

# **Monthly Report**

A Report by the New York Independent System Operator

November 2022



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# Operations Performance Metrics Monthly Report









### November 2022 Report

# Operations & Reliability Department New York Independent System Operator



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### **November 2022 Operations Performance Highlights**

- November 2022 peak load of 20,358 MW occurred on 11/21/2022 HB 17
- Winter 2022-2023 capability period peak load to date of 20,358MW occurred on 11/21/2022 HB 17
- All-time winter capability period peak load of 25,738 MW occurred on 01/07/2014 HB 18
- 0.0 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	Front-of-the-Meter	Energy Storage	
	Solar	Solar	Resource (ESR)	
2,191 MW	4,184 MW	94 MW	20 MW	

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

	Current Month	Year-to-Date
	Value (\$M)	Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$11.36	\$40.76
NY Savings from PJM-NY Coordinated Transaction Scheduling	\$0.09	\$1.53
NY Savings from NE-NY Coordinated Transaction Scheduling	(\$0.35)	\$8.11
Total NY Savings	\$11.10	\$50.40
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.63	\$6.65
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.09	\$3.35
Total Regional Savings	\$0.72	\$10.00

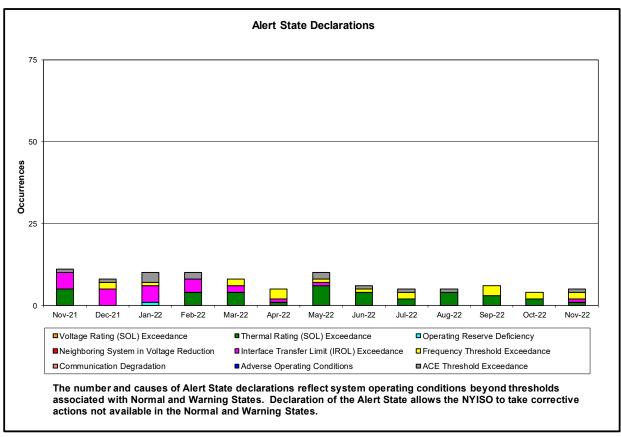
- Statewide uplift cost monthly average was (\$0.74)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

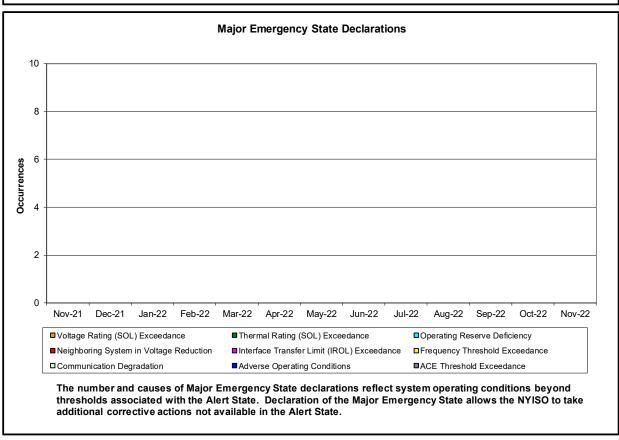
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
December 2022 Spot Price	\$2.06	\$2.06	\$2.06	\$2.06
November 2022 Spot Price	\$1.54	\$1.54	\$1.54	\$1.54
Delta	\$0.52	\$0.52	\$0.52	\$0.52

Price increase from November to December 2022 is driven by an increase in Unoffered MW

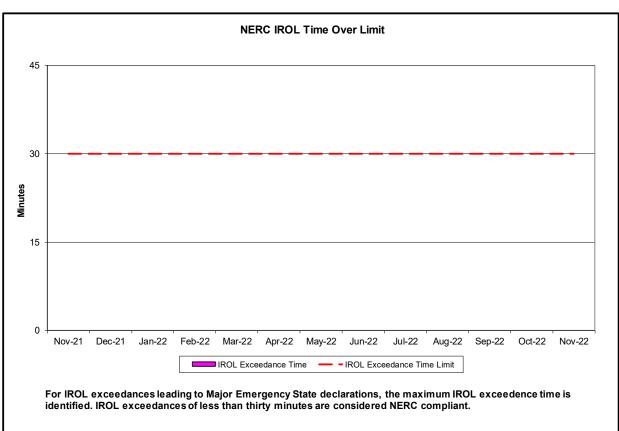


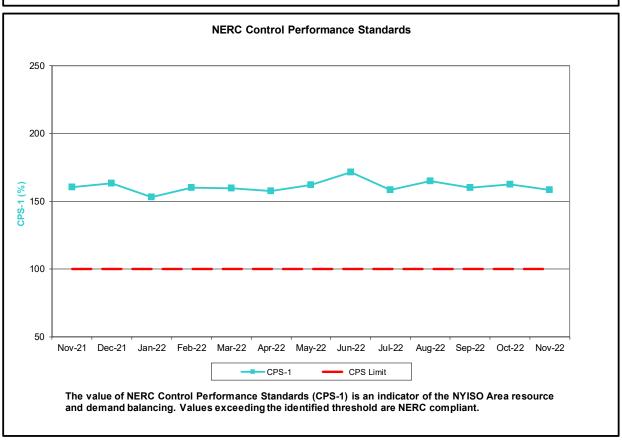
#### **Reliability Performance Metrics**

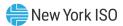


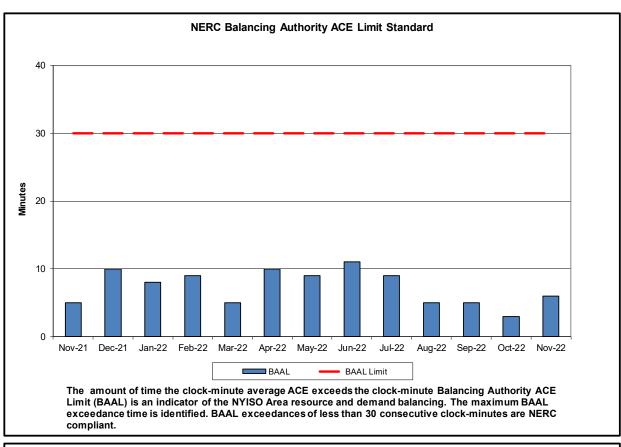


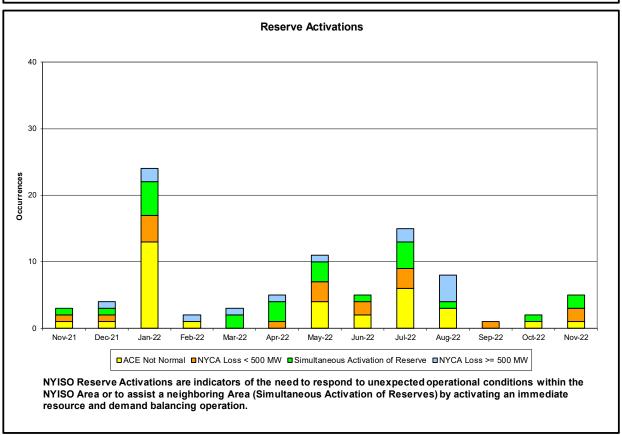




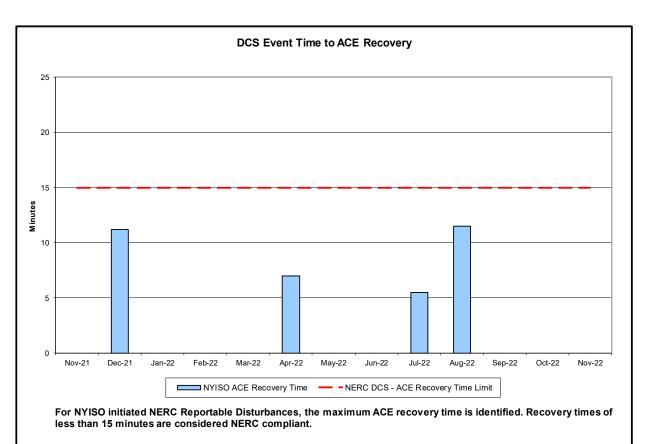


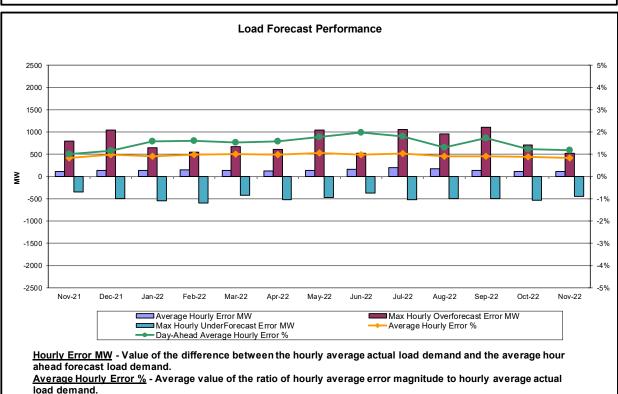






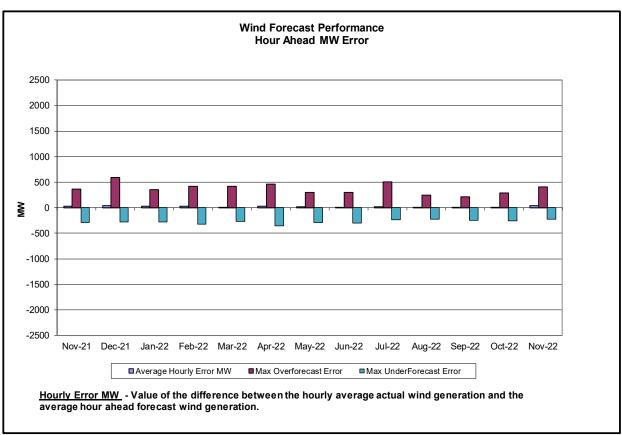


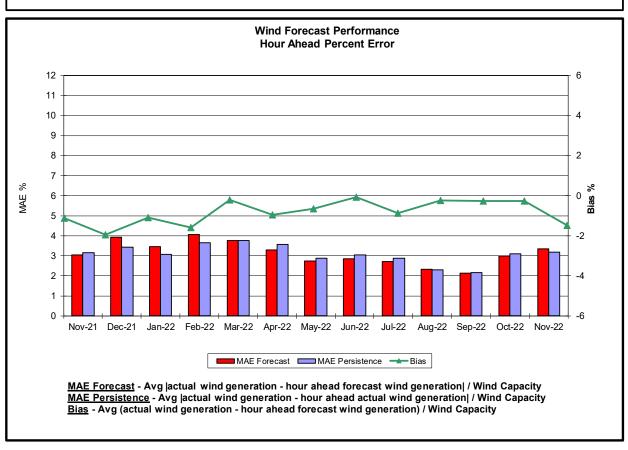




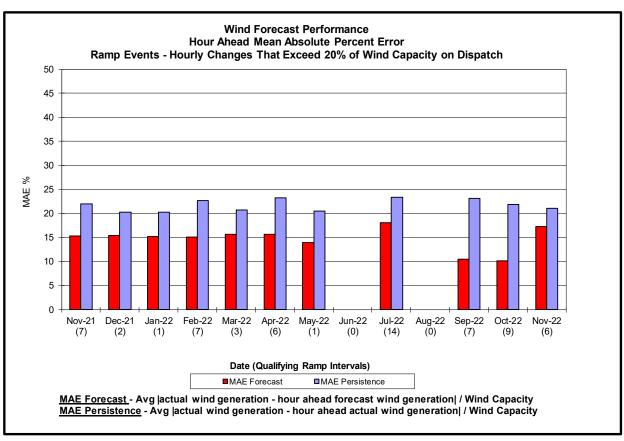
<u>Day-Ahead Average Hourly Error</u> % - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

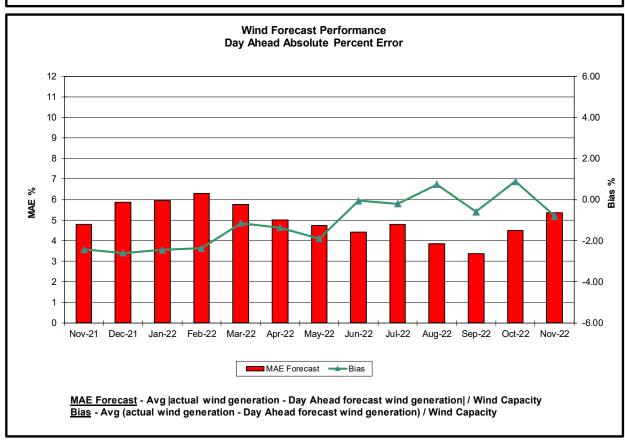




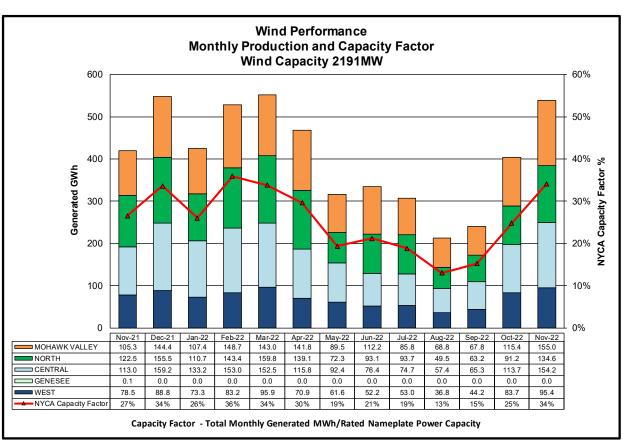


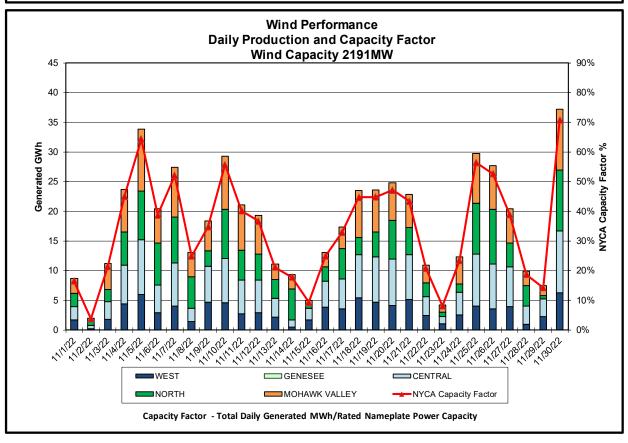




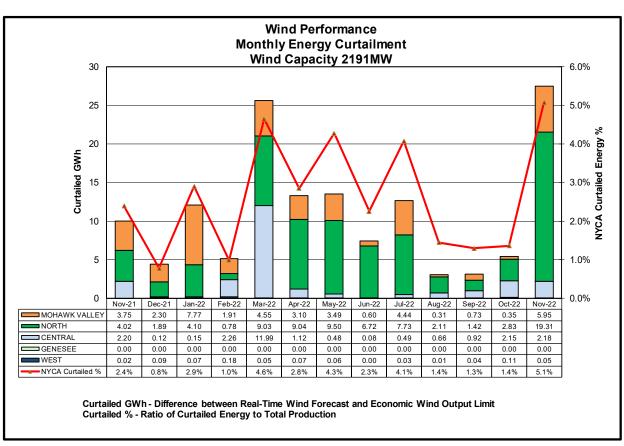


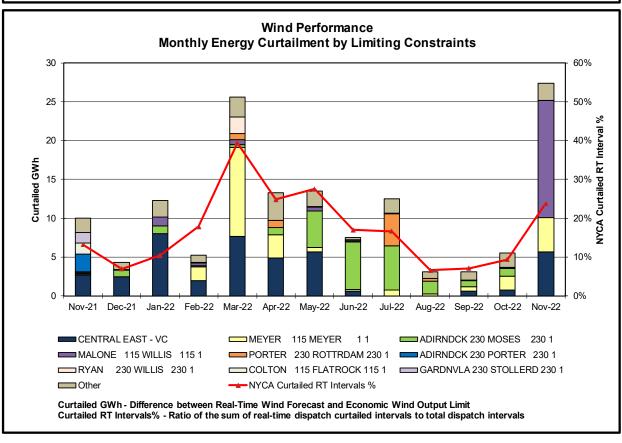




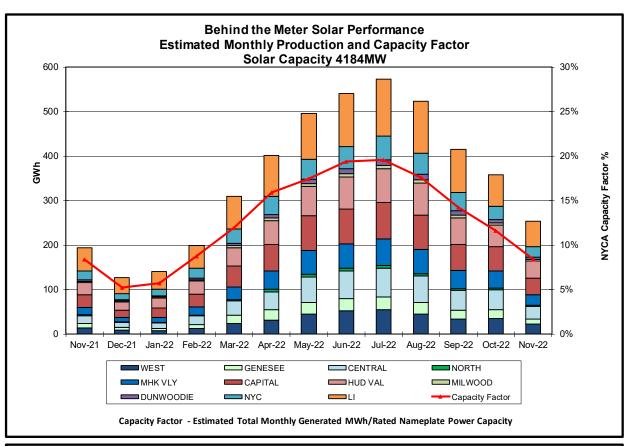


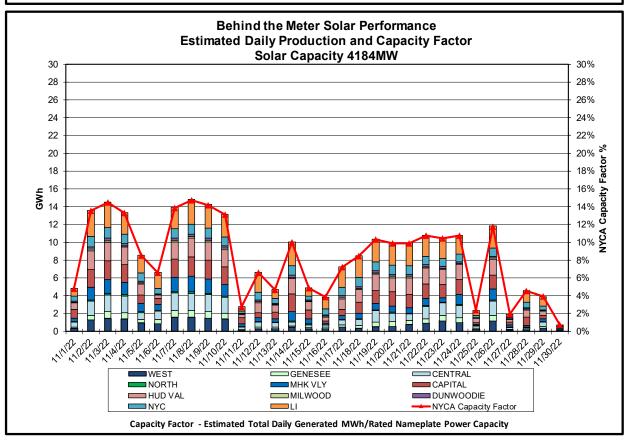




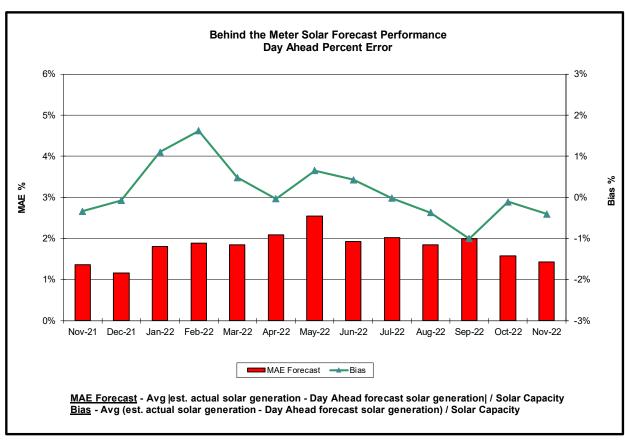


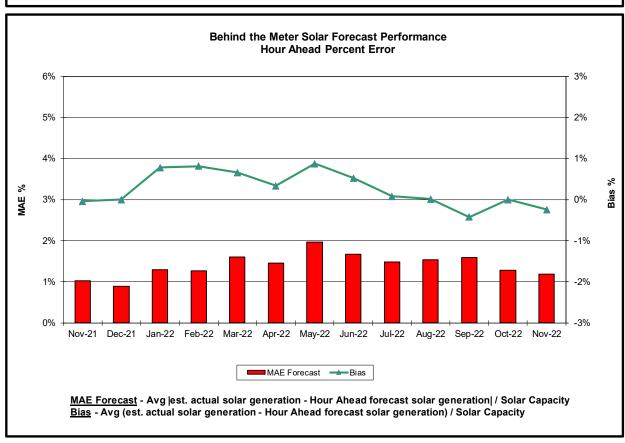




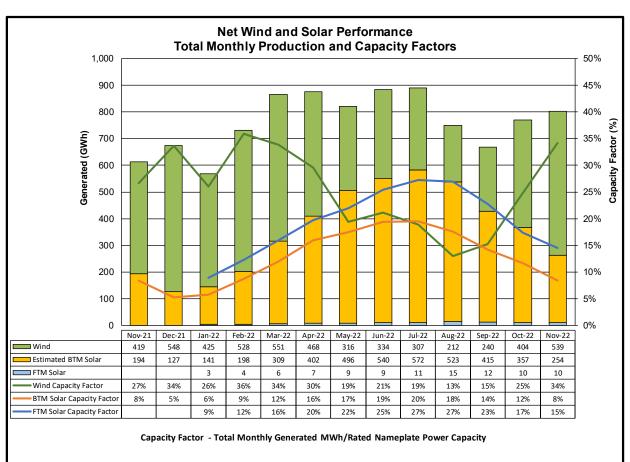


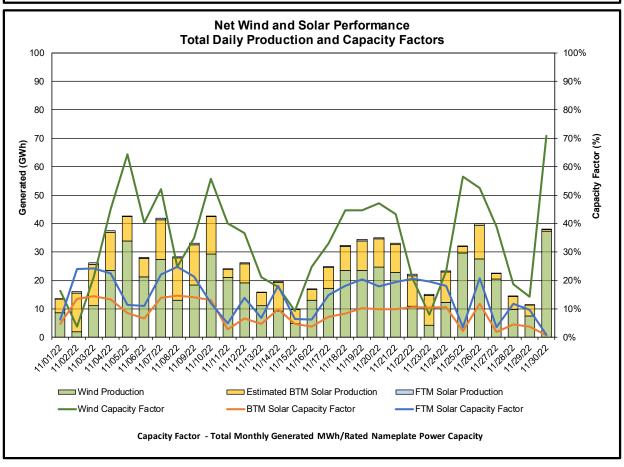




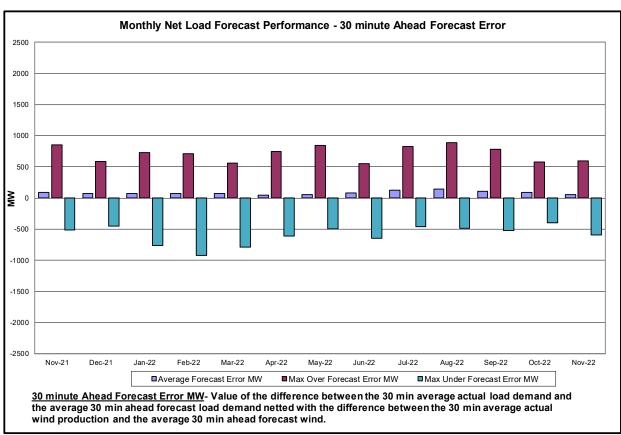


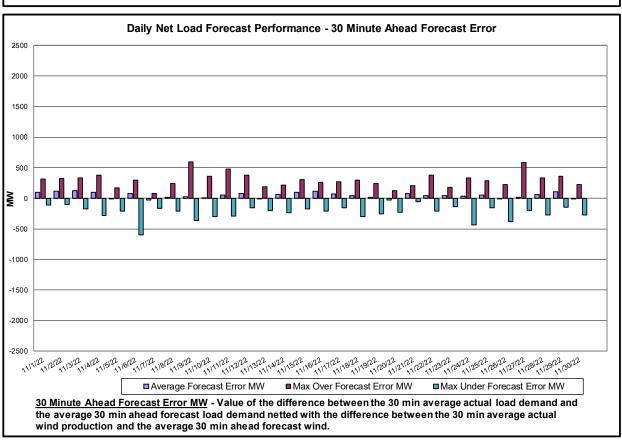




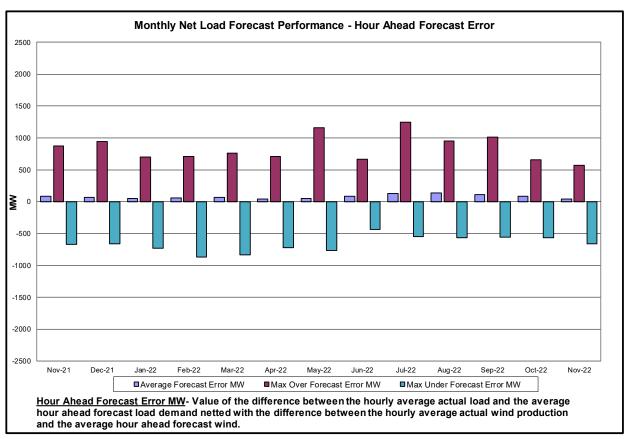


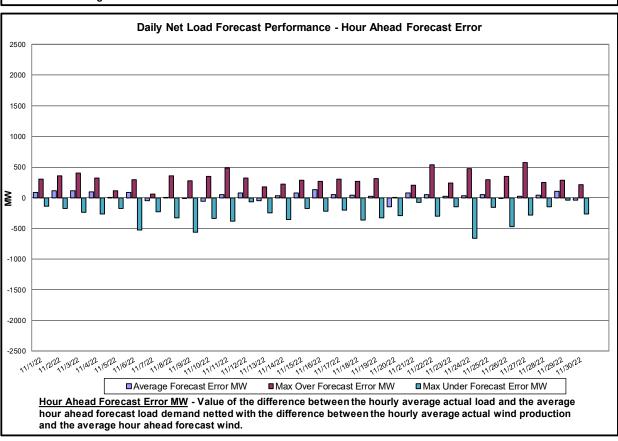




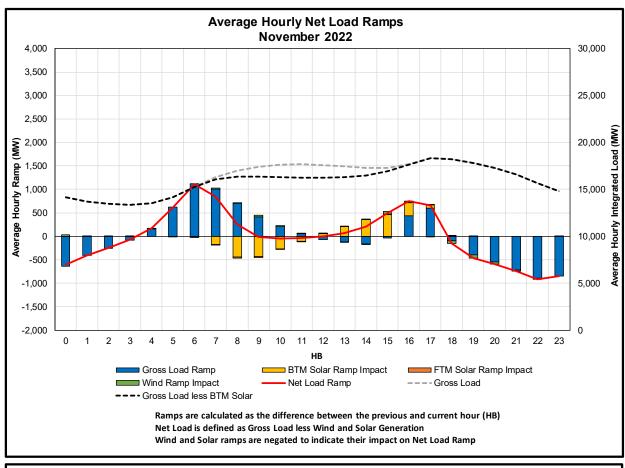


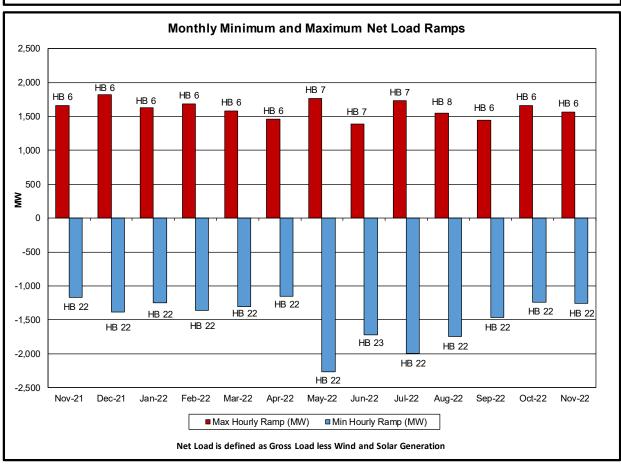




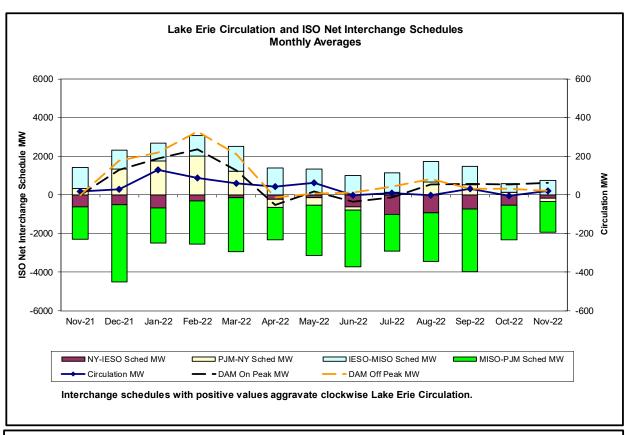


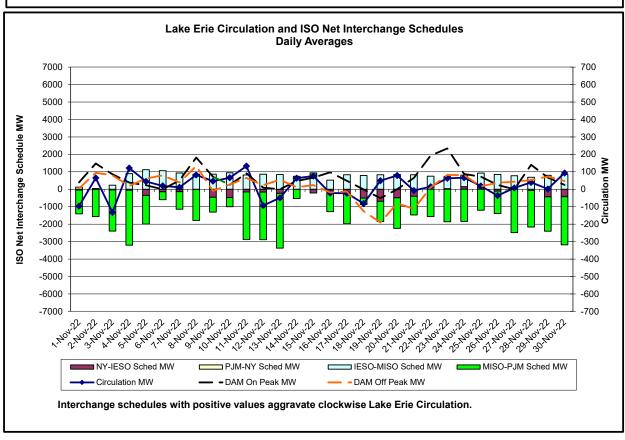






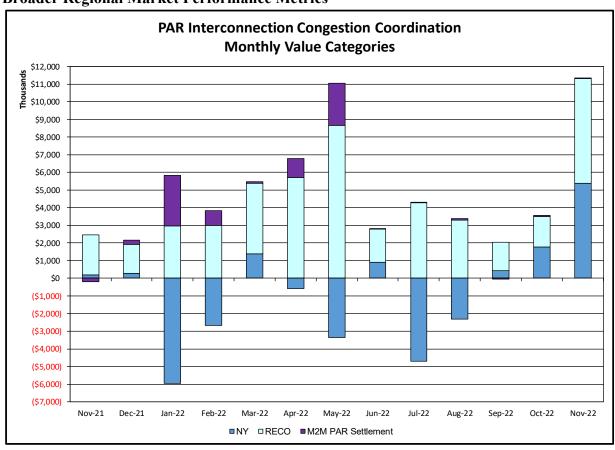


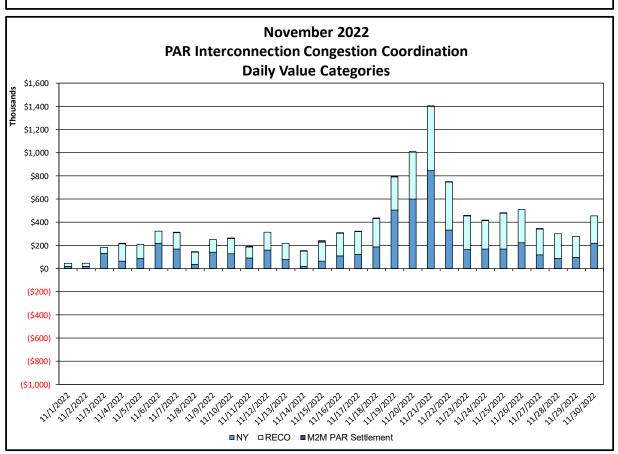






#### **Broader Regional Market Performance Metrics**







#### PAR Interconnection Congestion Coordination

<u>Category</u> <u>Description</u>

NY Represents the value NY realizes from Market-to-Market PAR Coordination when

experiencing congestion. This is the estimated savings to NY for additional deliveries into NY

RECO Represents the value of PJM's obligation to deliver 80% of service to RECO load over

Ramapo 5018. This is the estimated reduction in NYCA congestion due to the PJM delivery

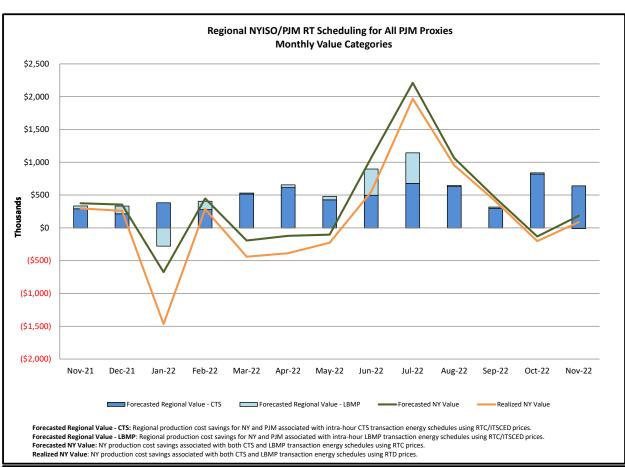
of RECO over Ramapo 5018.

