

# Monthly Report

A Report by the  
New York Independent System Operator

**July 2023**

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# ***Operations Performance Metrics Monthly Report***



## ***July 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 August 8, 2023.

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## July 2023 Operations Performance Highlights

Monthly Peak Load	Monthly Minimum Load	Summer 2023 Peak	All-time Summer Peak
07/28/2023 HB 17 28,735 MW	07/31/2023 HB 03 14,677 MW	07/28/2023 HB 17 28,735 MW	07/19/2013 HB 16 33,956 MW

- 62.7 hours of Thunderstorm Alerts were declared
- 0.0 hours of NERC TLR level 3 curtailment

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	4,760 MW	174 MW	40 MW

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

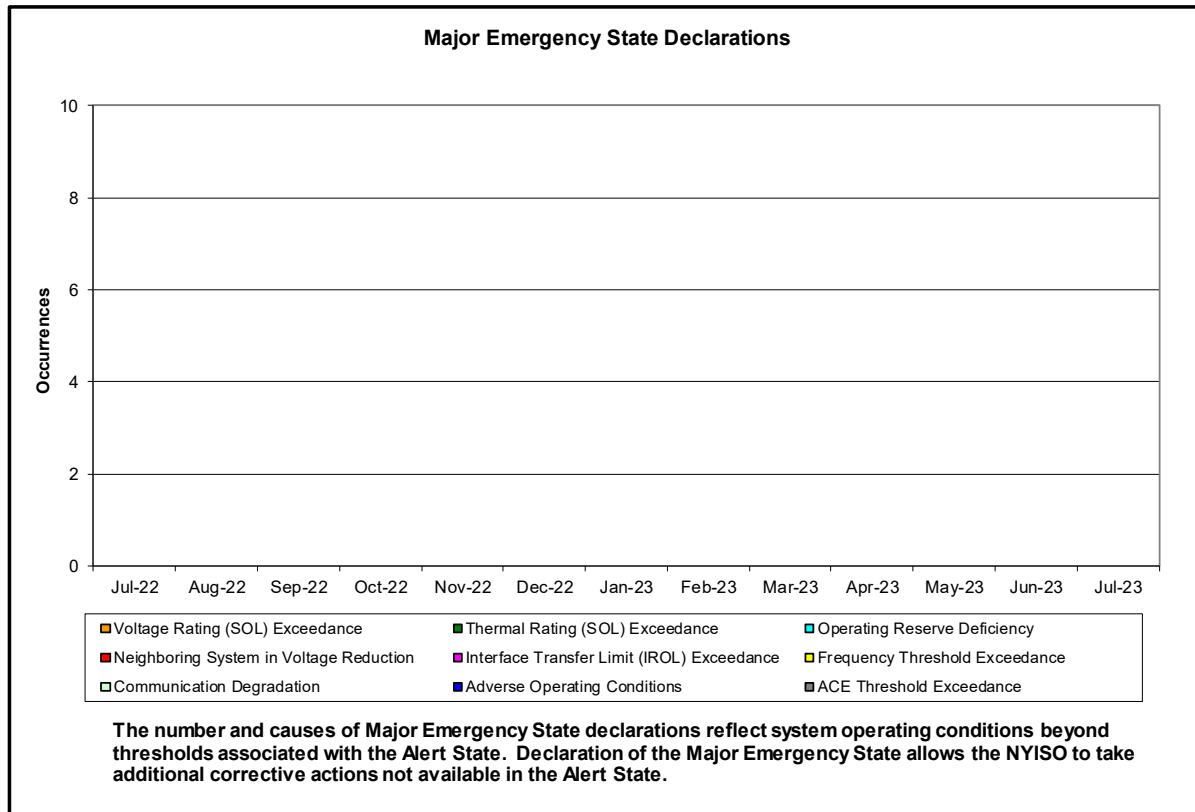
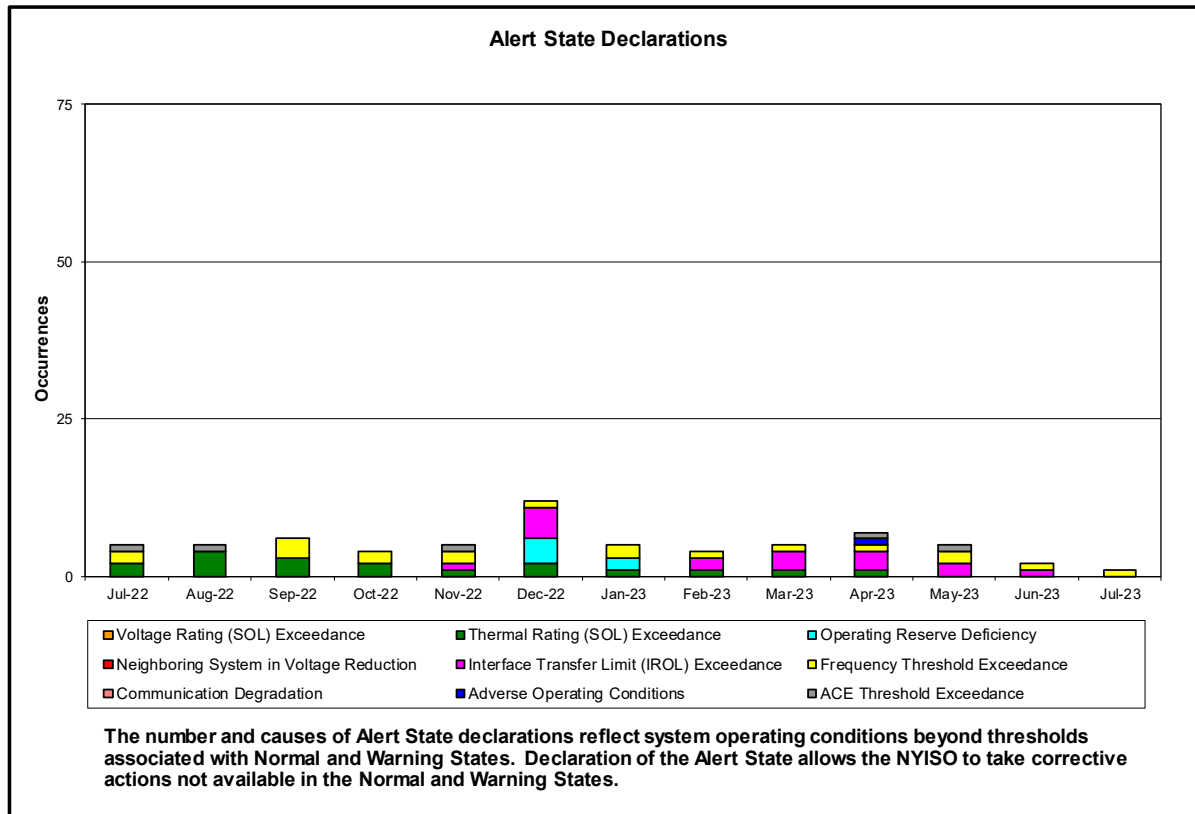
	Current Month Value (\$M)	Year-to-Date Value (\$M)
<b>NY Savings from PJM-NY Congestion Coordination</b>	(\$0.96)	\$12.03
<b>NY Savings from PJM-NY Coordinated Transaction Scheduling</b>	(\$0.28)	(\$0.70)
<b>NY Savings from NE-NY Coordinated Transaction Scheduling</b>	(\$0.20)	(\$1.49)
<b>Total NY Savings</b>	(\$1.44)	\$9.84
<b>Regional Savings from PJM-NY Coordinated Transaction Scheduling</b>	\$1.01	\$4.07
<b>Regional Savings from NE-NY Coordinated Transaction Scheduling</b>	\$0.12	\$0.58
<b>Total Regional Savings</b>	\$1.13	\$4.65

- Statewide uplift cost monthly average was (\$0.62)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

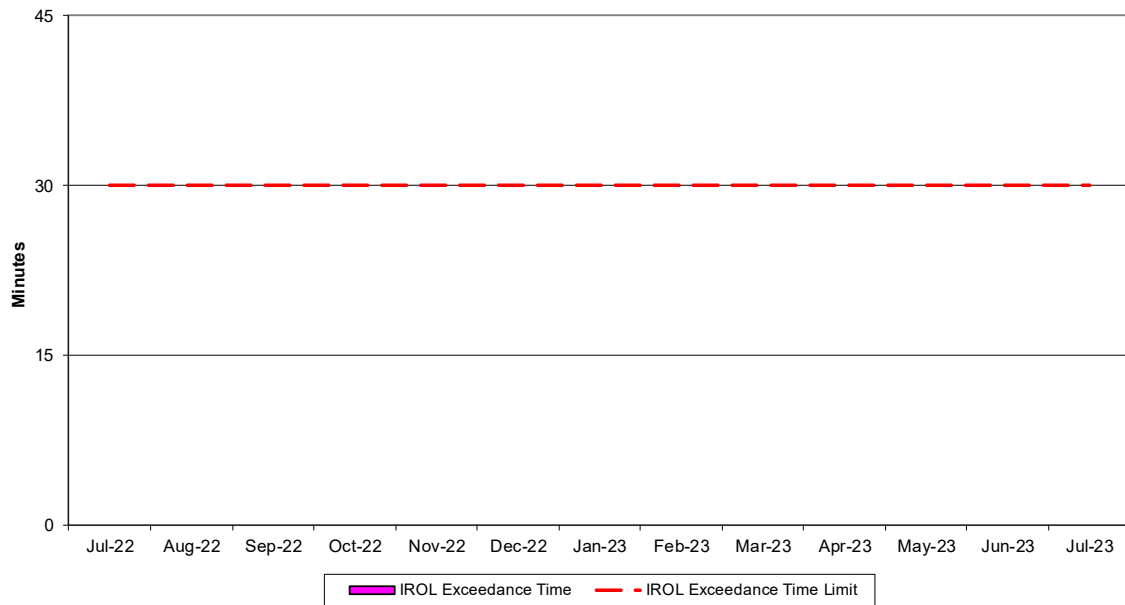
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
August 2023 Spot Price	\$6.01	\$6.01	\$19.46	\$6.01
July 2023 Spot Price	\$6.16	\$6.16	\$19.47	\$6.16
Delta	(\$0.15)	(\$0.15)	(\$0.01)	(\$0.15)

- The market clearing price decreased in NYCA, GHI & Long Island due to increased available UCAP.

## Reliability Performance Metrics

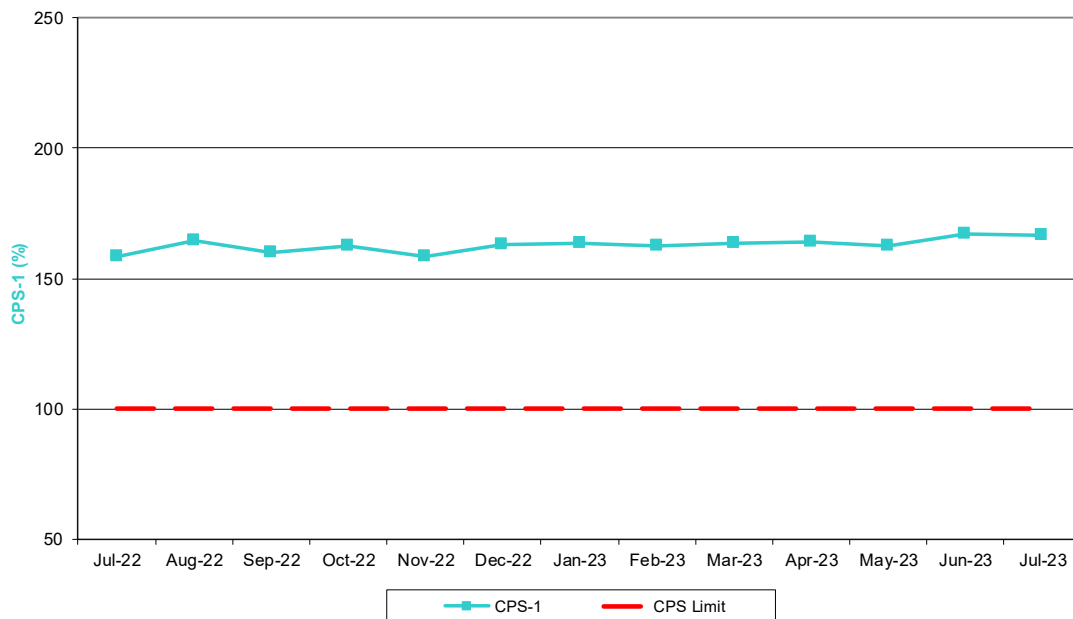


### NERC IROL Time Over Limit



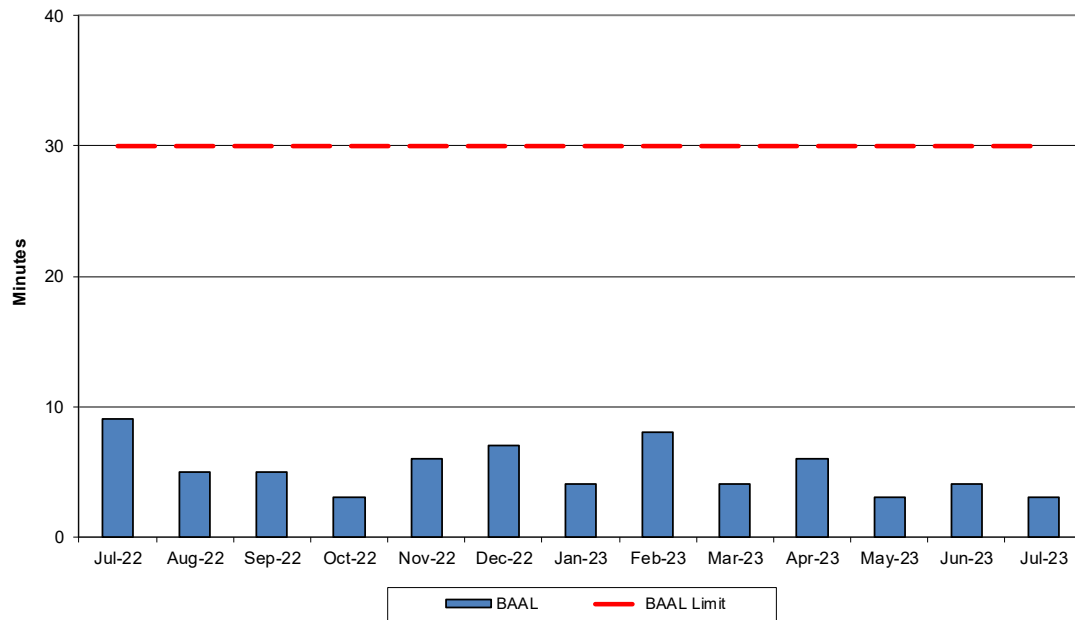
For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedance time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.

### NERC Control Performance Standards



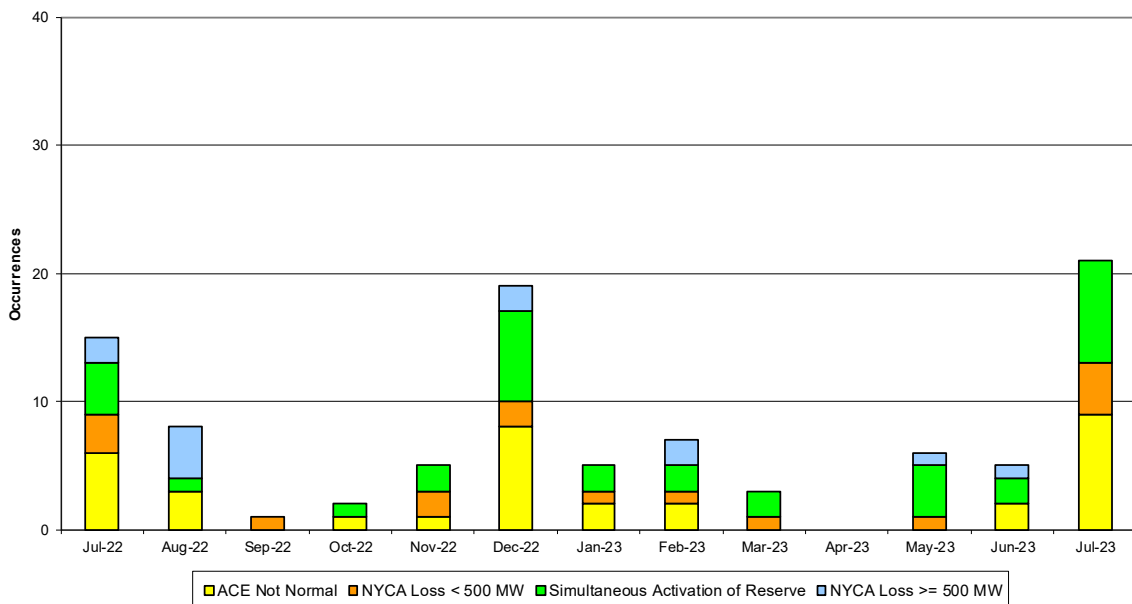
The value of NERC Control Performance Standards (CPS-1) is an indicator of the NYISO Area resource and demand balancing. Values exceeding the identified threshold are NERC compliant.

### NERC Balancing Authority ACE Limit Standard



The amount of time the clock-minute average ACE exceeds the clock-minute Balancing Authority ACE Limit (BAAL) is an indicator of the NYISO Area resource and demand balancing. The maximum BAAL exceedance time is identified. BAAL exceedances of less than 30 consecutive clock-minutes are NERC compliant.

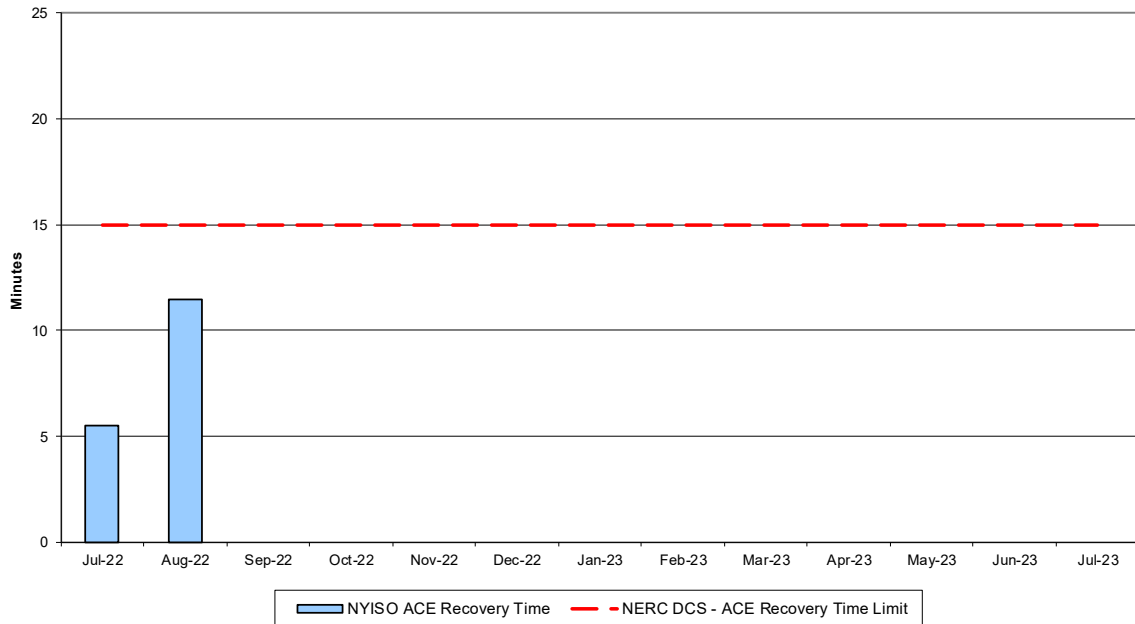
### Reserve Activations



NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Simultaneous Activation of Reserves) by activating an immediate resource and demand balancing operation.

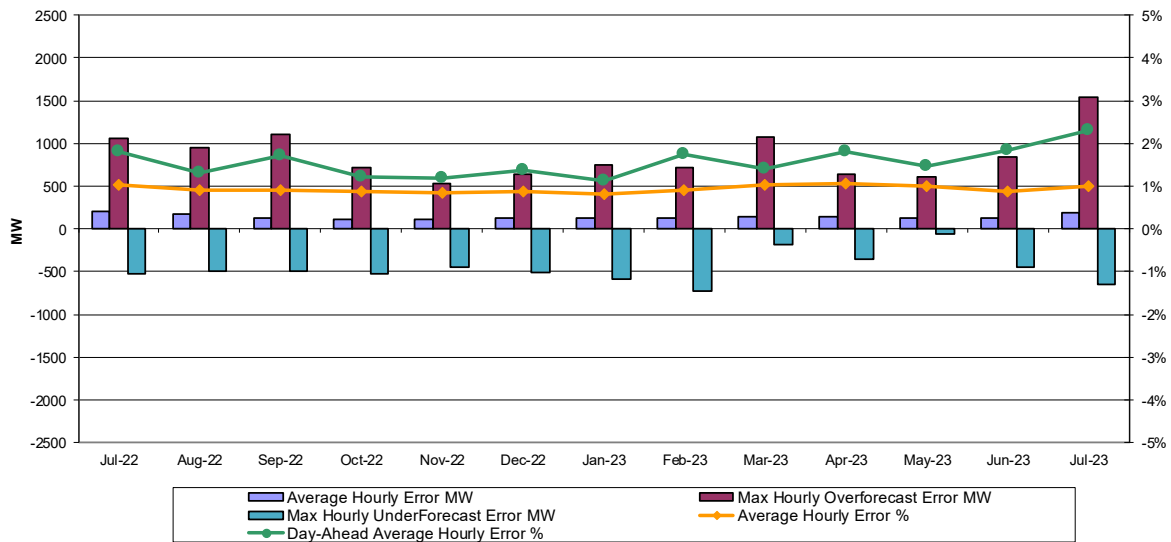


### DCS Event Time to ACE Recovery



For NYISO initiated NERC Reportable Disturbances, the maximum ACE recovery time is identified. Recovery times of less than 15 minutes are considered NERC compliant.

### Load Forecast Performance

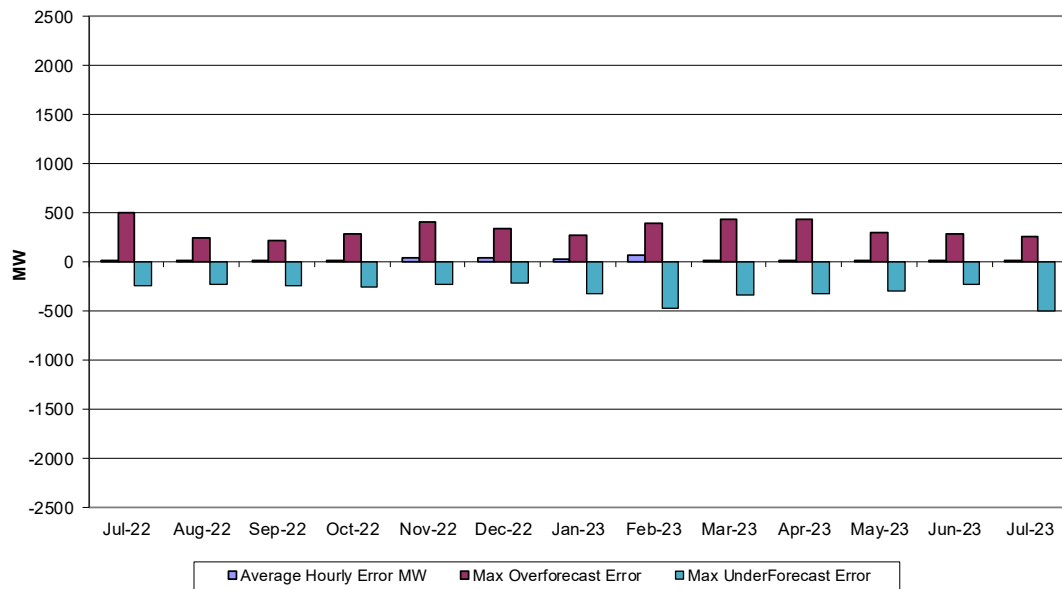


**Hourly Error MW** - Value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

**Average Hourly Error %** - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

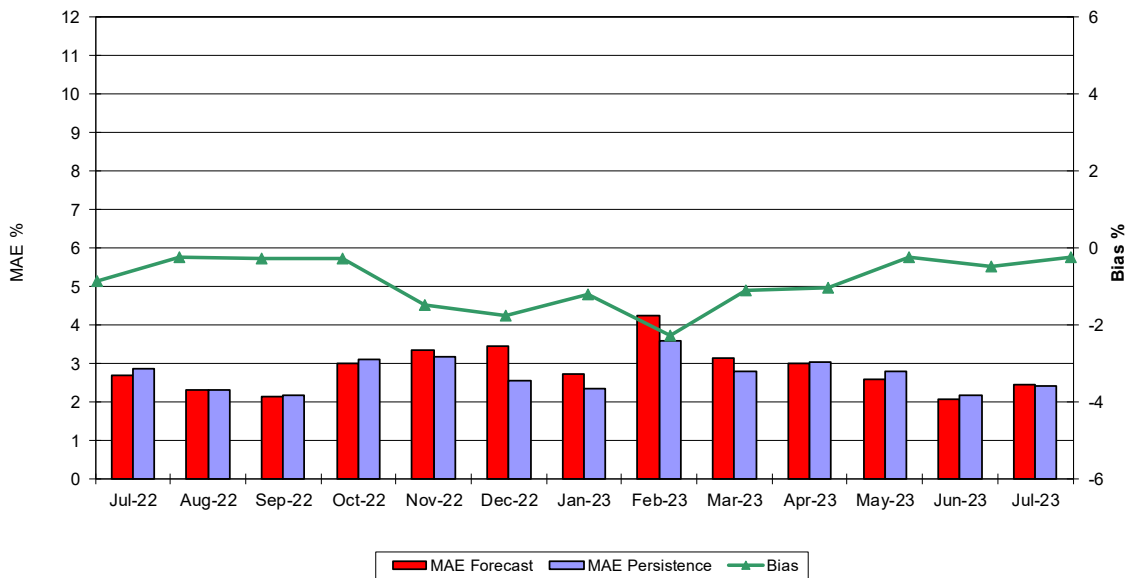
**Day-Ahead Average Hourly Error %** - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

### Wind Forecast Performance Hour Ahead MW Error



**Hourly Error MW** - Value of the difference between the hourly average actual wind generation and the average hour ahead forecast wind generation.

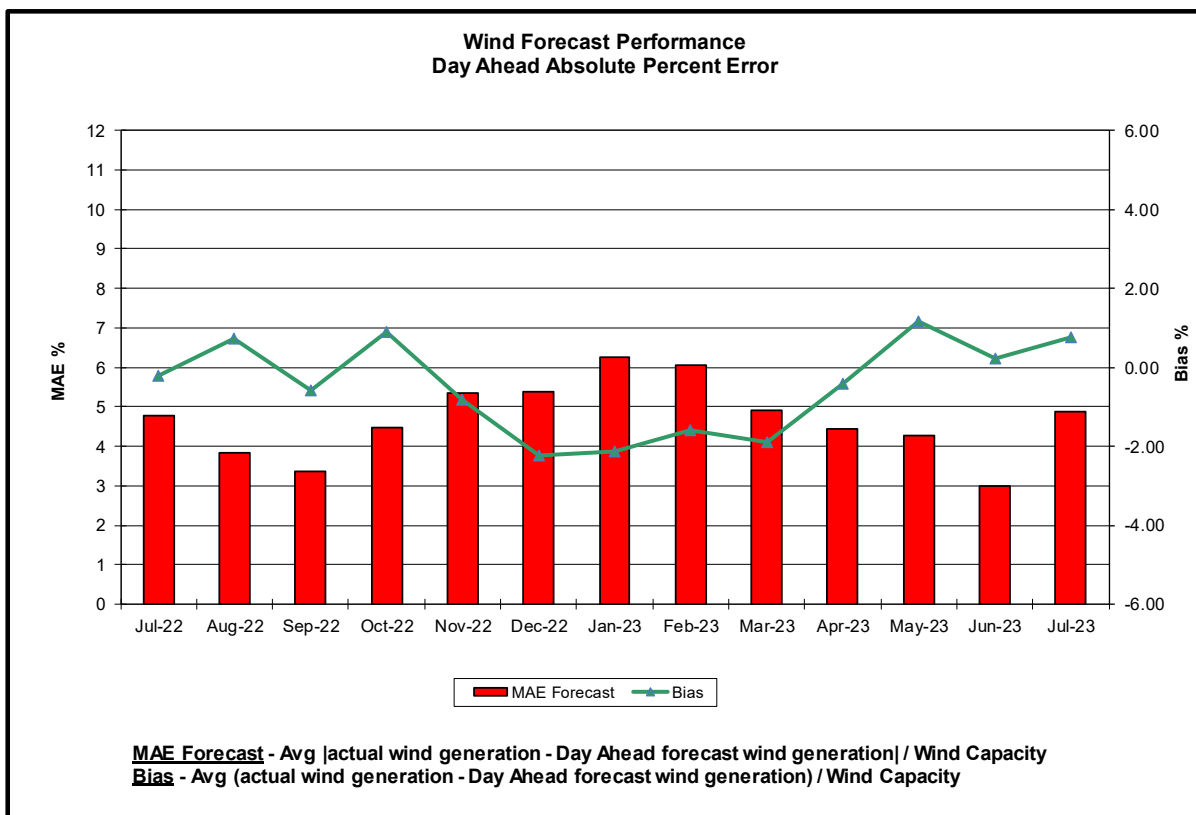
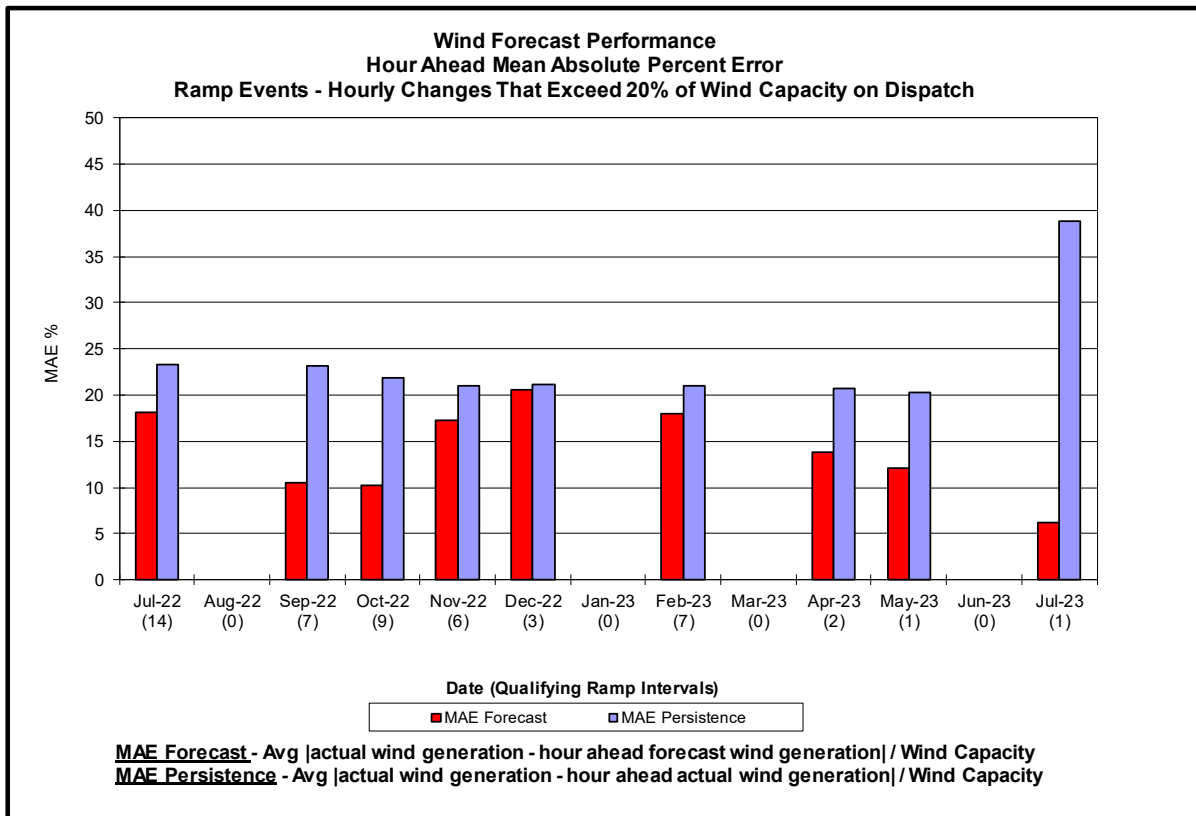
### Wind Forecast Performance Hour Ahead Percent Error

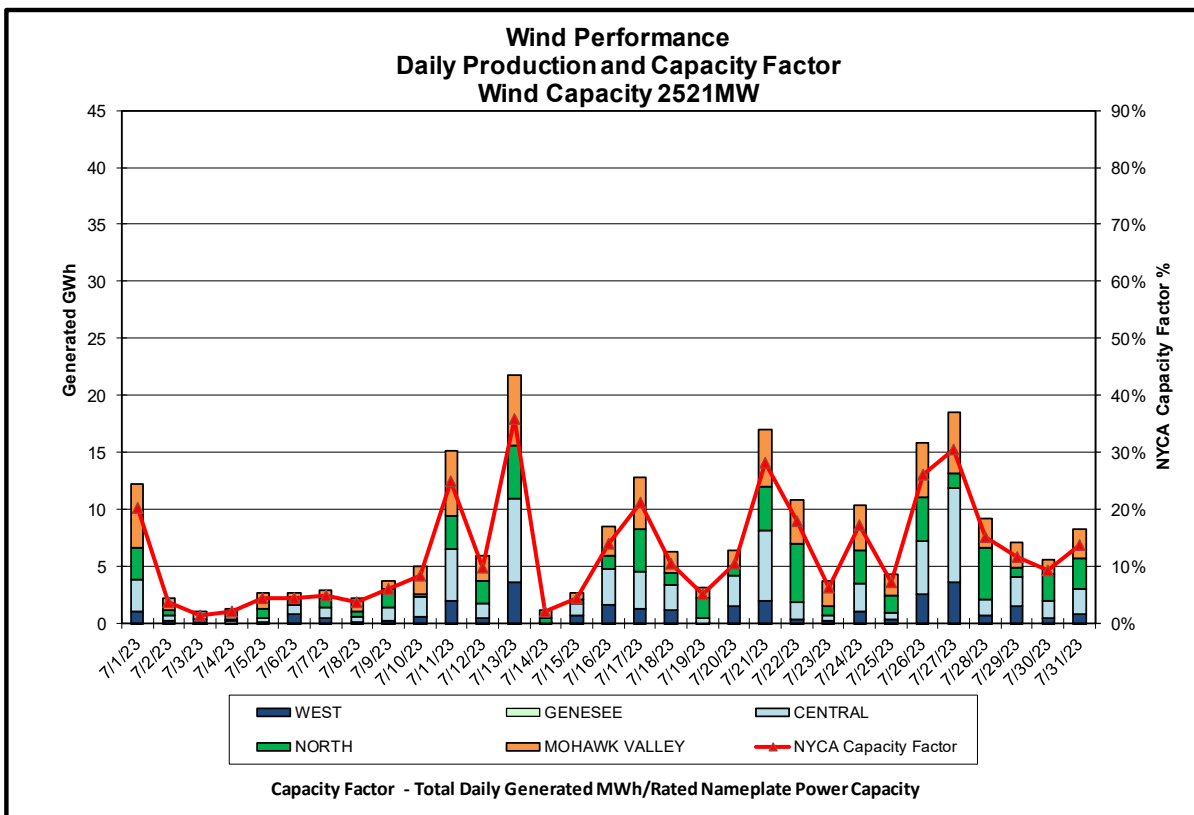
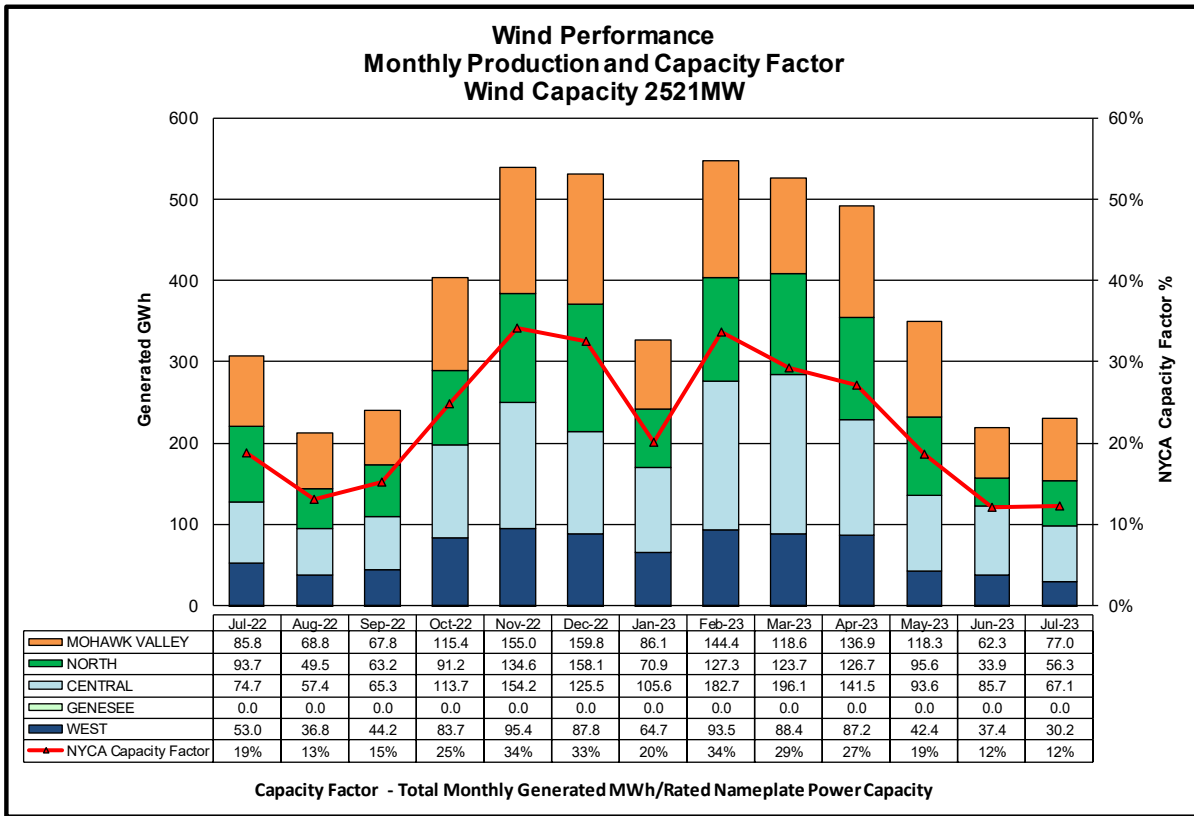


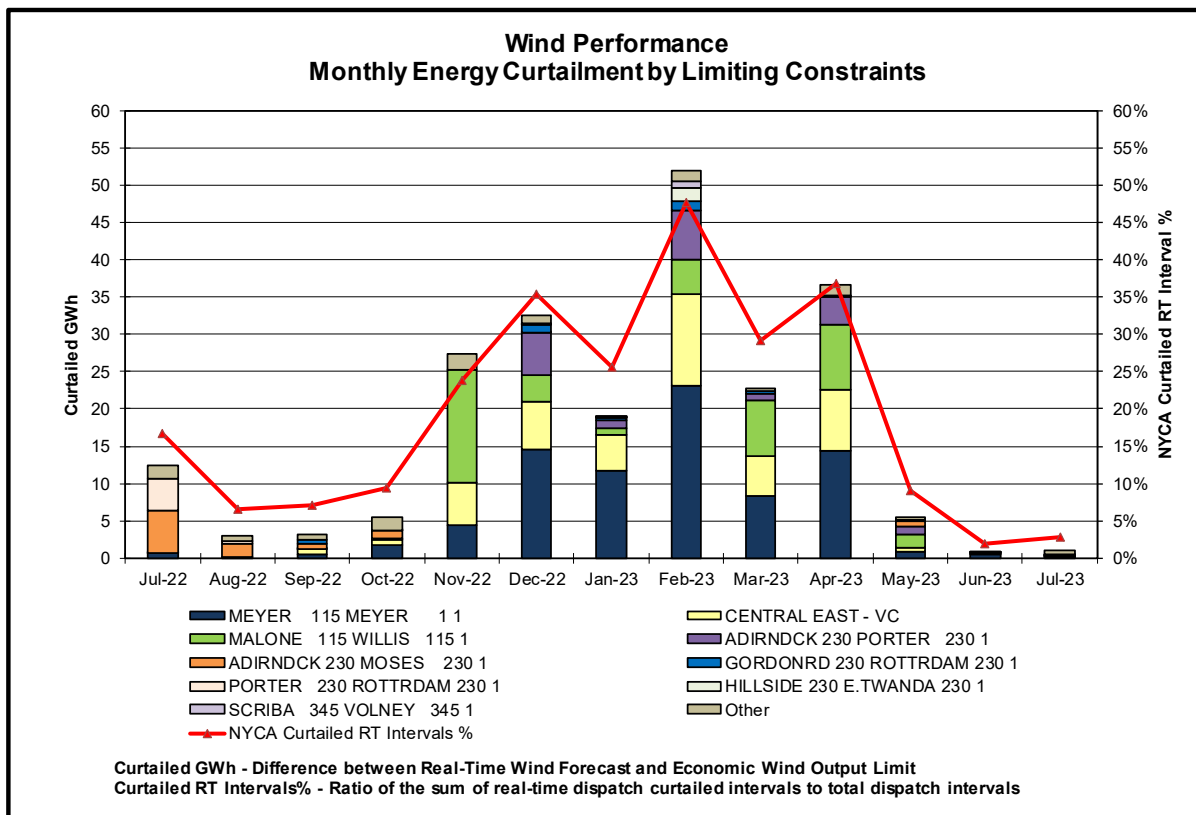
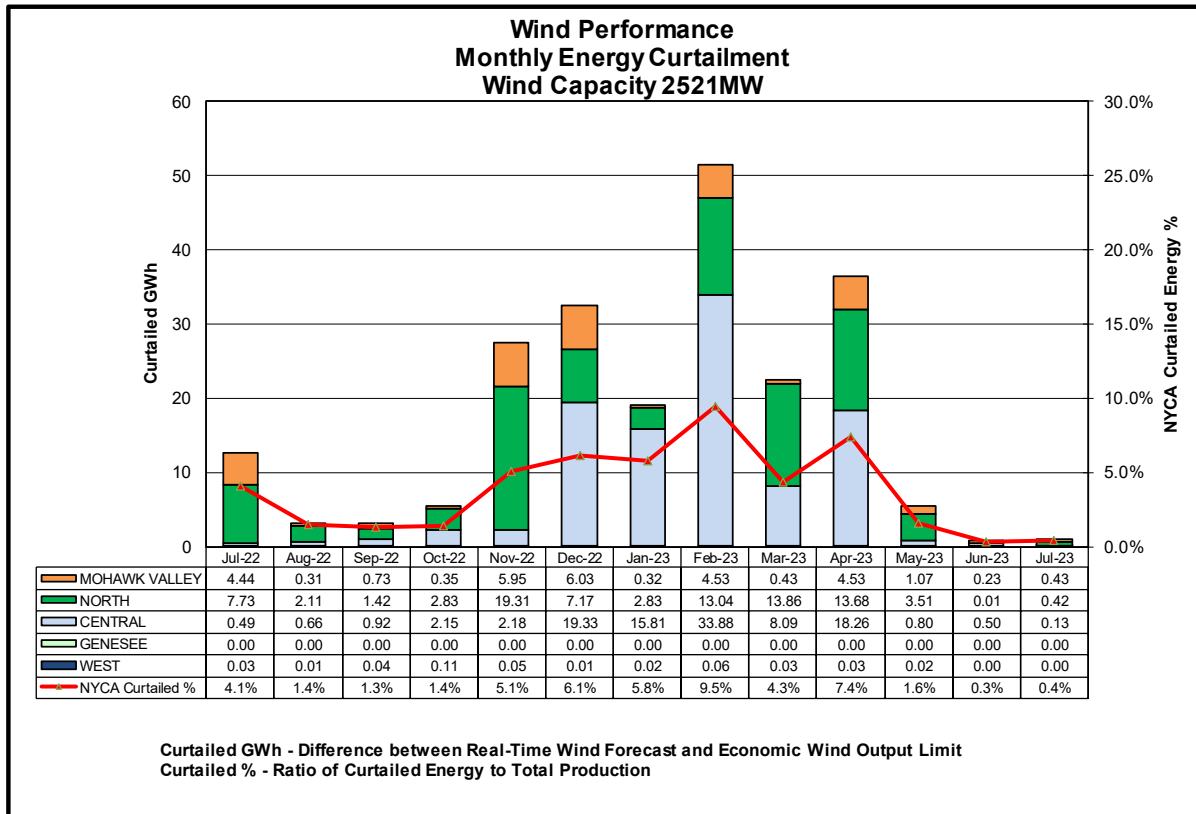
**MAE Forecast** - Avg |actual wind generation - hour ahead forecast wind generation| / Wind Capacity

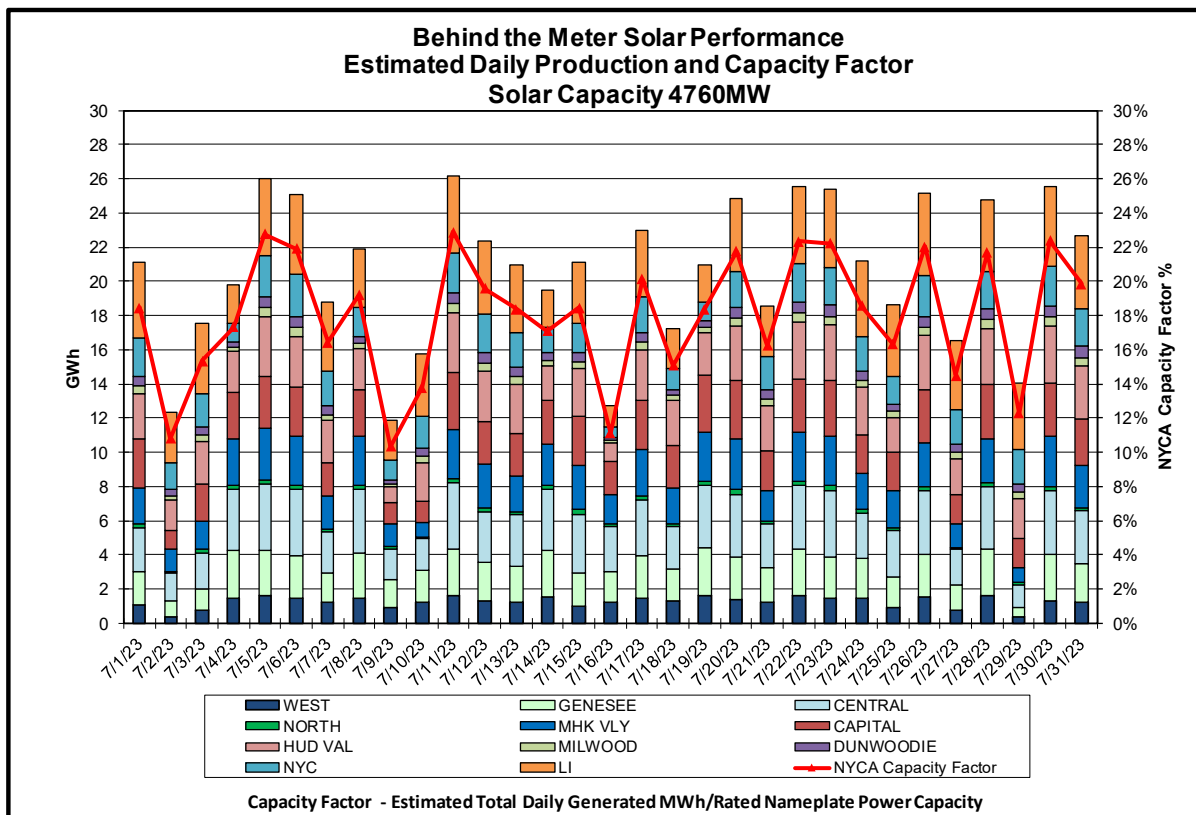
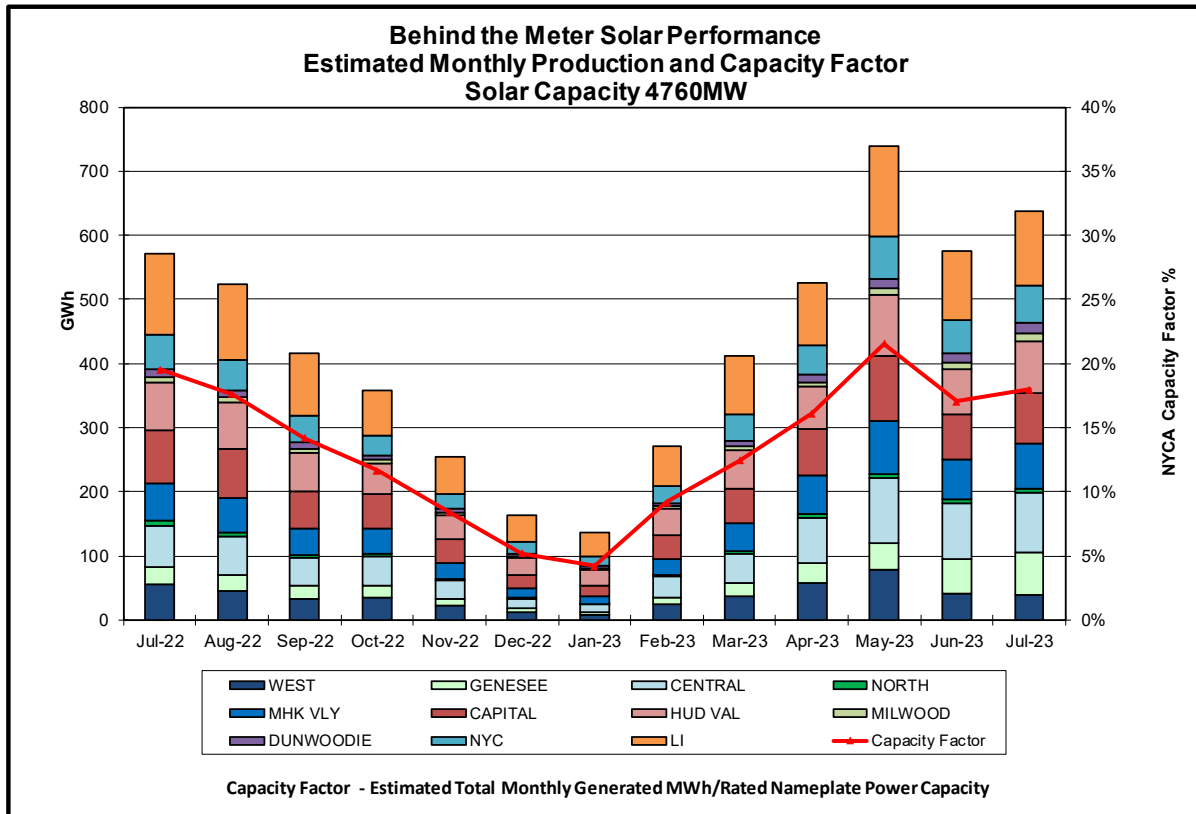
**MAE Persistence** - Avg |actual wind generation - hour ahead actual wind generation| / Wind Capacity

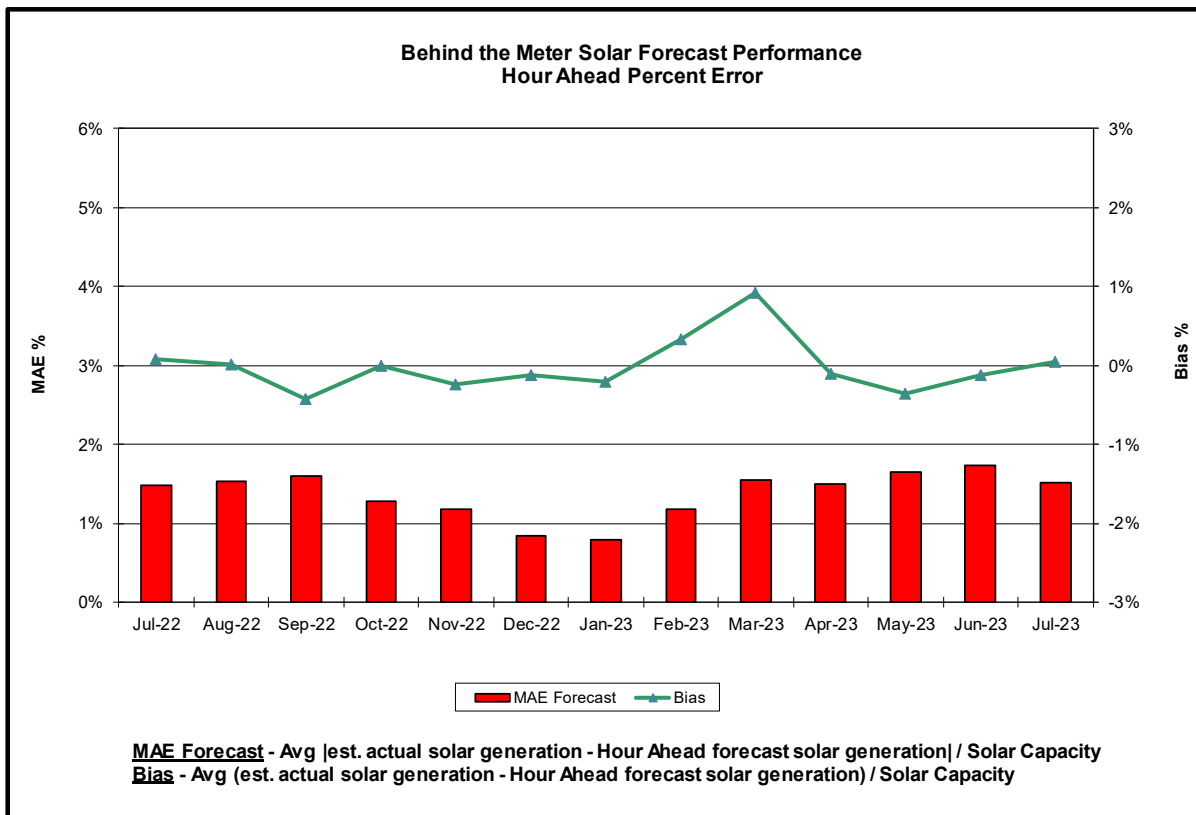
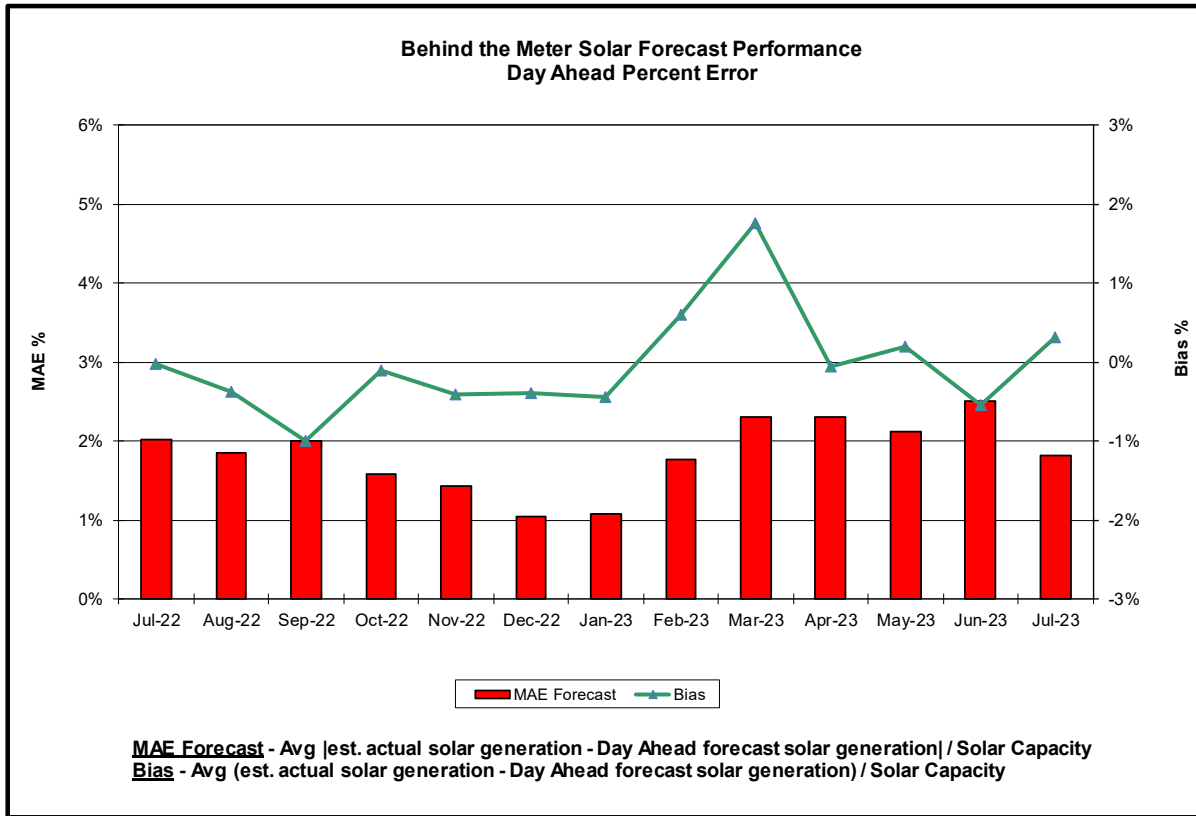
**Bias** - Avg (actual wind generation - hour ahead forecast wind generation) / Wind Capacity

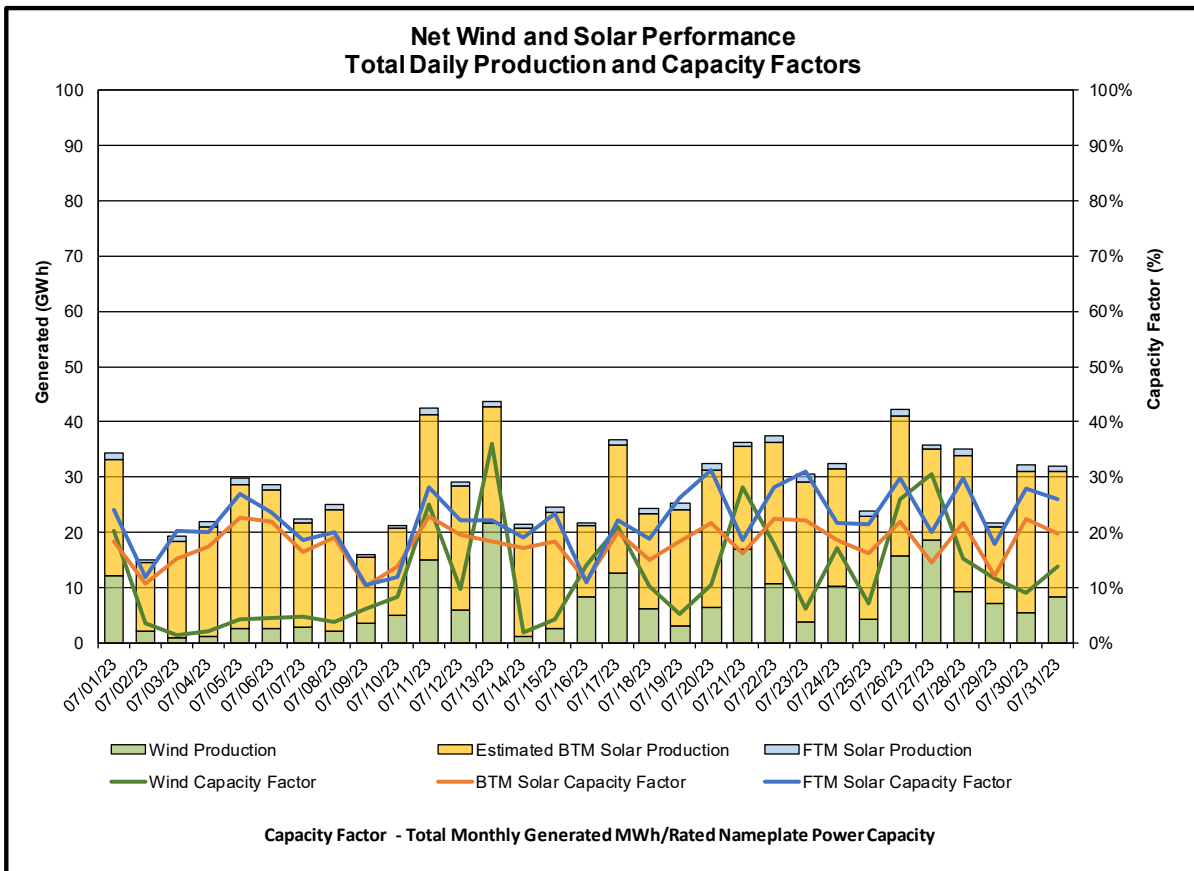
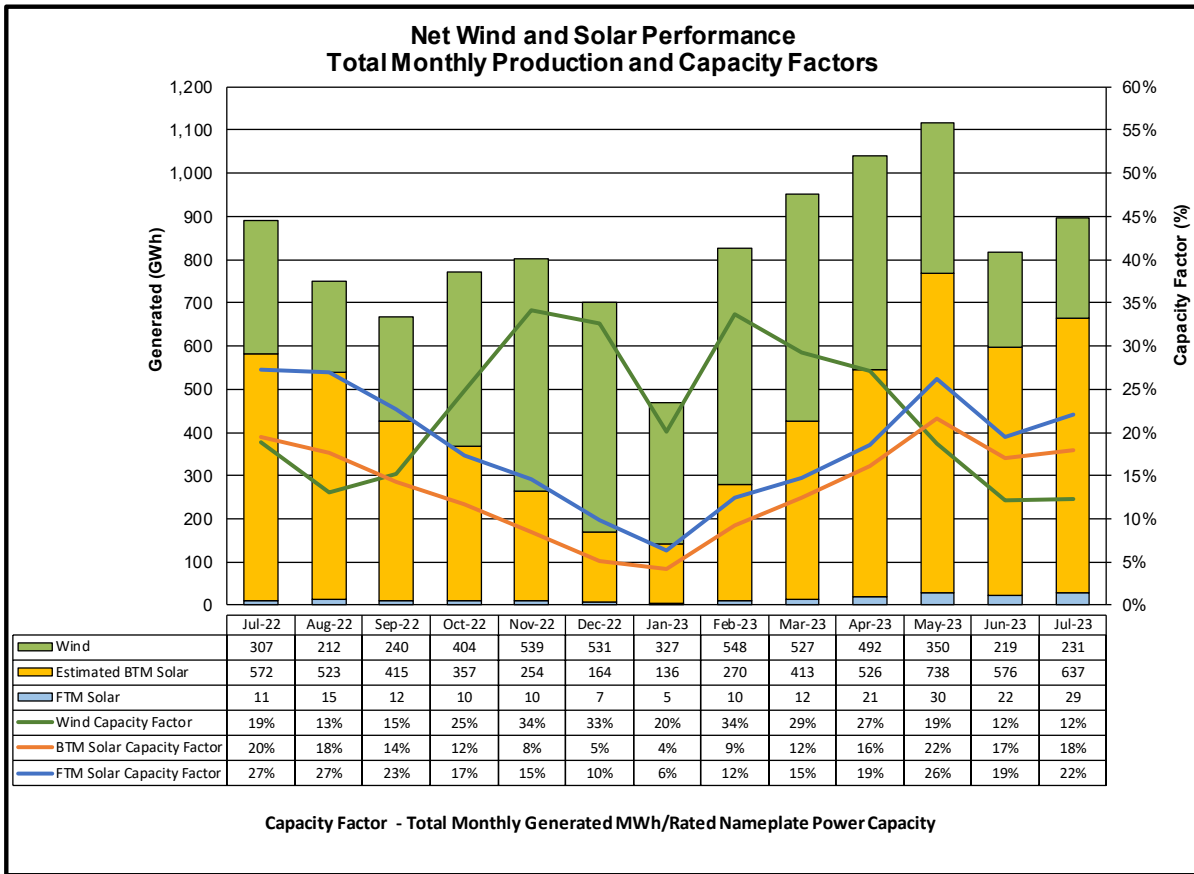




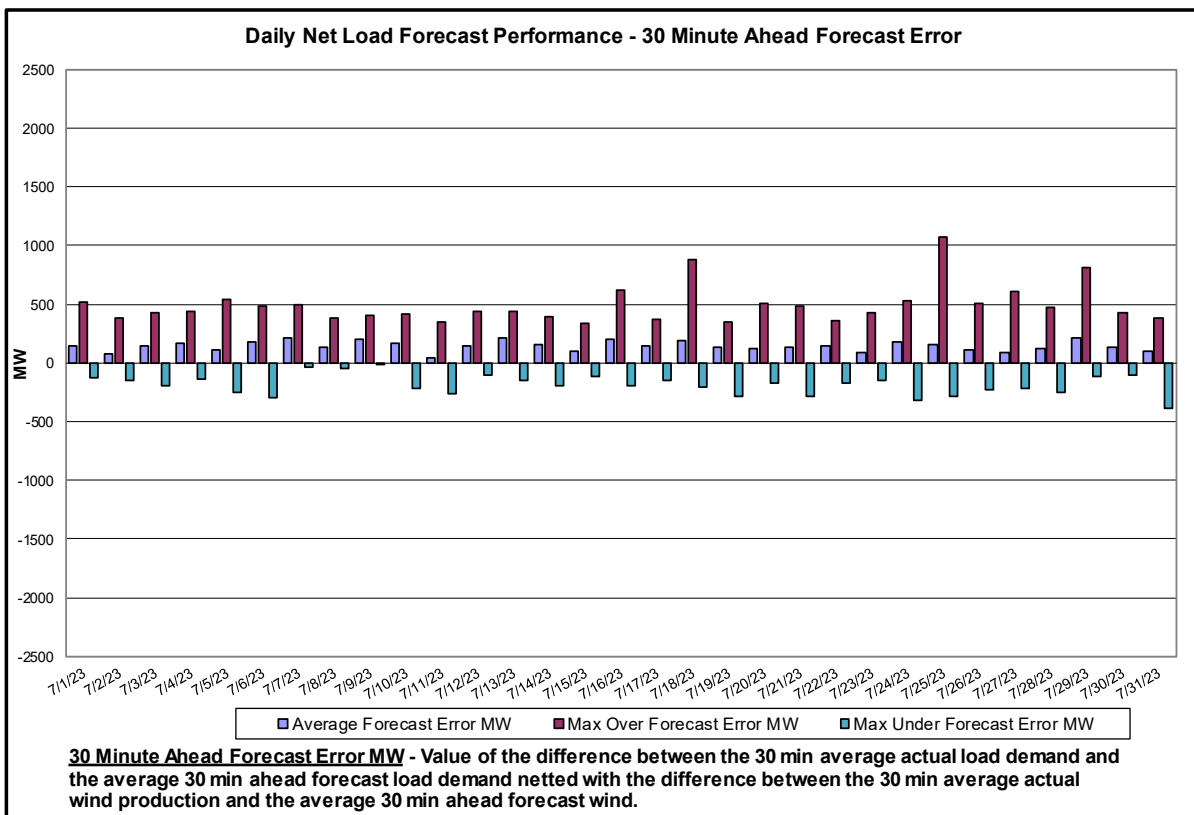
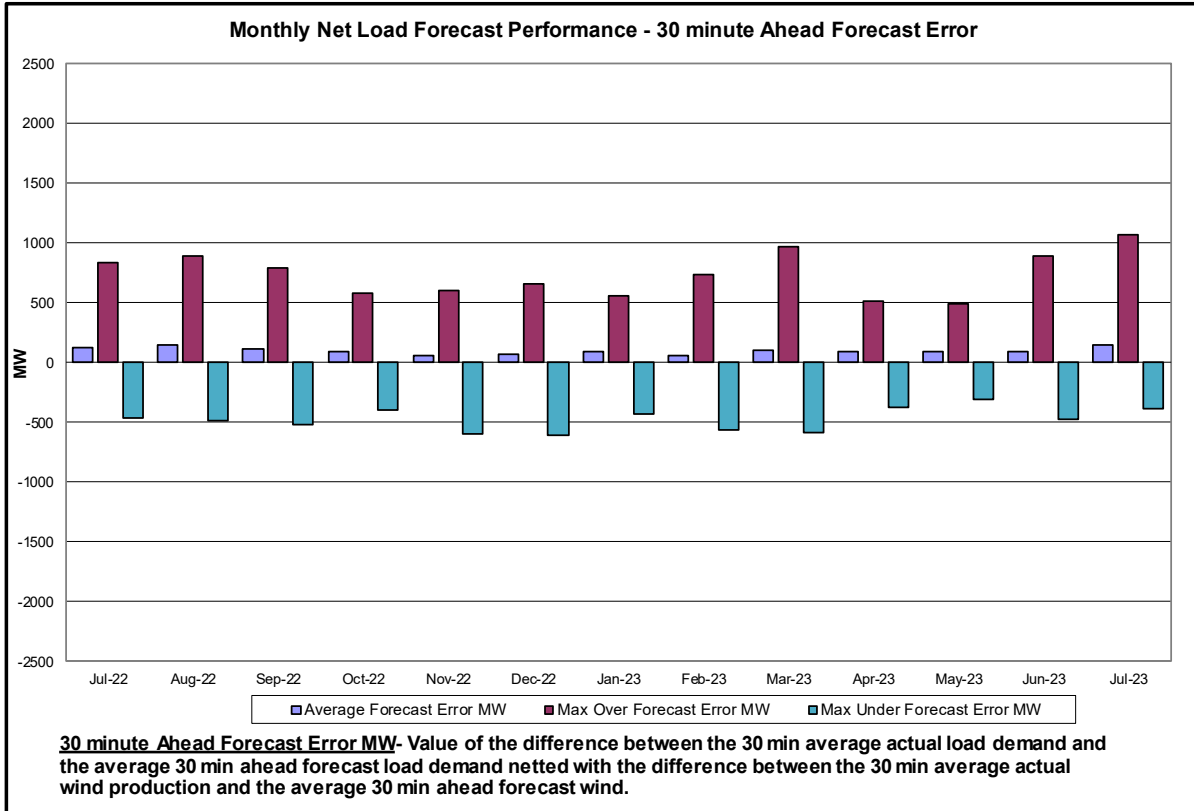


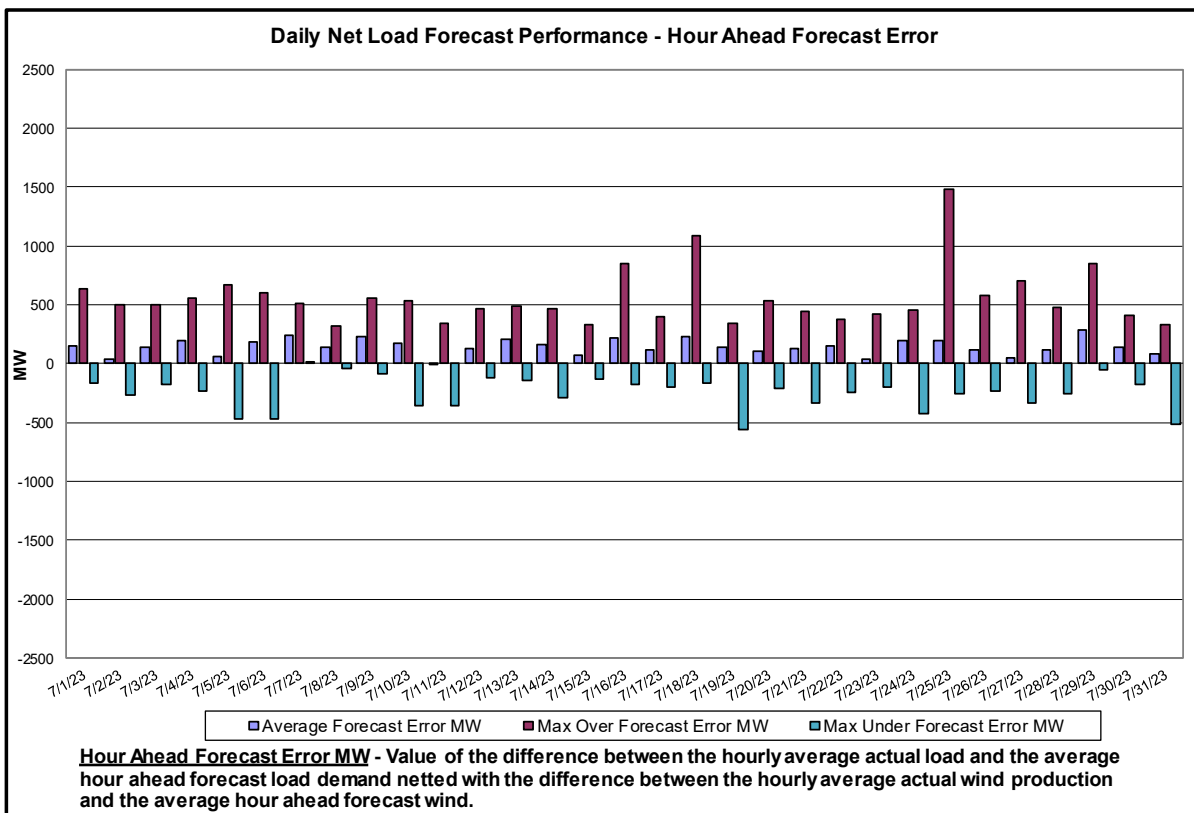
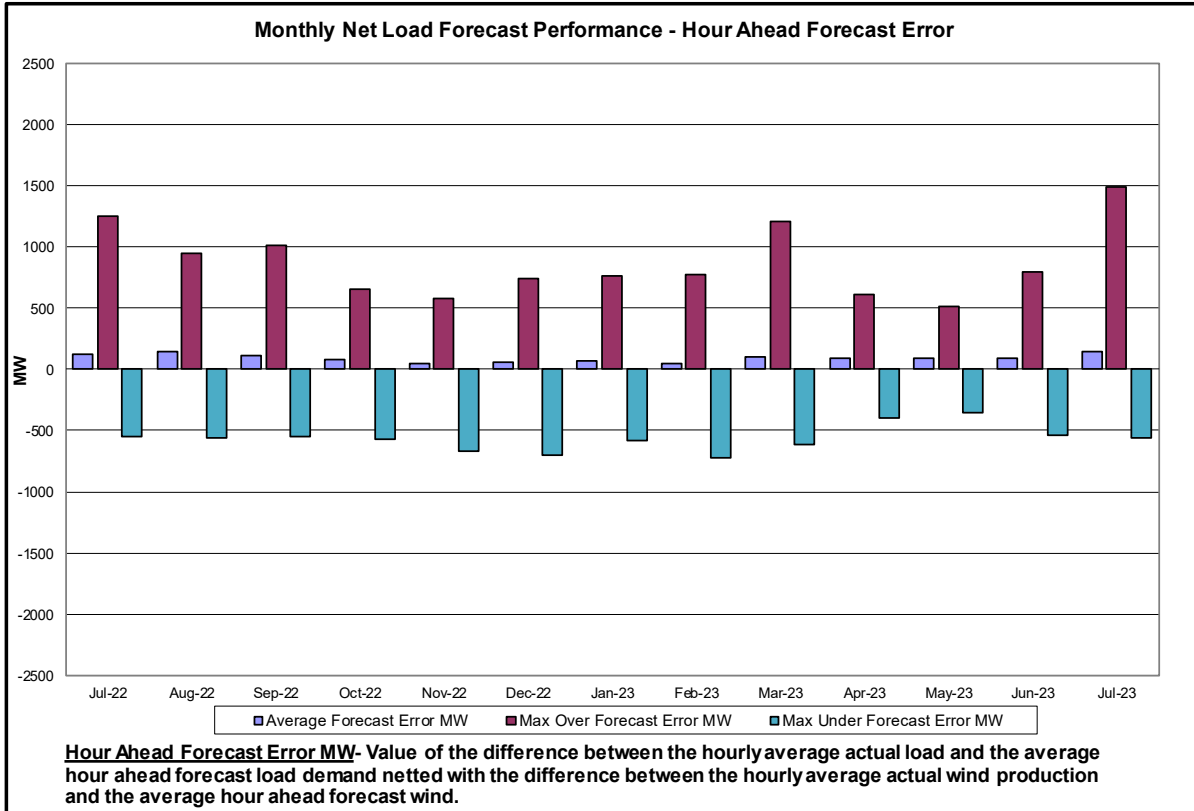


