

Monthly Report

A Report by the
New York Independent System Operator

July 2020

Table of Contents

Operations Performance Metrics Report

Market Operation's Report

Daily Loads

Regulatory Filings

Operations Performance Metrics Monthly Report



July 2020 Report

Operations & Reliability Department New York Independent System Operator

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data collected on or before August 10, 2020.

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*

July 2020 Operations Performance Highlights

- Peak load of 30,660 MW occurred on 07/27/2020 HB 17
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 29.93 hours of Thunder Storm Alerts were declared
- 0 hours of NERC TLR level 3 curtailment
- Warmer than normal temperatures offset the COVID-19 load impacts in July
- 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.

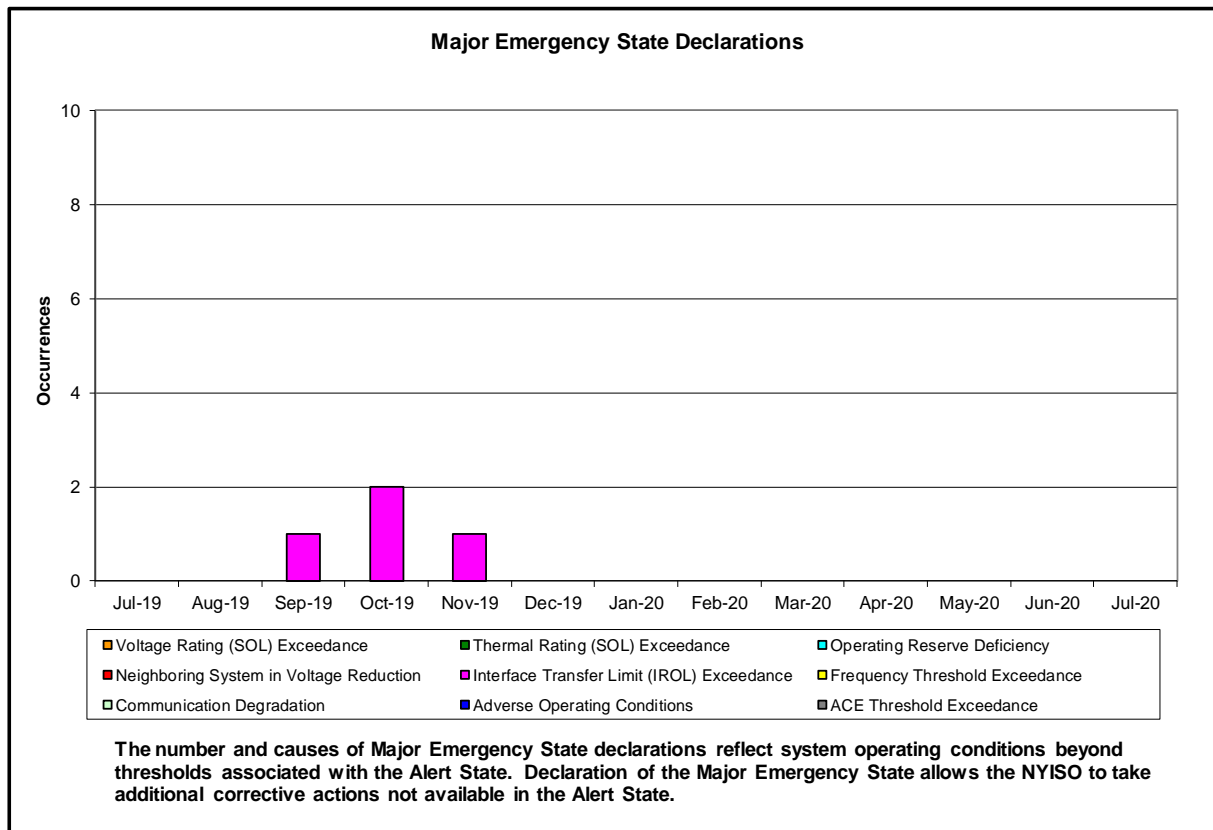
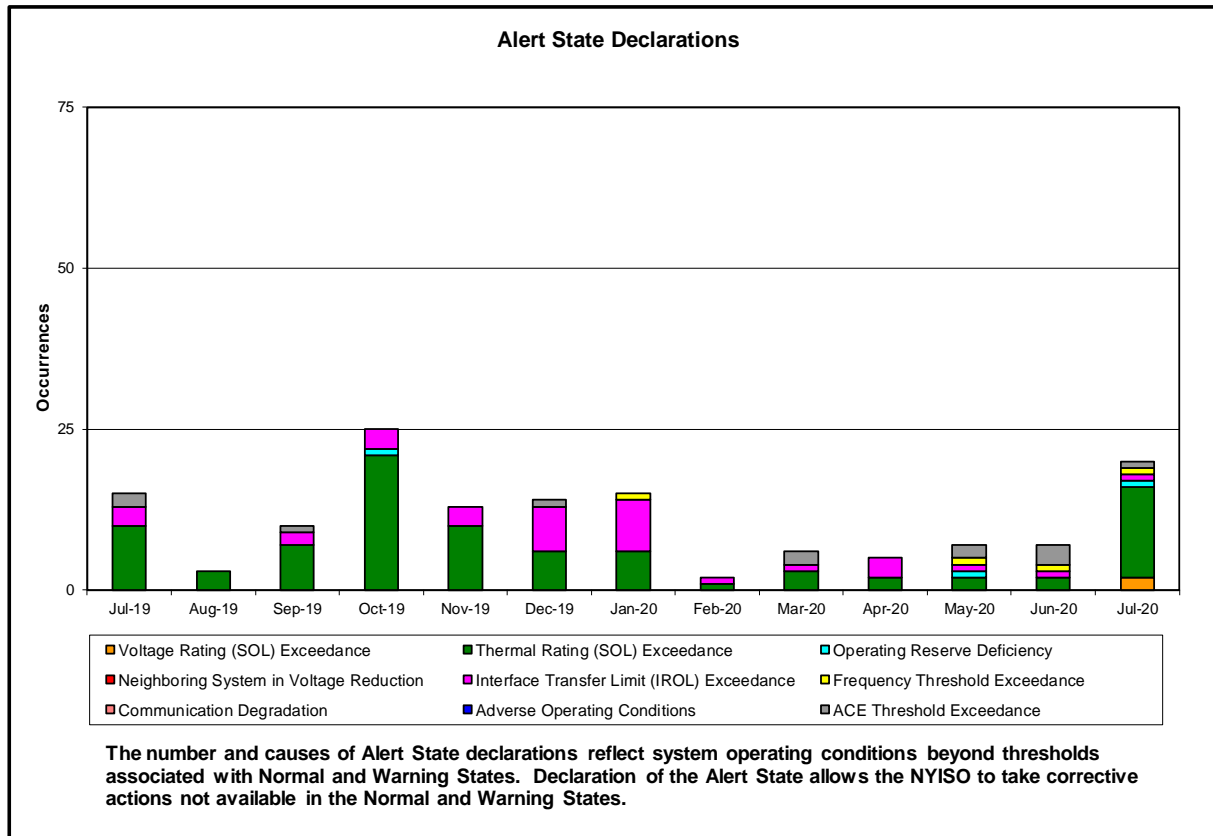
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$0.42	\$2.95
NY Savings from PJM-NY Coordinated Transaction Scheduling	(\$0.30)	(\$0.41)
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.49	\$1.04
Total NY Savings	\$0.61	\$3.58
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.40	\$1.17
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.16	\$0.18
Total Regional Savings	\$0.56	\$1.35

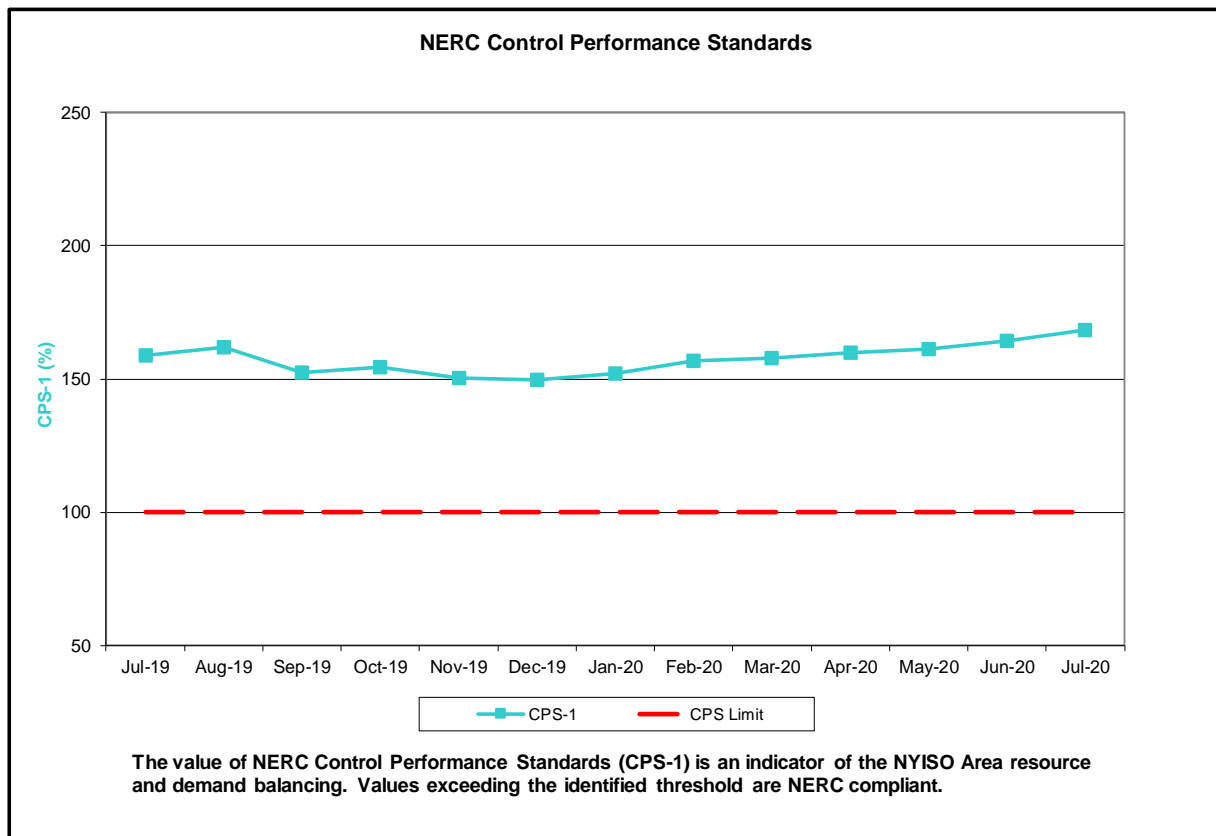
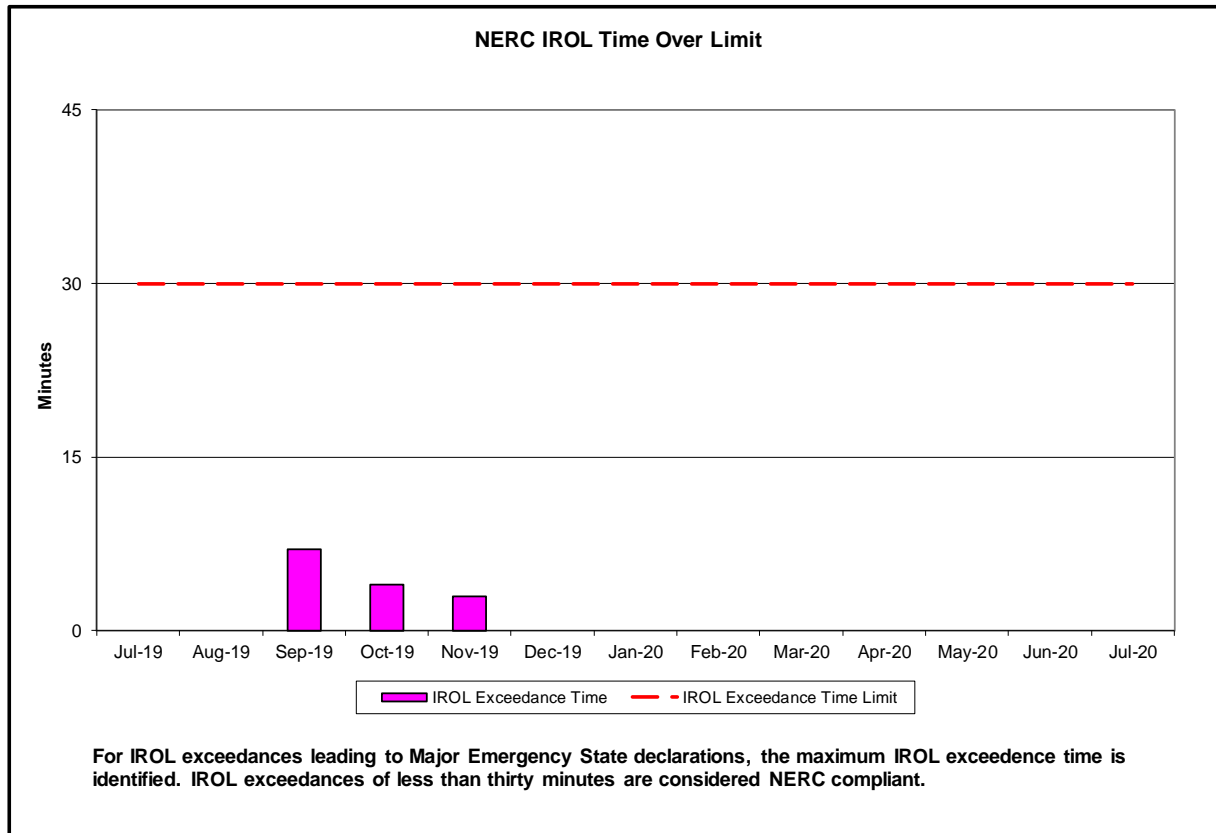
- Statewide uplift cost monthly average was (\$0.31)/MWh
- The following table identifies the Monthly ICAP spot market prices and the price delta.

Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
August 2020 Spot Price	\$2.37	\$2.37	\$18.72	\$5.17
July 2020 Spot Price	\$2.69	\$2.69	\$19.03	\$5.32
Delta	(\$0.32)	(\$0.32)	(\$0.31)	(\$0.15)

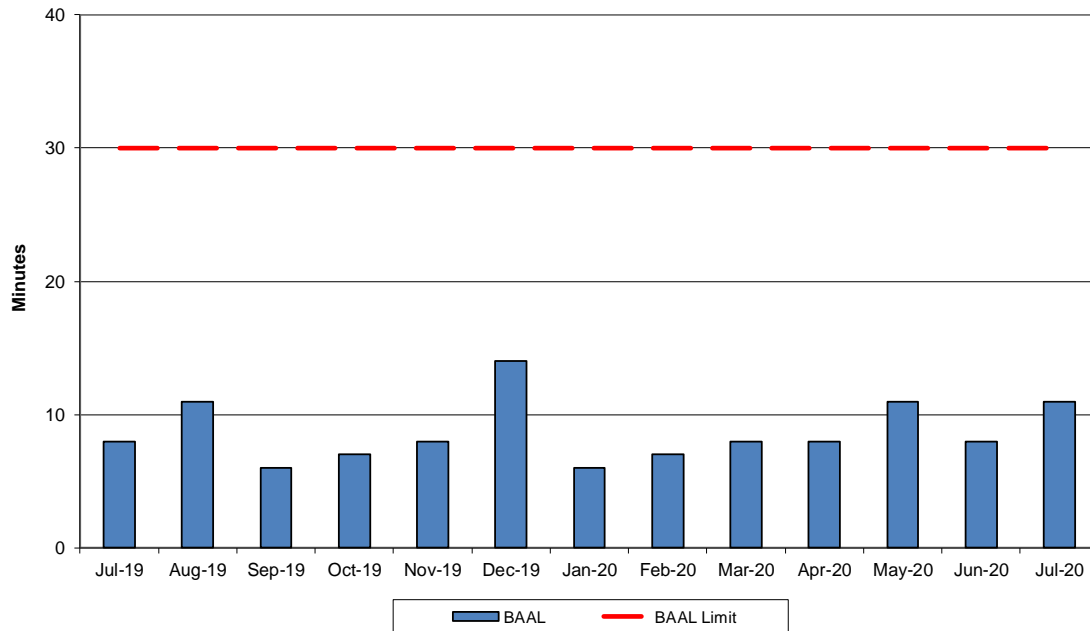
- Long Island - Increase in Gen UCAP, increase in SCR availability, decrease in unoffered
- NYC - Increase in Gen UCAP, increase in SCR availability, decrease in unoffered
- Lower Hudson Valley - Increase in Gen UCAP, increase in SCR availability, increase in unoffered
- NYCA - Increase in Gen UCAP, increase in SCR availability, increase in unoffered, increase in net imports