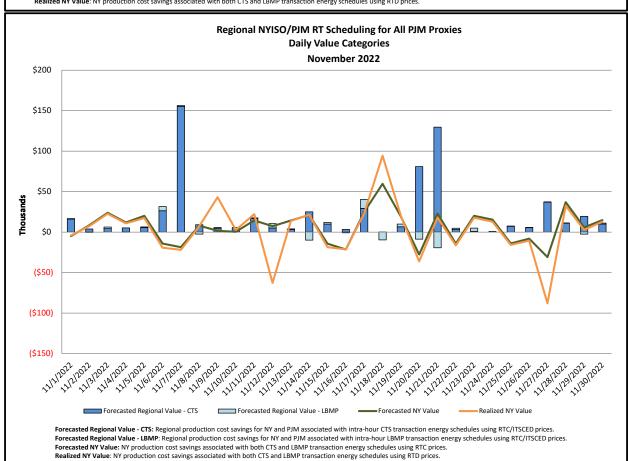
M2M PAR Settlement Market-to-Market PAR Coordination settlement on coordinated flowgates. Through April 2017

this value was included in the NY and RECO categories. The positive sign convention  $\,$ 

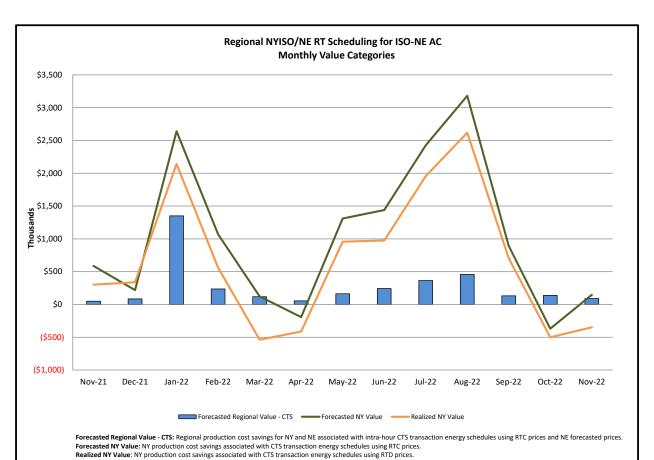
indicates settlement to NY while the negative indicates settlement to PJM.

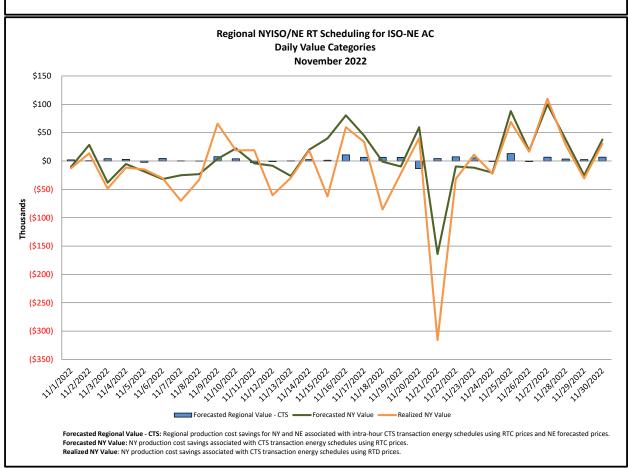






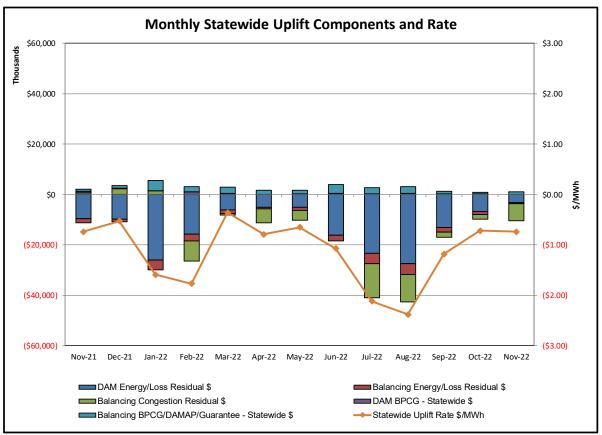




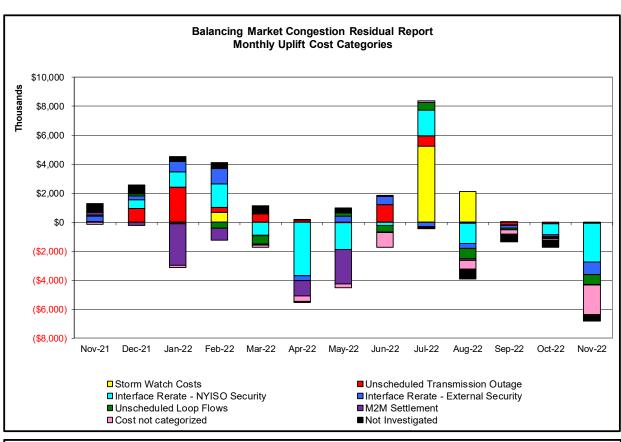


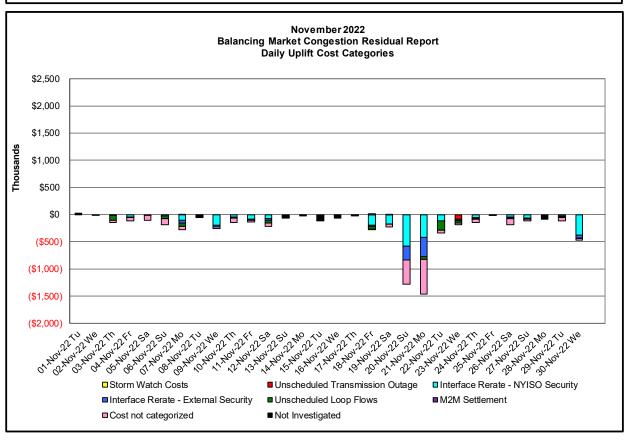


#### Market Performance Metrics







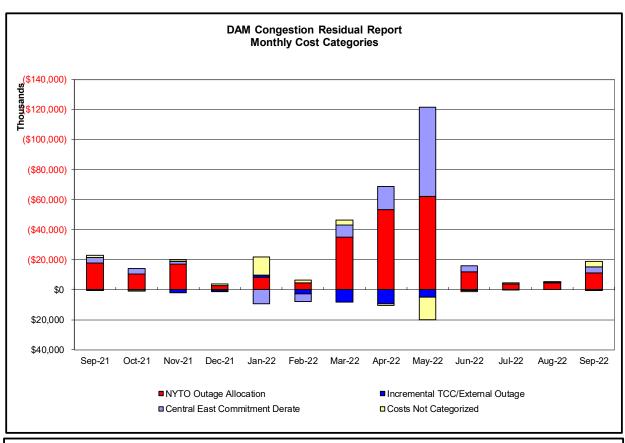


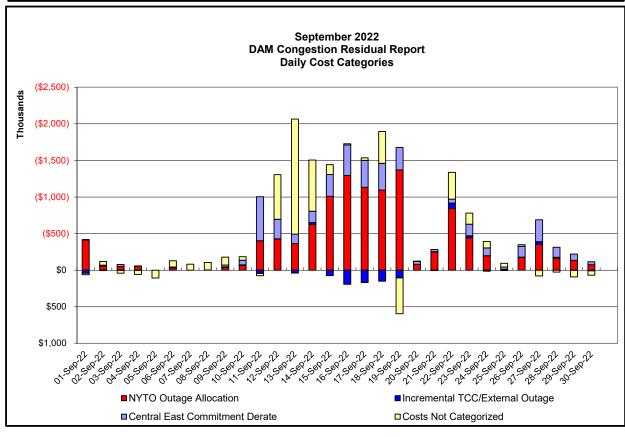


Day's in	vestigated in November: 3,4,5,6,7,9,10,11,12,18,19,20,21,22,23,24,26,27,29,30	
Event	Description	November Dates
	Early return to service Ramapo-Buchanan 345kV (#Y94)	23
	Forced outage Gowanus-Greenwood 138KV (#42231)	7
	Derate Central East	7,19,21,24
	Derate Foxhills-Willowbrook 138kV (#29231) I/o FOXHLLS-WILLWBRK_138_29212&BK2	7
	Derate Lake Success-Shore Rd. 138kV (#368)	7
	Derate Malone-Willis 115kV (1-910) I/o MOSESWILLIS230_MW1	7
	NYCA DNI Ramp Limit	5,7,9,11,12,18-22,24,27,30
	Uprate Central East	3-7,9-12,18-24,26,27,29,30
	Uprate CricketValley-PleasantValley 345kV (#F83) I/o CricketValley-PleasantValley 345kV (#F84)	19
	Uprate Motthaven-Dunwoodie 345kV (#72) I/o \$SCB:W49TH_ST(6):M55&BK5&BK13	19
	Uprate Northport-Pilgrim 138kV (#672) I/o BUS:NRTHPRT 677 & PS2 & G2	9
	IESO_AC ACTIVE DNI Ramp Limit	4,9,18,21
	NE_AC - NY Scheduling Limit	9,12,18,20,21
	NE_AC ACTIVE DNI Ramp Limit	3,7,10,12,19-24,26,29,30
	NE_NNC1385 - NY Scheduling Limit	24
	PJM_AC ACTIVE DNI Ramp Limit	6,22,23,26
	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East	3,5-7,10-12,18-24,26,27,29,30
	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West	7,10,11,18,21,22,29,30

Category Storm Watch	Cost Assignment Zone J	Events Types Thunderstorm Alert (TSA)	Event Examples TSA Activations
Com Water	Zone o	munderstorm Alert (162)	TOA ACUVALIONS
Transmission Outage Mismatch	Market-wide	Changes in DAM to RTM transfers related to transmission outage	Forced Line Outage, Unit AVR Outages
		mismatch	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
		not related to transmission outage	due to Kim Voltages
Interface Rerate - External Security	Market-wide	Changes in DAM to RTM transfers related to External Control Area	TLR Events, External Transaction
		Security Events	Curtailments
Unscheduled Loop Flows	Market-wide	Changes in DAM to RTM	DAM to RTM Lake Erie
		unscheduled loop flows impacting NYISO Interface transmission constraints	Loop Flows exceeding + 125 MW
M2M Settlement	Market-wide	Settlement result inclusive of coordinated redispatch and Ramapo flowgates	
Monthly Balancing Market Congestion Rep	ort Assumptions/No	ntes	



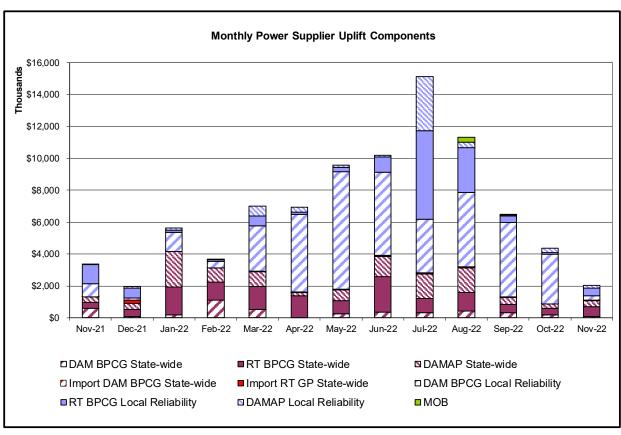


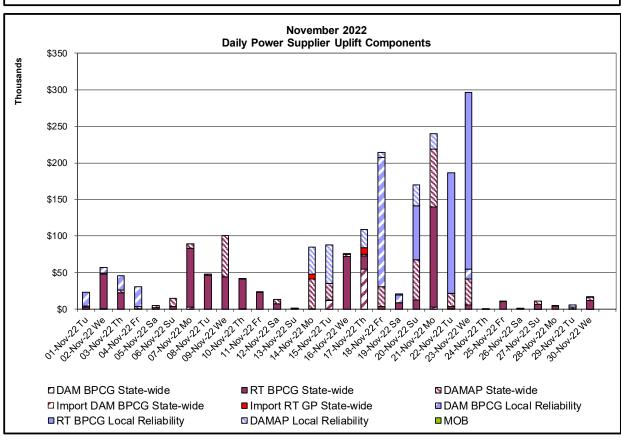




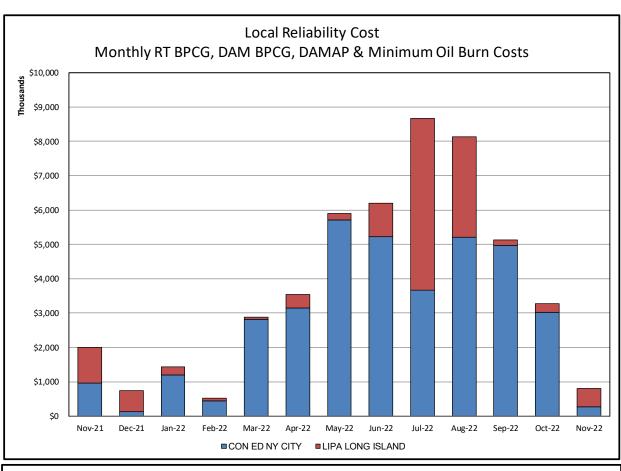
Day-Ahead Market Congestion Residual Categories				
<u>Category</u> NYTO Outage Allocation	<u>Cost Assignment</u> Responsible TO	Events Types Direct allocation to NYTO's responsible for transmission equipment status change.	Event Examples  DAM scheduled outage for equipment modeled inservice for the 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.		

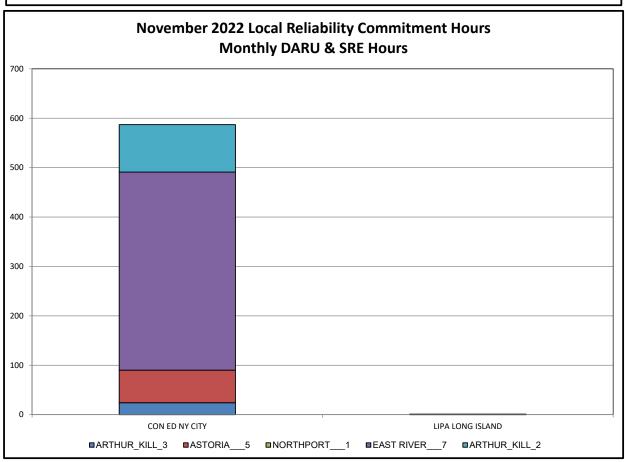




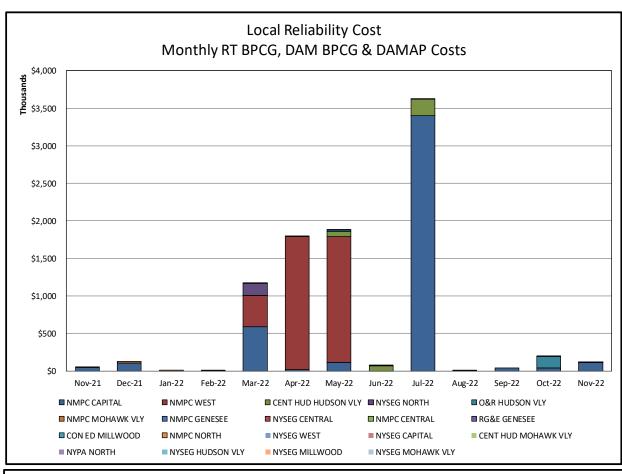


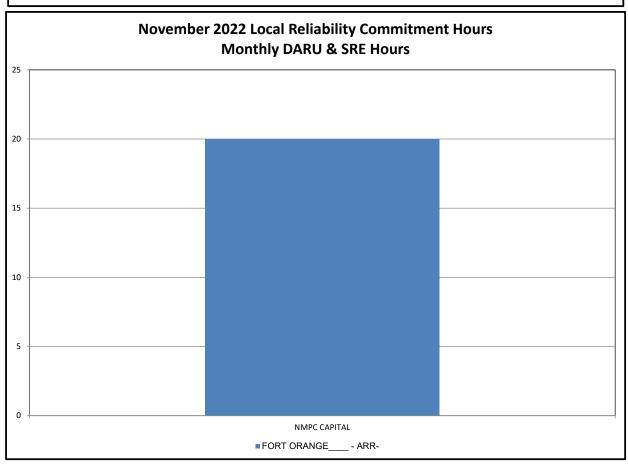




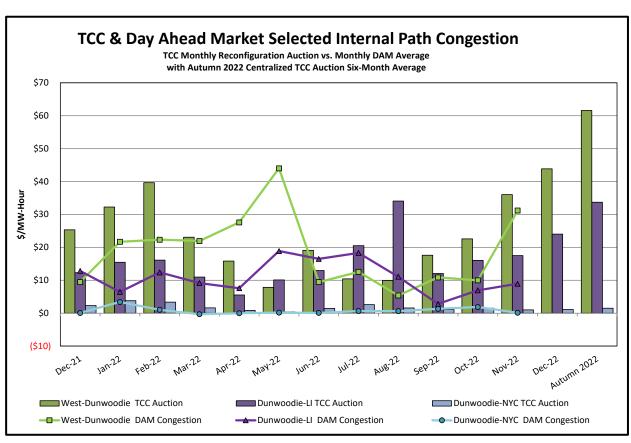


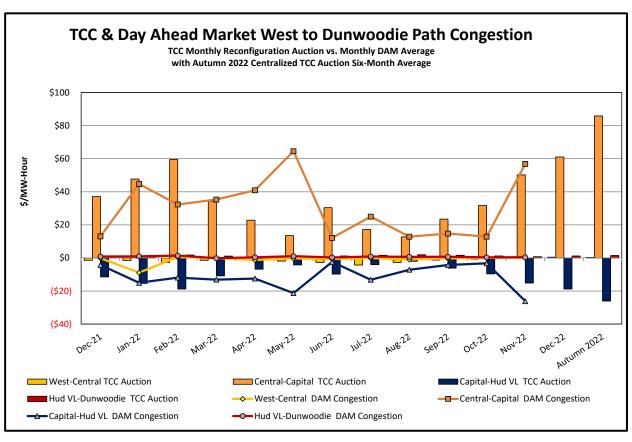




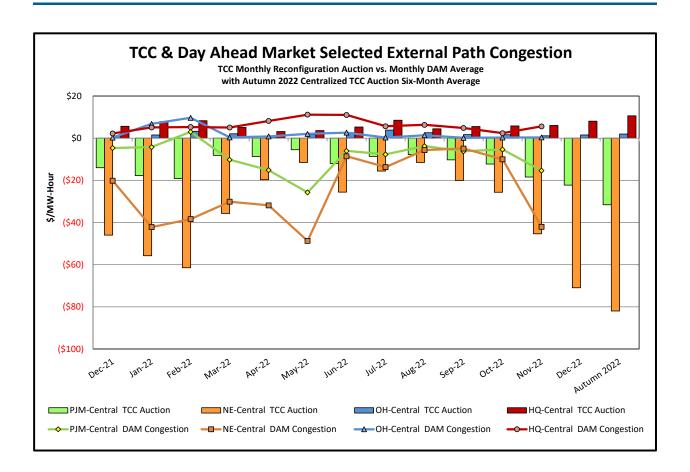




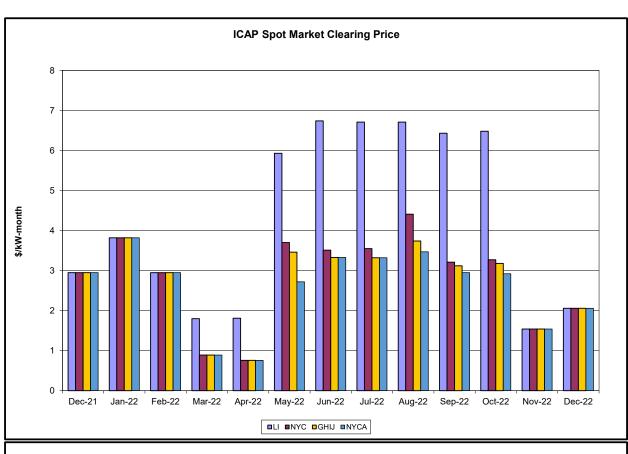


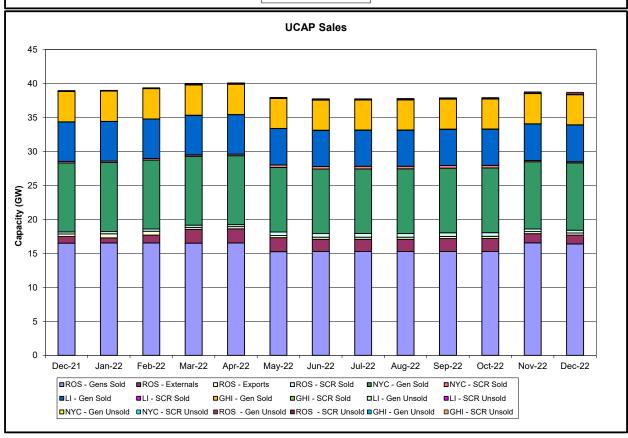








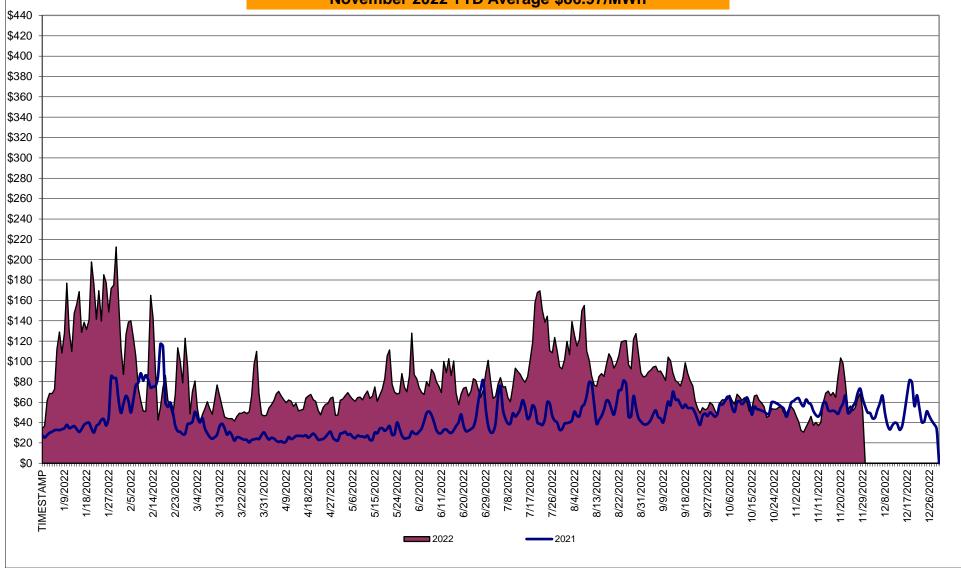




# Market Performance Highlights November 2022

- LBMP for November is \$52.47/MWh; lower than \$53.11/MWh in October 2022 and \$53.92/MWh in November 2021.
  - Day Ahead Load Weighted LBMPs are lower and Real Time Load Weighted LBMPs are mixed compared to October.
- November 2022 average year-to-date monthly cost of \$86.97/MWh is a 84% increase from \$47.29/MWh in November 2021.
- Average daily sendout is 382 GWh/day in November; higher than 359 GWh/day in October 2022 and lower than 387 GWh/day in November 2021.
- Natural gas prices are higher and distillate prices are lower compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$4.81/MMBtu, up from \$4.68/MMBtu in October.
  - Natural gas prices (Transco Z6 NY) are down 2.4% year-over-year.
  - Jet Kerosene Gulf Coast was \$23.64/MMBtu, down from \$27.55/MMBtu in October.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$29.63/MMBtu, down from \$30.66/MMBtu in October.
  - Distillate prices are up 58.7% year-over-year.
- Uplift per MWh is lower compared to the previous month.
  - Uplift (not including NYISO cost of operations) is (\$0.68)/MWh; lower than (\$0.45)/MWh in October.
    - Local Reliability Share is \$0.06/MWh, lower than \$0.27/MWh in October.
    - Statewide Share is (\$0.74)/MWh, lower than (\$0.72)/MWh in October.
  - TSA \$ per NYC MWh is \$0.00/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are lower than October.

# Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\* 2021 Annual Average \$47.59/MWh November 2021 YTD Average \$47.29/MWh November 2022 YTD Average \$86.97/MWh

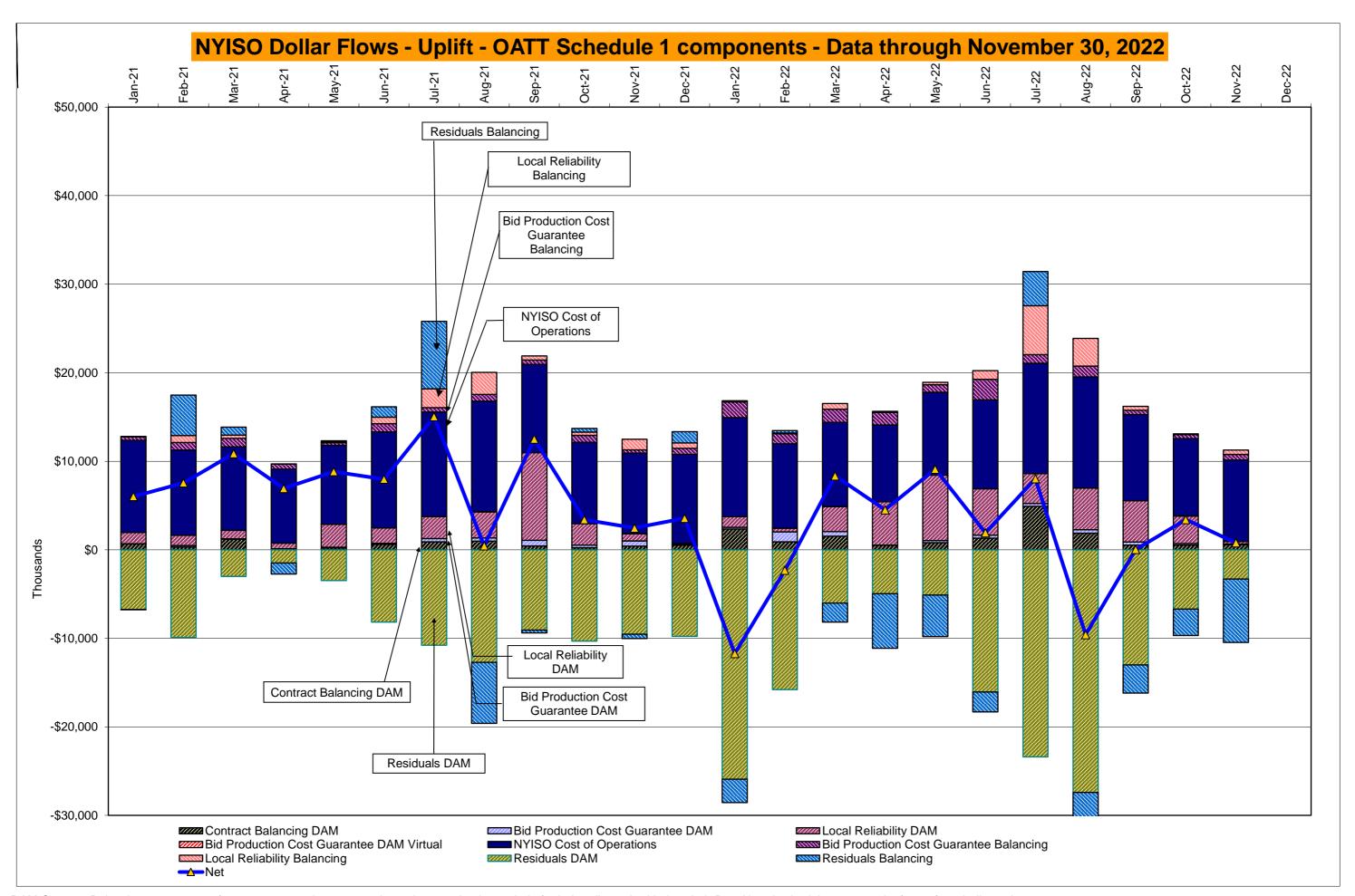


<sup>\*</sup> Excludes ICAP payments.