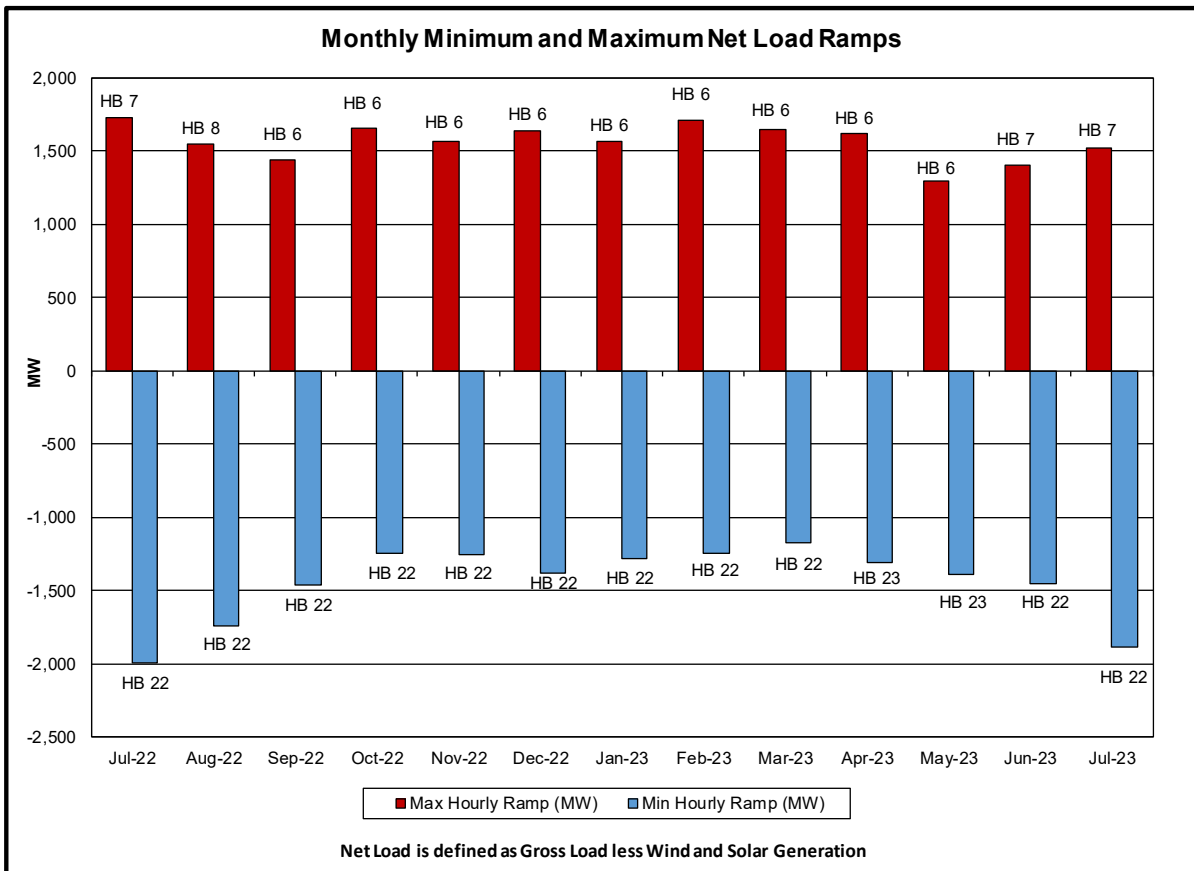
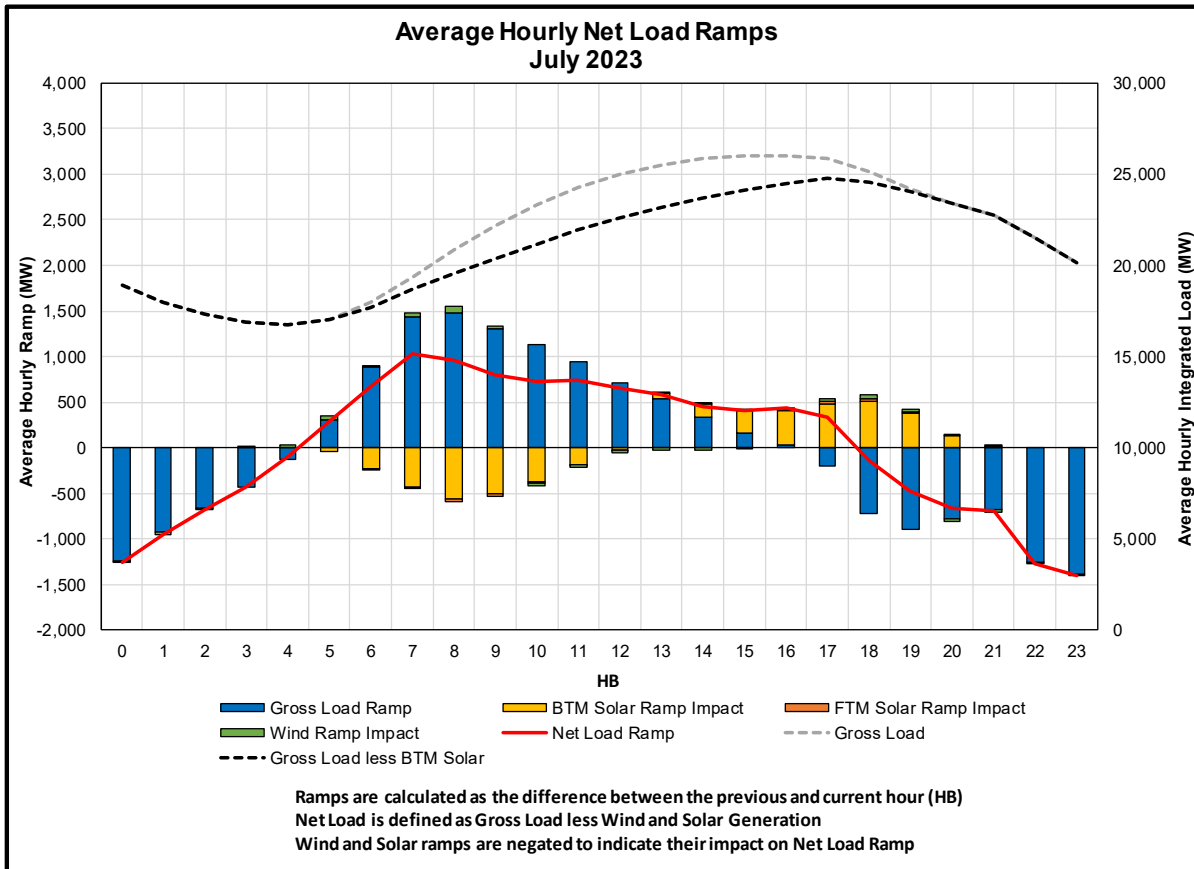




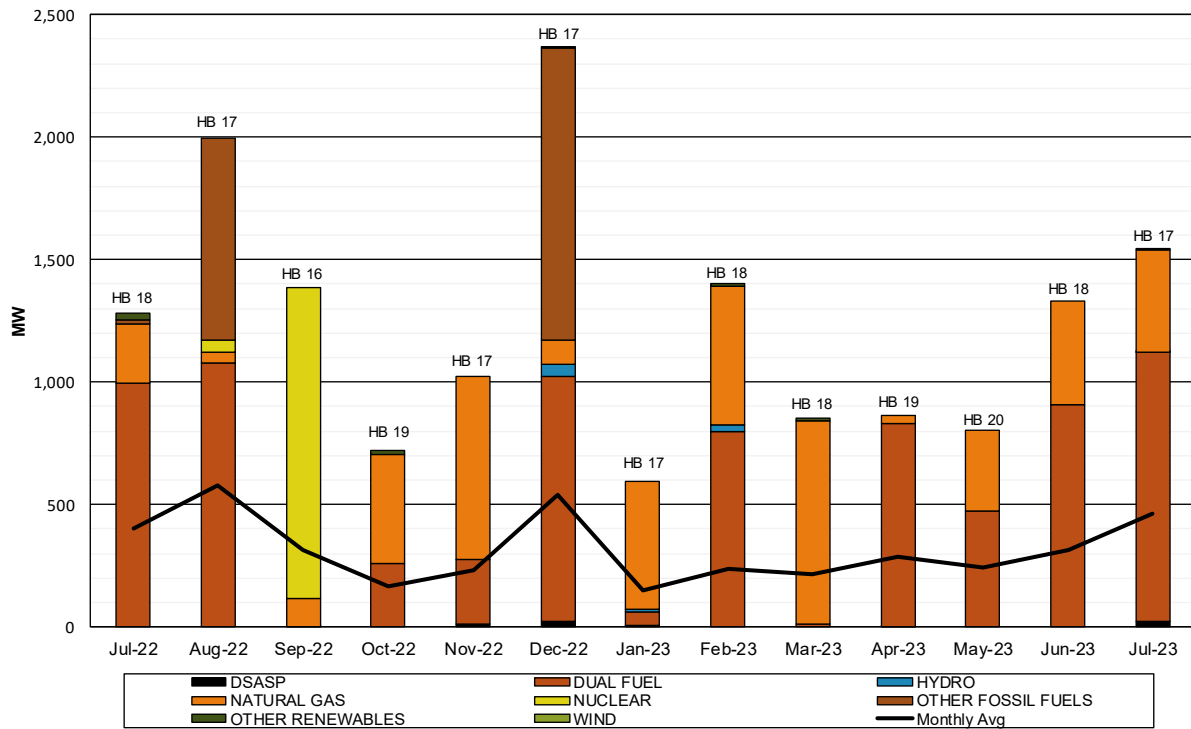








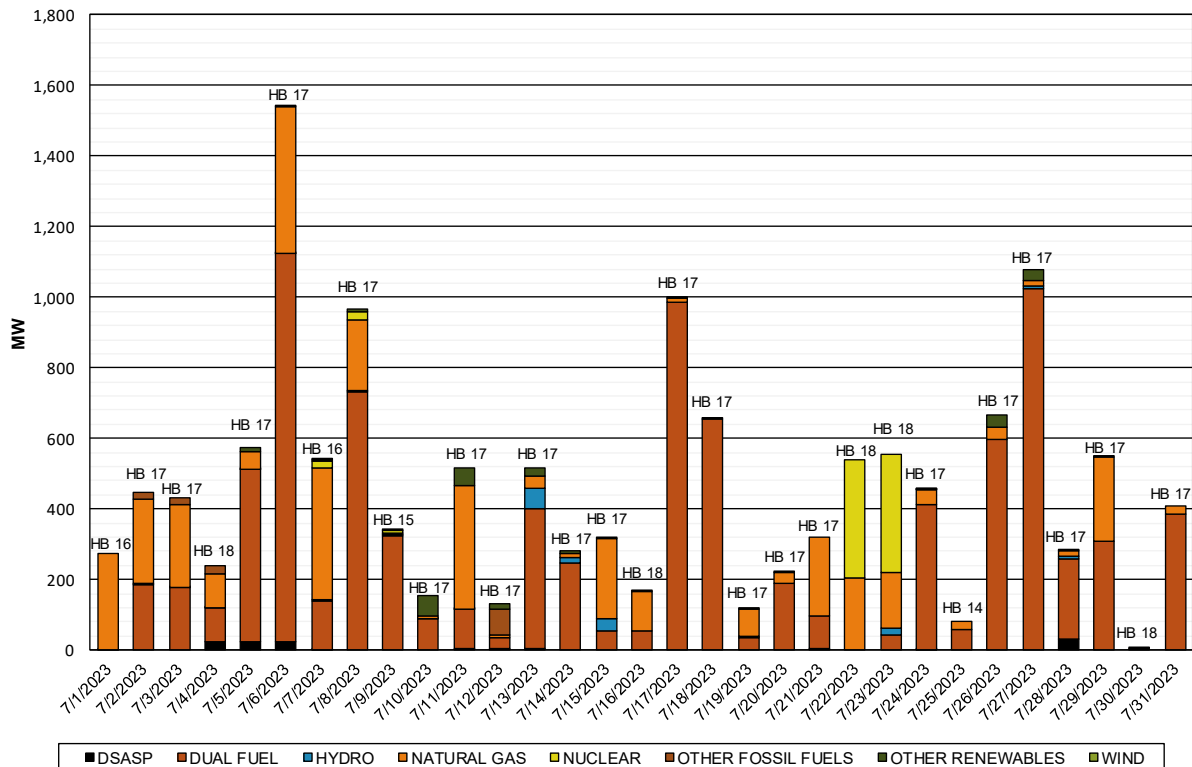
### Monthly Maximum Day-Ahead Market Capacity Unavailable In Real Time



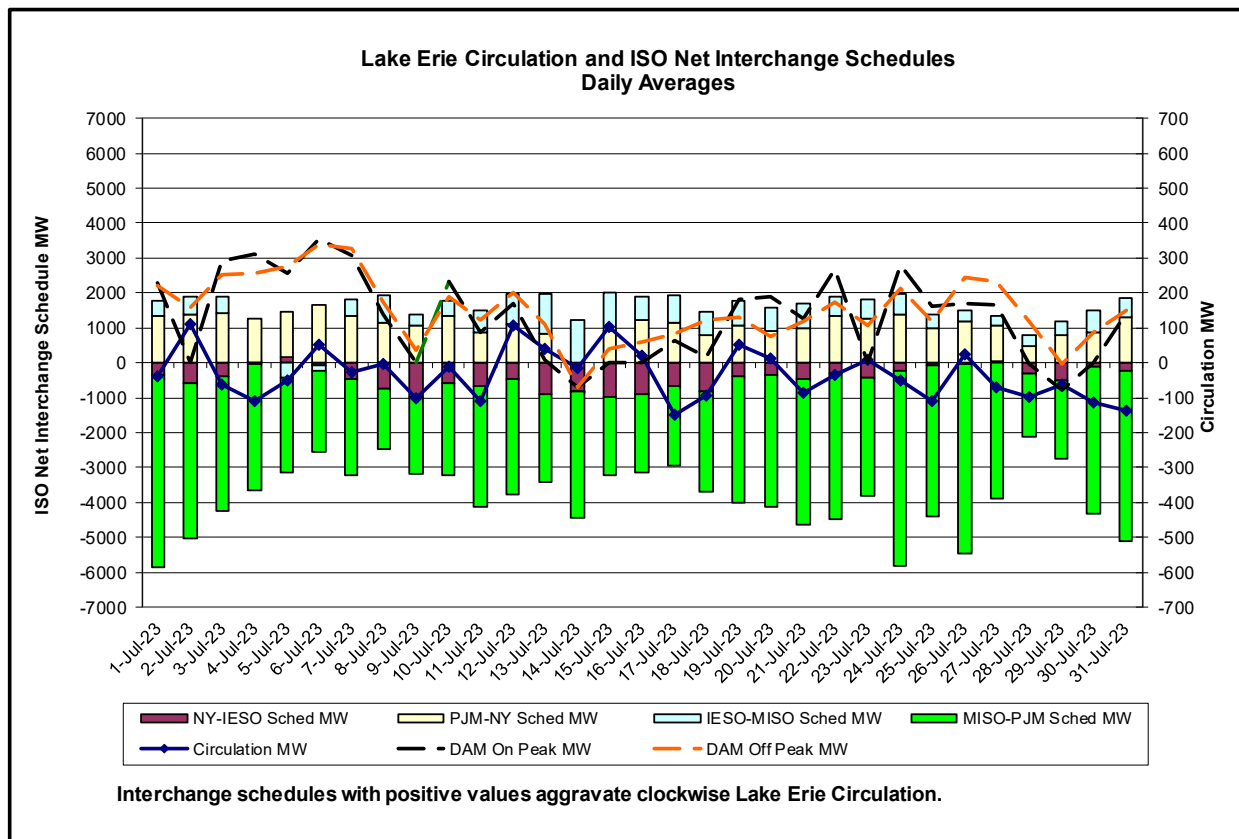
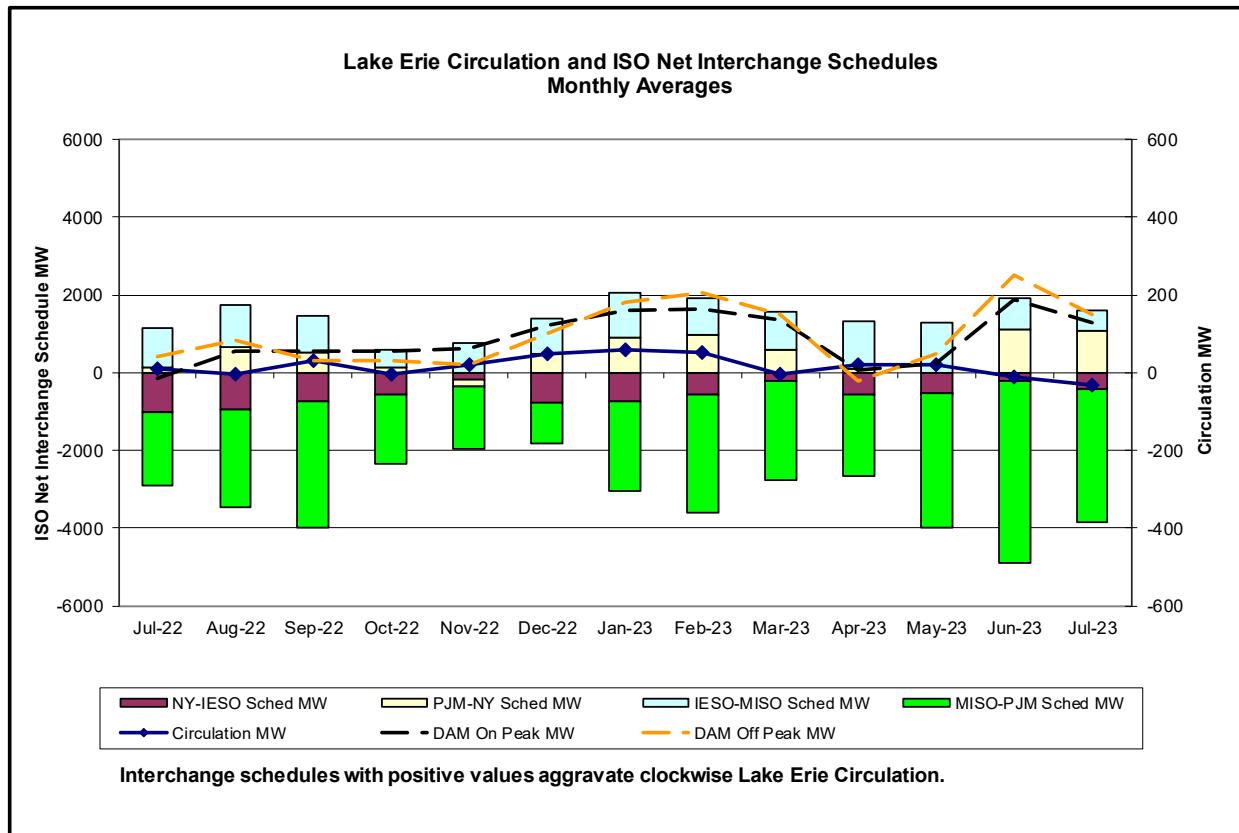
Unavailable Capacity is calculated as the difference of Day-Ahead Market (DAM) capacity relative to Real-Time (RT) capacity during RT peak load hour.

The Monthly Maximum is the day with the largest observed deficit during RT peak load hour.

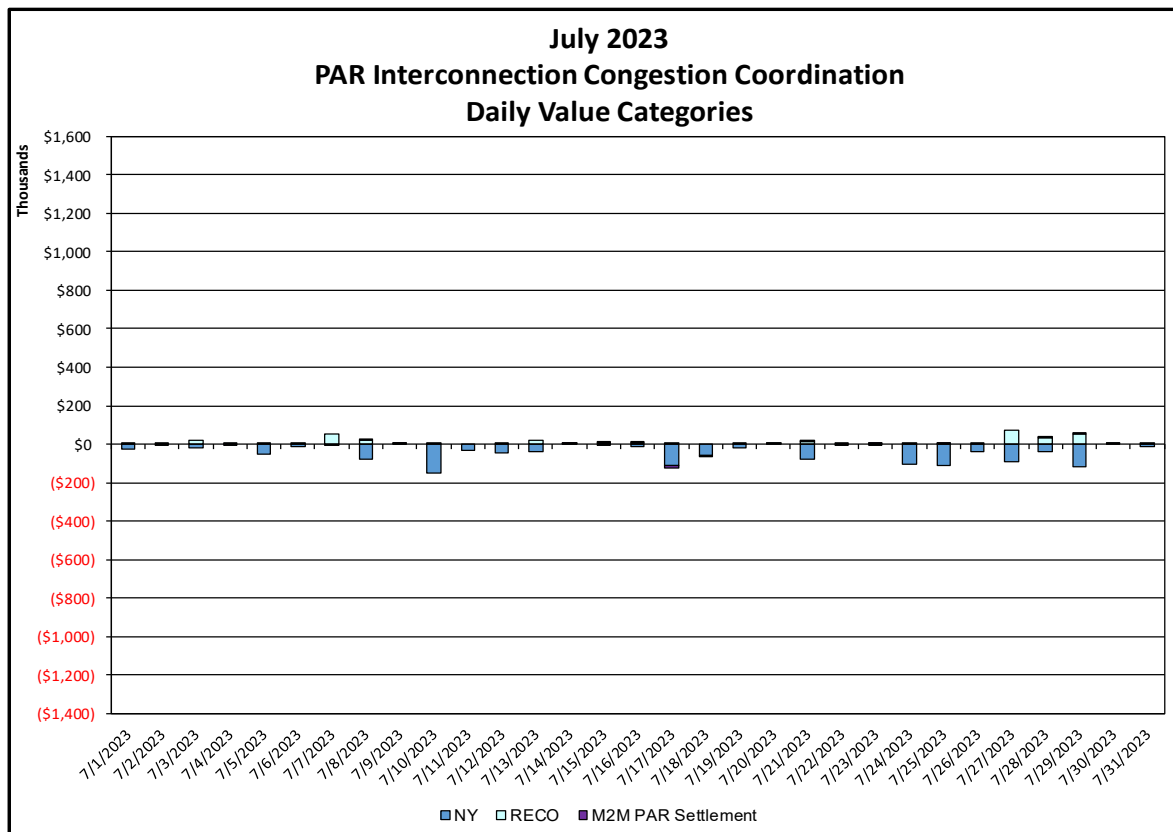
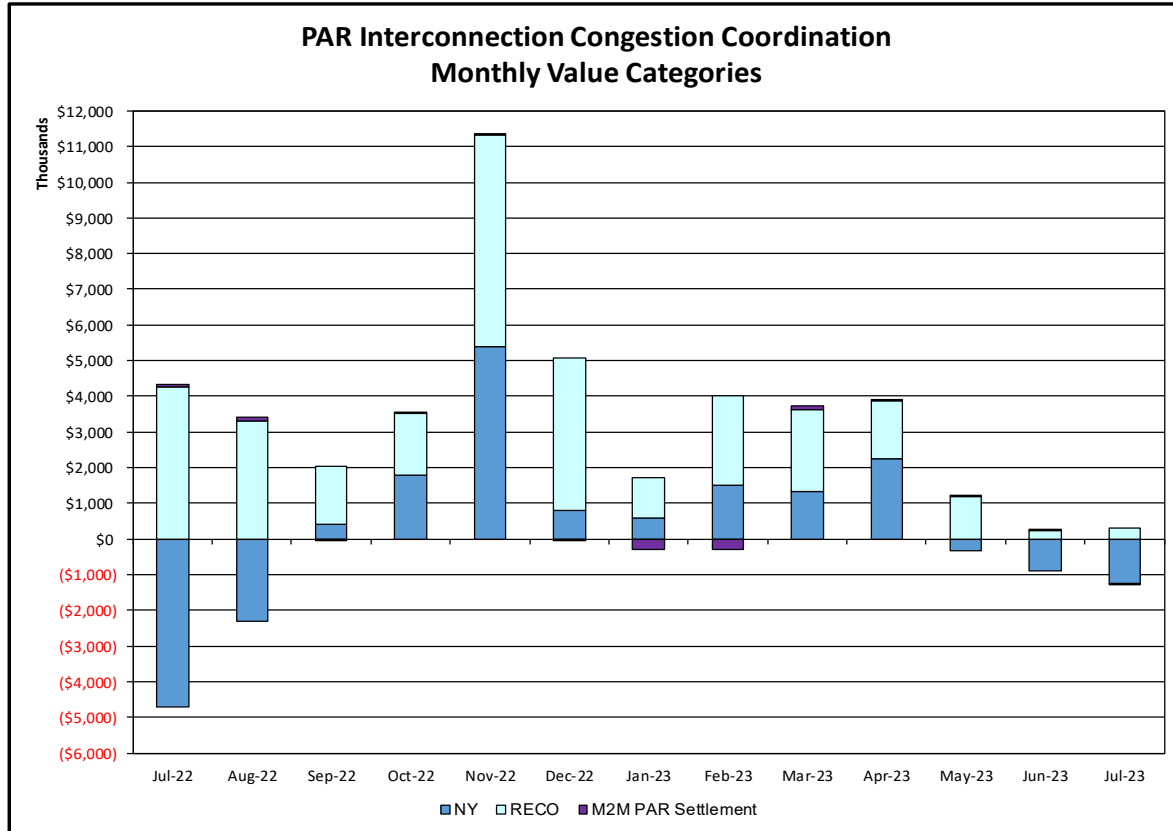
### Daily Day-Ahead Market Capacity Unavailable In Real Time



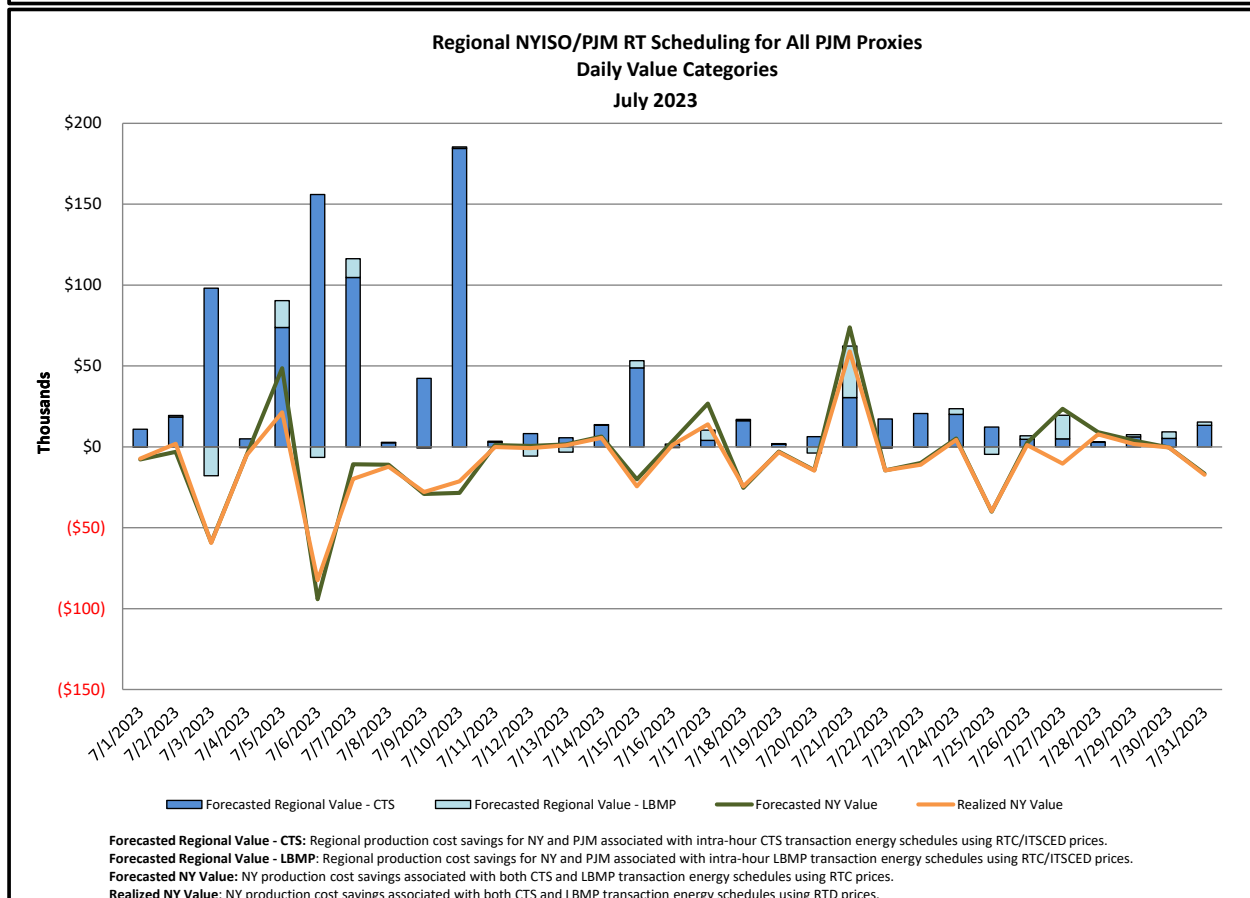
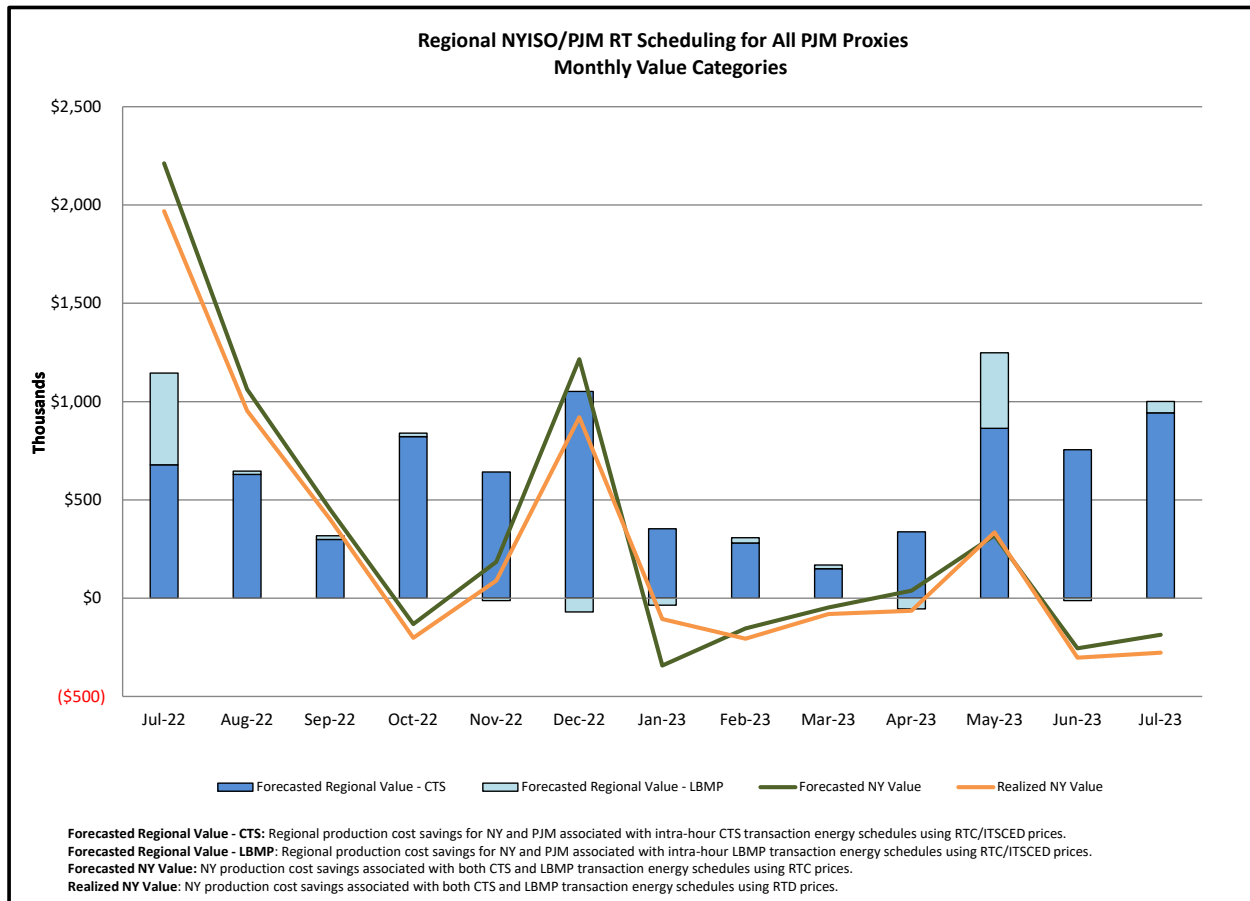
Unavailable Capacity is calculated as the difference of Day-Ahead Market (DAM) capacity relative to Real-Time (RT) capacity during RT peak load hour.



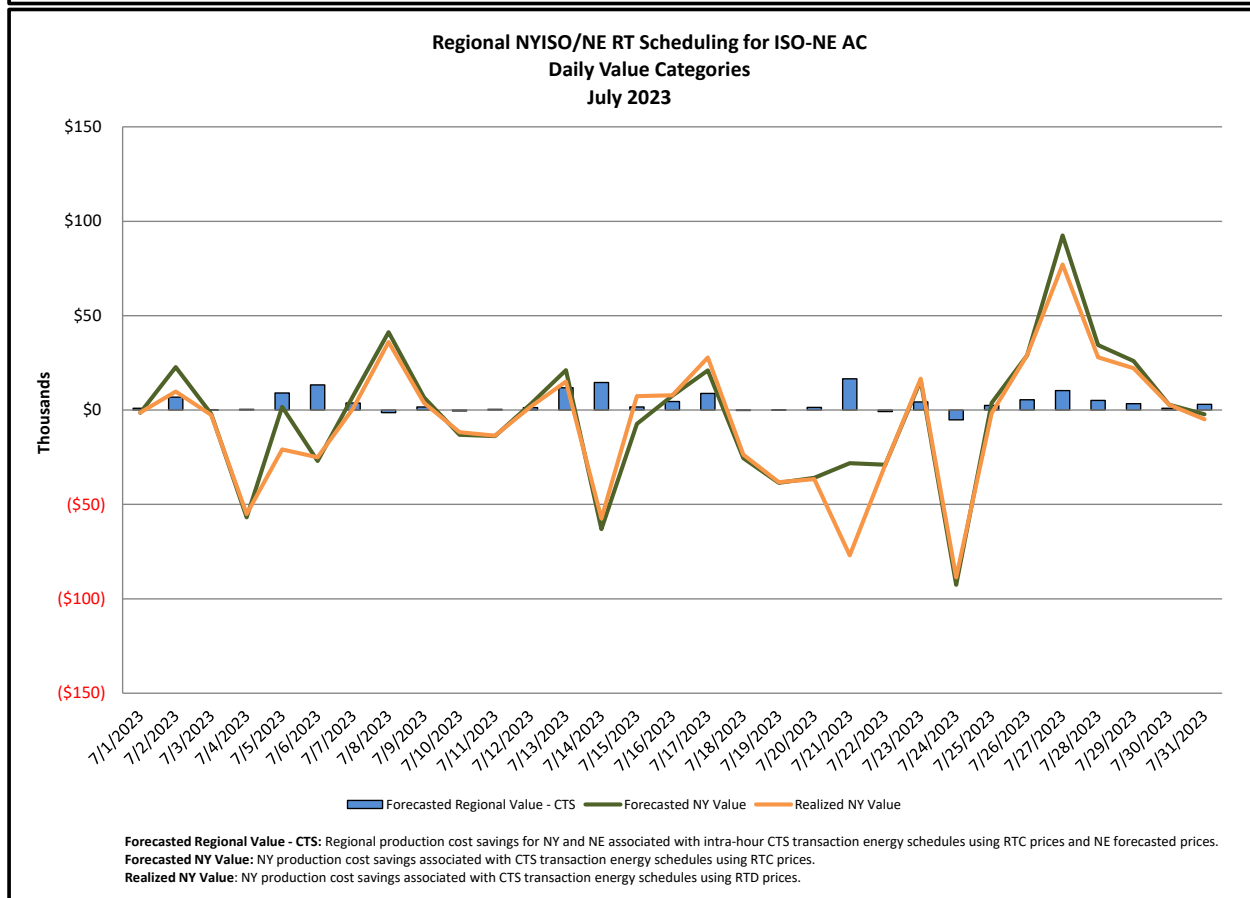
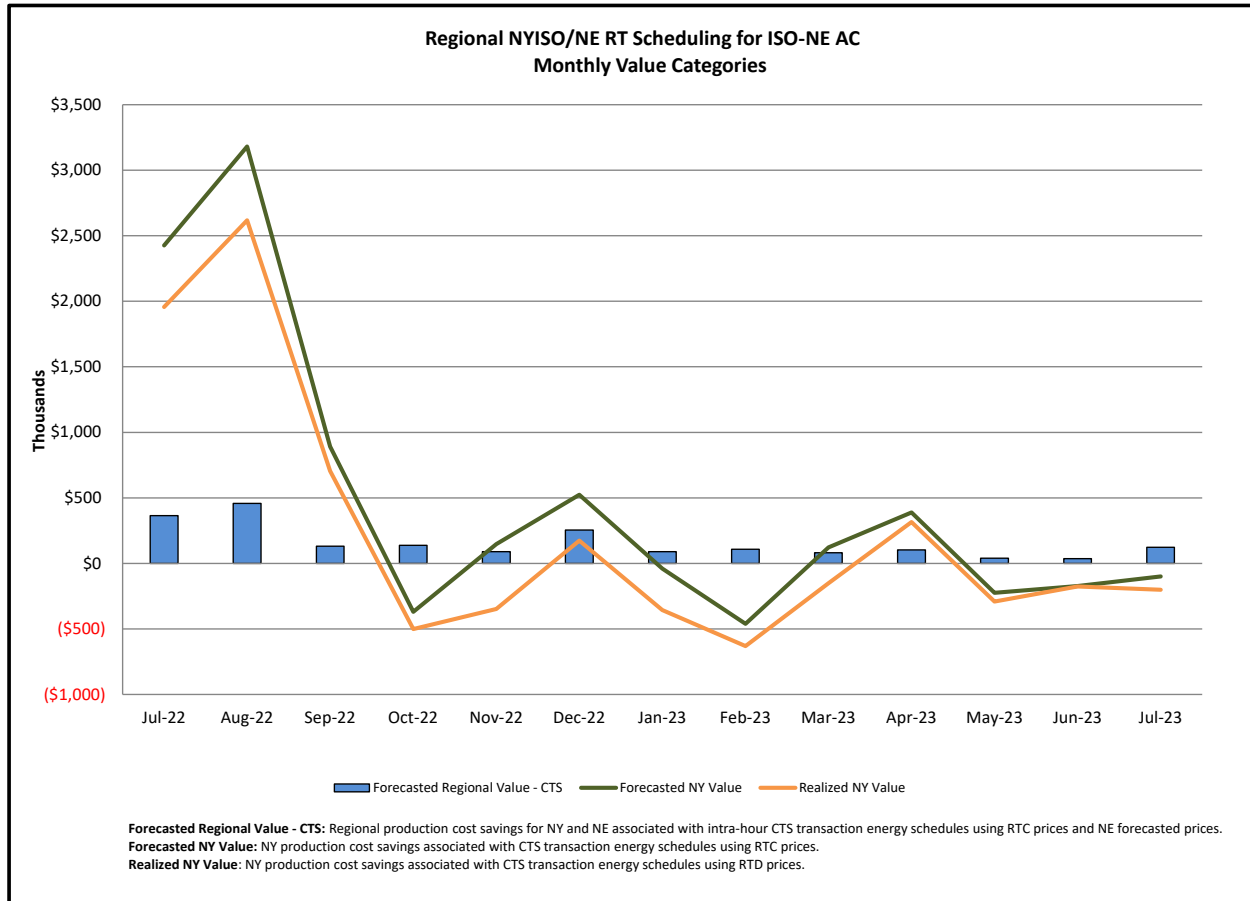
## Broader Regional Market Performance Metrics



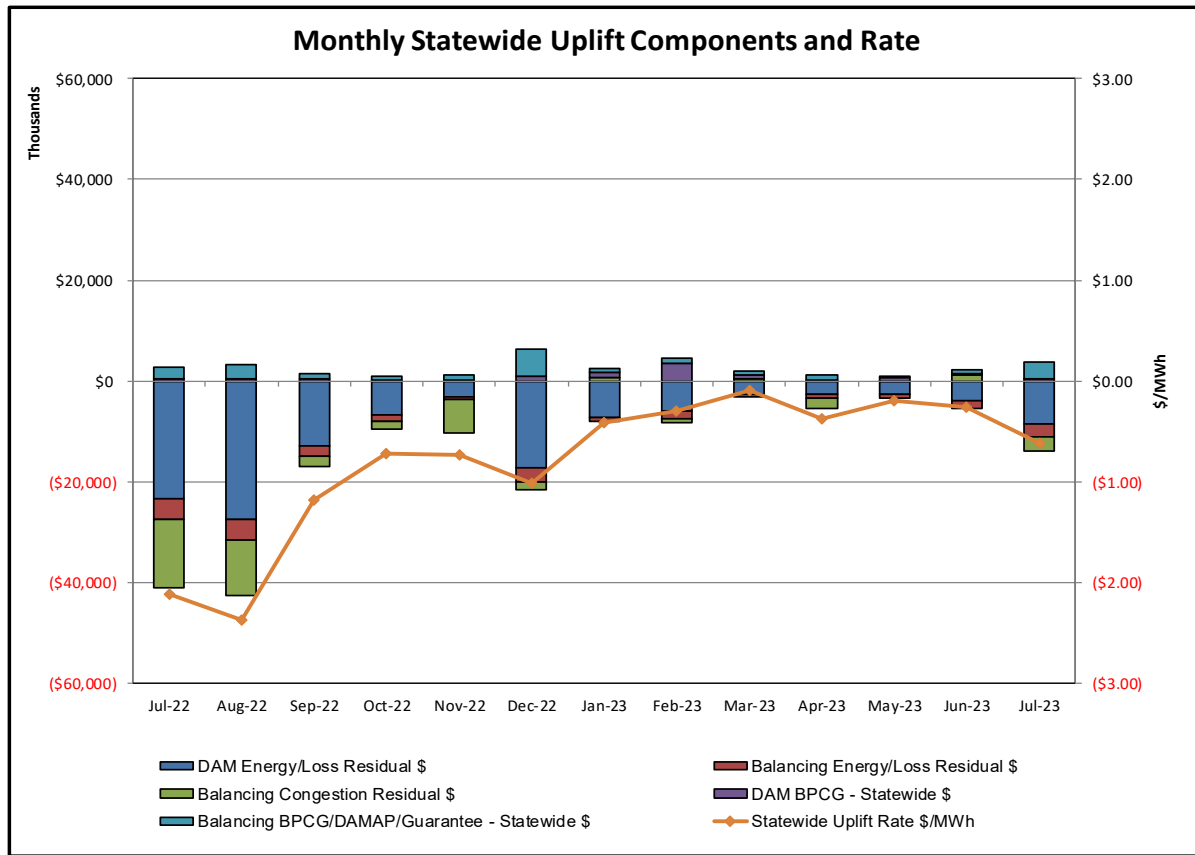
<b><u>PAR Interconnection Congestion Coordination</u></b>	
<b><u>Category</u></b>	<b><u>Description</u></b>
<b>NY</b>	Represents the value NY realizes from Market-to-Market PAR Coordination when experiencing congestion. This is the estimated savings to NY for additional deliveries into NY
<b>RECO</b>	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.
<b>M2M PAR Settlement</b>	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.

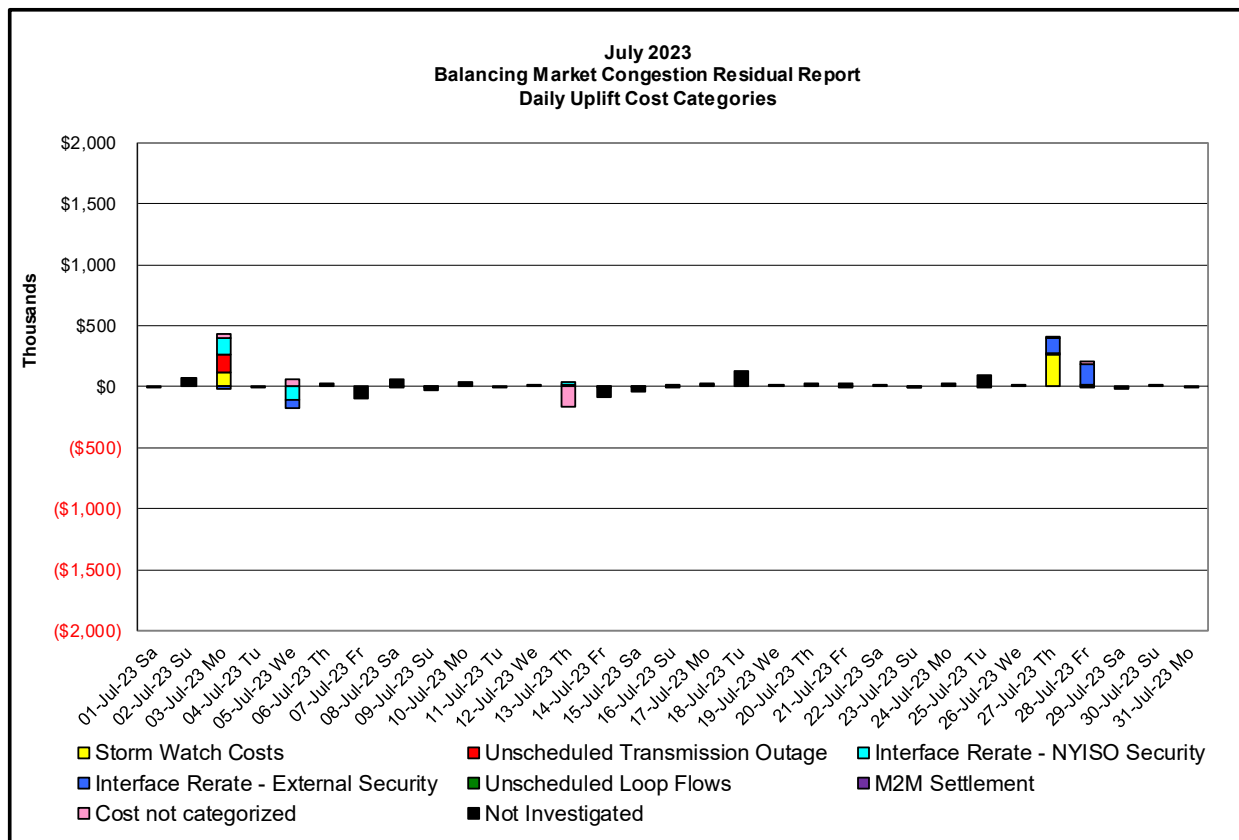
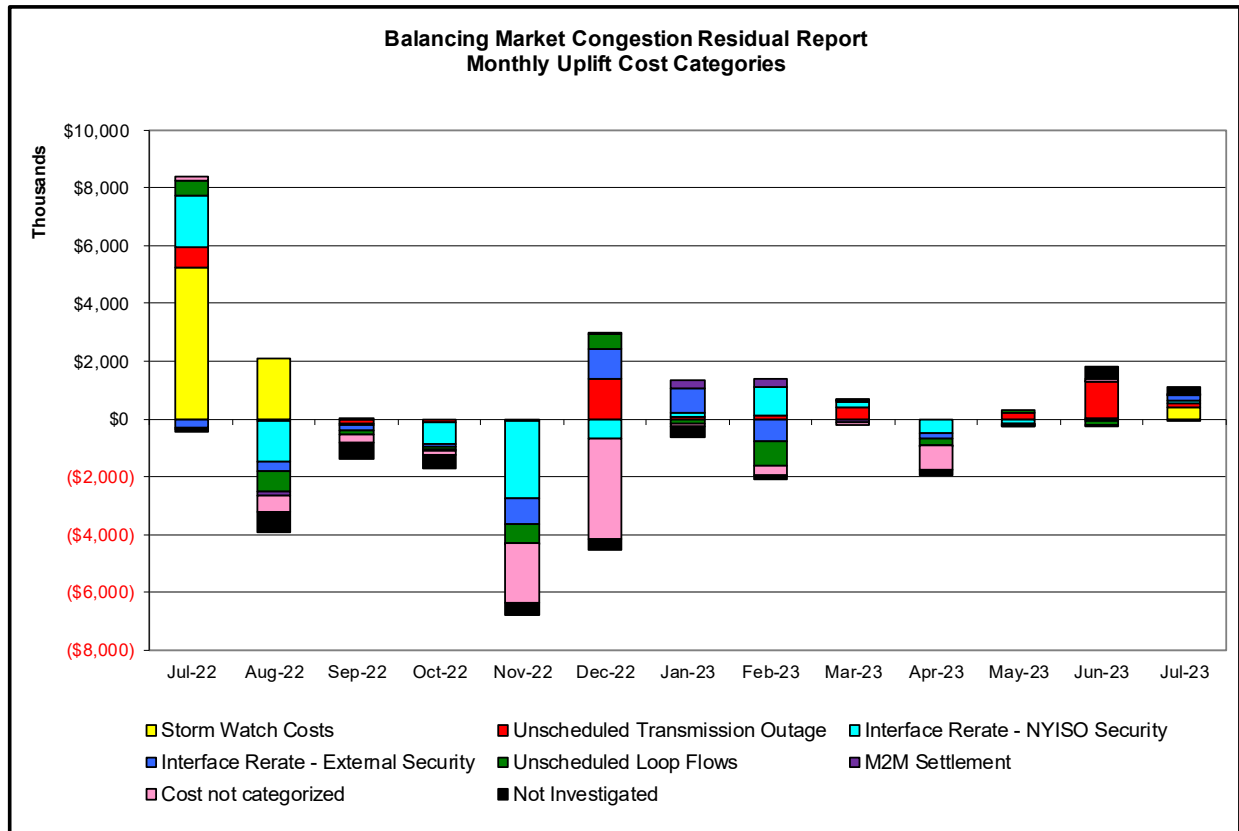






## Market Performance Metrics





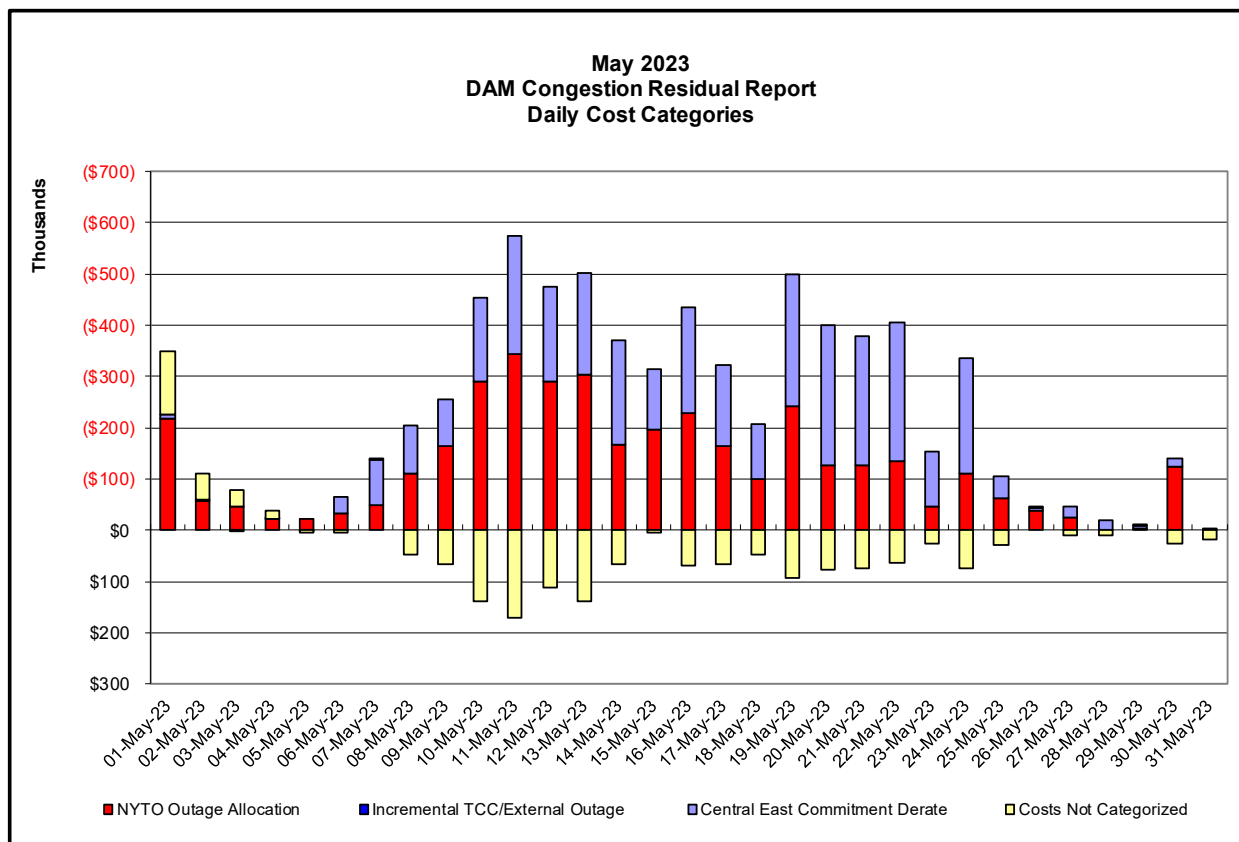
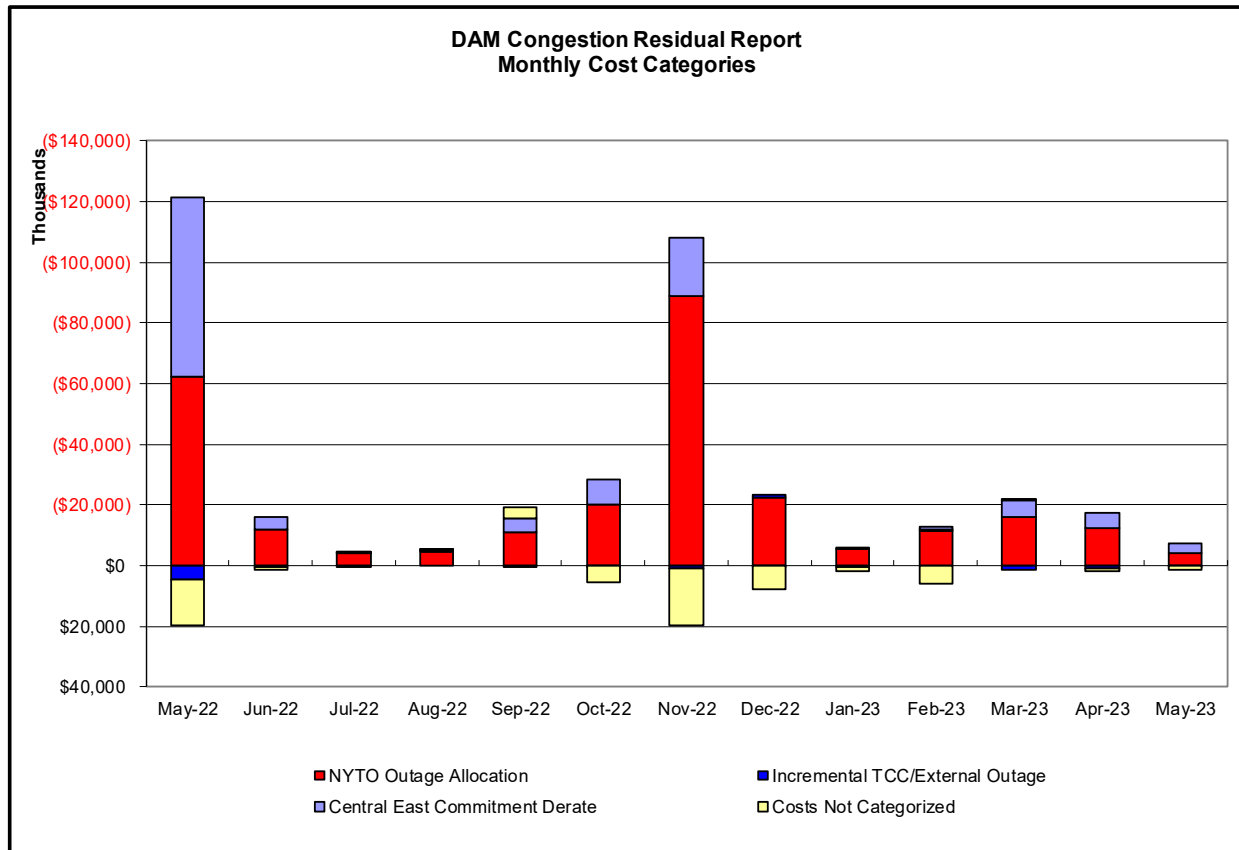
Day's investigated in July: 3,5,13,27,28			
Event	Date (yyyymmdd)	Hours	Description
	7/3/2023	17	Thunder Storm Alert, Linden-Goethals 230kV (#A2253)
	7/3/2023	16-18	Forced outage Dunwoodie-Motthaven 345kV (#71)
	7/3/2023	17,18	Derate East 13th Sta-West 49th St 345kV (#M55) I/o SCB:E13TH(1):M54&45&BK14&15
	7/3/2023	16-18	Derate East 13th Sta-West 49th St 345kV (#M55) I/o SCB:E13TH(2):M55&46&BK12+13
	7/3/2023	16	NE AC ACTIVE DNI Ramp Limit
	7/3/2023	13	PJM AC ACTIVE DNI Ramp Limit
	7/5/2023	13,22	NYCA DNI Ramp Limit
	7/5/2023	13,22	Uprate Goethals-Gowanus 345kV (#25)
	7/5/2023	22	Uprate Goethals-Gowanus 345kV (#26)
	7/5/2023	13,19-22	Uprate Scriba-Volney 345kV (#20) I/o Scriba-Volney 345kV (#21)
	7/5/2023	22	NE AC ACTIVE DNI Ramp Limit
	7/5/2023	19-21	NE AC-NY Scheduling Limit
	7/5/2023	19	PJM AC-NY Scheduling Limit
	7/5/2023	4,7	IESO AC ACTIVE DNI Ramp Limit
	7/5/2023	21,22	NE NNC1385-NY Scheduling Limit
	7/5/2023	19	PJM AC ACTIVE DNI Ramp Limit
	7/13/2023	21-23	Thunder Storm Alert, Buchanan North 345/138kV (BKTA5)
	7/13/2023	8,22	Derate Goethals-Gowanus (#26) I/o SCB:GOETH(3):25&22&R25
	7/13/2023	21,22	Derate Goethals-Gowanus (#26) I/o SCB:GOETH(5):25&R25&A2253&BK1
	7/27/2023	19	Thunder Storm Alert, Buchanan North 345/138kV (BKTA5)
	7/27/2023	14-18	Thunder Storm Alert, Chestor-Shoemaker 138kV (#27)
	7/27/2023	14-16,18,19,21	Thunder Storm Alert, Linden-Goethals 230kV (#A2253)
	7/27/2023	15	NYCA DNI Ramp Limit
	7/27/2023	9	Uprate Scriba-Volney 345kV (#20) I/o Scriba-Volney 345kV (#21)
	7/27/2023	14-16,21	NE AC ACTIVE DNI Ramp Limit
	7/28/2023	16,17	Derate Brownfalls-Taylorville 115kV (#3) I/o Brownfalls-Taylorville 115kV (#4)
	7/28/2023	20	NE AC ACTIVE DNI Ramp Limit
	7/28/2023	14,17,19	HQ CEDARS - NY Scheduling Limit
	7/28/2023	14-19	IESO AC Active DNI Ramp Limit

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

Category	Cost Assignment	Events Types	Event Examples
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 Rerates 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	

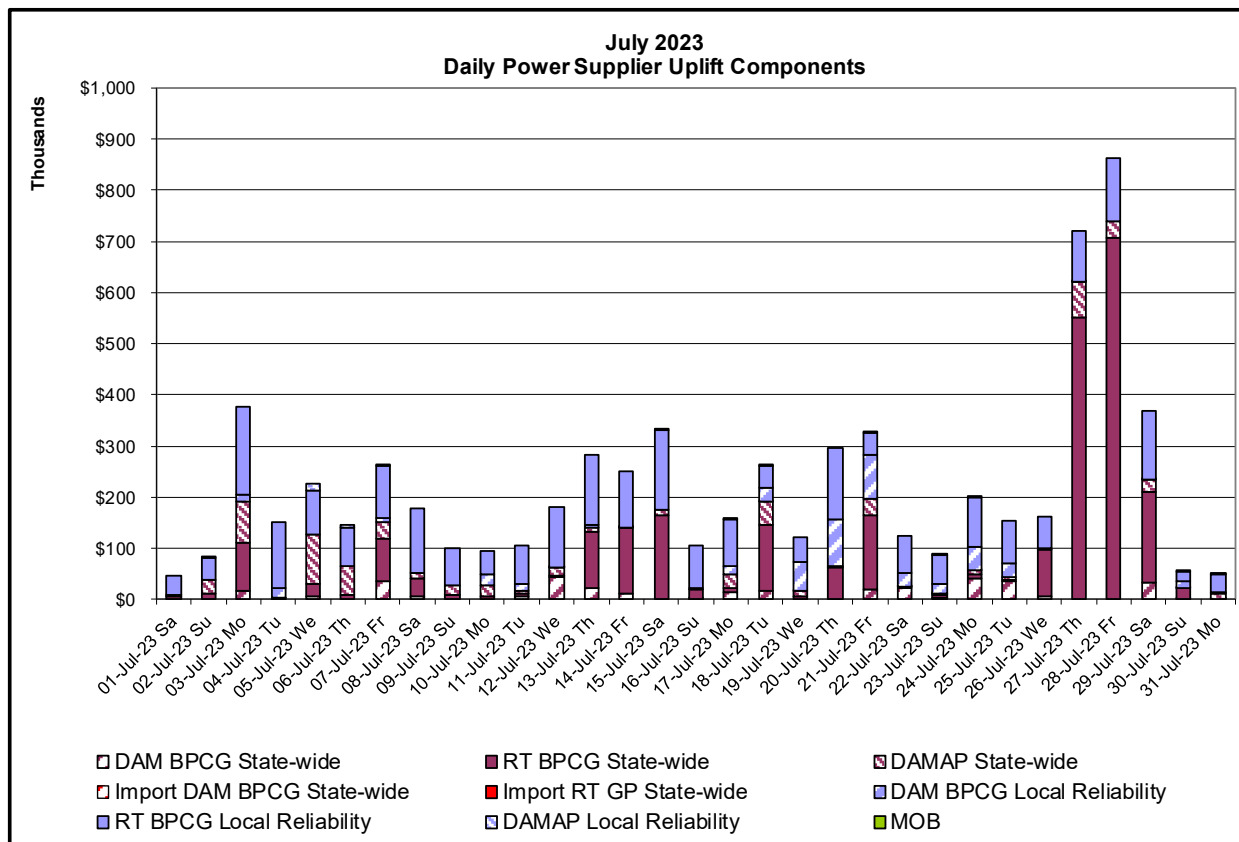
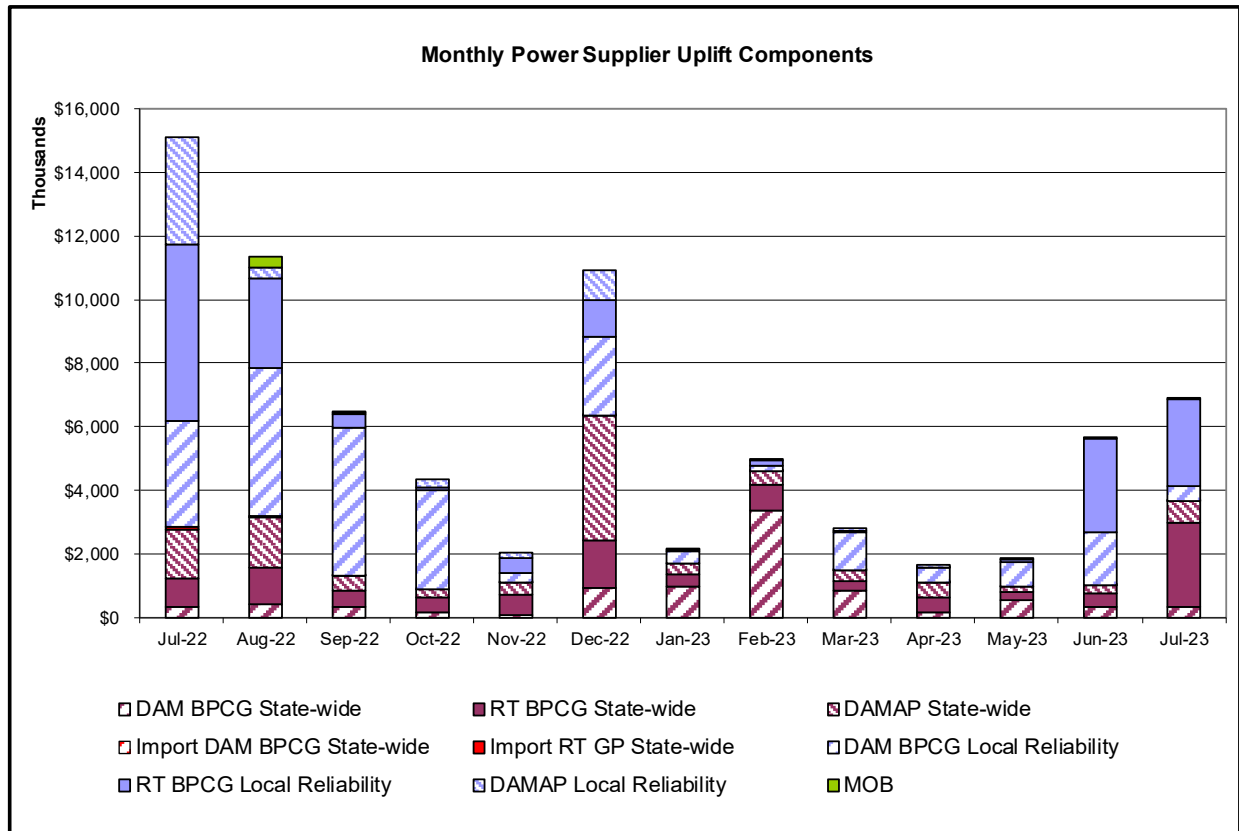
#### Monthly Balancing Market Congestion Report Assumptions/Notes

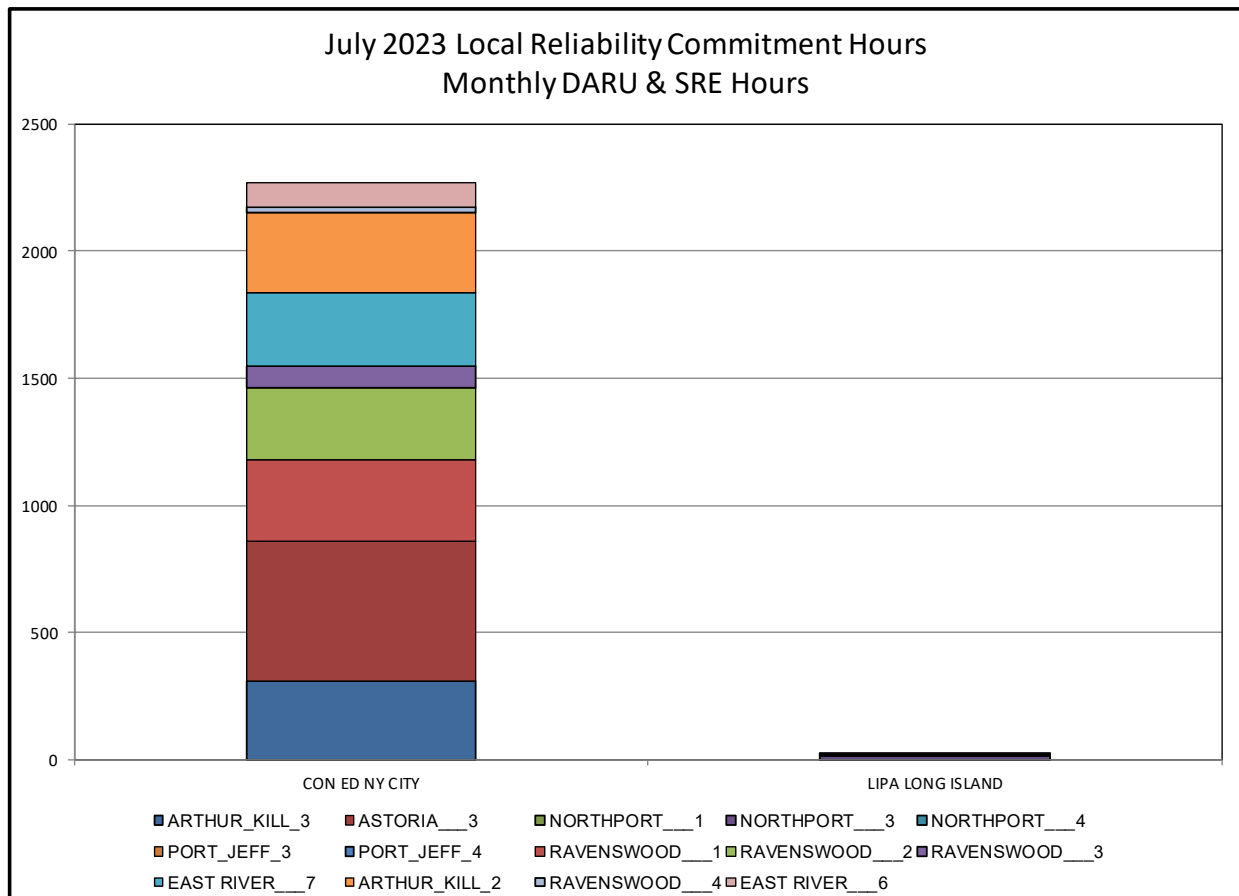
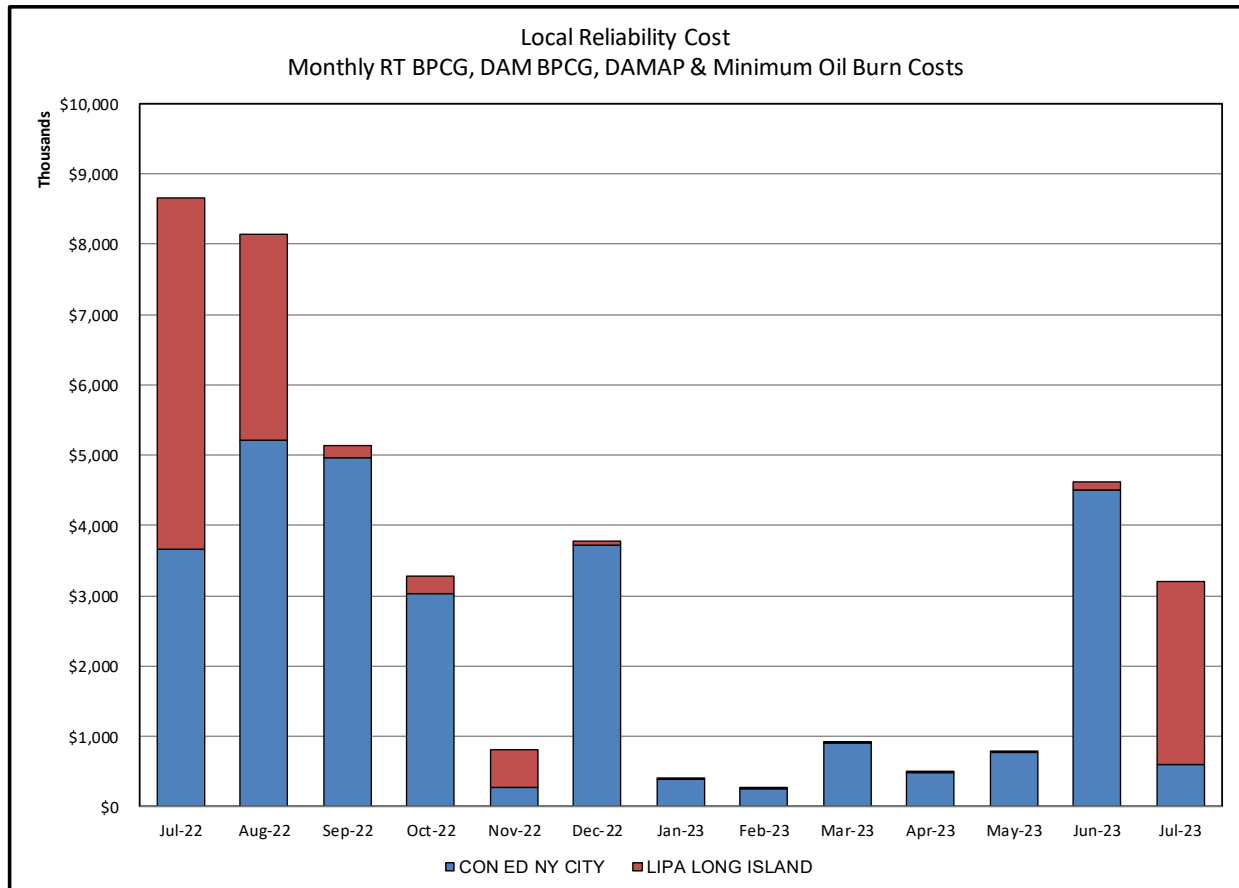
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour



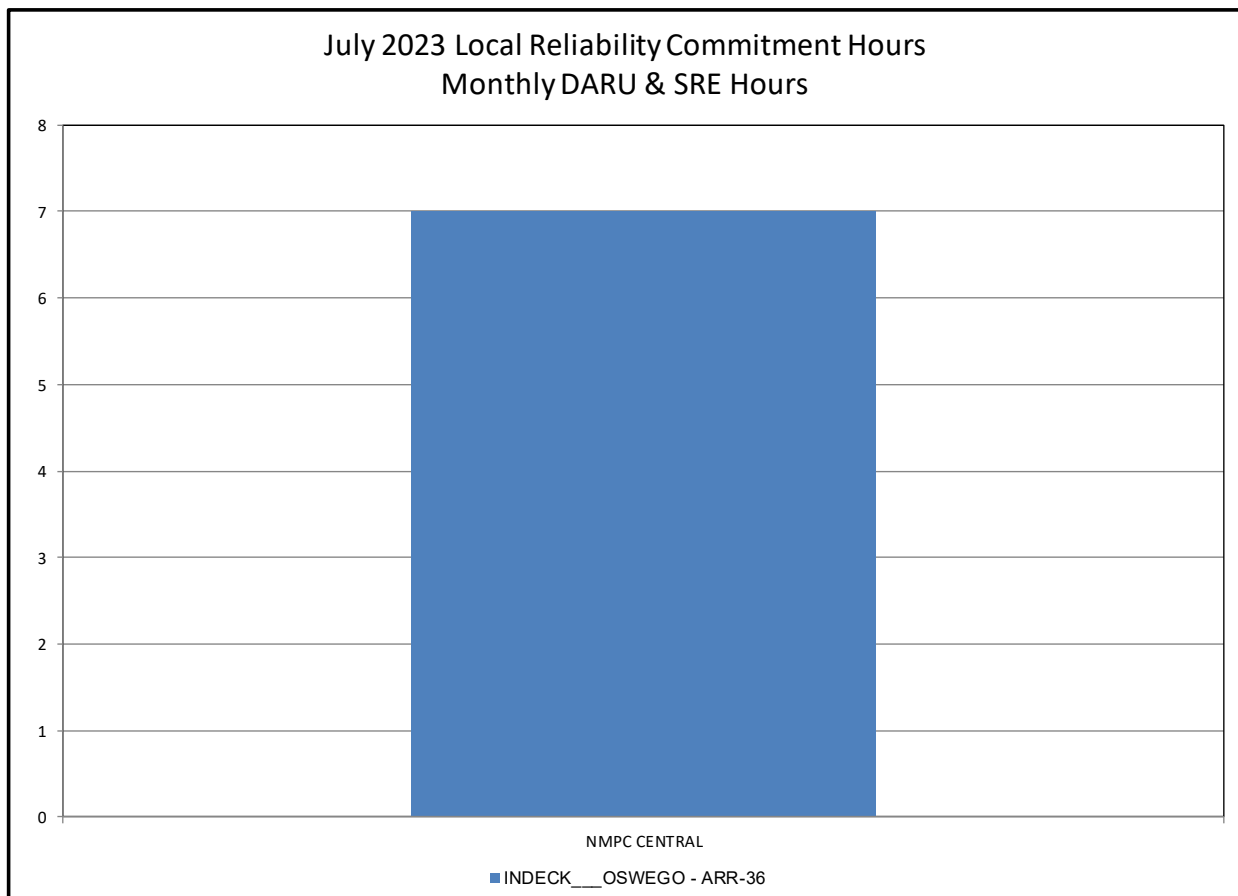
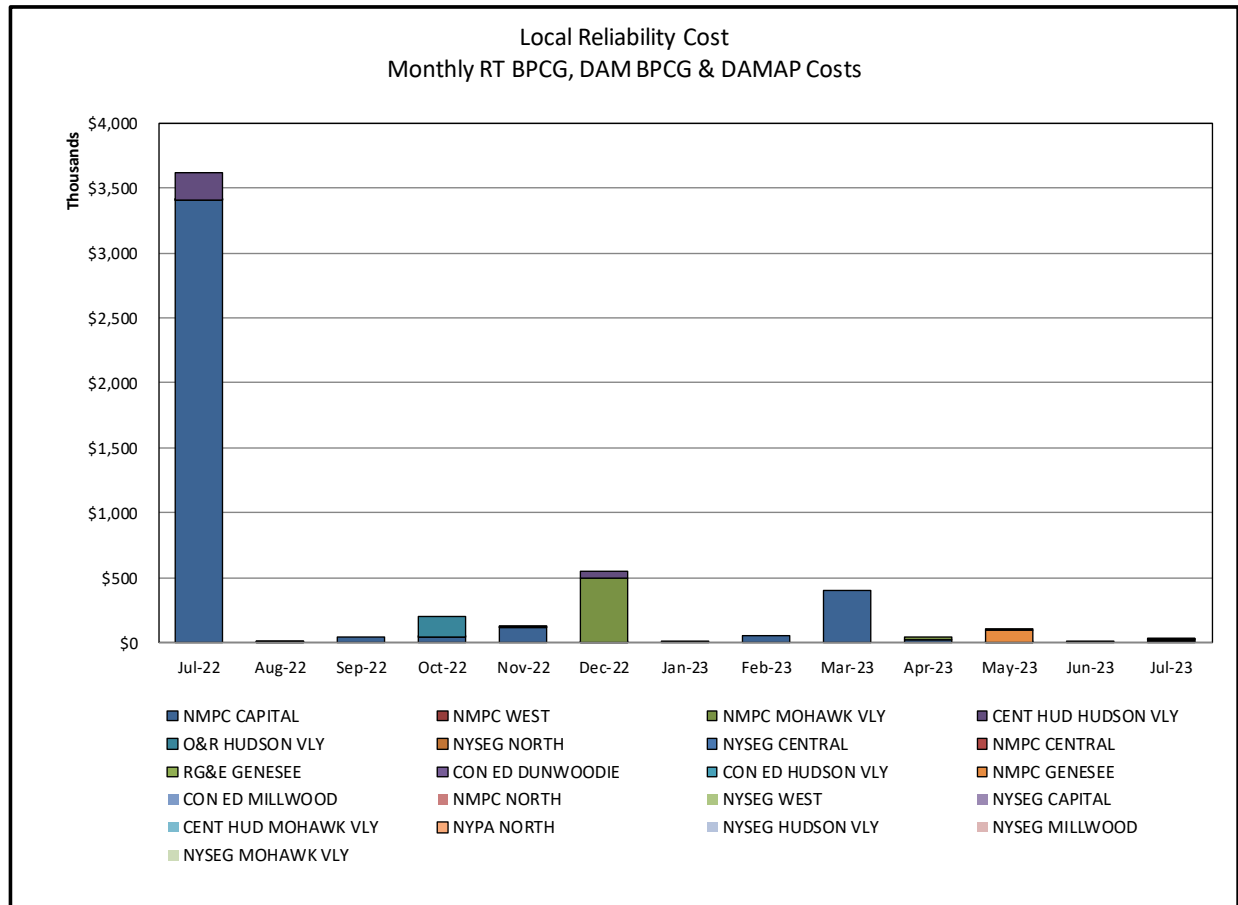
### Day-Ahead Market Congestion Residual Categories

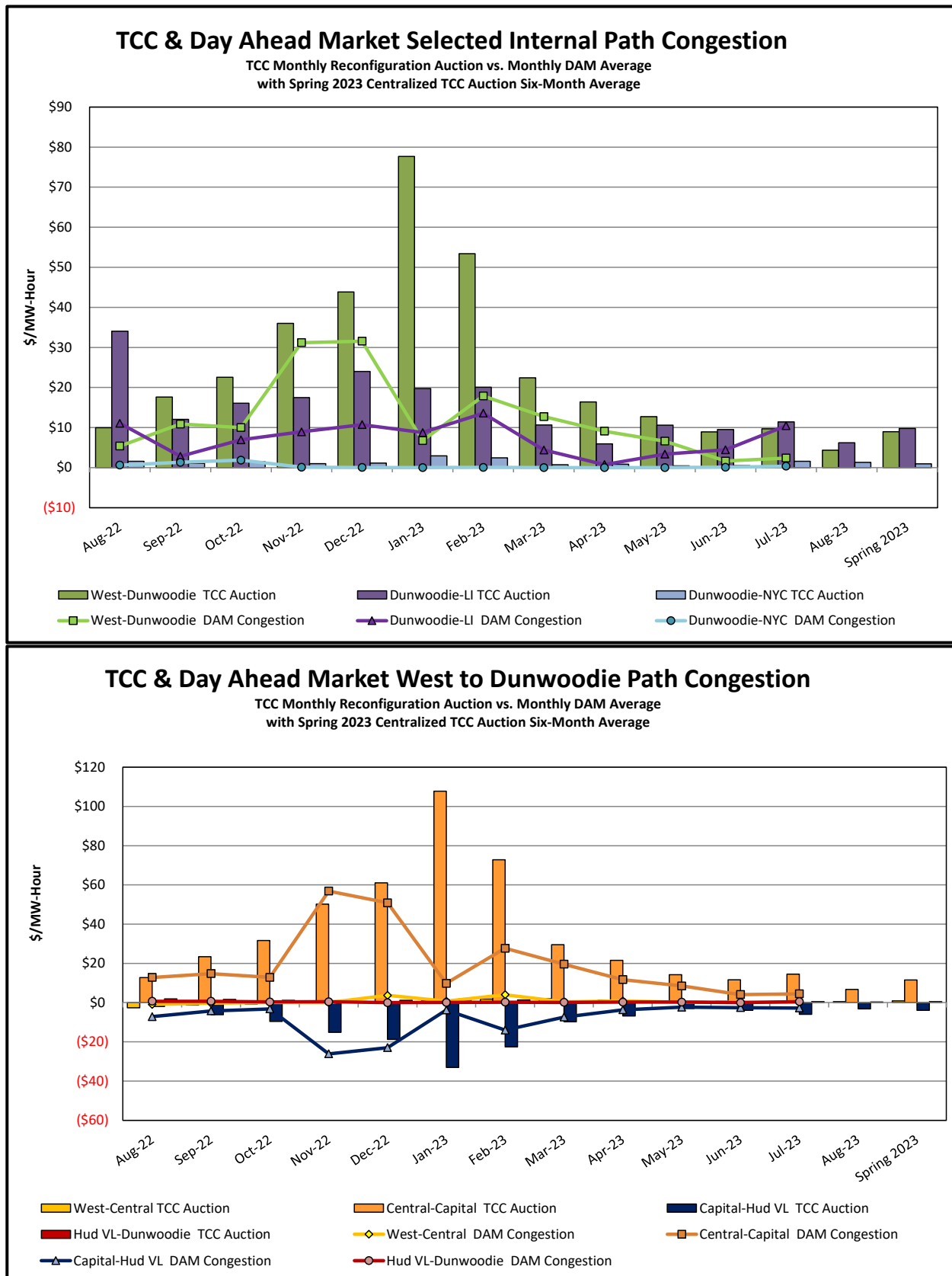
<u>Category</u>	<u>Cost Assignment</u>	<u>Events Types</u>	<u>Event Examples</u>
NYTO Outage Allocation	Responsible TO	Direct allocation to NYTO's responsible for transmission equipment status change.	DAM scheduled outage for equipment modeled in-service for the TCC Auction.
Incremental TCC/External 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.	

