

## **Monthly Report**

A Report by the New York Independent System Operator

**October 2021** 



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# Operations Performance Metrics Monthly Report









## October 2021 Report

## Operations & Reliability Department New York Independent System Operator



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### **October 2021 Operations Performance Highlights**

- Peak load of 19,594 MW occurred on 10/15/2021 HB 16
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 3.0 hours of Thunderstorm Alerts were declared
- 5.0 hours of NERC TLR level 3 curtailment
- Upgrades to the lines comprising HQ-CEDARS-NY interface were completed on 10/13/2021 which increases import capability by 80MW when all lines are in service.
- To reduce risks from COVID-19, the NYISO continues to take several actions to maintain critical business operations and protect the health and well-being of our employees and stakeholders.

The following table identifies the 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	\$1.53	\$13.94
NY Savings from PJM-NY Coordinated Transaction Scheduling	(\$0.67)	\$0.56
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.84	(\$0.20)
Total NY Savings	\$1.70	\$14.30
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.53	\$5.00
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.09	\$0.30
Total Regional Savings	\$0.62	\$5.30

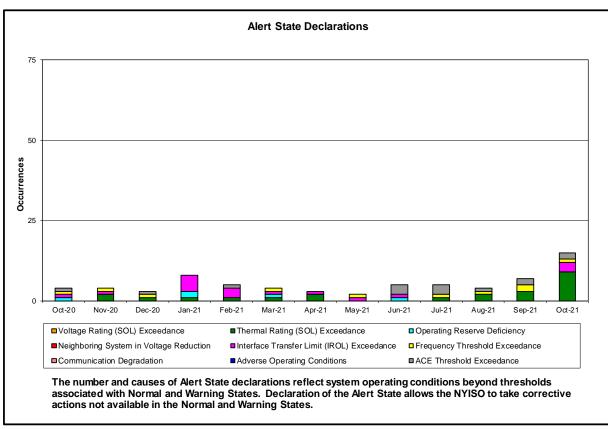
- Statewide uplift cost monthly average was (\$0.81)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

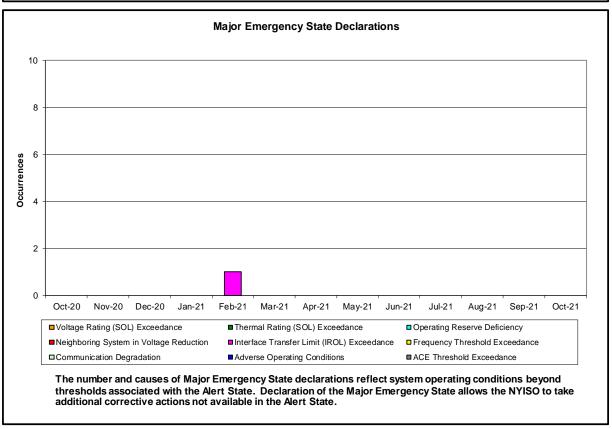
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
November 2021 Spot Price	\$1.65	\$1.65	\$1.65	\$1.65
April 2021 Spot Price	\$0.89	\$0.89	\$8.44	\$0.89
Delta	\$0.76	\$0.76	(\$6.79)	\$0.76

 Price changes from April 2021 to November 2021 are driven by changes in supply as well as Capability Year inputs such as demand curve parameters, Locational Capacity Requirements, the Installed Reserve Margin and the load forecast.

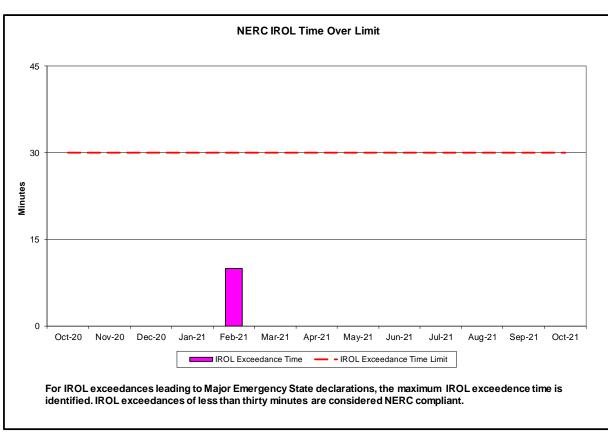


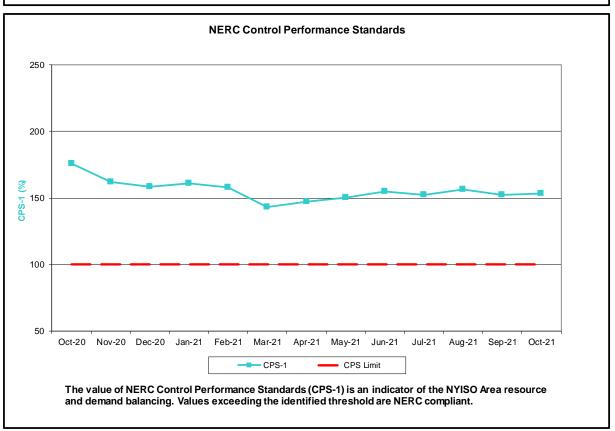
#### **Reliability Performance Metrics**



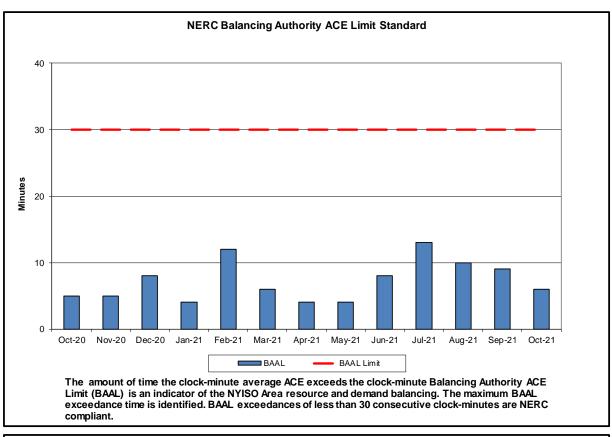


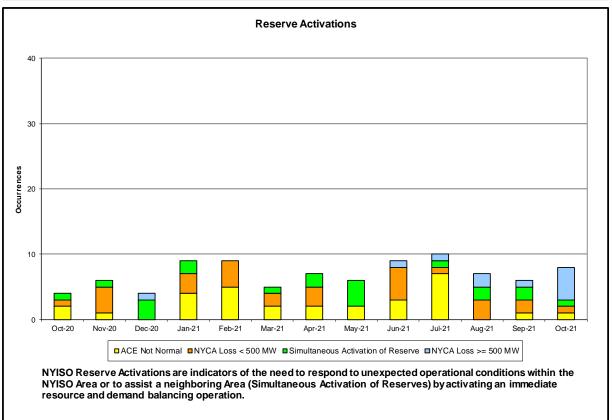




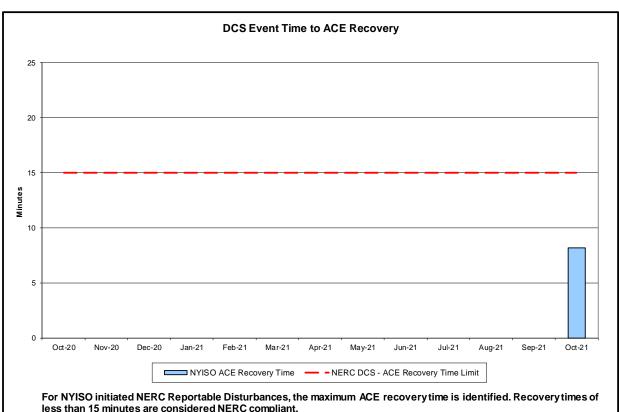




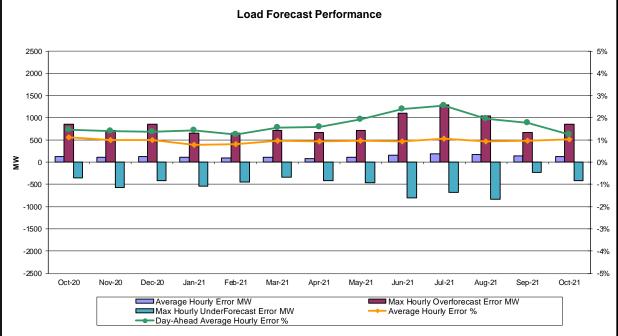










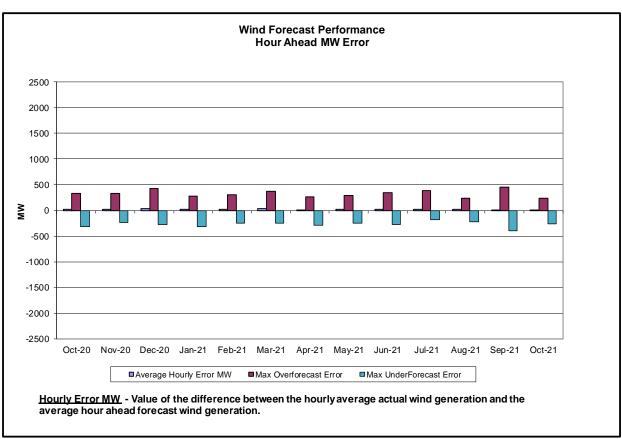


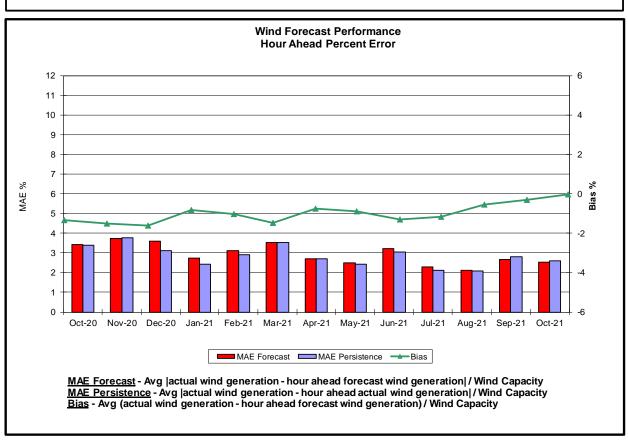
Hourly Error MW - Value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

 $\underline{\textbf{Average Hourly Error\,\%}} \text{ - Average value of the ratio of hourly average error magnitude to hourly average actual}$ load demand.

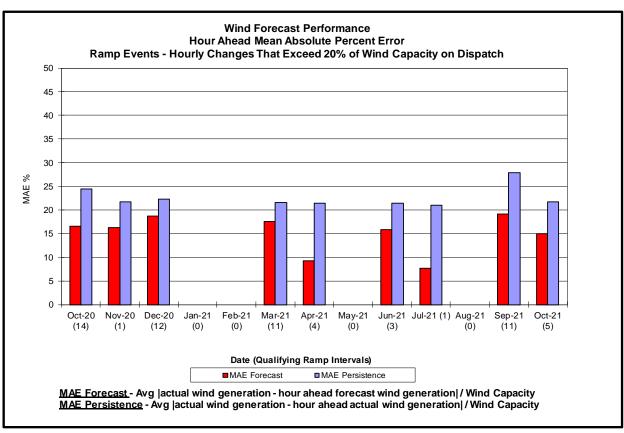
<u>Day-Ahead Average Hourly Error</u> % - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

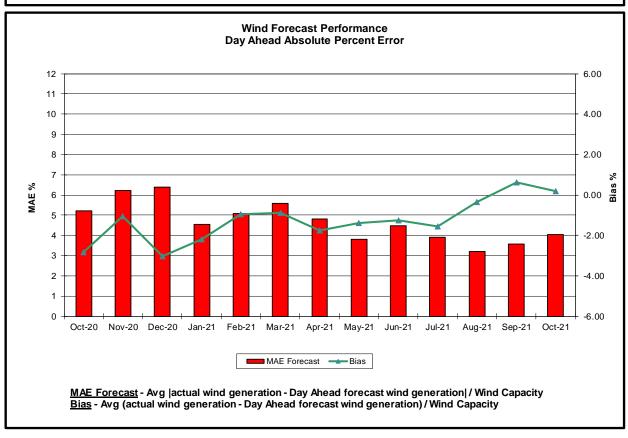




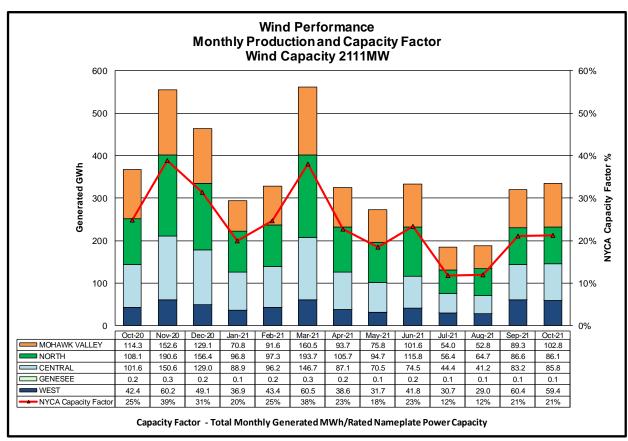


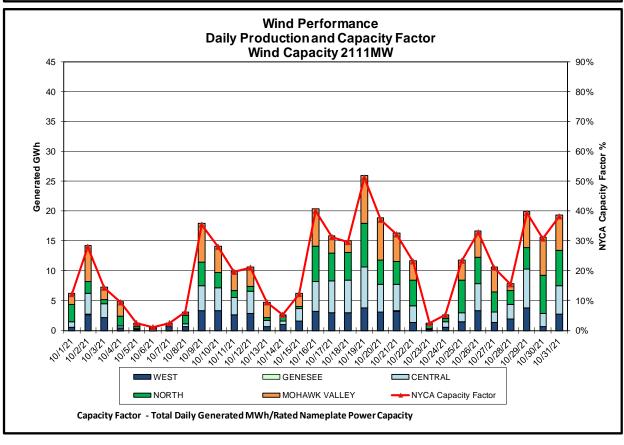




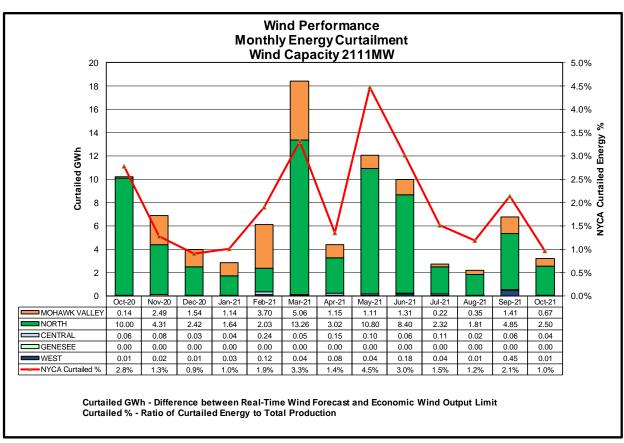


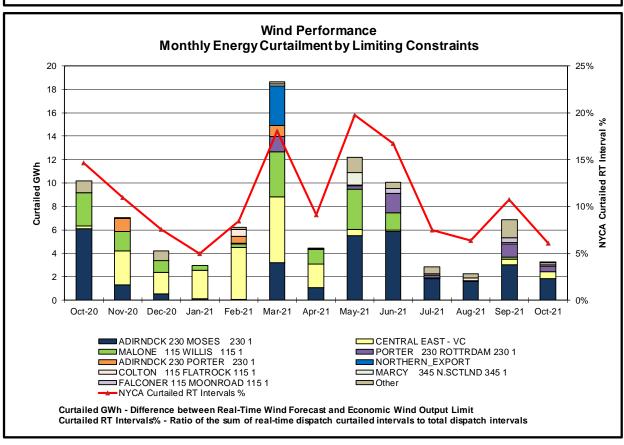




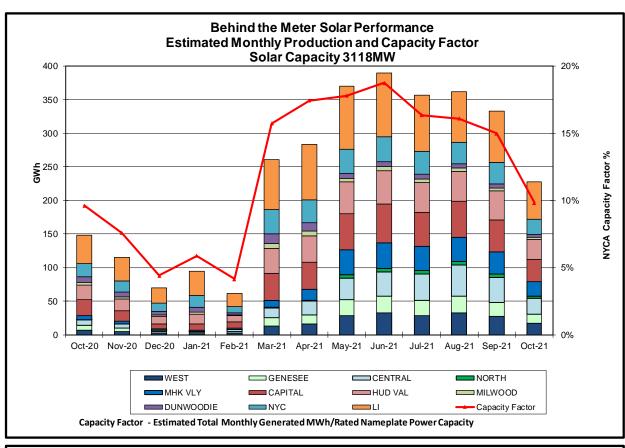


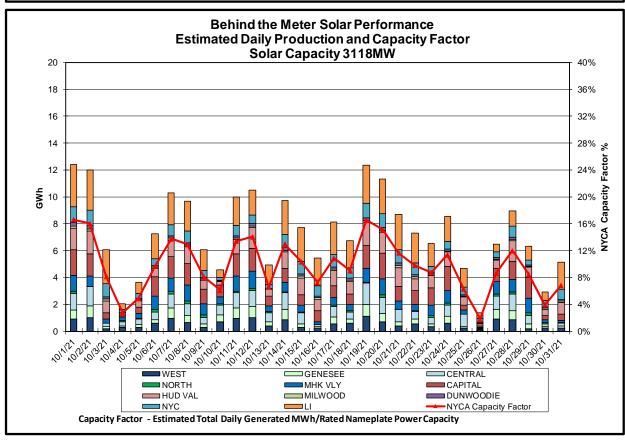




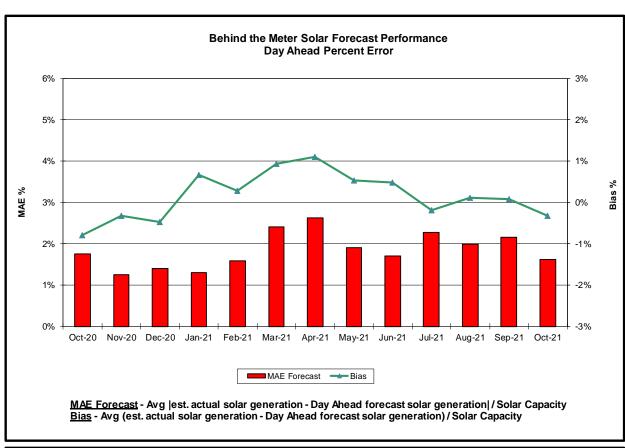


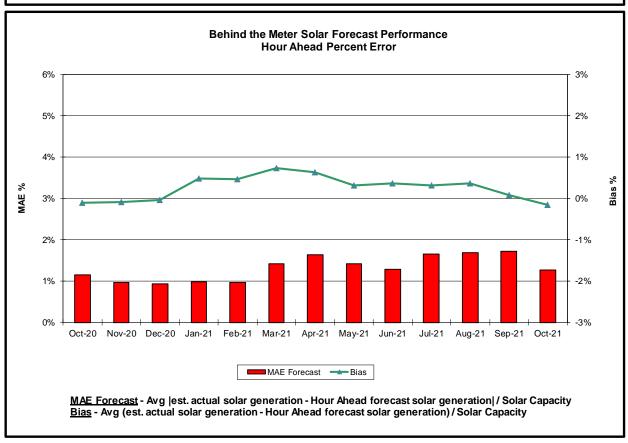




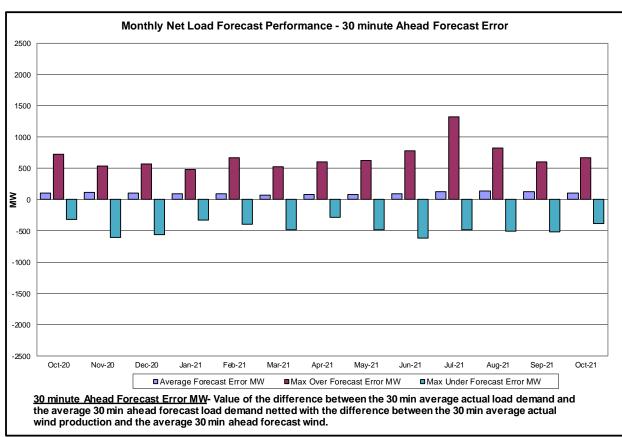


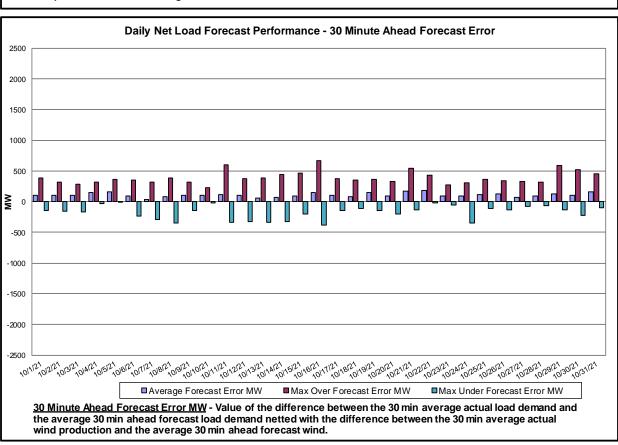




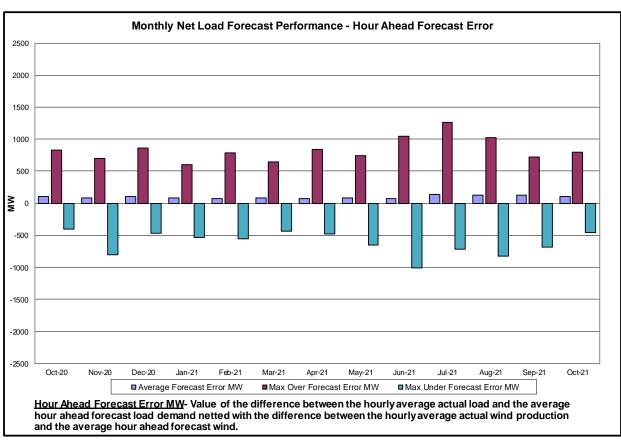


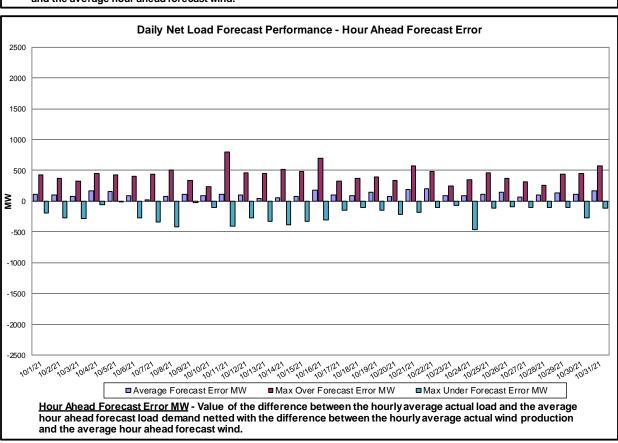




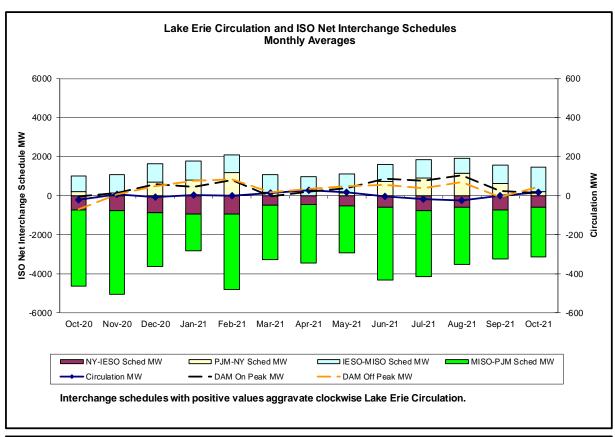


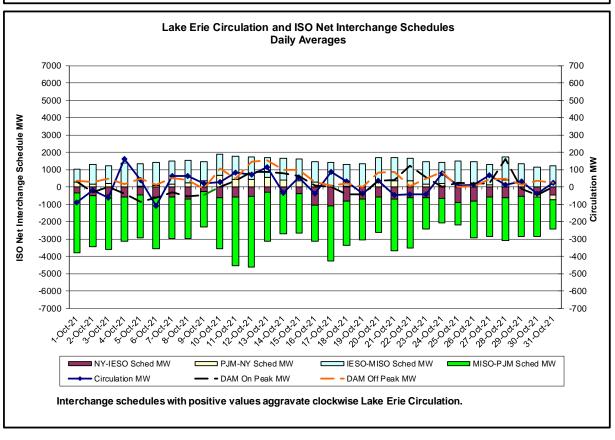






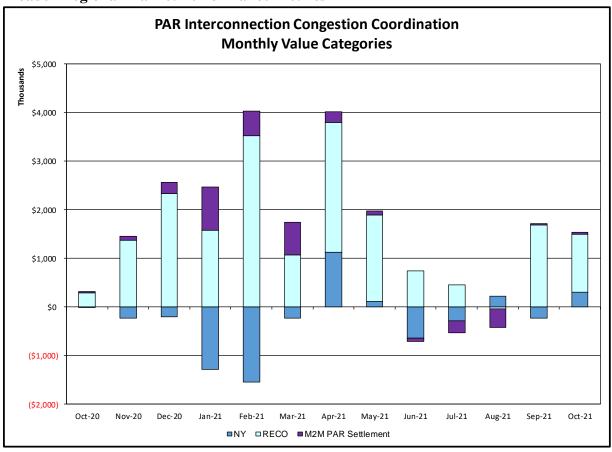


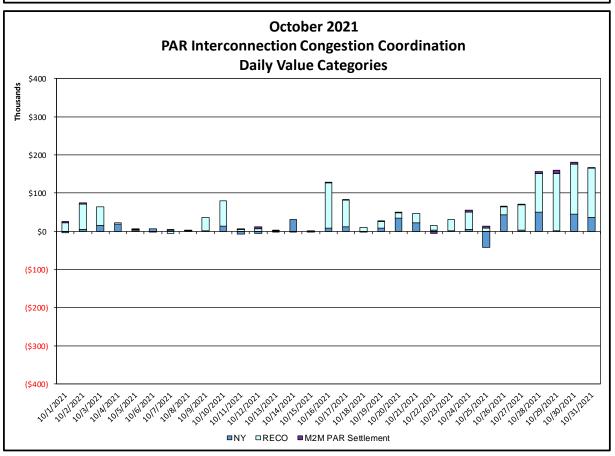






#### **Broader Regional Market Performance Metrics**







#### 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

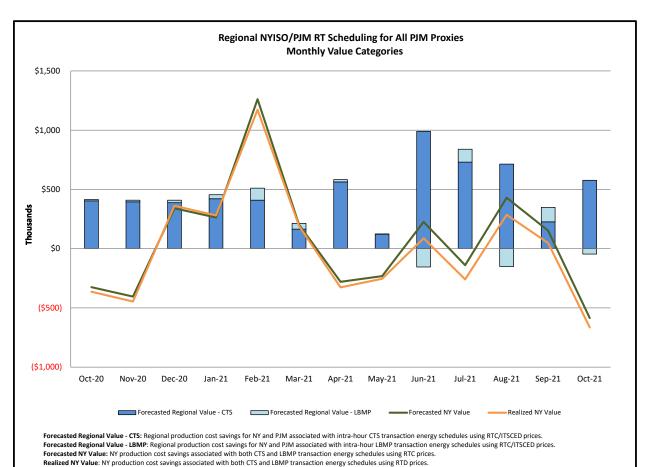
of RECO over Ramapo 5018.

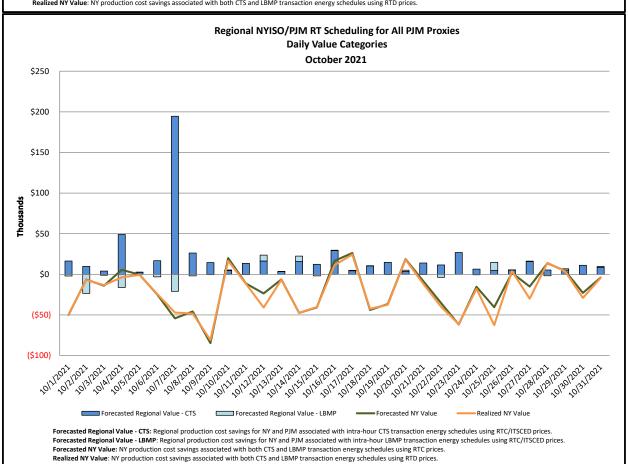
M2M PAR Settlement Market-to-Market PAR Coordination settlement on coordinated flowgates. Through April 2017

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

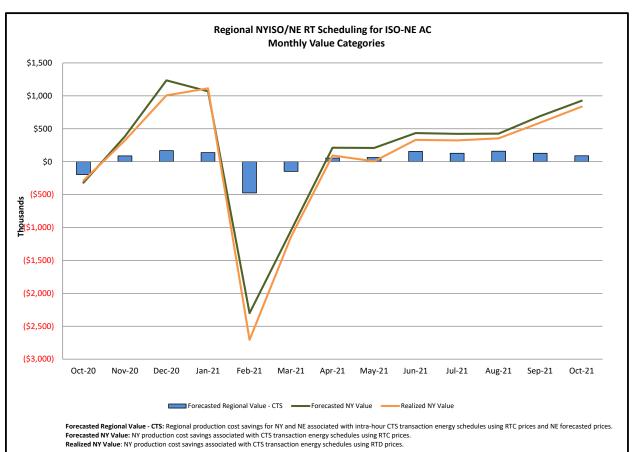
indicates settlement to NY while the negative indicates settlement to PJM.

