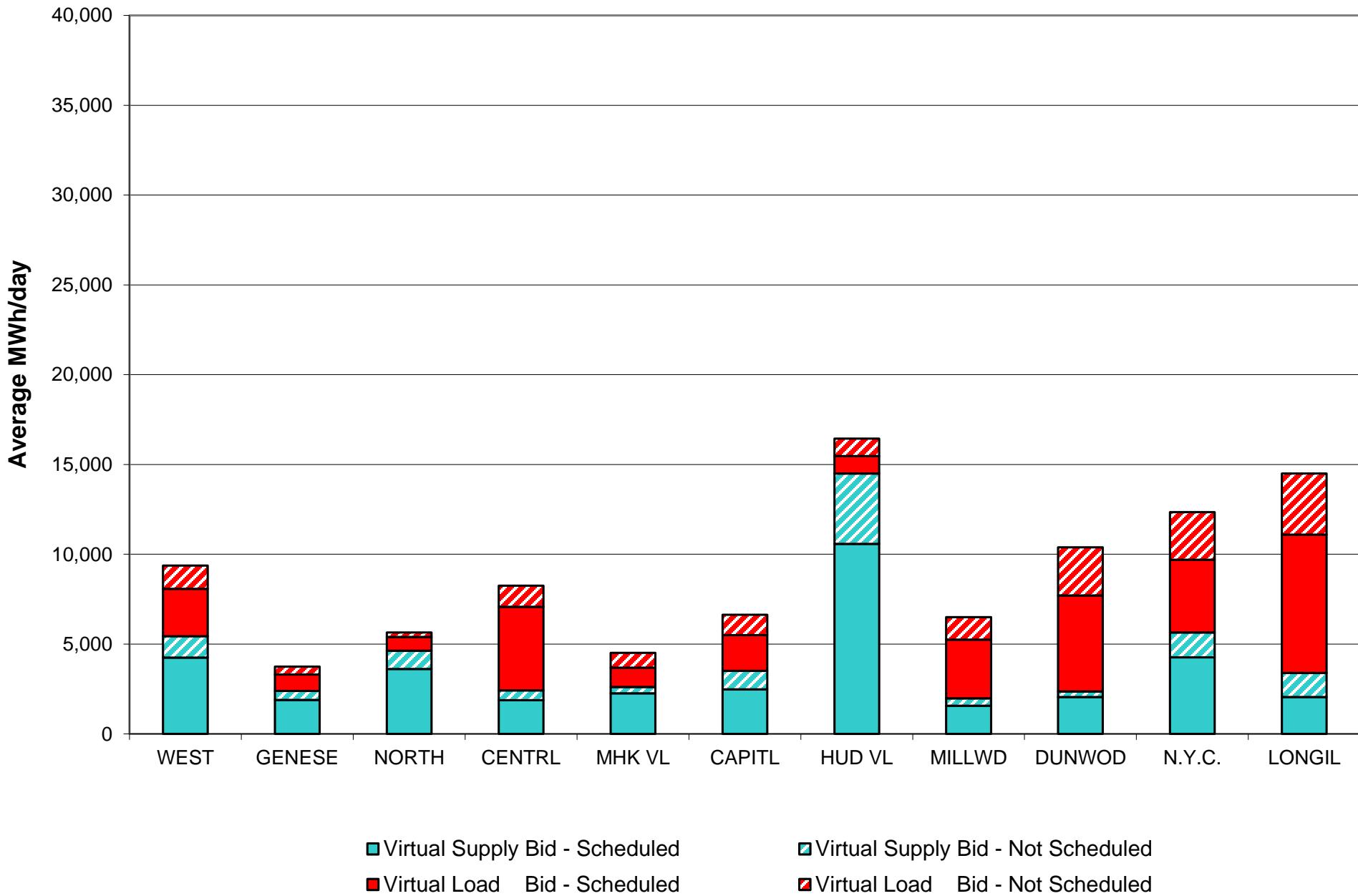
*Calendar days from reservation date; for June 2018 forward, business days from market date



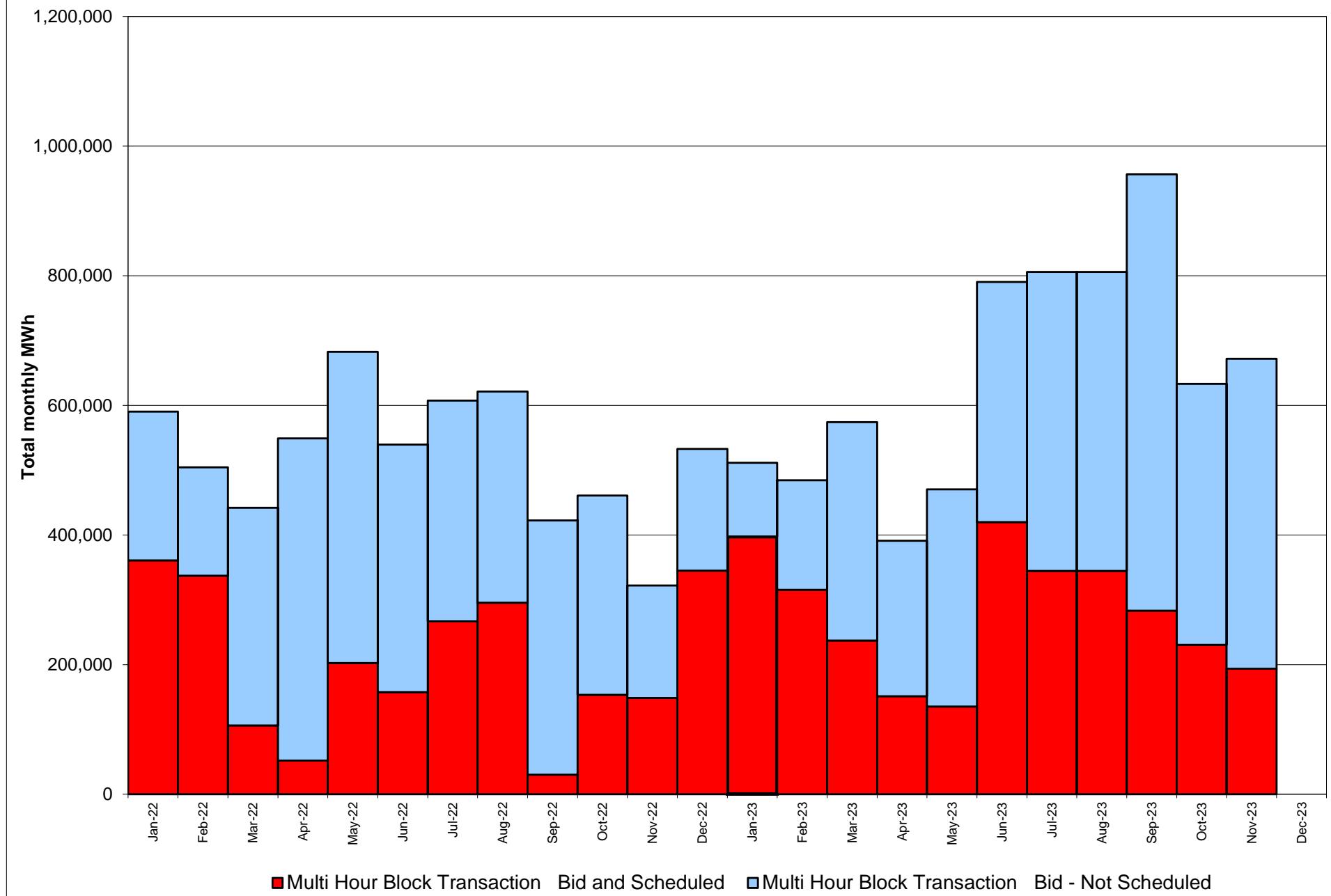
NYISO Virtual Trading
Average MWh per day

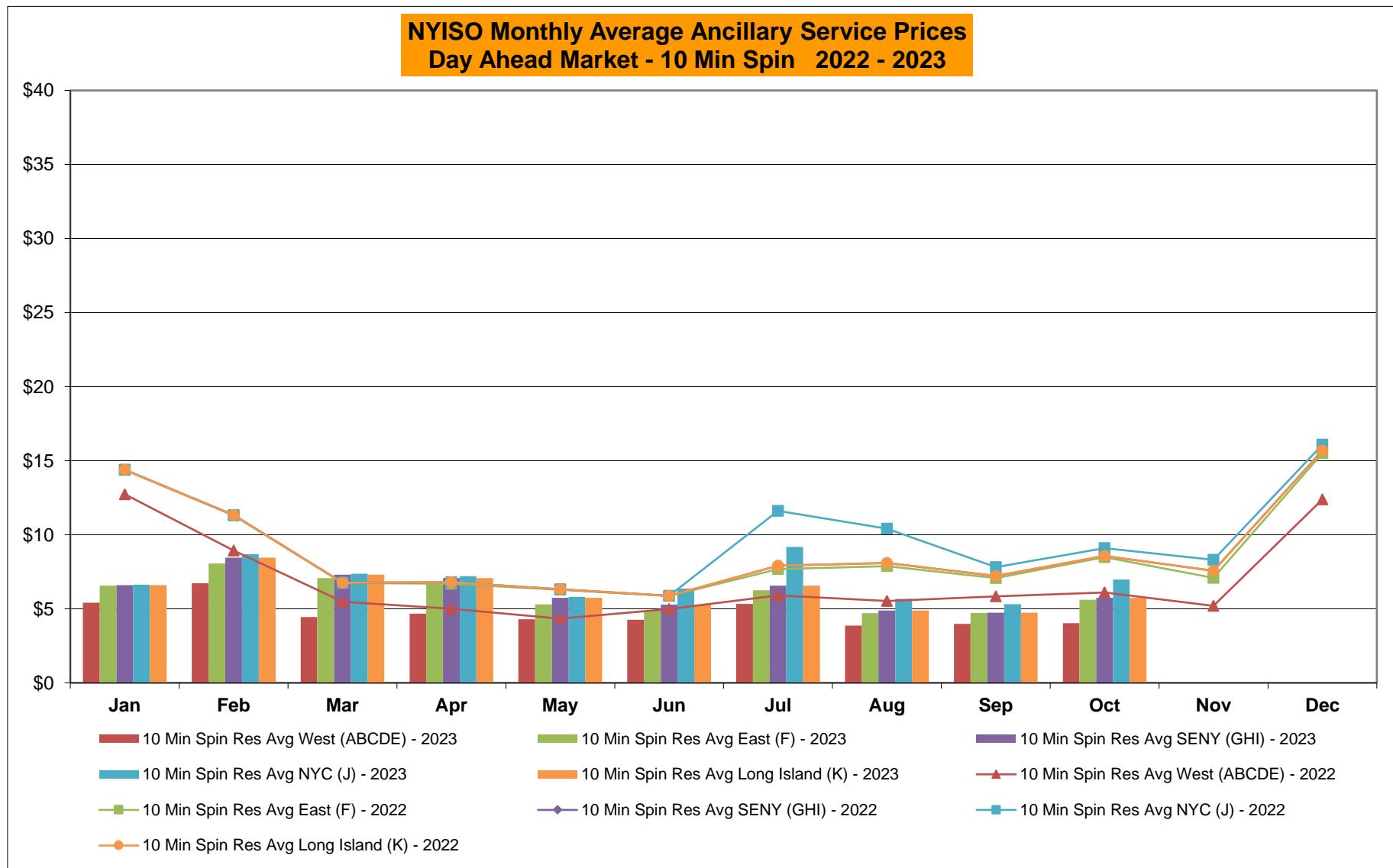


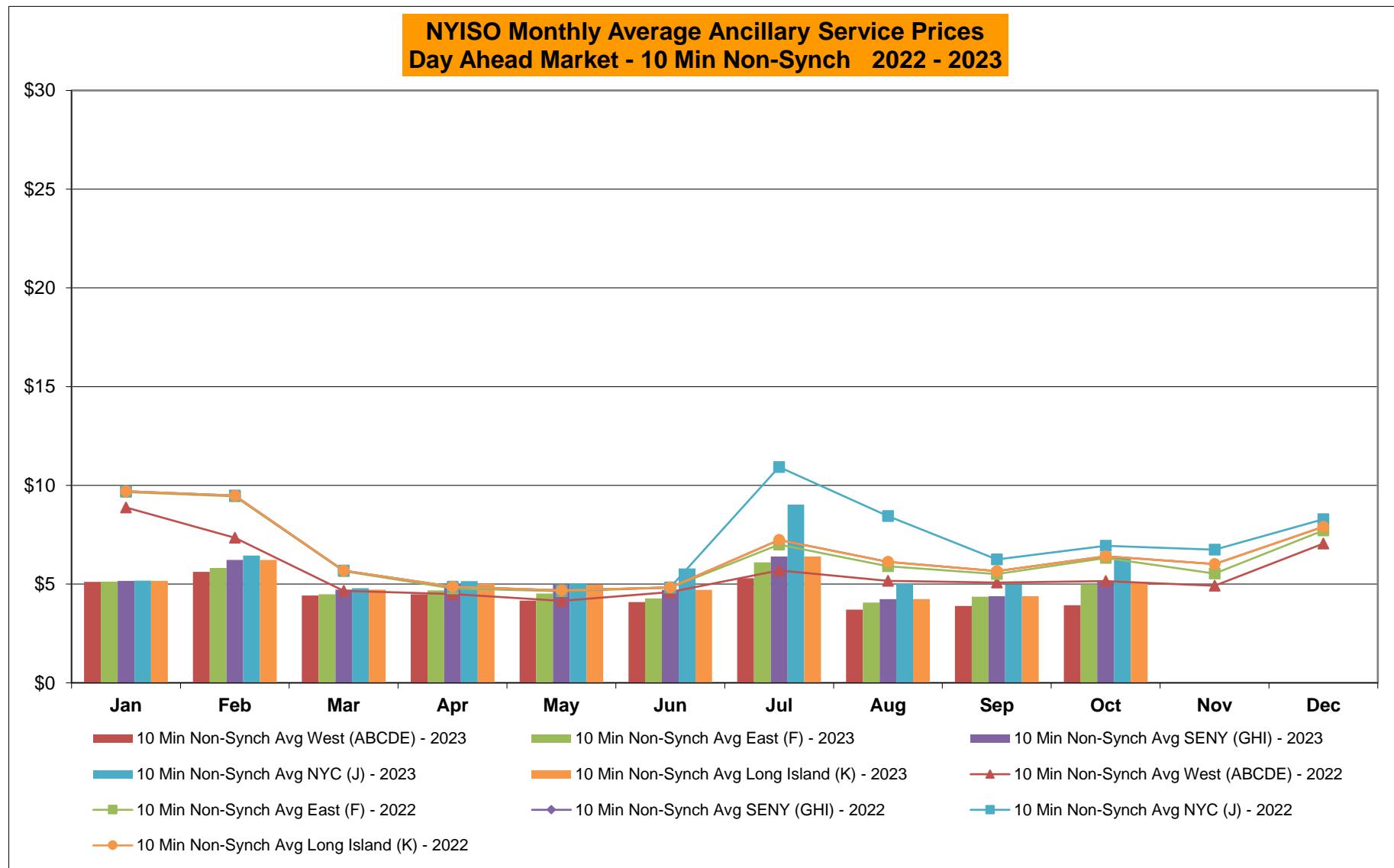
**Virtual Load and Supply Zonal Statistics
through October 31, 2023**