Reliability Performance Metrics



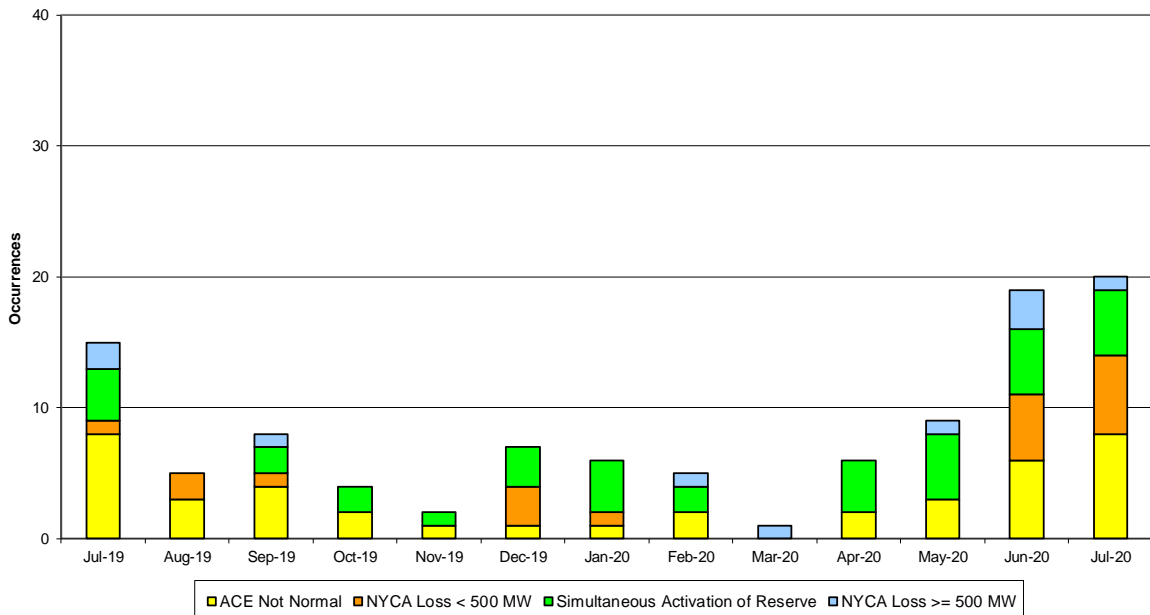


NERC Balancing Authority ACE Limit Standard



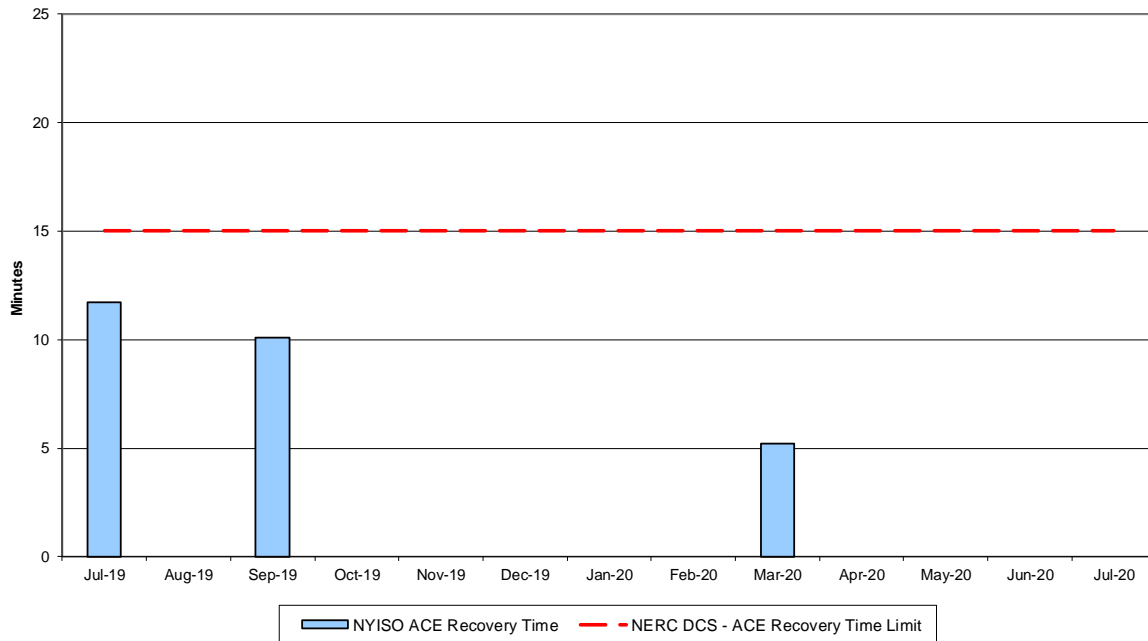
The amount of time the clock-minute average ACE exceeds the clock-minute Balancing Authority ACE Limit (BAAL) is an indicator of the NYISO Area resource and demand balancing. The maximum BAAL exceedance time is identified. BAAL exceedances of less than 30 consecutive clock-minutes are NERC compliant.

Reserve Activations



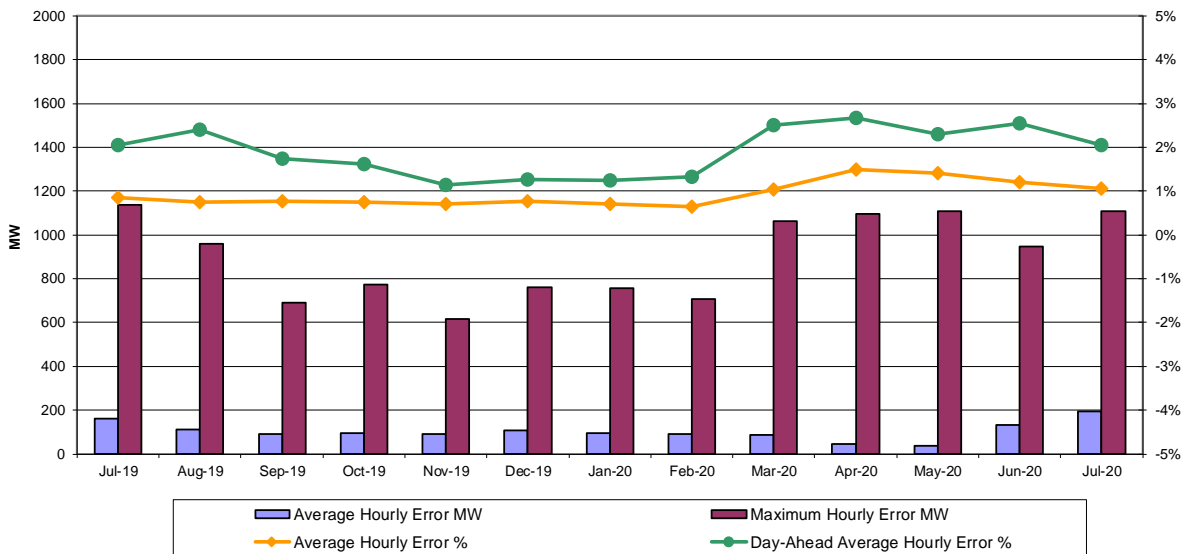
NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Simultaneous Activation of Reserves) by activating an immediate resource and demand balancing operation.

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

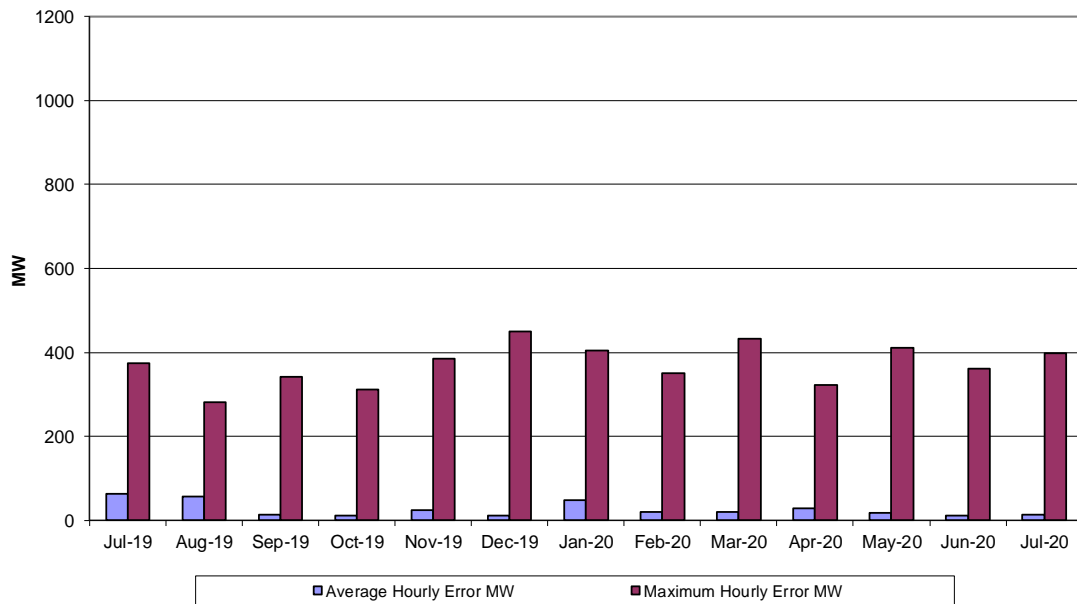


Hourly Error MW - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

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

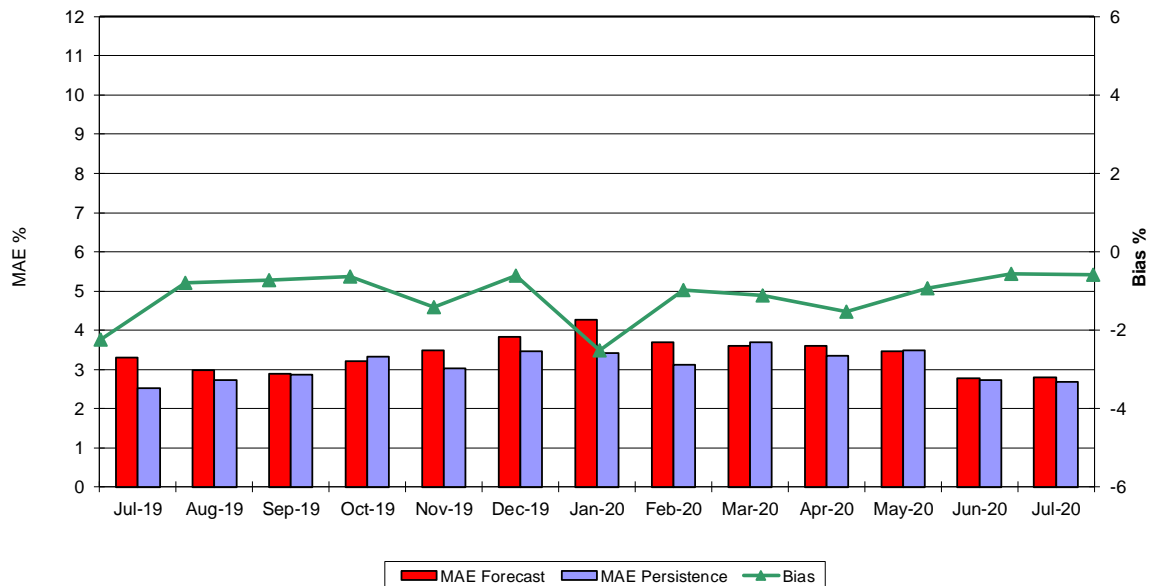
Day-Ahead Average Hourly Error % - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

Wind Forecast Performance Hour Ahead MW Error

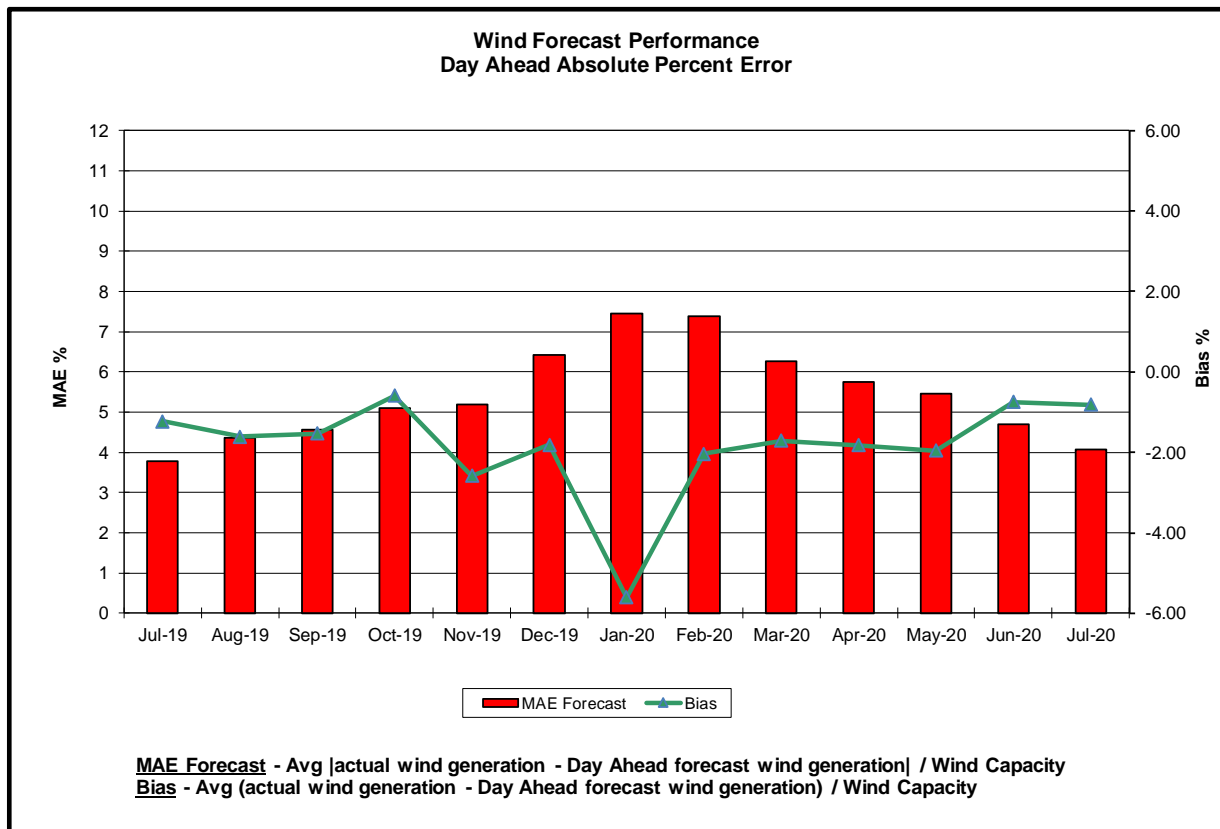
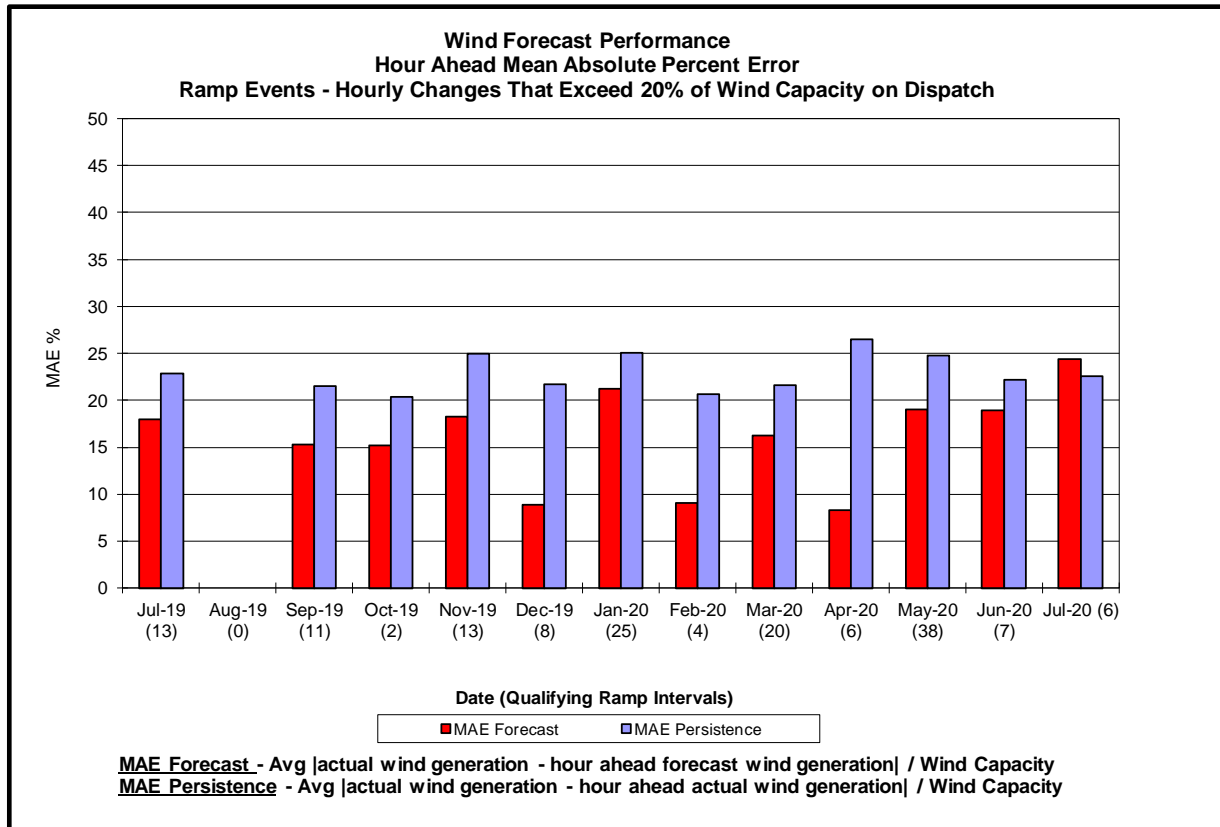