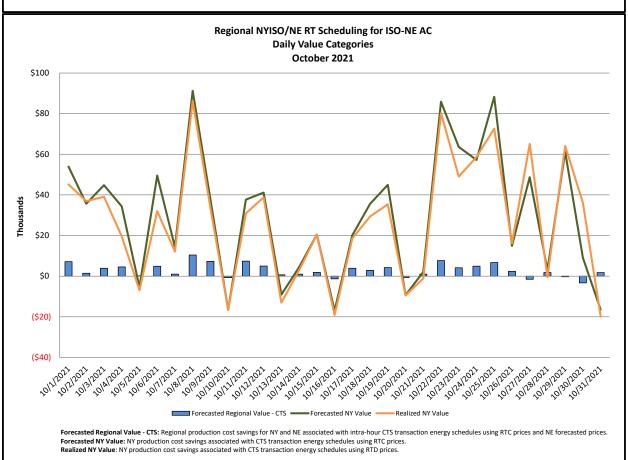






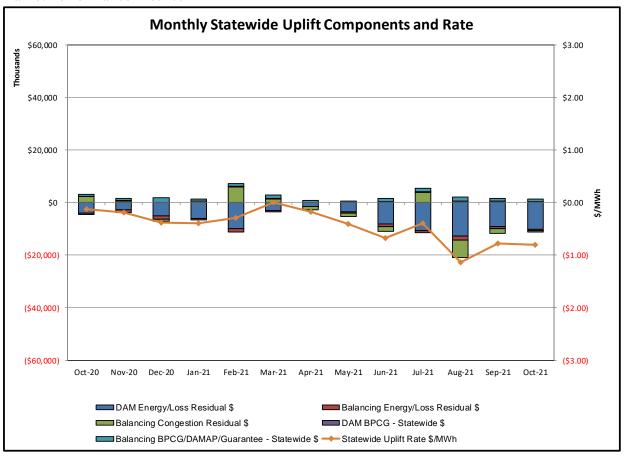




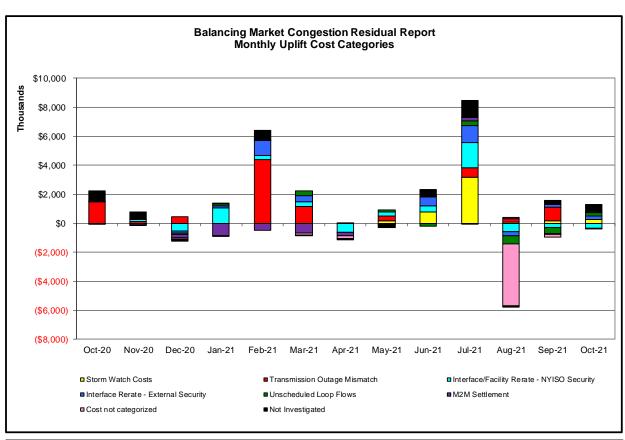


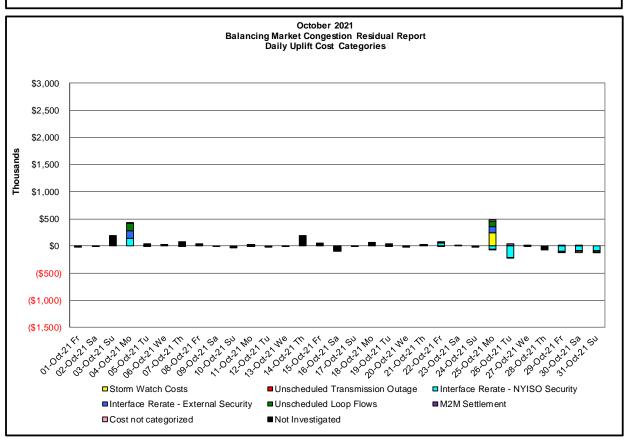


#### Market Performance Metrics











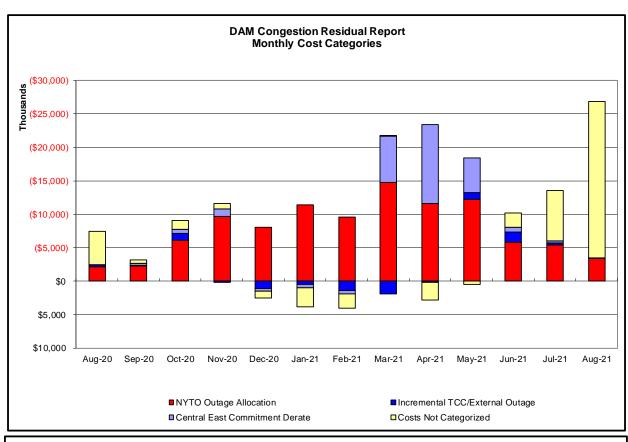
ent	Date (yyyymmdd)	Hours	Description
	10/4/2021		Derate Niagara-Packard 230kV (#61) for I/o TWR:PACKARD 62 & BP76
	10/4/2021		Derate Niagara Boulevard-Packard 115kV (#181-922) for I/o TWR:PACKARD 77 & 78
	10/4/2021		Derate Athens-PleasantValley 345kV (#91) for I/o TWR:PLSNTVLY F36 & F37
	10/4/2021		NE NNC 1385-NY Scheduling Limit
	10/4/2021		Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	10/22/2021		Derate Adirondack-Moses 230kV (#MA2) for SIN:MSU1&7040& HQ GN&LD PROXY
	10/22/2021		Derate Elwood-Pulaski 69kV (#670) for TWR:HOLTSVLLE 881& 882& 880
	10/22/2021	1-1	Derate Marcy-New Scotland 345kV (#18) for TWR:UCC2-41&EF24-40
	10/22/2021		Derate Packard-Sawyer 230kV (#62) for BUS:PACKARD BK3 & 61 & 78
	10/22/2021	7	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	10/22/2021		Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	10/25/2021		Thunder Storm Alert, Buchanon North 345/138kV (#TA5)
	10/25/2021	21,22	Thunder Storm Alert, Chester-Shoemaker 138kV (#27)
	10/25/2021	,	NYCA DNI Ramp Limit
	10/25/2021	2	Derate Central East
	10/25/2021	11,20	Uprate Dunwoodie-Shore Rd 345kV (#Y50)
	10/25/2021		Uprate Gardenville-LangnerRd 115kV (#180) I/o TWR:PACKARD 77 & 78
	10/25/2021		Uprate Porter-Rotterdam 230kV (#31) I/o BUS:N.SCTLD #99&18&1&94&BK1&C2
	10/25/2021	13	Uprate Niagara-Packard 115kV (#193) I/o Niagara-Packard 115kV (#194)
	10/25/2021	13,14	Uprate Niagara-Packard 115kV (#194) I/o Niagara-Packard 115kV (#193)
	10/25/2021		Uprate NiagaraBlvd-Packard 115kV (#181) I/o TWR:PACKARD 77 & 78
	10/25/2021	22,23	NE_NNC 1385-NY Scheduling Limit
	10/25/2021	11,13,14	HQ_CHAT-NY Scheduling Limit
	10/25/2021	11,13,20,21	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	10/26/2021	0	Thunder Storm Alert, Buchanon North 345/138kV (#TA5)
	10/26/2021	19	Derate Marcy-New Scotland 345kV (#18) for TWR:UCC2-41&EF24-40
	10/26/2021	6,23	Uprate Central East
	10/26/2021	8,9,11,14-18,20	Uprate Dunwoodie-Shore Rd 345kV (#Y50)
	10/26/2021	18	Uprate Niagara-Packard 115kV (#193) I/o Niagara-Packard 115kV (#194)
	10/26/2021	16,18,22	Uprate Niagara-Packard 115kV (#194) I/o Niagara-Packard 115kV (#193)
	10/26/2021	8,9,11,13-18,20,22,23	Uprade NiagaraBlvd-Packard 115kV (#181) I/o TWR:PACKARD 77 & 78
	10/26/2021	6,8,9,11,13-18,22,23	Uprate Porter-Rotterdam 230kV (#31) I/o BUS:N.SCTLD #99&18&1&94&BK1&C2
	10/26/2021	19,22	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	10/26/2021	19,22	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	10/29/2021		Uprate Central East
	10/29/2021		Uprate NiagaraBlvd-Packard 115kV (#181) I/o TWR:PACKARD 77 & 78
	10/29/2021		Uprate Cricket Valley-Pleasant Valley 345kV (#F83) for I/o Cricket Valley-Pleasant Valley 345kV (#F8
	10/29/2021	14	HQ_CHAT-NY Scheduling Limit
	10/30/2021	5,7-9,11,15,17,21-23	
	10/30/2021		Uprate Gardenville-LangnerRd 115kV (#180) I/o TWR:PACKARD 77 & 78
	10/30/2021		NE_AC DNI Ramp Limit
	10/30/2021		Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	10/30/2021		Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	10/31/2021		NYCA DNI Ramp Limit
	10/31/2021		Uprate Central East
	10/31/2021	0.19-21	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East

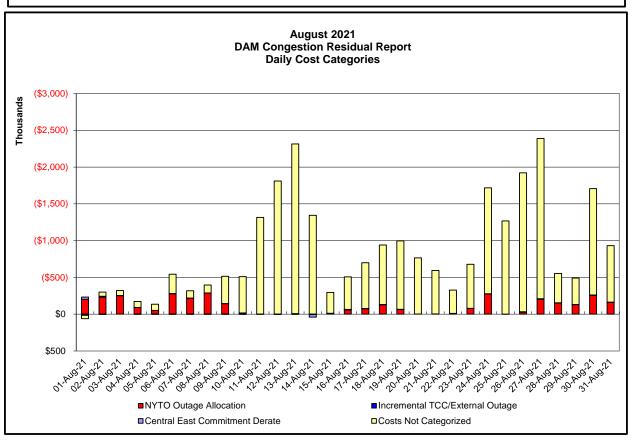


Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories			
<u>Cost Assignment</u> Zone J	<u>Events Types</u> Thunderstorm Alert (TSA)	Event Examples TSA Activations	
Market-wide	Changes in DAM to RTM transfers related to transmission outage mismatch	Forced Line Outage, Unit AVR Outages Early Line Return from Outage	
Market-wide	Changes in DAM to RTM transfers not related to transmission outage	Interface/Facility Rerates due to RTM voltages	
Market-wide	Changes in DAM to RTM transfers related to External Control Area Security Events	TLR Events, External Transaction Curtailments	
Market-wide	Changes in DAM to RTM unscheduled loop flows impacting NYISO Interface transmission constraints	DAM to RTM Lake Erie Loop Flows exceeding +/- 125 MW	
Market-wide	Settlement result inclusive of coordinated redispatch and Ramapo flowgates		
Monthly Balancing Market Congestion Report Assumptions/Notes  1) Storm Watch Costs are identified as daily total uplift costs			
	Cost Assignment Zone J  Market-wide  Market-wide  Market-wide  Market-wide  Market-wide	Cost Assignment Zone J Thunderstorm Alert (TSA)  Market-wide Changes in DAM to RTM transfers related to transmission outage mismatch  Market-wide Changes in DAM to RTM transfers not related to transmission outage  Market-wide Changes in DAM to RTM transfers related to External Control Area Security Events  Market-wide Changes in DAM to RTM unscheduled loop flows impacting NYISO Interface transmission constraints  Market-wide Settlement result inclusive of coordinated redispatch and Ramapo flowgates	

- 2) Days with a value of BMCR less M2M Settlement of \$100 K/HR, shortfall of \$200 K/Day or more, or surplus of \$100 K/Day or more are investigation of 3) Uplift costs associated with multiple event types are apportioned equally by hour



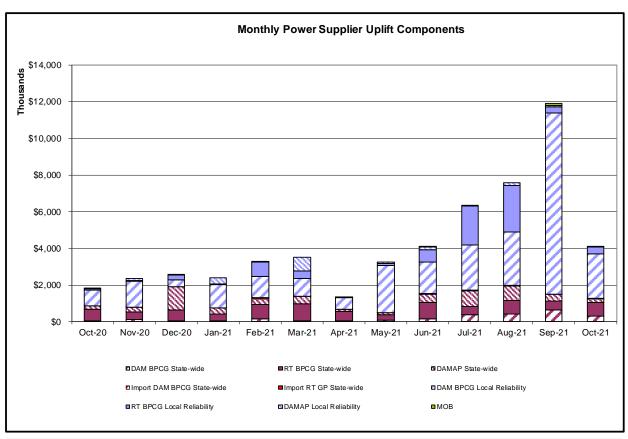


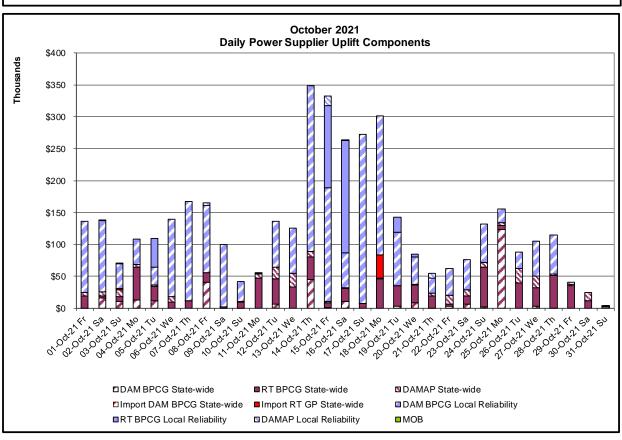




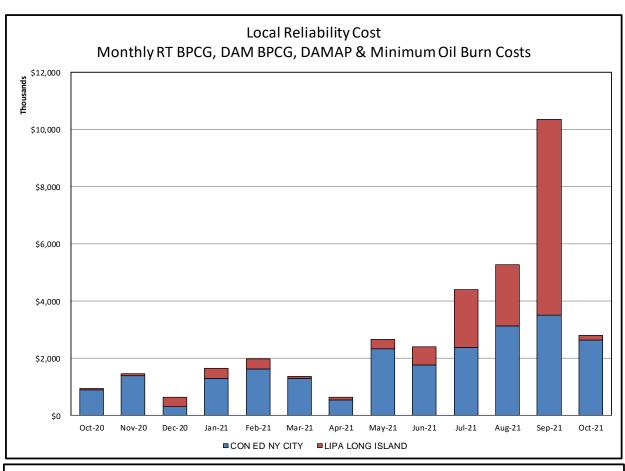
Day-Ahead Market Congestion Residual Categories			
<u>Category</u> NYTO Outage Allocation	<u>Cost Assignment</u> Responsible TO	<u>Events Types</u> Direct allocation to NYTO's responsible for transmission equipment status change.	Event Examples DAM scheduled outage for equipment modeled inservice for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

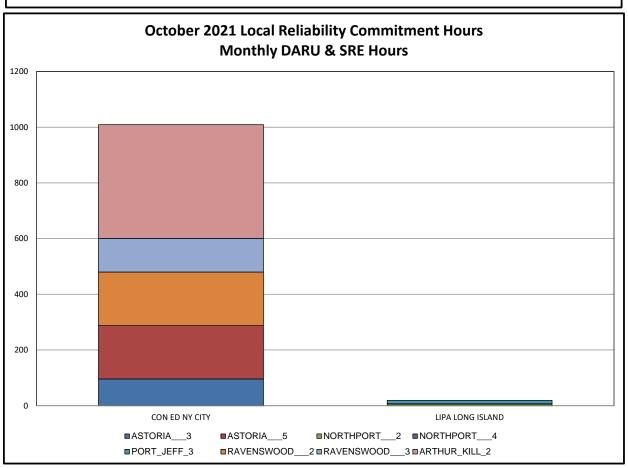




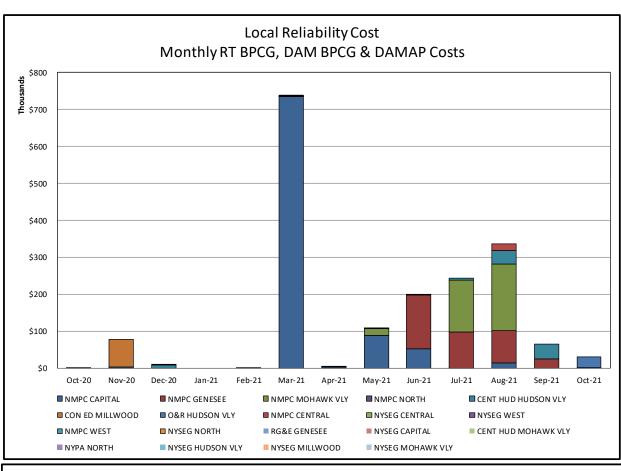


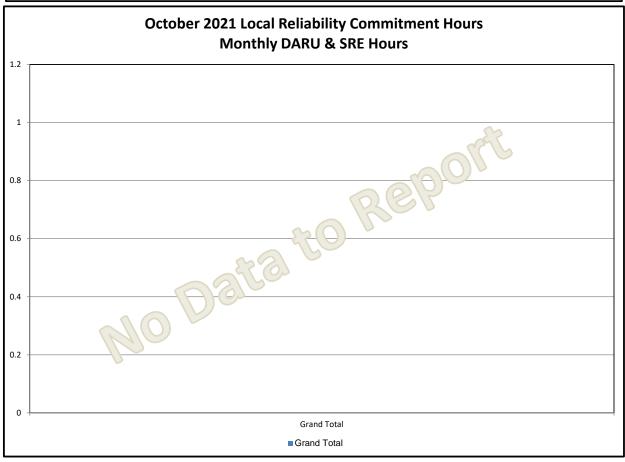




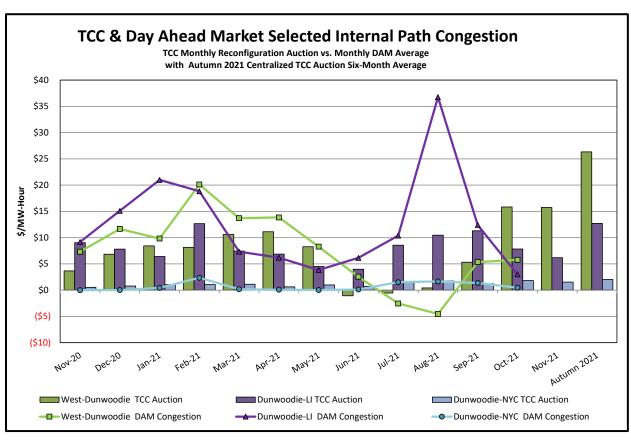


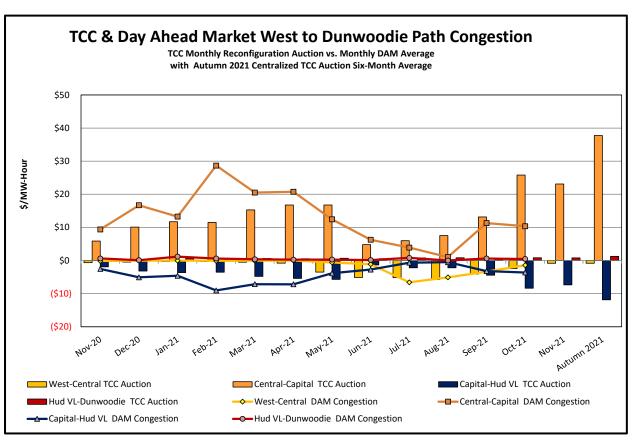




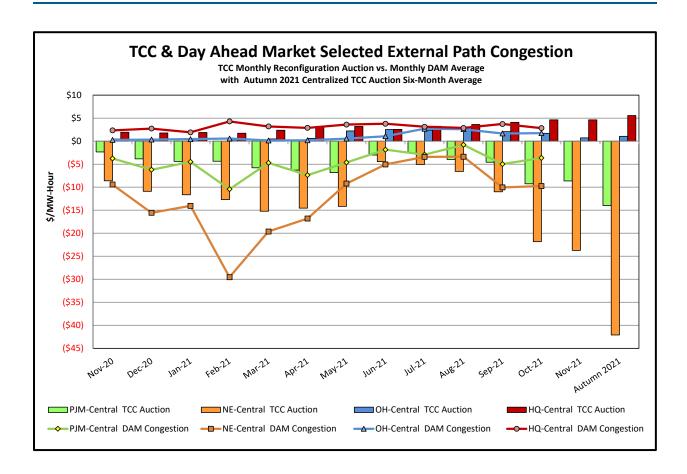




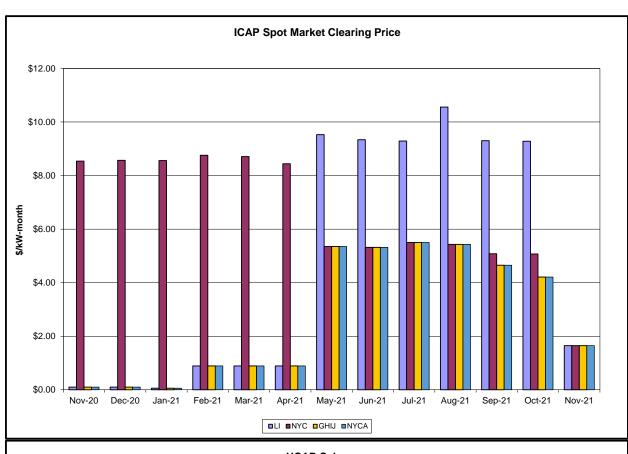


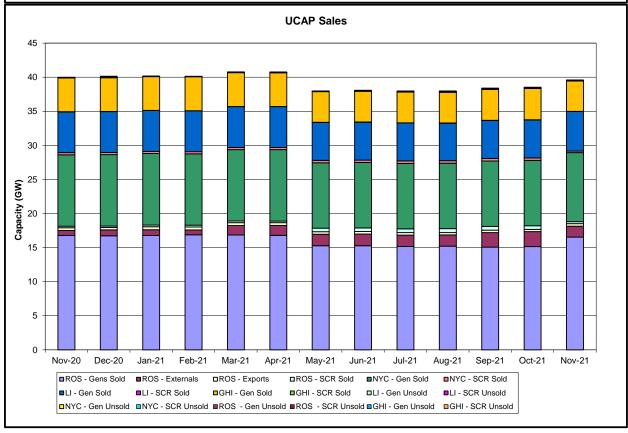








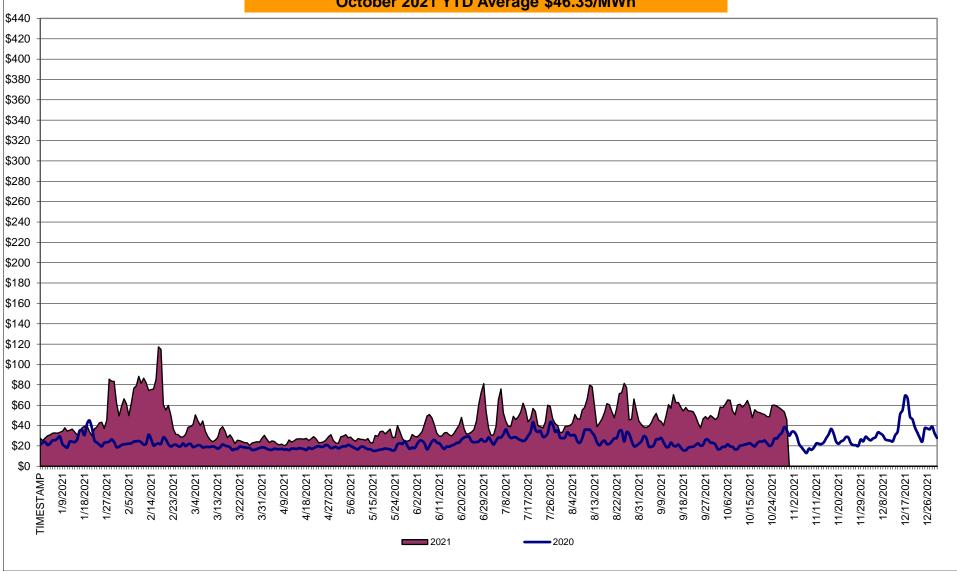




## Market Performance Highlights October 2021

- LBMP for October is \$52.97/MWh; higher than \$47.68/MWh in September 2021 and \$20.90/MWh in October 2020.
  - Day Ahead Load Weighted LBMPs and Real Time Load Weighted LBMPs are higher compared to September.
- October 2021 average year-to-date monthly cost of \$46.35/MWh is an 88% increase from \$24.62/MWh in October 2020.
- Average daily sendout is 373 GWh/day in October; lower than 420 GWh/day in September 2021 and higher than 367 GWh/day in October 2020.
- Natural gas prices and distillate prices are higher compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$4.50/MMBtu, up from \$4.27/MMBtu in September.
  - Natural gas prices are up 270.0% year-over-year.
  - Jet Kerosene Gulf Coast was \$16.94/MMBtu, up from \$14.74/MMBtu in September.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$17.93/MMBtu, up from \$15.65/MMBtu in September.
  - Distillate prices are up 118.1% year-over-year.
- Uplift per MWh is lower compared to the previous month.
  - Uplift (not including NYISO cost of operations) is (\$0.59)/MWh; lower than \$0.00/MWh in September.
    - Local Reliability Share is \$0.23/MWh, lower than \$0.78/MWh in September.
    - Statewide Share is (\$0.81)/MWh, lower than (\$0.78)/MWh in September.
  - TSA \$ per NYC MWh is \$0.39/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are lower than September.

# Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\* 2020 Annual Average \$25.70/MWh October 2020 YTD Average \$24.62/MWh October 2021 YTD Average \$46.35/MWh

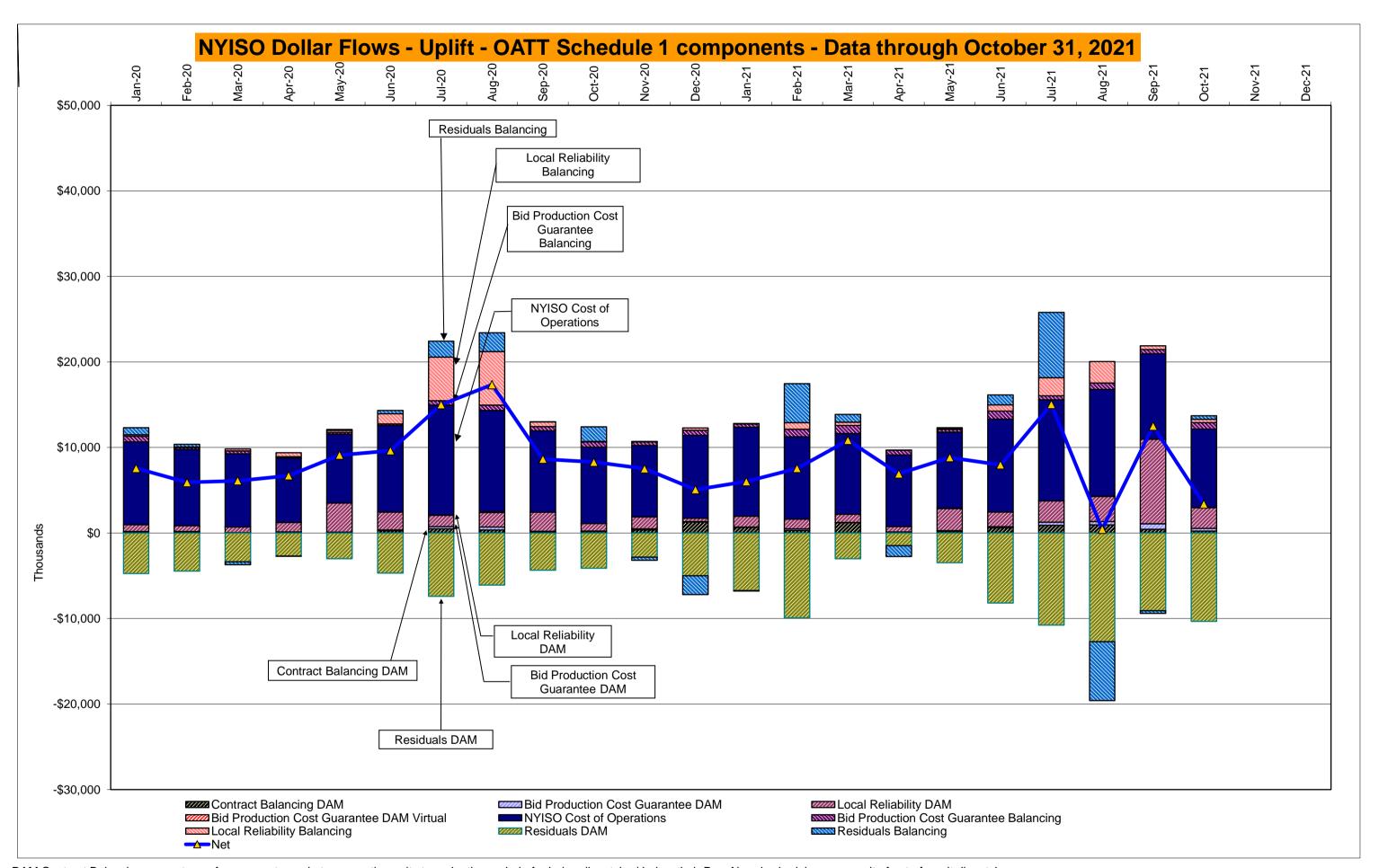


<sup>\*</sup> Excludes ICAP payments.