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

<b>2022</b> LBMP	<u>January</u> 134.79	February 94.06	<u>March</u> 56.78	<u>April</u> 56.46	<u>May</u> 70.60	<u>June</u> 76.72	<u>July</u> 99.47	<u>August</u> 108.85	September 78.91	October 53.11	November 52.47	<u>December</u>
NTAC	1.43	0.95	1.48	1.17	2.46	2.07	3.65	1.69	1.44	3.21	3.91	
Reserve	1.26	1.21	0.83	0.81	0.74	0.66	0.87	0.65	0.86	1.02	0.89	
Regulation	0.27	0.19	0.17	0.12	0.13	0.15	0.12	0.13	0.18	0.18	0.15	
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	
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	
Uplift	(1.50)	(1.73)	(0.09)	(0.36)	(0.05)	(0.61)	(1.58)	(1.91)	(0.78)	(0.45)	(0.68)	
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	
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)	
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	
Avg Monthly Cost	137.41	95.82	60.34	59.38	75.07	80.17	103.73	110.61	81.81	58.26	57.91	
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	
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	
2021	January	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	<u>October</u>	<u>November</u>	<u>December</u>
<b>2021</b> LBMP	January 37.83	February 63.70	<u>March</u> 28.59	<u>April</u> 22.79	<u>May</u> 25.72	<u>June</u> 39.37	<u>July</u> 45.16	<u>August</u> 55.48	September 47.68	October 52.97	November 53.92	December 47.99
LBMP	37.83	63.70	28.59	22.79	25.72	39.37	45.16	55.48	47.68	52.97	53.92	47.99
LBMP NTAC	37.83 1.35	63.70 1.20	28.59 1.26	22.79 1.54	25.72 2.09	39.37 2.05	45.16 2.01	55.48 1.37	47.68 1.23	52.97 1.67	53.92 2.03	47.99 1.40
LBMP NTAC Reserve	37.83 1.35 0.49	63.70 1.20 0.81	28.59 1.26 0.57	22.79 1.54 0.56	25.72 2.09 0.54	39.37 2.05 0.45	45.16 2.01 0.44	55.48 1.37 0.44	47.68 1.23 0.50	52.97 1.67 0.75	53.92 2.03 0.70	47.99 1.40 0.57
LBMP NTAC Reserve Regulation	37.83 1.35 0.49 0.07	63.70 1.20 0.81 0.13	28.59 1.26 0.57 0.09	22.79 1.54 0.56 0.10	25.72 2.09 0.54 0.08	39.37 2.05 0.45 0.07	45.16 2.01 0.44 0.06	55.48 1.37 0.44 0.05	47.68 1.23 0.50 0.09	52.97 1.67 0.75 0.13	53.92 2.03 0.70 0.15	47.99 1.40 0.57 0.11
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift	37.83 1.35 0.49 0.07 0.74	63.70 1.20 0.81 0.13 0.74	28.59 1.26 0.57 0.09 0.74	22.79 1.54 0.56 0.10 0.74	25.72 2.09 0.54 0.08 0.76	39.37 2.05 0.45 0.07 0.76	45.16 2.01 0.44 0.06 0.76	55.48 1.37 0.44 0.05 0.76	47.68 1.23 0.50 0.09 0.75	52.97 1.67 0.75 0.13 0.74	53.92 2.03 0.70 0.15 0.75	47.99 1.40 0.57 0.11 0.73
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery	37.83 1.35 0.49 0.07 0.74 0.08	63.70 1.20 0.81 0.13 0.74 0.09	28.59 1.26 0.57 0.09 0.74 0.09	22.79 1.54 0.56 0.10 0.74 0.11	25.72 2.09 0.54 0.08 0.76 0.10	39.37 2.05 0.45 0.07 0.76 0.08	45.16 2.01 0.44 0.06 0.76 0.07	55.48 1.37 0.44 0.05 0.76 0.06	47.68 1.23 0.50 0.09 0.75 0.08	52.97 1.67 0.75 0.13 0.74 0.09	53.92 2.03 0.70 0.15 0.75 0.09	47.99 1.40 0.57 0.11 0.73 0.08
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift	37.83 1.35 0.49 0.07 0.74 0.08 (0.31)	63.70 1.20 0.81 0.13 0.74 0.09 (0.15)	28.59 1.26 0.57 0.09 0.74 0.09 0.11	22.79 1.54 0.56 0.10 0.74 0.11 (0.12)	25.72 2.09 0.54 0.08 0.76 0.10 (0.19)	39.37 2.05 0.45 0.07 0.76 0.08 (0.50)	45.16 2.01 0.44 0.06 0.76 0.07 (0.09)	55.48 1.37 0.44 0.05 0.76 0.06 (0.81)	47.68 1.23 0.50 0.09 0.75 0.08 0.00	52.97 1.67 0.75 0.13 0.74 0.09 (0.59)	53.92 2.03 0.70 0.15 0.75 0.09 (0.58)	47.99 1.40 0.57 0.11 0.73 0.08 (0.48)
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share	37.83 1.35 0.49 0.07 0.74 0.08 (0.31) 0.09	63.70 1.20 0.81 0.13 0.74 0.09 (0.15) 0.15	28.59 1.26 0.57 0.09 0.74 0.09 0.11 0.11	22.79 1.54 0.56 0.10 0.74 0.11 (0.12) 0.06	25.72 2.09 0.54 0.08 0.76 0.10 (0.19) 0.22	39.37 2.05 0.45 0.07 0.76 0.08 (0.50) 0.17	45.16 2.01 0.44 0.06 0.76 0.07 (0.09) 0.30	55.48 1.37 0.44 0.05 0.76 0.06 (0.81) 0.33	47.68 1.23 0.50 0.09 0.75 0.08 0.00 0.78	52.97 1.67 0.75 0.13 0.74 0.09 (0.59) 0.23	53.92 2.03 0.70 0.15 0.75 0.09 (0.58) 0.16	47.99 1.40 0.57 0.11 0.73 0.08 (0.48) 0.05
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share Uplift: Statewide Share	37.83 1.35 0.49 0.07 0.74 0.08 (0.31) 0.09 (0.40)	63.70 1.20 0.81 0.13 0.74 0.09 (0.15) 0.15 (0.30)	28.59 1.26 0.57 0.09 0.74 0.09 0.11 0.11 0.00	22.79 1.54 0.56 0.10 0.74 0.11 (0.12) 0.06 (0.18)	25.72 2.09 0.54 0.08 0.76 0.10 (0.19) 0.22 (0.41)	39.37 2.05 0.45 0.07 0.76 0.08 (0.50) 0.17 (0.68)	45.16 2.01 0.44 0.06 0.76 0.07 (0.09) 0.30 (0.39)	55.48 1.37 0.44 0.05 0.76 0.06 (0.81) 0.33 (1.14)	47.68 1.23 0.50 0.09 0.75 0.08 0.00 0.78 (0.78)	52.97 1.67 0.75 0.13 0.74 0.09 (0.59) 0.23 (0.81)	53.92 2.03 0.70 0.15 0.75 0.09 (0.58) 0.16 (0.74)	47.99 1.40 0.57 0.11 0.73 0.08 (0.48) 0.05 (0.53)
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share Uplift: Statewide Share Voltage Support and Black Start	37.83 1.35 0.49 0.07 0.74 0.08 (0.31) 0.09 (0.40) 0.43	63.70 1.20 0.81 0.13 0.74 0.09 (0.15) 0.15 (0.30) 0.43	28.59 1.26 0.57 0.09 0.74 0.09 0.11 0.11 0.00 0.43	22.79 1.54 0.56 0.10 0.74 0.11 (0.12) 0.06 (0.18) 0.44	25.72 2.09 0.54 0.08 0.76 0.10 (0.19) 0.22 (0.41) 0.44	39.37 2.05 0.45 0.07 0.76 0.08 (0.50) 0.17 (0.68) 0.44	45.16 2.01 0.44 0.06 0.76 0.07 (0.09) 0.30 (0.39) 0.44	55.48 1.37 0.44 0.05 0.76 0.06 (0.81) 0.33 (1.14) 0.44	47.68 1.23 0.50 0.09 0.75 0.08 0.00 0.78 (0.78) 0.44	52.97 1.67 0.75 0.13 0.74 0.09 (0.59) 0.23 (0.81) 0.43	53.92 2.03 0.70 0.15 0.75 0.09 (0.58) 0.16 (0.74) 0.44	47.99 1.40 0.57 0.11 0.73 0.08 (0.48) 0.05 (0.53) 0.42

<sup>\*</sup> Excludes ICAP payments. Market Mitigation and Analysis Prepared: 12/13/2022 11:11 AM



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>April</u>

<u>May</u>

<u>June</u>

14,327,101 12,477,485 12,137,757 10,992,578 12,176,102 12,945,740 15,905,937 15,770,210 12,467,212 11,527,745 11,952,855

<u>July</u>

August September

<u>March</u>

<u>January</u> <u>February</u>

Day Albased Market MWh	Day Ahead Market MWh	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	
DAM Bisterial Petroper Bisterials   28%   29%   31%   31%   29%   29%   29%   29%   29%   29%   29%   31%   31%   31%   29%   29%   29%   29%   29%   29%   31%   31%   29%	DAM LSE Internal LBMP Energy Sales	57%	56%	59%	56%	55%	60%	64%	63%	62%	58%	56%	
DAM Blatteri - Import Manuer Lamber Robards Blatterials   24, 24, 24, 24, 24, 24, 24, 24, 24, 24,	DAM External TC LBMP Energy Sales	7%	8%	3%	5%	6%	3%	3%	3%	2%	3%	4%	
DAM Bilatroni - ExpontPronishBridinarian	DAM Bilateral - Internal Bilaterals	28%	28%	29%	31%	31%	29%	26%	26%	27%	30%	31%	
Palancing Enemy Market MWN   Palancing Enemy Market MWN   Palancing Enemy Market MWN   Palancing Enemy LSE Internal LSMP Enemy Sales   83%   83%   76%   83%   76%   85%   86%   86%   86%   86%   83%   8	DAM Bilateral - Importl/Non-LBMP Market Bilaterals	4%	4%	4%	5%	4%	4%	4%	5%	6%	5%	5%	
Ballurning Florety Marting Liber Planning Sales   89%   89%   89%   724-44   769.09   778.066   378.003   484.231   8076.002   804.40   101.083   3709.002   101.17   101.085	DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	
Belanning Finemal Lish PEnergy Sales   89%   87%   87%   6	DAM Bilateral - Wheel Through Bilaterals	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Balancing Enternal LBMP Ente	Balancing Energy Market MWh	942,823	742,449	758,386	772,666	378,503	464,231	567,602	785,464	361,883	379,932	519,117	
Belancing Energy Esterial From Blatterials   19%   19%   27%   2	Balancing Energy LSE Internal LBMP Energy Sales			76%					86%	66%			
Balancing Energy Bilateral - Internal Bilaterials   1%   2%   5%   5%   2%   5%   5%   2%   5%   5	· · · · · · · · · · · · · · · · · · ·	16%	19%	24%	33%	32%	36%	23%	14%	34%	55%	58%	
Belancing Encogy Bilatoral - Inport/Non-LEMP Markel Bilatorals   0.9%	• •	1%	2%	2%	0%	5%	2%	1%	0%	1%	0%	2%	
Balancing Energy Bilateral - Miner													
Pathonic   Pathonic	· · · · · · · · · · · · · · · · · · ·												
Part	· · · · · · · · · · · · · · · · · · ·												
Page											. , ,		
Import Bilaterials	<u> </u>	67%	66%	65%	62%	63%	64%	68%	68%	65%	62%	62%	
Part													
Expendibilaterals   28													
Market Shrare Of Istal Load   19%   19%   29%   29%   29%   29%   19%   19%   29%	·												
Marcie Share of Total Load	•												
Pay Ahead Market   93.88   94.49   94.19   93.48   93.48   93.49   93.69   93.09   96.69   95.39   97.29   96.89   95.89   97.29   96.89   95.29   79.29   79.20   7		1 70	1 70	270	270	2 /0	270	1 70	1 70	270	1 70	2 /0	
Balancing Energy	<u> </u>	02.00/	04.40/	04.40/	02.40/	07.00/	06.50/	06.69/	OF 20/	07.00/	06.00/	OF 90/	
Total MWH	•												
Average Daily Energy Sendout/Month GWh													
Day Ahead Market Who   14,108,84   13,325,329   12,843,278   11,204,262   11,854,214   14,106,62   15,843,724   16,032,288   12,759,550   11,852,213   11,406,431   13, DAM LSE Internal EIMP Energy Sales   5%   5%   56%   55%   56%   56%   66%	Average Daily Energy delidod/Month Ovvii	701	723	330	333	312	722	303	514	711	333	302	
Day Alhead Market MMh													
Day Ahead Market MMh	2021	January	February	March	April	May	.June	July.	August	September	October	November	December
DAM LSE Internal LBMP Energy Sales   66%   56%   56%   56%   56%   56%   66%   66%   66%   66%   56%	<del></del>		·	<del></del>	-								13,068,538
DAM Bilateral - Internal Bilaterals													
DAM Bilateral - Internal Bilaterals         31%         30%         32%         35%         29%         27%         26%         29%         30%         32%           DAM Bilateral - Import/Non-LBMP Market Bilaterals         19%         42%         2%													57%
DAM Bilateral - Import/Non-LBMP Market Bilaterals         1%         4%         4%         5%         4%         4%         3%         3%         4%         4%         2%         4%	——————————————————————————————————————												6%
DAM Bilateral - Export/Non-LBMP Market Bilaterals 2% 2% 2% 3% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%													30%
DAM Bilateral - Wheel Through Bilaterals   29   29   30   20   27   27   30   27   30   27   30   30   30   30   30   30   30   3	·												3%
Balancing Energy Market MWh   29,179   -308,157   -70,279   30,603   -36,350   247,874   -367,232   454,982   543,392   511,553   639,571     Balancing Energy LSE Internal LBMP Energy Sales   -215%   -151%   -367%   -456%   -398%   53%   -135%   82%   65%   63%   74%     Balancing Energy External TC LBMP Energy Sales   374%   59%   365%   578%   440%   60%   41%   34%   40%   39%   26%     Balancing Energy Bilateral - Internal Bilaterals   49%   4%   27%   34%   0%   0%   0%   0%   3%   3%   1%   2%   2%     Balancing Energy Bilateral - Importly/Non-LBMP Market Bilaterals   50%   5%   32%   34%   21%   5%   3%   2%   4%   5%   7%     Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals   50%   5%   17%   -158%   -30%   -163%   -17%   -11%   -21%   -9%   -10%   -8%     Balancing Energy Bilateral - Wheel Through Bilaterals   50%   5%   57%   58%   65%   66%   69%   66%   64%   65%     Balancing Energy Bilateral - Wheel Through Bilaterals   11%   4%   4%   5%   4%   3%   3%   3%   3%   4%   4%   3%     Export Bilaterals   2%   2%   2%   2%   2%   2%   2%   2	•												2%
Balancing Energy LSE Internal LBMP Energy Sales         -215%         -151%         -367%         -456%         -398%         53%         -135%         82%         65%         63%         74%         Balancing Energy External TC LBMP Energy Sales         374%         59%         365%         578%         440%         60%         41%         34%         40%         39%         26%           Balancing Energy Bilateral - Internal Bilaterals         49%         4%         27%         34%         0%         -1%         3%         3%         1%         2%         2%           Balancing Energy Bilateral - Internal Bilaterals         0%         0%         0%         0%         0%         3%         3%         1%         2%         2%           Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         50%         5%         32%         34%         21%         5%         3%         2%         4%         5%         7%         58%         65%         3%         2%         4%         5%         7%         58%         65%         66%         69%         66%         66%         66%         66%         66%         66%         66%         66%         66%         66%         65%         65%         65%													2%
Balancing Energy External TC LBMP Energy Sales         374%         59%         365%         578%         440%         60%         41%         34%         40%         39%         26%           Balancing Energy Bilateral - Internal Bilaterals         49%         4%         27%         34%         0%         -1%         3%         3%         1%         29%         2%           Balancing Energy Bilateral - Internal Bilaterals         50%         0%			,	•	•		•	•	•	•	•	·	675,223
Balancing Energy Bilateral - Internal Bilaterals   49%   49%   27%   34%   0%   -1%   37%   37%   37%   11%   2%   2%   28   28   28   28   28   2	· · · · · · · · · · · · · · · · · · ·												87%
Balancing Energy Bilateral - ImportI/Non-LBMP Market Bilaterals         0%	· · · · · · · · · · · · · · · · · · ·												18%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         50%         5%         32%         34%         21%         5%         3%         2%         4%         5%         7%           Balancing Energy Bilateral - Wheel Through Bilaterals         -158%         -17%         -158%         -90%         -163%         -17%         -11%         -21%         -9%         -10%         -8%           Transactions Summary           LBMP         65%         66%         66%         55%         57%         58%         65%         66%         69%         26%         27%         27%         28%         24%         26%         26%         26%         26%<													2%
Balancing Energy Bilateral - Wheel Through Bilaterals   -158%   -17%   -158%   -90%   -163%   -163%   -11%   -21%   -9%   -9%   -10%   -8%   -8%   -8%   -8%   -17%   -18%   -10%   -8%   -18%   -18%   -18%   -18%   -18%   -18%   -18%   -18%   -11%   -21%   -9%   -10%   -8%   -10%   -8%   -18%	· · · · · · · · · · · · · · · · · · ·	0%		0%							1%	0%	0%
Transactions Summary	Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	50%	5%	32%	34%	21%			2%	4%	5%	7%	8%
LBMP         65%         62%         59%         57%         58%         65%         66%         69%         66%         64%         65%           Internal Bilaterals         31%         31%         33%         35%         35%         29%         28%         25%         27%         28%         30%           Import Bilaterals         1%         4%         4%         5%         4%         3%         3%         3%         4%         4%         3%           Export Bilaterals         2%         2%         2%         2%         2%         1%         1%         2%         2%         2%         2%         1%         1%         2%         2%         2%         2%         1%         1%         1%         2%         2%         2%         2%         2%         1%         1%         1%         2%         2%         2%         2%         2%         1%         1%         1%         2%         2%         2%         2%         2%         1%         1%         1%         2%         2%         9%         3%         1%         1%         2%         2%         9%         3%         10.3         3%         10.3         3%	Balancing Energy Bilateral - Wheel Through Bilaterals	-158%	-17%	-158%	-90%	-163%	-17%	-11%	-21%	-9%	-10%	-8%	-15%
Internal Bilaterals   31%   31%   33%   35%   35%   29%   28%   25%   27%   28%   30%   28%	Transactions Summary												
Import Bilaterals         1%         4%         4%         5%         4%         3%         3%         4%         4%         3%           Export Bilaterals         2%         2%         2%         2%         2%         1%         1%         2%         2%         2%           Wheels Through         2%         2%         2%         2%         1%         1%         1%         2%         2%         2%           Market Share of Total Load           Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,136,001         13,           Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420 <td>LBMP</td> <td>65%</td> <td>62%</td> <td>59%</td> <td>57%</td> <td>58%</td> <td>65%</td> <td>66%</td> <td>69%</td> <td>66%</td> <td>64%</td> <td>65%</td> <td>65%</td>	LBMP	65%	62%	59%	57%	58%	65%	66%	69%	66%	64%	65%	65%
Export Bilaterals         2%         2%         2%         2%         2%         1%         1%         2%         2%         2%           Wheels Through         2%         2%         2%         2%         1%         1%         1%         2%         2%         0%           Market Share of Total Load           Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,363,765         12,136,001         13,           Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420         373         387	Internal Bilaterals	31%	31%	33%	35%	35%	29%	28%	25%	27%	28%	30%	28%
Wheels Through         2%         2%         2%         2%         1%         1%         1%         2%         2%         0%           Market Share of Total Load         Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,363,765         12,136,001         13,402           Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420         373         387	Import Bilaterals	1%	4%	4%	5%	4%	3%	3%	3%	4%	4%	3%	3%
Wheels Through         2%         2%         2%         2%         1%         1%         1%         2%         2%         0%           Market Share of Total Load         Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,363,765         12,136,001         13,402           Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420         373         387	•	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
Market Share of Total Load           Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,363,765         12,136,001         13,           Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420         373         387	•												1%
Day Ahead Market         99.8%         102.4%         100.6%         99.7%         100.3%         98.3%         102.4%         97.2%         95.9%         95.9%         94.7%           Balancing Energy +         0.2%         -2.4%         -0.6%         0.3%         -0.3%         1.7%         -2.4%         2.8%         4.1%         4.1%         5.3%           Total MWH         14,138,027         13,017,172         12,772,999         11,234,865         11,817,864         14,368,536         15,476,492         16,487,220         13,302,943         12,136,001         13,476,492         13,476,492         14,476,492 <td><u> </u></td> <td></td>	<u> </u>												
Balancing Energy +       0.2%       -2.4%       -0.6%       0.3%       -0.3%       1.7%       -2.4%       2.8%       4.1%       4.1%       5.3%         Total MWH       14,138,027       13,017,172       12,772,999       11,234,865       11,817,864       14,368,536       15,476,492       16,487,220       13,302,943       12,363,765       12,136,001       13,7         Average Daily Energy Sendout/Month GWh       427       434       381       354       365       458       483       504       420       373       387	<u> </u>	99.8%	102.4%	100.6%	99.7%	100.3%	98.3%	102.4%	97.2%	95.9%	95.9%	94.7%	95.1%
Total MWH 14,138,027 13,017,172 12,772,999 11,234,865 11,817,864 14,368,536 15,476,492 16,487,220 13,302,943 12,363,765 12,136,001 13, Average Daily Energy Sendout/Month GWh 427 434 381 354 365 458 483 504 420 373 387	· · · · · · · · · · · · · · · · · · ·												4.9%
Average Daily Energy Sendout/Month GWh         427         434         381         354         365         458         483         504         420         373         387													13,743,761
													408
T Majoraina i normi i codulititi nurobogad et Magi Lima i Milli	Palancing Energy: Load/MW\ purchased at Poal Time LPMP	121	10 1	301		300	100	100	301				

<sup>+</sup> Balancing Energy: Load(MW) purchased at Real Time LBMP.

Market Mitigation and Analysis Prepared: 12/13/2022 11:13 AM

<u>2022</u>

Day Ahead Market MWh

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

Virtual Transactions are not reflected in this chart.

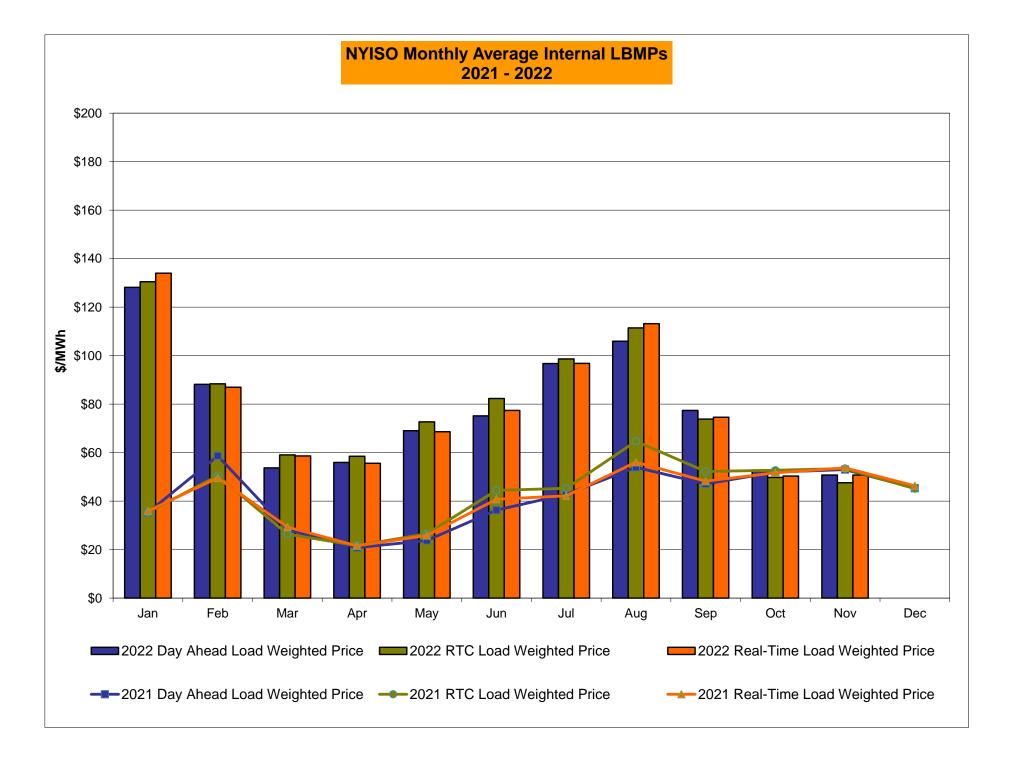
October November December

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

#### **NYISO Markets 2022 Energy Statistics**

- A.V. A.I A.B. I. B.I	<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>	November	<u>December</u>
<u>DAY AHEAD LBMP</u> Price *	\$124.39	\$85.98	\$52.41	\$55.23	\$66.11	\$72.43	\$90.42	\$100.71	\$74.23	\$51.77	\$49.08	
Standard Deviation	\$51.94	\$39.56	\$18.64	\$11.05	\$21.60	\$19.84	\$40.00	\$33.52	\$22.13	\$11.85	\$20.31	
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	
RTC LBMP												
Price *	\$127.16	\$85.48	\$57.58	\$57.33	\$68.27	\$78.66	\$92.25	\$104.69	\$70.59	\$48.87	\$45.91	
Standard Deviation	\$77.62	\$55.20	\$38.62	\$21.09	\$42.87	\$49.85	\$49.28	\$51.96	\$28.06	\$13.16	\$24.06	
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	
REAL TIME LBMP												
Price *	\$130.43	\$83.85	\$57.00	\$54.45	\$65.07	\$74.01	\$90.23	\$105.61	\$71.11	\$49.26	\$48.62	
Standard Deviation	\$93.35	\$57.99	\$44.52	\$20.46	\$33.01	\$41.27	\$54.20	\$69.83	\$30.72	\$17.89	\$37.20	
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	
Average Daily Energy Sendout/Month GWh	451	429	390	359	372	422	509	514	411	359	382	
				NYISO	Markets	2021 Ene	rgy Stati	stics				
DAY AHEAD LBMP	<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>	November	<u>December</u>
Price *	\$34.37	\$57.30	\$27.47	\$20.46	\$22.95	\$33.36	\$40.38	\$50.30	\$45.48	\$50.66	\$51.90	\$44.24
Standard Deviation	\$14.58	•	Ψ=	Ψ-00	Y		Ψ.σ.σσ	400.00	Ψ.σσ	<b>400.00</b>	Ψ	¥ · ··— ·
	Ψ I T.JU	\$24.48	\$8.23	\$4.58	\$6.28	-	\$15.56	\$22.37	\$12.42	\$11.04	\$11.83	\$13.72
Load Weighted Price **	\$35.31	\$24.48 \$58.67	\$8.23 \$28.12	\$4.58 \$20.81	\$6.28 \$23.75	\$15.88 \$36.28	\$15.56 \$42.84	\$22.37 \$53.93	\$12.42 \$47.08	\$11.04 \$51.92	\$11.83 \$52.98	\$13.72 \$45.33
, and the second	•	-	•	-	-	\$15.88			•			•
RTC LBMP	\$35.31	\$58.67	\$28.12	\$20.81	\$23.75	\$15.88 \$36.28	\$42.84	\$53.93	\$47.08	\$51.92	\$52.98	\$45.33
, and the second	\$35.31 \$34.32	\$58.67 \$49.25	\$28.12 \$25.59	\$20.81 \$21.30	\$23.75 \$25.36	\$15.88 \$36.28 \$39.69			\$47.08 \$50.07	\$51.92 \$51.41		•
RTC LBMP Price *	\$35.31	\$58.67	\$28.12	\$20.81	\$23.75	\$15.88 \$36.28	\$42.84 \$42.25	\$53.93 \$58.87	\$47.08	\$51.92	\$52.98 \$52.37	\$45.33 \$44.16
RTC LBMP Price * Standard Deviation Load Weighted Price **	\$35.31 \$34.32 \$20.93	\$58.67 \$49.25 \$23.34	\$28.12 \$25.59 \$12.67	\$20.81 \$21.30 \$7.91	\$23.75 \$25.36 \$11.17	\$15.88 \$36.28 \$39.69 \$34.08	\$42.84 \$42.25 \$47.97	\$53.93 \$58.87 \$47.79	\$47.08 \$50.07 \$22.24	\$51.92 \$51.41 \$13.96	\$52.98 \$52.37 \$16.97	\$45.33 \$44.16 \$17.49
RTC LBMP Price * Standard Deviation	\$35.31 \$34.32 \$20.93	\$58.67 \$49.25 \$23.34	\$28.12 \$25.59 \$12.67	\$20.81 \$21.30 \$7.91	\$23.75 \$25.36 \$11.17	\$15.88 \$36.28 \$39.69 \$34.08	\$42.84 \$42.25 \$47.97	\$53.93 \$58.87 \$47.79	\$47.08 \$50.07 \$22.24	\$51.92 \$51.41 \$13.96	\$52.98 \$52.37 \$16.97	\$45.33 \$44.16 \$17.49
RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP	\$35.31 \$34.32 \$20.93 \$35.40	\$58.67 \$49.25 \$23.34 \$50.48	\$28.12 \$25.59 \$12.67 \$26.37	\$20.81 \$21.30 \$7.91 \$21.67	\$23.75 \$25.36 \$11.17 \$26.50	\$15.88 \$36.28 \$39.69 \$34.08 \$44.41	\$42.84 \$42.25 \$47.97 \$45.27	\$53.93 \$58.87 \$47.79 \$64.66	\$47.08 \$50.07 \$22.24 \$52.21	\$51.92 \$51.41 \$13.96 \$52.71	\$52.98 \$52.37 \$16.97 \$53.44	\$45.33 \$44.16 \$17.49 \$45.12
RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP Price *	\$35.31 \$34.32 \$20.93 \$35.40 \$34.59	\$58.67 \$49.25 \$23.34 \$50.48	\$28.12 \$25.59 \$12.67 \$26.37 \$28.06	\$20.81 \$21.30 \$7.91 \$21.67 \$21.10	\$23.75 \$25.36 \$11.17 \$26.50 \$24.62	\$15.88 \$36.28 \$39.69 \$34.08 \$44.41 \$36.58	\$42.84 \$42.25 \$47.97 \$45.27 \$39.61	\$53.93 \$58.87 \$47.79 \$64.66 \$51.46	\$47.08 \$50.07 \$22.24 \$52.21 \$46.37	\$51.92 \$51.41 \$13.96 \$52.71 \$50.41	\$52.98 \$52.37 \$16.97 \$53.44 \$52.52	\$45.33 \$44.16 \$17.49 \$45.12 \$45.13

<sup>\*</sup> Average zonal load weighted prices.
\*\* Average zonal load weighted prices, load weighted in each hour.