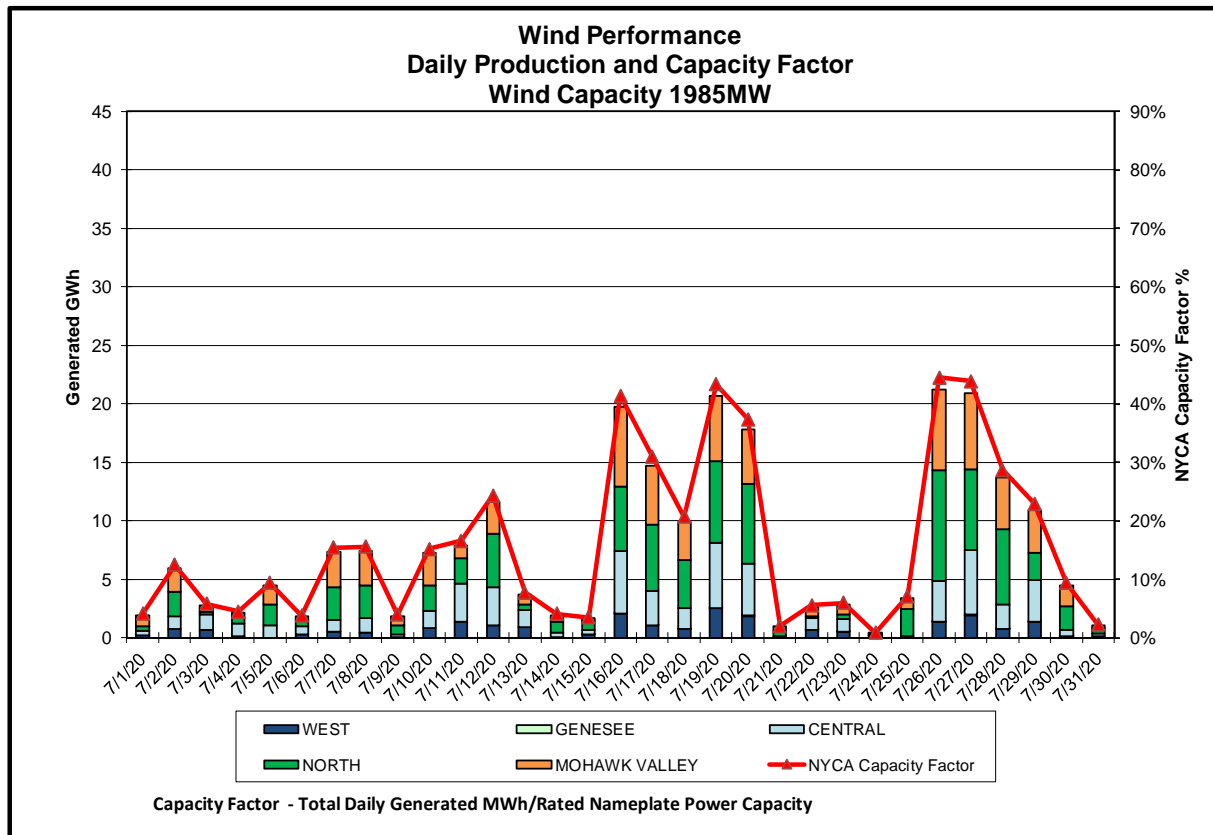
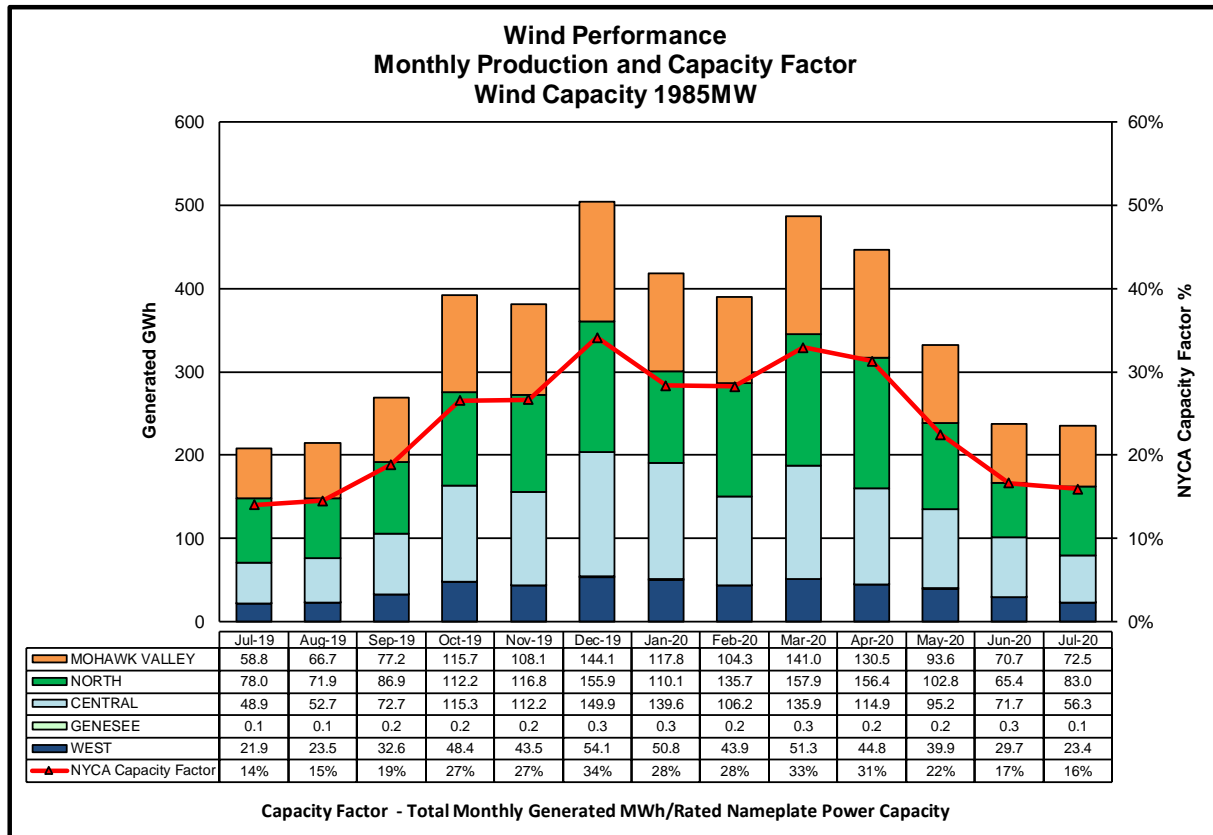
Hourly Error MW - Absolute value of the difference between the hourly average actual wind generation and the average hour ahead forecast wind generation.

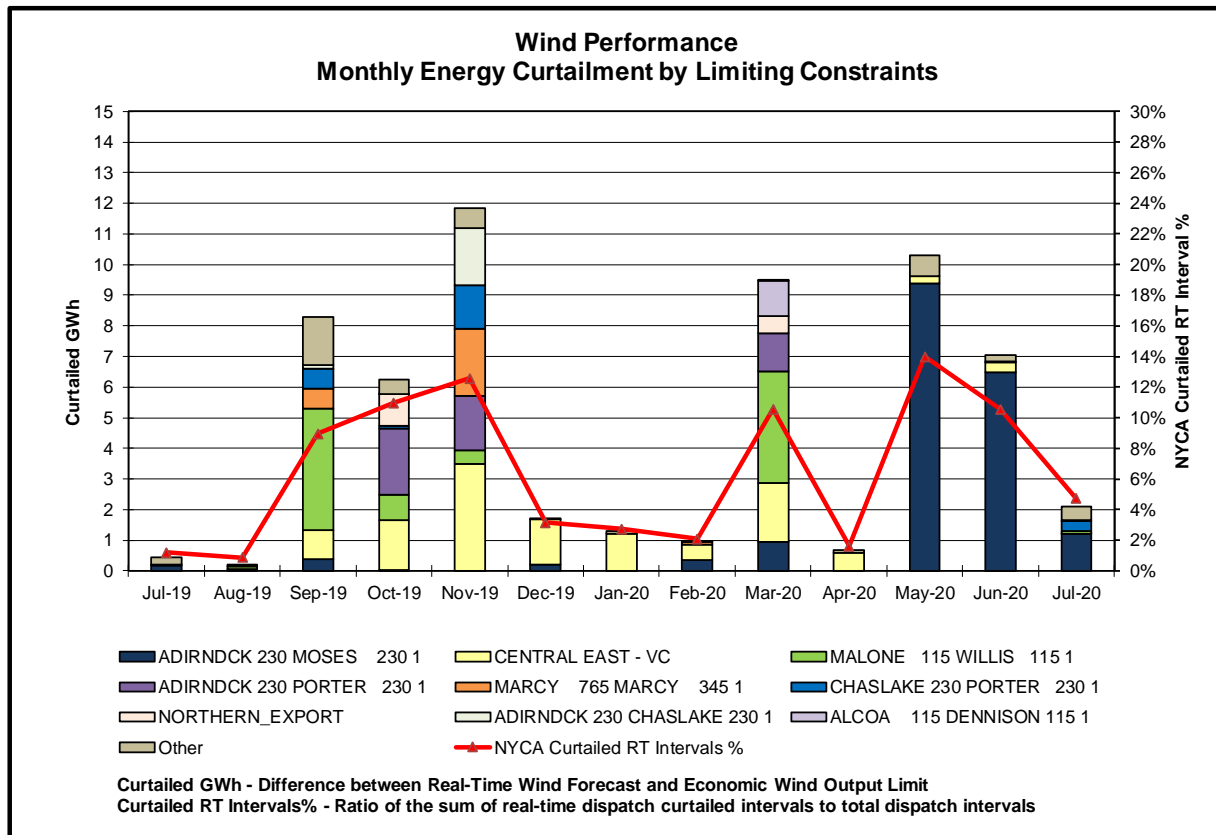
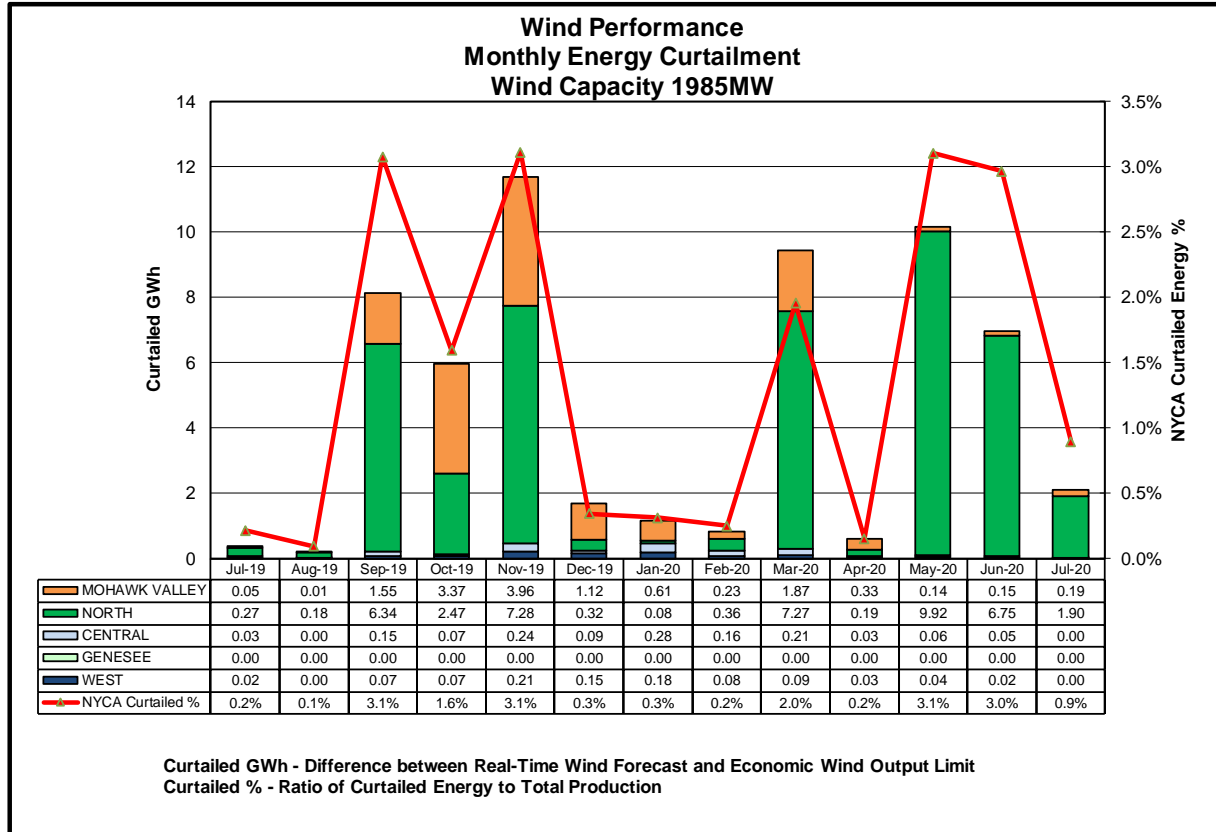
Wind Forecast Performance Hour Ahead Percent Error