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

2021	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
LBMP	37.83	63.70	28.59	22.79	25.72	39.37	45.16	55.48	47.68	52.97		
NTAC	1.35	1.20	1.26	1.54	2.09	2.05	2.01	1.37	1.23	1.67		
Reserve	0.49	0.81	0.57	0.56	0.54	0.45	0.44	0.44	0.50	0.75		
Regulation	0.07	0.13	0.09	0.10	0.08	0.07	0.06	0.05	0.09	0.13		
NYISO Cost of Operations	0.74	0.74	0.74	0.74	0.76	0.76	0.76	0.76	0.75	0.74		
FERC Fee Recovery	0.08	0.09	0.09	0.11	0.10	0.08	0.07	0.06	0.08	0.09		
Uplift	(0.31)	(0.15)	0.11	(0.12)	(0.19)	(0.50)	(0.09)	(0.81)	0.00	(0.59)		
Uplift: Local Reliability Share	0.09	0.15	0.11	0.06	0.22	0.17	0.30	0.33	0.78	0.23		
Uplift: Statewide Share	(0.40)	(0.30)	0.00	(0.18)	(0.41)	(0.68)	(0.39)	(1.14)	(0.78)	(0.81)		
Voltage Support and Black Start	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.44	0.43		
Avg Monthly Cost	40.61	66.87	31.81	26.06	29.45	42.65	48.79	57.73	50.70	56.11		
Avg YTD Cost	40.69	52.99	46.57	42.41	40.10	40.59	42.05	44.63	45.34	46.35		
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.52	0.90	0.93	0.24	0.56	0.39		
2020	<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	October	November	<u>December</u>
<b>2020</b> LBMP	<u>January</u> 24.77	February 21.11	<u>March</u> 17.11	<u>April</u> 15.77	<u>May</u> 16.14	<u>June</u> 21.36	<u>July</u> 28.86	<u>August</u> 26.13	September 20.52	October 20.90	November 22.57	December 33.70
				-		· · · · · · · · · · · · · · · · · · ·	-				·	
LBMP	24.77	21.11	17.11	15.77	16.14	21.36	28.86	26.13	20.52	20.90	22.57	33.70
LBMP NTAC	24.77 0.91	21.11 0.70	17.11 0.86	15.77 0.91	16.14 1.05	21.36 0.95	28.86 1.24	26.13 1.03	20.52 0.78	20.90 0.84	22.57 1.05	33.70 1.35
LBMP NTAC Reserve	24.77 0.91 0.46	21.11 0.70 0.43	17.11 0.86 0.47	15.77 0.91 0.50	16.14 1.05 0.53	21.36 0.95 0.45	28.86 1.24 0.39	26.13 1.03 0.39	20.52 0.78 0.42	20.90 0.84 0.61	22.57 1.05 0.51	33.70 1.35 0.49
LBMP NTAC Reserve Regulation	24.77 0.91 0.46 0.09	21.11 0.70 0.43 0.08	17.11 0.86 0.47 0.09	15.77 0.91 0.50 0.08	16.14 1.05 0.53 0.10	21.36 0.95 0.45 0.08	28.86 1.24 0.39 0.06	26.13 1.03 0.39 0.07	20.52 0.78 0.42 0.09	20.90 0.84 0.61 0.11	22.57 1.05 0.51 0.09	33.70 1.35 0.49 0.08
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift	24.77 0.91 0.46 0.09 0.68	21.11 0.70 0.43 0.08 0.69	0.86 0.47 0.09 0.68	15.77 0.91 0.50 0.08 0.66	16.14 1.05 0.53 0.10 0.71	21.36 0.95 0.45 0.08 0.74	28.86 1.24 0.39 0.06 0.76	26.13 1.03 0.39 0.07 0.75	20.52 0.78 0.42 0.09 0.74	20.90 0.84 0.61 0.11 0.73	22.57 1.05 0.51 0.09 0.69	33.70 1.35 0.49 0.08 0.70
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery	24.77 0.91 0.46 0.09 0.68 0.08	21.11 0.70 0.43 0.08 0.69 0.09	17.11 0.86 0.47 0.09 0.68 0.09	15.77 0.91 0.50 0.08 0.66 0.10	16.14 1.05 0.53 0.10 0.71 0.11	21.36 0.95 0.45 0.08 0.74 0.09	28.86 1.24 0.39 0.06 0.76 0.06	26.13 1.03 0.39 0.07 0.75 0.07	20.52 0.78 0.42 0.09 0.74 0.09	20.90 0.84 0.61 0.11 0.73 0.10	22.57 1.05 0.51 0.09 0.69 0.10	33.70 1.35 0.49 0.08 0.70 0.08
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift	24.77 0.91 0.46 0.09 0.68 0.08 (0.15)	21.11 0.70 0.43 0.08 0.69 0.09 (0.23)	17.11 0.86 0.47 0.09 0.68 0.09 (0.19)	15.77 0.91 0.50 0.08 0.66 0.10 (0.08)	16.14 1.05 0.53 0.10 0.71 0.11 0.09	21.36 0.95 0.45 0.08 0.74 0.09 (0.05)	28.86 1.24 0.39 0.06 0.76 0.06 0.07	26.13 1.03 0.39 0.07 0.75 0.07 0.17	20.52 0.78 0.42 0.09 0.74 0.09 (0.07)	20.90 0.84 0.61 0.11 0.73 0.10 (0.05)	22.57 1.05 0.51 0.09 0.69 0.10 (0.07)	33.70 1.35 0.49 0.08 0.70 0.08 (0.33)
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share	24.77 0.91 0.46 0.09 0.68 0.08 (0.15) 0.07	21.11 0.70 0.43 0.08 0.69 0.09 (0.23) 0.06	17.11 0.86 0.47 0.09 0.68 0.09 (0.19) 0.07	15.77 0.91 0.50 0.08 0.66 0.10 (0.08) 0.14	16.14 1.05 0.53 0.10 0.71 0.11 0.09 0.32	21.36 0.95 0.45 0.08 0.74 0.09 (0.05) 0.24	28.86 1.24 0.39 0.06 0.76 0.06 0.07 0.38	26.13 1.03 0.39 0.07 0.75 0.07 0.17 0.50	20.52 0.78 0.42 0.09 0.74 0.09 (0.07) 0.22	20.90 0.84 0.61 0.11 0.73 0.10 (0.05) 0.08	22.57 1.05 0.51 0.09 0.69 0.10 (0.07) 0.12	33.70 1.35 0.49 0.08 0.70 0.08 (0.33) 0.05
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share Uplift: Statewide Share	24.77 0.91 0.46 0.09 0.68 0.08 (0.15) 0.07 (0.22)	21.11 0.70 0.43 0.08 0.69 0.09 (0.23) 0.06 (0.29)	17.11 0.86 0.47 0.09 0.68 0.09 (0.19) 0.07 (0.26)	15.77 0.91 0.50 0.08 0.66 0.10 (0.08) 0.14 (0.21)	16.14 1.05 0.53 0.10 0.71 0.11 0.09 0.32 (0.23)	21.36 0.95 0.45 0.08 0.74 0.09 (0.05) 0.24 (0.29)	28.86 1.24 0.39 0.06 0.76 0.06 0.07 0.38 (0.31)	26.13 1.03 0.39 0.07 0.75 0.07 0.17 0.50 (0.33)	20.52 0.78 0.42 0.09 0.74 0.09 (0.07) 0.22 (0.28)	20.90 0.84 0.61 0.11 0.73 0.10 (0.05) 0.08 (0.13)	22.57 1.05 0.51 0.09 0.69 0.10 (0.07) 0.12 (0.19)	33.70 1.35 0.49 0.08 0.70 0.08 (0.33) 0.05 (0.38)
LBMP NTAC Reserve Regulation NYISO Cost of Operations FERC Fee Recovery Uplift Uplift: Local Reliability Share Uplift: Statewide Share Voltage Support and Black Start	24.77 0.91 0.46 0.09 0.68 0.08 (0.15) 0.07 (0.22) 0.44	21.11 0.70 0.43 0.08 0.69 0.09 (0.23) 0.06 (0.29) 0.44	17.11 0.86 0.47 0.09 0.68 0.09 (0.19) 0.07 (0.26) 0.44	15.77 0.91 0.50 0.08 0.66 0.10 (0.08) 0.14 (0.21) 0.43	16.14 1.05 0.53 0.10 0.71 0.11 0.09 0.32 (0.23) 0.45	21.36 0.95 0.45 0.08 0.74 0.09 (0.05) 0.24 (0.29) 0.45	28.86 1.24 0.39 0.06 0.76 0.06 0.07 0.38 (0.31) 0.46	26.13 1.03 0.39 0.07 0.75 0.07 0.17 0.50 (0.33) 0.46	20.52 0.78 0.42 0.09 0.74 0.09 (0.07) 0.22 (0.28) 0.45	20.90 0.84 0.61 0.11 0.73 0.10 (0.05) 0.08 (0.13) 0.45	22.57 1.05 0.51 0.09 0.69 0.10 (0.07) 0.12 (0.19) 0.44	33.70 1.35 0.49 0.08 0.70 0.08 (0.33) 0.05 (0.38) 0.45

<sup>\*</sup> Excludes ICAP payments. Market Mitigation and Analysis Prepared: 11/5/2021 1:31 PM



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>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>	<u>November</u>	<u>December</u>
Day Ahead Market MWh	14,108,848	13,325,329	12,843,278	11,204,262	11,854,214	14,120,662	15,843,724	16,032,238	12,759,550	11,852,213		
DAM LSE Internal LBMP Energy Sales	60%	59%	56%	55%	56%	61%	65%	64%	61%	59%		
DAM External TC LBMP Energy Sales	5%	4%	3%	2%	2%	3%	2%	4%	3%	4%		
DAM Bilateral - Internal Bilaterals	31%	30%	32%	35%	35%	29%	27%	26%	29%	30%		
DAM Bilateral - Importl/Non-LBMP Market Bilaterals	1%	4%	4%	5%	4%	4%	3%	3%	4%	4%		
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	1%	1%	1%	2%	2%		
DAM Bilateral - Wheel Through Bilaterals	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%		
Balancing Energy Market MWh	29,179	-308,157	-70,279	30,603	-36,350	247,874	-367,232	454,982	543,392	511,553		
Balancing Energy LSE Internal LBMP Energy Sales	-215%	-151%	-367%	-456%	-398%	53%	-135%	82%	65%	63%		
Balancing Energy External TC LBMP Energy Sales	374%	59%	365%	578%	440%	60%	41%	34%	40%	39%		
Balancing Energy Bilateral - Internal Bilaterals	49%	4%	27%	34%	0%	-1%	3%	3%	1%	2%		
Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%		
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	50%	5%	32%	34%	21%	5%	3%	2%	4%	5%		
Balancing Energy Bilateral - Wheel Through Bilaterals	-158%	-17%	-158%	-90%	-163%	-17%	-11%	-21%	-9%	-10%		
Transactions Summary												
LBMP	65%	62%	59%	57%	58%	65%	66%	69%	66%	64%		
Internal Bilaterals	31%	31%	33%	35%	35%	29%	28%	25%	27%	28%		
Import Bilaterals	1%	4%	4%	5%	4%	3%	3%	3%	4%	4%		
Export Bilaterals	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%		
Wheels Through	2%	2%	2%	2%	2%	1%	1%	1%	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%		
Balancing Energy +	0.2%	-2.4%	-0.6%	0.3%	-0.3%	1.7%	-2.4%	2.8%	4.1%	4.1%		
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		
Average Daily Energy Sendout/Month GWh	427	434	381	354	365	458	483	504	420	373		
	1	Editor	N4 I	A 21		1		Δ	0 ( ]	0.44	NI.	December
<u>2020</u>	<u>January</u>	February	March	<u>April</u>	<u>May</u>	<u>June</u>	July	August	September	October	November	<u>December</u>
Day Ahead Market MWh	14,194,609	13,172,669	12,495,999	11,372,390	11,462,320	13,825,178	16,629,337	15,671,629	13,122,542	12,338,638	12,157,281	13,748,181
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales	14,194,609 56%	13,172,669 56%	12,495,999 59%	11,372,390 54%	11,462,320 55%	13,825,178 58%	16,629,337 65%	15,671,629 63%	13,122,542 60%	12, <del>338,638</del> 56%	12,157,281 57%	13,748,181 59%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales	14,194,609 56% 6%	13,172,669 56% 5%	12,495,999 59% 5%	11,372,390 54% 7%	11,462,320 55% 4%	13,825,178 58% 3%	16,629,337 65% 2%	15,671,629 63% 4%	13,122,542 60% 4%	12,338,638 56% 5%	12,157,281 57% 5%	13,748,181 59% 5%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals	14,194,609 56% 6% 30%	13,172,669 56% 5% 30%	12,495,999 59% 5% 27%	11,372,390 54% 7% 30%	11,462,320 55% 4% 31%	13,825,178 58% 3% 29%	16,629,337 65% 2% 26%	15,671,629 63% 4% 27%	13,122,542 60% 4% 30%	12,338,638 56% 5% 32%	12,157,281 57% 5% 33%	13,748,181 59% 5% 31%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals	14,194,609 56% 6% 30% 5%	13,172,669 56% 5% 30% 5%	12,495,999 59% 5% 27% 6%	11,372,390 54% 7% 30% 6%	11,462,320 55% 4% 31% 6%	13,825,178 58% 3% 29% 5%	16,629,337 65% 2% 26% 3%	15,671,629 63% 4% 27% 3%	13,122,542 60% 4% 30% 2%	12,338,638 56% 5% 32% 3%	12,157,281 57% 5% 33% 3%	13,748,181 59% 5% 31% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals	14,194,609 56% 6% 30% 5% 2%	13,172,669 56% 5% 30% 5% 2%	12,495,999 59% 5% 27% 6% 2%	11,372,390 54% 7% 30% 6% 2%	11,462,320 55% 4% 31% 6% 2%	13,825,178 58% 3% 29% 5% 2%	16,629,337 65% 2% 26% 3% 1%	15,671,629 63% 4% 27% 3% 2%	13,122,542 60% 4% 30% 2% 2%	12,338,638 56% 5% 32% 3% 2%	12,157,281 57% 5% 33% 3% 2%	13,748,181 59% 5% 31% 2% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals	14,194,609 56% 6% 30% 5% 2% 1%	13,172,669 56% 5% 30% 5% 2% 1%	12,495,999 59% 5% 27% 6% 2% 1%	11,372,390 54% 7% 30% 6% 2% 1%	11,462,320 55% 4% 31% 6% 2% 1%	13,825,178 58% 3% 29% 5% 2% 2%	16,629,337 65% 2% 26% 3% 1% 2%	15,671,629 63% 4% 27% 3% 2% 2%	13,122,542 60% 4% 30% 2% 2% 2%	12,338,638 56% 5% 32% 3% 2% 2%	12,157,281 57% 5% 33% 3% 2% 0%	13,748,181 59% 5% 31% 2% 2% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh	14,194,609 56% 6% 30% 5% 2%	13,172,669 56% 5% 30% 5% 2%	12,495,999 59% 5% 27% 6% 2%	11,372,390 54% 7% 30% 6% 2% 1% 22,599	11,462,320 55% 4% 31% 6% 2%	13,825,178 58% 3% 29% 5% 2%	16,629,337 65% 2% 26% 3% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307	13,122,542 60% 4% 30% 2% 2% 2% -173,115	12,338,638 56% 5% 32% 3% 2%	12,157,281 57% 5% 33% 3% 2%	13,748,181 59% 5% 31% 2% 2% 2% 156,891
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104%	12,338,638 56% 5% 32% 3% 2% 2% -89,451	12,157,281 57% 5% 33% 3% 2% 0% -54,598	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales Balancing Energy Bilateral - Internal Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12%	13,825,178 58% 3% 29% 5% 2% -180,149 -134% 99% 7%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3%	13,748,181 59% 5% 31% 2% 2% 2% 2% 156,891 -12% 107% 7%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales Balancing Energy Bilateral - Internal Bilaterals Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0%	12,338,638 56% 5% 32% 3% 2% 2% 2% -89,451 -220% 187% 4% 20%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12%	13,825,178 58% 3% 29% 5% 2% -180,149 -134% 99% 7% 0% 5%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 0% 7%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0%	12,338,638 56% 5% 32% 3% 2% 2% 2% -89,451 -220% 187% 4% 20%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 0% 7% -116%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19% 64% 31%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24% 68% 26% 3%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46% 67% 27% 3%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3%	12,157,281 57% 5% 33% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 33%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 6% 11% -19% 64% 31% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales Balancing Energy Bilateral - Internal Bilaterals Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP Internal Bilaterals Import Bilaterals Export Bilaterals	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5% 2%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5% 2%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6% 27% 6% 2%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6% 2%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6% 2%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5% 2%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24% 68% 26% 3% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 44% -46% 67% 27% 3% 2%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2% 2%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 32% 33% 2%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 33% 2%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19% 64% 31% 2% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 2% -24% 68% 26% 3%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46% 67% 27% 3%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3%	12,157,281 57% 5% 33% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 33%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 6% 11% -19% 64% 31% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5% 2% 0%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5% 2% 1%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6% 2% 0%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6% 2% 0%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6% 2% 0%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5% 2% 1%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% -24% 68% 26% 3% 1% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46% 67% 27% 3% 2% 1%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2% 2% 1%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3% 2% 2% 2%	12,157,281 57% 5% 33% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 3% 2% 0%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19% 64% 31% 2% 2% 2% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Mheels Through  Market Share of Total Load  Day Ahead Market	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5% 2% 0%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5% 2% 1%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6% 27% 6% 2% 0%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6% 2% 0%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6% 2% 0%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5% 2% 1%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 24% 68% 26% 3% 1% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46% 67% 27% 3% 2% 1%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2% 2% 1%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3% 2% 2% 2%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 3% 2% 0%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19% 64% 31% 2% 2% 2% 2% 2%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load  Day Ahead Market  Balancing Energy +	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5% 2% 0% 100.2% -0.2%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5% 2% 1% 101.1% -1.1%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6% 27% 6% 2% 0% 98.9% 1.1%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6% 2% 0% 99.8% 0.2%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6% 2% 0% 101.2% -1.2%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5% 2% 1%  101.3% -1.3%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% -24% 68% 26% 3% 1% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 44% -46% 27% 3% 27% 3% 2% 1%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2% 2% 1% 101.3% -1.3%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3% 2% 2% 2% 2%	12,157,281 57% 5% 33% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 2% 0% 100.5% -0.5%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 6% 11% -19% 64% 31% 2% 2% 2% 2% 2% 1.1%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals  DAM Bilateral - Export/Non-LBMP Market Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Mheels Through  Market Share of Total Load  Day Ahead Market	14,194,609 56% 6% 30% 5% 2% 1% -26,753 -1080% 1156% 62% 0% 127% -365% 62% 31% 5% 2% 0%	13,172,669 56% 5% 30% 5% 2% 1% -142,168 -221% 181% 5% 0% 16% -81% 62% 31% 5% 2% 1%	12,495,999 59% 5% 27% 6% 2% 1% 144,076 -85% 240% 12% 0% 18% -85% 65% 27% 6% 27% 6% 2% 0%	11,372,390 54% 7% 30% 6% 2% 1% 22,599 -884% 1233% 55% 0% 92% -396% 61% 30% 6% 2% 0%	11,462,320 55% 4% 31% 6% 2% 1% -137,565 -187% 137% 12% 0% 12% -74% 59% 32% 6% 2% 0%	13,825,178 58% 3% 29% 5% 2% 2% -180,149 -134% 99% 7% 0% 5% -77% 62% 30% 5% 2% 1%	16,629,337 65% 2% 26% 3% 1% 2% 403,914 85% 35% 2% 0% 24% 68% 26% 3% 1% 1%	15,671,629 63% 4% 27% 3% 2% 2% 212,307 99% 43% 1% 0% 4% -46% 67% 27% 3% 2% 1%	13,122,542 60% 4% 30% 2% 2% 2% -173,115 -95% 104% 0% 7% -116% 64% 31% 2% 2% 1%	12,338,638 56% 5% 32% 3% 2% 2% -89,451 -220% 187% 4% 20% 17% -107% 61% 32% 3% 2% 2% 2%	12,157,281 57% 5% 33% 3% 2% 0% -54,598 -459% 382% 3% 9% 33% -69% 62% 33% 3% 2% 0%	13,748,181 59% 5% 31% 2% 2% 2% 156,891 -12% 107% 7% 6% 11% -19% 64% 31% 2% 2% 2% 2% 2%

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

Notes: Percent totals may not equal 100% due to rounding. Virtual Transactions are not reflected in this chart.

<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 2021 Energy Statistics**

				141130	Wai Kets	ZUZ I LIIG	igy Statis	<u> </u>				
DAY ALEAD I DMD	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November [	<u>December</u>
<u>DAY AHEAD LBMP</u> Price *	\$34.37	\$57.30	\$27.47	\$20.46	\$22.95	\$33.36	\$40.38	\$50.30	\$45.48	\$50.66		
Standard Deviation	\$14.58	\$24.48	\$8.23	\$4.58	\$6.28	\$15.88	\$15.56	\$22.37	\$12.42	\$11.04		
Load Weighted Price **	\$35.31	\$58.67	\$28.12	\$20.81	\$23.75	\$36.28	\$42.84	\$53.93	\$47.08	\$51.92		
RTC LBMP	00400	<b>0.40.0</b> =	00= =0	004.00	<b>^</b>	000.00	<b>A</b> 40 0=	<b>A-0.0-</b>	<b>4-0 0-</b>	<b>A-4</b> 44		
Price *	\$34.32	\$49.25	\$25.59	\$21.30	\$25.36	\$39.69	\$42.25	\$58.87	\$50.07	\$51.41		
Standard Deviation	\$20.93	\$23.34	\$12.67	\$7.91	\$11.17	\$34.08	\$47.97	\$47.79	\$22.24	\$13.96		
Load Weighted Price **	\$35.40	\$50.48	\$26.37	\$21.67	\$26.50	\$44.41	\$45.27	\$64.66	\$52.21	\$52.71		
REAL TIME LBMP												
Price *	\$34.59	\$48.22	\$28.06	\$21.10	\$24.62	\$36.58	\$39.61	\$51.46	\$46.37	\$50.41		
Standard Deviation	\$29.47	\$26.46	\$26.13	\$10.07	\$10.91	\$25.43	\$26.73	\$37.53	\$18.08	\$14.93		
Load Weighted Price **	\$35.89	\$49.57	\$29.33	\$21.55	\$25.78	\$40.76	\$42.20	\$56.04	\$48.21	\$51.66		
Average Daily Energy Sendout/Month GWh	427	434	381	354	365	458	483	504	420	373		
				NYISO	Markets	2020 Ene	rgy Stati	stics				
				111100			igy Clair	<u> </u>				
	<u>January</u>	<u>February</u>	March	<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>
DAY AHEAD LBMP		_										
Price *	\$22.11	\$19.48	\$16.07	\$14.67	\$14.97	\$19.15	\$26.30	\$23.61	\$18.88	\$19.40	\$20.07	\$30.45
Standard Deviation	\$7.43	\$4.45	\$3.21	\$2.71	\$3.55	\$6.40	\$10.45	\$8.56	\$5.41	\$6.36	\$7.15	\$12.35
Load Weighted Price **	\$22.77	\$19.84	\$16.36	\$14.86	\$15.37	\$20.28	\$27.94	\$25.01	\$19.72	\$19.91	\$20.75	\$31.36
RTC LBMP												
Price *	\$22.86	\$21.48	\$16.48	\$16.23	\$17.46	\$20.84	\$30.70	\$26.86	\$19.90	\$23.35	\$20.39	\$34.01

\$5.17

\$16.44

\$14.14

\$6.98

\$14.35

344

\$8.61

\$17.89

\$14.90

\$15.42

\$8.35

345

\$11.26

\$22.01

\$18.35

\$9.33

\$19.46

430

\$17.92

\$32.92

\$26.56

\$16.45

\$28.27

530

\$17.17

\$29.01

\$24.68

\$13.95

\$26.53

489

\$11.37

\$20.99

\$18.63

\$19.54

\$7.15

408

\$14.44

\$24.25

\$20.44

\$12.01

\$21.15

367

\$14.19

\$21.23

\$18.96

\$12.66

\$19.84

377

\$25.41

\$35.28

\$32.72

\$24.29

\$34.04

417

Average Daily Energy Sendout/Month GWh	

Load Weighted Price \*\*

**Standard Deviation** 

**REAL TIME LBMP** 

Standard Deviation

Price \*

Load Weighted Price \*\*

\$9.33

\$23.50

\$22.53

\$11.90

\$23.20

423

\$53.30

\$21.94

\$19.29

\$8.68

\$19.68

417

\$4.84

\$16.74

\$16.24

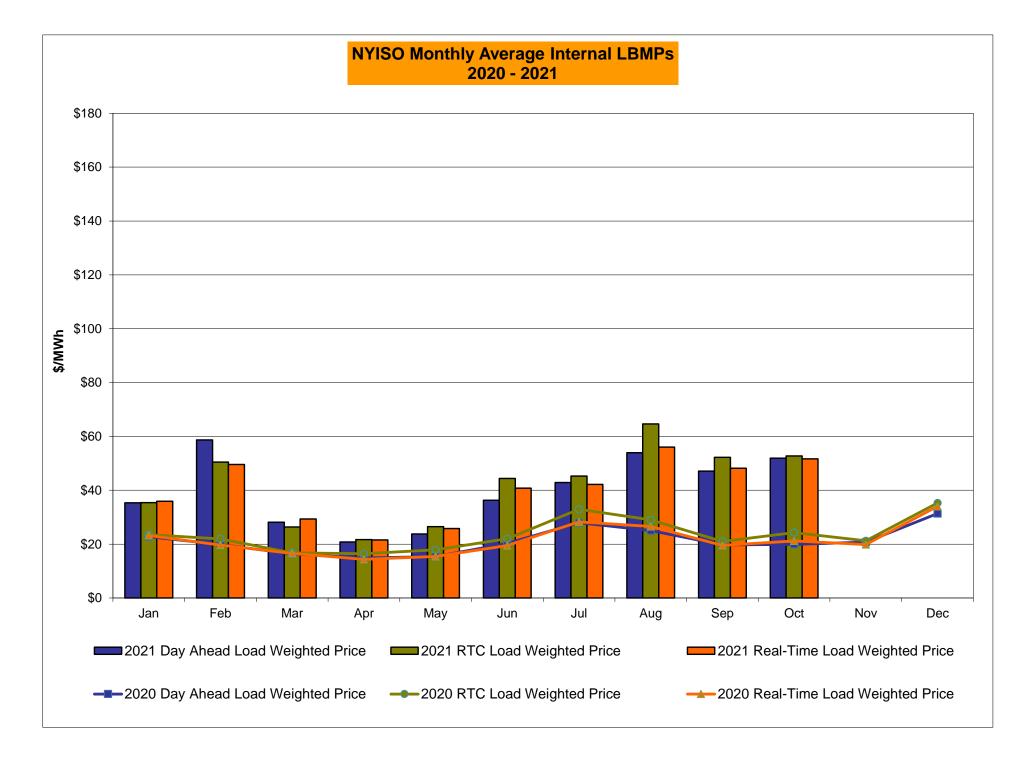
\$7.48

375

\$16.58

<sup>\*</sup> Average zonal load weighted prices.

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

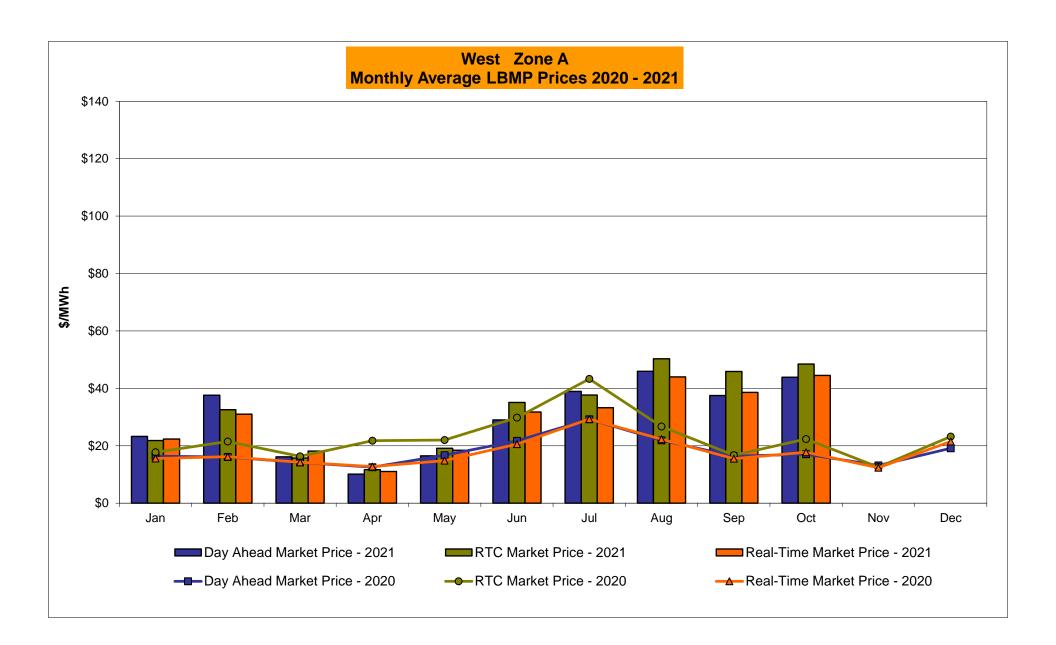


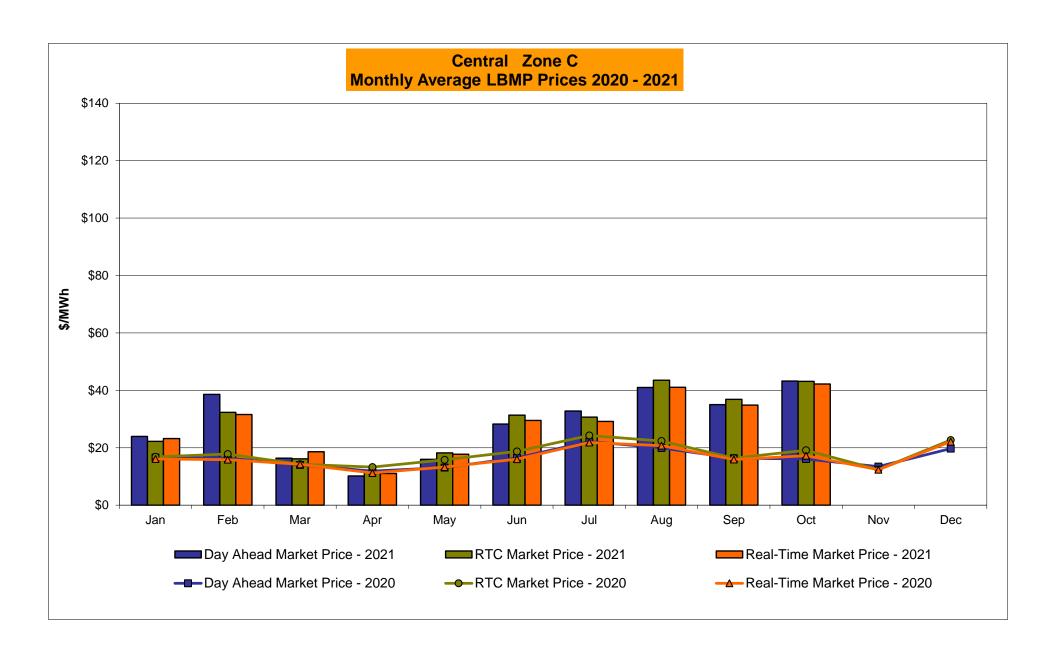
#### October 2021 Zonal LBMP Statistics for NYISO (\$/MWh)