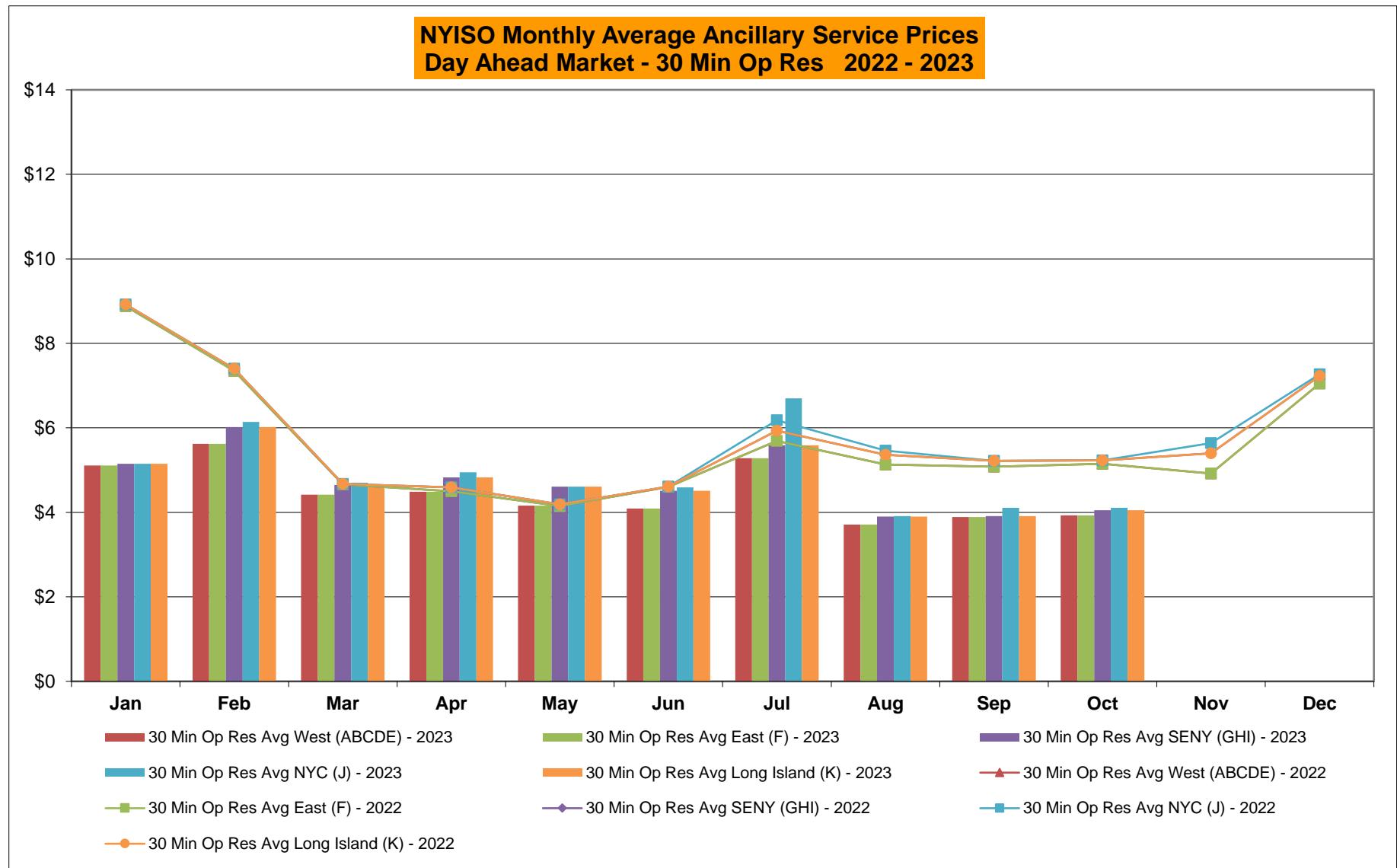


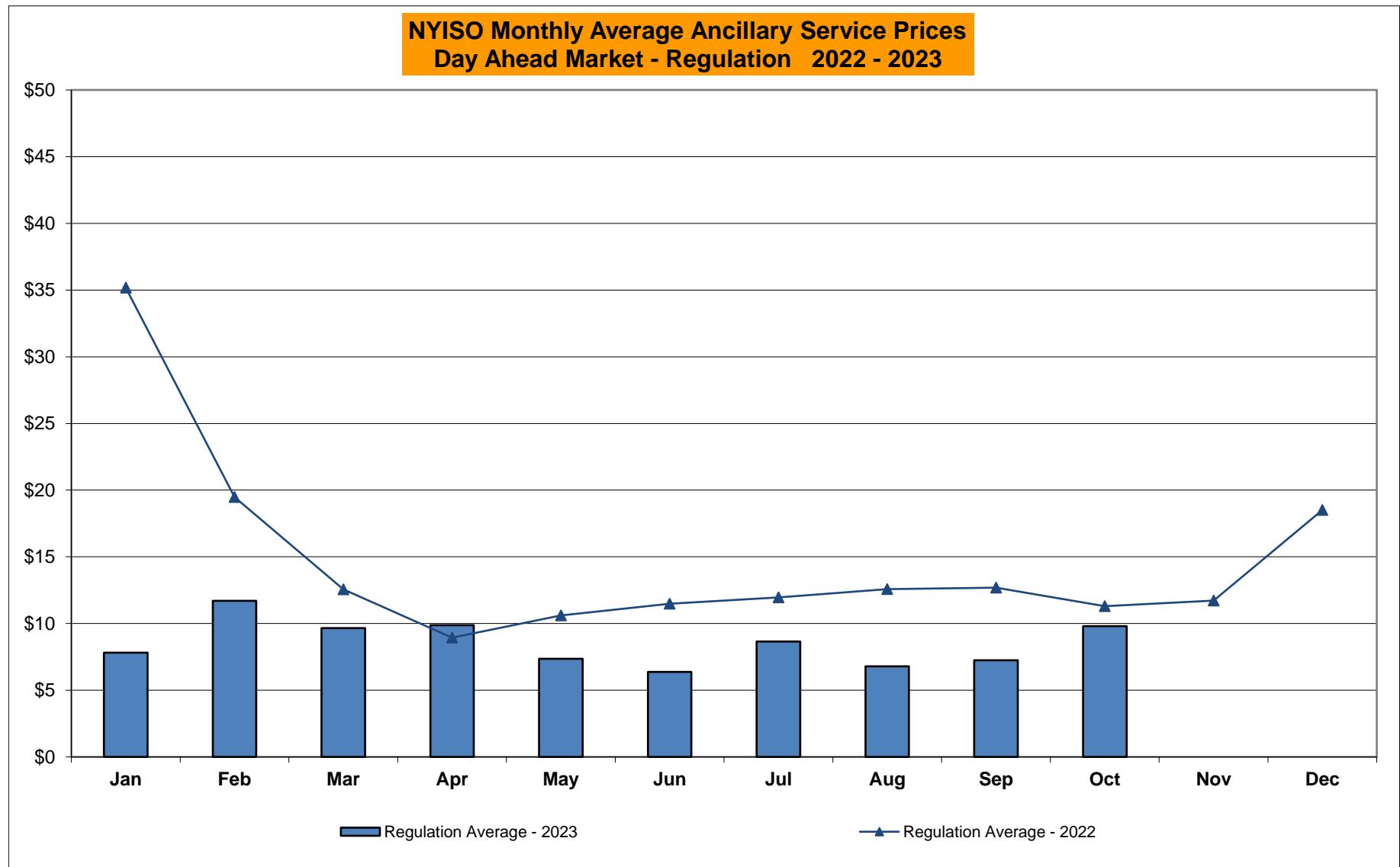
NYISO Multi Hour Block Transactions Monthly Total MWh