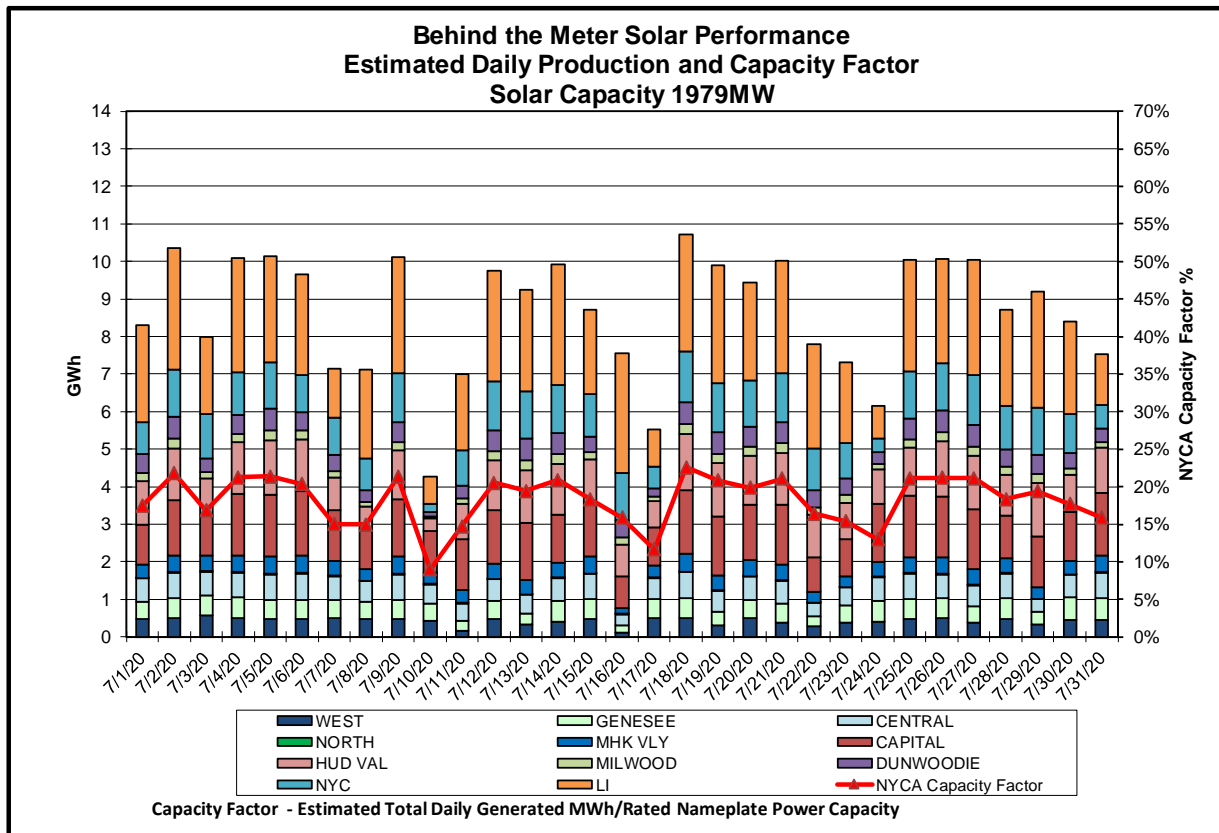
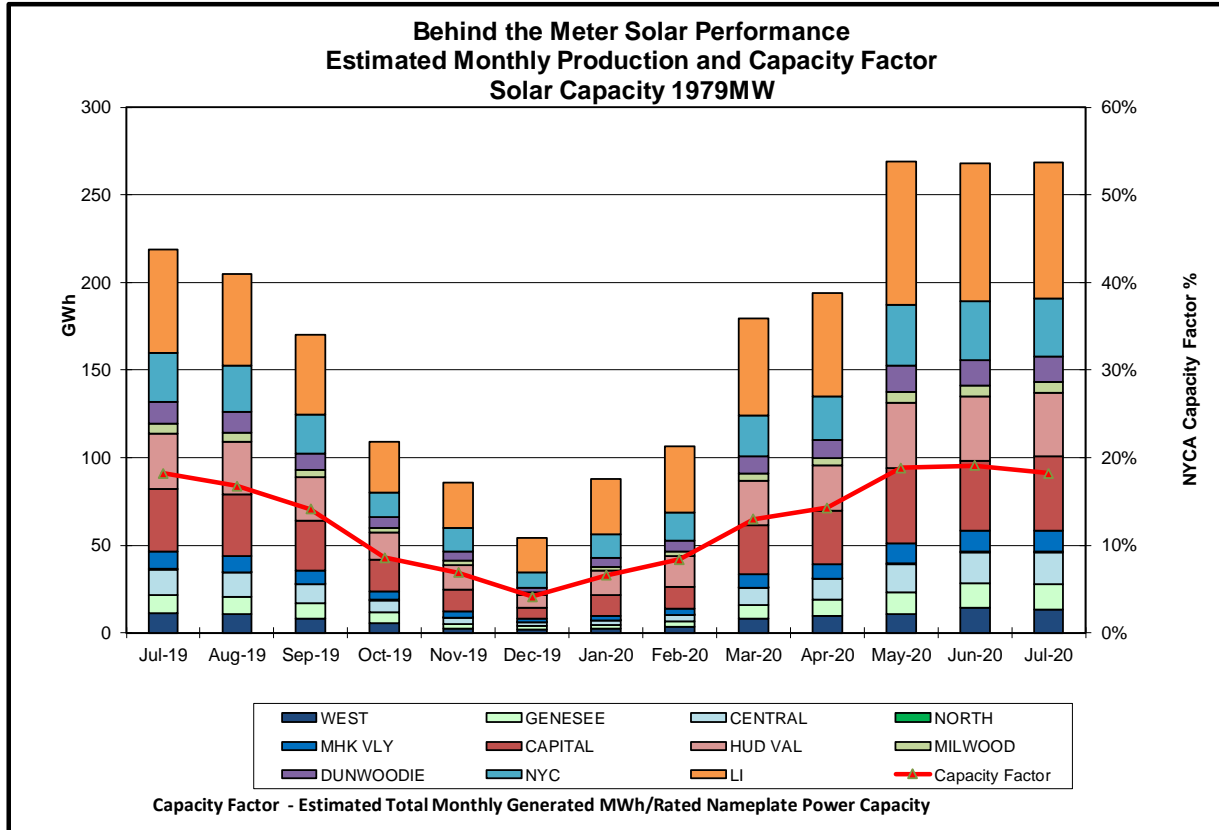


MAE Forecast - Avg [actual wind generation - hour ahead forecast wind generation] / Wind Capacity
MAE Persistence - Avg [actual wind generation - hour ahead actual wind generation] / Wind Capacity
Bias - Avg (actual wind generation - hour ahead forecast wind generation) / Wind Capacity

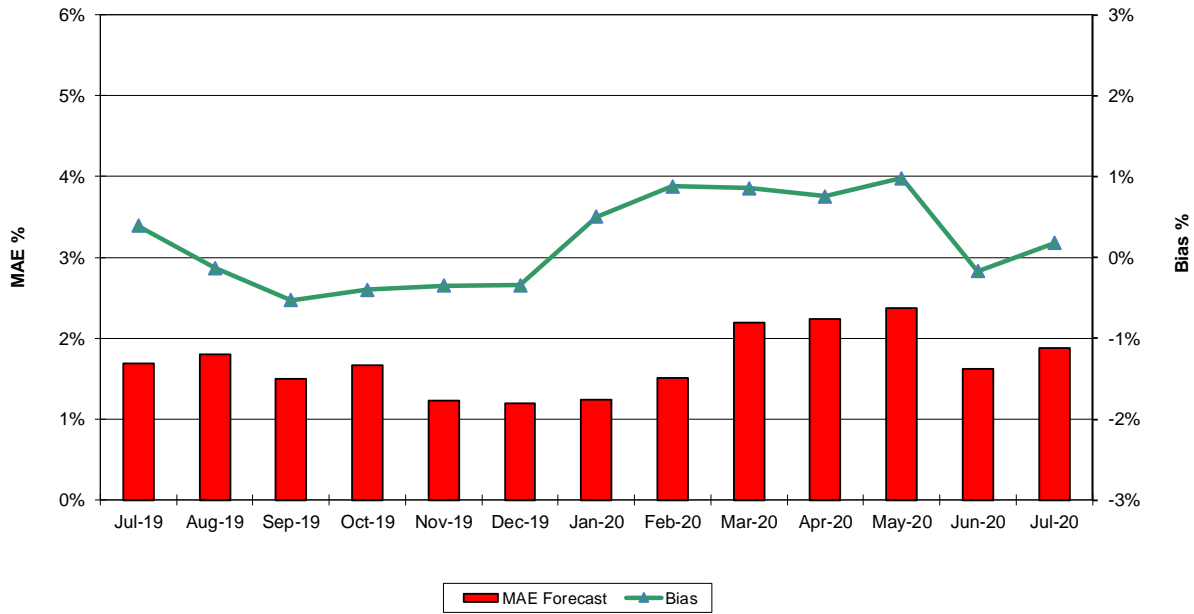






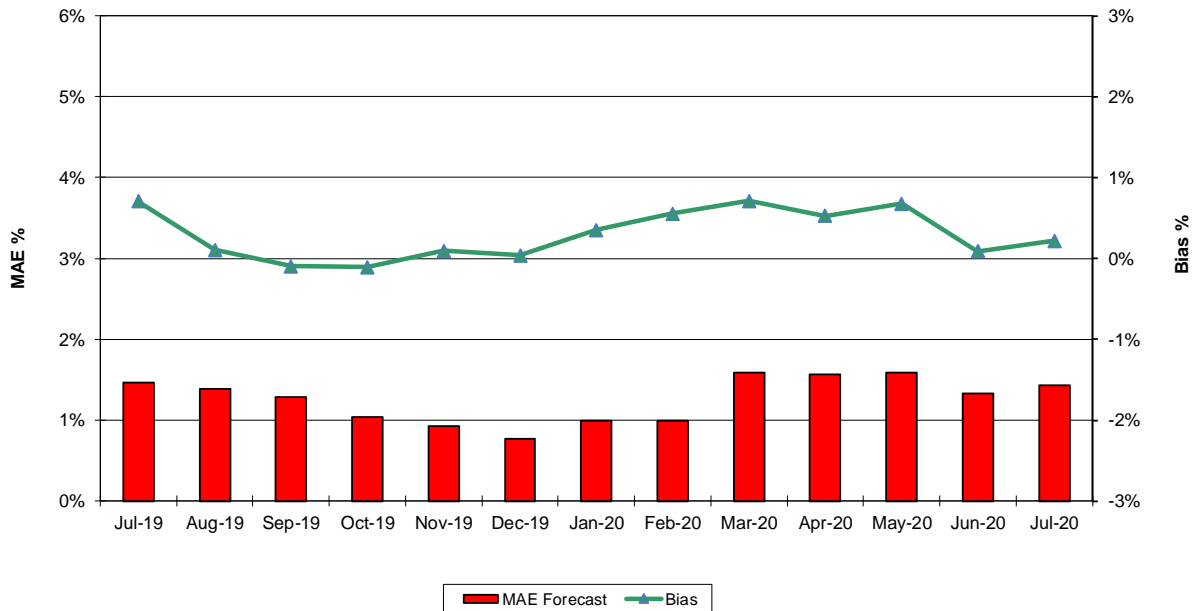


Behind the Meter Solar Forecast Performance Day Ahead Percent Error

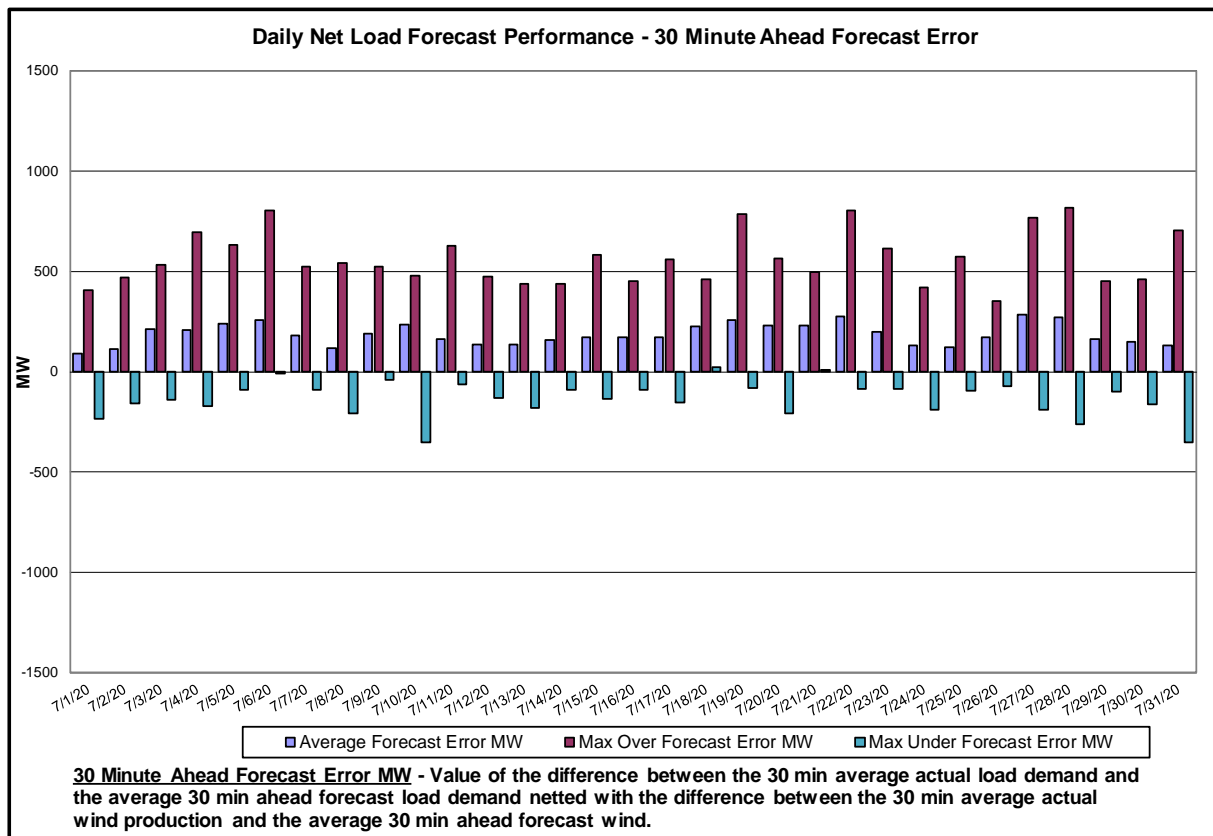
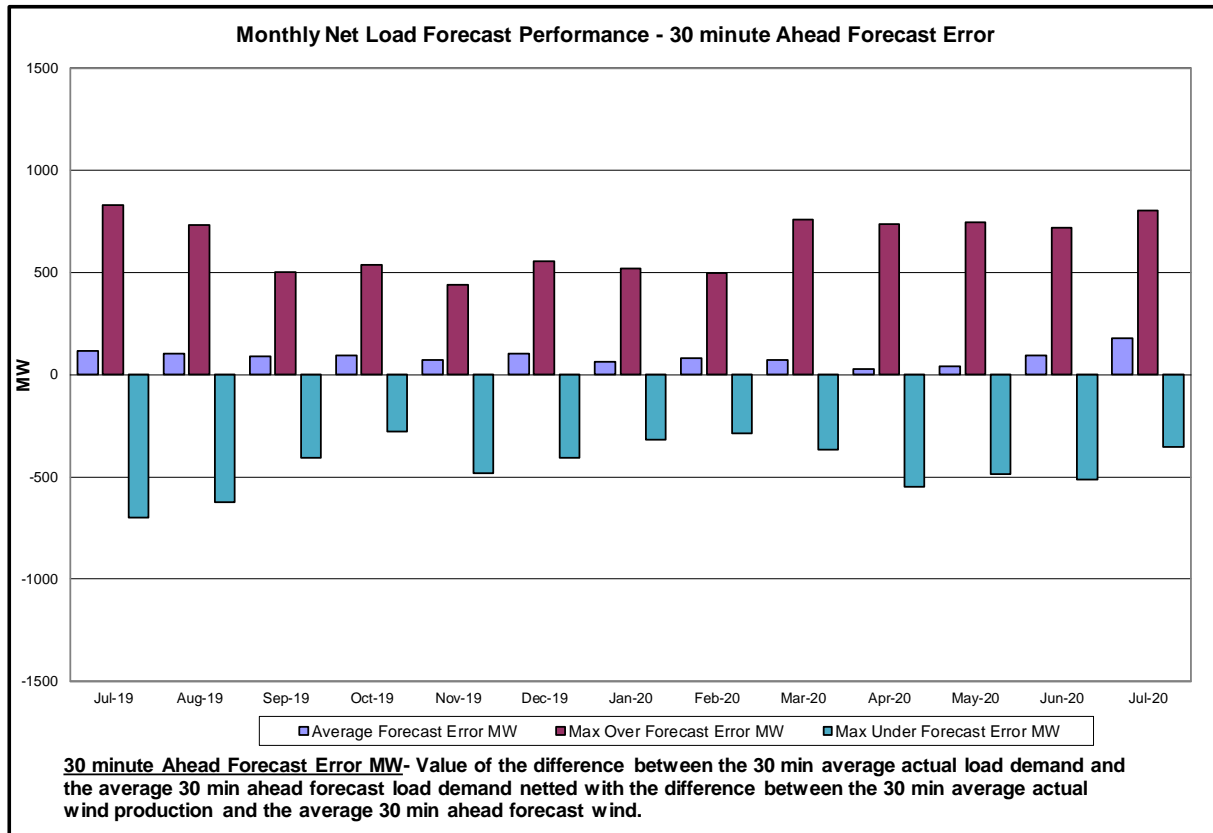