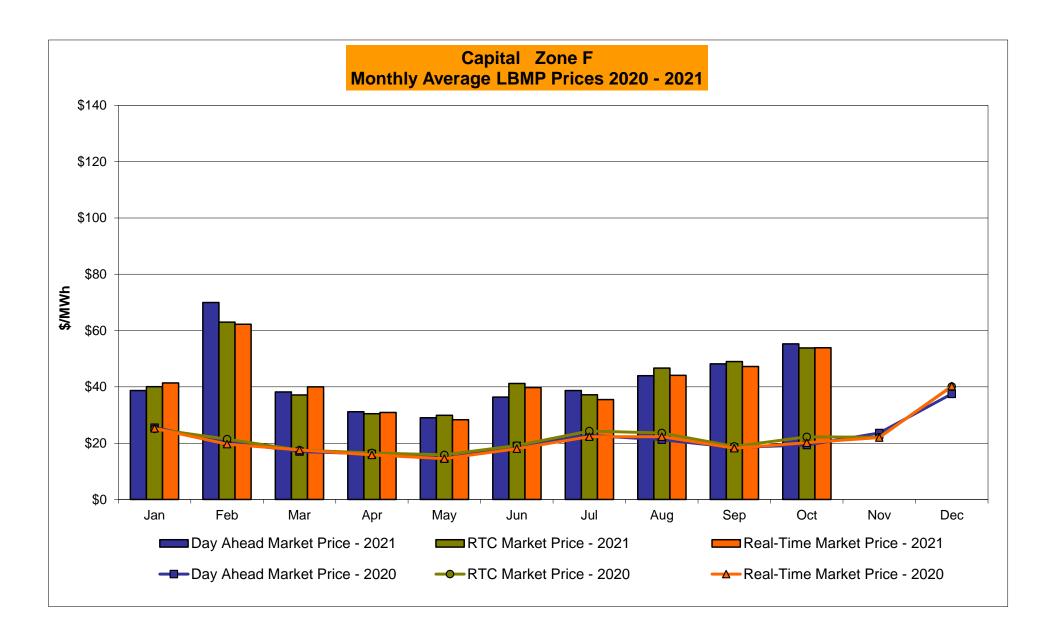
	WEST	GENESEE	NORTH	CENTRAL	MOHAWK VALLEY	CAPITAL	HUDSON VALLEY	MILLWOOD	DUNWOODIE	NEW YORK CITY	LONG ISLAND
	Zone A	Zone B	Zone D	Zone C	Zone E	Zone F	Zone G	Zone H	Zone I	Zone J	Zone K
DAY AHEAD LBMP											
Unweighted Price *	43.89	42.50	36.13	43.23	43.31	55.24	52.60	53.53	53.71	54.47	57.65
Standard Deviation	14.28	12.62	14.28	12.31	12.32	10.92	10.46	10.93	10.84	11.01	12.19
RTC LBMP											
Unweighted Price *	48.45	42.21	37.78	43.14	43.29	53.82	51.45	53.39	53.12	53.59	63.42
Standard Deviation	24.87	14.20	17.18	14.26	14.10	12.58	11.73	17.97	13.55	13.26	40.26
REAL TIME LBMP											
Unweighted Price *	44.48	41.56	36.80	42.21	42.48	53.90	51.39	53.46	53.12	53.87	60.39
Standard Deviation	21.70	15.96	19.13	15.75	15.83	16.31	14.69	18.75	15.72	16.15	27.21
		HYDRO	HYDRO			CROSS					
	ONTARIO	HYDRO QUEBEC	HYDRO QUEBEC		NEW		NORTHPORT-				
	ONTARIO IESO	QUEBEC		РЈМ	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	QUEBEC (Wheel)	QUEBEC (Import/Export)		ENGLAND	SOUND CABLE Controllable	NORWALK Controllable	Controllable	<u>Controllable</u>	<u>Controllable</u>	Controllable
Unweighted Price *	<b>Zone O</b> 39.36	QUEBEC (Wheel)  Zone M  38.56	QUEBEC (Import/Export)  Zone M  38.56	<b>Zone P</b> 47.64	ENGLAND  Zone N  54.66	SOUND CABLE Controllable Line 58.63	NORWALK Controllable Line 55.37	Controllable Line 56.70	Controllable Line 53.89	Controllable Line 53.85	Controllable Line 34.82
·	IESO Zone O	QUEBEC (Wheel) Zone M	QUEBEC (Import/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 * Standard Deviation  RTC LBMP	Zone O 39.36 11.19	QUEBEC (Wheel) Zone M 38.56 12.31	QUEBEC (Import/Export)  Zone M  38.56 12.31	<b>Zone P</b> 47.64 10.85	<b>Zone N</b> 54.66 10.82	SOUND CABLE Controllable Line 58.63 13.22	NORWALK Controllable Line  55.37 11.34	Controllable Line 56.70 11.96	Controllable Line 53.89 10.90	Controllable Line 53.85 10.93	Controllable Line 34.82 13.14
Unweighted Price * Standard Deviation	Zone O 39.36 11.19	QUEBEC (Wheel)  Zone M  38.56 12.31	QUEBEC (Import/Export)  Zone M  38.56 12.31	Zone P 47.64 10.85 48.15	<b>ENGLAND Zone N</b> 54.66  10.82	SOUND CABLE Controllable Line 58.63 13.22	NORWALK Controllable Line  55.37 11.34	<u>Line</u> 56.70 11.96	Controllable Line 53.89 10.90	Controllable	24.82 13.14 36.13
Unweighted Price * Standard Deviation  RTC LBMP	Zone O 39.36 11.19	QUEBEC (Wheel) Zone M 38.56 12.31	QUEBEC (Import/Export)  Zone M  38.56 12.31	<b>Zone P</b> 47.64 10.85	<b>Zone N</b> 54.66 10.82	SOUND CABLE Controllable Line 58.63 13.22	NORWALK Controllable Line  55.37 11.34	Controllable Line 56.70 11.96	Controllable Line 53.89 10.90	Controllable Line 53.85 10.93	Controllable Line 34.82 13.14
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price * Standard Deviation  REAL TIME LBMP	39.36 11.19 37.23 12.30	QUEBEC (Wheel)  Zone M  38.56 12.31  39.31 14.72	QUEBEC (Import/Export)  Zone M  38.56 12.31  39.31 14.72	<b>Zone P</b> 47.64 10.85 48.15 13.50	<b>Zone N</b> 54.66 10.82  55.67 16.07	\$OUND CABLE Controllable Line 58.63 13.22 65.99 47.59	NORWALK Controllable Line  55.37 11.34  61.55 38.25	56.70 11.96 61.76 38.66	53.89 10.90 53.08 13.22	53.85 10.93 51.05 14.08	34.82 13.14 36.13 19.91
Unweighted Price * Standard Deviation  RTC LBMP  Unweighted Price * Standard Deviation	Zone O 39.36 11.19	QUEBEC (Wheel)  Zone M  38.56 12.31	QUEBEC (Import/Export)  Zone M  38.56 12.31	Zone P 47.64 10.85 48.15	<b>ENGLAND Zone N</b> 54.66  10.82	SOUND CABLE Controllable Line 58.63 13.22	NORWALK Controllable Line  55.37 11.34	<u>Line</u> 56.70 11.96	Controllable Line 53.89 10.90	Controllable	24.82 13.14 36.13

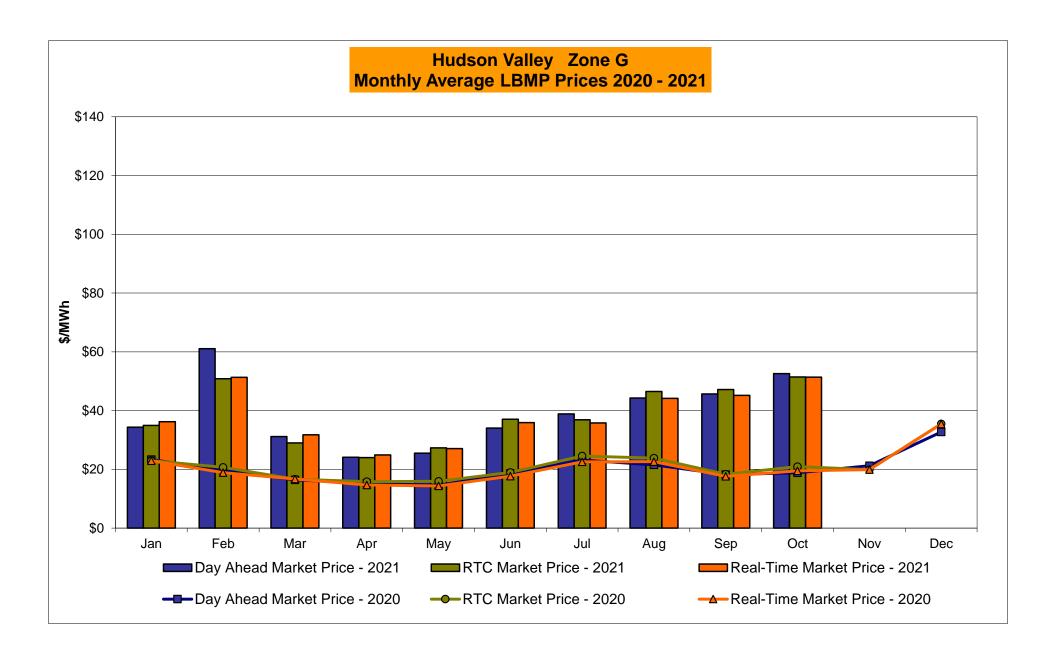
Market Mitigation and Analysis Prepared: 11/5/2021 1:28 PM

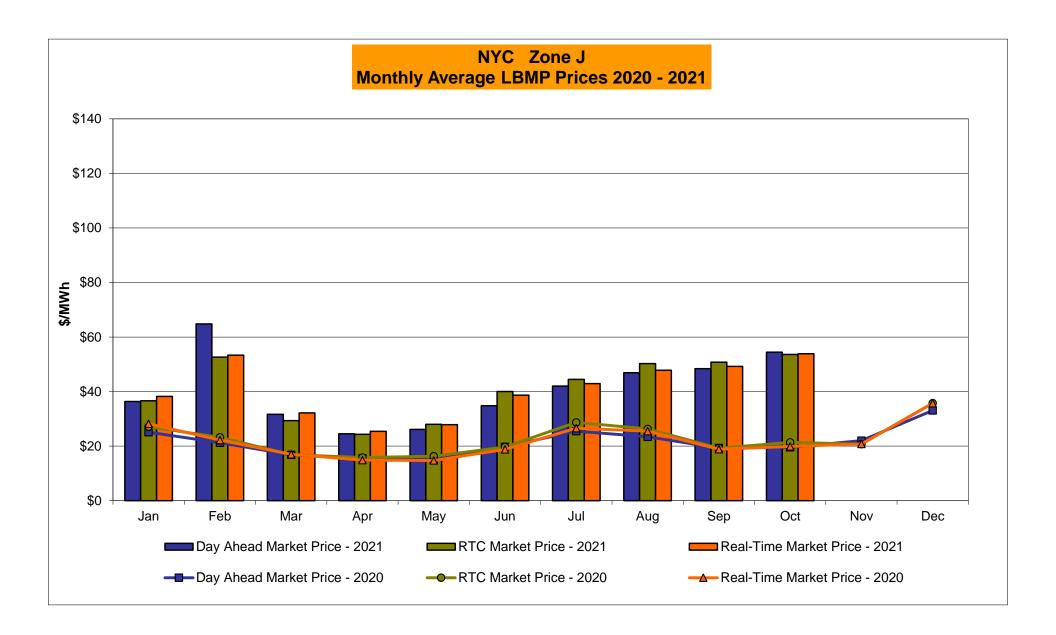
<sup>\*</sup> Straight LBMP averages

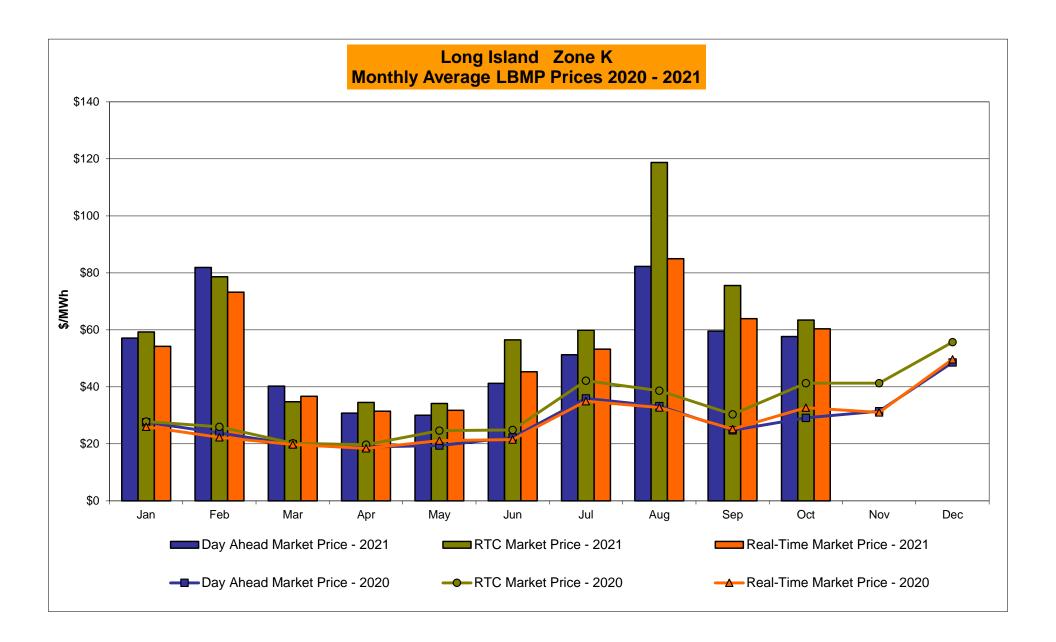


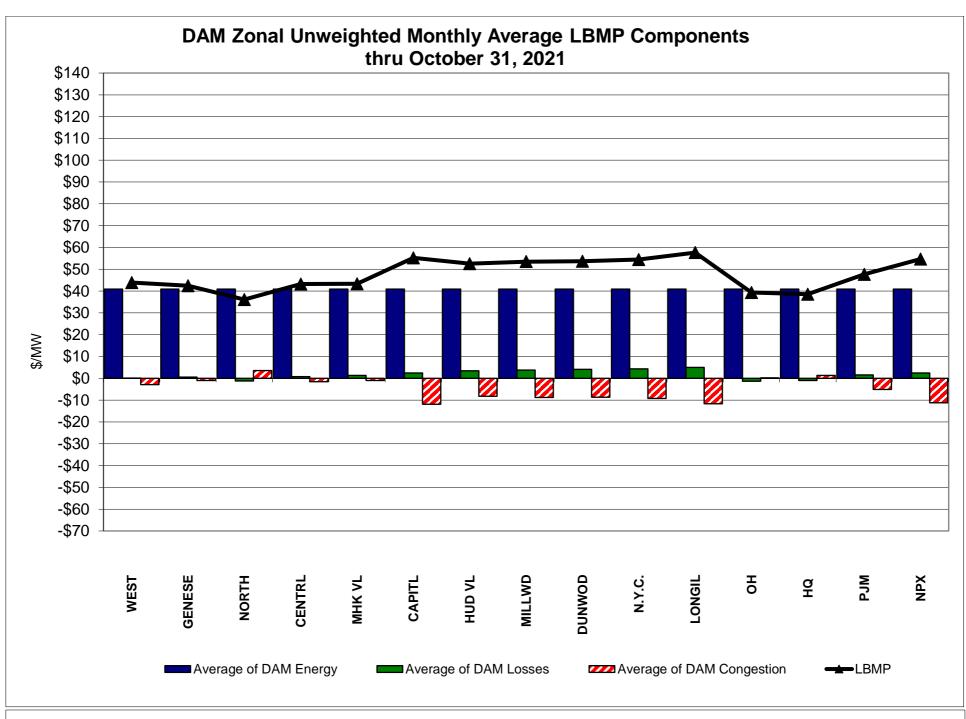


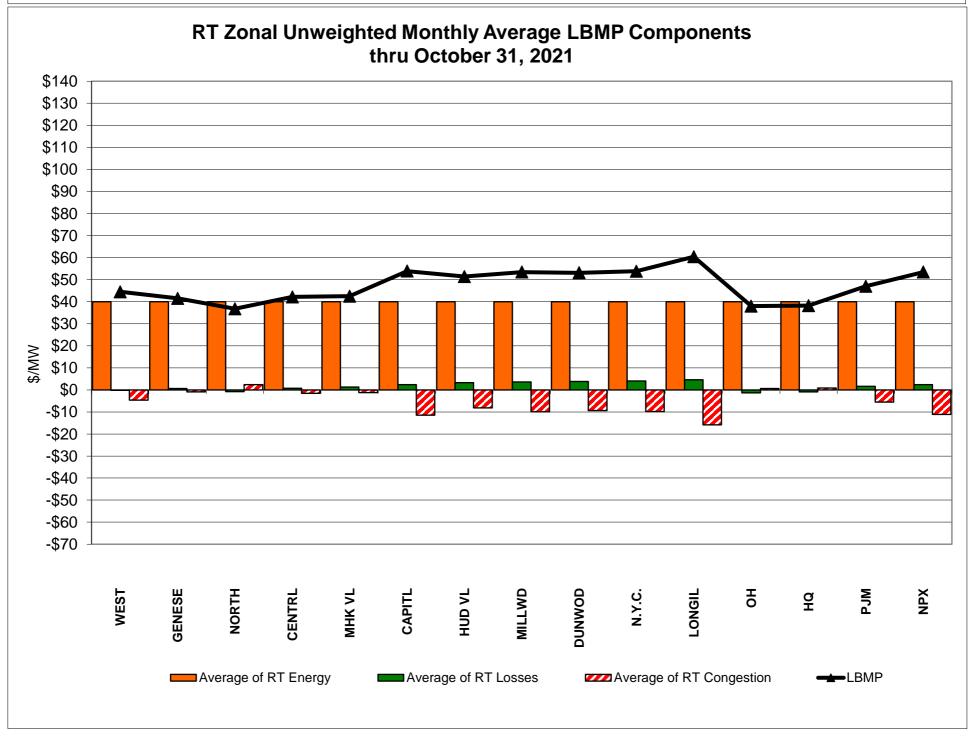




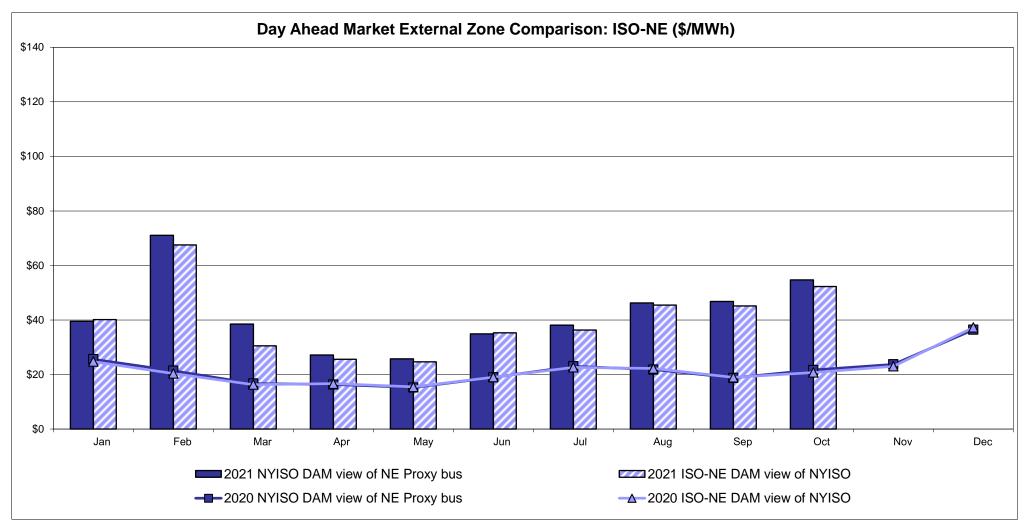


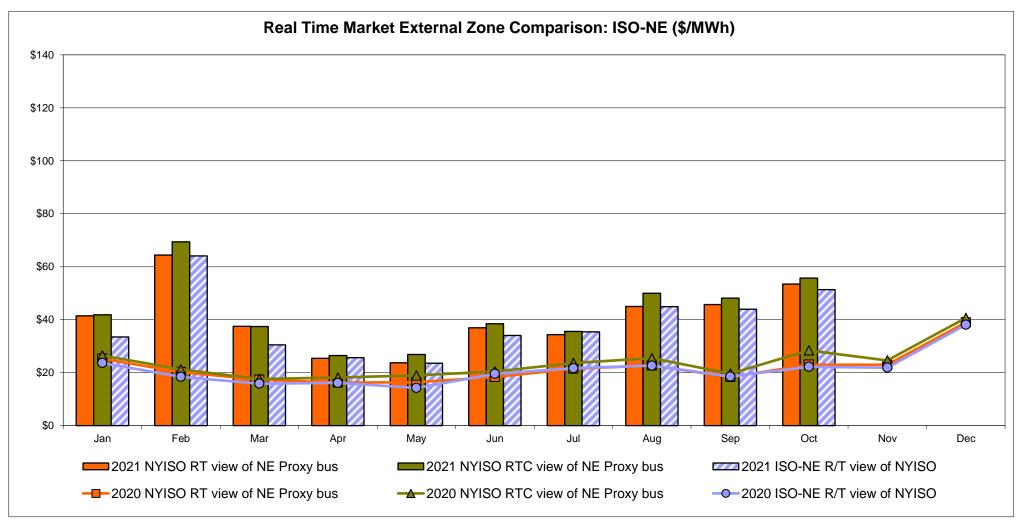




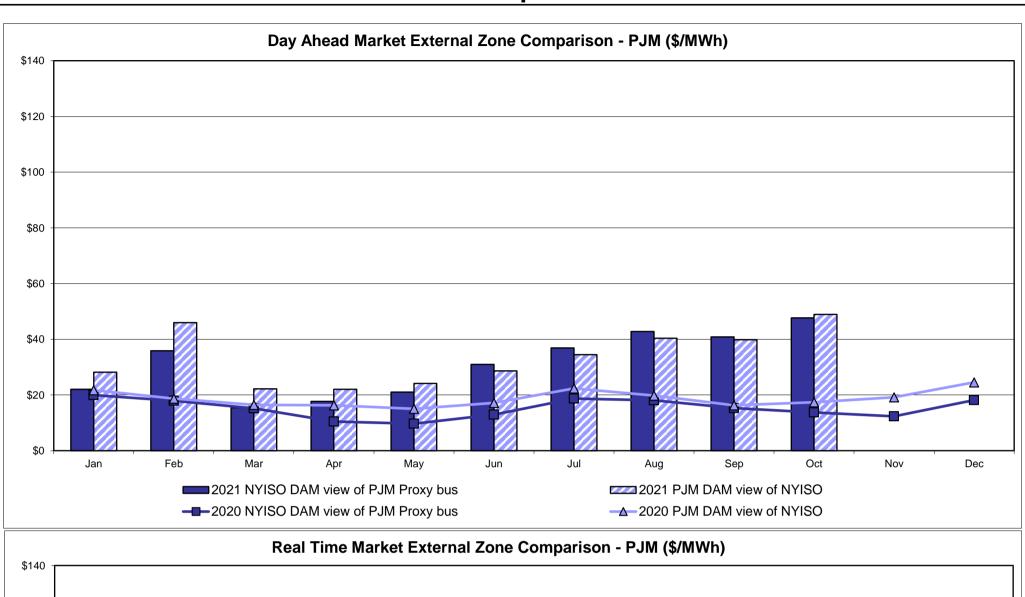


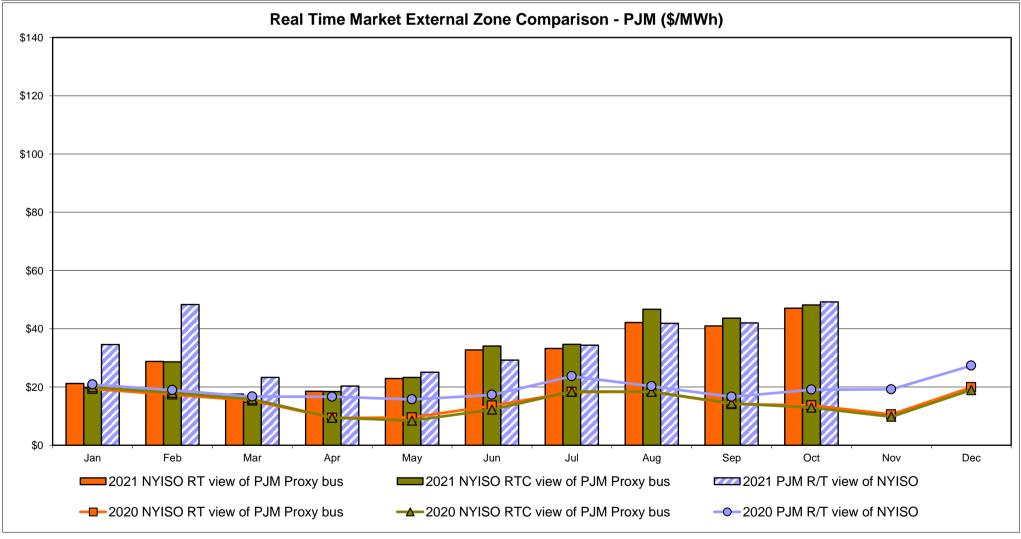
## **External Comparison ISO-New England**



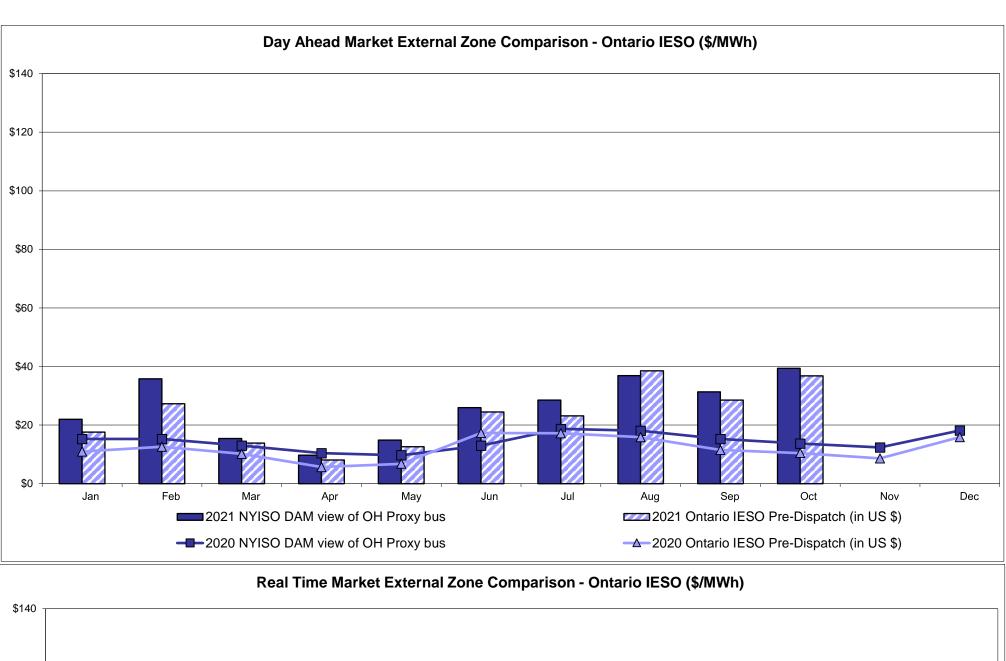


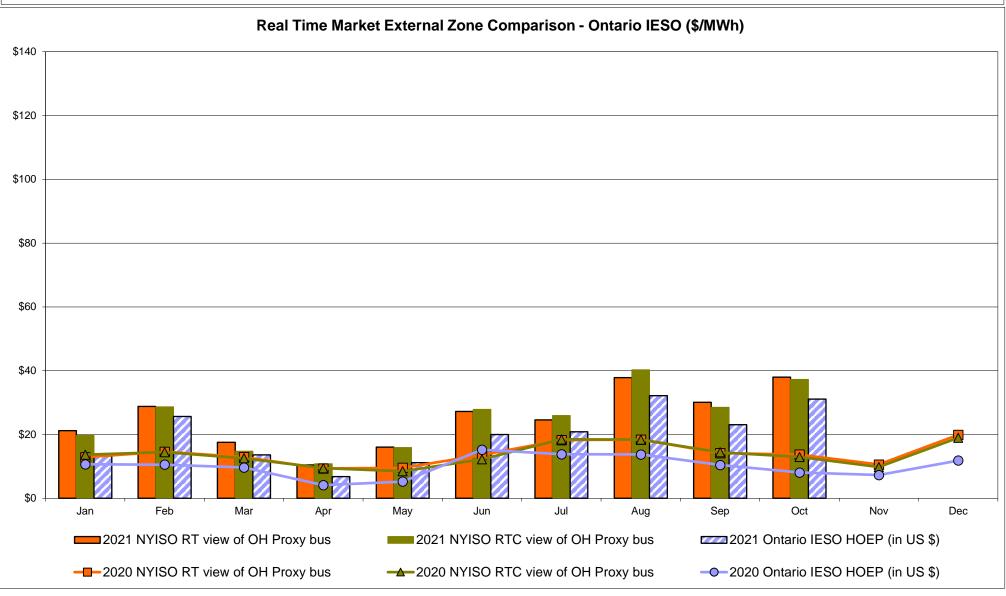
## **External Comparison PJM**





#### **External Comparison Ontario IESO**

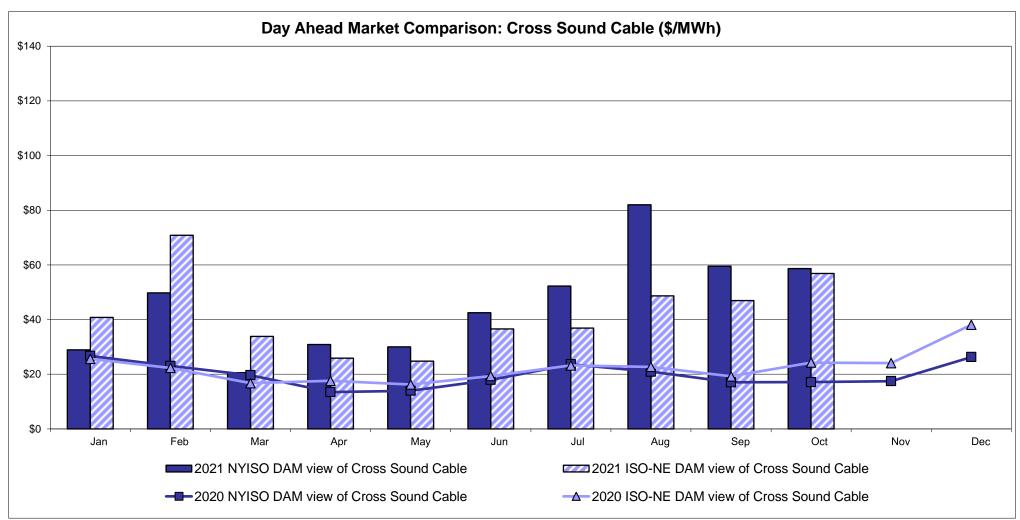


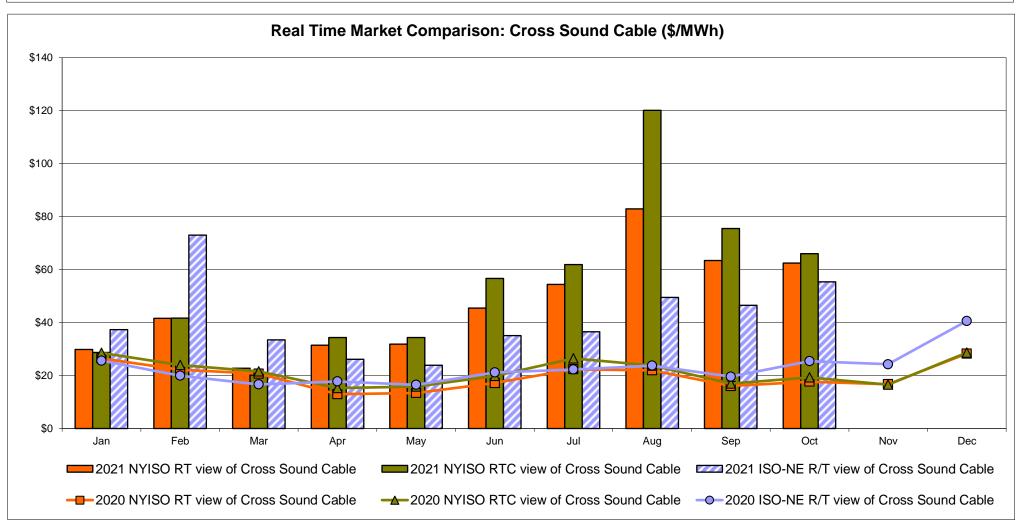


Notes: Exchange factor used for October 2021 was to US

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

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





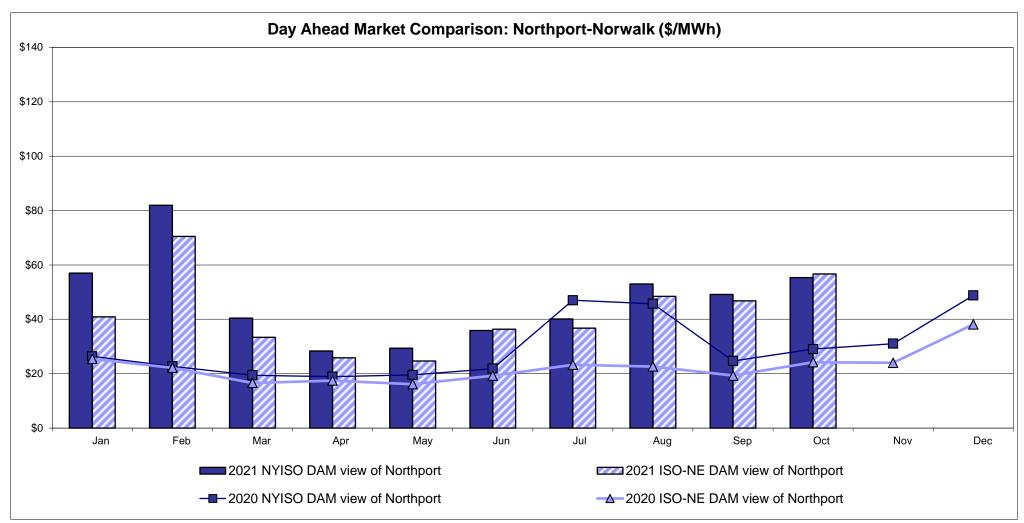
#### Note:

