

Monthly Report

A Report by the
New York Independent System Operator

February 2021

Table of Contents

Operations Performance Metrics Report

Market Operation's Report

Daily Loads

Regulatory Filings

Operations Performance Metrics Monthly Report



February 2021 Report

Operations & Reliability Department New York Independent System Operator

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data collected on or before March 8, 2021.

Table of Contents

- ♦ **Highlights**
 - *Operations Performance*
- ♦ **Reliability Performance Metrics**
 - *Alert State Declarations*
 - *Major Emergency State Declarations*
 - *IROL Exceedance Times*
 - *Balancing Area Control Performance*
 - *Reserve Activations*
 - *Disturbance Recovery Times*
 - *Load Forecasting Performance*
 - *Wind Forecasting Performance*
 - *Wind Performance and Curtailments*
 - *BTM Solar Performance*
 - *BTM Solar Forecasting Performance*
 - *Net Load Forecasting Performance*
 - *Lake Erie Circulation and ISO Schedules*
- ♦ **Broader Regional Market Performance Metrics**
 - *PAR Interconnection Congestion Coordination Monthly Value*
 - *PAR Interconnection Congestion Coordination Daily Value*
 - *Regional Generation Congestion Coordination Monthly Value*
 - *Regional Generation Congestion Coordination Daily Value*
 - *Regional RT Scheduling - PJM Monthly Value*
 - *Regional RT Scheduling - PJM Daily Value*
- ♦ **Market Performance Metrics**
 - *Monthly Statewide Uplift Components and Rate*
 - *RTM Congestion Residuals Monthly Trend*
 - *RTM Congestion Residuals Daily Costs*
 - *RTM Congestion Residuals Event Summary*
 - *RTM Congestion Residuals Cost Categories*
 - *DAM Congestion Residuals Monthly Trend*
 - *DAM Congestion Residuals Daily Costs*
 - *DAM Congestion Residuals Cost Categories*
 - *NYCA Unit Uplift Components Monthly Trend*
 - *NYCA Unit Uplift Components Daily Costs*
 - *Local Reliability Costs Monthly Trend & Commitment Hours*
 - *TCC Monthly Clearing Price with DAM Congestion*
 - *ICAP Spot Market Clearing Price*
 - *UCAP Awards*

February 2021 Operations Performance Highlights

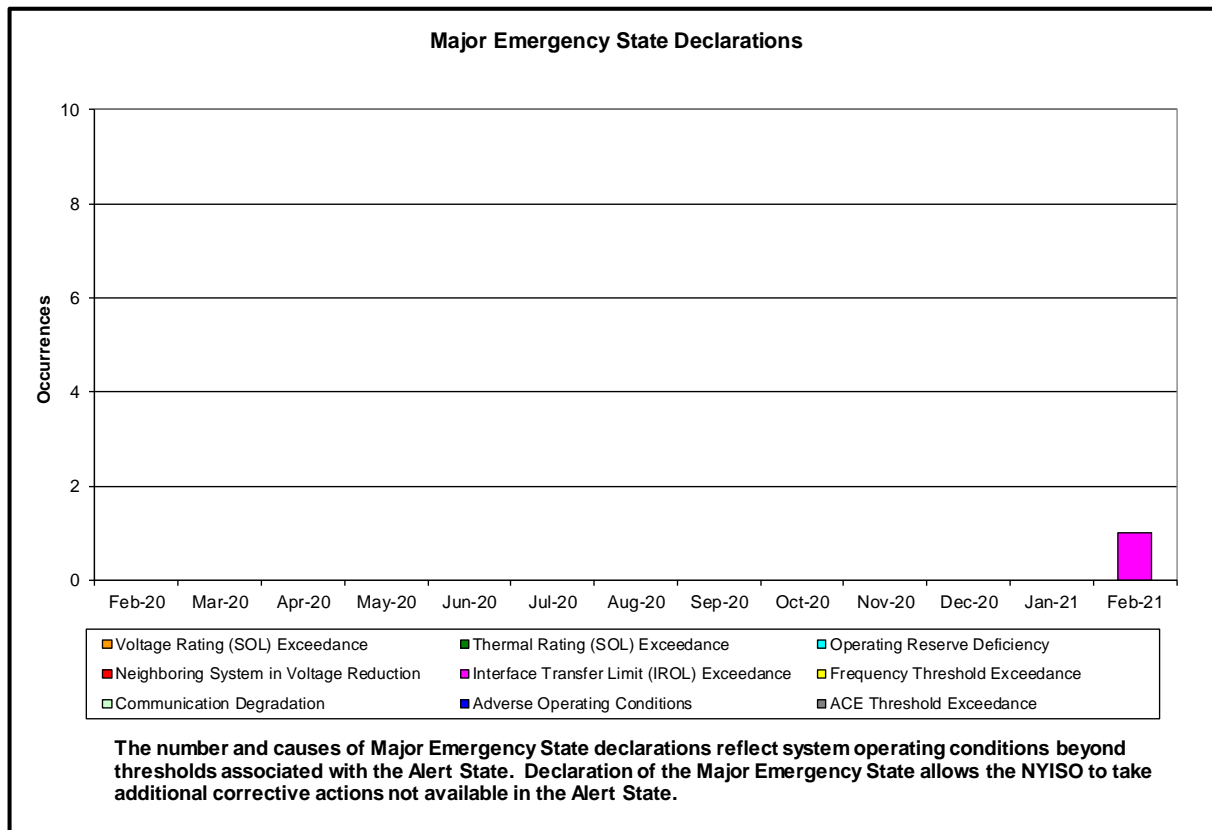
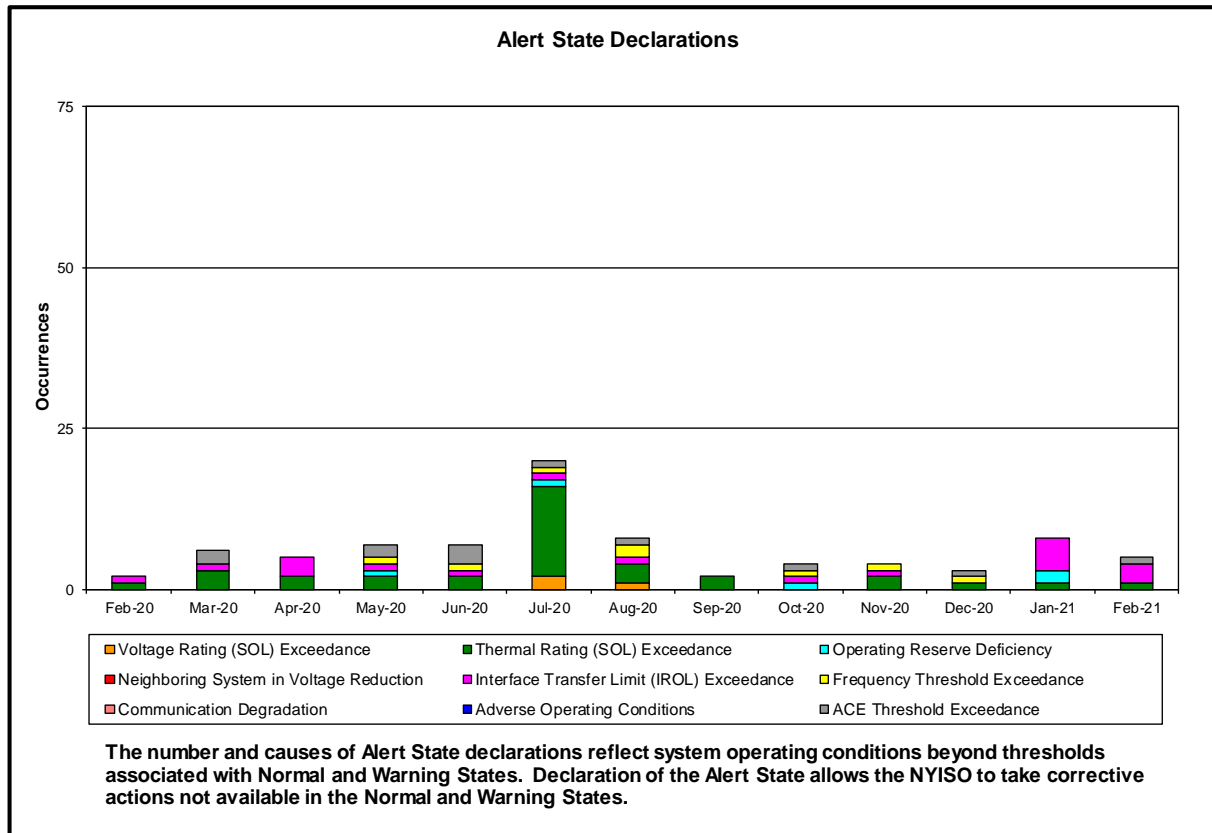
- Peak load of 21,746 MW occurred on 02/08/2021 HB 18
- All-time winter capability period peak load of 25,738 MW occurred on 1/7/2014 HB 18
- 0 hours of Thunder Storm Alerts were declared
- 0 hours of NERC TLR level 3 curtailment
- A Major Emergency was declared on 02/10/2021 in HB01 for the trip of the New Scotland 345kV #77k bus, disconnecting the New Scotland-Alps 345kV (#2), New Scotland-Leeds 345kV (#93), Edic-New Scotland 345kV (#14) from service, causing the power flow on Central East VC to exceed 105% of its voltage transfer limit.
- NYISO began securing the Regeneron-Greenbush 115kV (#9) facility in the Real-Time Market on 02/11/2021 and in the Day-Ahead Market execution occurring on 02/12/2021 for the 02/13/2021 market day.
- 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.

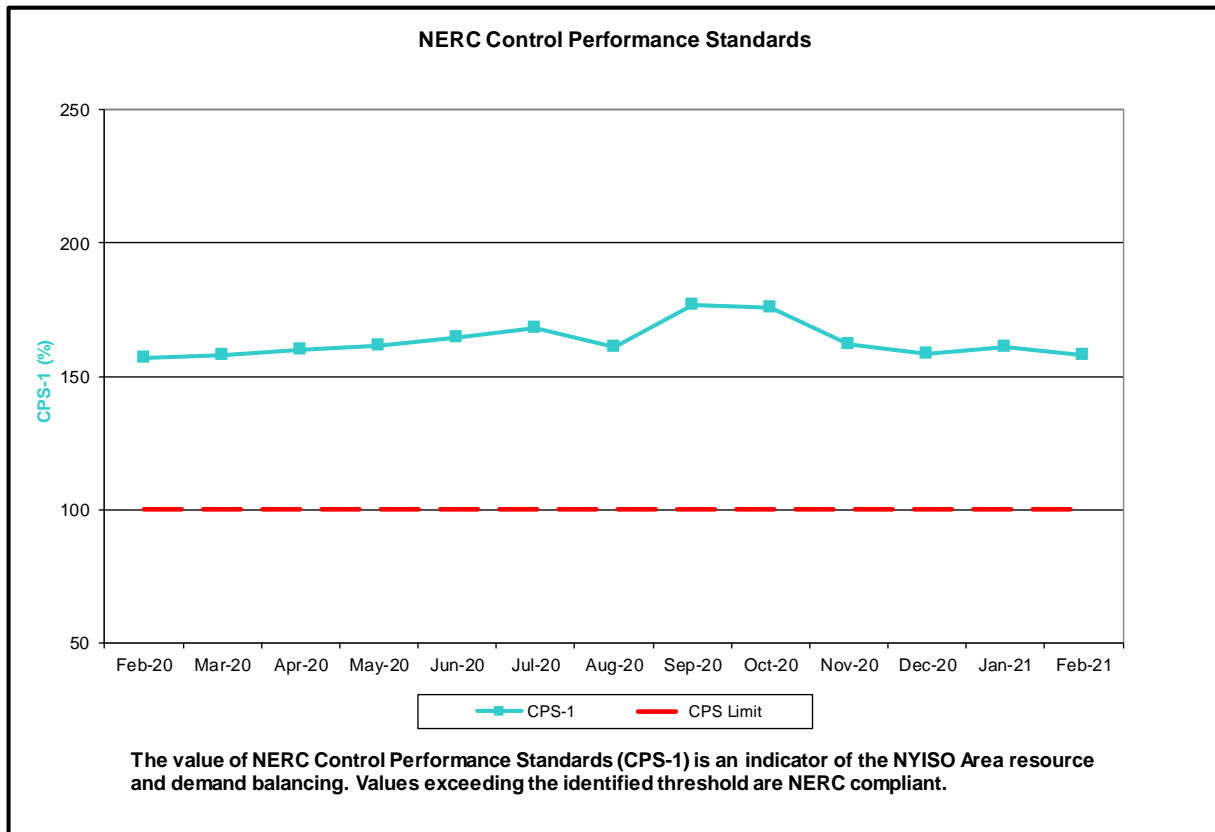
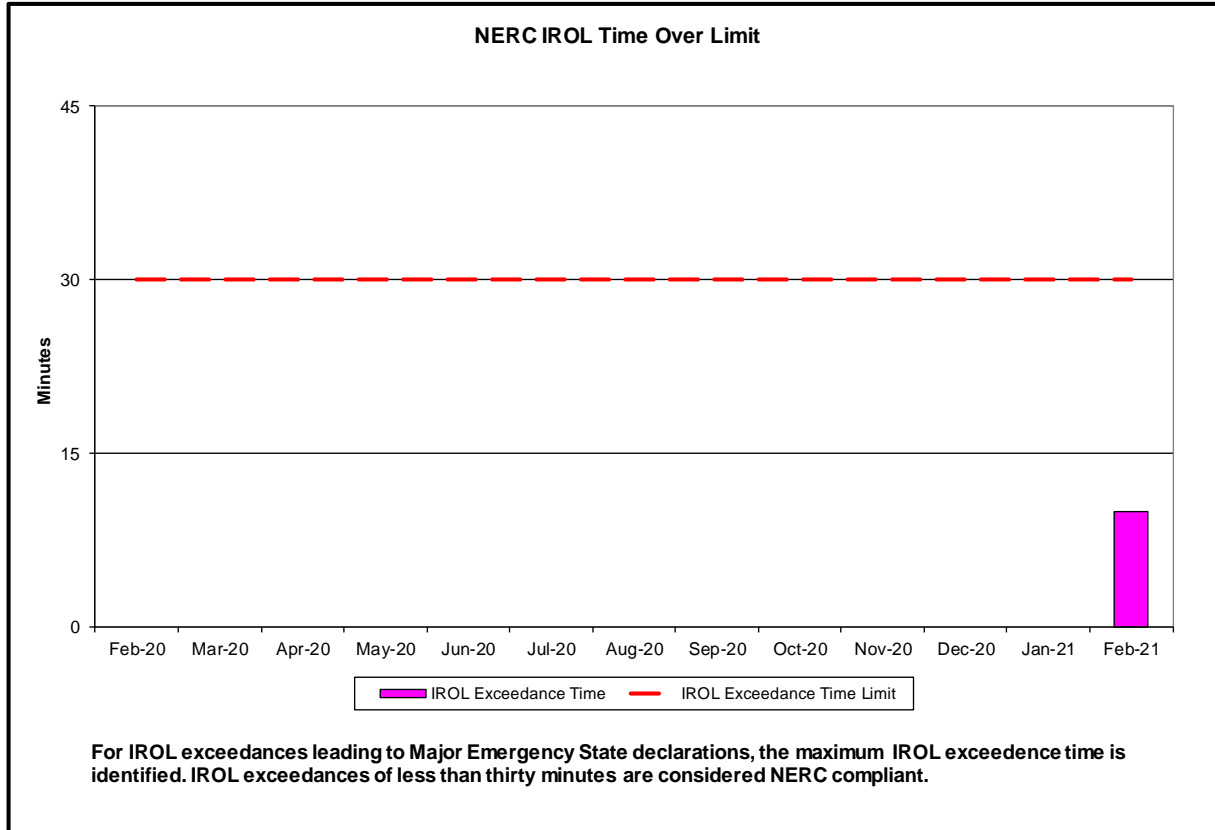
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$2.48	\$3.66
NY Savings from PJM-NY Coordinated Transaction Scheduling	\$1.17	\$1.45
NY Savings from NE-NY Coordinated Transaction Scheduling	(\$2.71)	(\$1.59)
Total NY Savings	\$0.94	\$3.52
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.51	\$0.97
Regional Savings from NE-NY Coordinated Transaction Scheduling	(\$0.47)	(\$0.34)
Total Regional Savings	\$0.04	\$0.63

- Statewide uplift cost monthly average was (\$0.30)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

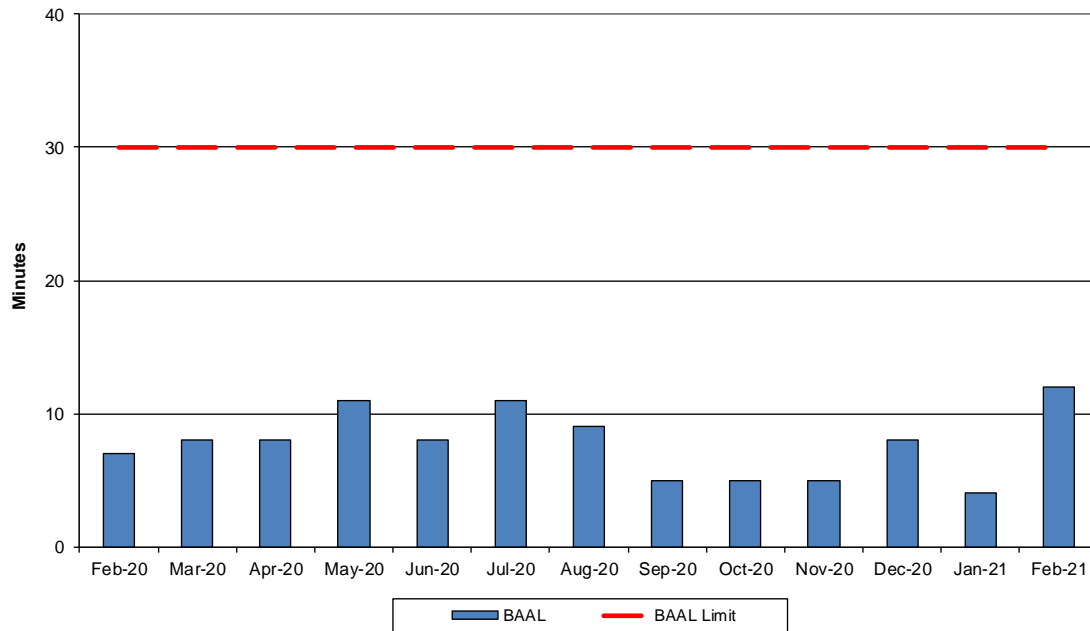
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
March 2021 Spot Price	\$0.89	\$0.89	\$8.71	\$0.89
February 2021 Spot Price	\$0.89	\$0.89	\$8.76	\$0.89
Delta	\$0.00	\$0.00	(\$0.05)	\$0.00

Reliability Performance Metrics



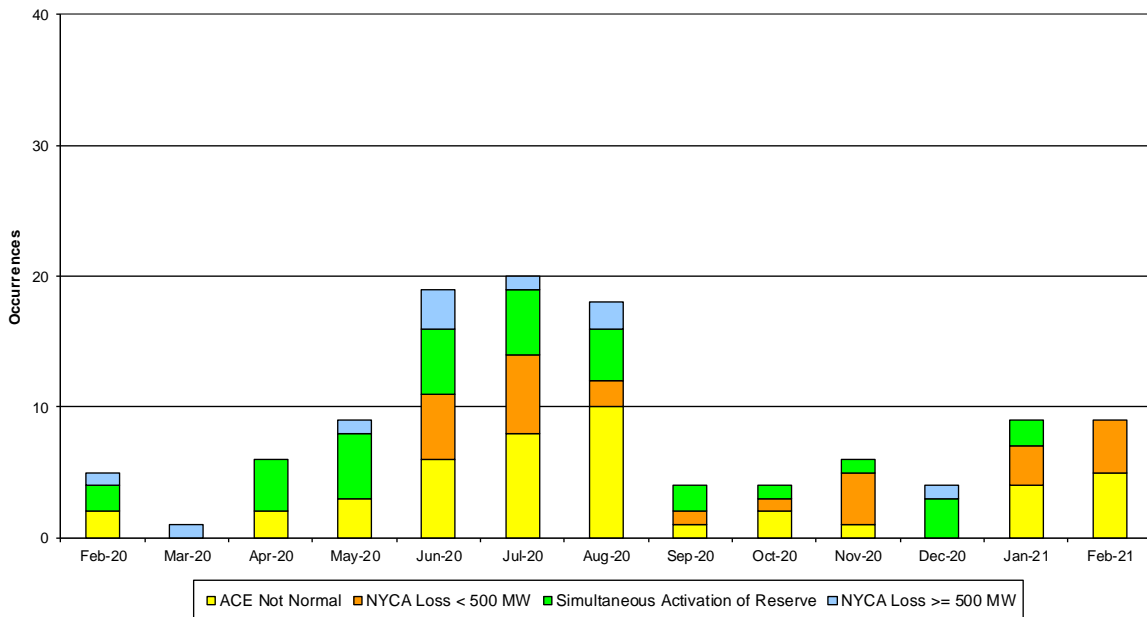


NERC Balancing Authority ACE Limit Standard



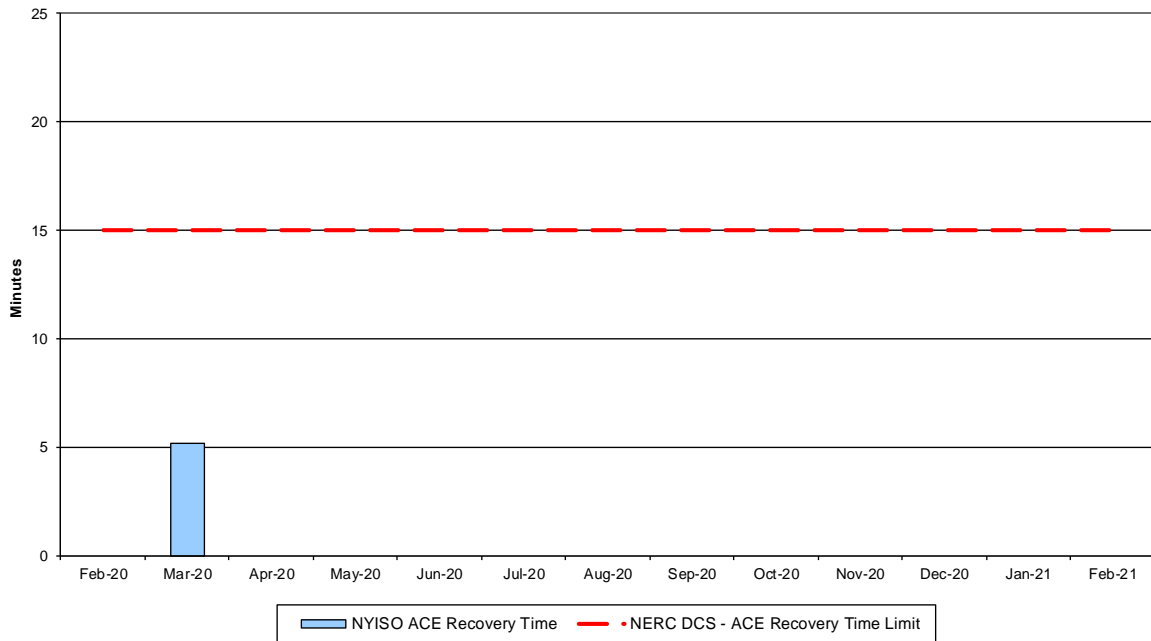
The amount of time the clock-minute average ACE exceeds the clock-minute Balancing Authority ACE Limit (BAAL) is an indicator of the NYISO Area resource and demand balancing. The maximum BAAL exceedance time is identified. BAAL exceedances of less than 30 consecutive clock-minutes are NERC compliant.

Reserve Activations



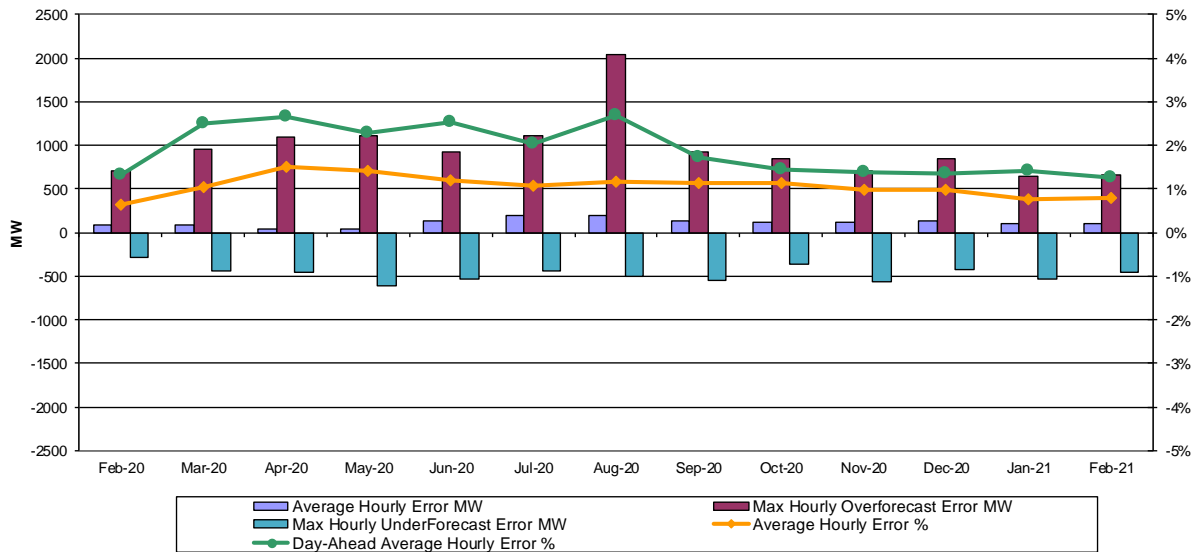
NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Simultaneous Activation of Reserves) by activating an immediate resource and demand balancing operation.

DCS Event Time to ACE Recovery



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

Load Forecast Performance

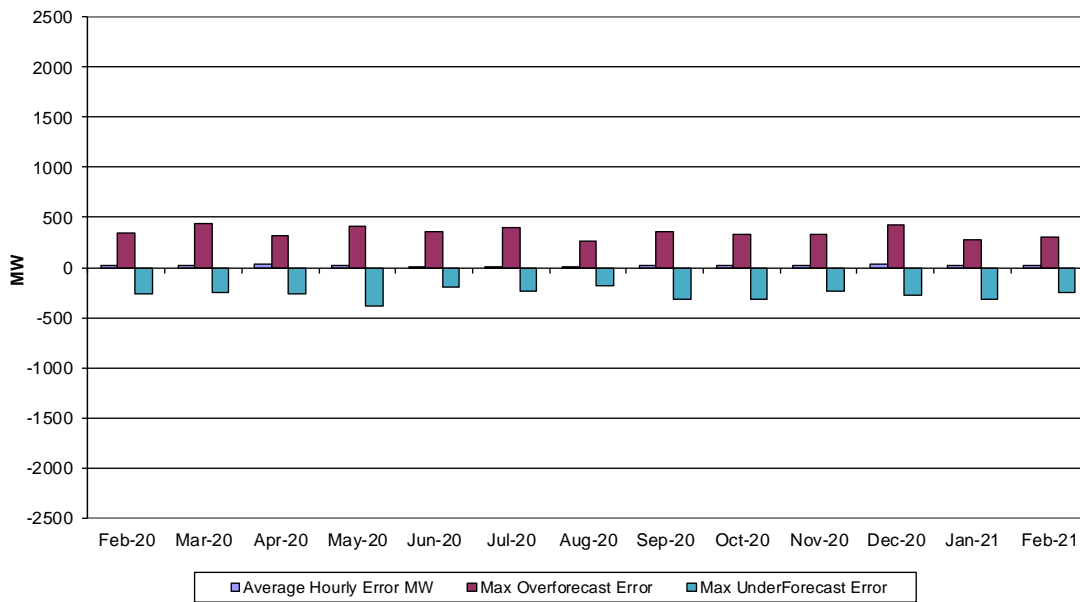


Hourly Error MW - Value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

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

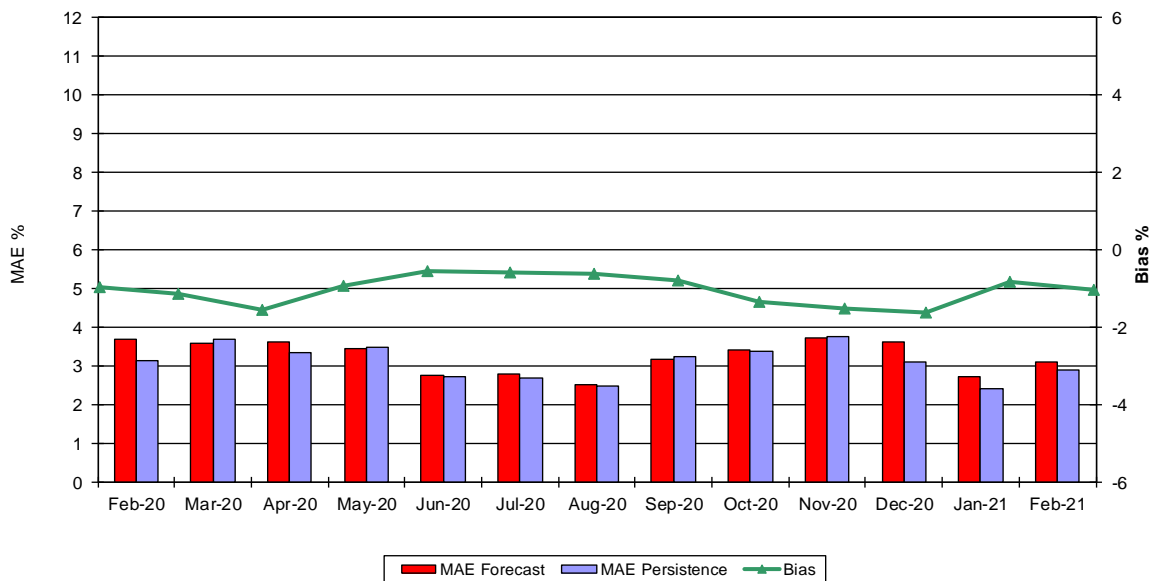
Day-Ahead Average Hourly Error % - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

Wind Forecast Performance Hour Ahead MW Error



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

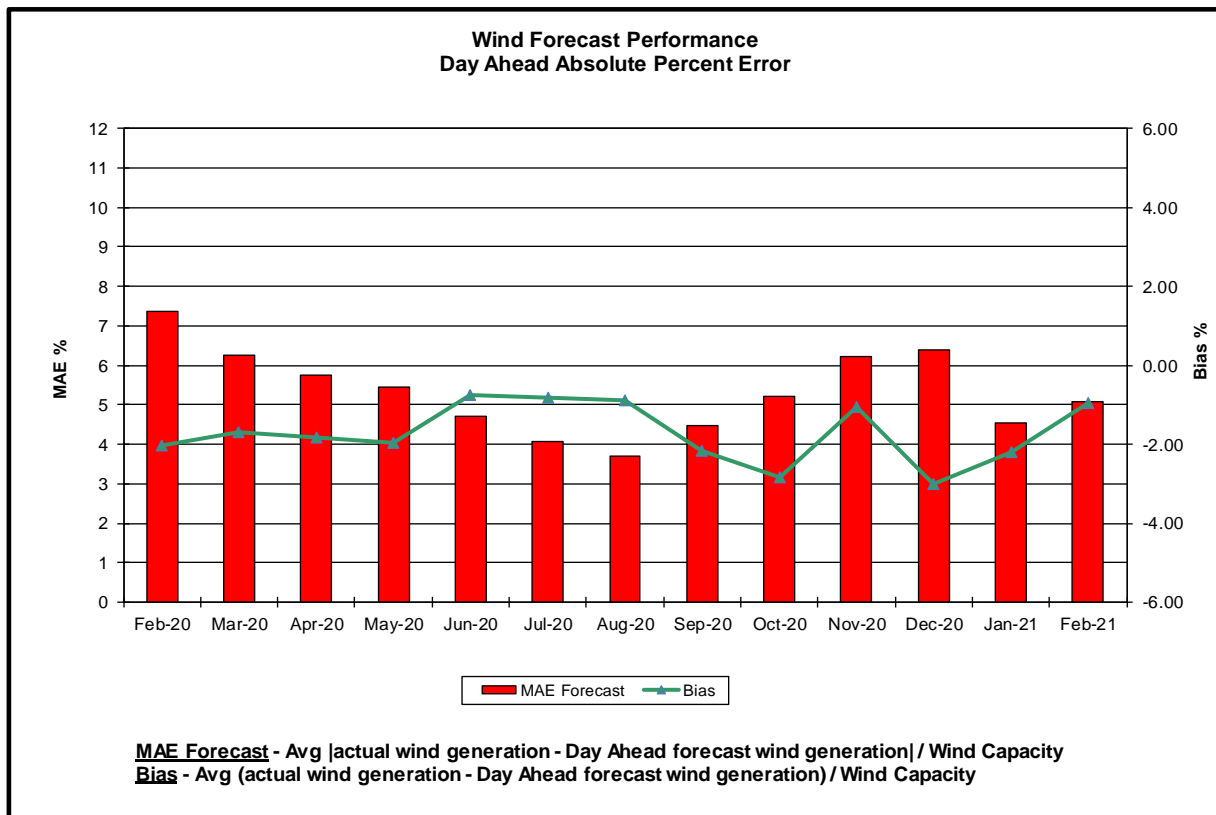
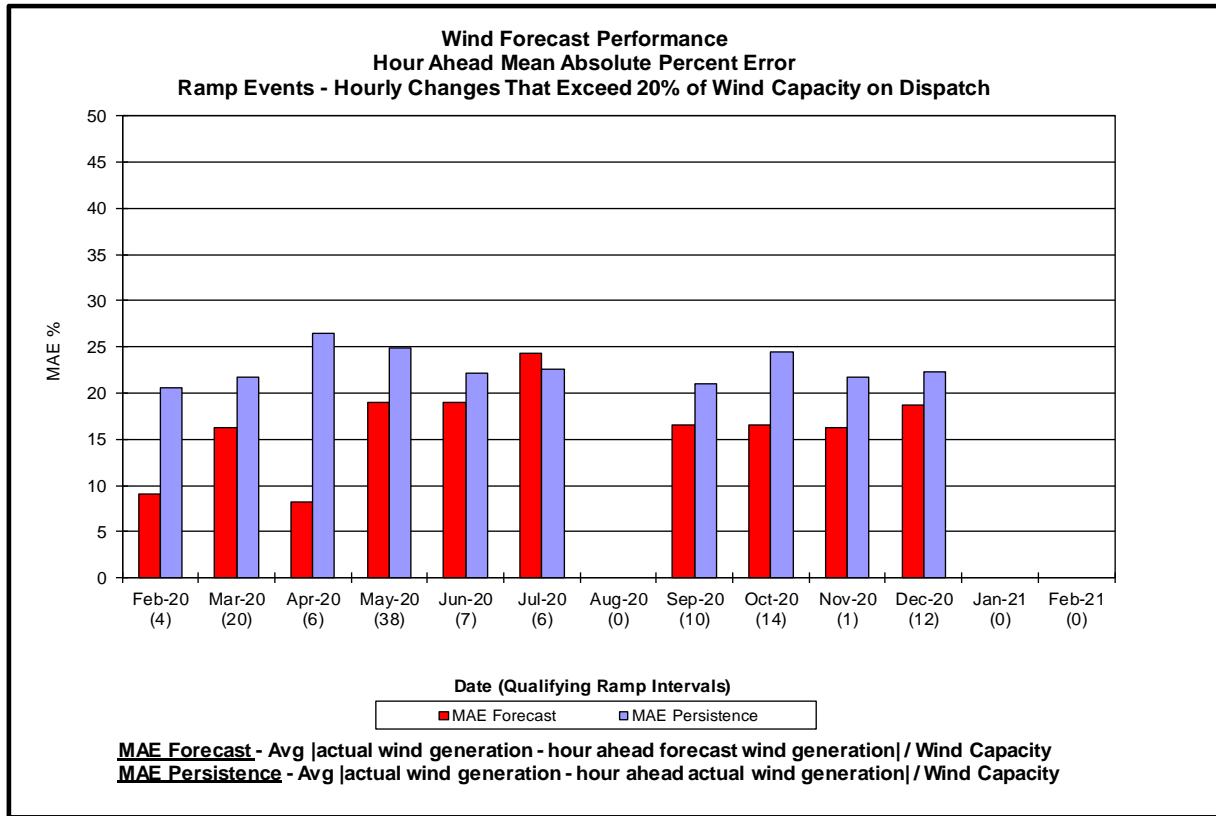
Wind Forecast Performance Hour Ahead Percent Error

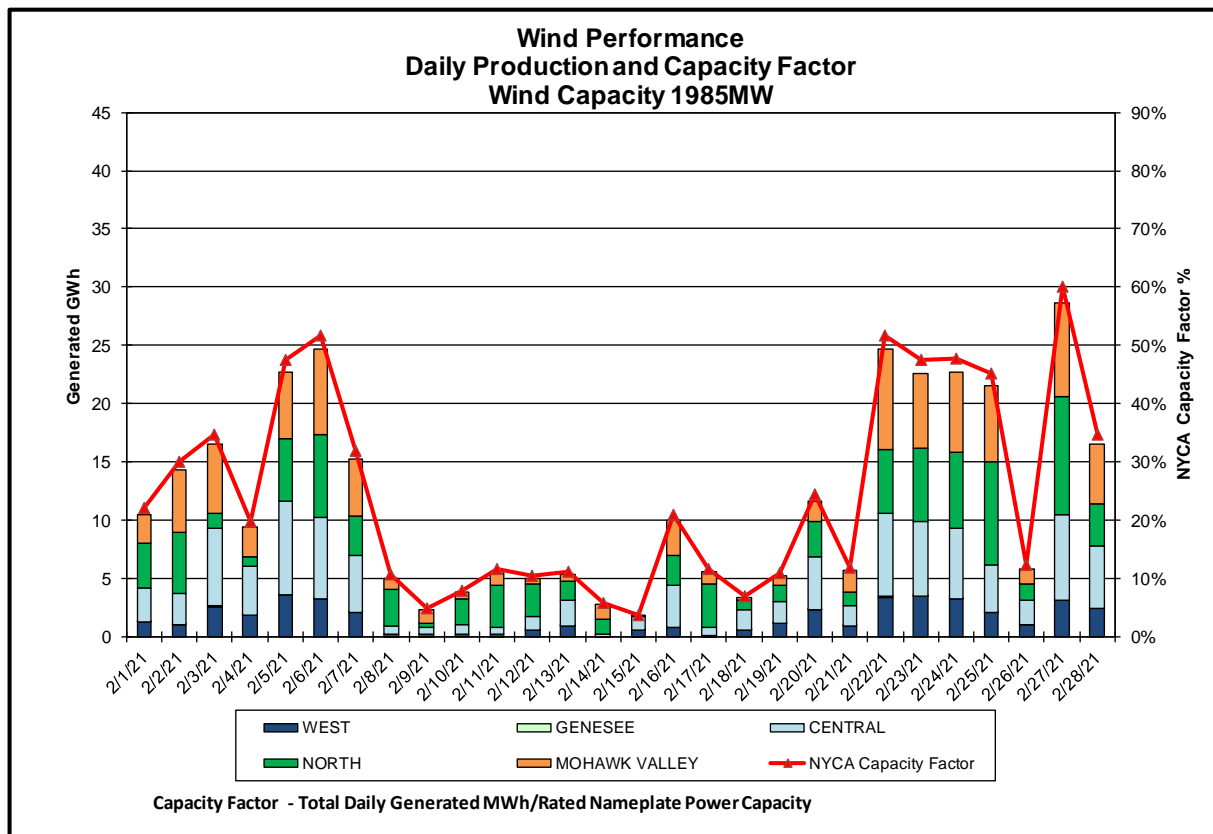
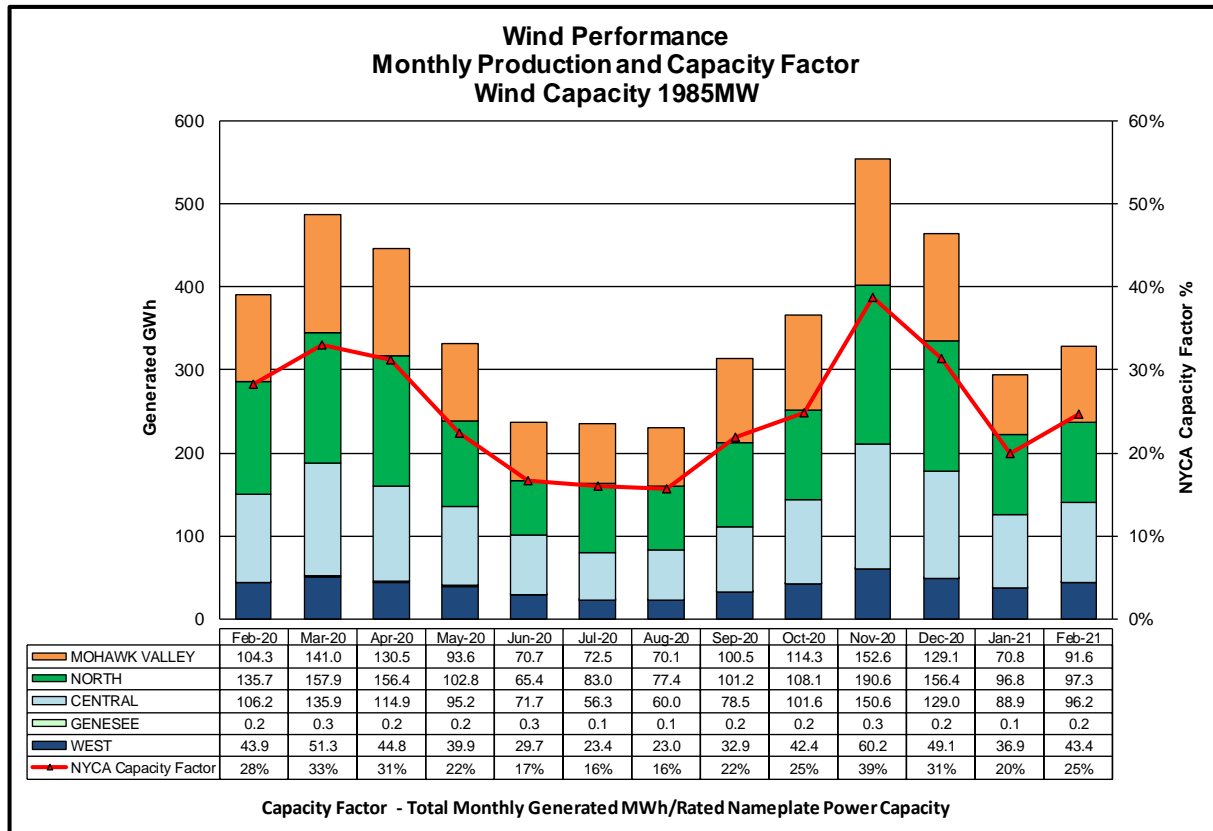


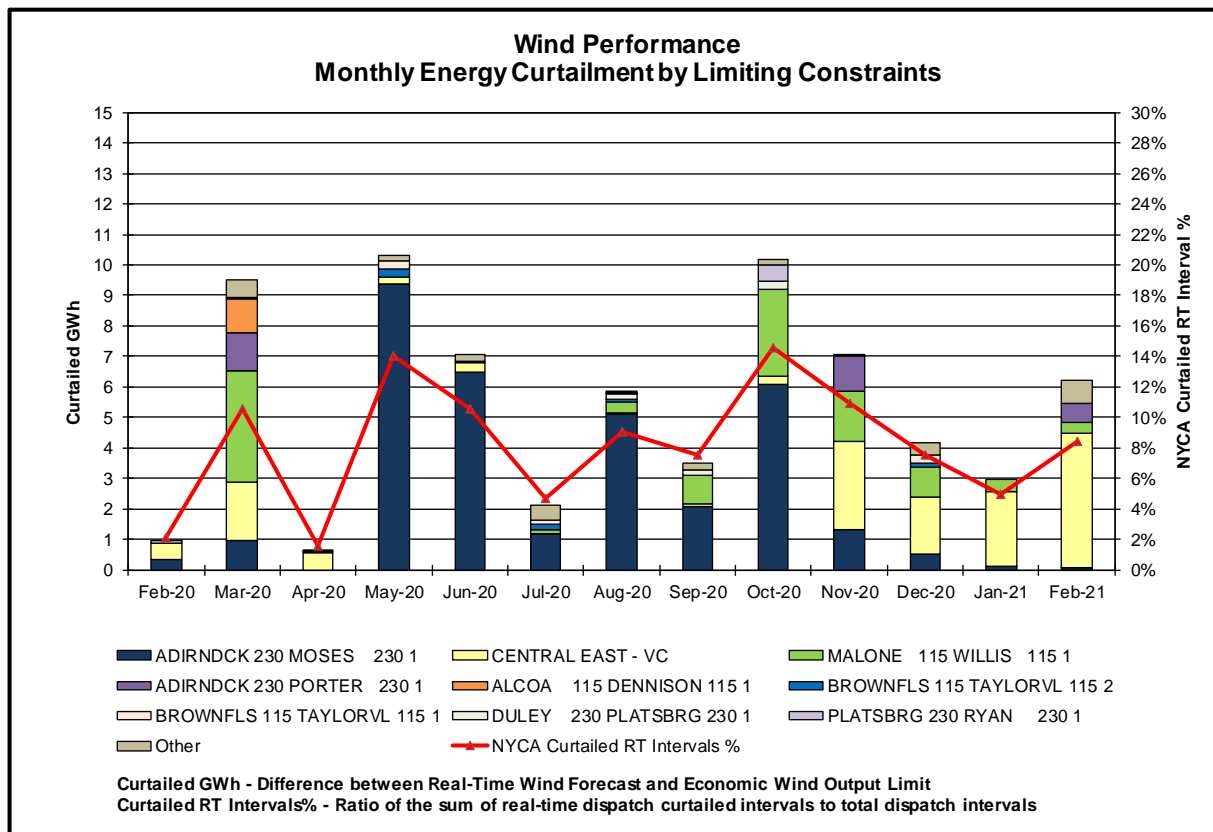
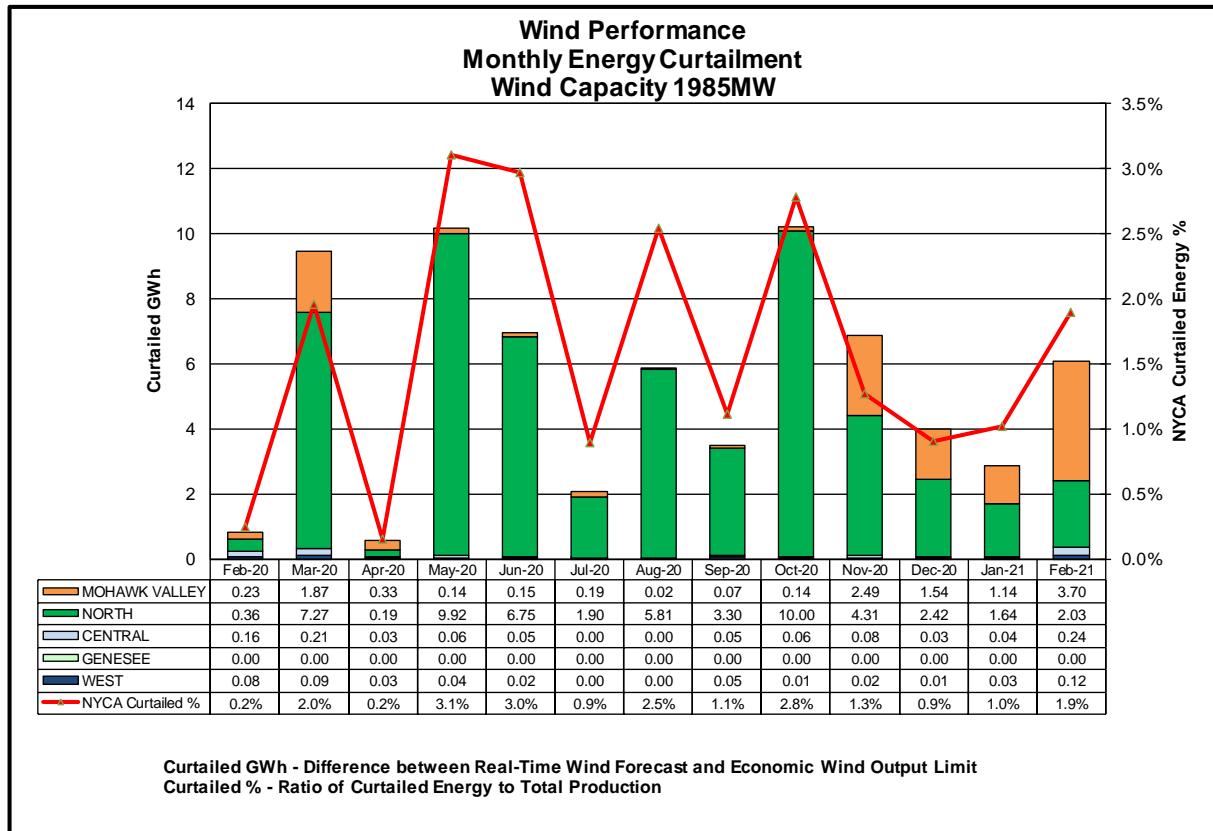
MAE Forecast - Avg |actual wind generation - hour ahead forecast wind generation| / Wind Capacity