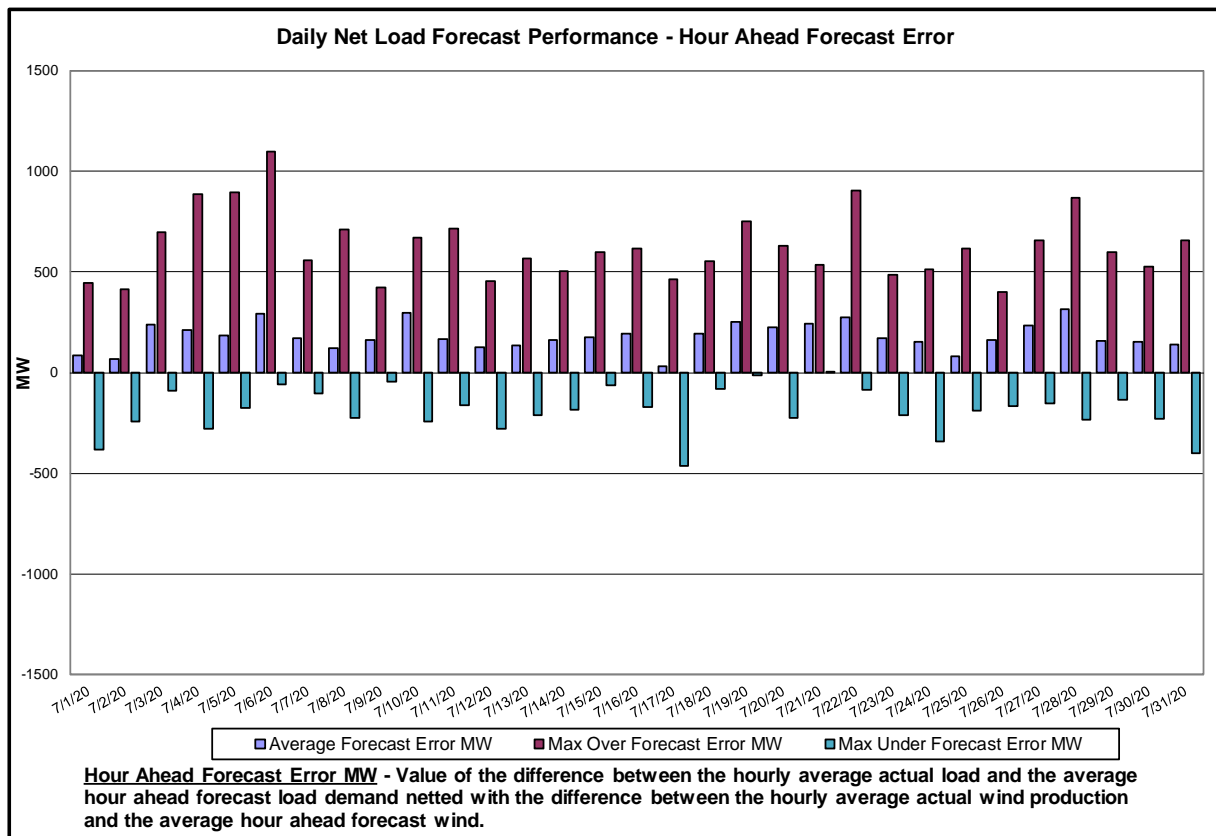
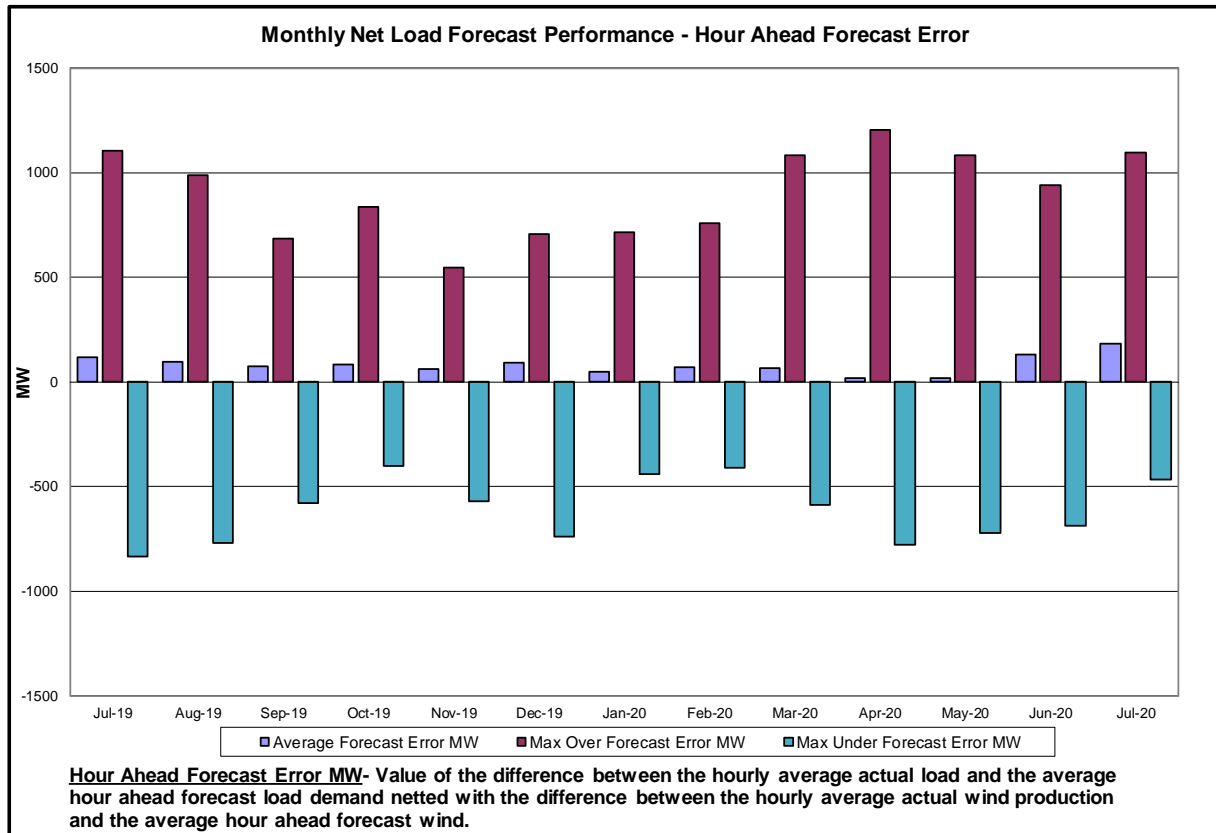
MAE Forecast - Avg |est. actual solar generation - Day Ahead forecast solar generation| / Solar Capacity
Bias - Avg (est. actual solar generation - Day Ahead forecast solar generation) / Solar Capacity

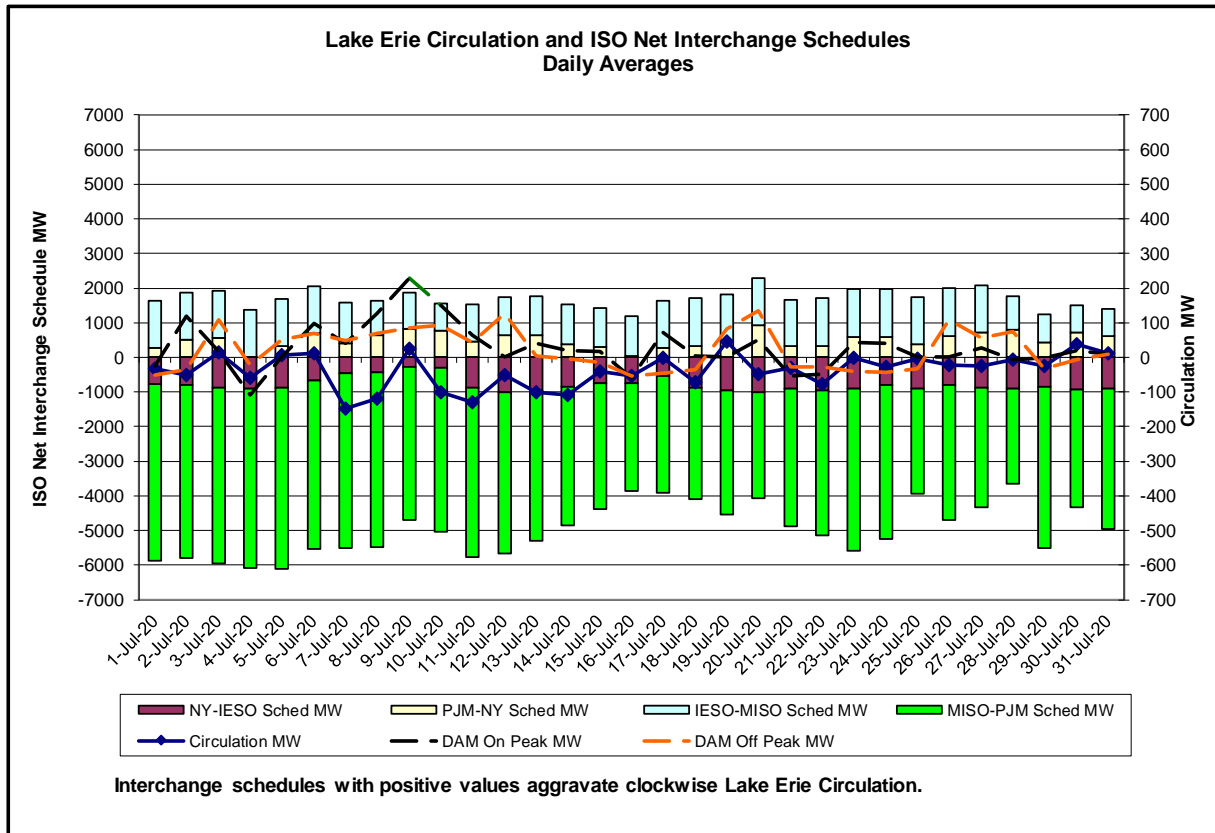
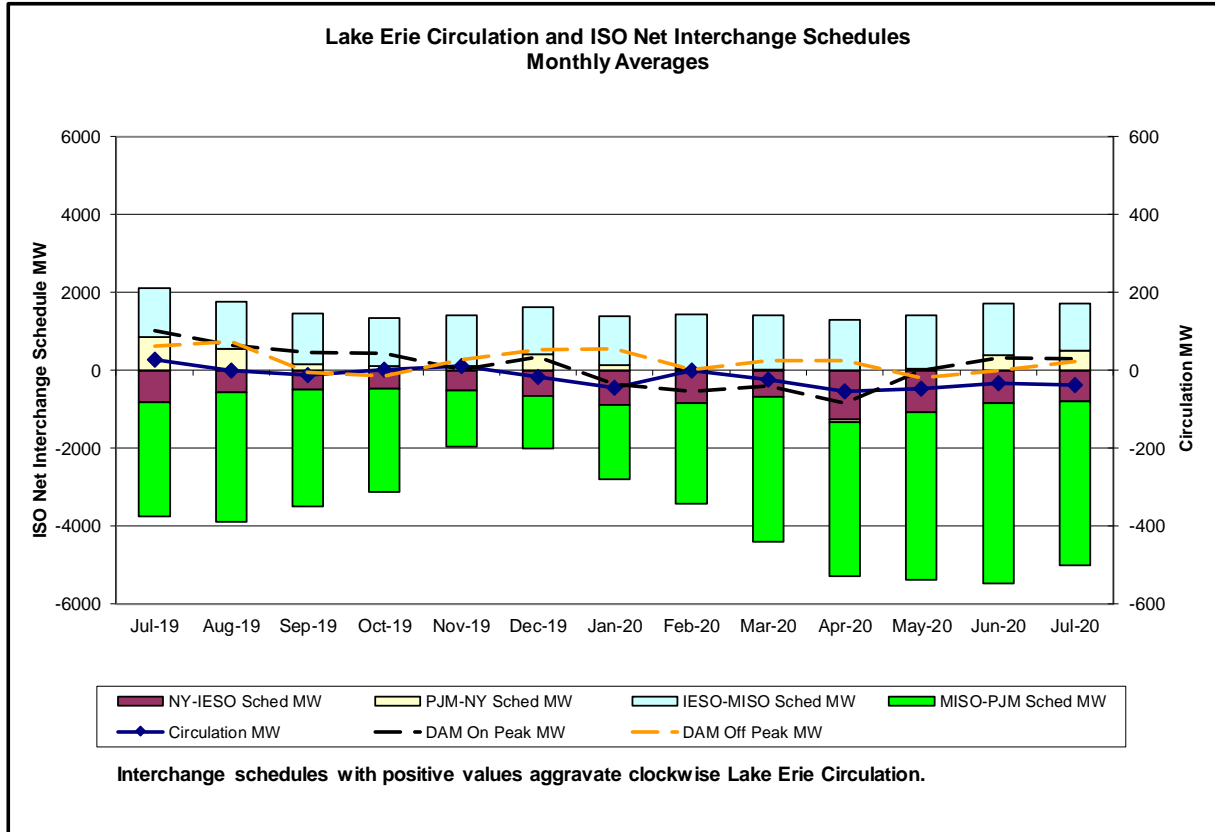
Behind the Meter Solar Forecast Performance Hour Ahead Percent Error



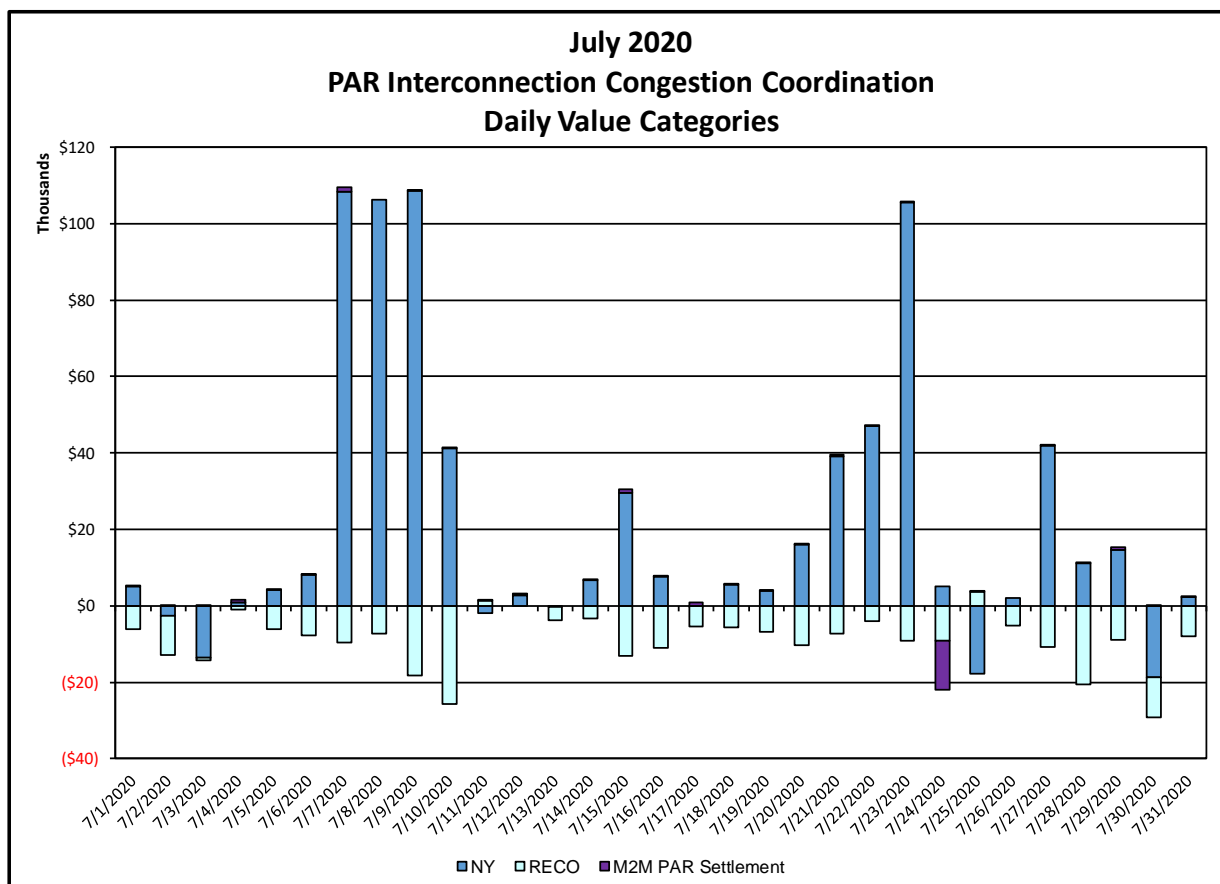
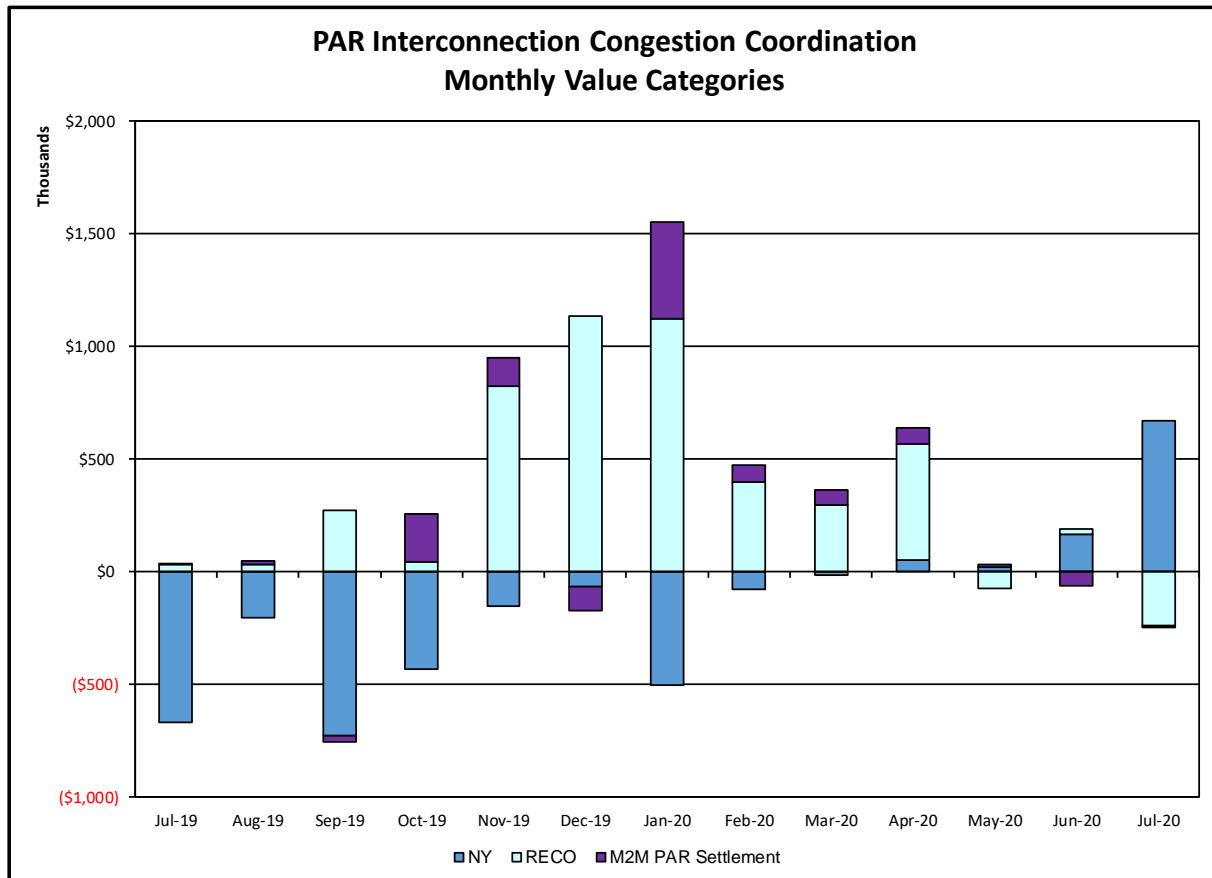
MAE Forecast - Avg |est. actual solar generation - Day Ahead forecast solar generation| / Solar Capacity
Bias - Avg (est. actual solar generation - Day Ahead forecast solar generation) / Solar Capacity