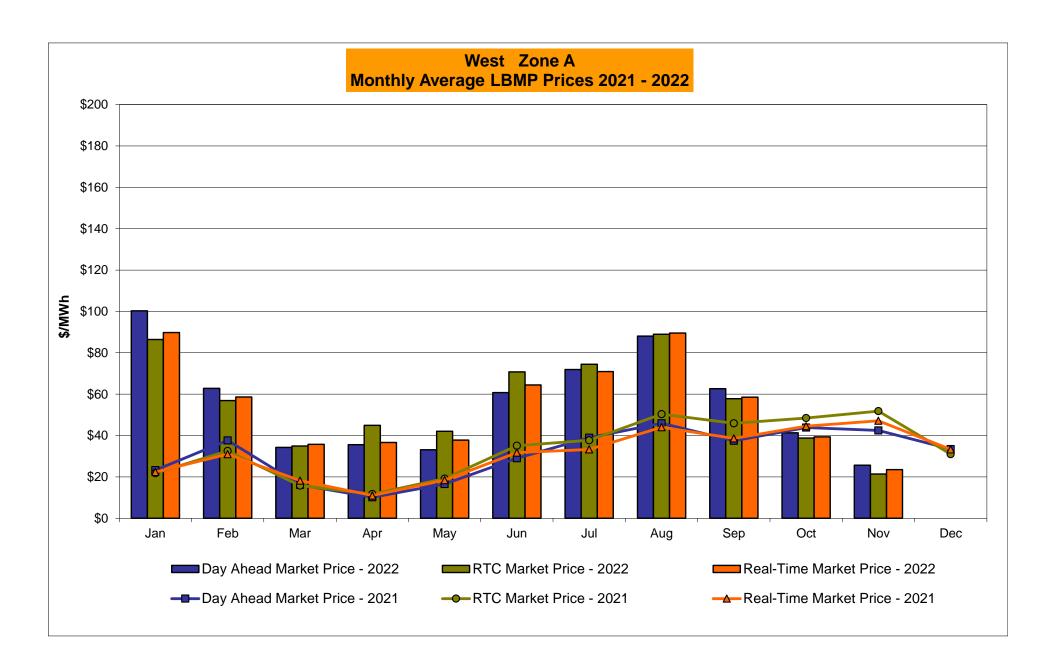


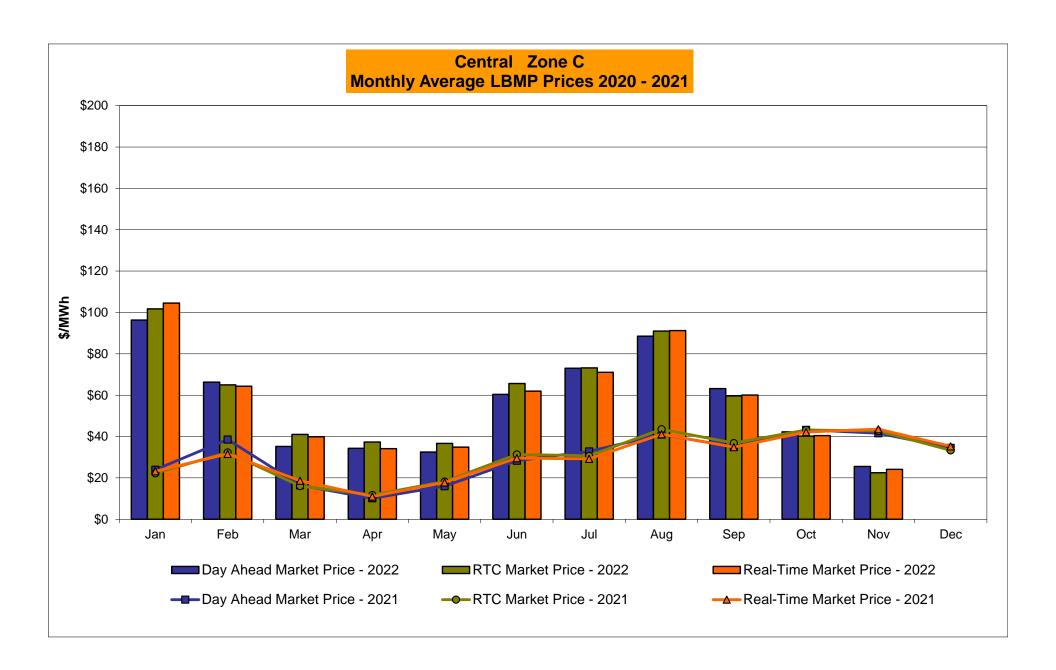
### November 2022 Zonal LBMP Statistics for NYISO (\$/MWh)

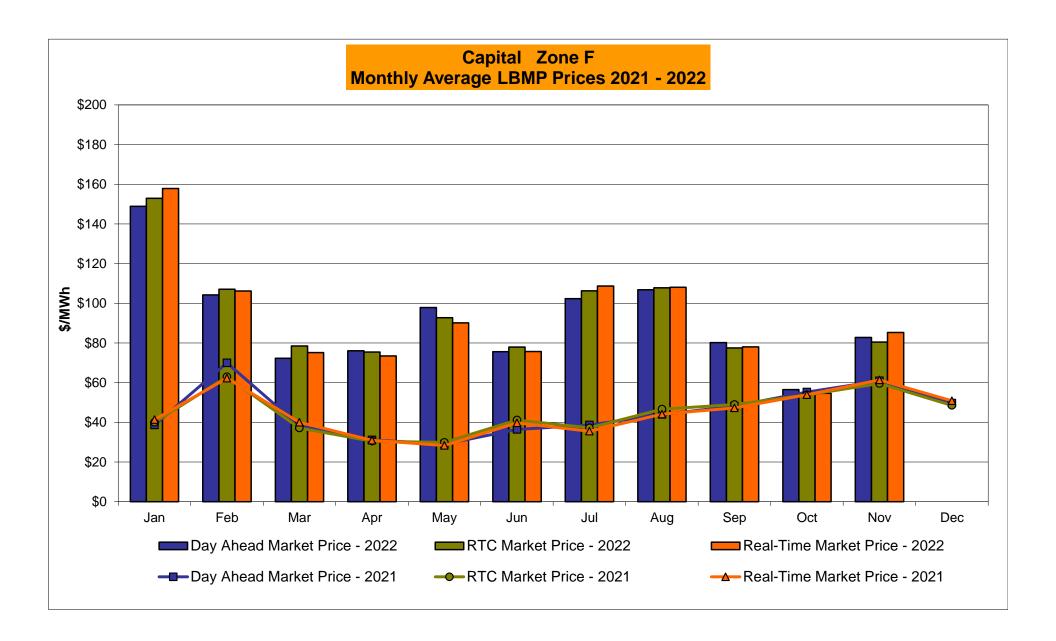
	WEST	GENESEE  Zone B	NORTH	CENTRAL  Zone C	MOHAWK VALLEY <u>Zone E</u>	CAPITAL Zone F	HUDSON VALLEY Zone G	MILLWOOD Zone H	DUNWOODIE	NEW YORK CITY Zone J	LONG ISLAND <u>Zone K</u>
DAY AHEAD LBMP	Zone A	Zone B	Zone D	Zone C	Zone E	Zone F	Zone G	Zone n	Zone I	Zone J	Zone K
Unweighted Price *	25.66	24.49	18.92	25.56	26.42	82.80	57.20	57.75	57.67	57.92	67.14
Standard Deviation	13.56	13.49	13.31	13.46	13.56	39.26	24.62	25.06	25.00	24.95	29.44
RTC LBMP											
Unweighted Price *	21.38	20.97	15.71	22.50	22.67	80.42	54.26	54.88	54.78	55.28	62.90
Standard Deviation	16.86	17.45	19.23	17.39	17.26	55.42	30.89	31.32	31.19	31.33	46.17
DEAL TIME LOND											
REAL TIME LBMP Unweighted Price *	23.48	22.66	17.00	24.09	24.41	85.32	57.72	58.35	58.23	58.71	65.43
Standard Deviation	24.48	24.91	26.30	24.87	24.93	82.79	47.78	48.28	48.08	48.17	55.36
Ctandard Boviation	21.10	21.01	20.00	21.07	21.00	02.70		10.20	10.00	10.17	00.00
		HYDRO	HYDRO			CROSS					
	ONTARIO	HYDRO QUEBEC	HYDRO QUEBEC		NEW	CROSS SOUND	NORTHPORT-				
	ONTARIO IESO	QUEBEC	HYDRO QUEBEC nport/Export)	PJM	NEW ENGLAND		NORTHPORT- NORWALK	NEPTUNE	LINDEN VFT	HUDSON	Dennison
		QUEBEC	QUEBEC	РЈМ		SOUND		NEPTUNE Controllable	LINDEN VFT Controllable	HUDSON Controllable	Dennison Controllable
		QUEBEC	QUEBEC	PJM <u>Zone P</u>		SOUND CABLE	NORWALK	_			
DAY AHEAD LBMP	IESO Zone O	QUEBEC (Wheel) (In	QUEBEC nport/Export) Zone M	Zone P	ENGLAND  Zone N	SOUND CABLE Controllable Line	NORWALK Controllable Line	Controllable Line	Controllable Line	Controllable Line	Controllable Line
Unweighted Price *	<b>Zone O</b> 24.94	QUEBEC (Wheel) (In Zone M	QUEBEC nport/Export)  Zone M  19.06	<b>Zone P</b> 41.21	ENGLAND  Zone N  67.96	SOUND CABLE Controllable Line 66.78	NORWALK Controllable Line	Controllable Line 63.96	Controllable Line 57.75	Controllable Line 57.68	Controllable Line 19.17
	IESO Zone O	QUEBEC (Wheel) (In	QUEBEC nport/Export) Zone M	Zone P	ENGLAND  Zone N	SOUND CABLE Controllable Line	NORWALK Controllable Line	Controllable Line	Controllable Line	Controllable Line	Controllable Line
Unweighted Price *	<b>Zone O</b> 24.94	QUEBEC (Wheel) (In Zone M	QUEBEC nport/Export)  Zone M  19.06	<b>Zone P</b> 41.21	ENGLAND  Zone N  67.96	SOUND CABLE Controllable Line 66.78	NORWALK Controllable Line	Controllable Line 63.96	Controllable Line 57.75	Controllable Line 57.68	Controllable Line 19.17
Unweighted Price * Standard Deviation	<b>Zone O</b> 24.94	QUEBEC (Wheel) (In Zone M	QUEBEC nport/Export)  Zone M  19.06	<b>Zone P</b> 41.21	ENGLAND  Zone N  67.96	SOUND CABLE Controllable Line 66.78	NORWALK Controllable Line	Controllable Line 63.96	Controllable Line 57.75	Controllable Line 57.68	Controllable Line 19.17
Unweighted Price * Standard Deviation  RTC LBMP	Zone O 24.94 13.24	QUEBEC (Wheel) (In Zone M 19.06 13.09	QUEBEC nport/Export)  Zone M  19.06 13.09	<b>Zone P</b> 41.21 16.82	<b>Zone N</b> 67.96 32.00	SOUND CABLE Controllable Line 66.78 29.63	NORWALK Controllable Line 64.41 29.49	Controllable Line 63.96 26.49	Controllable Line 57.75 24.87	Controllable Line 57.68 24.98	Controllable Line 19.17 13.12
Unweighted Price * Standard Deviation  RTC LBMP  Unweighted Price * Standard Deviation	Zone O  24.94 13.24	QUEBEC (Wheel) (In Zone M 19.06 13.09	QUEBEC nport/Export)  Zone M  19.06 13.09	<b>Zone P</b> 41.21 16.82	<b>ENGLAND Zone N</b> 67.96 32.00	SOUND CABLE Controllable Line 66.78 29.63	NORWALK Controllable Line 64.41 29.49	Controllable Line 63.96 26.49	<b>Controllable Line</b> 57.75 24.87	<b>Controllable Line</b> 57.68 24.98  54.68	<u>Line</u> 19.17 13.12
Unweighted Price * Standard Deviation  RTC LBMP  Unweighted Price * Standard Deviation  REAL TIME LBMP	24.94 13.24 20.65 16.00	QUEBEC (Wheel) (In Zone M 19.06 13.09 15.66 18.51	QUEBEC nport/Export)  Zone M  19.06 13.09  15.66 18.51	Zone P 41.21 16.82 37.97 18.30	<b>ENGLAND Zone N</b> 67.96 32.00  65.65 44.15	SOUND CABLE Controllable Line 66.78 29.63 62.13 45.51	NORWALK Controllable Line 64.41 29.49 61.84 45.55	Controllable Line 63.96 26.49 60.42 40.16	57.75 24.87 55.02 31.07	<u>Line</u> 57.68 24.98 54.68 30.90	19.17 13.12 15.80 18.57
Unweighted Price * Standard Deviation  RTC LBMP  Unweighted Price * Standard Deviation	Zone O  24.94 13.24	QUEBEC (Wheel) (In Zone M 19.06 13.09	QUEBEC nport/Export)  Zone M  19.06 13.09	<b>Zone P</b> 41.21 16.82	<b>ENGLAND Zone N</b> 67.96 32.00	SOUND CABLE Controllable Line 66.78 29.63	NORWALK Controllable Line 64.41 29.49	Controllable Line 63.96 26.49	<b>Controllable Line</b> 57.75 24.87	<b>Controllable Line</b> 57.68 24.98  54.68	20ntrollable Line 19.17 13.12 15.80

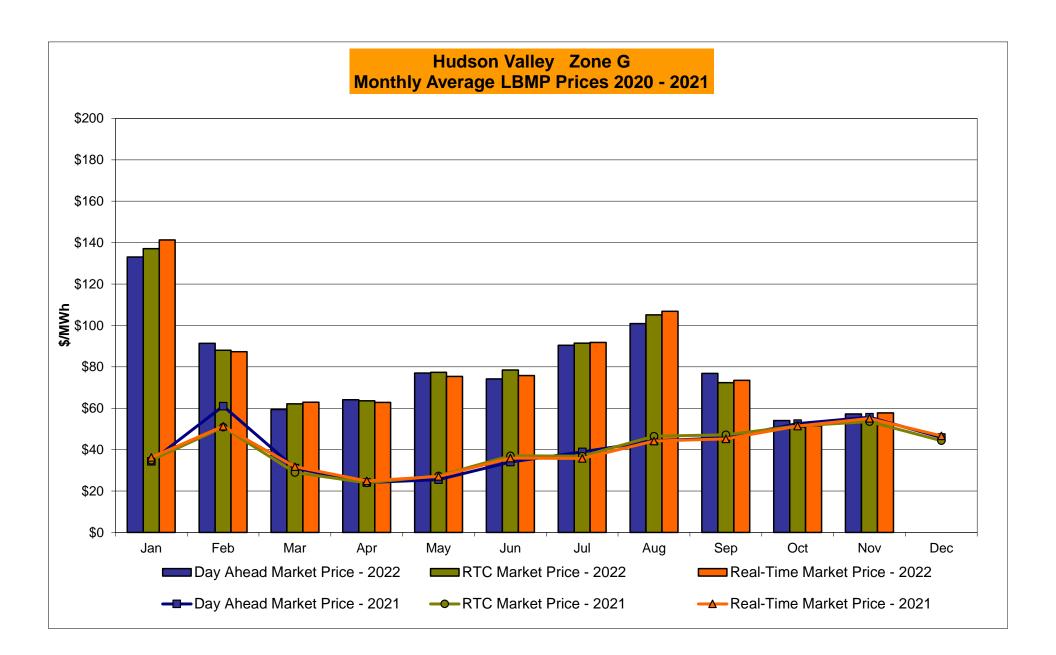
Market Mitigation and Analysis Prepared: 12/13/2022 11:08 AM

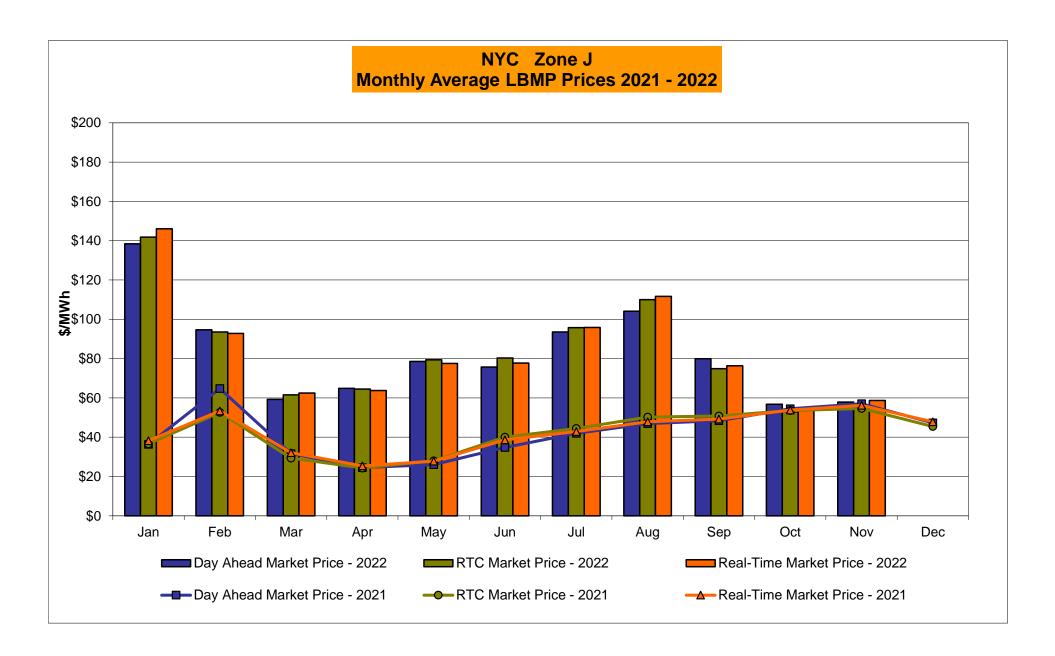
<sup>\*</sup> Straight LBMP averages

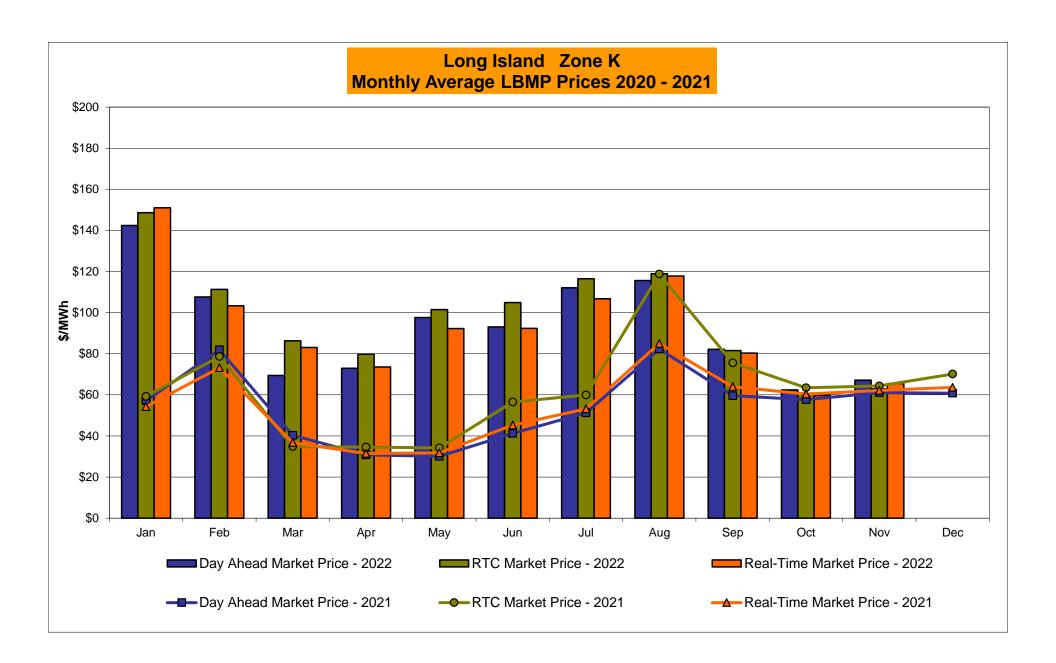


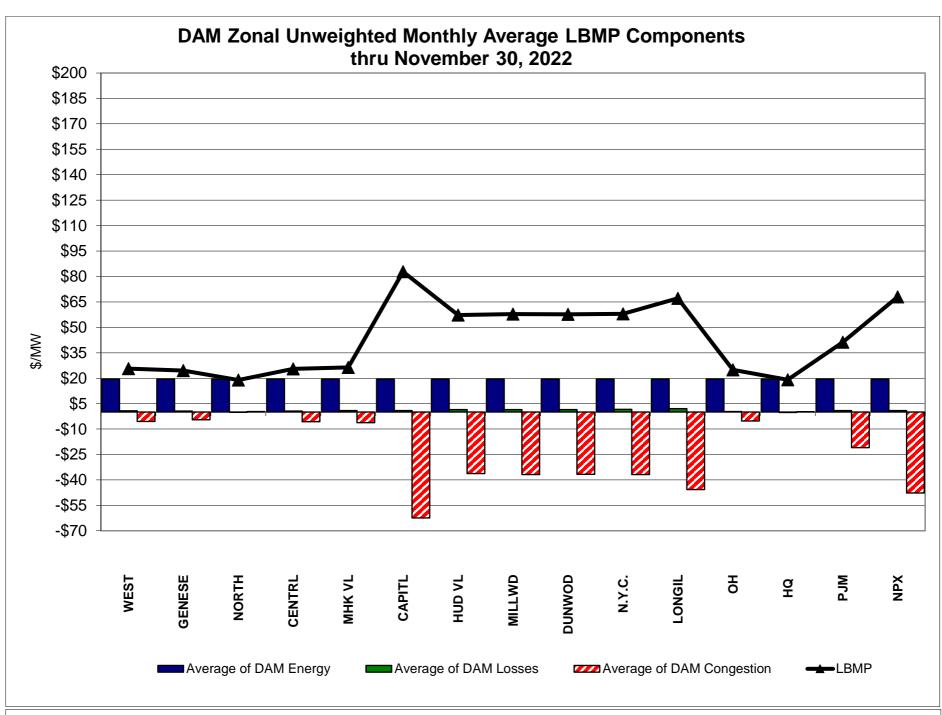


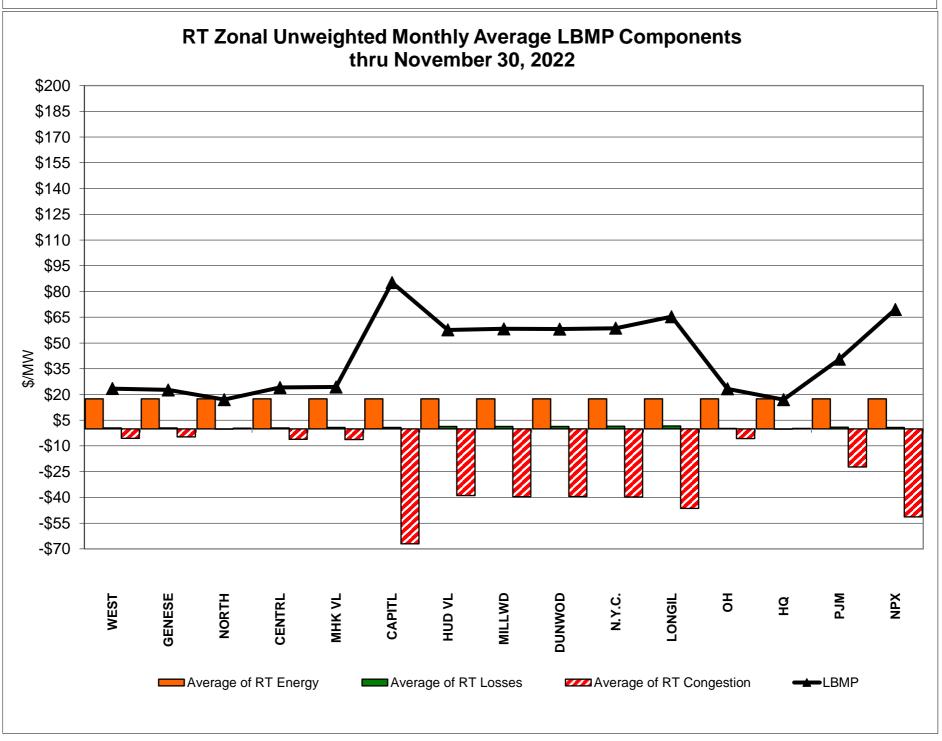




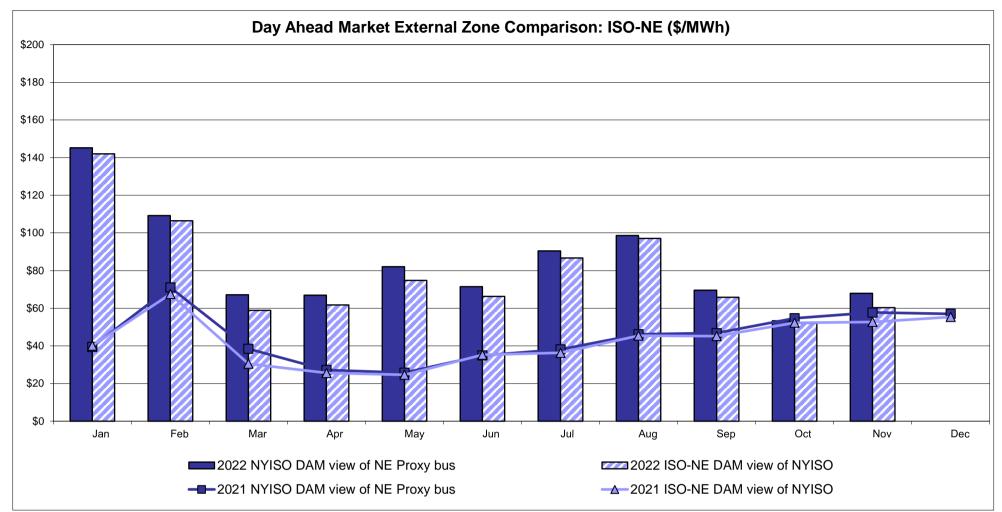


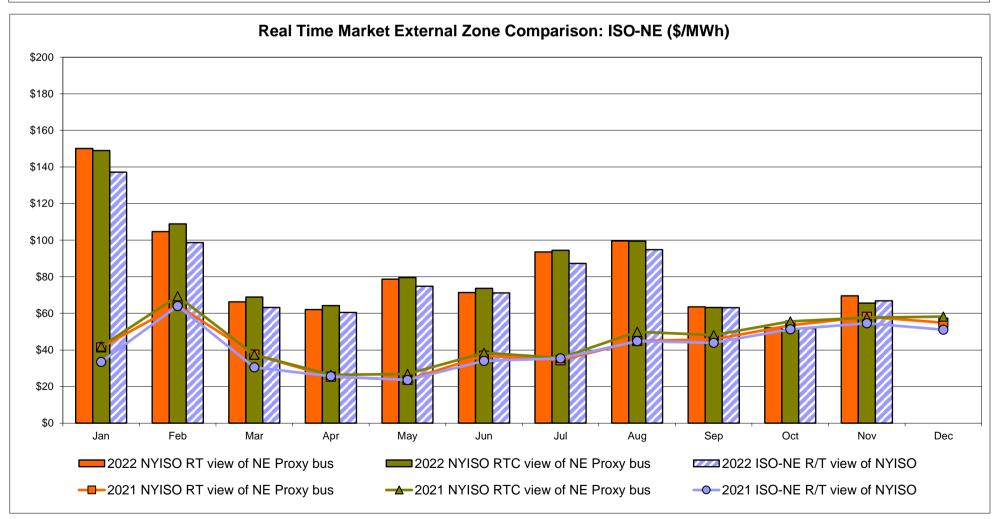




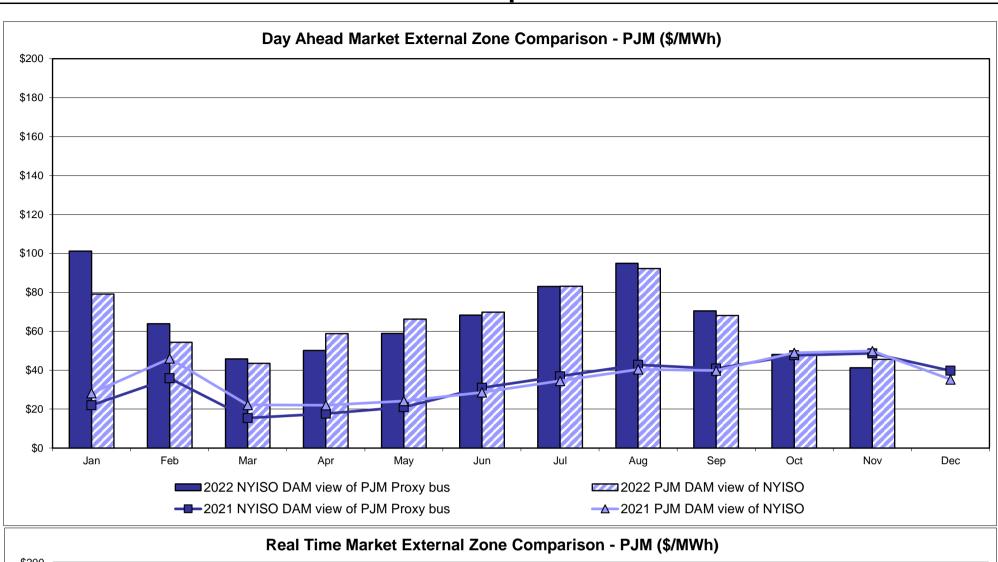


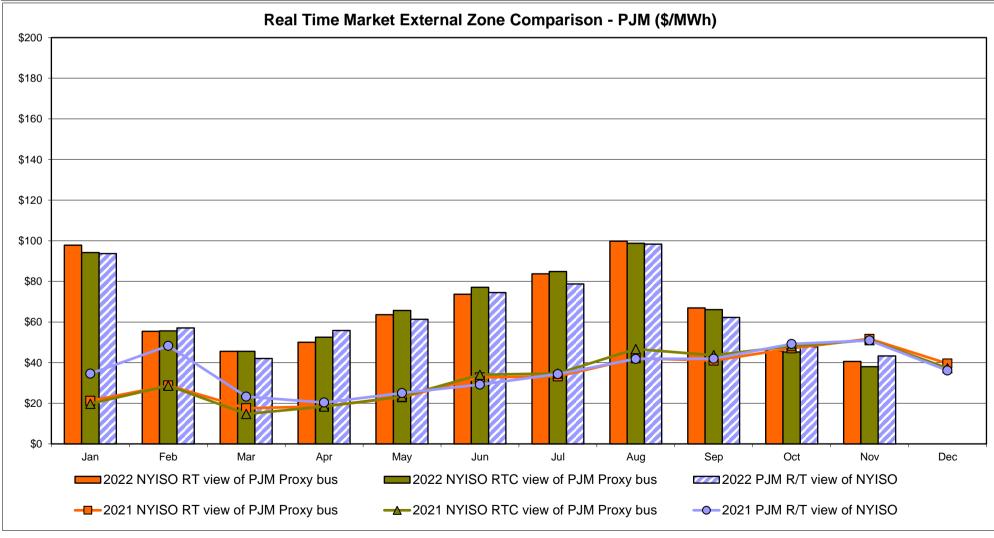
### **External Comparison ISO-New England**