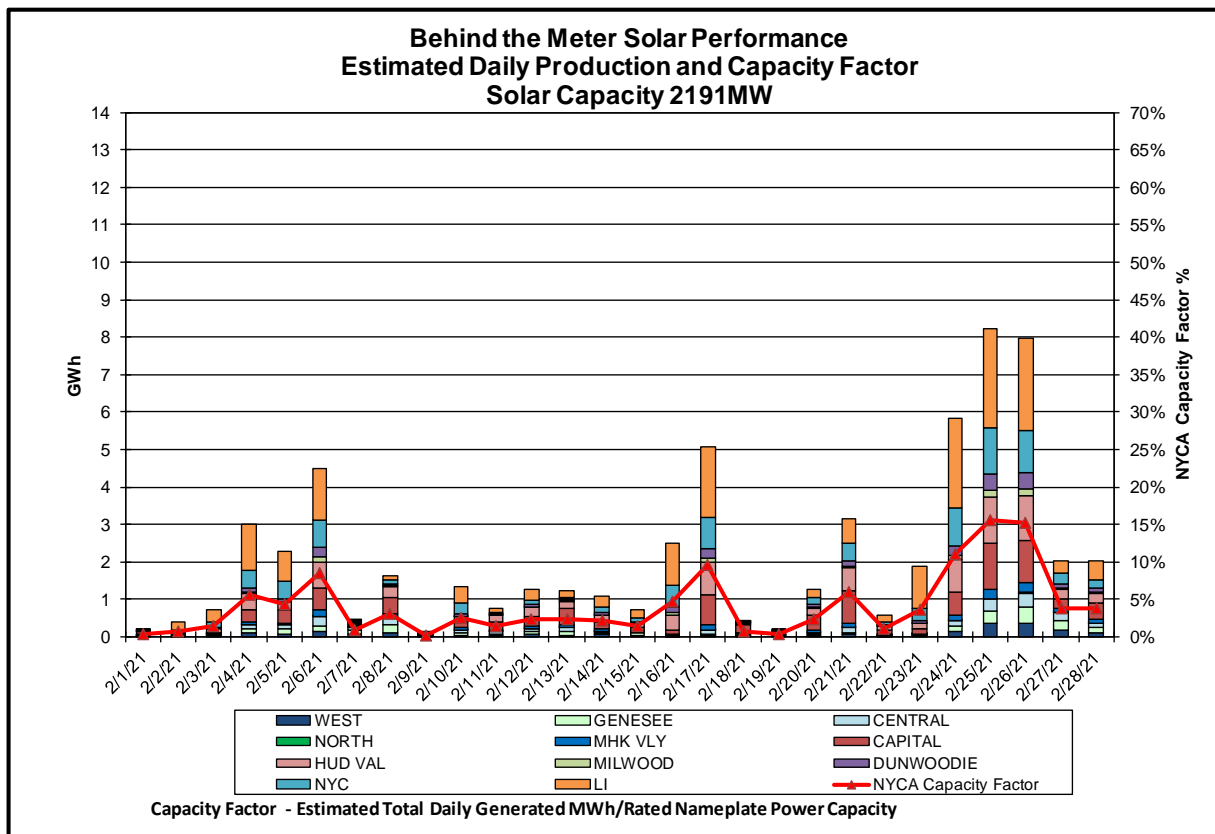
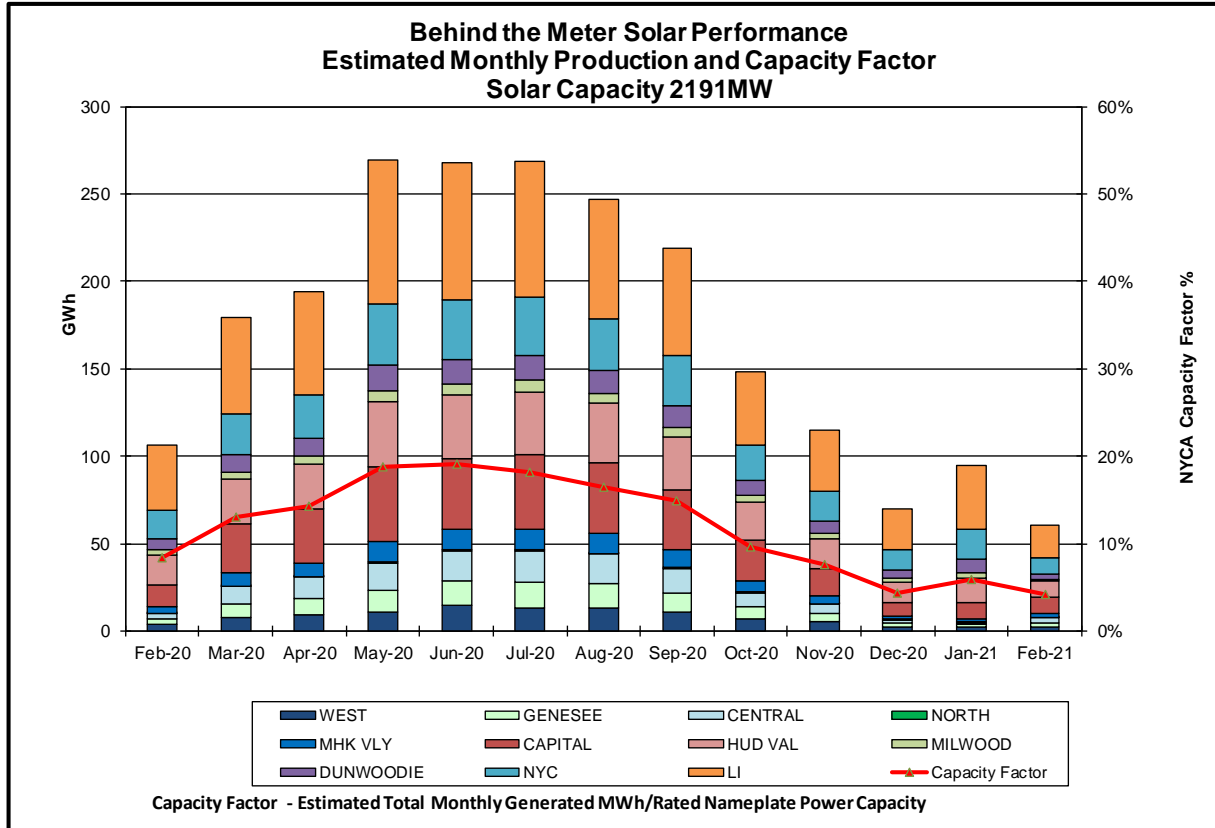
MAE Persistence - Avg |actual wind generation - hour ahead actual wind generation| / Wind Capacity

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

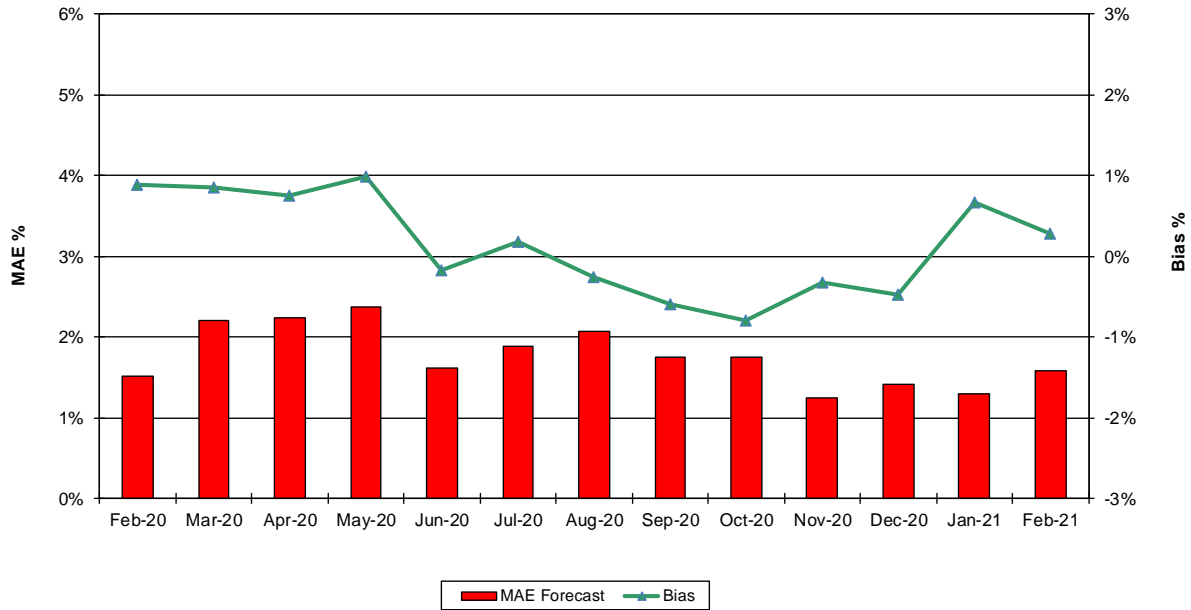






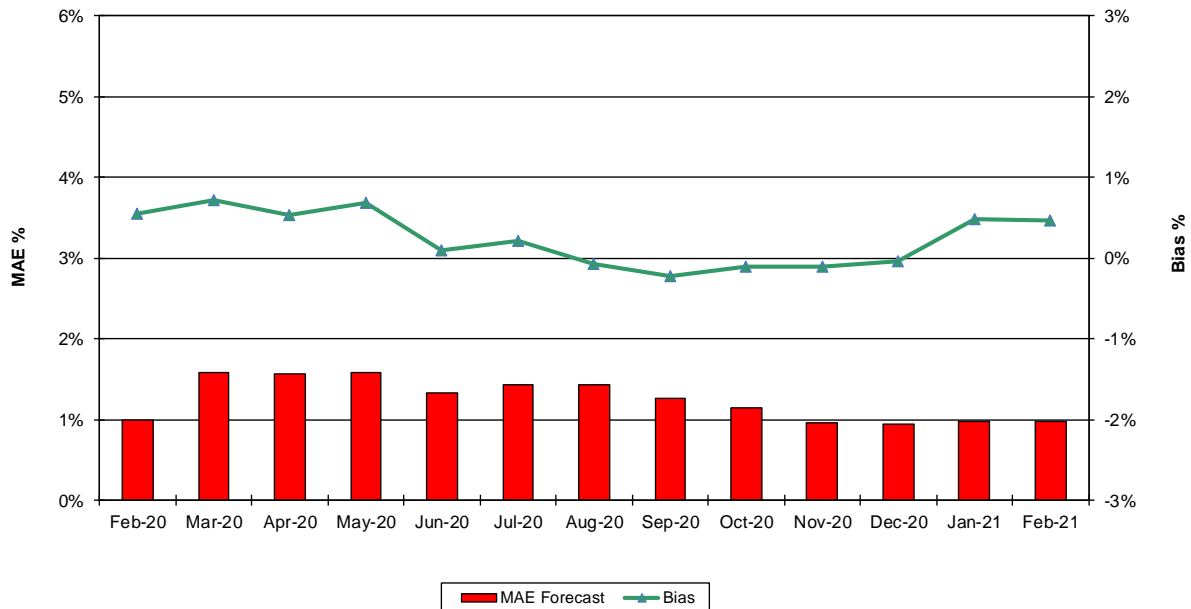


Behind the Meter Solar Forecast Performance Day Ahead Percent Error

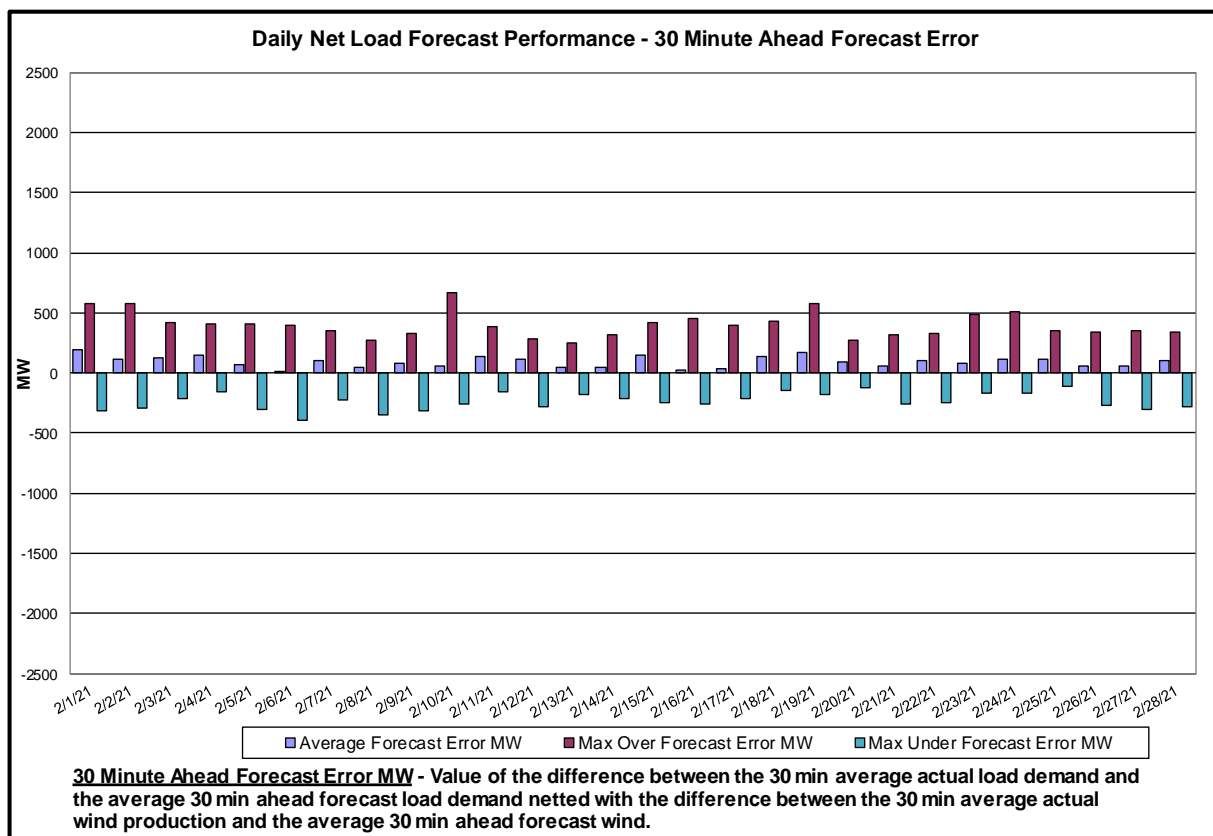
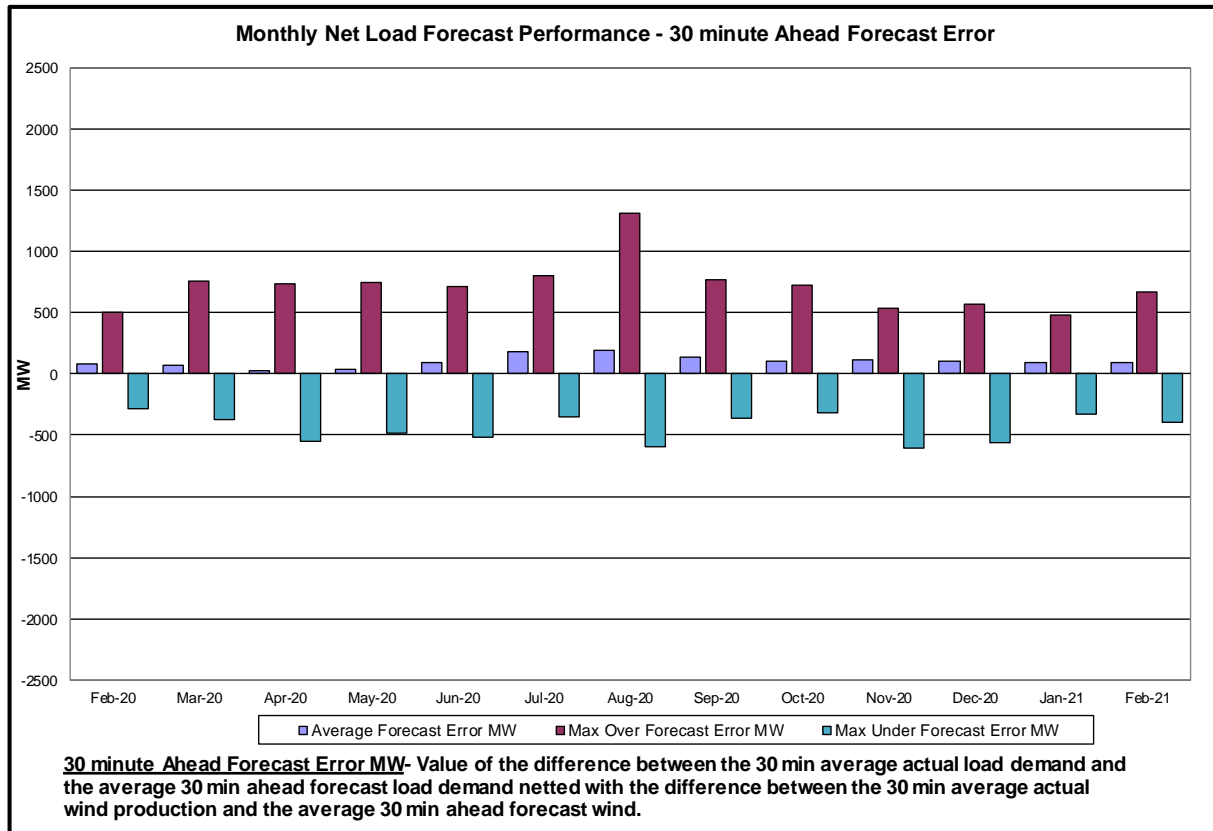


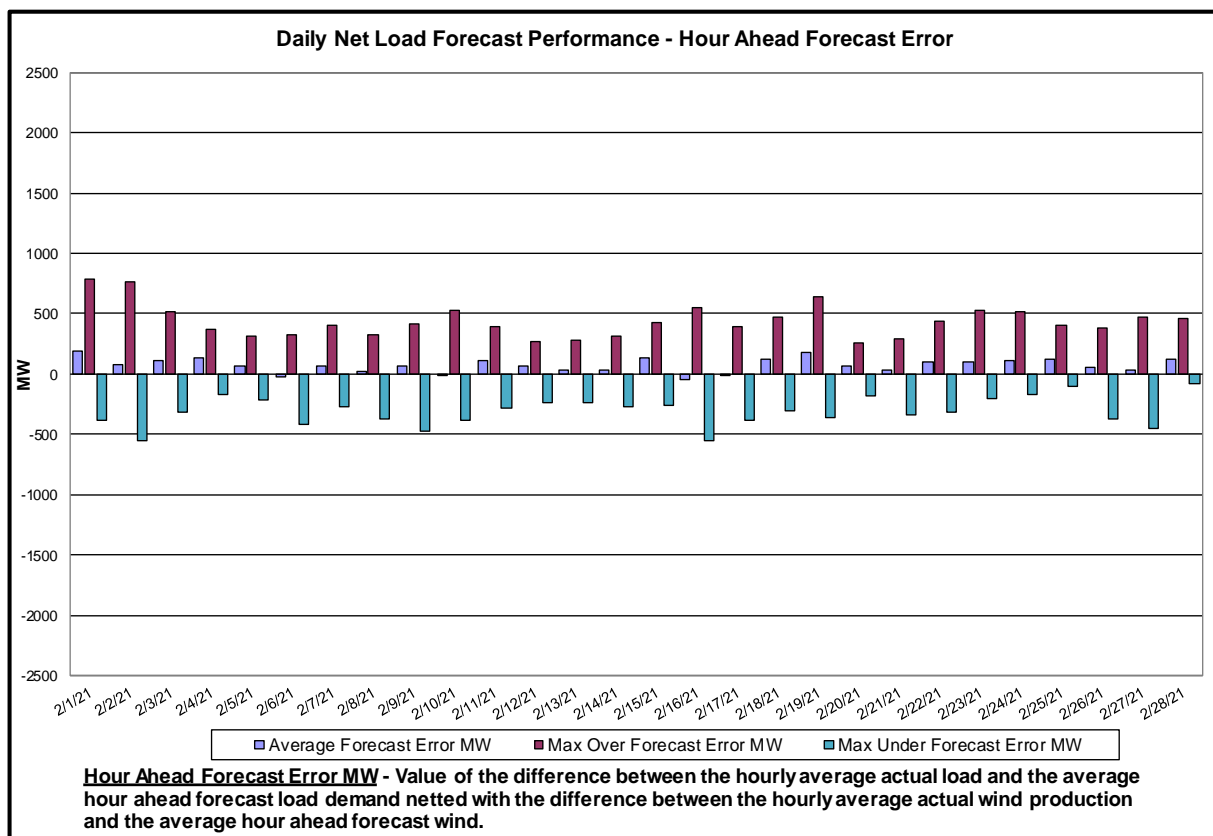
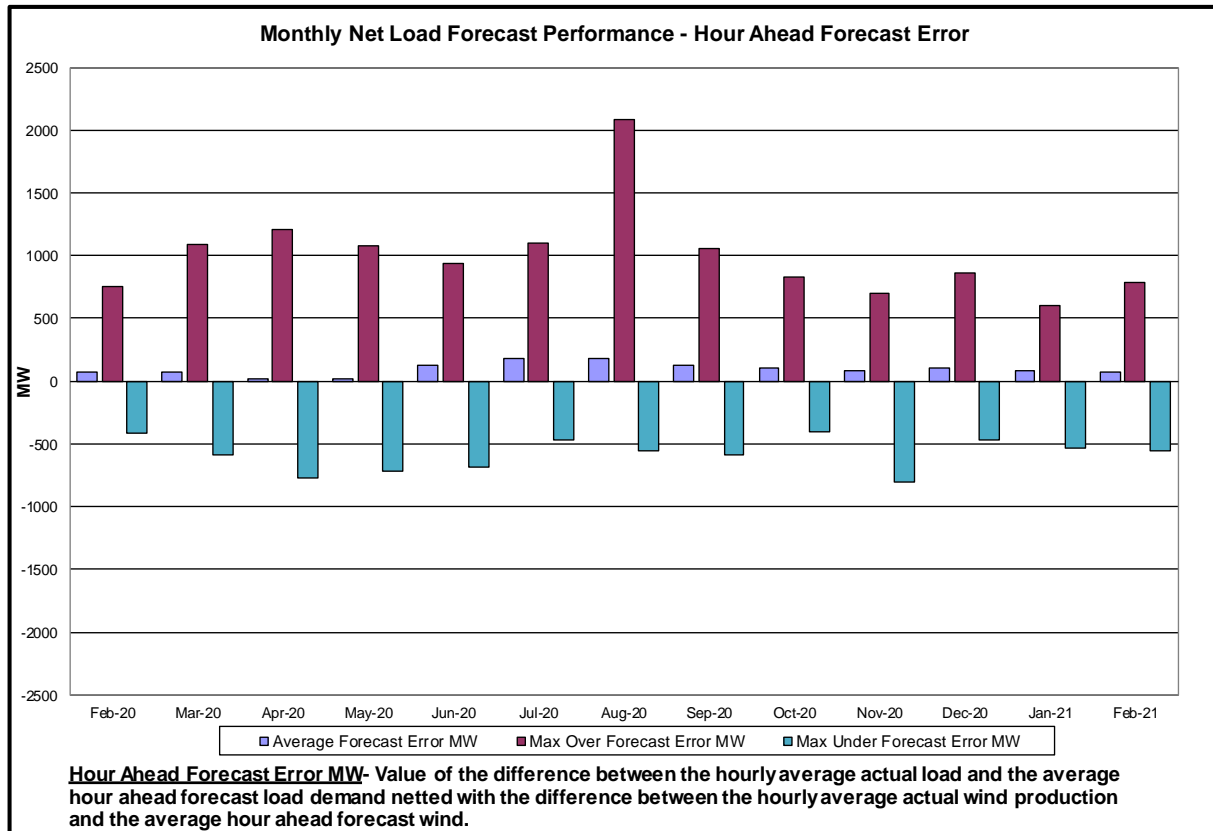
MAE Forecast - Avg |est. actual solar generation - Day Ahead forecast solar generation| / Solar Capacity
Bias - Avg (est. actual solar generation - Day Ahead forecast solar generation) / Solar Capacity

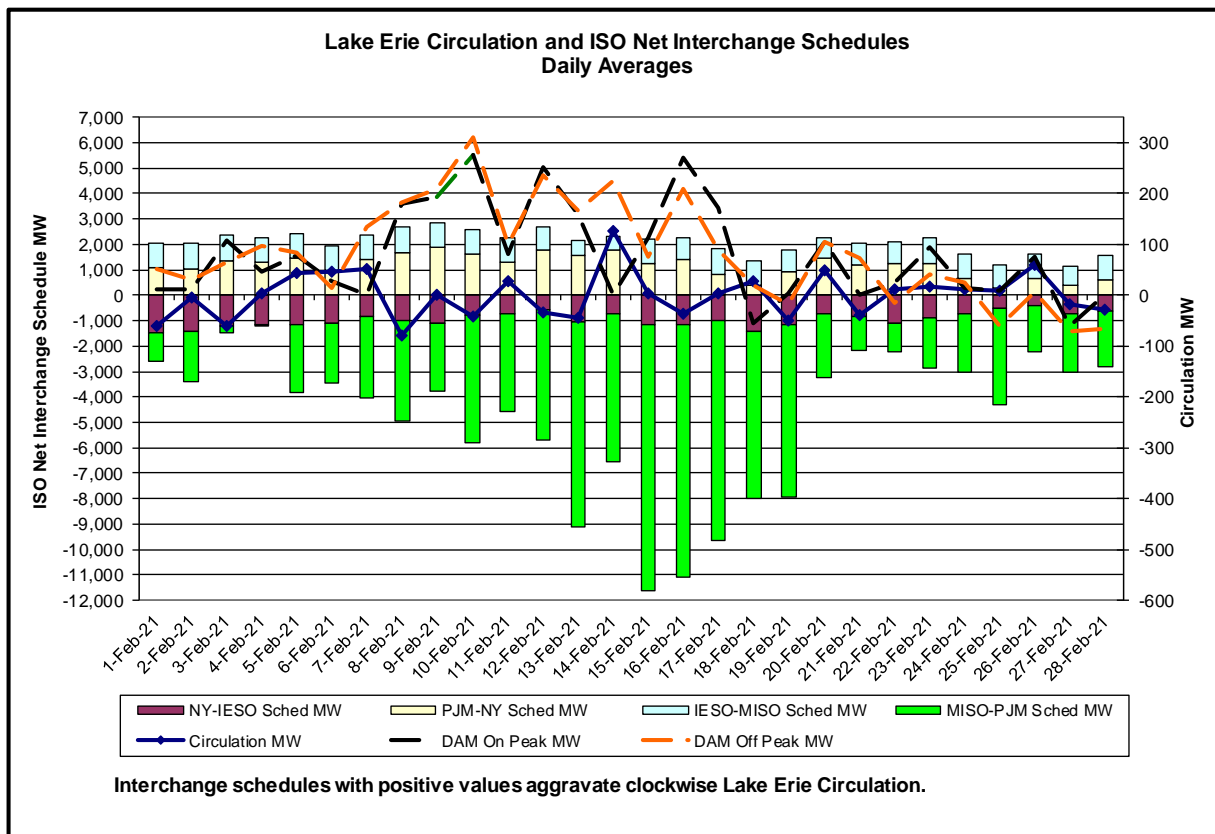
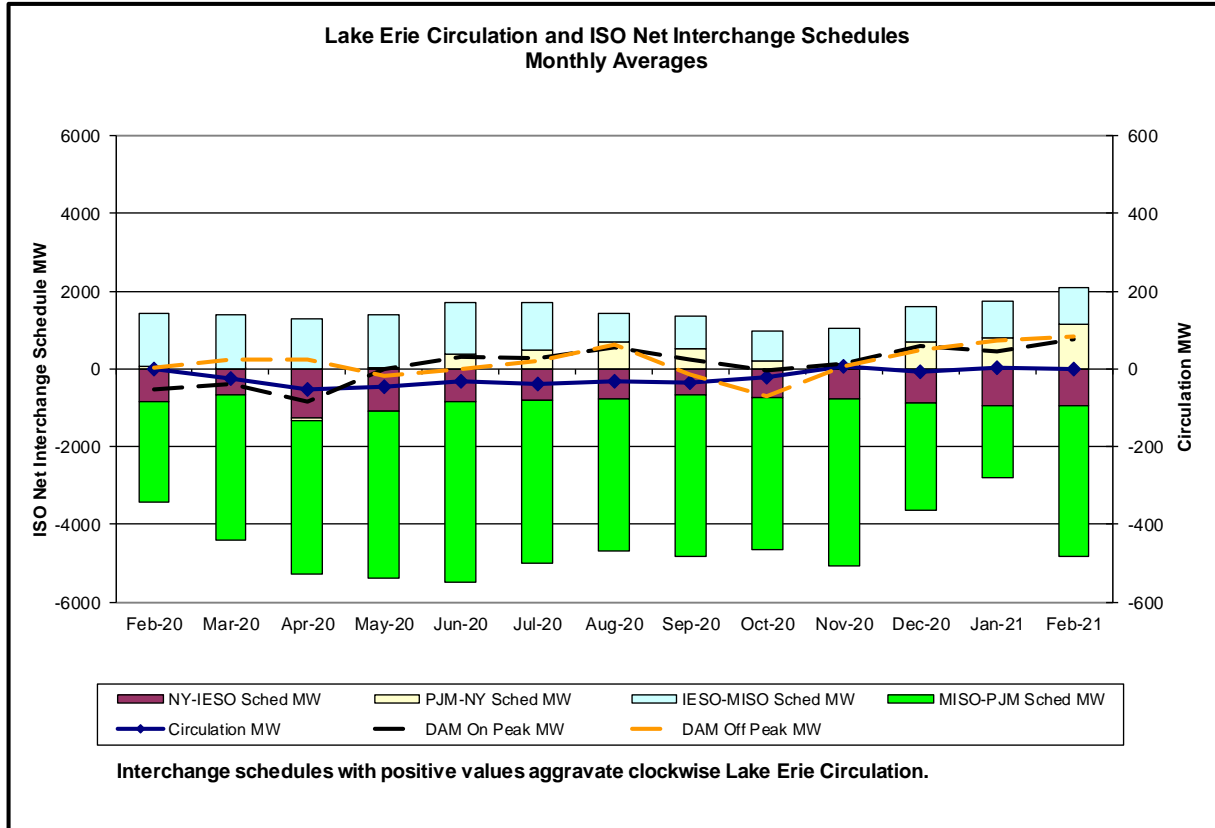
Behind the Meter Solar Forecast Performance Hour Ahead Percent Error



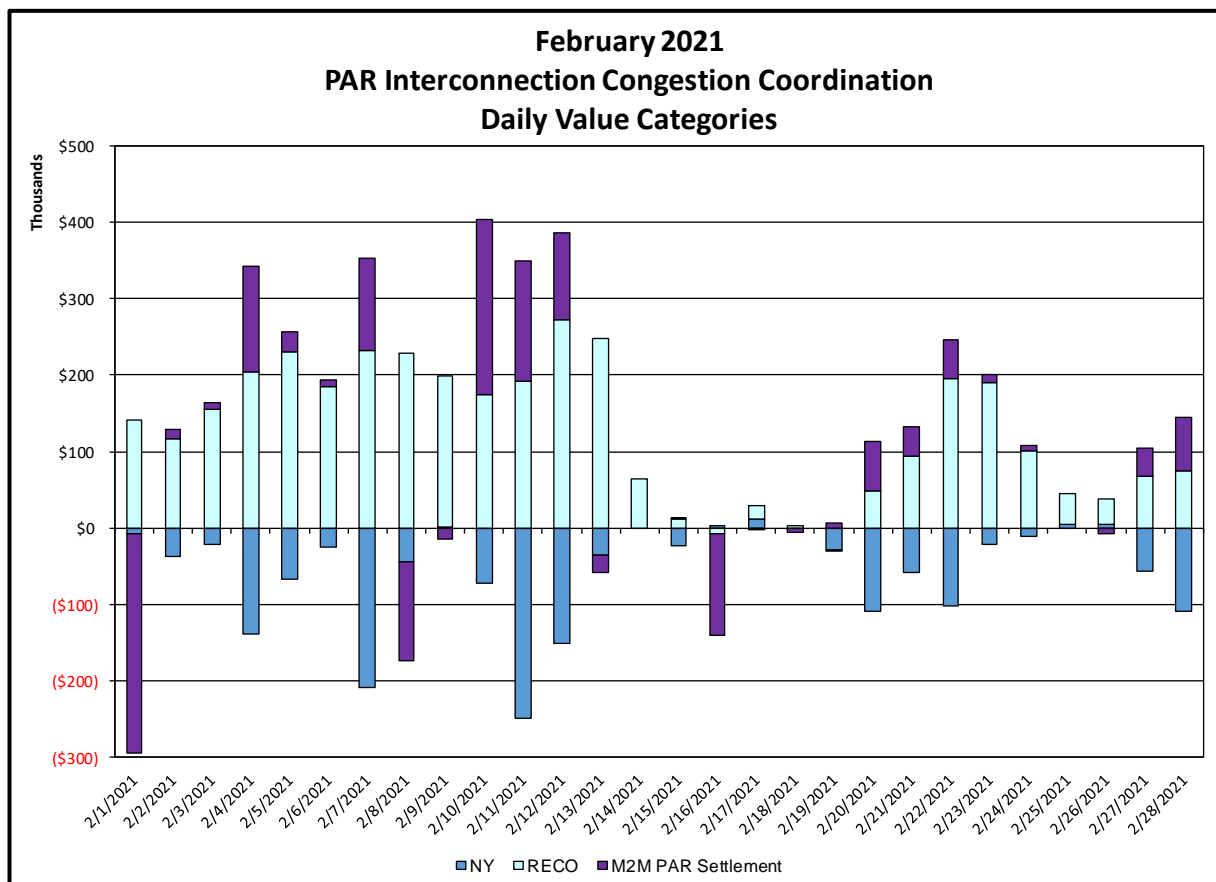
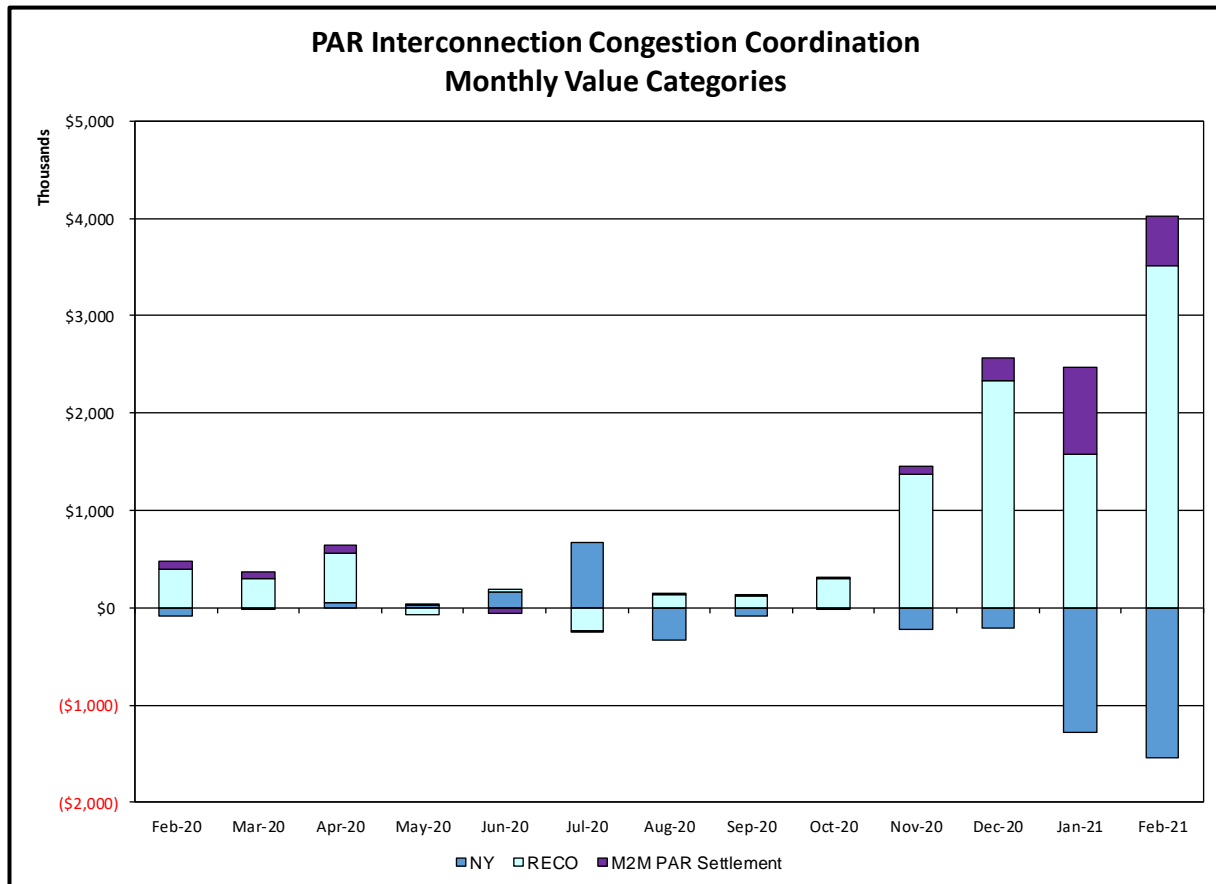
MAE Forecast - Avg |est. actual solar generation - Day Ahead forecast solar generation| / Solar Capacity
Bias - Avg (est. actual solar generation - Day Ahead forecast solar generation) / Solar Capacity







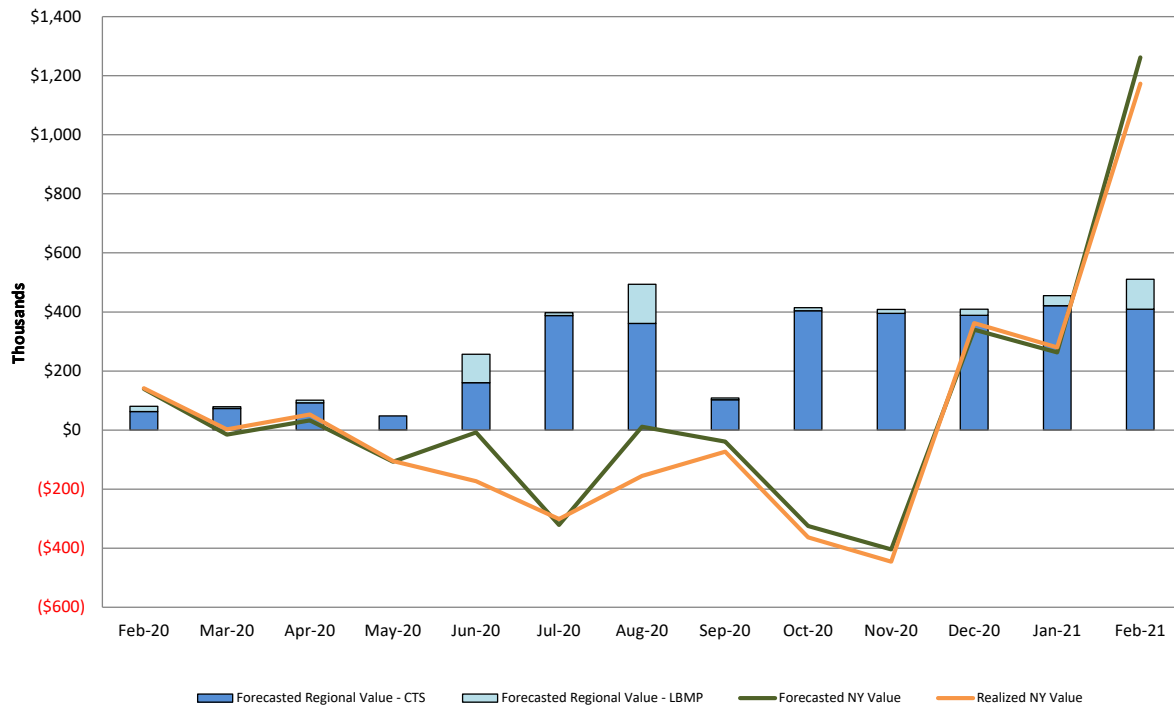
Broader Regional Market Performance Metrics



PAR Interconnection Congestion Coordination

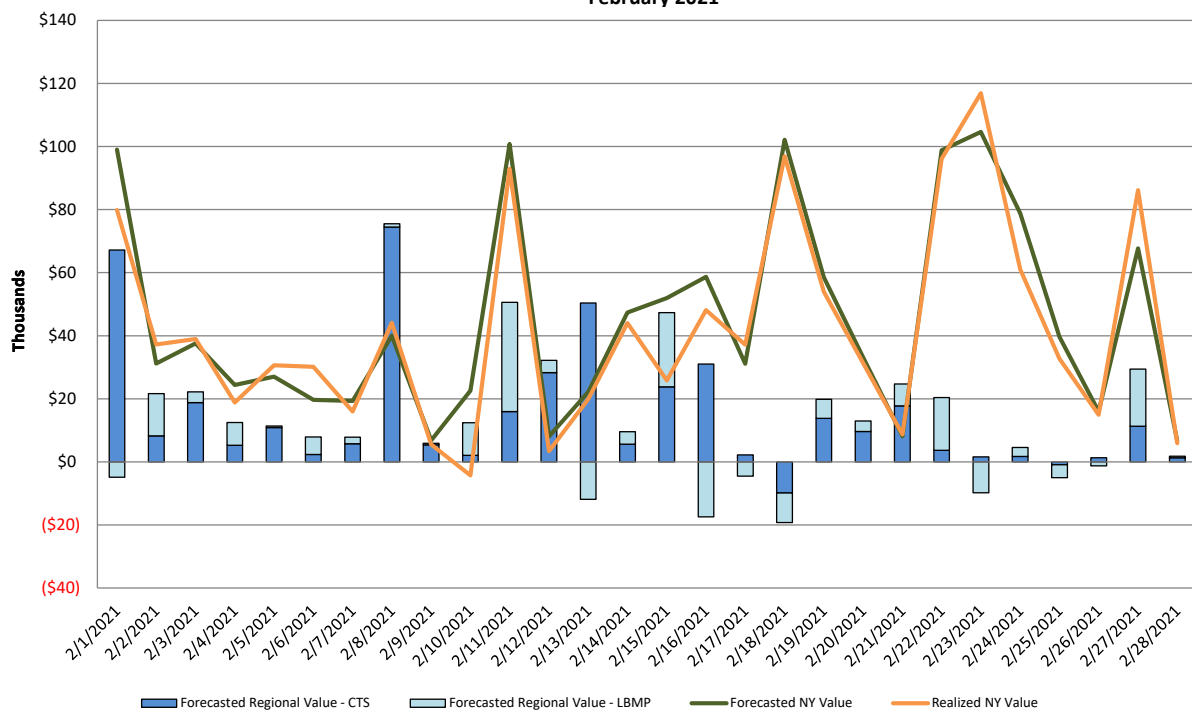
<u>Category</u>	<u>Description</u>
NY	Represents the value NY realizes from Market-to-Market PAR Coordination when experiencing congestion. This is the estimated savings to NY for additional deliveries into NY
RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 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.

Regional NYISO/PJM RT Scheduling for All PJM Proxies Monthly Value Categories

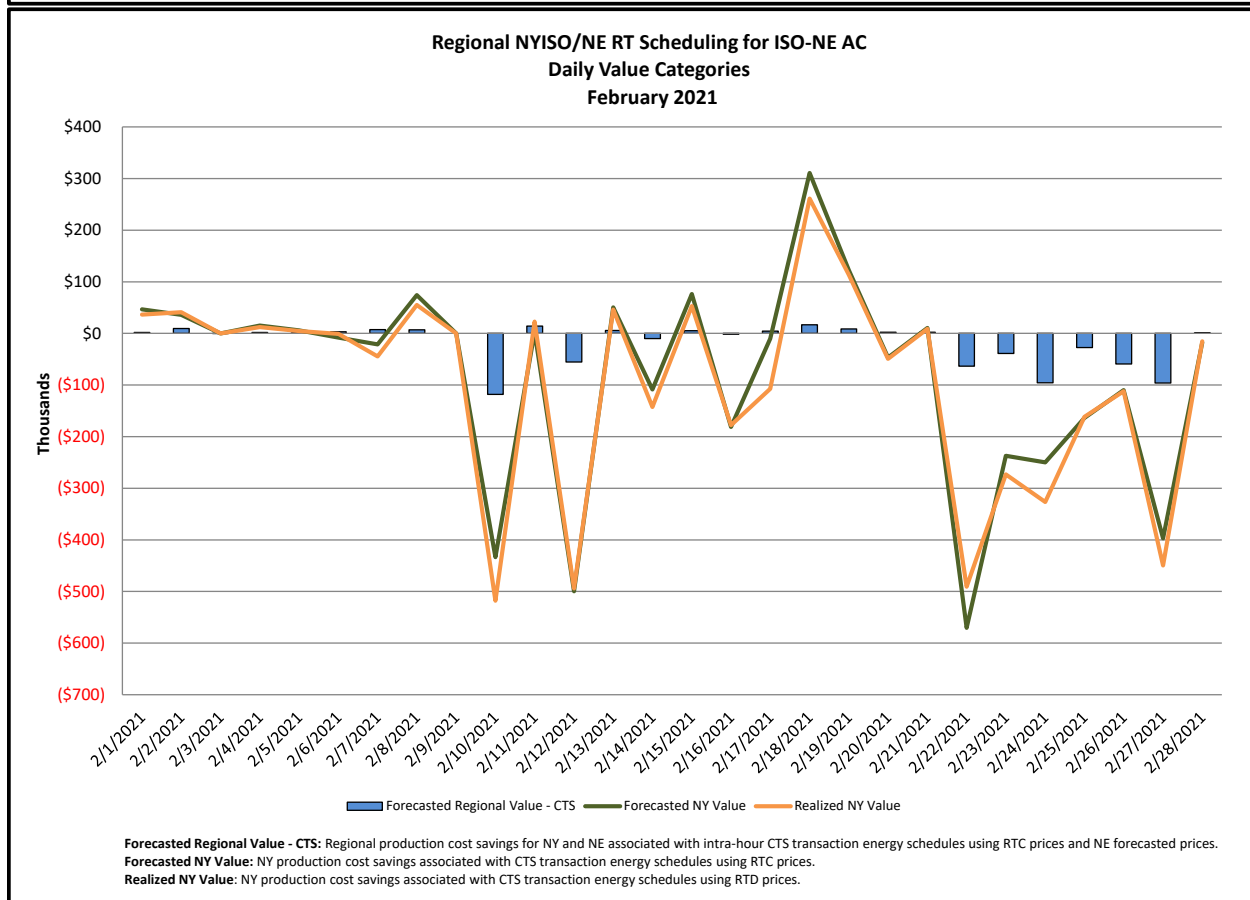
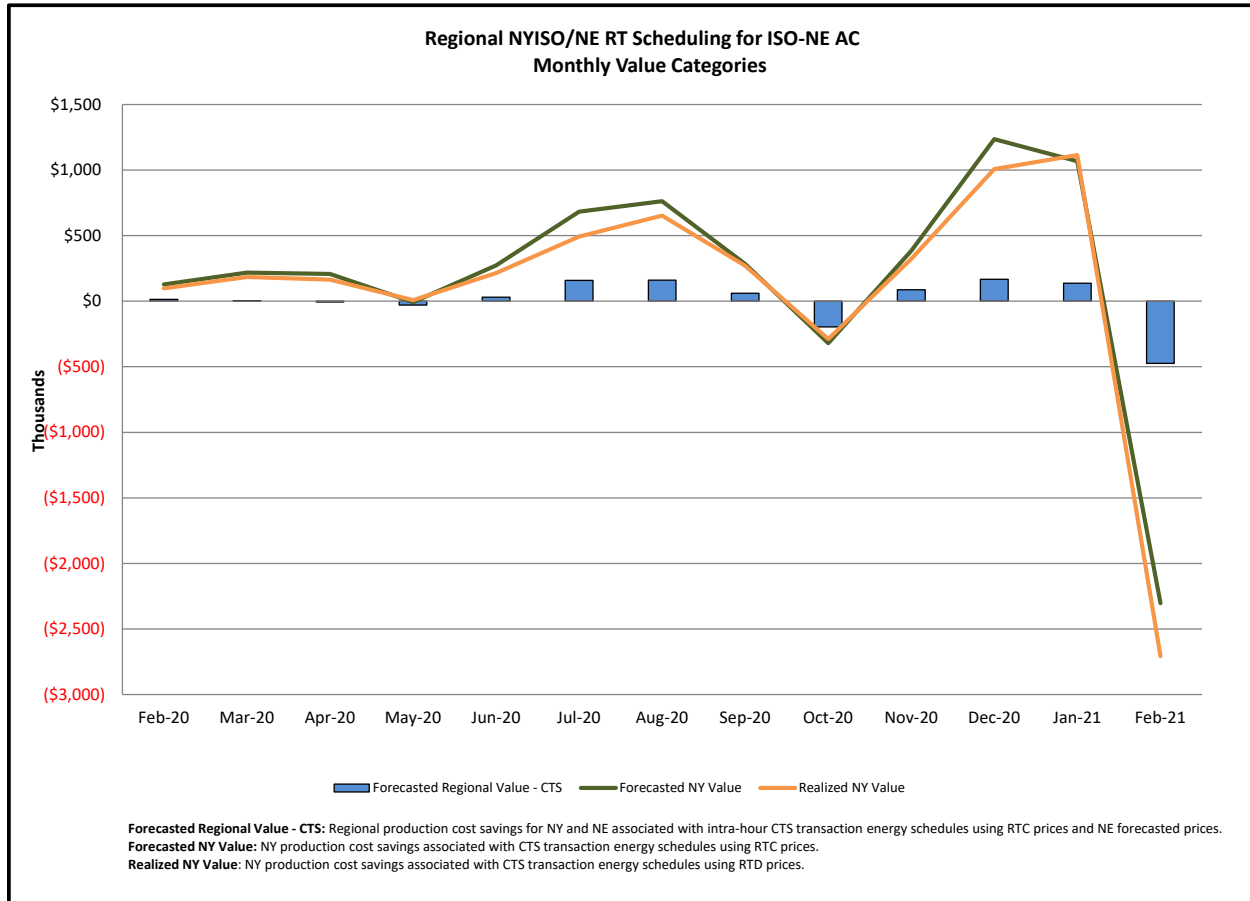


Forecasted Regional Value - CTS: Regional production cost savings for NY and PJM associated with intra-hour CTS transaction energy schedules using RTC/ITSCEd prices.
Forecasted Regional Value - LBMP: Regional production cost savings for NY and PJM associated with intra-hour LBMP transaction energy schedules using RTC/ITSCEd prices.
Forecasted NY Value: NY production cost savings associated with both CTS and LBMP transaction energy schedules using RTC prices.
Realized NY Value: NY production cost savings associated with both CTS and LBMP transaction energy schedules using RTD prices.