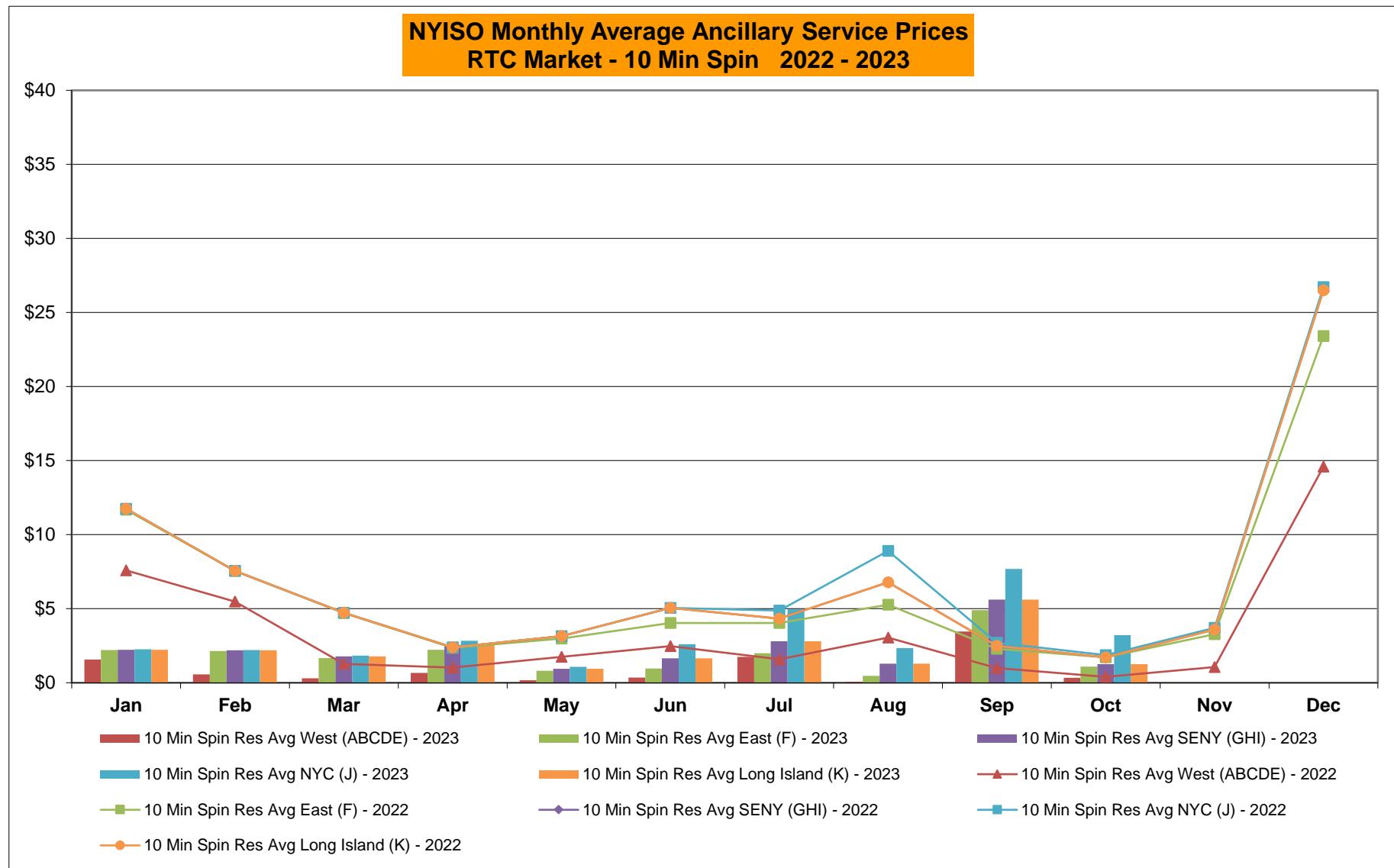


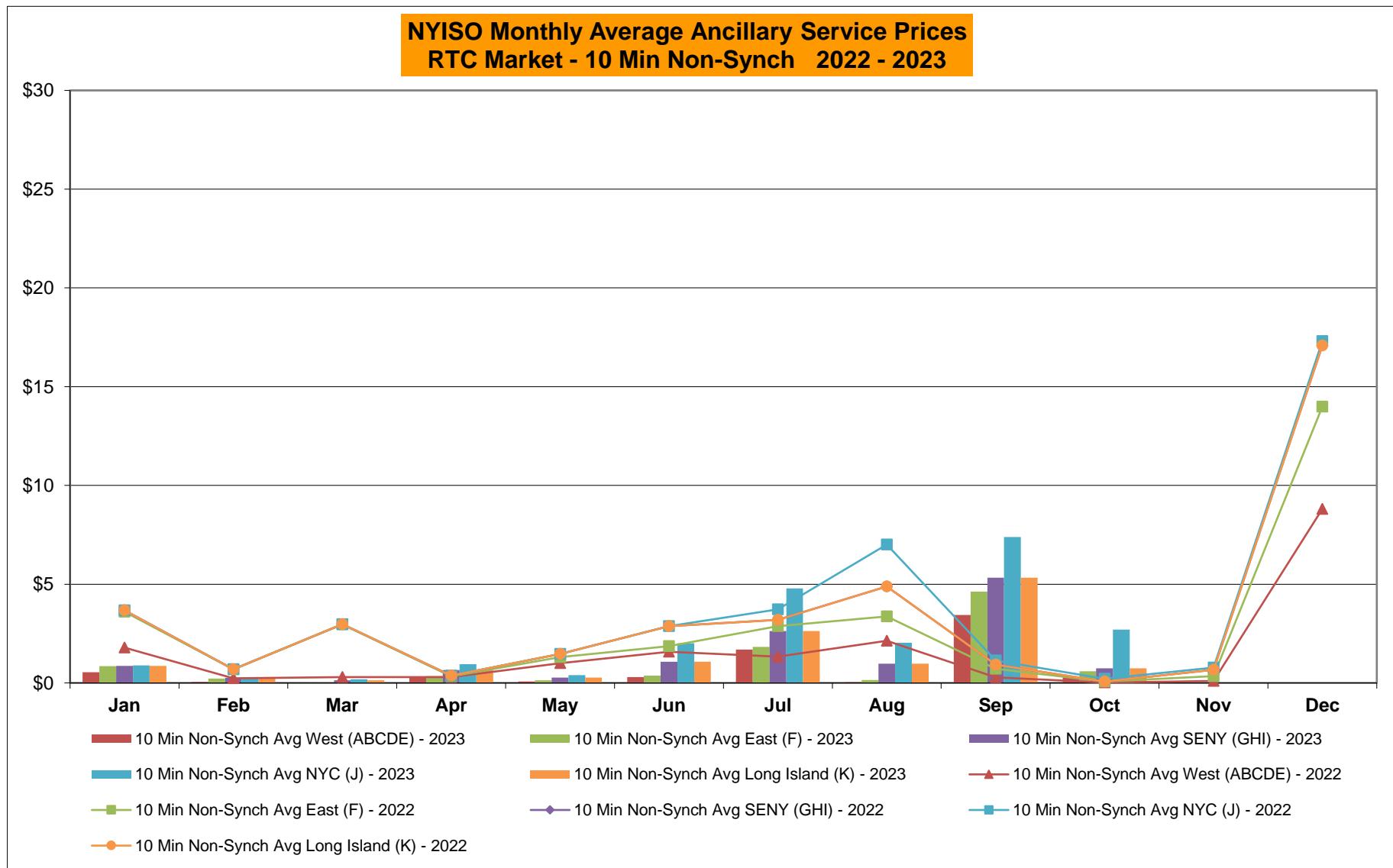


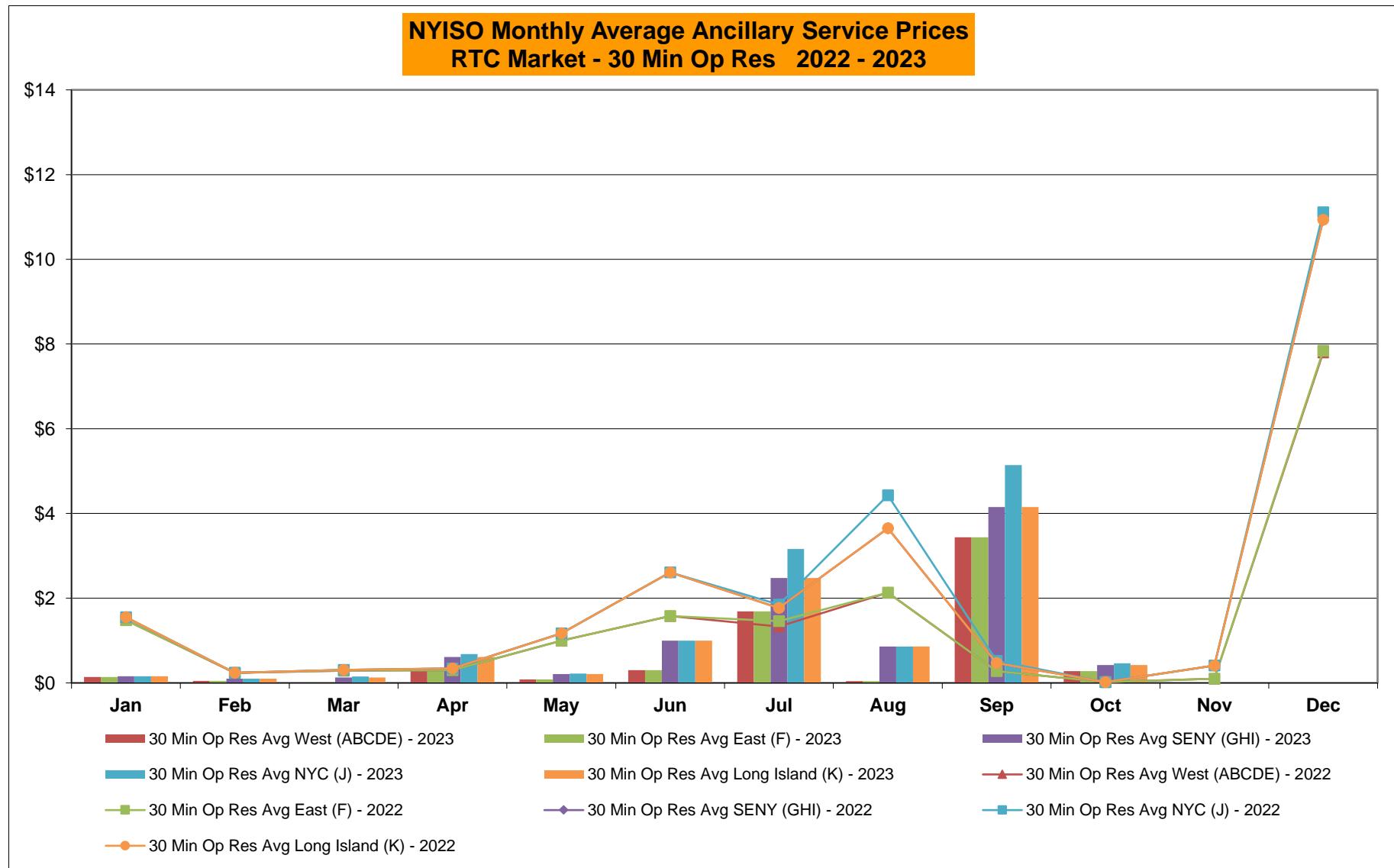


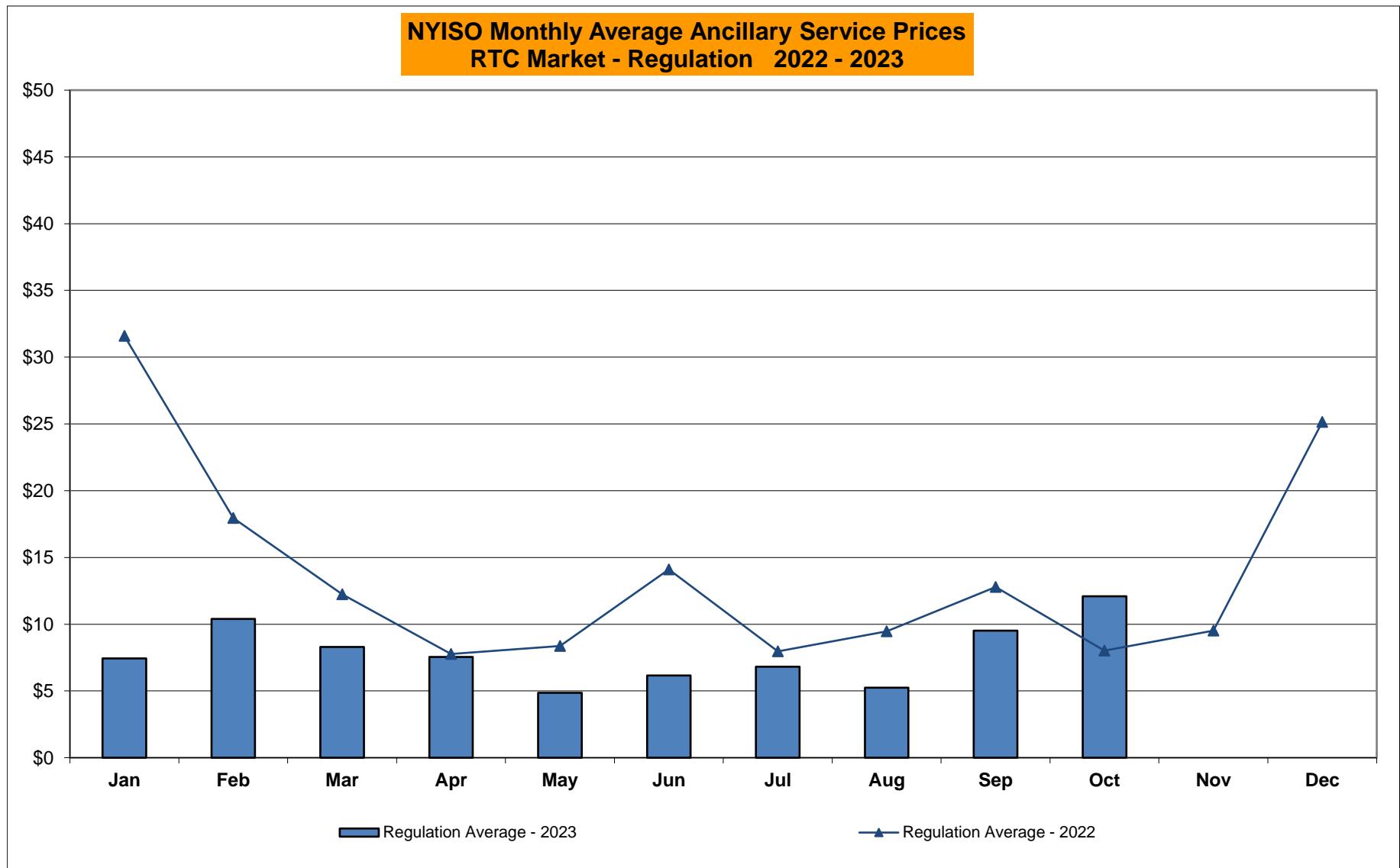




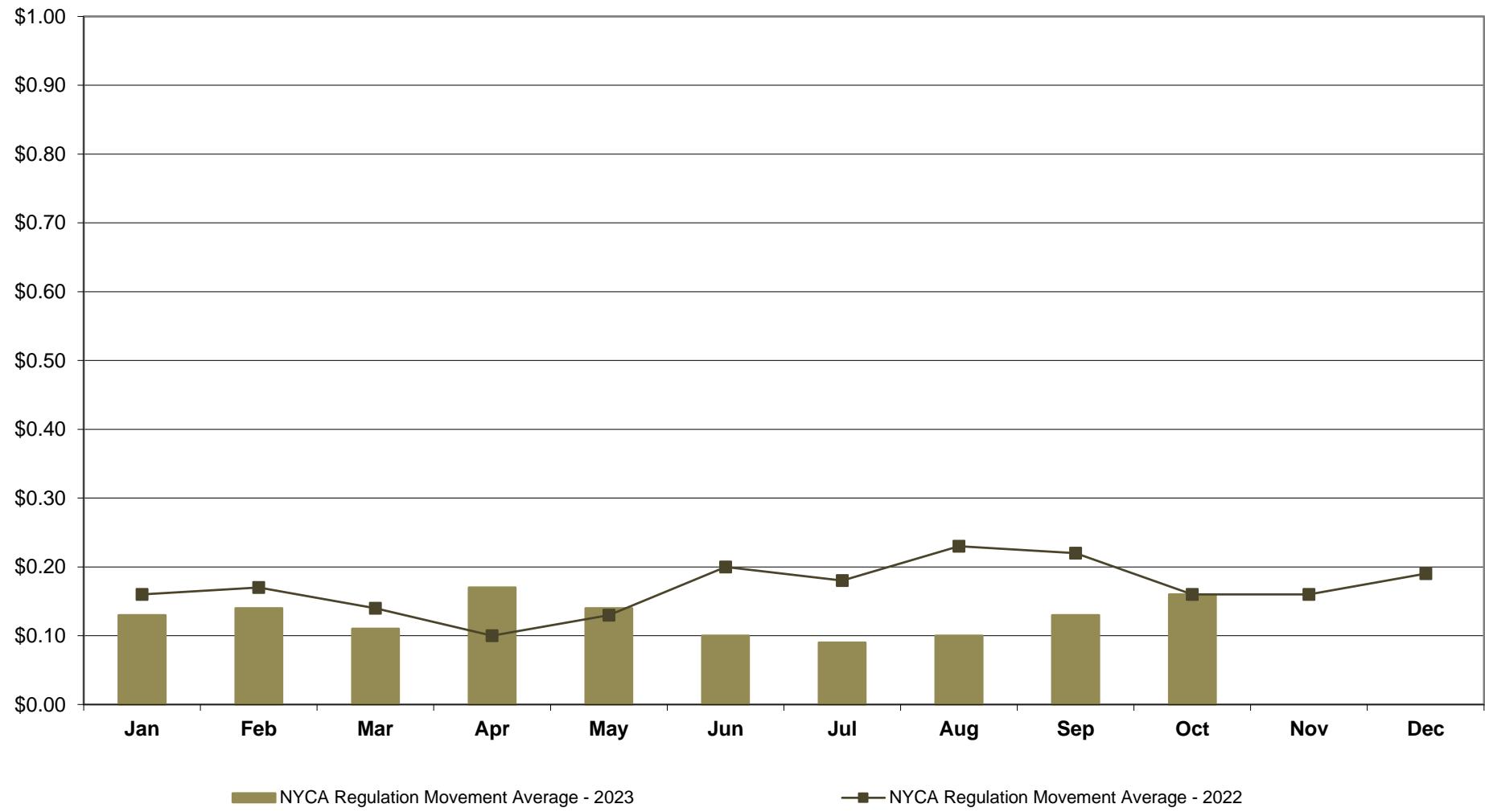


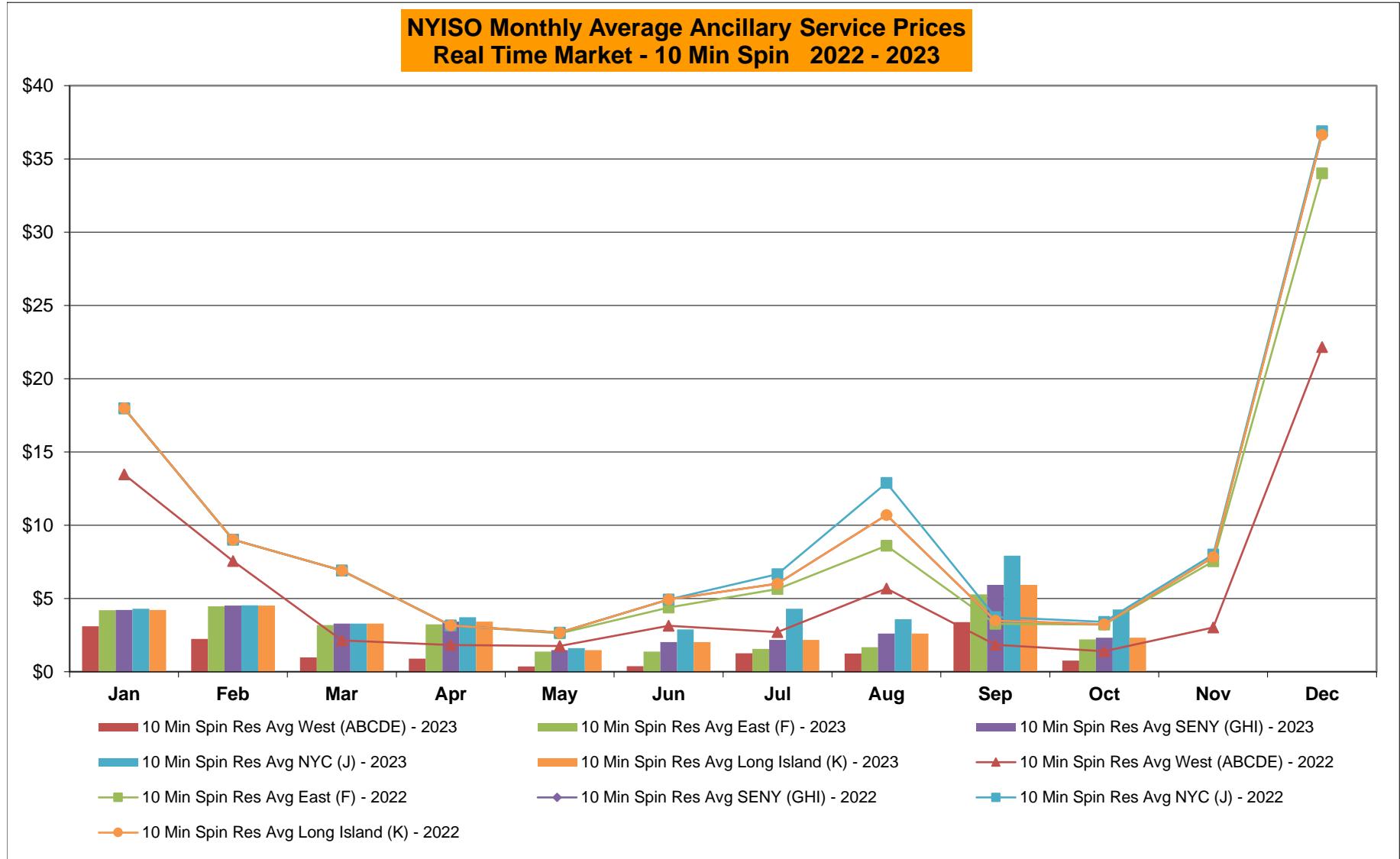