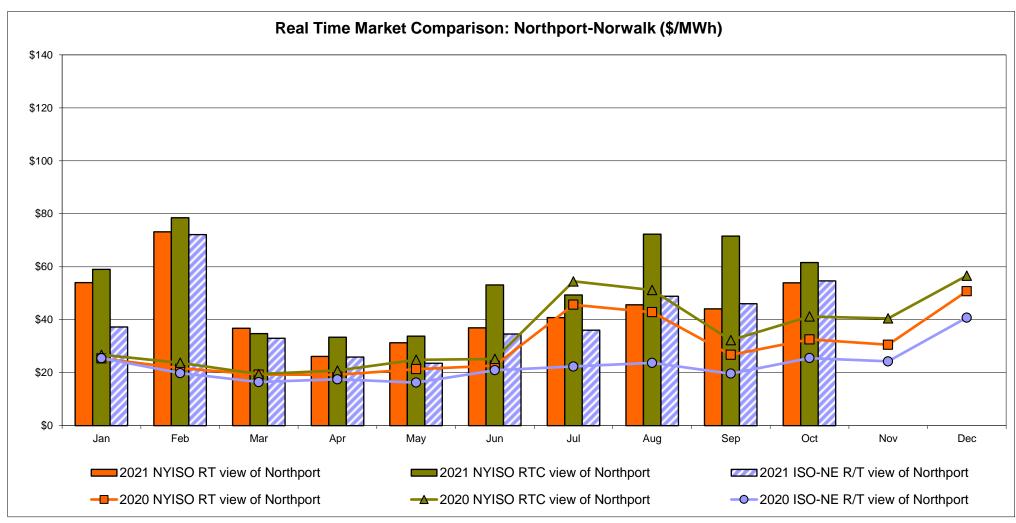
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

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

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





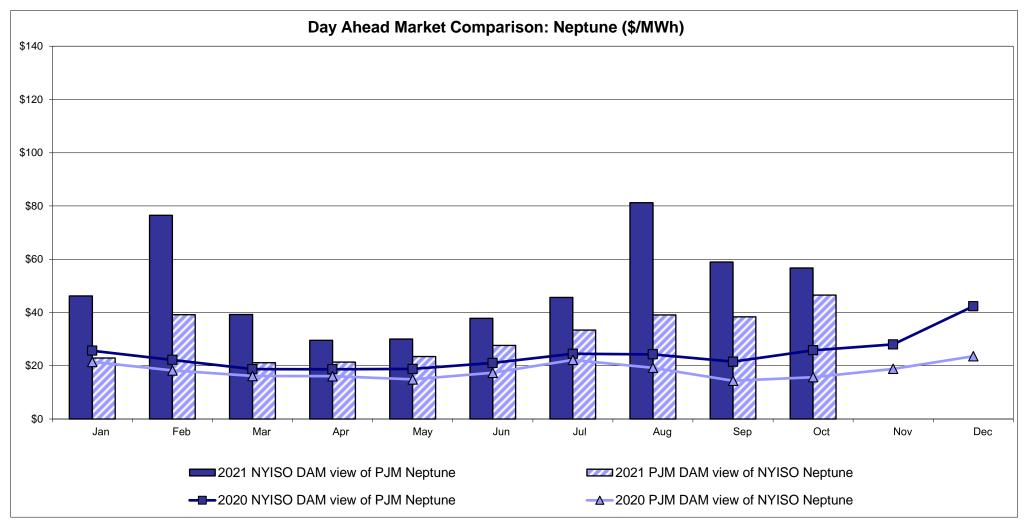
#### Note:

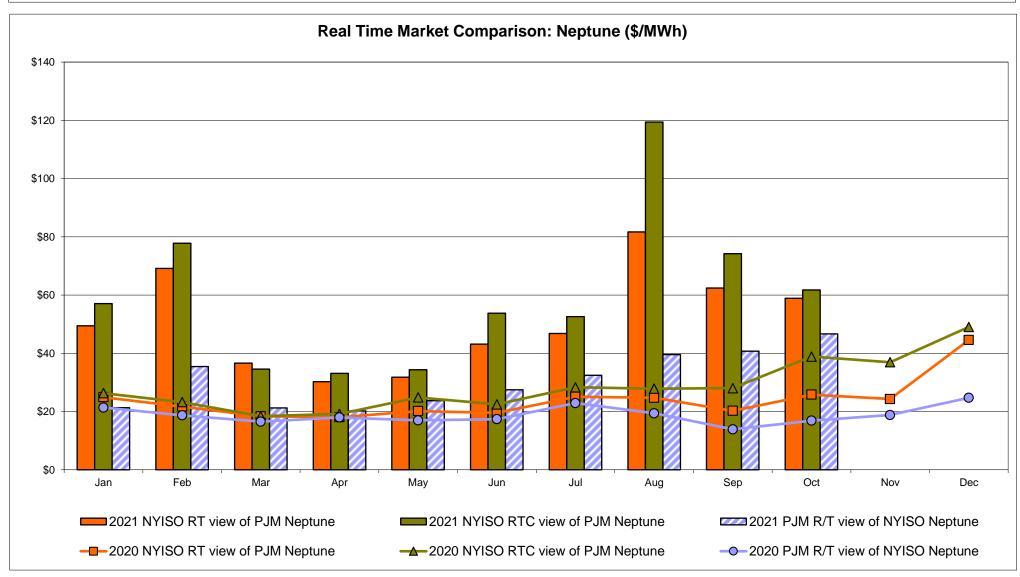
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

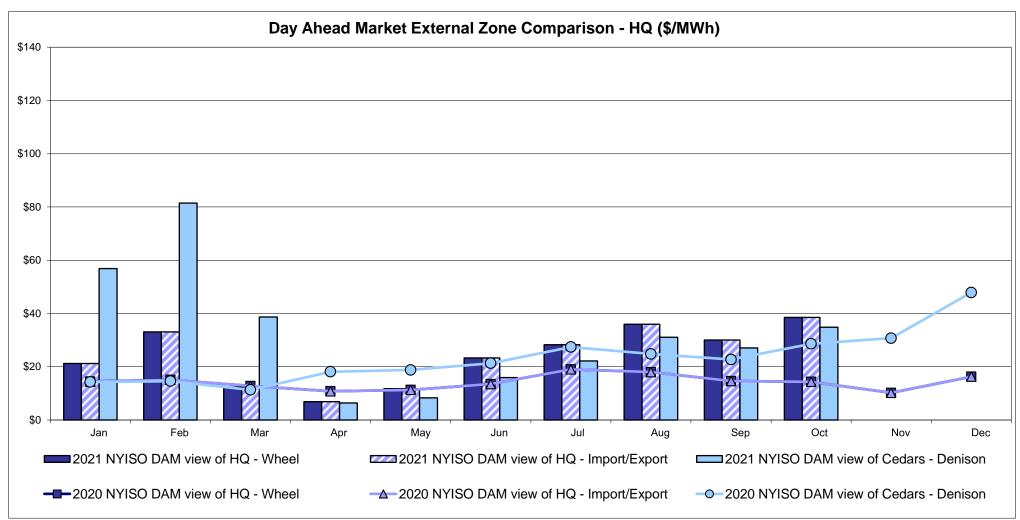
The DAM and R/T prices at the 1385 interface are used for NYISO.

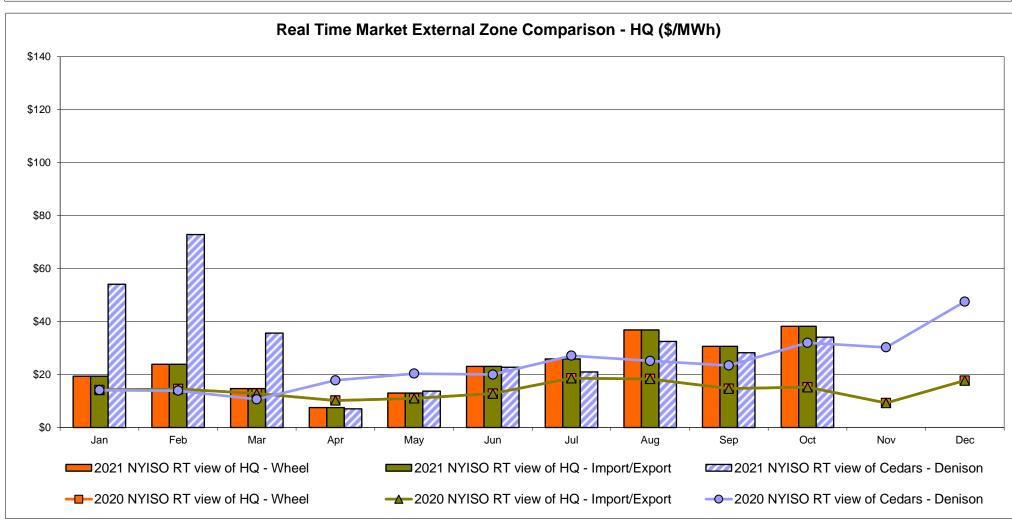
## **External Controllable Line: Neptune (PJM)**





## **External Comparison Hydro-Quebec**

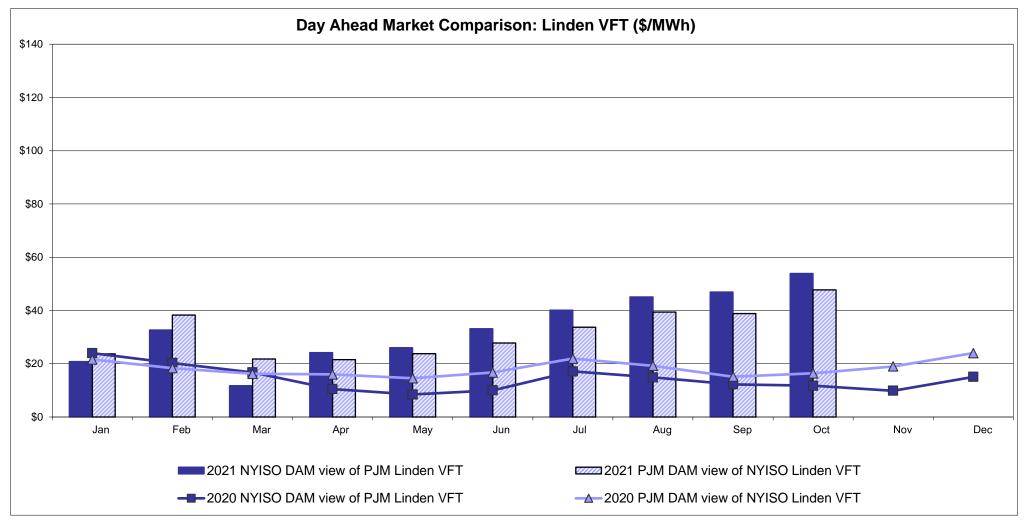


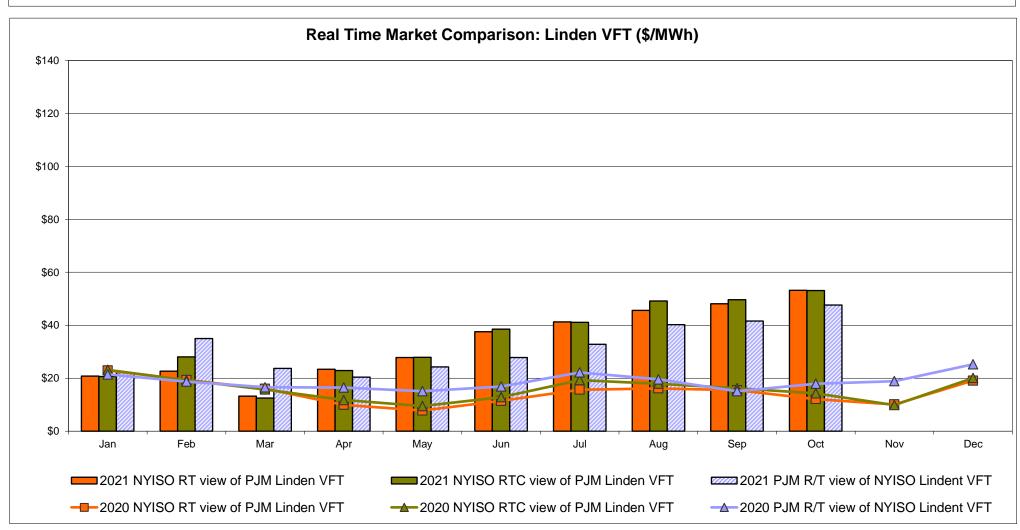


Note:

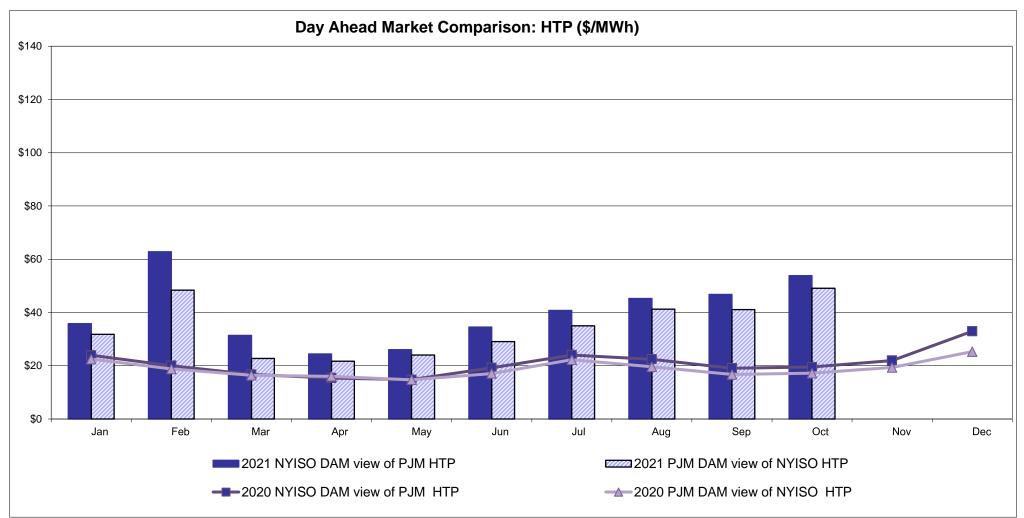
Hydro-Quebec Prices are unavailable.

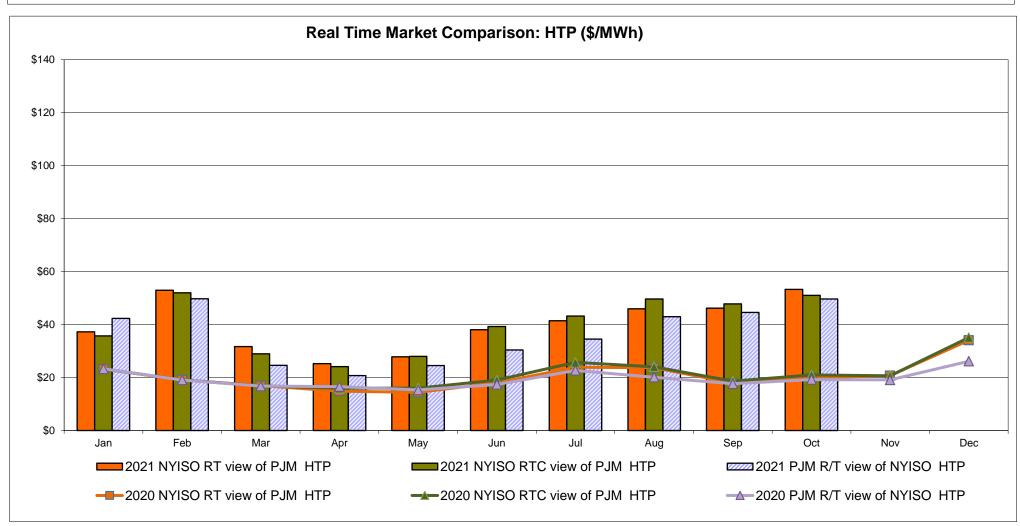
#### **External Controllable Line: Linden VFT (PJM)**





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

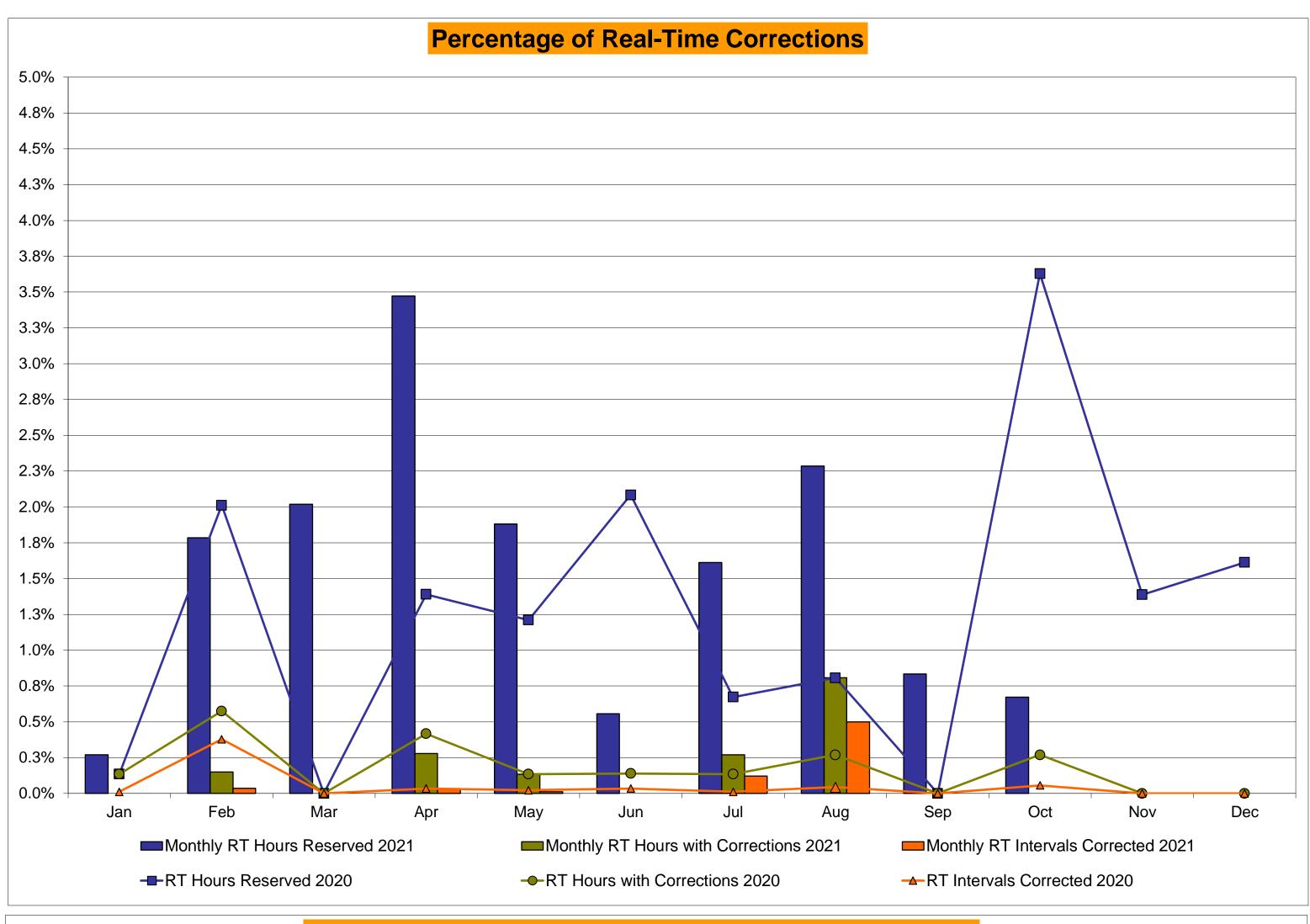


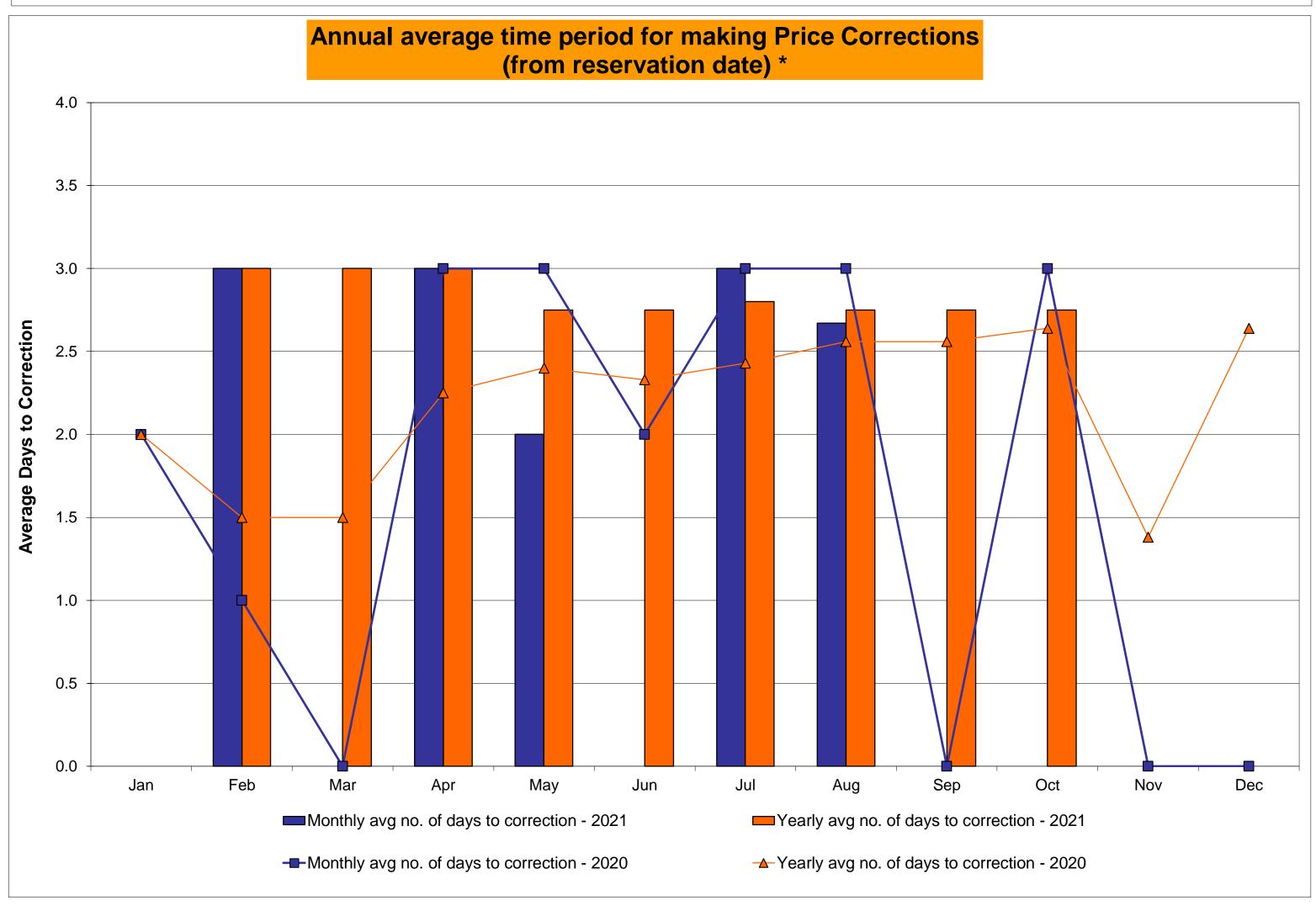


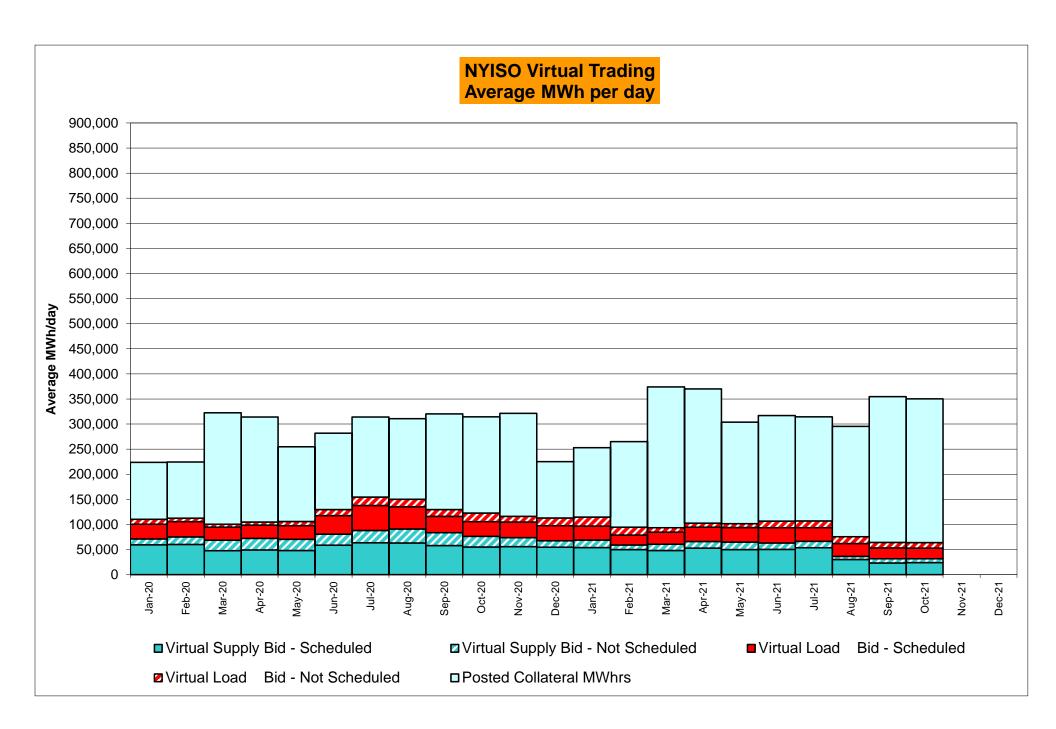
#### **NYISO Real Time Price Correction Statistics**