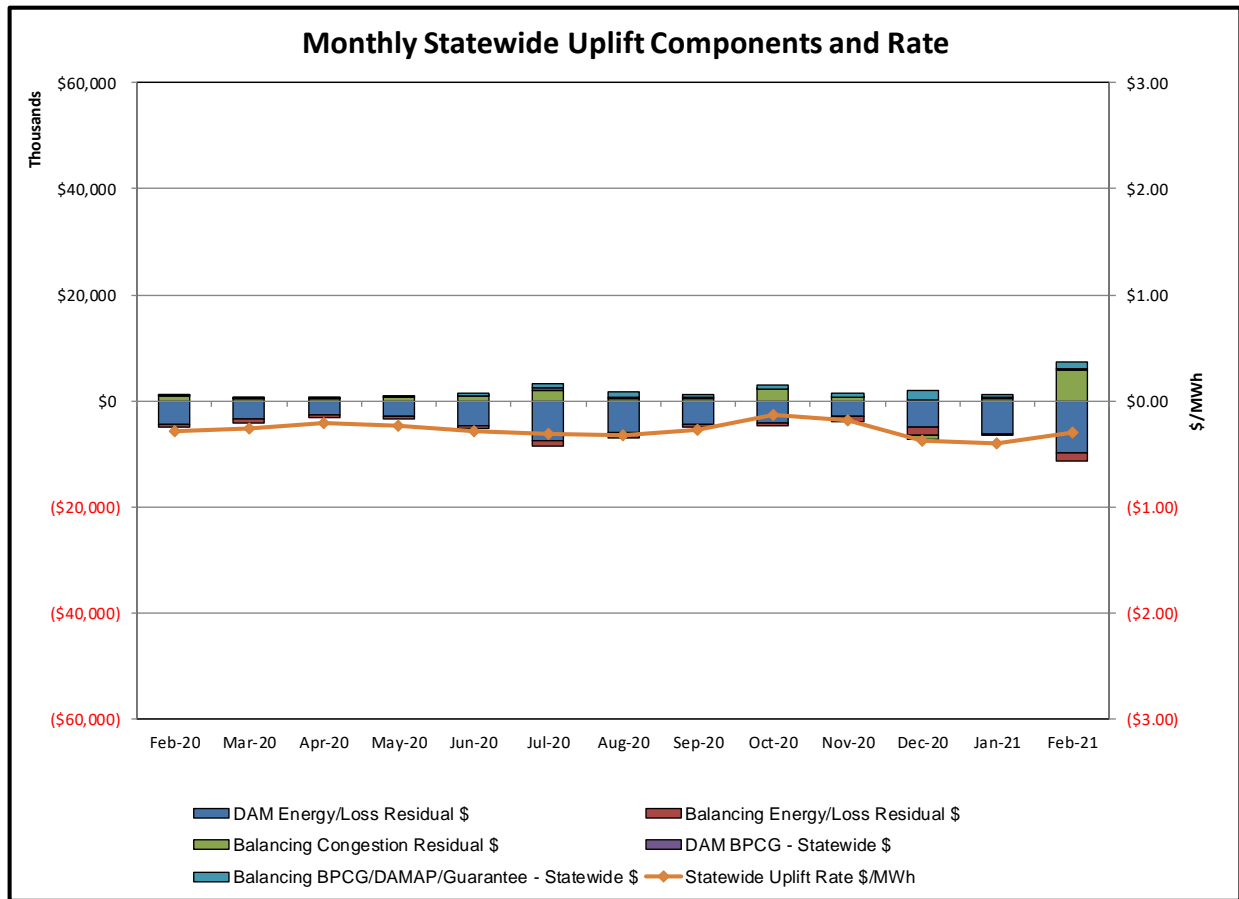
Regional NYISO/PJM RT Scheduling for All PJM Proxies Daily Value Categories February 2021

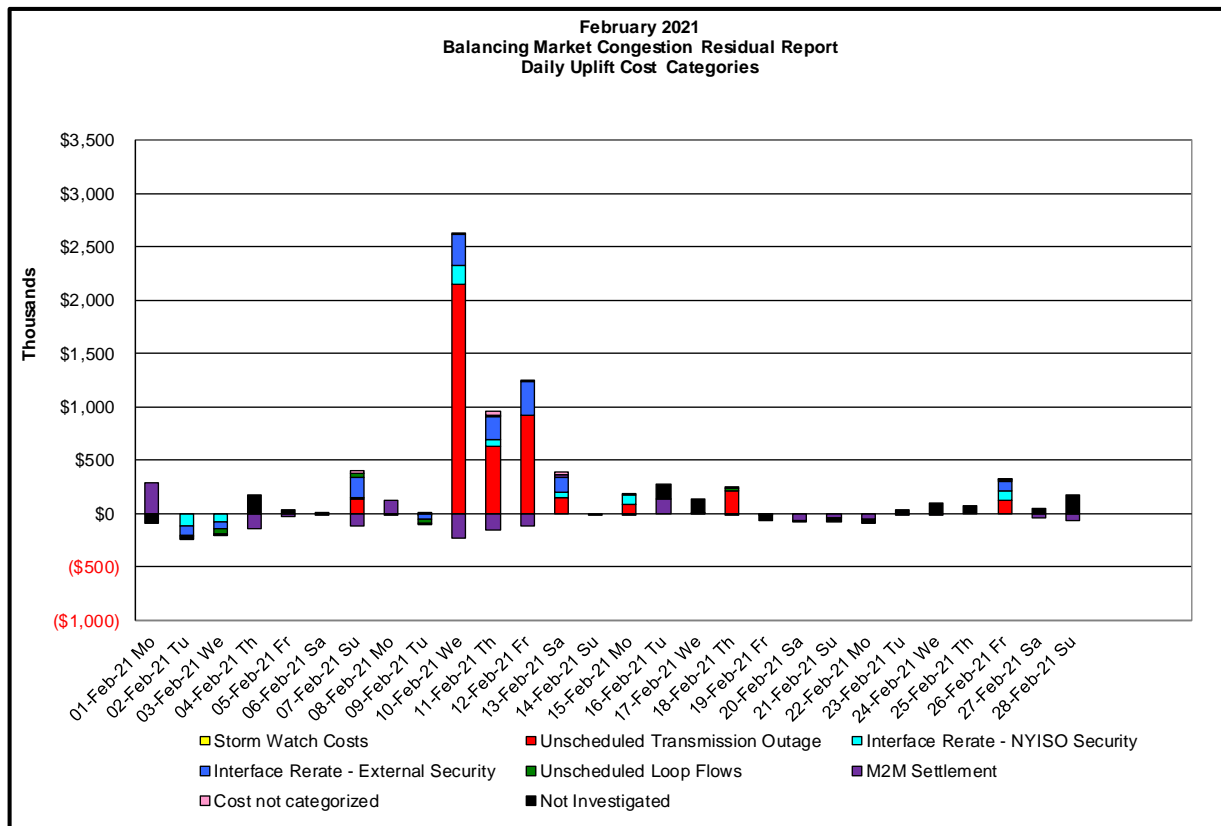
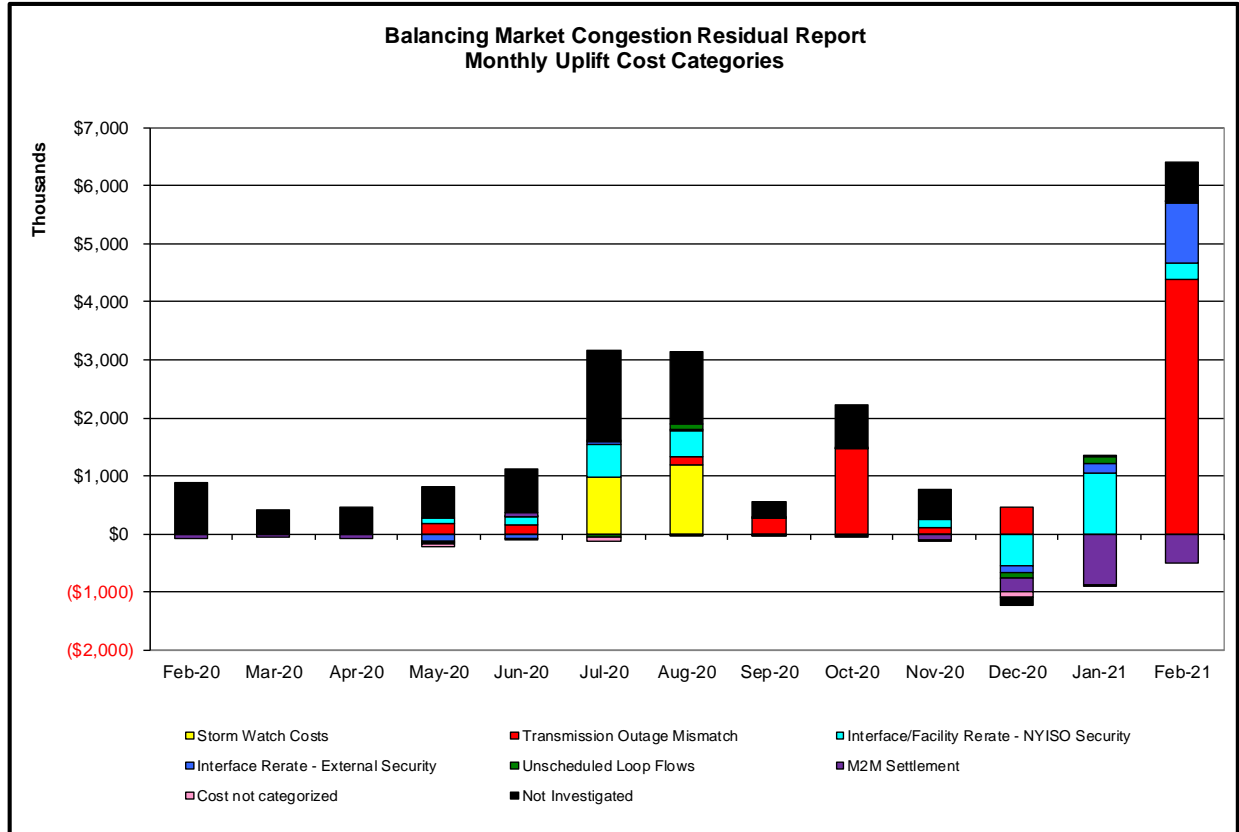


Forecasted Regional Value - CTS: Regional production cost savings for NY and PJM associated with intra-hour CTS transaction energy schedules using RTC/ITSCEd prices.
Forecasted Regional Value - LBMP: Regional production cost savings for NY and PJM associated with intra-hour LBMP transaction energy schedules using RTC/ITSCEd prices.
Forecasted NY Value: NY production cost savings associated with both CTS and LBMP transaction energy schedules using RTC prices.
Realized NY Value: NY production cost savings associated with both CTS and LBMP transaction energy schedules using RTD prices.



Market Performance Metrics





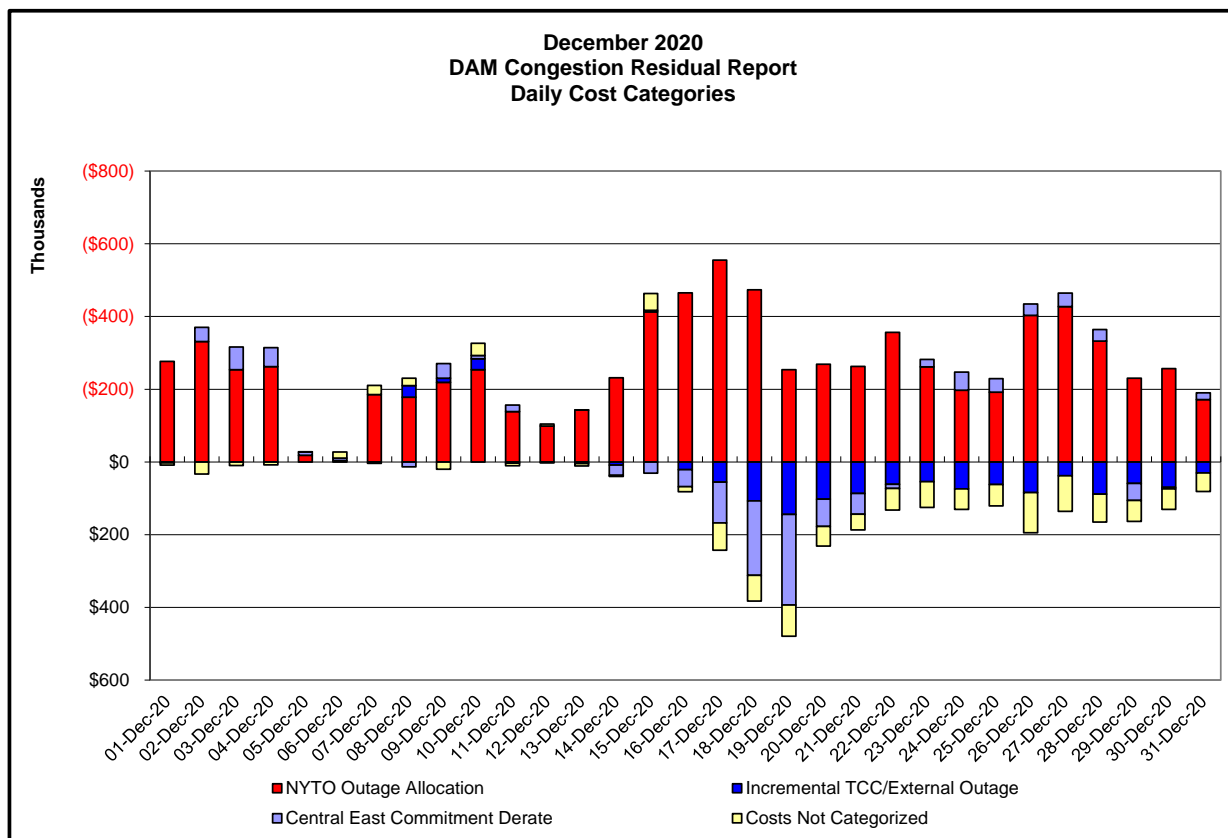
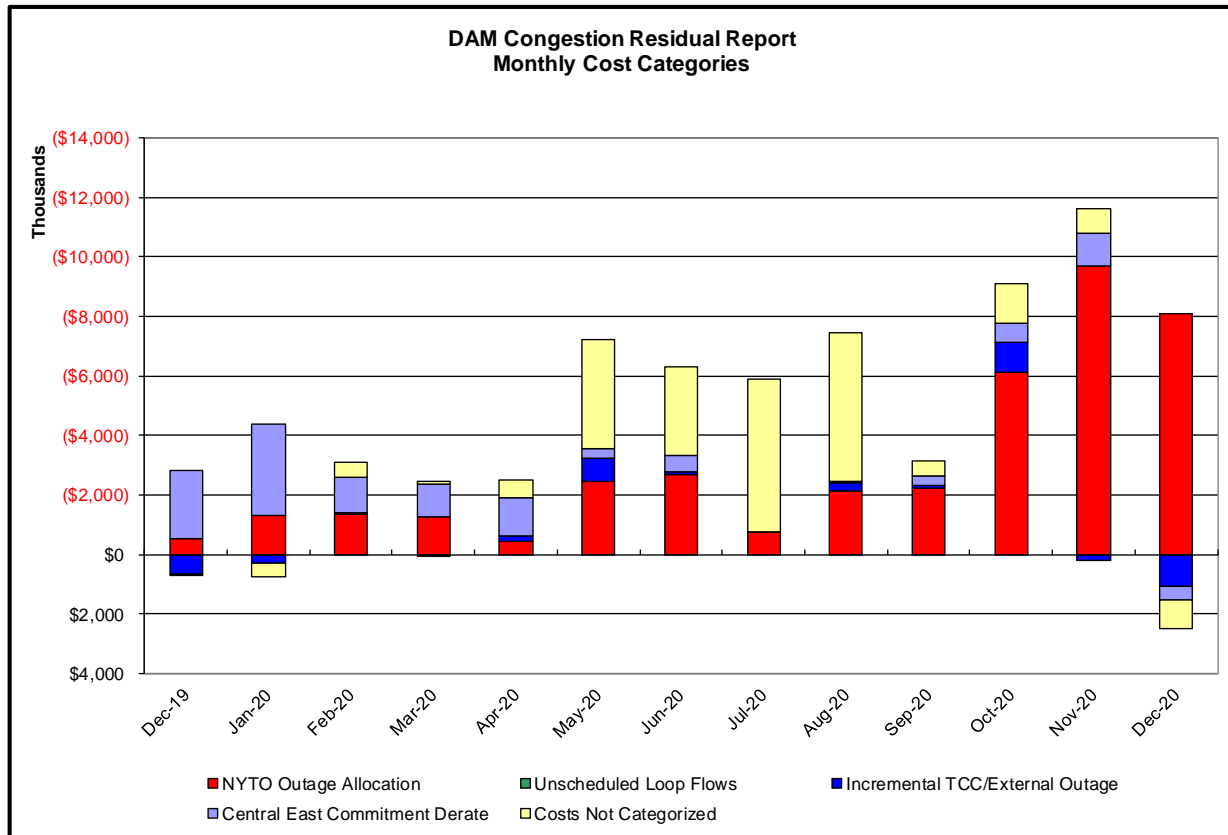
Day's investigated in February: 2,3,7,9,10,11,12,13,15,18,26			
Event	Date (yyyymmdd)	Hours	Description
	2/2/2021	12,13	NYCA DNI Ramp Limit
	2/2/2021	0-3,6-10,12-14,17-23	Uprate Central East
	2/2/2021	10,12-14	Uprate Freshkills-Willowbrook 138kV (#29211)
	2/2/2021	0,1,6-10,17-23	NE_AC - NY Scheduling Limit
	2/2/2021	7,8,17,18	IESO_AC - NY Scheduling Limit
	2/2/2021	6,8,17,20,21	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	2/2/2021	8	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	2/3/2021	0-4,6,10,14,18,23	Uprate Central East
	2/3/2021	10	Uprate Freshkills-Willowbrook 138kV (#29211)
	2/3/2021	10	Uprate East 179th Street-Hell Gate 138kV (#15055)
	2/3/2021	0-4,6,10,18,23	NE_AC - NY Scheduling Limit
	2/3/2021	1,2,4,6,10,14,18	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	2/7/2021	18-20	Forced outage of New Scotland-Leeds 345kV (#93)
	2/7/2021	18-20	Forced outage of Edic-New Scotland 345kV (#14)
	2/7/2021	22,23	Derate Central East
	2/7/2021	10,15,17	Uprate Central East
	2/7/2021	15	Uprate Freshkills-Willowbrook 138kV (#29211)
	2/7/2021	18-22	NE_AC ACTIVE DNI Ramp Limit
	2/7/2021	10,15,17,19,20	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	2/9/2021	11,12	Uprate Central East
	2/9/2021	14,17-20	Derate Dunwoodie-Shore Road 345kV (#Y50)
	2/9/2021	12	NE_NNC1385 - NY Scheduling Limit
	2/9/2021	11,12,16	HQ_CHAT-NY Scheduling Limit
	2/9/2021	12	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	2/10/2021	1-10,12-23	Forced outage of Edic-New Scotland 345kV (#14)
	2/10/2021	4,5,9,10,18,23	NYCA DNI Ramp Limit
	2/10/2021	2	Derate New Scotland 345/115kV (BK 1) for I/O BUS:ROTTDRM 31&38&BK7&C4
	2/10/2021	2-5,9,10,18,19,21,22	NE_AC DNI Ramp Limit
	2/10/2021	2,3	PJM_AC DNI Ramp Limit
	2/11/2021	0-5,21-23	Forced outage of Edic-New Scotland 345kV (#14)
	2/11/2021	21,23	NYCA DNI Ramp Limit
	2/11/2021	11-13,17	Uprate Central East
	2/11/2021	12,13	NE_NNC1385 - NY Scheduling Limit
	2/11/2021	0,23	PJM_AC DNI Ramp Limit
	2/11/2021	15,21-23	NE_AC DNI Ramp Limit
	2/11/2021	11,12,17,23	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	2/12/2021	0-20,22,23	Forced outage of Edic-New Scotland 345kV (#14)
	2/12/2021	20,22,23	HQ_CEDARS - NY Scheduling Limit
	2/12/2021	9,18,19	HQ_CHAT-NY Scheduling Limit
	2/12/2021	0,7-9,11-14,17,19,23	NE_AC DNI Ramp Limit
	2/13/2021	0	Forced outage of Edic-New Scotland 345kV (#14)
	2/13/2021	9-18	Extended outage Sprainbrook-East Garden City 345kV (#Y49)
	2/13/2021	0,9	NYCA DNI Ramp Limit
	2/13/2021	9-16,18	HQ_CEDARS - NY Scheduling Limit
	2/13/2021	9-16,18	HQ_CHAT-NY Scheduling Limit
	2/13/2021	17	NE_NNC1385 - NY Scheduling Limit
	2/13/2021	0	NE_AC DNI Ramp Limit
	2/15/2021	21-23	Forced outage East 13th Street-Farragut 345kV (#46)
	2/15/2021	23	NYCA DNI Ramp Limit
	2/15/2021	21-23	Derate Greenbush-Regeneron 115kV (#9)
	2/18/2021	8-12,14-17	Forced outage East 13th Street-Farragut 345kV (#46)
	2/18/2021	12,14,15,17	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	2/26/2021	5-19	Forced outage Chateaugay DC Converter GC1
	2/26/2021	10-13	Forced outage Hopatcong-Ramapo 500kV (#5018)
	2/26/2021	9,14,22	NYCA DNI Ramp Limit
	2/26/2021	21,22	Derate Central East
	2/26/2021	13,15,16	Derate Greenbush-Regeneron 115kV (#9)
	2/26/2021	5-13	Derate Packard 230/115 Bk3 for I/o TWR:PACKARD 77 & 78
	2/26/2021	19	NE_NNC1385 - NY Scheduling Limit
	2/26/2021	16-23	NE_AC DNI Ramp Limit
	2/26/2021	6	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	2/26/2021	22	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East

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

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

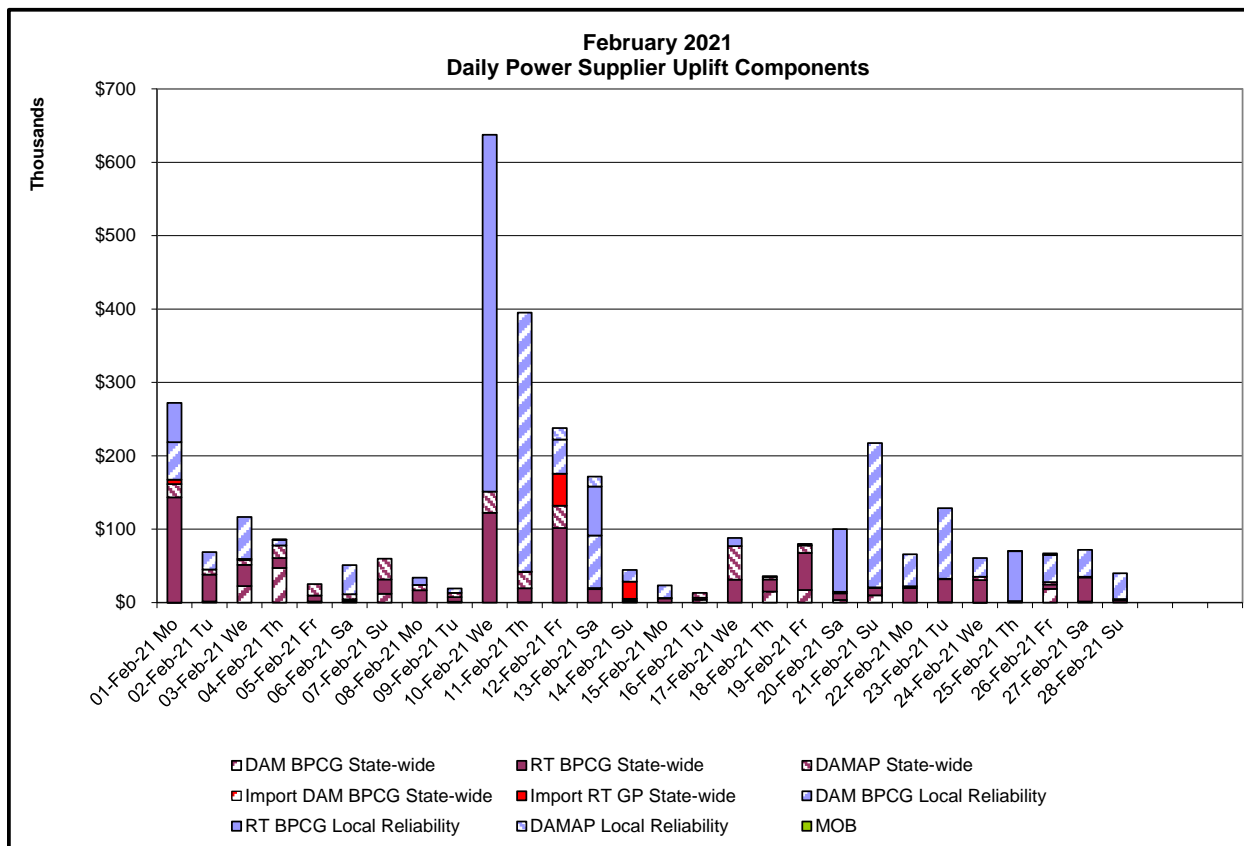
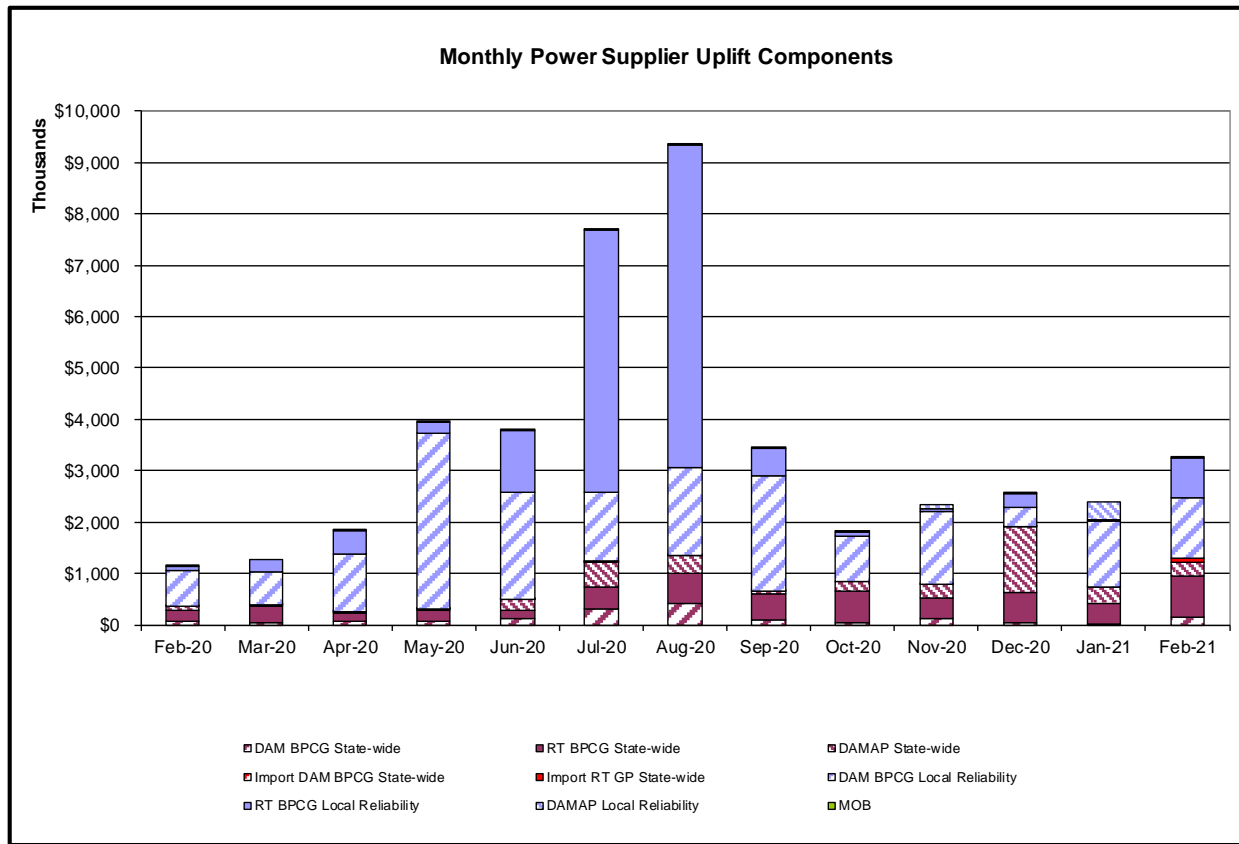
Monthly Balancing Market Congestion Report Assumptions/Notes

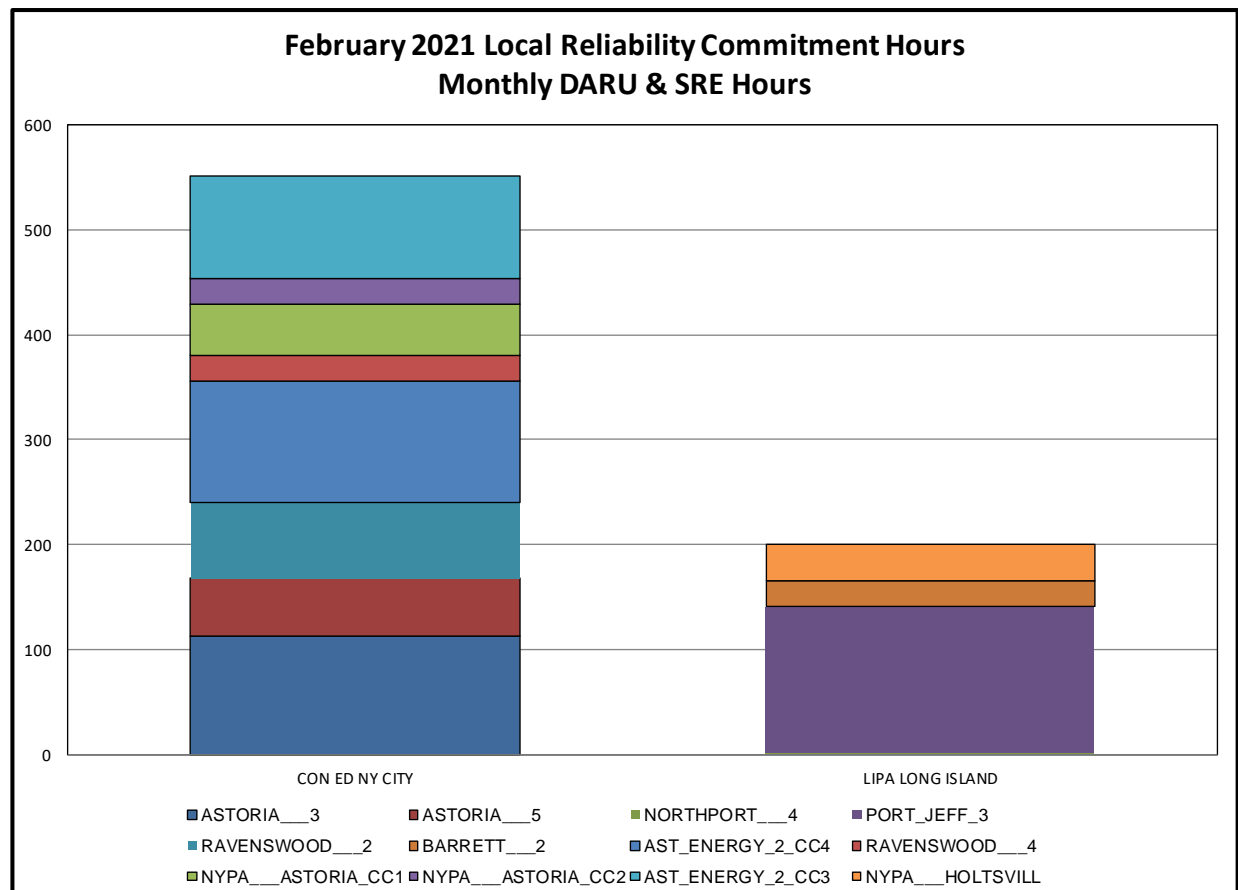
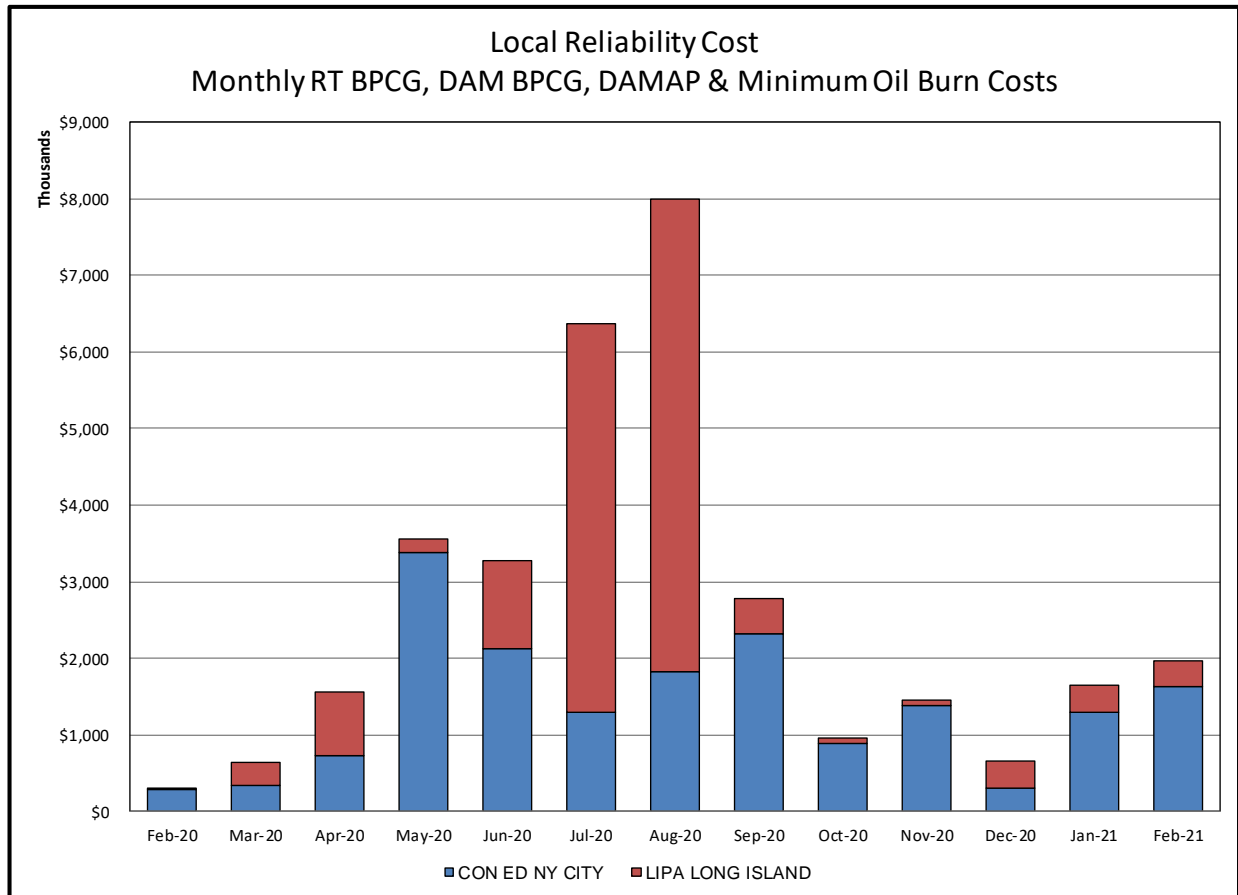
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

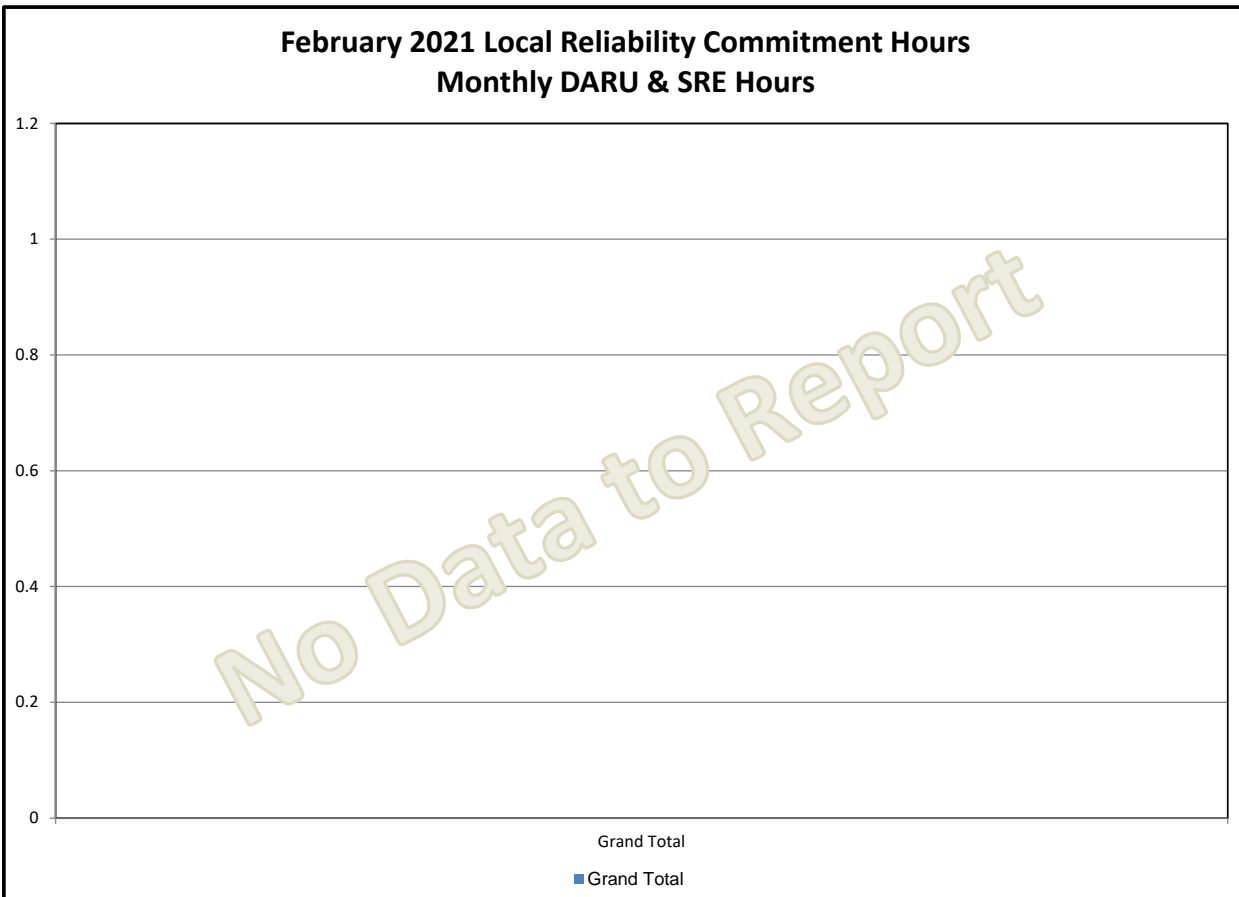
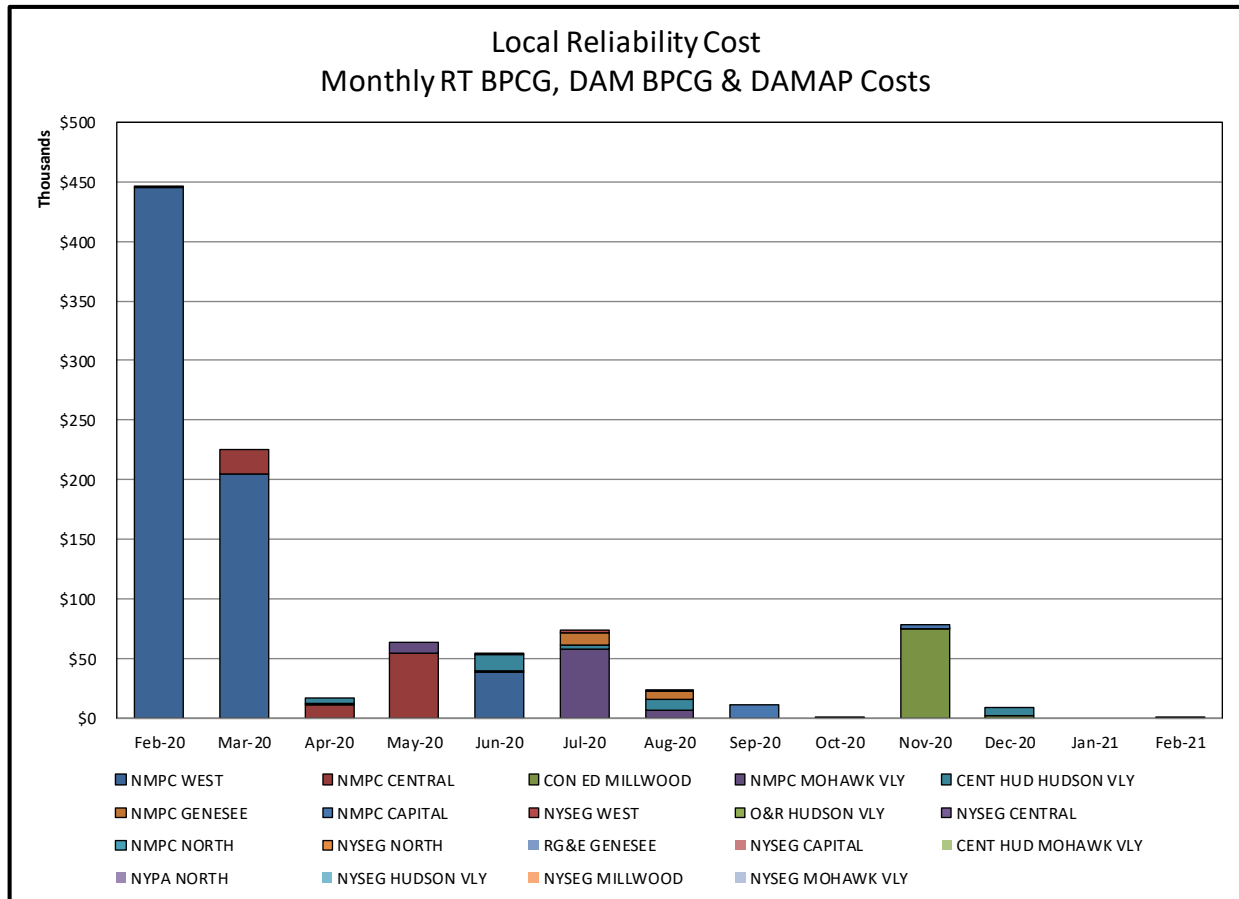


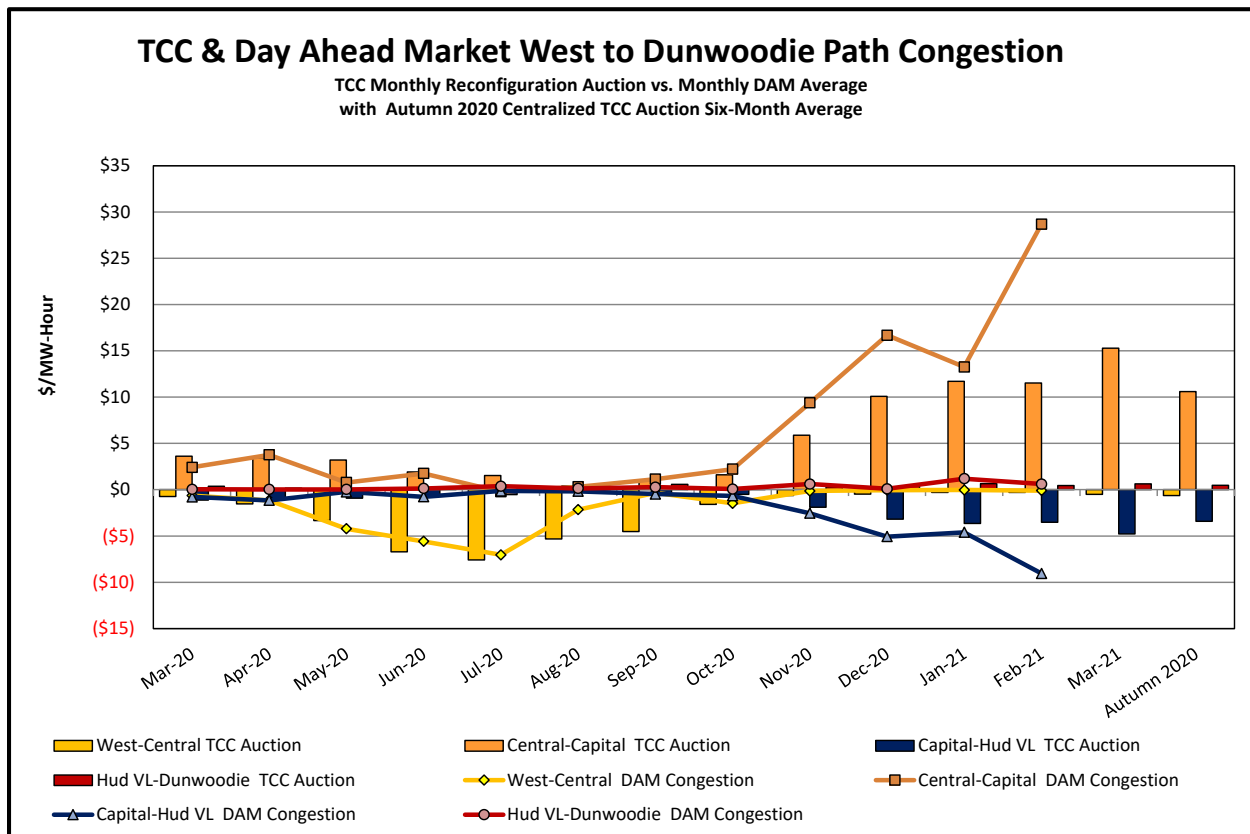
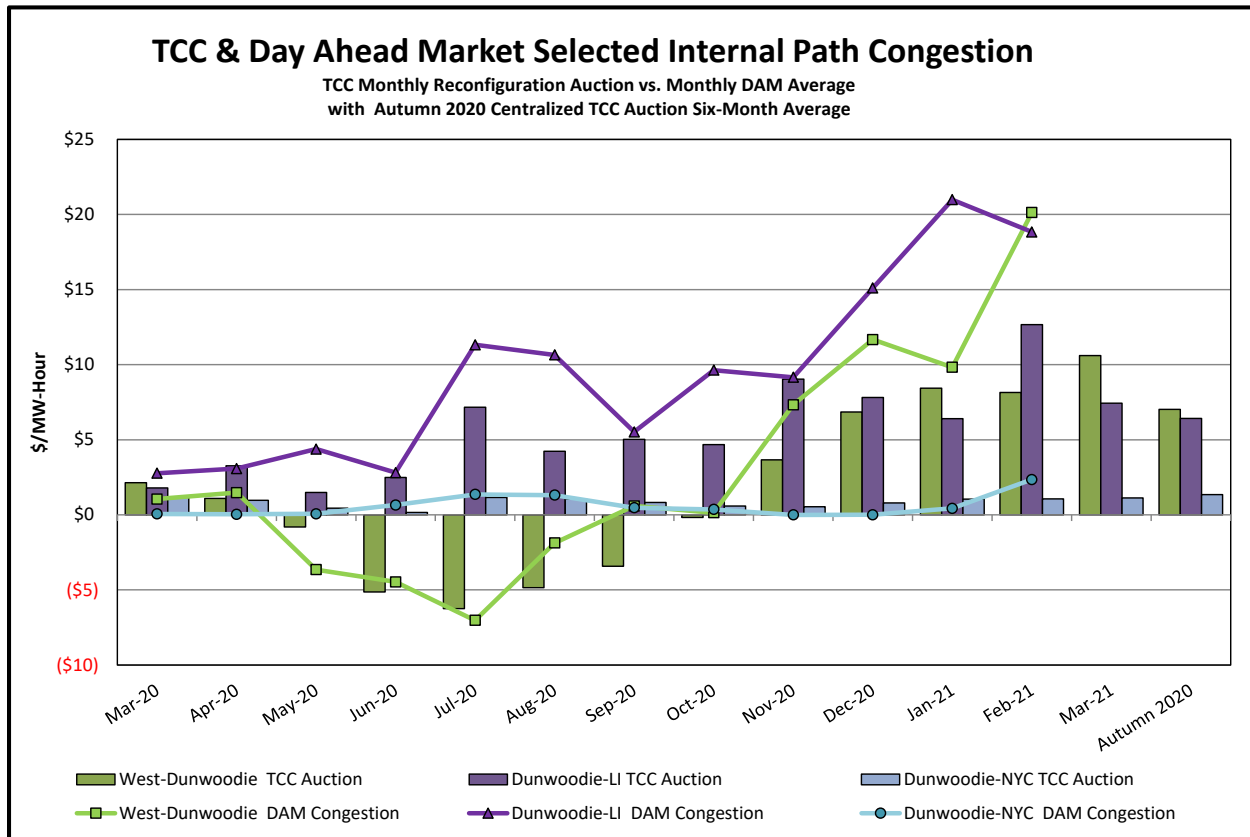
Day-Ahead Market Congestion Residual Categories

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



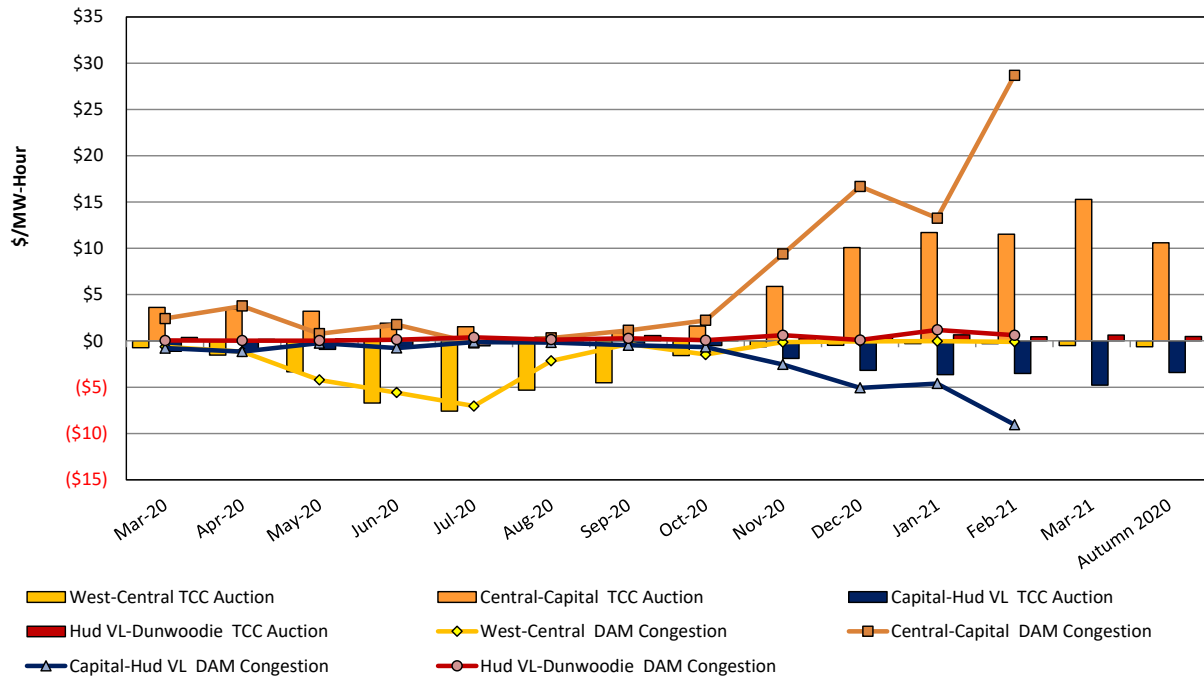


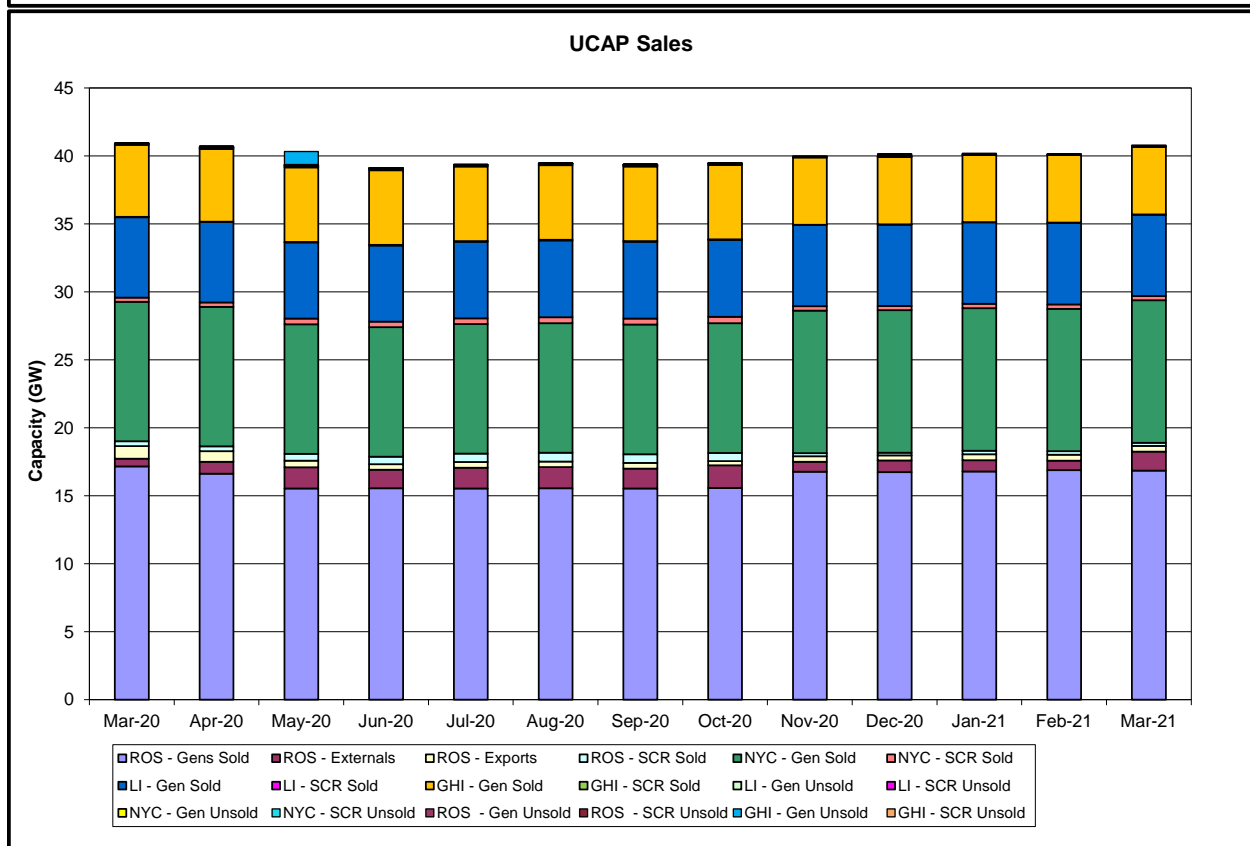
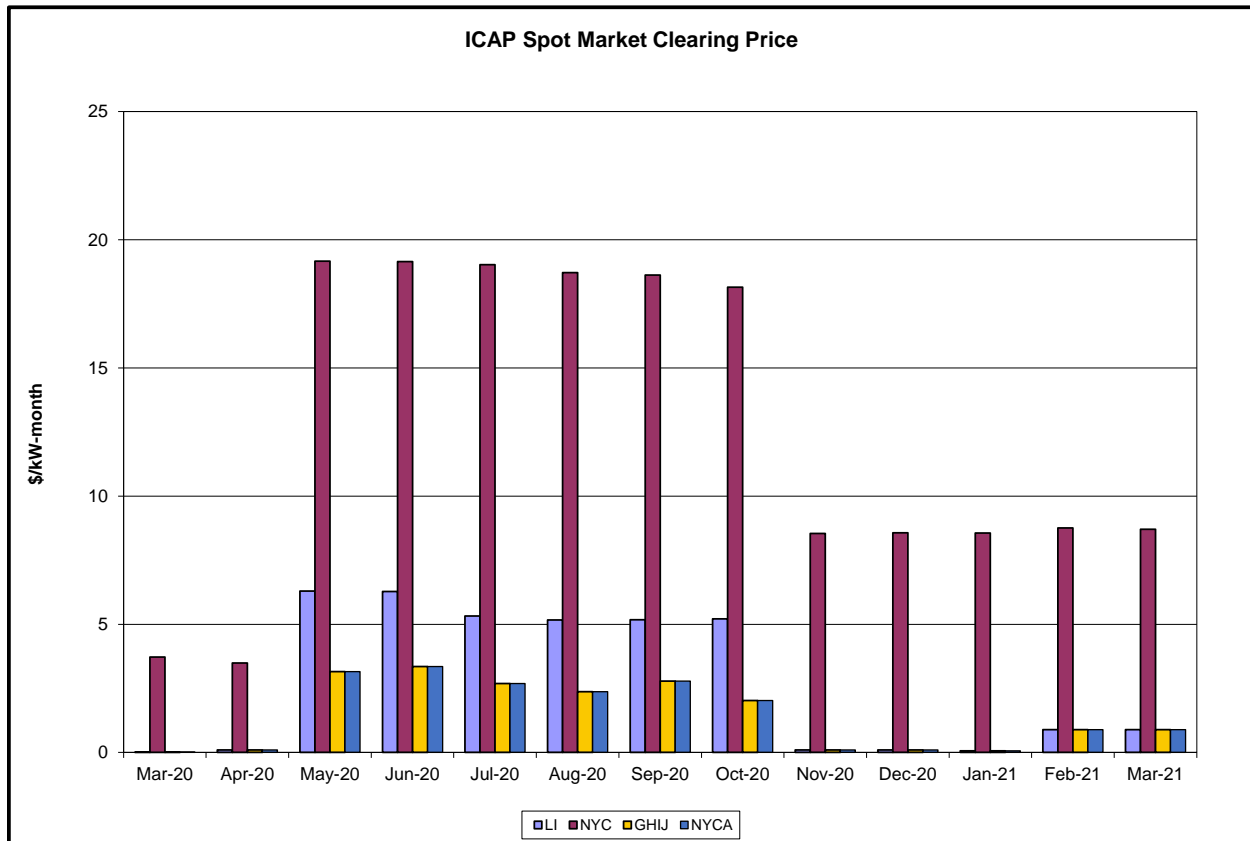