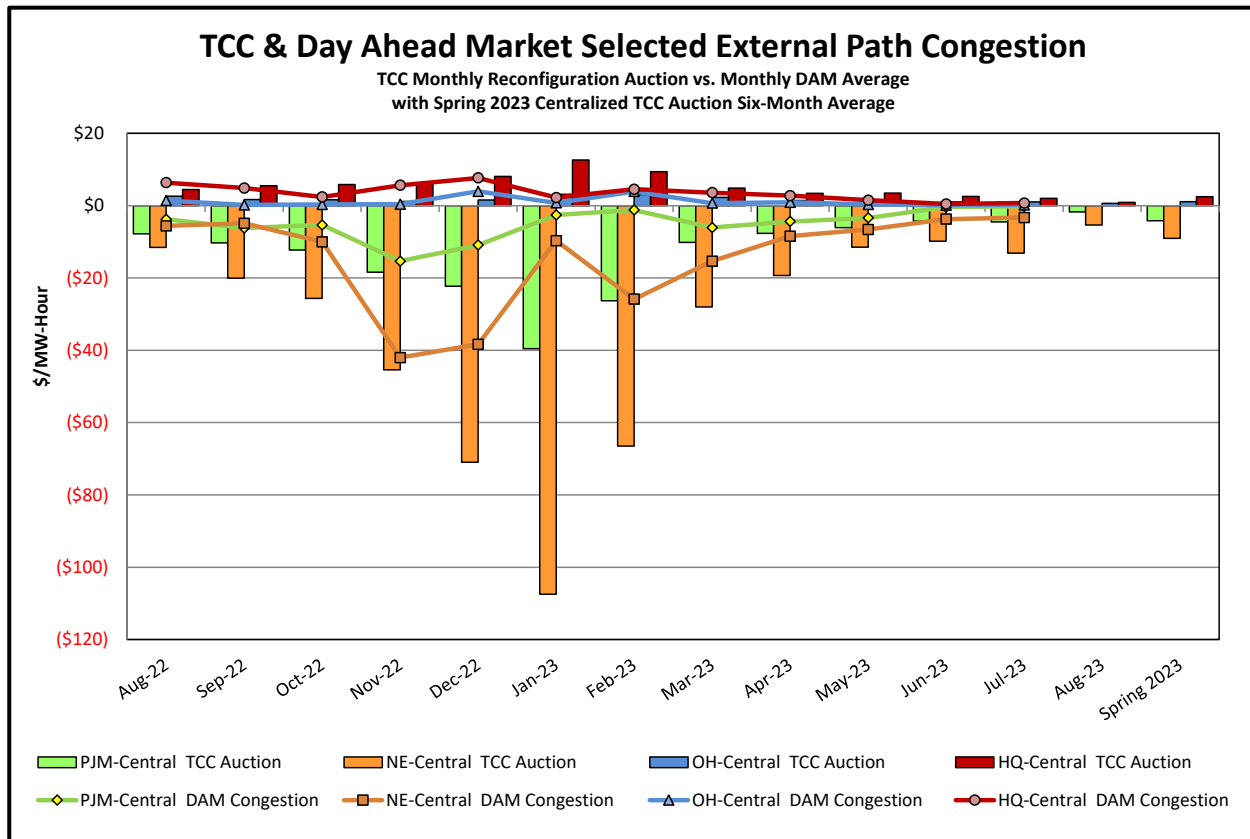




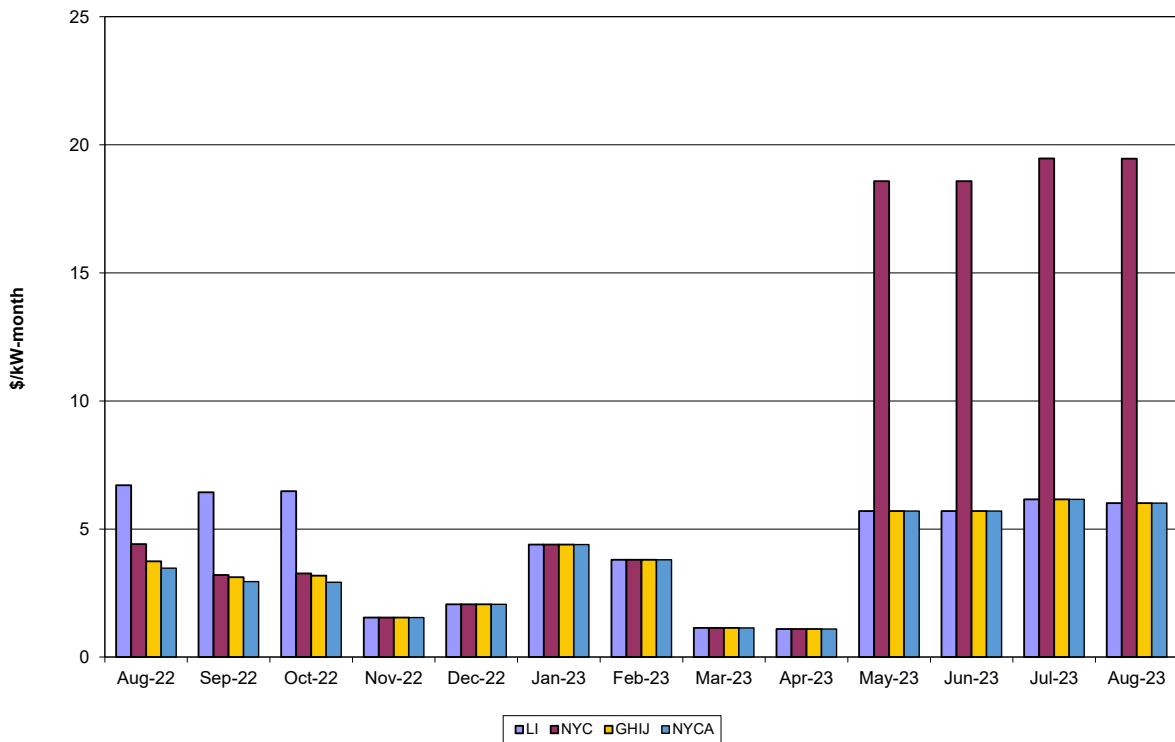




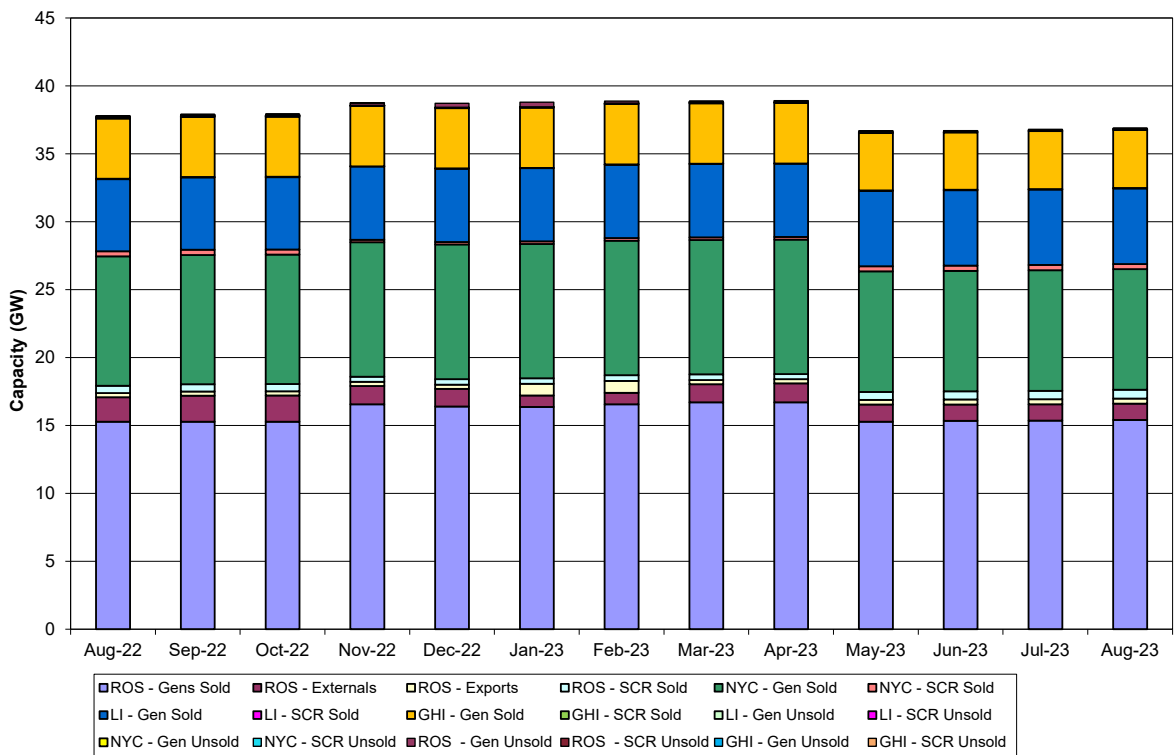




ICAP Spot Market Clearing Price



UCAP Sales

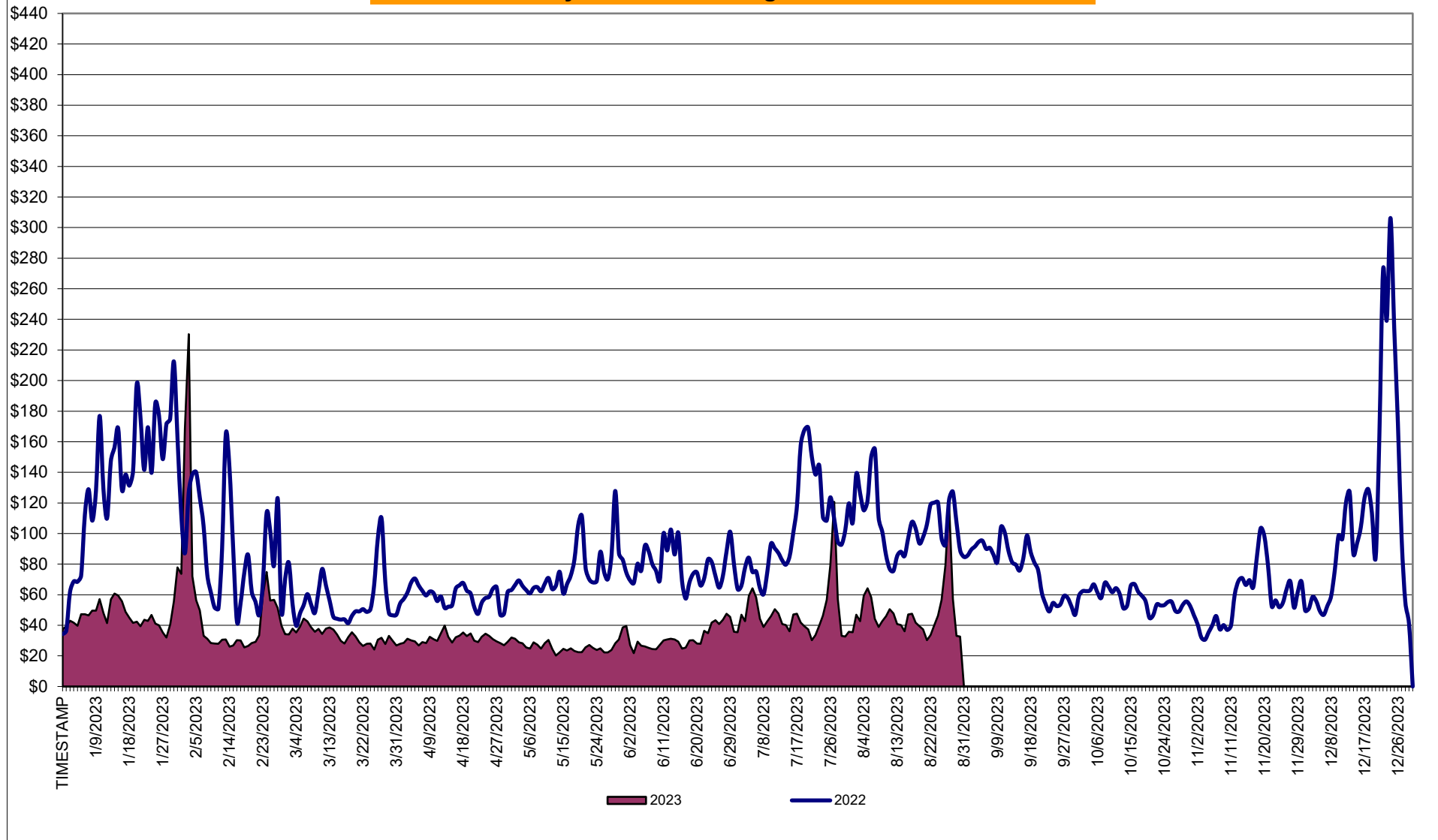


# Market Performance Highlights

## July 2023

- LBMP for July is \$45.70/MWh; higher than \$29.85/MWh in June 2023 and lower than \$99.47/MWh in July 2022.
  - Day Ahead Load Weighted LBMPs and Real Time Load Weighted LBMPs are higher compared to June.
- July 2023 average year-to-date monthly cost of \$41.18/MWh is a 54% decrease from \$90.31/MWh in July 2022.
- Average daily sendout is 503 GWh/day in July; higher than 401 GWh/day in June 2023 and lower than 509 GWh/day in July 2022.
- Natural gas prices and distillate prices are higher compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$1.57/MMBtu, up from \$1.39/MMBtu in June.
  - Natural gas prices (Transco Z6 NY) are down 76.7% year-over-year.
  - Jet Kerosene Gulf Coast was \$18.38/MMBtu, up from \$16.68/MMBtu in June.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$19.06/MMBtu, up from \$17.36/MMBtu in June.
  - Distillate prices are down 29.4% year-over-year
- Uplift per MWh is lower compared to the previous month.
  - Uplift (not including NYISO cost of operations) is (0.43)/MWh; lower than 0.09/MWh in June.
    - Local Reliability Share is \$0.20/MWh, lower than \$0.35/MWh in June.
    - Statewide Share is (\$0.62)/MWh, lower than (\$0.26)/MWh in June.
  - TSA \$ per NYC MWh is \$0.74/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are lower than June.

**Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\***  
**2022 Annual Average \$89.23/MWh**  
**July 2022 YTD Average \$90.31/MWh**  
**July 2023 YTD Average \$41.18/MWh**



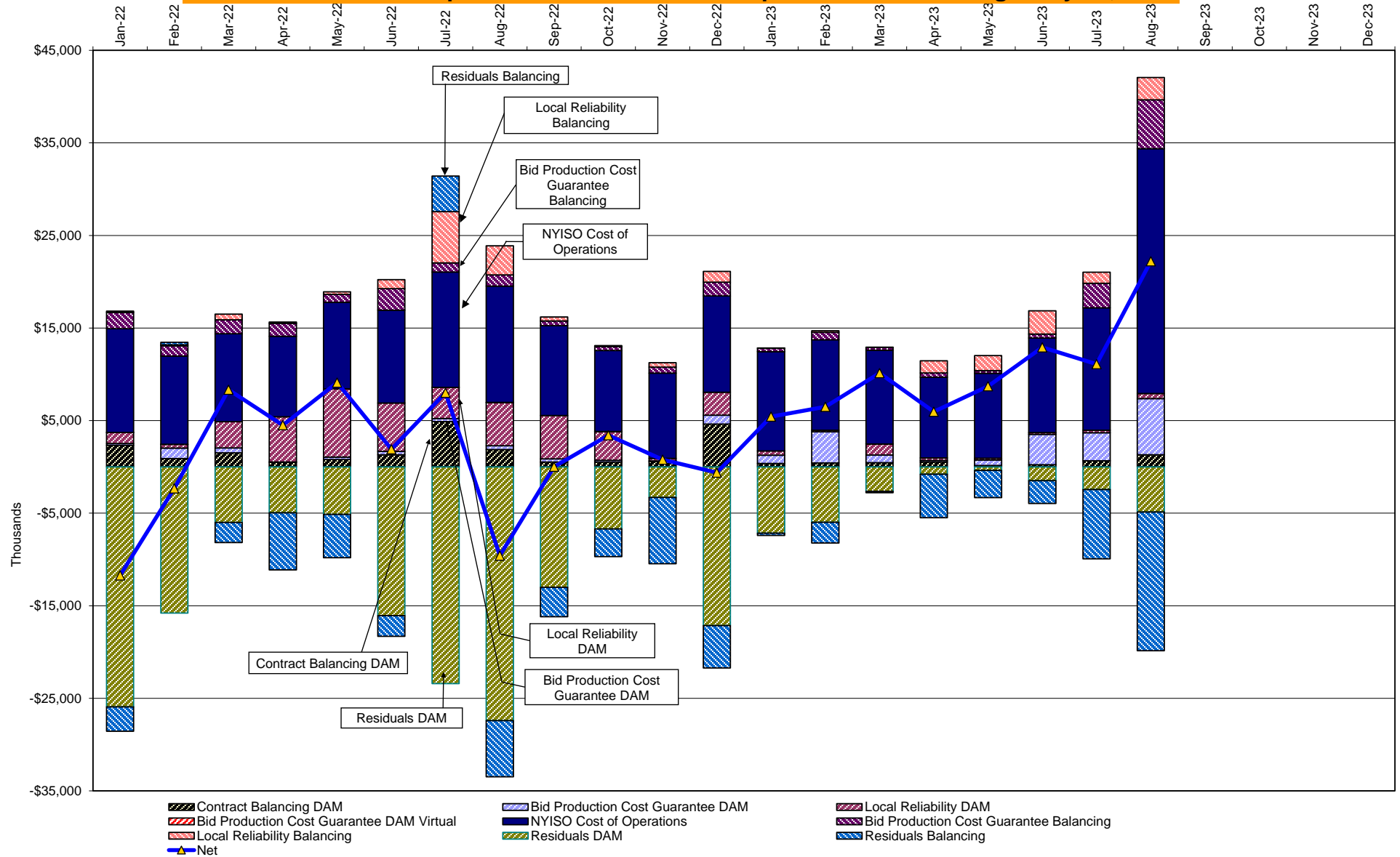
\* Excludes ICAP payments.

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

<b>2023</b>	<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					
NTAC	2.82	1.15	1.39	1.72	1.38	1.62	1.79					
Reserve	0.72	0.90	0.73	0.85	0.81	0.69	0.76					
Regulation	0.09	0.13	0.13	0.15	0.12	0.10	0.10					
NYISO Cost of Operations	0.77	0.77	0.77	0.78	0.78	0.78	0.80					
FERC Fee Recovery	0.08	0.09	0.09	0.10	0.10	0.09	0.06					
Uplift	(0.38)	(0.27)	(0.00)	(0.34)	(0.13)	0.09	(0.43)					
Uplift: Local Reliability Share	0.03	0.03	0.09	0.04	0.07	0.35	0.20					
Uplift: Statewide Share	(0.41)	(0.30)	(0.10)	(0.38)	(0.20)	(0.26)	(0.62)					
Voltage Support and Black Start	0.42	0.42	0.43	0.43	0.43	0.43	0.44					
<b>Avg Monthly Cost</b>	46.56	58.58	34.58	31.67	26.55	33.60	49.17					
 Avg YTD Cost	46.64	52.36	46.65	43.45	40.45	39.27	41.18					
 TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.08	0.74					
 <b>2022</b>	<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
<b>Avg Monthly Cost</b>	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: 8/9/2023 4:56 PM

## NYISO Dollar Flows - Uplift - OATT Schedule 1 components - Data through July 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

<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>
<b>Day Ahead Market MWh</b>	13,662,137	12,355,489	12,651,083	11,058,870	11,601,426	12,934,709	16,199,282					
DAM LSE Internal LBMP Energy Sales	55%	55%	56%	55%	55%	57%	63%					
DAM External TC LBMP Energy Sales	7%	7%	4%	4%	4%	6%	4%					
DAM Bilateral - Internal Bilaterals	28%	29%	30%	30%	31%	29%	25%					
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	6%	6%	6%	6%	5%					
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%					
DAM Bilateral - Wheel Through Bilaterals	3%	2%	2%	2%	2%	2%	2%					
<b>Balancing Energy Market MWh</b>	328,840	397,488	420,170	303,381	-77,279	-40,037	235,270					
Balancing Energy LSE Internal LBMP Energy Sales	65%	38%	53%	43%	-157%	37%	118%					
Balancing Energy External TC LBMP Energy Sales	68%	68%	58%	69%		143%	47%					
Balancing Energy Bilateral - Internal Bilaterals	2%	1%	2%	-1%	-5%	28%	5%					
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	7%	0%	0%					
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	7%	6%	6%	5%	10%	18%	5%					
Balancing Energy Bilateral - Wheel Through Bilaterals	-43%	-13%	-18%	-16%	-178%	-326%	-75%					
<b>Transactions Summary</b>												
LBMP	63%	63%	62%	61%	60%	63%	69%					
Internal Bilaterals	28%	28%	29%	29%	31%	29%	25%					
Import Bilaterals	5%	5%	6%	6%	6%	6%	4%					
Export Bilaterals	2%	2%	2%	3%	2%	2%	1%					
Wheels Through	2%	1%	1%	2%	1%	0%	0%					
<b>Market Share of Total Load</b>												
Day Ahead Market	97.6%	96.9%	96.8%	97.3%	100.7%	100.3%	98.6%					
Balancing Energy +	2.4%	3.1%	3.2%	2.7%	-0.7%	-0.3%	1.4%					
Total MWh	13,990,977	12,752,977	13,071,253	11,362,252	11,524,147	12,894,671	16,434,552					
Average Daily Energy Sendout/Month GWh	410	408	387	349	350	401	503					

<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>
<b>Day Ahead Market MWh</b>	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%
<b>Balancing Energy Market MWh</b>	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%
<b>Transactions Summary</b>												
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%
<b>Market Share of Total Load</b>												
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.

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

Notes: Percent totals may not equal 100% due to rounding.  
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>
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$40.60	\$47.82	\$29.84	\$26.91	\$22.41	\$27.67	\$41.75					
Standard Deviation	\$10.32	\$47.20	\$7.42	\$6.50	\$6.46	\$9.25	\$24.21					
Load Weighted Price **	\$41.37	\$50.55	\$30.37	\$27.38	\$23.02	\$28.99	\$44.71					
<b><u>RTC LBMP</u></b>												
Price *	\$38.28	\$42.67	\$28.02	\$26.93	\$21.13	\$27.94	\$40.11					
Standard Deviation	\$31.37	\$39.75	\$11.53	\$9.23	\$7.61	\$12.06	\$25.96					
Load Weighted Price **	\$39.04	\$44.80	\$28.49	\$27.39	\$21.62	\$29.24	\$42.24					
<b><u>REAL TIME LBMP</u></b>												
Price *	\$38.76	\$43.99	\$28.15	\$27.41	\$20.76	\$27.44	\$37.88					
Standard Deviation	\$45.06	\$43.54	\$15.02	\$13.08	\$9.13	\$12.38	\$23.42					
Load Weighted Price **	\$39.68	\$46.75	\$28.72	\$27.97	\$21.27	\$28.66	\$39.88					
Average Daily Energy Sendout/Month GWh	410	408	387	349	350	401	503					

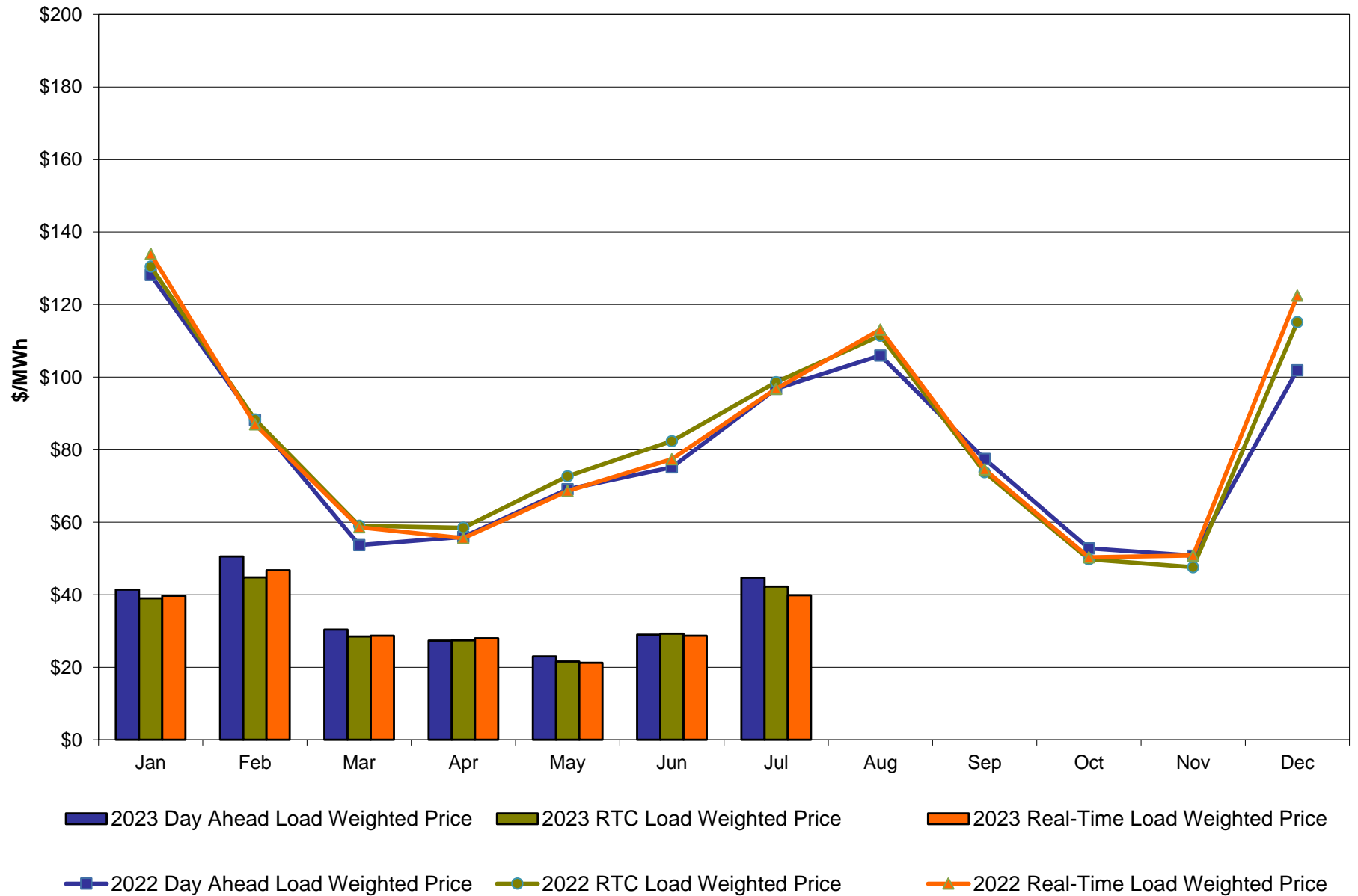
### NYISO Markets 2022 Energy Statistics

	<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>
<b><u>DAY AHEAD LBMP</u></b>												
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
<b><u>RTC LBMP</u></b>												
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
<b><u>REAL TIME LBMP</u></b>												
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**

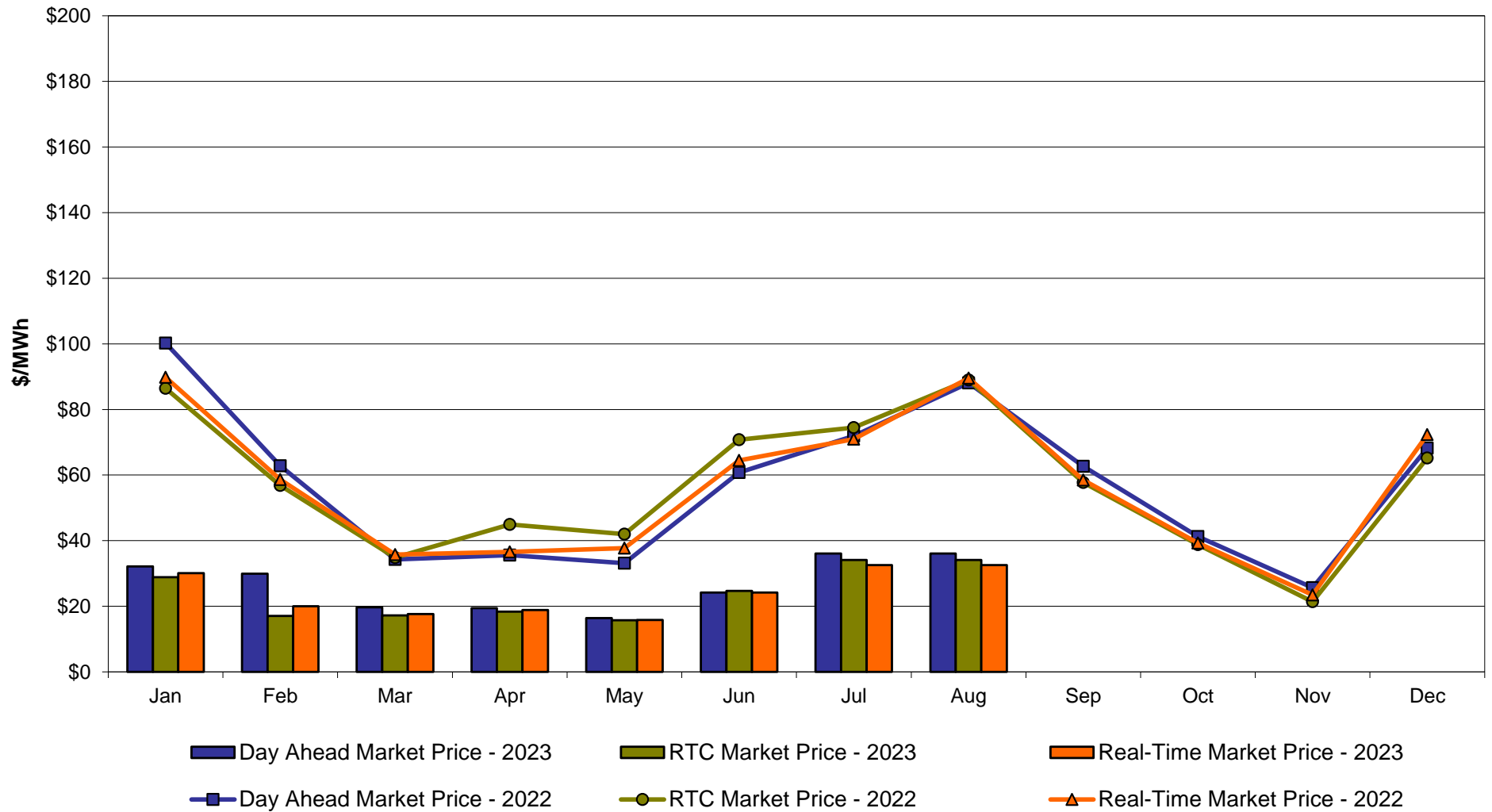


**July 2023 Zonal LBMP Statistics for NYISO (\$/MWh)**

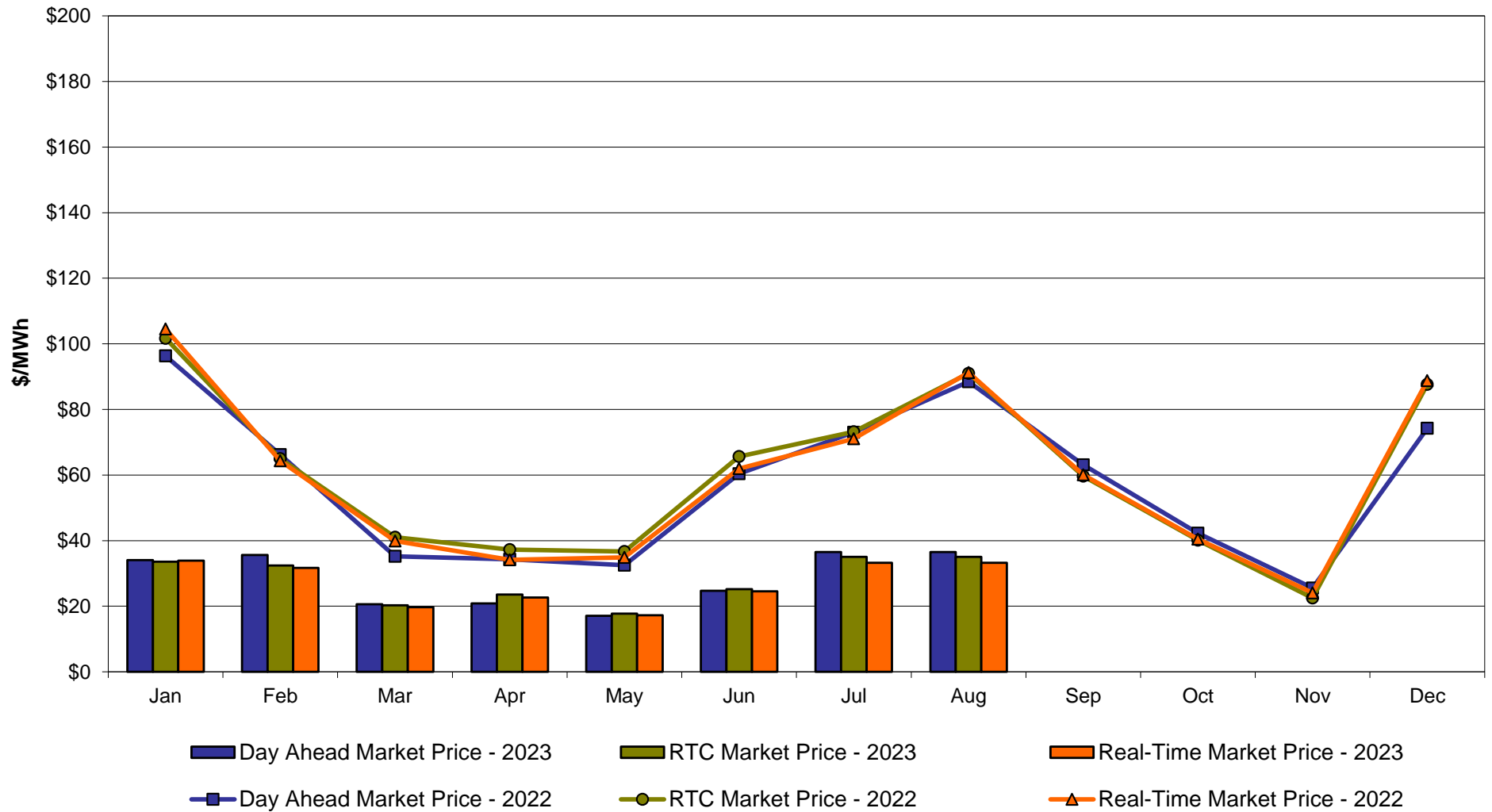
	<b><u>WEST</u></b> <b><u>Zone A</u></b>	<b><u>GENESEE</u></b> <b><u>Zone B</u></b>	<b><u>NORTH</u></b> <b><u>Zone D</u></b>	<b><u>CENTRAL</u></b> <b><u>Zone C</u></b>	<b><u>MOHAWK</u></b> <b><u>VALLEY</u></b> <b><u>Zone E</u></b>	<b><u>CAPITAL</u></b> <b><u>Zone F</u></b>	<b><u>HUDSON</u></b> <b><u>VALLEY</u></b> <b><u>Zone G</u></b>	<b><u>MILLWOOD</u></b> <b><u>Zone H</u></b>	<b><u>DUNWOODIE</u></b> <b><u>Zone I</u></b>	<b><u>NEW YORK</u></b> <b><u>CITY</u></b> <b><u>Zone J</u></b>	<b><u>LONG</u></b> <b><u>ISLAND</u></b> <b><u>Zone K</u></b>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	36.07	36.07	33.46	36.54	37.44	42.57	40.12	41.04	41.24	41.72	52.46
Standard Deviation	18.91	19.05	11.55	19.69	19.84	27.59	22.43	23.85	24.00	24.47	36.46
<b><u>RTC LBMP</u></b>											
Unweighted Price *	34.14	34.33	33.63	35.01	35.58	36.88	36.68	37.91	38.14	39.89	54.34
Standard Deviation	18.26	18.41	18.55	19.06	19.10	19.51	19.56	20.64	21.11	38.55	65.60
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	32.59	32.70	31.96	33.21	33.78	35.12	34.69	36.43	36.67	38.93	47.42
Standard Deviation	14.44	14.61	14.72	15.24	15.29	15.89	16.01	17.11	17.29	46.19	44.17
	<b><u>ONTARIO</u></b> <b><u>IESO</u></b>  <b><u>Zone O</u></b>	<b><u>HYDRO</u></b> <b><u>QUEBEC</u></b> <b><u>(Wheel)</u></b> <b><u>Zone M</u></b>	<b><u>HYDRO</u></b> <b><u>QUEBEC</u></b> <b><u>(Import/Export)</u></b> <b><u>Zone M</u></b>	<b><u>PJM</u></b>  <b><u>Zone P</u></b>	<b><u>NEW</u></b> <b><u>ENGLAND</u></b>  <b><u>Zone N</u></b>	<b><u>CROSS</u></b> <b><u>SOUND</u></b> <b><u>CABLE</u></b> <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>NORTHPORT-</u></b> <b><u>NORWALK</u></b> <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>NEPTUNE</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>LINDEN VFT</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>HUDSON</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>Dennison</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	35.27	34.63	34.63	37.31	41.18	60.06	42.88	45.73	36.48	41.08	33.07
Standard Deviation	18.27	16.08	16.08	19.69	24.00	51.54	20.28	26.55	17.79	23.82	11.19
<b><u>RTC LBMP</u></b>											
Unweighted Price *	33.32	33.89	33.89	34.75	37.41	59.09	47.83	50.04	35.52	37.93	33.35
Standard Deviation	17.72	17.97	17.97	19.47	24.61	73.14	59.11	62.65	16.73	20.73	18.54
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	32.09	32.22	32.22	32.47	35.17	51.76	40.81	43.53	34.49	36.51	31.42
Standard Deviation	16.47	14.31	14.31	16.98	17.82	52.60	38.31	40.70	14.34	17.14	15.82

\* Straight LBMP averages

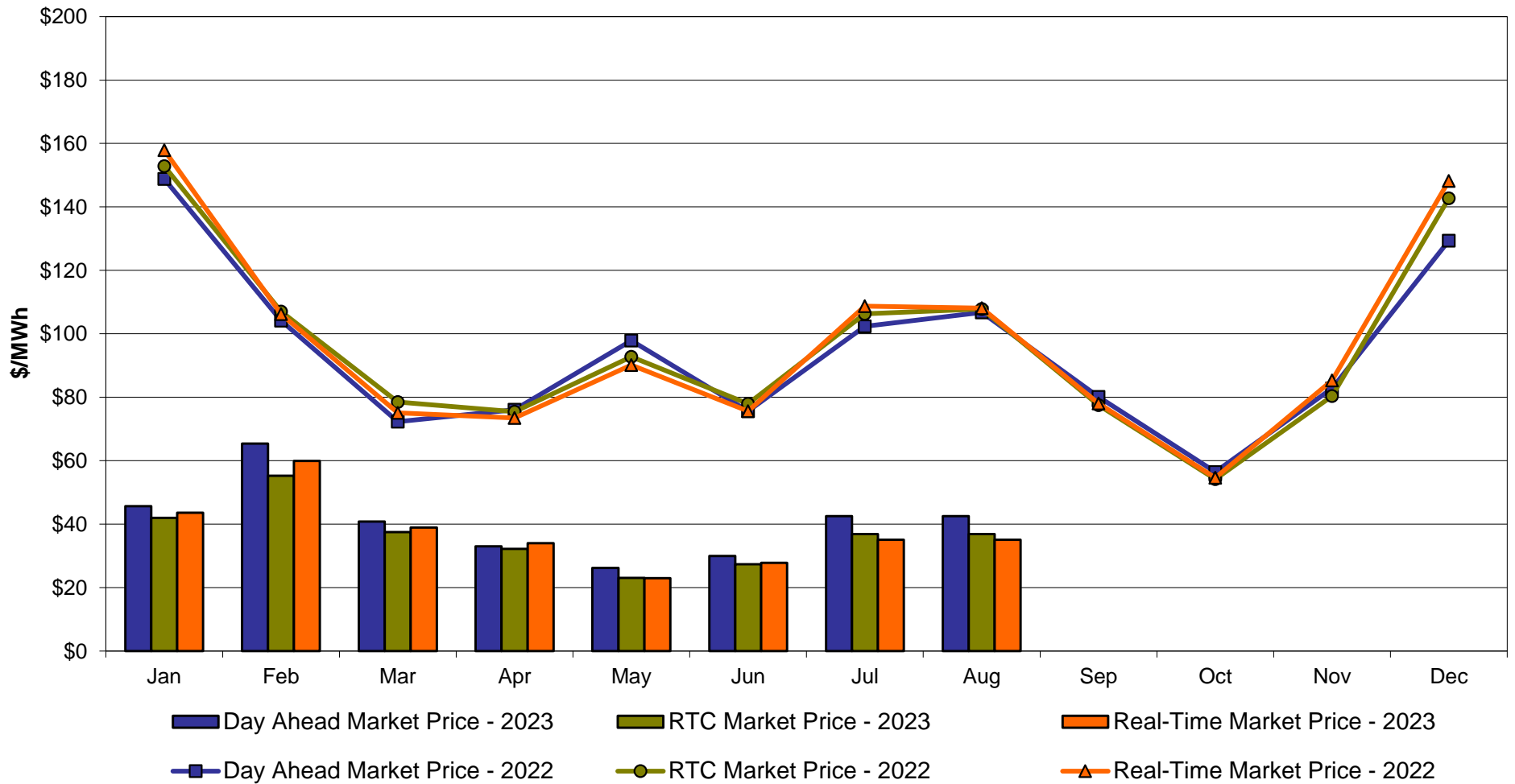
# West Zone A Monthly Average LBMP Prices 2022 - 2023



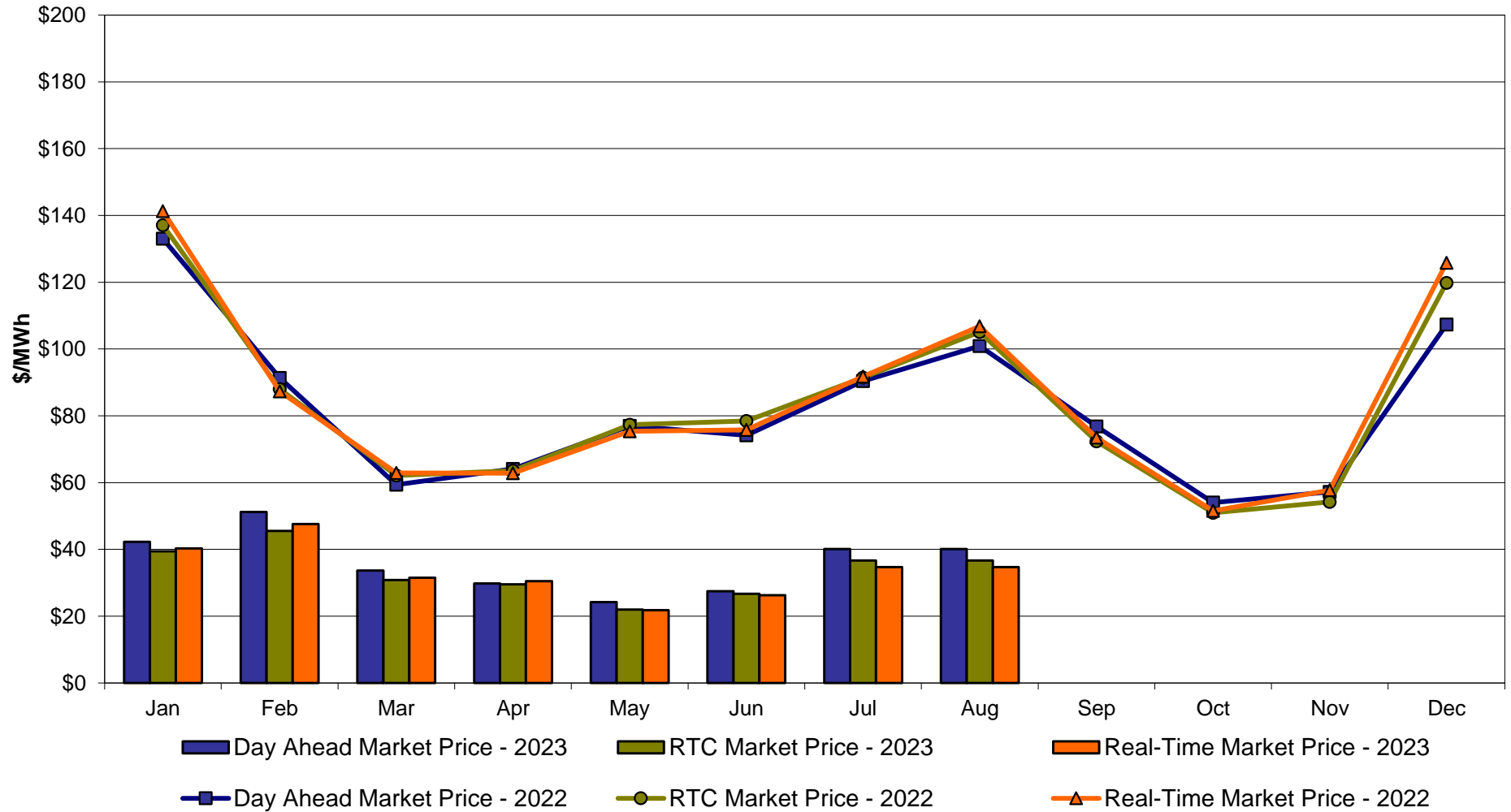
# Central Zone C Monthly Average LBMP Prices 2022 - 2023



# **Capital Zone F** **Monthly Average LBMP Prices 2022 - 2023**

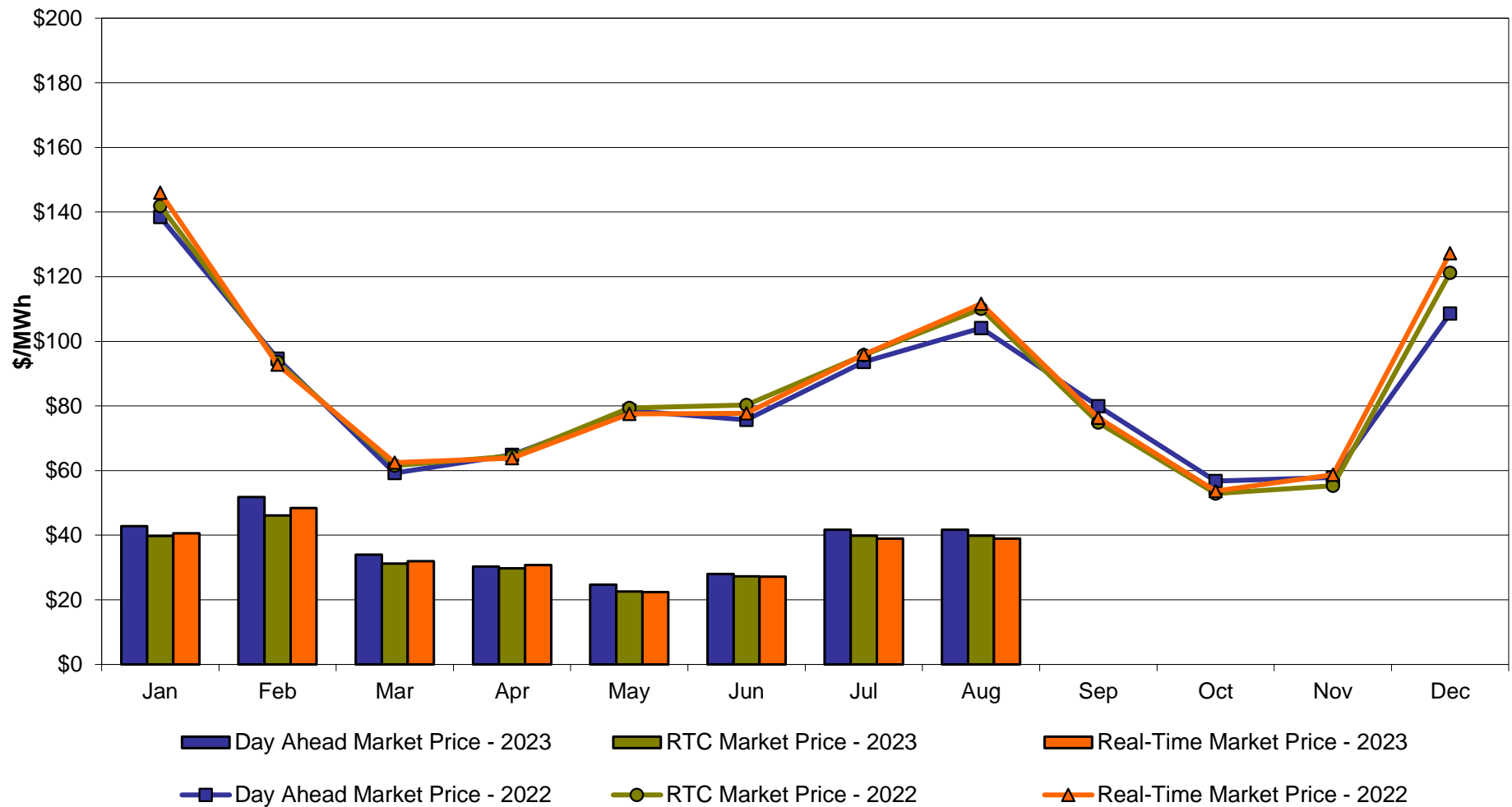


## Hudson Valley Zone G Monthly Average LBMP Prices 2022 - 2023

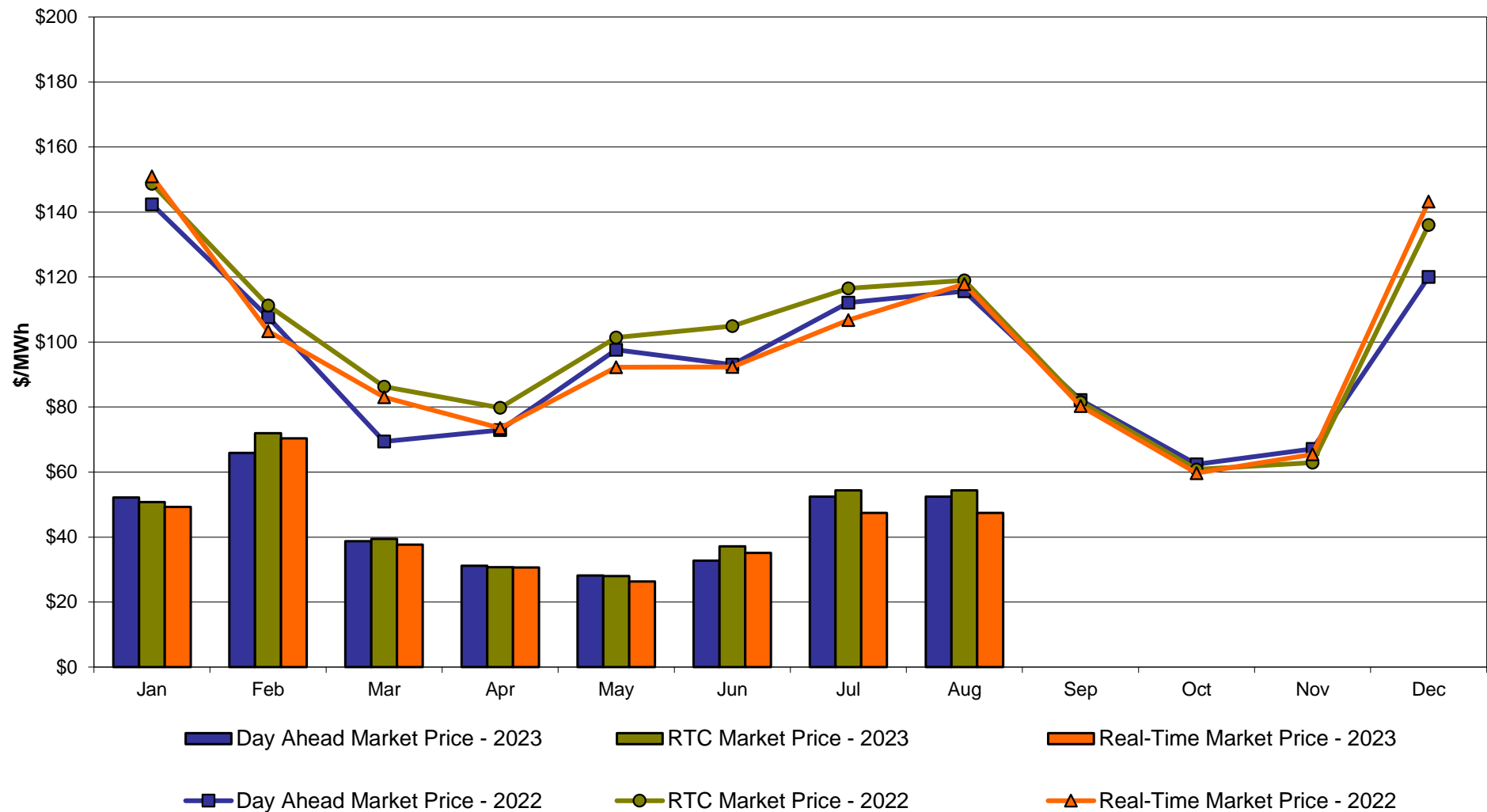




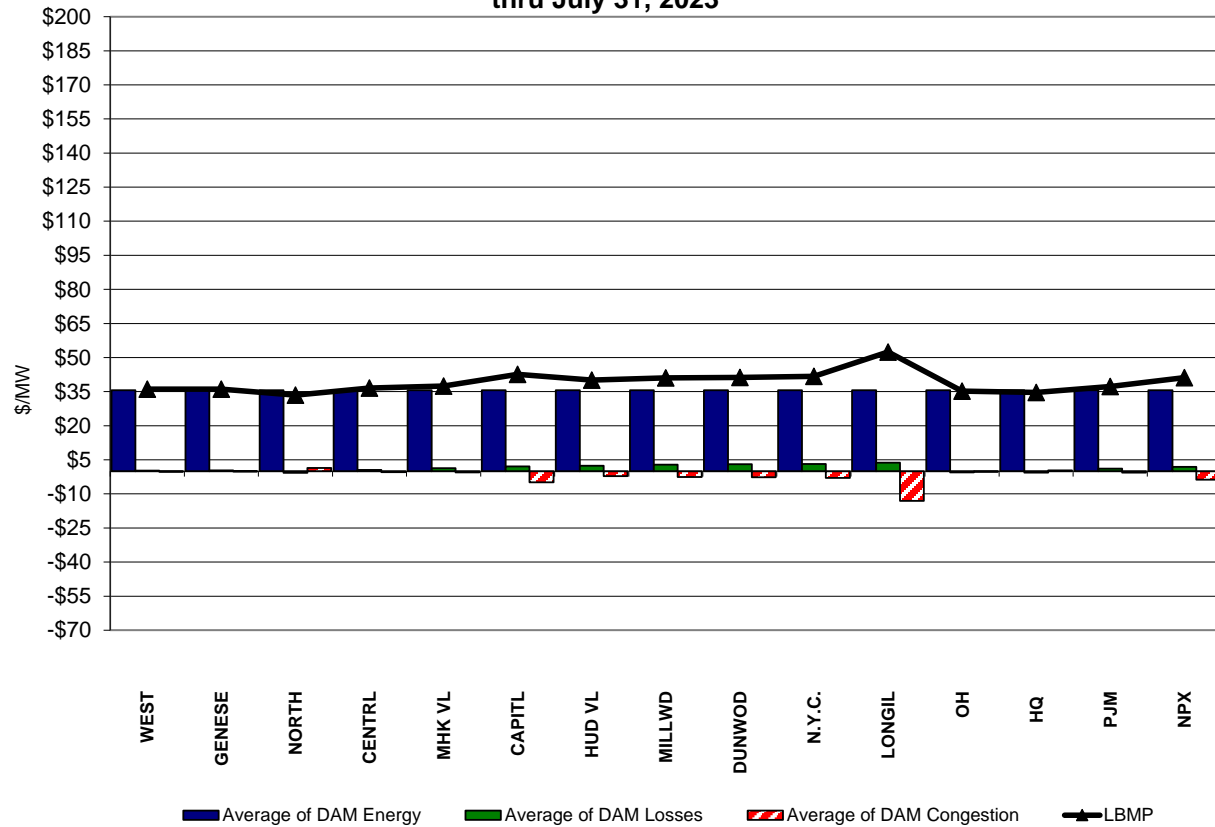
# NYC Zone J Monthly Average LBMP Prices 2022 - 2023



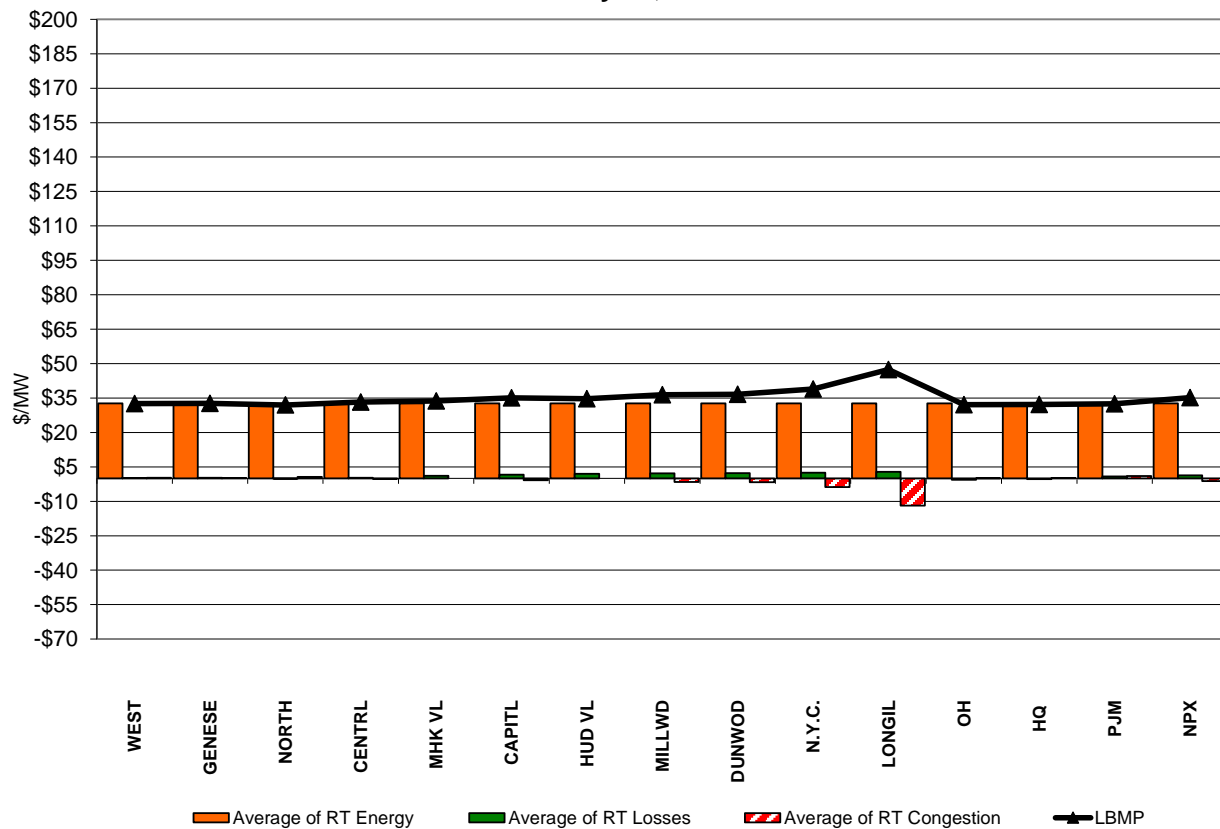
# Long Island Zone K Monthly Average LBMP Prices 2022 - 2023



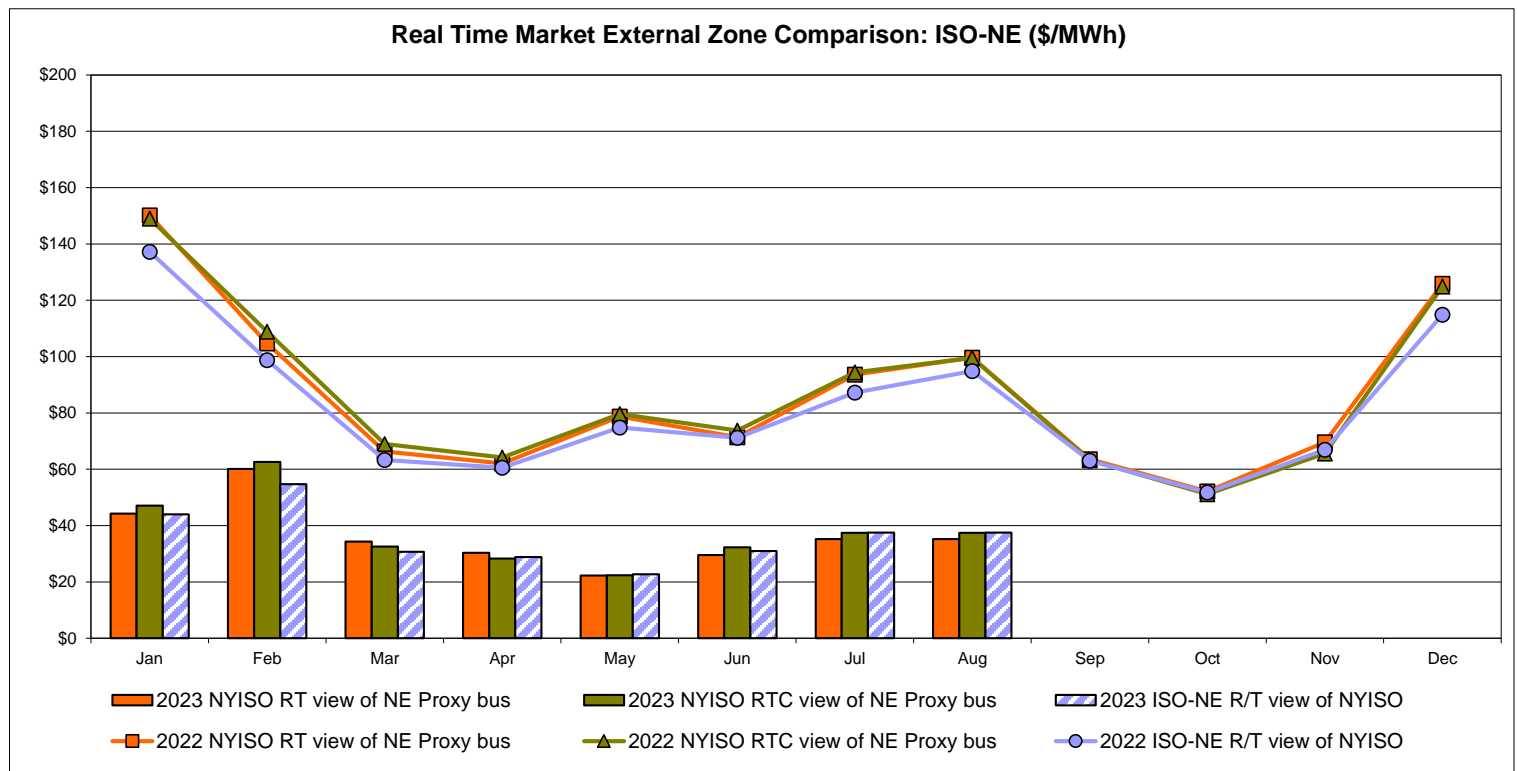
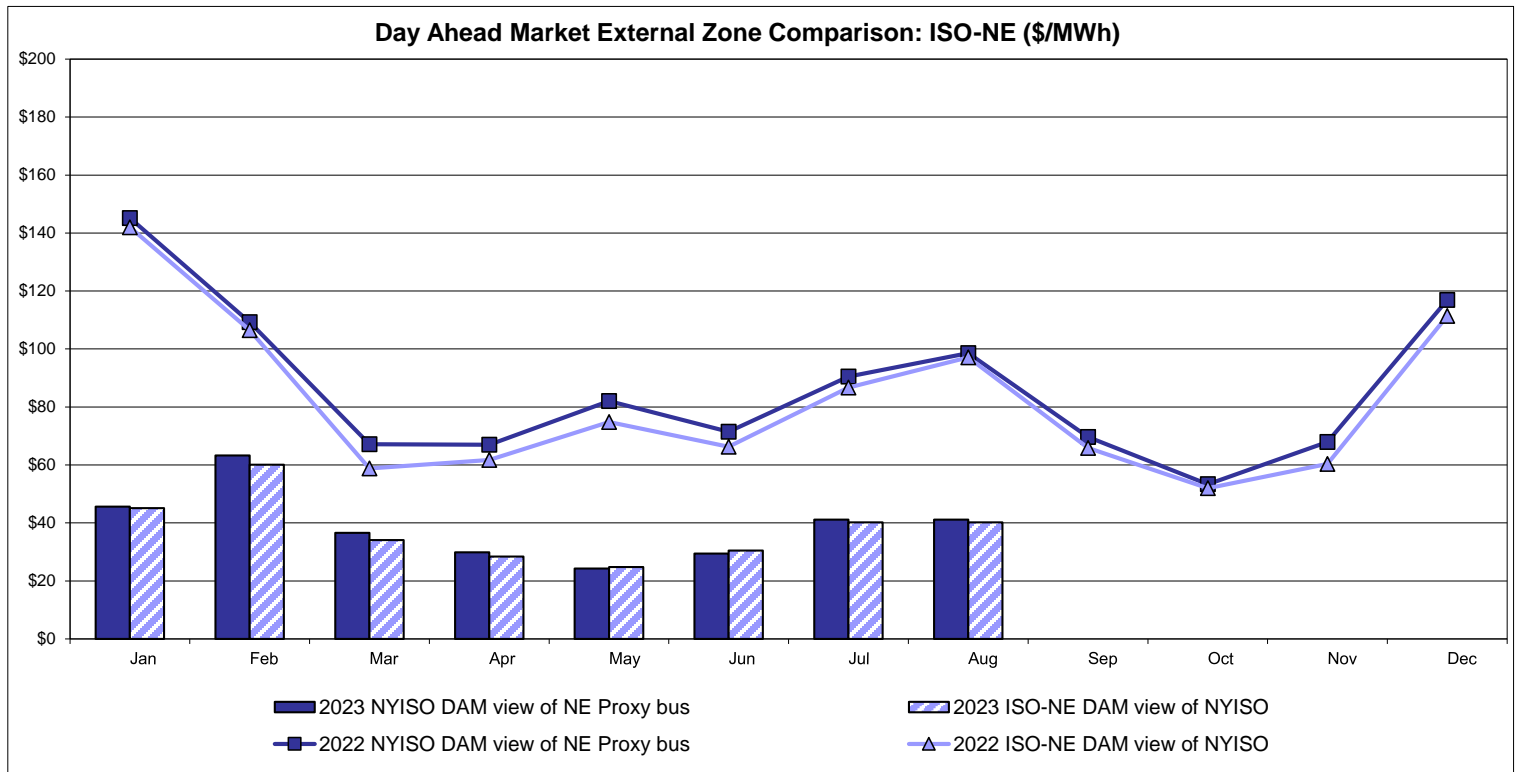
**DAM Zonal Unweighted Monthly Average LBMP Components  
thru July 31, 2023**