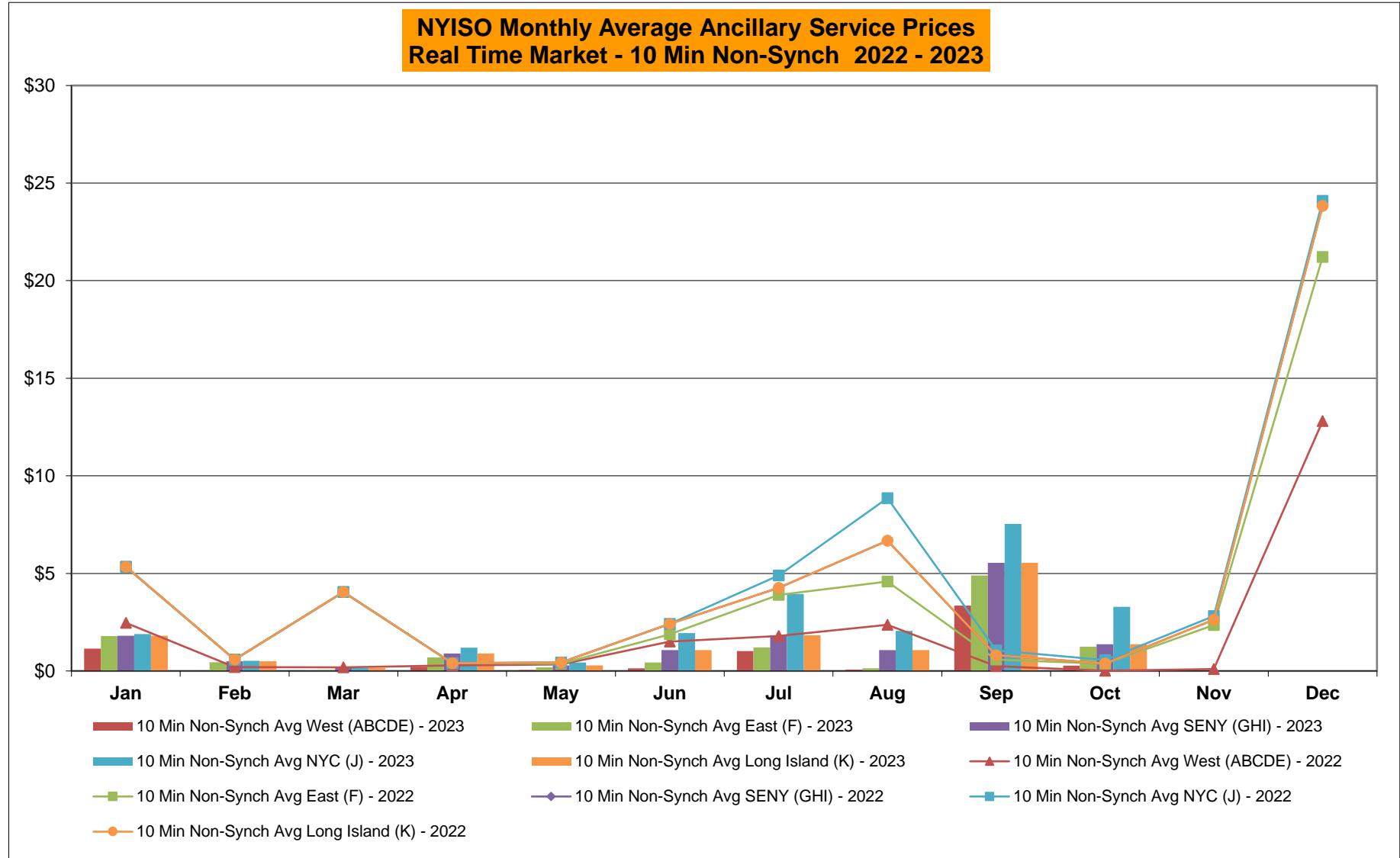


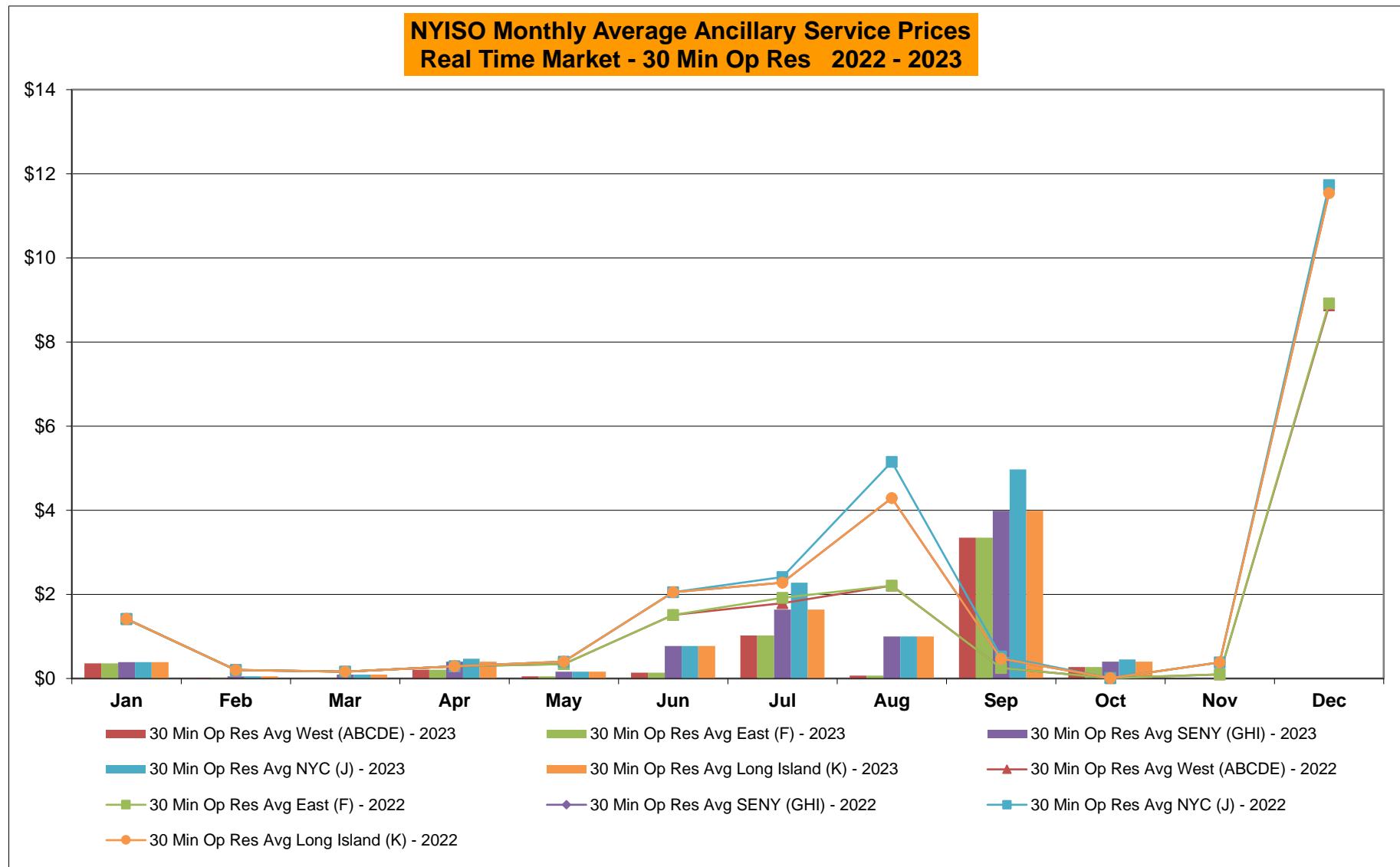


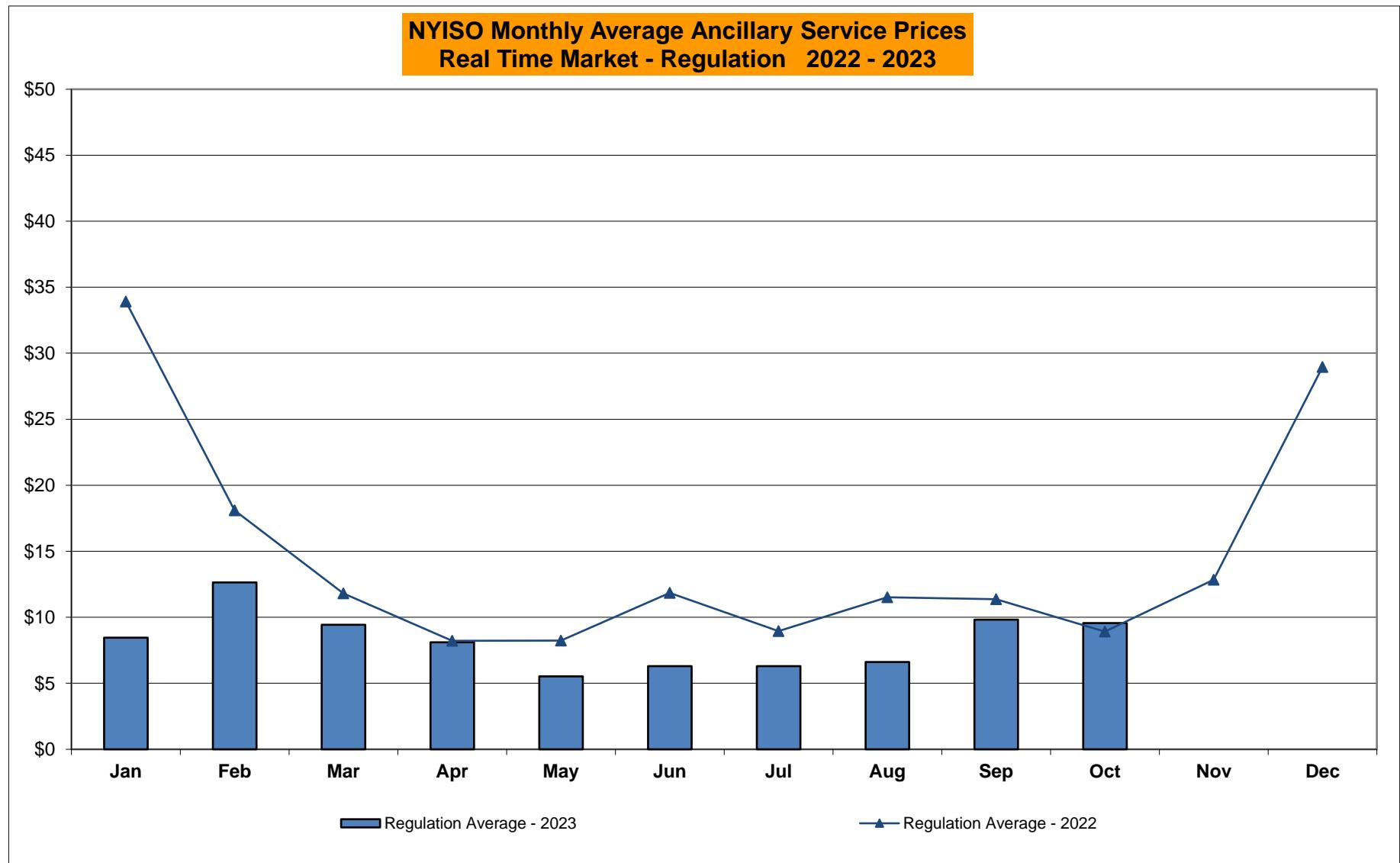
**NYISO Monthly Average Ancillary Service Prices
RTC Market - Regulation Movement 2022 - 2023**