TCC & Day Ahead Market West to Dunwoodie Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average
with Autumn 2020 Centralized TCC Auction Six-Month Average



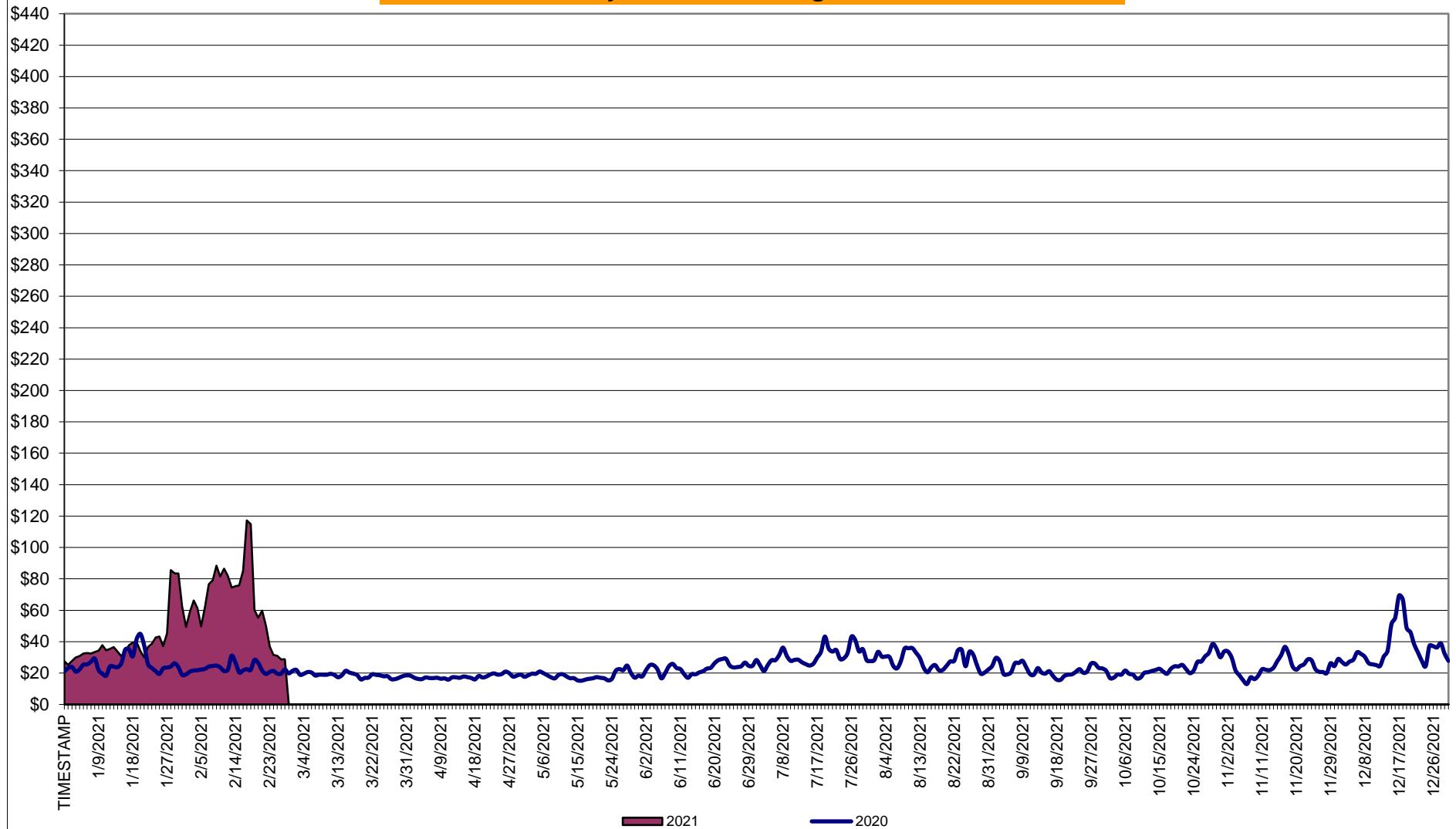


Market Performance Highlights

February 2021

- LBMP for February is \$63.70/MWh; higher than \$37.83/MWh in January 2021 and \$21.11/MWh in February 2020.
 - Day Ahead Load Weighted LBMPs and Real Time Load Weighted LBMPs are higher compared to January.
- February 2021 average year-to-date monthly cost of \$52.90/MWh is a 108% increase from \$25.40/MWh in February 2020.
- Average daily sendout is 434 GWh/day in February; higher than 427 GWh/day in January 2021 and 417 GWh/day in February 2020.
- Natural gas prices and distillate prices are higher compared to the previous month.
 - Natural Gas (Transco Z6 NY) was \$5.22/MMBtu, up from \$2.94/MMBtu in January.
 - Natural gas prices are up 179.8% year-over-year.
 - Jet Kerosene Gulf Coast was \$11.79/MMBtu, up from \$10.45/MMBtu in January.
 - Ultra Low Sulfur No.2 Diesel NY Harbor was \$12.71/MMBtu, up from \$11.17/MMBtu in January.
 - Distillate prices are up 6.2% year-over-year.
- Uplift per MWh is higher compared to the previous month.
 - Uplift (not including NYISO cost of operations) is (\$0.15)/MWh; higher than (\$0.31)/MWh in January.
 - Local Reliability Share is \$0.15/MWh, higher than \$0.09/MWh in January.
 - Statewide Share is (\$0.30)/MWh, higher than (\$0.40)/MWh in January.
 - TSA \$ per NYC MWh is \$0.00/MWh.
 - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than January.

Daily NYISO Average Cost/MWh (Energy & Ancillary Services)*
2020 Annual Average \$25.62/MWh
February 2020 YTD Average \$25.03/MWh
February 2021 YTD Average \$52.99/MWh



* Excludes ICAP payments.

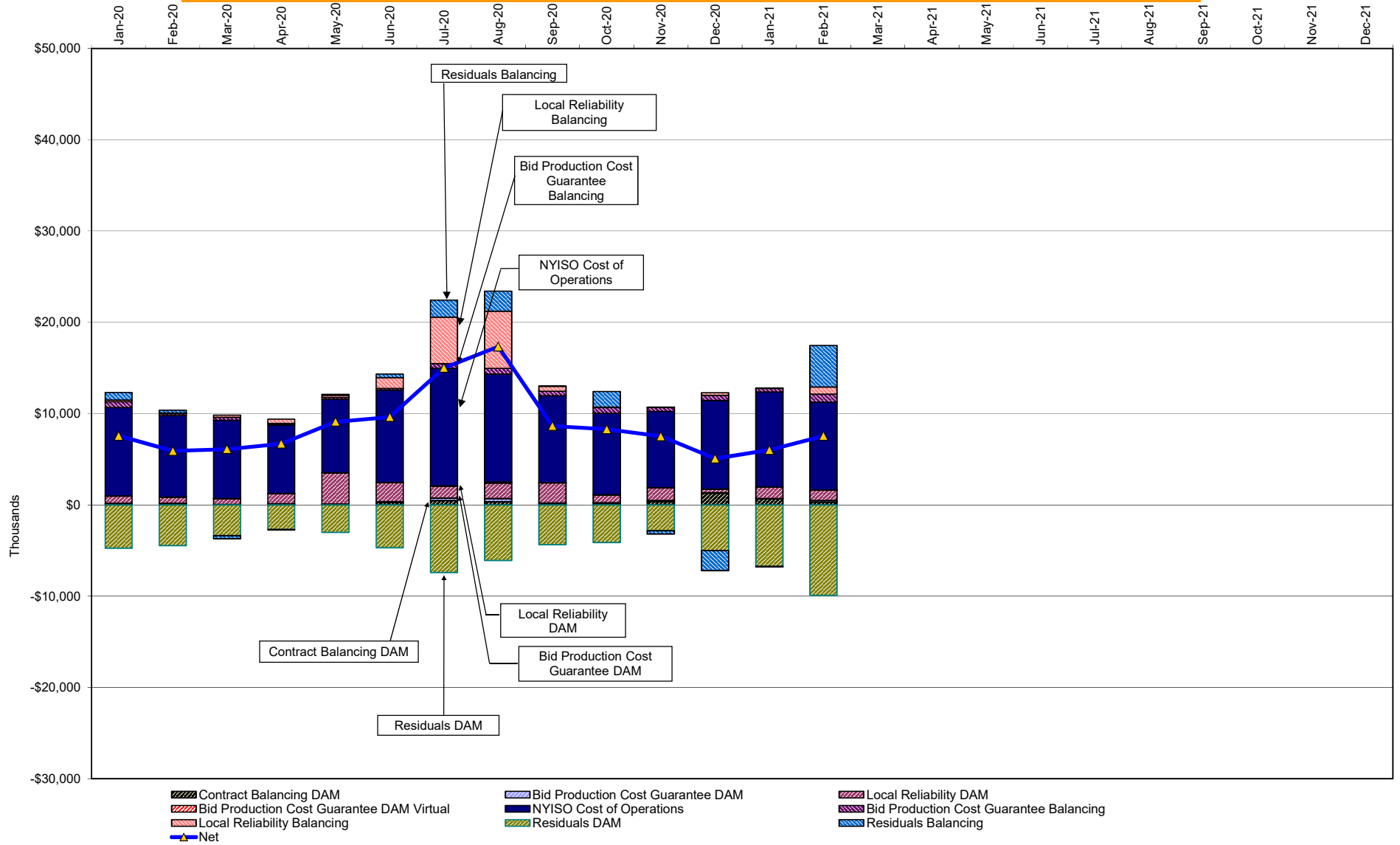
NYISO Average Cost/MWh (Energy and Ancillary Services) *
from the LBMP Customer point of view

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										
NTAC	1.35	1.20										
Reserve	0.49	0.81										
Regulation	0.07	0.13										
NYISO Cost of Operations	0.74	0.74										
FERC Fee Recovery	0.08	0.09										
Uplift	(0.31)	(0.15)										
Uplift: Local Reliability Share	0.09	0.15										
Uplift: Statewide Share	(0.40)	(0.30)										
Voltage Support and Black Start	0.43	0.43										
Avg Monthly Cost	40.61	66.87										
 Avg YTD Cost	40.61	52.90										
 TSA \$ per NYC MWh	0.00	0.00										
 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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
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
NTAC	0.91	0.70	0.86	0.91	1.05	0.95	1.24	1.03	0.78	0.84	1.05	1.35
Reserve	0.46	0.43	0.47	0.50	0.53	0.45	0.39	0.39	0.42	0.61	0.51	0.49
Regulation	0.09	0.08	0.09	0.08	0.10	0.08	0.06	0.07	0.09	0.11	0.09	0.08
NYISO Cost of Operations	0.68	0.69	0.68	0.66	0.71	0.74	0.76	0.75	0.74	0.73	0.69	0.70
FERC Fee Recovery	0.08	0.09	0.09	0.10	0.11	0.09	0.06	0.07	0.09	0.10	0.10	0.08
Uplift	(0.15)	(0.23)	(0.19)	(0.08)	0.09	(0.05)	0.07	0.17	(0.07)	(0.05)	(0.07)	(0.33)
Uplift: Local Reliability Share	0.07	0.06	0.07	0.14	0.32	0.24	0.38	0.50	0.22	0.08	0.12	0.05
Uplift: Statewide Share	(0.22)	(0.29)	(0.26)	(0.21)	(0.23)	(0.29)	(0.31)	(0.33)	(0.28)	(0.13)	(0.19)	(0.38)
Voltage Support and Black Start	0.44	0.44	0.44	0.43	0.45	0.45	0.46	0.46	0.45	0.45	0.44	0.45
Avg Monthly Cost	27.29	23.32	19.55	18.38	19.16	24.09	31.91	29.07	23.03	23.70	25.40	36.52
 Avg YTD Cost	27.29	25.40	23.48	22.38	21.82	22.21	24.11	24.88	24.69	24.62	24.68	25.70
 TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.04	0.18	0.54	0.00	0.00	0.00	0.00

* Excludes ICAP payments.
Market Mitigation and Analysis
Prepared: 3/8/2021 12:27 PM

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

NYISO Dollar Flows - Uplift - OATT Schedule 1 components - Data through February 28, 2021



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>
<u>Day Ahead Market MWh</u>	14,108,848	13,325,329										
DAM LSE Internal LBMP Energy Sales	60%	59%										
DAM External TC LBMP Energy Sales	5%	4%										
DAM Bilateral - Internal Bilaterals	31%	30%										
DAM Bilateral - Import/Non-LBMP Market Bilaterals	1%	4%										
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%										
DAM Bilateral - Wheel Through Bilaterals	2%	2%										
<u>Balancing Energy Market MWh</u>	29,179	-308,157										
Balancing Energy LSE Internal LBMP Energy Sales	-215%	-151%										
Balancing Energy External TC LBMP Energy Sales	374%	59%										
Balancing Energy Bilateral - Internal Bilaterals	49%	4%										
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%										
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	50%	5%										
Balancing Energy Bilateral - Wheel Through Bilaterals	-158%	-17%										
<u>Transactions Summary</u>												
LBMP	65%	62%										
Internal Bilaterals	31%	31%										
Import Bilaterals	1%	4%										
Export Bilaterals	2%	2%										
Wheels Through	2%	2%										
<u>Market Share of Total Load</u>												
Day Ahead Market	99.8%	102.4%										
Balancing Energy +	0.2%	-2.4%										
Total MWH	14,138,027	13,017,172										
Average Daily Energy Sendout/Month GWh	427	434										

<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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Day Ahead Market MWh</u>	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
DAM LSE Internal LBMP Energy Sales	56%	56%	59%	54%	55%	58%	65%	63%	60%	56%	57%	59%
DAM External TC LBMP Energy Sales	6%	5%	5%	7%	4%	3%	2%	4%	4%	5%	5%	5%
DAM Bilateral - Internal Bilaterals	30%	30%	27%	30%	31%	29%	26%	27%	30%	32%	33%	31%
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	6%	6%	6%	5%	3%	3%	2%	3%	3%	2%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	0%	2%
<u>Balancing Energy Market MWh</u>	-26,753	-142,168	144,076	22,599	-137,565	-180,149	403,914	212,307	-173,115	-89,451	-54,598	156,891
Balancing Energy LSE Internal LBMP Energy Sales	-1080%	-221%	-85%	-884%	-187%	-134%	85%	99%	-95%	-220%	-459%	-12%
Balancing Energy External TC LBMP Energy Sales	1156%	181%	240%	1233%	137%	99%	35%	43%	104%	187%	382%	107%
Balancing Energy Bilateral - Internal Bilaterals	62%	5%	12%	55%	12%	7%	2%	1%	0%	4%	3%	7%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	9%	6%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	127%	16%	18%	92%	12%	5%	2%	4%	7%	17%	33%	11%
Balancing Energy Bilateral - Wheel Through Bilaterals	-365%	-81%	-85%	-396%	-74%	-77%	-24%	-46%	-116%	-107%	-69%	-19%
<u>Transactions Summary</u>												
LBMP	62%	62%	65%	61%	59%	62%	68%	67%	64%	61%	62%	64%
Internal Bilaterals	31%	31%	27%	30%	32%	30%	26%	27%	31%	32%	33%	31%
Import Bilaterals	5%	5%	6%	6%	6%	5%	3%	3%	2%	3%	3%	2%
Export Bilaterals	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%
Wheels Through	0%	1%	0%	0%	0%	1%	1%	1%	1%	2%	0%	2%
<u>Market Share of Total Load</u>												
Day Ahead Market	100.2%	101.1%	98.9%	99.8%	101.2%	101.3%	97.6%	98.7%	101.3%	100.7%	100.5%	98.9%
Balancing Energy +	-0.2%	-1.1%	1.1%	0.2%	-1.2%	-1.3%	2.4%	1.3%	-1.3%	-0.7%	-0.5%	1.1%
Total MWH	14,167,856	13,030,501	12,640,075	11,394,989	11,324,755	13,645,029	17,033,251	15,883,935	12,949,426	12,249,187	12,102,682	13,905,071
Average Daily Energy Sendout/Month GWh	423	417	375	344	345	430	530	489	408	367	377	417

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

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

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

Virtual Transactions are not reflected in this chart.

NYISO Markets 2021 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>DAY AHEAD LBMP</u>												
Price *	\$34.37	\$57.30										
Standard Deviation	\$14.58	\$24.48										
Load Weighted Price **	\$35.31	\$58.67										
<u>RTC LBMP</u>												
Price *	\$34.32	\$49.25										
Standard Deviation	\$20.93	\$23.34										
Load Weighted Price **	\$35.40	\$50.48										
<u>REAL TIME LBMP</u>												
Price *	\$34.59	\$48.22										
Standard Deviation	\$29.47	\$26.46										
Load Weighted Price **	\$35.89	\$49.57										
Average Daily Energy Sendout/Month GWh	427	434										

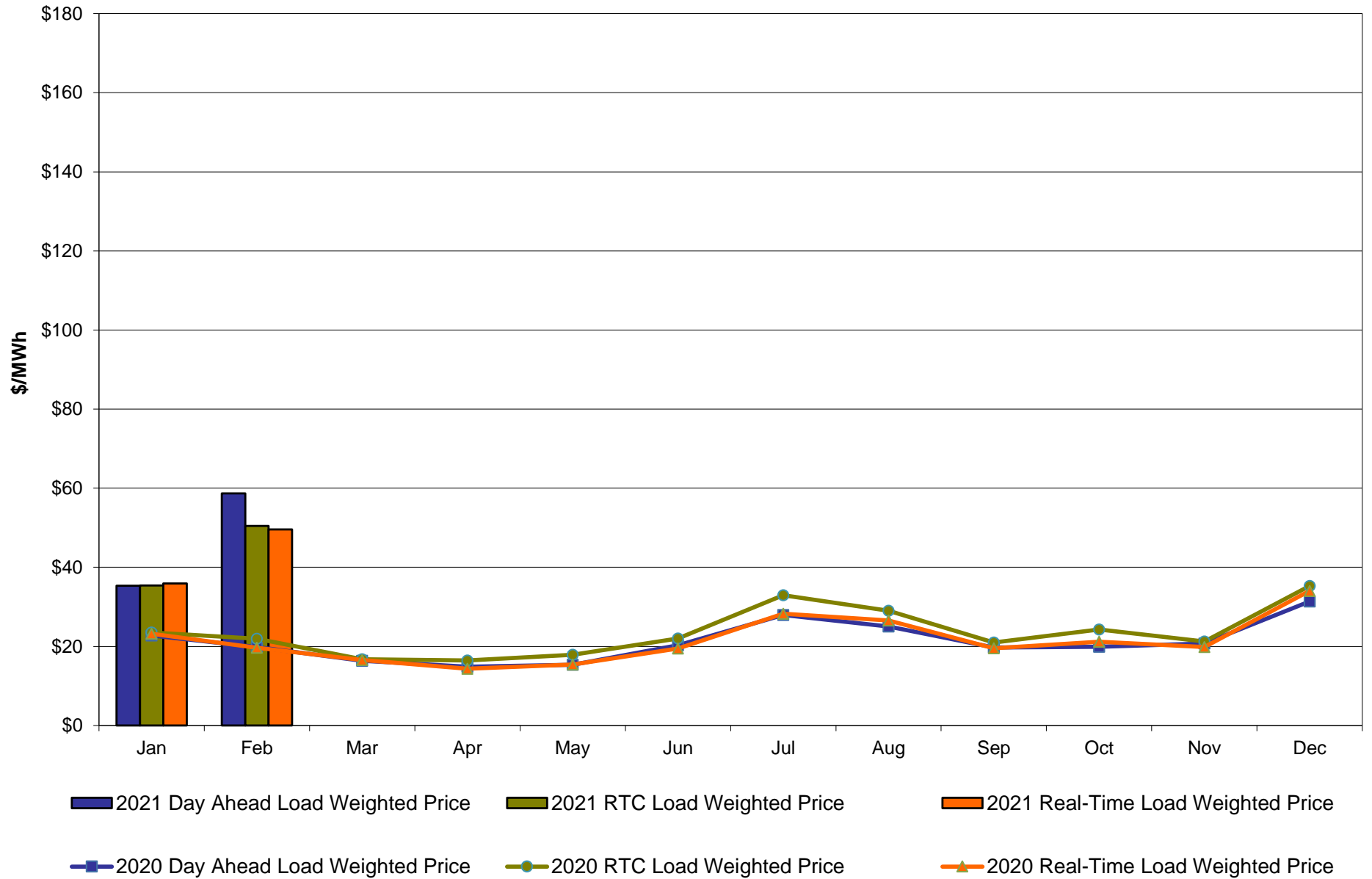
NYISO Markets 2020 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>DAY AHEAD LBMP</u>												
Price *	\$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
<u>RTC LBMP</u>												
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
Standard Deviation	\$9.33	\$53.30	\$4.84	\$5.17	\$8.61	\$11.26	\$17.92	\$17.17	\$11.37	\$14.44	\$14.19	\$25.41
Load Weighted Price **	\$23.50	\$21.94	\$16.74	\$16.44	\$17.89	\$22.01	\$32.92	\$29.01	\$20.99	\$24.25	\$21.23	\$35.28
<u>REAL TIME LBMP</u>												
Price *	\$22.53	\$19.29	\$16.24	\$14.14	\$14.90	\$18.35	\$26.56	\$24.68	\$18.63	\$20.44	\$18.96	\$32.72
Standard Deviation	\$11.90	\$8.68	\$7.48	\$6.98	\$8.35	\$9.33	\$16.45	\$13.95	\$7.15	\$12.01	\$12.66	\$24.29
Load Weighted Price **	\$23.20	\$19.68	\$16.58	\$14.35	\$15.42	\$19.46	\$28.27	\$26.53	\$19.54	\$21.15	\$19.84	\$34.04
Average Daily Energy Sendout/Month GWh	423	417	375	344	345	430	530	489	408	367	377	417

* Average zonal load weighted prices.

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

NYISO Monthly Average Internal LBMPs 2020 - 2021

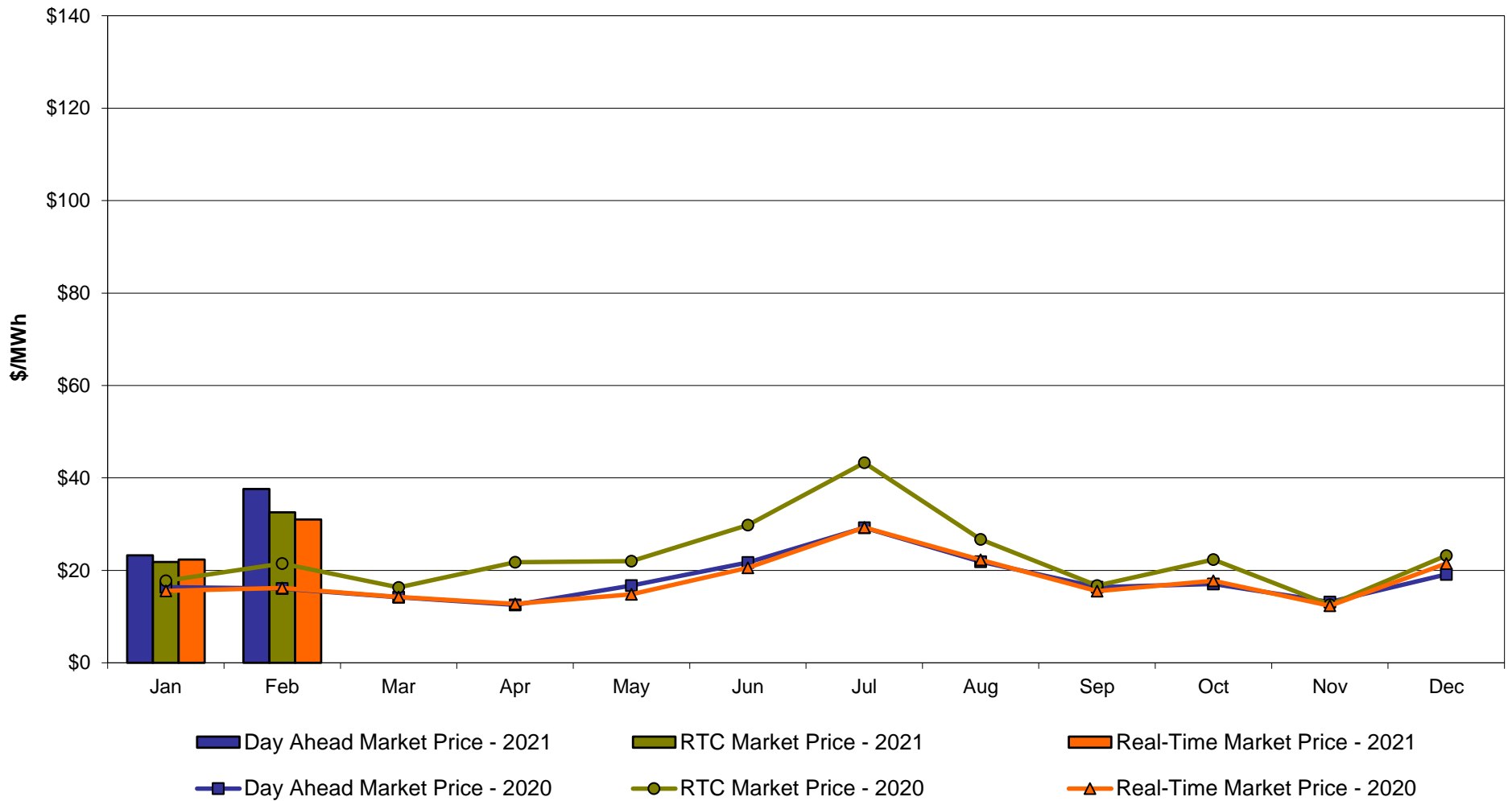


February 2021 Zonal LBMP Statistics for NYISO (\$/MWh)

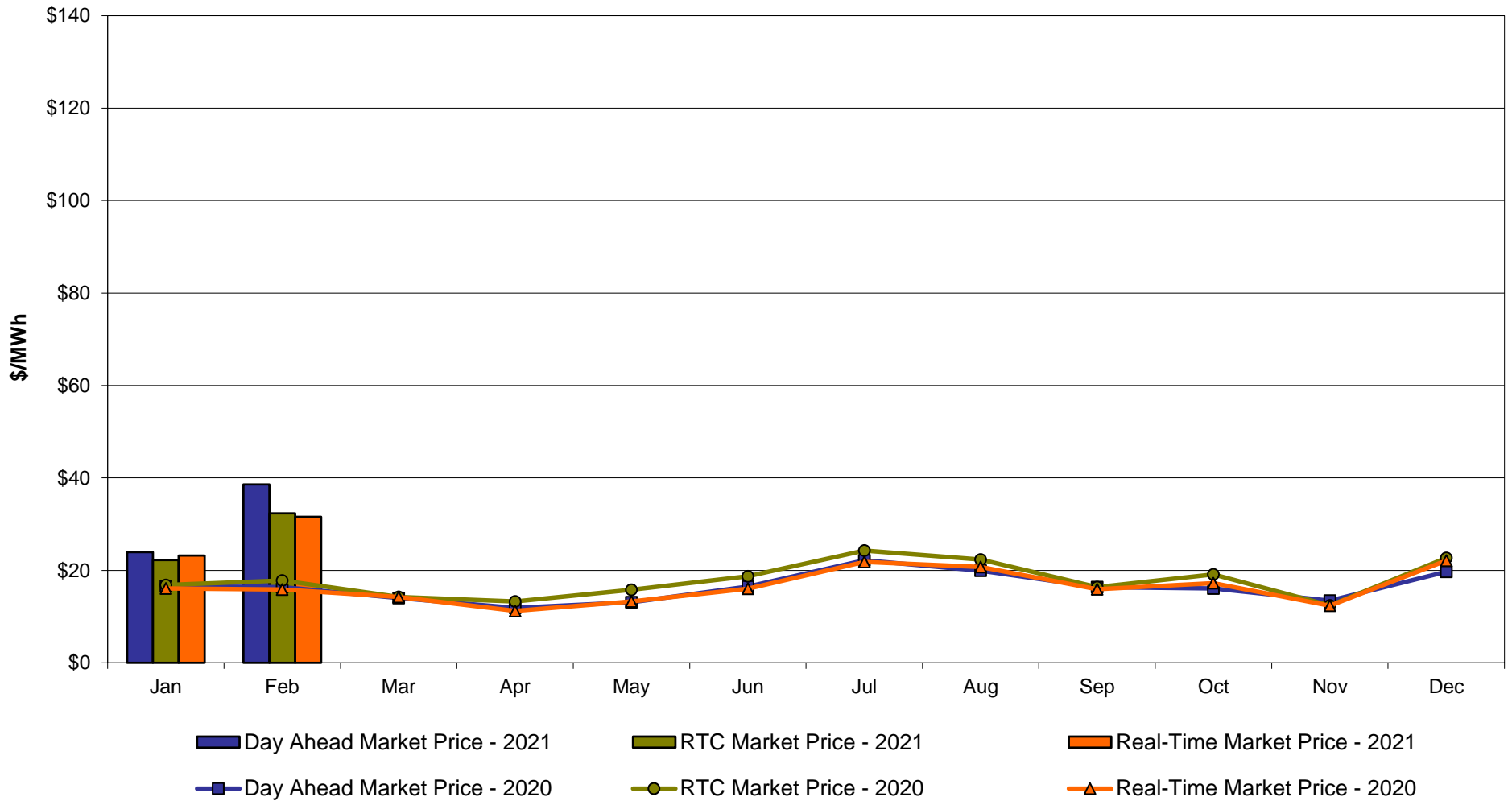
	<u>WEST Zone A</u>	<u>GENESEE Zone B</u>	<u>NORTH Zone D</u>	<u>CENTRAL Zone C</u>	<u>MOHAWK VALLEY Zone E</u>	<u>CAPITAL Zone F</u>	<u>HUDSON VALLEY Zone G</u>	<u>MILLWOOD Zone H</u>	<u>DUNWOODIE Zone I</u>	<u>NEW YORK CITY Zone J</u>	<u>LONG ISLAND Zone K</u>
<u>DAY AHEAD LBMP</u>											
Unweighted Price *	37.61	36.66	33.28	38.58	40.09	69.97	61.05	62.22	62.10	64.78	81.92
Standard Deviation	23.49	23.77	25.34	24.17	25.05	25.34	23.81	24.94	24.91	26.71	30.43
<u>RTC LBMP</u>											
Unweighted Price *	32.54	30.56	28.35	32.32	34.02	62.96	50.83	51.59	51.48	52.63	78.62
Standard Deviation	25.19	23.40	26.02	23.77	24.80	31.93	22.00	22.24	22.28	23.95	67.98
<u>REAL TIME LBMP</u>											
Unweighted Price *	31.01	29.94	27.13	31.56	32.89	62.24	51.31	52.11	52.01	53.34	73.20
Standard Deviation	35.46	35.99	40.09	35.41	36.15	42.55	26.49	26.86	26.85	28.46	45.62
	<u>ONTARIO IESO Zone O</u>	<u>HYDRO QUEBEC (Wheel) Zone M</u>	<u>HYDRO QUEBEC (Import/Export) Zone M</u>	<u>PJM Zone P</u>	<u>NEW ENGLAND Zone N</u>	<u>CROSS SOUND CABLE Controllable Line</u>	<u>NORTHPORT- NORWALK Controllable Line</u>	<u>NEPTUNE Controllable Line</u>	<u>LINDEN VFT Controllable Line</u>	<u>HUDSON Controllable Line</u>	<u>Dennison Controllable Line</u>
<u>DAY AHEAD LBMP</u>											
Unweighted Price *	35.83	33.11	33.11	35.83	71.01	49.79	81.92	76.46	32.68	62.82	81.46
Standard Deviation	22.72	25.15	25.15	22.72	26.57	22.31	30.41	29.39	24.84	25.76	30.17
<u>RTC LBMP</u>											
Unweighted Price *	28.66	24.20	24.20	28.66	69.42	41.66	78.53	77.77	28.09	51.98	78.28
Standard Deviation	21.13	26.44	26.44	21.13	32.85	20.71	68.08	67.71	25.60	23.81	67.87
<u>REAL TIME LBMP</u>											
Unweighted Price *	28.79	23.90	23.90	28.79	64.40	41.58	73.18	69.16	22.62	52.93	72.87
Standard Deviation	34.54	39.38	39.38	34.54	38.23	25.89	45.68	49.90	36.75	28.56	45.44

* Straight LBMP averages

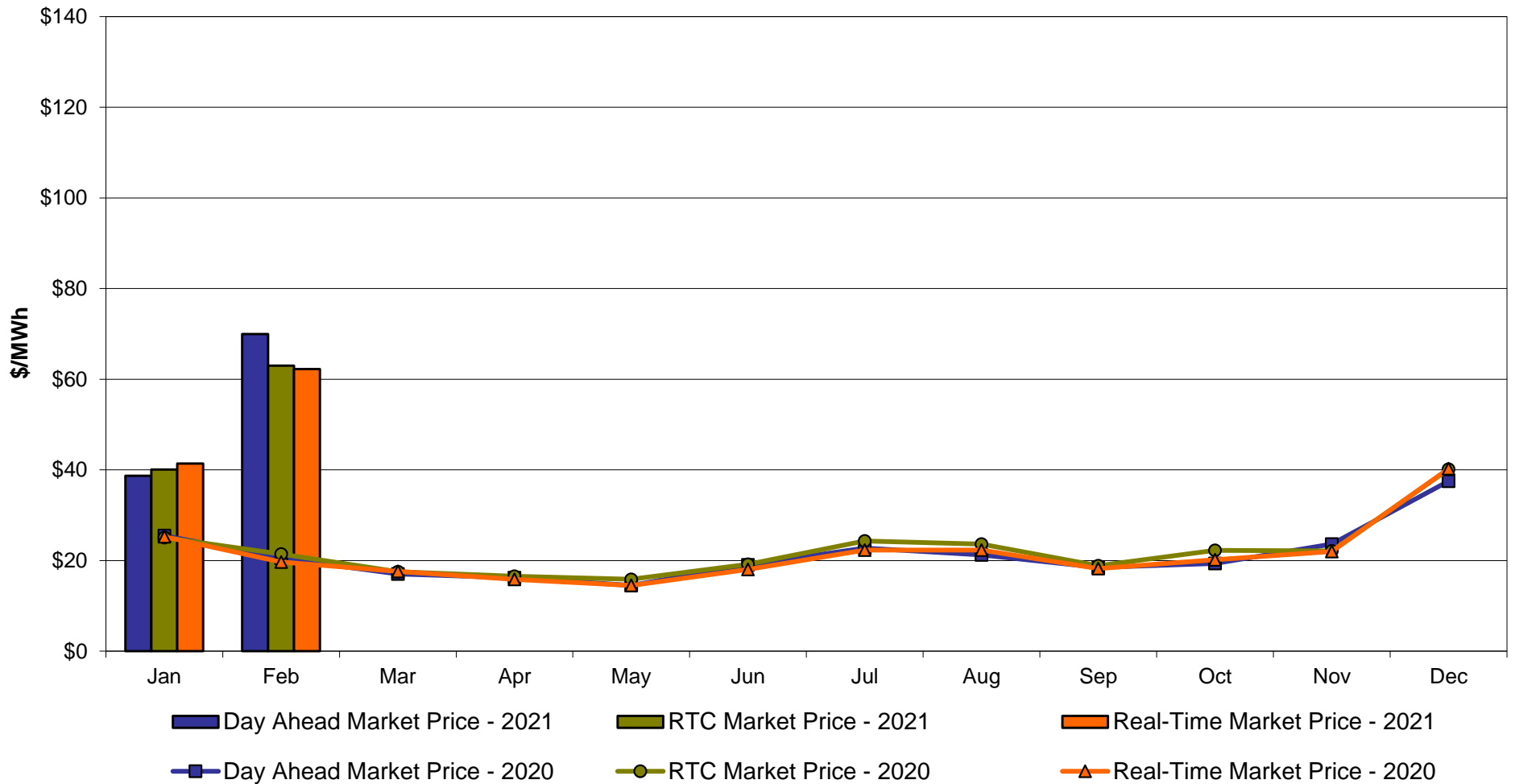
West Zone A
Monthly Average LBMP Prices 2020 - 2021



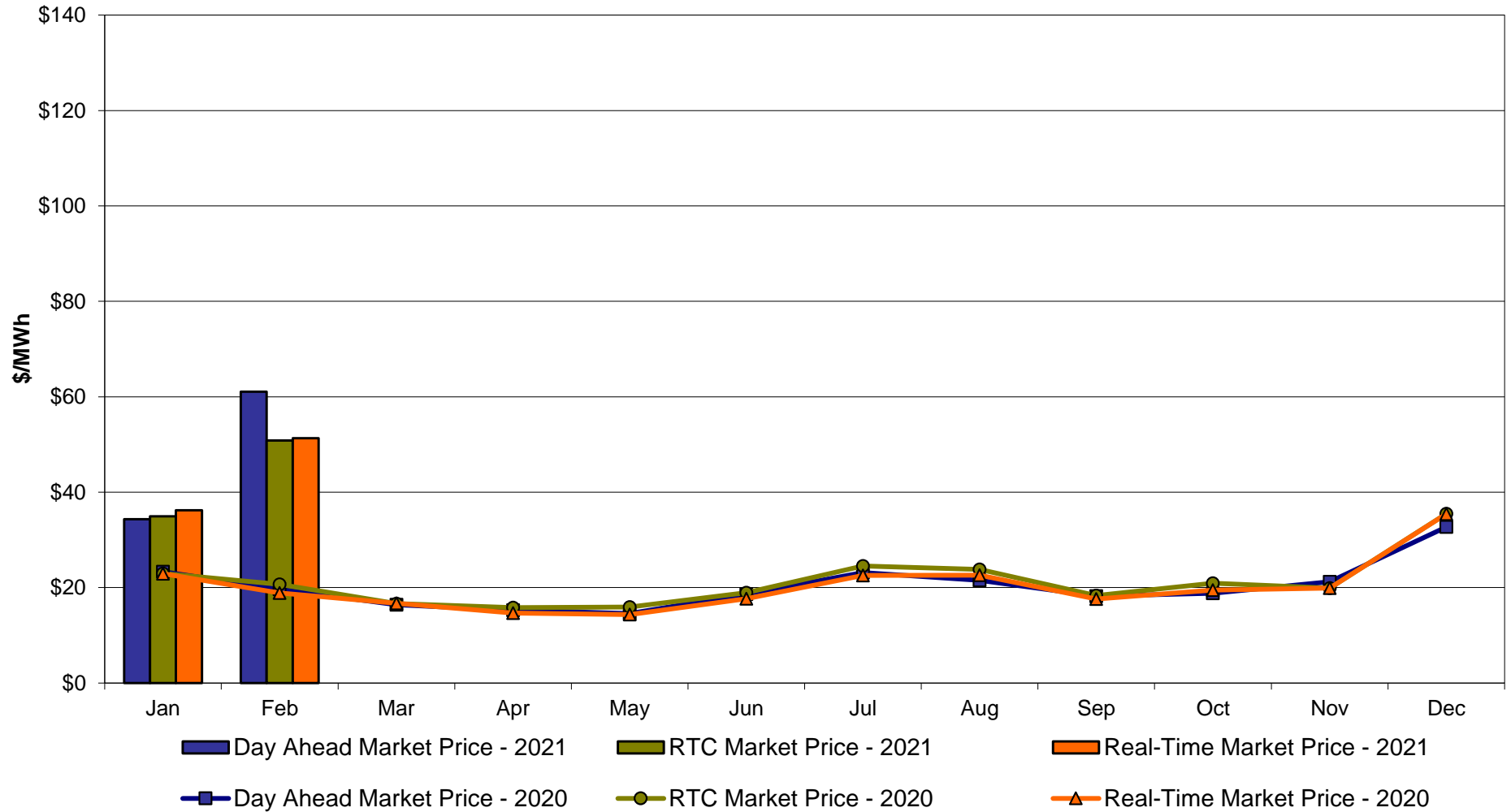
Central Zone C Monthly Average LBMP Prices 2019 - 2020



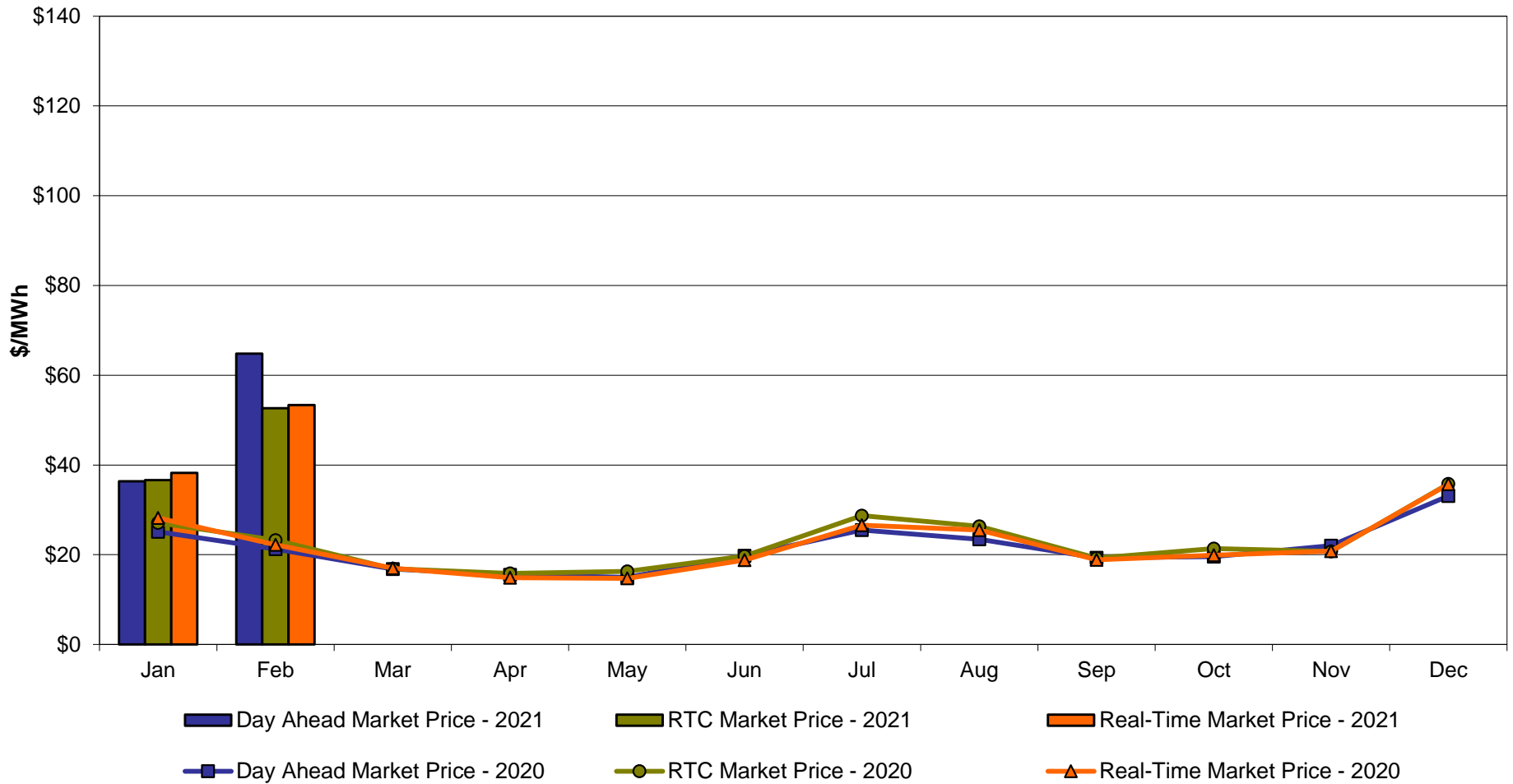
Capital Zone F **Monthly Average LBMP Prices 2020 - 2021**



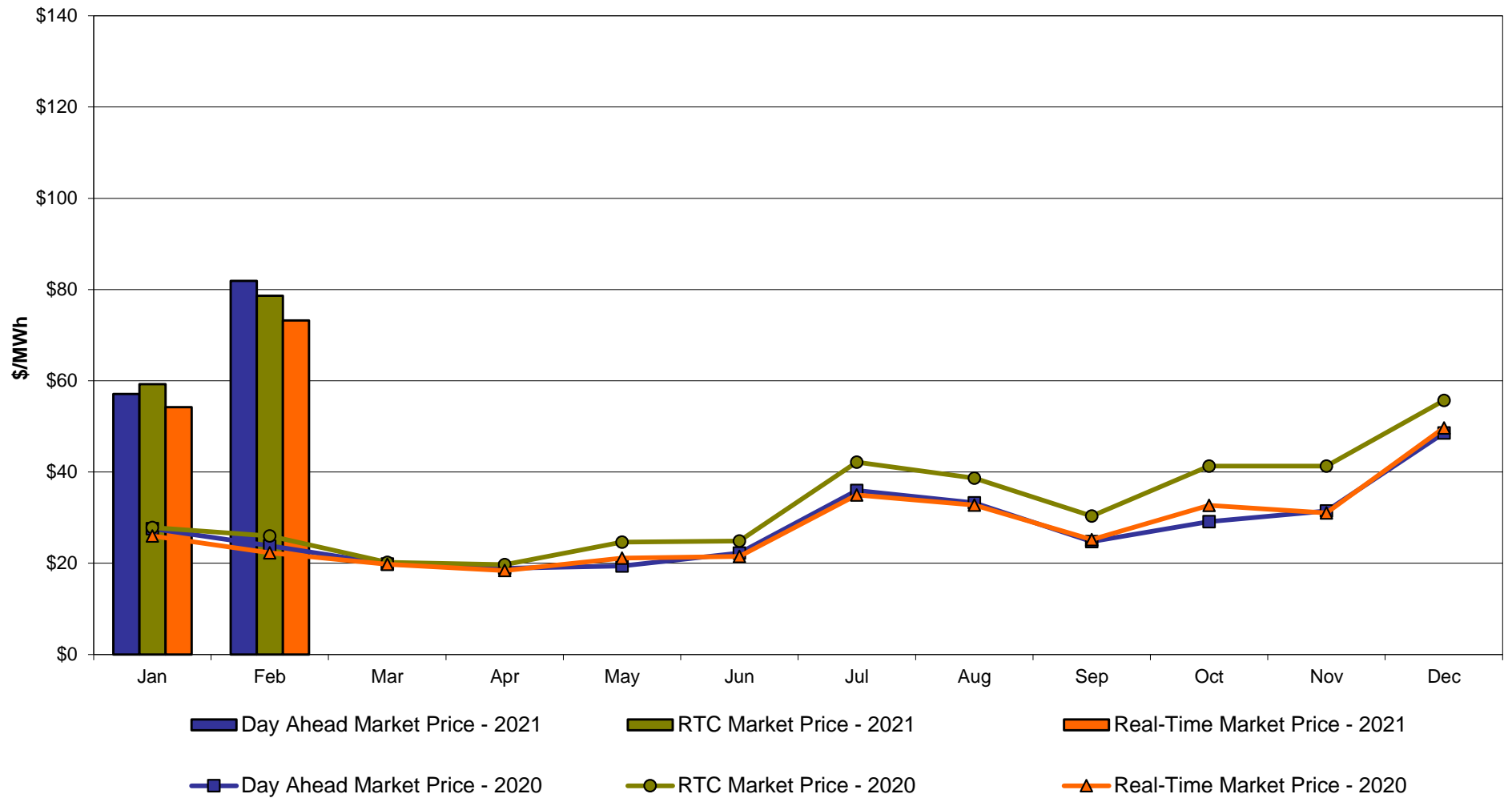
Hudson Valley Zone G Monthly Average LBMP Prices 2019 - 2020