**RT Zonal Unweighted Monthly Average LBMP Components  
thru July 31, 2023**

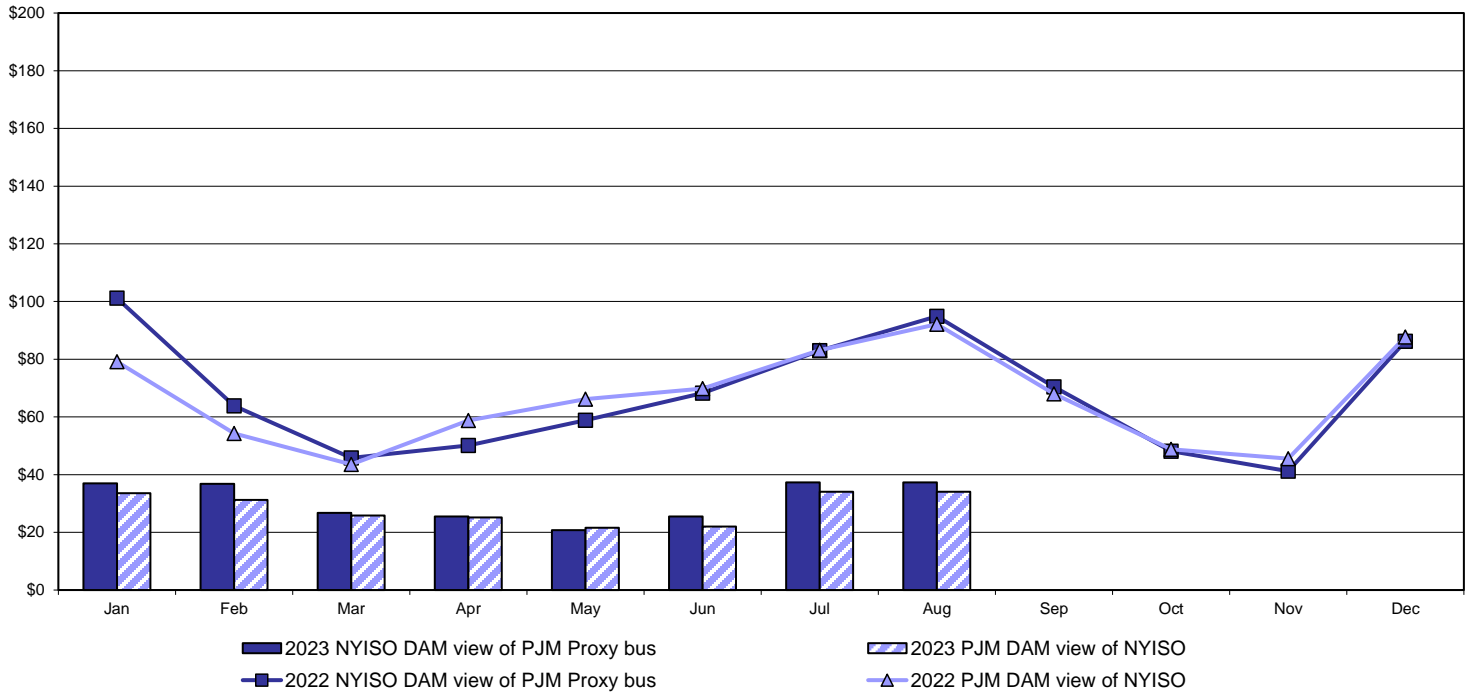


## External Comparison ISO-New England

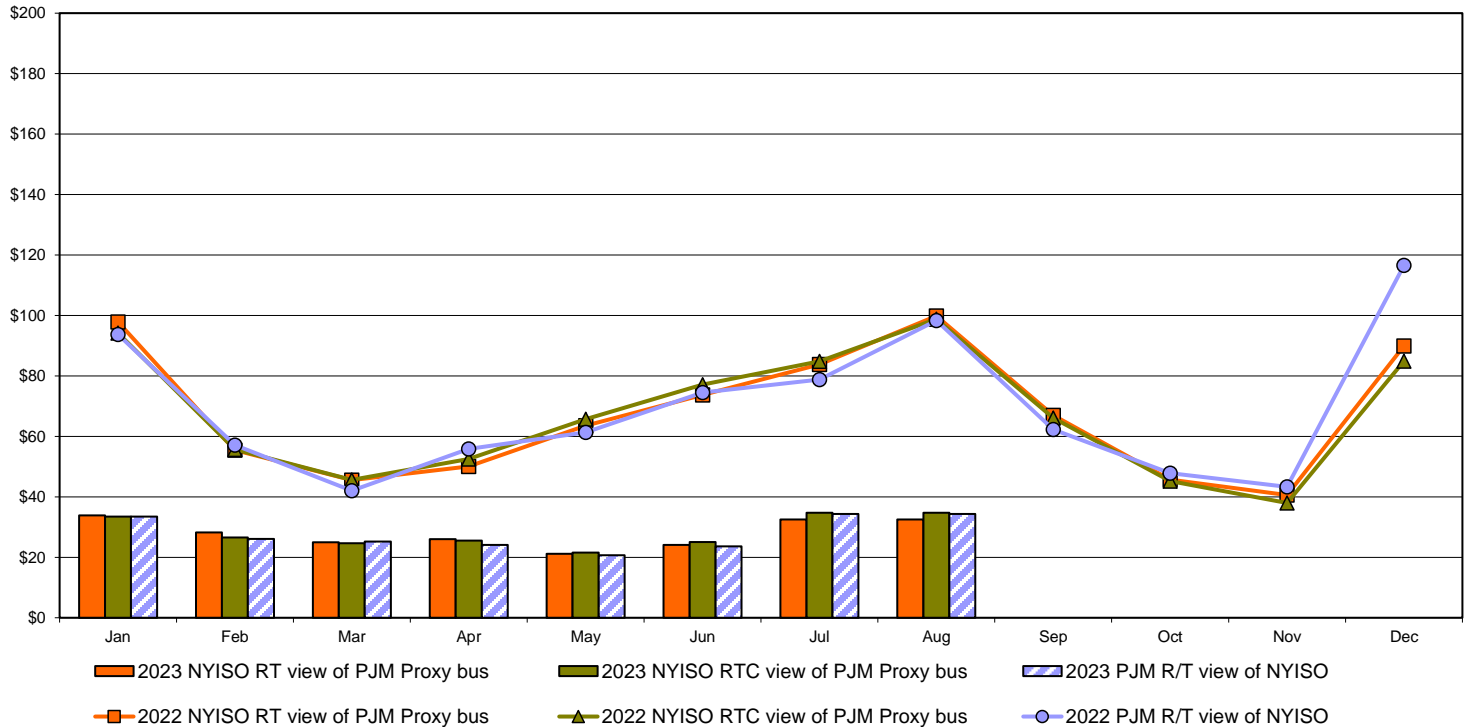


## External Comparison PJM

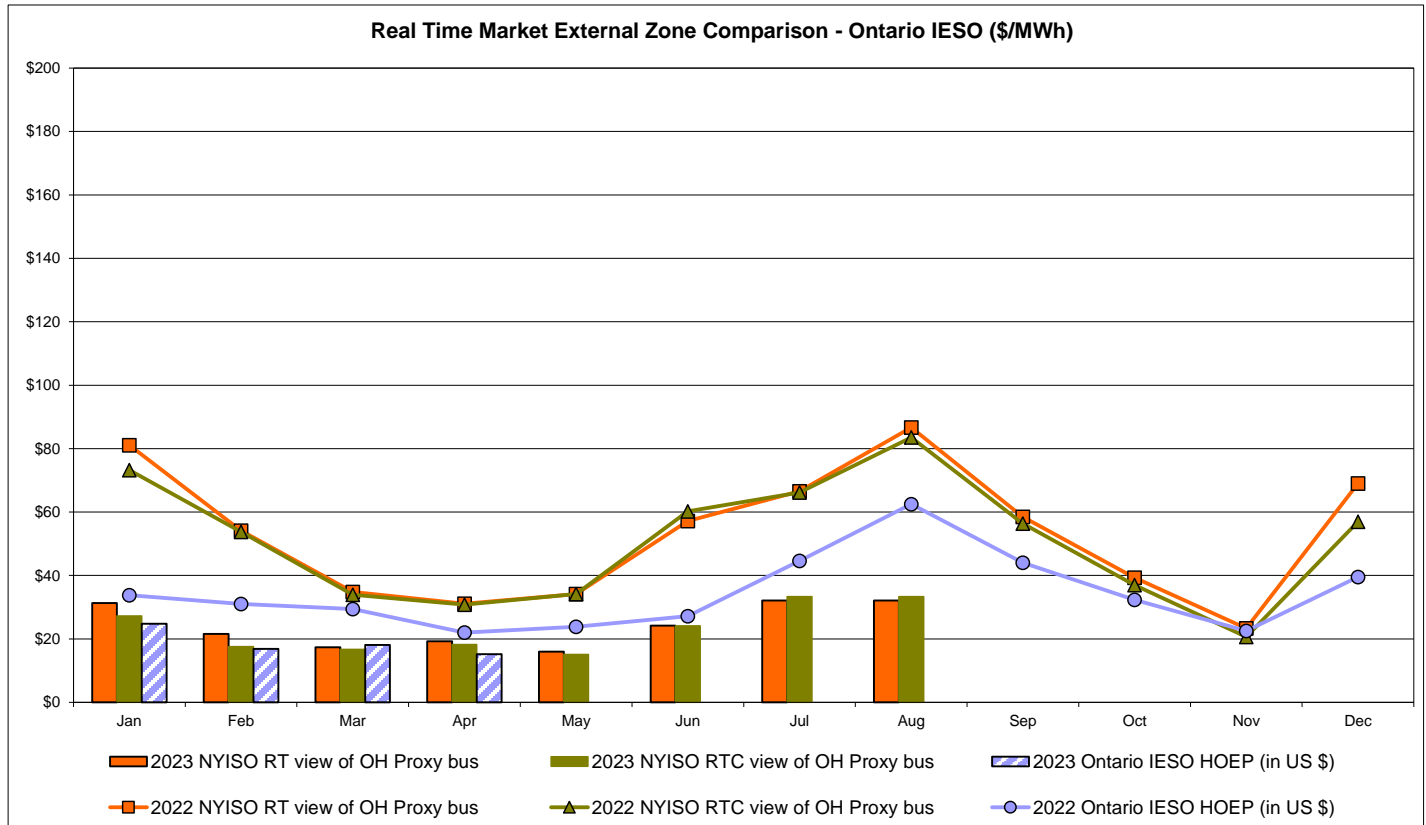
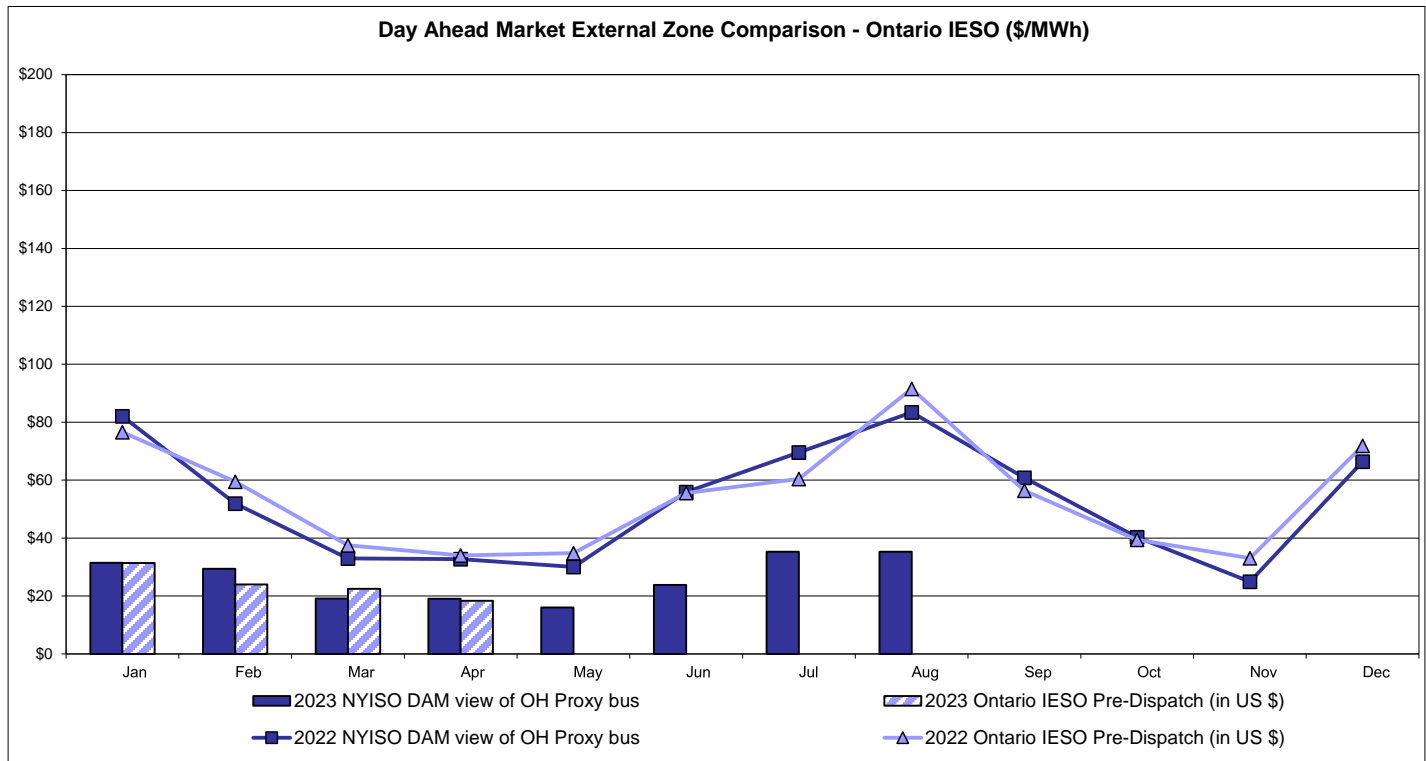
**Day Ahead Market External Zone Comparison - PJM (\$/MWh)**



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

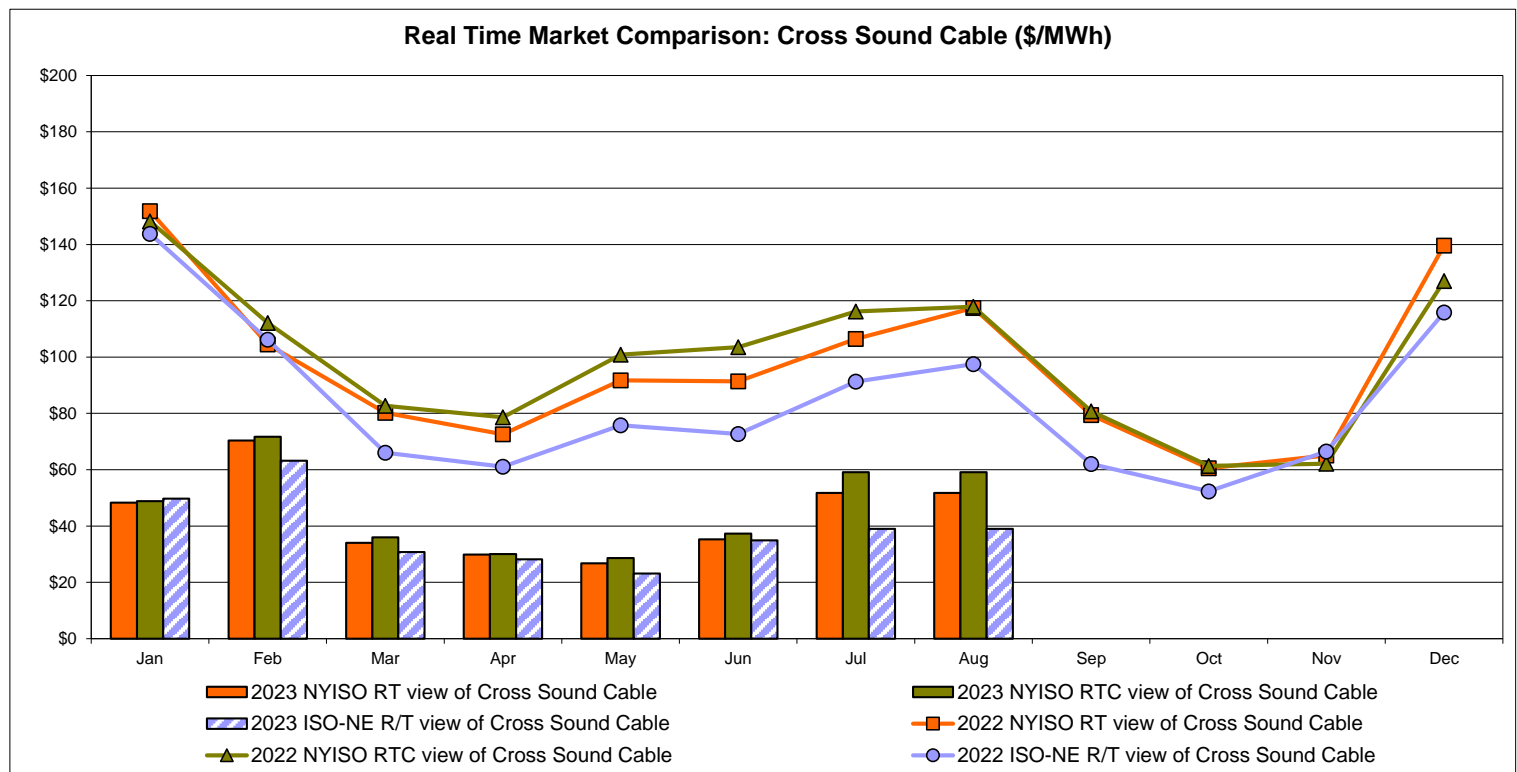
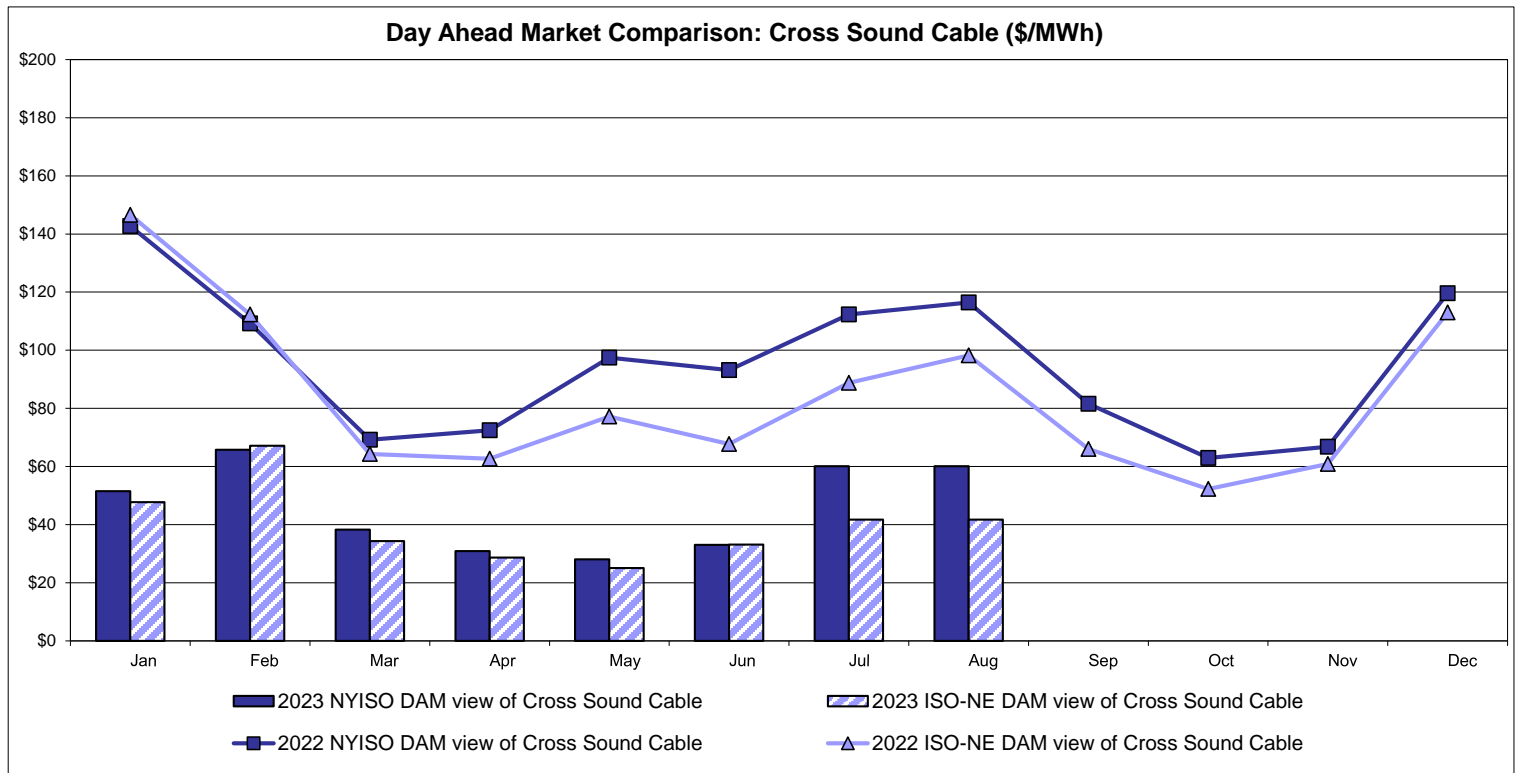


## External Comparison Ontario IESO



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

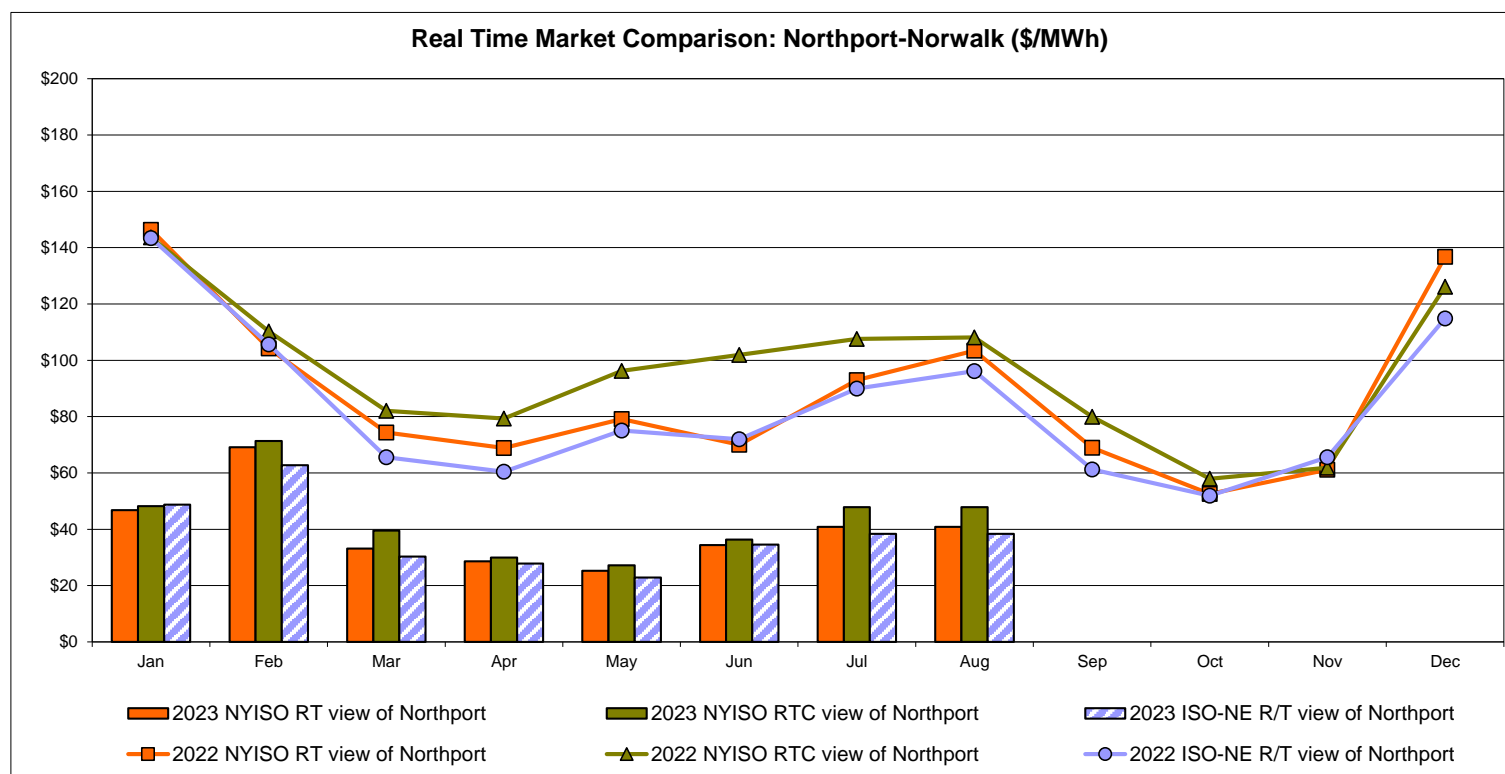
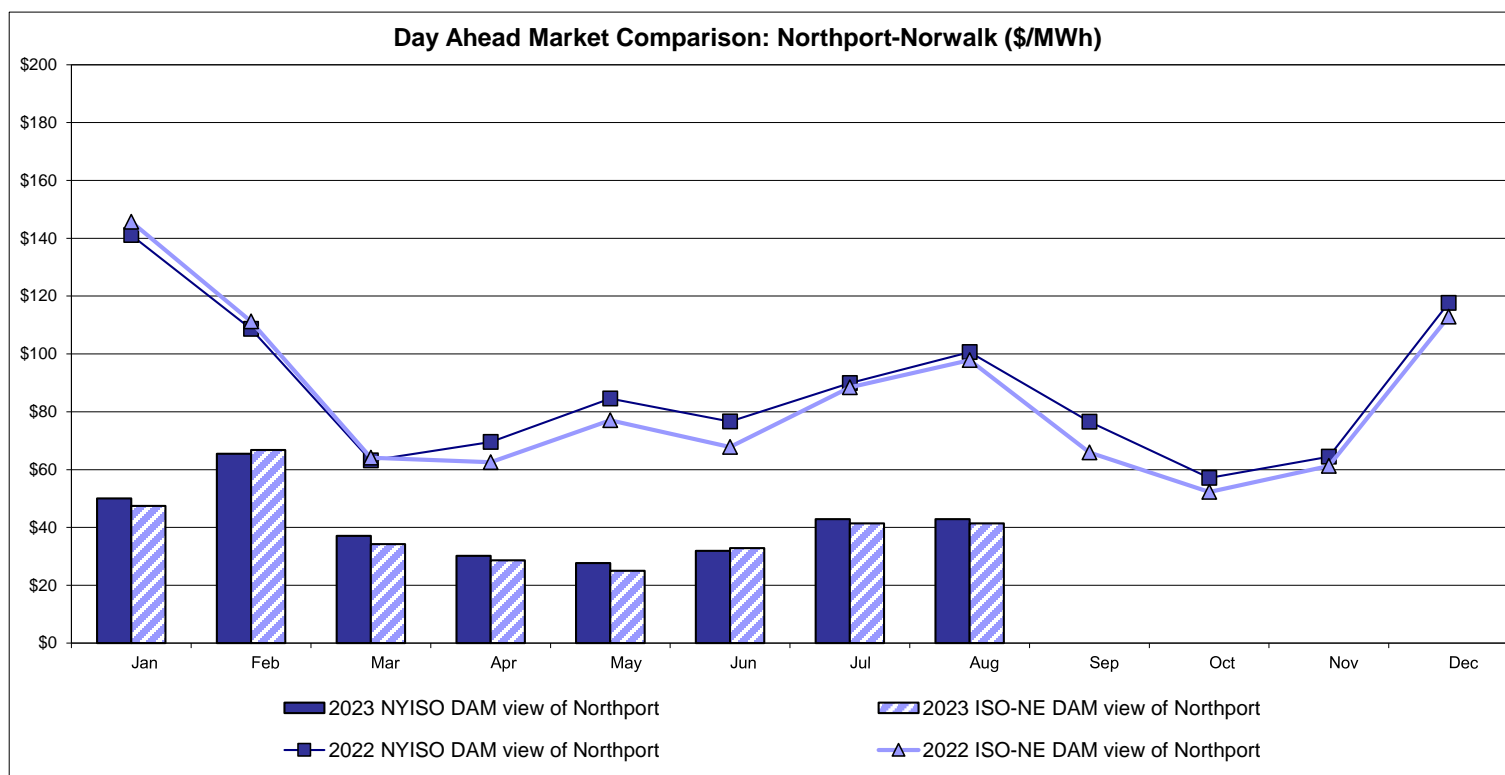
## External Controllable Line: Cross Sound Cable (New England)



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)



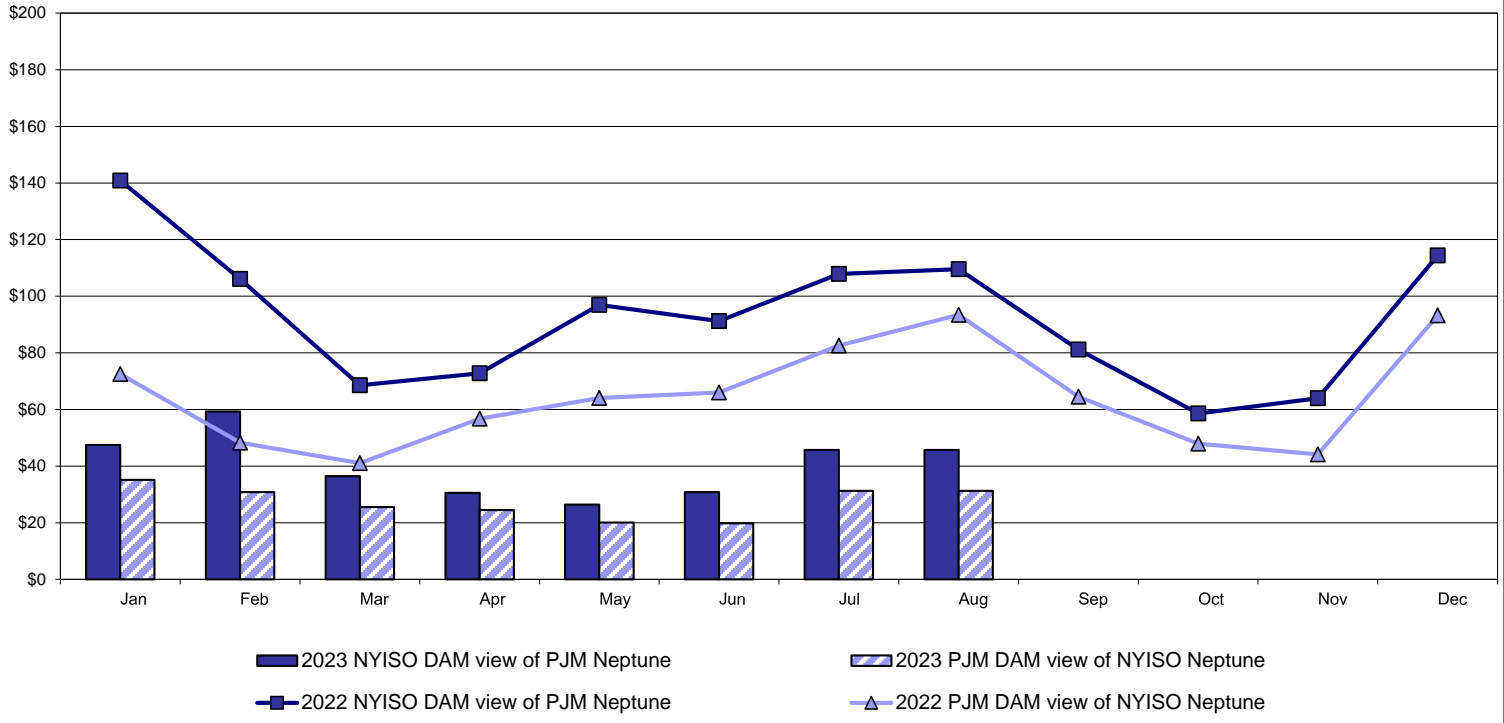
Note:

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.

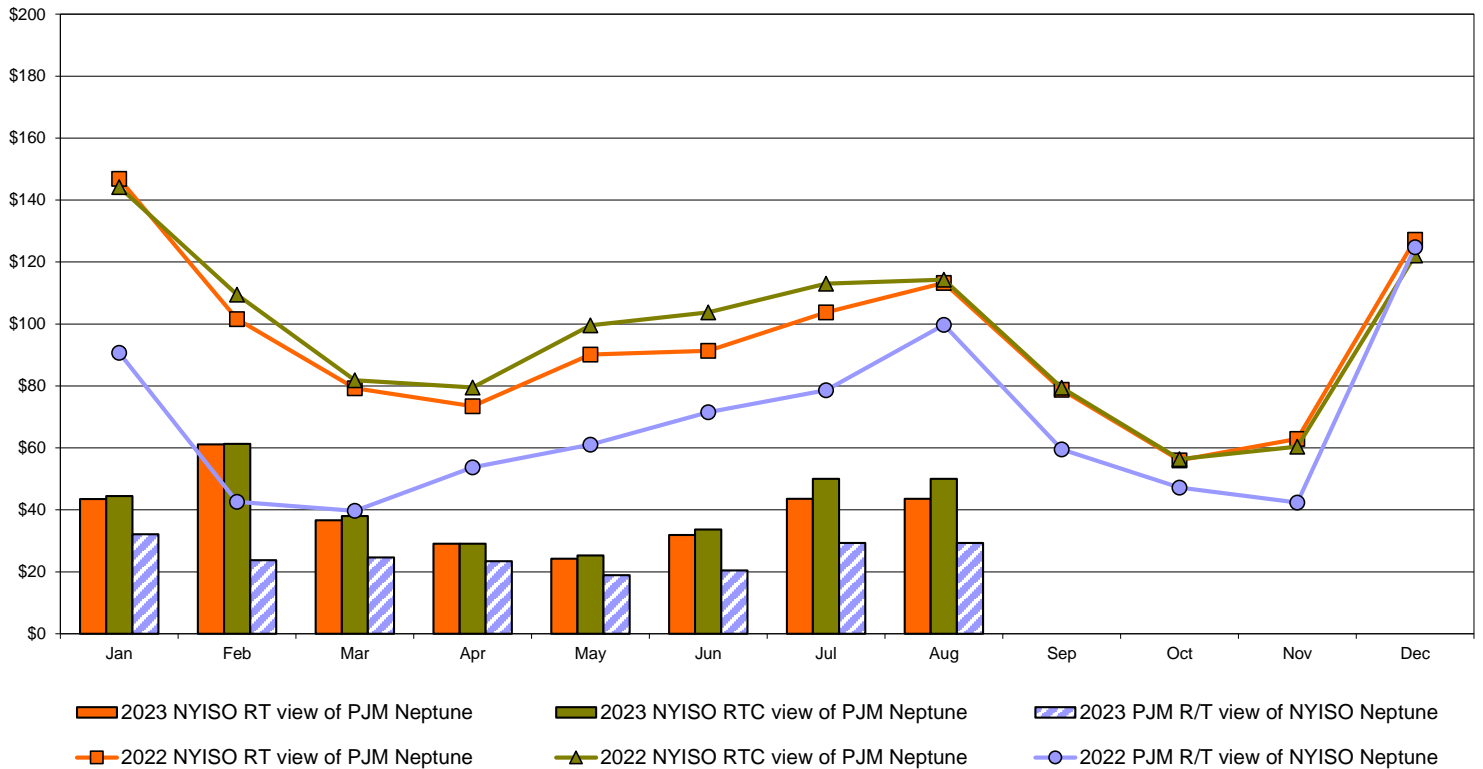


## External Controllable Line: Neptune (PJM)

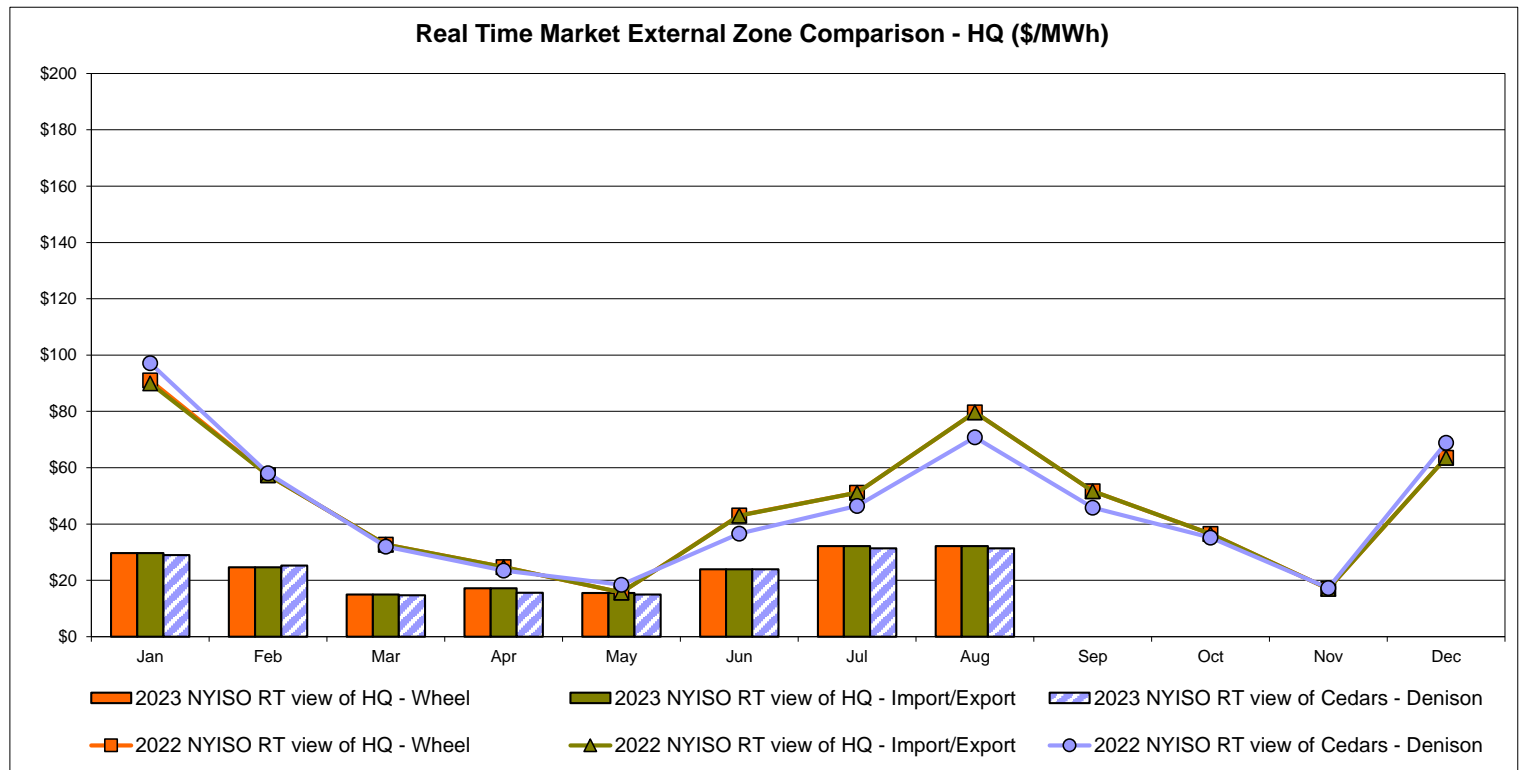
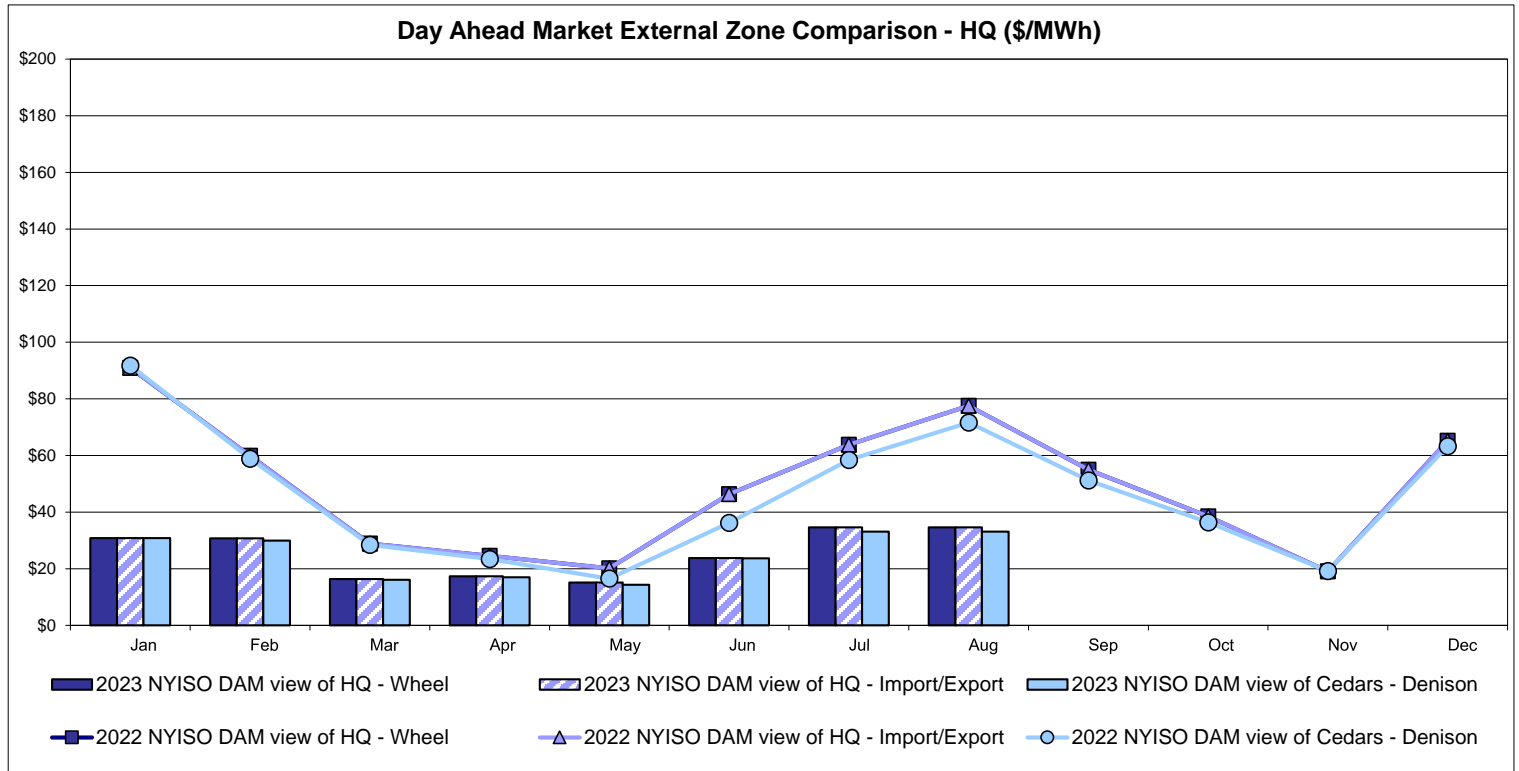
Day Ahead Market Comparison: Neptune (\$/MWh)



Real Time Market Comparison: Neptune (\$/MWh)

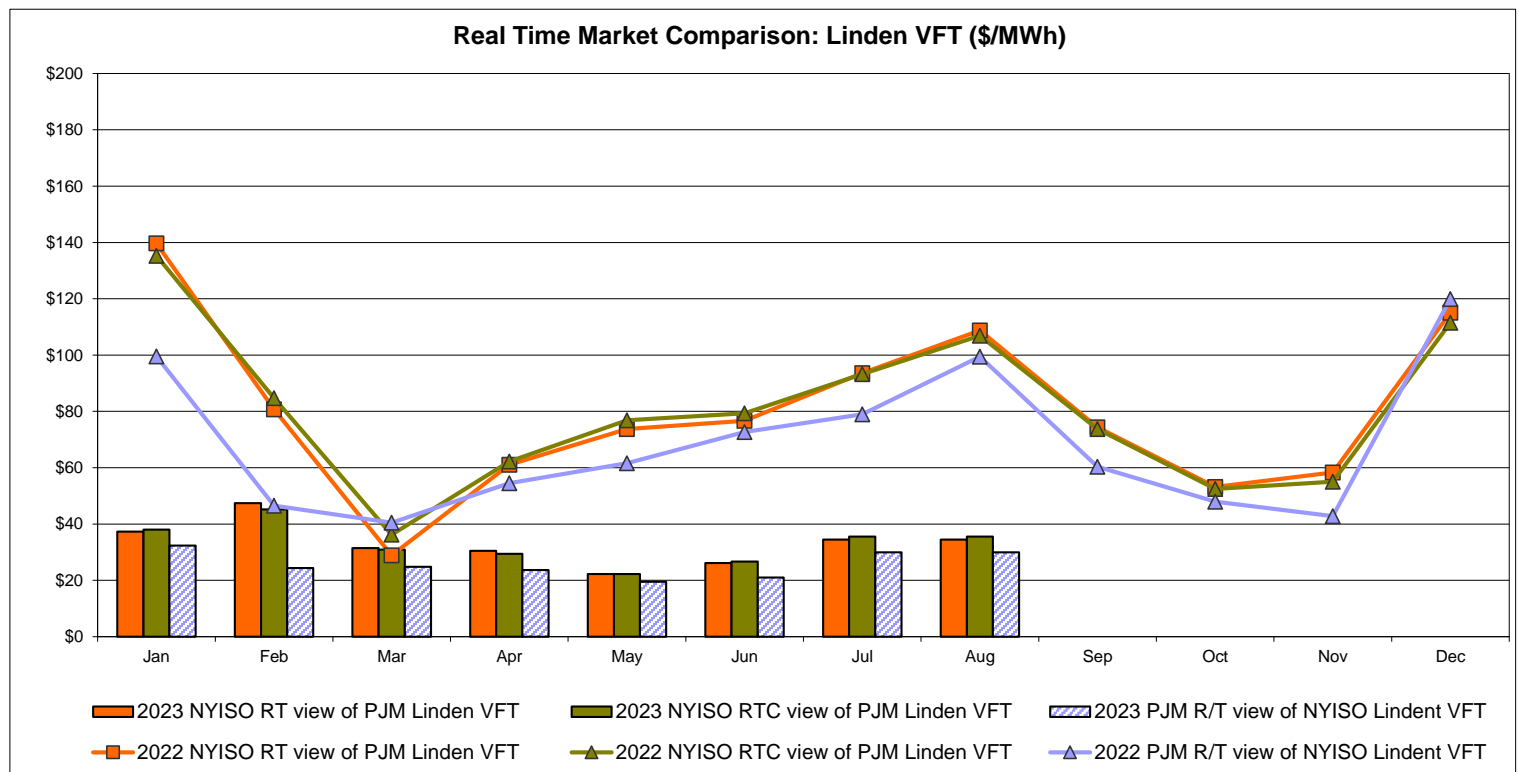
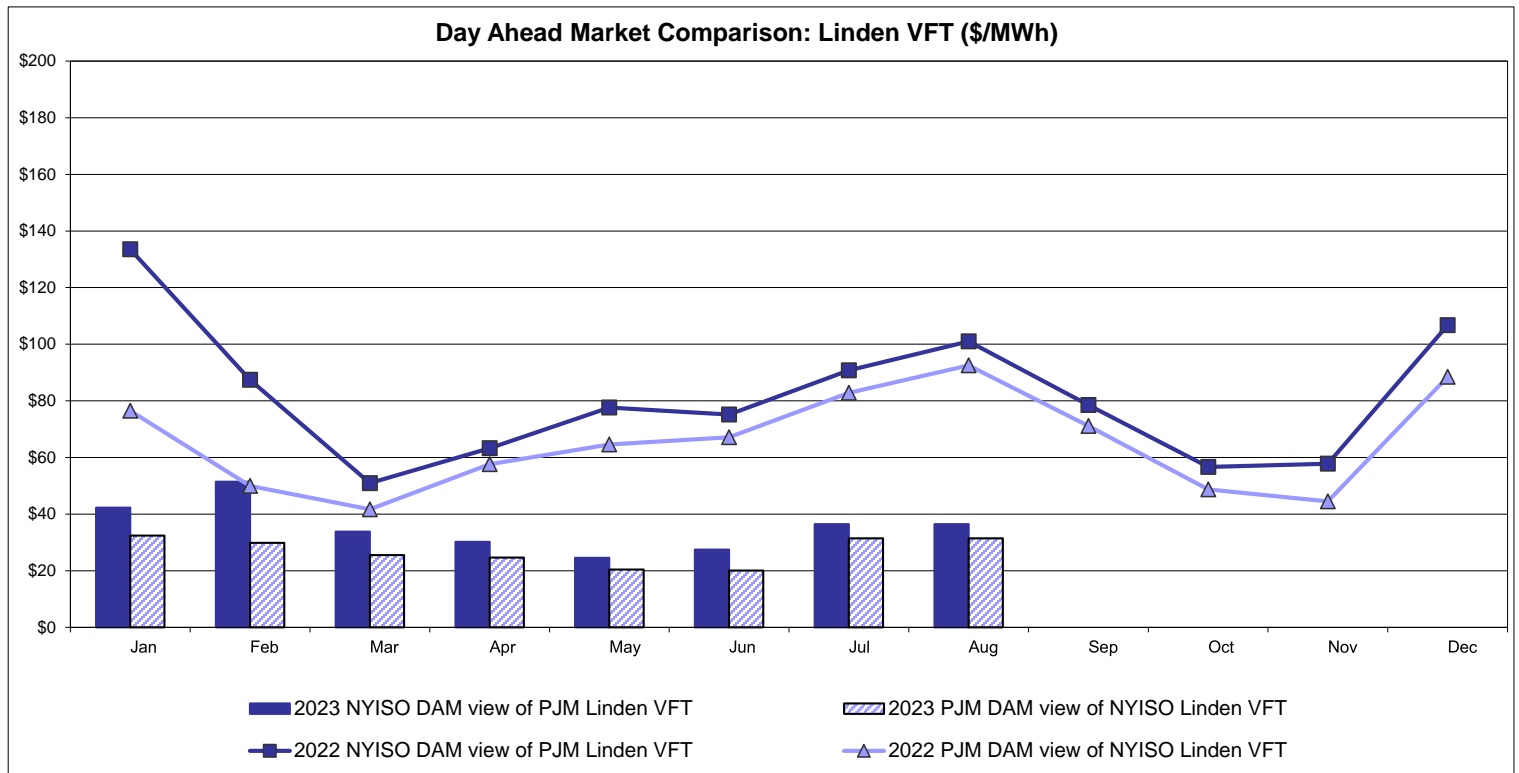


## External Comparison Hydro-Quebec

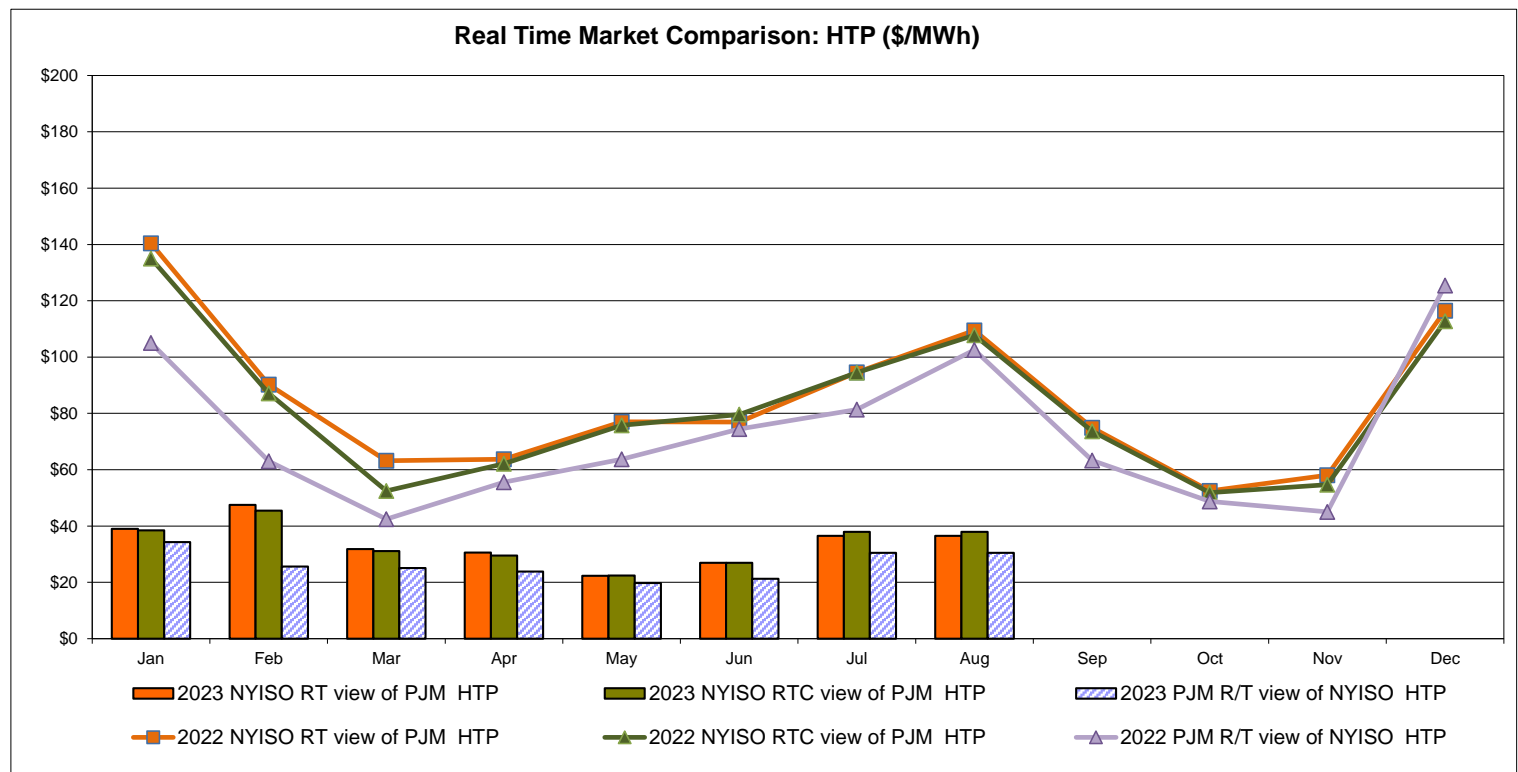
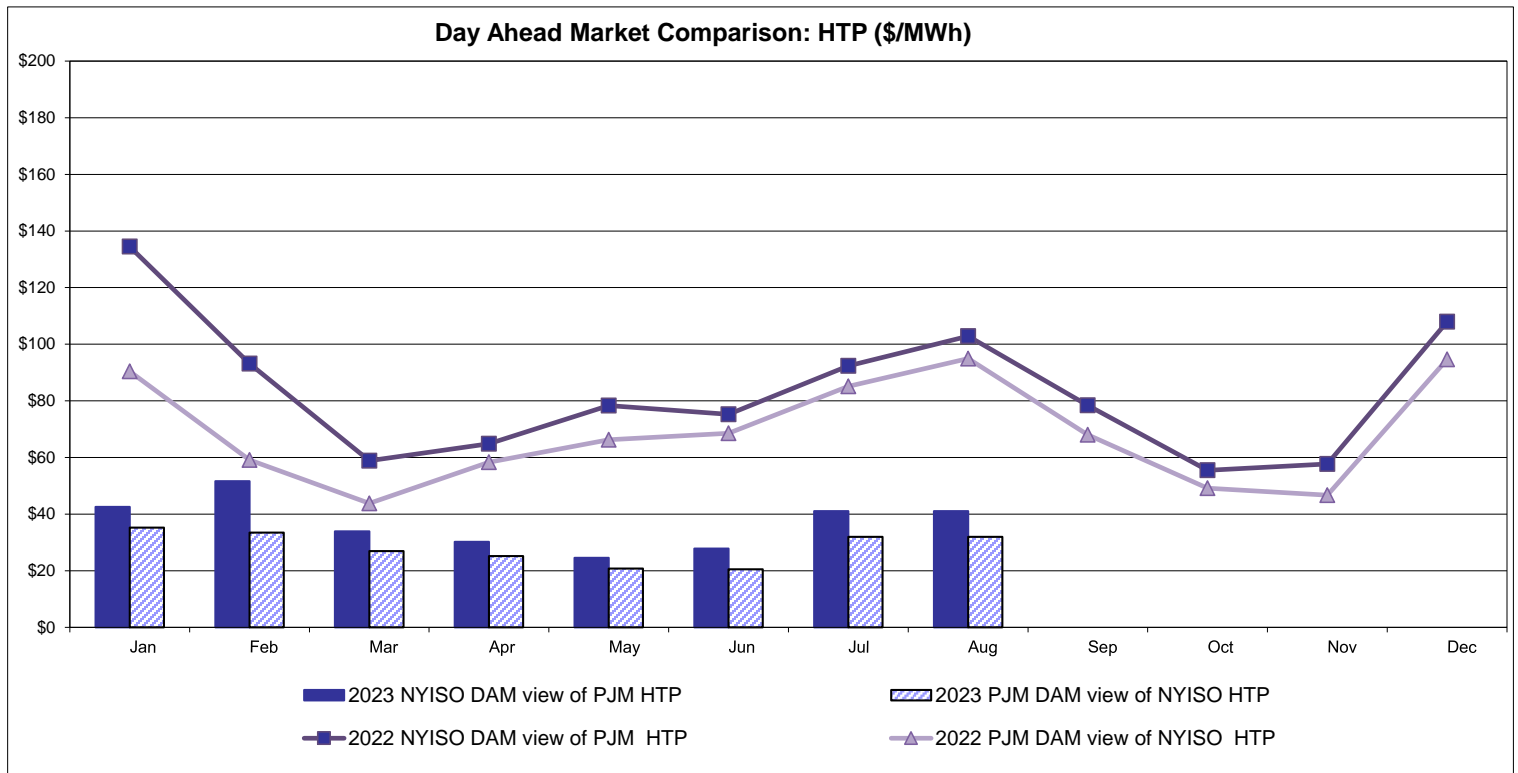


Note:  
Hydro-Quebec Prices are unavailable.

## External Controllable Line: Linden VFT (PJM)



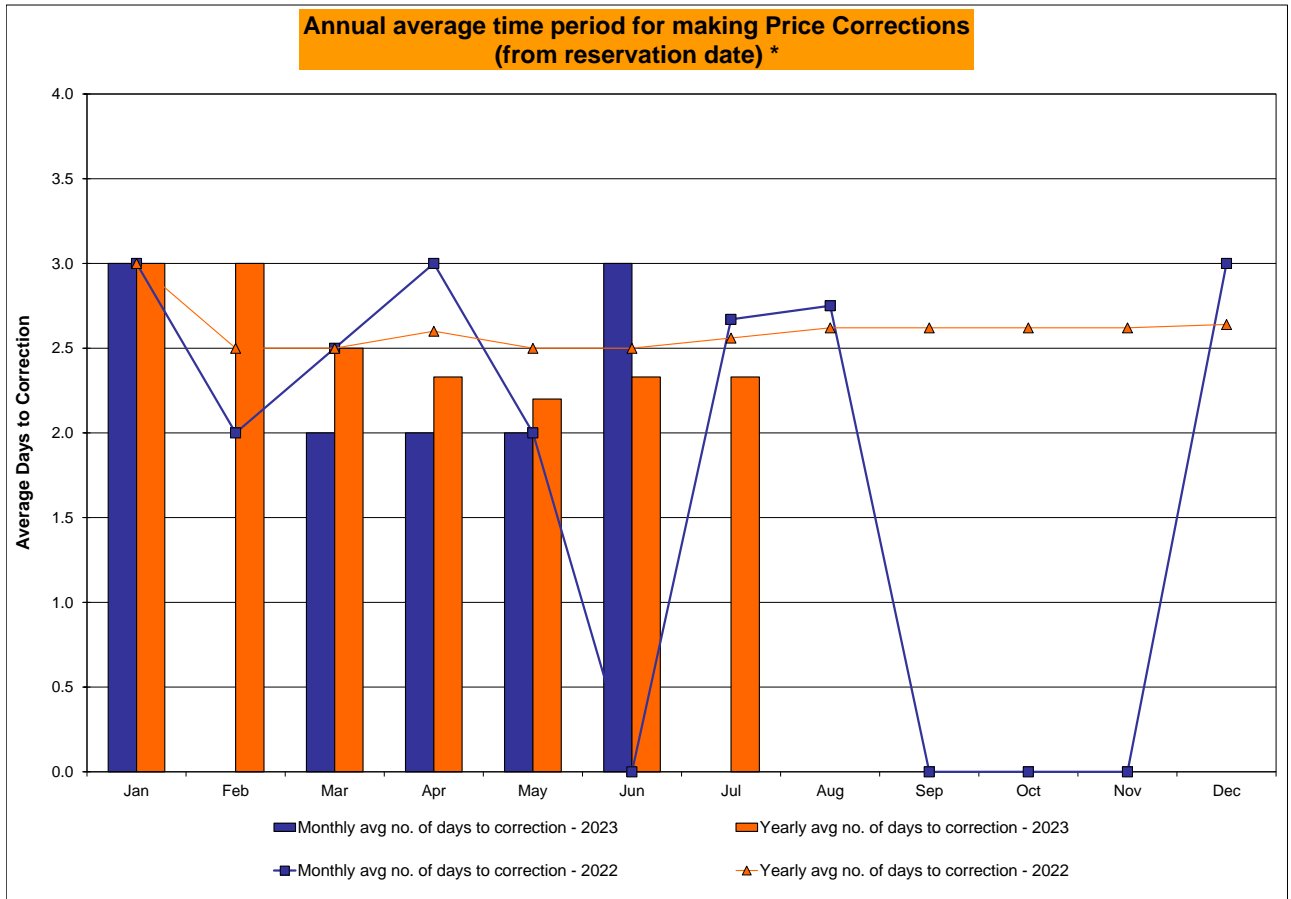
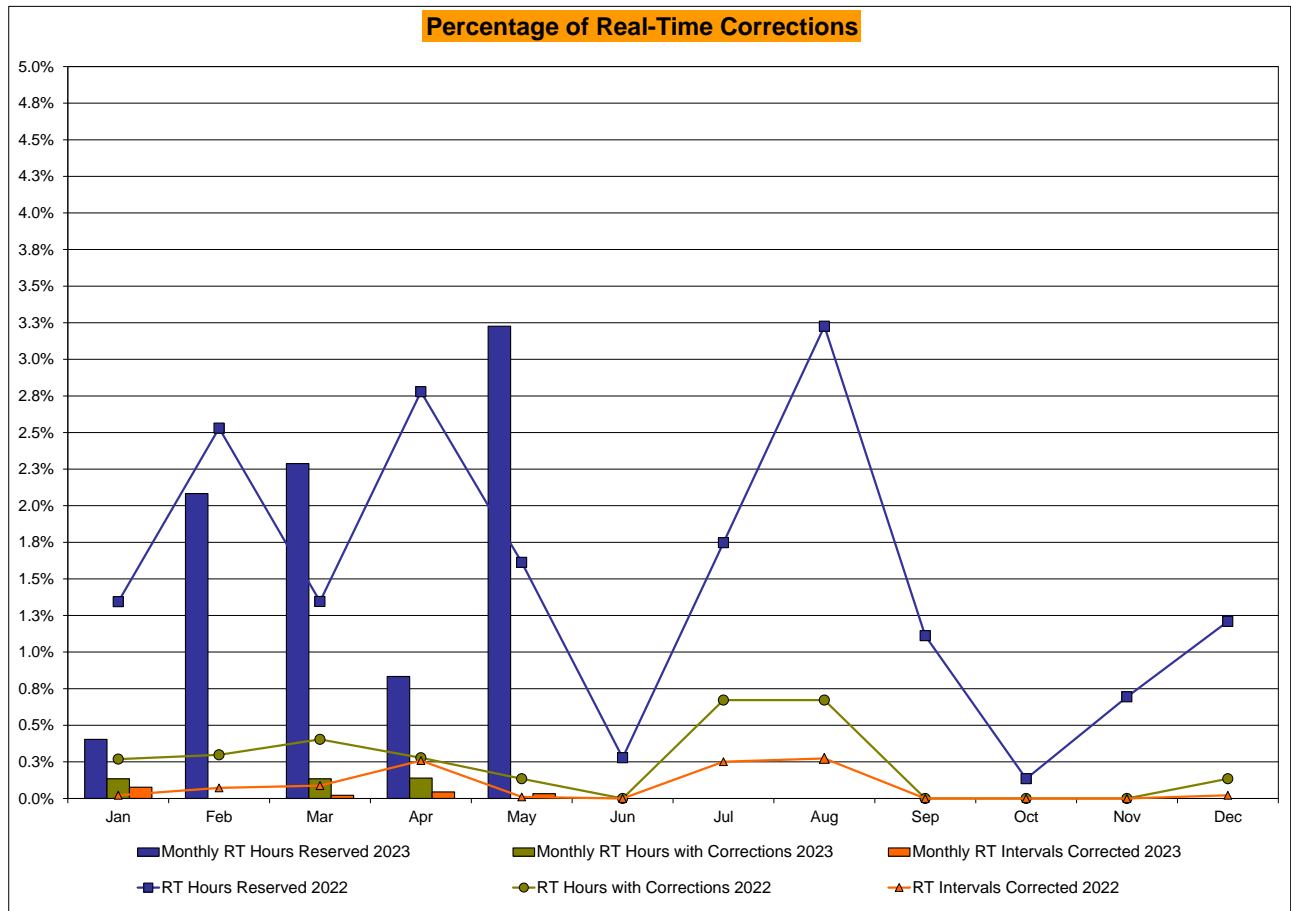
## External Controllable Line: Hudson (PJM)



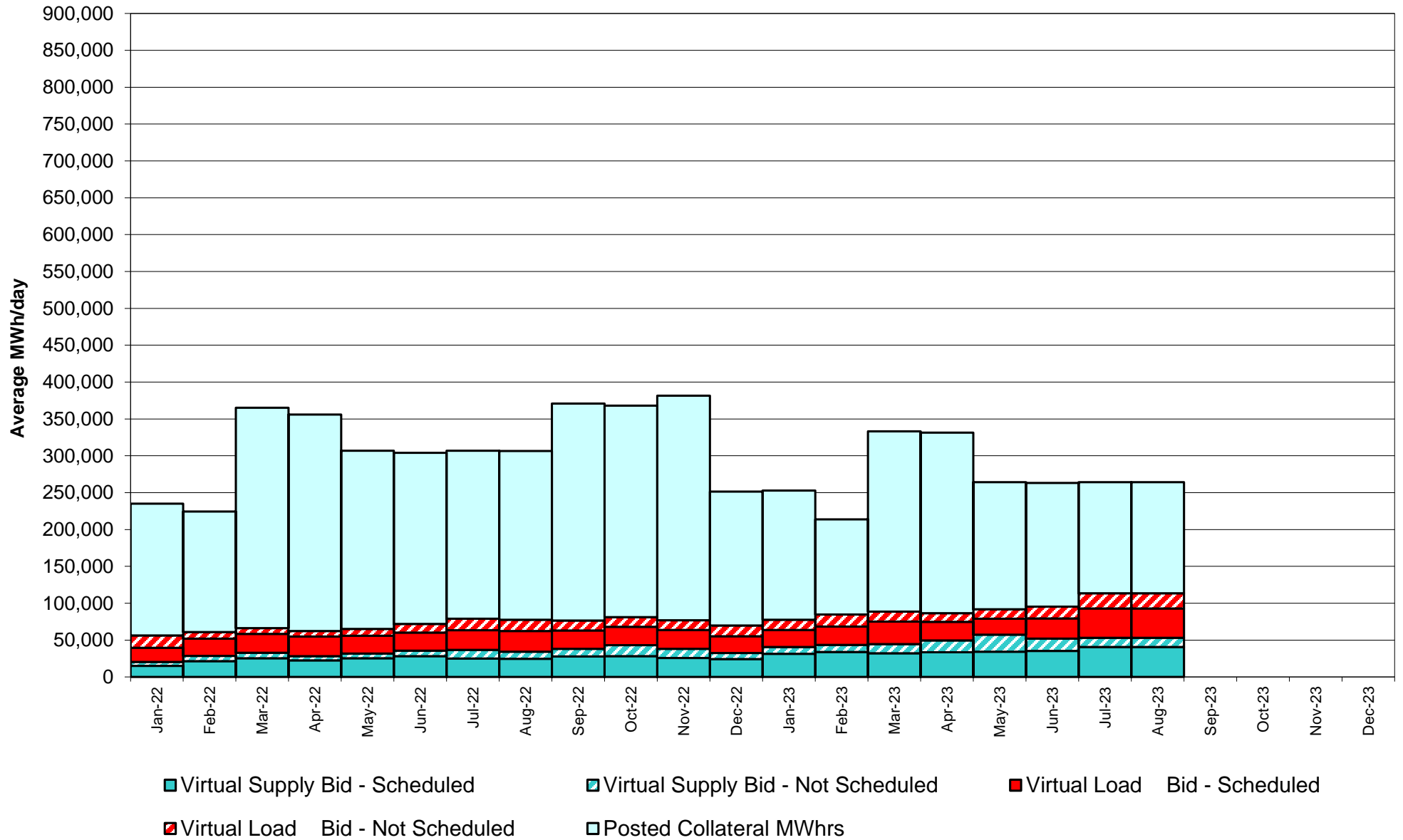
### NYISO Real Time Price Correction Statistics

<b>2023</b>		<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>
<b>Hour Corrections</b>													
Number of hours with corrections	in the month	1	0	1	1	0	#N/A	0					
Number of hours	in the month	744	672	743	720	744	720	744					
% of hours with corrections	in the month	0.13%	0.00%	0.13%	0.14%	0.00%	#N/A	0.00%					
% of hours with corrections	year-to-date	0.13%	0.07%	0.09%	0.10%	0.08%	#N/A	#N/A					
<b>Interval Corrections</b>													
Number of intervals corrected	in the month	7	0	2	4	3	0	0					
Number of intervals	in the month	9,082	8,373	9,171	8,890	9,160	8,797	288					
% of intervals corrected	in the month	0.08%	0.00%	0.02%	0.04%	0.03%	0.00%	0.00%					
% of intervals corrected	year-to-date	0.08%	0.04%	0.03%	0.04%	0.04%	0.03%	0.03%					
<b>Hours Reserved</b>													
Number of hours reserved	in the month	3	14	17	6	24	#N/A	0					
Number of hours	in the month	744	672	743	720	744	720	744					
% of hours reserved	in the month	0.40%	2.08%	2.29%	0.83%	3.23%	#N/A	0.00%					
% of hours reserved	year-to-date	0.40%	1.20%	1.57%	1.39%	1.77%	#N/A	#N/A					
<b>Days to Correction *</b>													
Avg. number of days to correction	in the month	3.00	0.00	2.00	2.00	2.00	3.00	0.00					
Avg. number of days to correction	year-to-date	3.00	3.00	2.50	2.33	2.20	2.33	2.33					
<b>Days Without Corrections</b>													
Days without corrections	in the month	30	28	30	29	29	30	1					
Days without corrections	year-to-date	30	58	88	117	146	176	177					
<b>2022</b>		<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>
<b>Hour Corrections</b>													
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%
<b>Interval Corrections</b>													
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%
<b>Hours Reserved</b>													
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%
<b>Days to Correction *</b>													
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
<b>Days Without Corrections</b>													
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



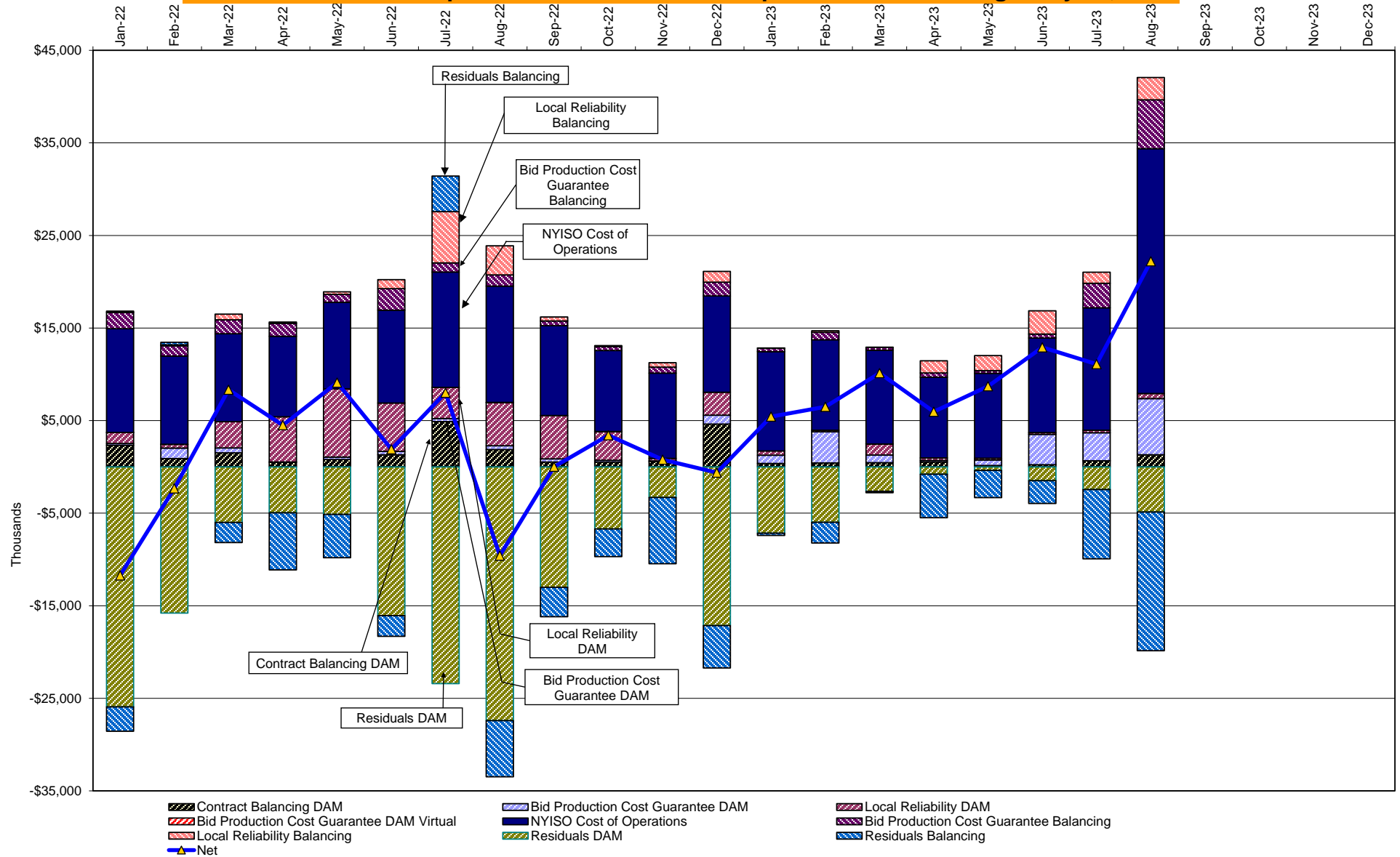
**NYISO Average Cost/MWh (Energy and Ancillary Services) \***  
**from the LBMP Customer point of view**

<b>2023</b>	<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					
NTAC	2.82	1.15	1.39	1.72	1.38	1.62	1.79					
Reserve	0.72	0.90	0.73	0.85	0.81	0.69	0.76					
Regulation	0.09	0.13	0.13	0.15	0.12	0.10	0.10					
NYISO Cost of Operations	0.77	0.77	0.77	0.78	0.78	0.78	0.80					
FERC Fee Recovery	0.08	0.09	0.09	0.10	0.10	0.09	0.06					
Uplift	(0.38)	(0.27)	(0.00)	(0.34)	(0.13)	0.09	(0.43)					
Uplift: Local Reliability Share	0.03	0.03	0.09	0.04	0.07	0.35	0.20					
Uplift: Statewide Share	(0.41)	(0.30)	(0.10)	(0.38)	(0.20)	(0.26)	(0.62)					
Voltage Support and Black Start	0.42	0.42	0.43	0.43	0.43	0.43	0.44					
<b>Avg Monthly Cost</b>	46.56	58.58	34.58	31.67	26.55	33.60	49.17					
 Avg YTD Cost	46.64	52.36	46.65	43.45	40.45	39.27	41.18					
 TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.08	0.74					
 <b>2022</b>	<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
<b>Avg Monthly Cost</b>	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: 8/9/2023 4:56 PM



## NYISO Dollar Flows - Uplift - OATT Schedule 1 components - Data through July 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

<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>
<b>Day Ahead Market MWh</b>	13,662,137	12,355,489	12,651,083	11,058,870	11,601,426	12,934,709	16,199,282					
DAM LSE Internal LBMP Energy Sales	55%	55%	56%	55%	55%	57%	63%					
DAM External TC LBMP Energy Sales	7%	7%	4%	4%	4%	6%	4%					
DAM Bilateral - Internal Bilaterals	28%	29%	30%	30%	31%	29%	25%					
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	6%	6%	6%	6%	5%					
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%					
DAM Bilateral - Wheel Through Bilaterals	3%	2%	2%	2%	2%	2%	2%					
<b>Balancing Energy Market MWh</b>	328,840	397,488	420,170	303,381	-77,279	-40,037	235,270					
Balancing Energy LSE Internal LBMP Energy Sales	65%	38%	53%	43%	-157%	37%	118%					
Balancing Energy External TC LBMP Energy Sales	68%	68%	58%	69%		143%	47%					
Balancing Energy Bilateral - Internal Bilaterals	2%	1%	2%	-1%	-5%	28%	5%					
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	7%	0%	0%					
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	7%	6%	6%	5%	10%	18%	5%					
Balancing Energy Bilateral - Wheel Through Bilaterals	-43%	-13%	-18%	-16%	-178%	-326%	-75%					
<b>Transactions Summary</b>												
LBMP	63%	63%	62%	61%	60%	63%	69%					
Internal Bilaterals	28%	28%	29%	29%	31%	29%	25%					
Import Bilaterals	5%	5%	6%	6%	6%	6%	4%					
Export Bilaterals	2%	2%	2%	3%	2%	2%	1%					
Wheels Through	2%	1%	1%	2%	1%	0%	0%					
<b>Market Share of Total Load</b>												
Day Ahead Market	97.6%	96.9%	96.8%	97.3%	100.7%	100.3%	98.6%					
Balancing Energy +	2.4%	3.1%	3.2%	2.7%	-0.7%	-0.3%	1.4%					
Total MWh	13,990,977	12,752,977	13,071,253	11,362,252	11,524,147	12,894,671	16,434,552					
Average Daily Energy Sendout/Month GWh	410	408	387	349	350	401	503					

<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>
<b>Day Ahead Market MWh</b>	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%
<b>Balancing Energy Market MWh</b>	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%
<b>Transactions Summary</b>												
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%
<b>Market Share of Total Load</b>												
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.