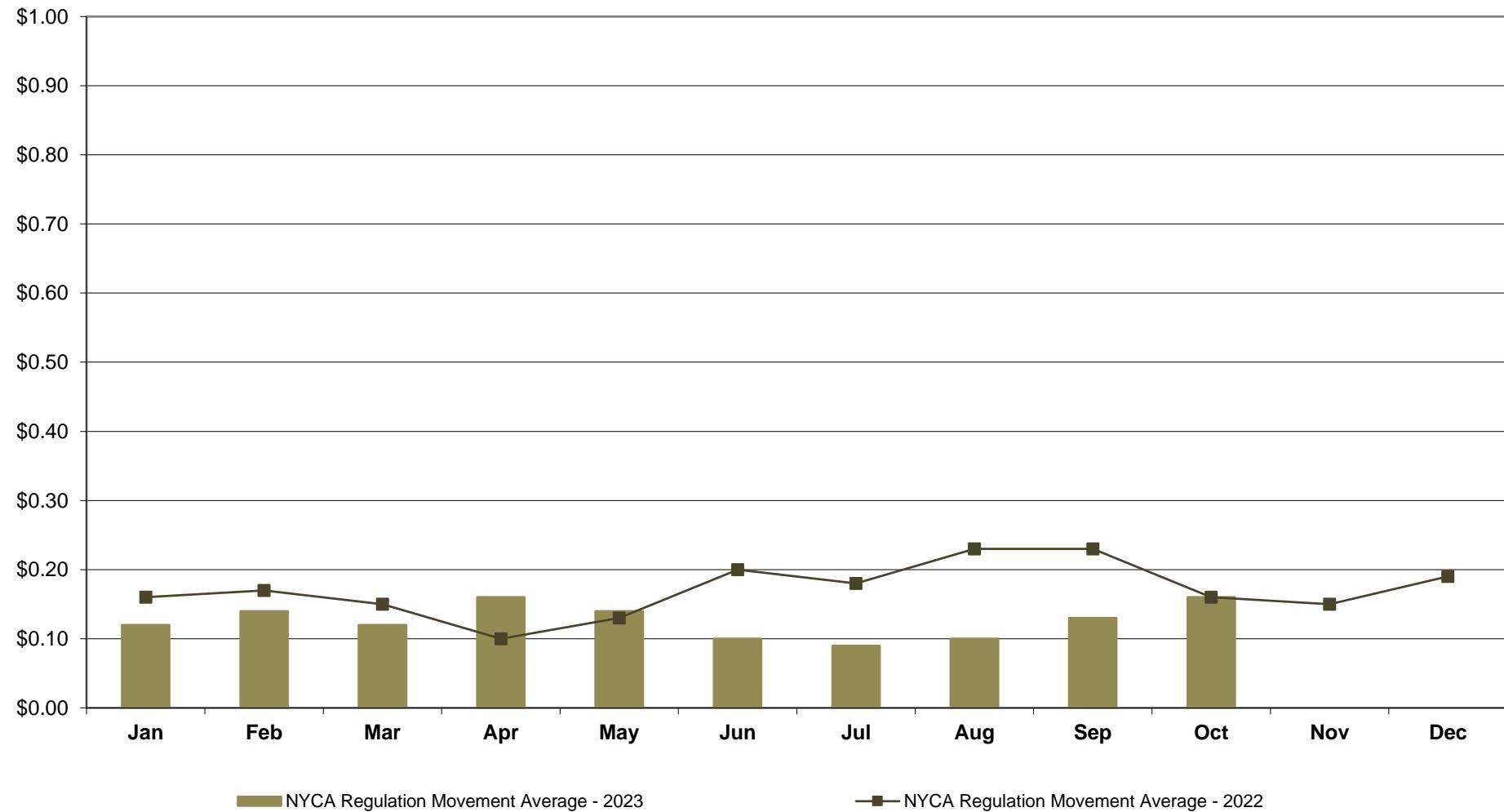








**NYISO Monthly Average Ancillary Service Prices
Real Time Market - Regulation Movement 2022 - 2023**



NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - DAM

2023	January	February	March	April	May	June	July	August	September	October	November	December
<u>Day Ahead Market</u>												
10 Min Spin Long Island (K)	6.60	8.46	7.31	7.07	5.74	5.29	6.56	4.89	4.74	5.75		
10 Min Spin NYC (J)	6.63	8.68	7.38	7.20	5.81	6.37	9.18	5.68	5.31	6.98		
10 Min Spin SENY (GHI)	6.60	8.46	7.31	7.07	5.74	5.29	6.56	4.89	4.74	5.75		
10 Min Spin East (F)	6.56	8.06	7.07	6.73	5.30	4.87	6.25	4.70	4.72	5.62		
10 Min Spin West (ABCDE)	5.41	6.73	4.45	4.67	4.29	4.27	5.34	3.87	3.99	4.04		
10 Min Non Synch Long Island (K)	5.16	6.22	4.72	5.02	4.97	4.71	6.40	4.24	4.38	5.11		
10 Min Non Synch NYC (J)	5.18	6.44	4.79	5.15	5.04	5.79	9.03	5.03	4.96	6.35		
10 Min Non Synch SENY (GHI)	5.16	6.22	4.72	5.02	4.97	4.71	6.40	4.24	4.38	5.11		
10 Min Non Synch East (F)	5.12	5.82	4.48	4.68	4.52	4.28	6.10	4.06	4.36	4.99		
10 Min Non Synch West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.30	3.71	3.89	3.93		
30 Min Long Island (K)	5.15	6.02	4.65	4.83	4.61	4.51	5.59	3.90	3.91	4.05		
30 Min NYC (J)	5.15	6.14	4.70	4.95	4.61	4.59	6.70	3.91	4.11	4.11		
30 Min SENY (GHI)	5.15	6.02	4.65	4.83	4.61	4.51	5.59	3.90	3.91	4.05		
30 Min East (F)	5.11	5.62	4.42	4.49	4.16	4.09	5.28	3.71	3.89	3.93		
30 Min West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.28	3.71	3.89	3.93		
Regulation	7.82	11.71	9.65	9.88	7.36	6.37	8.66	6.79	7.24	9.80		
2022	January	February	March	April	May	June	July	August	September	October	November	December
<u>Day Ahead Market</u>												
10 Min Spin Long Island (K)	14.40	11.34	6.76	6.79	6.32	5.88	7.92	8.10	7.22	8.57	7.57	15.69
10 Min Spin NYC (J)	15.32	12.52	7.29	6.80	7.01	6.12	11.61	10.41	7.81	9.10	8.31	16.08
10 Min Spin SENY (GHI)	14.40	11.34	6.76	6.79	6.32	5.88	7.92	8.10	7.22	8.57	7.57	15.69
10 Min Spin East (F)	14.37	11.30	6.74	6.70	6.28	5.87	7.68	7.88	7.07	8.49	7.10	15.51
10 Min Spin West (ABCDE)	12.74	8.93	5.48	5.01	4.34	4.99	5.91	5.53	5.84	6.11	5.20	12.39
10 Min Non Synch Long Island (K)	9.70	9.48	5.68	4.87	4.68	4.83	7.24	6.13	5.65	6.41	6.01	7.90
10 Min Non Synch NYC (J)	10.61	10.66	6.20	4.89	5.38	5.07	10.93	8.44	6.25	6.94	6.74	8.29
10 Min Non Synch SENY (GHI)	9.70	9.48	5.68	4.87	4.68	4.83	7.24	6.13	5.65	6.41	6.01	7.90
10 Min Non Synch East (F)	9.66	9.44	5.66	4.78	4.64	4.82	7.00	5.90	5.51	6.32	5.53	7.72
10 Min Non Synch West (ABCDE)	8.88	7.35	4.66	4.50	4.15	4.60	5.69	5.16	5.08	5.15	4.92	7.05
30 Min Long Island (K)	8.92	7.40	4.67	4.59	4.19	4.61	5.93	5.36	5.22	5.23	5.40	7.23
30 Min NYC (J)	8.95	7.42	4.67	4.59	4.21	4.61	6.18	5.46	5.22	5.23	5.64	7.27
30 Min SENY (GHI)	8.92	7.40	4.67	4.59	4.19	4.61	5.93	5.36	5.22	5.23	5.40	7.23
30 Min East (F)	8.88	7.35	4.66	4.50	4.15	4.60	5.69	5.13	5.08	5.15	4.92	7.05
30 Min West (ABCDE)	8.88	7.35	4.66	4.50	4.15	4.60	5.69	5.13	5.08	5.15	4.92	7.05
Regulation	35.17	19.48	12.56	8.94	10.61	11.49	11.96	12.58	12.68	11.31	11.72	18.51

NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RTC

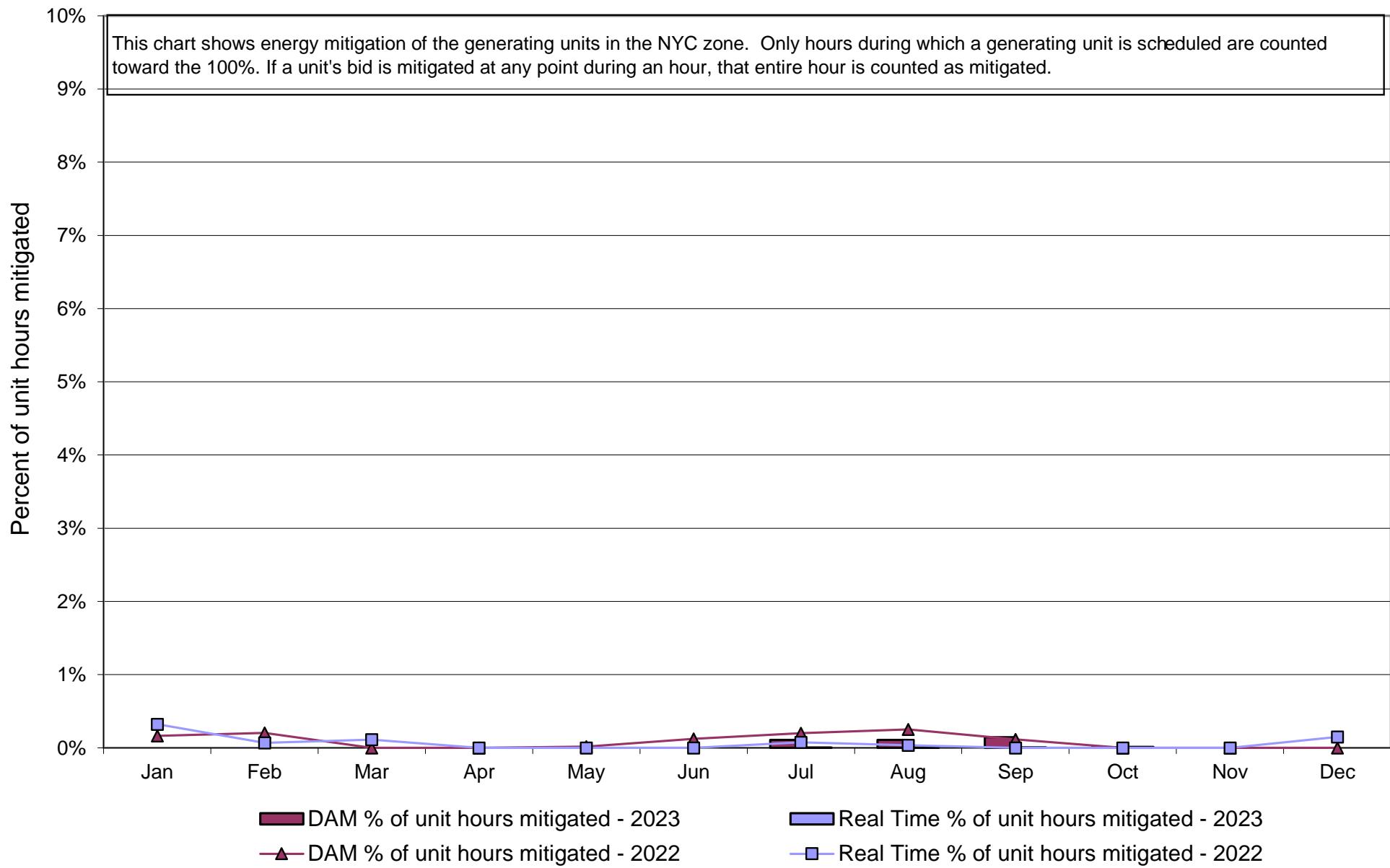
<u>2023</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
RTC Market													
10 Min Spin Long Island (K)		2.22	2.19	1.79	2.55	0.95	1.66	2.80	1.29	5.62	1.25		
10 Min Spin NYC (J)		2.26	2.21	1.83	2.84	1.07	2.60	4.96	2.35	7.68	3.21		
10 Min Spin SENY (GHI)		2.22	2.19	1.79	2.55	0.95	1.66	2.80	1.29	5.62	1.25		
10 Min Spin East (F)		2.21	2.15	1.67	2.23	0.82	0.96	2.00	0.47	4.91	1.10		
10 Min Spin West (ABCDE)		1.57	0.56	0.30	0.67	0.17	0.36	1.75	0.08	3.46	0.34		
10 Min Non Synch Long Island (K)		0.86	0.26	0.14	0.65	0.27	1.07	2.63	0.97	5.33	0.74		
10 Min Non Synch NYC (J)		0.89	0.27	0.18	0.95	0.39	2.01	4.79	2.03	7.39	2.70		
10 Min Non Synch SENY (GHI)		0.86	0.26	0.14	0.65	0.27	1.07	2.63	0.97	5.33	0.74		
10 Min Non Synch East (F)		0.85	0.22	0.02	0.34	0.14	0.37	1.83	0.15	4.62	0.59		
10 Min Non Synch West (ABCDE)		0.54	0.05	0.00	0.29	0.08	0.30	1.69	0.04	3.44	0.28		
30 Min Long Island (K)		0.16	0.10	0.13	0.61	0.21	1.00	2.48	0.86	4.15	0.42		
30 Min NYC (J)		0.16	0.10	0.15	0.68	0.22	1.00	3.16	0.86	5.14	0.46		
30 Min SENY (GHI)		0.16	0.10	0.13	0.61	0.21	1.00	2.48	0.86	4.15	0.42		
30 Min East (F)		0.14	0.05	0.00	0.29	0.08	0.30	1.69	0.04	3.44	0.28		
30 Min West (ABCDE)		0.14	0.05	0.00	0.29	0.08	0.30	1.69	0.04	3.44	0.28		
Regulation		7.44	10.40	8.29	7.55	4.86	6.16	6.81	5.25	9.52	12.10		
NYCA Regulation Movement		0.13	0.14	0.11	0.17	0.14	0.10	0.09	0.10	0.13	0.16		
<u>2022</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
RTC Market													
10 Min Spin Long Island (K)		11.75	7.55	4.73	2.39	3.15	5.06	4.34	6.79	2.49	1.72	3.59	26.50
10 Min Spin NYC (J)		11.75	7.81	4.92	2.53	3.72	5.51	4.88	8.90	2.71	1.87	3.71	26.72
10 Min Spin SENY (GHI)		11.75	7.55	4.73	2.39	3.15	5.06	4.34	6.79	2.49	1.72	3.59	26.50
10 Min Spin East (F)		11.68	7.55	4.71	2.36	2.98	4.03	4.03	5.27	2.29	1.72	3.28	23.41
10 Min Spin West (ABCDE)		7.59	5.49	1.27	1.03	1.75	2.47	1.58	3.05	0.99	0.40	1.06	14.59
10 Min Non Synch Long Island (K)		3.67	0.69	2.97	0.37	1.47	2.88	3.19	4.89	0.92	0.07	0.66	17.08
10 Min Non Synch NYC (J)		3.67	0.95	3.16	0.51	2.04	3.34	3.73	7.00	1.13	0.21	0.78	17.31
10 Min Non Synch SENY (GHI)		3.67	0.69	2.97	0.37	1.47	2.88	3.19	4.89	0.92	0.07	0.66	17.08
10 Min Non Synch East (F)		3.60	0.69	2.96	0.33	1.31	1.86	2.88	3.37	0.72	0.07	0.35	13.99
10 Min Non Synch West (ABCDE)		1.79	0.24	0.29	0.30	1.00	1.58	1.33	2.13	0.28	0.02	0.10	8.81
30 Min Long Island (K)		1.55	0.24	0.31	0.34	1.17	2.61	1.77	3.65	0.47	0.02	0.41	10.93
30 Min NYC (J)		1.55	0.24	0.31	0.34	1.34	2.74	1.85	4.43	0.52	0.02	0.41	11.11
30 Min SENY (GHI)		1.55	0.24	0.31	0.34	1.17	2.61	1.77	3.65	0.47	0.02	0.41	10.93
30 Min East (F)		1.48	0.24	0.29	0.30	1.00	1.58	1.46	2.13	0.28	0.02	0.10	7.84
30 Min West (ABCDE)		1.48	0.24	0.29	0.30	1.00	1.58	1.33	2.13	0.28	0.02	0.10	7.80
Regulation		31.59	17.95	12.23	7.77	8.36	14.11	7.96	9.46	12.79	8.03	9.52	25.14
NYCA Regulation Movement		0.16	0.17	0.14	0.10	0.13	0.20	0.18	0.23	0.22	0.16	0.16	0.19

NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RT

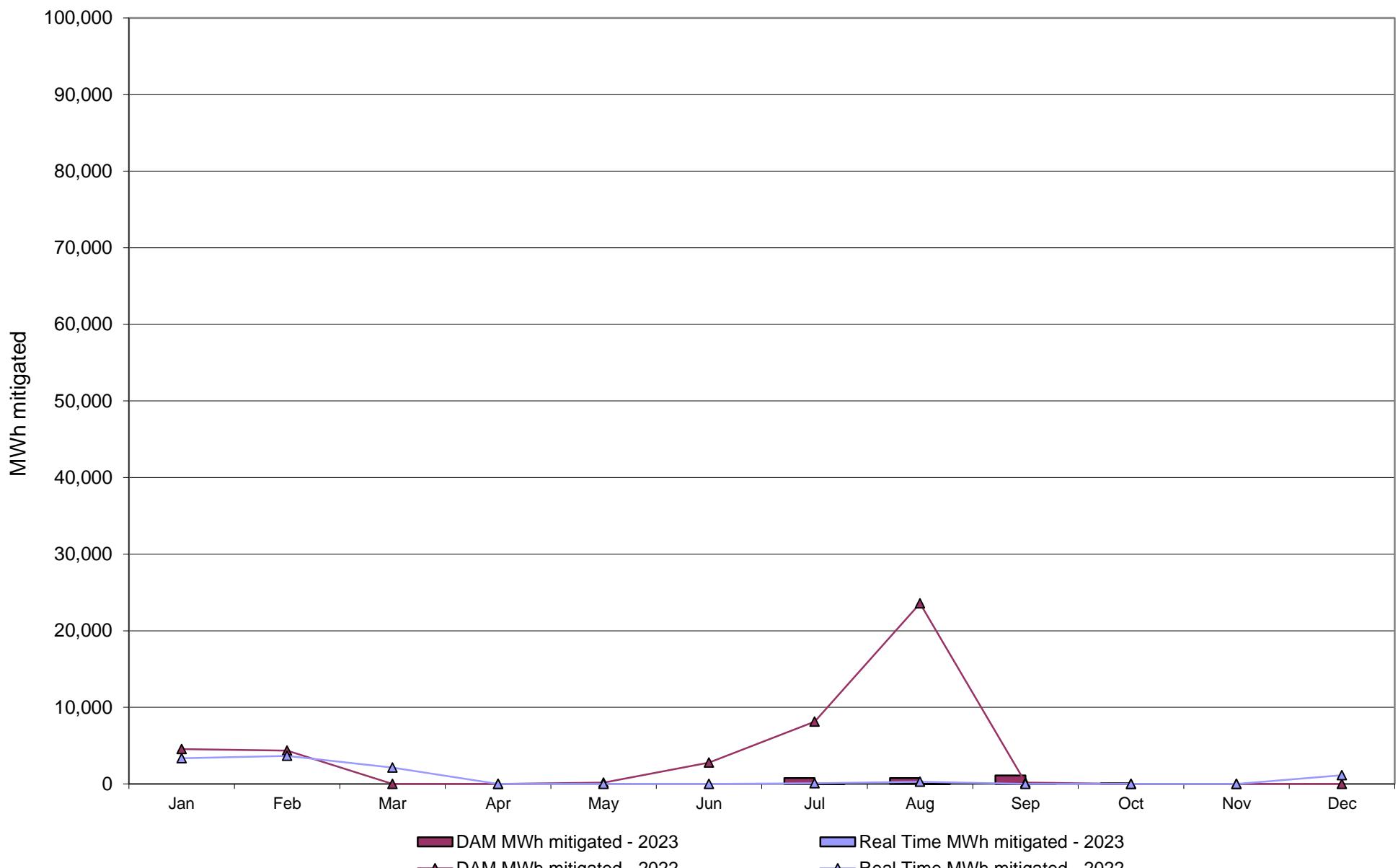
<u>2023</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Real Time Market</u>												
10 Min Spin Long Island (K)	4.22	4.51	3.28	3.42	1.48	2.02	2.18	2.60	5.92	2.33		
10 Min Spin NYC (J)	4.30	4.53	3.28	3.72	1.61	2.89	4.30	3.58	7.92	4.25		
10 Min Spin SENY (GHI)	4.22	4.51	3.28	3.42	1.48	2.02	2.18	2.60	5.92	2.33		
10 Min Spin East (F)	4.20	4.46	3.19	3.23	1.37	1.38	1.56	1.67	5.28	2.20		
10 Min Spin West (ABCDE)	3.10	2.24	0.97	0.89	0.36	0.38	1.26	1.24	3.39	0.77		
10 Min Non Synch Long Island (K)	1.81	0.50	0.15	0.89	0.29	1.07	1.83	1.07	5.54	1.37		
10 Min Non Synch NYC (J)	1.89	0.52	0.15	1.19	0.43	1.94	3.95	2.05	7.54	3.29		
10 Min Non Synch SENY (GHI)	1.81	0.50	0.15	0.89	0.29	1.07	1.83	1.07	5.54	1.37		
10 Min Non Synch East (F)	1.79	0.45	0.05	0.70	0.19	0.43	1.21	0.14	4.90	1.24		
10 Min Non Synch West (ABCDE)	1.15	0.01	0.00	0.21	0.05	0.14	1.02	0.07	3.35	0.27		
30 Min Long Island (K)	0.39	0.05	0.09	0.40	0.16	0.77	1.64	1.00	3.99	0.40		
30 Min NYC (J)	0.39	0.05	0.09	0.47	0.16	0.77	2.28	1.00	4.97	0.45		
30 Min SENY (GHI)	0.39	0.05	0.09	0.40	0.16	0.77	1.64	1.00	3.99	0.40		
30 Min East (F)	0.36	0.01	0.00	0.21	0.05	0.14	1.02	0.07	3.35	0.27		
30 Min West (ABCDE)	0.36	0.01	0.00	0.21	0.05	0.14	1.02	0.07	3.35	0.27		
Regulation	8.46	12.64	9.44	8.10	5.52	6.30	6.30	6.62	9.82	9.57		
NYCA Regulation Movement	0.12	0.14	0.12	0.16	0.14	0.10	0.09	0.10	0.13	0.16		
<u>2022</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Real Time Market</u>												
10 Min Spin Long Island (K)	17.99	9.02	6.90	3.15	2.68	4.93	6.01	10.69	3.49	3.23	7.82	36.64
10 Min Spin NYC (J)	18.04	9.27	7.04	3.27	3.17	5.46	6.66	12.88	3.74	3.41	8.01	36.89
10 Min Spin SENY (GHI)	17.99	9.02	6.90	3.15	2.68	4.93	6.01	10.69	3.49	3.23	7.82	36.64
10 Min Spin East (F)	17.97	9.02	6.90	3.15	2.62	4.39	5.65	8.61	3.27	3.22	7.54	34.02
10 Min Spin West (ABCDE)	13.47	7.56	2.14	1.83	1.76	3.13	2.70	5.68	1.84	1.40	3.02	22.15
10 Min Non Synch Long Island (K)	5.34	0.59	4.05	0.40	0.43	2.42	4.26	6.67	0.81	0.38	2.63	23.83
10 Min Non Synch NYC (J)	5.40	0.84	4.19	0.51	0.92	2.95	4.90	8.85	1.06	0.56	2.81	24.09
10 Min Non Synch SENY (GHI)	5.34	0.59	4.05	0.40	0.43	2.42	4.26	6.67	0.81	0.38	2.63	23.83
10 Min Non Synch East (F)	5.33	0.59	4.05	0.40	0.37	1.88	3.90	4.58	0.59	0.37	2.35	21.21
10 Min Non Synch West (ABCDE)	2.46	0.20	0.19	0.29	0.34	1.51	1.79	2.37	0.25	0.01	0.10	12.80
30 Min Long Island (K)	1.42	0.20	0.16	0.29	0.40	2.05	2.28	4.29	0.47	0.01	0.38	11.54
30 Min NYC (J)	1.42	0.20	0.16	0.29	0.56	2.20	2.41	5.15	0.52	0.01	0.38	11.73
30 Min SENY (GHI)	1.42	0.20	0.16	0.29	0.40	2.05	2.28	4.29	0.47	0.01	0.38	11.54
30 Min East (F)	1.41	0.20	0.16	0.29	0.34	1.51	1.92	2.21	0.25	0.01	0.10	8.92
30 Min West (ABCDE)	1.41	0.20	0.16	0.29	0.34	1.51	1.79	2.21	0.25	0.01	0.10	8.87
Regulation	33.92	18.10	11.81	8.22	8.23	11.84	8.95	11.52	11.36	8.91	12.84	28.95
NYCA Regulation Movement	0.16	0.17	0.15	0.10	0.13	0.20	0.18	0.23	0.23	0.16	0.15	0.19