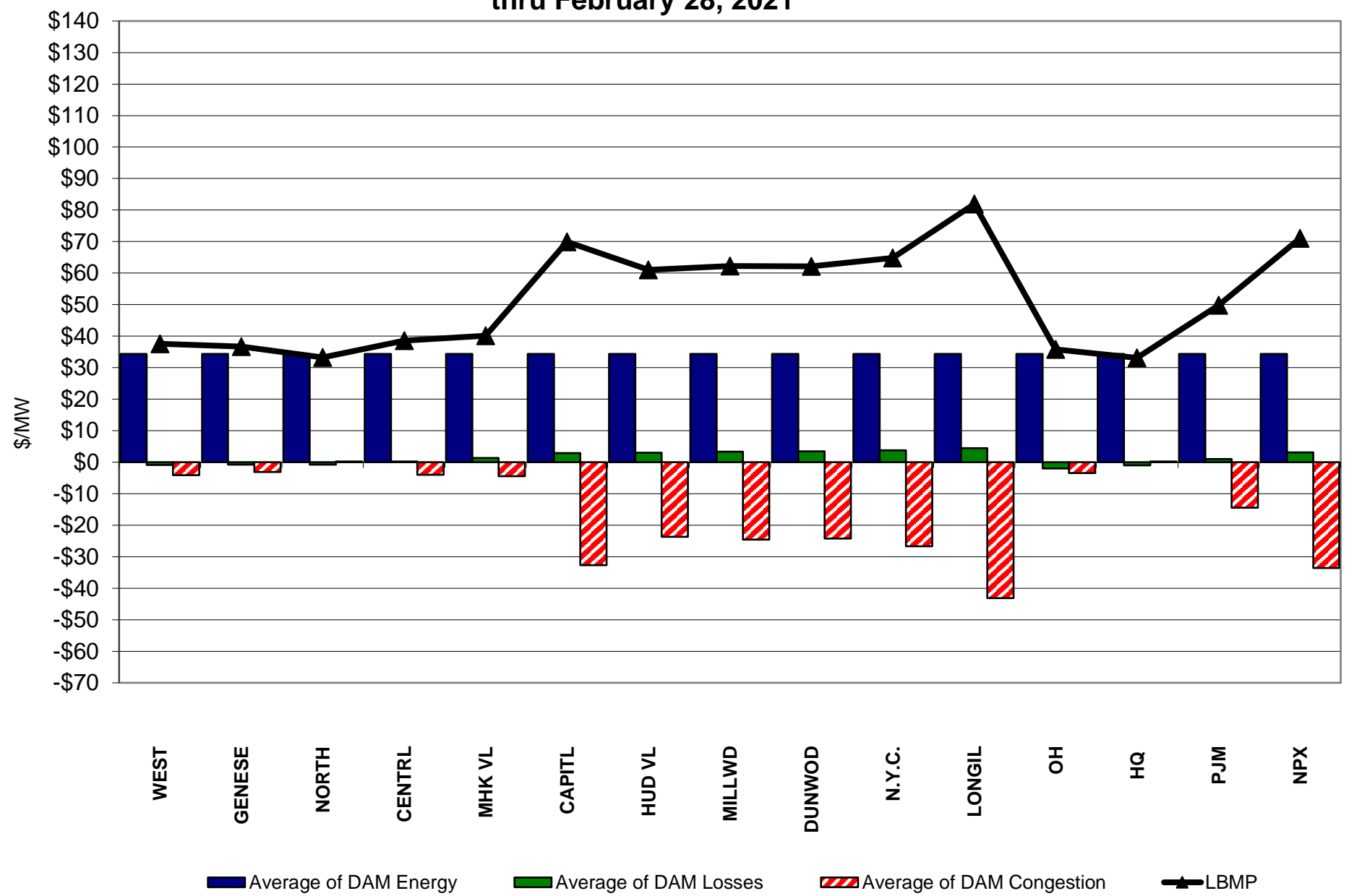
NYC Zone J **Monthly Average LBMP Prices 2020 - 2021**



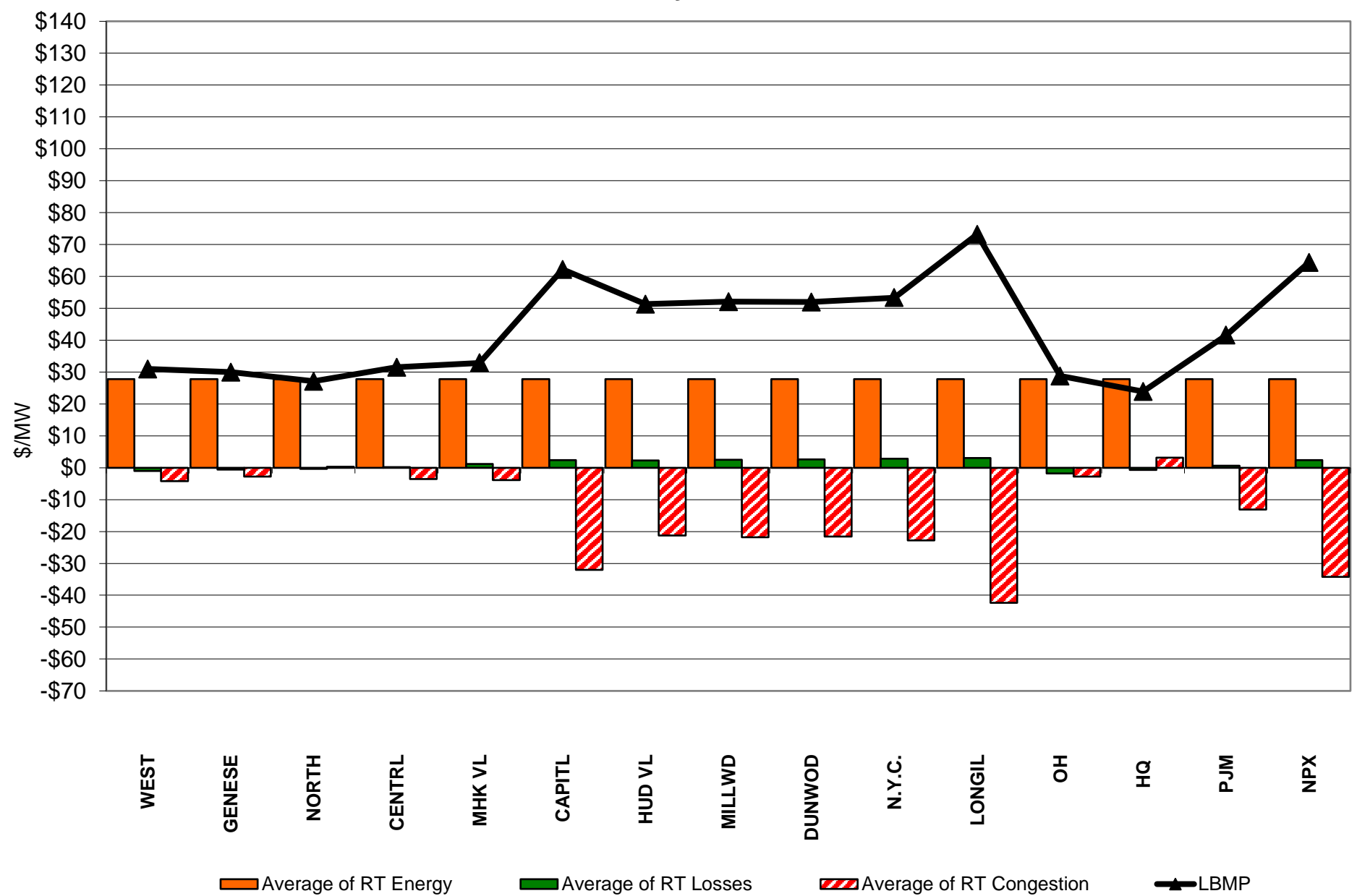
Long Island Zone K Monthly Average LBMP Prices 2019 - 2020



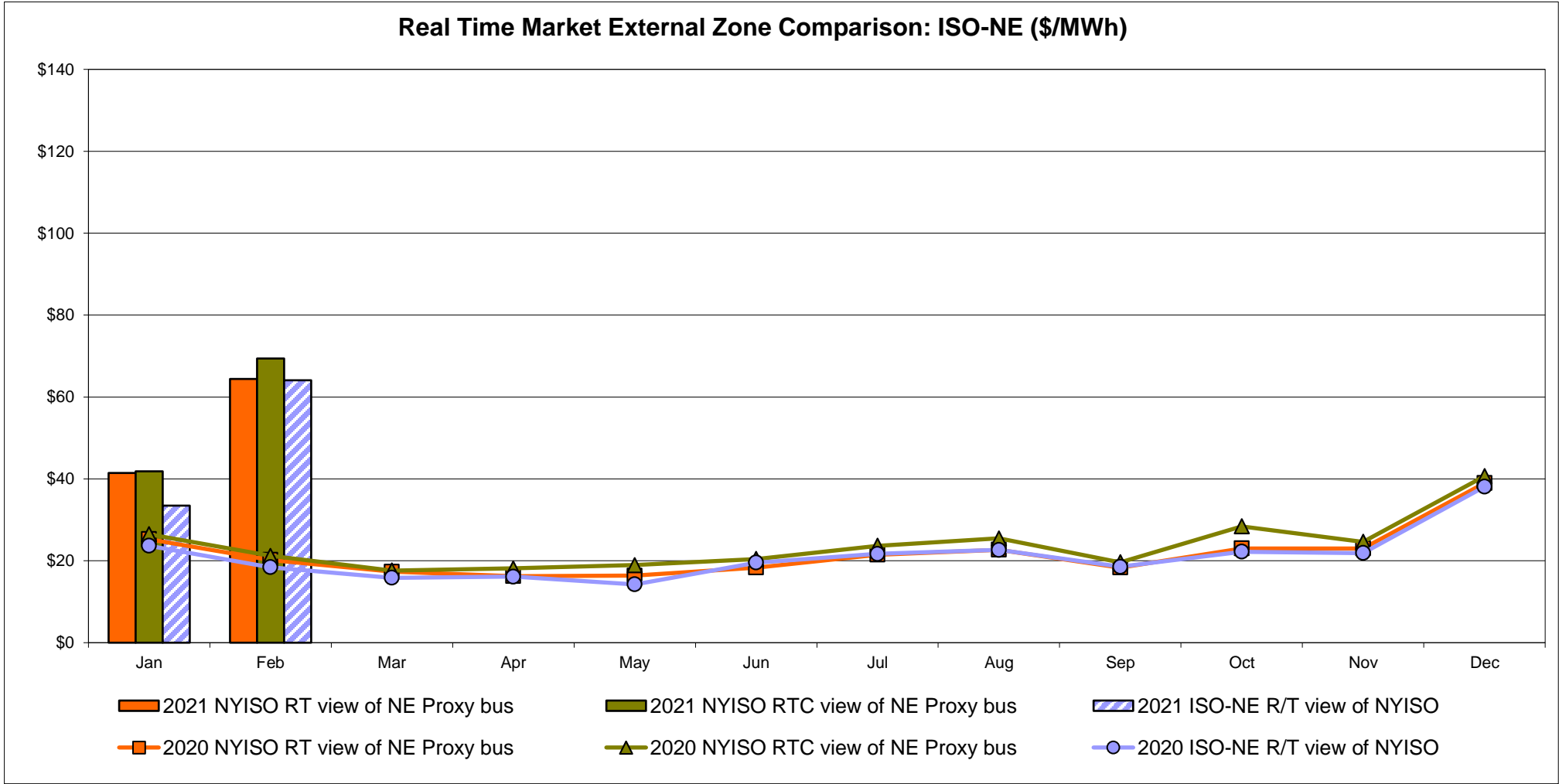
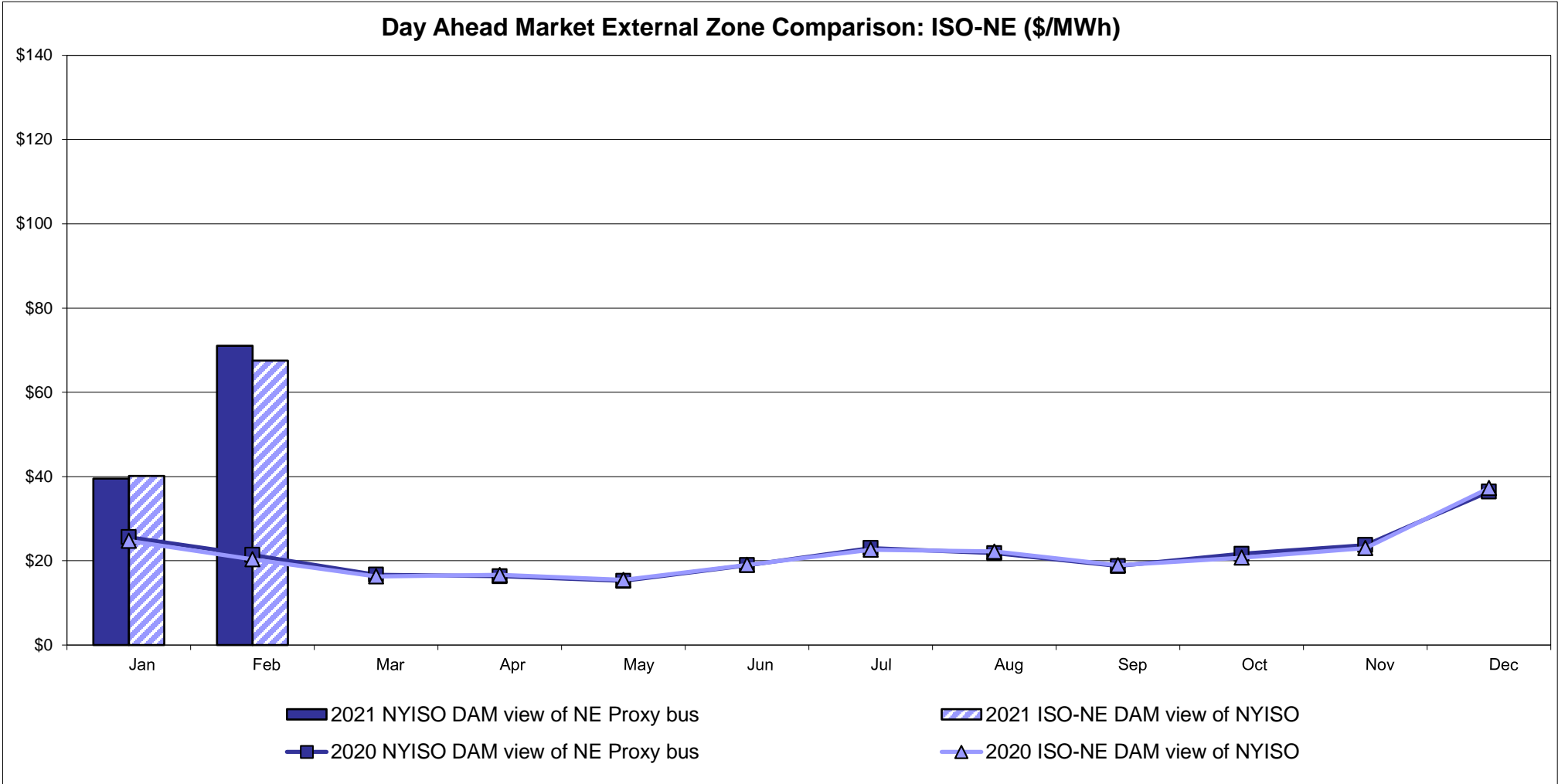
**DAM Zonal Unweighted Monthly Average LBMP Components
thru February 28, 2021**



**RT Zonal Unweighted Monthly Average LBMP Components
thru February 28, 2021**

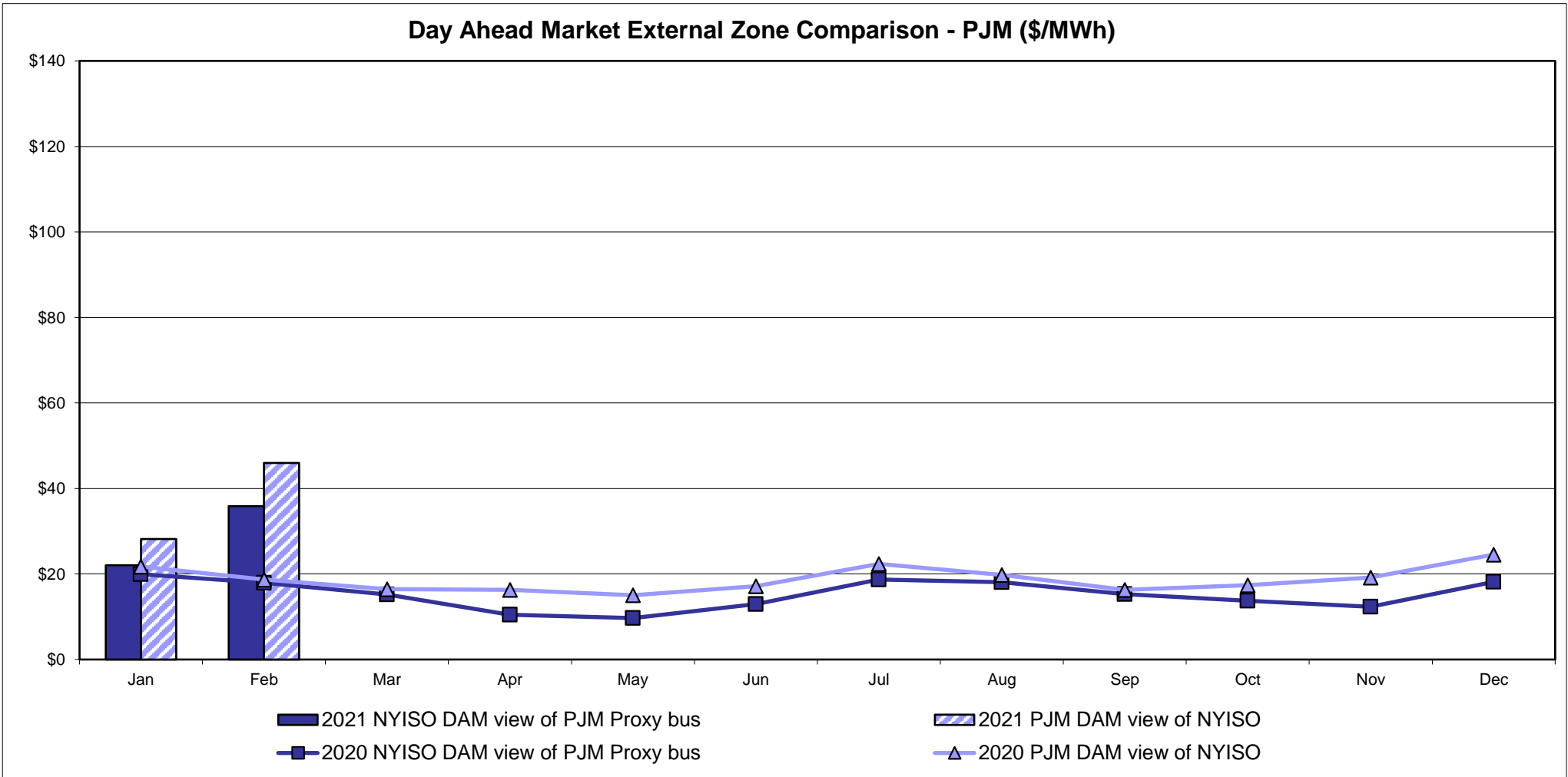


External Comparison ISO-New England

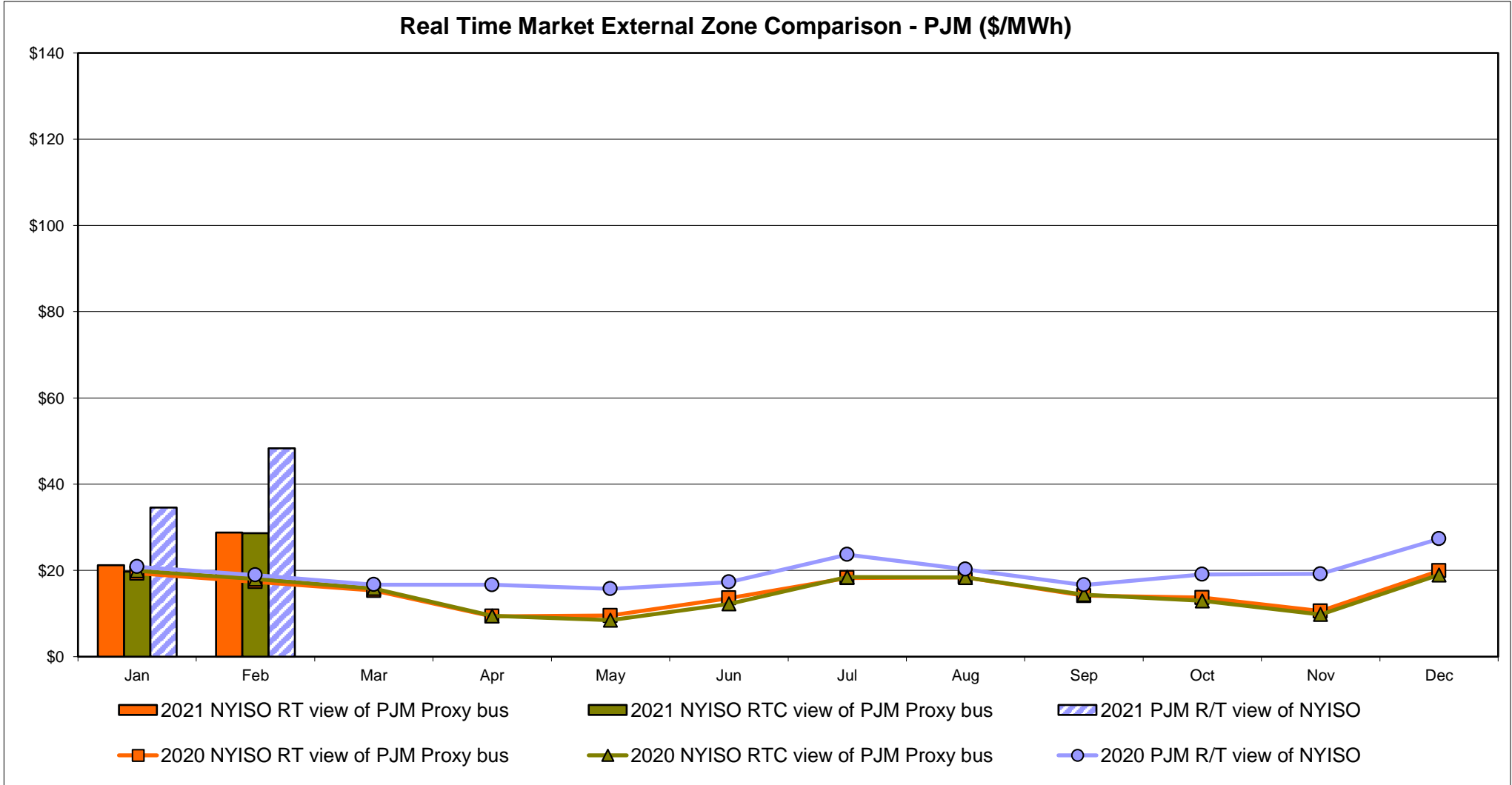


External Comparison PJM

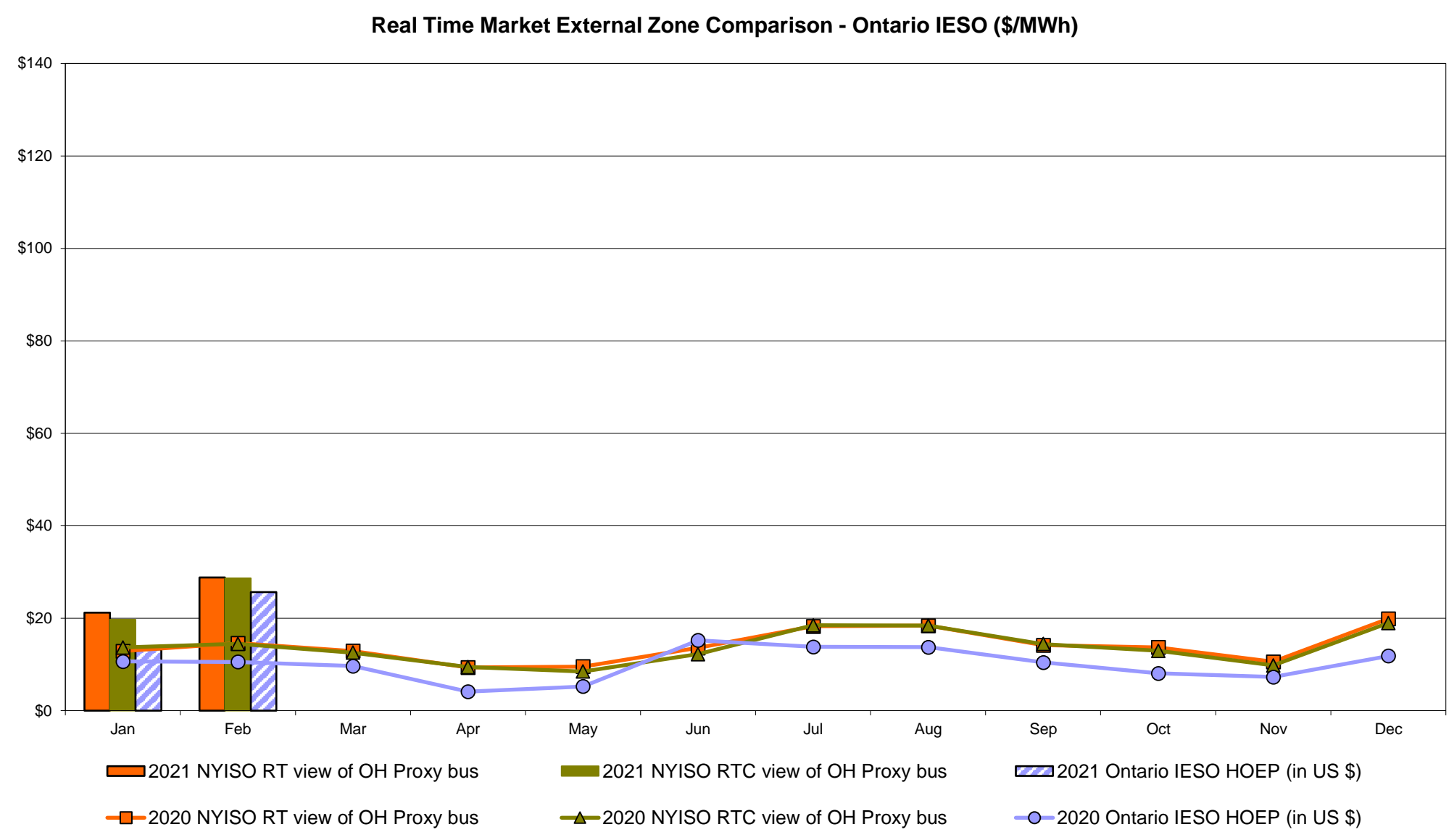
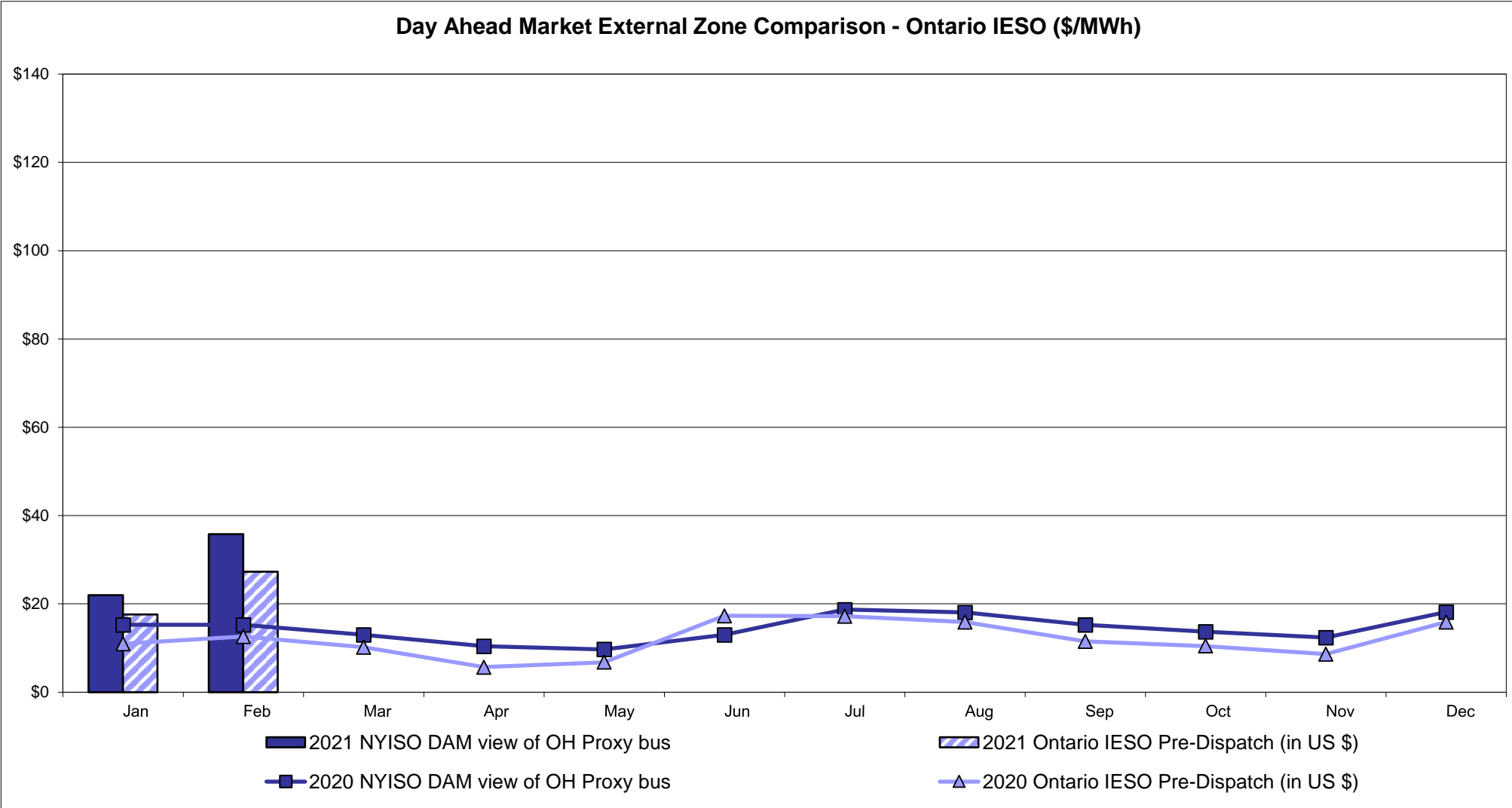
Day Ahead Market External Zone Comparison - PJM (\$/MWh)



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

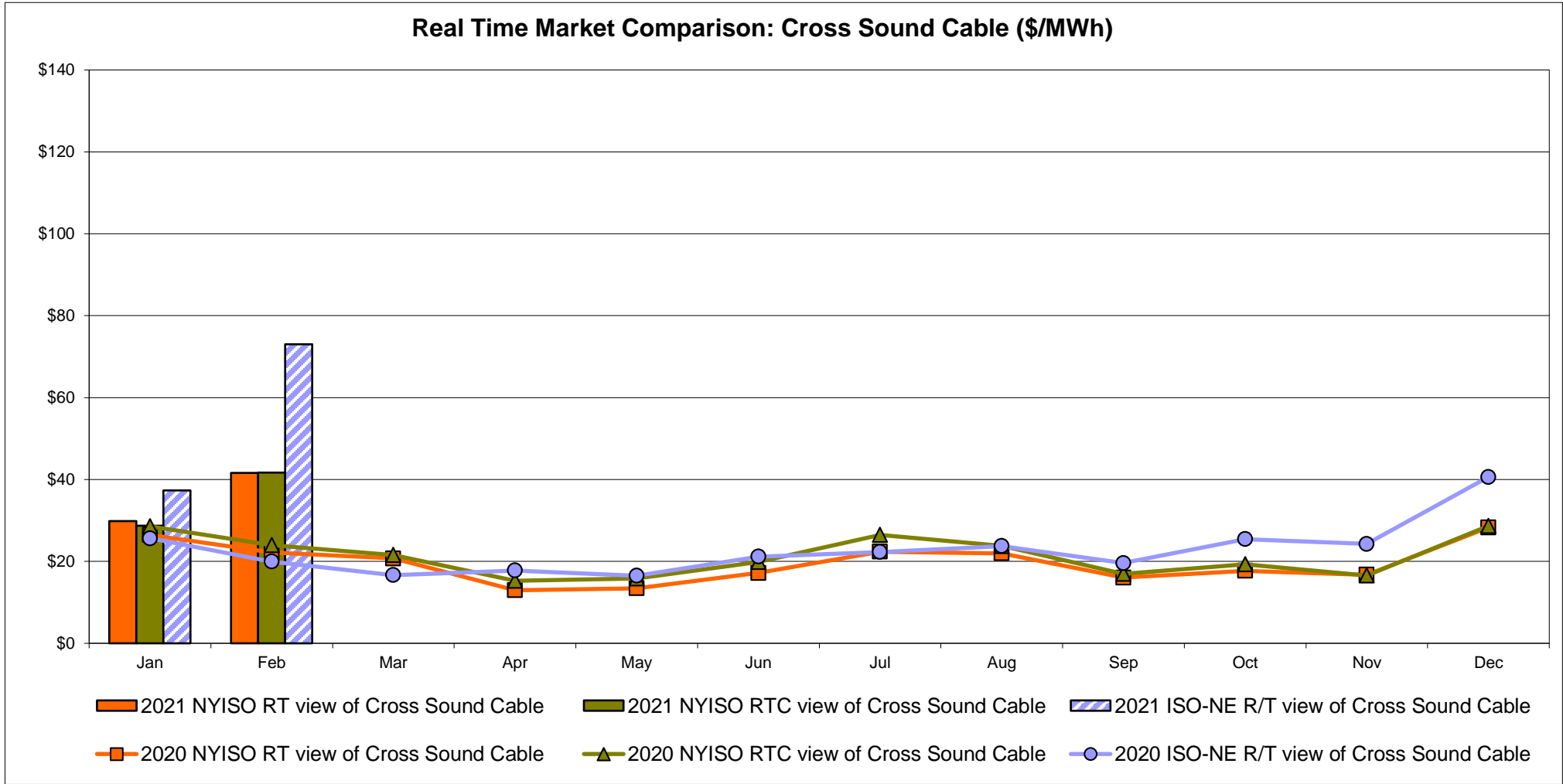
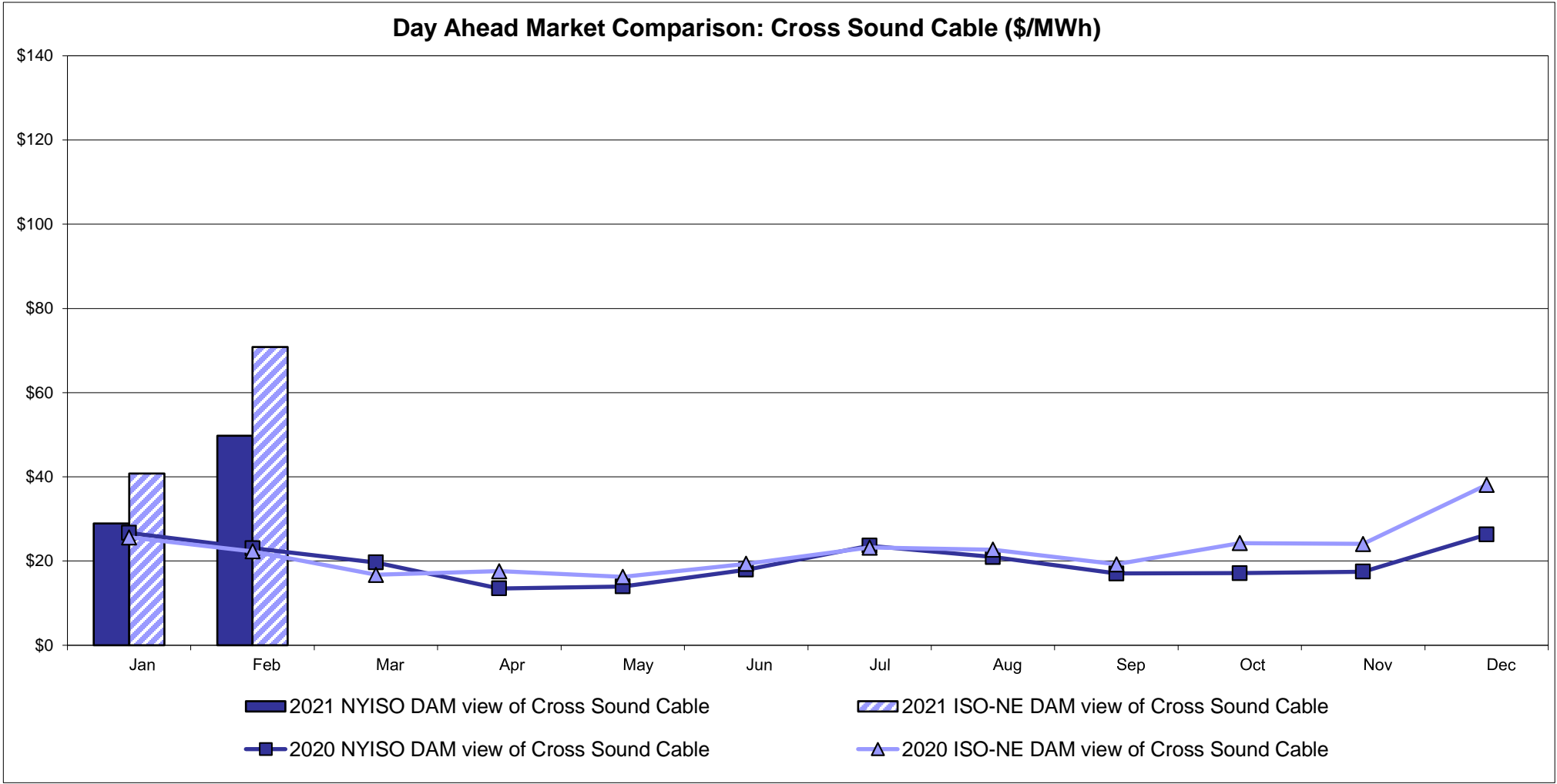


External Comparison Ontario IESO



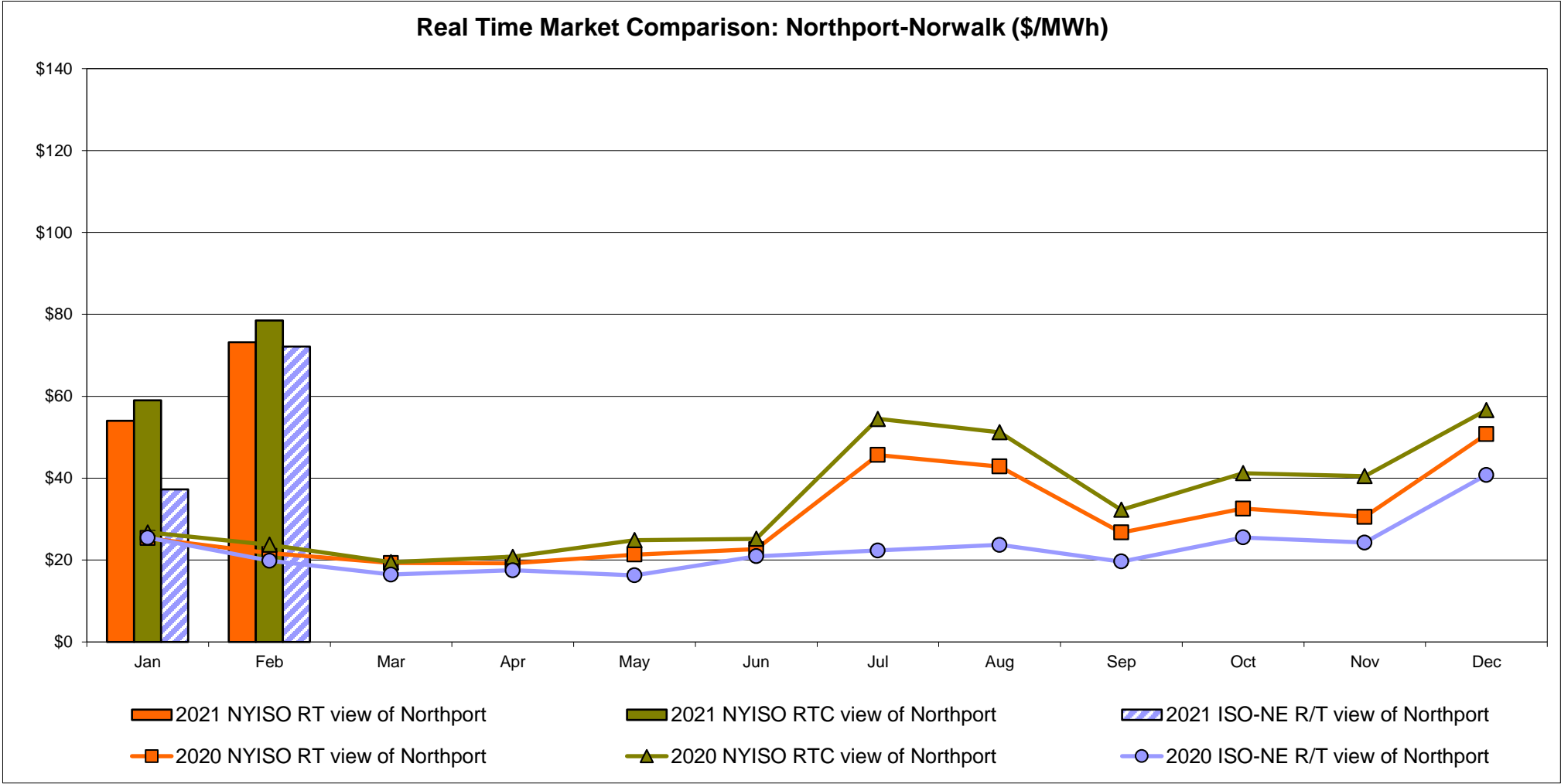
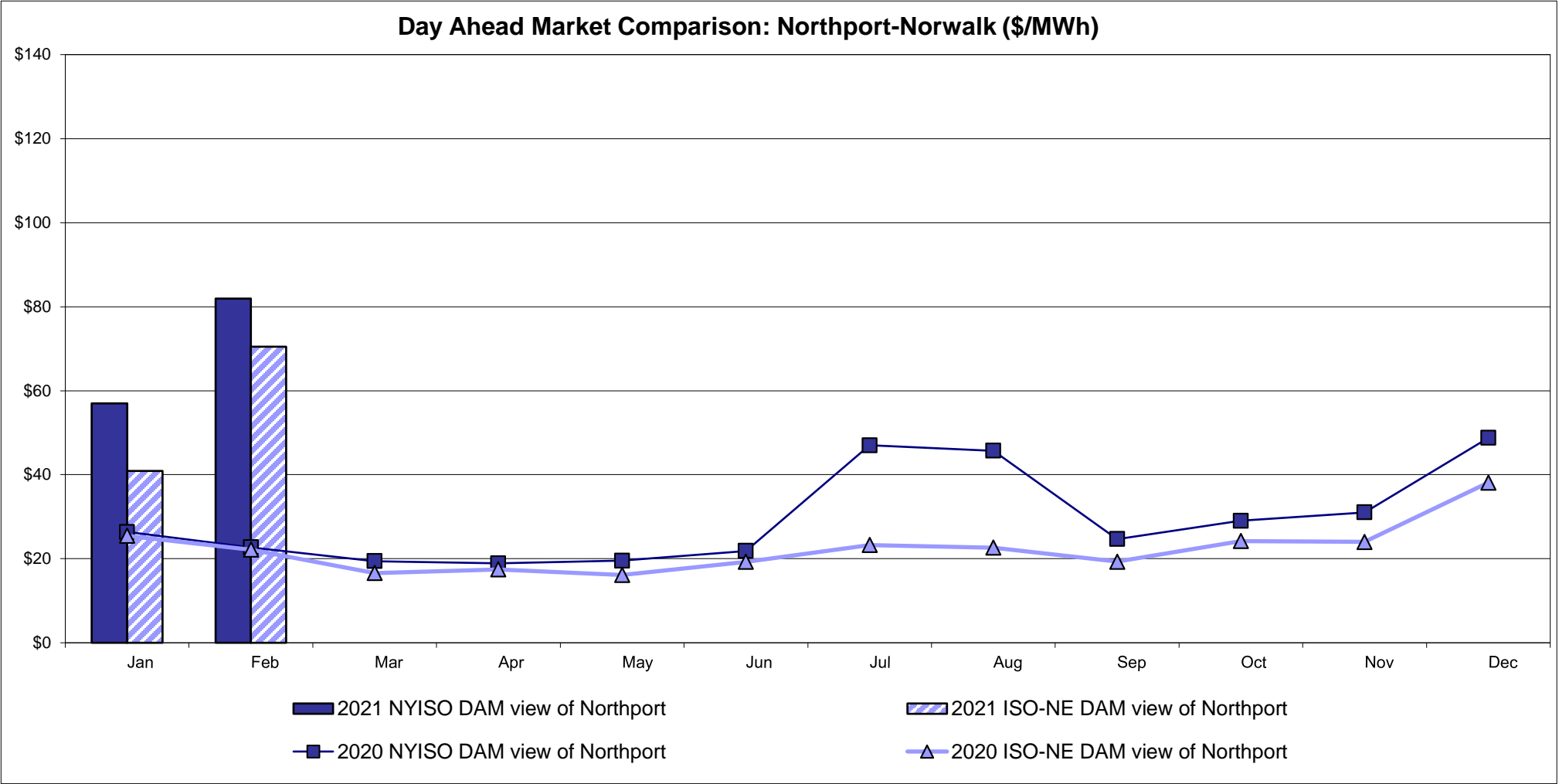
Notes: Exchange factor used for February 2021 was 0.787649653434152 to US
HOEP: Hourly Ontario Energy Price
Pre-Dispatch: Projected Energy Price

External Controllable Line: Cross Sound Cable (New England)



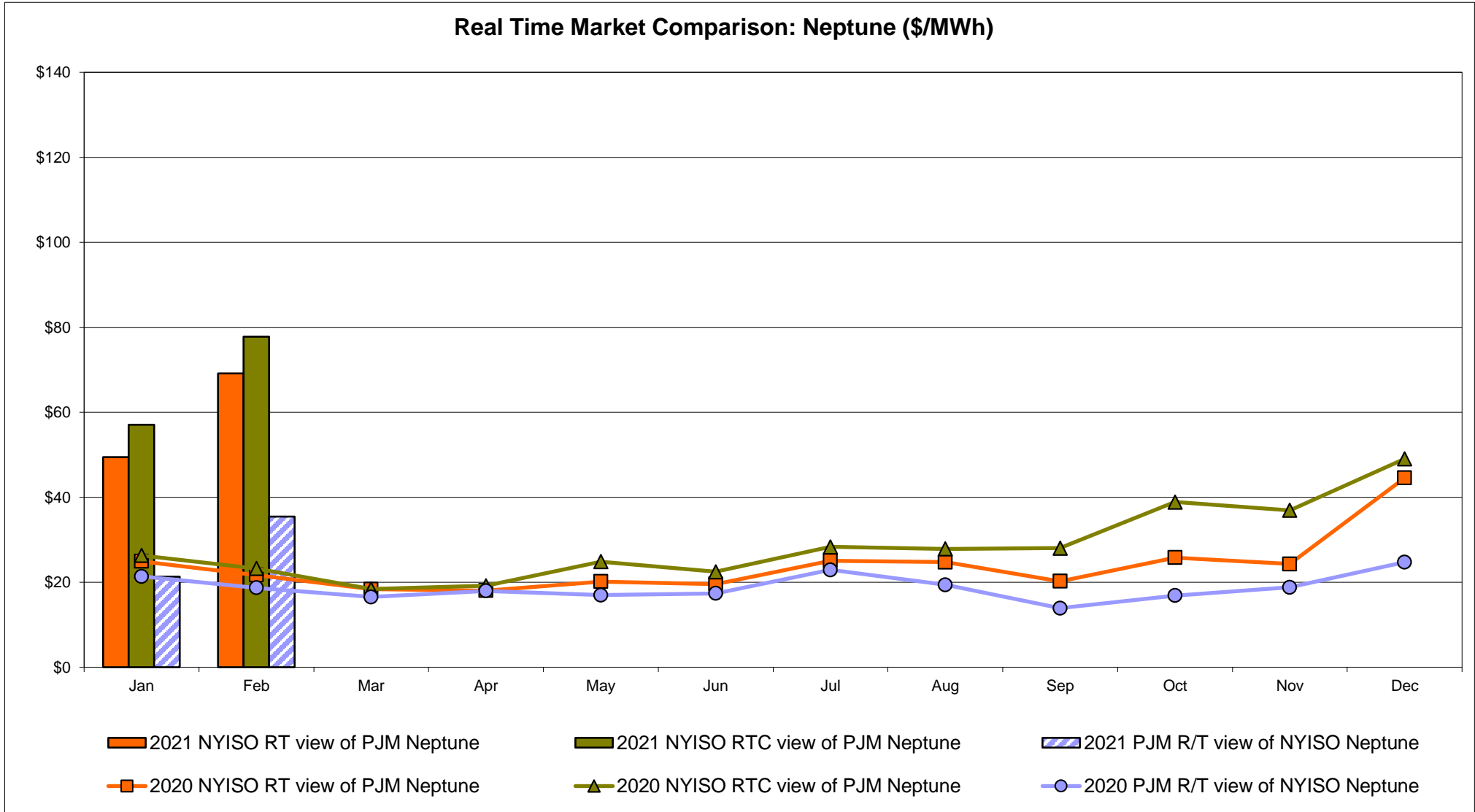
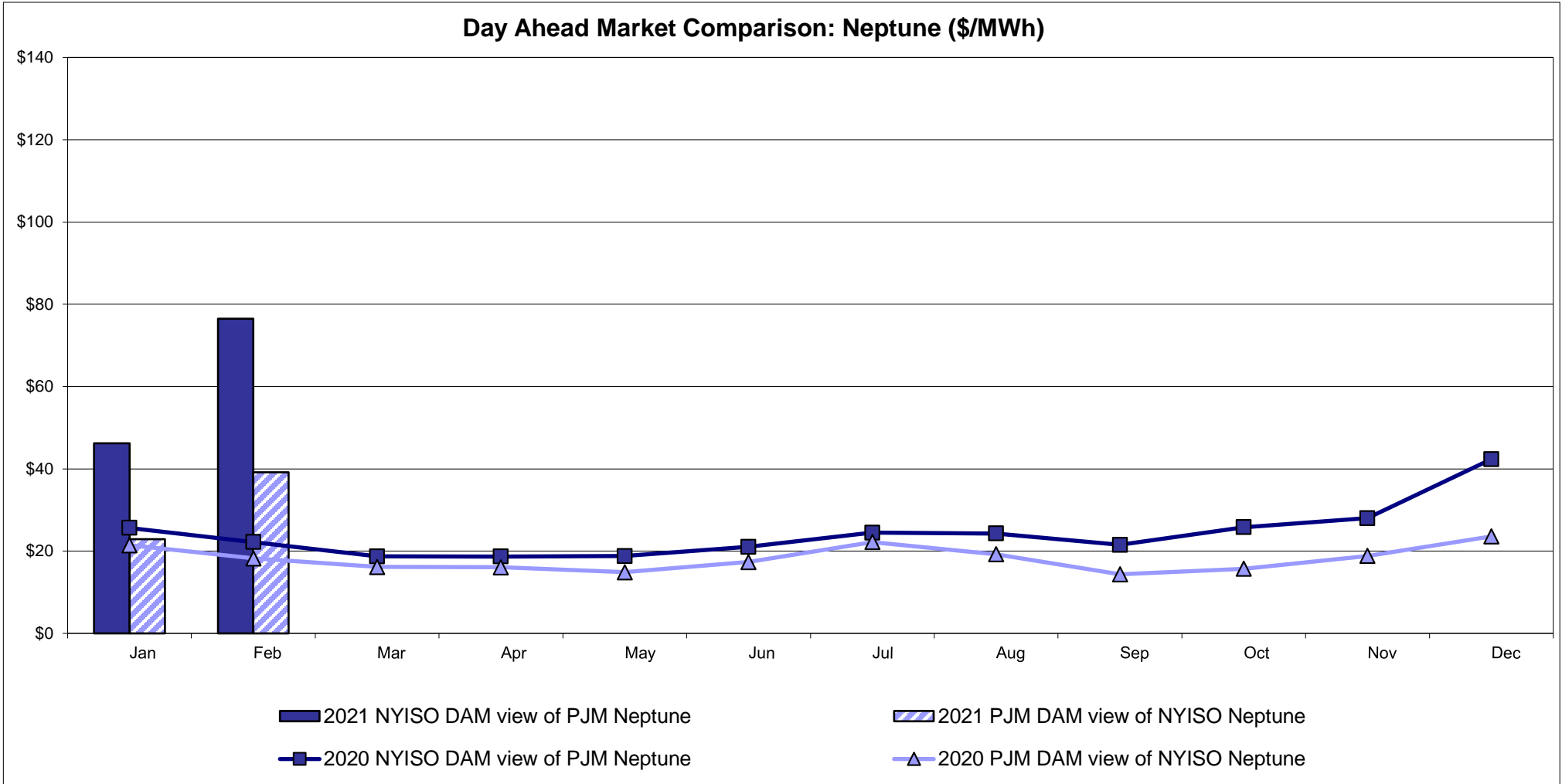
Note:
ISO-NE Forecast is an advisory posting @ 18:00 day before.
The DAM and R/T prices at the Shorham 13899 interface are used for ISO-NE.
The DAM and R/T prices at the CSC interface are used for NYISO.