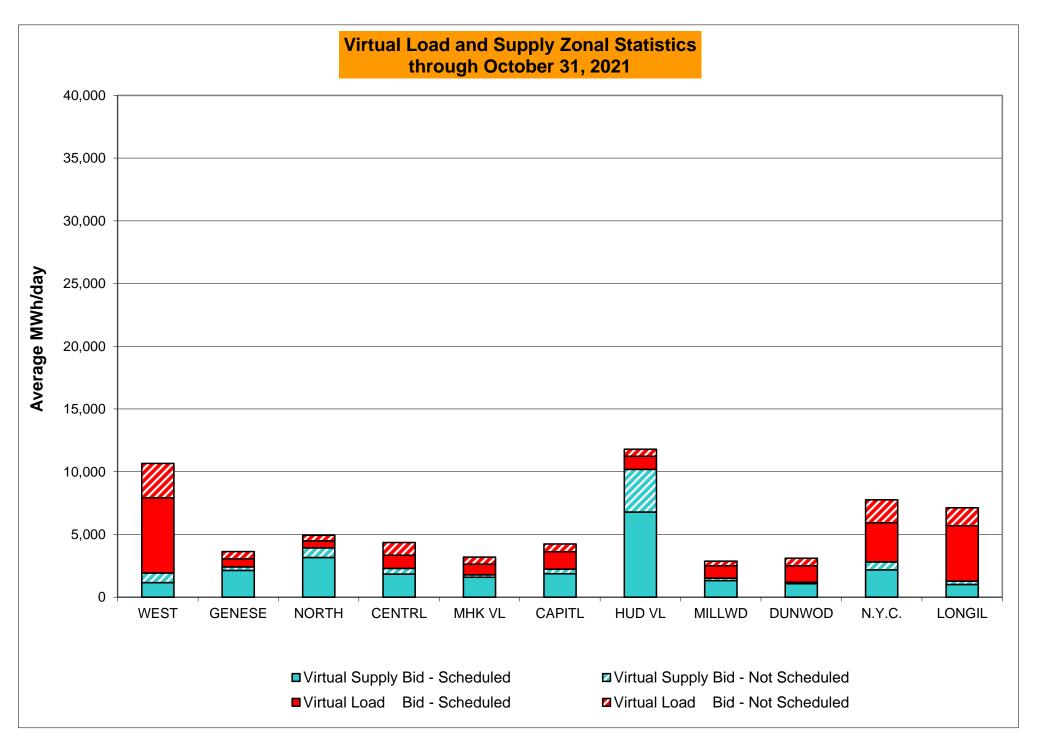
2021 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
Number of hours with corrections	in the month	0	1	0	2	1	0	2	6	0	0		
Number of hours	in the month	744	672	743	720	744	720	- 744	744	720	744		
% of hours with corrections	in the month	0.00%	0.15%	0.00%	0.28%	0.13%	0.00%	0.27%	0.81%	0.00%	0.00%		
% of hours with corrections	year-to-date	0.00%	0.07%	0.05%	0.10%	0.11%	0.09%	0.12%	0.21%	0.18%	0.16%		
Interval Corrections	year to date	0.0070	0.0770	0.0070	0.1070	0.1170	0.0070	0.1270	0.2170	0.1070	0.1070		
Number of intervals corrected	in the month	0	3	0	3	1	0	11	45	0	0		
Number of intervals	in the month	9,095	8,236	9,100	8,827	9,157	8,813	9,084	9,024	8,783	9,133		
% of intervals corrected	in the month	0.00%	0.04%	0.00%	0.03%	0.01%	0.00%	0.12%	0.50%	0.00%	0.00%		
% of intervals corrected	year-to-date	0.00%	0.02%	0.01%	0.02%	0.02%	0.01%	0.03%	0.09%	0.08%	0.07%		
Hours Reserved		_									_		
Number of hours reserved	in the month	2	12	15	25	14	4	12	17	6	5		
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744		
% of hours reserved	in the month	0.27%	1.79%	2.02%	3.47%	1.88%	0.56%	1.61%	2.28%	0.83%	0.67%		
% of hours reserved	year-to-date	0.27%	0.99%	1.34%	1.88%	1.88%	1.66%	1.65%	1.73%	1.63%	1.54%		
Days to Correction *													<u> </u>
Avg. number of days to correction	in the month	0.00	3.00	0.00	3.00	2.00	0.00	3.00	2.67	0.00	0.00		
Avg. number of days to correction	year-to-date	0.00	3.00	3.00	3.00	2.75	2.75	2.80	2.75	2.75	2.75		
<b>Days Without Corrections</b>													
Days without corrections	in the month	31	27	31	28	30	30	30	28	30	31		
Days without corrections	year-to-date	31	58	89	117	147	177	207	235	265	296		
<u>2020</u>		<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	<u>September</u>	October	November	<u>December</u>
2020 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	May	<u>June</u>	<u>July</u>	<u>August</u>	September	October	November	<u>December</u>
	in the month	<u>January</u> 1	February 4	March 0	April 3	<u>May</u> 1	<u>June</u> 1	<u>July</u> 1	August 2	September 0	October 2	November 0	<u>December</u>
Hour Corrections	in the month in the month	<u>January</u> 1 744			-	<u>May</u> 1 744	<u>June</u> 1 720	<u>July</u> 1 744					
Hour Corrections  Number of hours with corrections		1	4	0	3	1	1	1	2	0	2	0	0
Hour Corrections  Number of hours with corrections  Number of hours	in the month	1 744	4 696	0 743	3 720	1 744	1 720	1 744	2 744	0 720	2 744	0 721	0 744
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections	in the month in the month	1 744 0.13%	4 696 0.57%	0 743 0.00%	3 720 0.42%	1 744 0.13%	1 720 0.14%	1 744 0.13%	2 744 0.27%	0 720 0.00%	2 744 0.27%	0 721 0.00%	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 in the month	1 744 0.13%	4 696 0.57%	0 743 0.00%	3 720 0.42%	1 744 0.13%	1 720 0.14%	1 744 0.13%	2 744 0.27%	0 720 0.00%	2 744 0.27%	0 721 0.00%	0 744 0.00%
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	1 744 0.13%	4 696 0.57% 0.35%	0 743 0.00% 0.23%	3 720 0.42% 0.28%	1 744 0.13% 0.25%	1 720 0.14% 0.23%	1 744 0.13%	2 744 0.27%	0 720 0.00% 0.20%	2 744 0.27% 0.20%	0 721 0.00% 0.19%	0 744 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	in the month in the month year-to-date in the month	1 744 0.13% 0.13%	4 696 0.57% 0.35%	0 743 0.00% 0.23%	3 720 0.42% 0.28%	1 744 0.13% 0.25%	1 720 0.14% 0.23%	1 744 0.13% 0.22%	2 744 0.27% 0.22%	0 720 0.00% 0.20%	2 744 0.27% 0.20%	0 721 0.00% 0.19%	0 744 0.00% 0.17%
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	1 744 0.13% 0.13% 1 9,088	4 696 0.57% 0.35% 32 8,460	0 743 0.00% 0.23% 0 9,011	3 720 0.42% 0.28% 3 8,776	1 744 0.13% 0.25% 2 9,030	1 720 0.14% 0.23% 3 8,826	1 744 0.13% 0.22% 1 9,128	2 744 0.27% 0.22% 4 9,156	0 720 0.00% 0.20%	2 744 0.27% 0.20% 5 9,048	0 721 0.00% 0.19% 0 8,790	0 744 0.00% 0.17% 0 9,083
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	1 744 0.13% 0.13% 1 9,088 0.01%	4 696 0.57% 0.35% 32 8,460 0.38%	0 743 0.00% 0.23% 0 9,011 0.00%	3 720 0.42% 0.28% 3 8,776 0.03%	1 744 0.13% 0.25% 2 9,030 0.02%	1 720 0.14% 0.23% 3 8,826 0.03%	1 744 0.13% 0.22% 1 9,128 0.01%	2 744 0.27% 0.22% 4 9,156 0.04%	0 720 0.00% 0.20% 0 8,810 0.00%	2 744 0.27% 0.20% 5 9,048 0.06%	0 721 0.00% 0.19% 0 8,790 0.00%	0 744 0.00% 0.17% 0 9,083 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 in the month	1 744 0.13% 0.13% 1 9,088 0.01%	4 696 0.57% 0.35% 32 8,460 0.38%	0 743 0.00% 0.23% 0 9,011 0.00%	3 720 0.42% 0.28% 3 8,776 0.03%	1 744 0.13% 0.25% 2 9,030 0.02%	1 720 0.14% 0.23% 3 8,826 0.03%	1 744 0.13% 0.22% 1 9,128 0.01%	2 744 0.27% 0.22% 4 9,156 0.04%	0 720 0.00% 0.20% 0 8,810 0.00%	2 744 0.27% 0.20% 5 9,048 0.06%	0 721 0.00% 0.19% 0 8,790 0.00%	0 744 0.00% 0.17% 0 9,083 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 Hours Reserved	in the month in the month year-to-date in the month in the month in the month year-to-date	1 744 0.13% 0.13% 1 9,088 0.01%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06%	0 721 0.00% 0.19% 0 8,790 0.00% 0.05%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05%
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  Wors 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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06%	0 721 0.00% 0.19% 0 8,790 0.00% 0.05%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05%
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	in the month in the month year-to-date  in the month in the month in the month year-to-date  in the month	1 744 0.13% 0.13% 1 9,088 0.01% 0.01% 1 744 0.13%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63%	0 721 0.00% 0.19% 0 8,790 0.00% 0.05% 10 721 1.39%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61%
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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744	0 721 0.00% 0.19% 0 8,790 0.00% 0.05%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05%
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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01% 1 744 0.13% 0.13%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01% 1.04%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00% 0.69%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39% 0.86%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21% 0.93%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08% 1.12%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67% 1.06%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81% 1.02%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00% 0.91%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63% 1.19%	0 721 0.00% 0.19% 0 8,790 0.00% 0.05% 10 721 1.39% 1.21%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61% 1.24%
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  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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01% 1 744 0.13% 0.13% 2.00	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01% 1.04%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00% 0.69%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39% 0.86%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21% 0.93% 3.00	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08% 1.12%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67% 1.06%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81% 1.02% 3.00	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00% 0.91%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63% 1.19%	0 721 0.00% 0.19%  0 8,790 0.00%  0.05%  10 721 1.39% 1.21%  0.00	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61% 1.24%
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  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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01% 1 744 0.13% 0.13%	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01% 1.04%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00% 0.69%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39% 0.86%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21% 0.93%	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08% 1.12%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67% 1.06%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81% 1.02%	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00% 0.91%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63% 1.19%	0 721 0.00% 0.19% 0 8,790 0.00% 0.05% 10 721 1.39% 1.21%	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61% 1.24%
Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections  Mumber of intervals corrected Number of intervals % of intervals corrected % of intervals corrected % of intervals corrected  Number of hours reserved Number of hours reserved Number of hours % of hours reserved Days to Correction 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	1 744 0.13% 0.13%  1 9,088 0.01% 0.01%  1 744 0.13% 0.13% 2.00 2.00	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01% 1.04% 1.00 1.50	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00% 0.69% 0.00 1.50	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39% 0.86% 3.00 2.25	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21% 0.93% 3.00 2.40	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08% 1.12% 2.00 2.33	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67% 1.06% 3.00 2.43	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81% 1.02% 3.00 2.56	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00% 0.91% 0.00 2.56	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63% 1.19% 3.00 2.64	0 721 0.00% 0.19%  0 8,790 0.00% 0.05%  10 721 1.39% 1.21%  0.00 1.38	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61% 1.24% 0.00 2.64
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  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	1 744 0.13% 0.13% 1 9,088 0.01% 0.01% 1 744 0.13% 0.13% 2.00	4 696 0.57% 0.35% 32 8,460 0.38% 0.19% 14 696 2.01% 1.04%	0 743 0.00% 0.23% 0 9,011 0.00% 0.12% 0 743 0.00% 0.69%	3 720 0.42% 0.28% 3 8,776 0.03% 0.10% 10 720 1.39% 0.86%	1 744 0.13% 0.25% 2 9,030 0.02% 0.09% 9 744 1.21% 0.93% 3.00	1 720 0.14% 0.23% 3 8,826 0.03% 0.08% 15 720 2.08% 1.12%	1 744 0.13% 0.22% 1 9,128 0.01% 0.07% 5 744 0.67% 1.06%	2 744 0.27% 0.22% 4 9,156 0.04% 0.06% 6 744 0.81% 1.02% 3.00	0 720 0.00% 0.20% 0 8,810 0.00% 0.06% 0 720 0.00% 0.91%	2 744 0.27% 0.20% 5 9,048 0.06% 0.06% 27 744 3.63% 1.19%	0 721 0.00% 0.19%  0 8,790 0.00%  0.05%  10 721 1.39% 1.21%  0.00	0 744 0.00% 0.17% 0 9,083 0.00% 0.05% 12 744 1.61% 1.24%

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









#### Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2021 Virtual Load Bid Virtual Load Bid **Virtual Supply Bid** Virtual Load Bid **Virtual Supply Bid Virtual Supply Bid** Not Not Not Not Not Not Date Scheduled Zone Scheduled Zone Date Zone Date MHK VL DUNWOD **WEST** Jan-21 6,262 1,726 2,018 1,076 Jan-21 1,537 548 1,967 531 Jan-21 1,881 2,339 2,000 475 Feb-21 4,588 1,544 1,842 959 Feb-21 1,031 584 2,081 392 Feb-21 912 1,806 2,015 568 Mar-21 5,696 840 1,144 893 Mar-21 1,669 305 1.402 524 Mar-21 1,303 817 1,780 1,142 1,100 1,948 1,982 670 2,166 524 Apr-21 6,747 873 Apr-21 1,741 366 Apr-21 1,519 638 2,009 3,219 7,289 1,632 1,432 630 May-21 1,279 353 447 May-21 868 1,347 461 May-21 4,916 1,989 1,498 559 1,400 438 1,637 283 Jun-21 2,411 1,770 1,455 233 Jun-21 Jun-21 Jul-21 3,954 2,328 1,857 1,390 Jul-21 951 412 2,439 413 Jul-21 2,349 1.494 1.492 488 928 532 337 1,769 1,260 1,158 147 Aug-21 4,542 3,007 1,848 1,078 1,641 <u>Aug-21</u> Aug-21 Sep-21 4,520 1,473 Sep-21 758 447 Sep-21 1,060 60 2,511 777 1,865 660 1,347 718 Oct-21 5.995 2,737 1,161 766 Oct-21 846 564 1,589 192 Oct-21 1,314 594 1,078 112 Nov-21 Nov-21 Nov-21 Dec-21 Dec-21 Dec-21 GENESE CAPITL N.Y.C. Jan-21 1,117 329 1,085 853 Jan-21 3,046 1,995 2,207 792 Jan-21 3,486 2,580 2,503 679 Feb-21 857 390 1.310 617 Feb-21 2.483 1.967 2.065 535 Feb-21 1.983 2.475 2.275 678 295 833 3,192 Mar-21 757 Mar-21 817 1,433 Mar-21 1,581 2,230 1,041 2,149 1,385 2,465 1,251 Apr-21 1,396 466 834 3,175 662 Apr-21 Apr-21 2,770 1,075 3,404 694 2,116 602 May-21 862 431 1,680 486 May-21 1,417 532 2,776 837 May-21 2,664 678 2,697 532 Jun-21 653 393 1,426 390 Jun-21 2,396 994 2,144 636 Jun-21 5,791 1,832 1,941 620 Jul-21 603 394 2,451 500 Jul-21 1,350 632 2,598 1,069 Jul-21 6,538 2,006 1,898 1,003 1,289 2,052 660 614 395 1,478 548 657 Aug-21 7,676 2,095 1,669 1,038 Aug-21 Aug-21 Sep-21 672 435 1,692 455 Sep-21 1,145 664 1,885 922 Sep-21 5,286 2,466 2,078 571 272 Oct-21 653 567 2,139 Oct-21 1,376 622 1,860 382 Oct-21 3,123 1,818 2,174 641 Nov-21 Nov-21 Nov-21 Dec-21 Dec-21 Dec-21