NYISO In City Energy Mitigation - AMP (NYC Zone) 2022 - 2023

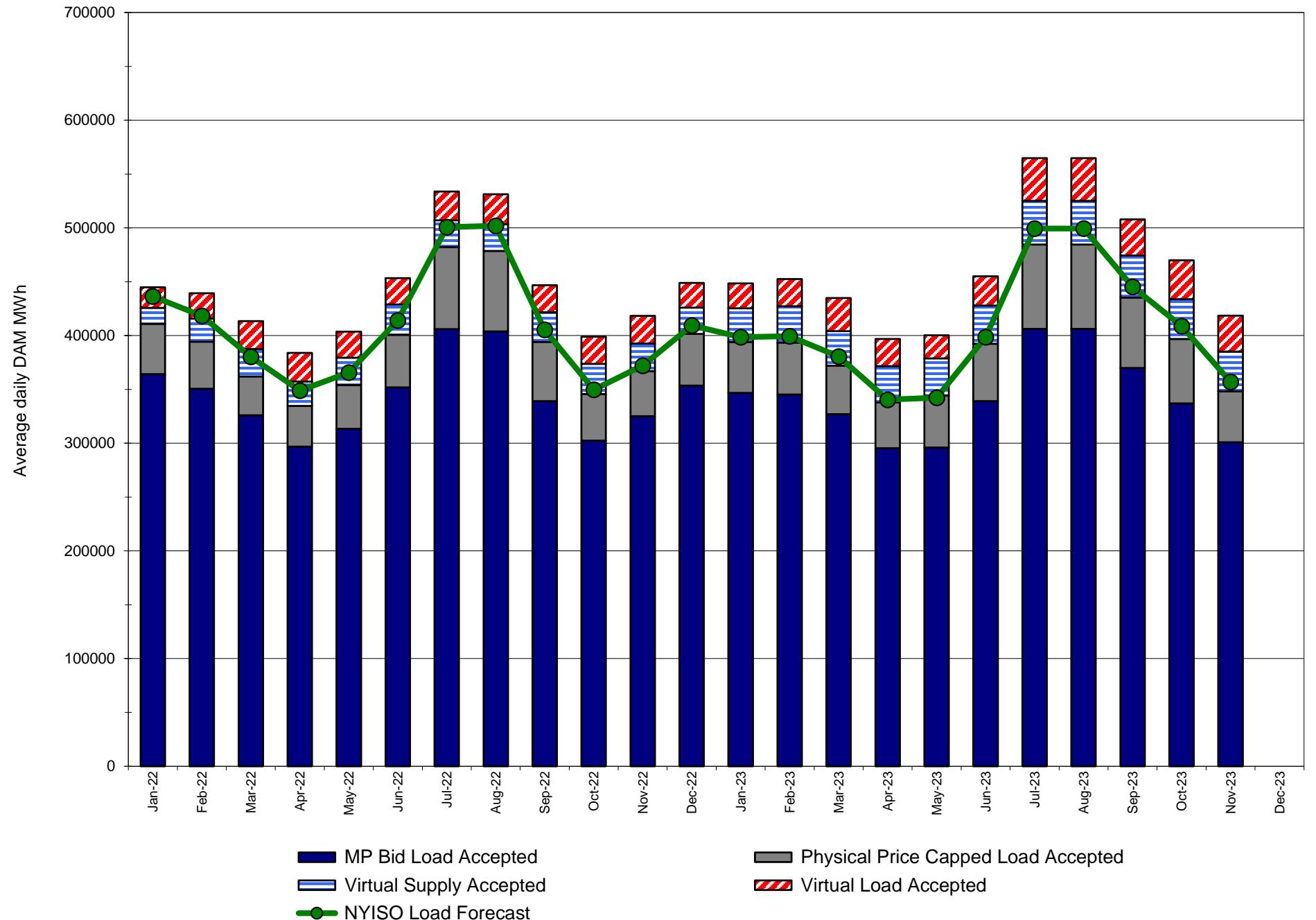
Percentage of committed unit-hours mitigated



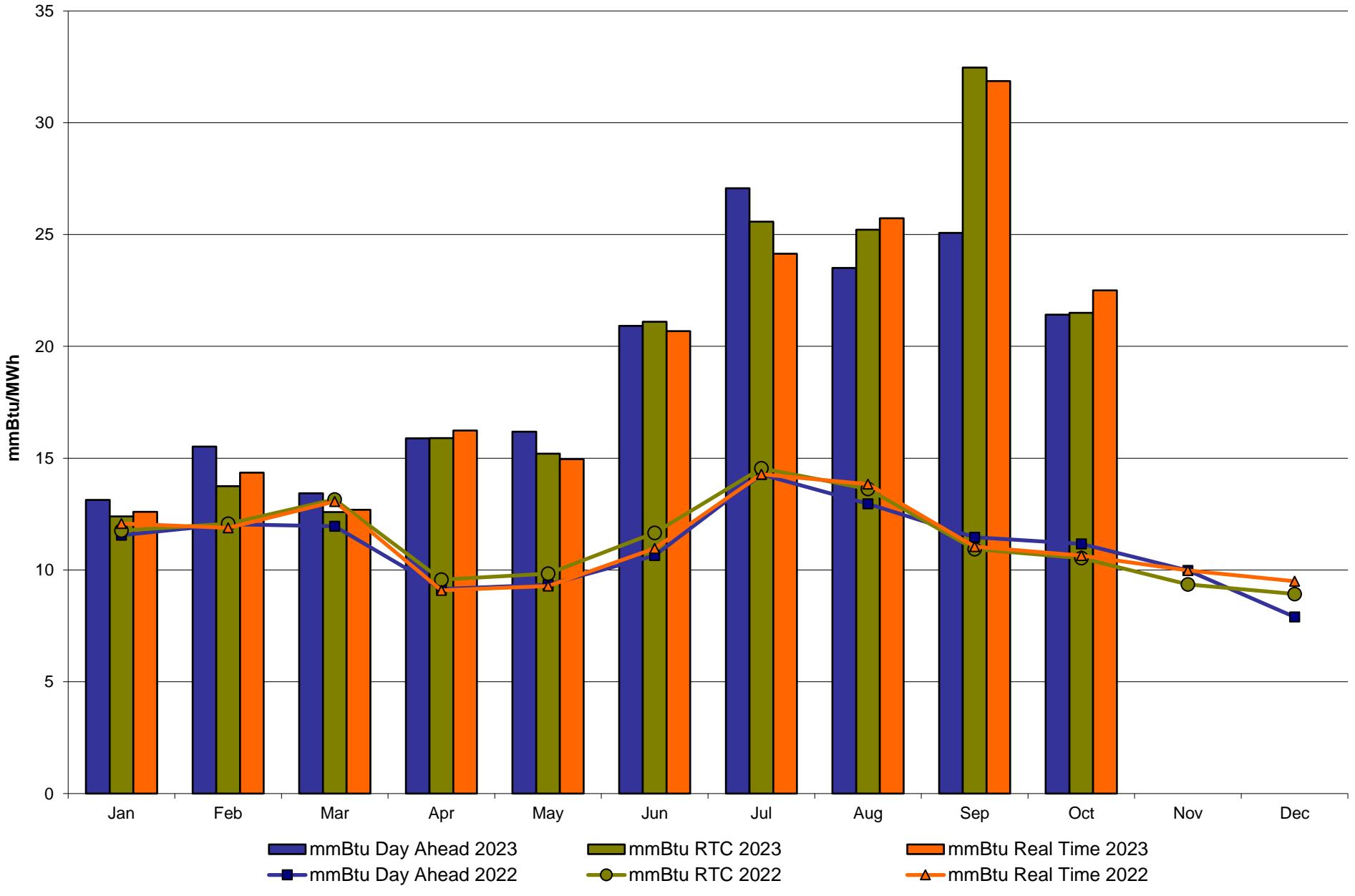
NYISO In City Energy Mitigation (NYC Zone) 2022 - 2023
Monthly megawatt hours mitigated



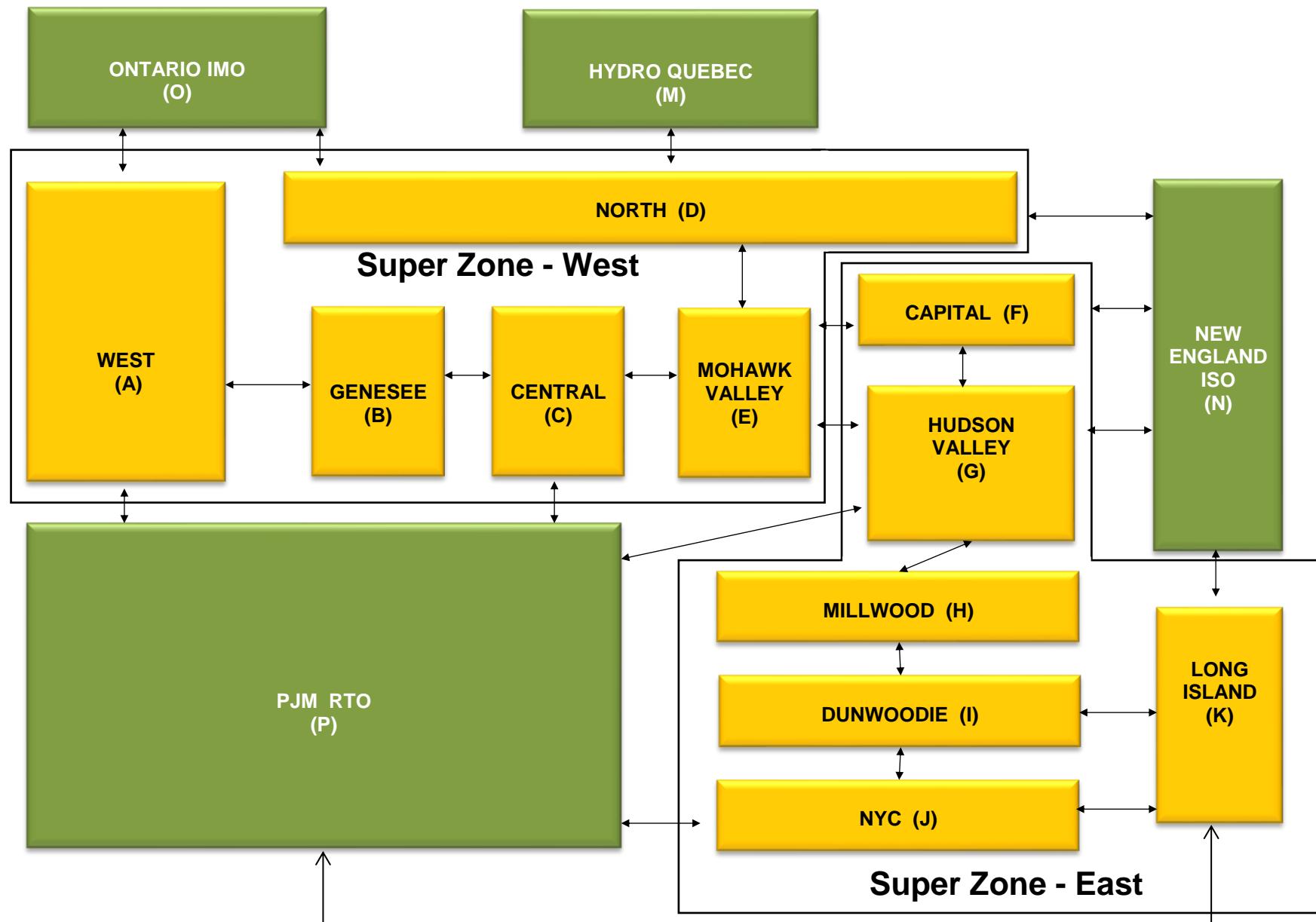
NYISO Average Daily DAM Load Bid Summary