External Controllable Line: Northport - Norwalk (New England)

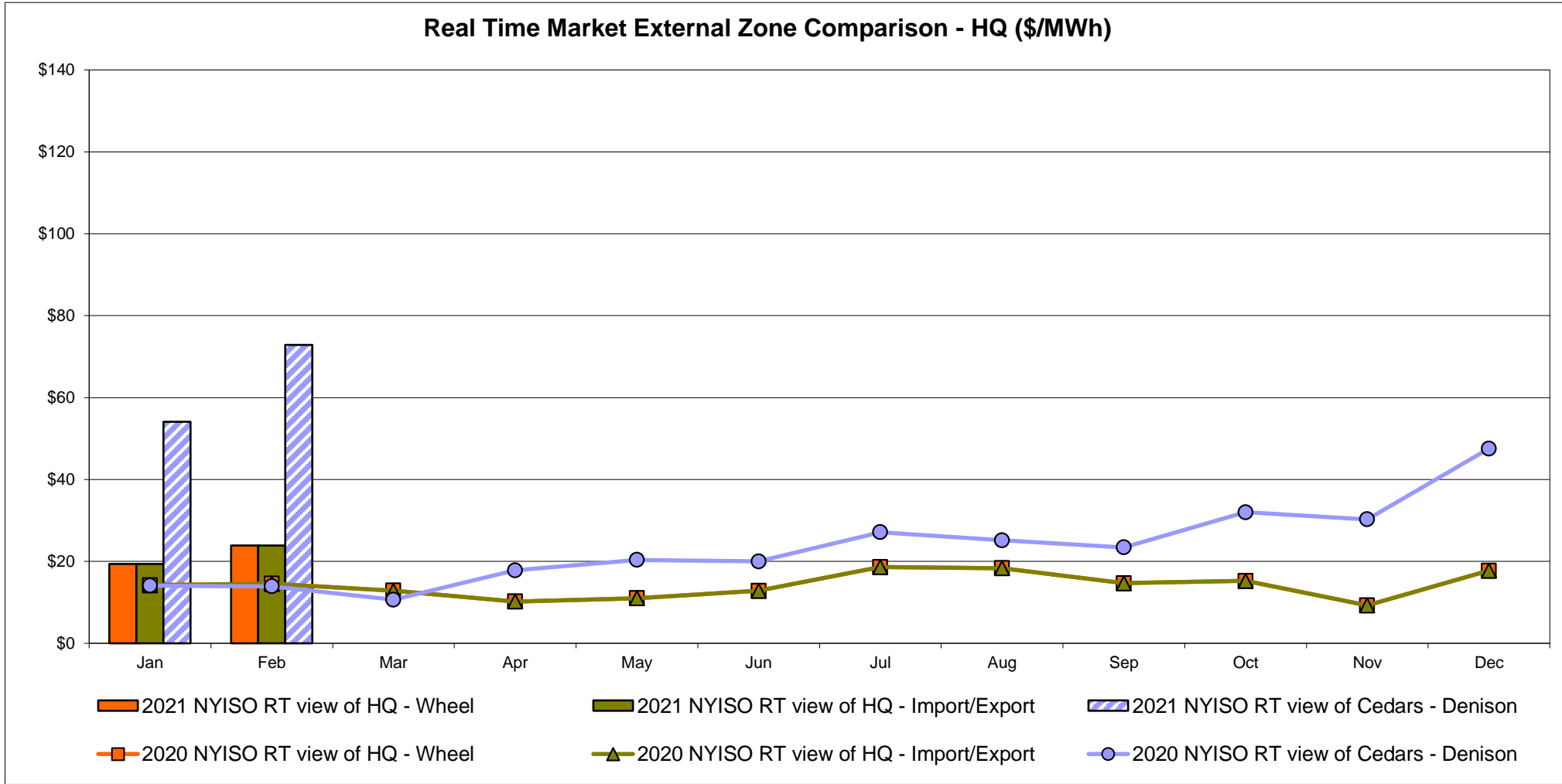
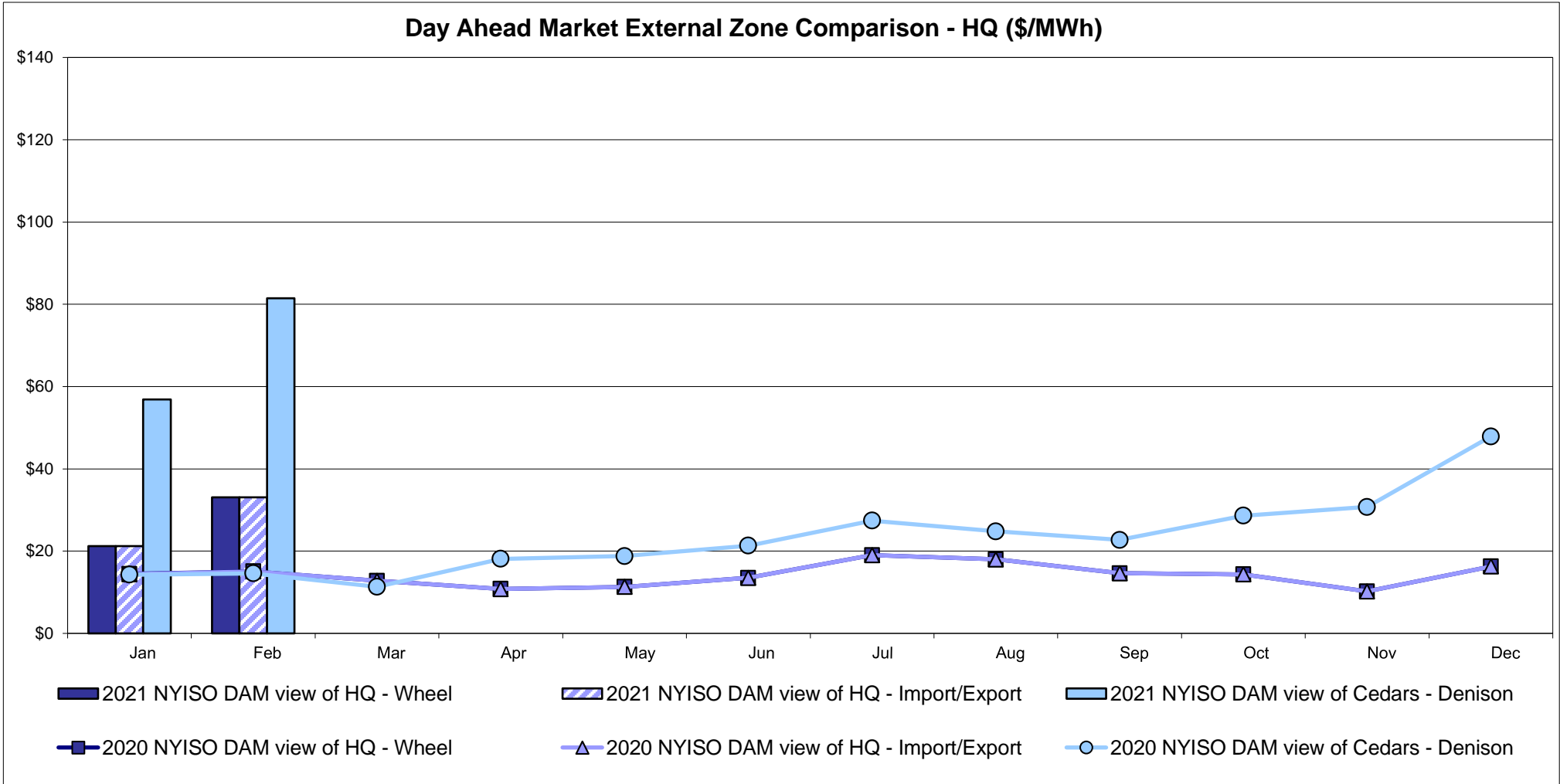


Note:
ISO-NE Forecast is an advisory posting @ 18:00 day before.
The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.
The DAM and R/T prices at the 1385 interface are used for NYISO.

External Controllable Line: Neptune (PJM)

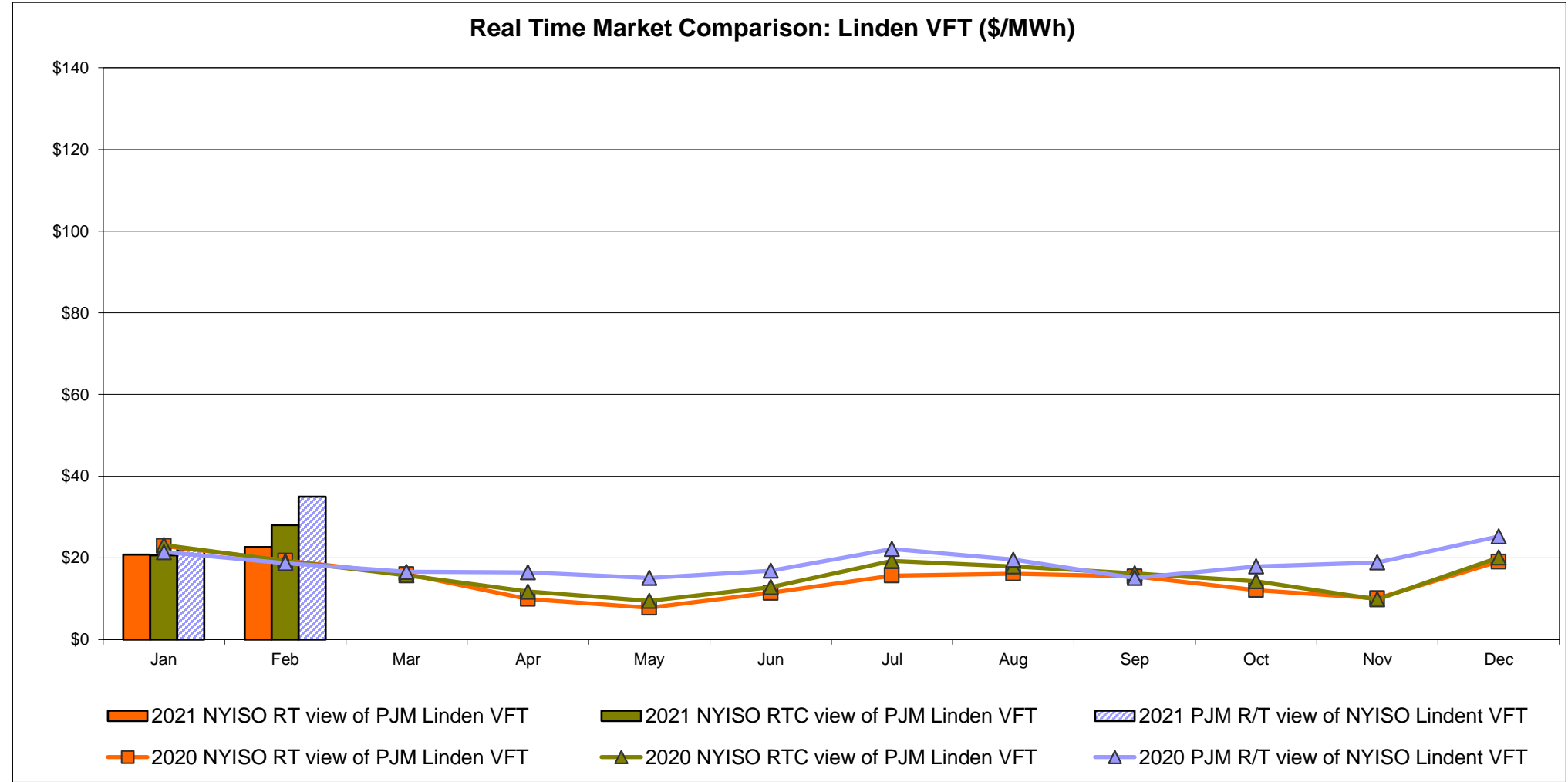
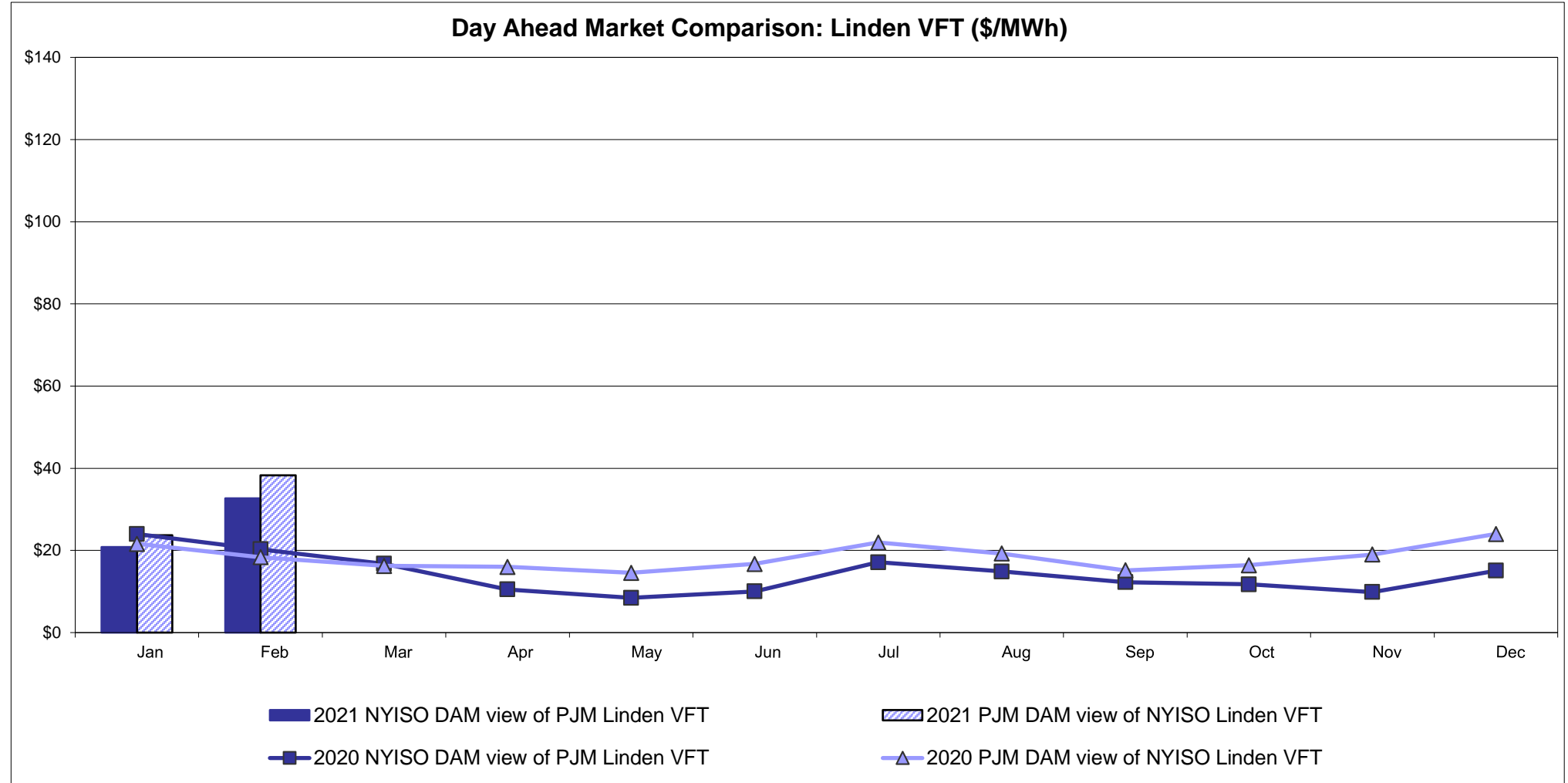


External Comparison Hydro-Quebec

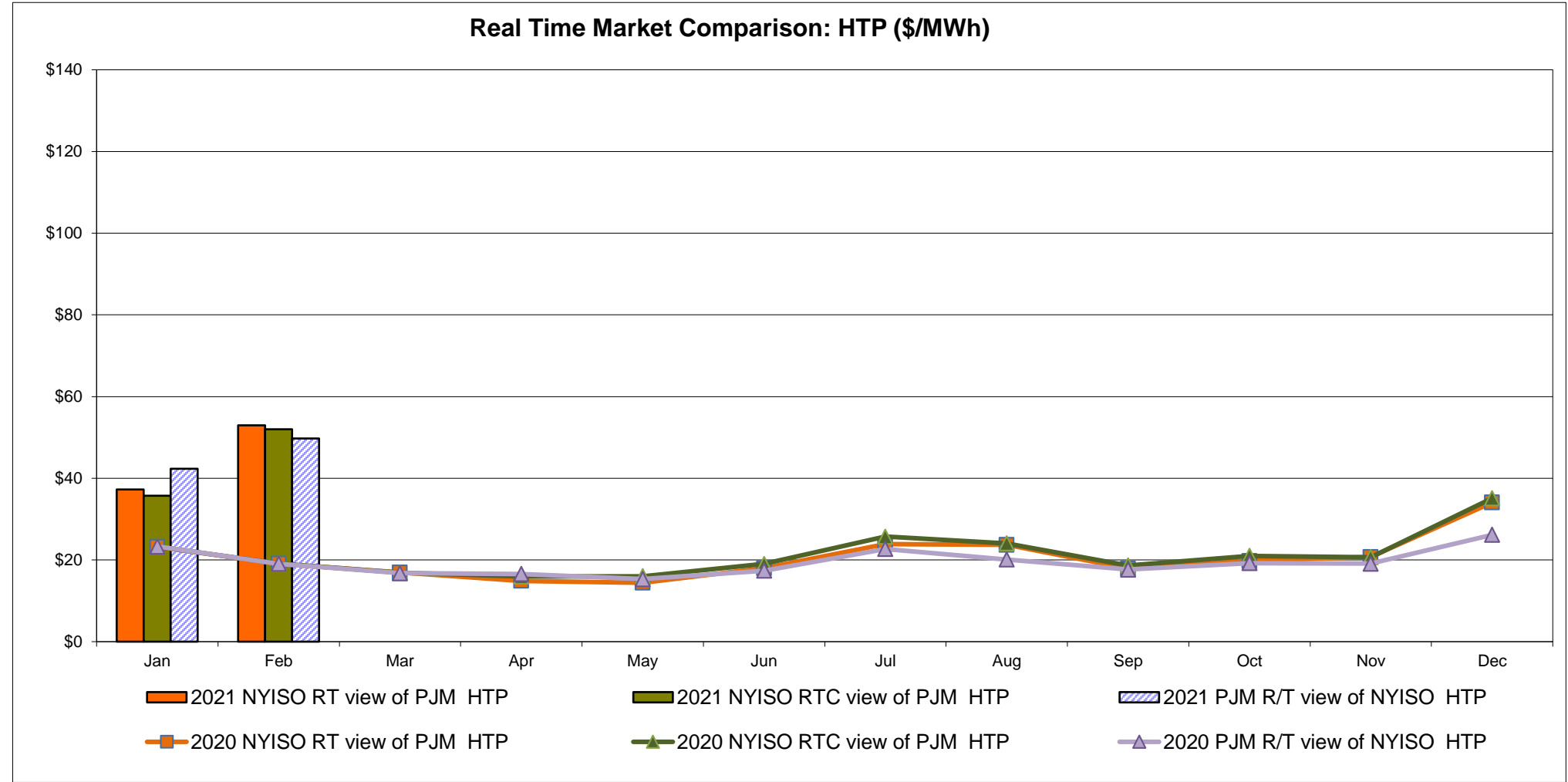
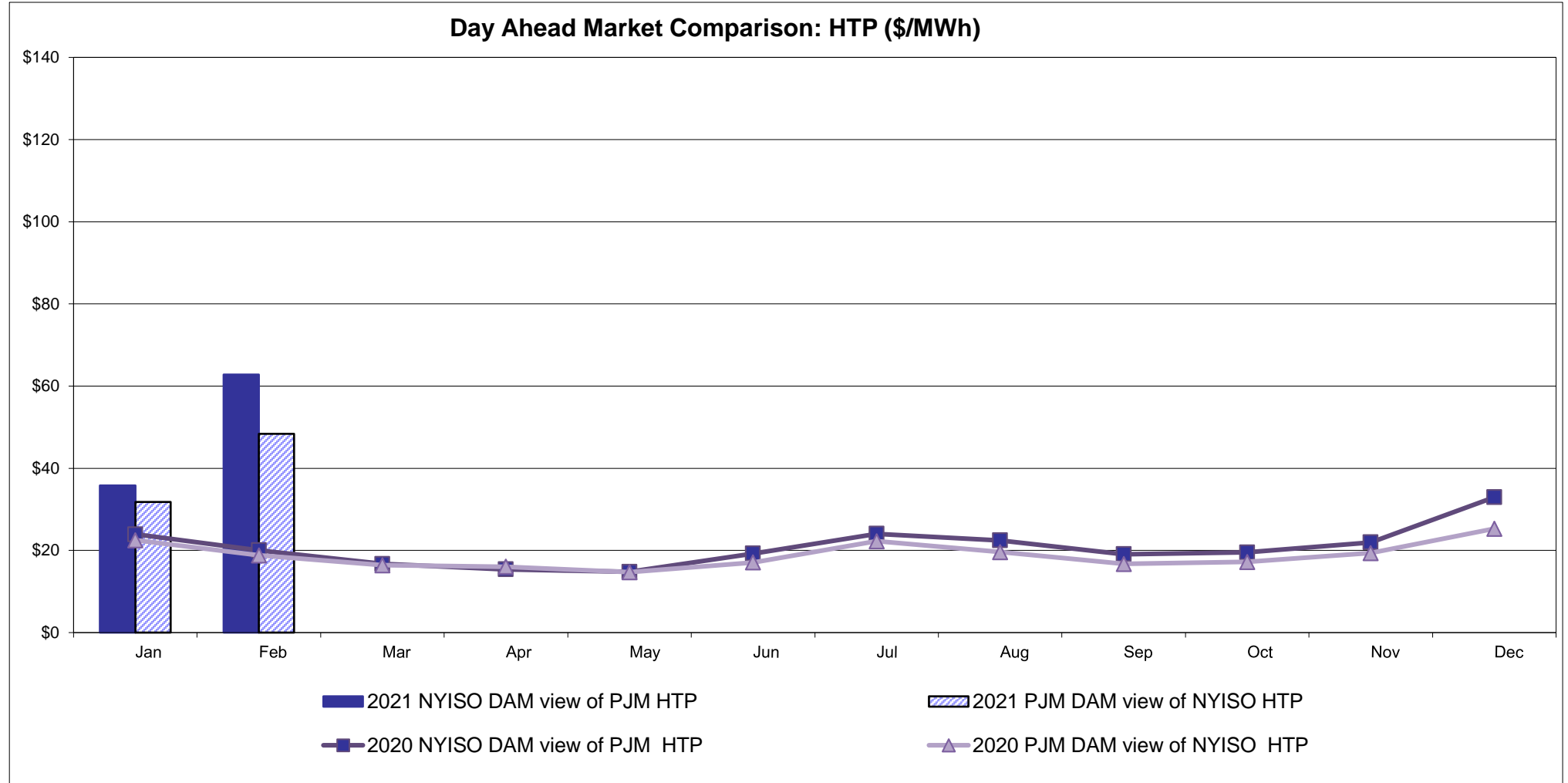


Note:
Hydro-Quebec Prices are unavailable.

External Controllable Line: Linden VFT (PJM)



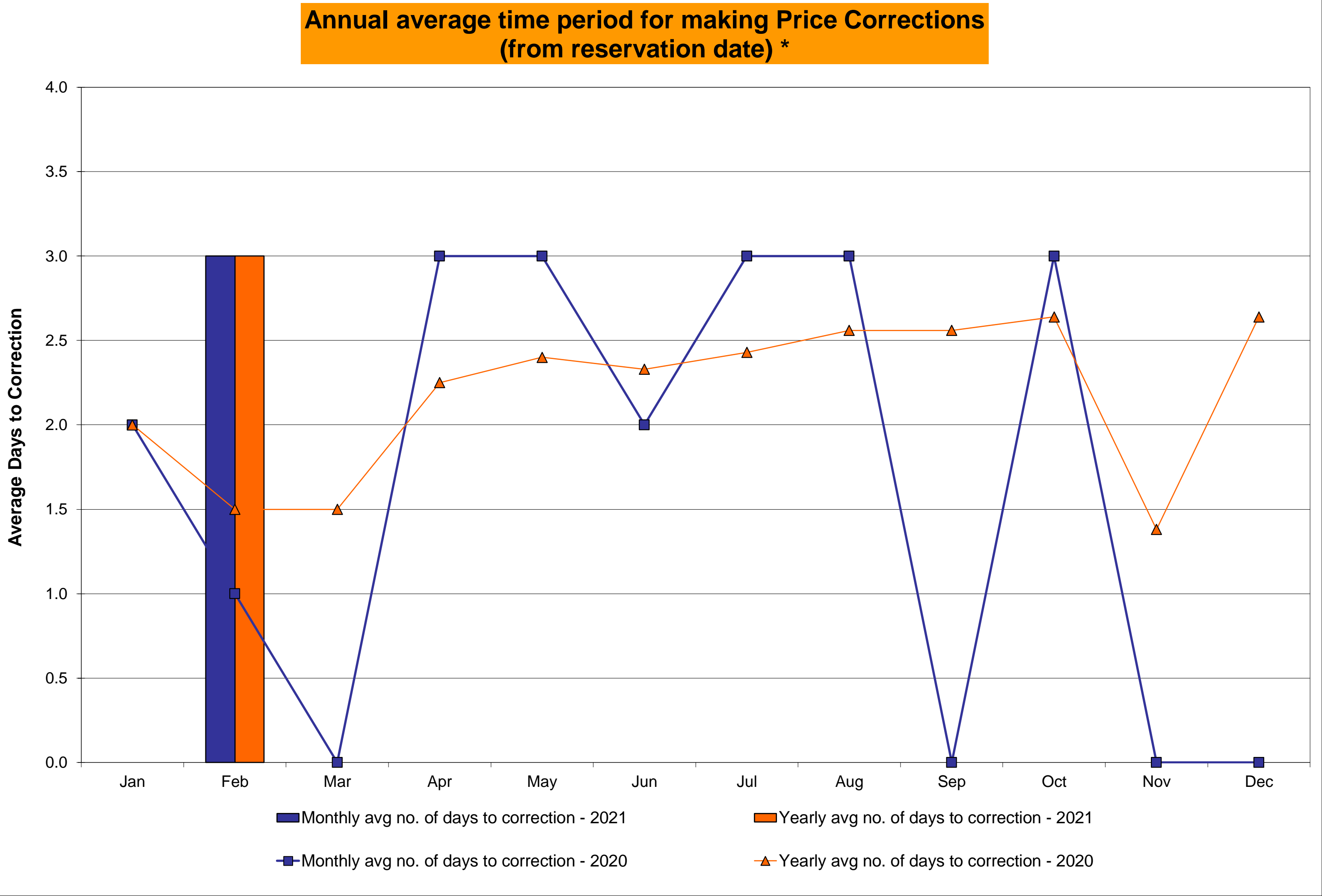
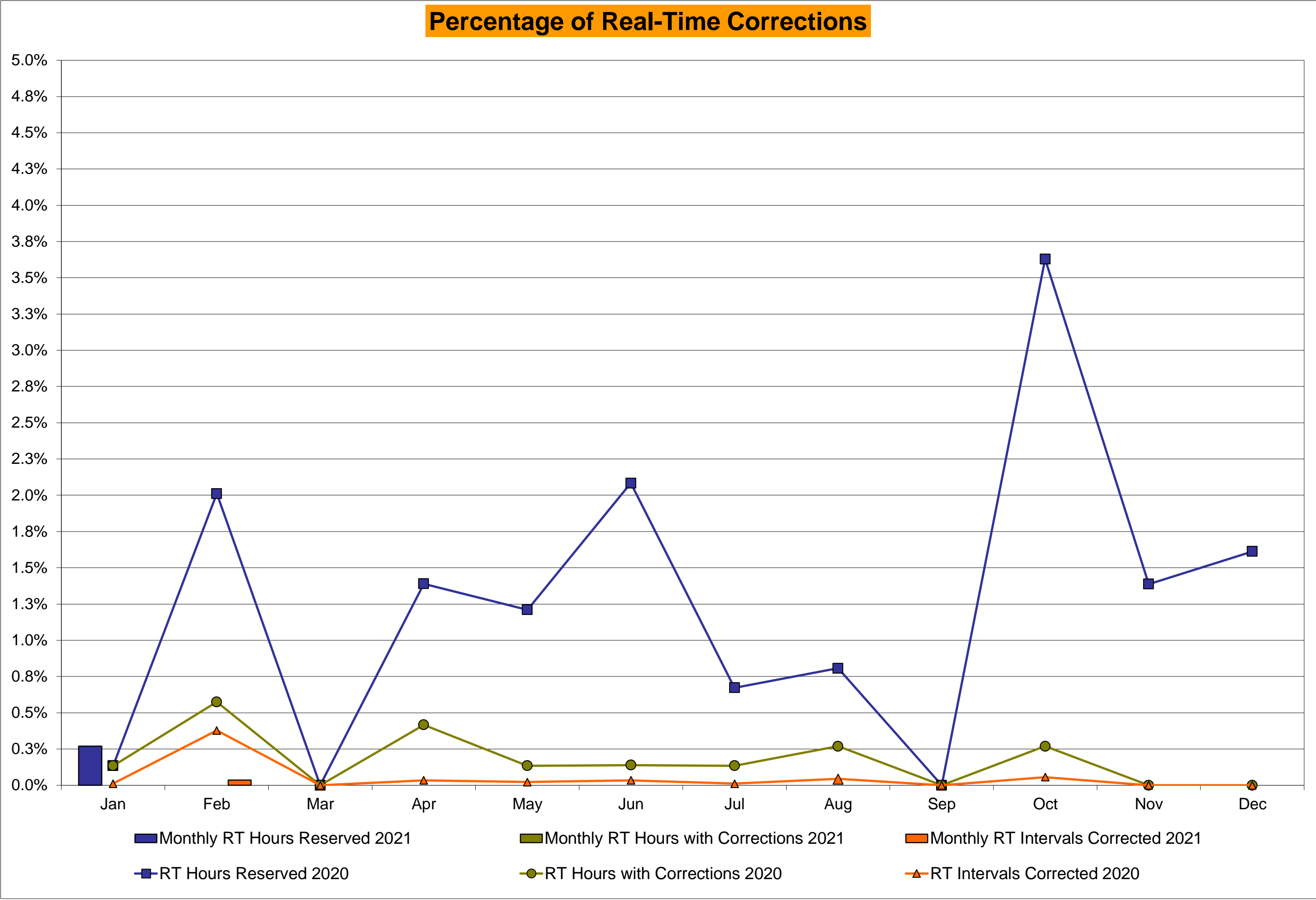
External Controllable Line: Hudson (PJM)



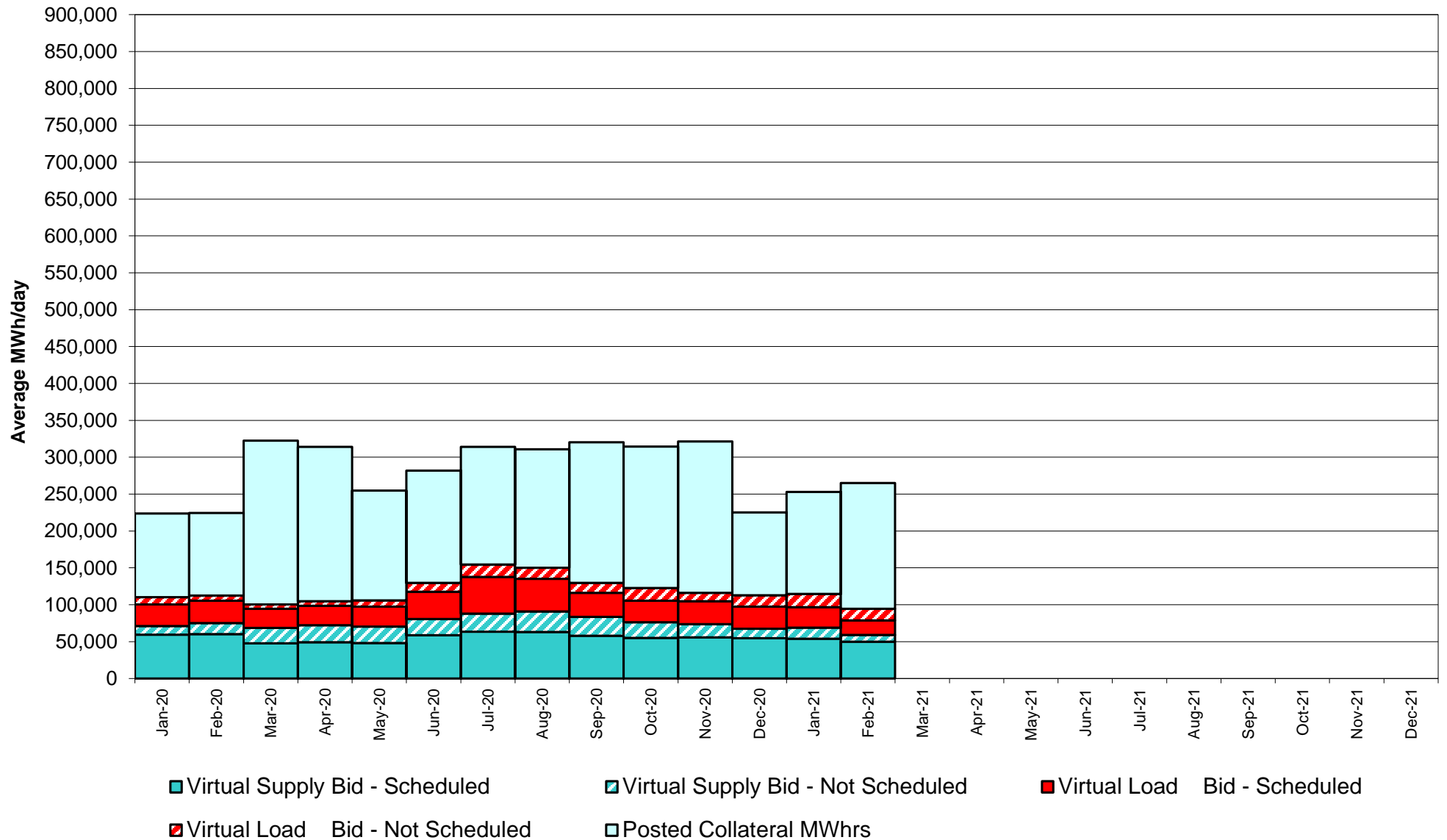
NYISO Real Time Price Correction Statistics

2021		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Hour Corrections</u>													
Number of hours with corrections	in the month	0	1										
Number of hours	in the month	744	672										
% of hours with corrections	in the month	0.00%	0.15%										
% of hours with corrections	year-to-date	0.00%	0.07%										
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	0	3										
Number of intervals	in the month	9,095	8,236										
% of intervals corrected	in the month	0.00%	0.04%										
% of intervals corrected	year-to-date	0.00%	0.02%										
<u>Hours Reserved</u>													
Number of hours reserved	in the month	2	12										
Number of hours	in the month	744	672										
% of hours reserved	in the month	0.27%	1.79%										
% of hours reserved	year-to-date	0.27%	0.99%										
<u>Days to Correction *</u>													
Avg. number of days to correction	in the month	0.00	3.00										
Avg. number of days to correction	year-to-date	0.00	3.00										
<u>Days Without Corrections</u>													
Days without corrections	in the month	31	27										
Days without corrections	year-to-date	31	58										
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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Hour Corrections</u>													
Number of hours with corrections	in the month	1	4	0	3	1	1	1	2	0	2	0	0
Number of hours	in the month	744	696	743	720	744	720	744	744	720	744	721	744
% of hours with corrections	in the month	0.13%	0.57%	0.00%	0.42%	0.13%	0.14%	0.13%	0.27%	0.00%	0.27%	0.00%	0.00%
% of hours with corrections	year-to-date	0.13%	0.35%	0.23%	0.28%	0.25%	0.23%	0.22%	0.22%	0.20%	0.20%	0.19%	0.17%
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	1	32	0	3	2	3	1	4	0	5	0	0
Number of intervals	in the month	9,088	8,460	9,011	8,776	9,030	8,826	9,128	9,156	8,810	9,048	8,790	9,083
% of intervals corrected	in the month	0.01%	0.38%	0.00%	0.03%	0.02%	0.03%	0.01%	0.04%	0.00%	0.06%	0.00%	0.00%
% of intervals corrected	year-to-date	0.01%	0.19%	0.12%	0.10%	0.09%	0.08%	0.07%	0.06%	0.06%	0.06%	0.05%	0.05%
<u>Hours Reserved</u>													
Number of hours reserved	in the month	1	14	0	10	9	15	5	6	0	27	10	12
Number of hours	in the month	744	696	743	720	744	720	744	744	720	744	721	744
% of hours reserved	in the month	0.13%	2.01%	0.00%	1.39%	1.21%	2.08%	0.67%	0.81%	0.00%	3.63%	1.39%	1.61%
% of hours reserved	year-to-date	0.13%	1.04%	0.69%	0.86%	0.93%	1.12%	1.06%	1.02%	0.91%	1.19%	1.21%	1.24%
<u>Days to Correction *</u>													
Avg. number of days to correction	in the month	2.00	1.00	0.00	3.00	3.00	2.00	3.00	3.00	0.00	3.00	0.00	0.00
Avg. number of days to correction	year-to-date	2.00	1.50	1.50	2.25	2.40	2.33	2.43	2.56	2.56	2.64	1.38	2.64
<u>Days Without Corrections</u>													
Days without corrections	in the month	30	28	31	28	30	29	30	29	30	29	30	31
Days without corrections	year-to-date	30	58	89	117	147	176	206	235	265	294	324	355

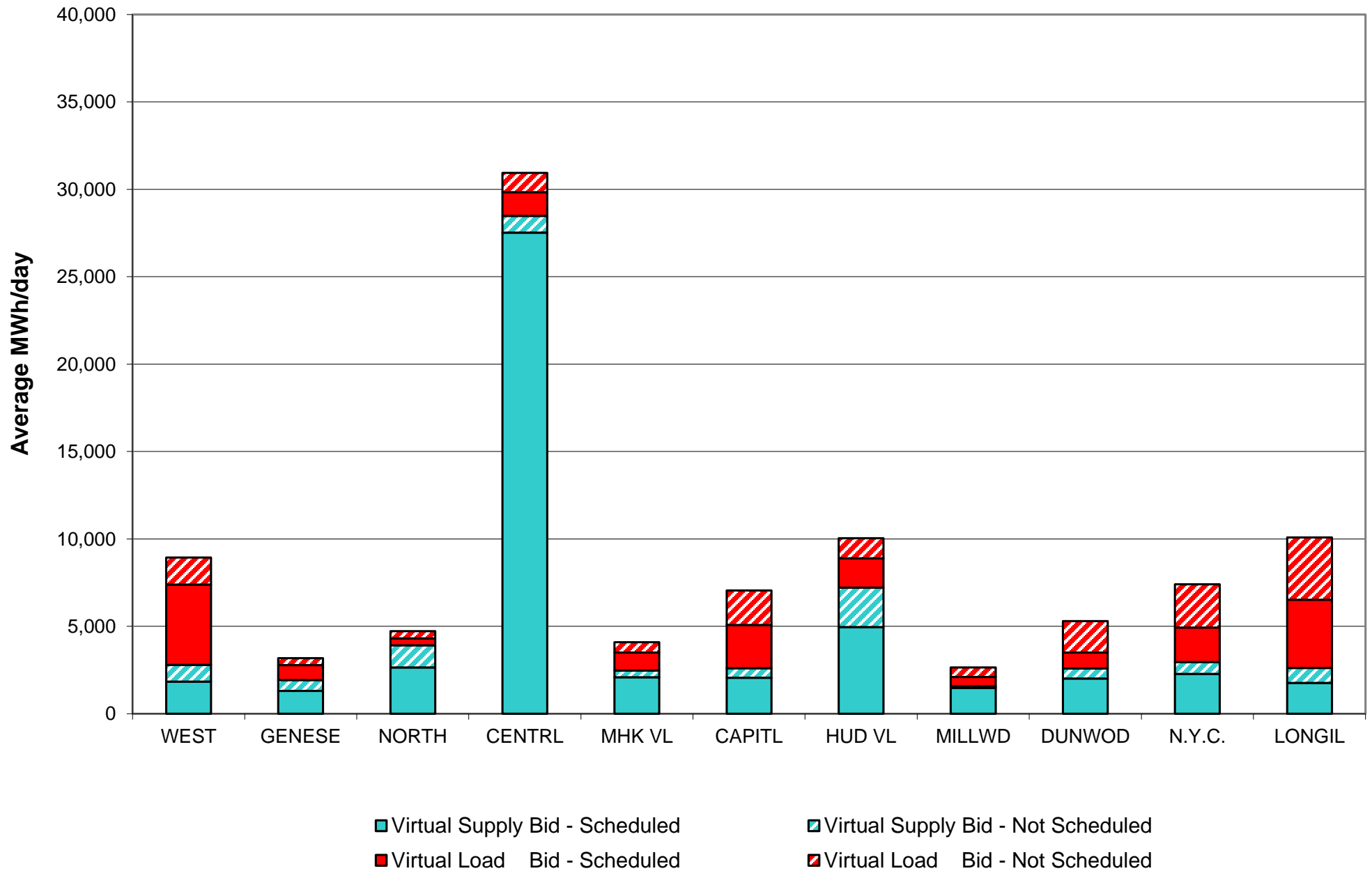
*Calendar days from reservation date; for June 2018 forward, business days from market date



NYISO Virtual Trading Average MWh per day



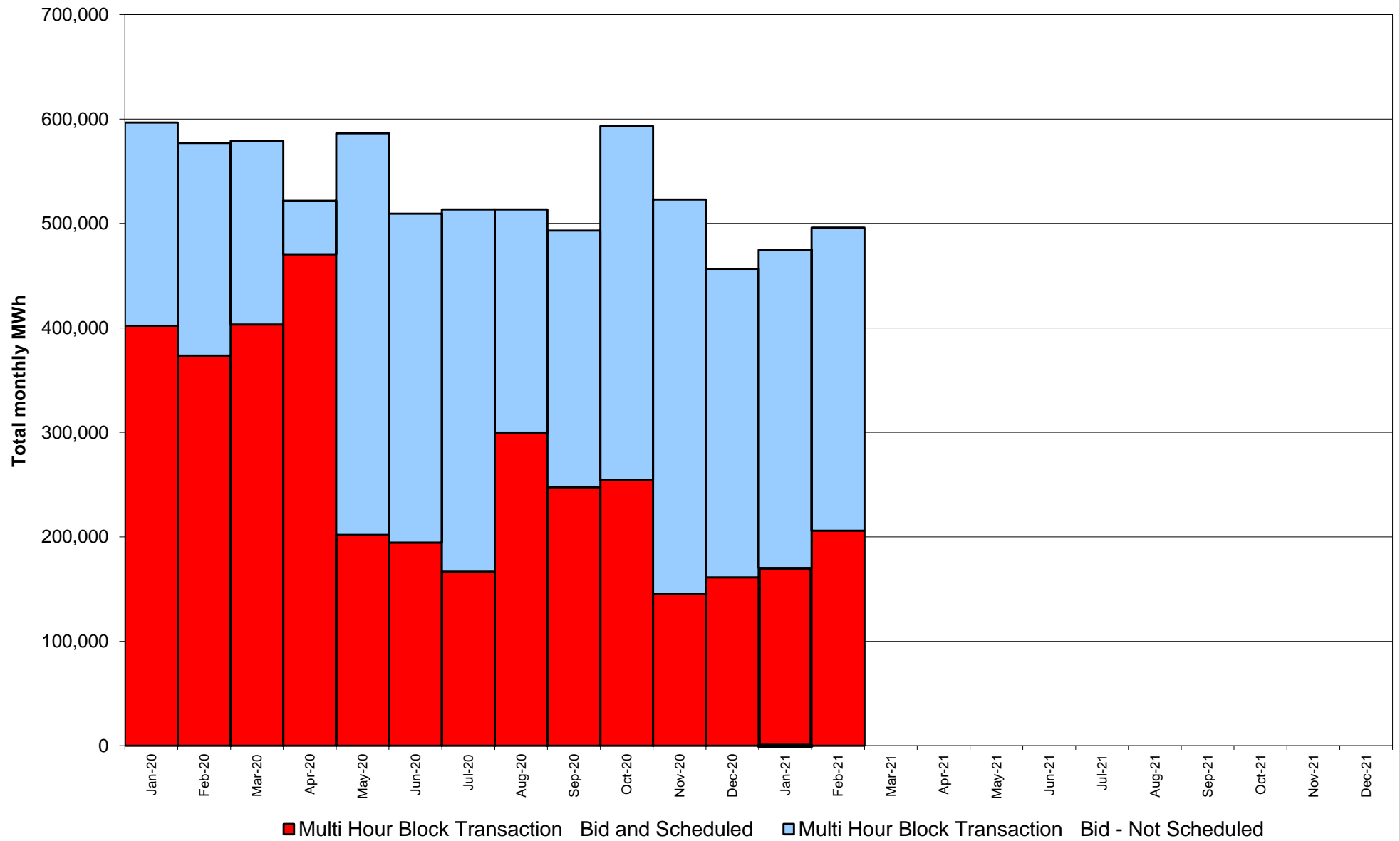
Virtual Load and Supply Zonal Statistics through February 28, 2021



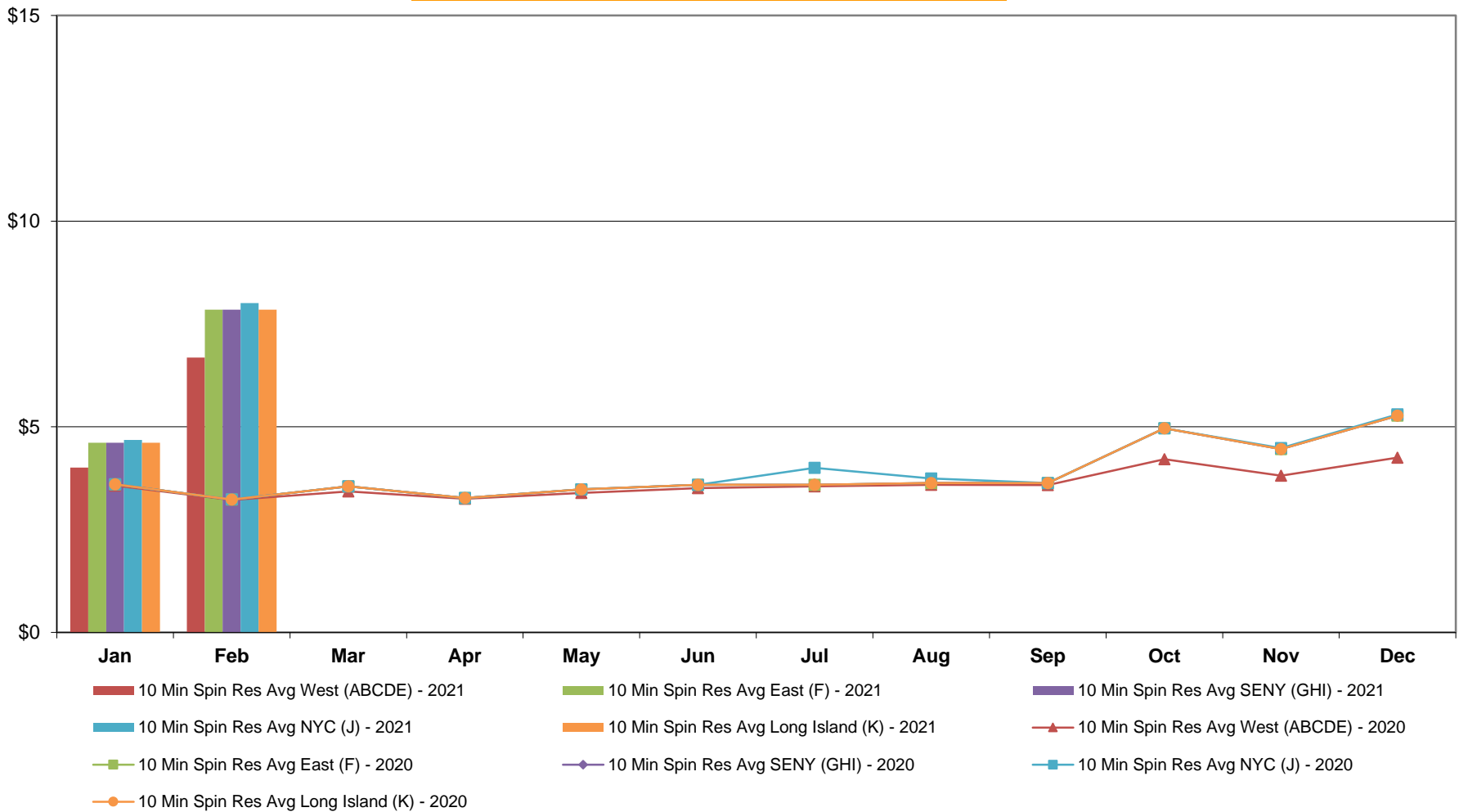
Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2021

		Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid			
Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled		Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled		Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled
WEST	Jan-21	6,262	1,726	2,018	1,076		MHK VL	Jan-21	1,537	548	1,967	531		DUNWOD	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							Mar-21							Mar-21				
	Apr-21							Apr-21							Apr-21				
	May-21							May-21							May-21				
	Jun-21							Jun-21							Jun-21				
	Jul-21							Jul-21							Jul-21				
	Aug-21							Aug-21							Aug-21				
	Sep-21							Sep-21							Sep-21				
	Oct-21							Oct-21							Oct-21				
	Nov-21							Nov-21							Nov-21				
	Dec-21							Dec-21							Dec-21				
	GENESE	Jan-21	1,117	329	1,085	853			CAPITL	Jan-21	3,046	1,995	2,207		792		N.Y.C.	Jan-21	3,486
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
Mar-21							Mar-21							Mar-21					
Apr-21							Apr-21							Apr-21					
May-21							May-21							May-21					
Jun-21							Jun-21							Jun-21					
Jul-21							Jul-21							Jul-21					
Aug-21							Aug-21							Aug-21					
Sep-21							Sep-21							Sep-21					
Oct-21							Oct-21							Oct-21					
Nov-21							Nov-21							Nov-21					
Dec-21							Dec-21							Dec-21					
NORTH		Jan-21	830	498	3,280	1,220		HUD VL		Jan-21	1,666	1,215	5,917	7,429		LONGIL		Jan-21	4,341
	Feb-21	405	410	2,654	1,258		Feb-21		1,685	1,148	4,967	2,247		Feb-21	3,899		3,560	1,758	862
	Mar-21						Mar-21							Mar-21					
	Apr-21						Apr-21							Apr-21					
	May-21						May-21							May-21					
	Jun-21						Jun-21							Jun-21					
	Jul-21						Jul-21							Jul-21					
	Aug-21						Aug-21							Aug-21					
	Sep-21						Sep-21							Sep-21					
	Oct-21						Oct-21							Oct-21					
	Nov-21						Nov-21							Nov-21					
	Dec-21						Dec-21							Dec-21					
	CENTRL	Jan-21	2,124	938	28,034	1,094			MILLWD	Jan-21	1,368	672	1,820	139			NYISO	Jan-21	27,659
Feb-21		1,357	1,102	27,531	954		Feb-21	530		541	1,463	115		Feb-21	19,732	15,526		49,963	9,186
Mar-21							Mar-21							Mar-21					
Apr-21							Apr-21							Apr-21					
May-21							May-21							May-21					
Jun-21							Jun-21							Jun-21					
Jul-21							Jul-21							Jul-21					
Aug-21							Aug-21							Aug-21					
Sep-21							Sep-21							Sep-21					
Oct-21							Oct-21							Oct-21					
Nov-21							Nov-21							Nov-21					
Dec-21							Dec-21							Dec-21					