LONGIL

**NYISO** 

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

4,341

3,899

4,846

6,288

6,112

6,451

5,218

2,406

3,229

4,411

27,659

19,732

24,164

28.658

28,758

30,385

27,090

25,602

21,526

21,349

4.976

3,560

2,196

1,581

1,898

3,532

3,792

2,764

1,448

1,433

17,816

15,526

8,780

7,818

7,933

13,112

13,465

13,598

11,116

10,720

3.261

1,758

2,232

2,121

1,422

1,082

1,279

1,740

1,253

1,008

54,093

49,963

47,999

53.015

50,094

50,174

53,486

30,040

23,251

24,118

686

862

1,195

631

961

663

583

354

300

275

14,973

9,186

12,586

13.052

14,836

12,992

13,053

6,443

8,474

7,467

HUD VL

MILLWD

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

1,666

1,685

1,013

1,096

1,658

1,758

1,199

1,091

1,044

1,368

530

731

775

1,245

2,049

3,381

2,800

1,750

996

934

1,215

1,148

455

411

425

692

547

533

498

557

672

541

240

359

245

506

822

650

635

367

5.917

4,967

5,555

6,547

5,040

7,862

7,395

5,596

5,982

6,779

1,820

1,463

1,732

2.106

1,386

1,203

1,292

1,197

1,335

1,324

7.429

2,247

3,086

5,166

8,201

7,556

5,215

2,490

3,416

139

115

175

126

145

85

293

259

234

183

798

1,220

1,258

2,052

1,622

1,703

1,454

1,134

1,413

1,094

954

888

433

512

965

646

591

459

1.249

733

768

Market Mitigation and Analysis Prepared: 11/5/2021 1:27 PM

830

405

641

1,031

1,041

1,051

839

876

696

551

2,124

1,357

2,108

3.179

1,973

1,508

1,269

1,031

1,039

974

498

410

125

278

164

294

217

525

462

449

938

1,102

541

941

708

672

820

1,070

831

1,010

3.280

2,654

3,152

3,310

3,171

2,897

2,827

2,125

2,757

3,166

28,034

27,531

24,874

25.006

27,134

27,029

27,958

9,724

1,870

1,841

NORTH

CENTRL

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-21

Feb-21

Mar-21

Apr-21

May-21

Jun-21

Jul-21

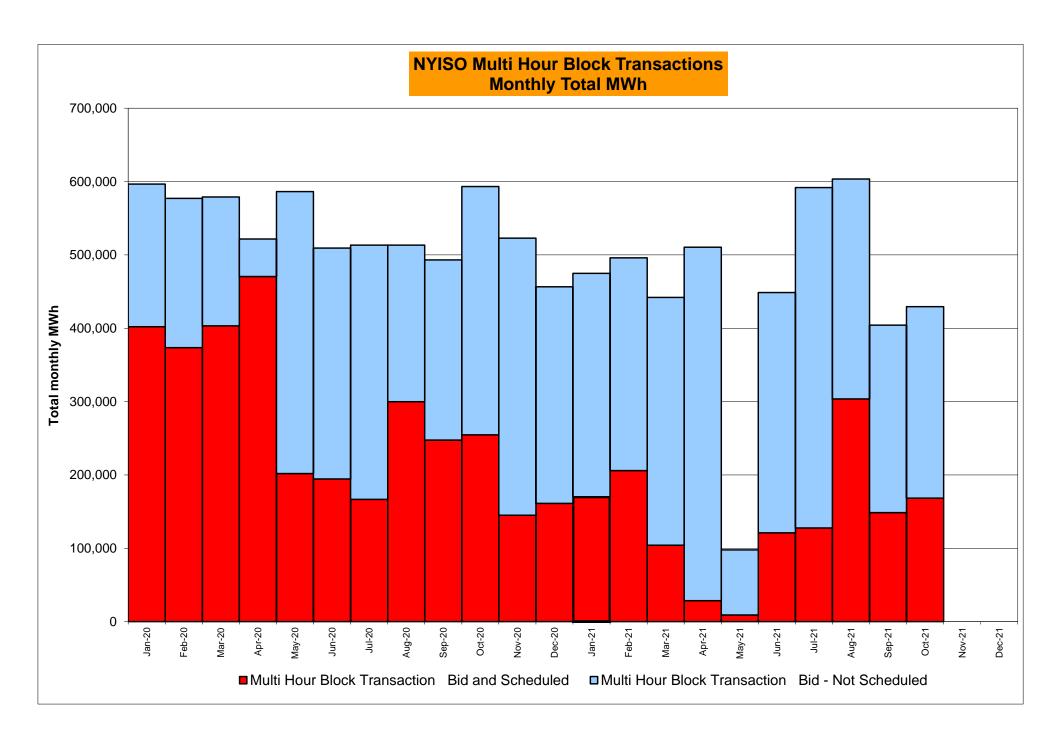
Aug-21

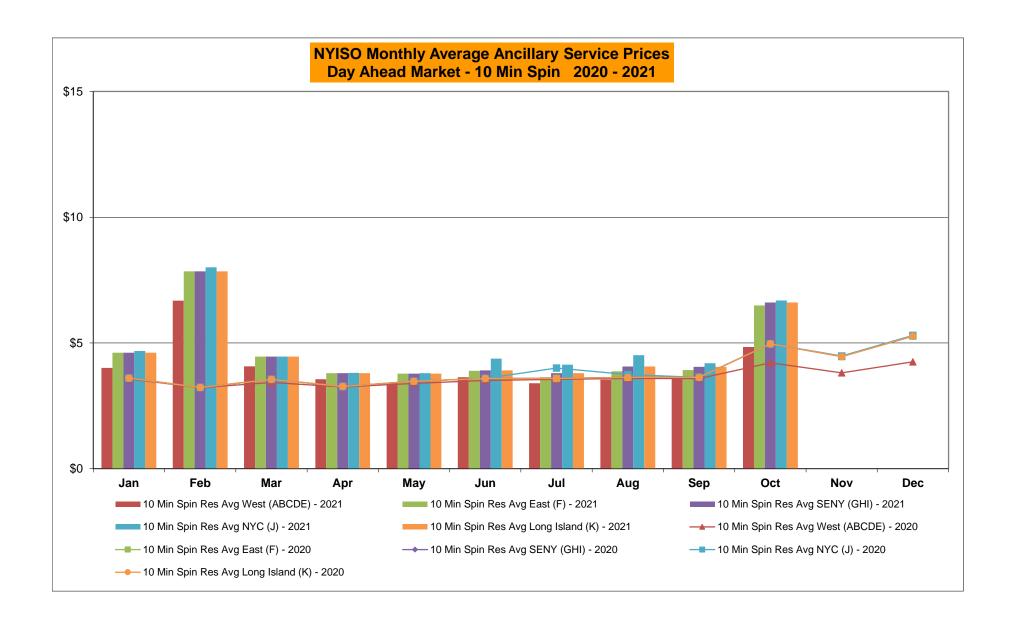
Sep-21

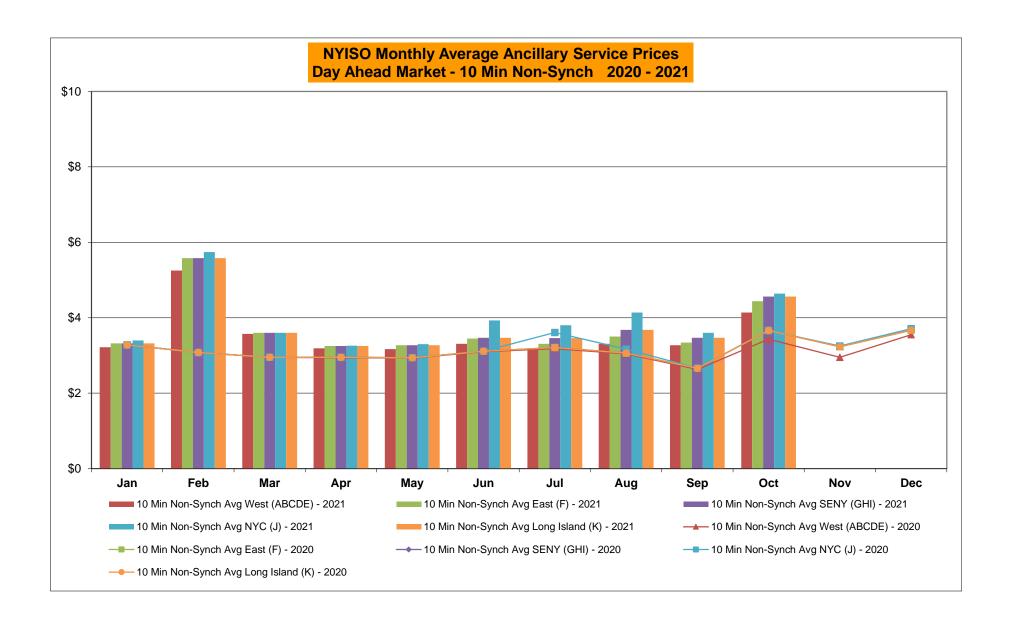
Oct-21

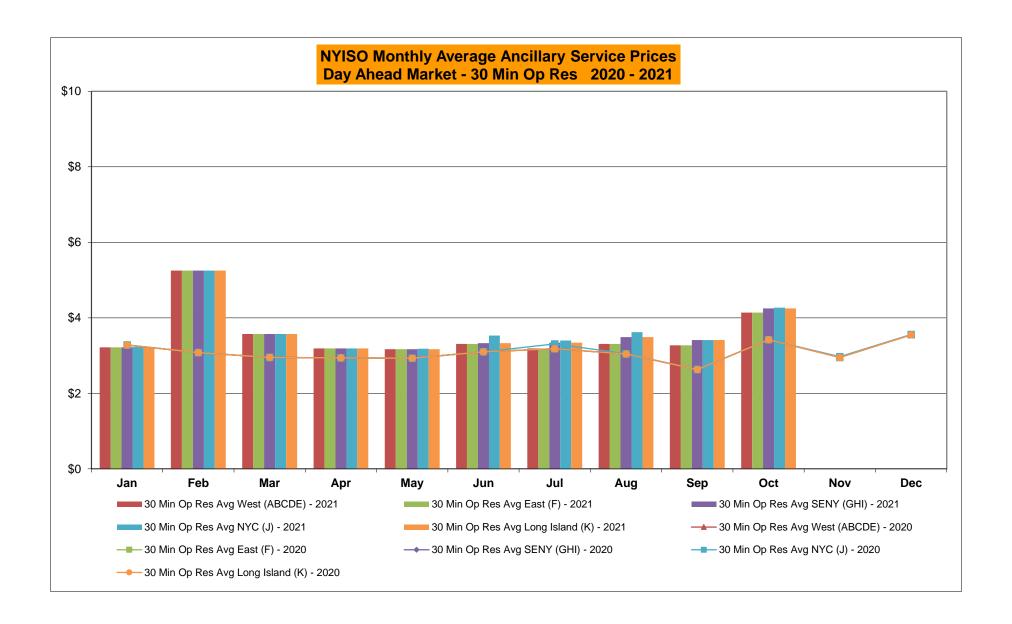
Nov-21

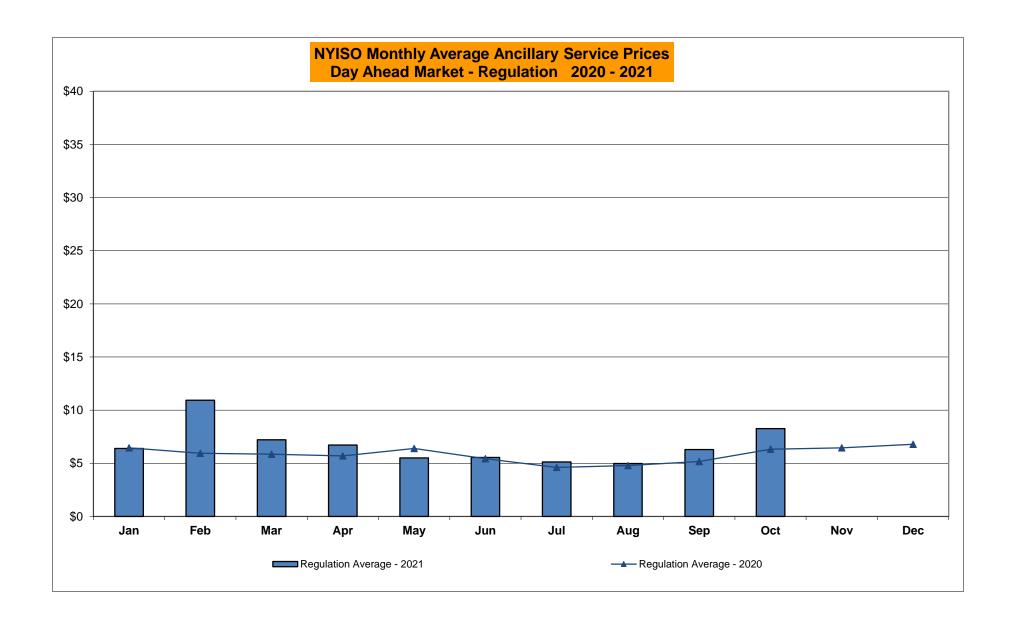
Dec-21

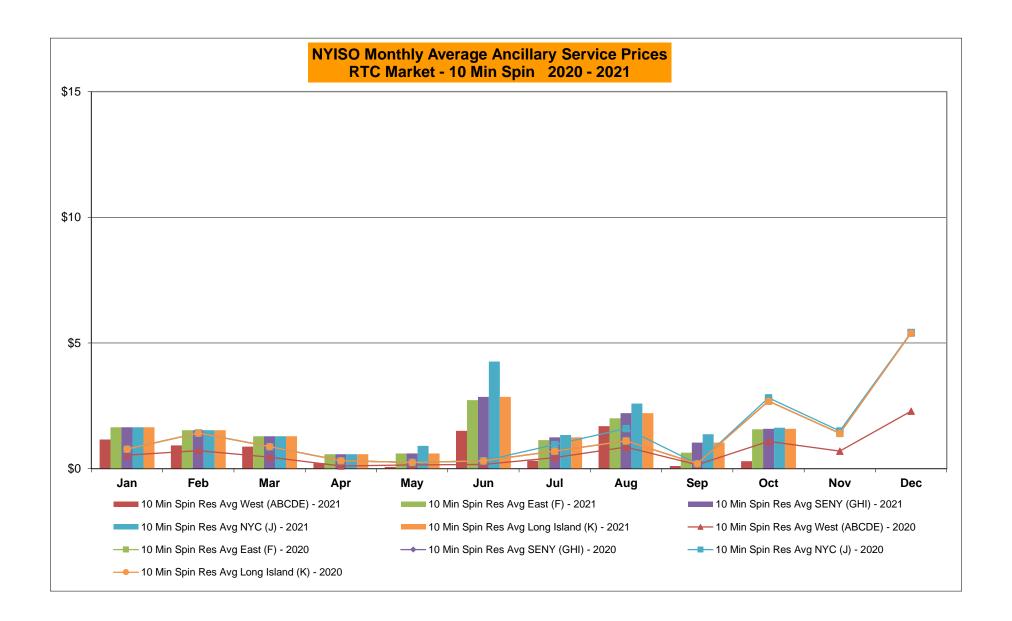


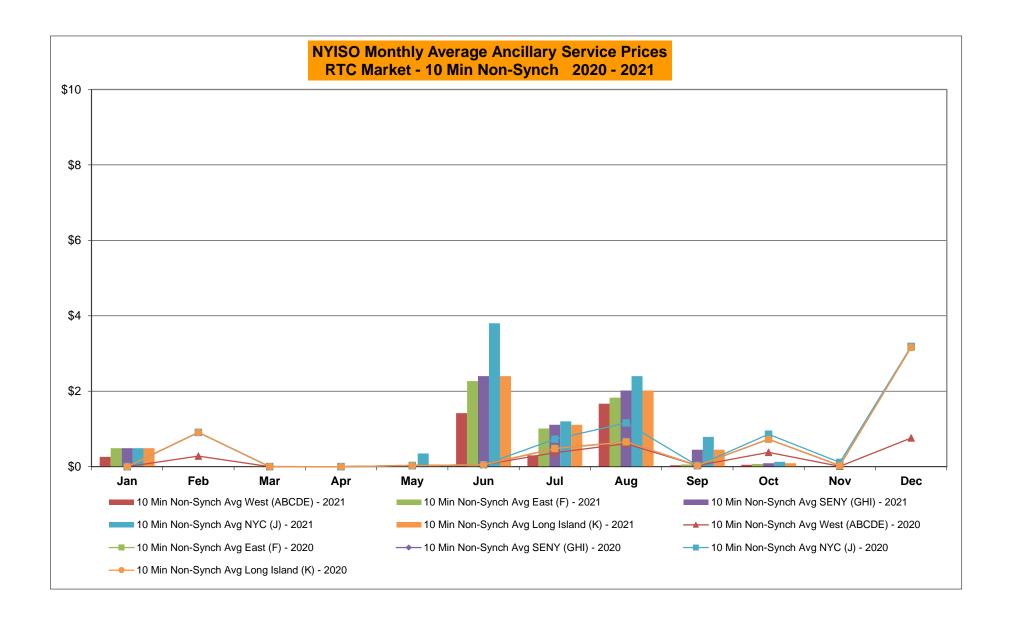


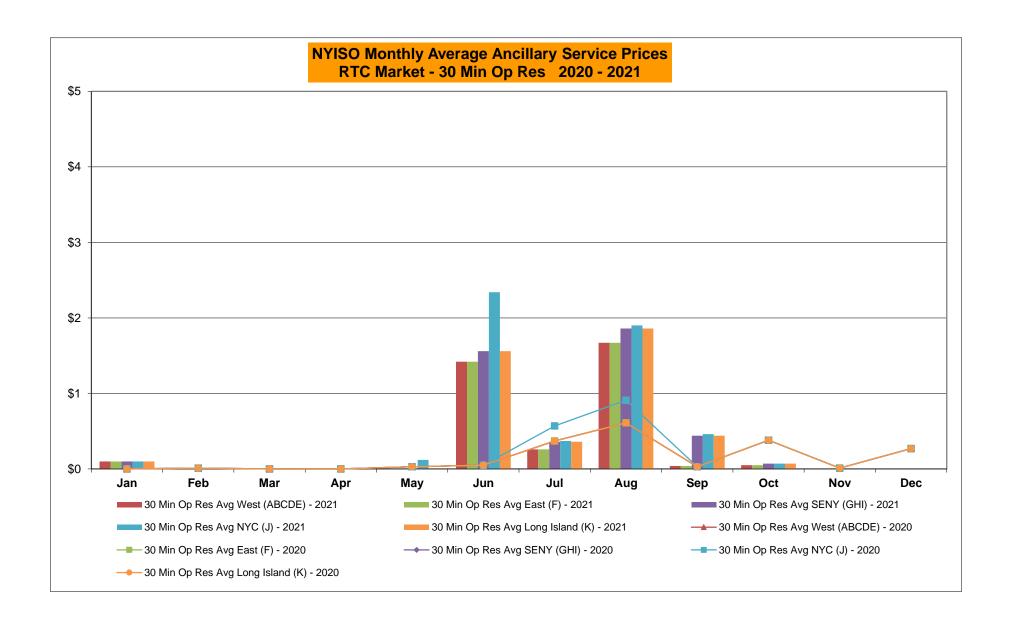


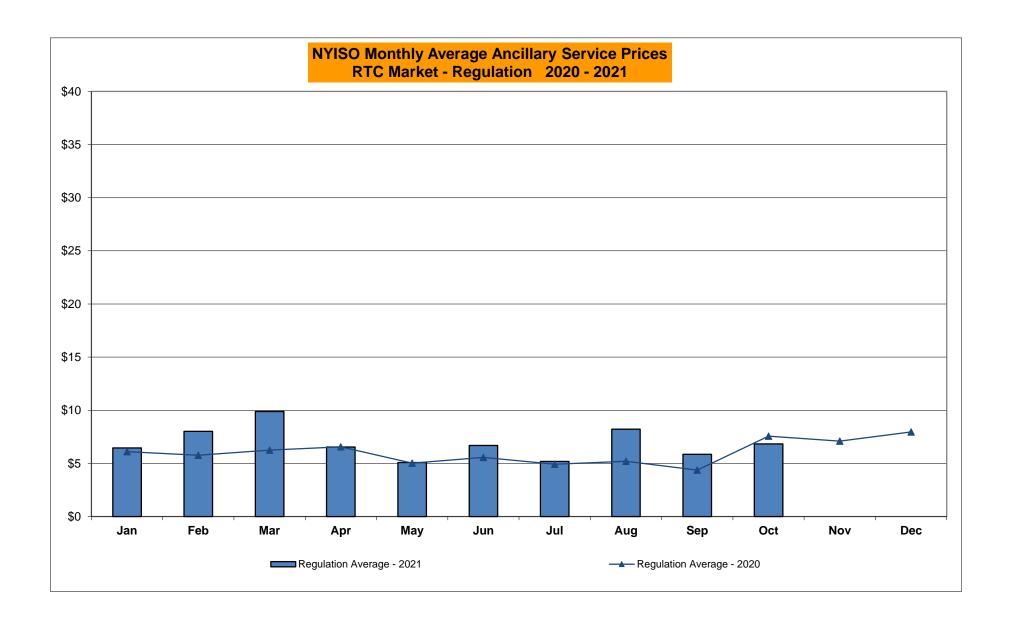


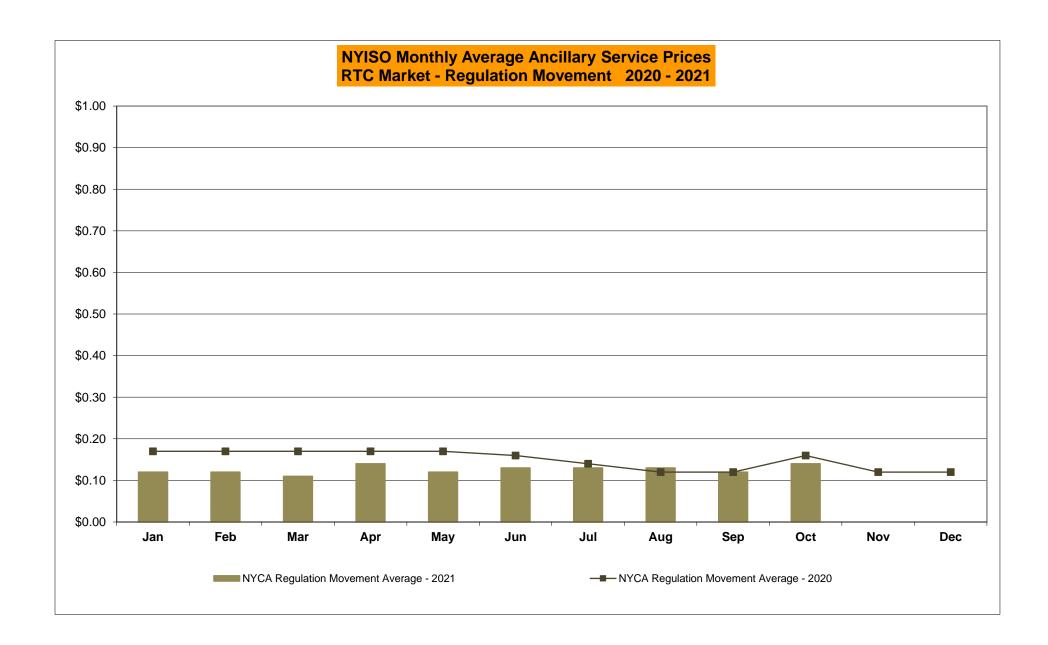


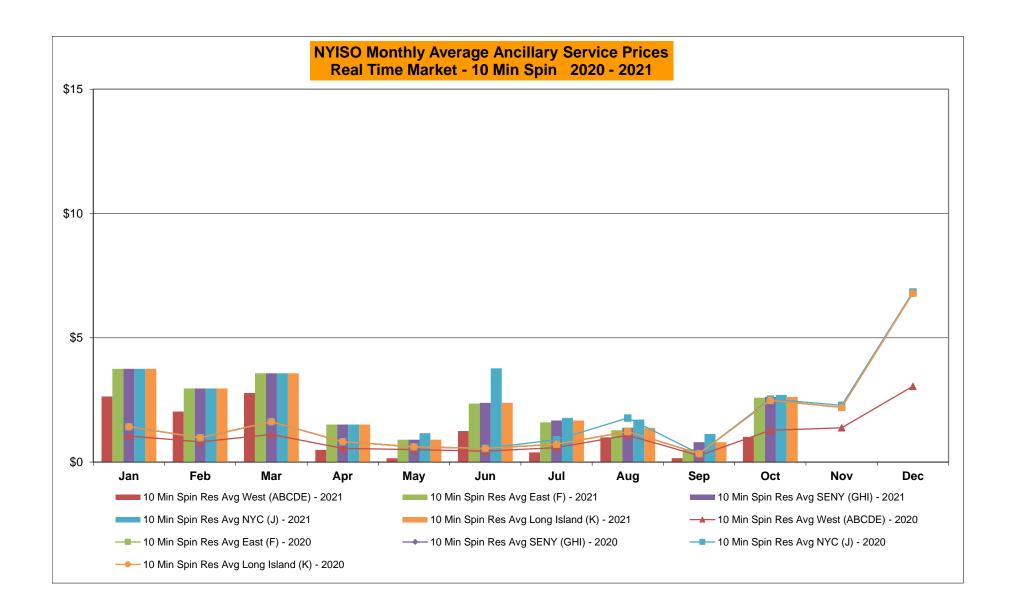


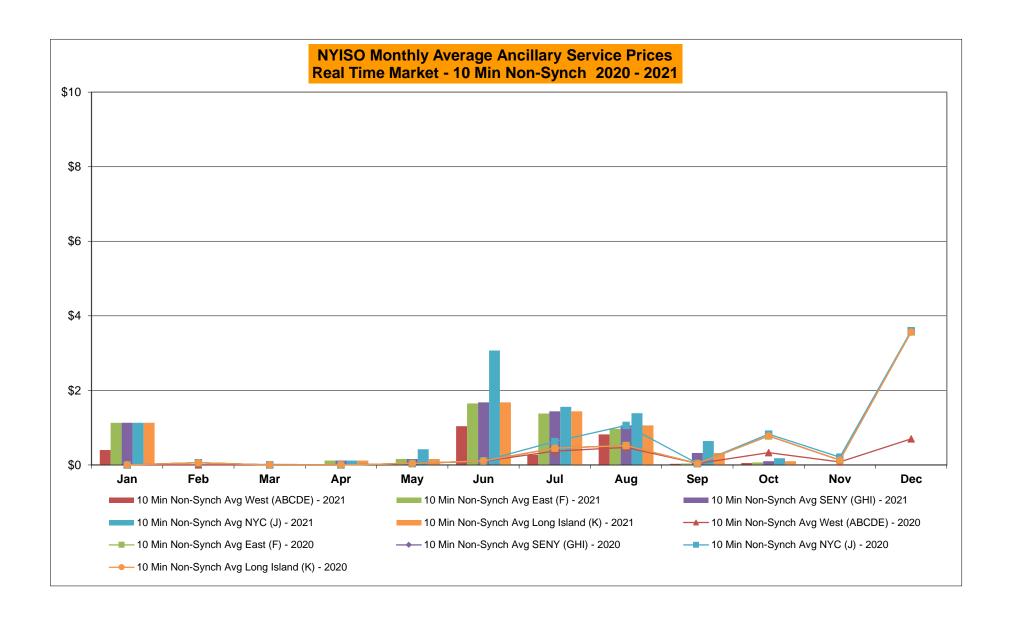


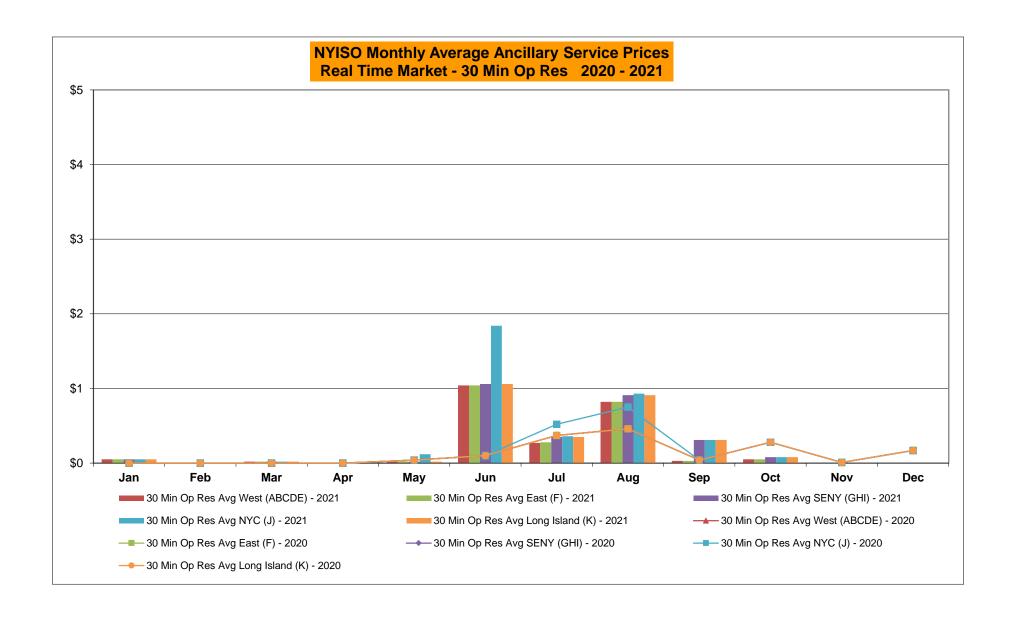


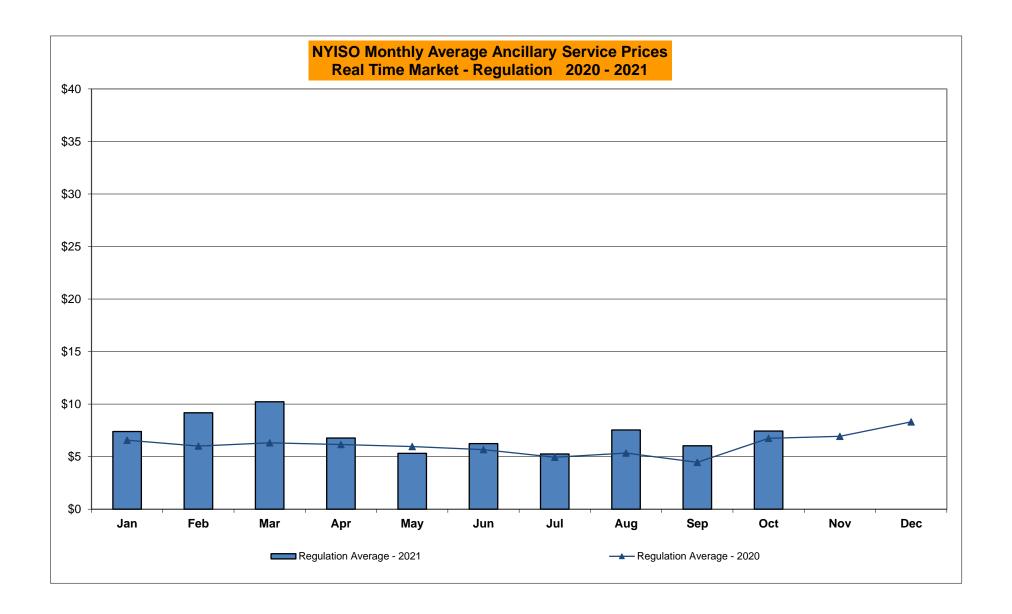


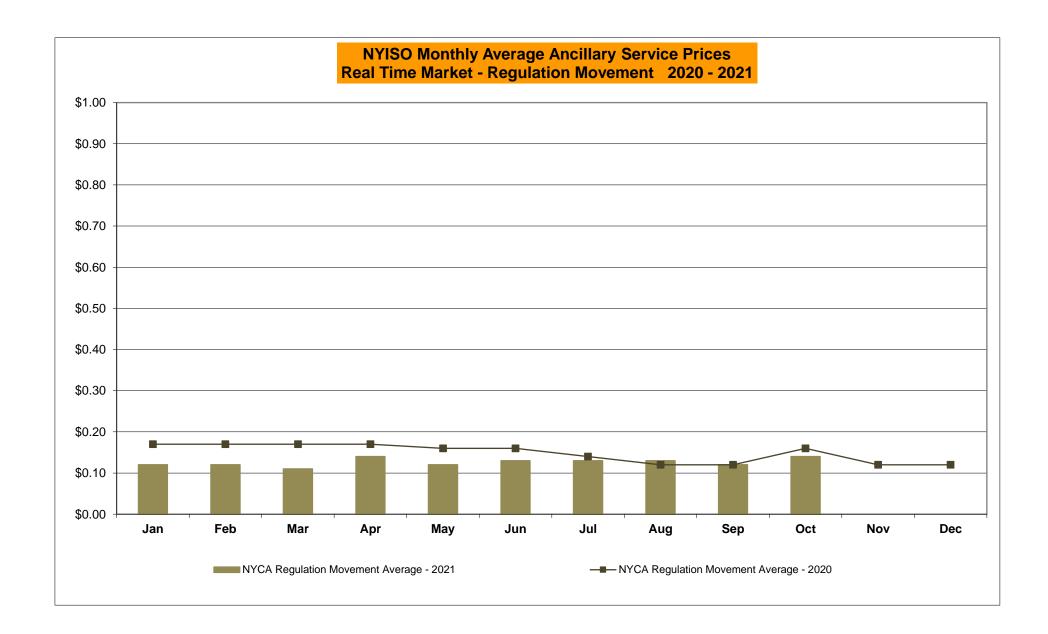












#### NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - DAM

<u>2021</u>	<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	<u>December</u>
Day Ahead Market												
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		
10 Min Spin NYC (J)	4.68	8.01	4.46	3.81	3.80	4.38	4.14	4.51	4.19	6.69		
10 Min Spin SENY (GHI)	4.61	7.85	4.46	3.80	3.78	3.91	3.80	4.06	4.05	6.61		
10 Min Spin East (F)	4.61	7.85	4.46	3.80	3.78	3.89	3.64	3.87	3.92	6.49		
10 Min Spin West (ABCDE)	4.01	6.68	4.07	3.56	3.43	3.64	3.40	3.54	3.62	4.84		
10 Min Non Synch Long Island (K)	3.32	5.58	3.60	3.25	3.27	3.47	3.46	3.68	3.47	4.56		
10 Min Non Synch NYC (J)	3.40	5.74	3.60	3.26	3.30	3.93	3.80	4.14	3.60	4.64		
10 Min Non Synch SENY (GHI)	3.32	5.58	3.60	3.25	3.27	3.47	3.46	3.68	3.47	4.56		
10 Min Non Synch East (F)	3.32	5.58	3.60	3.25	3.27	3.45	3.31	3.50	3.34	4.44		
10 Min Non Synch West (ABCDE)	3.22	5.25	3.57	3.19	3.17	3.31	3.19	3.31	3.27	4.14		
30 Min Long Island (K)	3.22	5.25	3.57	3.19	3.17	3.33	3.34	3.49	3.41	4.25		
30 Min NYC (J)	3.23	5.25	3.57	3.19	3.18	3.53	3.40	3.62	3.41	4.27		
30 Min SENY (GHI)	3.22	5.25	3.57	3.19	3.17	3.33	3.34	3.49	3.41	4.25		
30 Min East (F)	3.22	5.25	3.57	3.19	3.17	3.31	3.19	3.31	3.27	4.14		
30 Min West (ABCDE)	3.22	5.25	3.57	3.19	3.17	3.31	3.19	3.31	3.27	4.14		
Regulation	6.40	10.93	7.21	6.72	5.50	5.55	5.13	4.98	6.29	8.27		
2020	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>	November	<u>December</u>
Day Ahead Market	<u>ouridary</u>	<u>r obradry</u>	<u>ivial of i</u>	<u> 710111</u>	<u>iviay</u>	<u> </u>	<u>oury</u>	<u>rtagaot</u>	<u>coptombol</u>	<u> </u>	11010111001	<u> Docombor</u>
10 Min Spin Long Island (K)	3.60	3.23	3.55	3.27	3.48	3.59	3.59	3.63	3.63	4.96	4.46	5.27
10 Min Spin NYC (J)	3.60	3.23	3.55	3.27	3.48	3.64	4.00	3.74	3.63	4.96	4.48	5.30
10 Min Spin SENY (GHI)	3.60	3.23	3.55	3.27	3.48	3.59	3.59	3.63	3.63	4.96	4.46	5.27
10 Min Spin East (F)	3.60	3.23	3.55	3.27	3.48	3.59	3.59	3.63	3.63	4.96	4.46	5.27
10 Min Spin West (ABCDE)	3.57	3.22	3.43	3.25	3.39	3.51	3.55	3.59	3.58	4.21	3.81	4.25
10 Min Non Synch Long Island (K)	3.28	3.08	2.95	2.95	2.94	3.11	3.21	3.06	2.66	3.66	3.23	3.67
10 Min Non Synch NYC (J)	3.28	3.08	2.95	2.95	2.94	3.17	3.61	3.17	2.66	3.66	3.25	3.71
10 Min Non Synch SENY (GHI)	3.28	3.08	2.95	2.95	2.94	3.11	3.21	3.06	2.66	3.66	3.23	3.67
10 Min Non Synch East (F)	3.28	3.08	2.95	2.95	2.94	3.11	3.21	3.06	2.66	3.66	3.23	3.67
10 Min Non Synch West (ABCDE)	3.28	3.08	2.95	2.94	2.93	3.10	3.18	3.04	2.63	3.43	2.95	3.55
30 Min Long Island (K)	3.28	3.08	2.95	2.94	2.93	3.10	3.18	3.04	2.63	3.42	2.95	3.55
30 Min NYC (J)	3.28	3.08	2.95	2.94	2.93	3.10	3.31	3.05	2.63	3.42	2.97	3.56
30 Min SENY (GHI)	3.28	3.08	2.95	2.94	2.93	3.10	3.18	3.04	2.63	3.42	2.95	3.55
30 Min East (F)	3.28	3.08	2.95	2.94	2.93	3.10	3.18	3.04	2.63	3.42	2.95	3.55
30 Min West (ABCDE)	3.28	3.08	2.95	2.94	2.93	3.10	3.18	3.04	2.63	3.42	2.95	3.55
Regulation												

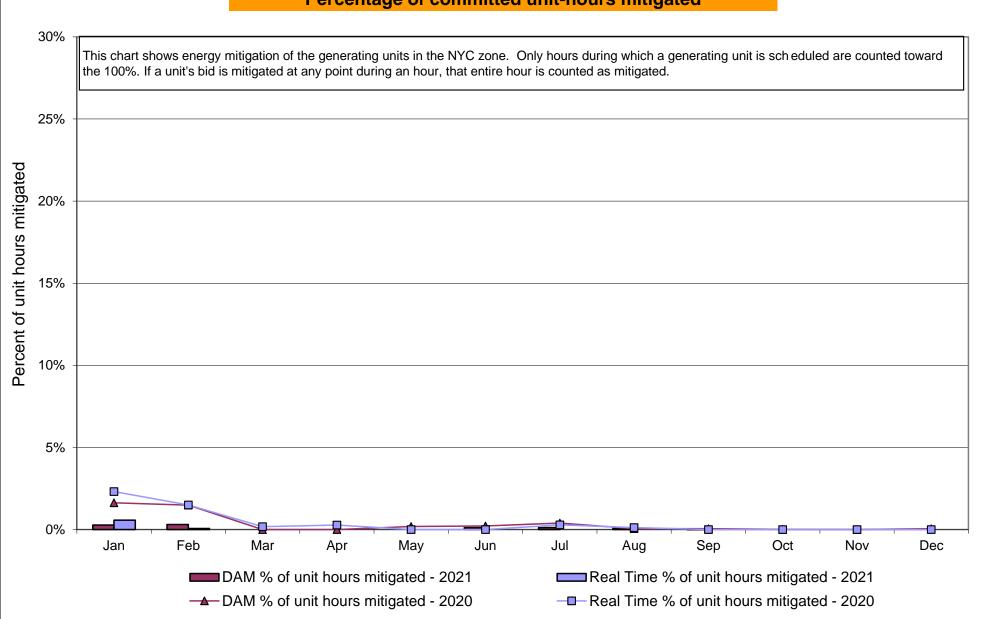
### NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RTC

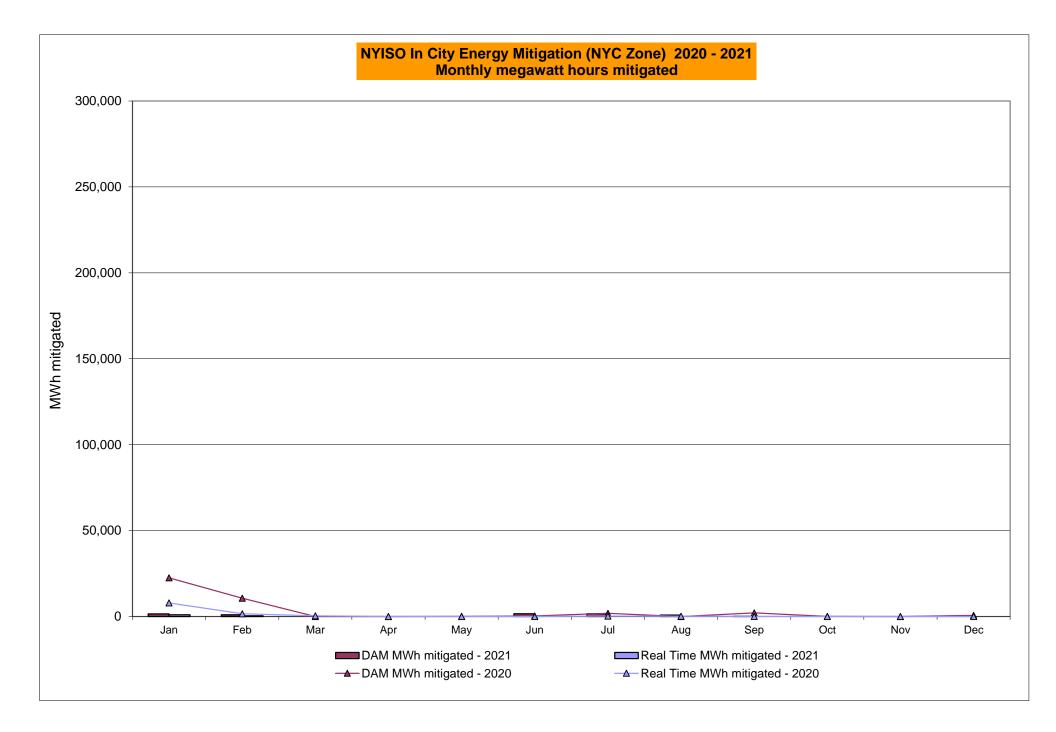
2021 RTC Market	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	December
10 Min Spin Long Island (K)	1.65	1.53	1.29	0.58	0.61	2.86	1.25	2.21	1.04	1.59		
10 Min Spin NYC (J)	1.65	1.53	1.29	0.58	0.91	4.26	1.34	2.59	1.37	1.63		
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		
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		
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		
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		
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		
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		
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		
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		
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		
30 Min NYC (J)	0.10	0.00	0.01	0.00	0.12	2.34	0.37	1.90	0.46	0.07		
30 Min SENY (GHI)	0.10	0.00	0.01	0.00	0.00	1.56	0.36	1.86	0.44	0.07		
30 Min East (F)	0.10	0.00	0.01	0.00	0.00	1.42	0.26	1.67	0.04	0.05		
30 Min West (ABCDE)	0.10	0.00	0.01	0.00	0.00	1.42	0.26	1.67	0.04	0.05		
Regulation	6.46	8.02	9.88	6.54	5.08	6.69	5.18	8.22	5.86	6.83		
NYCA Regulation Movement	0.12	0.12	0.11	0.14	0.12	0.13	0.13	0.13	0.12	0.14		
2020	<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>
<u>2020</u> <u>RTC Market</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>	October	November	<u>December</u>
	<u>January</u> 0.78	1.42	<u>March</u> 0.88	<u>April</u> 0.32	<u>May</u> 0.25	0.31	0.70	1.11	September 0.20	2.69	1.41	5.40
RTC Market  10 Min Spin Long Island (K) 10 Min Spin NYC (J)	-	1.42 1.46		-		0.31 0.31		1.11 1.60	-		1.41 1.50	
RTC Market  10 Min Spin Long Island (K)	0.78	1.42 1.46 1.42	0.88	0.32 0.32 0.32	0.25 0.26 0.25	0.31 0.31 0.31	0.70	1.11	0.20	2.69 2.82 2.69	1.41	5.40 5.42 5.40
RTC Market  10 Min Spin Long Island (K) 10 Min Spin NYC (J)	0.78 0.78	1.42 1.46	0.88 0.88	0.32 0.32	0.25 0.26	0.31 0.31	0.70 0.96	1.11 1.60	0.20 0.20	2.69 2.82	1.41 1.50	5.40 5.42
RTC 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)	0.78 0.78 0.78	1.42 1.46 1.42 1.42 0.72	0.88 0.88 0.88 0.88 0.46	0.32 0.32 0.32 0.32 0.11	0.25 0.26 0.25	0.31 0.31 0.31 0.31 0.17	0.70 0.96 0.70	1.11 1.60 1.11 1.11 0.86	0.20 0.20 0.20 0.20 0.20 0.16	2.69 2.82 2.69 2.69 1.09	1.41 1.50 1.41	5.40 5.42 5.40 5.40 2.29
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00	1.42 1.46 1.42 1.42 0.72 0.91	0.88 0.88 0.88 0.88 0.46 0.00	0.32 0.32 0.32 0.32 0.11 0.00	0.25 0.26 0.25 0.25 0.15 0.03	0.31 0.31 0.31 0.31 0.17 0.05	0.70 0.96 0.70 0.70 0.44 0.48	1.11 1.60 1.11 1.11 0.86 0.66	0.20 0.20 0.20 0.20 0.16 0.03	2.69 2.82 2.69 2.69 1.09 0.73	1.41 1.50 1.41 1.41 0.70 0.03	5.40 5.42 5.40 5.40 2.29 3.17
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95	0.88 0.88 0.88 0.88 0.46 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06	0.70 0.96 0.70 0.70 0.44 0.48 0.73	1.11 1.60 1.11 1.11 0.86 0.66 1.16	0.20 0.20 0.20 0.20 0.16 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86	1.41 1.50 1.41 1.41 0.70 0.03 0.11	5.40 5.42 5.40 5.40 2.29 3.17 3.19
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91	0.88 0.88 0.88 0.46 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66	0.20 0.20 0.20 0.20 0.16 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73	1.41 1.50 1.41 1.41 0.70 0.03	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91	0.88 0.88 0.88 0.86 0.46 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.66	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.03	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.66 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.03 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.37 0.17 0.05 0.06 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.66 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.03 0.01 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00 0.00	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37 0.37	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.66 0.61 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.03 0.01 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27 0.27
RTC 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)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37 0.37 0.57	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.66 0.61 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.03 0.01 0.01 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27 0.27
RTC 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) 30 Min East (F)	0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01 0.01 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.37 0.17 0.05 0.06 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37 0.37 0.57	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.61 0.61 0.61 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38 0.38 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.01 0.01 0.01 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27 0.27 0.27
RTC 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) 30 Min East (F) 30 Min West (ABCDE)	0.78 0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01 0.01 0.01 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.31 0.17 0.05 0.06 0.05 0.05 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.37 0.37 0.37 0.37	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.61 0.61 0.61 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.0	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.38 0.38 0.38 0.38 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.01 0.01 0.01 0.01 0.0	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27 0.27 0.27 0.27
RTC 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) 30 Min East (F)	0.78 0.78 0.78 0.54 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	1.42 1.46 1.42 1.42 0.72 0.91 0.95 0.91 0.91 0.28 0.01 0.01 0.01	0.88 0.88 0.88 0.46 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.32 0.32 0.32 0.32 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.25 0.26 0.25 0.25 0.15 0.03 0.04 0.03 0.03 0.03 0.03 0.03 0.03	0.31 0.31 0.31 0.37 0.17 0.05 0.06 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.70 0.96 0.70 0.70 0.44 0.48 0.73 0.48 0.48 0.37 0.37 0.57	1.11 1.60 1.11 1.11 0.86 0.66 1.16 0.66 0.61 0.61 0.61 0.61	0.20 0.20 0.20 0.20 0.16 0.03 0.03 0.03 0.03 0.03 0.03 0.03	2.69 2.82 2.69 2.69 1.09 0.73 0.86 0.73 0.73 0.38 0.38 0.38	1.41 1.50 1.41 1.41 0.70 0.03 0.11 0.03 0.01 0.01 0.01 0.01	5.40 5.42 5.40 5.40 2.29 3.17 3.19 3.17 0.76 0.27 0.27 0.27