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

Notes: Percent totals may not equal 100% due to rounding.  
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>
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$40.60	\$47.82	\$29.84	\$26.91	\$22.41	\$27.67	\$41.75					
Standard Deviation	\$10.32	\$47.20	\$7.42	\$6.50	\$6.46	\$9.25	\$24.21					
Load Weighted Price **	\$41.37	\$50.55	\$30.37	\$27.38	\$23.02	\$28.99	\$44.71					
<b><u>RTC LBMP</u></b>												
Price *	\$38.28	\$42.67	\$28.02	\$26.93	\$21.13	\$27.94	\$40.11					
Standard Deviation	\$31.37	\$39.75	\$11.53	\$9.23	\$7.61	\$12.06	\$25.96					
Load Weighted Price **	\$39.04	\$44.80	\$28.49	\$27.39	\$21.62	\$29.24	\$42.24					
<b><u>REAL TIME LBMP</u></b>												
Price *	\$38.76	\$43.99	\$28.15	\$27.41	\$20.76	\$27.44	\$37.88					
Standard Deviation	\$45.06	\$43.54	\$15.02	\$13.08	\$9.13	\$12.38	\$23.42					
Load Weighted Price **	\$39.68	\$46.75	\$28.72	\$27.97	\$21.27	\$28.66	\$39.88					
Average Daily Energy Sendout/Month GWh	410	408	387	349	350	401	503					

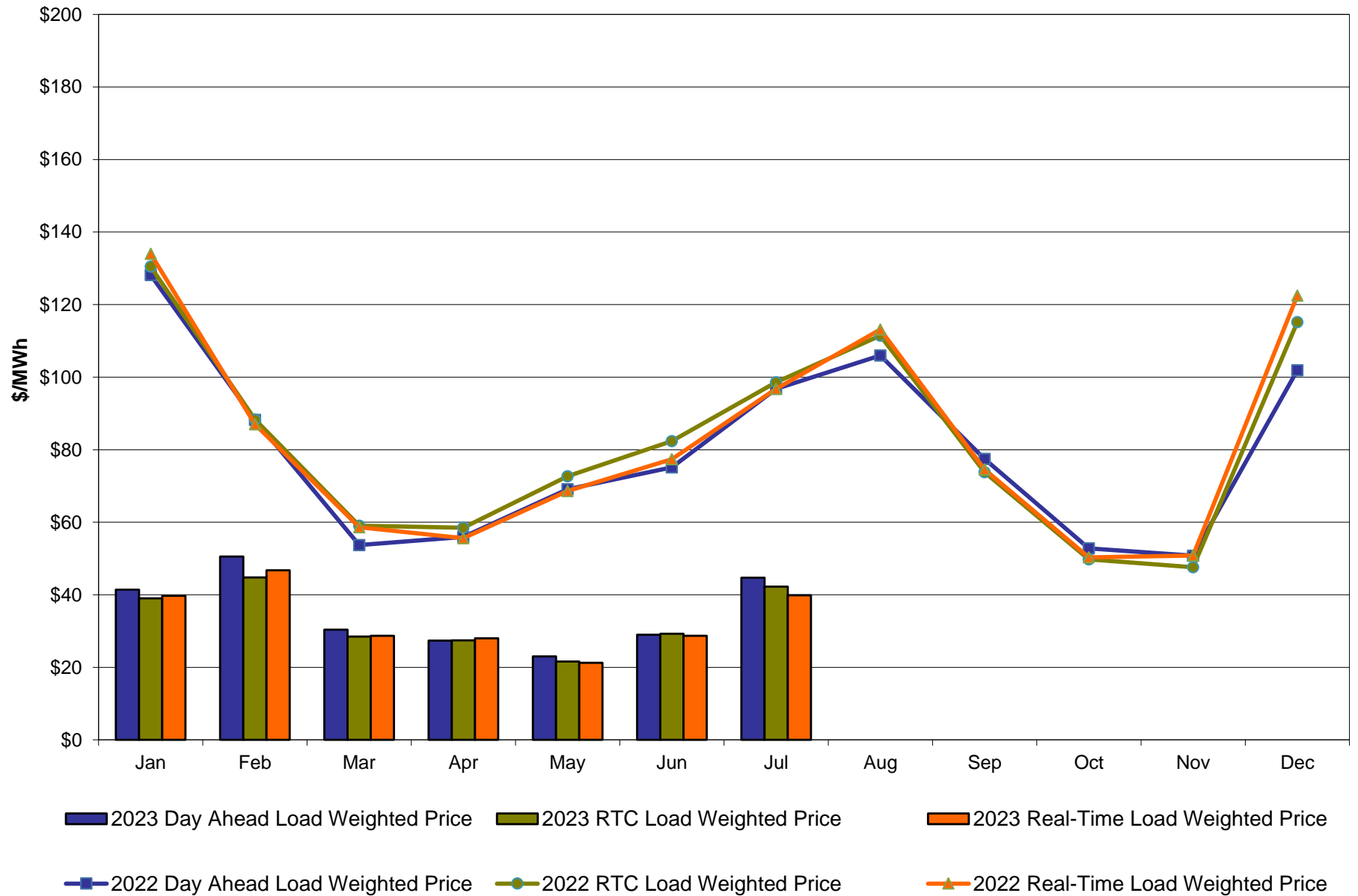
### NYISO Markets 2022 Energy Statistics

	<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>
<b><u>DAY AHEAD LBMP</u></b>												
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
<b><u>RTC LBMP</u></b>												
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
<b><u>REAL TIME LBMP</u></b>												
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**

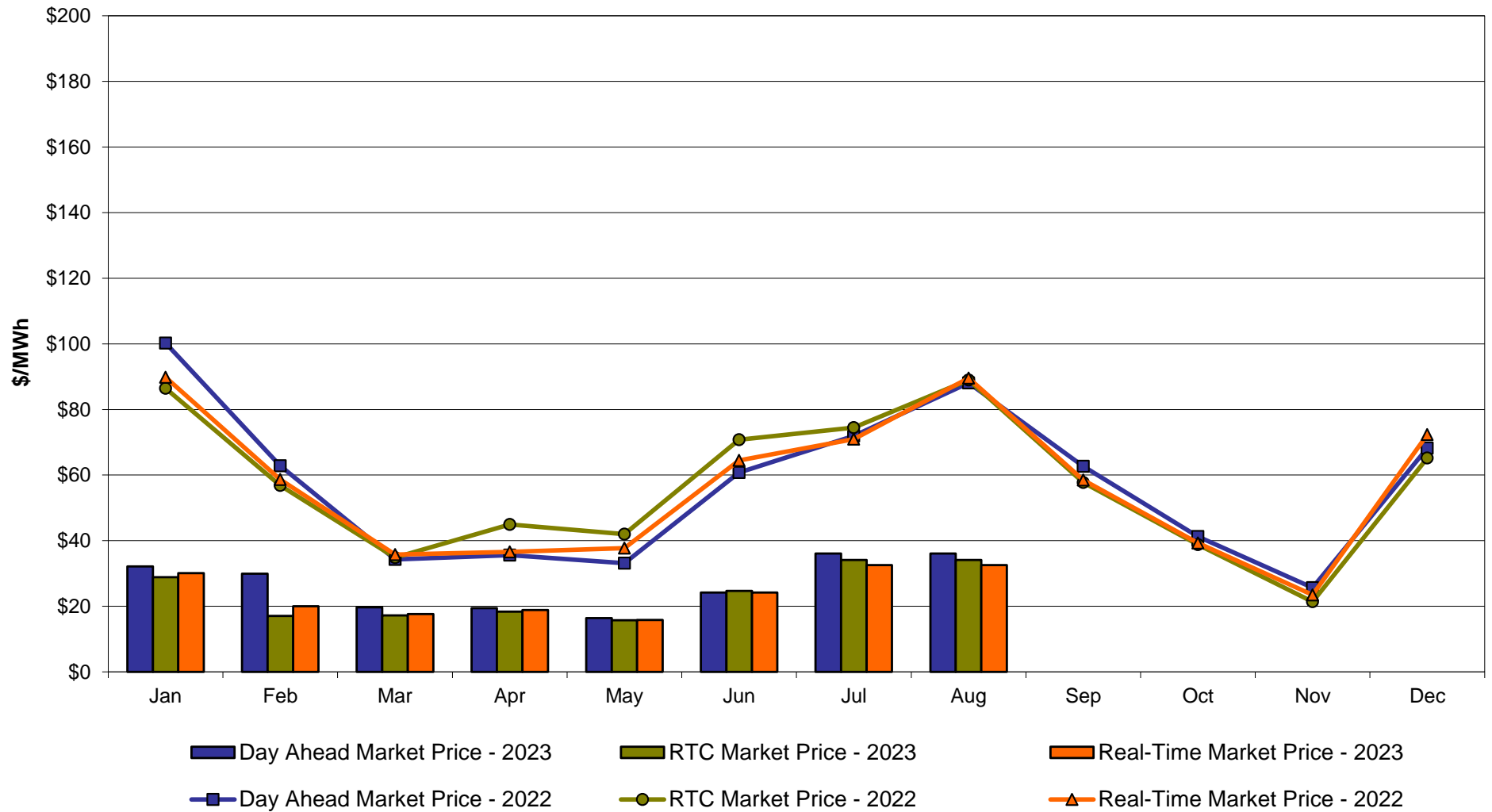


**July 2023 Zonal LBMP Statistics for NYISO (\$/MWh)**

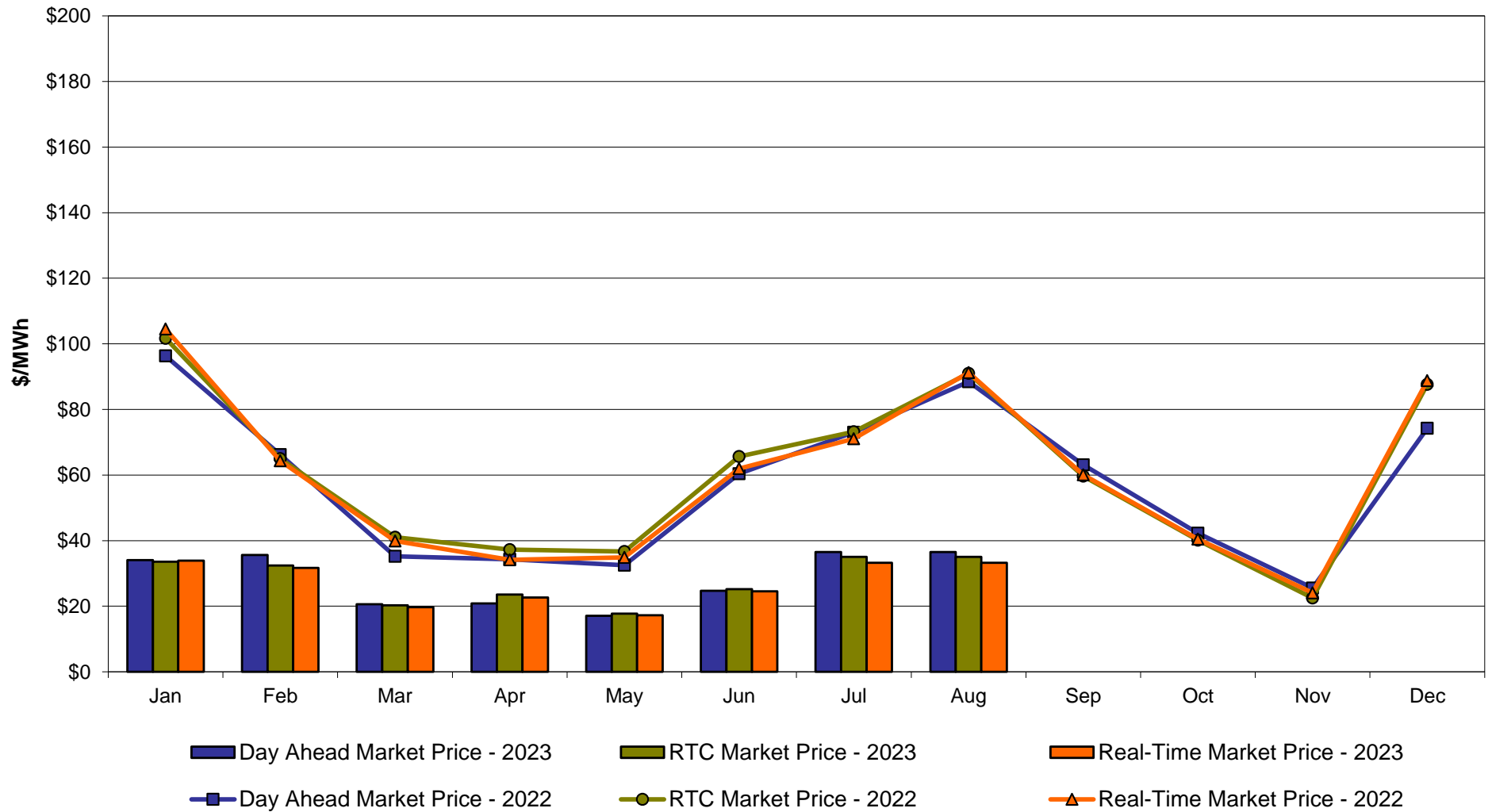
	<b><u>WEST</u></b> <b><u>Zone A</u></b>	<b><u>GENESEE</u></b> <b><u>Zone B</u></b>	<b><u>NORTH</u></b> <b><u>Zone D</u></b>	<b><u>CENTRAL</u></b> <b><u>Zone C</u></b>	<b><u>MOHAWK</u></b> <b><u>VALLEY</u></b> <b><u>Zone E</u></b>	<b><u>CAPITAL</u></b> <b><u>Zone F</u></b>	<b><u>HUDSON</u></b> <b><u>VALLEY</u></b> <b><u>Zone G</u></b>	<b><u>MILLWOOD</u></b> <b><u>Zone H</u></b>	<b><u>DUNWOODIE</u></b> <b><u>Zone I</u></b>	<b><u>NEW YORK</u></b> <b><u>CITY</u></b> <b><u>Zone J</u></b>	<b><u>LONG</u></b> <b><u>ISLAND</u></b> <b><u>Zone K</u></b>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	36.07	36.07	33.46	36.54	37.44	42.57	40.12	41.04	41.24	41.72	52.46
Standard Deviation	18.91	19.05	11.55	19.69	19.84	27.59	22.43	23.85	24.00	24.47	36.46
<b><u>RTC LBMP</u></b>											
Unweighted Price *	34.14	34.33	33.63	35.01	35.58	36.88	36.68	37.91	38.14	39.89	54.34
Standard Deviation	18.26	18.41	18.55	19.06	19.10	19.51	19.56	20.64	21.11	38.55	65.60
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	32.59	32.70	31.96	33.21	33.78	35.12	34.69	36.43	36.67	38.93	47.42
Standard Deviation	14.44	14.61	14.72	15.24	15.29	15.89	16.01	17.11	17.29	46.19	44.17
	<b><u>ONTARIO</u></b> <b><u>IESO</u></b>  <b><u>Zone O</u></b>	<b><u>HYDRO</u></b> <b><u>QUEBEC</u></b> <b><u>(Wheel)</u></b> <b><u>Zone M</u></b>	<b><u>HYDRO</u></b> <b><u>QUEBEC</u></b> <b><u>(Import/Export)</u></b> <b><u>Zone M</u></b>	<b><u>PJM</u></b>  <b><u>Zone P</u></b>	<b><u>NEW</u></b> <b><u>ENGLAND</u></b>  <b><u>Zone N</u></b>	<b><u>CROSS</u></b> <b><u>SOUND</u></b> <b><u>CABLE</u></b> <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>NORTHPORT-</u></b> <b><u>NORWALK</u></b> <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>NEPTUNE</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>LINDEN VFT</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>HUDSON</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>	<b><u>Dennison</u></b>  <b><u>Controllable</u></b> <b><u>Line</u></b>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	35.27	34.63	34.63	37.31	41.18	60.06	42.88	45.73	36.48	41.08	33.07
Standard Deviation	18.27	16.08	16.08	19.69	24.00	51.54	20.28	26.55	17.79	23.82	11.19
<b><u>RTC LBMP</u></b>											
Unweighted Price *	33.32	33.89	33.89	34.75	37.41	59.09	47.83	50.04	35.52	37.93	33.35
Standard Deviation	17.72	17.97	17.97	19.47	24.61	73.14	59.11	62.65	16.73	20.73	18.54
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	32.09	32.22	32.22	32.47	35.17	51.76	40.81	43.53	34.49	36.51	31.42
Standard Deviation	16.47	14.31	14.31	16.98	17.82	52.60	38.31	40.70	14.34	17.14	15.82

\* Straight LBMP averages

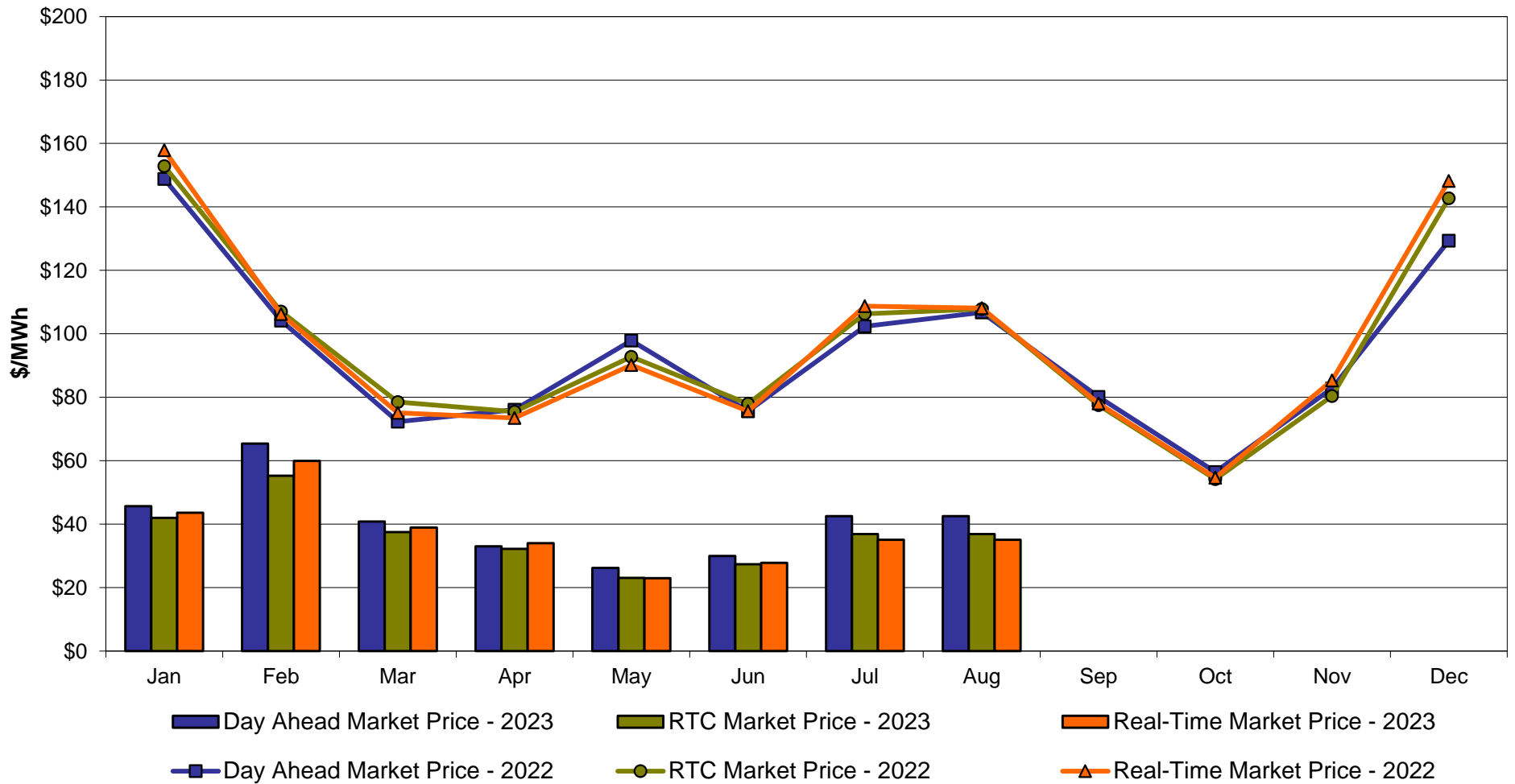
# West Zone A Monthly Average LBMP Prices 2022 - 2023



# Central Zone C Monthly Average LBMP Prices 2022 - 2023

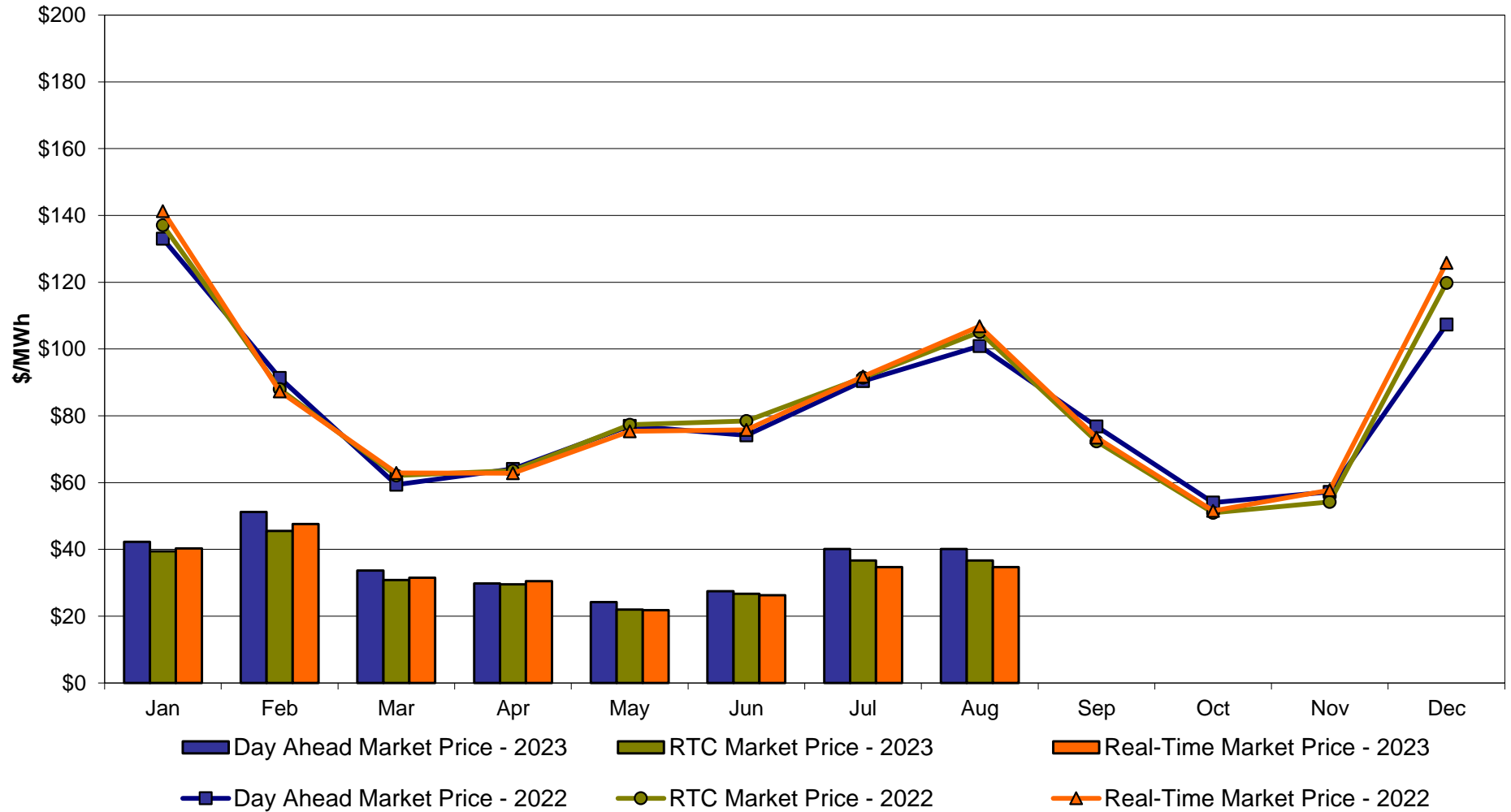


# **Capital Zone F** **Monthly Average LBMP Prices 2022 - 2023**

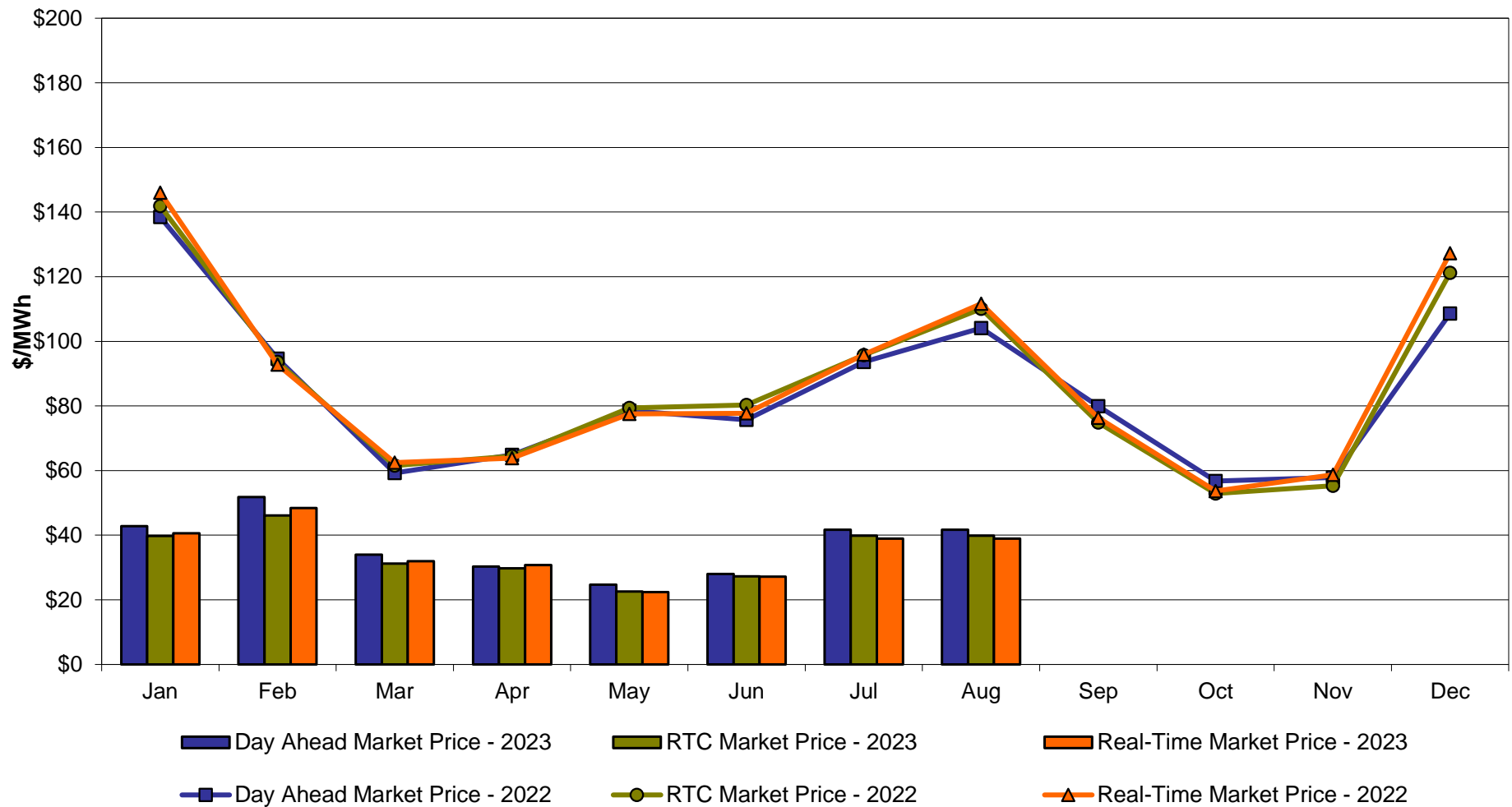




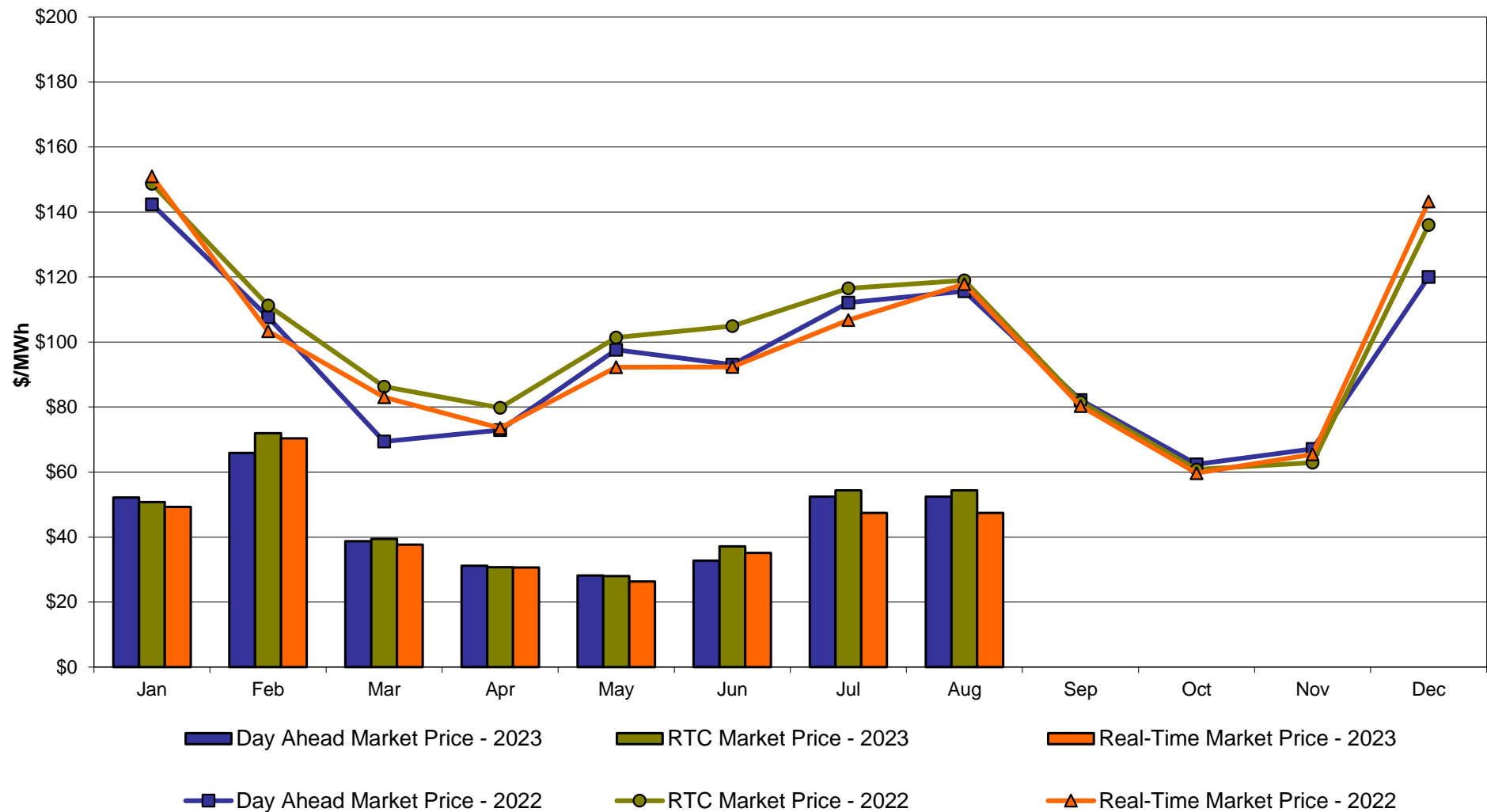
## Hudson Valley Zone G Monthly Average LBMP Prices 2022 - 2023



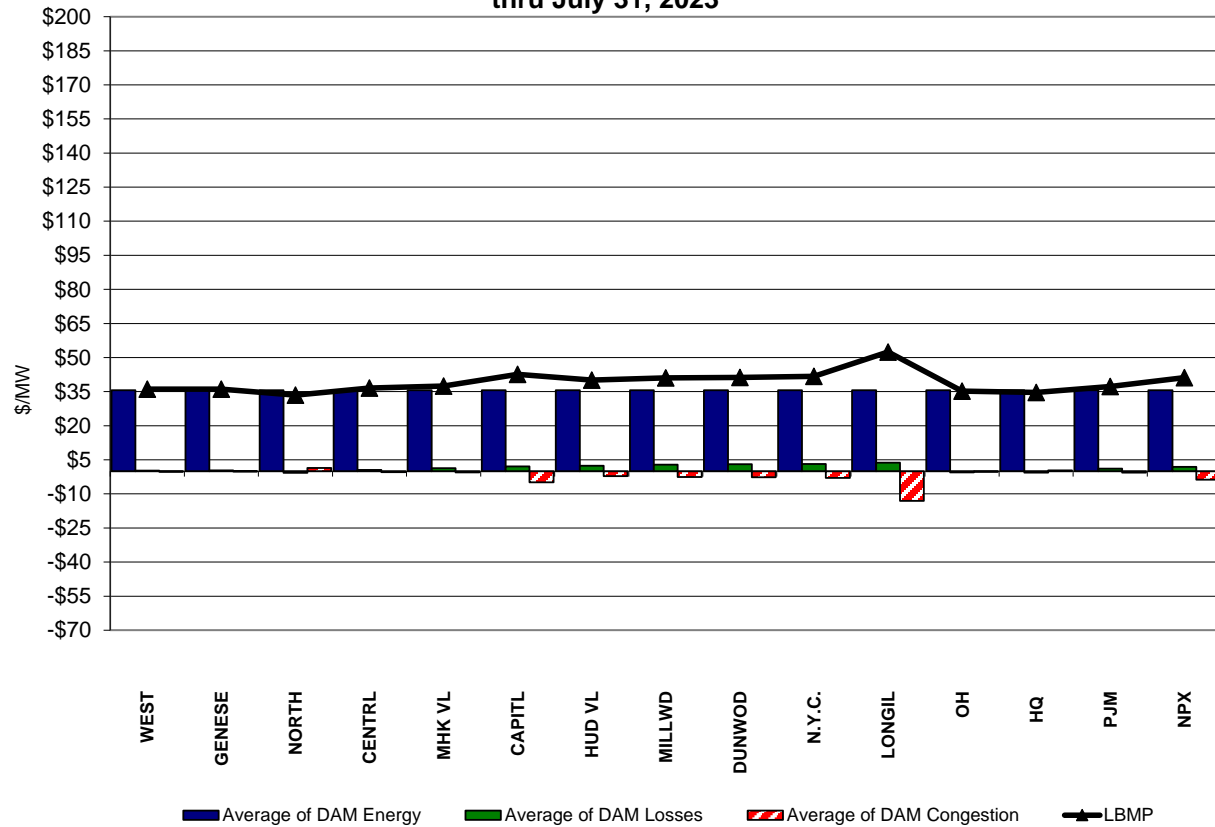
# NYC Zone J Monthly Average LBMP Prices 2022 - 2023



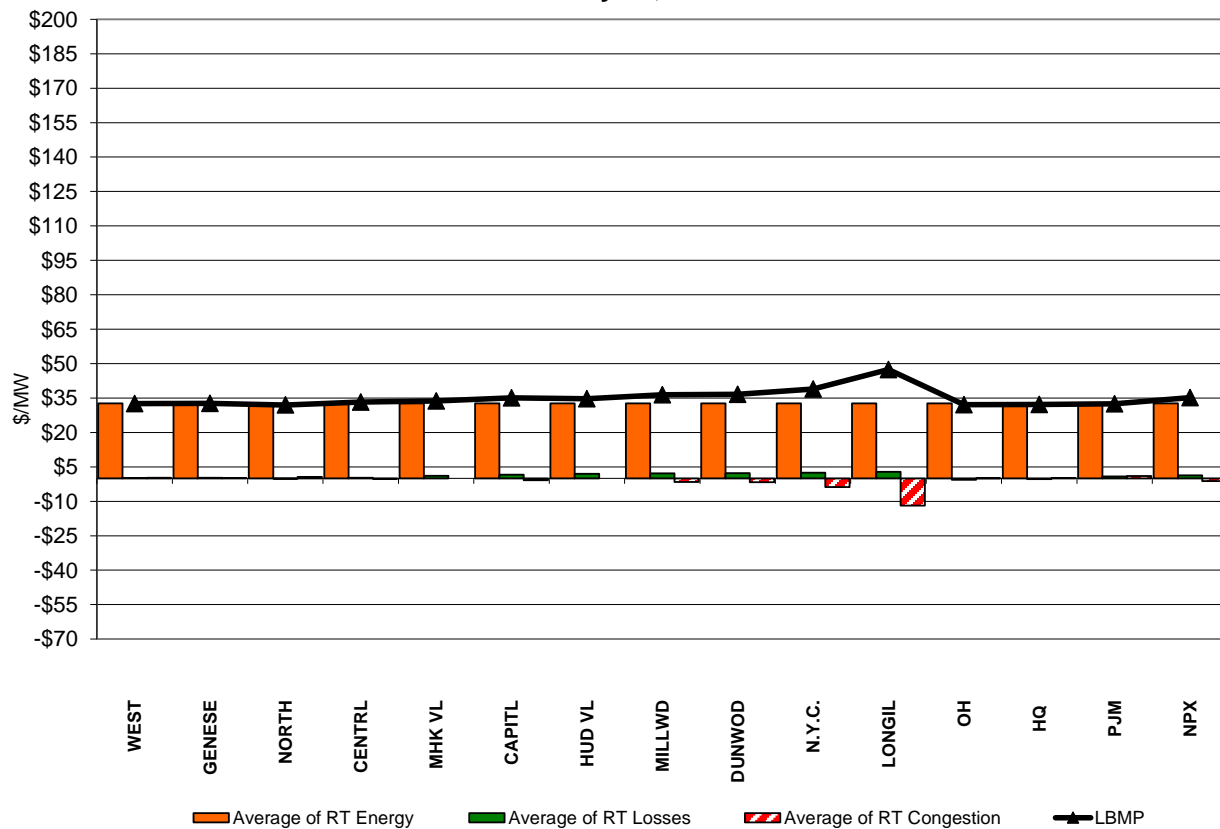
# Long Island Zone K Monthly Average LBMP Prices 2022 - 2023



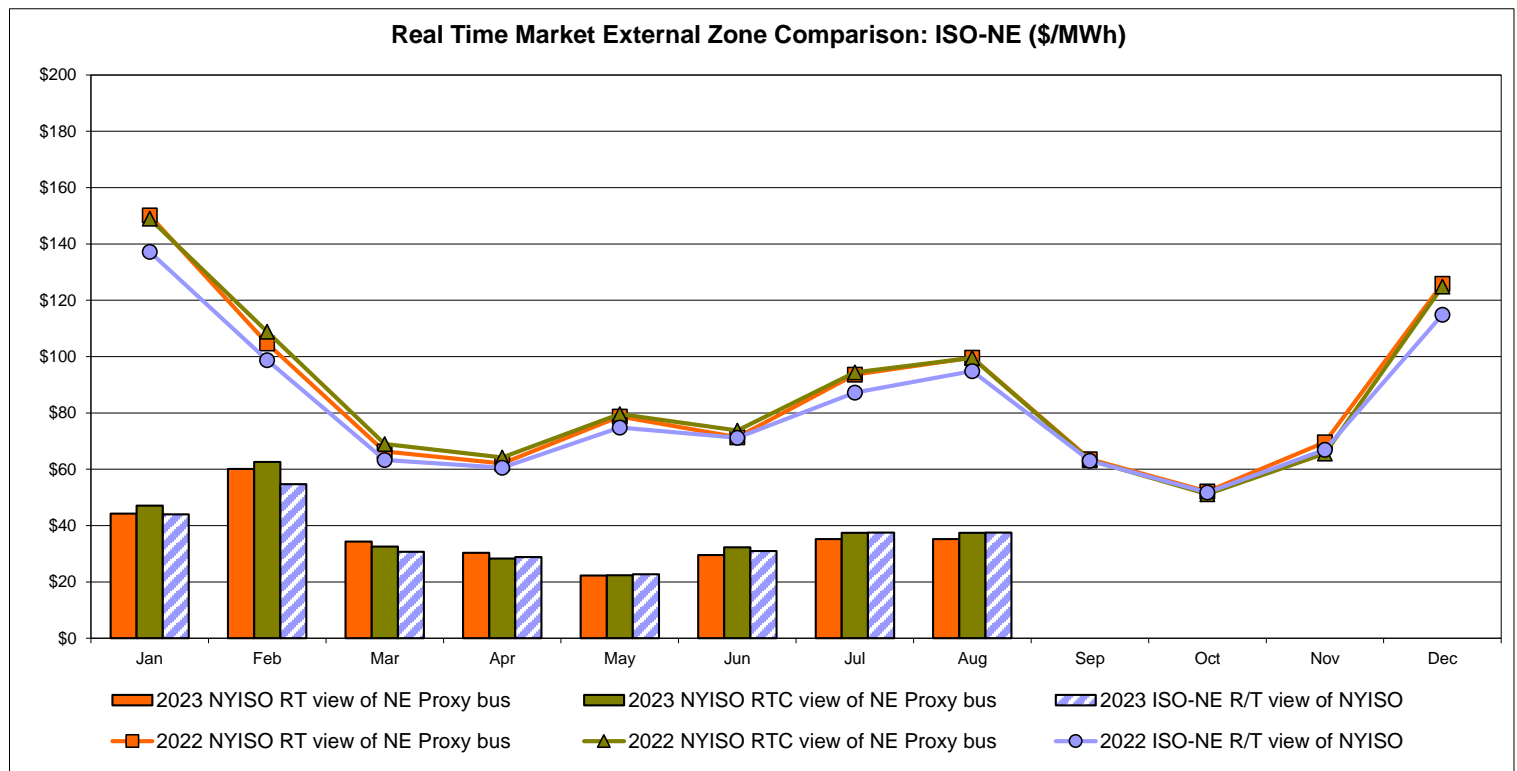
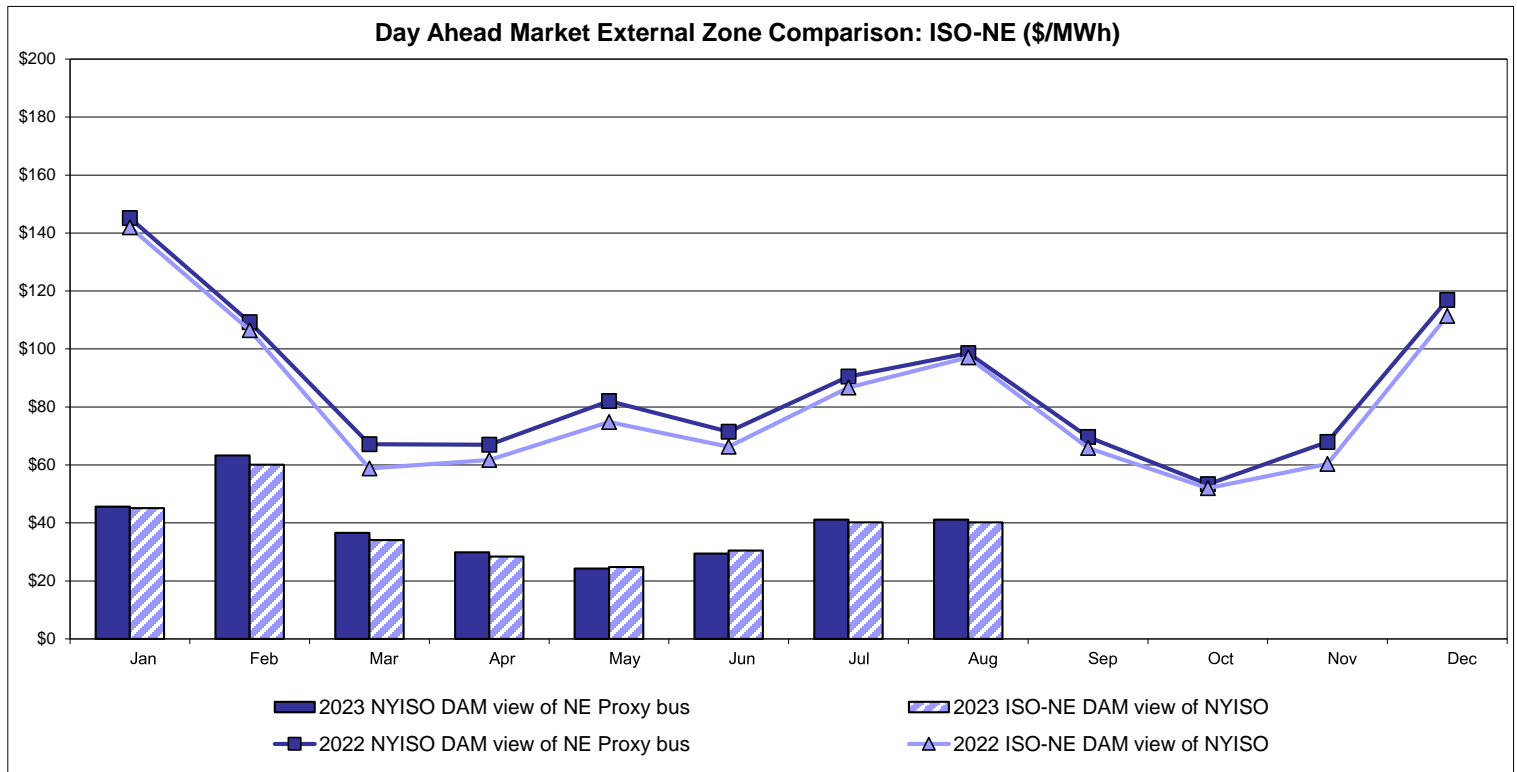
**DAM Zonal Unweighted Monthly Average LBMP Components  
thru July 31, 2023**



**RT Zonal Unweighted Monthly Average LBMP Components  
thru July 31, 2023**

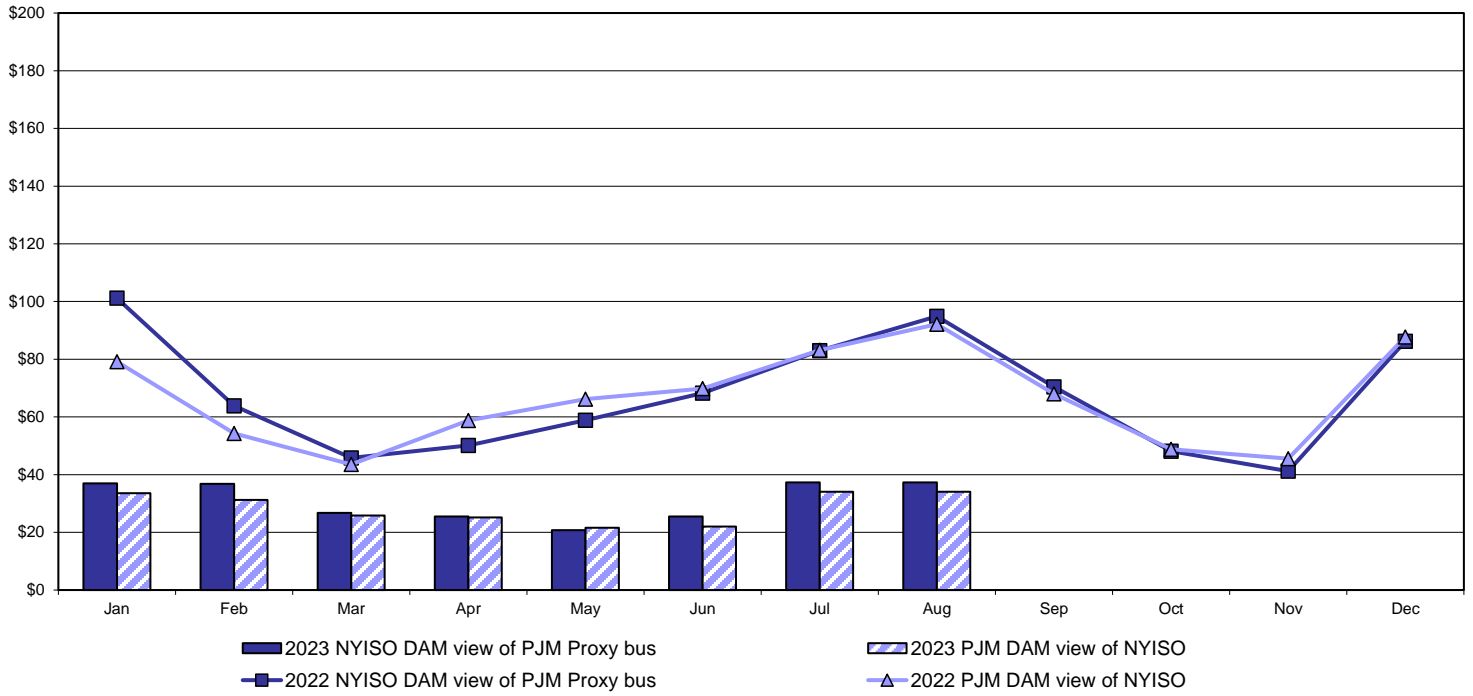


# External Comparison ISO-New England

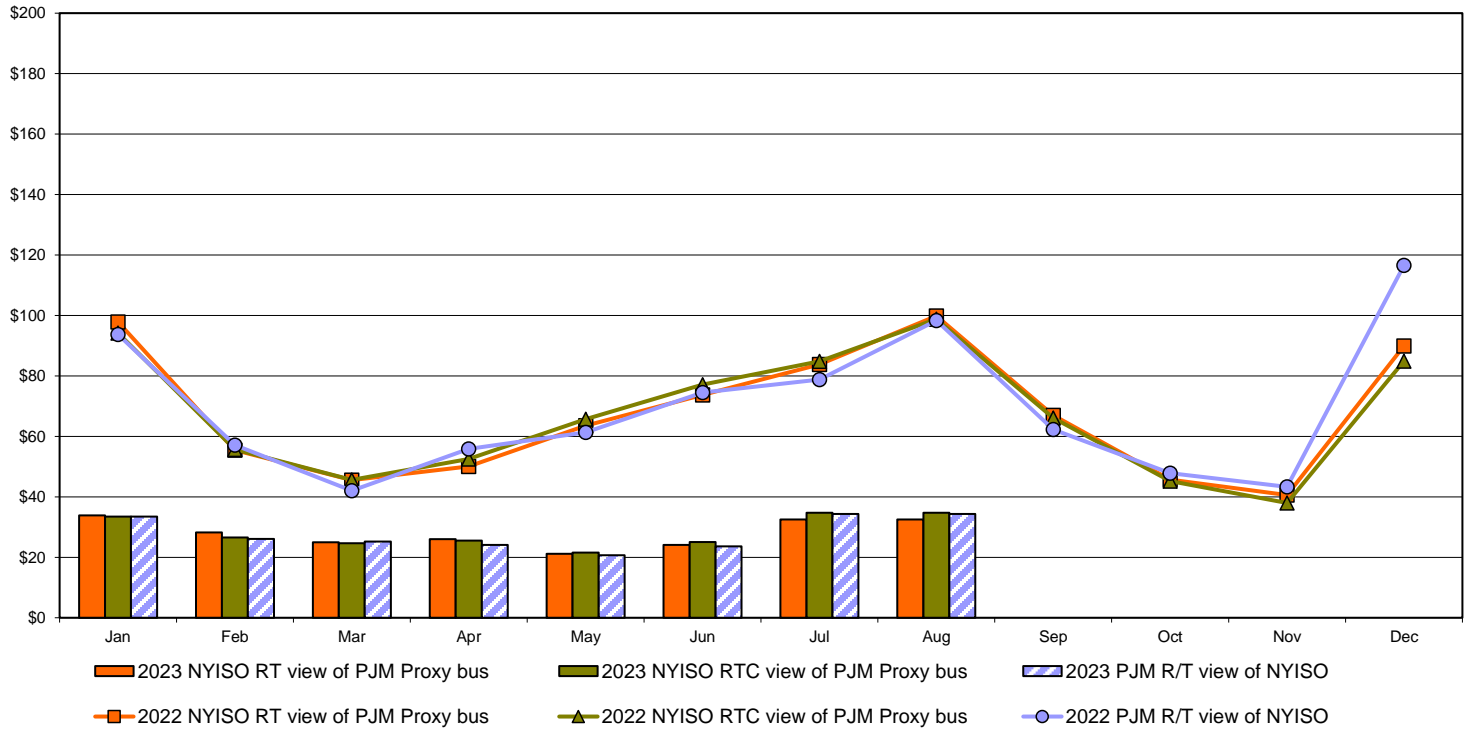


## External Comparison PJM

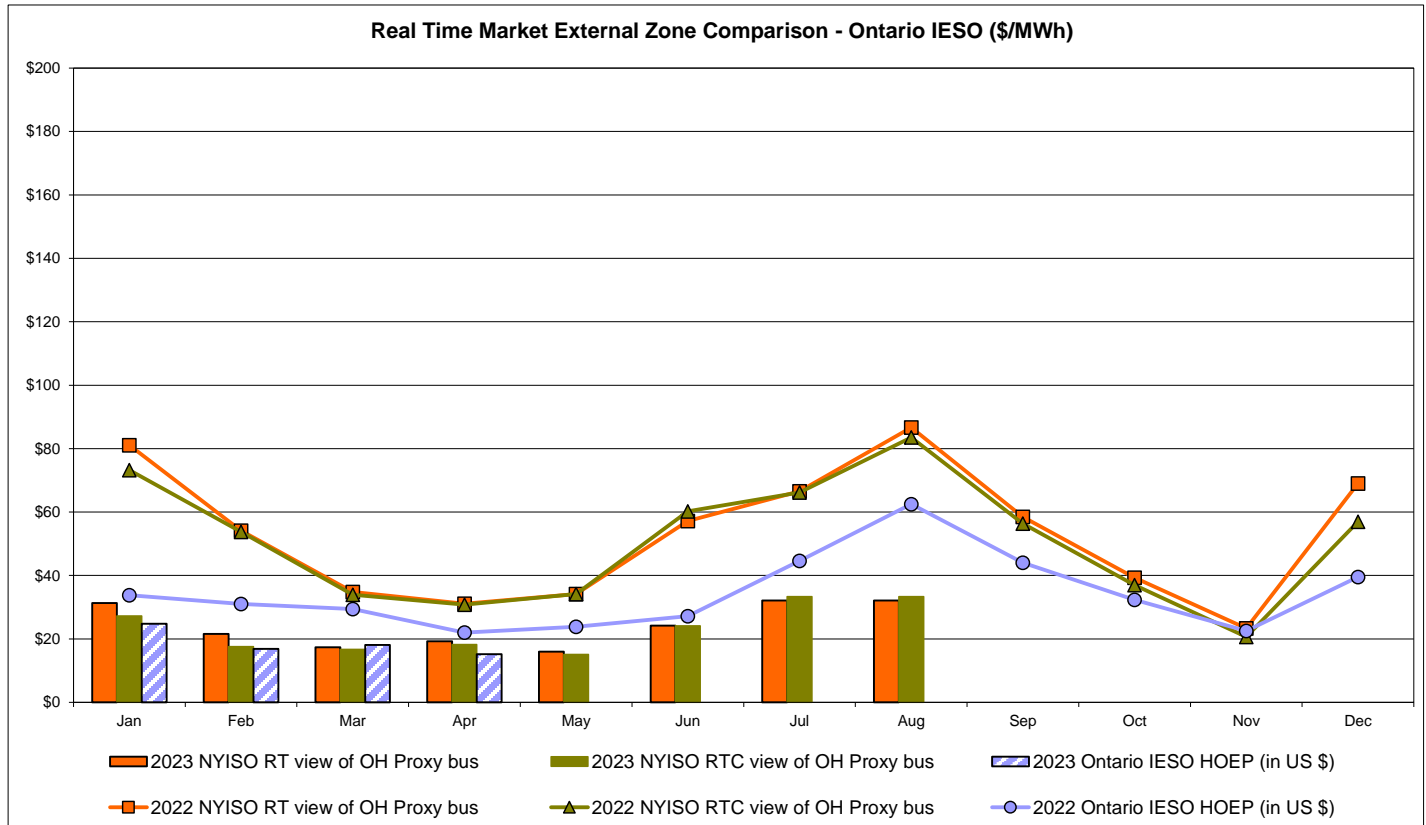
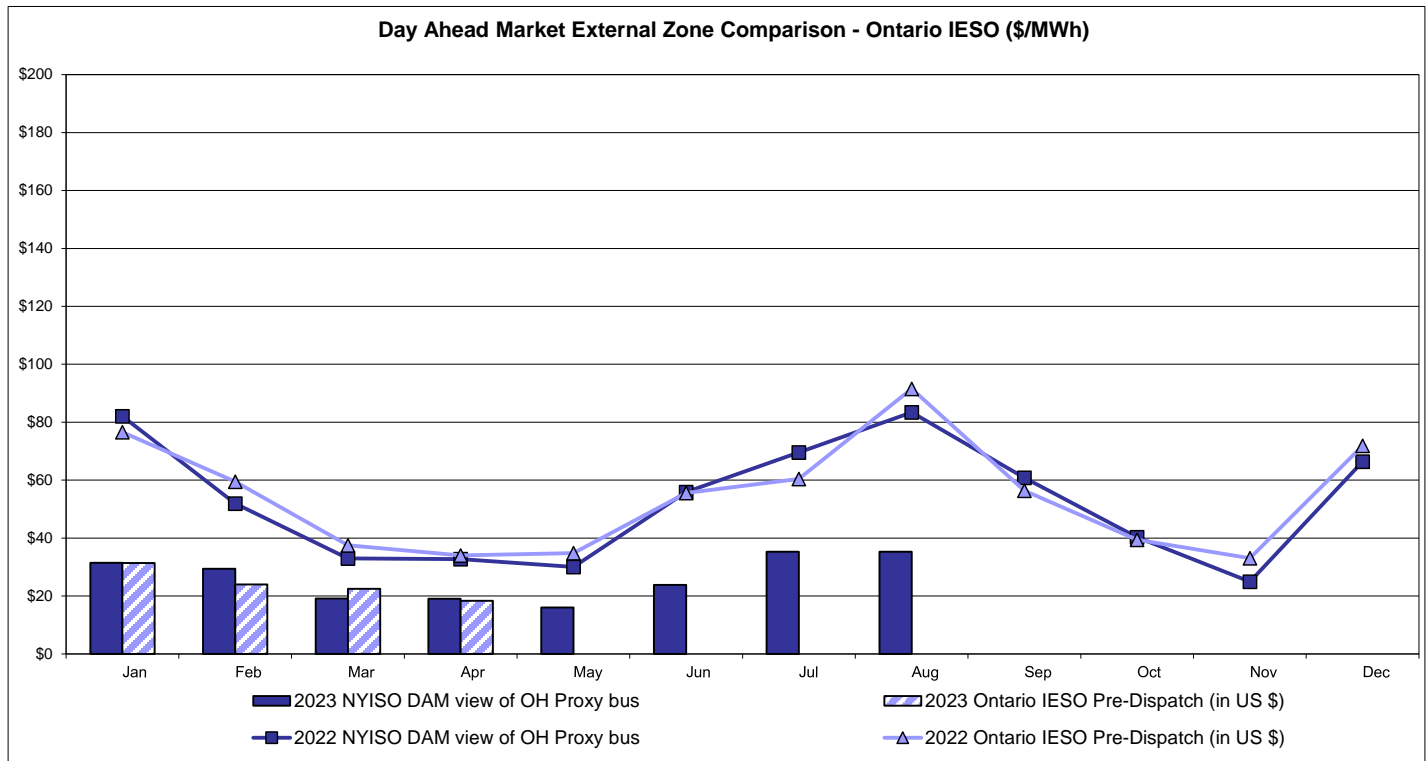
**Day Ahead Market External Zone Comparison - PJM (\$/MWh)**



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

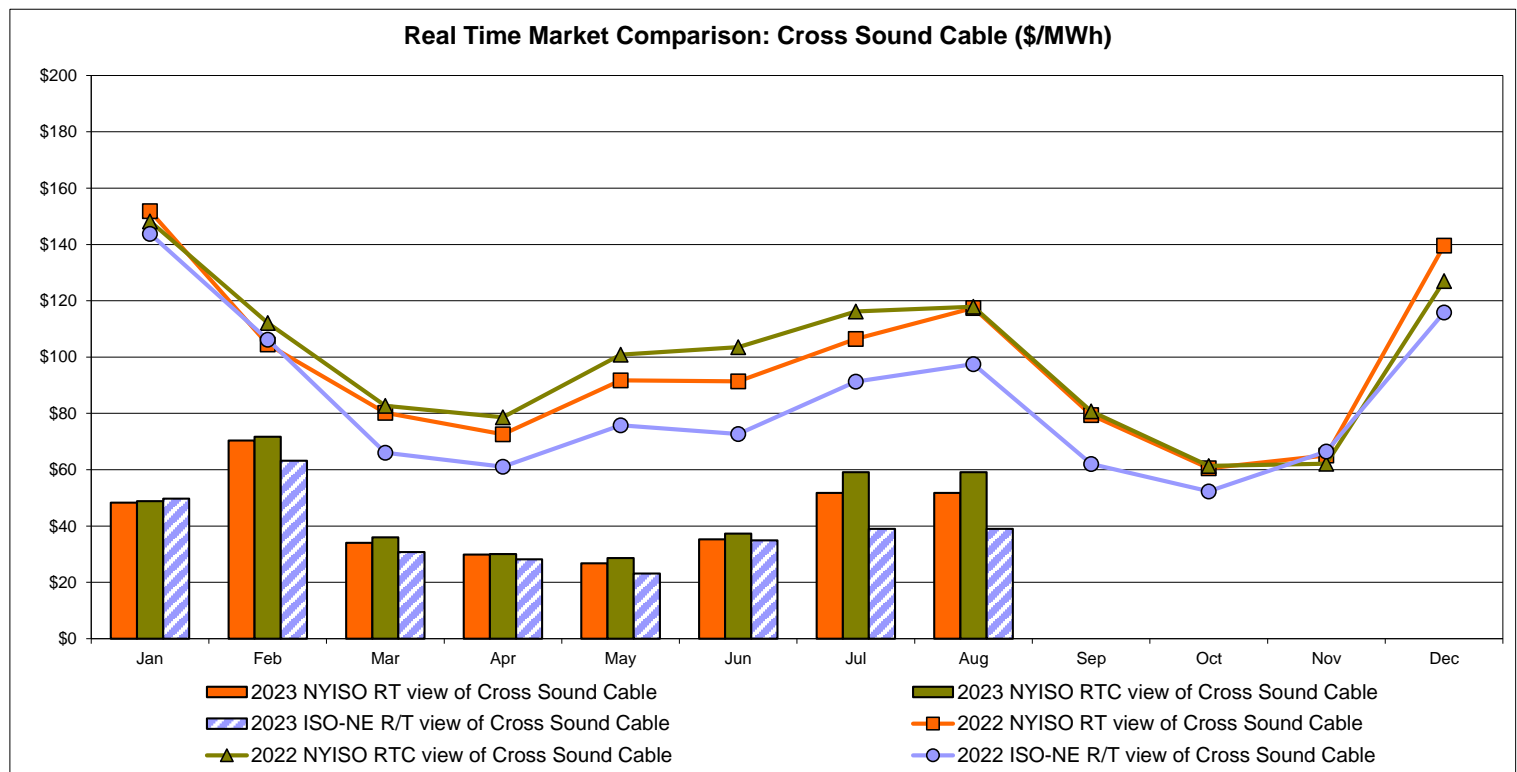
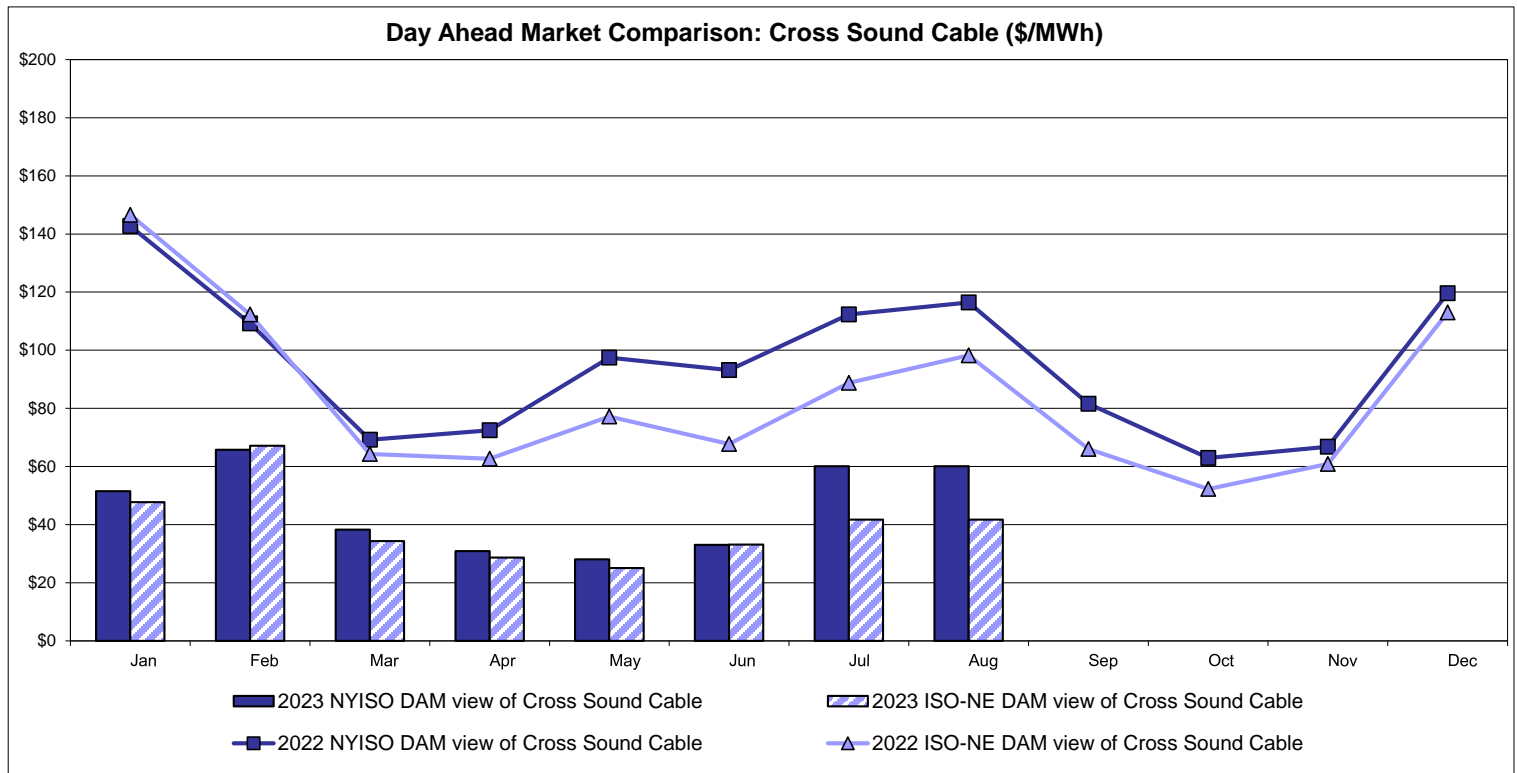


## External Comparison Ontario IESO



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

## External Controllable Line: Cross Sound Cable (New England)

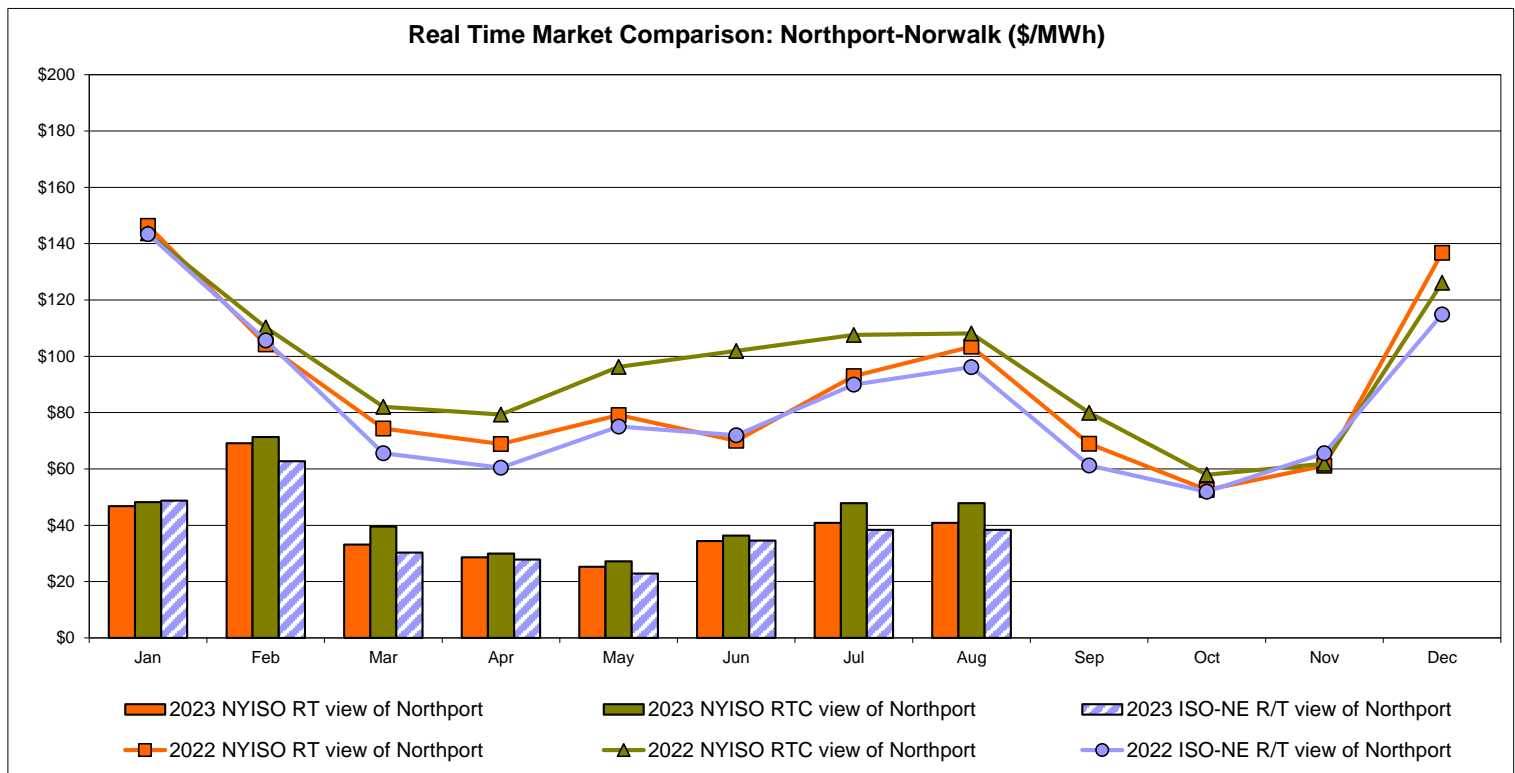
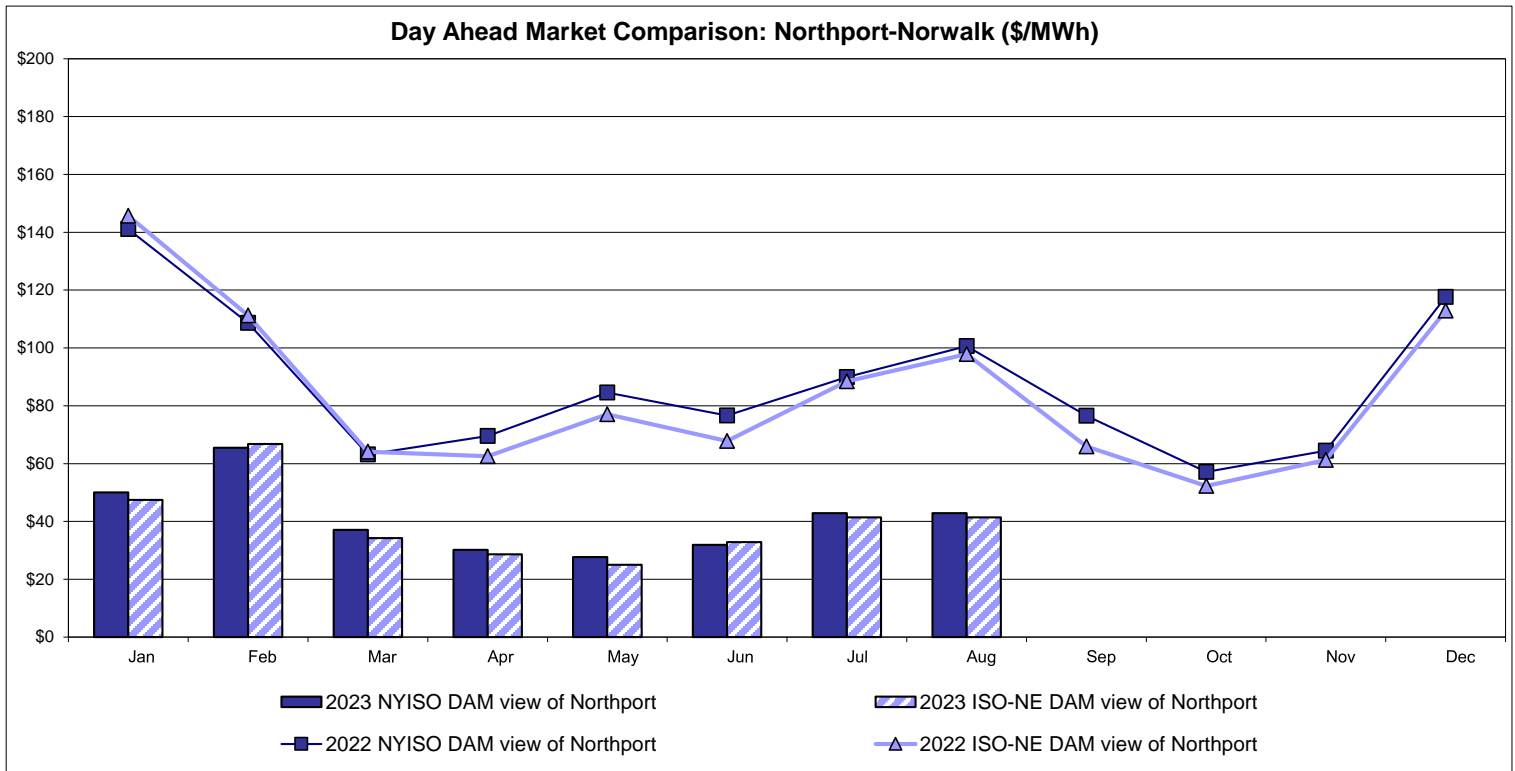


Note:

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)

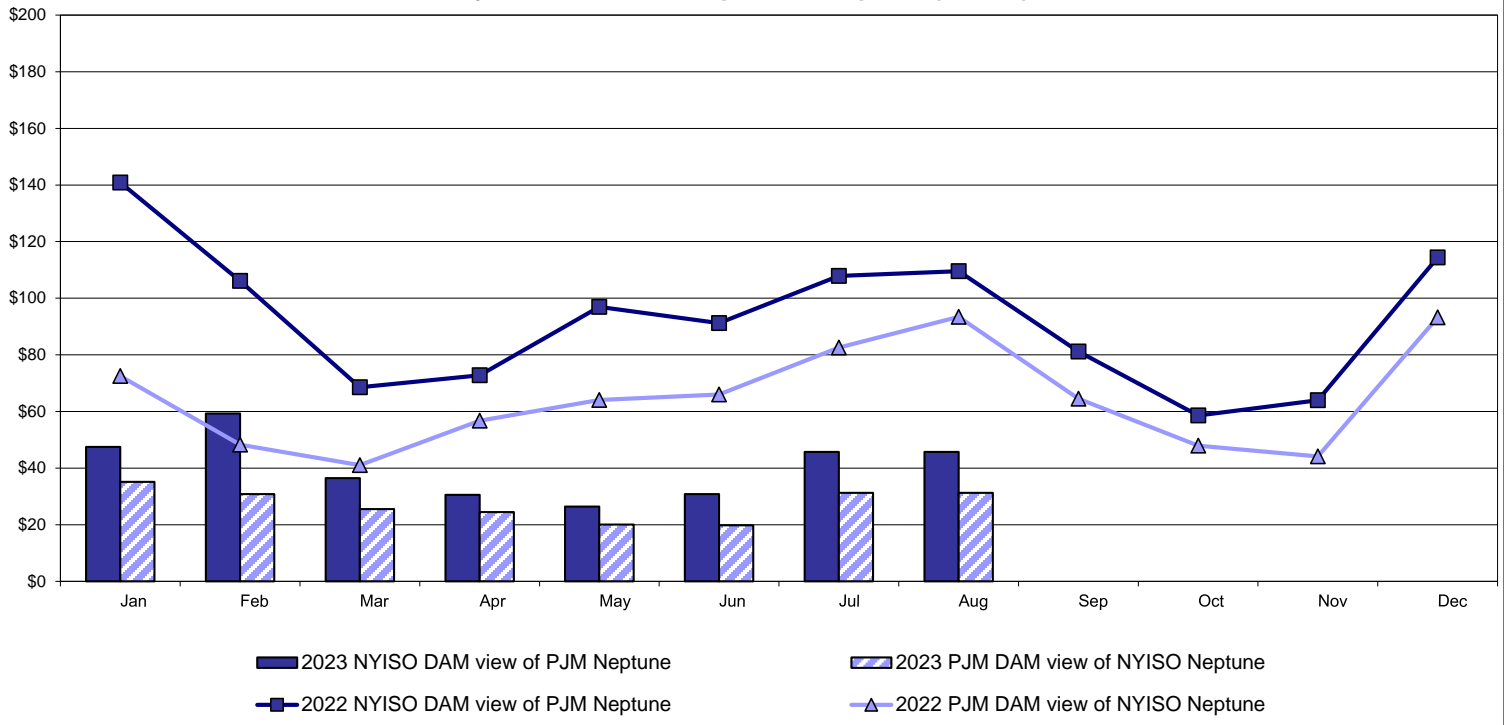


Note:

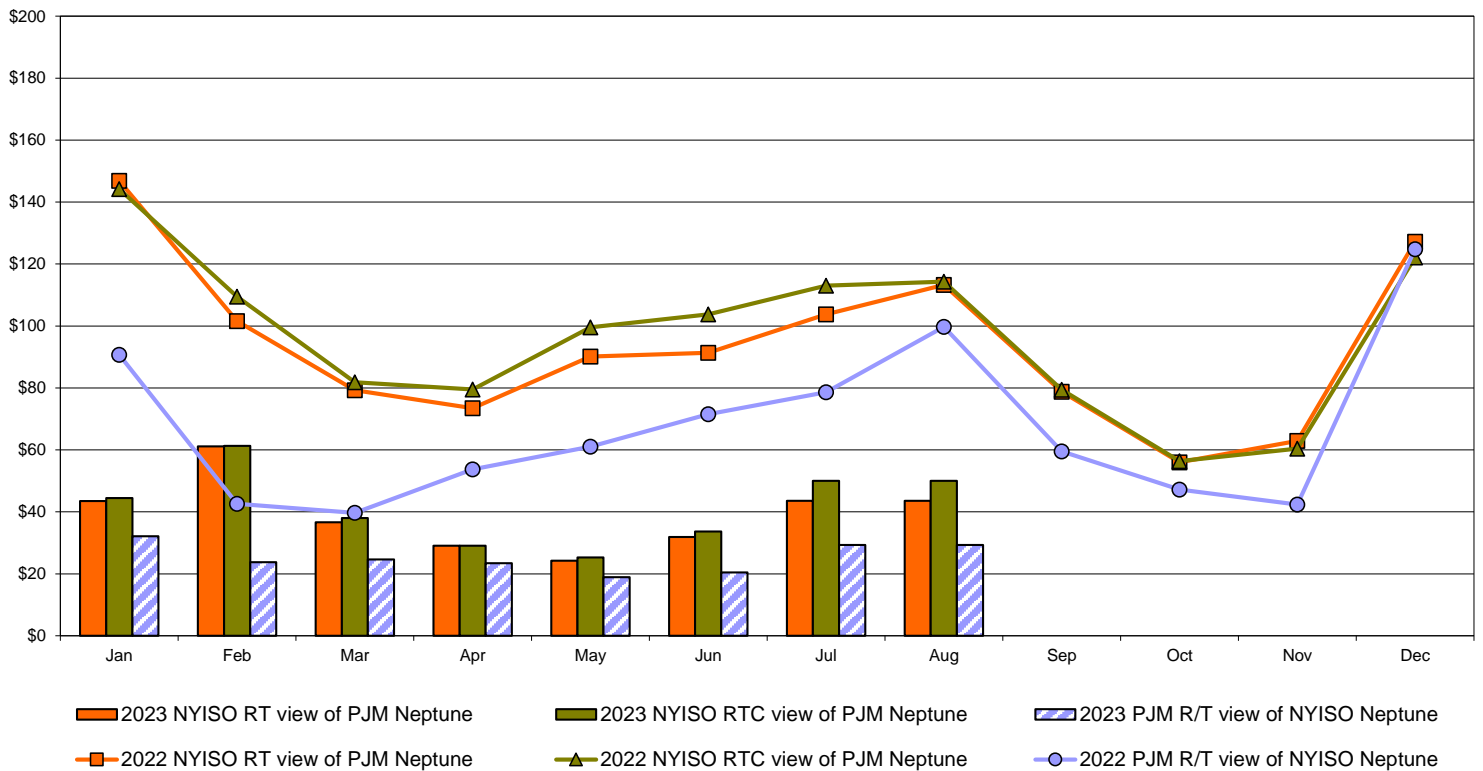
ISO-NE Forecast is an advisory posting @ 18:00 day before.  
 The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.  
 The DAM and R/T prices at the 1385 interface are used for NYISO.