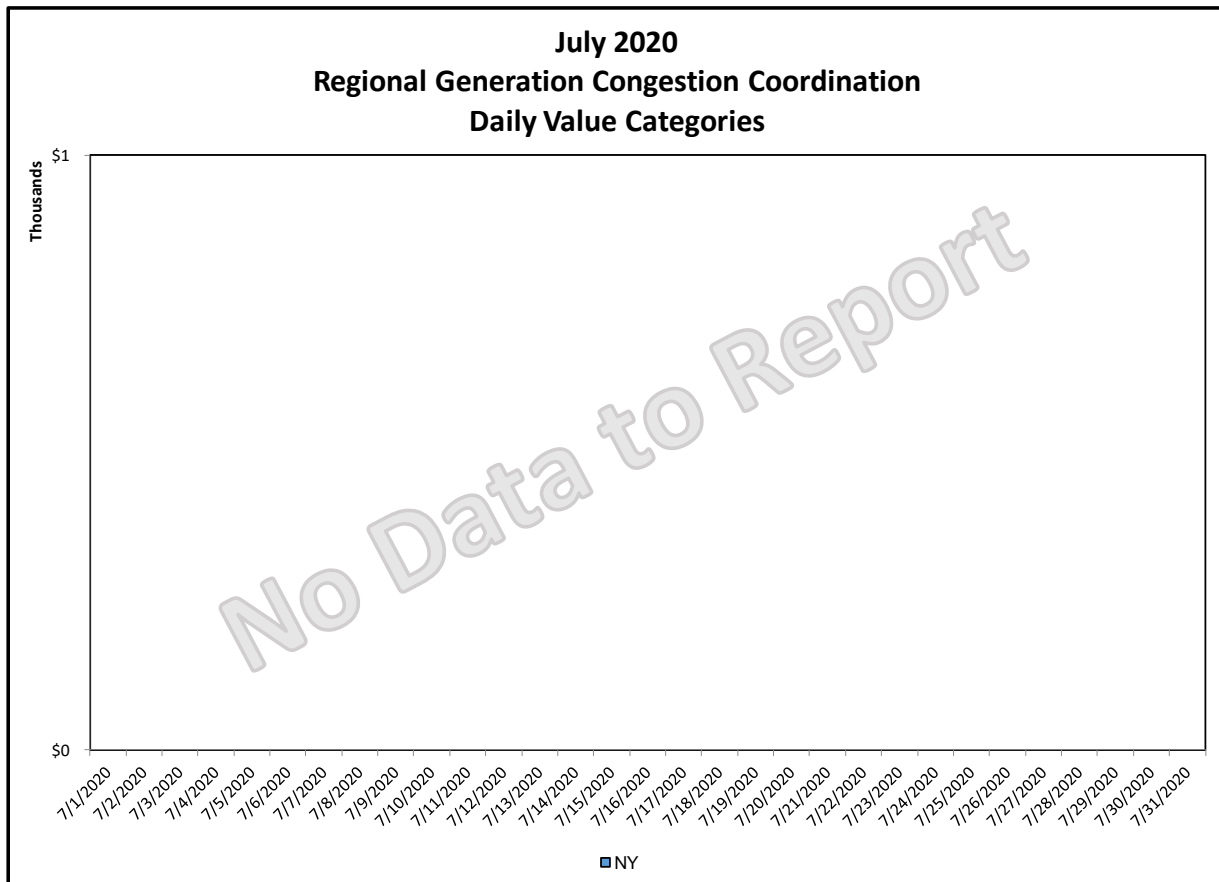
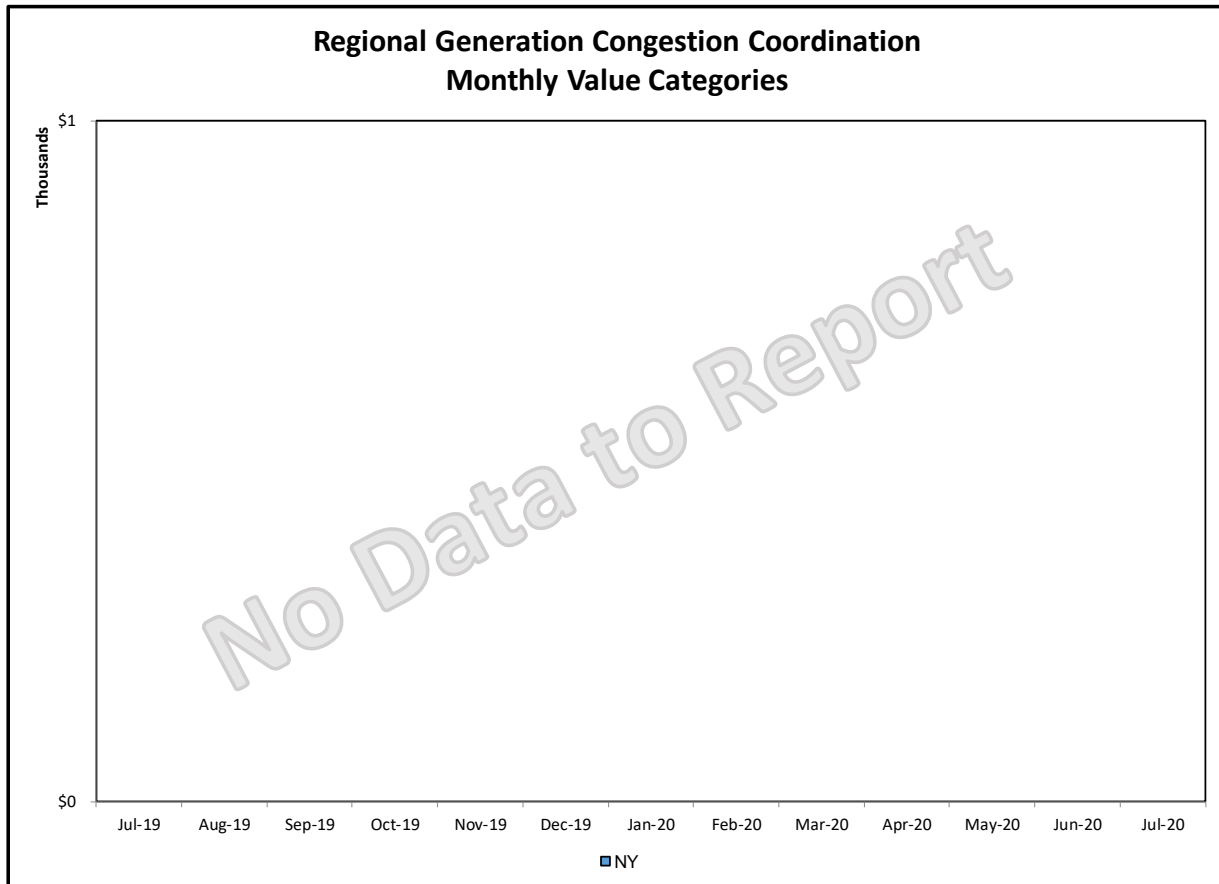


Broader Regional Market Performance Metrics



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.

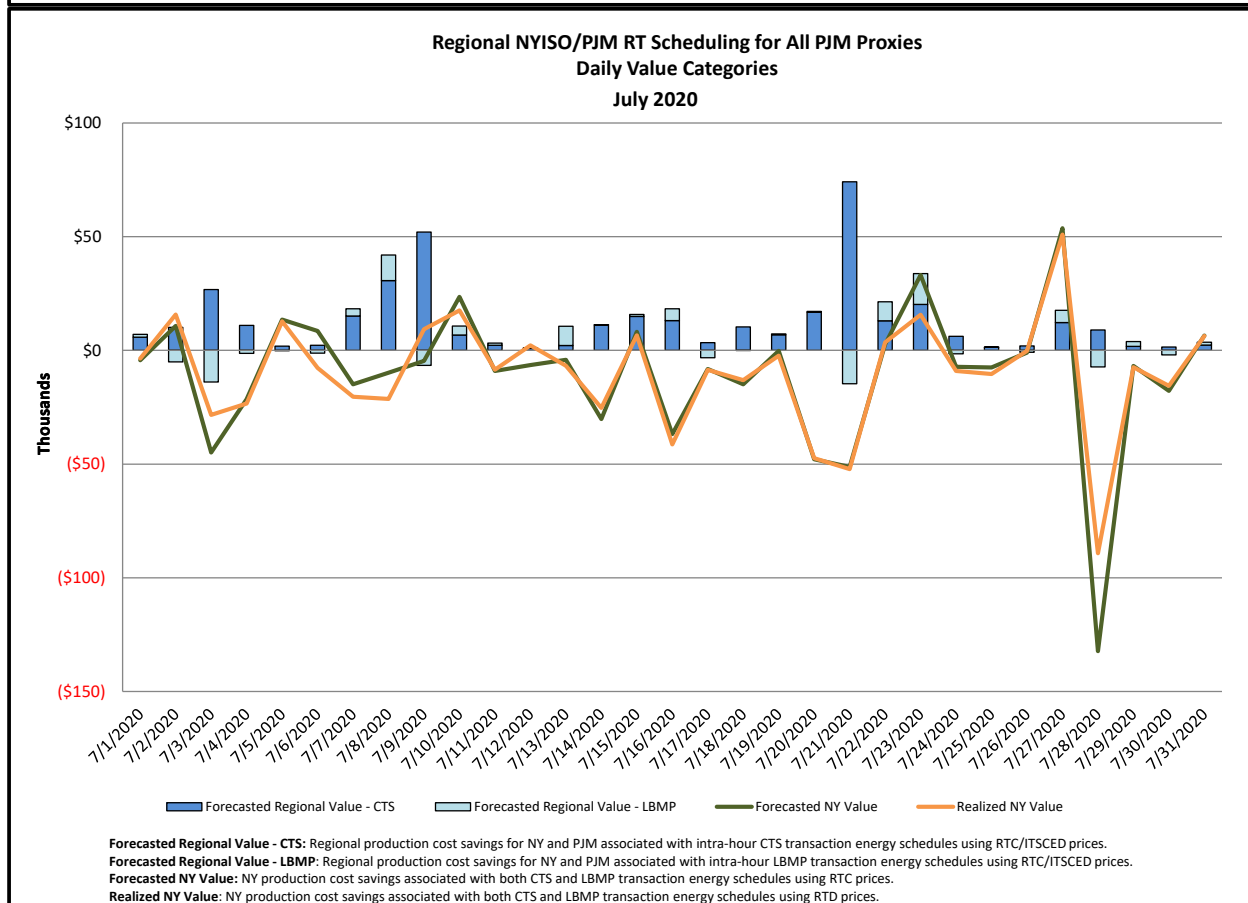
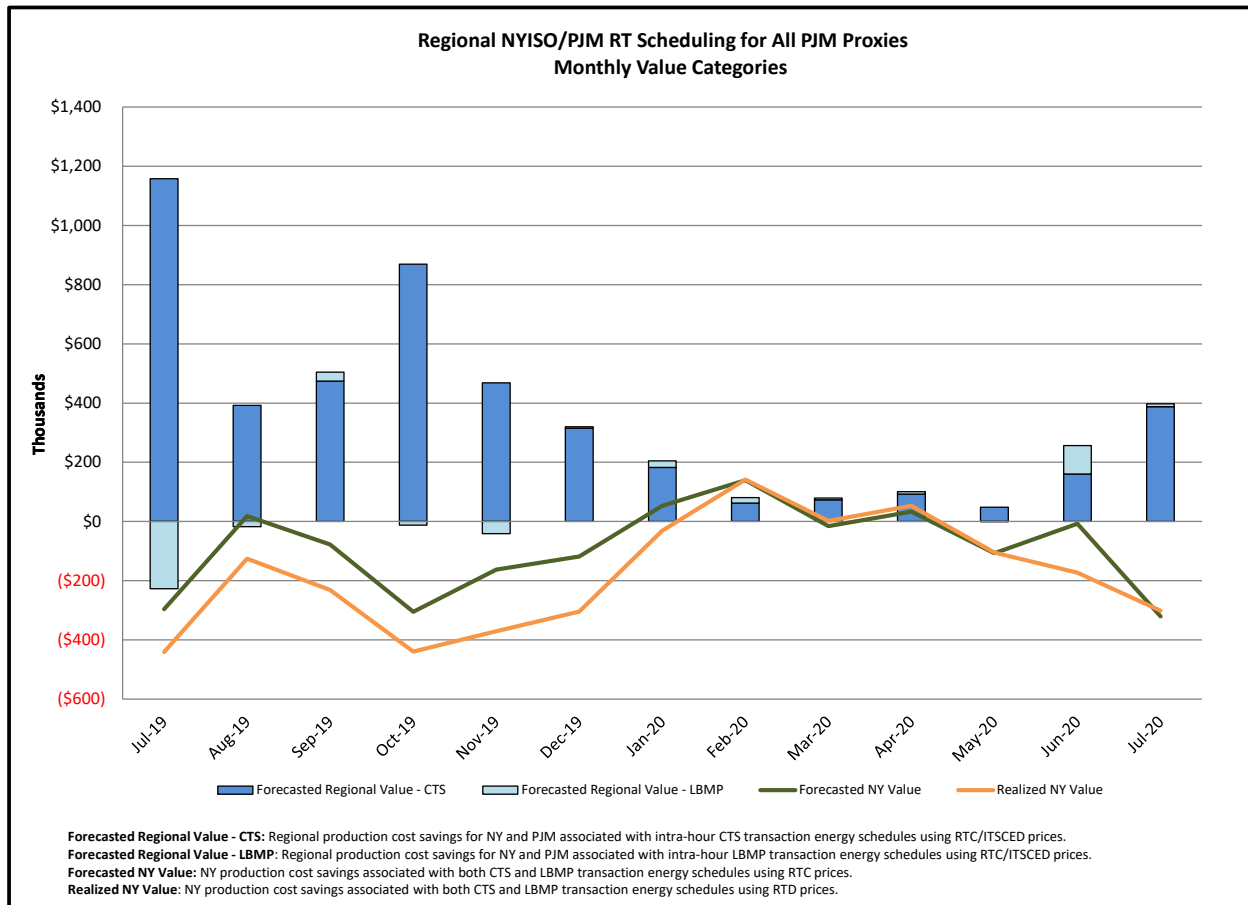


Regional Generation Congestion Coordination

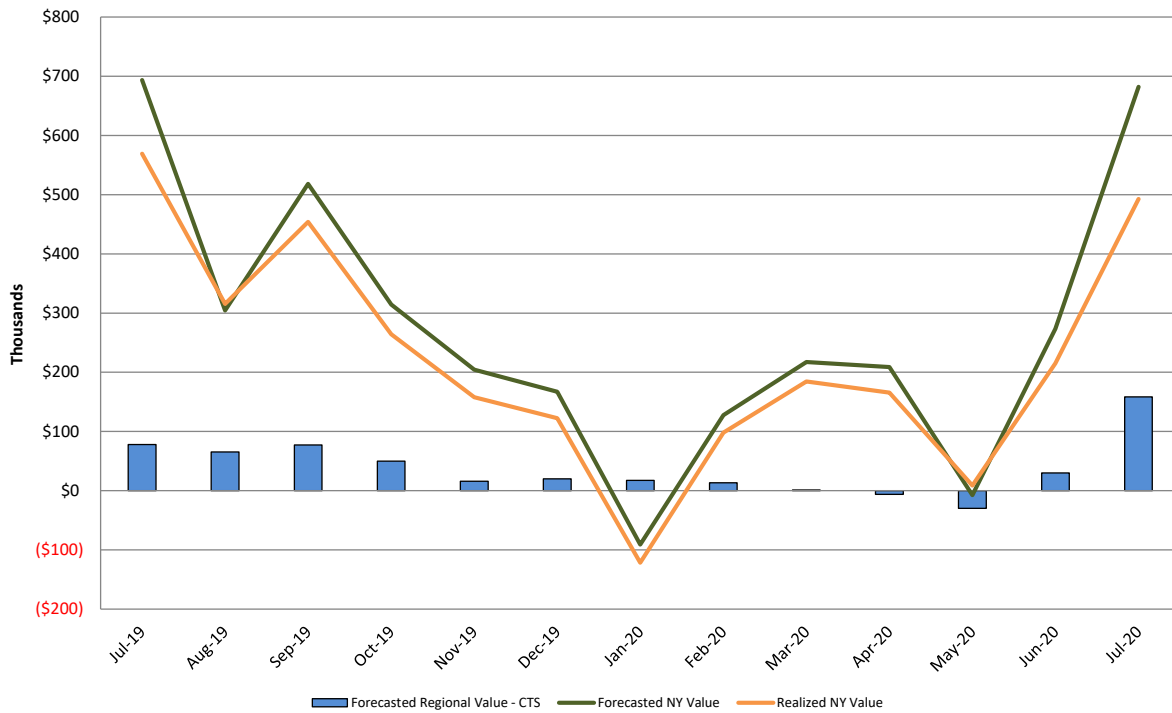
Category
NY

Description

NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from the more efficient regional utilization of PJM's generation resources to directly address Western or Central NY transmission congestion.