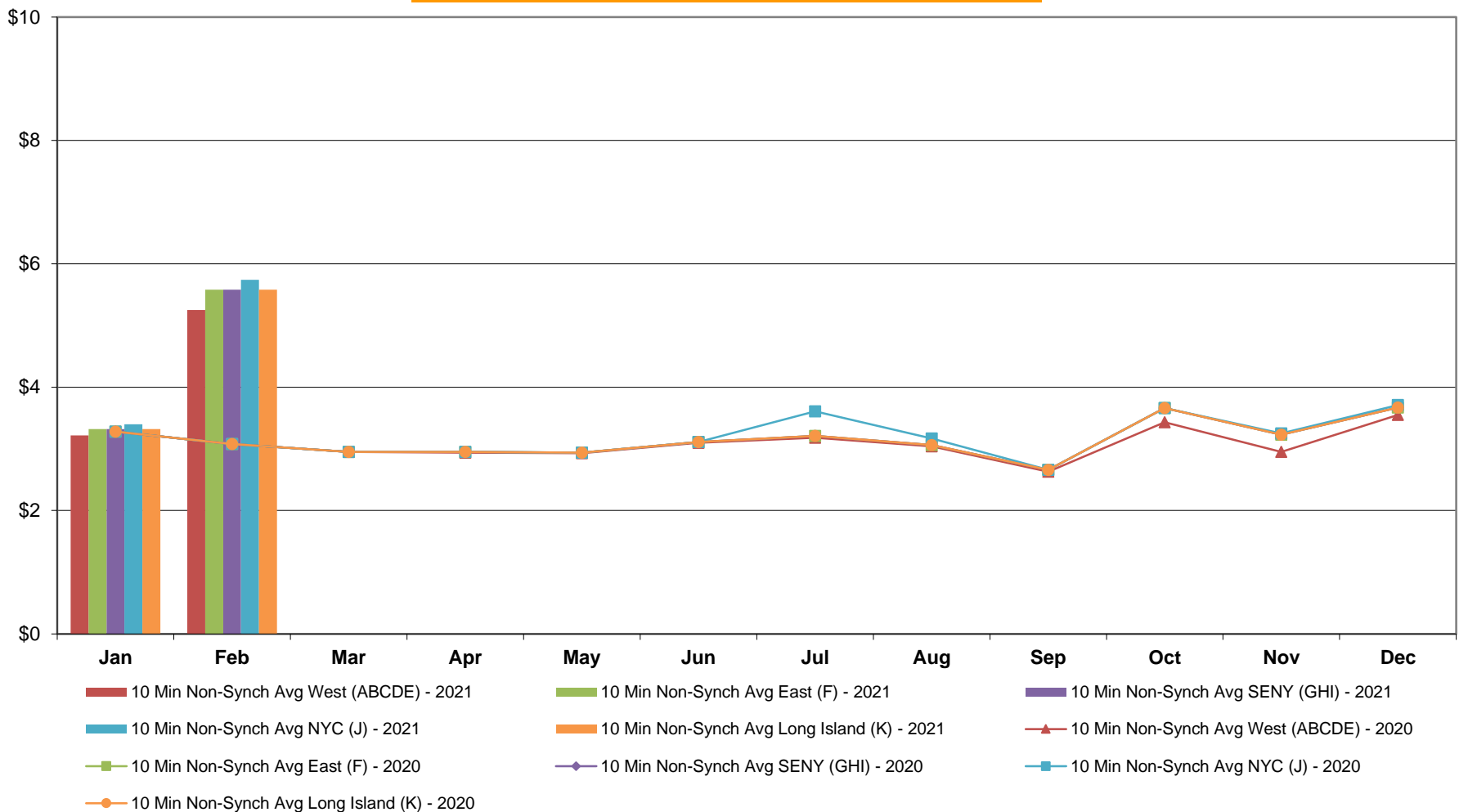
NYISO Multi Hour Block Transactions Monthly Total MWh



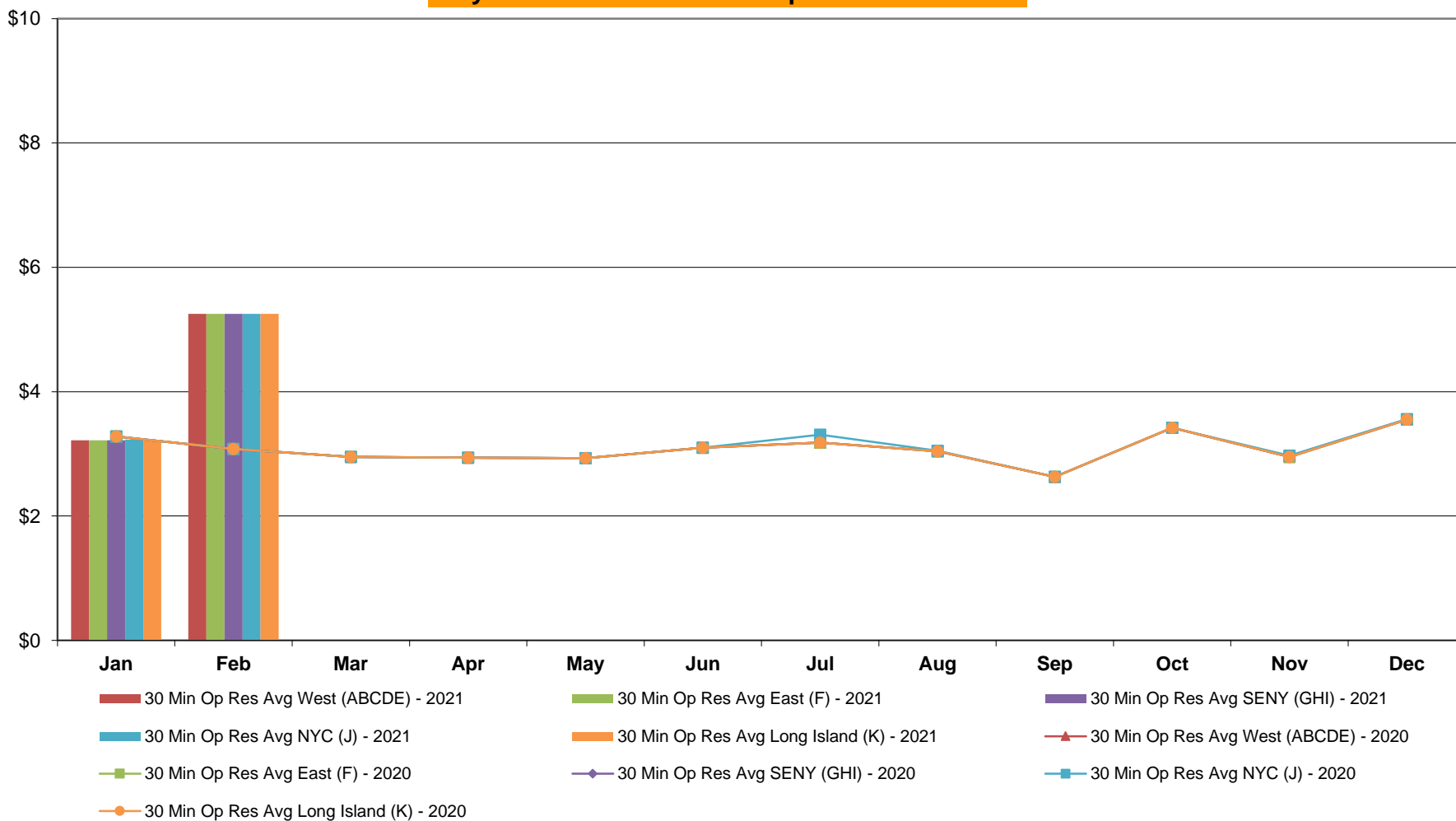
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - 10 Min Spin 2020 - 2021**



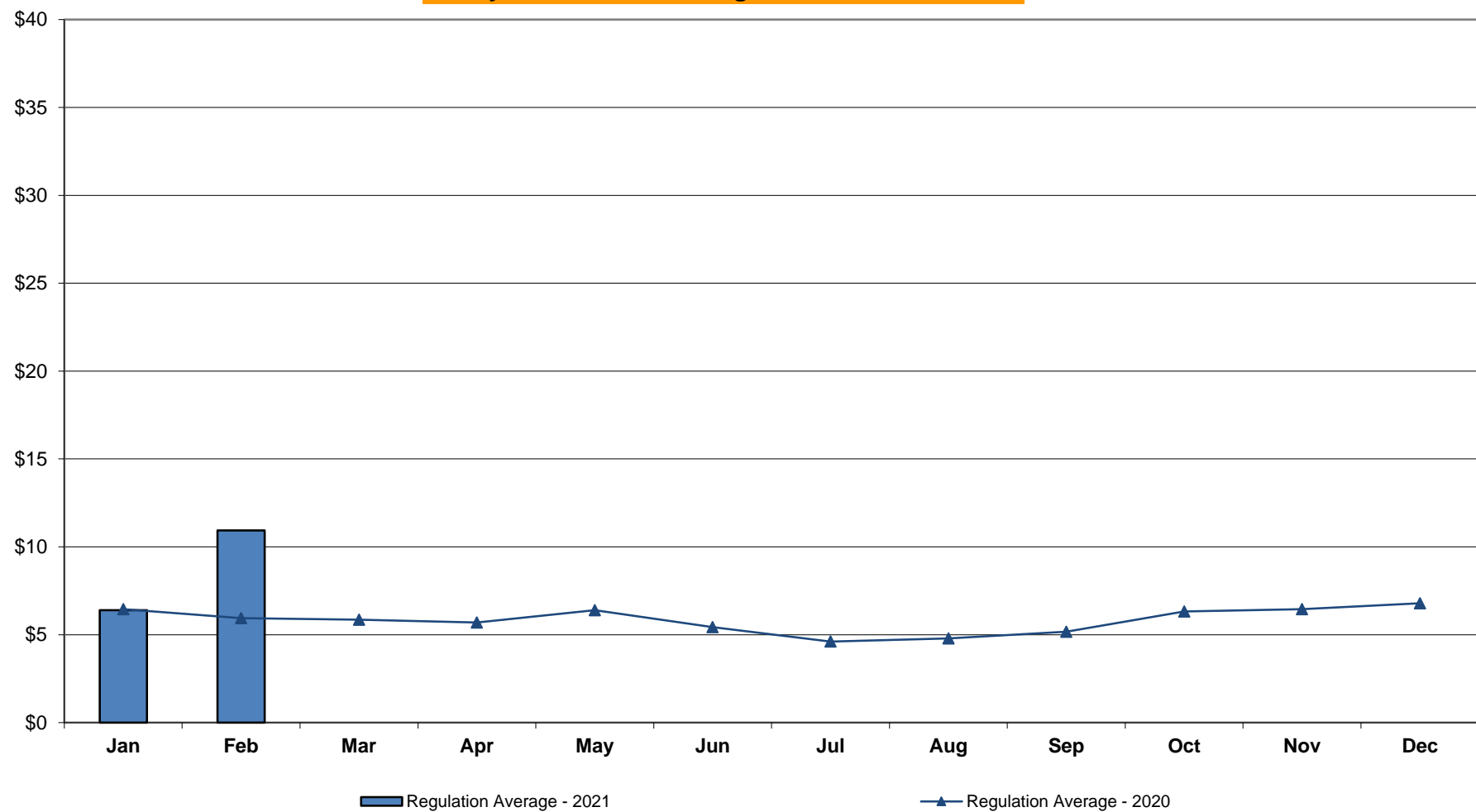
NYISO Monthly Average Ancillary Service Prices Day Ahead Market - 10 Min Non-Synch 2020 - 2021



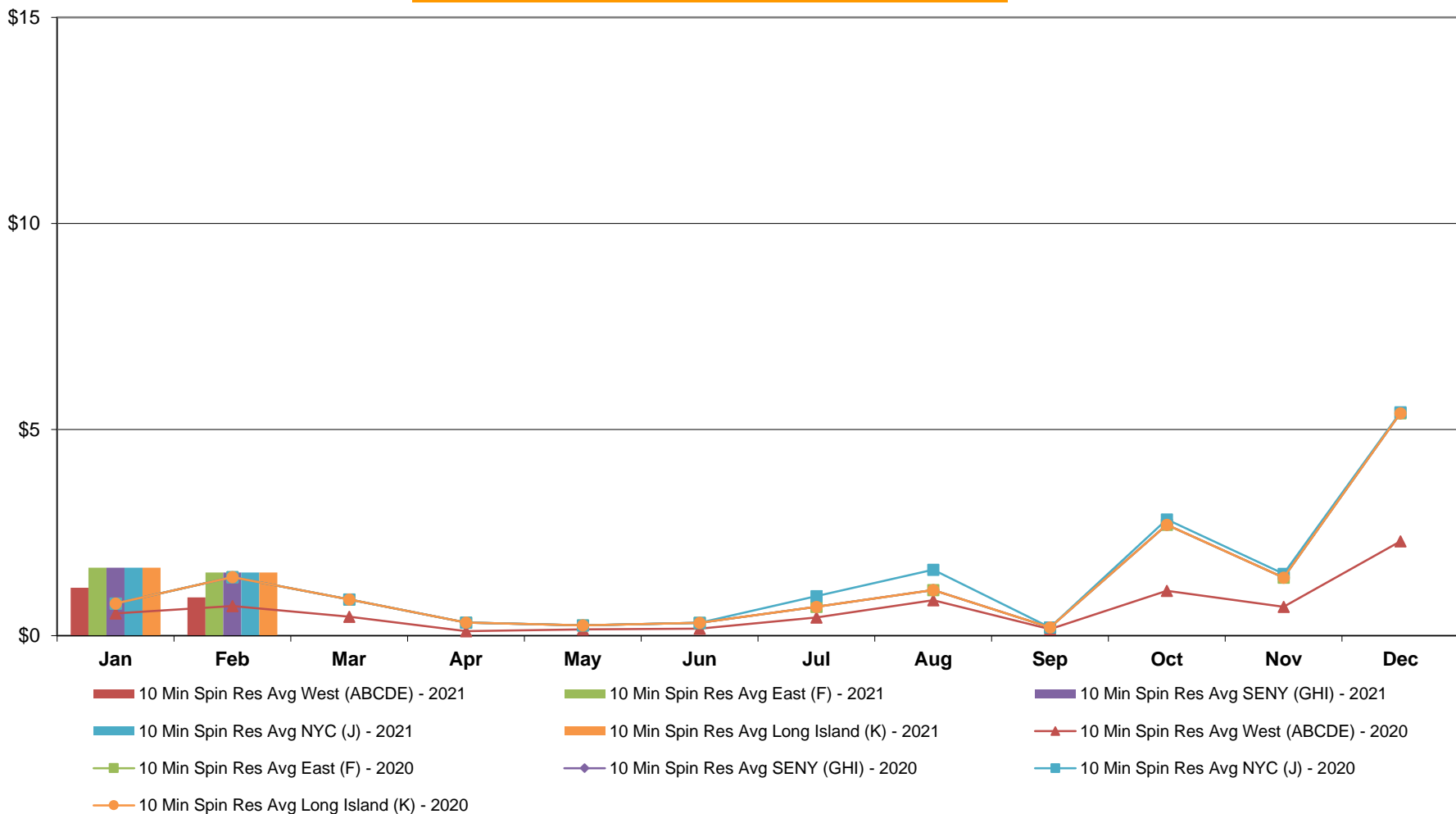
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - 30 Min Op Res 2020 - 2021**



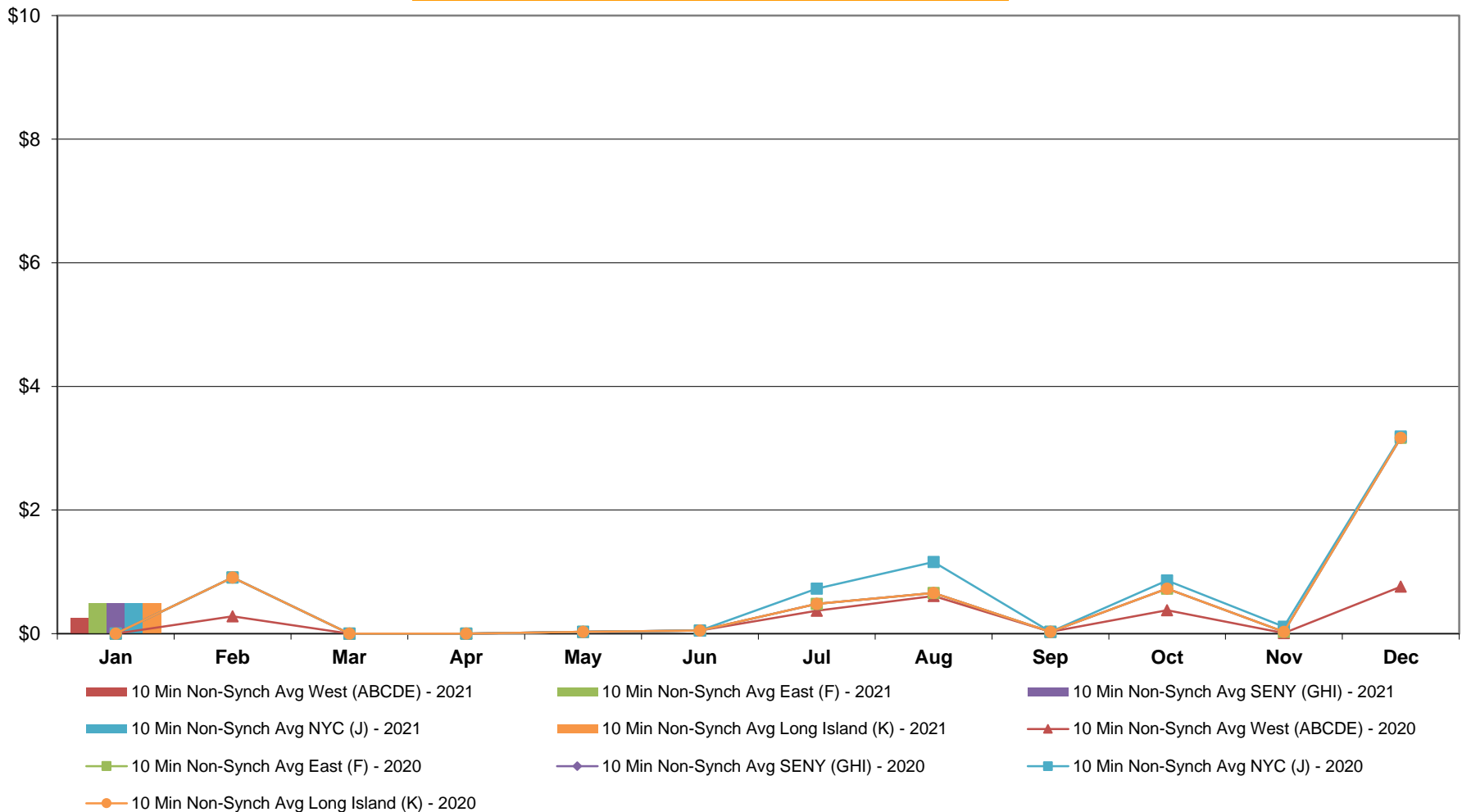
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - Regulation 2020 - 2021**



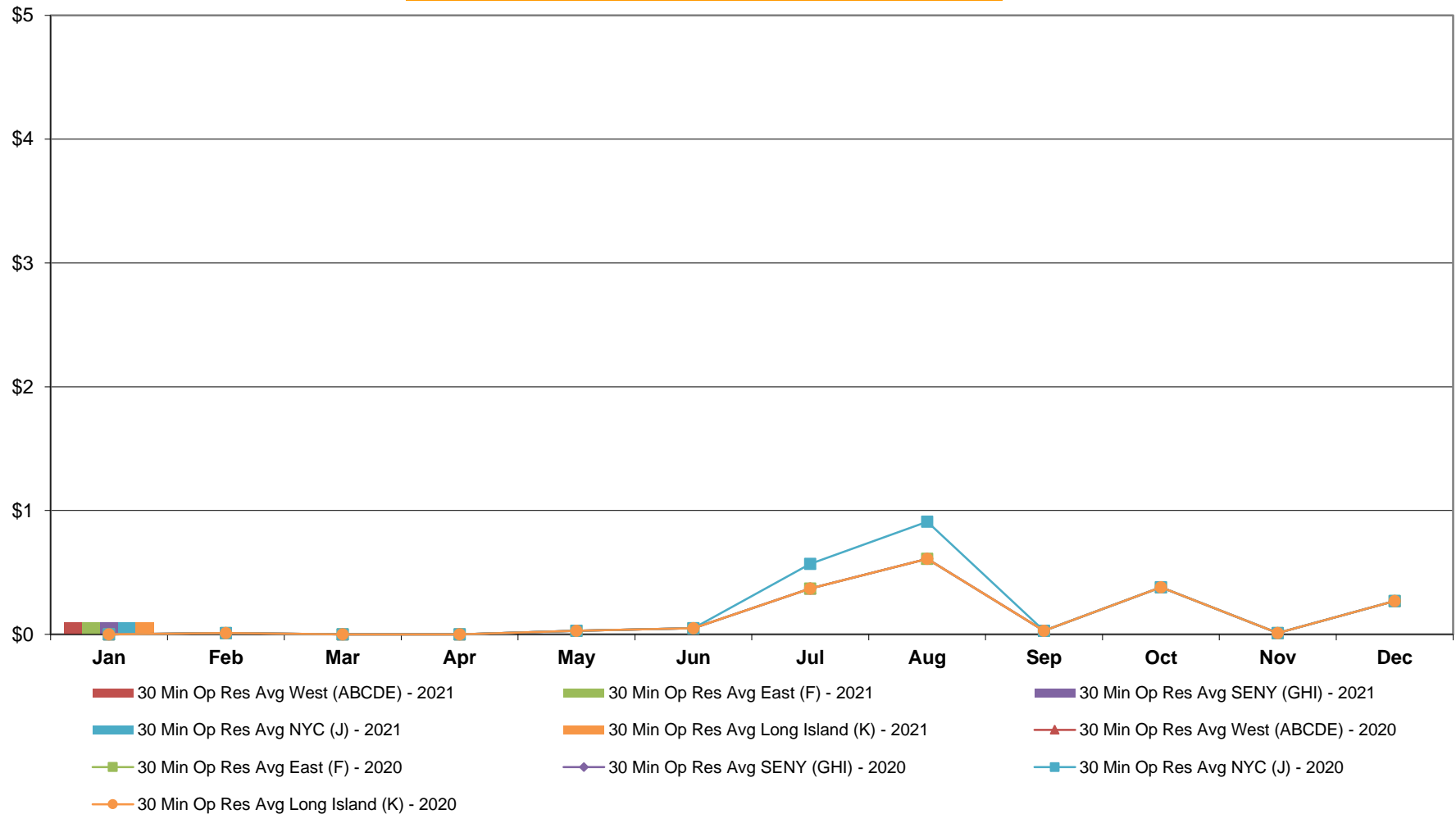
NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Spin 2020 - 2021



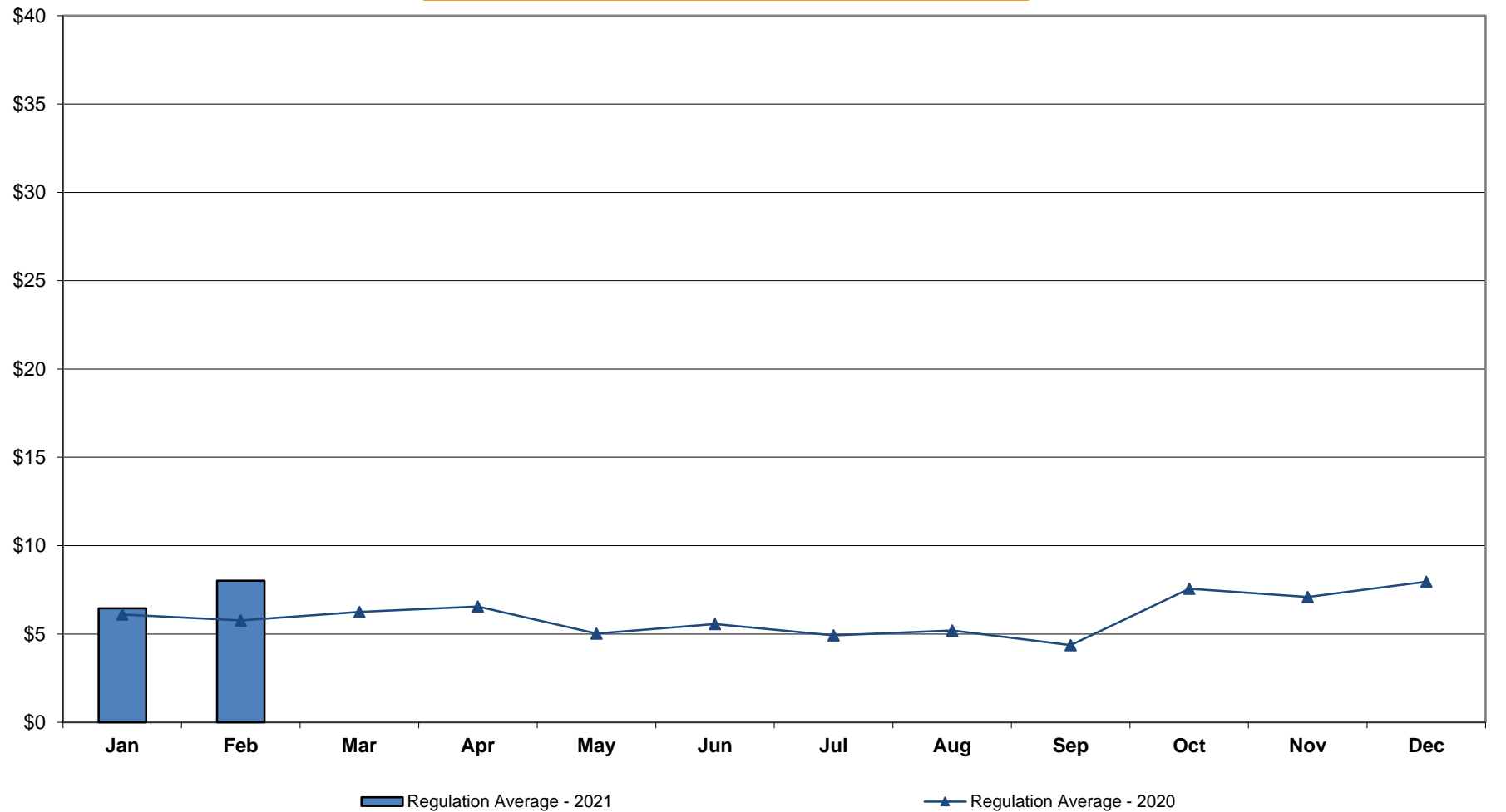
**NYISO Monthly Average Ancillary Service Prices
RTC Market - 10 Min Non-Synch 2020 - 2021**



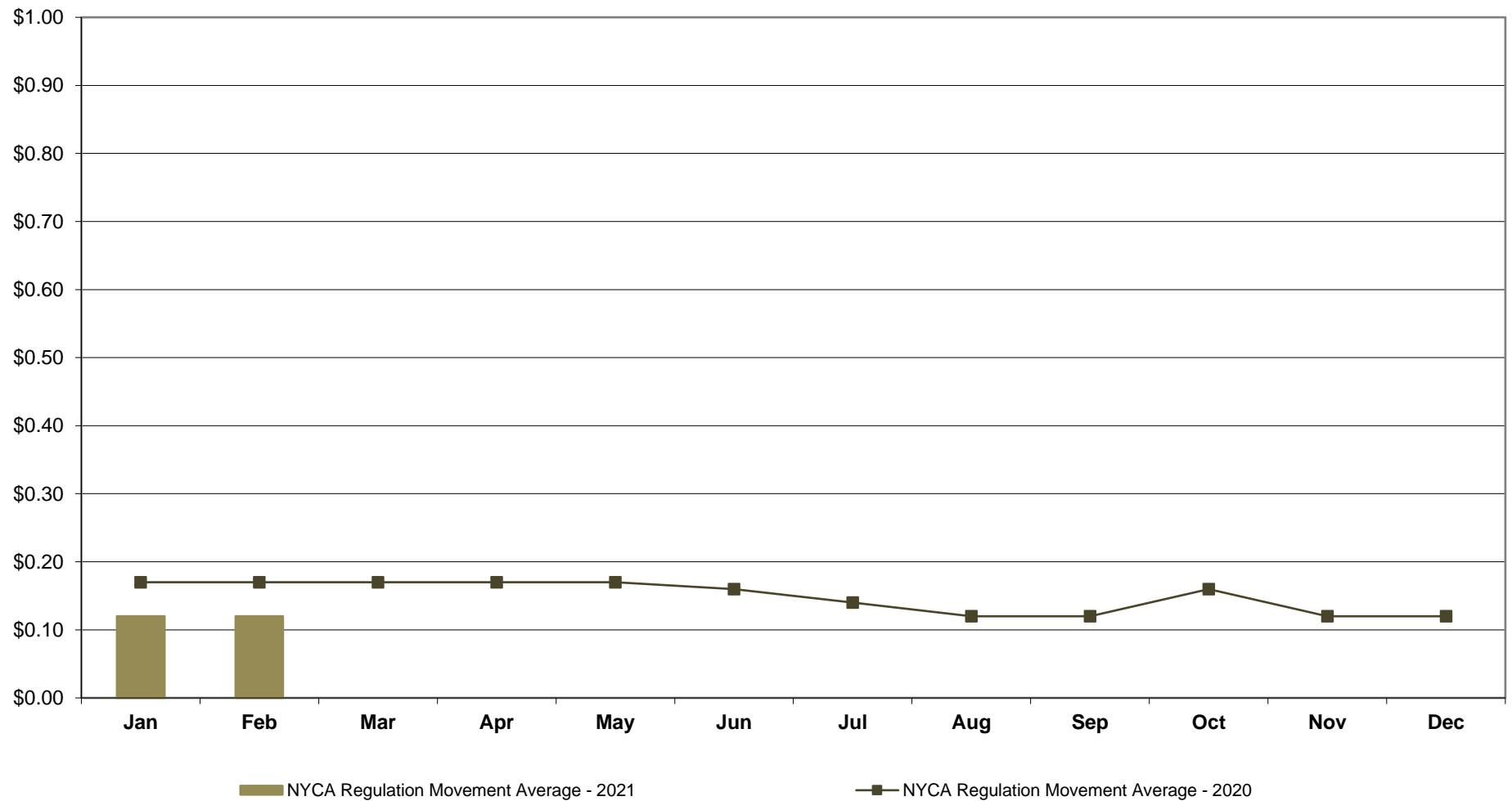
**NYISO Monthly Average Ancillary Service Prices
RTC Market - 30 Min Op Res 2020 - 2021**



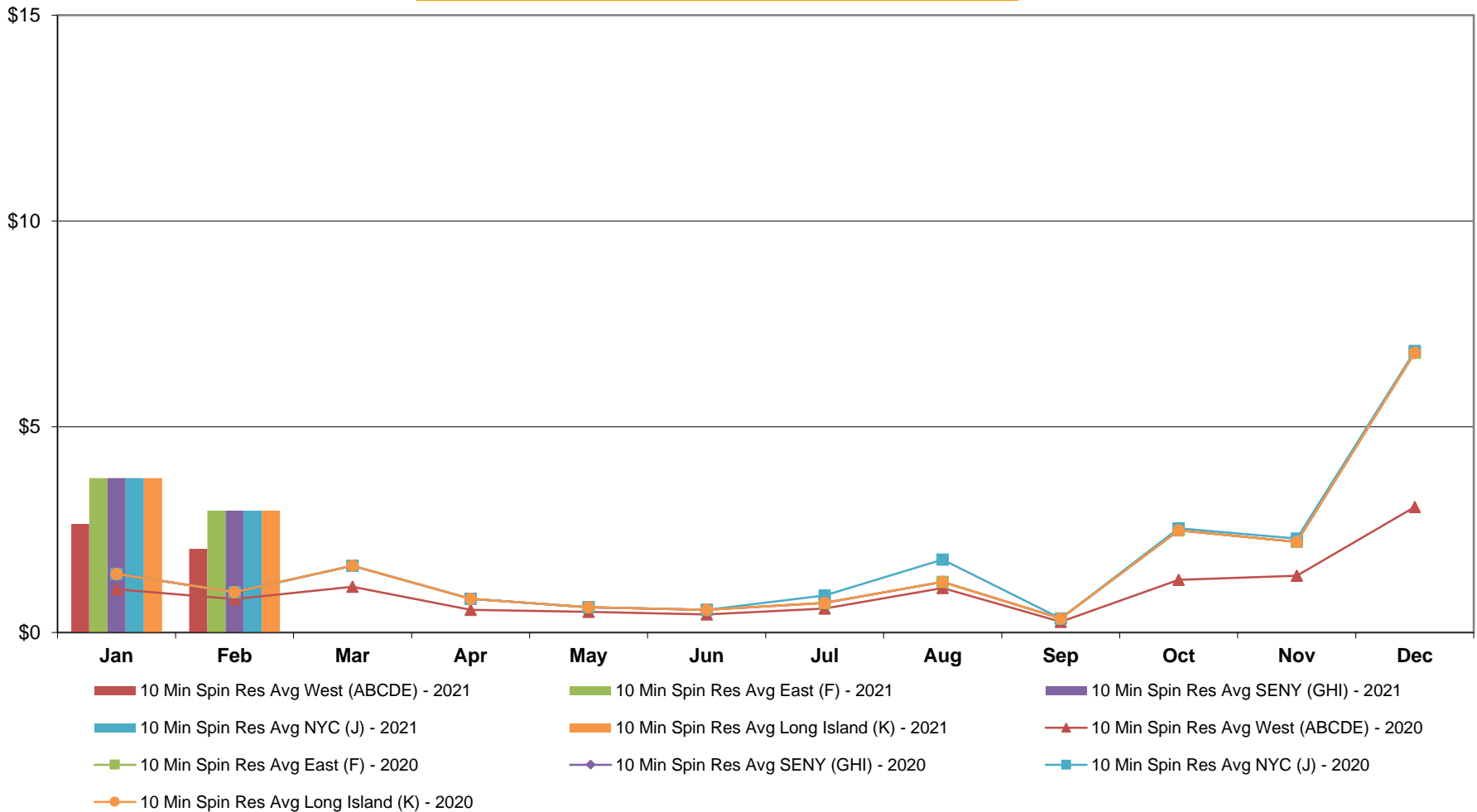
**NYISO Monthly Average Ancillary Service Prices
RTC Market - Regulation 2020 - 2021**



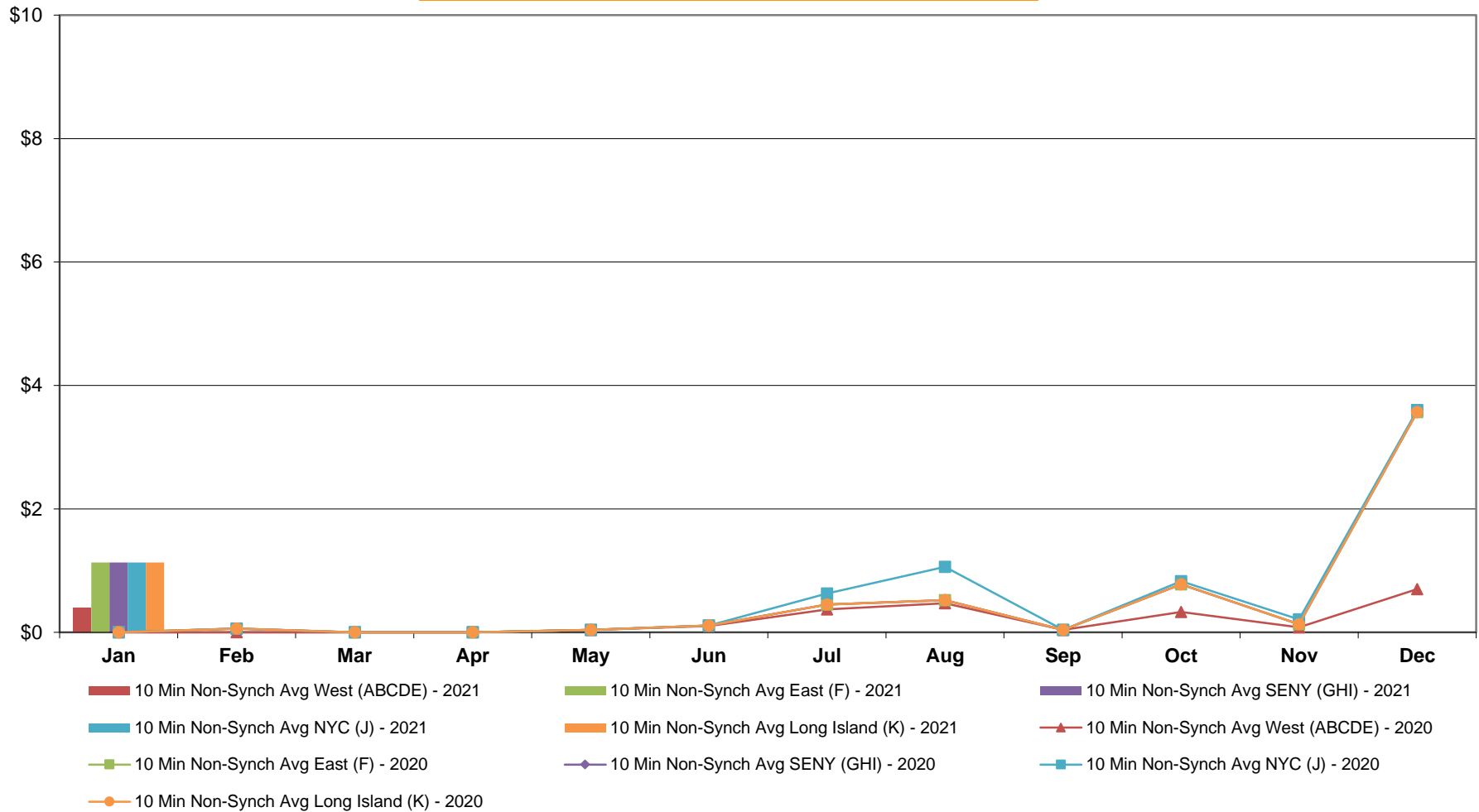
NYISO Monthly Average Ancillary Service Prices RTC Market - Regulation Movement 2020 - 2021



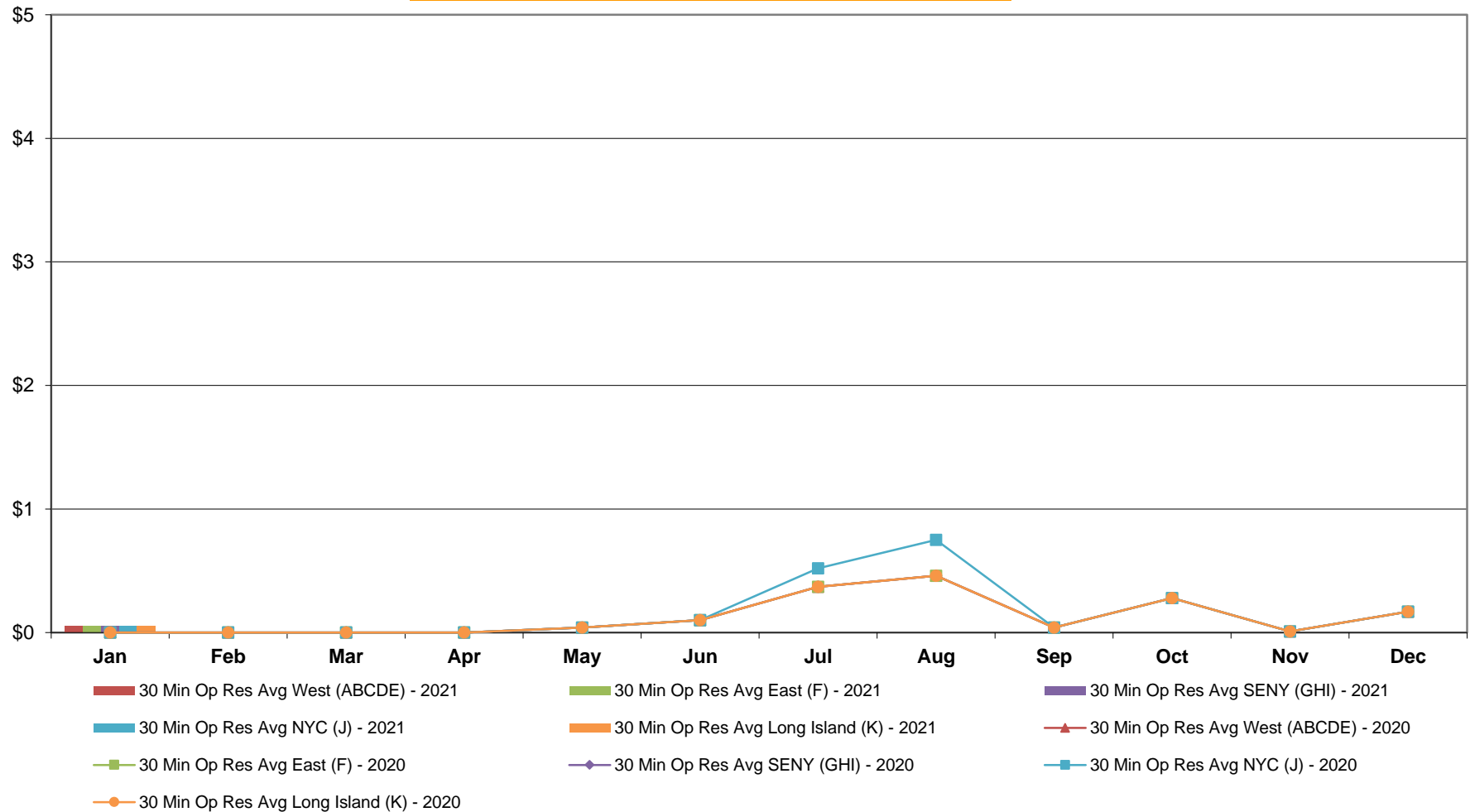
**NYISO Monthly Average Ancillary Service Prices
Real Time Market - 10 Min Spin 2020 - 2021**



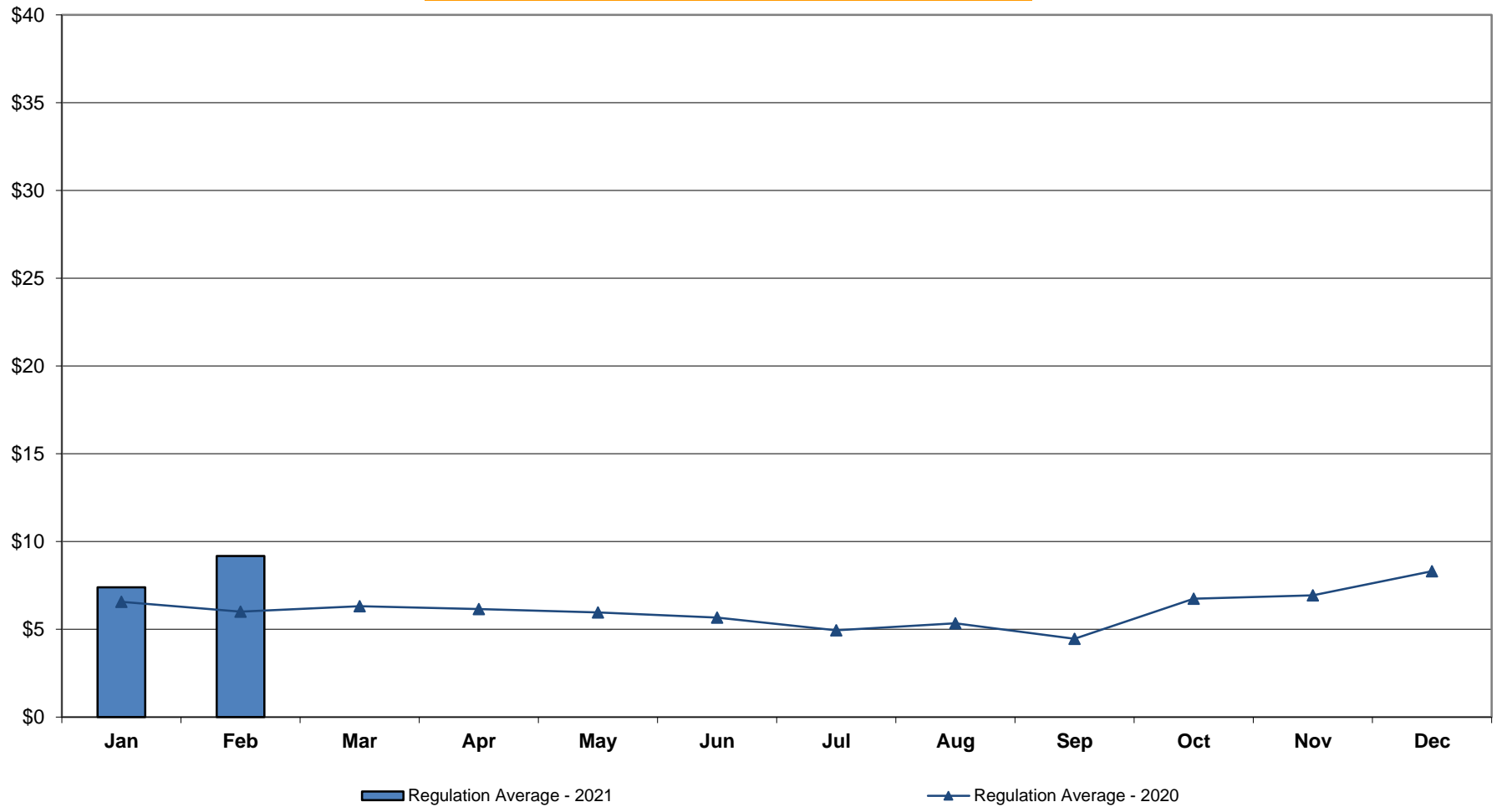
NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Non-Synch 2020 - 2021



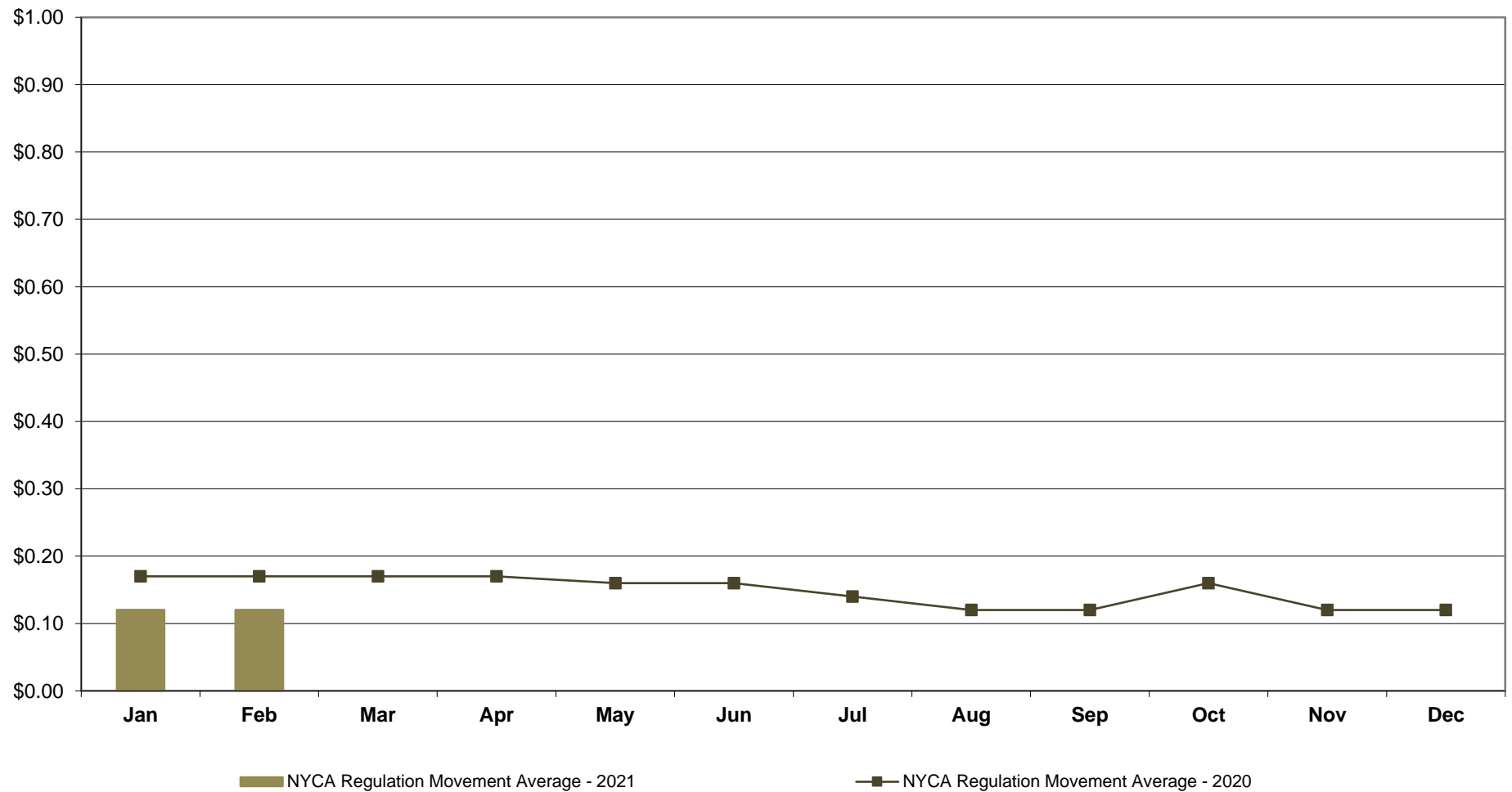
**NYISO Monthly Average Ancillary Service Prices
Real Time Market - 30 Min Op Res 2020 - 2021**



**NYISO Monthly Average Ancillary Service Prices
Real Time Market - Regulation 2020 - 2021**



NYISO Monthly Average Ancillary Service Prices Real Time Market - Regulation Movement 2020 - 2021



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

<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>
<u>Day Ahead Market</u>												
10 Min Spin Long Island (K)	4.61	7.85										
10 Min Spin NYC (J)	4.68	8.01										
10 Min Spin SENY (GHI)	4.61	7.85										
10 Min Spin East (F)	4.61	7.85										
10 Min Spin West (ABCDE)	4.01	6.68										
10 Min Non Synch Long Island (K)	3.32	5.58										
10 Min Non Synch NYC (J)	3.40	5.74										
10 Min Non Synch SENY (GHI)	3.32	5.58										
10 Min Non Synch East (F)	3.32	5.58										
10 Min Non Synch West (ABCDE)	3.22	5.25										
30 Min Long Island (K)	3.22	5.25										
30 Min NYC (J)	3.23	5.25										
30 Min SENY (GHI)	3.22	5.25										
30 Min East (F)	3.22	5.25										
30 Min West (ABCDE)	3.22	5.25										
Regulation	6.40	10.93										
<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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Day Ahead Market</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	6.46	5.94	5.86	5.70	6.40	5.44	4.61	4.79	5.17	6.32	6.45	6.79