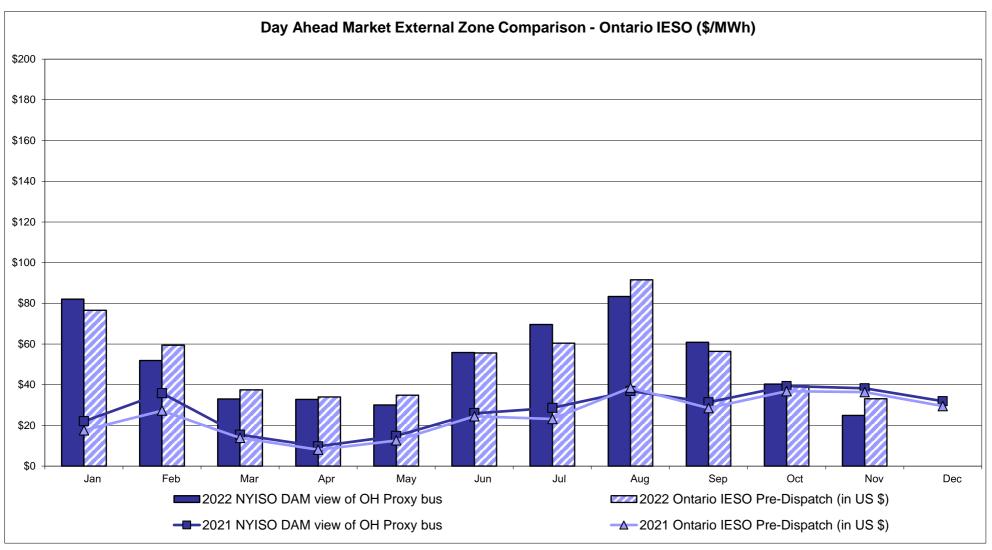


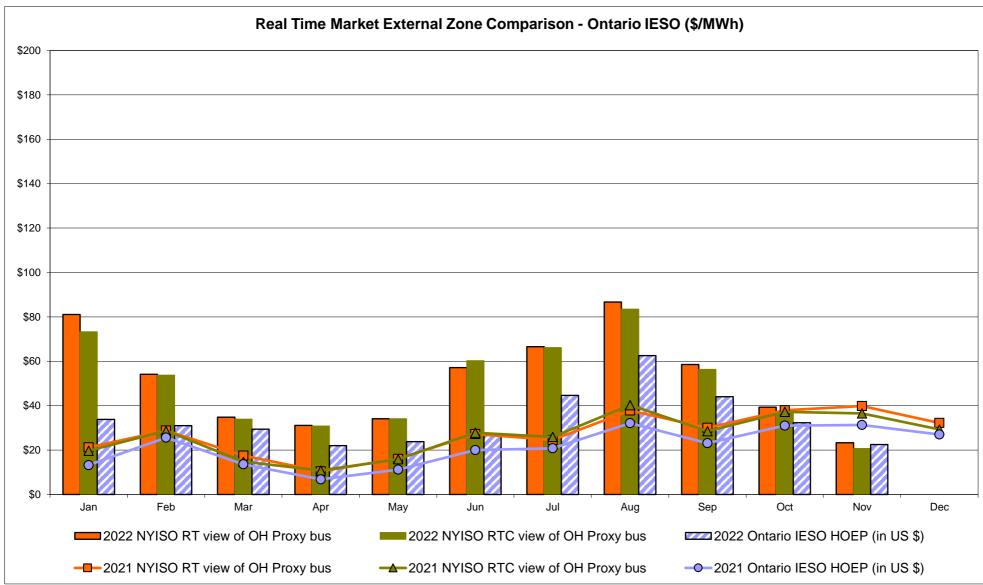
### **External Comparison PJM**





### **External Comparison Ontario IESO**

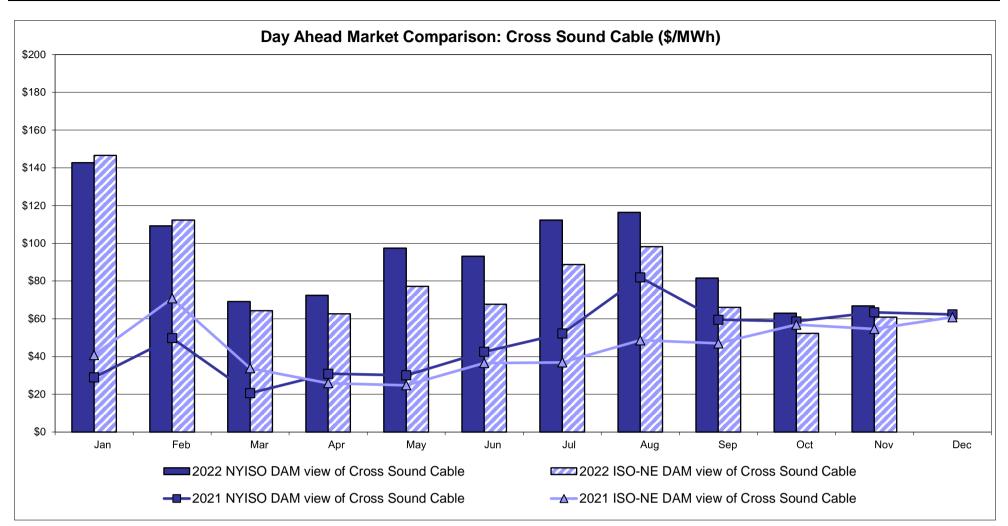


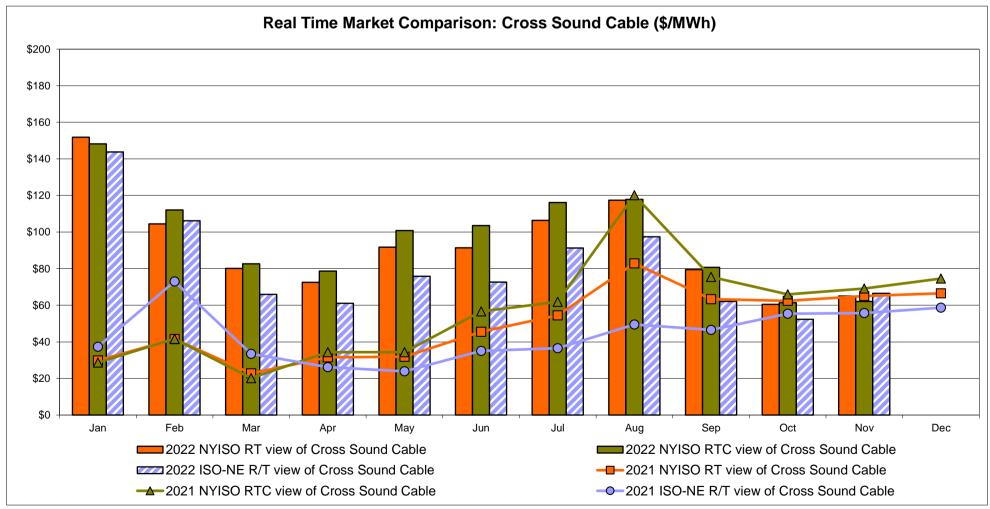


Notes: Exchange factor used for November 2022 was 0.743107676302296 to US

HOEP: Hourly Ontario Energy Price Pre-Dispatch: Projected Energy Price

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





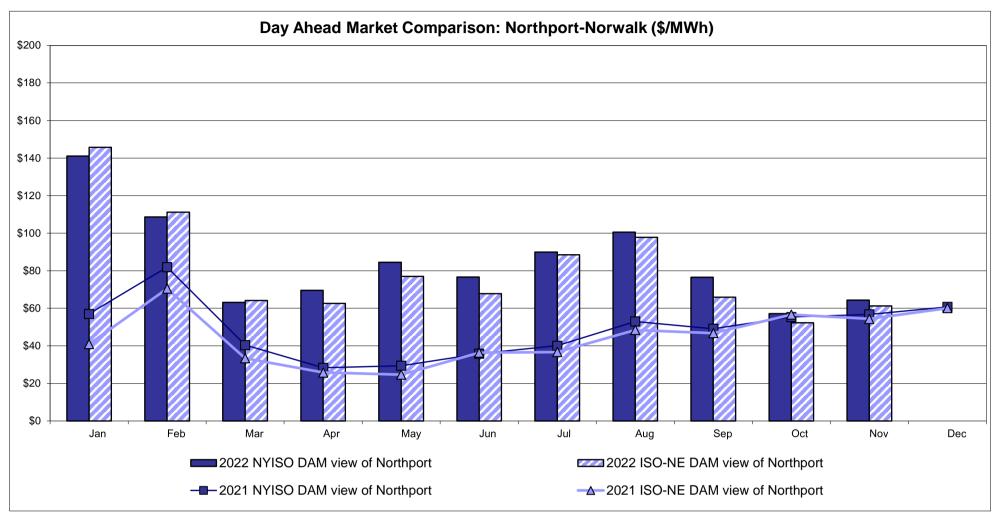
#### Note:

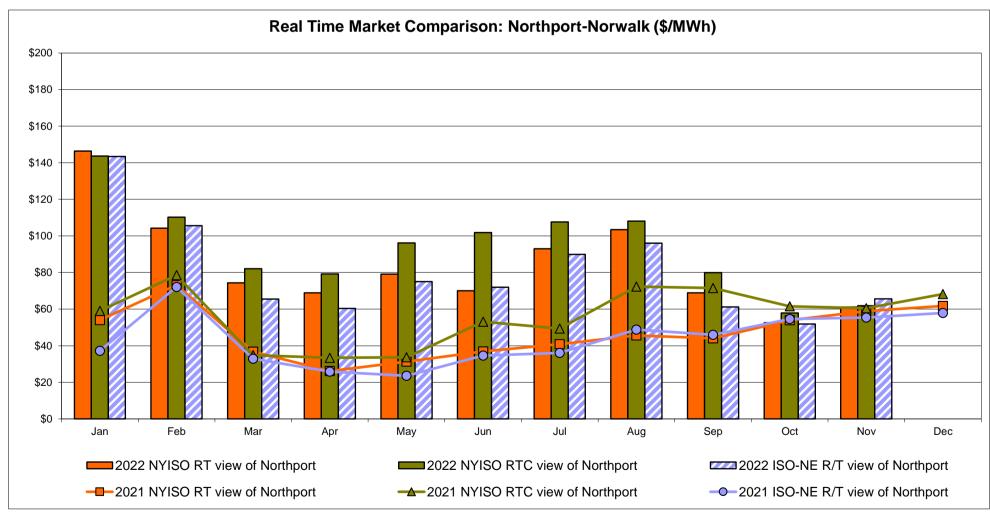
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

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

### External Controllable Line: Northport - Norwalk (New England)





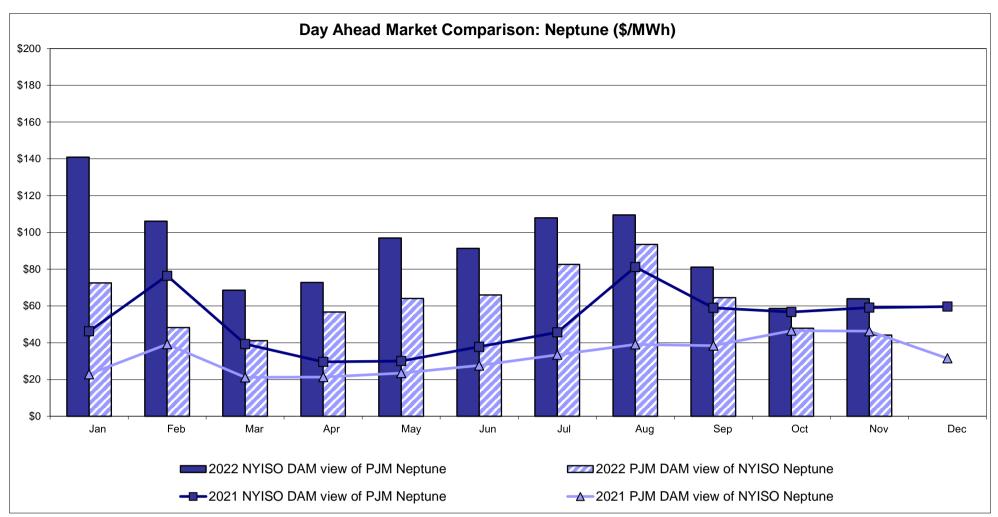
#### Note:

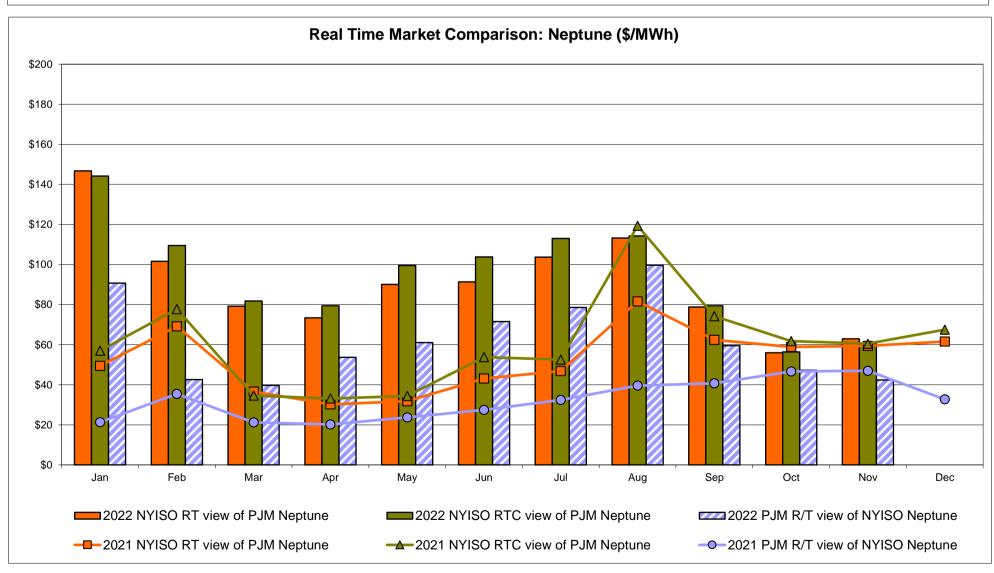
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

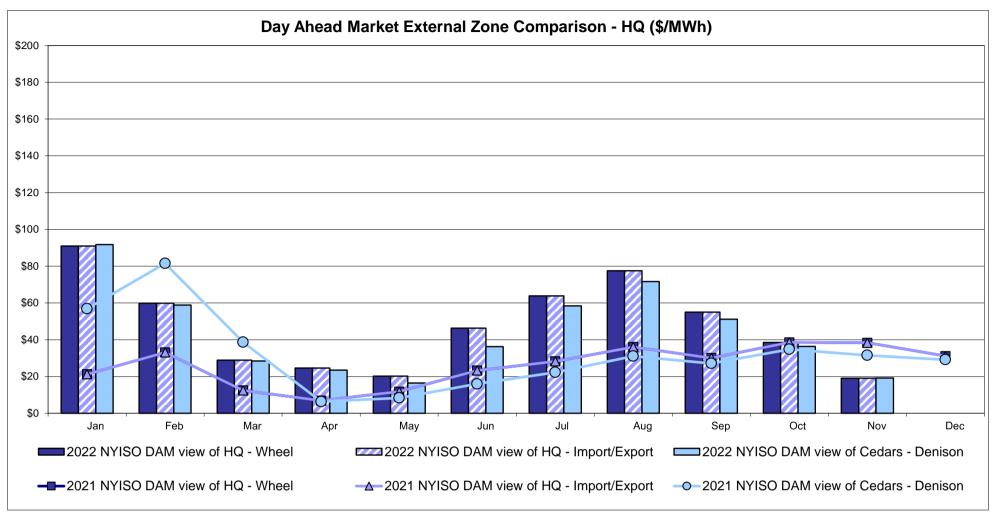
The DAM and R/T prices at the 1385 interface are used for NYISO.

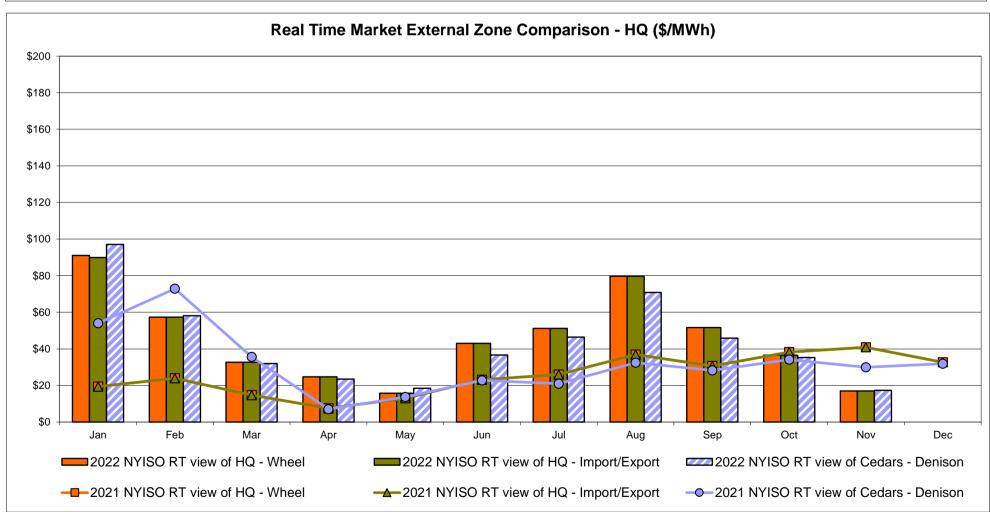
### **External Controllable Line: Neptune (PJM)**





### **External Comparison Hydro-Quebec**

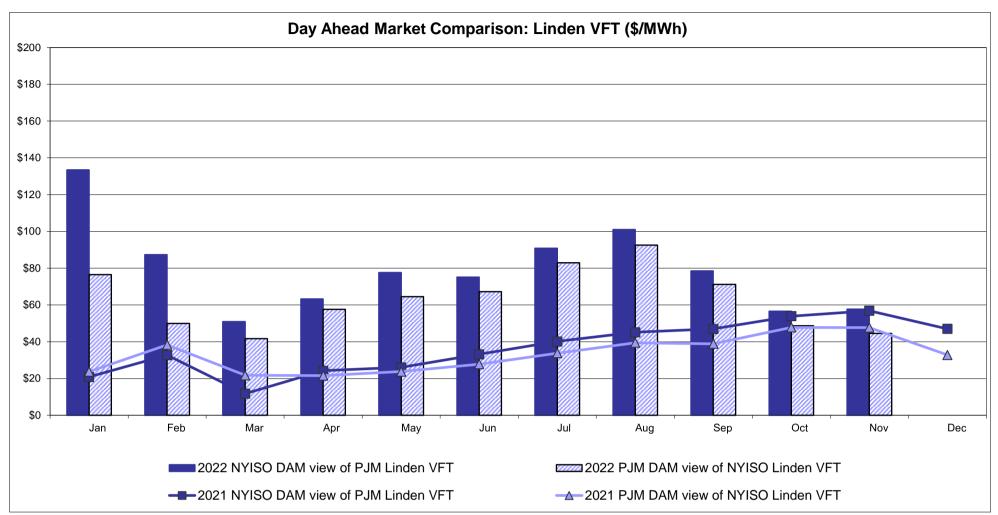


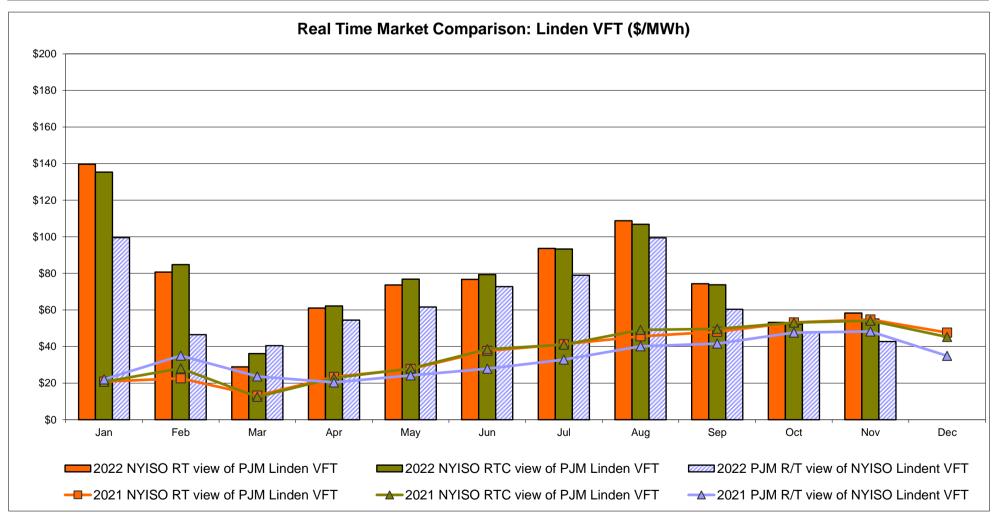


Note:

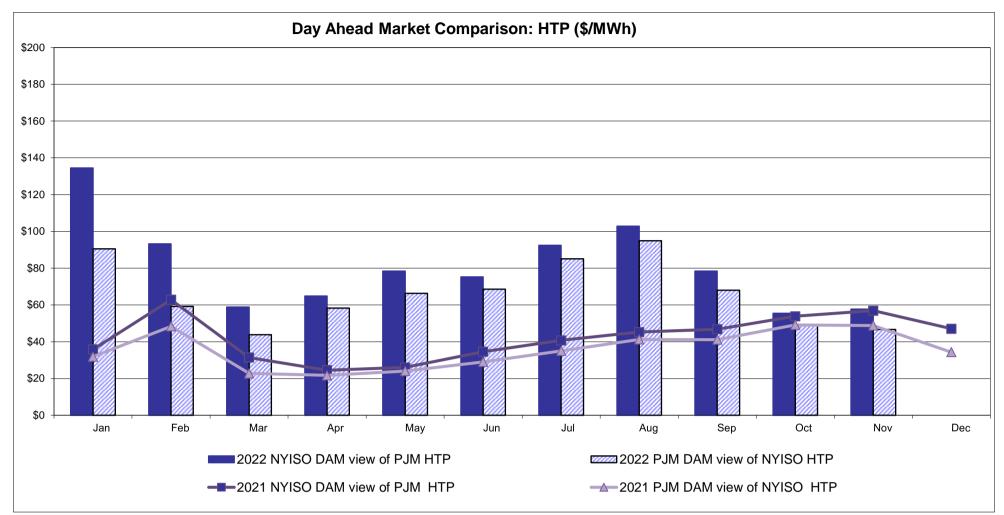
Hydro-Quebec Prices are unavailable.

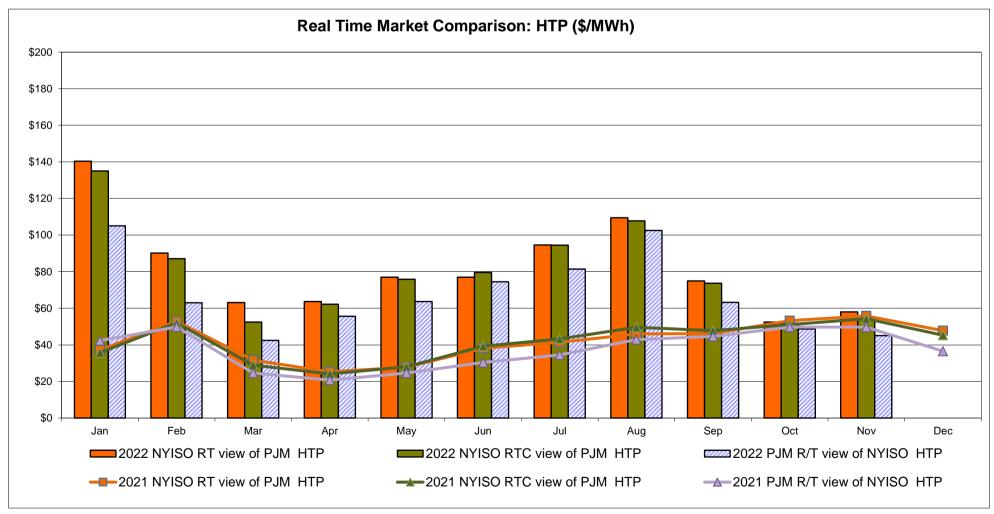
### External Controllable Line: Linden VFT (PJM)