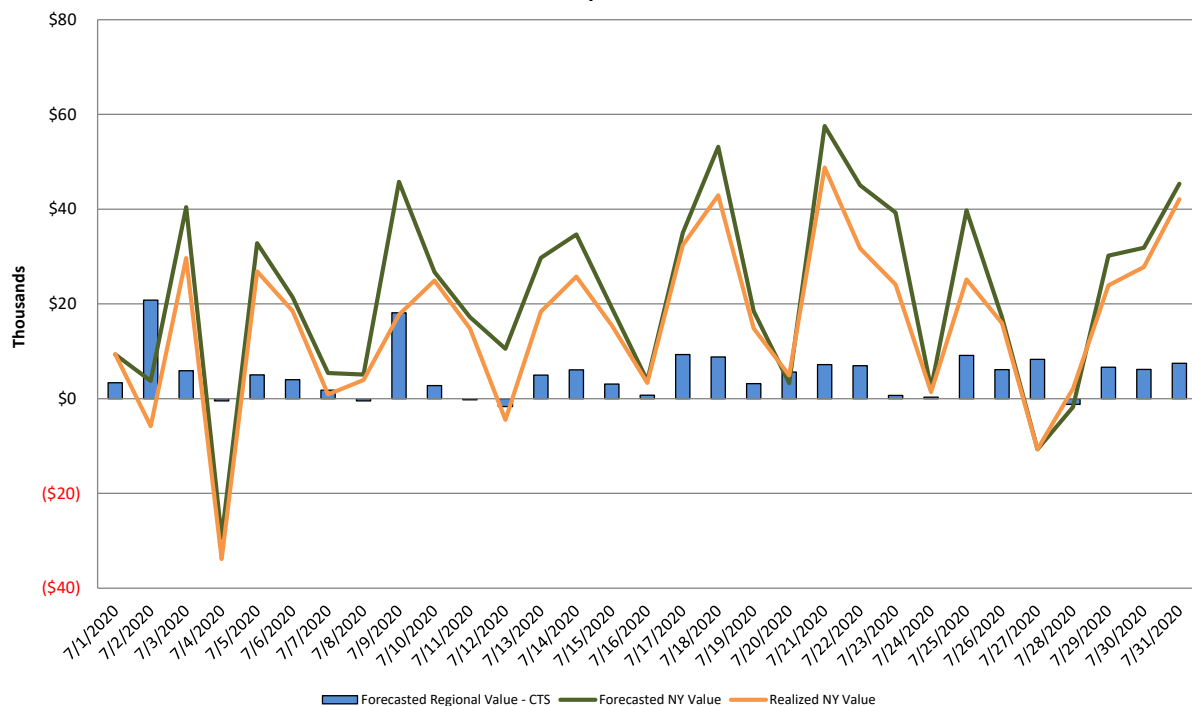


Regional NYISO/NE RT Scheduling for ISO-NE AC Monthly Value Categories



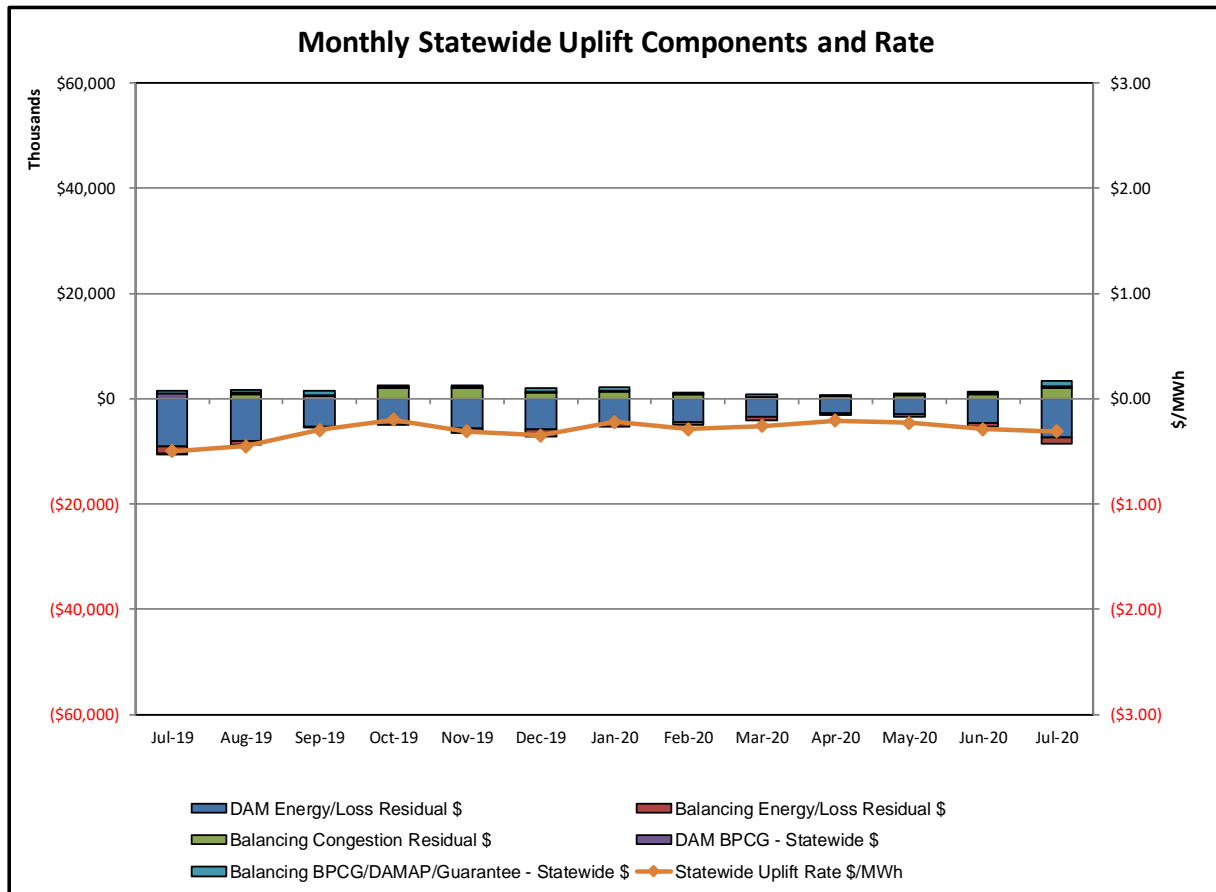
Forecasted Regional Value - CTS: Regional production cost savings for NY and NE associated with intra-hour CTS transaction energy schedules using RTC prices and NE forecasted prices.
Forecasted NY Value: NY production cost savings associated with CTS transaction energy schedules using RTC prices.
Realized NY Value: NY production cost savings associated with CTS transaction energy schedules using RTD prices.

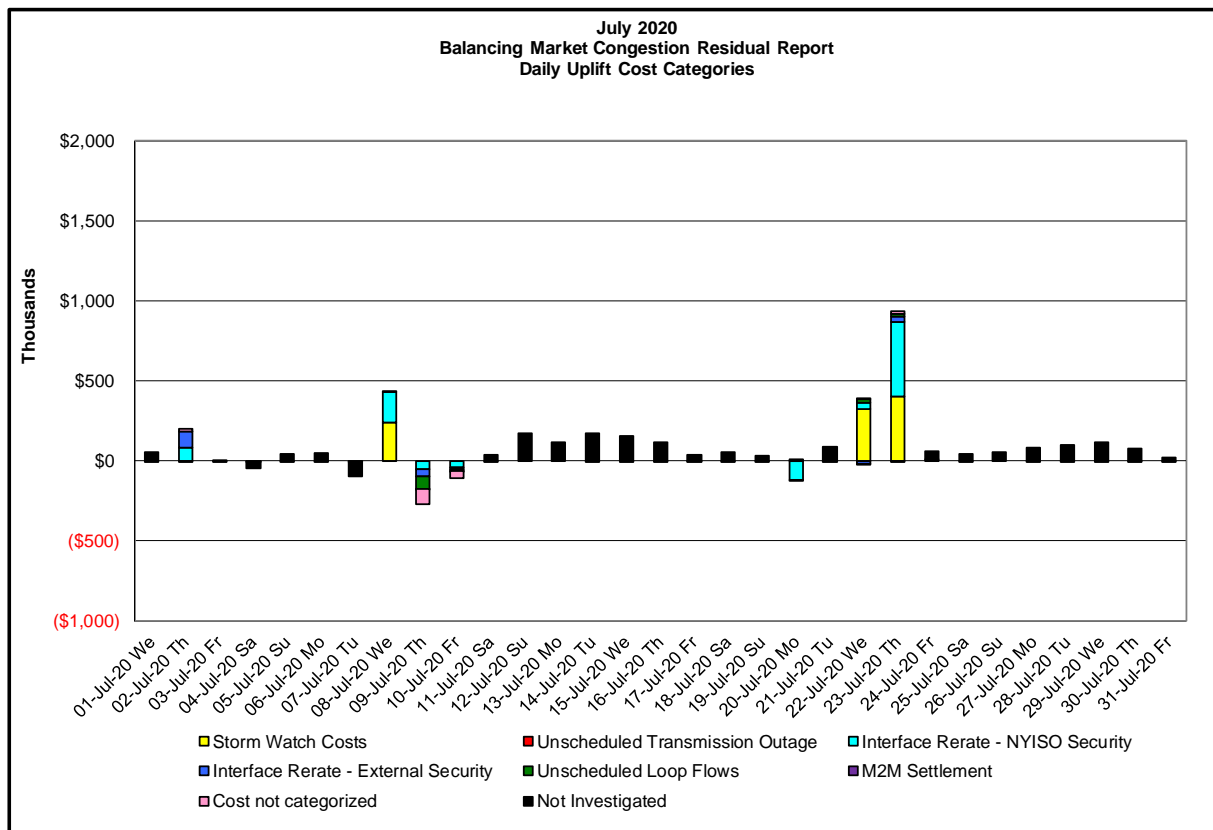
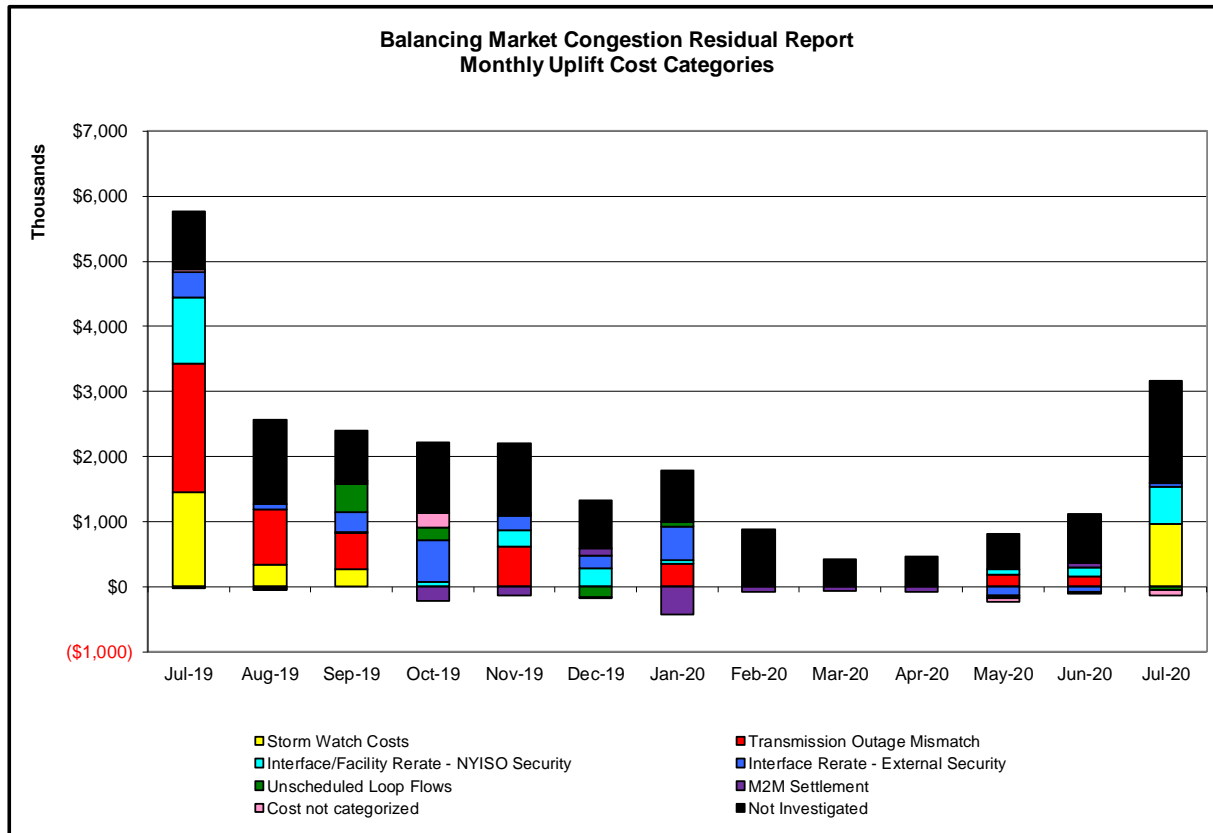
Regional NYISO/NE RT Scheduling for ISO-NE AC Daily Value Categories July 2020



Forecasted Regional Value - CTS: Regional production cost savings for NY and NE associated with intra-hour CTS transaction energy schedules using RTC prices and NE forecasted prices.
Forecasted NY Value: NY production cost savings associated with CTS transaction energy schedules using RTC prices.
Realized NY Value: NY production cost savings associated with CTS transaction energy schedules using RTD prices.