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

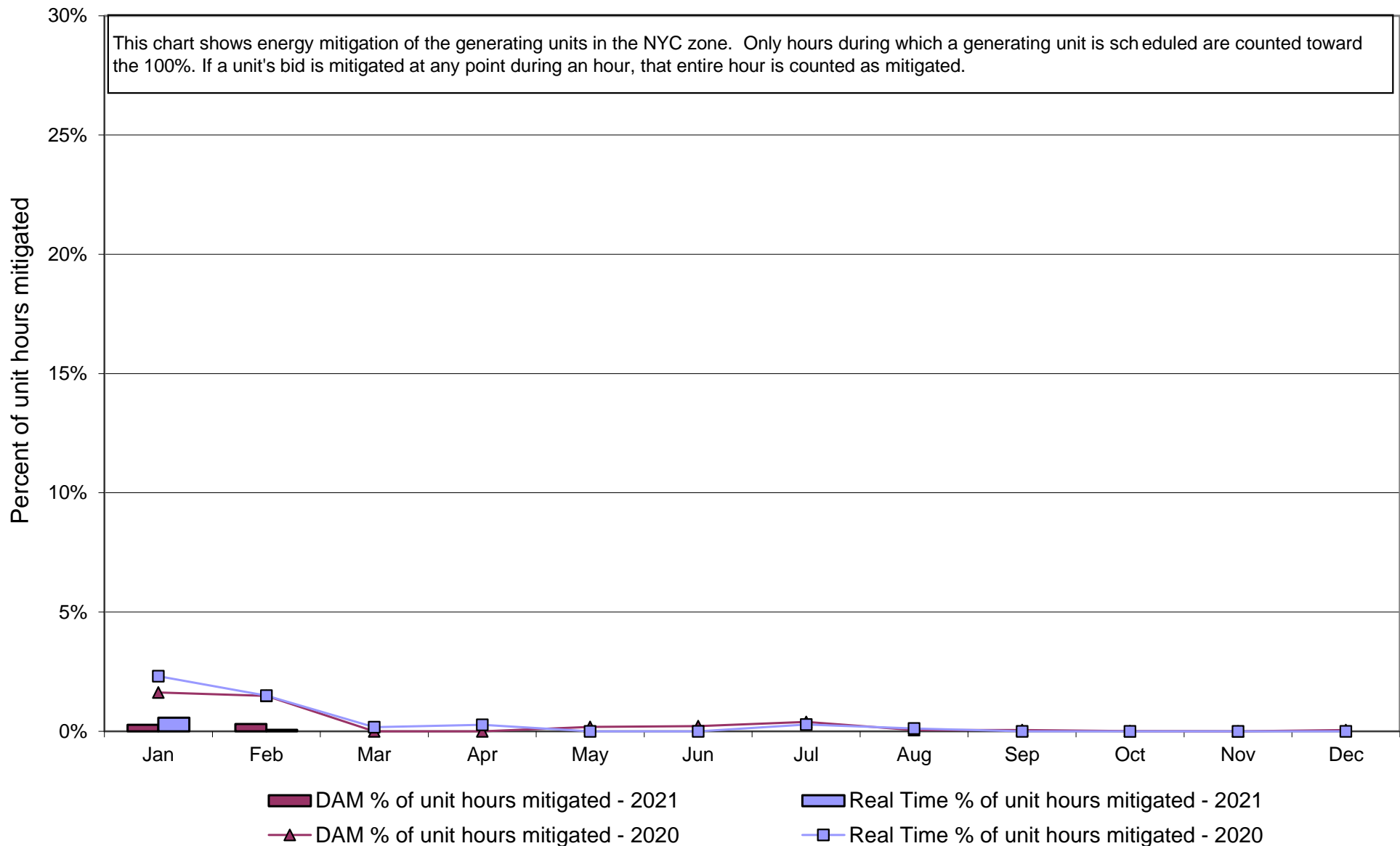
<u>2021</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>RTC Market</u>												
10 Min Spin Long Island (K)	1.65	1.53										
10 Min Spin NYC (J)	1.65	1.53										
10 Min Spin SENY (GHI)	1.65	1.53										
10 Min Spin East (F)	1.65	1.53										
10 Min Spin West (ABCDE)	1.16	0.93										
10 Min Non Synch Long Island (K)	0.49	0.00										
10 Min Non Synch NYC (J)	0.49	0.00										
10 Min Non Synch SENY (GHI)	0.49	0.00										
10 Min Non Synch East (F)	0.49	0.00										
10 Min Non Synch West (ABCDE)	0.26	0.00										
30 Min Long Island (K)	0.10	0.00										
30 Min NYC (J)	0.10	0.00										
30 Min SENY (GHI)	0.10	0.00										
30 Min East (F)	0.10	0.00										
30 Min West (ABCDE)	0.10	0.00										
Regulation	6.46	8.02										
NYCA Regulation Movement	0.12	0.12										
<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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>RTC Market</u>												
10 Min Spin Long Island (K)	0.78	1.42	0.88	0.32	0.25	0.31	0.70	1.11	0.20	2.69	1.41	5.40
10 Min Spin NYC (J)	0.78	1.46	0.88	0.32	0.26	0.31	0.96	1.60	0.20	2.82	1.50	5.42
10 Min Spin SENY (GHI)	0.78	1.42	0.88	0.32	0.25	0.31	0.70	1.11	0.20	2.69	1.41	5.40
10 Min Spin East (F)	0.78	1.42	0.88	0.32	0.25	0.31	0.70	1.11	0.20	2.69	1.41	5.40
10 Min Spin West (ABCDE)	0.54	0.72	0.46	0.11	0.15	0.17	0.44	0.86	0.16	1.09	0.70	2.29
10 Min Non Synch Long Island (K)	0.00	0.91	0.00	0.00	0.03	0.05	0.48	0.66	0.03	0.73	0.03	3.17
10 Min Non Synch NYC (J)	0.00	0.95	0.00	0.00	0.04	0.06	0.73	1.16	0.03	0.86	0.11	3.19
10 Min Non Synch SENY (GHI)	0.00	0.91	0.00	0.00	0.03	0.05	0.48	0.66	0.03	0.73	0.03	3.17
10 Min Non Synch East (F)	0.00	0.91	0.00	0.00	0.03	0.05	0.48	0.66	0.03	0.73	0.03	3.17
10 Min Non Synch West (ABCDE)	0.00	0.28	0.00	0.00	0.03	0.05	0.37	0.61	0.03	0.38	0.01	0.76
30 Min Long Island (K)	0.00	0.01	0.00	0.00	0.03	0.05	0.37	0.61	0.03	0.38	0.01	0.27
30 Min NYC (J)	0.00	0.01	0.00	0.00	0.03	0.05	0.57	0.91	0.03	0.38	0.01	0.27
30 Min SENY (GHI)	0.00	0.01	0.00	0.00	0.03	0.05	0.37	0.61	0.03	0.38	0.01	0.27
30 Min East (F)	0.00	0.01	0.00	0.00	0.03	0.05	0.37	0.61	0.03	0.38	0.01	0.27
30 Min West (ABCDE)	0.00	0.01	0.00	0.00	0.03	0.05	0.37	0.61	0.03	0.38	0.01	0.27
Regulation	6.11	5.77	6.25	6.56	5.02	5.56	4.92	5.20	4.37	7.57	7.09	7.96
NYCA Regulation Movement	0.17	0.17	0.17	0.17	0.17	0.16	0.14	0.12	0.12	0.16	0.12	0.12

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

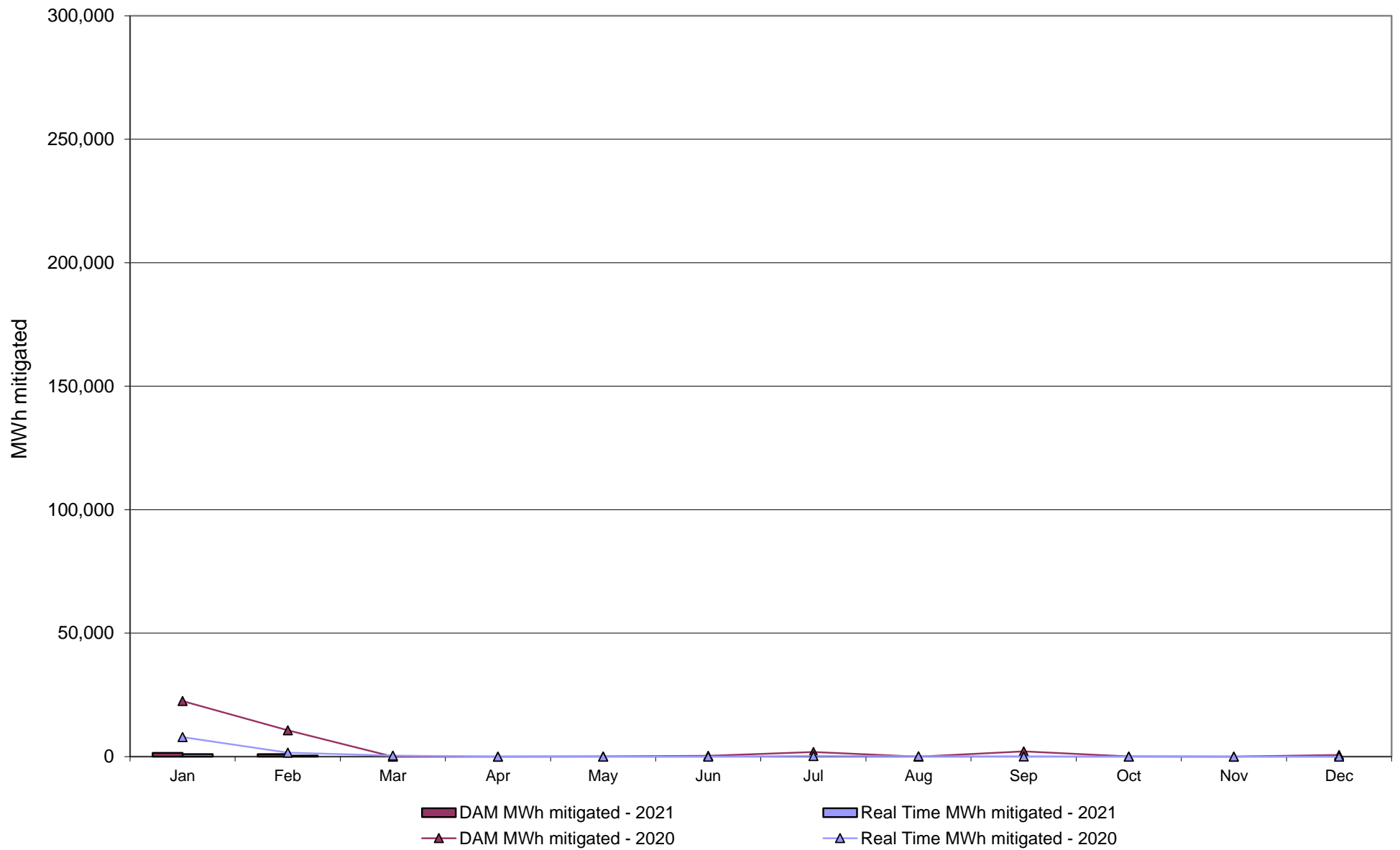
<u>2021</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Real Time Market</u>												
10 Min Spin Long Island (K)	3.75	2.96										
10 Min Spin NYC (J)	3.75	2.96										
10 Min Spin SENY (GHI)	3.75	2.96										
10 Min Spin East (F)	3.75	2.96										
10 Min Spin West (ABCDE)	2.64	2.03										
10 Min Non Synch Long Island (K)	1.13	0.02										
10 Min Non Synch NYC (J)	1.13	0.02										
10 Min Non Synch SENY (GHI)	1.13	0.02										
10 Min Non Synch East (F)	1.13	0.02										
10 Min Non Synch West (ABCDE)	0.40	0.00										
30 Min Long Island (K)	0.05	0.00										
30 Min NYC (J)	0.05	0.00										
30 Min SENY (GHI)	0.05	0.00										
30 Min East (F)	0.05	0.00										
30 Min West (ABCDE)	0.05	0.00										
Regulation	7.39	9.17										
NYCA Regulation Movement	0.12	0.12										
<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>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Real Time Market</u>												
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
10 Min Spin NYC (J)	1.42	0.98	1.62	0.82	0.63	0.56	0.90	1.77	0.34	2.53	2.28	6.84
10 Min Spin SENY (GHI)	1.42	0.98	1.62	0.82	0.61	0.55	0.72	1.23	0.34	2.48	2.20	6.80
10 Min Spin East (F)	1.42	0.98	1.62	0.82	0.61	0.55	0.72	1.23	0.34	2.48	2.20	6.80
10 Min Spin West (ABCDE)	1.05	0.81	1.11	0.55	0.50	0.44	0.58	1.08	0.26	1.28	1.38	3.05
10 Min Non Synch Long Island (K)	0.00	0.06	0.00	0.00	0.04	0.11	0.45	0.52	0.04	0.78	0.13	3.57
10 Min Non Synch NYC (J)	0.00	0.06	0.00	0.00	0.07	0.12	0.63	1.06	0.04	0.83	0.21	3.60
10 Min Non Synch SENY (GHI)	0.00	0.06	0.00	0.00	0.04	0.11	0.45	0.52	0.04	0.78	0.13	3.57
10 Min Non Synch East (F)	0.00	0.06	0.00	0.00	0.04	0.11	0.45	0.52	0.04	0.78	0.13	3.57
10 Min Non Synch West (ABCDE)	0.00	0.00	0.00	0.00	0.04	0.10	0.37	0.47	0.04	0.33	0.08	0.70
30 Min Long Island (K)	0.00	0.00	0.00	0.00	0.04	0.10	0.37	0.46	0.04	0.28	0.01	0.17
30 Min NYC (J)	0.00	0.00	0.00	0.00	0.04	0.10	0.52	0.75	0.04	0.28	0.01	0.17
30 Min SENY (GHI)	0.00	0.00	0.00	0.00	0.04	0.10	0.37	0.46	0.04	0.28	0.01	0.17
30 Min East (F)	0.00	0.00	0.00	0.00	0.04	0.10	0.37	0.46	0.04	0.28	0.01	0.17
30 Min West (ABCDE)	0.00	0.00	0.00	0.00	0.04	0.10	0.37	0.46	0.04	0.28	0.01	0.17
Regulation	6.57	6.00	6.32	6.16	5.96	5.67	4.94	5.34	4.46	6.75	6.93	8.31
NYCA Regulation Movement	0.17	0.17	0.17	0.17	0.16	0.16	0.14	0.12	0.12	0.16	0.12	0.12

NYISO In City Energy Mitigation - AMP (NYC Zone) 2020 - 2021

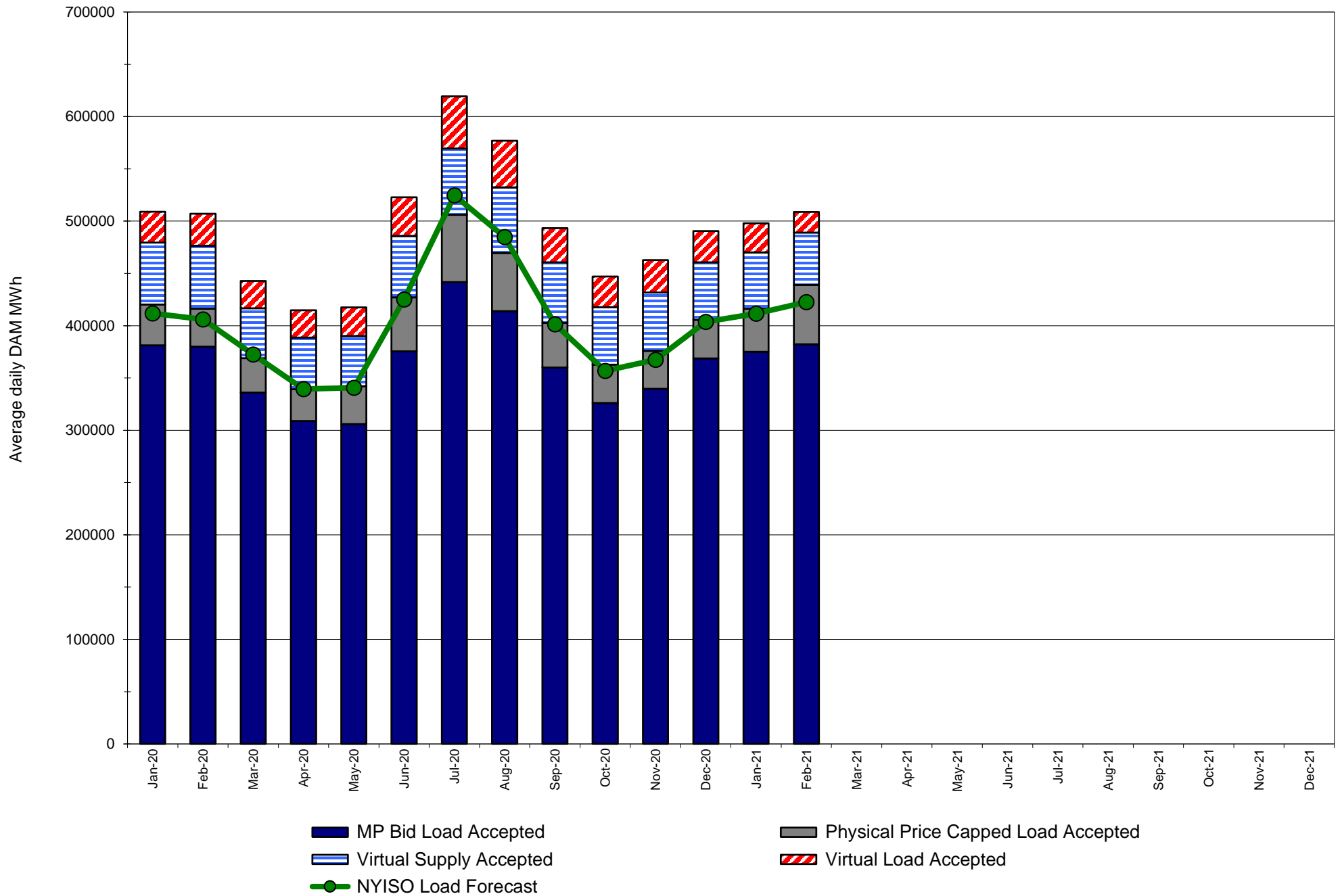
Percentage of committed unit-hours mitigated



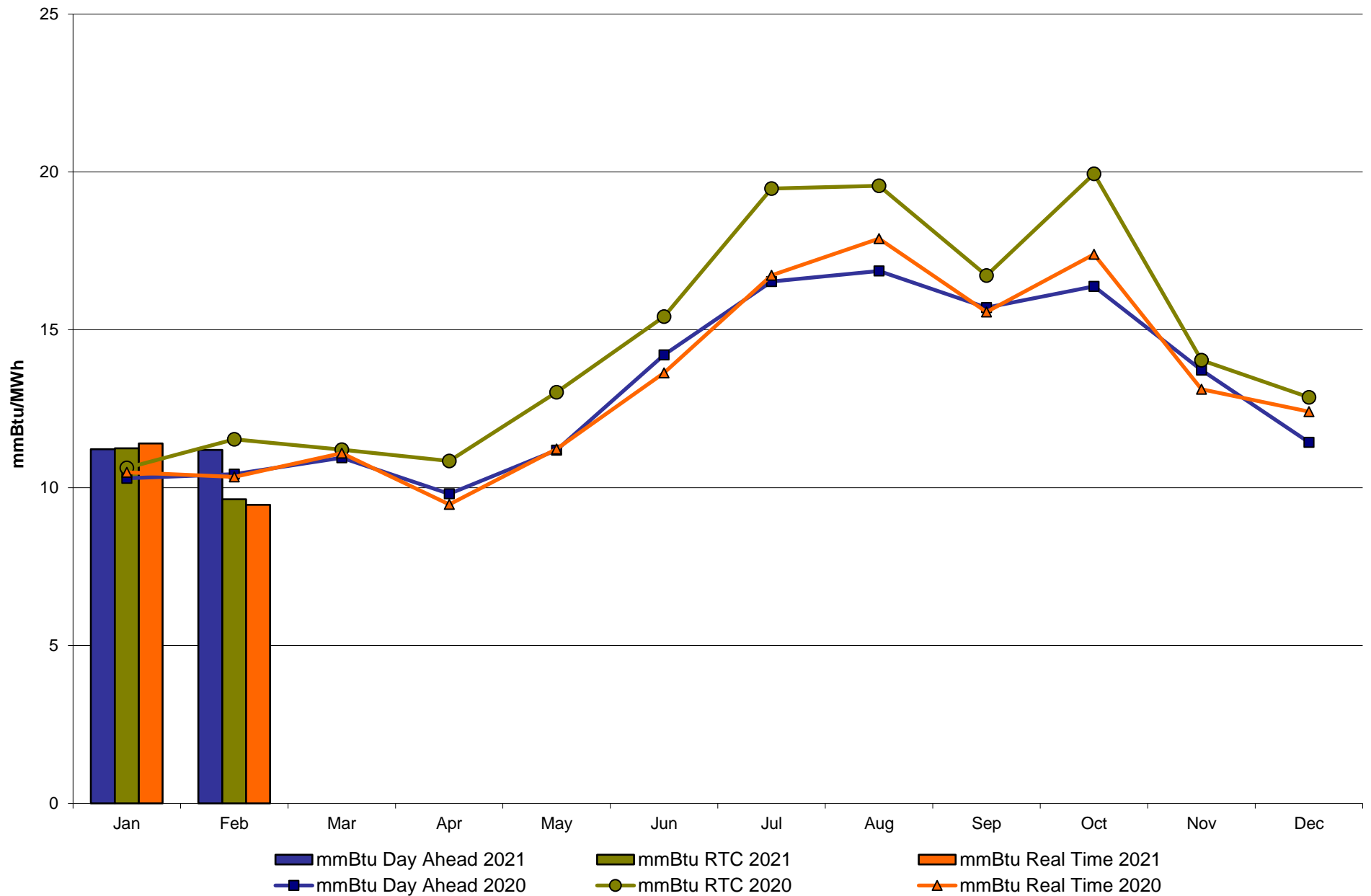
NYISO In City Energy Mitigation (NYC Zone) 2020 - 2021
Monthly megawatt hours mitigated



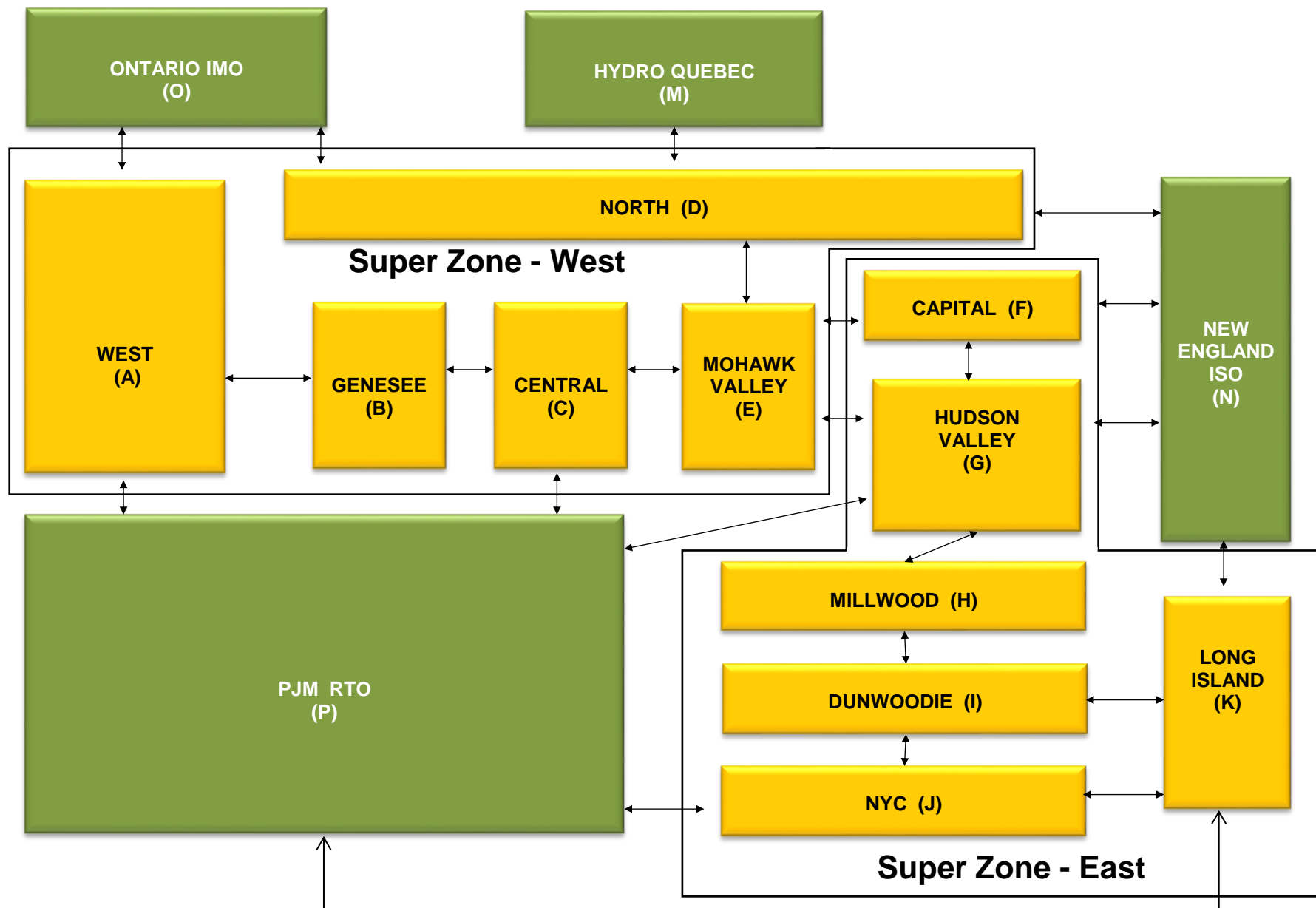
NYISO Average Daily DAM Load Bid Summary



Monthly Implied Heat Rate 2020-2021



NYISO LBMP ZONES



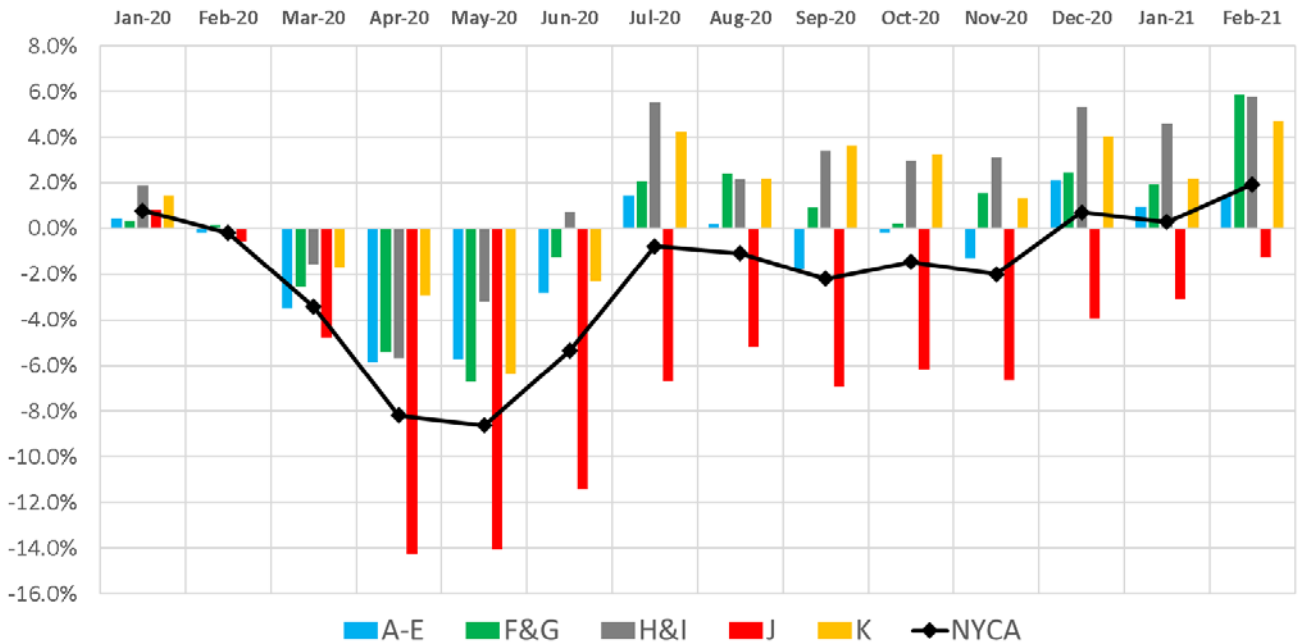
Billing Codes for Chart C

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

COVID-19: Estimated Load Impacts

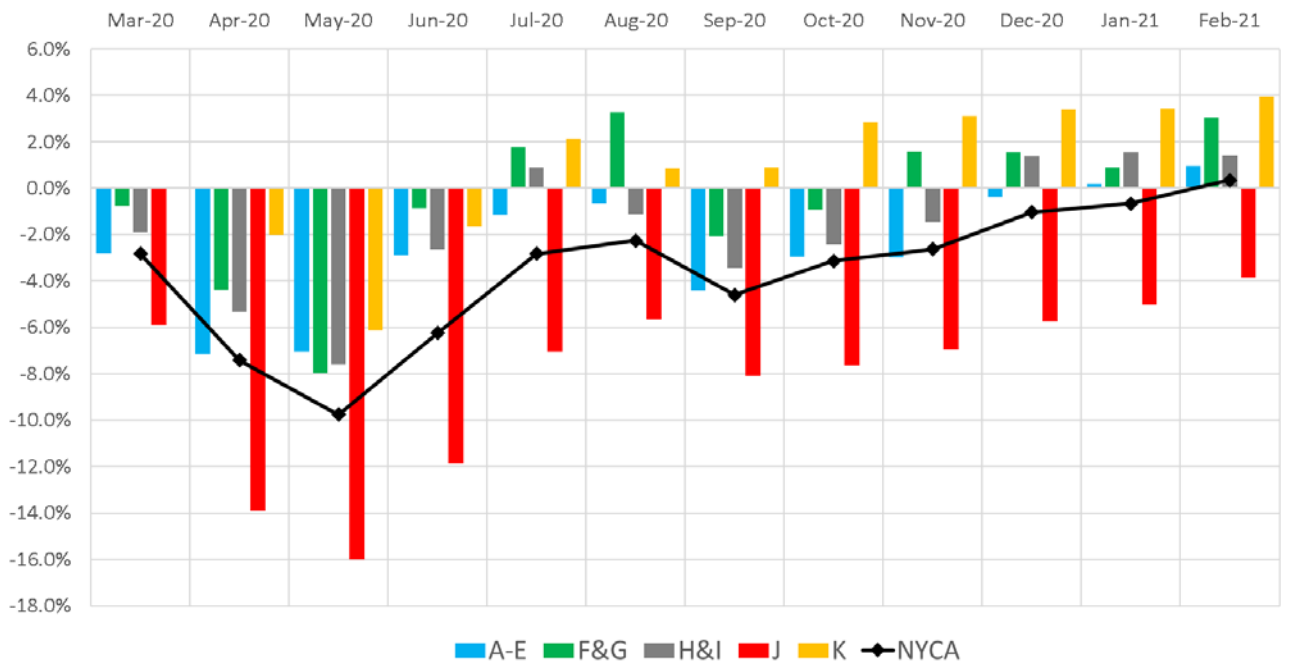
Regional Energy Impacts

Weather Normalized Monthly Energy Use - % Versus Expected (Areas)



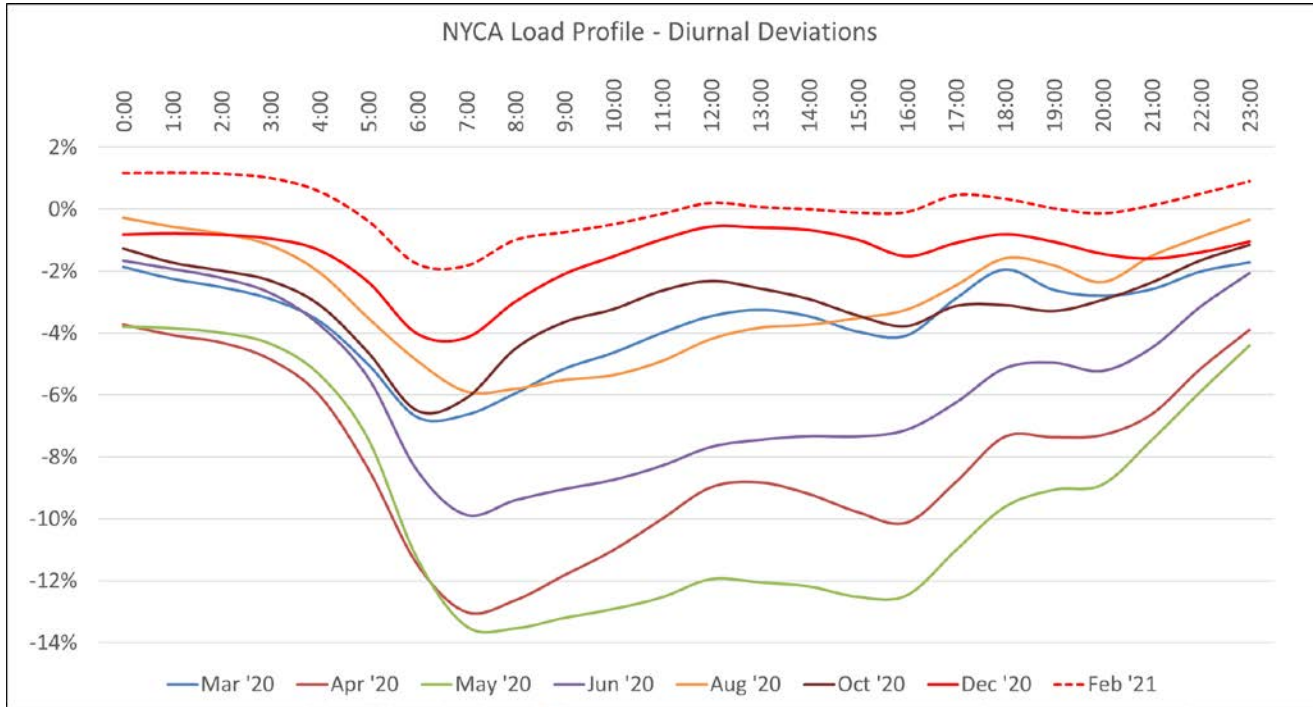
Regional Peak Impacts

Monthly Peak Demand - % Versus Expected (Areas)



COVID-19: Estimated Load Impacts

NYCA Hourly Impacts versus Expected*

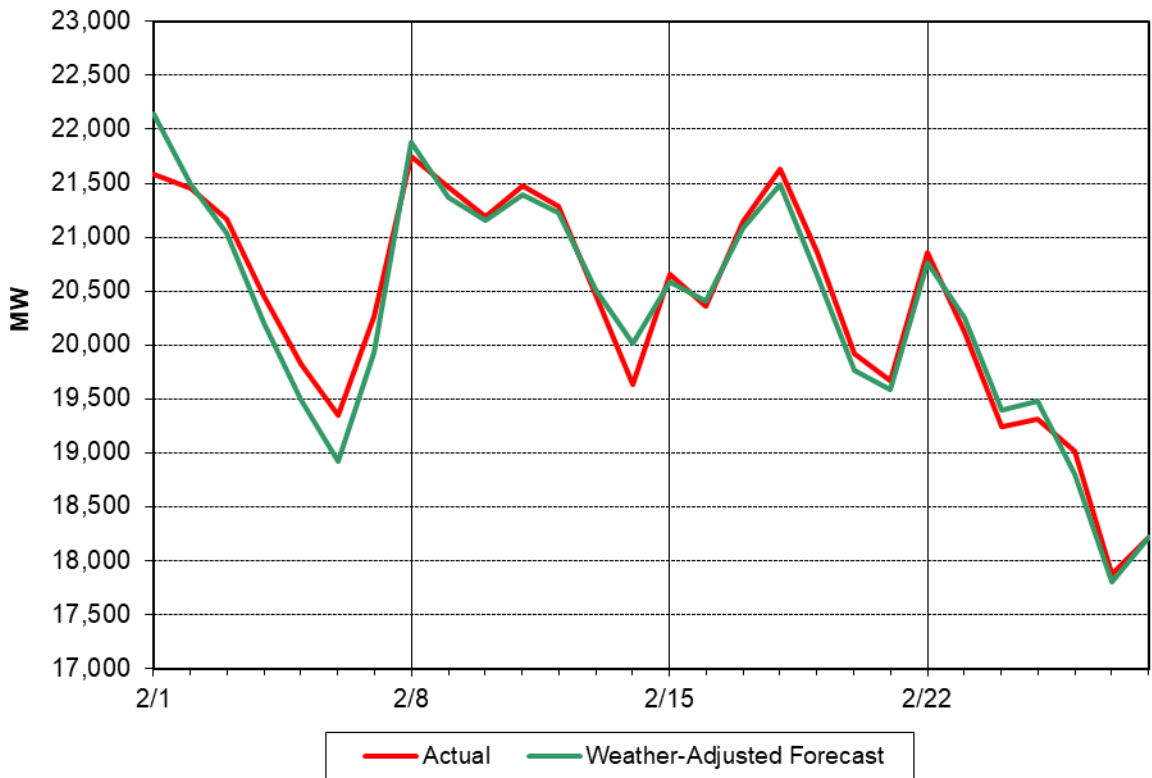


Percent Deviations

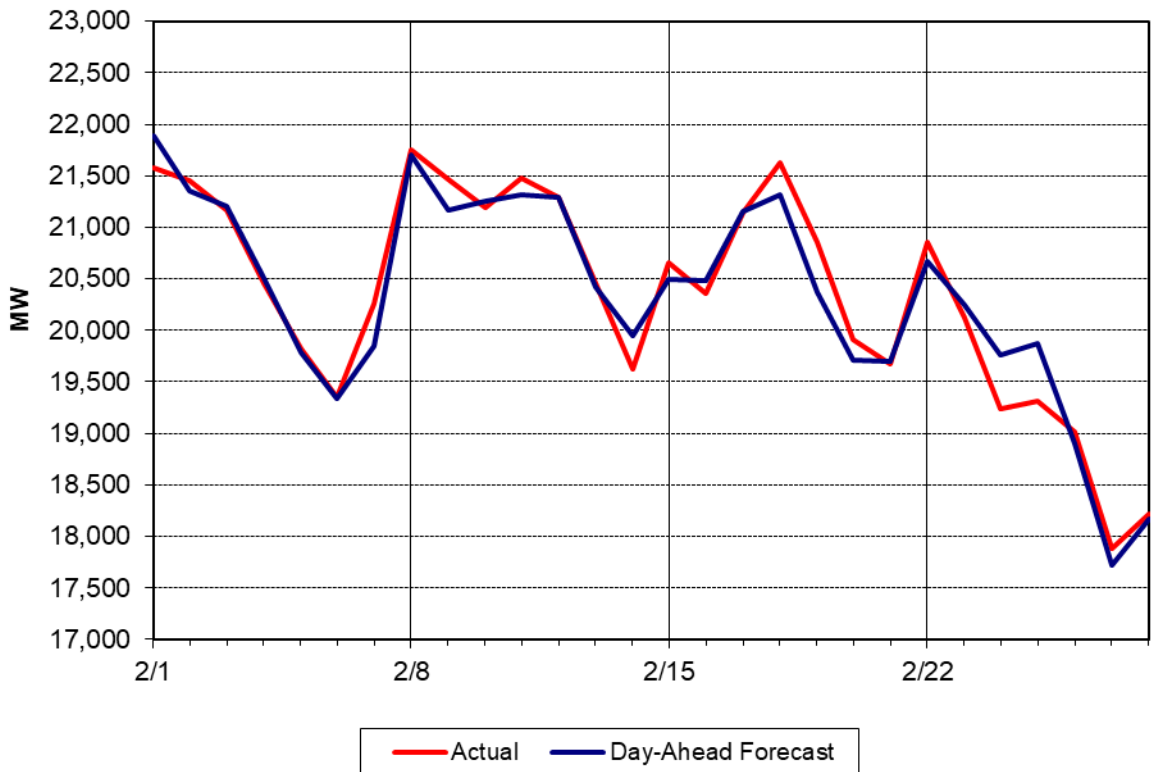
Hour	Mar '20	Apr '20	May '20	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21
0:00	-2%	-4%	-4%	-2%	-1%	0%	-1%	-1%	-2%	-1%	0%	0%
1:00	-2%	-4%	-4%	-2%	-1%	-1%	-1%	-2%	-2%	-1%	0%	0%
2:00	-3%	-4%	-4%	-2%	-1%	-1%	-2%	-2%	-2%	-1%	-1%	-1%
3:00	-3%	-5%	-4%	-3%	-1%	-1%	-2%	-3%	-3%	-1%	-1%	-1%
4:00	-4%	-6%	-5%	-4%	-2%	-2%	-3%	-3%	-3%	-1%	-1%	-1%
5:00	-5%	-8%	-7%	-5%	-4%	-4%	-5%	-5%	-4%	-2%	-2%	-2%
6:00	-7%	-11%	-11%	-8%	-5%	-5%	-7%	-6%	-5%	-4%	-3%	-3%
7:00	-7%	-13%	-13%	-10%	-6%	-6%	-7%	-6%	-5%	-4%	-3%	-3%
8:00	-6%	-13%	-14%	-9%	-6%	-6%	-6%	-5%	-4%	-3%	-2%	-2%
9:00	-5%	-12%	-13%	-9%	-6%	-6%	-6%	-4%	-3%	-2%	-2%	-2%
10:00	-5%	-11%	-13%	-9%	-6%	-5%	-5%	-3%	-2%	-2%	-1%	-1%
11:00	-4%	-10%	-13%	-8%	-5%	-5%	-5%	-3%	-2%	-1%	-1%	-1%
12:00	-3%	-9%	-12%	-8%	-4%	-4%	-4%	-2%	-2%	-1%	0%	0%
13:00	-3%	-9%	-12%	-7%	-4%	-4%	-4%	-3%	-2%	-1%	0%	0%
14:00	-3%	-9%	-12%	-7%	-4%	-4%	-4%	-3%	-2%	-1%	0%	0%
15:00	-4%	-10%	-13%	-7%	-4%	-4%	-5%	-3%	-2%	-1%	0%	0%
16:00	-4%	-10%	-12%	-7%	-4%	-3%	-5%	-4%	-3%	-2%	-1%	-1%
17:00	-3%	-9%	-11%	-6%	-3%	-2%	-4%	-3%	-3%	-1%	-1%	-1%
18:00	-2%	-7%	-10%	-5%	-2%	-2%	-4%	-3%	-2%	-1%	-1%	-1%
19:00	-3%	-7%	-9%	-5%	-2%	-2%	-5%	-3%	-2%	-1%	-1%	-1%
20:00	-3%	-7%	-9%	-5%	-2%	-2%	-4%	-3%	-3%	-1%	-1%	-1%
21:00	-3%	-7%	-7%	-4%	-2%	-2%	-3%	-2%	-3%	-2%	-1%	-1%
22:00	-2%	-5%	-6%	-3%	-1%	-1%	-1%	-2%	-2%	-1%	-1%	-1%
23:00	-2%	-4%	-4%	-2%	-1%	0%	-1%	-1%	-2%	-1%	0%	0%

Peak Hour

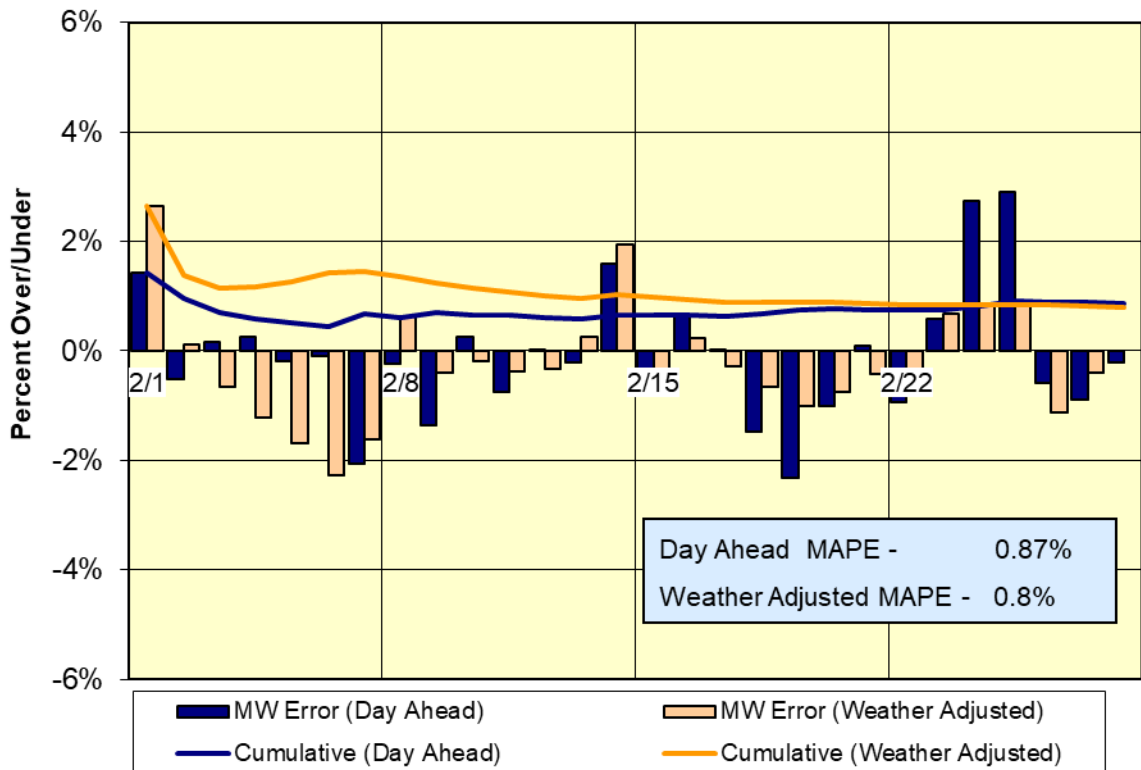
NYISO Daily Peak Load - February 2021
Actual vs. Weather-Adjusted Forecast



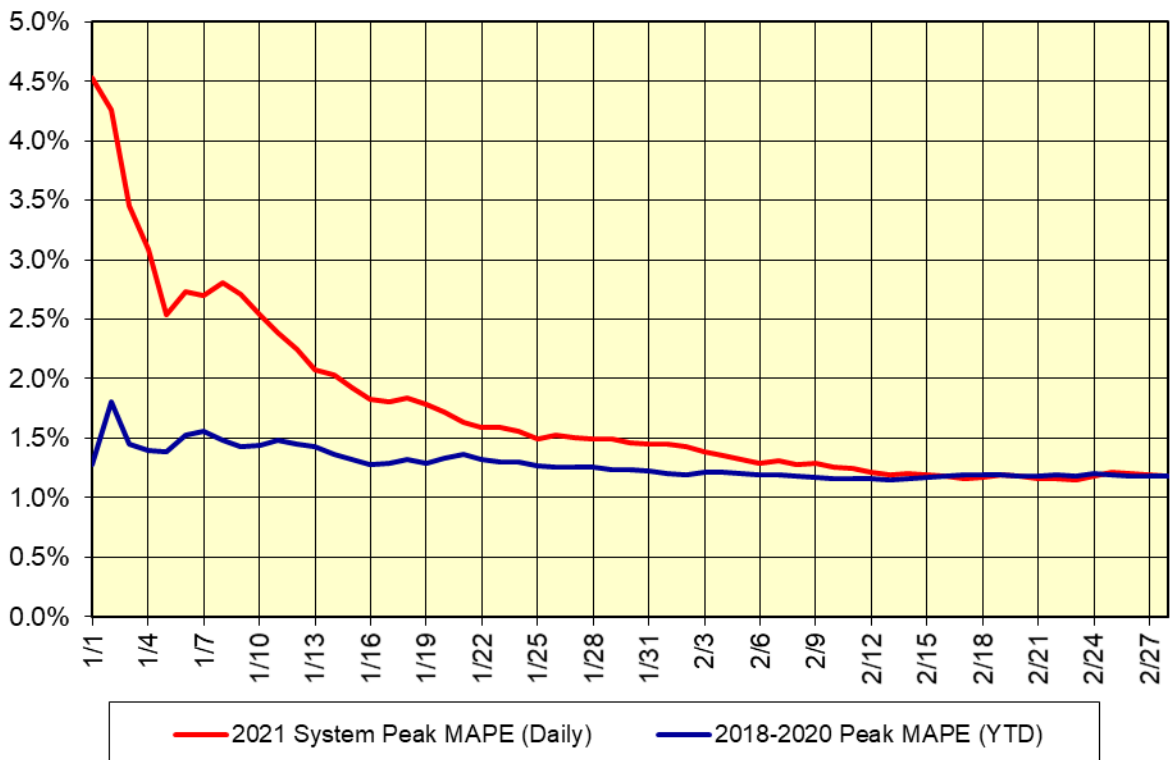
NYISO Daily Peak Load - February 2021
Actual vs. Forecast



Day Ahead Peak Forecast - February 2021 Percent Error - Actual & Weather-Adjusted



Day-Ahead Forecast Accuracy - Cumulative Performance 2021 Year-to-Date



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

Filing Date	Filing Summary	Docket	Order Date	Order Summary
11/23/2020	NYISO compliance filing directed by October 7, 2020 FERC Order to modify the language that describes how an Offer Floor for an SCR is calculated.	ER17-996-005	02/18/2021	Letter order accepted tariff revisions effective 10/7/2020, as requested
02/02/2021	NYISO Section 205 filing of proposed tariff revisions to revise the process for procuring Operating Reserves and to establish a process for procuring Supplemental Reserves	ER21-1018-000		
02/05/2021	NYISO and Niagara Mohawk Power Corporation (National Grid) Joint Section 205 filing of a Large Generator Interconnection Agreement among NYISO, National Grid and PPM Roaring Brook, LLC	ER21-1061-000		
02/05/2021	NYISO and NYPA Joint Section 205 filing of an Engineering Procurement and Construction agreement among NYISO, NYPA and PPM Roaring Brook	ER21-1062-000		
02/09/2021	NYISO Section 205 filing of proposed tariff revisions related to Economic Planning Processes	ER21-1074-000		
02/10/2021	NYISO and National Grid Joint Section 205 filing of a Small Generator Interconnection Agreement among NYISO, NMPC and SunEast Watkins Road Solar	ER21-1088-000		
02/10/2021	NYISO notification to FERC of a major emergency state in the New York Control Area at 0119 on February 10, 2021	EY21-1-000		
02/11/2021	NYISO and Con Edison joint Section 205 filing of Amended and Restated Large Generator Interconnection Agreement among NYISO, Con Edison and NRG Berrians East Development (contains CEII)	ER21-1101-000		
02/12/2021	NYISO response to FERC's request for additional information on NYISO's proposal related to the quadrennial review of the ICAP demand curves	ER21-502-001		
02/16/2021	NYISO informational filing re: interconnection study metrics for the fourth quarter of 2020 consistent with the requirements of Order Nos. 845 and 845-A	ER19-1949-000		

02/26/2021	NYISO and Niagara Mohawk Power Corporation (National Grid) Joint Section 205 filing of a Transmission Project Interconnection Agreement among NYISO, National Grid and H. Q. Energy Services (U.S) Inc. for Cedar Rapids	ER21-1220-000		
02/26/2021	NYISO, Alcoa Power Generating, Inc., and H.Q. Energy Services (U.S.) Section 205 filing of an Engineering Procurement and Construction agreement among NYISO, National Grid and H.Q. Energy Services (U.S.) Inc. for Cedar Rapids	ER21-1221-000		