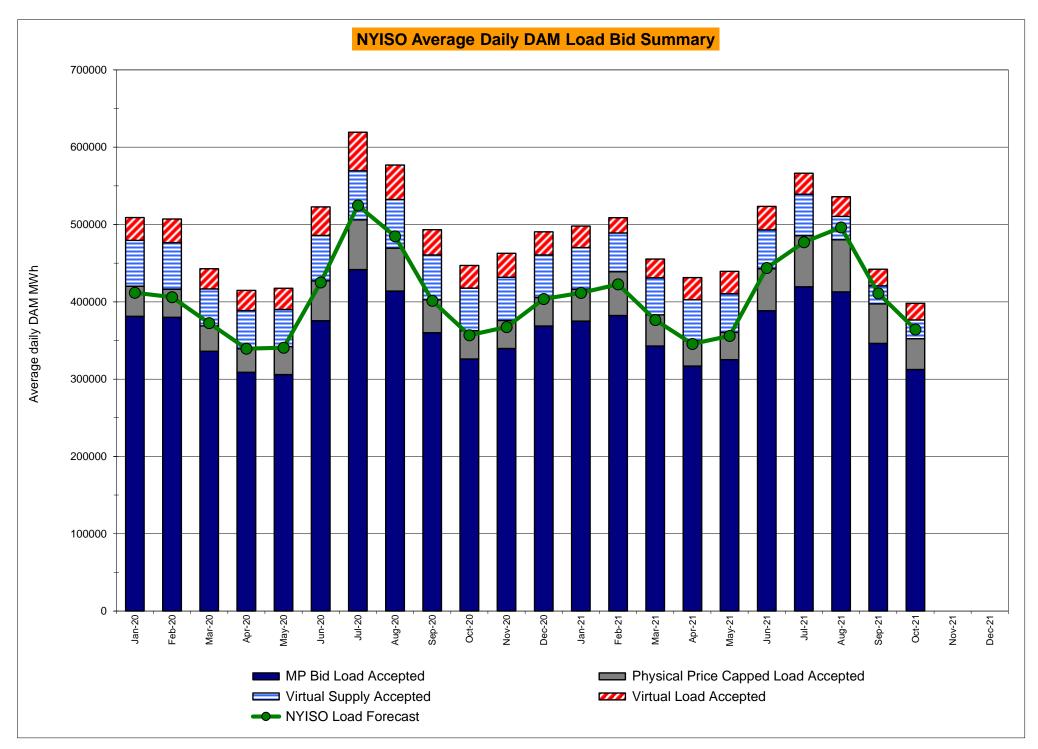
## NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH) - RT

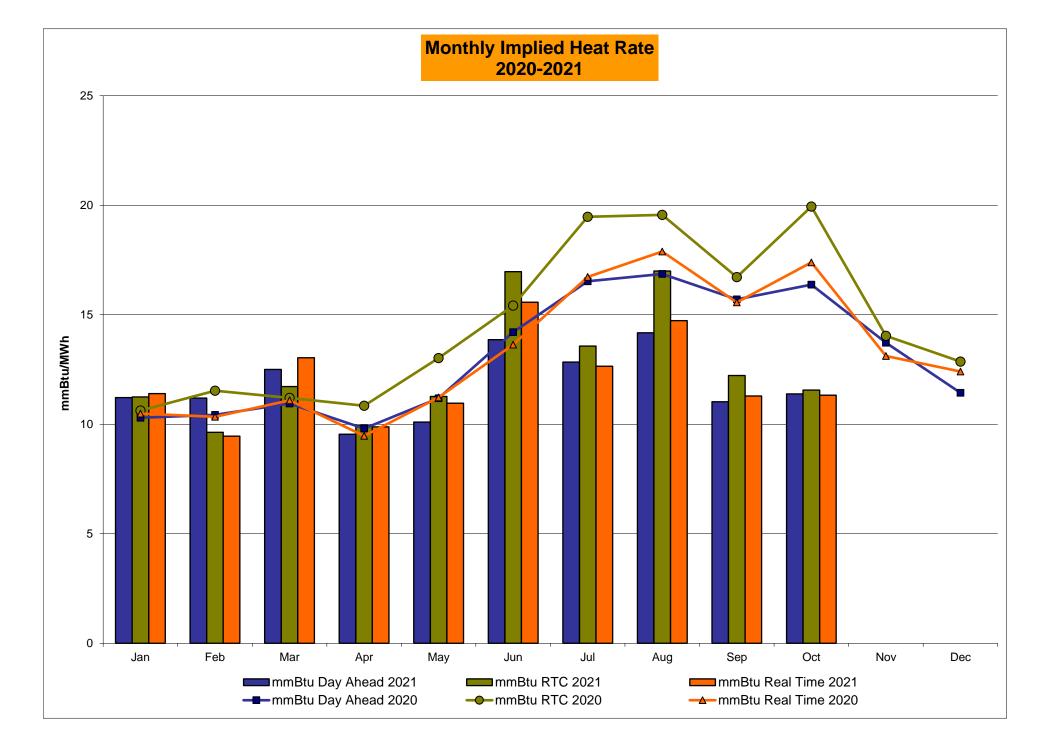
2021	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
Real Time Market												
10 Min Spin Long Island (K)	3.75	2.96	3.57	1.51	0.90	2.38	1.67	1.38	0.80	2.62		
10 Min Spin NYC (J)	3.75	2.96	3.57	1.51	1.16	3.77	1.78	1.71	1.13	2.70		
10 Min Spin SENY (GHI)	3.75	2.96	3.57	1.51	0.90	2.38	1.67	1.38	0.80	2.62		
10 Min Spin East (F)	3.75	2.96	3.57	1.51	0.90	2.35	1.60	1.28	0.52	2.59		
10 Min Spin West (ABCDE)	2.64	2.03	2.78	0.49	0.15	1.25	0.39	0.99	0.16	1.01		
10 Min Non Synch Long Island (K)	1.13	0.02	0.03	0.12	0.16	1.68	1.44	1.06	0.32	0.10		
10 Min Non Synch NYC (J)	1.13	0.02	0.03	0.12	0.42	3.07	1.56	1.39	0.64	0.18		
10 Min Non Synch SENY (GHI)	1.13	0.02	0.03	0.12	0.16	1.68	1.44	1.06	0.32	0.10		
10 Min Non Synch East (F)	1.13	0.02	0.03	0.12	0.16	1.65	1.38	0.97	0.04	0.07		
10 Min Non Synch West (ABCDE)	0.40	0.00	0.02	0.00	0.02	1.04	0.27	0.82	0.03	0.05		
30 Min Long Island (K)	0.05	0.00	0.02	0.00	0.02	1.06	0.35	0.91	0.31	0.08		
30 Min NYC (J)	0.05	0.00	0.02	0.00	0.12	1.84	0.36	0.93	0.31	0.08		
30 Min SENY (GHI)	0.05	0.00	0.02	0.00	0.02	1.06	0.35	0.91	0.31	0.08		
30 Min East (F)	0.05	0.00	0.02	0.00	0.02	1.04	0.28	0.82	0.03	0.05		
30 Min West (ABCDE)	0.05	0.00	0.02	0.00	0.02	1.04	0.27	0.82	0.03	0.05		
Regulation	7.39	9.17	10.23	6.78	5.31	6.24	5.25	7.54	6.03	7.43		
NYCA Regulation Movement	0.12	0.12	0.11	0.14	0.12	0.13	0.13	0.13	0.12	0.14		
<u>2020</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>
2020 Real Time Market	•	<u>February</u>		-				_	·			<u>December</u>
Real Time Market  10 Min Spin Long Island (K)	1.42	0.98	1.62	0.82	0.61	0.55	0.72	1.23	0.34	2.48	2.20	6.80
Real Time Market  10 Min Spin Long Island (K) 10 Min Spin NYC (J)	1.42 1.42		1.62 1.62	0.82 0.82		0.55 0.56		1.23 1.77	0.34 0.34	2.48 2.53	2.20 2.28	
Real Time Market  10 Min Spin Long Island (K)	1.42 1.42 1.42	0.98	1.62	0.82	0.61	0.55	0.72	1.23 1.77 1.23	0.34	2.48	2.20	6.80
Real Time Market  10 Min Spin Long Island (K) 10 Min Spin NYC (J)	1.42 1.42	0.98 0.98	1.62 1.62	0.82 0.82	0.61 0.63	0.55 0.56	0.72 0.90	1.23 1.77	0.34 0.34	2.48 2.53	2.20 2.28	6.80 6.84
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)	1.42 1.42 1.42	0.98 0.98 0.98	1.62 1.62 1.62	0.82 0.82 0.82	0.61 0.63 0.61	0.55 0.56 0.55	0.72 0.90 0.72	1.23 1.77 1.23	0.34 0.34 0.34	2.48 2.53 2.48	2.20 2.28 2.20	6.80 6.84 6.80
Real Time Market  10 Min Spin Long Island (K)  10 Min Spin NYC (J)  10 Min Spin SENY (GHI)  10 Min Spin East (F)	1.42 1.42 1.42 1.42	0.98 0.98 0.98 0.98	1.62 1.62 1.62 1.62	0.82 0.82 0.82 0.82	0.61 0.63 0.61 0.61	0.55 0.56 0.55 0.55	0.72 0.90 0.72 0.72	1.23 1.77 1.23 1.23	0.34 0.34 0.34 0.34	2.48 2.53 2.48 2.48	2.20 2.28 2.20 2.20	6.80 6.84 6.80 6.80
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)	1.42 1.42 1.42 1.42 1.05	0.98 0.98 0.98 0.98 0.81	1.62 1.62 1.62 1.62 1.11	0.82 0.82 0.82 0.82 0.55	0.61 0.63 0.61 0.61 0.50	0.55 0.56 0.55 0.55 0.44	0.72 0.90 0.72 0.72 0.58	1.23 1.77 1.23 1.23 1.08	0.34 0.34 0.34 0.34 0.26	2.48 2.53 2.48 2.48 1.28	2.20 2.28 2.20 2.20 1.38	6.80 6.84 6.80 6.80 3.05
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)	1.42 1.42 1.42 1.42 1.05 0.00	0.98 0.98 0.98 0.98 0.81 0.06	1.62 1.62 1.62 1.62 1.11 0.00	0.82 0.82 0.82 0.82 0.55 0.00	0.61 0.63 0.61 0.61 0.50 0.04	0.55 0.56 0.55 0.55 0.44 0.11	0.72 0.90 0.72 0.72 0.58 0.45	1.23 1.77 1.23 1.23 1.08 0.52	0.34 0.34 0.34 0.34 0.26 0.04	2.48 2.53 2.48 2.48 1.28 0.78	2.20 2.28 2.20 2.20 1.38 0.13	6.80 6.84 6.80 6.80 3.05 3.57
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)	1.42 1.42 1.42 1.42 1.05 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06	1.62 1.62 1.62 1.62 1.11 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00	0.61 0.63 0.61 0.61 0.50 0.04	0.55 0.56 0.55 0.55 0.44 0.11	0.72 0.90 0.72 0.72 0.58 0.45 0.63	1.23 1.77 1.23 1.23 1.08 0.52 1.06	0.34 0.34 0.34 0.34 0.26 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83	2.20 2.28 2.20 2.20 1.38 0.13 0.21	6.80 6.84 6.80 6.80 3.05 3.57 3.60
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)	1.42 1.42 1.42 1.42 1.05 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00 0.00	0.61 0.63 0.61 0.61 0.50 0.04 0.07	0.55 0.56 0.55 0.55 0.44 0.11 0.12	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52	0.34 0.34 0.34 0.26 0.04 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13	6.80 6.80 6.80 3.05 3.57 3.60 3.57
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)	1.42 1.42 1.42 1.42 1.05 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52	0.34 0.34 0.34 0.34 0.26 0.04 0.04 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.13	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 3.57
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)	1.42 1.42 1.42 1.42 1.05 0.00 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06 0.06	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00 0.00	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04 0.04	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11 0.11	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45 0.37	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52 0.47	0.34 0.34 0.34 0.26 0.04 0.04 0.04 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78 0.33	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.13 0.08	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 0.70
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)	1.42 1.42 1.42 1.05 0.00 0.00 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06 0.06	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00 0.00 0.00	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04 0.04 0.04	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11 0.11 0.10 0.10	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45 0.37	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52 0.47 0.46	0.34 0.34 0.34 0.26 0.04 0.04 0.04 0.04 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78 0.33 0.28	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.013 0.08 0.01	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 0.70
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)  30 Min NYC (J)	1.42 1.42 1.42 1.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06 0.06 0.00	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00 0.00 0.00 0.00	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00 0.00 0.00 0.00	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04 0.04 0.04 0.04	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11 0.11 0.10 0.10	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45 0.37 0.37	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52 0.47 0.46 0.75	0.34 0.34 0.34 0.26 0.04 0.04 0.04 0.04 0.04 0.04	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78 0.33 0.28	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.13 0.08 0.01	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 0.70 0.17
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)  30 Min NYC (J)  30 Min SENY (GHI)	1.42 1.42 1.42 1.42 1.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06 0.06 0.00 0.00	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04 0.04 0.04 0.04 0.04 0.0	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11 0.11 0.10 0.10 0.10	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45 0.37 0.37	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52 0.47 0.46 0.75 0.46	0.34 0.34 0.34 0.26 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78 0.33 0.28 0.28	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.13 0.08 0.01 0.01	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 0.70 0.17
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)  30 Min East (F)	1.42 1.42 1.42 1.42 1.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.98 0.98 0.98 0.98 0.81 0.06 0.06 0.06 0.06 0.00 0.00 0.00	1.62 1.62 1.62 1.62 1.11 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.82 0.82 0.82 0.82 0.55 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.61 0.63 0.61 0.61 0.50 0.04 0.07 0.04 0.04 0.04 0.04 0.04 0.0	0.55 0.56 0.55 0.55 0.44 0.11 0.12 0.11 0.11 0.10 0.10 0.10	0.72 0.90 0.72 0.72 0.58 0.45 0.63 0.45 0.45 0.37 0.37 0.52 0.37	1.23 1.77 1.23 1.23 1.08 0.52 1.06 0.52 0.52 0.47 0.46 0.75 0.46 0.46	0.34 0.34 0.34 0.26 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.0	2.48 2.53 2.48 2.48 1.28 0.78 0.83 0.78 0.78 0.33 0.28 0.28	2.20 2.28 2.20 2.20 1.38 0.13 0.21 0.13 0.13 0.08 0.01 0.01 0.01	6.80 6.84 6.80 6.80 3.05 3.57 3.60 3.57 0.70 0.17 0.17

# NYISO In City Energy Mitigation - AMP (NYC Zone) 2020 - 2021 Percentage of committed unit-hours mitigated

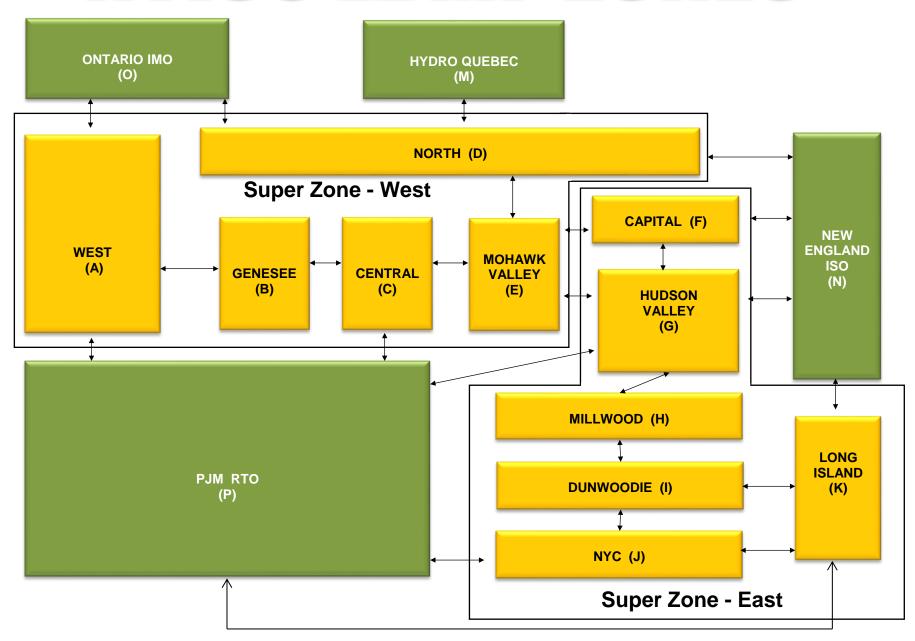








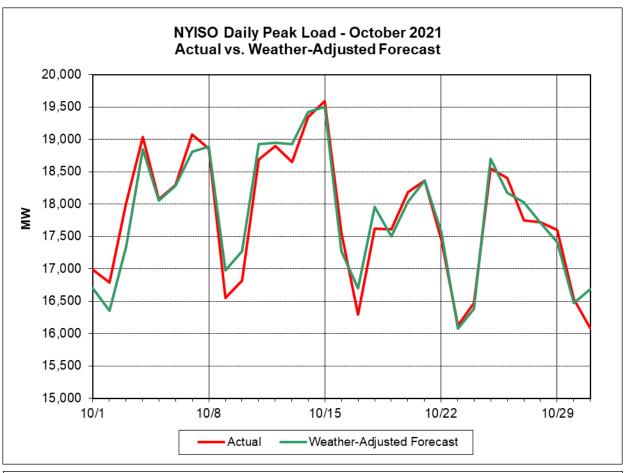
# NYISO LBMP ZONES

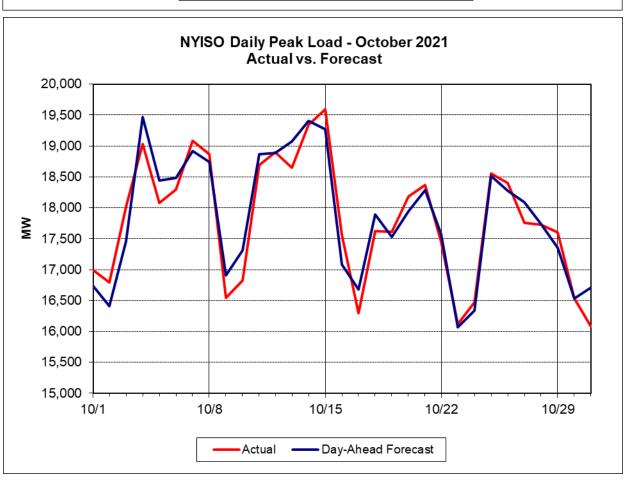


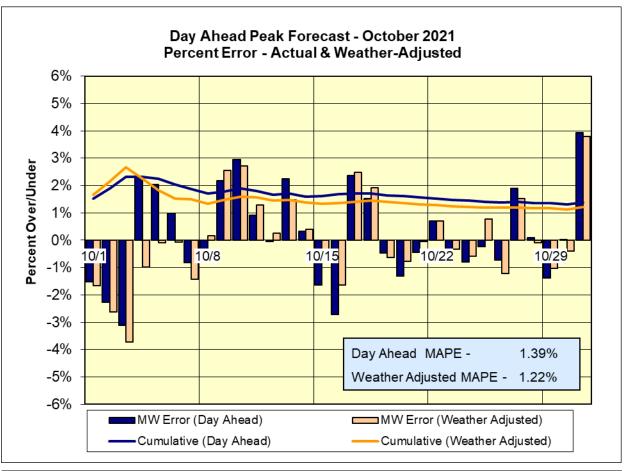
Market Mitigation and Analysis Prepared: 11/5/2021 1:28 PM

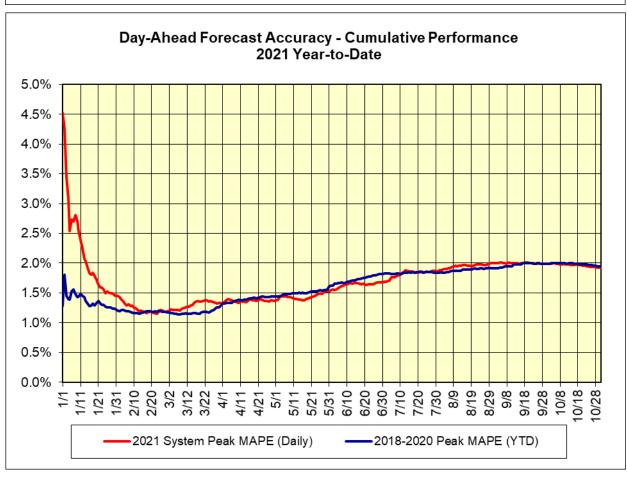
#### **Billing Codes for Chart C**

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









# Summary Description of Regulatory Filings, Investigations, Rulemakings and Related Orders in NYISO Matters – October 2021

Filing Date	Filing Summary	Docket	Order Summary	Order Date
08/05/2021	NYISO-National Grid joint Section 205 filing to FERC of a Small Generator Interconnection Agreement among NYISO, National Grid and SunEast Hilltop Solar	ER21-2612-000	A letter order accepted the submission, effective July 28, 2021, as requested	10/01/2021
07/19/2021	NYISO compliance filing to FERC of proposed tariff revisions directed by FERC Order No. 2222 re: Distributed Energy Resource aggregation participation in RTO/ISO markets	ER21-2460-000	A letter order directed a further compliance filing to provide additional information	10/01/2021
06/30/2021	NYISO filing to FERC, on behalf of Central Hudson, of an offer of settlement addressing Central Hudson's Rate Schedule for Highway System Deliverability Upgrades	ER20-715-002	A letter order accepted the submission, effective May 20, 2020, as requested	10/04/2021
08/10/2021	NYISO-National Grid joint Section 205 filing to FERC of a Small Generator Interconnection Agreement among the NYISO, National Grid and SunEast Watkins Road Solar for the Watkins Road Solar project		A letter order accepted the submission, effective July 30, 2021, as requested	10/07/2021
10/05/2021	NYISO filing to FERC of a motion for extension of time until November 19, 2021 to respond to a FERC letter requesting additional information related to NYISO's Order No. 2222 compliance filing	ER21-2460-000	A notice granted the extension of time, as requested	10/19/2021
10/20/2021	NYISO filing to FERC of a motion for extension of time until November 3, 2021 to answer a Flint Mine Solar complaint against the NYISO requesting a refund of their Milestone Deposit	EL22-3-000	A notice granted the extension of time, as requested	10/22/2021
09/24/2021	NYISO filing to FERC of an effective date notice to establish a October 12, 2021 effective date for the proposed tariff revisions to Enhance TCC Credit Requirements	ER21-486-002	A letter order accepted the submission, effective October 12, 2021, as requested	10/22/2021
08/13/2021	NYISO filing to FERC, on behalf of NY Transco of a Section 205 filing of an Engineering, Procurement & Construction Agreement among NYISO, NY Transco and ADM Milling for Segment B	ER21-2672-000	A letter order accepted the submission, effective July 28, 2021, as requested	10/08/2021
09/13/2021	NYISO-NYPA joint Section 205 filing to FERC of a Small Generator Interconnection Agreement between NYISO and NYPA for the North Country Energy Storage project	ER21-2881-000	A letter order accepted the submission, effective August 27, 2021, as requested	10/26/2021

	ER21-2526-001 RM05-5-000	
NYISO Section 206 filing to FERC of proposed tariff revisions to establish the rules by which a NYTO can exercise its ROFR regarding upgrades identified in the NYISO's Public Policy Process	EL22-2-000	
NYISO errata filing to FERC to update the requested effective date of proposed ROFR tariff revisions	EL22-2-001	
NYISO filing to FERC of comments in response to the Commission's Advance Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection	RM21-17-000	
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NYISO filing to FERC of a motion for an extension of time until November 3, 2021, to answer a Flint Mine Solar complaint related to a request for a Refund of their Milestone Deposit	EL22-3-000	
NYISO filing to FERC of comments in response to issues raised by commentators in FERC's proceeding to integrate hybrid resources into the markets	AD20-9-000	
NYISO filing to FERC, on behalf of NEET New York, of a motion to withdraw NEET NY's July 30, 2021 formula rate filing	ER21-2563-000	
NYISO-Con Edison joint Section 205 filing to FERC of a Transmission Project Interconnection Agreement among the NYISO, Con Edison, and New York Transco for the New York Energy Solution Project	ER22-189-000	
Generator Interconnection Agreement among the NYISO, Con	ER22-198-000	
NYISO filing to FERC, on behalf of Long Island Power Authority, of a Section 205 filing of revisions to LIPA's Wholesale Transmission Service Charge calculation in Attachment H of the OATT	ER22-203-000	
	pertaining to certain NAESB WEQ business practice standards  NYISO Section 206 filing to FERC of proposed tariff revisions to establish the rules by which a NYTO can exercise its ROFR regarding upgrades identified in the NYISO's Public Policy Process  NYISO errata filing to FERC to update the requested effective date of proposed ROFR tariff revisions  NYISO filing to FERC of comments in response to the Commission's Advance Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection  NYISO filing to FERC, on behalf of LS Power Grid New York, of a Section 205 filing to request authorization and a date to commence the collection of the regulatory asset authorized by the Commission in its May 2020 Order  NYISO filing to FERC of a motion for an extension of time until November 3, 2021, to answer a Flint Mine Solar complaint related to a request for a Refund of their Milestone Deposit  NYISO filing to FERC of comments in response to issues raised by commentators in FERC's proceeding to integrate hybrid resources into the markets  NYISO filing to the U. S. Court of Appeals for the DC Circuit of a Motion to Intervene in Hecate Energy Greene County 3 proceeding at the US Court of Appeals for the DC Circuit  NYISO filing to FERC, on behalf of NEET New York, of a motion to withdraw NEET Ny's July 30, 2021 formula rate filing  NYISO-Con Edison joint Section 205 filing to FERC of a Transmission Project Interconnection Agreement among the NYISO, Con Edison, and New York Transco for the New York Energy Solution Project  NYISO-Con Edison joint Section 205 filing to FERC of Large Generator Interconnection Agreement among the NYISO, Con Edison, and NRG Berrians East Development for the Berrians East Replacement Project	pertaining to certain NAESB WEQ business practice standards NYISO Section 206 filing to FERC of proposed tariff revisions to stabilish the rules by which a NYTO can exercise its ROFR regarding upgrades identified in the NYISO's Public Policy Process NYISO errata filing to FERC to update the requested effective date of proposed ROFR tariff revisions NYISO filing to FERC of comments in response to the Commission's Advance Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection NYISO filing to request authorization and a date to commence the collection of the regulatory asset authorized by the Commission in its May 2020 Order NYISO filing to FERC of a motion for an extension of time until November 3, 2021, to answer a Flint Mine Solar complaint related to a request for a Retund of their Milestone Deposit NYISO filing to FERC's proceeding to integrate hybrid resources into the markets  NYISO filing to the U. S. Court of Appeals for the DC Circuit of a NYISO filing to the U. S. Court of Appeals for the DC Circuit of a NYISO filing to the U. S. Court of Appeals for the DC Circuit of a NYISO filing to FERC, on behalf of NEET New York, of a motion to withdraw NEET NY's July 30, 2021 formula rate filing  NYISO filing to FERC, on behalf of NEET New York, of a motion to withdraw NEET NY's July 30, 2021 formula rate filing  NYISO-Con Edison joint Section 205 filing to FERC of a Transmission Project Interconnection Agreement among the NYISO, Con Edison, and New York Transco for the New York Energy Solution Project  NYISO-Con Edison joint Section 205 filing to FERC of Large Generator Interconnection Agreement among the NYISO, Con Edison, and NRG Berrians East Development for the Berrians East Replacement Project  NYISO filing to FERC, on behalf of Long Island Power Authority, of ER22-203-000

10/27/2021	NYISO filing to FERC of an Electric Quarterly Report (EQR) re: data on electric power contracts and wholesale power sales during the most recent calendar quarter	ER02-2001-000	
10/28/2021	NYISO filing to FERC of a motion to intervene and comments in response to the Empire Offshore Wind request for limited waiver of NYISO tariff	ER22-98-000	
10/29/2021	3	Matter No. 10-02007	