### **External Controllable Line: Hudson (PJM)**

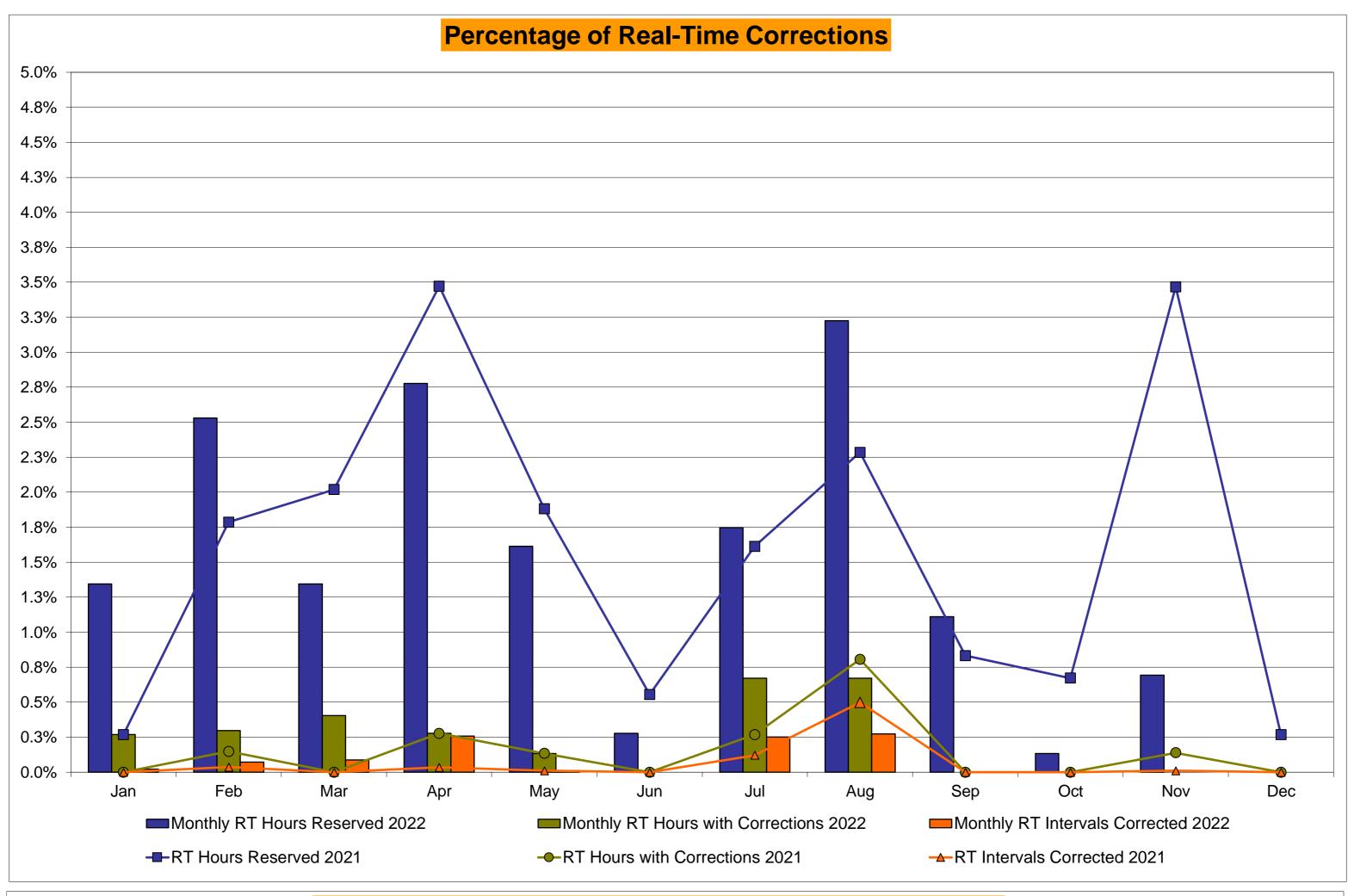


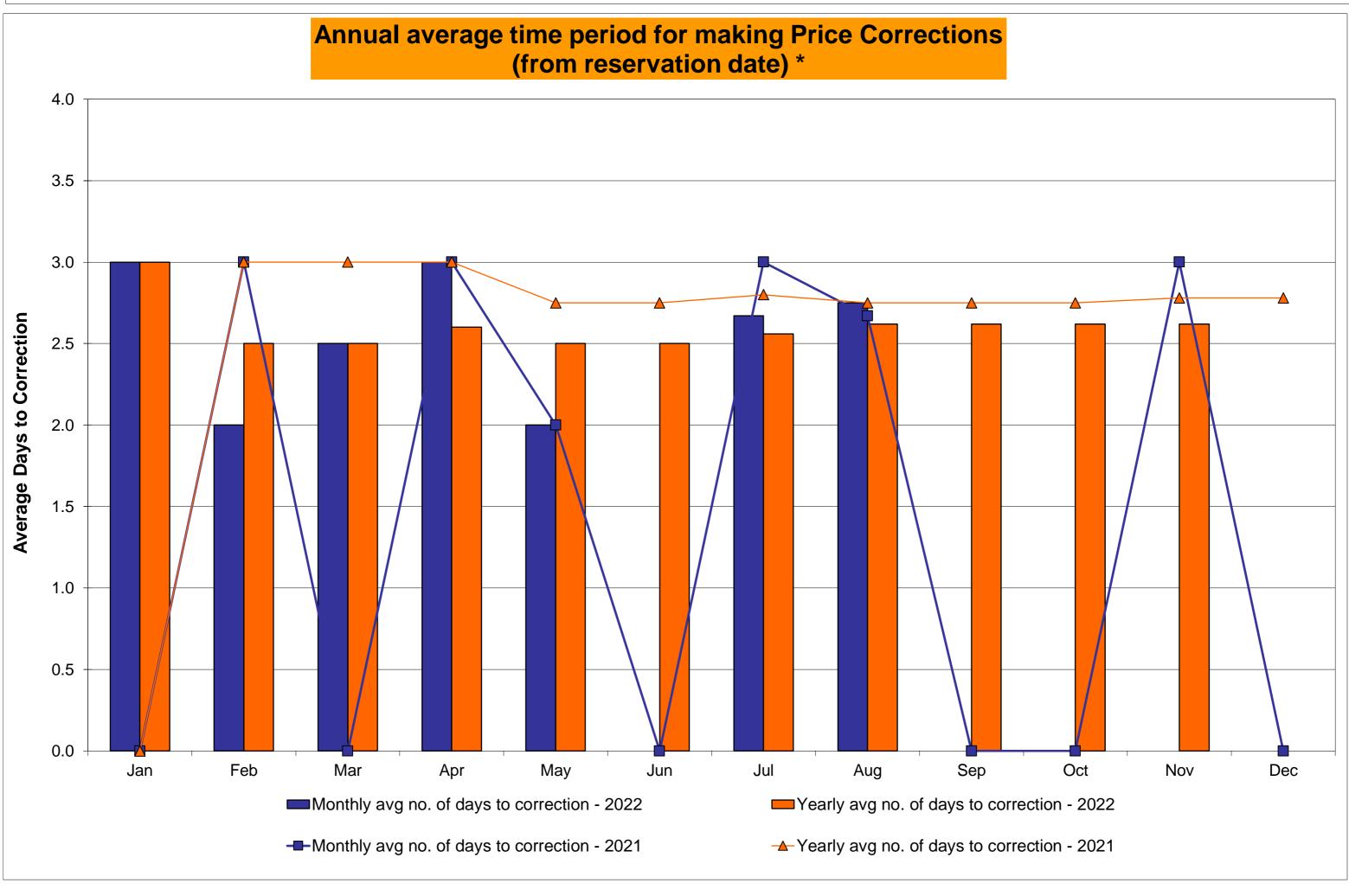


### **NYISO Real Time Price Correction Statistics**

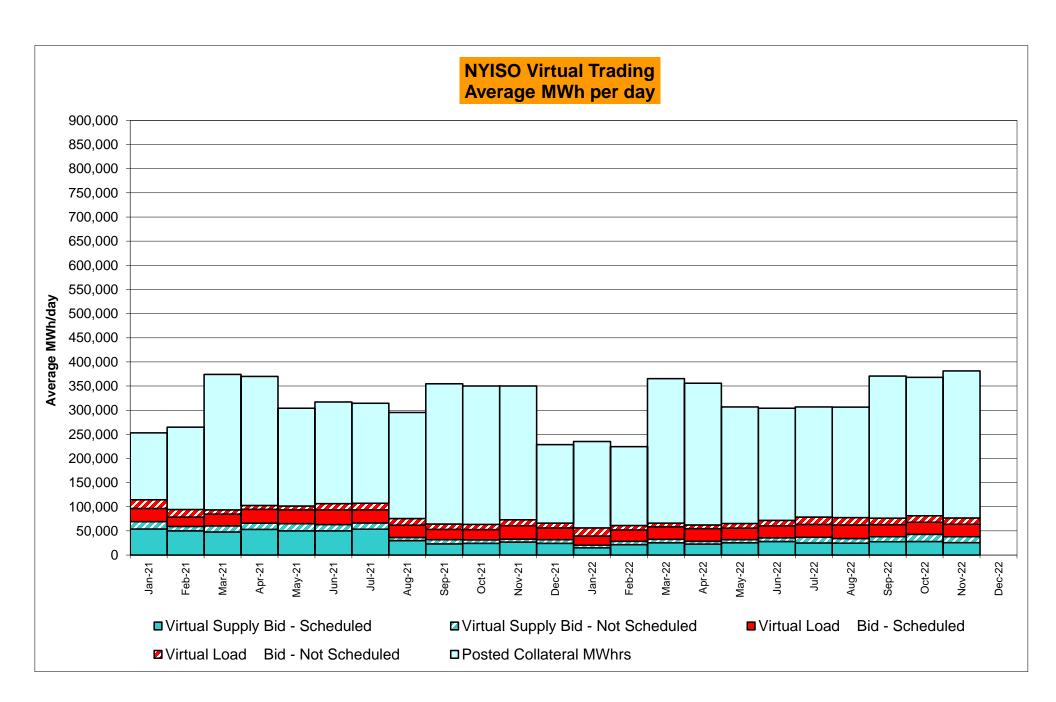
	NTIOO Real Time Trice Correction Statistics												
<u>2022</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Hour Corrections													
Number of hours with corrections	in the month	2	2	3	2	1	0	5	5	0	0	0	
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	
% 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%	
% 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%	
Interval Corrections													
Number of intervals corrected	in the month	2	6	8	23	1	0	23	25	0	0	0	
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	
% 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%	
% 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%	
Hours Reserved													
Number of hours reserved	in the month	10	17	10	20	12	2	13	24	8	1	5	
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	
% 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%	
% 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%	
Days to Correction *													_
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	
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	
Days Without Corrections													
Days without corrections	in the month	30	27	29	29	30	30	28	27	30	31	30	
Days without corrections	year-to-date	30	57	86	115	145	175	203	230	260	291	321	
2021		Januarv	February	March	April	Mav	June	Julv	August	September	October	November	December
2021 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	<u>October</u>	November	<u>December</u>
Hour Corrections	in the month	<u>-</u>	<u>February</u>			<u>May</u> 1						November 1	
Hour Corrections  Number of hours with corrections	in the month	0	1	0	2	1	0	2	6	0	0	1	0
Hour Corrections  Number of hours with corrections  Number of hours	in the month	0 744	1 672	0 743	2 720	 1 744	0 720	2 744	6 744	0 720	0 744	1 721	0 744
Hour Corrections  Number of hours with corrections  Number of hours  % of hours with corrections	in the month in the month	0 744 0.00%	1 672 0.15%	0 743 0.00%	2 720 0.28%	1 744 0.13%	0 720 0.00%	2 744 0.27%	6 744 0.81%	0 720 0.00%	0 744 0.00%	1 721 0.14%	0 744 0.00%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections	in the month	0 744	1 672	0 743	2 720	 1 744	0 720	2 744	6 744	0 720	0 744	1 721	0 744
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections	in the month in the month year-to-date	0 744 0.00% 0.00%	1 672 0.15% 0.07%	0 743 0.00% 0.05%	2 720 0.28% 0.10%	1 744 0.13%	0 720 0.00% 0.09%	2 744 0.27% 0.12%	6 744 0.81% 0.21%	0 720 0.00% 0.18%	0 744 0.00% 0.16%	1 721 0.14%	0 744 0.00% 0.15%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections Number of intervals corrected	in the month in the month year-to-date in the month	0 744 0.00% 0.00%	1 672 0.15% 0.07%	0 743 0.00% 0.05%	2 720 0.28% 0.10%	1 744 0.13% 0.11%	0 720 0.00% 0.09%	2 744 0.27% 0.12%	6 744 0.81% 0.21%	0 720 0.00% 0.18%	0 744 0.00% 0.16%	1 721 0.14% 0.16%	0 744 0.00% 0.15%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals	in the month in the month year-to-date in the month in the month	0 744 0.00% 0.00% 0 9,095	1 672 0.15% 0.07%	0 743 0.00% 0.05% 0 9,100	2 720 0.28% 0.10% 3 8,827	1 744 0.13% 0.11% 1 9,157	0 720 0.00% 0.09% 0 8,813	2 744 0.27% 0.12% 11 9,084	6 744 0.81% 0.21% 45 9,024	0 720 0.00% 0.18% 0 8,783	0 744 0.00% 0.16% 0 9,133	1 721 0.14% 0.16% 1 8,802	0 744 0.00% 0.15% 0 9,063
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected	in the month in the month year-to-date  in the month in the month in the month	0 744 0.00% 0.00% 0 9,095 0.00%	1 672 0.15% 0.07% 3 8,236 0.04%	0 743 0.00% 0.05% 0 9,100 0.00%	2 720 0.28% 0.10% 3 8,827 0.03%	1 744 0.13% 0.11% 1 9,157 0.01%	0 720 0.00% 0.09% 0 8,813 0.00%	2 744 0.27% 0.12% 11 9,084 0.12%	6 744 0.81% 0.21% 45 9,024 0.50%	0 720 0.00% 0.18% 0 8,783 0.00%	0 744 0.00% 0.16% 0 9,133 0.00%	1 721 0.14% 0.16% 1 8,802 0.01%	0 744 0.00% 0.15% 0 9,063 0.00%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected	in the month in the month year-to-date in the month in the month	0 744 0.00% 0.00% 0 9,095	1 672 0.15% 0.07%	0 743 0.00% 0.05% 0 9,100	2 720 0.28% 0.10% 3 8,827	1 744 0.13% 0.11% 1 9,157	0 720 0.00% 0.09% 0 8,813	2 744 0.27% 0.12% 11 9,084	6 744 0.81% 0.21% 45 9,024	0 720 0.00% 0.18% 0 8,783	0 744 0.00% 0.16% 0 9,133	1 721 0.14% 0.16% 1 8,802	0 744 0.00% 0.15% 0 9,063
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected Hours Reserved	in the month in the month year-to-date  in the month in the month in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07%	1 721 0.14% 0.16% 1 8,802 0.01% 0.07%	0 744 0.00% 0.15% 0 9,063 0.00% 0.06%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected Hours Reserved Number of hours reserved	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month	0 744 0.00% 0.00% 0 9,095 0.00% 0.00%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07%	1 721 0.14% 0.16% 1 8,802 0.01% 0.07%	0 744 0.00% 0.15% 0 9,063 0.00% 0.06%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected  Hours Reserved Number of hours reserved Number of hours	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00% 0.00%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07%	1 721 0.14% 0.16% 1 8,802 0.01% 0.07% 25 721	0 744 0.00% 0.15% 0 9,063 0.00% 0.06%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected Hours Reserved Number of hours reserved	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month	0 744 0.00% 0.00% 0 9,095 0.00% 0.00%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07%	1 721 0.14% 0.16% 1 8,802 0.01% 0.07%	0 744 0.00% 0.15% 0 9,063 0.00% 0.06%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00% 0.00%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07%	1 721 0.14% 0.16% 1 8,802 0.01% 0.07% 25 721	0 744 0.00% 0.15% 0 9,063 0.00% 0.06%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved Days to Correction *	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02% 12 672 1.79% 0.99%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01% 15 743 2.02% 1.34%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02% 25 720 3.47% 1.88%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02% 14 744 1.88% 1.88%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01% 4 720 0.56% 1.66%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03% 12 744 1.61% 1.65%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09% 17 744 2.28% 1.73%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08% 6 720 0.83% 1.63%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07% 5 744 0.67% 1.54%	1 721 0.14% 0.16%  1 8,802 0.01% 0.07%  25 721 3.47% 1.71%	0 744 0.00% 0.15% 0 9,063 0.00% 0.06% 2 744 0.27% 1.59%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected  Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved % of hours reserved Days to Correction * Avg. number of days to correction	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date  in the month	0 744 0.00% 0.00% 0 9,095 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02% 12 672 1.79% 0.99%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01% 15 743 2.02% 1.34%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02% 25 720 3.47% 1.88%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02% 14 744 1.88% 1.88%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01% 4 720 0.56% 1.66%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03% 12 744 1.61% 1.65%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09% 17 744 2.28% 1.73%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08% 6 720 0.83% 1.63%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07% 5 744 0.67% 1.54%	1 721 0.14% 0.16%  1 8,802 0.01% 0.07%  25 721 3.47% 1.71%  3.00	0 744 0.00% 0.15% 0 9,063 0.00% 0.06% 2 744 0.27% 1.59%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected  Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved % of hours reserved  Avg. number of days to correction Avg. number of days to correction	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02% 12 672 1.79% 0.99%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01% 15 743 2.02% 1.34%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02% 25 720 3.47% 1.88%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02% 14 744 1.88% 1.88%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01% 4 720 0.56% 1.66%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03% 12 744 1.61% 1.65%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09% 17 744 2.28% 1.73%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08% 6 720 0.83% 1.63%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07% 5 744 0.67% 1.54%	1 721 0.14% 0.16%  1 8,802 0.01% 0.07%  25 721 3.47% 1.71%	0 744 0.00% 0.15% 0 9,063 0.00% 0.06% 2 744 0.27% 1.59%
Hour Corrections  Number of hours with corrections  Number of hours  % of hours with corrections  % of hours with corrections  Interval Corrections  Number of intervals corrected  Number of intervals  % of intervals corrected  % of intervals corrected  Hours Reserved  Number of hours reserved  Number of hours  % of hours reserved  % of hours reserved  % of hours reserved  Avg. number of days to correction  Avg. number of days to correction  Days Without Corrections	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date  in the month year-to-date	0 744 0.00% 0.00% 0 9,095 0.00% 0.00% 2 744 0.27% 0.27% 0.00 0.00	1 672 0.15% 0.07% 3 8,236 0.04% 0.02% 12 672 1.79% 0.99% 3.00 3.00	0 743 0.00% 0.05% 0 9,100 0.00% 0.01% 15 743 2.02% 1.34% 0.00 3.00	2 720 0.28% 0.10% 3 8,827 0.03% 0.02% 25 720 3.47% 1.88% 3.00 3.00	1 744 0.13% 0.11% 1 9,157 0.01% 0.02% 14 744 1.88% 1.88% 2.00 2.75	0 720 0.00% 0.09% 0 8,813 0.00% 0.01% 4 720 0.56% 1.66% 0.00 2.75	2 744 0.27% 0.12% 11 9,084 0.12% 0.03% 12 744 1.61% 1.65% 3.00 2.80	6 744 0.81% 0.21% 45 9,024 0.50% 0.09% 17 744 2.28% 1.73% 2.67 2.75	0 720 0.00% 0.18% 0 8,783 0.00% 0.08% 6 720 0.83% 1.63% 0.00 2.75	0 744 0.00% 0.16% 0 9,133 0.00% 0.07% 5 744 0.67% 1.54% 0.00 2.75	1 721 0.14% 0.16%  1 8,802 0.01% 0.07%  25 721 3.47% 1.71%  3.00 2.78	0 744 0.00% 0.15% 0 9,063 0.00% 0.06% 2 744 0.27% 1.59% 0.00 2.78
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Interval Corrections  Number of intervals corrected Number of intervals % of intervals corrected % of intervals corrected  Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved % of hours reserved  Avg. number of days to correction Avg. number of days to correction	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month year-to-date  in the month	0 744 0.00% 0.00% 0 9,095 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 3 8,236 0.04% 0.02% 12 672 1.79% 0.99%	0 743 0.00% 0.05% 0 9,100 0.00% 0.01% 15 743 2.02% 1.34%	2 720 0.28% 0.10% 3 8,827 0.03% 0.02% 25 720 3.47% 1.88%	1 744 0.13% 0.11% 1 9,157 0.01% 0.02% 14 744 1.88% 1.88%	0 720 0.00% 0.09% 0 8,813 0.00% 0.01% 4 720 0.56% 1.66%	2 744 0.27% 0.12% 11 9,084 0.12% 0.03% 12 744 1.61% 1.65%	6 744 0.81% 0.21% 45 9,024 0.50% 0.09% 17 744 2.28% 1.73%	0 720 0.00% 0.18% 0 8,783 0.00% 0.08% 6 720 0.83% 1.63%	0 744 0.00% 0.16% 0 9,133 0.00% 0.07% 5 744 0.67% 1.54%	1 721 0.14% 0.16%  1 8,802 0.01% 0.07%  25 721 3.47% 1.71%  3.00	0 744 0.00% 0.15% 0 9,063 0.00% 0.06% 2 744 0.27% 1.59%

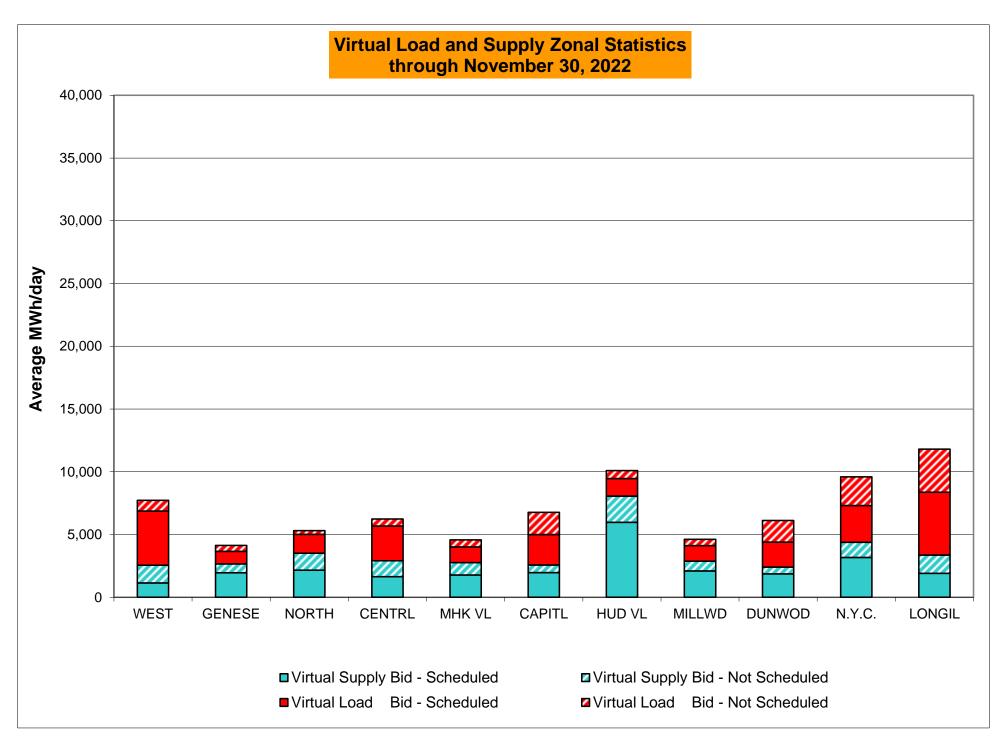
<sup>\*</sup>Calendar days from reservation date; for June 2018 forward, business days from market date



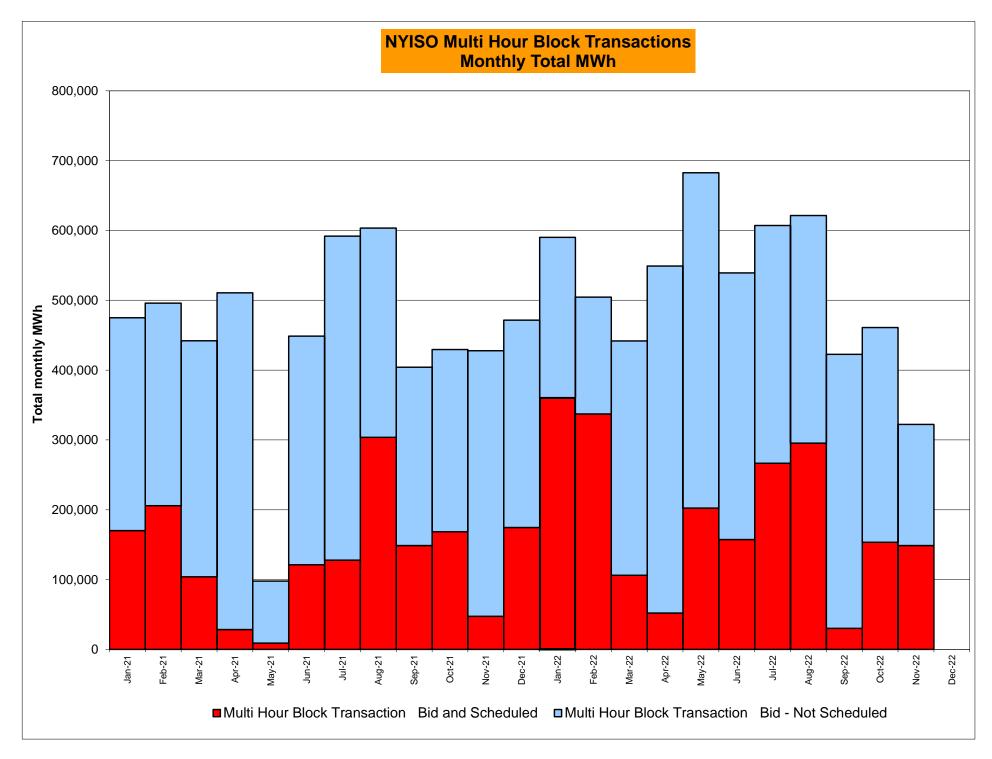


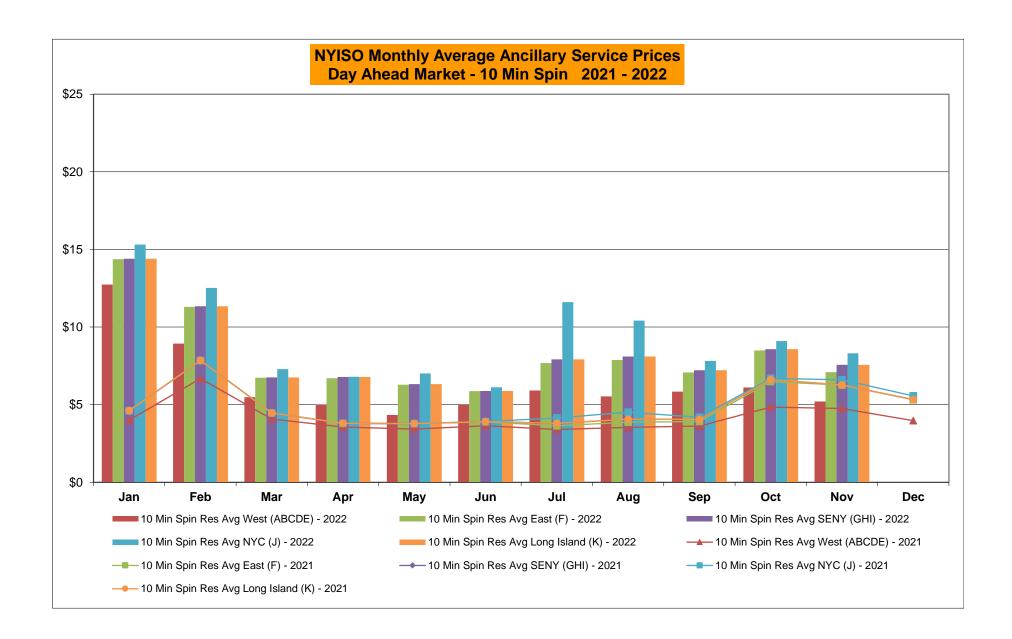
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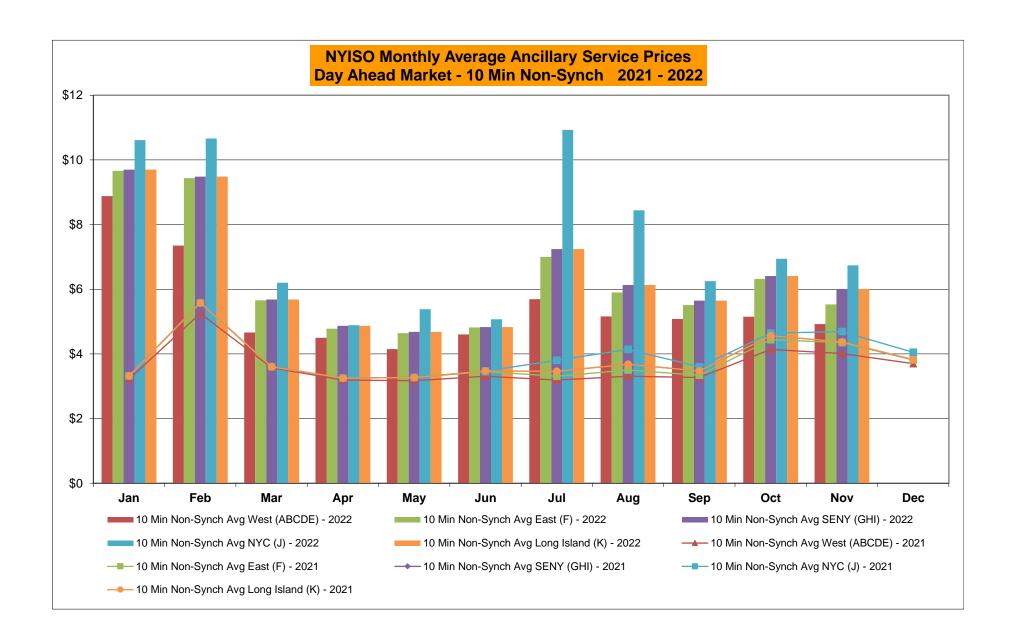


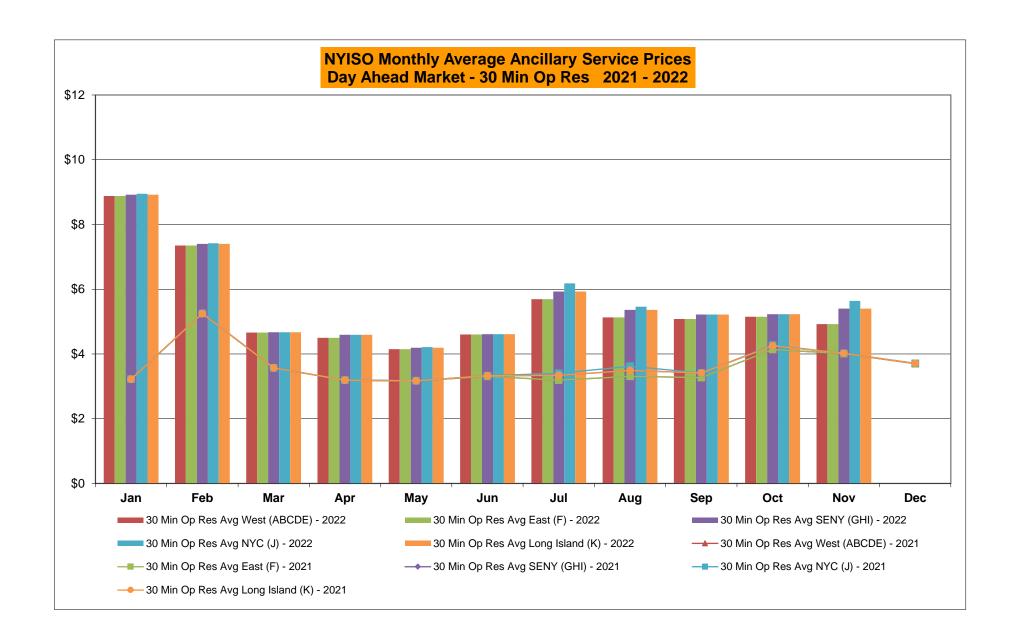


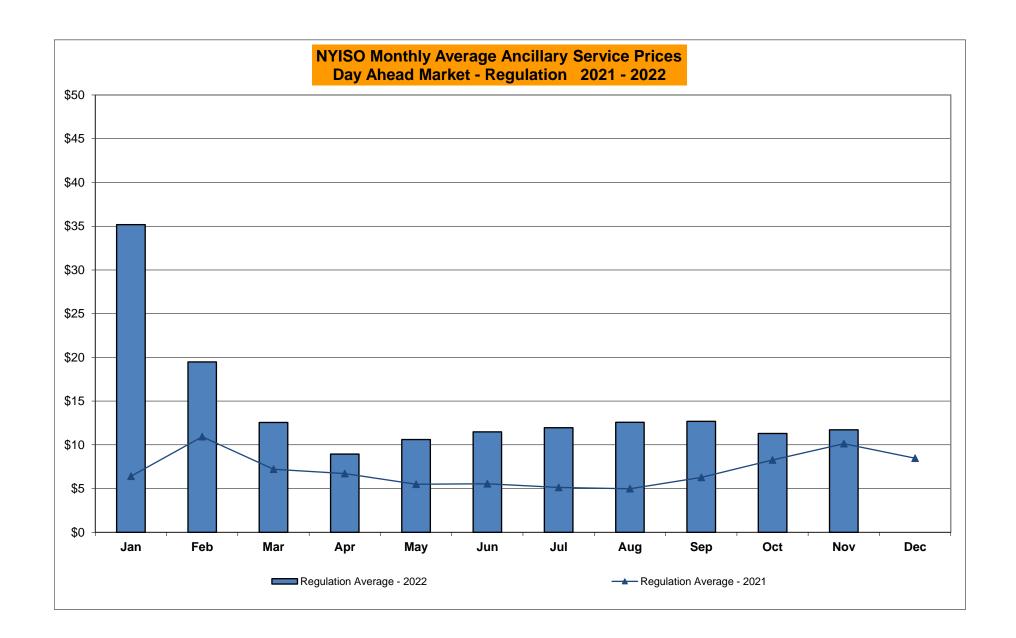
					<u>Virtual L</u>	oad and	Supp	ly Zonal	Statistic	s (Avera	ge MWh/	day) - 2022	1				
		Virtual Lo	oad Bid	Virtual S	upply Bid			Virtual L	oad Bid	Virtual Su	upply Bid			Virtual L	oad Bid	Virtual Su	upply Bid
			Not		Not				Not		Not				Not		Not
Zone	Date		Scheduled	Scheduled	Scheduled	Zone	Date	Scheduled	Scheduled	Scheduled	Scheduled	Zone	Date	Scheduled	Scheduled	Scheduled	Scheduled
WEST	Jan-22	2,754	1,900	2,076	1,276	MHK VL	Jan-22	722	621	1,245			Jan-22	1,376		652	
	Feb-22	2,773	1,170	3,027	908		Feb-22	1,830	386				Feb-22	,		1,218	
	Mar-22	3,702	830	2,480	526		Mar-22	2,263	131	1,506			Mar-22	1,427		1,944	
	Apr-22	3,967	1,016	2,214	402		Apr-22	1,848	208	1,483			Apr-22	2,229		1,219	
	May-22	5,740	1,247	1,473	670		May-22	1,108	254	2,338			May-22		· ·	·	
	Jun-22	6,049	2,343	1,239	1,048		Jun-22	1,021	423	2,636			Jun-22	1,859			
	Jul-22	4,521	2,537	1,837	945		Jul-22	316	824	2,895			Jul-22	2,607		·	
	Aug-22	3,954	2,685	1,252	848		Aug-22	831	937	2,676			Aug-22				
	Sep-22	3,586	2,483 1,660	1,848	907 1,659		Sep-22	770 756	1,023 1,007	2,924	408 1,023		Sep-22	2,309			413 646
	Oct-22 Nov-22	4,649	851	1,469	,		Oct-22		553	2,419	· ·		Oct-22 Nov-22	2,129		1,873	554
		4,311	851	1,133	1,425		Nov-22	1,259	553	1,774	981			1,982	1,724	1,855	554
	Dec-22						Dec-22						Dec-22				
GENESE	Jan-22	722	464	1,058	319	CAPITL	Jan-22	2,536	2,157	749	695	N.Y.C.	Jan-22	2,341	3,279	1,155	349
SLIVESE	Feb-22	853	293	1,560	395	CAFIIL	Feb-22	3,700	1,211	1,075	785		Feb-22	2,889		1,133	607
	Mar-22	1,615	190	1,176	265		Mar-22	2,660	1,045	1,450			Mar-22	1,769	· ·	·	
	Apr-22	1,226	244	1,415	354		Apr-22	1,761	610	2,274	843		Apr-22	1,703			
	May-22	994	302	2,104	636		May-22	2,118	868	2,609			May-22	2,215		2,425	405
	Jun-22	728	542	2,426	453		Jun-22	1,856	697	2,784	832		Jun-22			·	613
	Jul-22	670	463	2,060	346		Jul-22	1,621	1,170	2,543			Jul-22			1,795	1,265
	Aug-22		526	2,080	281		Aug-22	2,663	1,016		503		Aug-22	5,333			1,023
	Sep-22	1,207	531	1,224	356		Sep-22	2,104	739	1,874	893		Sep-22	3,294		· ·	1,077
	Oct-22	765	616	2,348	429		Oct-22	3,104	1,000	1,653			Oct-22	1,803		·	1,164
	Nov-22	994	475	1,953	706		Nov-22	2,433	1,765	1,960			Nov-22	2,934			1,201
	Dec-22			1,000			Dec-22	_,	1,100	,,,,,,			Dec-22		_,	,,,,,	,,_,
NORTH	Jan-22	938	469	1,778	643	HUD VL	Jan-22	1,062	1,130	3,738	1,083	LONGIL	Jan-22	4,217	2,685	601	241
	Feb-22	1,019	231	1,899	887		Feb-22	1,288	390	5,143	1,806		Feb-22	4,110	1,658	1,021	355
	Mar-22	1,192	148		699		Mar-22		308				Mar-22				
	Apr-22	1,046	165	2,180	885		Apr-22	1,400	172		· ·		Apr-22				
	May-22	1,501	233	1,889	1,039		May-22		300	-			May-22			·	
	Jun-22	1,641	492	2,160	710		Jun-22	697	518	· ·			Jun-22			·	
	Jul-22	1,483	489	1,987	477		Jul-22	1,107	1,052		· ·		Jul-22				
	Aug-22	797	609	3,024	964		Aug-22		680	-	2,379		Aug-22				·
	Sep-22	1,585	613		1,027		Sep-22	1,250	596				Sep-22				
	Oct-22	2,458	1,274	2,311	1,297		Oct-22	1,006	376	-			Oct-22				·
	Nov-22	1,493	299	2,157	1,357		Nov-22	1,399	634	5,969	2,096		Nov-22		3,426	1,909	1,447
	Dec-22						Dec-22						Dec-22				
CENTRL	Jan-22	1,317	1,284	1,104	364	MILLWD	Jan-22	1,104	654	867	262	NYISO	Jan-22	19,089	16,494	15,023	5,489
OLIVIL .	Feb-22	1,665	499	1,780	409	IVIILLAAD	Feb-22	1,104	462				Feb-22				
	Mar-22	3,731	251	1,780	338		Mar-22	1,413	234	2,038			Mar-22	25,823	· ·	25,430	
	Apr-22	4,837	390	1,415	307		Apr-22	2,136	172				Apr-22			· ·	
	May-22	2,265	267	1,845	543		May-22		277	1,628			May-22			· ·	
	Jun-22	1,597	718	2,303	368		Jun-22		393				Jun-22			28,164	7,511
	Jul-22	1,108	1,071	2,051	464		Jul-22	2,248	909				Jul-22			· ·	
	Aug-22	1,172	1,149	2,338	628		Aug-22	2,387	686				Aug-22	· ·		24,733	
	Sep-22	1,809	1,280	2,915	663		Sep-22	1,966	661	1,527			Sep-22				
	Oct-22	2,743	1,023	2,011	999		Oct-22	1,285	387	1,829			Oct-22			-	14,971
	Nov-22	2,769	568		1,260		Nov-22	1,236					Nov-22	-		·	
ļ	Dec-22		330	,	,		Dec-22						Dec-22		2,210	2,520	_, : · <u>_</u>