## External Controllable Line: Neptune (PJM)

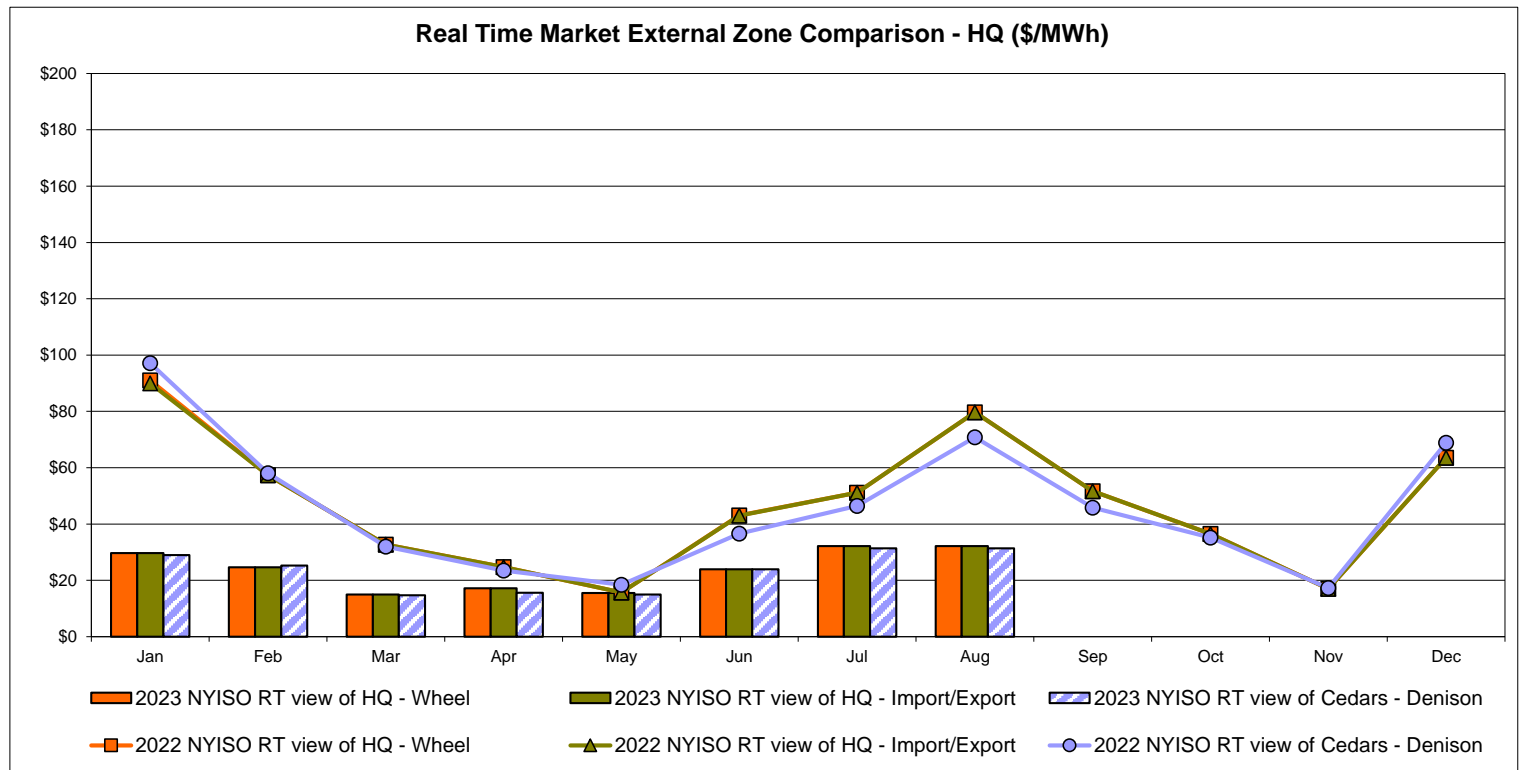
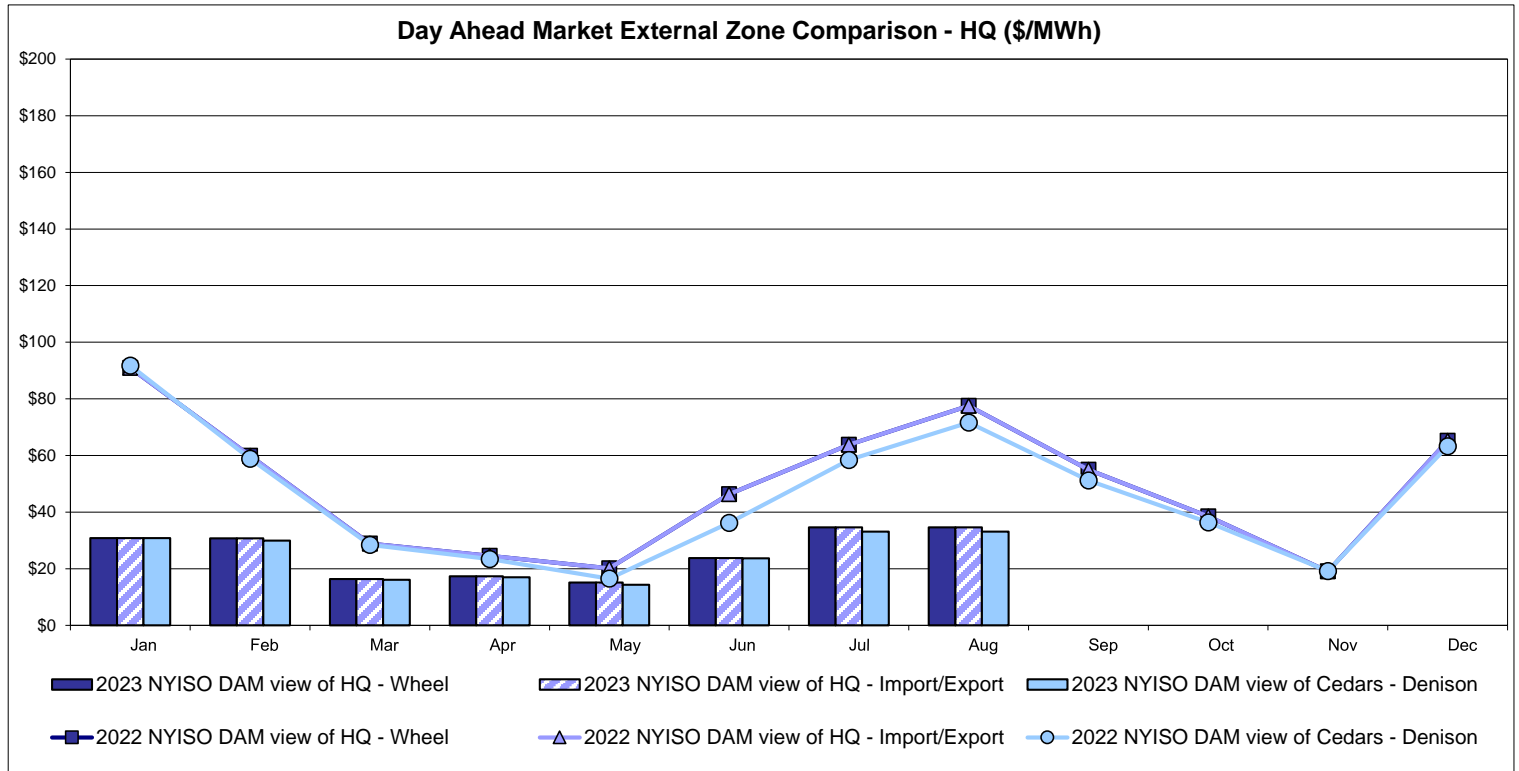
Day Ahead Market Comparison: Neptune (\$/MWh)



Real Time Market Comparison: Neptune (\$/MWh)

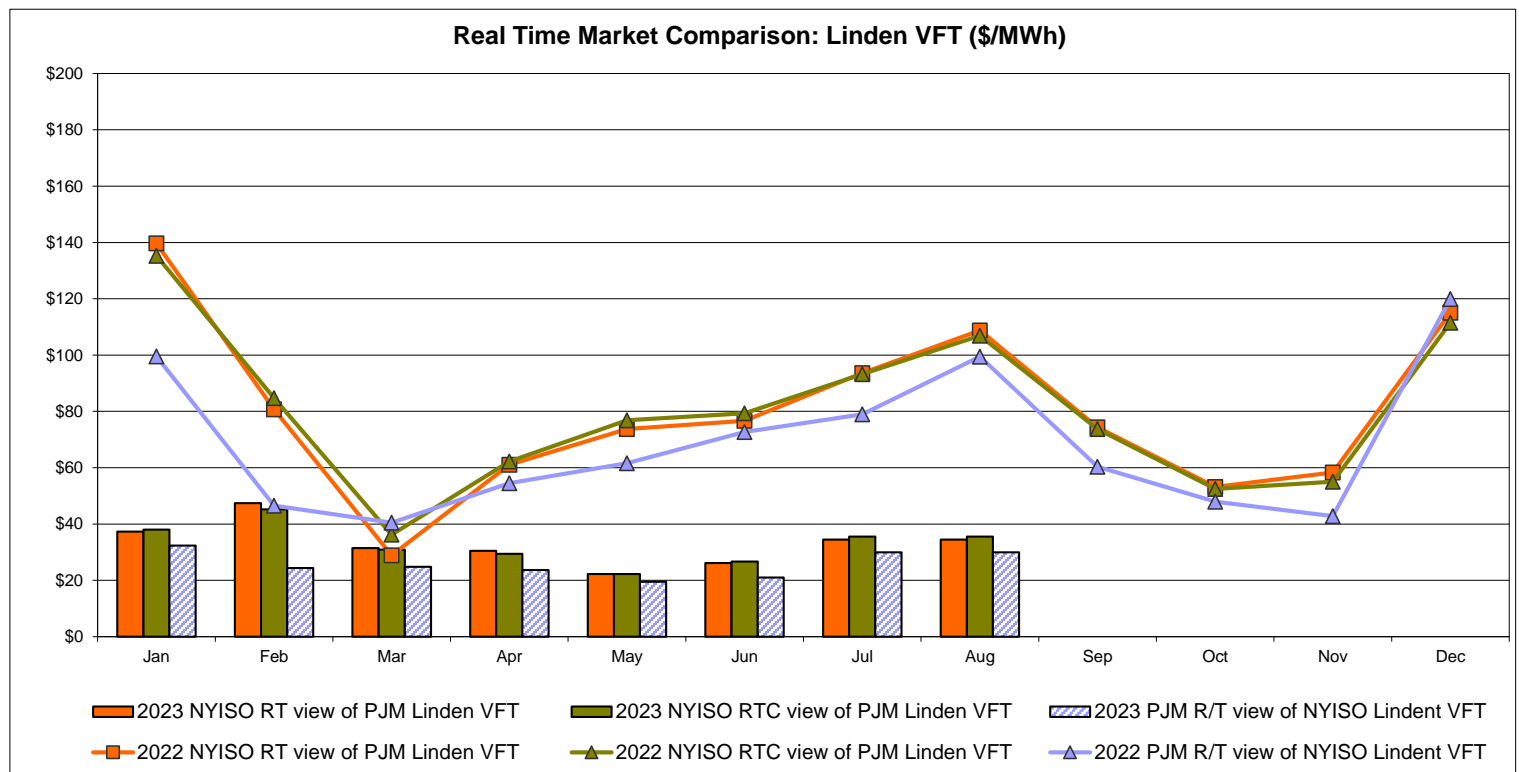
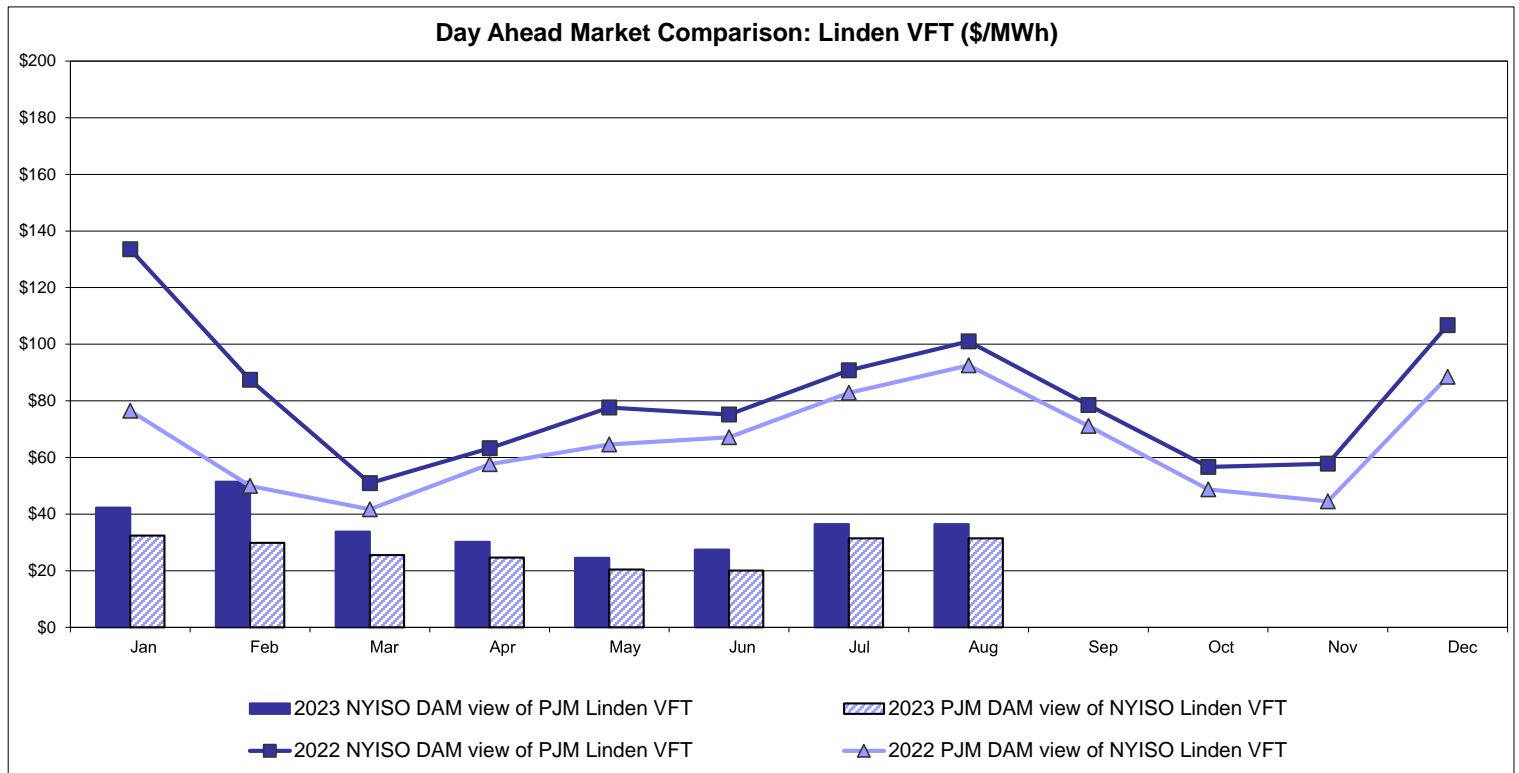


## External Comparison Hydro-Quebec

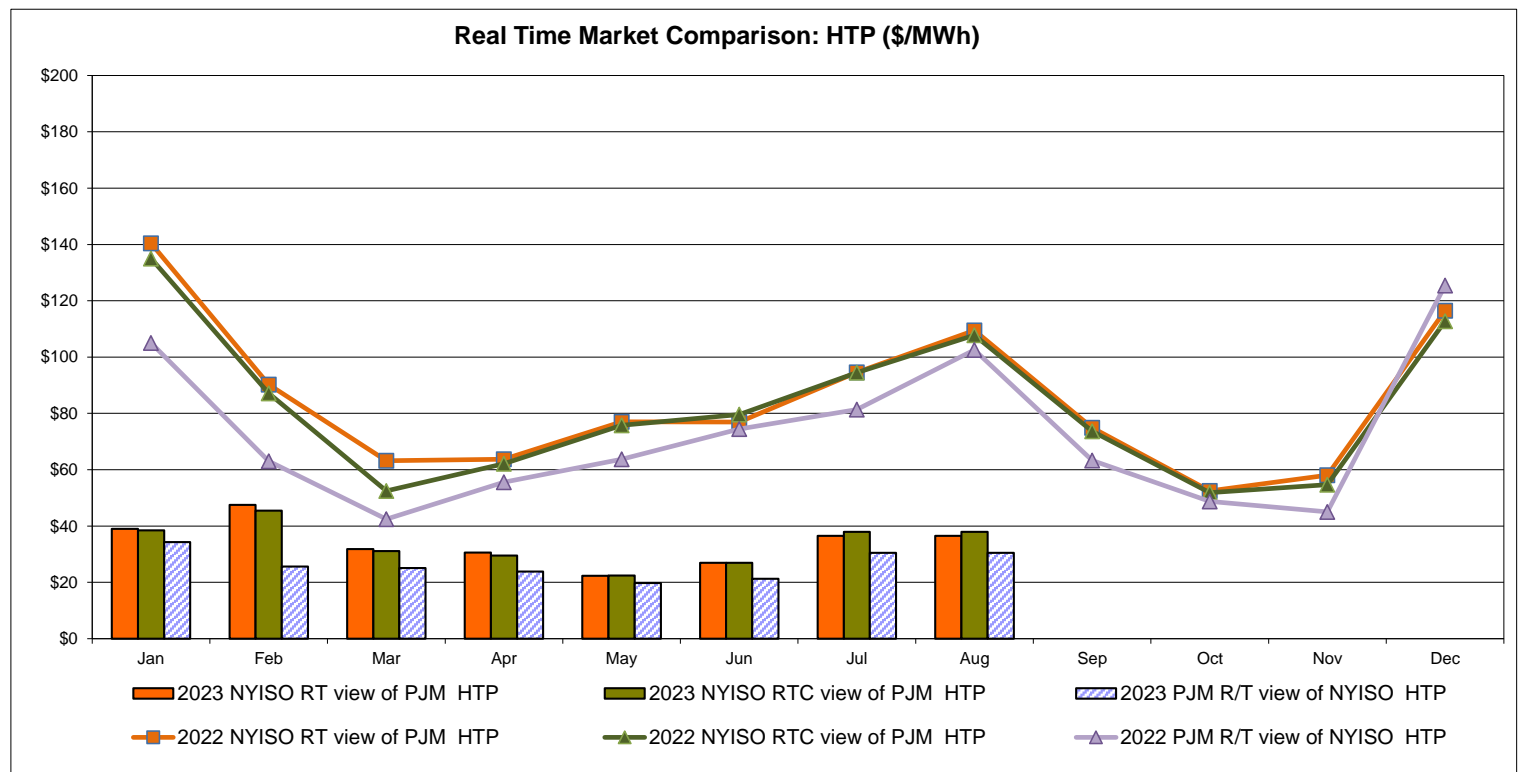
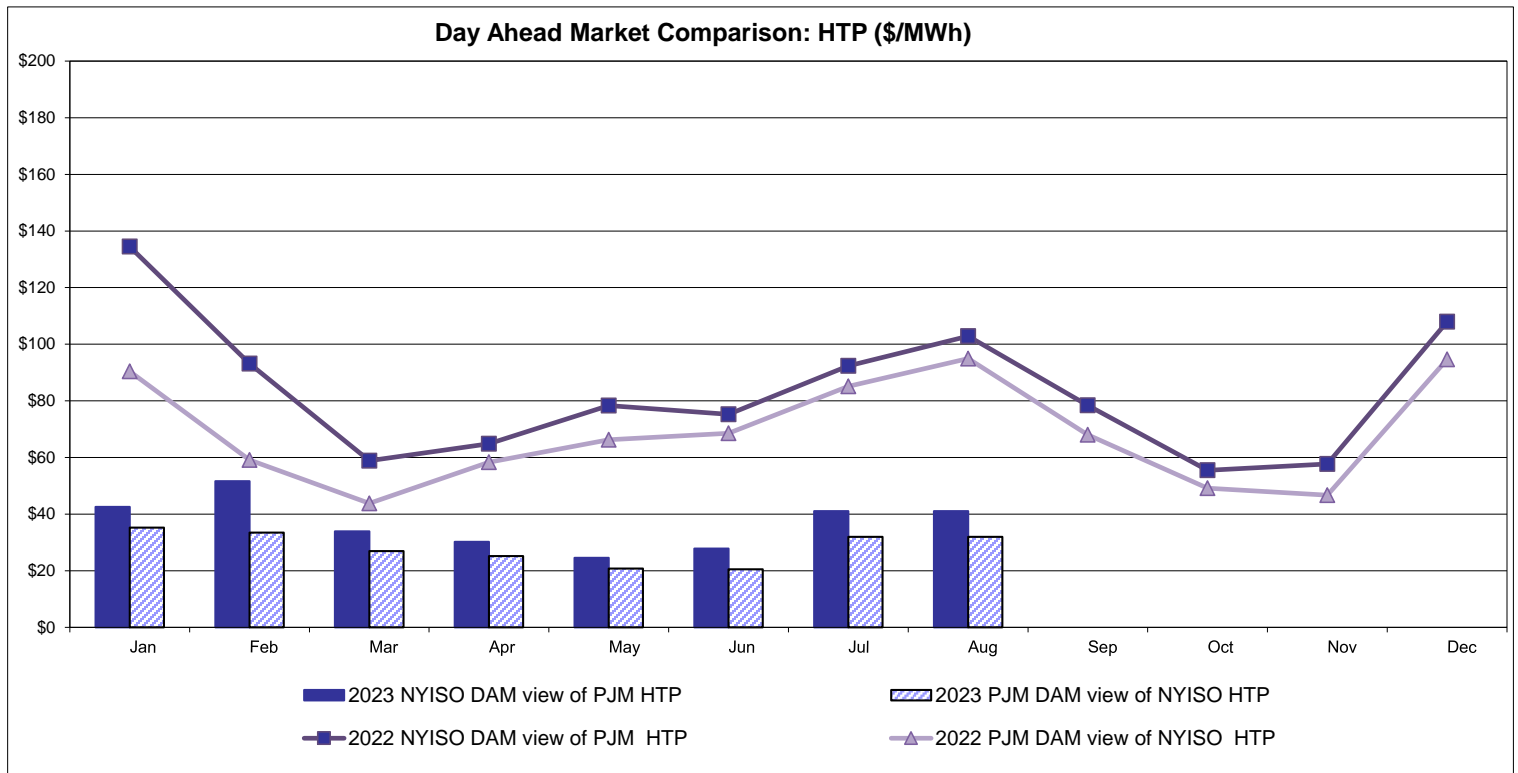


Note:  
Hydro-Quebec Prices are unavailable.

## External Controllable Line: Linden VFT (PJM)



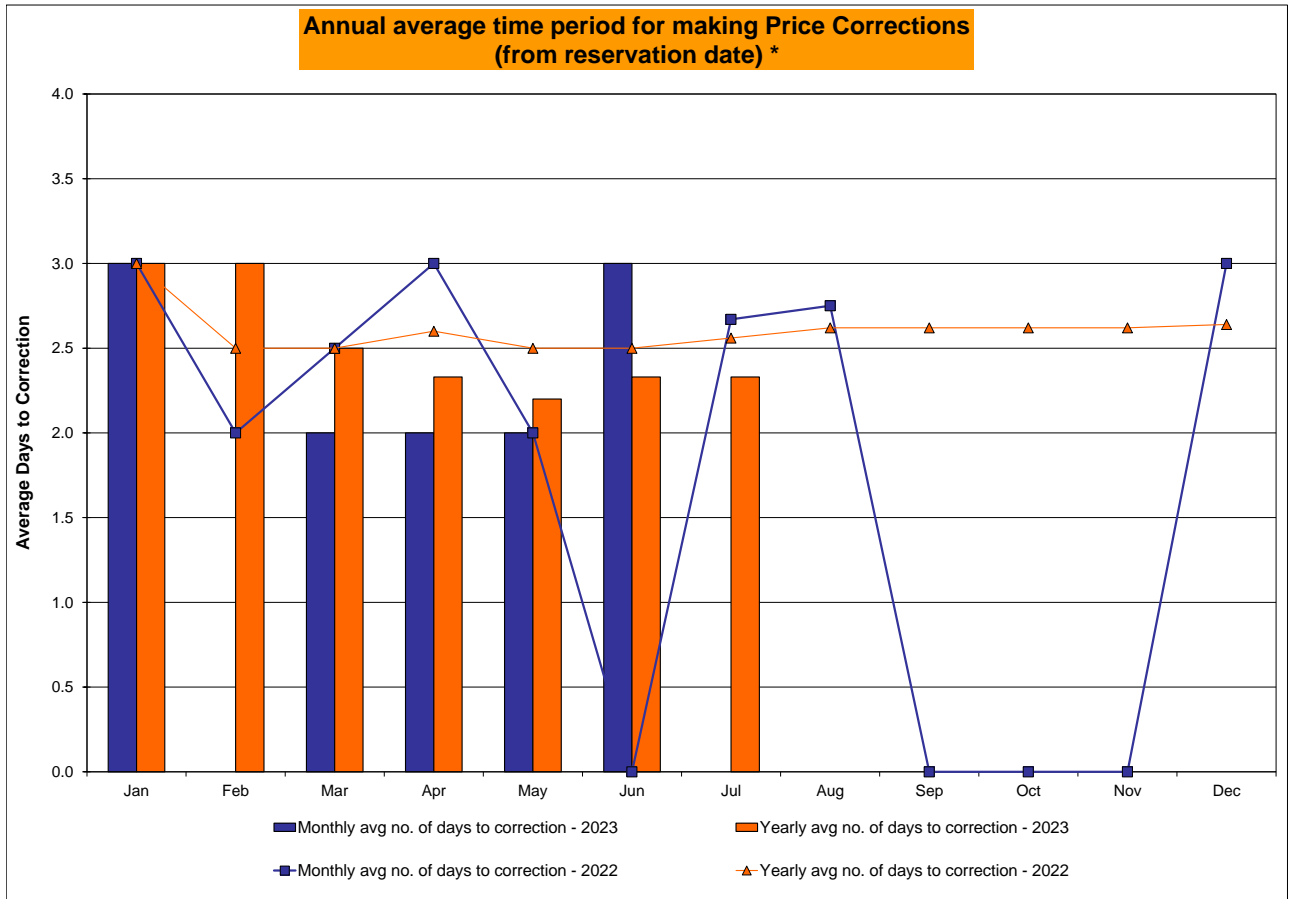
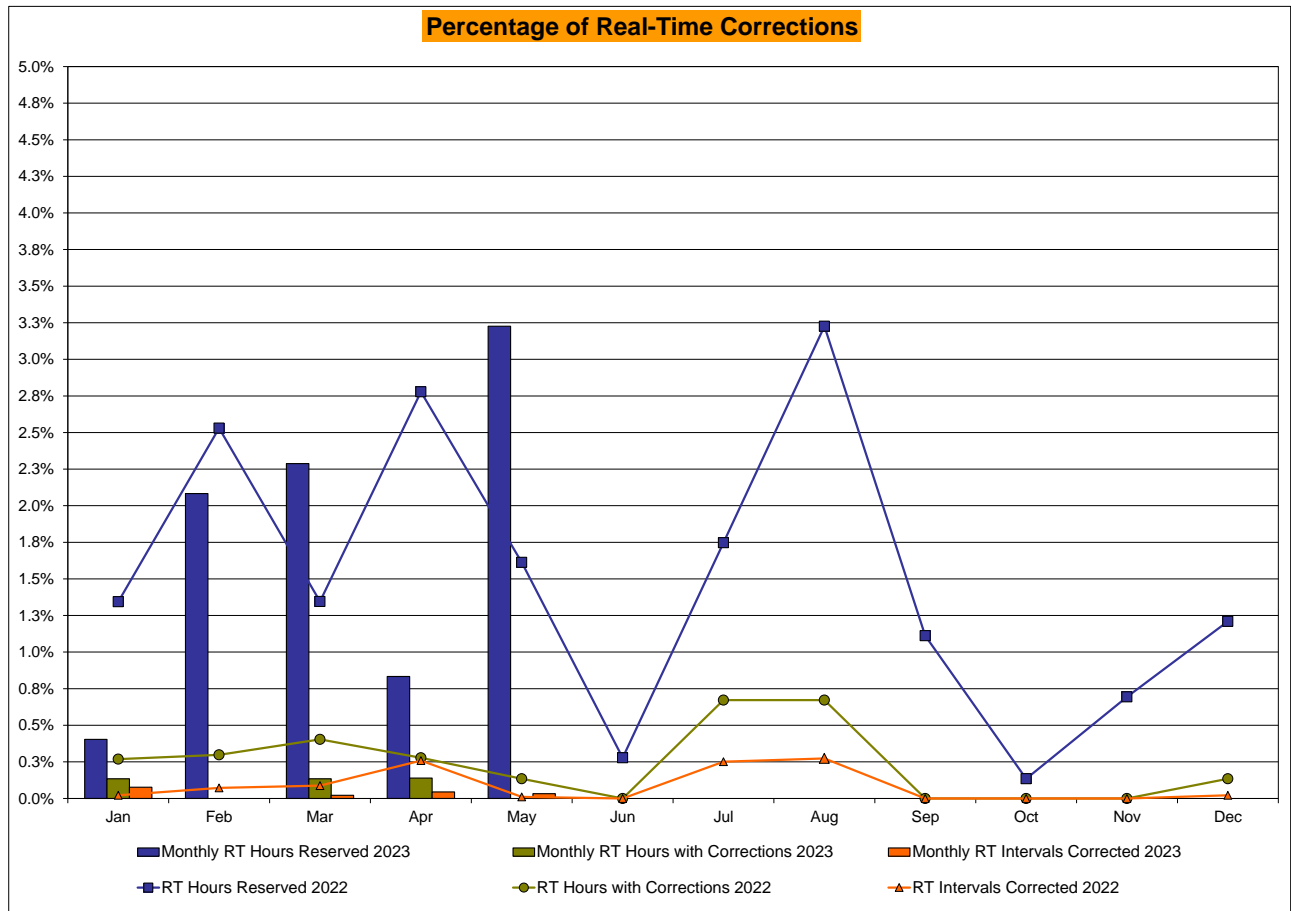
## External Controllable Line: Hudson (PJM)



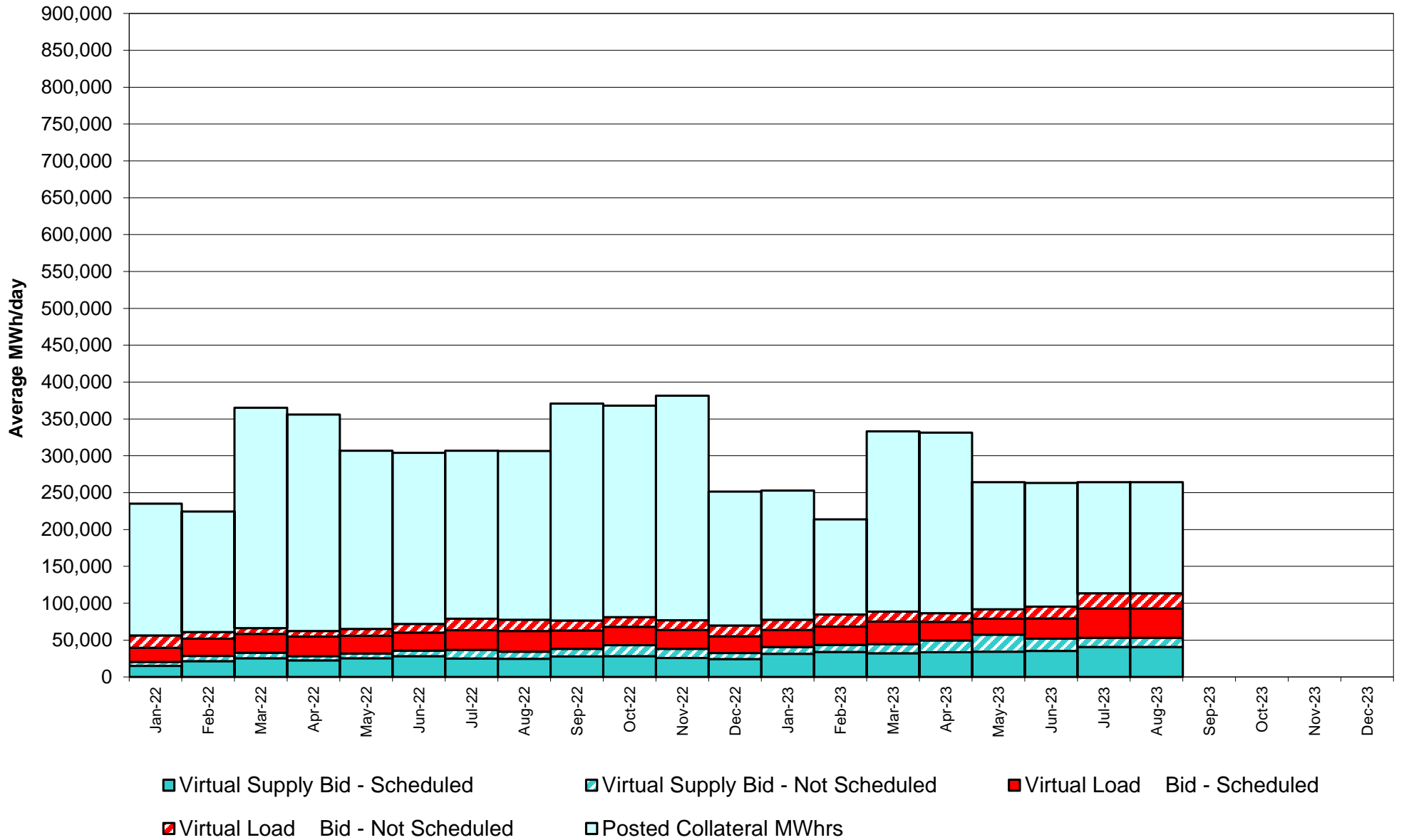
### NYISO Real Time Price Correction Statistics

<b>2023</b>		<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>
<b>Hour Corrections</b>													
Number of hours with corrections	in the month	1	0	1	1	0	#N/A	0					
Number of hours	in the month	744	672	743	720	744	720	744					
% of hours with corrections	in the month	0.13%	0.00%	0.13%	0.14%	0.00%	#N/A	0.00%					
% of hours with corrections	year-to-date	0.13%	0.07%	0.09%	0.10%	0.08%	#N/A	#N/A					
<b>Interval Corrections</b>													
Number of intervals corrected	in the month	7	0	2	4	3	0	0					
Number of intervals	in the month	9,082	8,373	9,171	8,890	9,160	8,797	288					
% of intervals corrected	in the month	0.08%	0.00%	0.02%	0.04%	0.03%	0.00%	0.00%					
% of intervals corrected	year-to-date	0.08%	0.04%	0.03%	0.04%	0.04%	0.03%	0.03%					
<b>Hours Reserved</b>													
Number of hours reserved	in the month	3	14	17	6	24	#N/A	0					
Number of hours	in the month	744	672	743	720	744	720	744					
% of hours reserved	in the month	0.40%	2.08%	2.29%	0.83%	3.23%	#N/A	0.00%					
% of hours reserved	year-to-date	0.40%	1.20%	1.57%	1.39%	1.77%	#N/A	#N/A					
<b>Days to Correction *</b>													
Avg. number of days to correction	in the month	3.00	0.00	2.00	2.00	2.00	3.00	0.00					
Avg. number of days to correction	year-to-date	3.00	3.00	2.50	2.33	2.20	2.33	2.33					
<b>Days Without Corrections</b>													
Days without corrections	in the month	30	28	30	29	29	30	1					
Days without corrections	year-to-date	30	58	88	117	146	176	177					
<b>2022</b>		<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>
<b>Hour Corrections</b>													
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%
<b>Interval Corrections</b>													
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%
<b>Hours Reserved</b>													
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%
<b>Days to Correction *</b>													
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
<b>Days Without Corrections</b>													
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

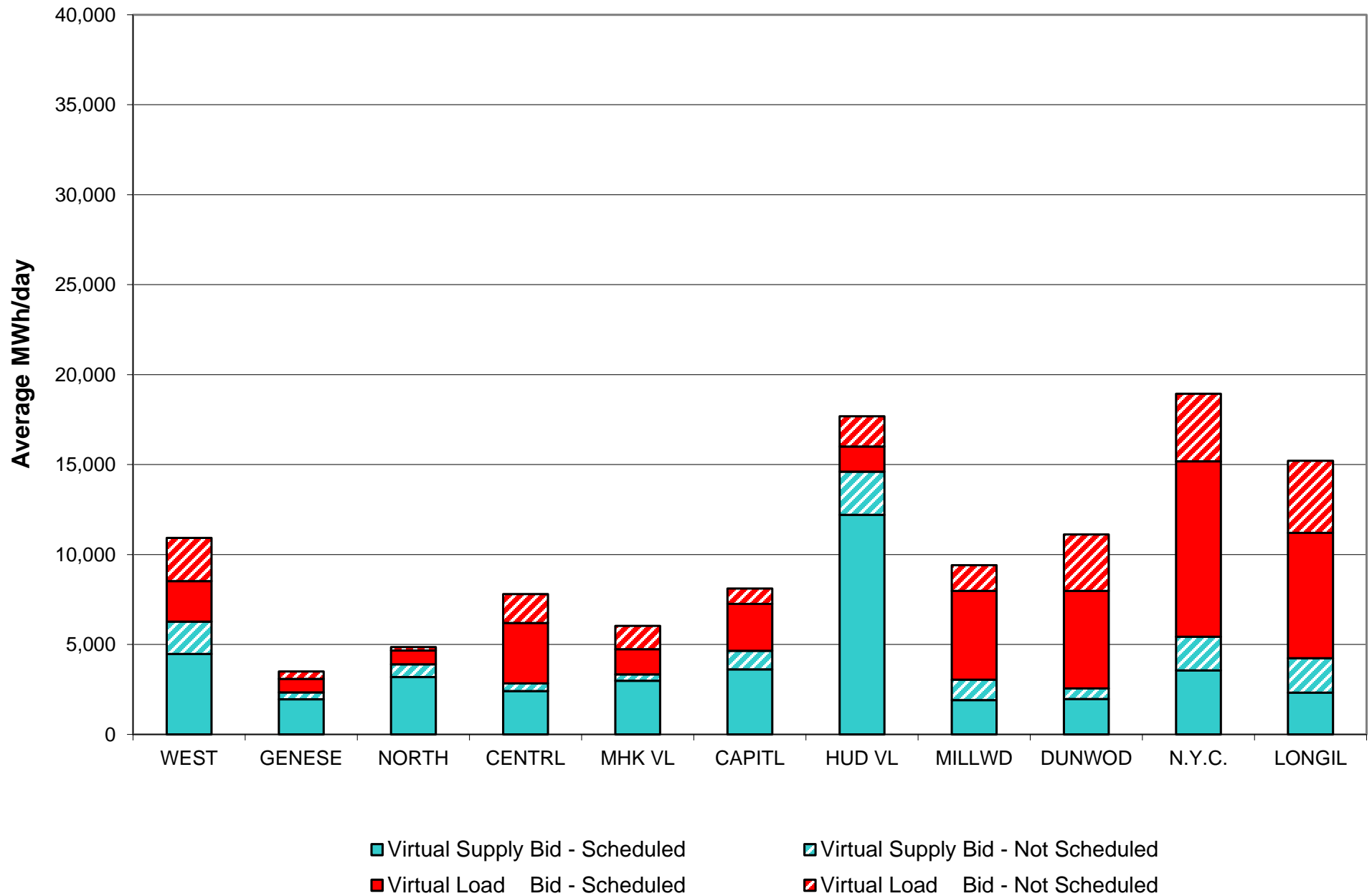


# NYISO Virtual Trading Average MWh per day





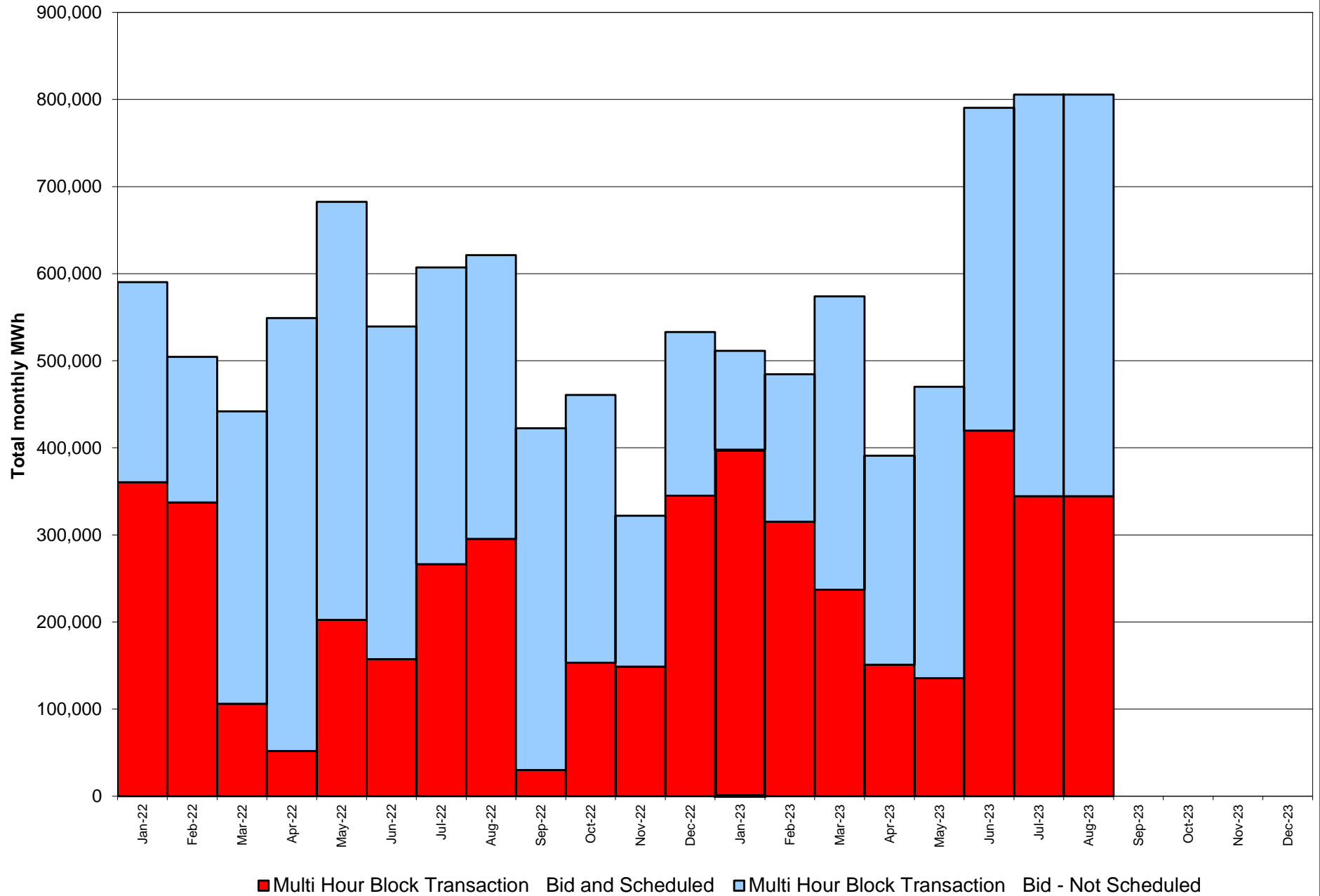
## Virtual Load and Supply Zonal Statistics through July 31, 2023



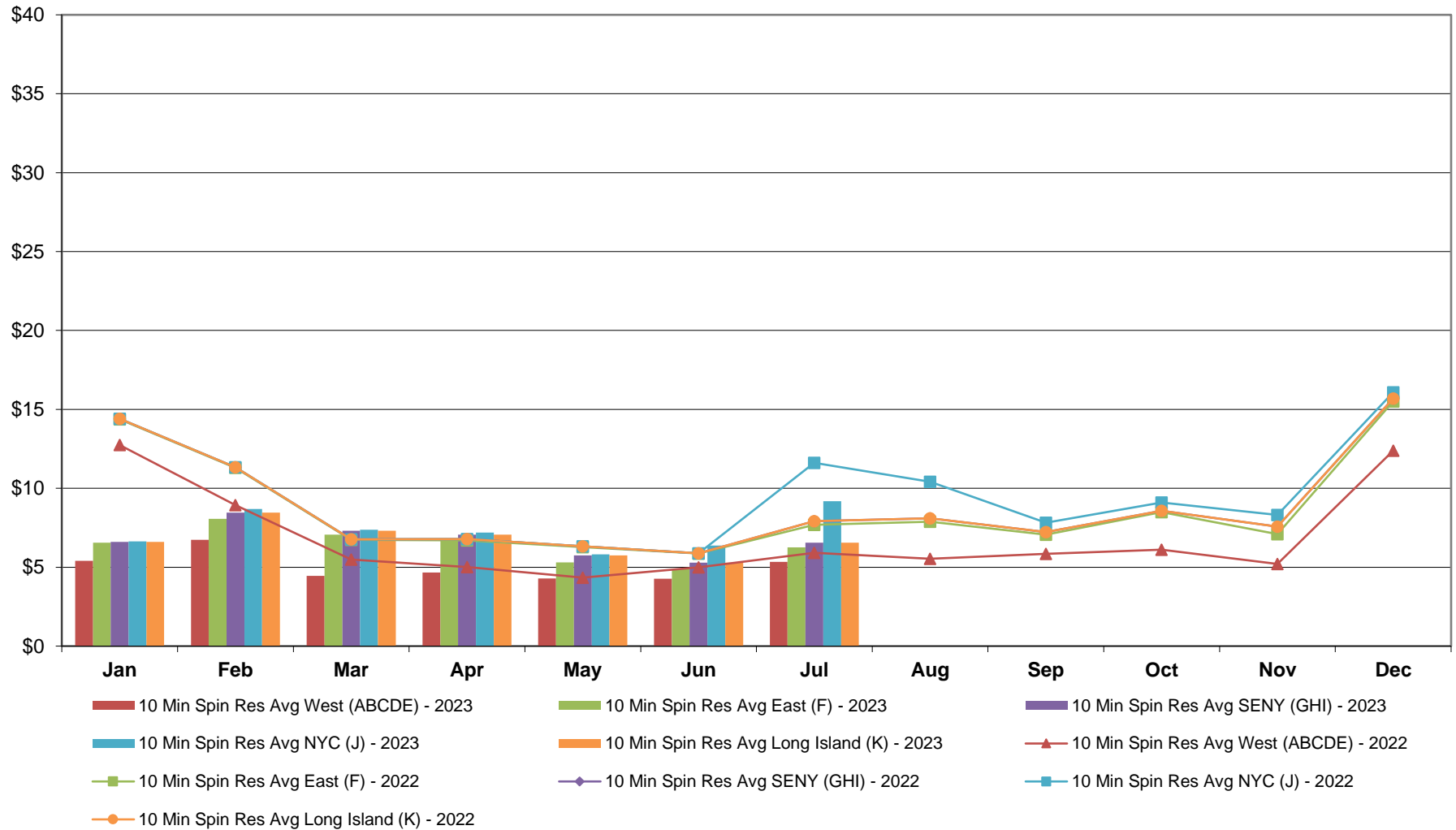
## Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2023

		Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid	
Zone	Date	Scheduled	Not	Scheduled	Not	Zone	Date	Scheduled	Not	Scheduled	Not	Zone	Date	Scheduled	Not	Scheduled	Not
WEST	Jan-23	3,364	1,605	5,555	1,026	MHK VL	Jan-23	1,312	1,038	1,590	558	DUNWOD	Jan-23	862	1,623	1,884	319
	Feb-23	2,266	1,863	6,652	1,270		Feb-23	1,146	1,395	2,484	436		Feb-23	1,366	1,793	2,082	408
	Mar-23	3,318	1,373	5,353	2,062		Mar-23	1,815	829	1,488	1,135		Mar-23	2,505	1,556	2,093	670
	Apr-23	2,407	1,561	5,939	1,245		Apr-23	1,182	841	1,556	450		Apr-23	1,941	1,615	1,682	633
	May-23	2,572	1,636	3,868	1,941		May-23	1,165	1,312	2,365	567		May-23	1,434	1,391	2,719	680
	Jun-23	3,187	2,289	4,717	1,351		Jun-23	1,774	1,301	2,009	585		Jun-23	2,342	2,422	2,299	522
	Jul-23	2,249	2,400	4,471	1,796		Jul-23	1,402	1,292	2,986	350		Jul-23	5,415	3,132	1,968	592
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
GENESE	Jan-23	1,005	469	1,438	255	CAPITL	Jan-23	1,762	834	1,824	917	N.Y.C.	Jan-23	2,674	2,287	4,516	977
	Feb-23	1,136	523	1,480	586		Feb-23	1,902	1,166	2,655	729		Feb-23	2,663	2,398	3,564	1,126
	Mar-23	835	495	1,562	905		Mar-23	3,256	1,595	2,454	594		Mar-23	2,230	2,393	4,646	1,121
	Apr-23	982	746	1,817	584		Apr-23	2,509	960	2,303	695		Apr-23	2,032	1,683	3,490	1,100
	May-23	721	408	1,807	568		May-23	1,691	681	2,810	736		May-23	2,063	2,034	4,284	1,488
	Jun-23	933	520	1,811	529		Jun-23	2,121	783	3,359	808		Jun-23	4,139	2,409	3,742	1,700
	Jul-23	747	412	1,947	394		Jul-23	2,610	863	3,616	1,027		Jul-23	9,758	3,758	3,562	1,862
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
NORTH	Jan-23	1,246	284	2,910	1,072	HUD VL	Jan-23	835	1,168	5,672	1,513	LONGIL	Jan-23	4,119	2,358	2,370	1,687
	Feb-23	1,111	302	2,854	1,432		Feb-23	1,335	1,484	5,382	1,297		Feb-23	4,408	2,440	2,494	1,130
	Mar-23	789	383	3,605	1,395		Mar-23	2,224	1,049	5,815	1,357		Mar-23	5,725	1,753	1,778	1,029
	Apr-23	615	332	3,338	854		Apr-23	896	846	8,301	7,864		Apr-23	4,436	1,401	2,087	746
	May-23	938	184	2,274	964		May-23	1,119	937	7,383	13,585		May-23	3,608	1,817	2,640	1,073
	Jun-23	1,032	148	2,685	629		Jun-23	1,784	1,120	8,337	7,759		Jun-23	5,238	2,124	1,770	1,359
	Jul-23	777	179	3,193	699		Jul-23	1,397	1,690	12,207	2,396		Jul-23	6,977	3,999	2,319	1,911
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
CENTRL	Jan-23	5,294	1,193	1,715	563	MILLWD	Jan-23	649	1,103	2,019	278	NYISO	Jan-23	23,122	13,963	31,494	9,165
	Feb-23	6,851	1,526	2,219	703		Feb-23	888	1,228	2,021	434		Feb-23	25,071	16,118	33,885	9,552
	Mar-23	6,340	843	1,355	1,520		Mar-23	1,616	992	1,938	736		Mar-23	30,654	13,262	32,086	12,525
	Apr-23	6,824	914	1,546	855		Apr-23	1,564	853	1,566	831		Apr-23	25,387	11,752	33,625	15,856
	May-23	5,246	1,357	1,858	830		May-23	995	1,119	2,250	784		May-23	21,553	12,874	34,260	23,216
	Jun-23	3,257	1,442	2,305	784		Jun-23	1,392	1,329	2,385	667		Jun-23	27,199	15,886	35,419	16,693
	Jul-23	3,351	1,609	2,416	423		Jul-23	4,935	1,437	1,914	1,124		Jul-23	39,618	20,771	40,598	12,575
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				

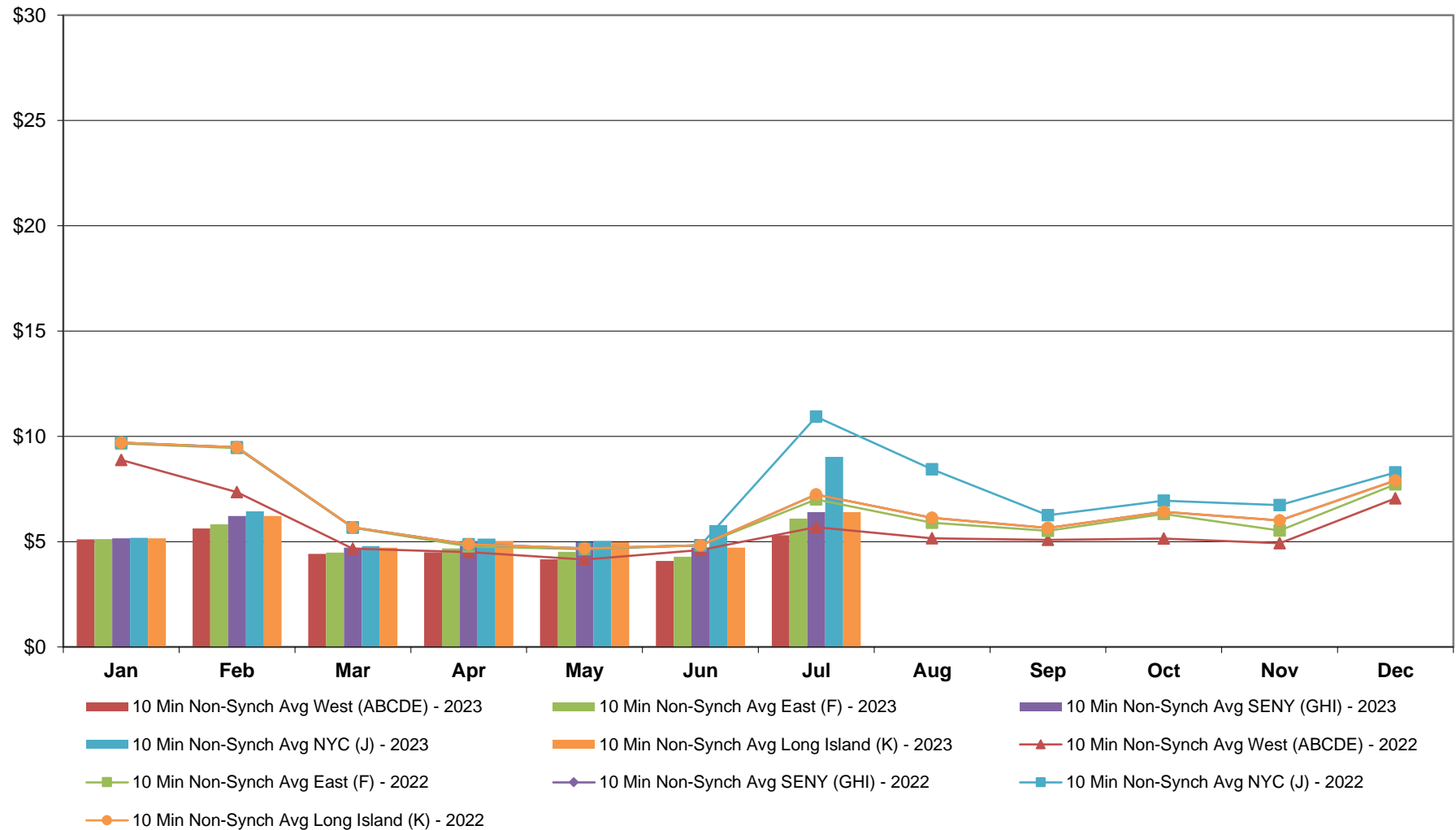
# NYISO Multi Hour Block Transactions Monthly Total MWh



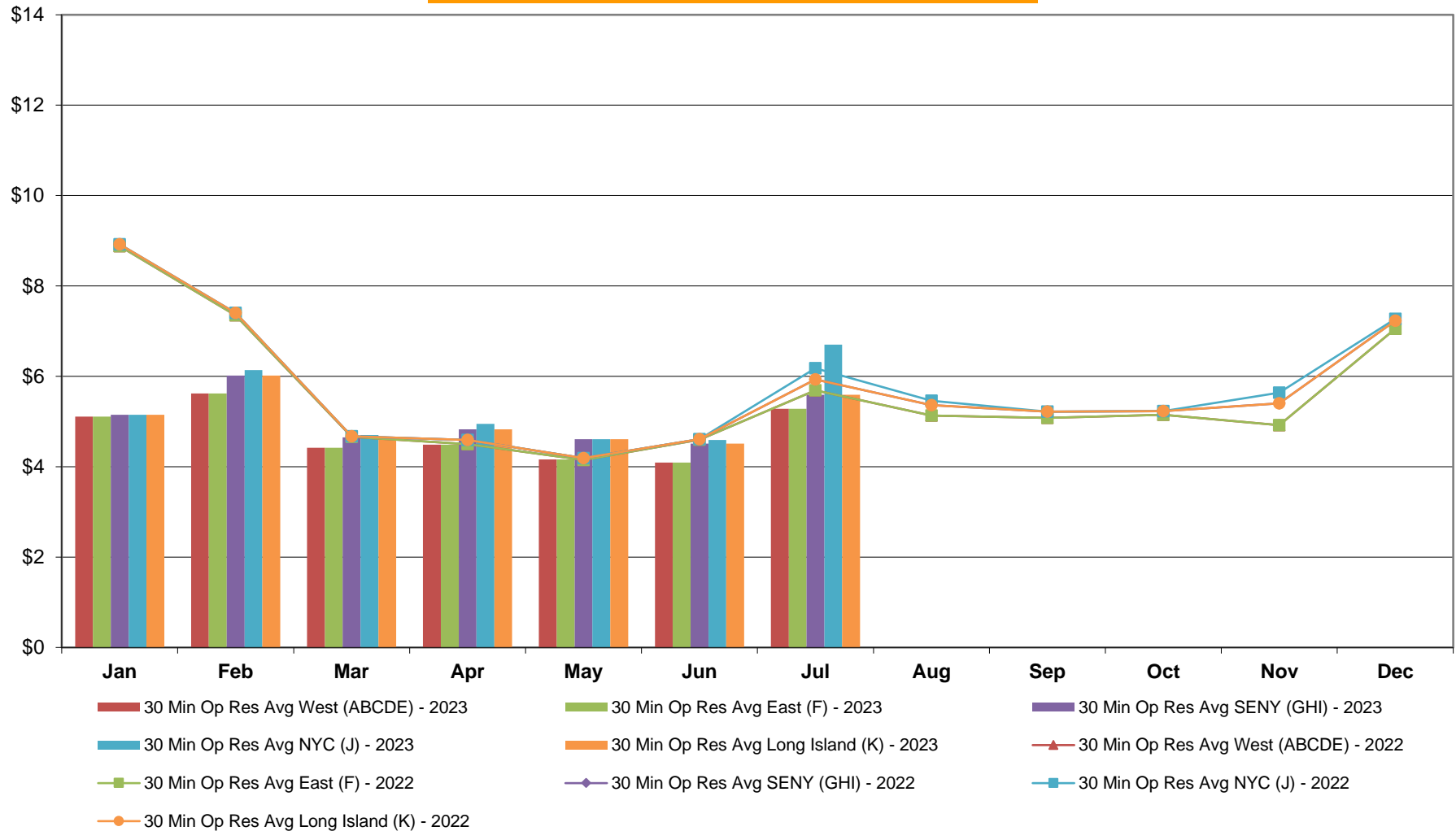
# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 10 Min Spin 2022 - 2023**

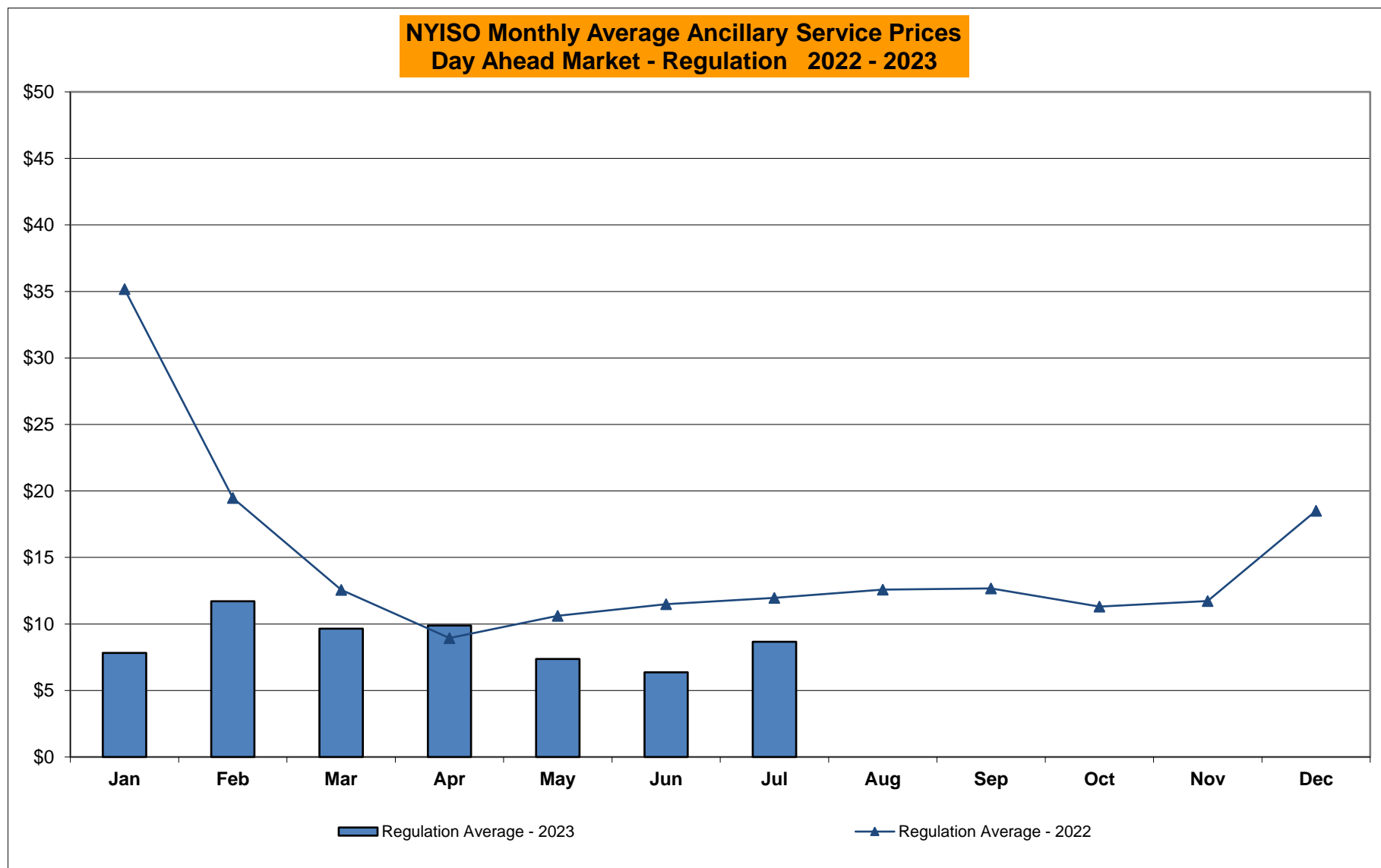


# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 10 Min Non-Synch 2022 - 2023**

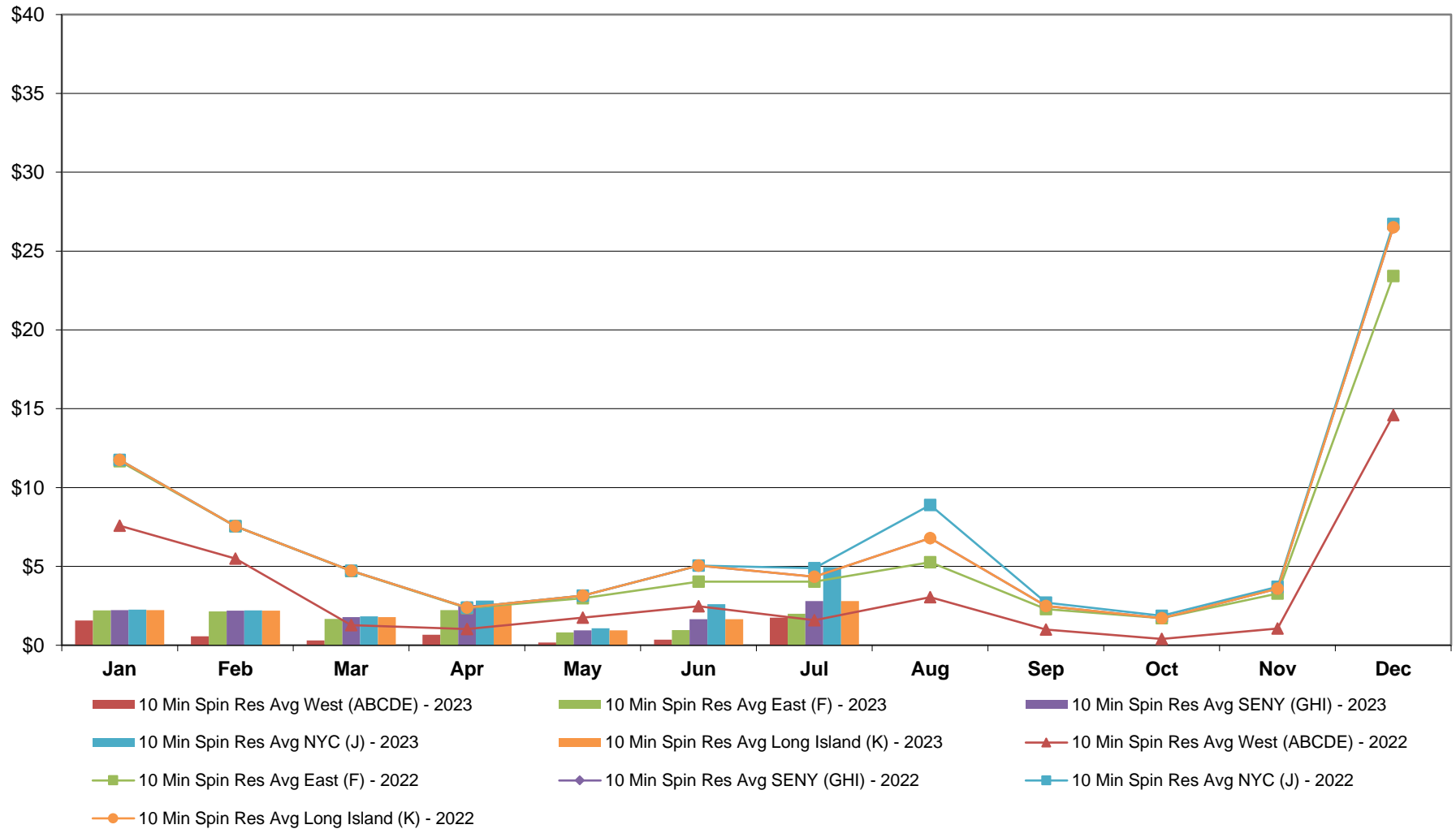


# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 30 Min Op Res 2022 - 2023**