Monthly Implied Heat Rate 2022-2023



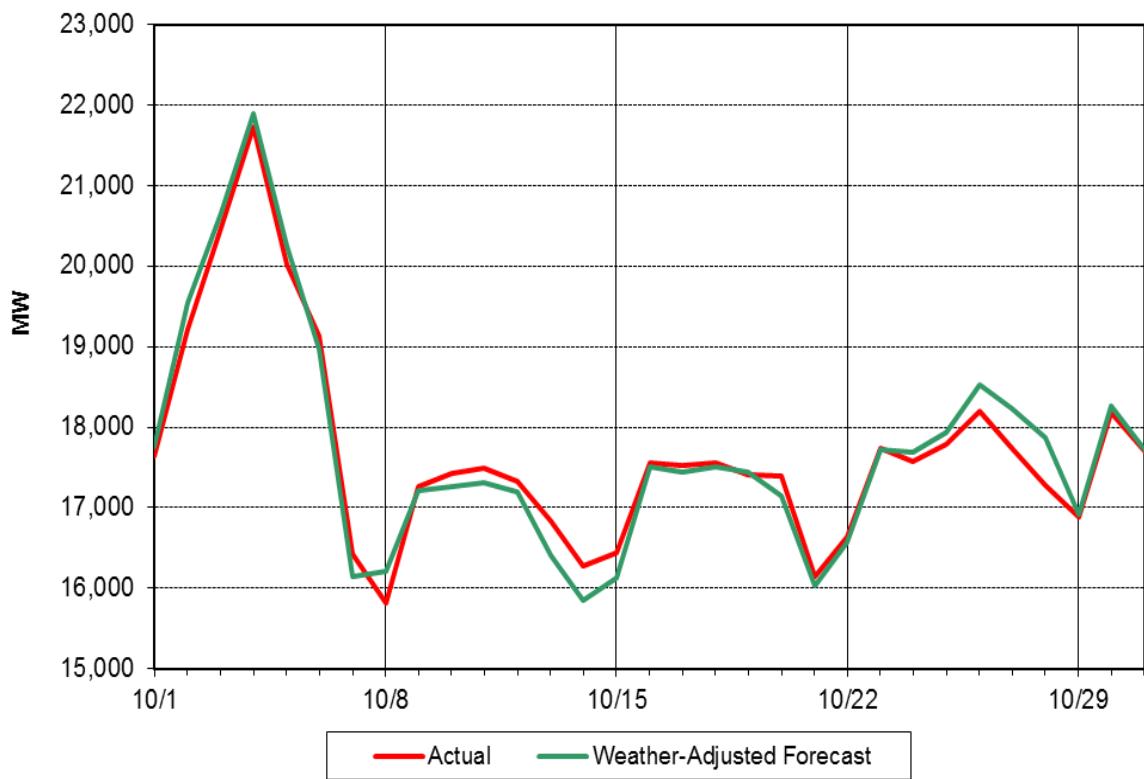
NYISO LBMP ZONES



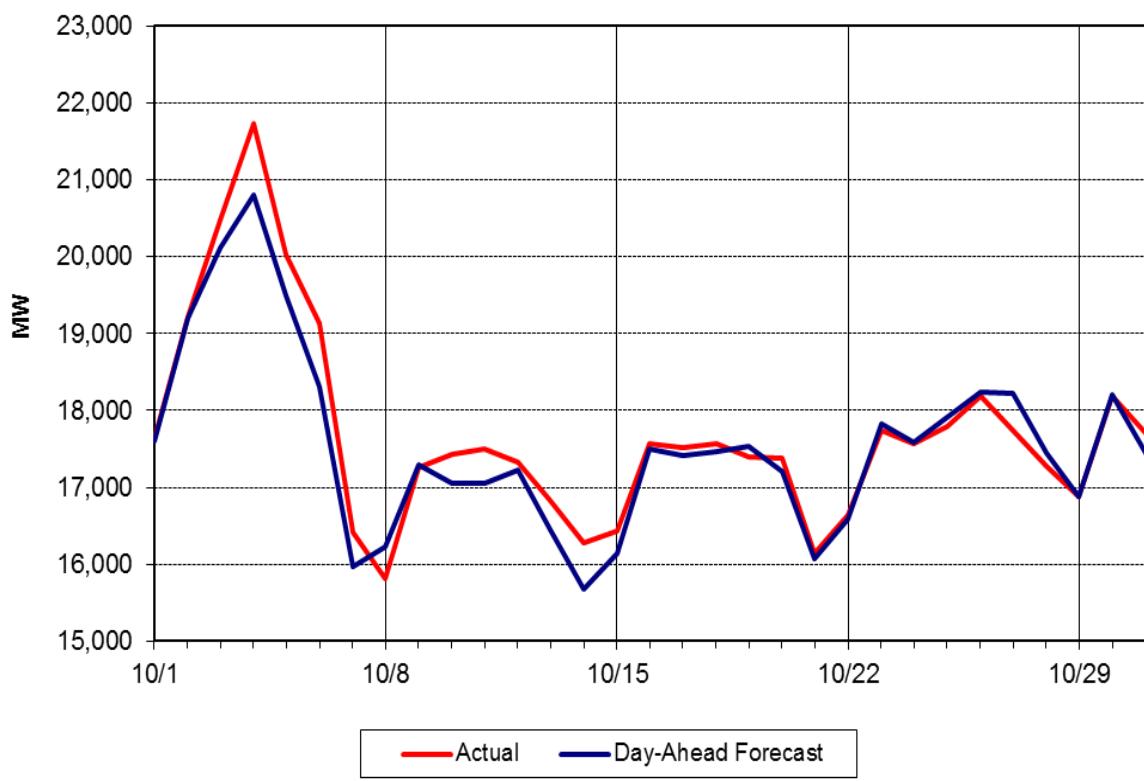
Billing Codes for Chart C

<u>Chart - C Category Name</u>	<u>Billing Code</u>	<u>Billing Category Name</u>
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81205	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81208	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81209	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81213	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee DAM	81201	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	84001	EDRP/SCR Demand Response - Local
Bid Production Cost Guarantee DAM	84101	EDRP/SCR Demand Response - NYISO Wide
Bid Production Cost Guarantee DAM	81401	DAM Price Responsive Load Program
Bid Production Cost Guarantee DAM	81202	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM	81206	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	81207	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM Virtual	81501	DAM Virtual Bid Production Cost Guarantee
DAM Contract Balancing	81315	DAM Contract Balancing
DAM Contract Balancing	81317	DAM Contract Balancing
Local Reliability Balancing	81002	Balancing Local Reliability Bid Production Cost Guarantee
Local Reliability Balancing	83901	Margin Restoration (MOB) Revenue
Local Reliability DAM	81001	DAM Local Reliability Bid Production Cost Guarantee
NYISO Cost of Operations	80901	NYISO Cost Of Operations
NYISO Cost of Operations	80902	NYISO Cost Of Operations
NYISO Cost of Operations	83501	NYISO Cost Of Operations
NYISO Cost of Operations	83502	NYISO Cost Of Operations
Residuals Balancing	81302	Balancing Market Energy Residual
Residuals Balancing	81304	Balancing Market Loss Residual
Residuals Balancing	81305	Balancing Market Congestion Balancing
Residuals Balancing	81306	Emergency Energy Purchases
Residuals Balancing	81307	Emergency Energy Sales
Residuals Balancing	81309	Balancing Market Energy Residual
Residuals Balancing	81311	Balancing Market Loss Residual
Residuals Balancing	81312	Balancing Market Congestion Balancing
Residuals Balancing	81313	Emergency Energy Purchases
Residuals Balancing	81314	Emergency Energy Sales
Residuals DAM	81301	Day Ahead Market Energy Residual
Residuals DAM	81303	Day Ahead Market Loss Residual
Residuals DAM	81308	Day Ahead Market Energy Residual
Residuals DAM	81310	Day Ahead Market Loss Residual

NYISO Daily Peak Load - October 2023 Actual vs. Weather-Adjusted Forecast

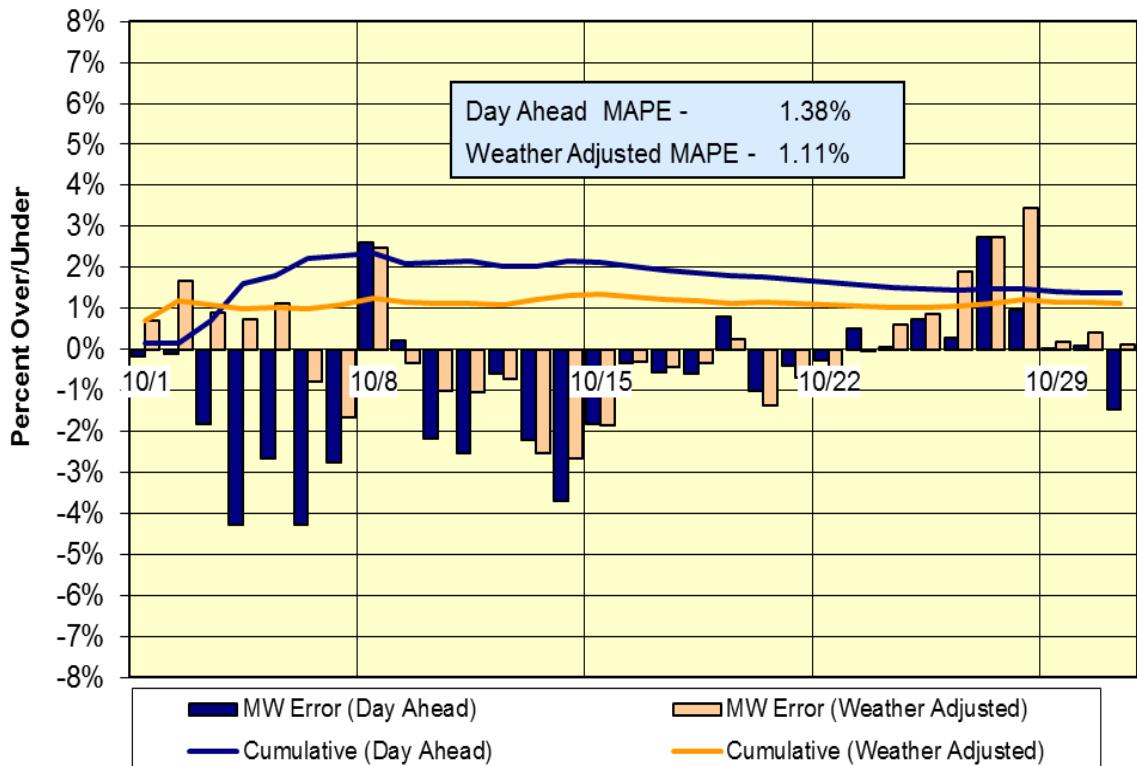


NYISO Daily Peak Load - October 2023 Actual vs. Forecast



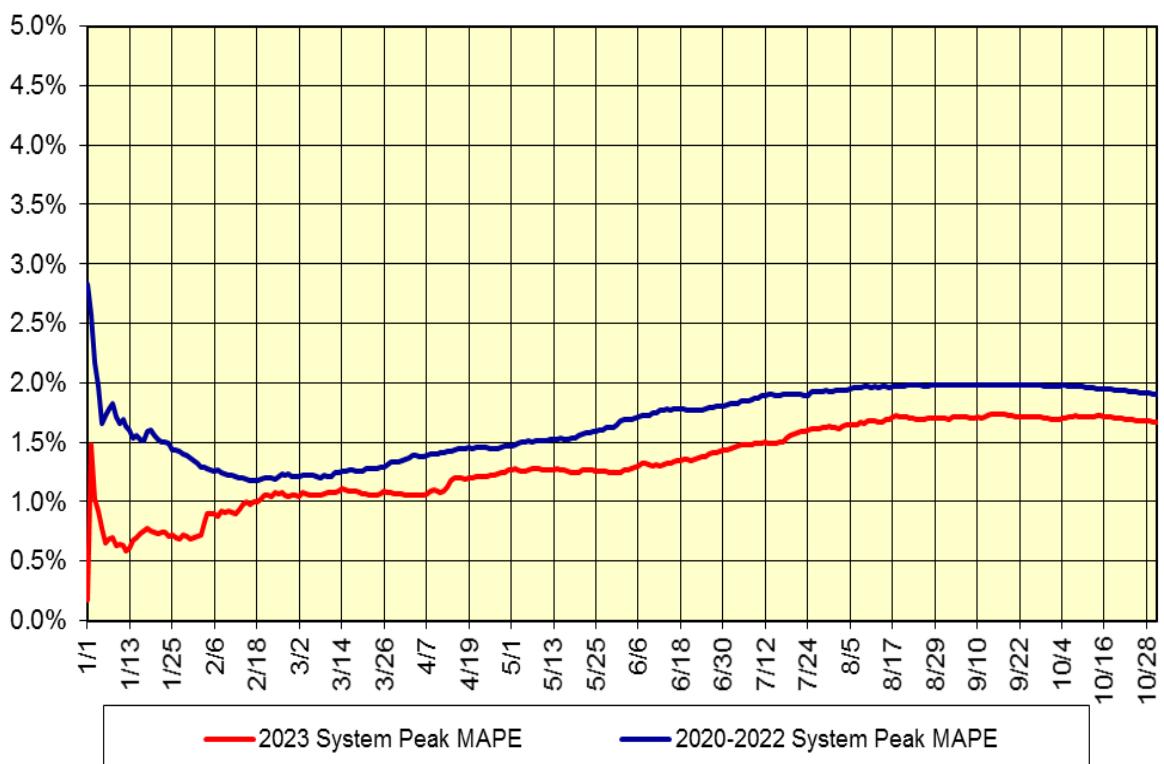
Day Ahead Peak Forecast - October 2023

Percent Error - Actual & Weather-Adjusted



Day-Ahead Forecast Accuracy - Cumulative Performance

2023 Year-to-Date



Summary Description of Regulatory Filings, Investigations, Rulemakings and Related Orders in NYISO Matters – October 2023

Filing Date	Filing Summary	Docket	Order Summary	Order Date
8/8/2023	Joint NYISO-New York Power Authority (NYPA) Section 205 filing of an executed Large Generator Interconnection Agreement (LGIA) among NYISO, NYPA, and Hecate Energy Cider Solar for the Cider Solar Project (SA 2773).	ER23-2583-000	FERC order accepted the LGIA as filed, effective July 25, 2023, as requested.	10/3/2023
8/22/2023	Joint NYISO-New York State Electric & Gas Corporation (NYSEG) Section 205 filing of an executed Second Amended and Restated Large Generator Interconnection Agreement (LGIA) among NYISO, NYSEG, and Baron Winds LLC for the Baron Winds Project (SA 2487).	ER23-2680-000	FERC order accepted the Large Generator Interconnection Agreement (LGIA) among NYISO, NYSEG, and Baron Winds for the Baron Winds project as filed, effective August 8, 2023, as requested.	10/12/2023
9/1/2023	Errata to NYISO's May 1, 2023 Compliance filing to incorporate by reference North American Energy Standards Board (NAESB) Wholesale Electric Quadrant (WEQ) standards required by FERC's Order 676-J, and to request waivers of certain standards.	ER23-1783-001	FERC order accepted the NYISO's May 1, 2023 compliance filing, as amended on September 1, 2023, effective February 1, 2024, subject to an additional compliance filing submitted within 30 days of the date of the order.	10/27/2023
10/6/2023	NYISO Notice of Delay of Effective Date regarding tariff provisions for Transmission Constraint Pricing Logic Enhancements.	ER23-1863-000		
10/12/2023	Joint NYISO-New York State Electric & Gas Corporation (NYSEG) Section 205 filing of an amended and restated Small Generator Interconnection Agreement among NYISO, NYSEG, and SunEast Scipio Solar for the Scipio Solar Project (SA 2527).	ER24-79-000		
10/13/2023	NYISO Compliance filing of tariff revisions in compliance with the Commission's Order No. 895 regarding credit-related information sharing.	RM22-13-000; ER24-95-000		
10/18/2023	NYISO Amendment to the June 1, 2023 filing regarding Distributed Energy Resources participation model enhancements, to set an effective date for proposed tariff revisions.	ER23-2040-002		
10/19/2023	NYISO Notice of Delayed and Revised Effective Date regarding its DER and Aggregation Participation Model.	ER19-2276-000		

Filing Date	Filing Summary	Docket	Order Summary	Order Date
10/20/2023	NYISO informational filing, as directed in FERC's April 20, 2023 order, advising the Commission on the progress of the NYISO's stakeholder process and compliance with the directive from FERC's June 17, 2022 order.	ER21-2460-003		
10/25/2023	NYISO filing, on behalf of itself, the New York Transmission Owners, LS Power Grid New York, NextEra Energy Transmission New York, Inc., and New York Transco, of a one-time informational report regarding extreme weather vulnerability assessments in compliance with the directives of FERC Order No. 897.	RM22-16-000; AD21-13-000		
10/26/2023	NYISO filing of the Q3 2023 Electronic Quarterly Report.	ER02-2001-000		
10/31/2023	NYISO Section 205 filing of an Engineering, Procurement, and Construction Agreement among NYISO, Long Island Power Authority (LIPA) and Shoreham Solar, Riverhead Solar, East Hampton Energy Storage, and Montauk Energy Storage for the Class Year 2017 Long Island System Deliverability Upgrade (SA2776).	ER24-261-000		