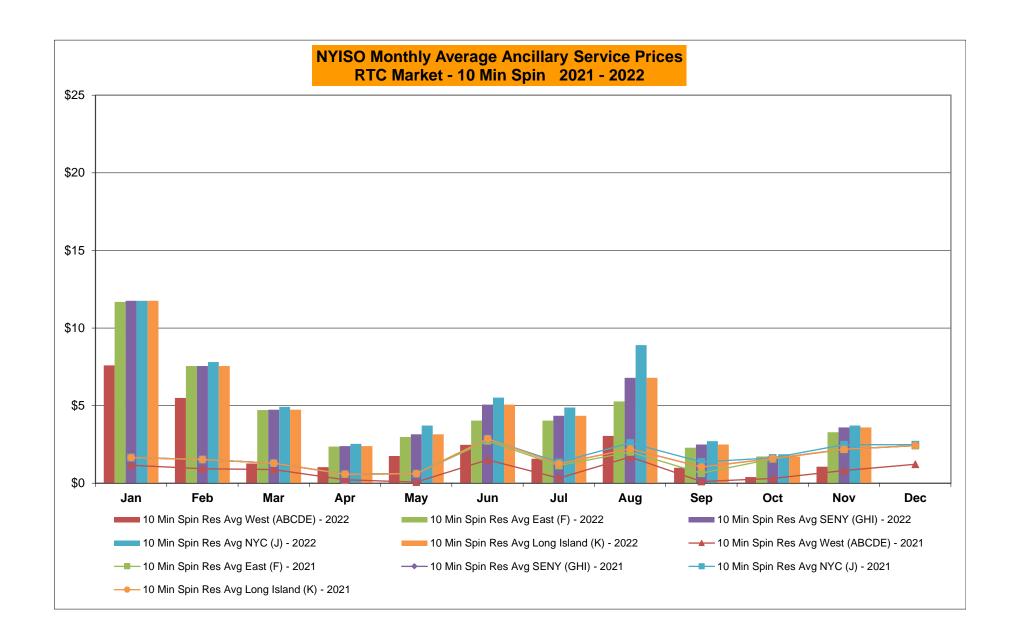


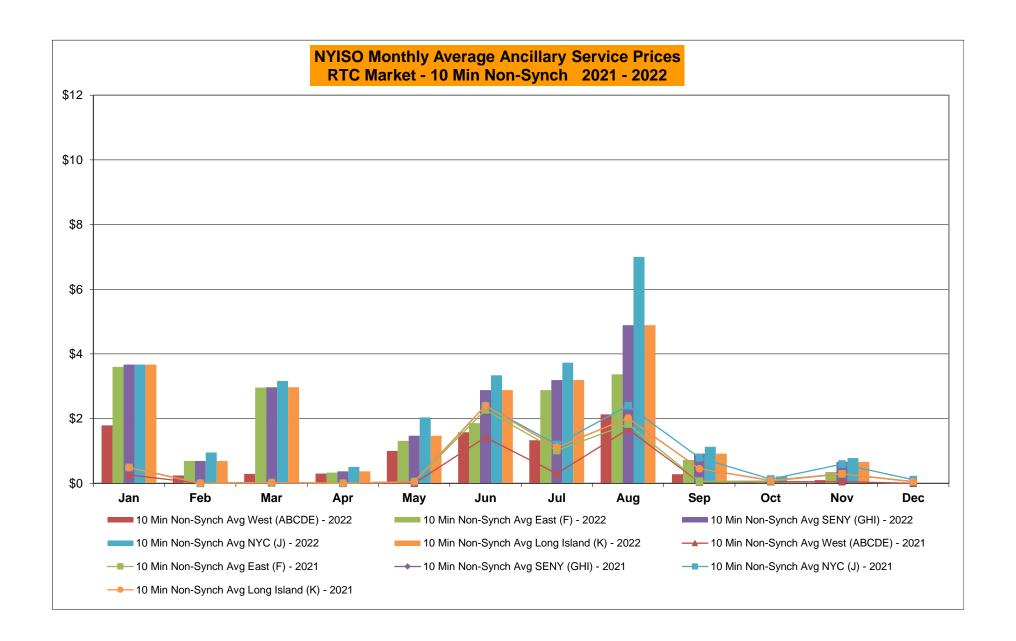


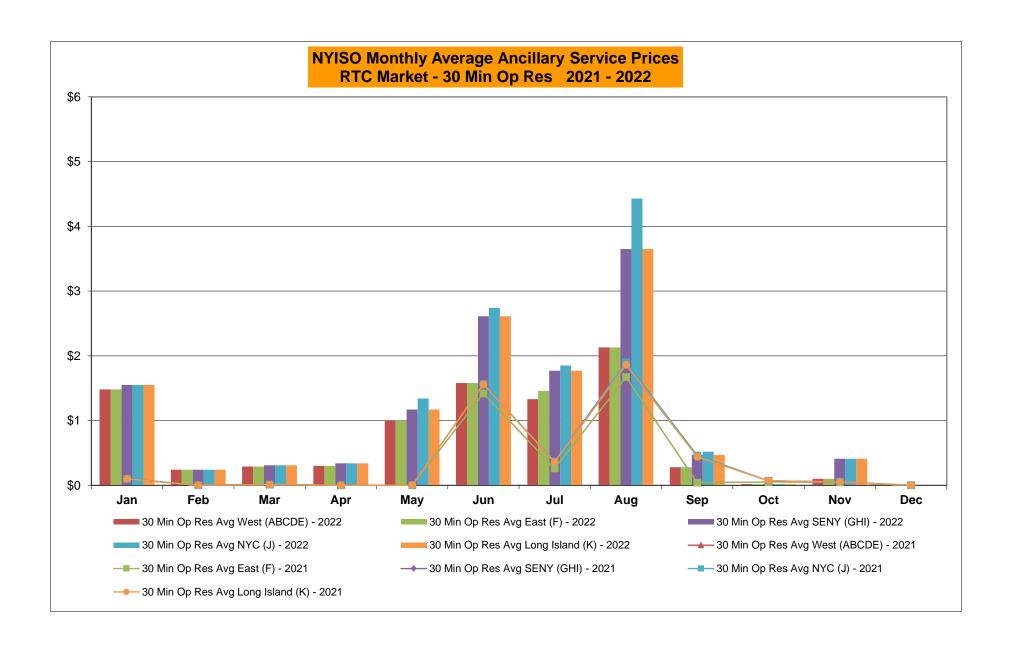


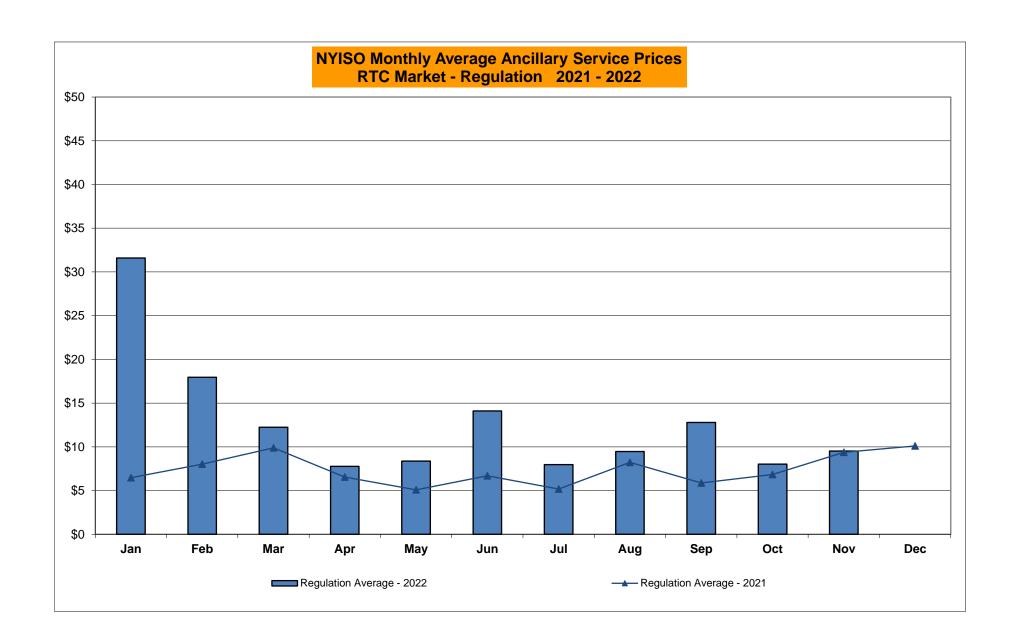


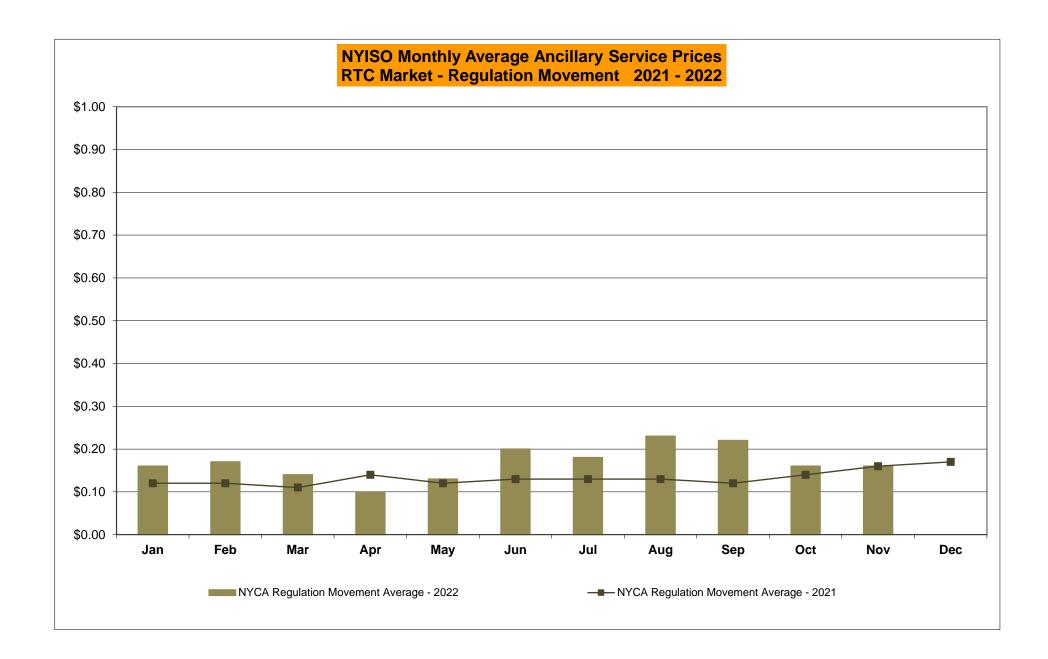


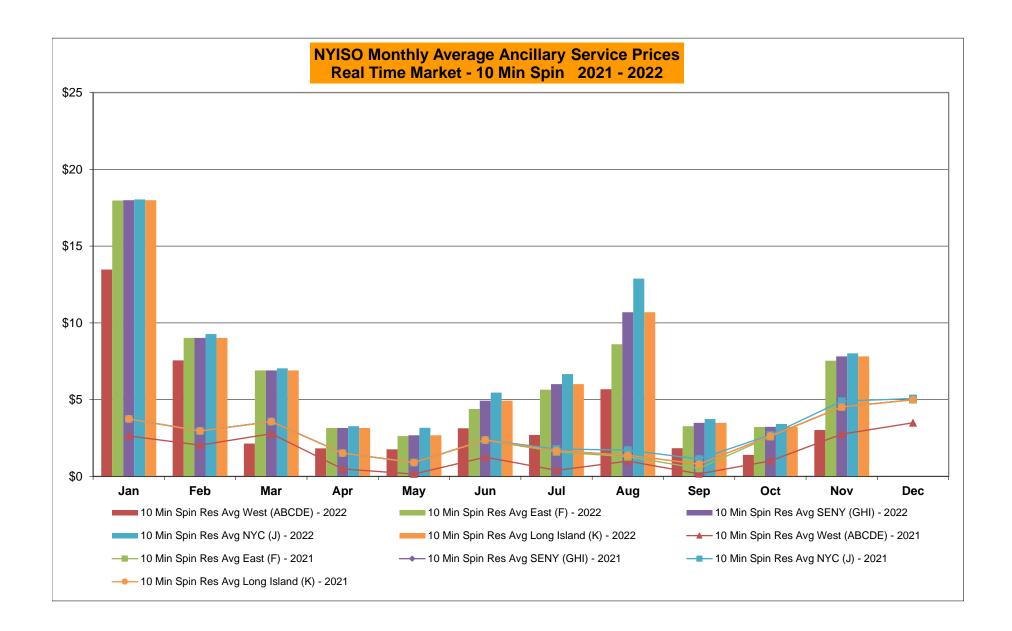


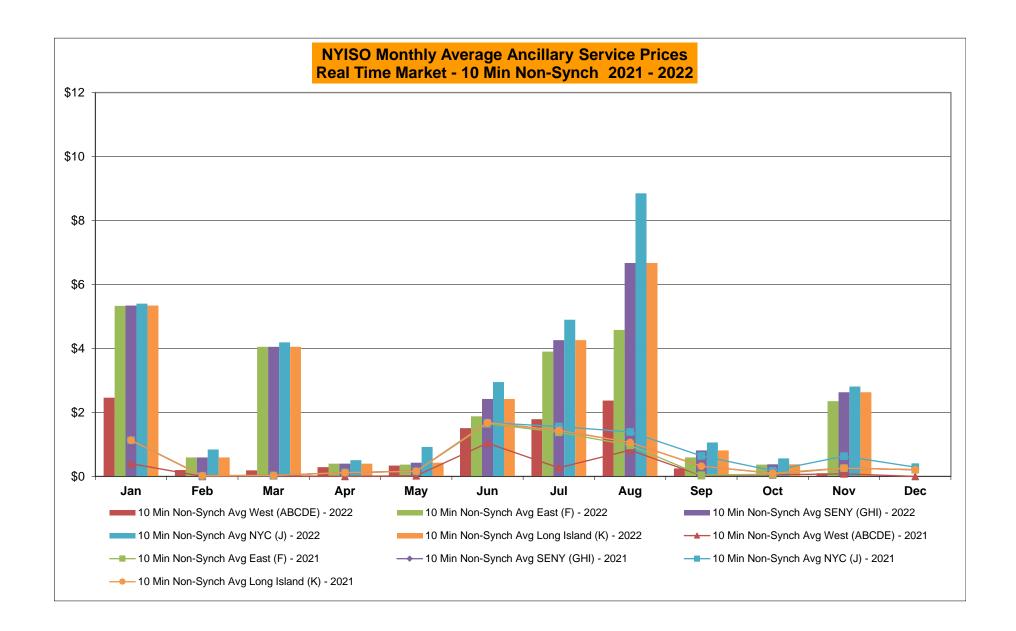


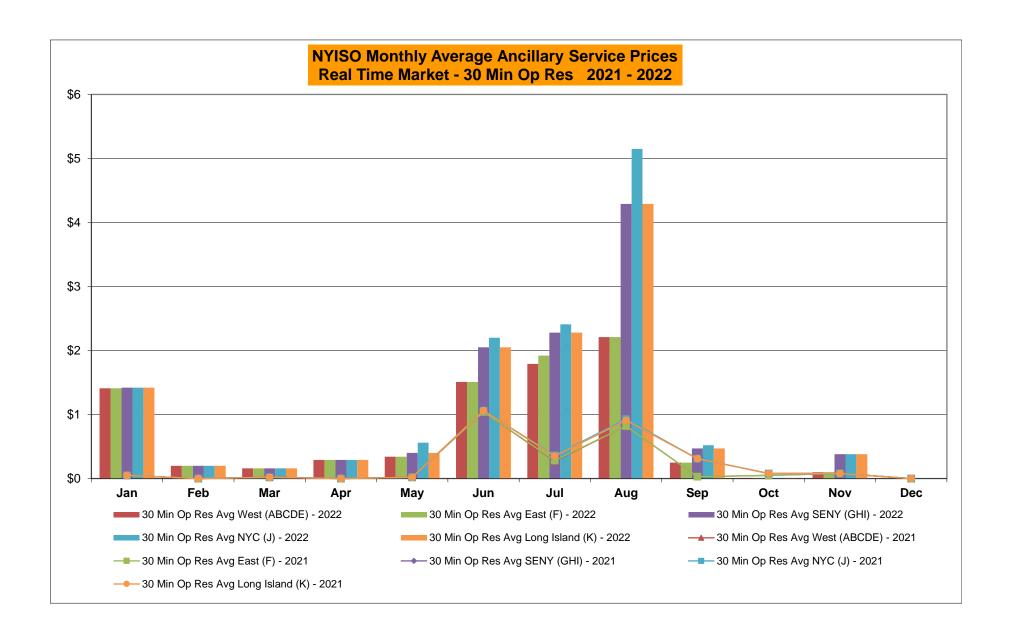


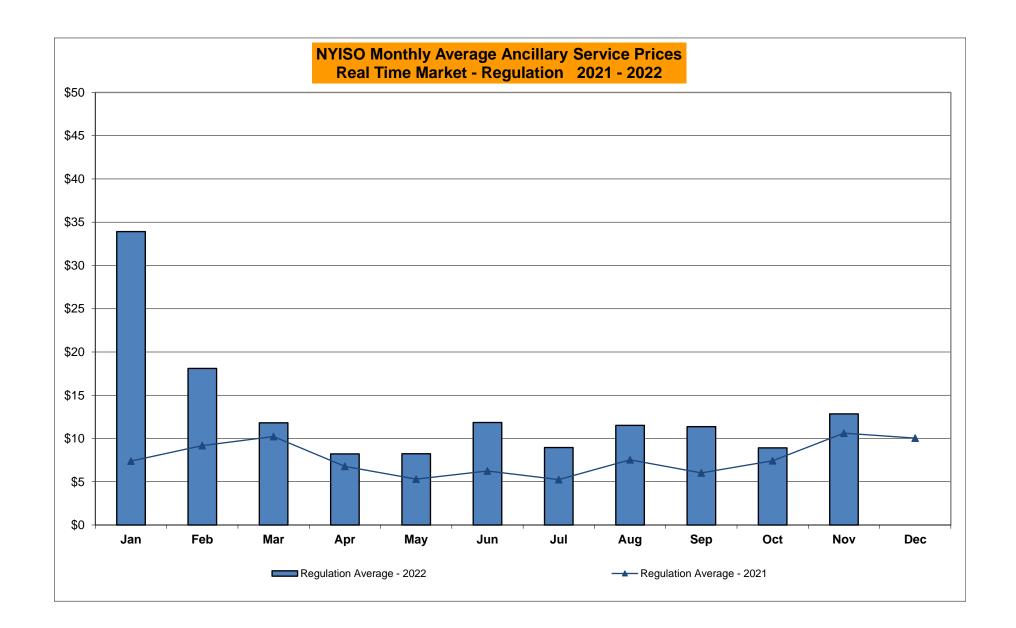


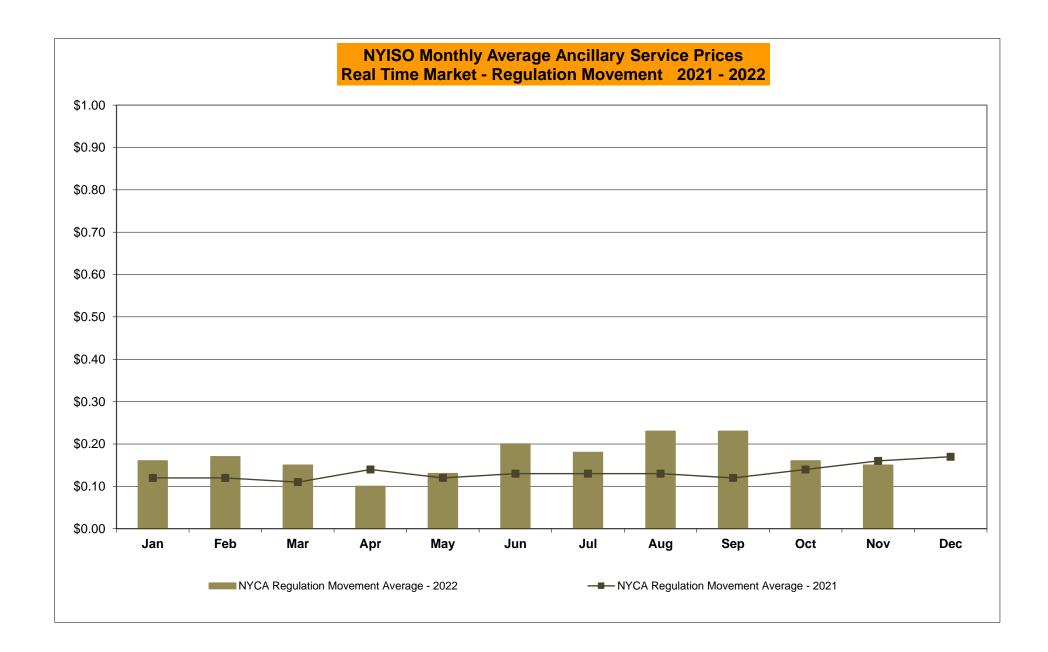












# NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - DAM

<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>
Day Ahead Market												
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
Regulation	35.17	19.48	12.56	8.94	10.61	11.49	11.96	12.58	12.68	11.31	11.72	
<u>2021</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>	September	<u>October</u>	November	<u>December</u>
2021 Day Ahead Market	<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>	November	<u>December</u>
	<u>January</u> 4.61	February 7.85	<u>March</u> 4.46	<u>April</u> 3.80	<u>May</u> 3.78	<u>June</u> 3.91	<u>July</u> 3.80	<u>August</u> 4.06	September 4.05	October 6.61	November 6.27	<u>December</u> 5.33
Day Ahead Market	•	-			-			_				
<u>Day Ahead Market</u> 10 Min Spin Long Island (K)	4.61	7.85	4.46	3.80	3.78	3.91	3.80	4.06	4.05	6.61	6.27	5.33
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)	4.61 4.68	7.85 8.01	4.46 4.46	3.80 3.81	3.78 3.80	3.91 4.38	3.80 4.14	4.06 4.51	4.05 4.19	6.61 6.69	6.27 6.60	5.33 5.56
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)	4.61 4.68 4.61	7.85 8.01 7.85	4.46 4.46 4.46	3.80 3.81 3.80	3.78 3.80 3.78	3.91 4.38 3.91	3.80 4.14 3.80	4.06 4.51 4.06	4.05 4.19 4.05	6.61 6.69 6.61	6.27 6.60 6.27	5.33 5.56 5.33
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)	4.61 4.68 4.61 4.61	7.85 8.01 7.85 7.85	4.46 4.46 4.46 4.46	3.80 3.81 3.80 3.80	3.78 3.80 3.78 3.78	3.91 4.38 3.91 3.89	3.80 4.14 3.80 3.64	4.06 4.51 4.06 3.87	4.05 4.19 4.05 3.92	6.61 6.69 6.61 6.49	6.27 6.60 6.27 6.26	5.33 5.56 5.33 5.32
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)	4.61 4.68 4.61 4.61 4.01	7.85 8.01 7.85 7.85 6.68	4.46 4.46 4.46 4.46 4.07	3.80 3.81 3.80 3.80 3.56	3.78 3.80 3.78 3.78 3.43	3.91 4.38 3.91 3.89 3.64	3.80 4.14 3.80 3.64 3.40	4.06 4.51 4.06 3.87 3.54	4.05 4.19 4.05 3.92 3.62	6.61 6.69 6.61 6.49 4.84	6.27 6.60 6.27 6.26 4.75	5.33 5.56 5.33 5.32 3.97
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)	4.61 4.68 4.61 4.61 4.01 3.32	7.85 8.01 7.85 7.85 6.68 5.58	4.46 4.46 4.46 4.07 3.60	3.80 3.81 3.80 3.80 3.56 3.25	3.78 3.80 3.78 3.78 3.43 3.27	3.91 4.38 3.91 3.89 3.64 3.47	3.80 4.14 3.80 3.64 3.40 3.46	4.06 4.51 4.06 3.87 3.54 3.68	4.05 4.19 4.05 3.92 3.62 3.47	6.61 6.69 6.61 6.49 4.84 4.56	6.27 6.60 6.27 6.26 4.75 4.37	5.33 5.56 5.33 5.32 3.97 3.82
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)	4.61 4.68 4.61 4.61 4.01 3.32 3.40	7.85 8.01 7.85 7.85 6.68 5.58 5.74	4.46 4.46 4.46 4.07 3.60 3.60	3.80 3.81 3.80 3.80 3.56 3.25 3.25	3.78 3.80 3.78 3.78 3.43 3.27 3.30	3.91 4.38 3.91 3.89 3.64 3.47 3.93	3.80 4.14 3.80 3.64 3.40 3.46 3.80	4.06 4.51 4.06 3.87 3.54 3.68 4.14	4.05 4.19 4.05 3.92 3.62 3.47 3.60	6.61 6.69 6.61 6.49 4.84 4.56 4.64	6.27 6.60 6.27 6.26 4.75 4.37 4.69	5.33 5.56 5.33 5.32 3.97 3.82 4.05
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32	7.85 8.01 7.85 7.85 6.68 5.58 5.74	4.46 4.46 4.46 4.07 3.60 3.60 3.60	3.80 3.81 3.80 3.80 3.56 3.25 3.25 3.26 3.25	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47	6.61 6.69 6.61 6.49 4.84 4.56 4.64	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.82
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32 3.32	7.85 8.01 7.85 7.85 6.68 5.58 5.74 5.58 5.58	4.46 4.46 4.46 4.46 4.07 3.60 3.60 3.60 3.60	3.80 3.81 3.80 3.56 3.25 3.26 3.25 3.25	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27 3.27	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47 3.45	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46 3.31	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68 3.50	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47 3.34	6.61 6.69 6.61 6.49 4.84 4.56 4.64 4.56	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.82 3.81
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min NYC (J)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32 3.32 3.22	7.85 8.01 7.85 7.85 6.68 5.58 5.74 5.58 5.58 5.25	4.46 4.46 4.46 4.07 3.60 3.60 3.60 3.57	3.80 3.81 3.80 3.56 3.25 3.26 3.25 3.25 3.19	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27 3.27 3.17	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47 3.45 3.31	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46 3.31 3.19	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68 3.50 3.31	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47 3.34 3.27	6.61 6.69 6.61 6.49 4.84 4.56 4.64 4.56 4.44	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37 4.35 4.01	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.82 3.81 3.70
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Long Island (K)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32 3.32 3.22 3.22	7.85 8.01 7.85 7.85 6.68 5.58 5.74 5.58 5.58 5.25	4.46 4.46 4.46 4.07 3.60 3.60 3.60 3.57 3.57	3.80 3.81 3.80 3.56 3.25 3.26 3.25 3.25 3.19 3.19	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27 3.17 3.17	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47 3.45 3.31 3.33	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46 3.31 3.19 3.34	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68 3.50 3.31 3.49	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47 3.34 3.27 3.41	6.61 6.69 6.61 6.49 4.84 4.56 4.64 4.56 4.44 4.14	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37 4.35 4.01 4.02	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.81 3.70 3.71
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min NYC (J)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32 3.22 3.22 3.22 3.22	7.85 8.01 7.85 7.85 6.68 5.58 5.74 5.58 5.58 5.25 5.25	4.46 4.46 4.46 4.07 3.60 3.60 3.60 3.57 3.57	3.80 3.81 3.80 3.56 3.25 3.26 3.25 3.25 3.19 3.19 3.19	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27 3.27 3.17 3.17 3.18	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47 3.45 3.31 3.33 3.53	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46 3.31 3.19 3.34 3.40	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68 3.50 3.31 3.49 3.62	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47 3.34 3.27 3.41 3.41	6.61 6.69 6.61 6.49 4.84 4.56 4.64 4.56 4.44 4.14 4.25 4.27	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37 4.35 4.01 4.02	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.82 3.81 3.70 3.71 3.71
Day Ahead Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min NYC (J)  30 Min SENY (GHI)	4.61 4.68 4.61 4.61 4.01 3.32 3.40 3.32 3.22 3.22 3.22 3.22 3.23 3.22	7.85 8.01 7.85 7.85 6.68 5.58 5.74 5.58 5.25 5.25 5.25 5.25	4.46 4.46 4.46 4.07 3.60 3.60 3.60 3.57 3.57 3.57	3.80 3.81 3.80 3.56 3.25 3.26 3.25 3.19 3.19 3.19 3.19	3.78 3.80 3.78 3.78 3.43 3.27 3.30 3.27 3.27 3.17 3.17 3.18 3.17	3.91 4.38 3.91 3.89 3.64 3.47 3.93 3.47 3.45 3.31 3.33 3.53 3.53	3.80 4.14 3.80 3.64 3.40 3.46 3.80 3.46 3.31 3.19 3.34 3.40 3.34	4.06 4.51 4.06 3.87 3.54 3.68 4.14 3.68 3.50 3.31 3.49 3.62 3.49	4.05 4.19 4.05 3.92 3.62 3.47 3.60 3.47 3.34 3.27 3.41 3.41	6.61 6.69 6.61 6.49 4.84 4.56 4.64 4.56 4.44 4.14 4.25 4.27	6.27 6.60 6.27 6.26 4.75 4.37 4.69 4.37 4.35 4.01 4.02 4.02	5.33 5.56 5.33 5.32 3.97 3.82 4.05 3.82 3.81 3.70 3.71 3.71