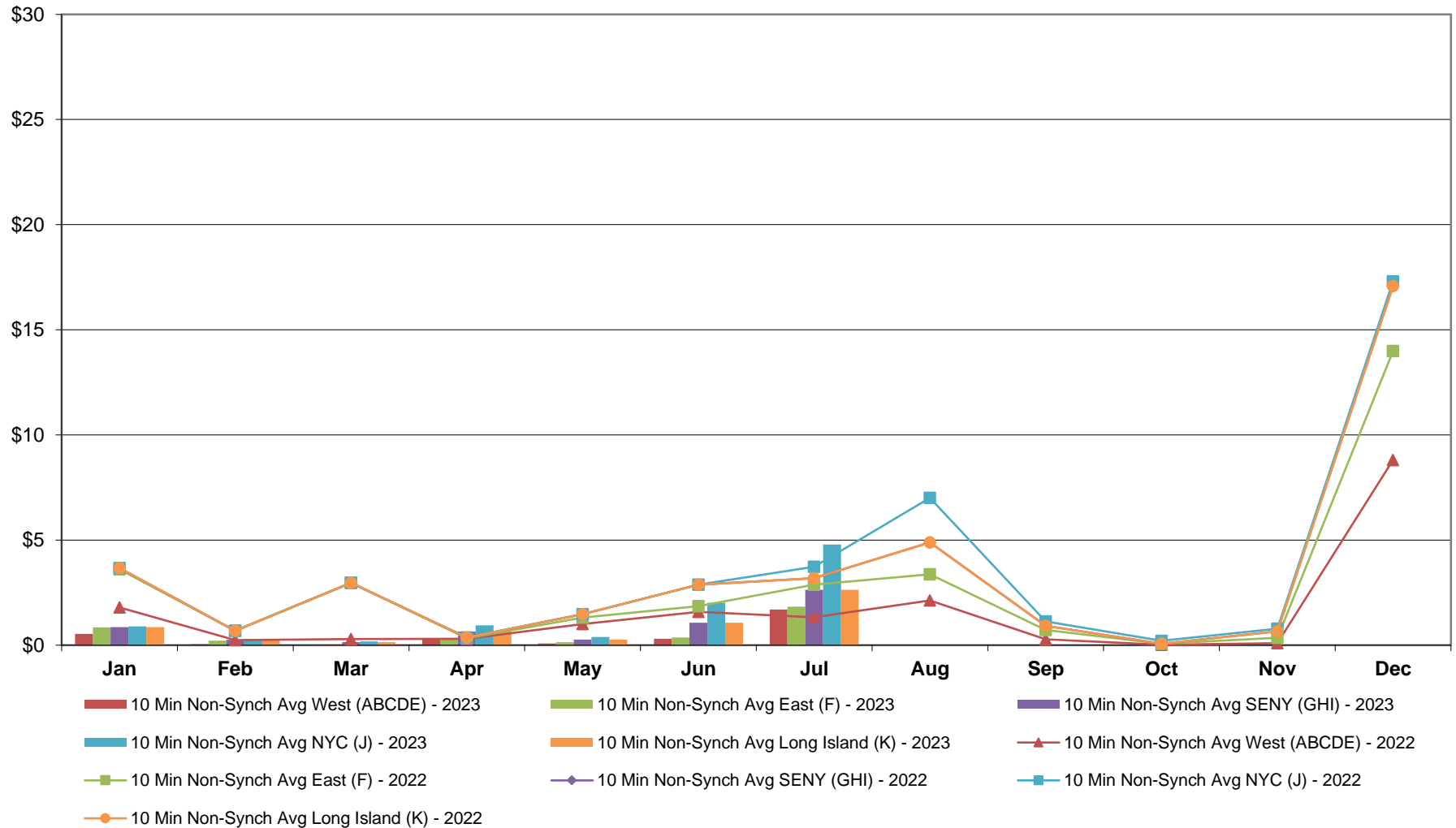


# **NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Spin 2022 - 2023**

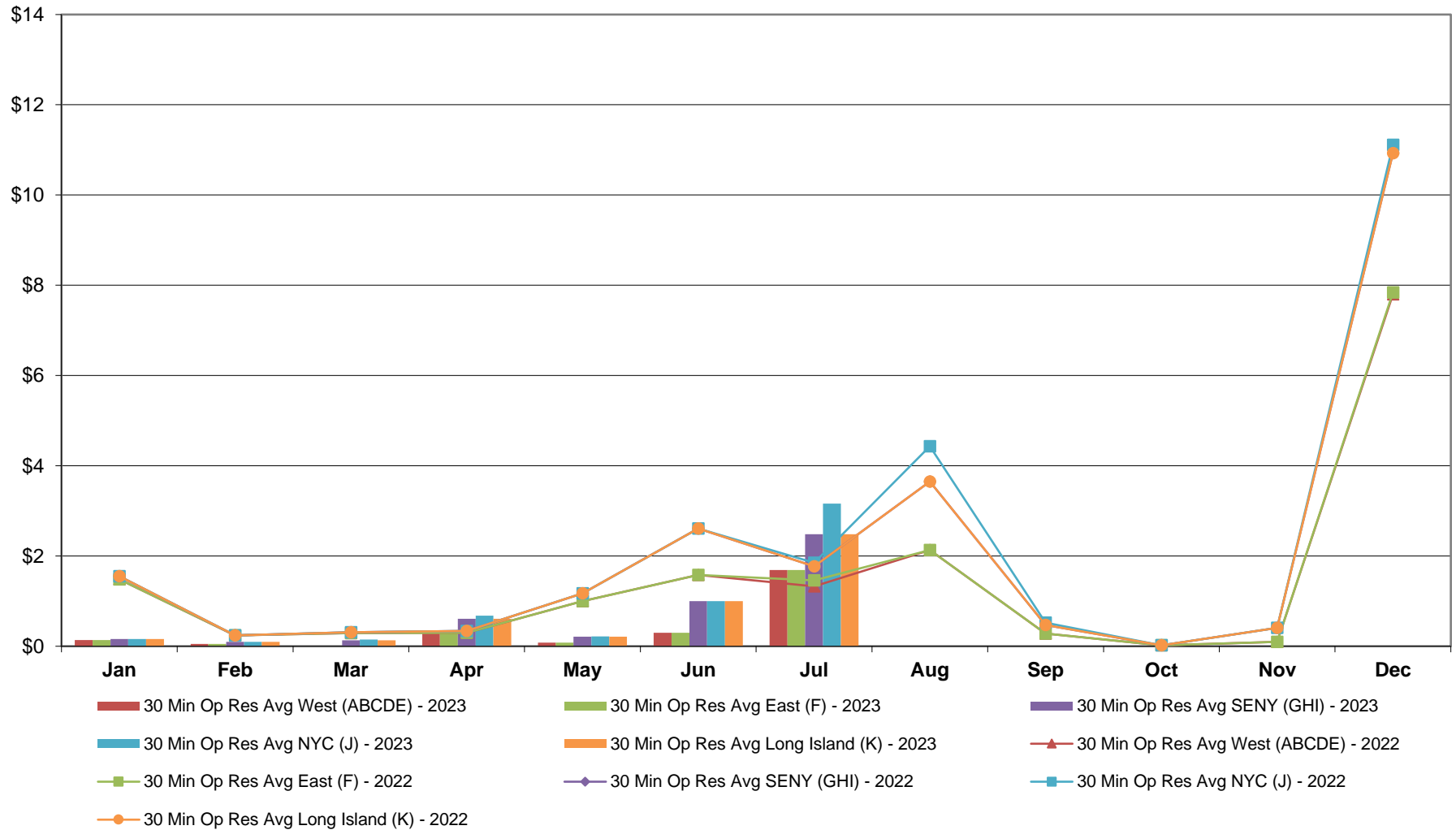




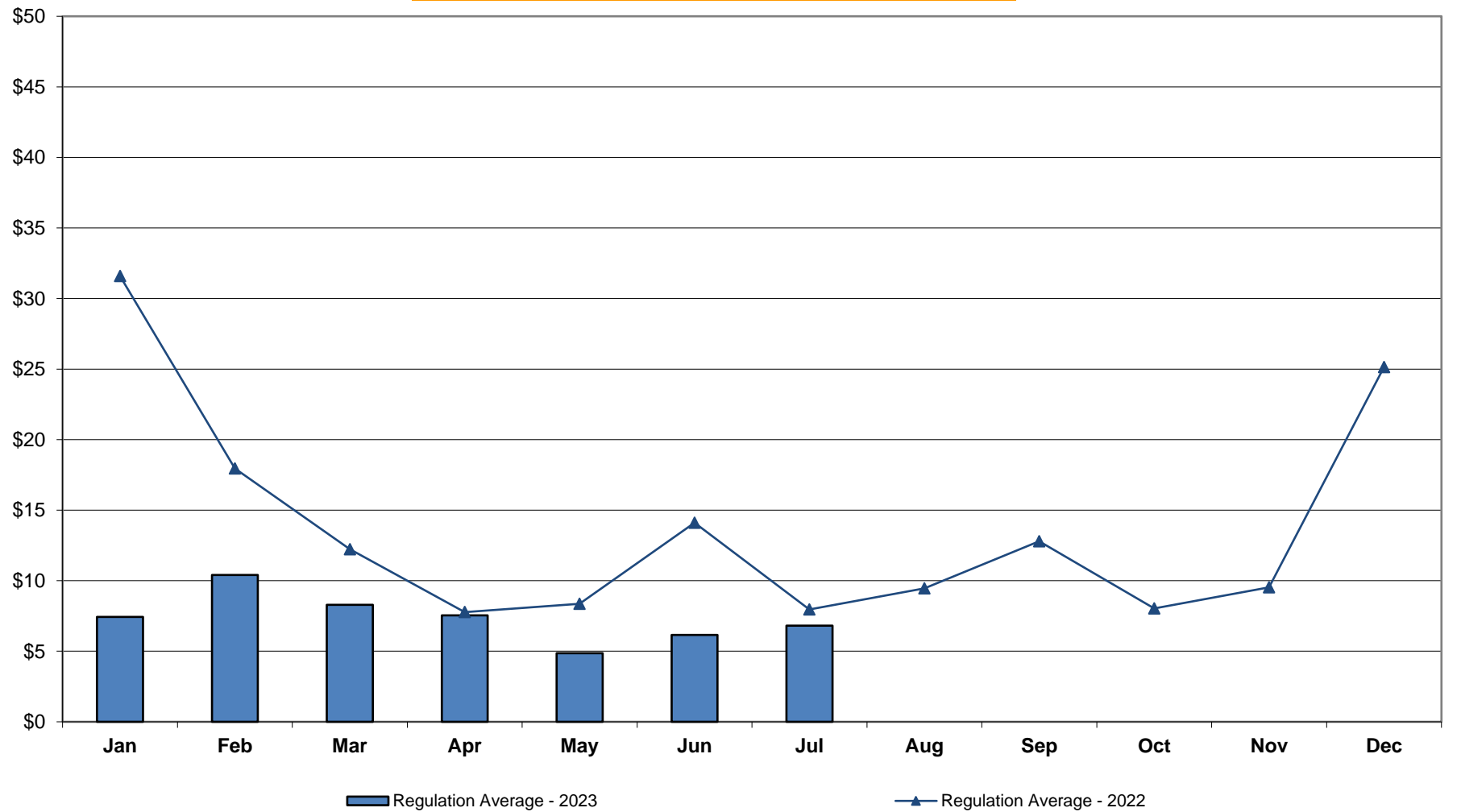
# **NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Non-Synch 2022 - 2023**



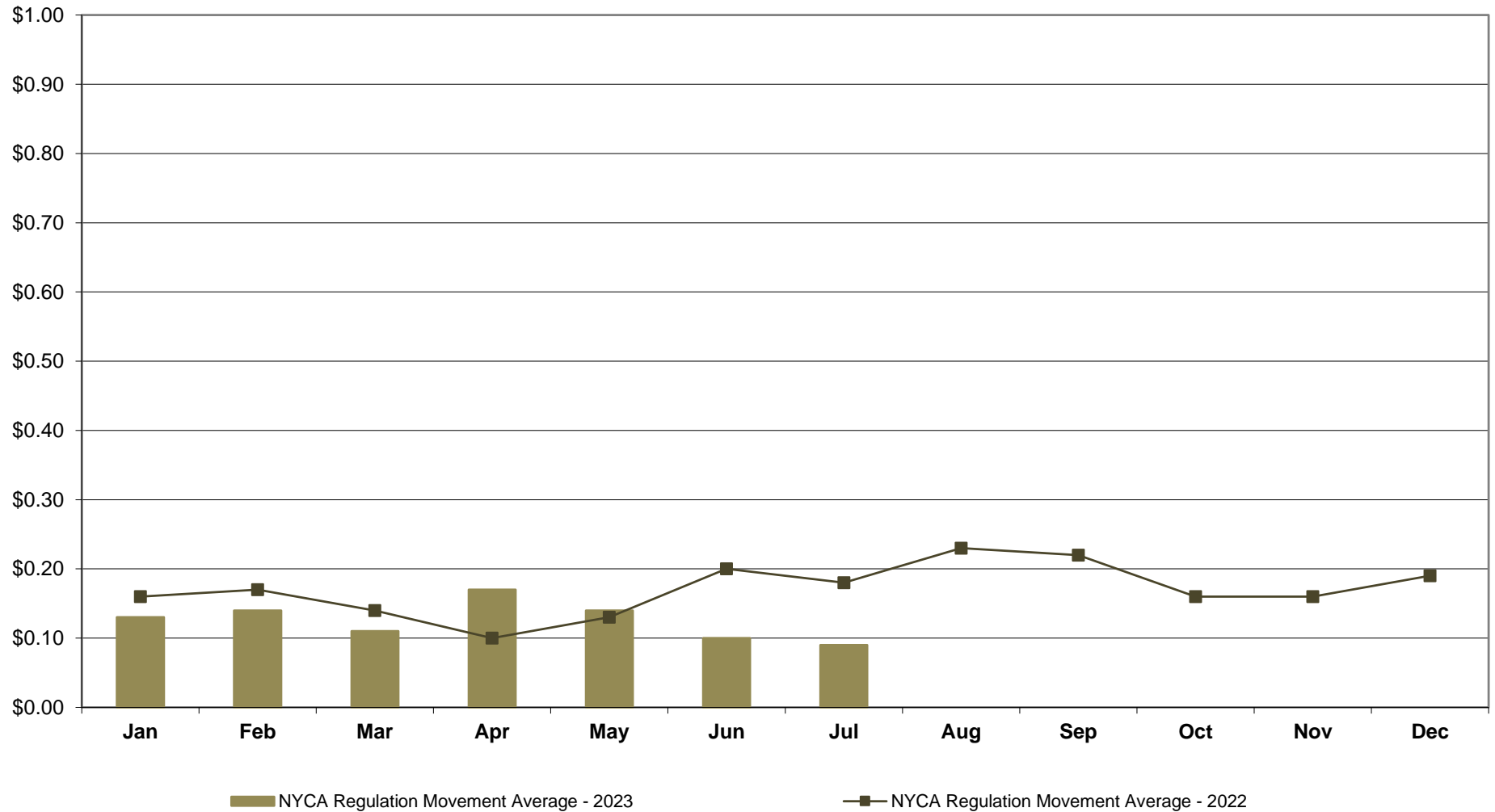
# **NYISO Monthly Average Ancillary Service Prices RTC Market - 30 Min Op Res 2022 - 2023**



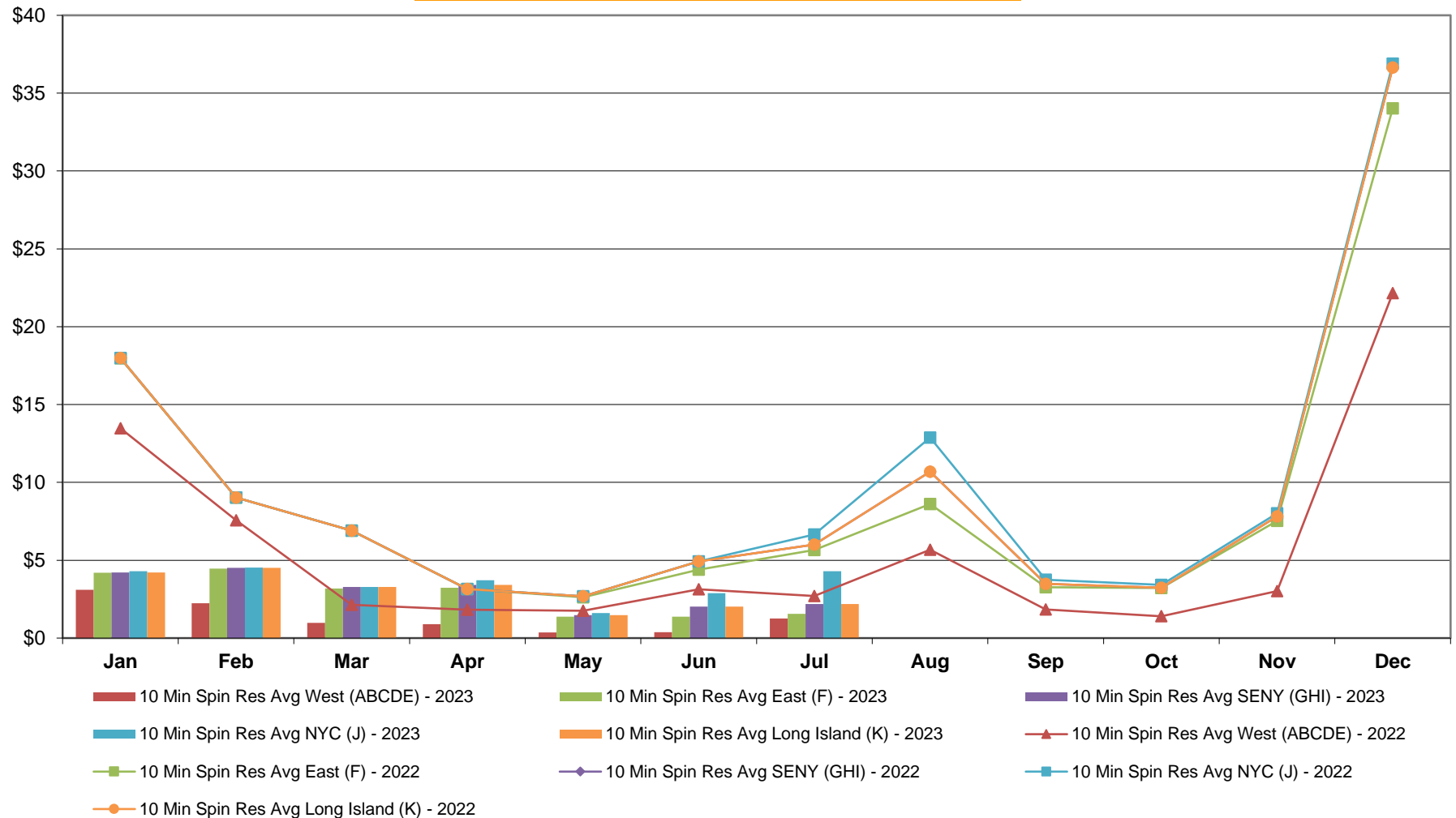
**NYISO Monthly Average Ancillary Service Prices  
RTC Market - Regulation 2022 - 2023**



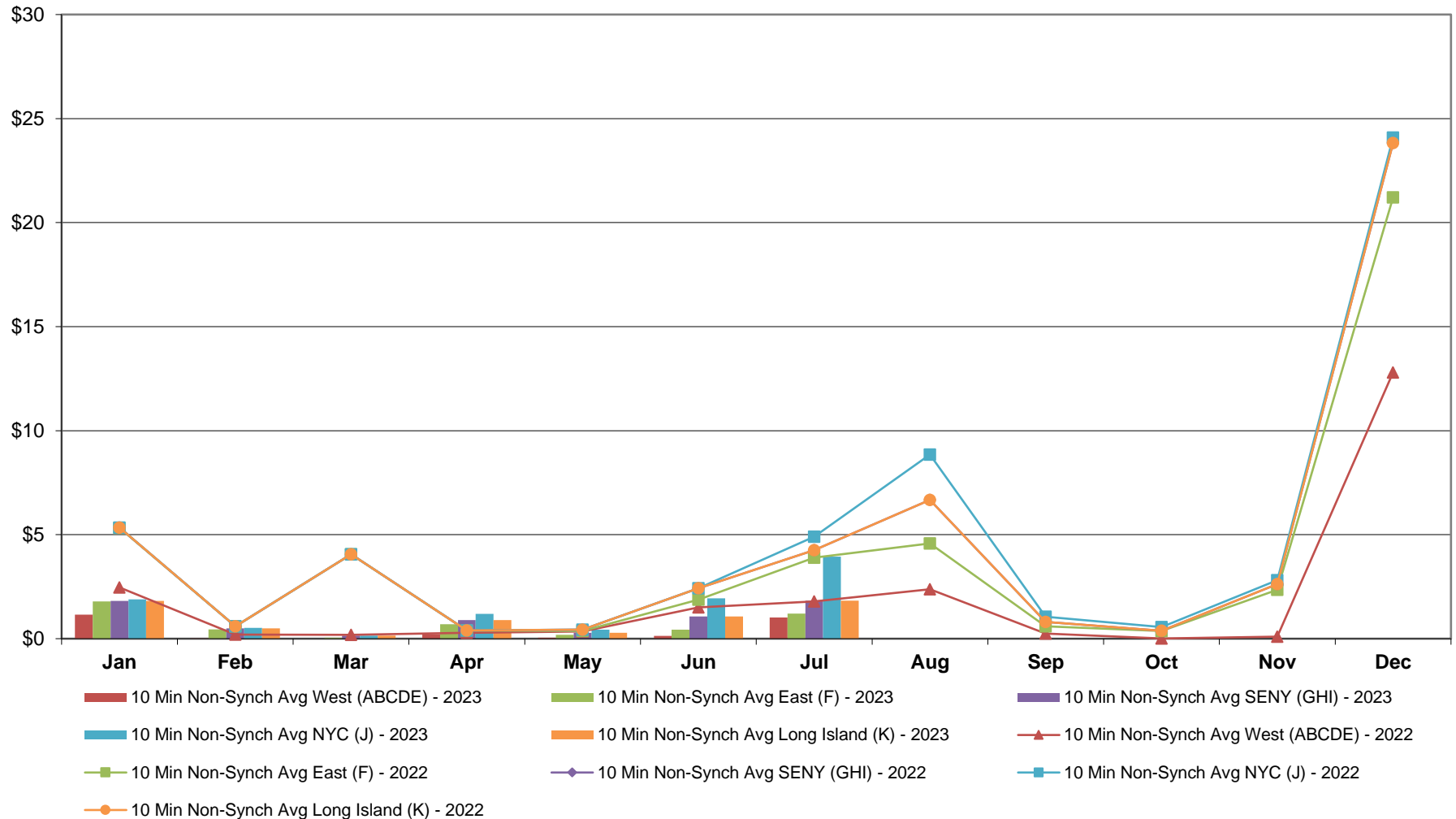
# NYISO Monthly Average Ancillary Service Prices RTC Market - Regulation Movement 2022 - 2023



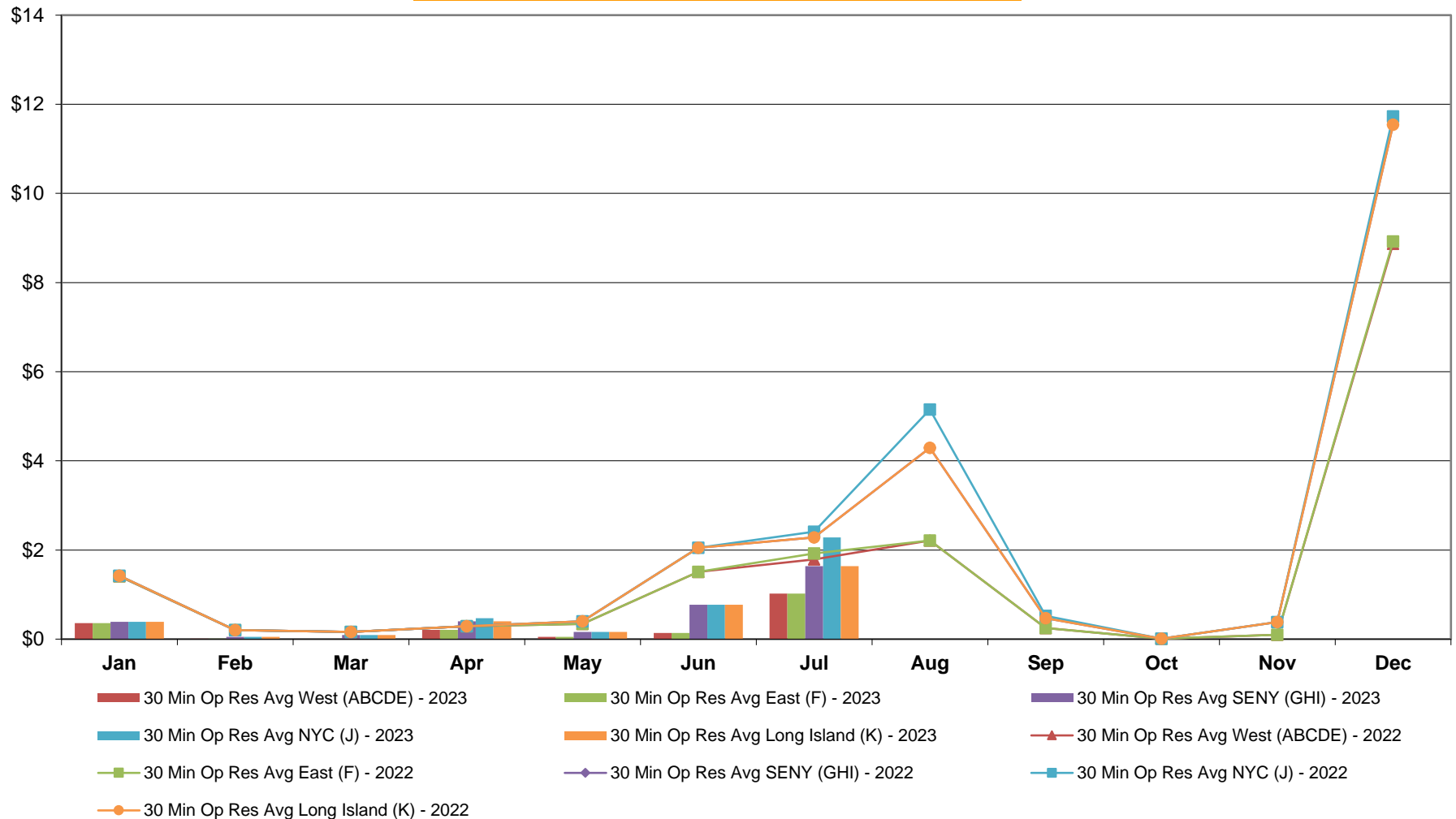
# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Spin 2022 - 2023**



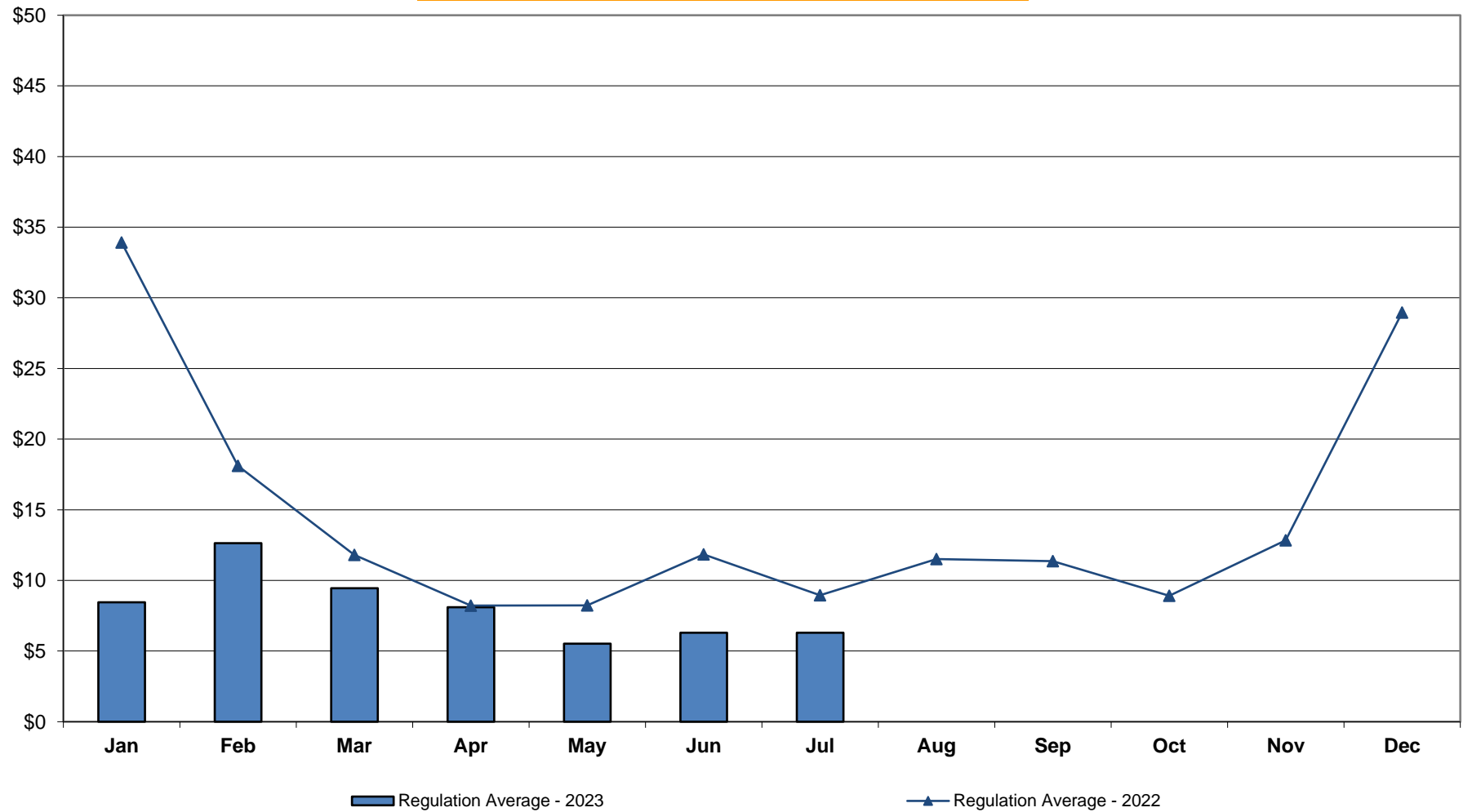
# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Non-Synch 2022 - 2023**



# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 30 Min Op Res 2022 - 2023**

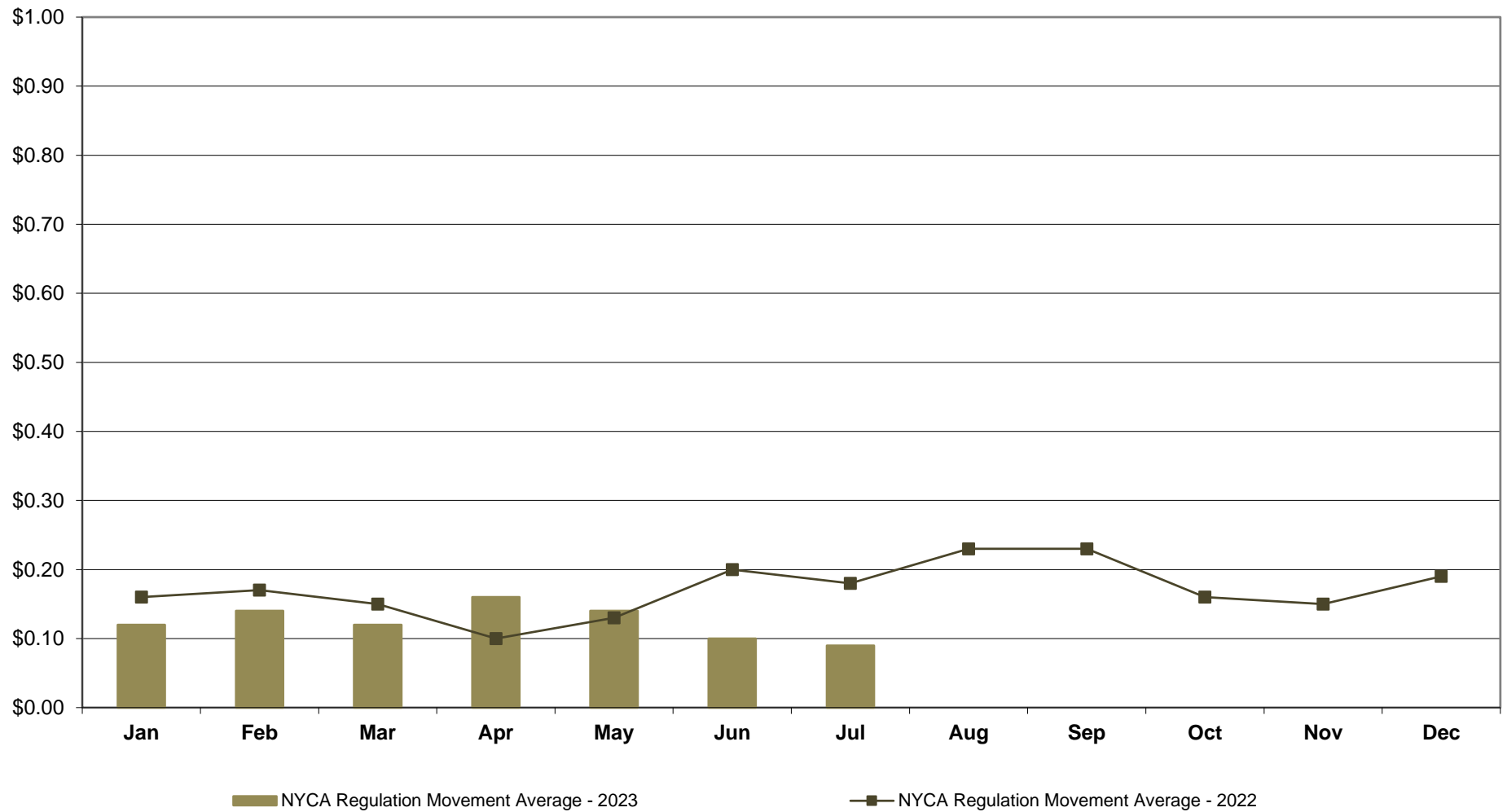


**NYISO Monthly Average Ancillary Service Prices  
Real Time Market - Regulation 2022 - 2023**





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



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

<b><u>2023</u></b>	<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>
<b><u>Day Ahead Market</u></b>												
10 Min Spin Long Island (K)	6.60	8.46	7.31	7.07	5.74	5.29	6.56					
10 Min Spin NYC (J)	6.63	8.68	7.38	7.20	5.81	6.37	9.18					
10 Min Spin SENY (GHI)	6.60	8.46	7.31	7.07	5.74	5.29	6.56					
10 Min Spin East (F)	6.56	8.06	7.07	6.73	5.30	4.87	6.25					
10 Min Spin West (ABCDE)	5.41	6.73	4.45	4.67	4.29	4.27	5.34					
10 Min Non Synch Long Island (K)	5.16	6.22	4.72	5.02	4.97	4.71	6.40					
10 Min Non Synch NYC (J)	5.18	6.44	4.79	5.15	5.04	5.79	9.03					
10 Min Non Synch SENY (GHI)	5.16	6.22	4.72	5.02	4.97	4.71	6.40					
10 Min Non Synch East (F)	5.12	5.82	4.48	4.68	4.52	4.28	6.10					
10 Min Non Synch West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.30					
30 Min Long Island (K)	5.15	6.02	4.65	4.83	4.61	4.51	5.59					
30 Min NYC (J)	5.15	6.14	4.70	4.95	4.61	4.59	6.70					
30 Min SENY (GHI)	5.15	6.02	4.65	4.83	4.61	4.51	5.59					
30 Min East (F)	5.11	5.62	4.42	4.49	4.16	4.09	5.28					
30 Min West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.28					
Regulation	7.82	11.71	9.65	9.88	7.36	6.37	8.66					
<b><u>2022</u></b>	<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>
<b><u>Day Ahead Market</u></b>												
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

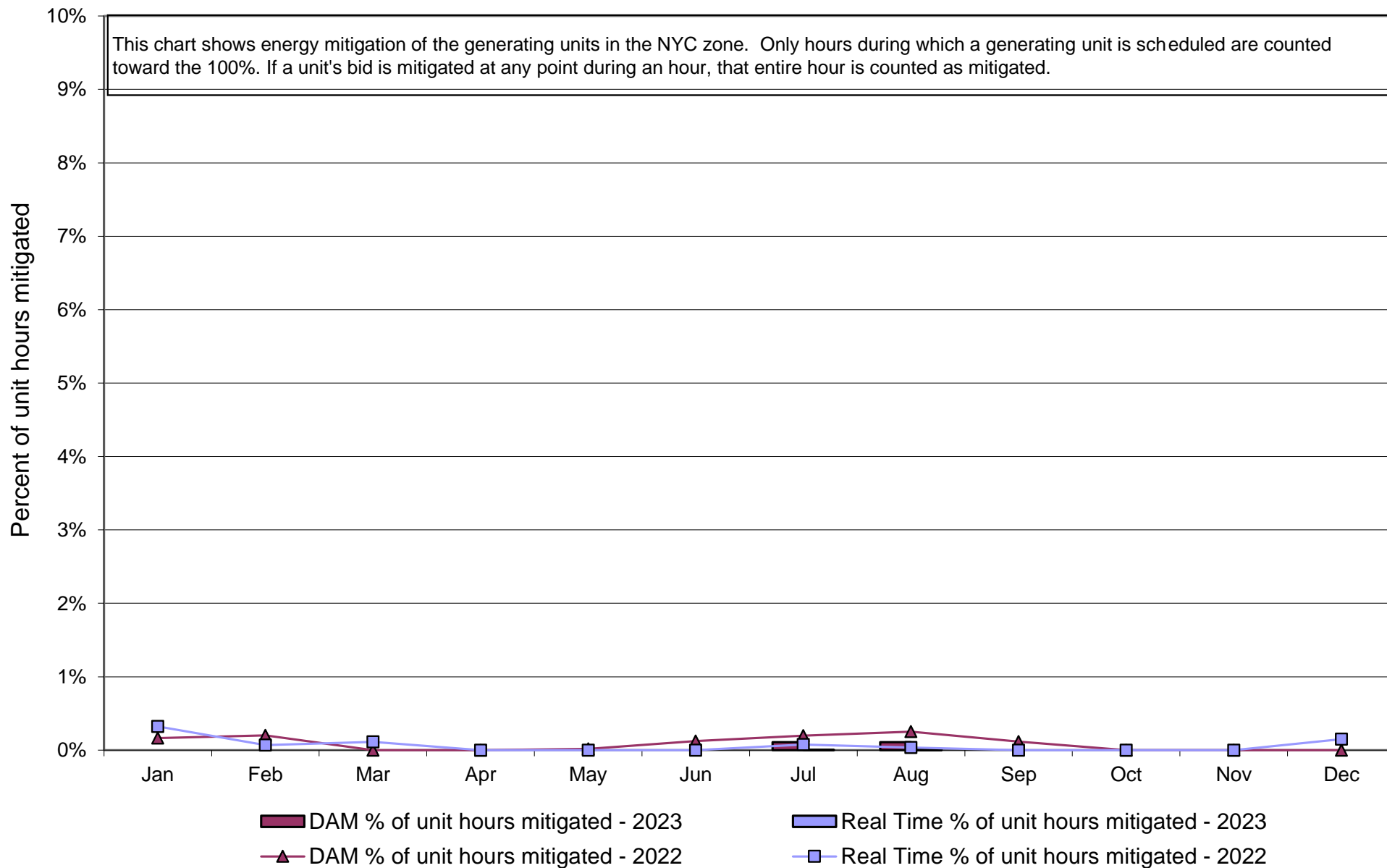
<b>2023</b>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b>RTC Market</b>												
10 Min Spin Long Island (K)	2.22	2.19	1.79	2.55	0.95	1.66	2.80					
10 Min Spin NYC (J)	2.26	2.21	1.83	2.84	1.07	2.60	4.96					
10 Min Spin SENY (GHI)	2.22	2.19	1.79	2.55	0.95	1.66	2.80					
10 Min Spin East (F)	2.21	2.15	1.67	2.23	0.82	0.96	2.00					
10 Min Spin West (ABCDE)	1.57	0.56	0.30	0.67	0.17	0.36	1.75					
10 Min Non Synch Long Island (K)	0.86	0.26	0.14	0.65	0.27	1.07	2.63					
10 Min Non Synch NYC (J)	0.89	0.27	0.18	0.95	0.39	2.01	4.79					
10 Min Non Synch SENY (GHI)	0.86	0.26	0.14	0.65	0.27	1.07	2.63					
10 Min Non Synch East (F)	0.85	0.22	0.02	0.34	0.14	0.37	1.83					
10 Min Non Synch West (ABCDE)	0.54	0.05	0.00	0.29	0.08	0.30	1.69					
30 Min Long Island (K)	0.16	0.10	0.13	0.61	0.21	1.00	2.48					
30 Min NYC (J)	0.16	0.10	0.15	0.68	0.22	1.00	3.16					
30 Min SENY (GHI)	0.16	0.10	0.13	0.61	0.21	1.00	2.48					
30 Min East (F)	0.14	0.05	0.00	0.29	0.08	0.30	1.69					
30 Min West (ABCDE)	0.14	0.05	0.00	0.29	0.08	0.30	1.69					
Regulation	7.44	10.40	8.29	7.55	4.86	6.16	6.81					
NYCA Regulation Movement	0.13	0.14	0.11	0.17	0.14	0.10	0.09					
<b>2022</b>	<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>
<b>RTC Market</b>												
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**

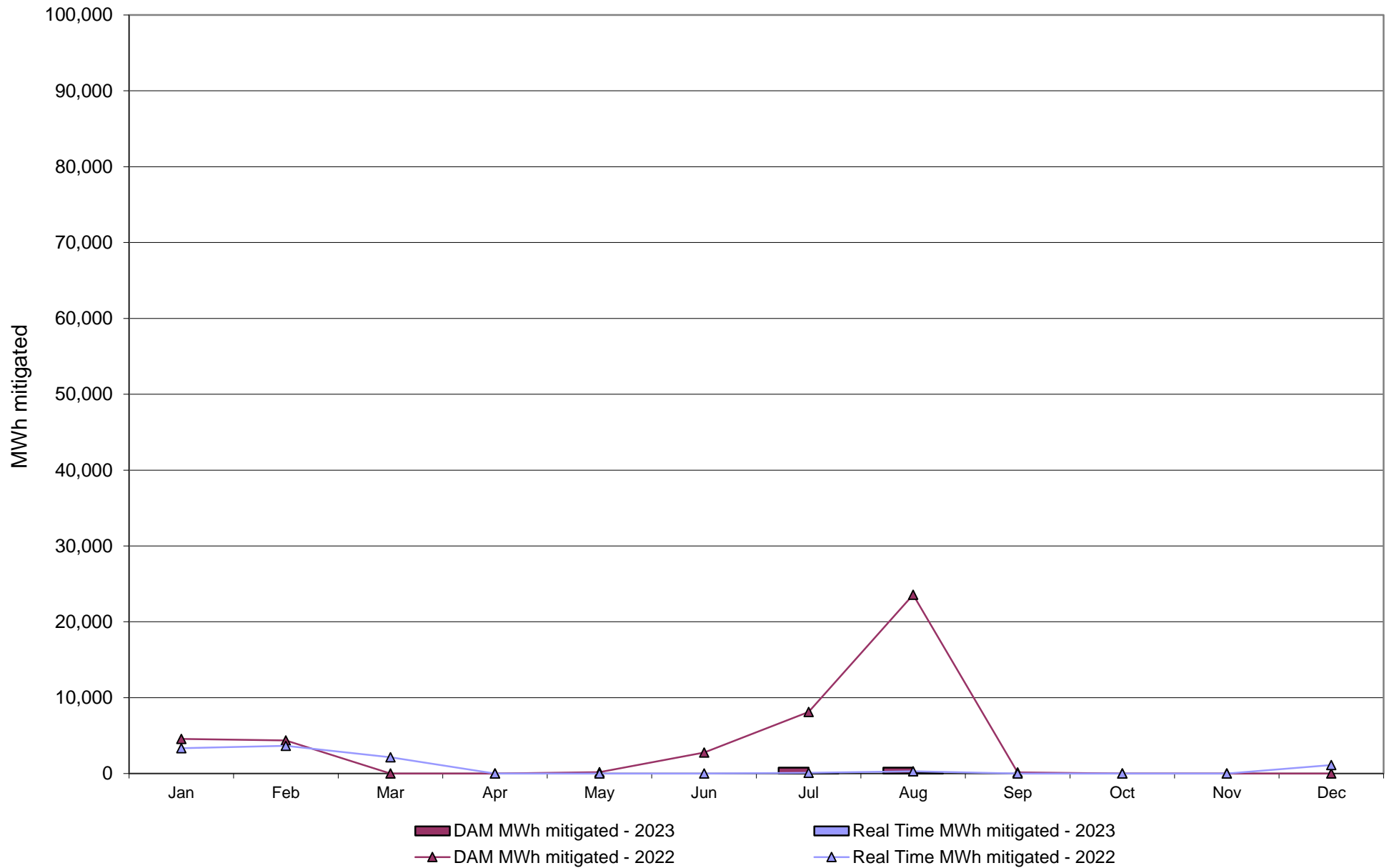
<b><u>2023</u></b>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>Real Time Market</u></b>												
10 Min Spin Long Island (K)	4.22	4.51	3.28	3.42	1.48	2.02	2.18					
10 Min Spin NYC (J)	4.30	4.53	3.28	3.72	1.61	2.89	4.30					
10 Min Spin SENEY (GHI)	4.22	4.51	3.28	3.42	1.48	2.02	2.18					
10 Min Spin East (F)	4.20	4.46	3.19	3.23	1.37	1.38	1.56					
10 Min Spin West (ABCDE)	3.10	2.24	0.97	0.89	0.36	0.38	1.26					
10 Min Non Synch Long Island (K)	1.81	0.50	0.15	0.89	0.29	1.07	1.83					
10 Min Non Synch NYC (J)	1.89	0.52	0.15	1.19	0.43	1.94	3.95					
10 Min Non Synch SENEY (GHI)	1.81	0.50	0.15	0.89	0.29	1.07	1.83					
10 Min Non Synch East (F)	1.79	0.45	0.05	0.70	0.19	0.43	1.21					
10 Min Non Synch West (ABCDE)	1.15	0.01	0.00	0.21	0.05	0.14	1.02					
30 Min Long Island (K)	0.39	0.05	0.09	0.40	0.16	0.77	1.64					
30 Min NYC (J)	0.39	0.05	0.09	0.47	0.16	0.77	2.28					
30 Min SENEY (GHI)	0.39	0.05	0.09	0.40	0.16	0.77	1.64					
30 Min East (F)	0.36	0.01	0.00	0.21	0.05	0.14	1.02					
30 Min West (ABCDE)	0.36	0.01	0.00	0.21	0.05	0.14	1.02					
Regulation	8.46	12.64	9.44	8.10	5.52	6.30	6.30					
NYCA Regulation Movement	0.12	0.14	0.12	0.16	0.14	0.10	0.09					
<b><u>2022</u></b>	<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>
<b><u>Real Time Market</u></b>												
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 SENEY (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 SENEY (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 SENEY (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

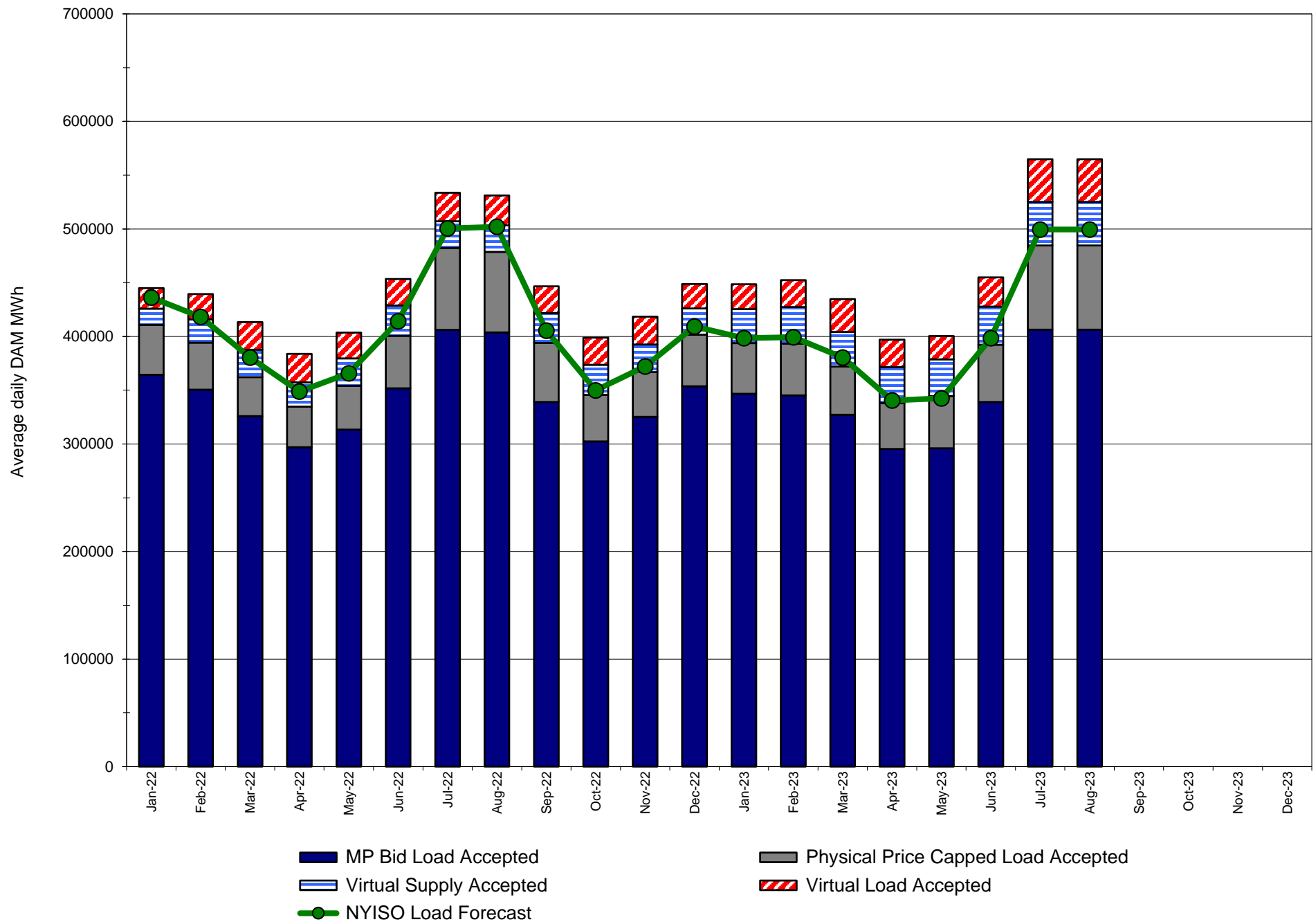
### Percentage of committed unit-hours mitigated



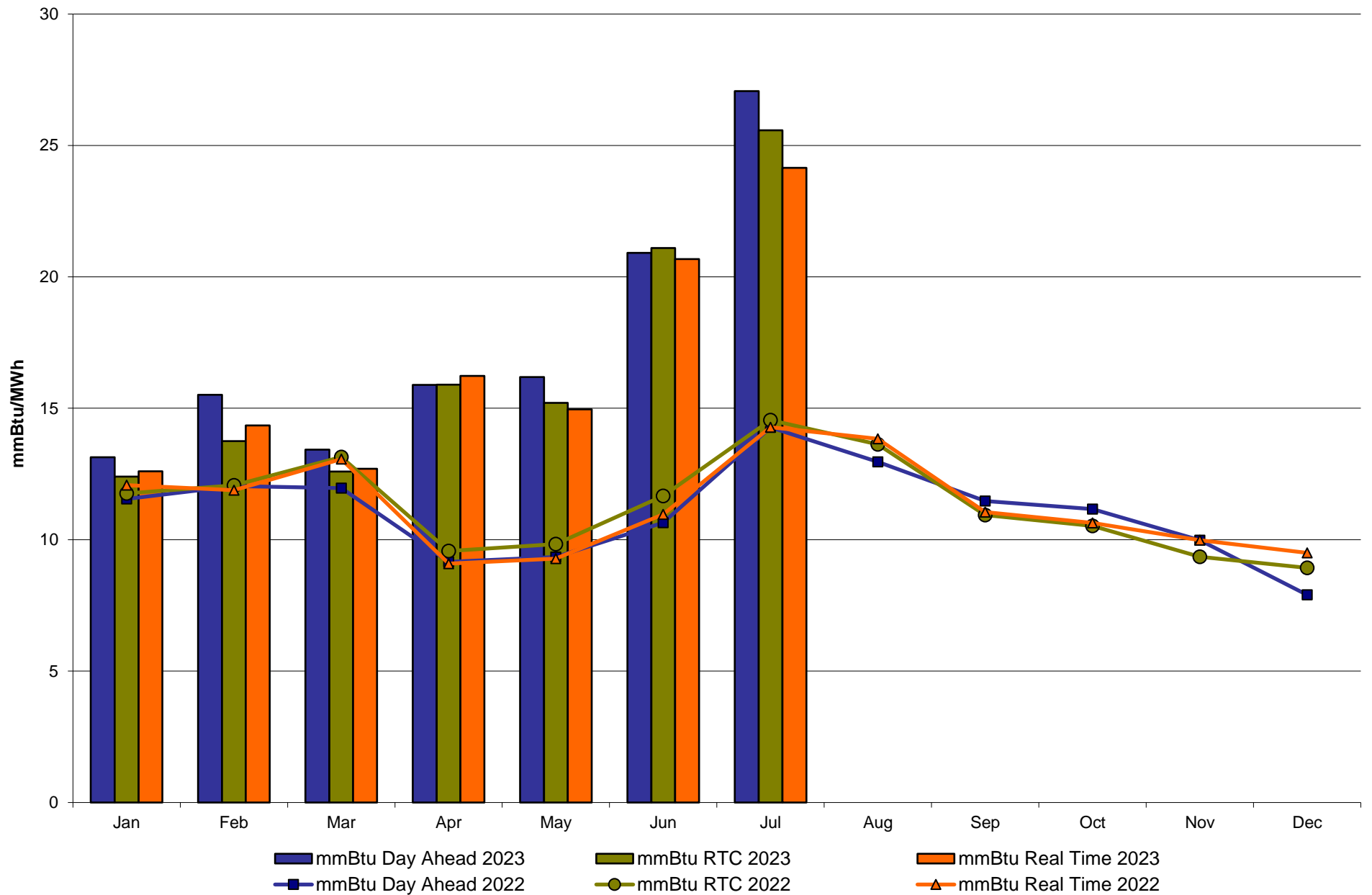
# **NYISO In City Energy Mitigation (NYC Zone) 2022 - 2023** **Monthly megawatt hours mitigated**



# NYISO Average Daily DAM Load Bid Summary

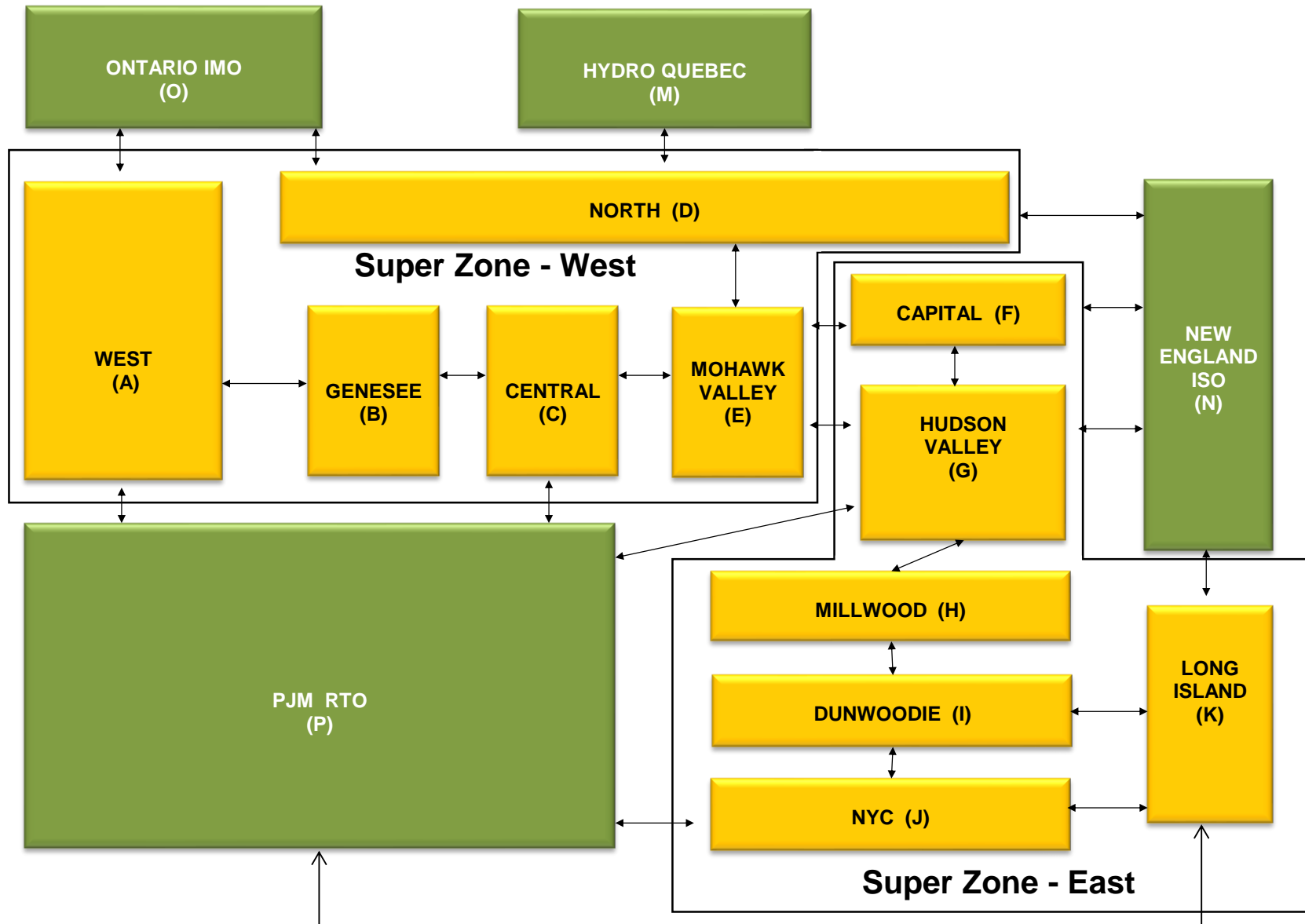


# Monthly Implied Heat Rate 2022-2023





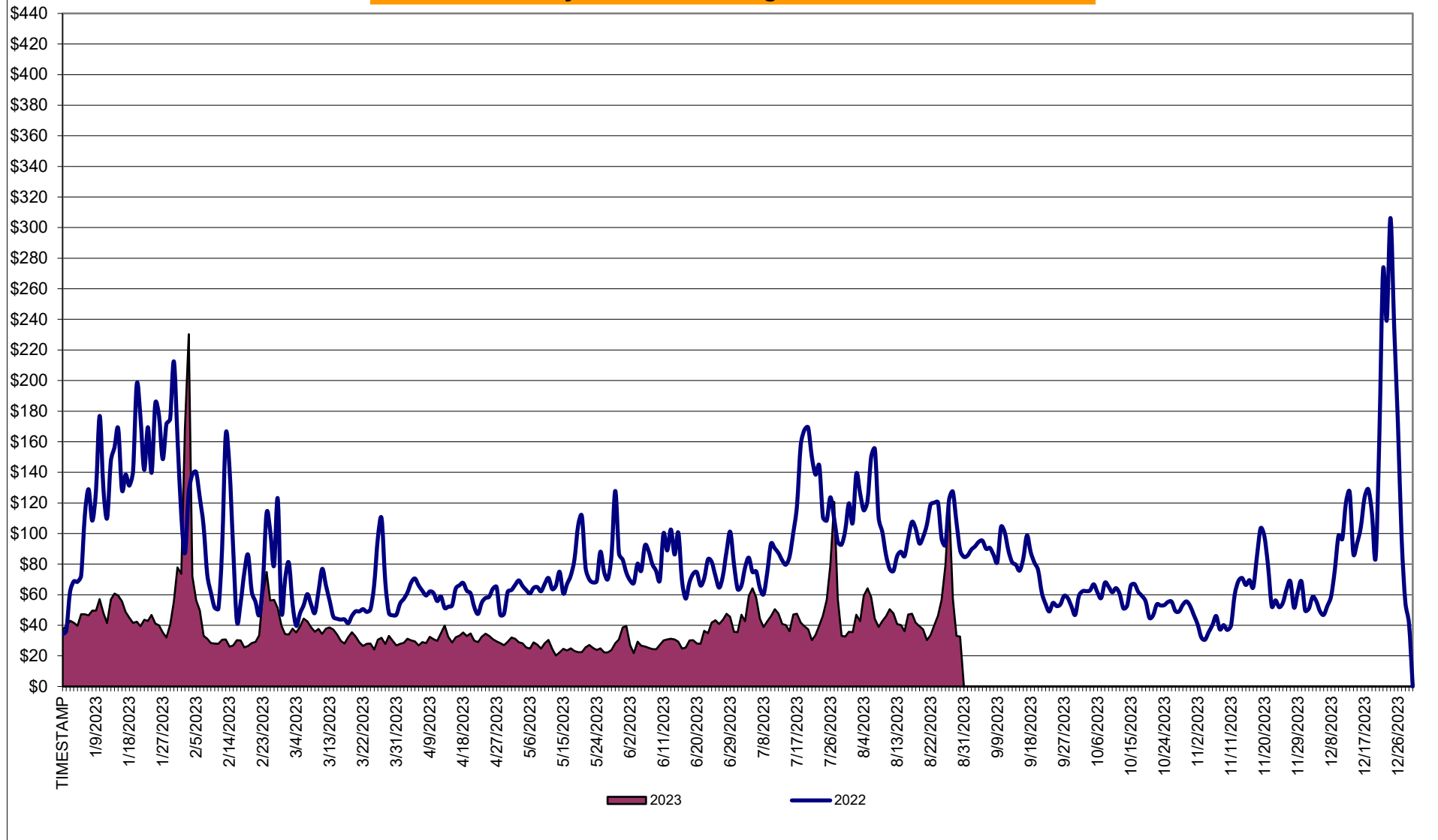
# NYISO LBMP ZONES



### Billing Codes for Chart C

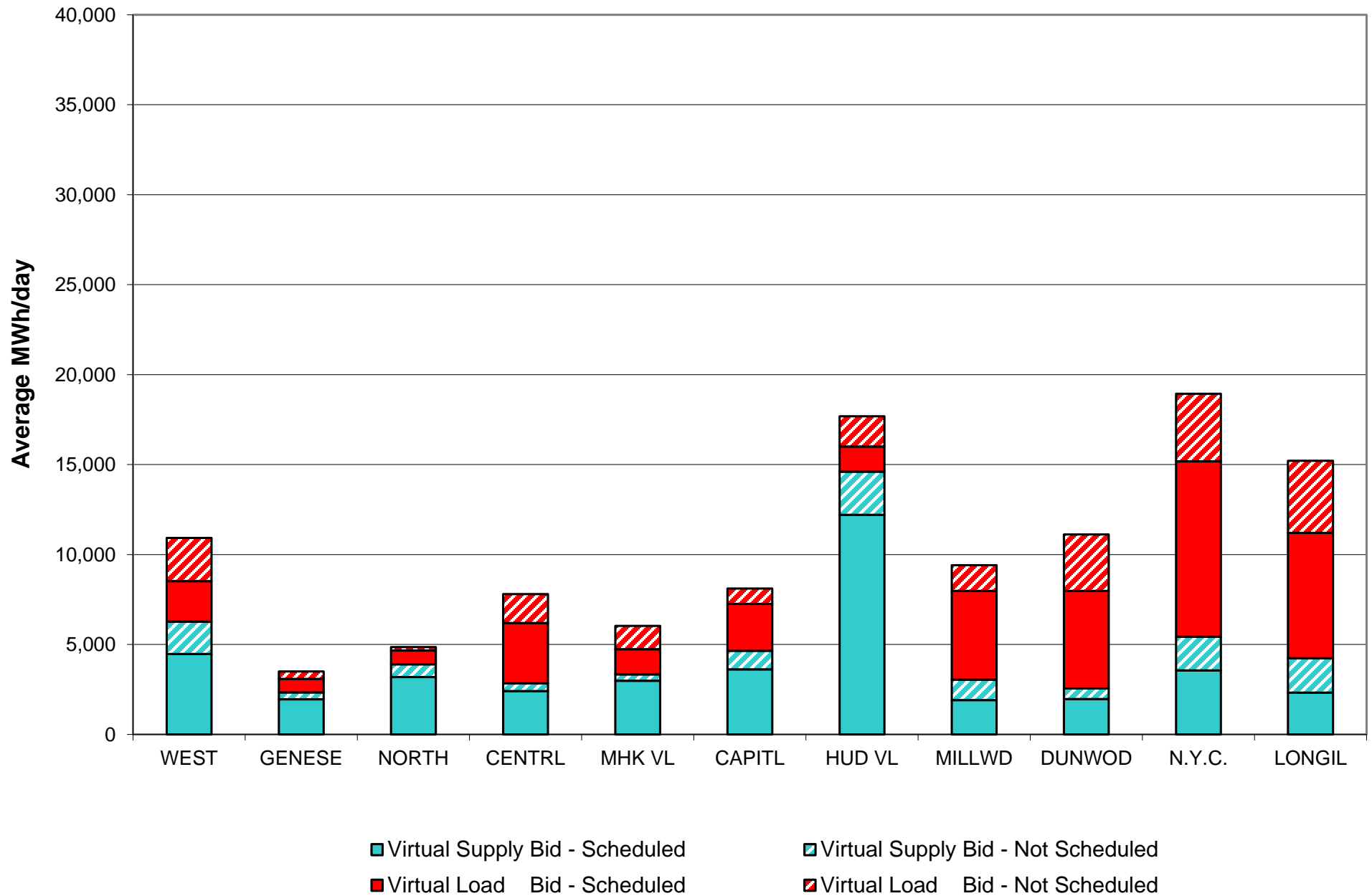
<u>Chart - C Category Name</u>	<u>Billing Code</u>	<u>Billing Category Name</u>
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid 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

**Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\***  
**2022 Annual Average \$89.23/MWh**  
**July 2022 YTD Average \$90.31/MWh**  
**July 2023 YTD Average \$41.18/MWh**



\* Excludes ICAP payments.

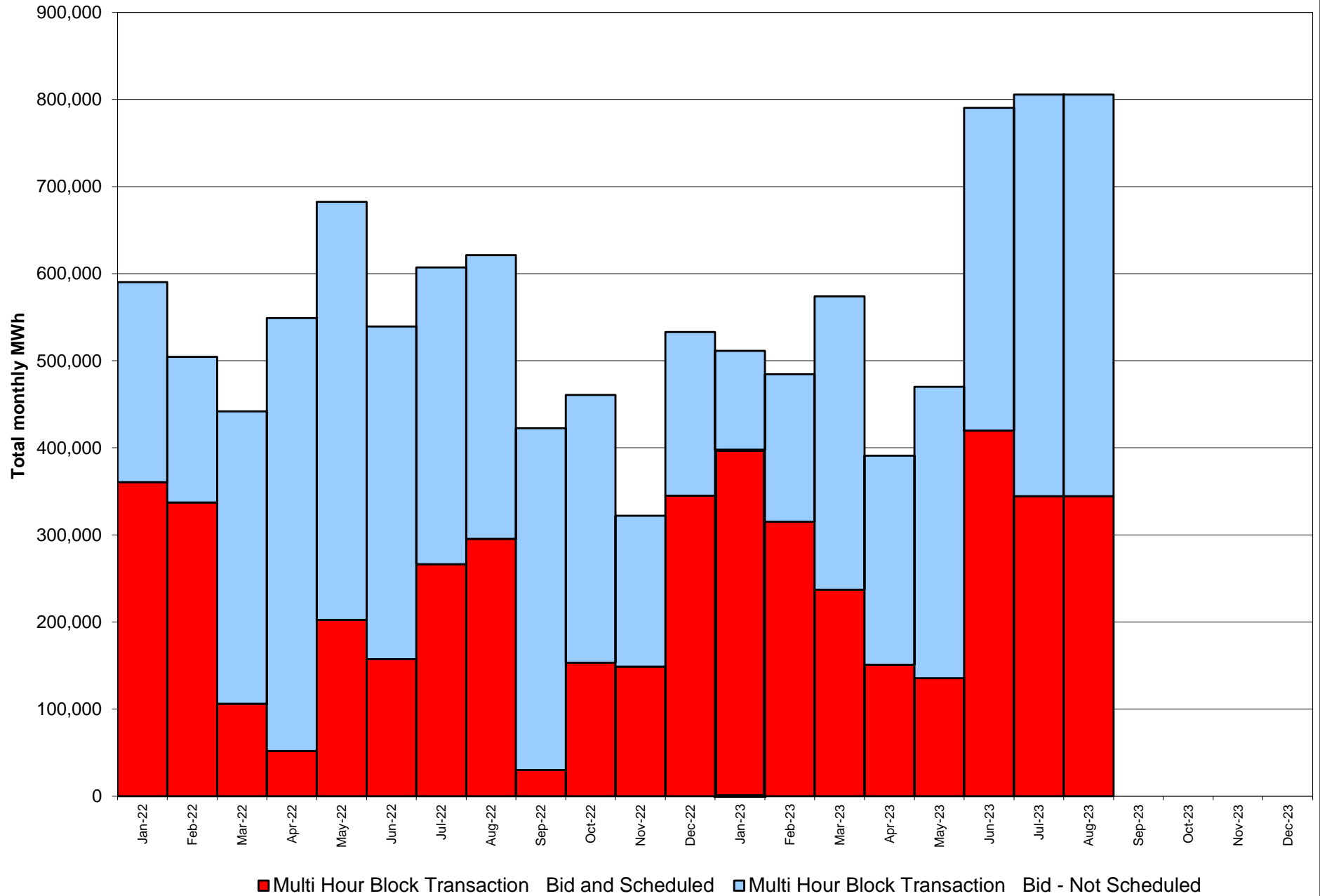
## Virtual Load and Supply Zonal Statistics through July 31, 2023



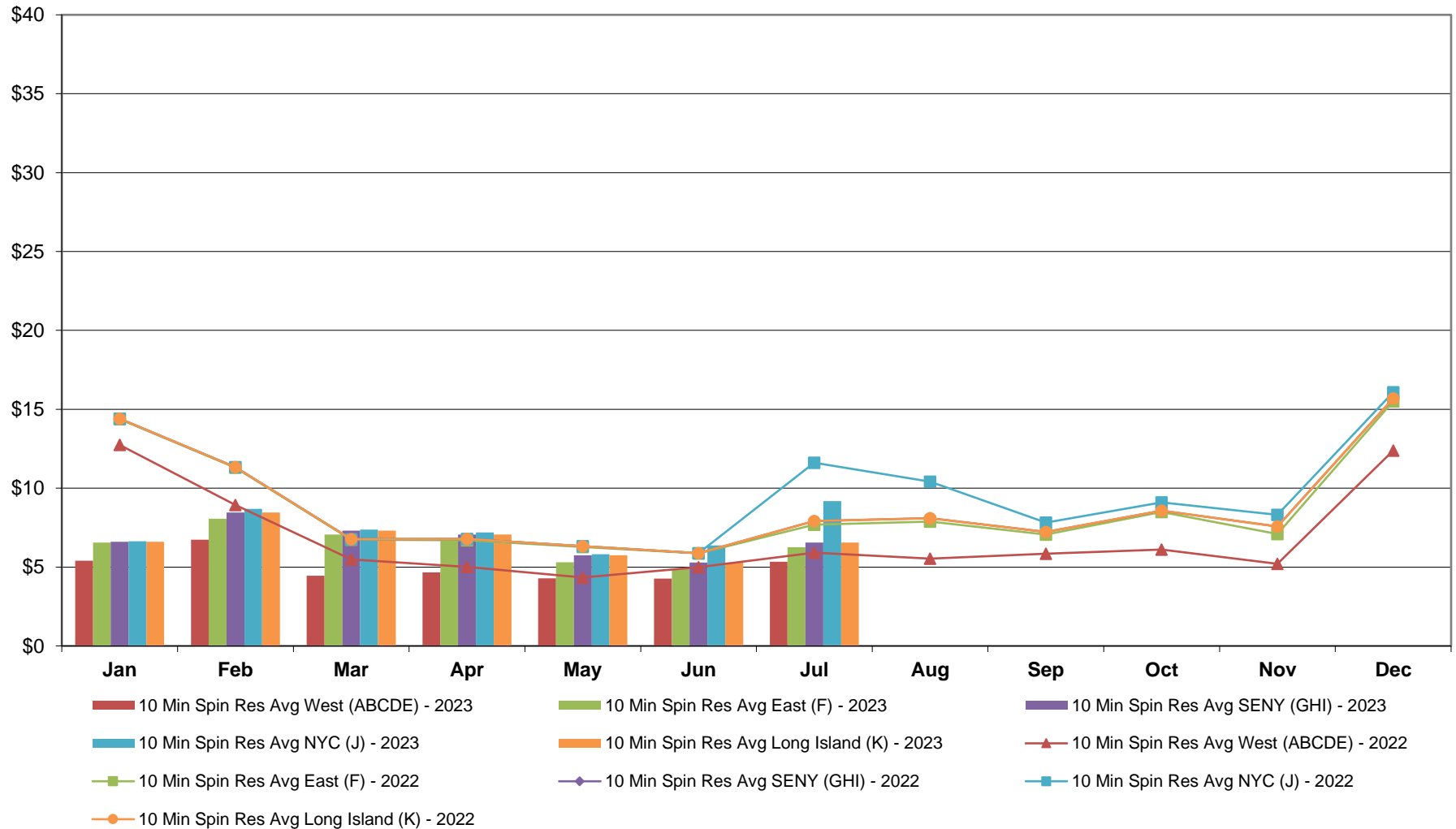
## Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2023

		Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid	
Zone	Date	Scheduled	Not	Scheduled	Not	Zone	Date	Scheduled	Not	Scheduled	Not	Zone	Date	Scheduled	Not	Scheduled	Not
WEST	Jan-23	3,364	1,605	5,555	1,026	MHK VL	Jan-23	1,312	1,038	1,590	558	DUNWOD	Jan-23	862	1,623	1,884	319
	Feb-23	2,266	1,863	6,652	1,270		Feb-23	1,146	1,395	2,484	436		Feb-23	1,366	1,793	2,082	408
	Mar-23	3,318	1,373	5,353	2,062		Mar-23	1,815	829	1,488	1,135		Mar-23	2,505	1,556	2,093	670
	Apr-23	2,407	1,561	5,939	1,245		Apr-23	1,182	841	1,556	450		Apr-23	1,941	1,615	1,682	633
	May-23	2,572	1,636	3,868	1,941		May-23	1,165	1,312	2,365	567		May-23	1,434	1,391	2,719	680
	Jun-23	3,187	2,289	4,717	1,351		Jun-23	1,774	1,301	2,009	585		Jun-23	2,342	2,422	2,299	522
	Jul-23	2,249	2,400	4,471	1,796		Jul-23	1,402	1,292	2,986	350		Jul-23	5,415	3,132	1,968	592
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
GENESE	Jan-23	1,005	469	1,438	255	CAPITL	Jan-23	1,762	834	1,824	917	N.Y.C.	Jan-23	2,674	2,287	4,516	977
	Feb-23	1,136	523	1,480	586		Feb-23	1,902	1,166	2,655	729		Feb-23	2,663	2,398	3,564	1,126
	Mar-23	835	495	1,562	905		Mar-23	3,256	1,595	2,454	594		Mar-23	2,230	2,393	4,646	1,121
	Apr-23	982	746	1,817	584		Apr-23	2,509	960	2,303	695		Apr-23	2,032	1,683	3,490	1,100
	May-23	721	408	1,807	568		May-23	1,691	681	2,810	736		May-23	2,063	2,034	4,284	1,488
	Jun-23	933	520	1,811	529		Jun-23	2,121	783	3,359	808		Jun-23	4,139	2,409	3,742	1,700
	Jul-23	747	412	1,947	394		Jul-23	2,610	863	3,616	1,027		Jul-23	9,758	3,758	3,562	1,862
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
NORTH	Jan-23	1,246	284	2,910	1,072	HUD VL	Jan-23	835	1,168	5,672	1,513	LONGIL	Jan-23	4,119	2,358	2,370	1,687
	Feb-23	1,111	302	2,854	1,432		Feb-23	1,335	1,484	5,382	1,297		Feb-23	4,408	2,440	2,494	1,130
	Mar-23	789	383	3,605	1,395		Mar-23	2,224	1,049	5,815	1,357		Mar-23	5,725	1,753	1,778	1,029
	Apr-23	615	332	3,338	854		Apr-23	896	846	8,301	7,864		Apr-23	4,436	1,401	2,087	746
	May-23	938	184	2,274	964		May-23	1,119	937	7,383	13,585		May-23	3,608	1,817	2,640	1,073
	Jun-23	1,032	148	2,685	629		Jun-23	1,784	1,120	8,337	7,759		Jun-23	5,238	2,124	1,770	1,359
	Jul-23	777	179	3,193	699		Jul-23	1,397	1,690	12,207	2,396		Jul-23	6,977	3,999	2,319	1,911
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				
CENTRL	Jan-23	5,294	1,193	1,715	563	MILLWD	Jan-23	649	1,103	2,019	278	NYISO	Jan-23	23,122	13,963	31,494	9,165
	Feb-23	6,851	1,526	2,219	703		Feb-23	888	1,228	2,021	434		Feb-23	25,071	16,118	33,885	9,552
	Mar-23	6,340	843	1,355	1,520		Mar-23	1,616	992	1,938	736		Mar-23	30,654	13,262	32,086	12,525
	Apr-23	6,824	914	1,546	855		Apr-23	1,564	853	1,566	831		Apr-23	25,387	11,752	33,625	15,856
	May-23	5,246	1,357	1,858	830		May-23	995	1,119	2,250	784		May-23	21,553	12,874	34,260	23,216
	Jun-23	3,257	1,442	2,305	784		Jun-23	1,392	1,329	2,385	667		Jun-23	27,199	15,886	35,419	16,693
	Jul-23	3,351	1,609	2,416	423		Jul-23	4,935	1,437	1,914	1,124		Jul-23	39,618	20,771	40,598	12,575
	Aug-23						Aug-23						Aug-23				
	Sep-23						Sep-23						Sep-23				
	Oct-23						Oct-23						Oct-23				
	Nov-23						Nov-23						Nov-23				
	Dec-23						Dec-23						Dec-23				

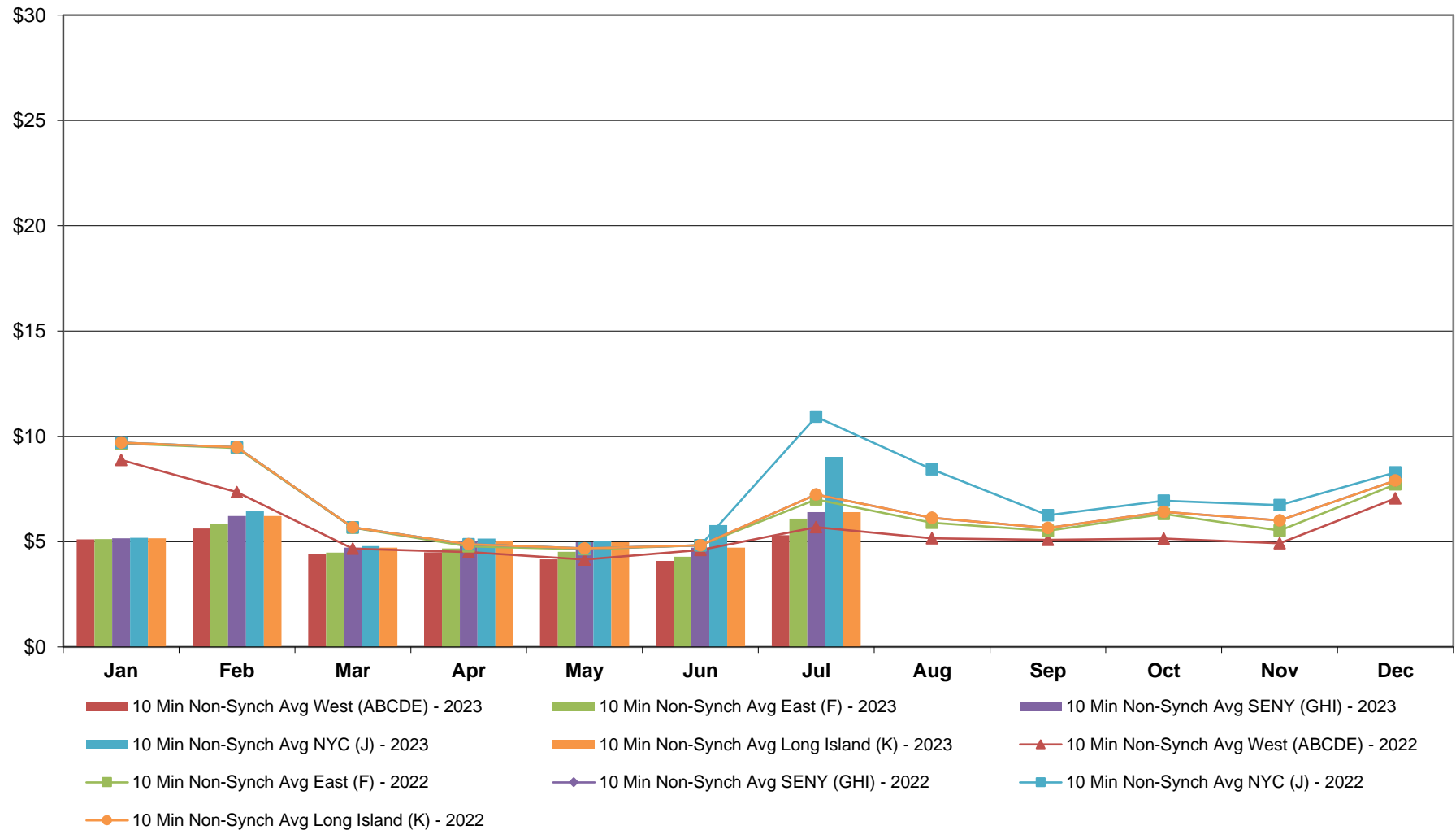
# NYISO Multi Hour Block Transactions Monthly Total MWh



# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 10 Min Spin 2022 - 2023**

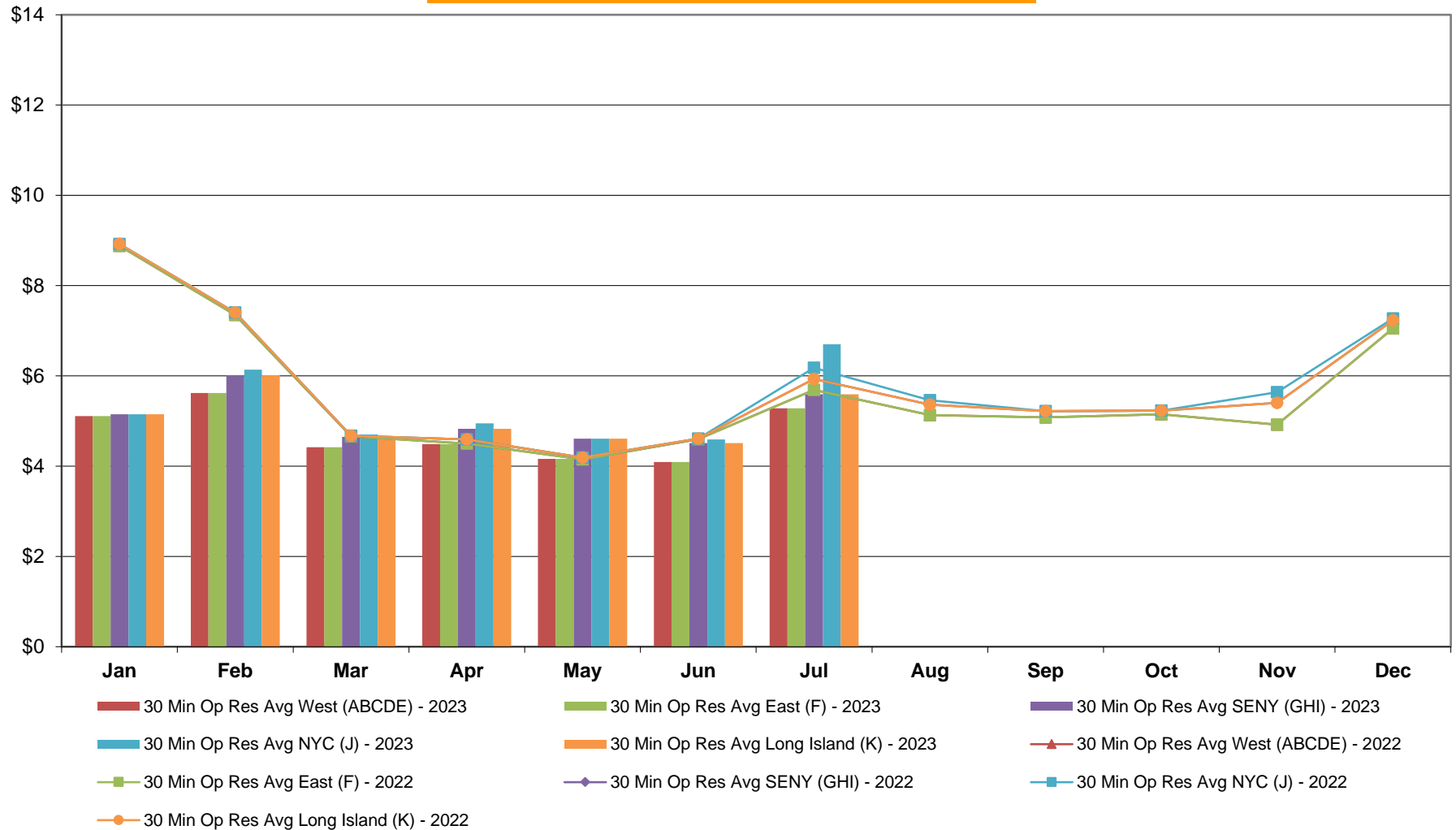


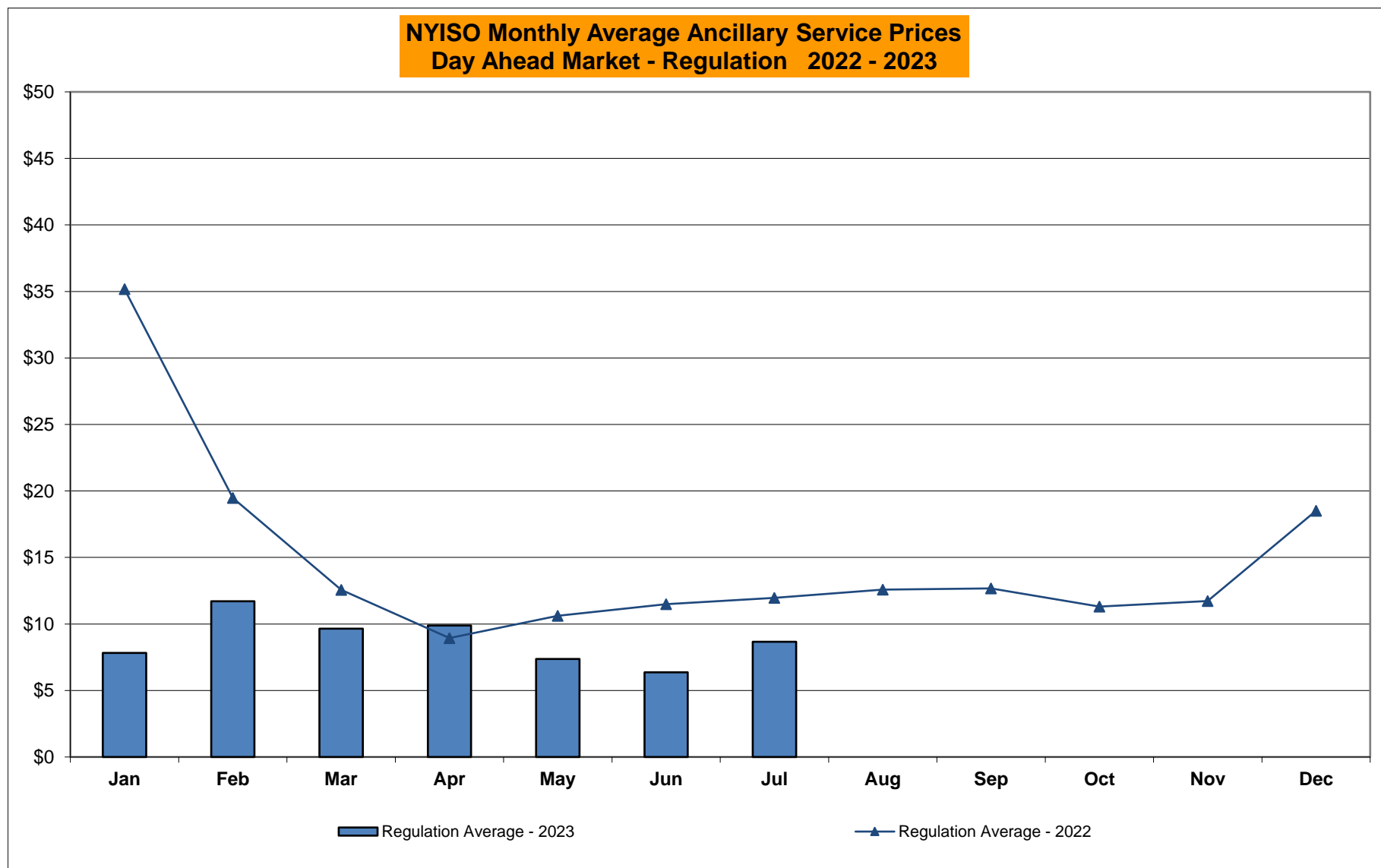
# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 10 Min Non-Synch 2022 - 2023**



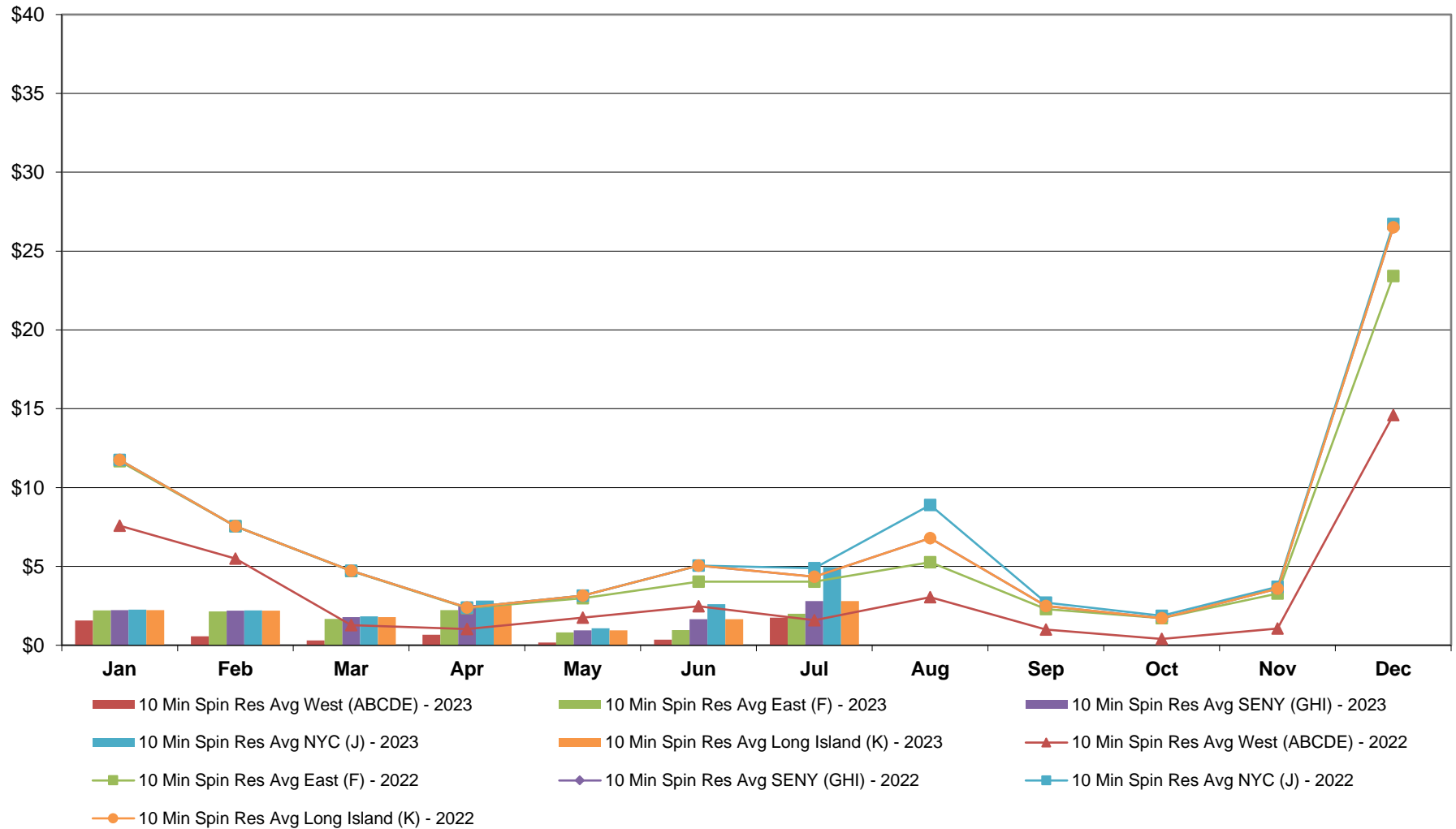


# **NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 30 Min Op Res 2022 - 2023**

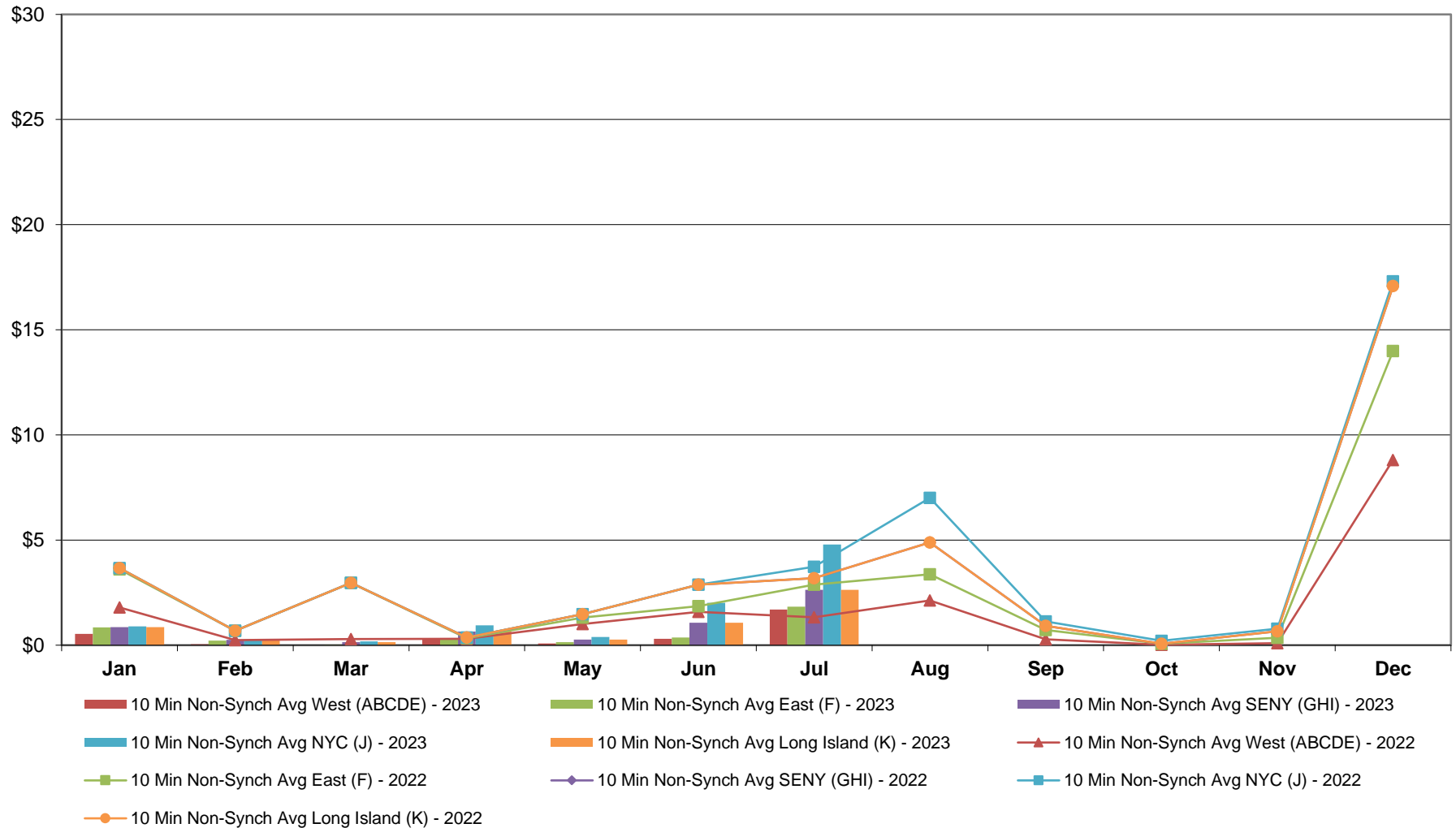




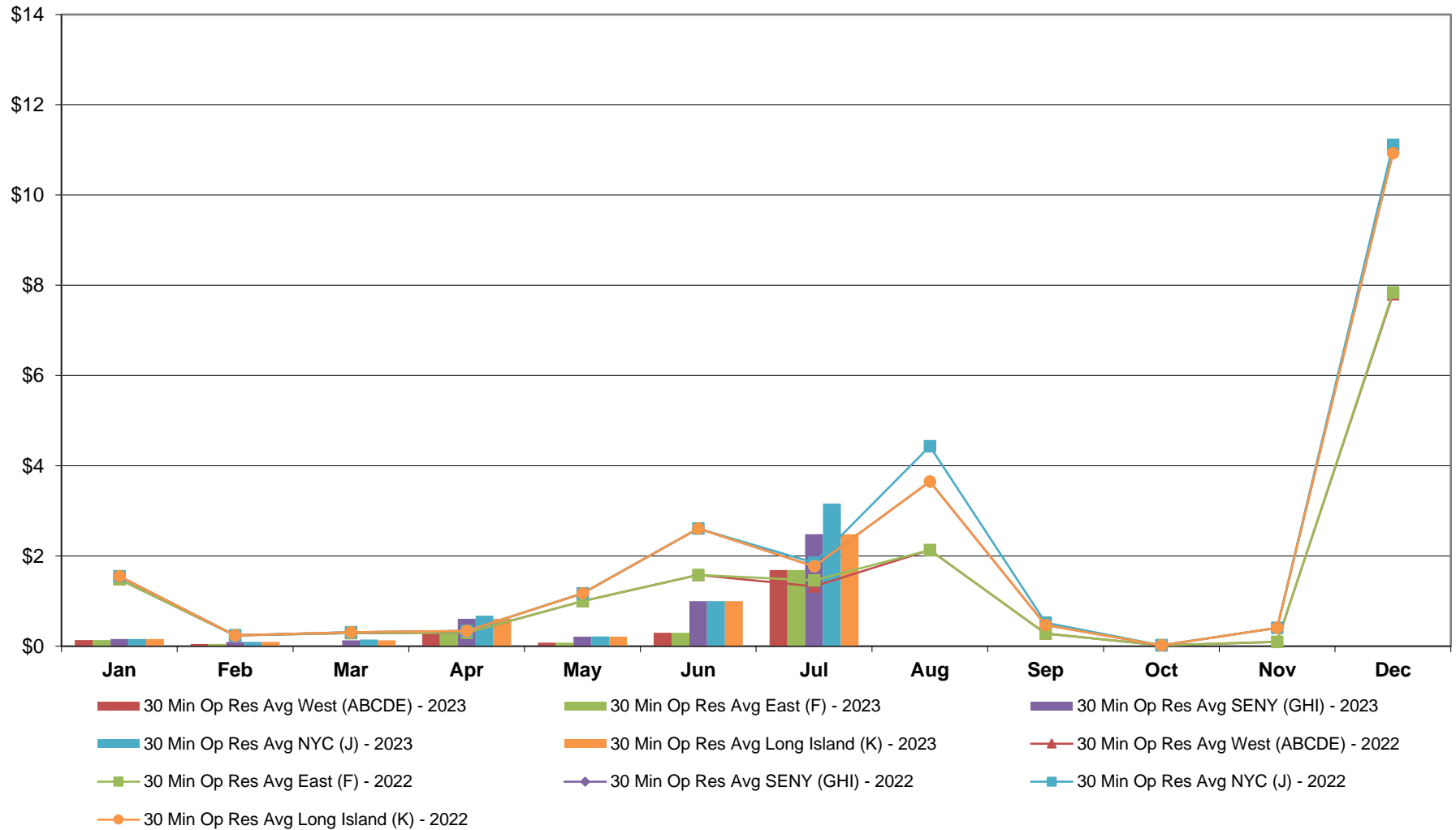
# **NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Spin 2022 - 2023**



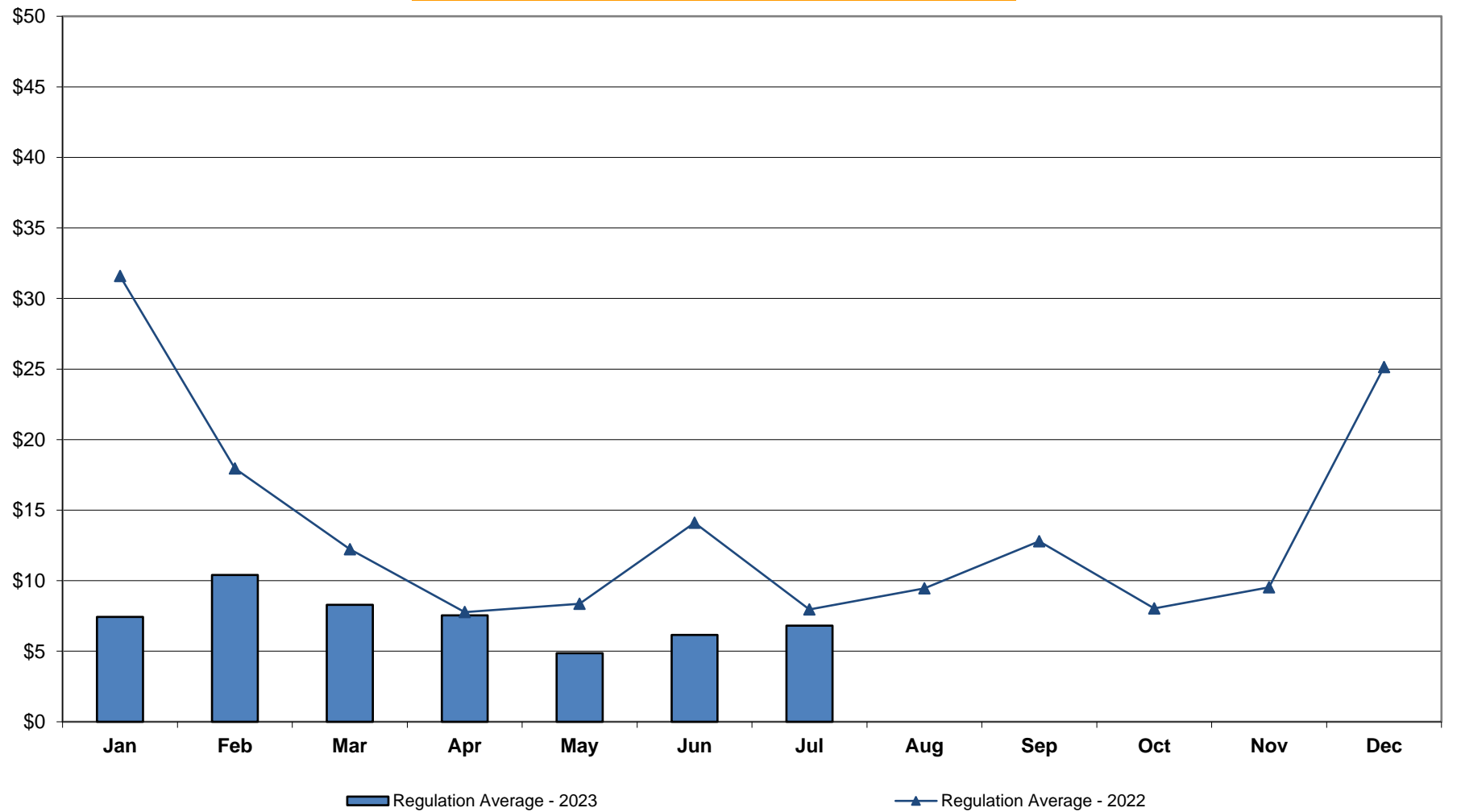
# **NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Non-Synch 2022 - 2023**



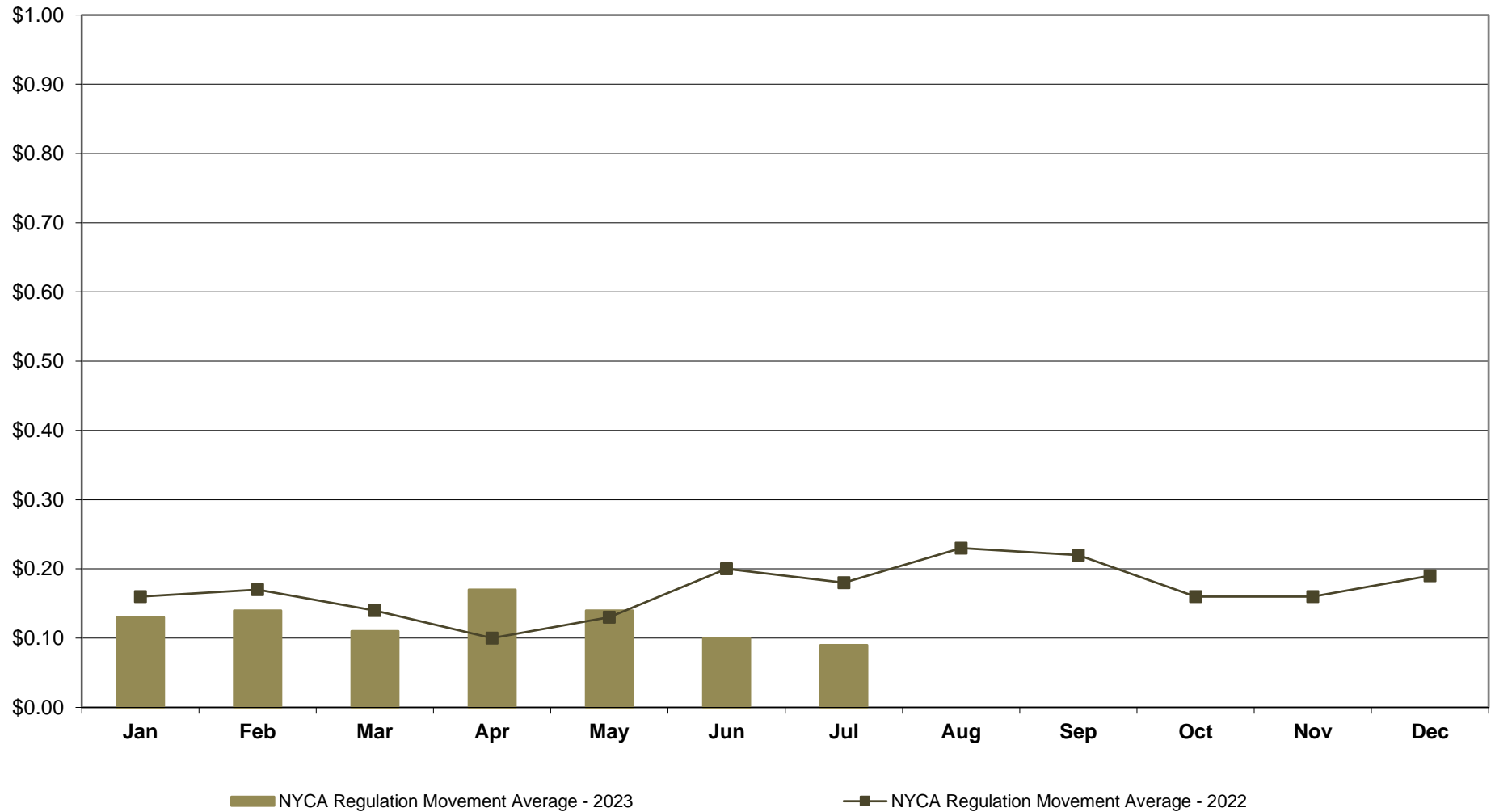
# **NYISO Monthly Average Ancillary Service Prices RTC Market - 30 Min Op Res 2022 - 2023**



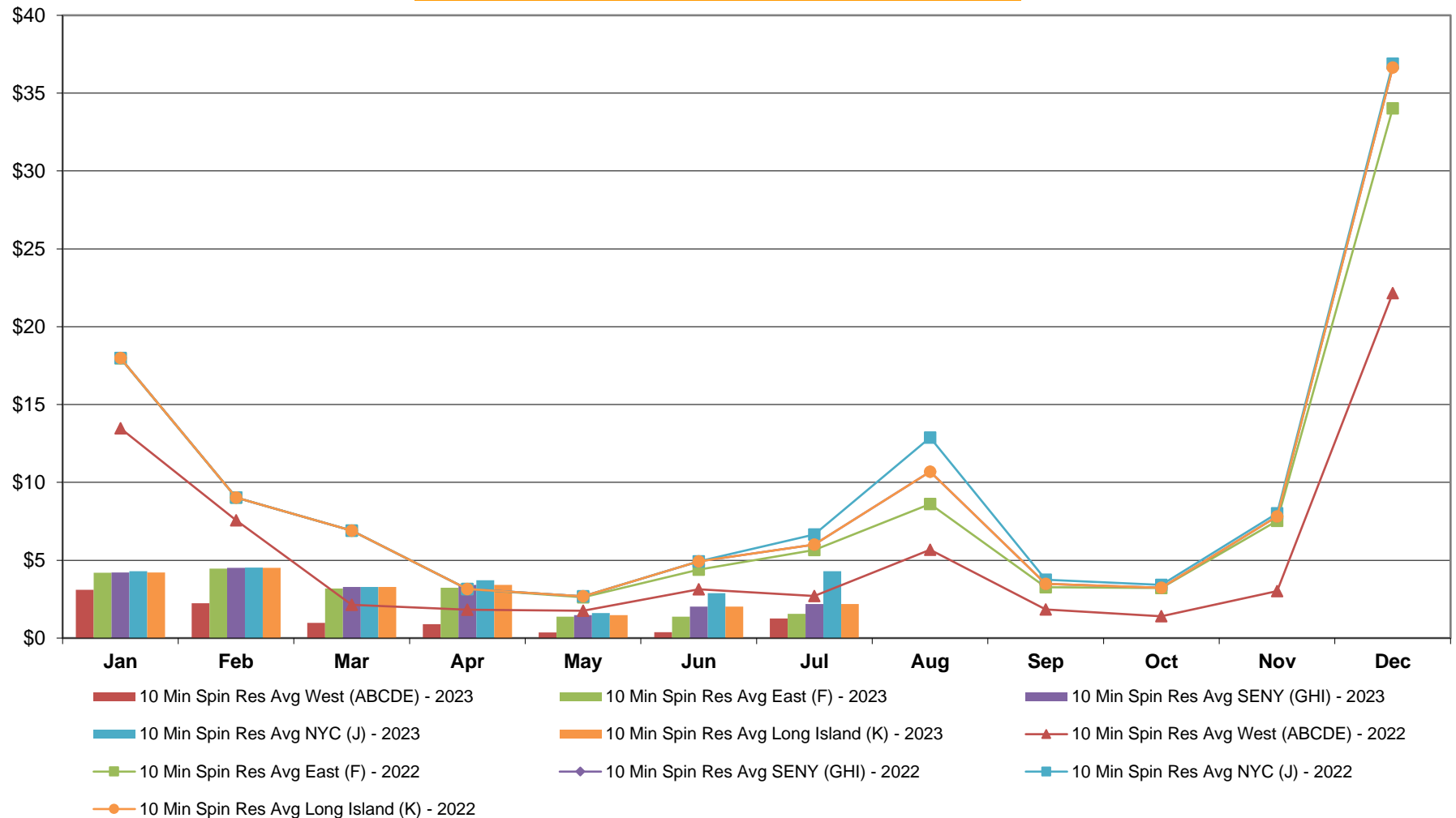
**NYISO Monthly Average Ancillary Service Prices  
RTC Market - Regulation 2022 - 2023**



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

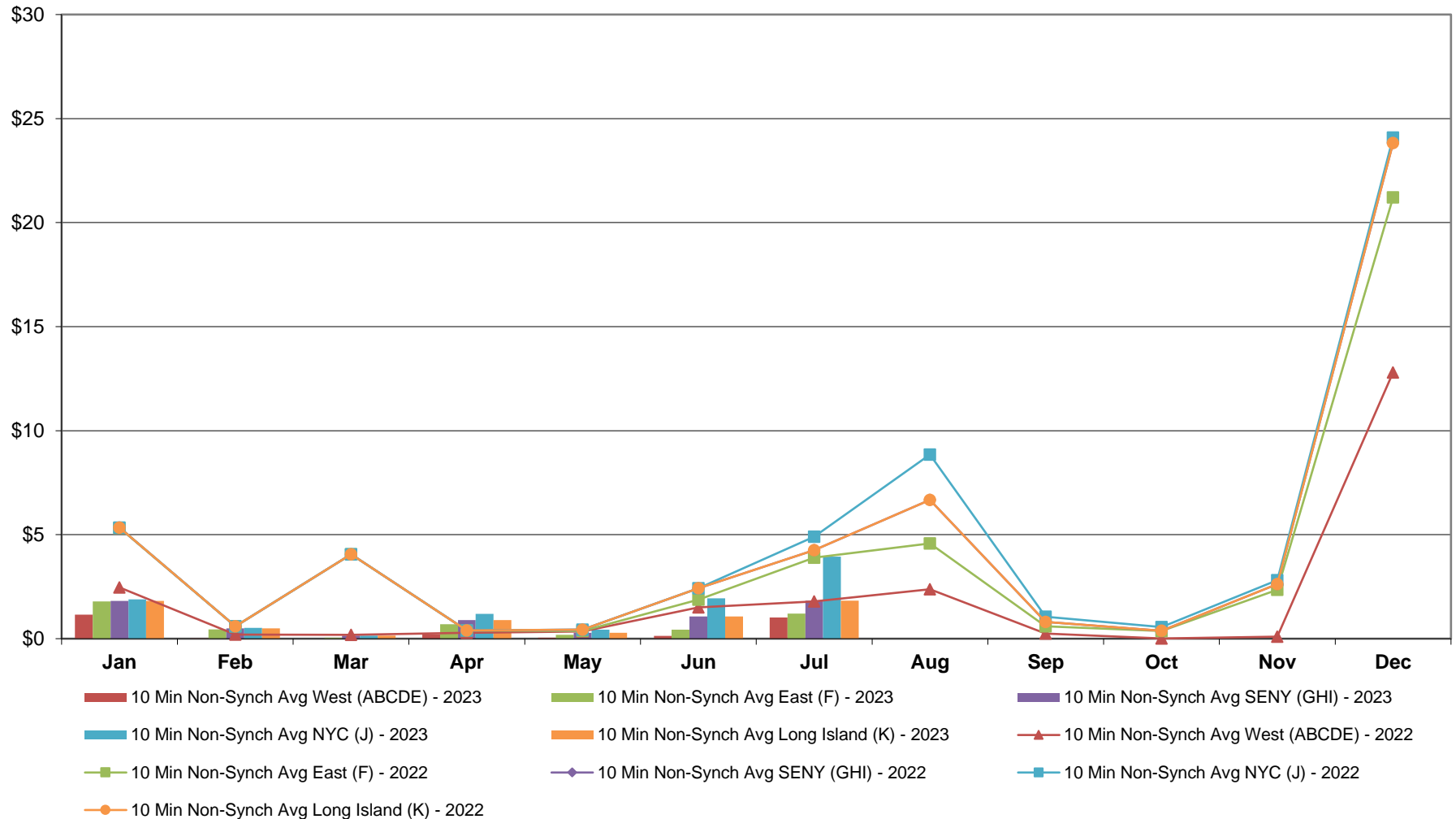


# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Spin 2022 - 2023**

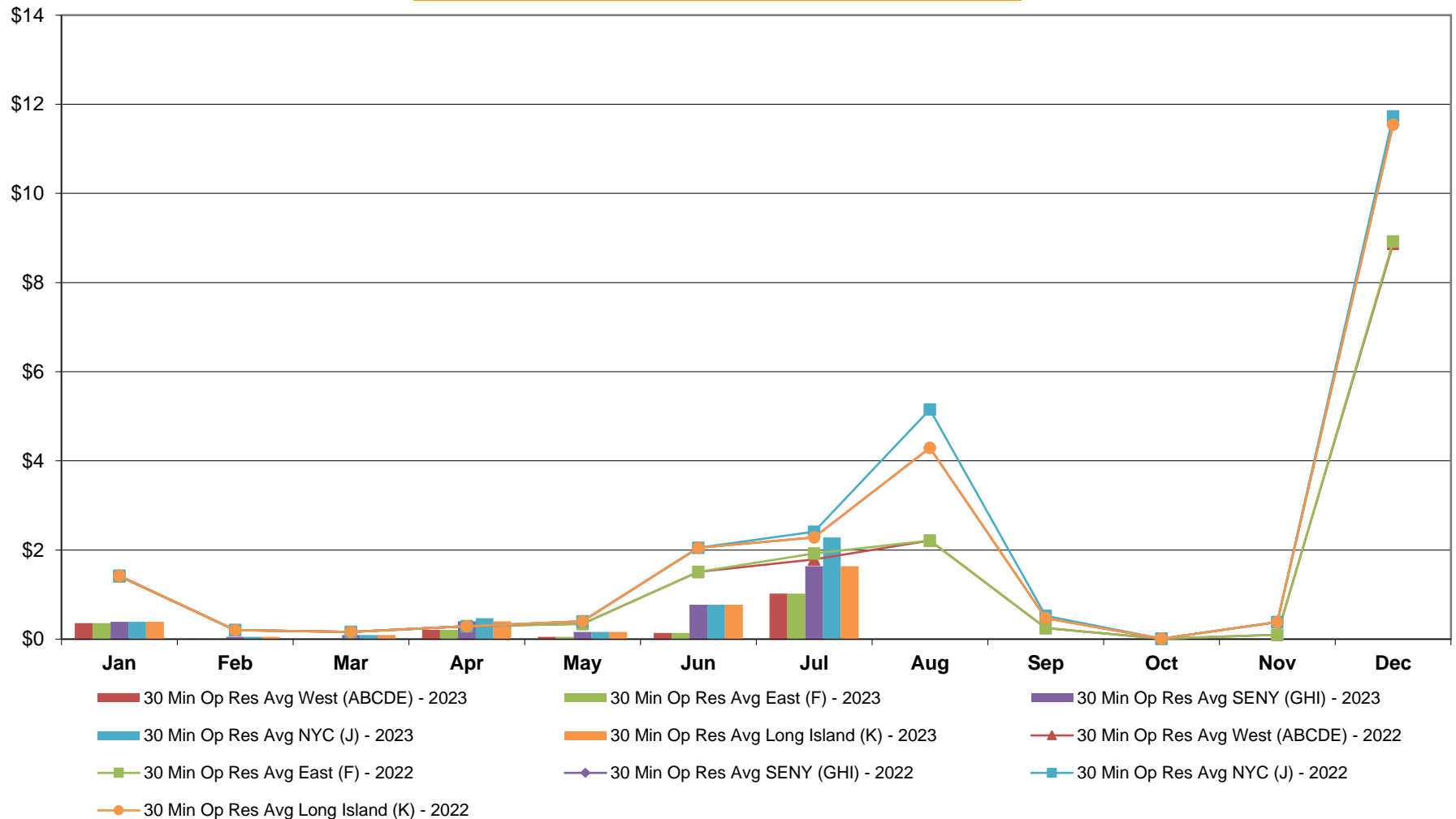




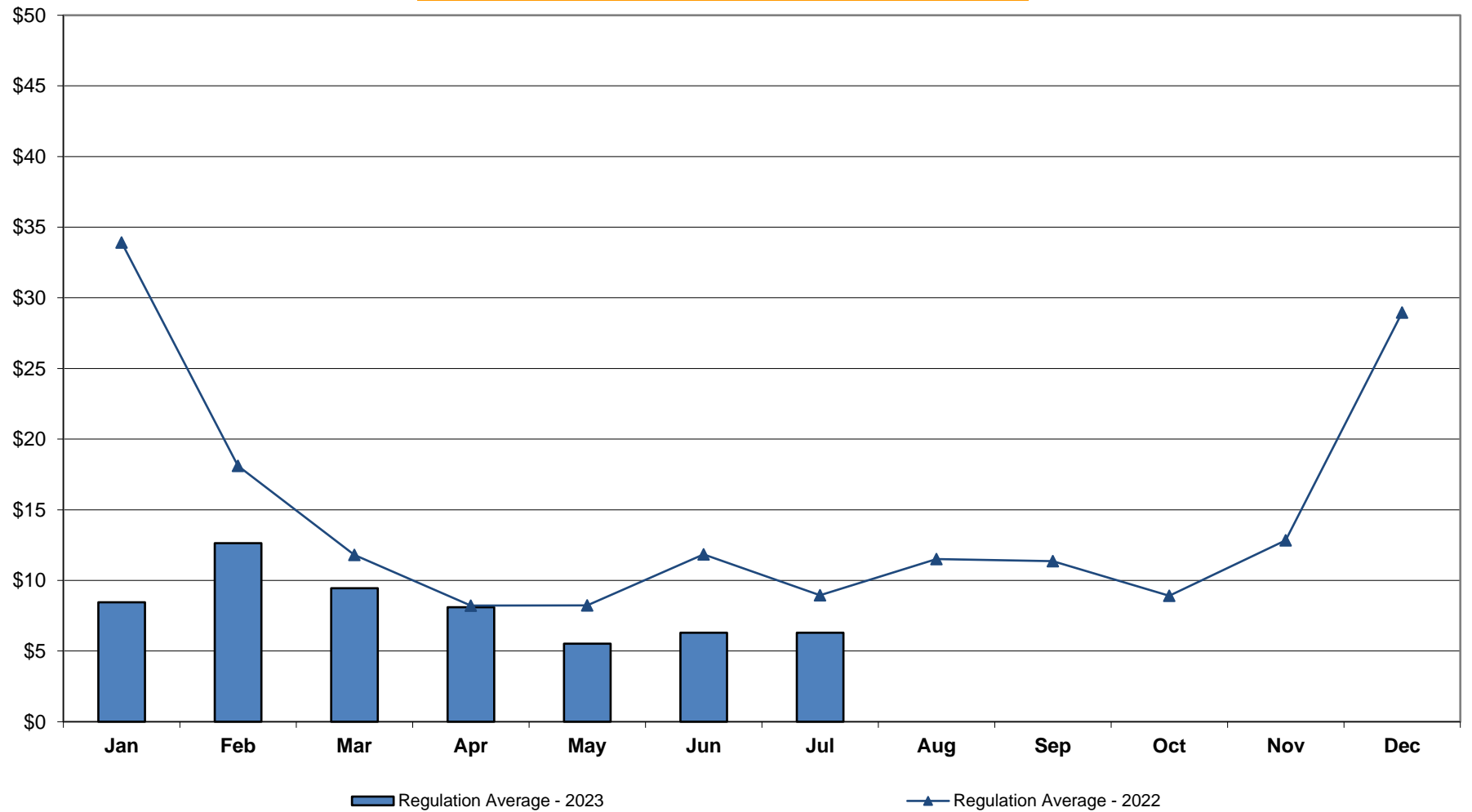
# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Non-Synch 2022 - 2023**



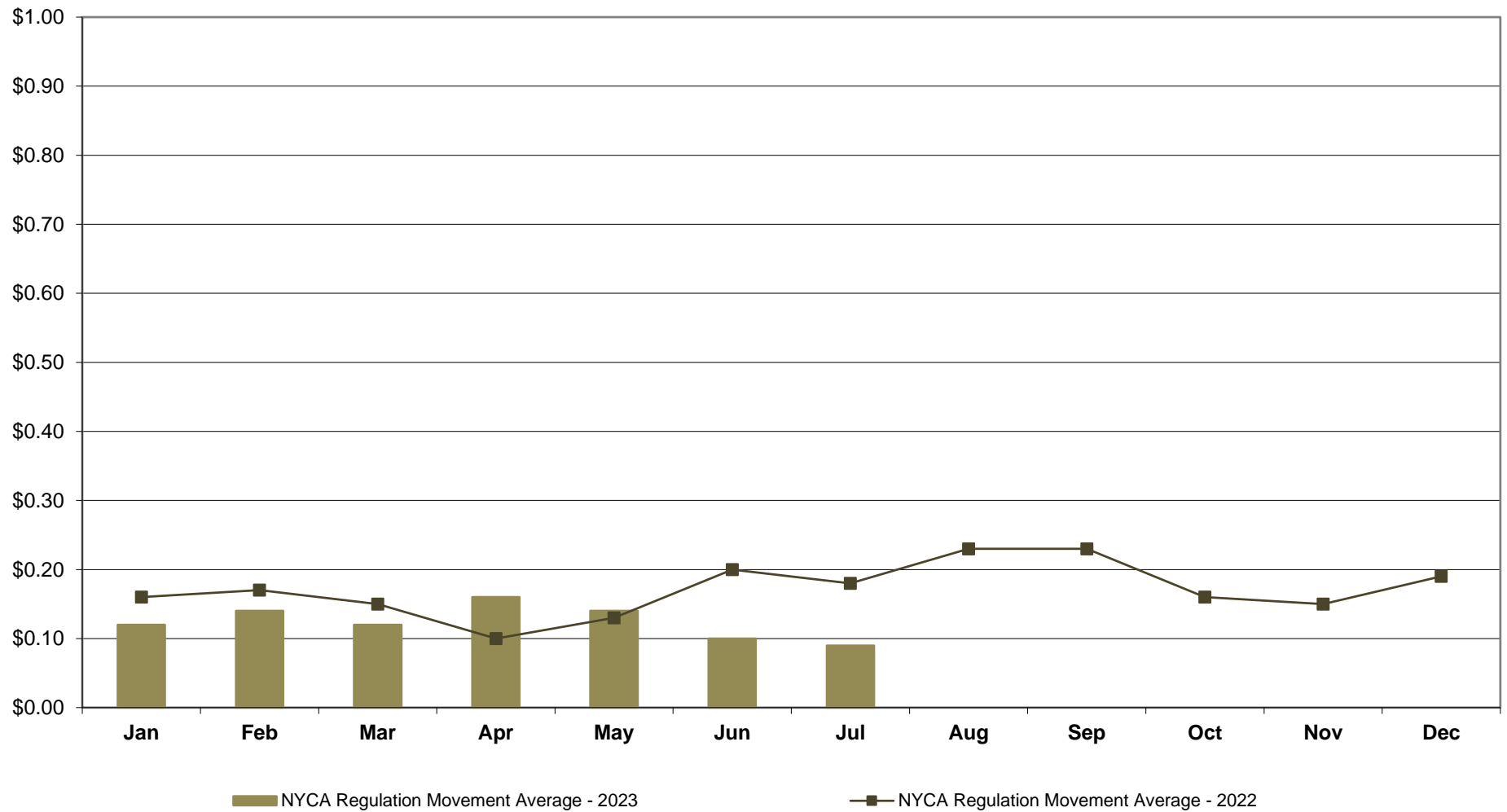
# **NYISO Monthly Average Ancillary Service Prices Real Time Market - 30 Min Op Res 2022 - 2023**



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



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



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

<b><u>2023</u></b>	<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>
<b><u>Day Ahead Market</u></b>												
10 Min Spin Long Island (K)	6.60	8.46	7.31	7.07	5.74	5.29	6.56					
10 Min Spin NYC (J)	6.63	8.68	7.38	7.20	5.81	6.37	9.18					
10 Min Spin SENY (GHI)	6.60	8.46	7.31	7.07	5.74	5.29	6.56					
10 Min Spin East (F)	6.56	8.06	7.07	6.73	5.30	4.87	6.25					
10 Min Spin West (ABCDE)	5.41	6.73	4.45	4.67	4.29	4.27	5.34					
10 Min Non Synch Long Island (K)	5.16	6.22	4.72	5.02	4.97	4.71	6.40					
10 Min Non Synch NYC (J)	5.18	6.44	4.79	5.15	5.04	5.79	9.03					
10 Min Non Synch SENY (GHI)	5.16	6.22	4.72	5.02	4.97	4.71	6.40					
10 Min Non Synch East (F)	5.12	5.82	4.48	4.68	4.52	4.28	6.10					
10 Min Non Synch West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.30					
30 Min Long Island (K)	5.15	6.02	4.65	4.83	4.61	4.51	5.59					
30 Min NYC (J)	5.15	6.14	4.70	4.95	4.61	4.59	6.70					
30 Min SENY (GHI)	5.15	6.02	4.65	4.83	4.61	4.51	5.59					
30 Min East (F)	5.11	5.62	4.42	4.49	4.16	4.09	5.28					
30 Min West (ABCDE)	5.11	5.62	4.42	4.49	4.16	4.09	5.28					
Regulation	7.82	11.71	9.65	9.88	7.36	6.37	8.66					
<b><u>2022</u></b>	<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>
<b><u>Day Ahead Market</u></b>												
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

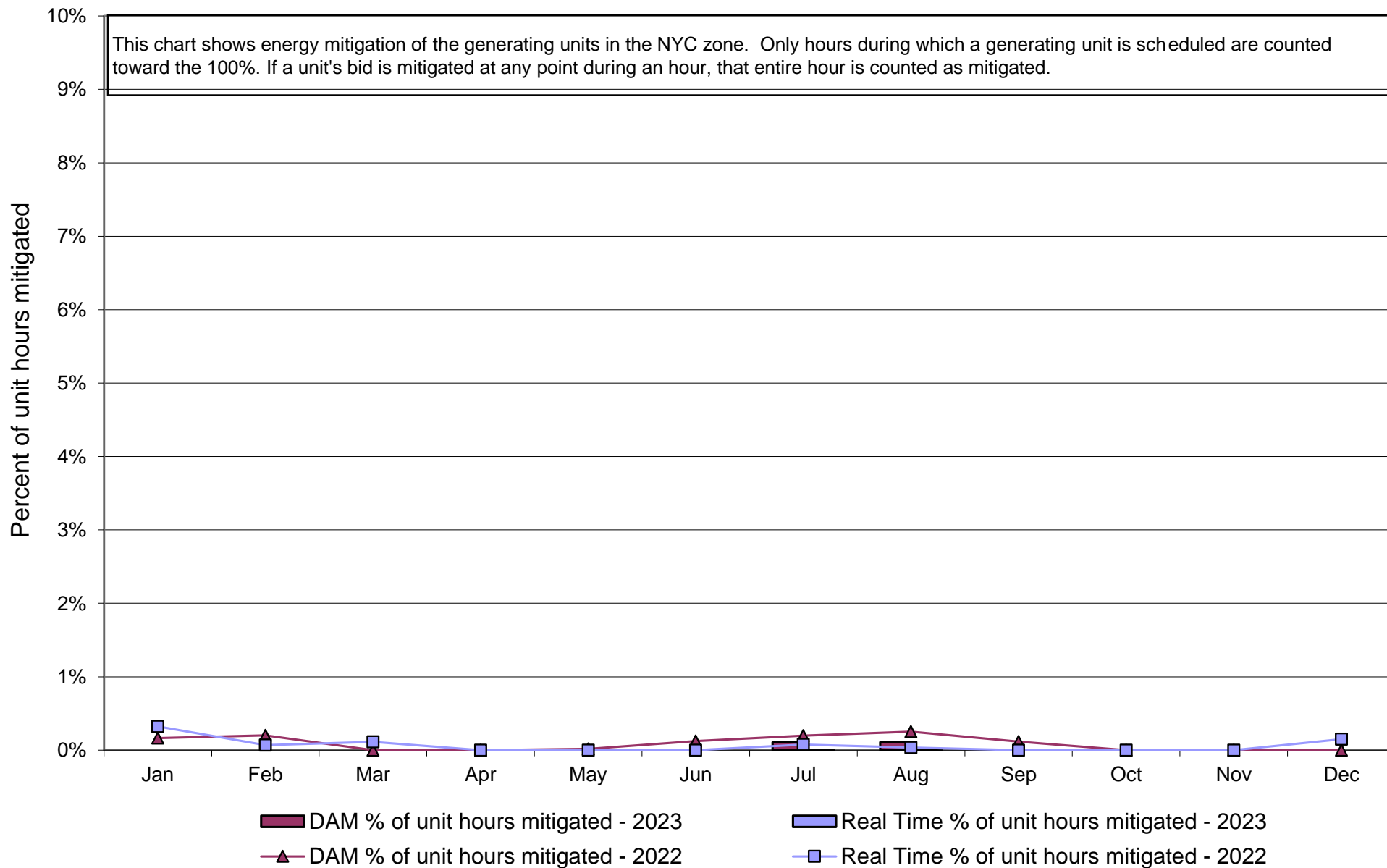
<b>2023</b>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b>RTC Market</b>												
10 Min Spin Long Island (K)	2.22	2.19	1.79	2.55	0.95	1.66	2.80					
10 Min Spin NYC (J)	2.26	2.21	1.83	2.84	1.07	2.60	4.96					
10 Min Spin SENEY (GHI)	2.22	2.19	1.79	2.55	0.95	1.66	2.80					
10 Min Spin East (F)	2.21	2.15	1.67	2.23	0.82	0.96	2.00					
10 Min Spin West (ABCDE)	1.57	0.56	0.30	0.67	0.17	0.36	1.75					
10 Min Non Synch Long Island (K)	0.86	0.26	0.14	0.65	0.27	1.07	2.63					
10 Min Non Synch NYC (J)	0.89	0.27	0.18	0.95	0.39	2.01	4.79					
10 Min Non Synch SENEY (GHI)	0.86	0.26	0.14	0.65	0.27	1.07	2.63					
10 Min Non Synch East (F)	0.85	0.22	0.02	0.34	0.14	0.37	1.83					
10 Min Non Synch West (ABCDE)	0.54	0.05	0.00	0.29	0.08	0.30	1.69					
30 Min Long Island (K)	0.16	0.10	0.13	0.61	0.21	1.00	2.48					
30 Min NYC (J)	0.16	0.10	0.15	0.68	0.22	1.00	3.16					
30 Min SENEY (GHI)	0.16	0.10	0.13	0.61	0.21	1.00	2.48					
30 Min East (F)	0.14	0.05	0.00	0.29	0.08	0.30	1.69					
30 Min West (ABCDE)	0.14	0.05	0.00	0.29	0.08	0.30	1.69					
Regulation	7.44	10.40	8.29	7.55	4.86	6.16	6.81					
NYCA Regulation Movement	0.13	0.14	0.11	0.17	0.14	0.10	0.09					
<b>2022</b>	<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>
<b>RTC Market</b>												
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 SENEY (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 SENEY (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 SENEY (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**

<b><u>2023</u></b>	<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>
<b><u>Real Time Market</u></b>												
10 Min Spin Long Island (K)	4.22	4.51	3.28	3.42	1.48	2.02	2.18					
10 Min Spin NYC (J)	4.30	4.53	3.28	3.72	1.61	2.89	4.30					
10 Min Spin SENEY (GHI)	4.22	4.51	3.28	3.42	1.48	2.02	2.18					
10 Min Spin East (F)	4.20	4.46	3.19	3.23	1.37	1.38	1.56					
10 Min Spin West (ABCDE)	3.10	2.24	0.97	0.89	0.36	0.38	1.26					
10 Min Non Synch Long Island (K)	1.81	0.50	0.15	0.89	0.29	1.07	1.83					
10 Min Non Synch NYC (J)	1.89	0.52	0.15	1.19	0.43	1.94	3.95					
10 Min Non Synch SENEY (GHI)	1.81	0.50	0.15	0.89	0.29	1.07	1.83					
10 Min Non Synch East (F)	1.79	0.45	0.05	0.70	0.19	0.43	1.21					
10 Min Non Synch West (ABCDE)	1.15	0.01	0.00	0.21	0.05	0.14	1.02					
30 Min Long Island (K)	0.39	0.05	0.09	0.40	0.16	0.77	1.64					
30 Min NYC (J)	0.39	0.05	0.09	0.47	0.16	0.77	2.28					
30 Min SENEY (GHI)	0.39	0.05	0.09	0.40	0.16	0.77	1.64					
30 Min East (F)	0.36	0.01	0.00	0.21	0.05	0.14	1.02					
30 Min West (ABCDE)	0.36	0.01	0.00	0.21	0.05	0.14	1.02					
Regulation	8.46	12.64	9.44	8.10	5.52	6.30	6.30					
NYCA Regulation Movement	0.12	0.14	0.12	0.16	0.14	0.10	0.09					
<b><u>2022</u></b>	<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>
<b><u>Real Time Market</u></b>												
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 SENEY (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 SENEY (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 SENEY (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

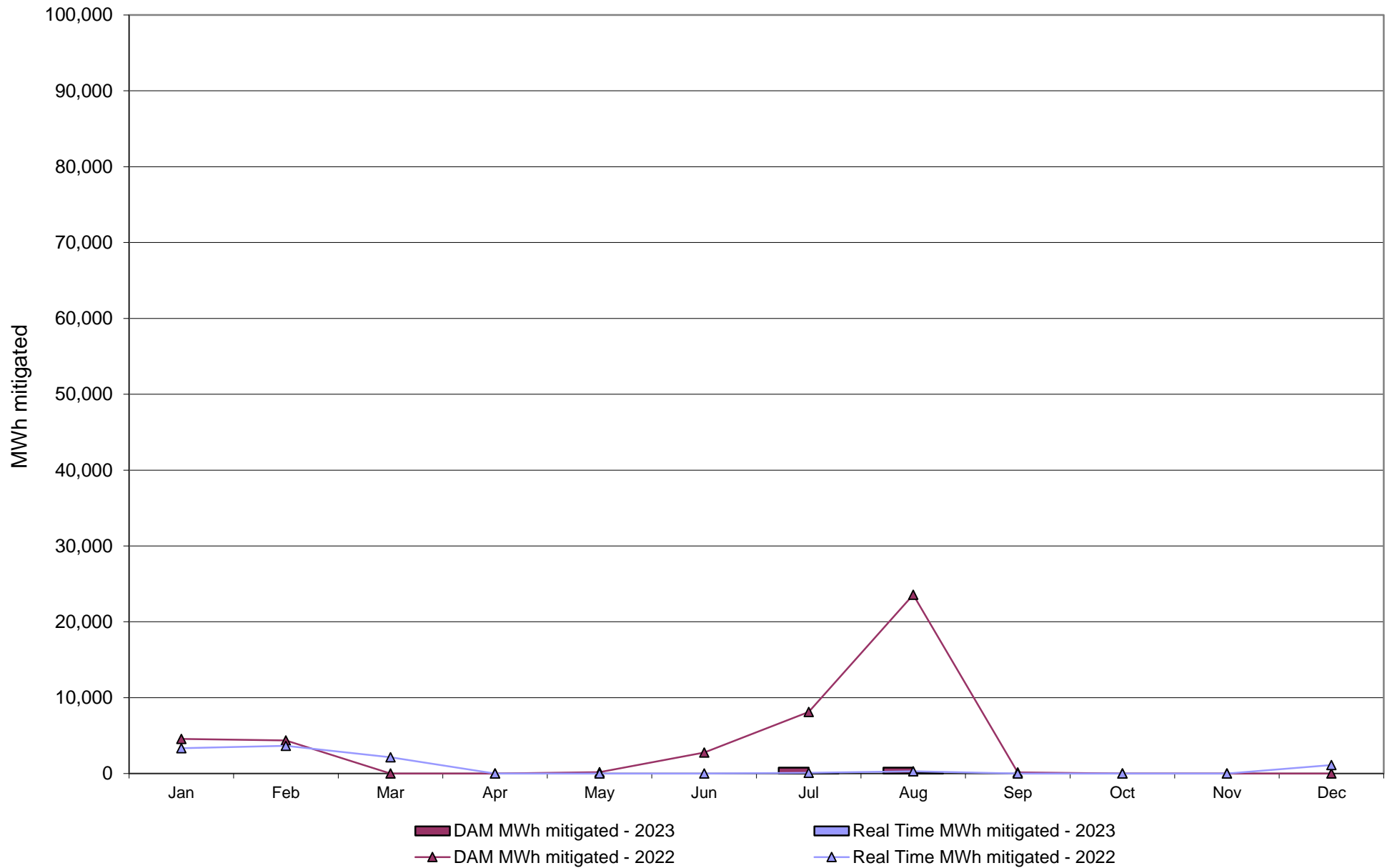
## NYISO In City Energy Mitigation - AMP (NYC Zone) 2022 - 2023

### Percentage of committed unit-hours mitigated

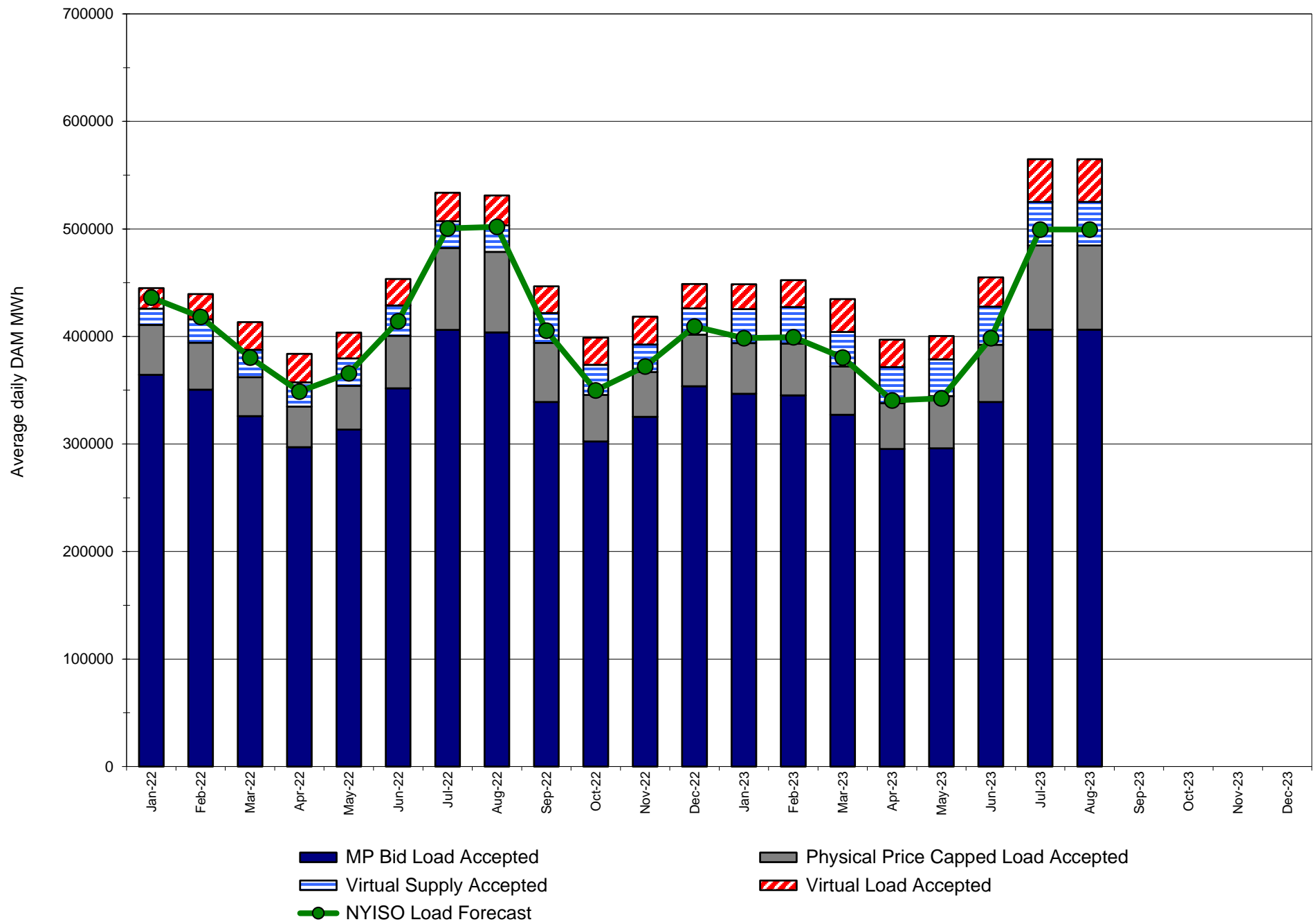




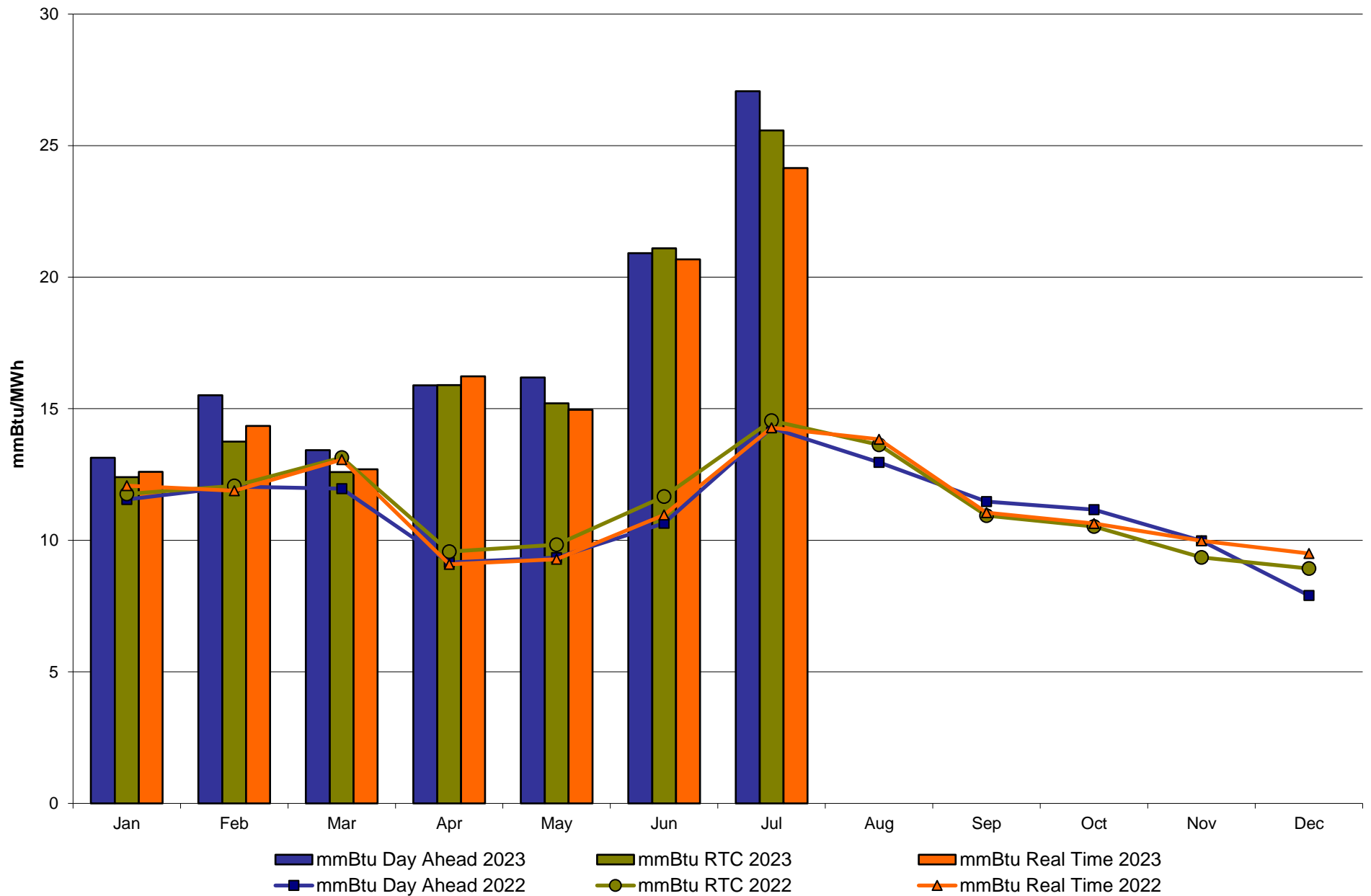
**NYISO In City Energy Mitigation (NYC Zone) 2022 - 2023**  
**Monthly megawatt hours mitigated**



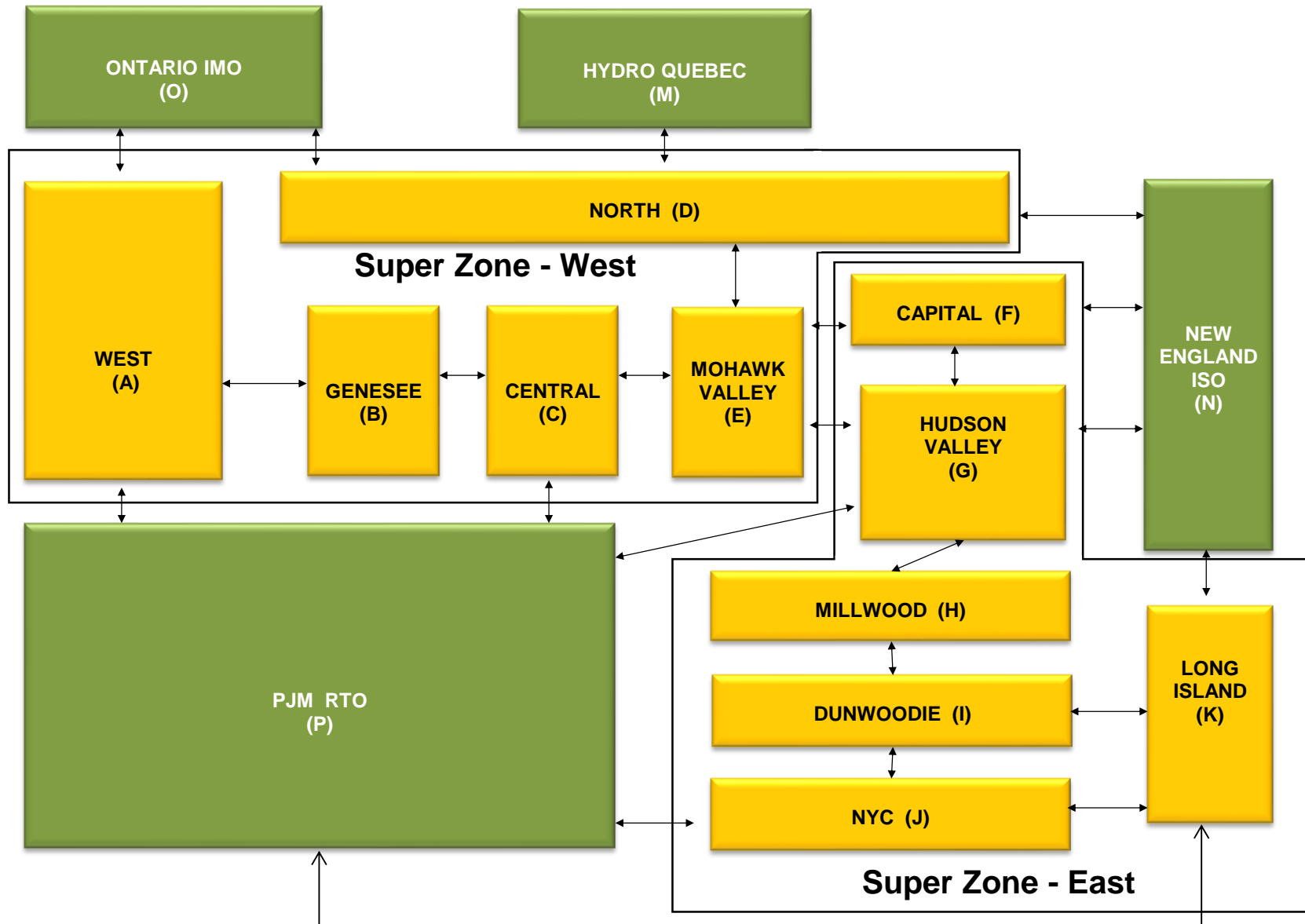
# NYISO Average Daily DAM Load Bid Summary



# 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

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

<b>Filing Date</b>	<b>Filing Summary</b>	<b>Docket</b>	<b>Order Summary</b>	<b>Order Date</b>
5/5/2023	Joint Section 205 filing of a Transmission Facility Interconnection Agreement among NYISO, Con Edison, New York Power Authority, and CHPE LLC for the Astoria-Rainey Cable and upgrades concerning the Champlain Hudson Power Express project (SA 2772).	ER23-1839-000	FERC Order accepted the executed agreement as filed, effective April 21, 2023, as requested.	7/3/2023
5/11/2023	NYISO Section 205 filing of tariff revisions to implement enhancements to its transmission constraint pricing logic.	ER23-1863-000	FERC Order accepted the NYISO's proposed revisions as filed, with a pending effective date, as requested.	7/6/2023
5/18/2023	NYISO filing of a notice of cancellation of the Second Amended and Restated Large Generator Interconnection Agreement (LGIA) in connection with the Berrians East Replacement project, among NYISO, Con Edison, and NRG Berrians East Development (SA No. 2535).	ER23-1914-000	FERC Order accepted the notice of cancellation of the second amended and restated LGIA as filed, effective July 18, 2023, as requested.	7/14/2023
5/22/2023	NYISO compliance filing to fulfill the directives of FERC's April 20, 2023 Order on the NYISO's Order No. 2222 compliance filing.	ER21-2460-005	FERC Order accepted the NYISO's May 22, 2023 compliance filing as filed, with a pending effective date, as requested.	7/21/2023
5/31/2023	Joint NYISO-New York State Electric and Gas Corporation (NYSEG) Section 205 filing of an executed Small Generator Interconnection Agreement (SGIA) among NYISO, NYSEG, and Clear View Solar for the Clear View Solar project (SA 2775).	ER23-2004-000	FERC Order accepted the SGIA as filed, effective May 16, 2023, as requested.	7/27/2023
6/1/2023	NYISO Section 205 filing of proposed tariff revisions to clarify and complement the market rules proposed in the NYISO's June 27, 2019 Distributed Energy Resources (DER) and Aggregation filing, regarding the participation of DER and Aggregations.	ER23-2040-000	FERC Deficiency Letter informed the NYISO that its Section 205 filing was deficient, and directed a deficiency response within 30 days (i.e., by August 17, 2023).	7/18/2023
6/2/2023	NYISO compliance filing to address the directives of FERC's May 19, 2023 Order, which set aside FERC's Order on Remand that affirmed the Commission's prior determination to require use of a 20-year amortization period and directs the NYISO to implement its proposed 17-year amortization period.	ER21-502-006	FERC Order found that NYISO's compliance filing complies with the directives in the May 19 Order and accepted NYISO's proposed revisions as filed, to be effective June 9, 2023, as requested.	7/17/2023

<b>Filing Date</b>	<b>Filing Summary</b>	<b>Docket</b>	<b>Order Summary</b>	<b>Order Date</b>
6/5/2023	NYISO response to FERC's May 5, 2023 deficiency letter regarding proposed tariff revisions to better align the credit requirements for Virtual and External Transactions with the risk associated with the transactions.	ER23-1307-001	FERC Order accepted the NYISO's proposed tariff changes to revise the methodology used to calculate credit requirements for Virtual and External Transactions, effective September 12, 2023, as requested.	7/25/2023
7/3/2023	NYISO Motion to Intervene and Comments re: Bull Run Energy, LLC request for waiver of the requirements for the Project to satisfy a regulatory milestone pursuant to Sections 25.6.2.3.2 and 30.11.1 of the OATT within six months of the NYISO's tender of the Large Generator Interconnection Agreement.	ER23-2140-000		
7/6/2023	NYISO informational submittal of the Con Edison System Restoration Plan.	ER12-2568-000		
7/7/2023	NYISO submittal to FERC of an Answer to a protest of the NYISO's proposed tariff revisions concerning the participation of DER and Aggregations.	ER23-2040-000		
7/14/2023	NYISO amendment filing to its October 20, 2022 filing of technical corrections, to amend Services Tariff Section 23.2.1 to include certain defined terms that were effective as of September 8, 2020 but were inadvertently omitted in the October 2022 filing.	ER19-467-009		
7/20/2023	Joint NYISO-NMPC Section 205 filing of a Small Generator Interconnection Agreement among NYISO, Niagara Mohawk Power Corporation d/b/a National Grid, and SunEast Flat Hill Solar LLC for the Flat Hill Solar Project (SA 2777).	ER23-2453-000		
7/20/2023	Joint NYISO-National Grid Section 205 filing of an executed Small Generator Interconnection Agreement among NYISO, National Grid, and SunEast Grassy Knoll Solar for the Grassy Knoll Solar Project (SA 2778).	ER23-2454-000		
7/24/2023	Joint NYISO-RG&E Section 205 filing of an executed Engineering, Procurement, and Construction (EPC) Agreement among NYISO, Rochester Gas and Electric Corporation (RG&E) and Excelsior Energy Center, LLC for the Excelsior Energy Center Project (SA2774).	ER23-2476-000		

<b>Filing Date</b>	<b>Filing Summary</b>	<b>Docket</b>	<b>Order Summary</b>	<b>Order Date</b>
7/28/2023	NYISO filing of its Electric Quarterly Report in accordance with FERC Order 2001.	ER02-2001-000		
7/31/2023	NYISO filing of the Quarterly Reliability Project Tracking report to the NYPSC Records Access Officer	Matter No. 10-02007		
7/31/2023	NYISO Motion to Intervene and Comments re: Hecate Grid Swiftsure, LLC (Hecate) request for waiver of the requirements for the Project to satisfy a regulatory milestone pursuant to Sections 25.6.2.3.2 and 25.6.2.3.3 of the OATT within six months of the NYISO's tender of the Large Generator Interconnection Agreement (LGIA).	ER23-2455-000		