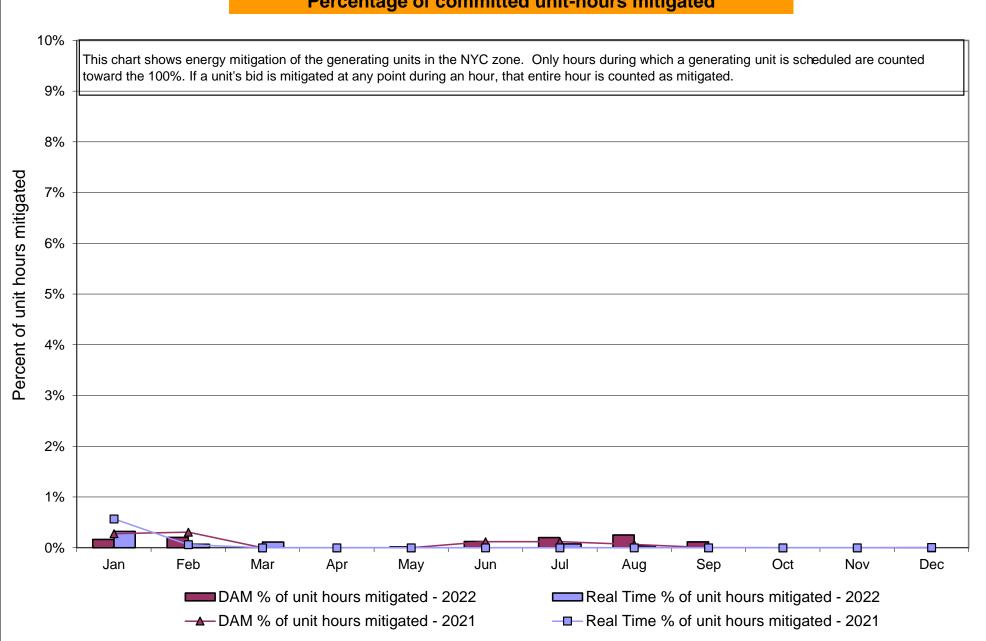
# NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RTC

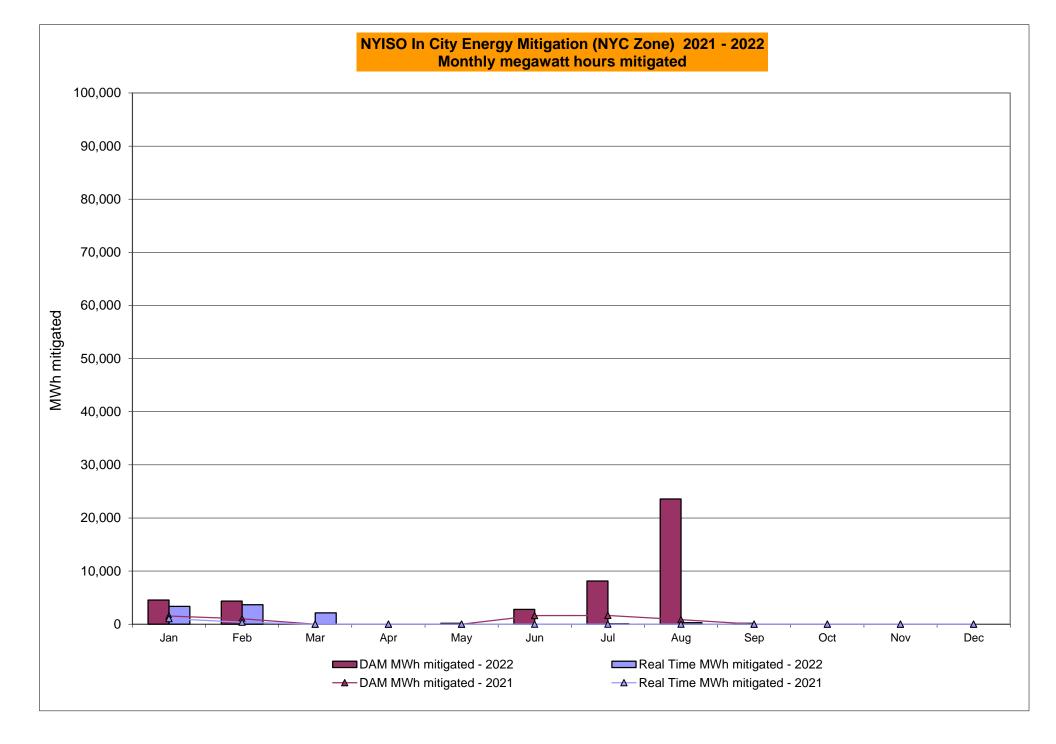
2022	<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	<u>September</u>	<u>October</u>	November	<u>December</u>
RTC Market	44.75	7.55	4.70	0.00	0.45	5.00	4.04	0.70	0.40	4.70	2.50	
10 Min Spin Long Island (K)	11.75	7.55	4.73	2.39	3.15	5.06	4.34	6.79	2.49	1.72	3.59	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
Regulation	31.59	17.95	12.23	7.77	8.36	14.11	7.96	9.46	12.79	8.03	9.52	
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	
<u>2021</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>	November	<u>December</u>
RTC Market												
10 Min Spin Long Island (K)	1.65	1.53	1.29	0.58	0.61	2.86	1.25	2.21	1.04	1.59	2.18	2.42
10 Min Spin NYC (J)	1.65	1.53	1.29	0.58	0.91	4.26	1.34	2.59	1.37	1.63	2.48	2.48
10 Min Spin SENY (GHI)	1.65	1.53	1.29	0.58	0.61	2.86	1.25	2.21	1.04	1.59	2.18	2.42
10 Min Spin East (F)	1.65	1.53	1.29	0.58	0.61	2.73	1.14	2.01	0.64	1.57	2.18	2.42
10 Min Spin West (ABCDE)	1.16	0.93	0.88	0.22	0.07	1.51	0.32	1.69	0.11	0.30	0.82	1.22
10 Min Non Synch Long Island (K)	0.49	0.00	0.02	0.00	0.05	2.40	1.11	2.02	0.45	0.09	0.29	0.05
10 Min Non Synch NYC (J)	0.49	0.00	0.02	0.00	0.35	3.80	1.20	2.40	0.79	0.13	0.59	0.11
10 Min Non Synch SENY (GHI)	0.49	0.00	0.02	0.00	0.05	2.40	1.11	2.02	0.45	0.09	0.29	0.05
10 Min Non Synch East (F)	0.49	0.00	0.02	0.00	0.05	2.27	1.01	1.83	0.06	0.07	0.29	0.05
10 Min Non Synch West (ABCDE)	0.26	0.00	0.01	0.00	0.00	1.42	0.30	1.67	0.04	0.05	0.05	0.00
30 Min Long Island (K)	0.10	0.00	0.01	0.00	0.00	1.56	0.36	1.86	0.44	0.07	0.05	0.00
30 Min NYC (J)	0.10	0.00	0.01	0.00	0.12	2.34	0.37	1.90	0.46	0.07	0.05	0.00
30 Min SENY (GHI)	0.10	0.00	0.01	0.00	0.00	1.56	0.36	1.86	0.44	0.07	0.05	0.00
30 Min East (F)	0.10	0.00	0.01	0.00	0.00	1.42	0.26	1.67	0.04	0.05	0.05	0.00
30 Min West (ABCDE)	0.10	0.00	0.01	0.00	0.00	1.42	0.26	1.67	0.04	0.05	0.05	0.00
Regulation	6.46	8.02	9.88	6.54	5.08	6.69	5.18	8.22	5.86	6.83	9.37	10.10
NYCA Regulation Movement	0.12	0.12	0.11	0.14	0.12	0.13	0.13	0.13	0.12	0.14	0.16	0.17

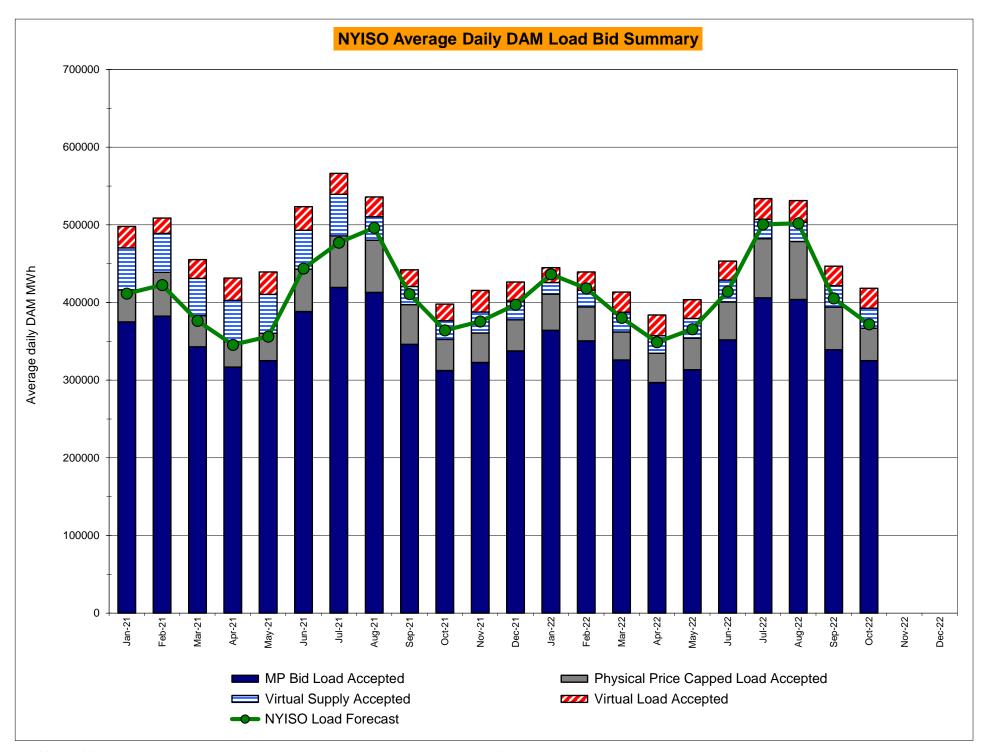
# NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RT

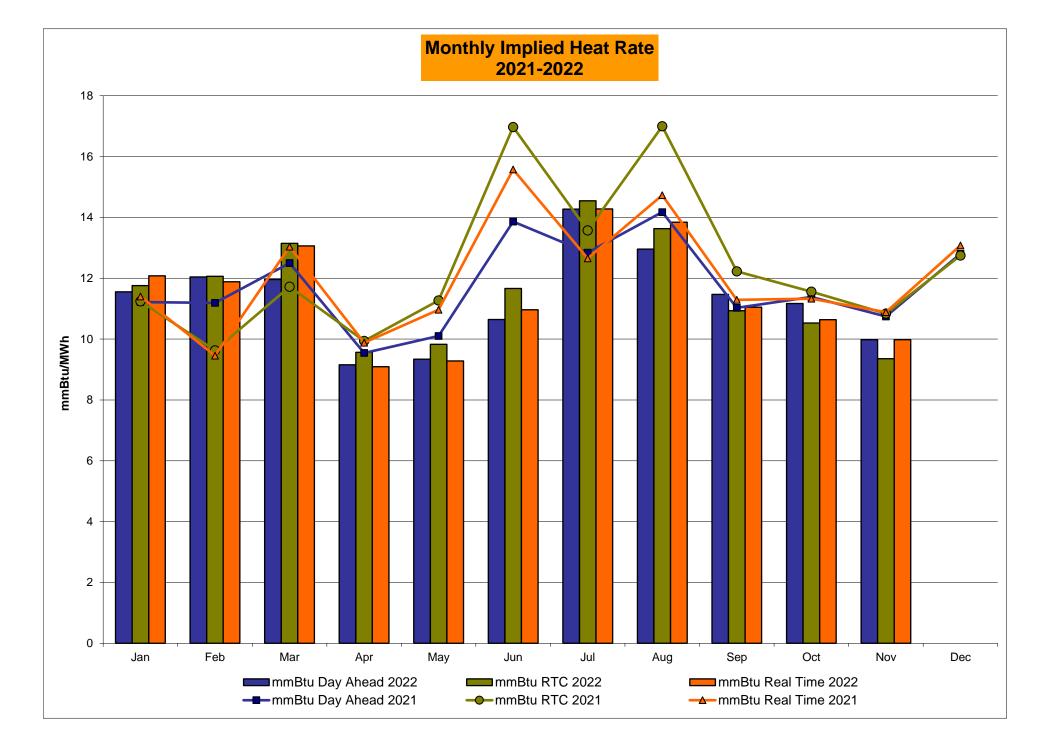
2022 Real Time Market	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
10 Min Spin Long Island (K)	17.99	9.02	6.90	3.15	2.68	4.93	6.01	10.69	3.49	3.23	7.82	
10 Min Spin NYC (J)	18.04	9.27	7.04	3.27	3.17	5.46	6.66	12.88	3.74	3.41	8.01	
10 Min Spin SENY (GHI)	17.99	9.02	6.90	3.15	2.68	4.93	6.01	10.69	3.49	3.23	7.82	
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	
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	
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	
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	
10 Min Non Synch SENY (GHI)	5.34	0.59	4.05	0.40	0.43	2.42	4.26	6.67	0.81	0.38	2.63	
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	
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	
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	
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	
30 Min SENY (GHI)	1.42	0.20	0.16	0.29	0.40	2.05	2.28	4.29	0.47	0.01	0.38	
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	
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	
Regulation	33.92	18.10	11.81	8.22	8.23	11.84	8.95	11.52	11.36	8.91	12.84	
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	
c, cg dianon mo roman	0.10	0	0.10	00	00	0.20	0.10	0.20	0.20	0.10	0.10	
<u>2021</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>	September	<u>October</u>	<u>November</u>	<u>December</u>
Real Time Market	<u>January</u>	•		<u>April</u>	<u>May</u>				•			<u>December</u>
Real Time Market  10 Min Spin Long Island (K)	3.75	2.96	3.57	1.51	<u>May</u> 0.90	2.38	1.67	1.38	0.80	2.62	4.53	4.99
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)	3.75 3.75	2.96 2.96	3.57 3.57	1.51 1.51	0.90 1.16	2.38 3.77	1.67 1.78	1.38 1.71	0.80 1.13	2.62 2.70	4.53 4.90	4.99 5.07
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)	3.75 3.75 3.75	2.96 2.96 2.96	3.57 3.57 3.57	1.51 1.51 1.51	0.90 1.16 0.90	2.38 3.77 2.38	1.67 1.78 1.67	1.38 1.71 1.38	0.80 1.13 0.80	2.62 2.70 2.62	4.53 4.90 4.53	4.99 5.07 4.99
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)	3.75 3.75 3.75 3.75	2.96 2.96 2.96 2.96	3.57 3.57 3.57 3.57	1.51 1.51 1.51 1.51	0.90 1.16 0.90 0.90	2.38 3.77 2.38 2.35	1.67 1.78 1.67 1.60	1.38 1.71 1.38 1.28	0.80 1.13 0.80 0.52	2.62 2.70 2.62 2.59	4.53 4.90 4.53 4.53	4.99 5.07 4.99 4.99
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)	3.75 3.75 3.75 3.75 2.64	2.96 2.96 2.96 2.96 2.03	3.57 3.57 3.57 3.57 2.78	1.51 1.51 1.51 1.51 0.49	0.90 1.16 0.90 0.90 0.15	2.38 3.77 2.38 2.35 1.25	1.67 1.78 1.67 1.60 0.39	1.38 1.71 1.38 1.28 0.99	0.80 1.13 0.80 0.52 0.16	2.62 2.70 2.62 2.59 1.01	4.53 4.90 4.53 4.53 2.75	4.99 5.07 4.99 4.99 3.49
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)	3.75 3.75 3.75 3.75 2.64 1.13	2.96 2.96 2.96 2.96 2.03 0.02	3.57 3.57 3.57 3.57 2.78 0.03	1.51 1.51 1.51 1.51 0.49 0.12	0.90 1.16 0.90 0.90 0.15 0.16	2.38 3.77 2.38 2.35 1.25 1.68	1.67 1.78 1.67 1.60 0.39 1.44	1.38 1.71 1.38 1.28 0.99 1.06	0.80 1.13 0.80 0.52 0.16 0.32	2.62 2.70 2.62 2.59 1.01 0.10	4.53 4.90 4.53 4.53 2.75 0.26	4.99 5.07 4.99 4.99 3.49 0.21
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)	3.75 3.75 3.75 3.75 2.64 1.13 1.13	2.96 2.96 2.96 2.96 2.03 0.02 0.02	3.57 3.57 3.57 3.57 2.78 0.03 0.03	1.51 1.51 1.51 1.51 0.49 0.12 0.12	0.90 1.16 0.90 0.90 0.15 0.16 0.42	2.38 3.77 2.38 2.35 1.25 1.68 3.07	1.67 1.78 1.67 1.60 0.39 1.44 1.56	1.38 1.71 1.38 1.28 0.99 1.06 1.39	0.80 1.13 0.80 0.52 0.16 0.32 0.64	2.62 2.70 2.62 2.59 1.01 0.10 0.18	4.53 4.90 4.53 4.53 2.75 0.26 0.63	4.99 5.07 4.99 4.99 3.49 0.21 0.29
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)	3.75 3.75 3.75 3.75 2.64 1.13 1.13	2.96 2.96 2.96 2.96 2.03 0.02 0.02	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03	1.51 1.51 1.51 1.51 0.49 0.12 0.12	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68	1.67 1.78 1.67 1.60 0.39 1.44 1.56	1.38 1.71 1.38 1.28 0.99 1.06 1.39	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26	4.99 5.07 4.99 4.99 3.49 0.21 0.29
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.02	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.12	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.21 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Long Island (K)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Island (K)  30 Min NYC (J)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03 0.02 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04 1.06 1.84	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35 0.36	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91 0.93	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min NYC (J)  30 Min SENY (GHI)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.00 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03 0.02 0.02 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02 0.02 0.12	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04 1.06 1.84 1.06	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35 0.36 0.35	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91 0.93 0.91	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03 0.31 0.31	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08 0.08	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min SENY (GHI)  30 Min SENY (GHI)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05 0.05 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.00 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03 0.02 0.02 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02 0.02 0.02 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04 1.06 1.84 1.06 1.04	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35 0.35 0.36	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91 0.93 0.91 0.82	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03 0.31 0.31	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08 0.08 0.08	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00 0.00 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Synch West (ABCDE)  30 Min SENY (GHI)  30 Min SENY (GHI)  30 Min SENY (GHI)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05 0.05 0.05 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.00 0.00 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.02 0.02 0.02 0.02 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02 0.02 0.02 0.02 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04 1.06 1.84 1.06 1.04	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35 0.36 0.35 0.28	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91 0.93 0.91 0.82 0.82	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03 0.31 0.31 0.31 0.03	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08 0.08 0.08 0.05 0.05	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.08 0.08 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00 0.00 0.00
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)  10 Min Spin West (ABCDE)  10 Min Non Synch Long Island (K)  10 Min Non Synch NYC (J)  10 Min Non Synch SENY (GHI)  10 Min Non Synch East (F)  10 Min Non Synch West (ABCDE)  30 Min Non Synch West (ABCDE)  30 Min Long Island (K)  30 Min SENY (GHI)  30 Min SENY (GHI)	3.75 3.75 3.75 3.75 2.64 1.13 1.13 1.13 0.40 0.05 0.05 0.05	2.96 2.96 2.96 2.96 2.03 0.02 0.02 0.02 0.02 0.00 0.00 0.00	3.57 3.57 3.57 3.57 2.78 0.03 0.03 0.03 0.03 0.02 0.02 0.02	1.51 1.51 1.51 1.51 0.49 0.12 0.12 0.12 0.12 0.00 0.00 0.00	0.90 1.16 0.90 0.90 0.15 0.16 0.42 0.16 0.16 0.02 0.02 0.02 0.02	2.38 3.77 2.38 2.35 1.25 1.68 3.07 1.68 1.65 1.04 1.06 1.84 1.06 1.04	1.67 1.78 1.67 1.60 0.39 1.44 1.56 1.44 1.38 0.27 0.35 0.35 0.36	1.38 1.71 1.38 1.28 0.99 1.06 1.39 1.06 0.97 0.82 0.91 0.93 0.91 0.82	0.80 1.13 0.80 0.52 0.16 0.32 0.64 0.32 0.04 0.03 0.31 0.31	2.62 2.70 2.62 2.59 1.01 0.10 0.18 0.10 0.07 0.05 0.08 0.08 0.08	4.53 4.90 4.53 4.53 2.75 0.26 0.63 0.26 0.26 0.08 0.08	4.99 5.07 4.99 4.99 3.49 0.21 0.29 0.21 0.00 0.00 0.00 0.00

#### NYISO In City Energy Mitigation - AMP (NYC Zone) 2021 - 2022 Percentage of committed unit-hours mitigated

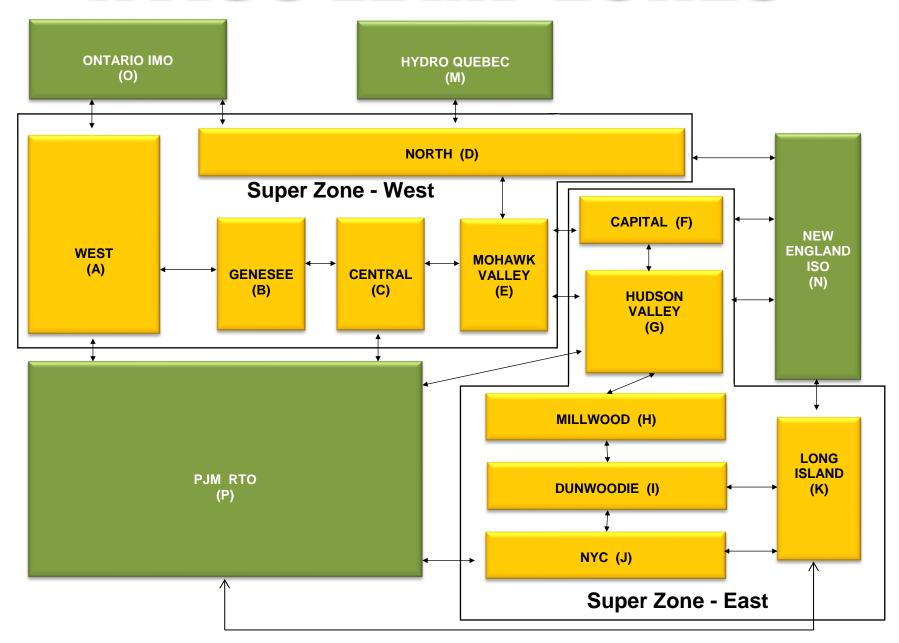








# NYISO LBMP ZONES

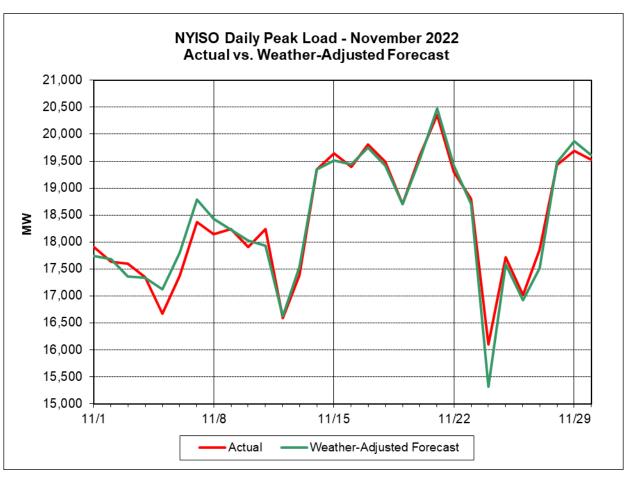


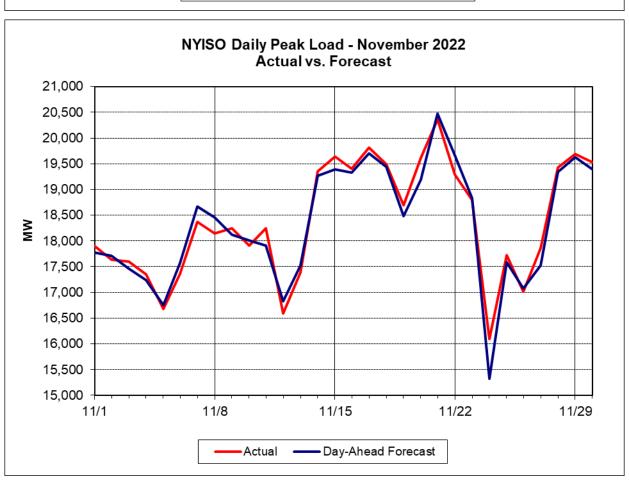
Market Mitigation and Analysis Prepared: 12/13/2022 11:08 AM

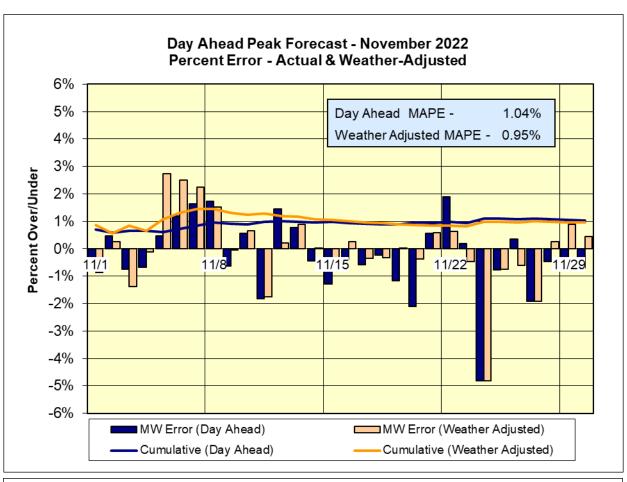
#### **Billing Codes for Chart C**

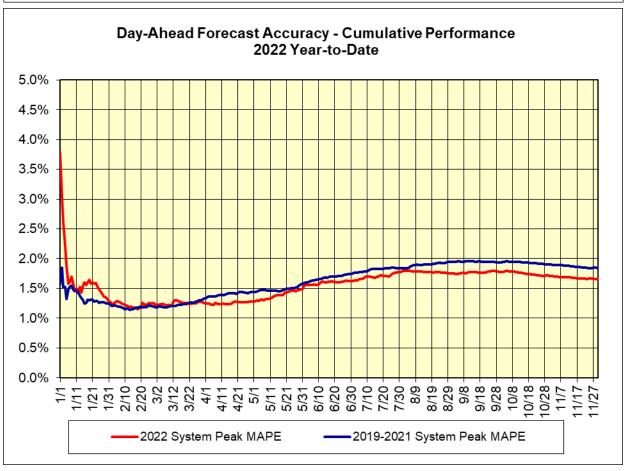
Chart - C Category Name	<b>Billing Code</b>	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost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

Market Mitigation and Analysis Prepared: 12/13/2022 11:08 AM









# Summary Description of Regulatory Filings, Investigations, Rulemakings and Related Orders in NYISO Matters – November 2022

Filing Date	Filing Summary	Docket	Order Summary	Order Date
09/14/2022	Joint NYISO-Central Hudson Section 205 filing to FERC of an executed Amended and Restated Transmission Project Interconnection Agreement (SA No. 2605) among the NYISO, Central Hudson, and New York Transco for the New York Energy Solution Project.	ER22-2845-000	An Order accepted the submission effective September 1, 2022, as requested.	11/09/2022
10/04/2022	Joint NYISO-Central Hudson Section 205 filing to FERC of an executed Engineering, Procurement, and Construction Agreement (EPCA), entered into by the NYISO, Central Hudson, and Flint Mine Solar, LLC in connection with the Flint Mine Solar project (SA No. 2731).	ER23-15-000	An Order accepted the submission, effective September 20, 2022, as requested.	11/15/2022
10/06/2022	NYISO filing to FERC of a notice of cancellation of the Engineering, Procurement, and Construction Agreement (EPCA) in connection with the Roaring Brook wind facility, among NYISO, PPM Roaring Brook, LLC, and NYPA (SA No. 2592).	ER23-27-000	An Order accepted the submission, effective December 6, 2022, as requested.	11/28/2022
10/05/2022	Joint NYISO-NYSEG Section 205 filing to FERC of an executed Small Generator Interconnection Agreement for the Highview Solar Project, among NYISO, NYSEG, SunEast (SA No. 2696).	ER23-19-000	An Order accepted the submission, effective September 21, 2022, as requested.	11/29/2022
11/02/2022	NYISO Section 205 filing to FERC of proposed tariff revisions to modify the time period used to calculate a Customer's share of a bad debt loss resulting from non-payment of money owed to the NYISO by another Customer.	ER23-349-000		
11/07/2022	ISO/RTO Council reply comments to FERC (joined by the NYISO) on FERC's Notice of Proposed Rulemaking (NOPR) related to credit-related information sharing.	RM22-13-000		
11/10/2022	NYISO filing to FERC providing comments in response to FERC's NOPR regarding a proposed Duty of Candor Rule.	RM22-20-000		
11/10/2022	NYISO filing to FERC of a request for a one-time prospective waiver of Section 5.13.1 of the NYISO's Market Administration and Control Area Services Tariff regarding the posting of the Monthly Capacity Auction results.	ER23-418-000		
11/14/2022	NYISO filing to FERC of a Notice of Withdrawal of its November 10, 2022 prospective waiver request of Services Tariff 5.13.1.	ER23-418-000		

Filing Date	Filing Summary	Docket	Order Summary	Order Date
11/14/2022	NYISO filing to FERC of a compliance filing to address the directives of FERC's June 17, 2022 Order on the NYISO's Order No. 2222 compliance filing.	ER21-2460-003		
11/14/2022	NYISO filing to FERC of a request for an extension of time of the effective date for NYISO's Order No. 2222 compliance implementation date.	ER21-2460-004		
11/14/2022	NYISO filing to FERC to provide information on interconnection study metrics for the third quarter of 2022 consistent with the requirements of Order Nos. 845 and 845-A.	ER19-1949-000		
11/15/2022	NYISO filing to FERC of a supplement to its November 14, 2022 motion to extend the effective date of its Order No. 2222 compliance tariff revisions to include an inadvertently omitted page.	ER21-2460-000, -003		
11/15/2022	NYISO filing to FERC of a motion to intervene and to submit comments on Clean Path New York's request for a waiver of certain requirements of the NYISO's OATT.	ER23-253-000		
11/17/2022	Joint NYISO-NYPA Section 205 filing to FERC of an executed Large Generator Interconnection Agreement (LGIA) among NYISO, NYPA, and North Side Energy Center for the North Side Solar Project (SA No. 2739). Contains CEII.			
11/21/2022	NYISO filing to FERC of a notice of withdrawal of the NYISO's docless motions to intervene in proceedings regarding PJM's allocation of Regional Transmission Expansion Project costs.	EL15-18-000, EL15-67-000		
11/23/2022	NYISO filing to FERC, on behalf of New York Power Authority (NYPA), of a Section 205 filing proposing to revise its Formula Rate Template and Formula Rate Protocols.	ER23-491-000		
11/29/2022	NYISO filing to FERC to request an extension of time until December 6, 2022 for NYISO to file FERC Form 3Q.	AC23-9-000		