Market Performance Metrics





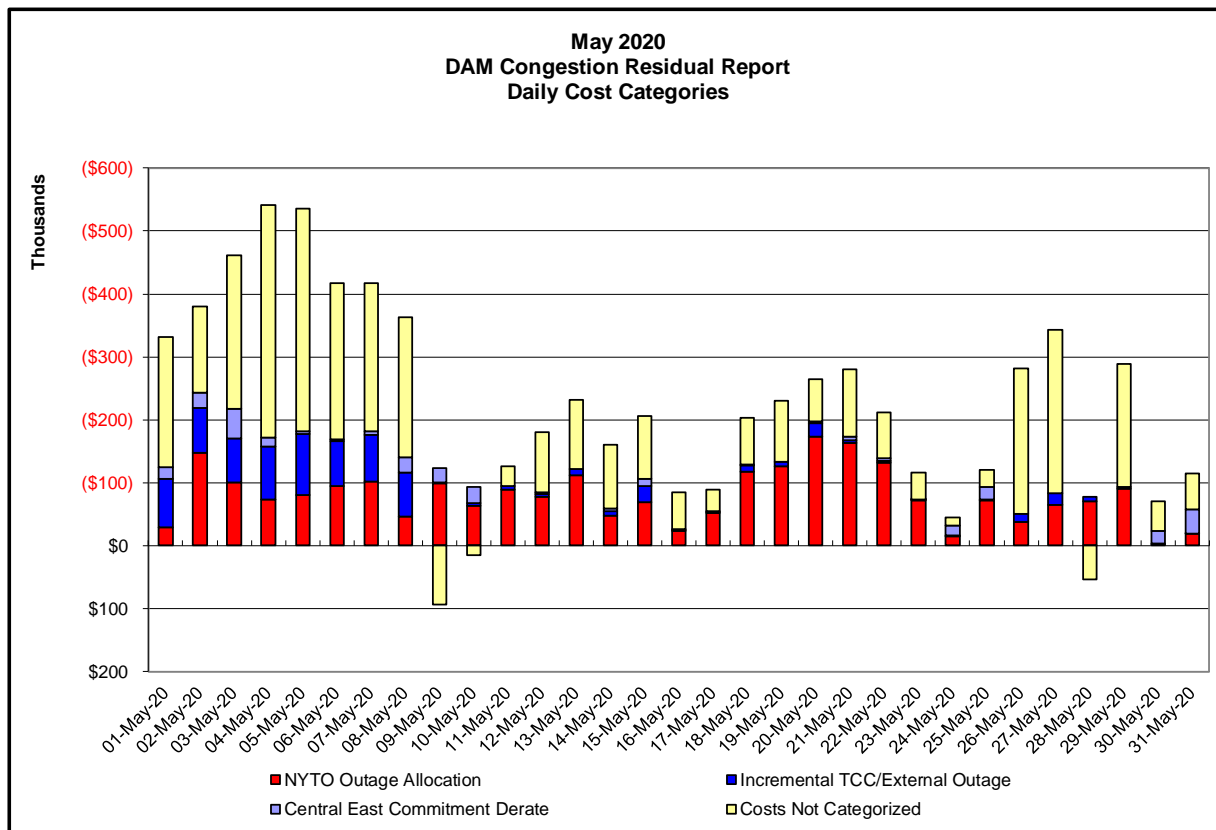
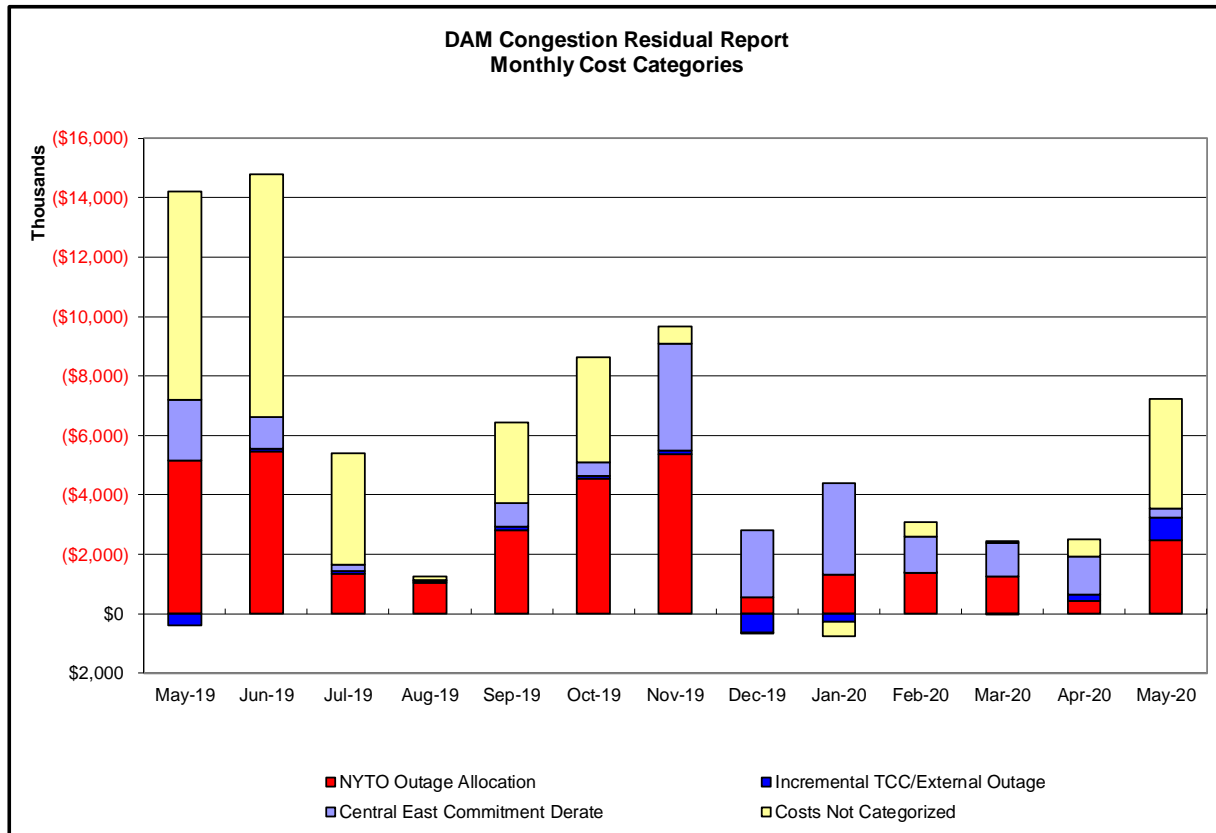
Day's investigated in July: 2, 8, 9, 10, 20, 22, 23			
Event	Date (yyyymmdd)	Hours	Description
	7/2/2020	16,17	Derate C.Islip-Happauge 138kV (#889) for I/o TWR:HOLTSVILLE 881& 882& 880
	7/2/2020	13,14	Derate of Cricket Valley-Pleasant Valley 345 kV (#F83) for I/o Cricket Valley-Pleasant Valley 345 kV (#F84)
	7/2/2020	17-20	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK(RNS2):Y49&M29&Y49_ST
	7/2/2020	14	Derate Moses South
	7/2/2020	13-20	Derate Scriba-Volney 345kV (#20) for I/o Scriba-Volney 345kV (#21)
	7/2/2020	20	NYCA DNI Ramp Limit
	7/2/2020	13-22	PJM_AC-NY Scheduling Limit
	7/2/2020	15	NE_NNC1385-NY Scheduling Limit
	7/8/2020	12-15,17	Thunder Storm Alert, Buchanan 345/138kV (#TA5)
	7/8/2020	12	NYCA DNI ramp limit
	7/8/2020	12-14	Derate of Cricket Valley-Pleasant Valley 345 kV (#F83) for I/o Cricket Valley-Pleasant Valley 345 kV (#F84)
	7/9/2020	15-17,20	Uprate of Niagara-Packard 230kV (#62) for I/o TWR:NIAGARA 61 & 64
	7/9/2020	14	NE_AC ACTIVE DNI ramp limit
	7/9/2020	20	PJM_AC ACTIVE DNI ramp limit
	7/9/2020	13,15-17	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	7/10/2020	13	Uprate of Niagara-Packard 230kV (#62) for I/o TWR:NIAGARA 61 & 64
	7/10/2020	13	Uprate Niagara Blvd-Packard 115kV (#)
	7/10/2020	17	IESO_AC DNI Ramp Limit
	7/10/2020	22	HQ_CEDARS - NY Scheduling Limit
	7/10/2020	17	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	7/20/2020	23	NYCA DNI Ramp Limit
	7/20/2020	17,19	Uprate Buffalo78-Huntley 115kV (#130) for SIN:PACKARD-WALCK_RD_129
	7/20/2020	11,16,18	Derate East Garden City-Valley Stream 138kV (#262) for BUS:BARRETT 292&459&G2&IC9-12
	7/20/2020	10,19,22	Uprate Gowanus-Greenwood 138kV (#42231)
	7/20/2020	10,19,22	Uprate Gowanus-Greenwood 138kV (#42232)
	7/20/2020	19,22	Uprate Gowanus-Greenwood 138kV (#42232) for TWR:GOETHALS 22 & 21
	7/20/2020	7,8,14,16,18	Derate Greenwood-Vernon 138kV (#31231) for TWR:GOETHALS 22 & 21
	7/20/2020	7,8,11	Derate Mott Haven-Dunwoodie 345kV (#71)
	7/20/2020	18	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	7/22/2020	16-20	Thunder Storm Alert, Buchanan 345/138kV (#TA5)
	7/22/2020	17,18	Thunder Storm Alert, Chester-Shoemaker 138kV (#27)
	7/22/2020	11-16,20	Derate Niagara - Packard 230 kV (#61) for I/o TWR:PACKARD 62 & BP76
	7/22/2020	12,20	Derate Scriba - Volney 345 kV (#20) for I/o Scriba - Volney 345kV (#21)
	7/22/2020	9,10	Uprate Buffalo78-Huntley 115kV (#130) for SIN:PACKARD-WALCK_RD_129
	7/22/2020	9,19	Uprate East 179th Street-Hellgate 138kV (#15055)
	7/22/2020	10	NE_AC DNI ramp limit
	7/22/2020	9	PJM_AC DNI ramp limit
	7/22/2020	12-14	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	7/23/2020	14-21	Thunder Storm Alert, Buchanan 345/138kV (#TA5)
	7/23/2020	16,18	NYCA DNI Ramp Limit
	7/23/2020	11,12,16-18,22,23	Derate C.Islip-Happauge 138kV (#889) for I/o TWR:HOLTSVILLE 881& 882& 880
	7/23/2020	10,11	Derate Cricket Valley-Pleasant Valley 345kV (#F83) for I/o Cricket Valley-Pleasant Valley 345kV (#F84)
	7/23/2020	8-12,14-18,20-23	Derate Packard-Sawyer 230kV (#77) for I/o BUS:PACKARD BK3 & 61 & 78
	7/23/2020	9,11,12,14-16,21-23	Derate Scriba-Volney 345 kV (#20) for I/o Scriba - Volney 345kV (#21)
	7/23/2020	19	PJM_AC DNI ramp limit
	7/23/2020	9,14	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West

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	

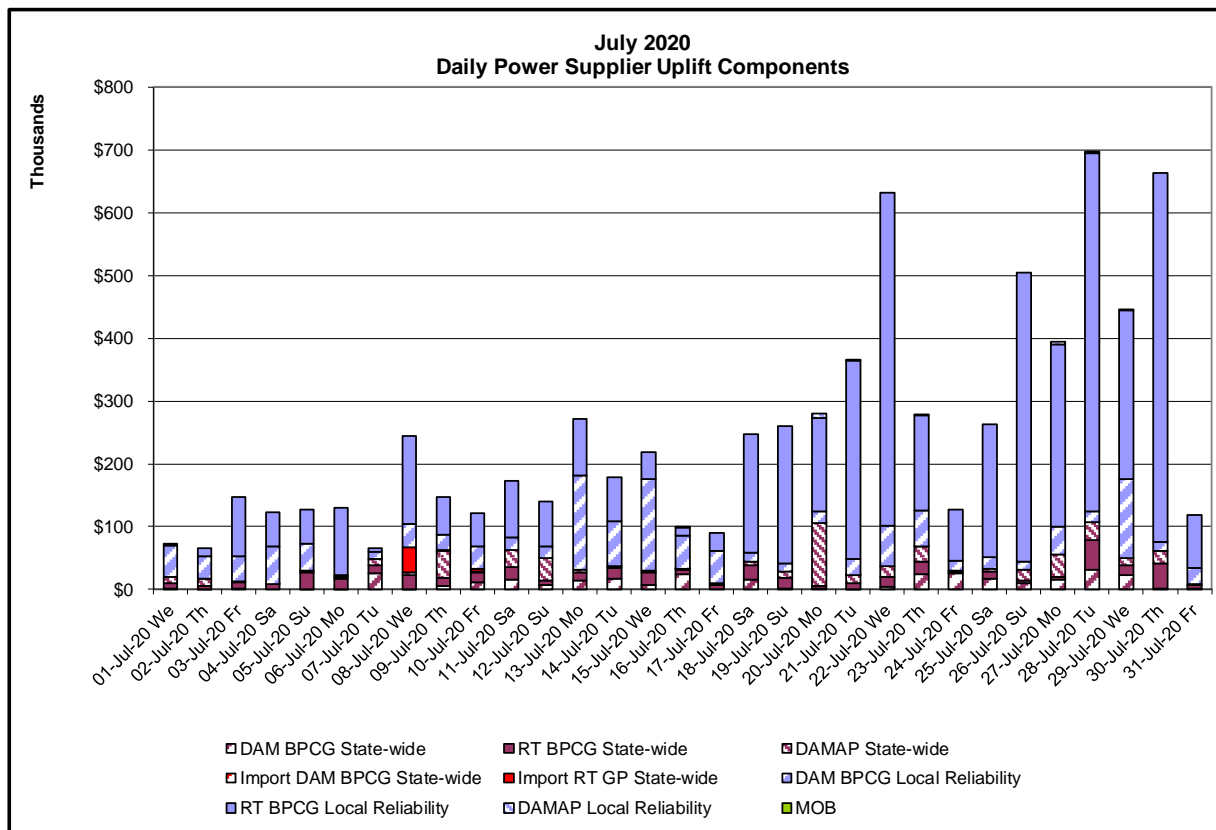
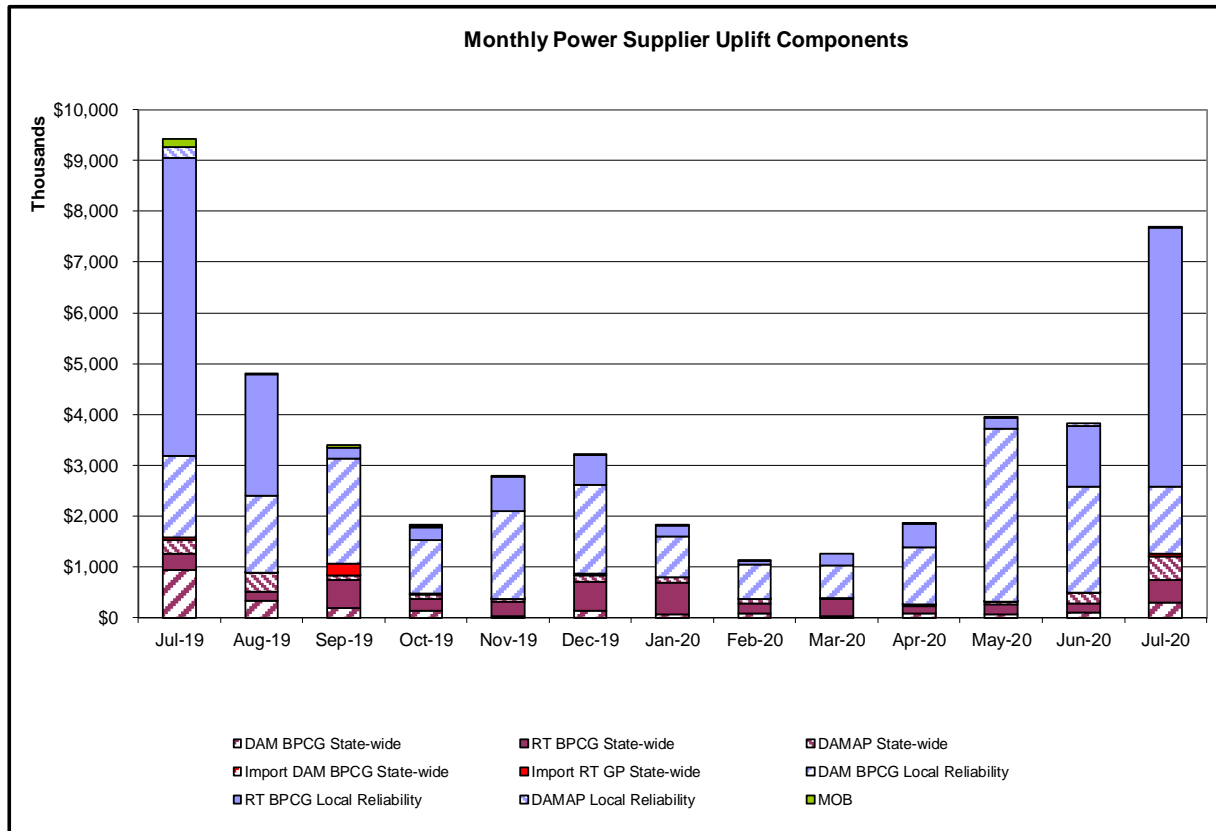
Monthly Balancing Market Congestion Report Assumptions/Notes

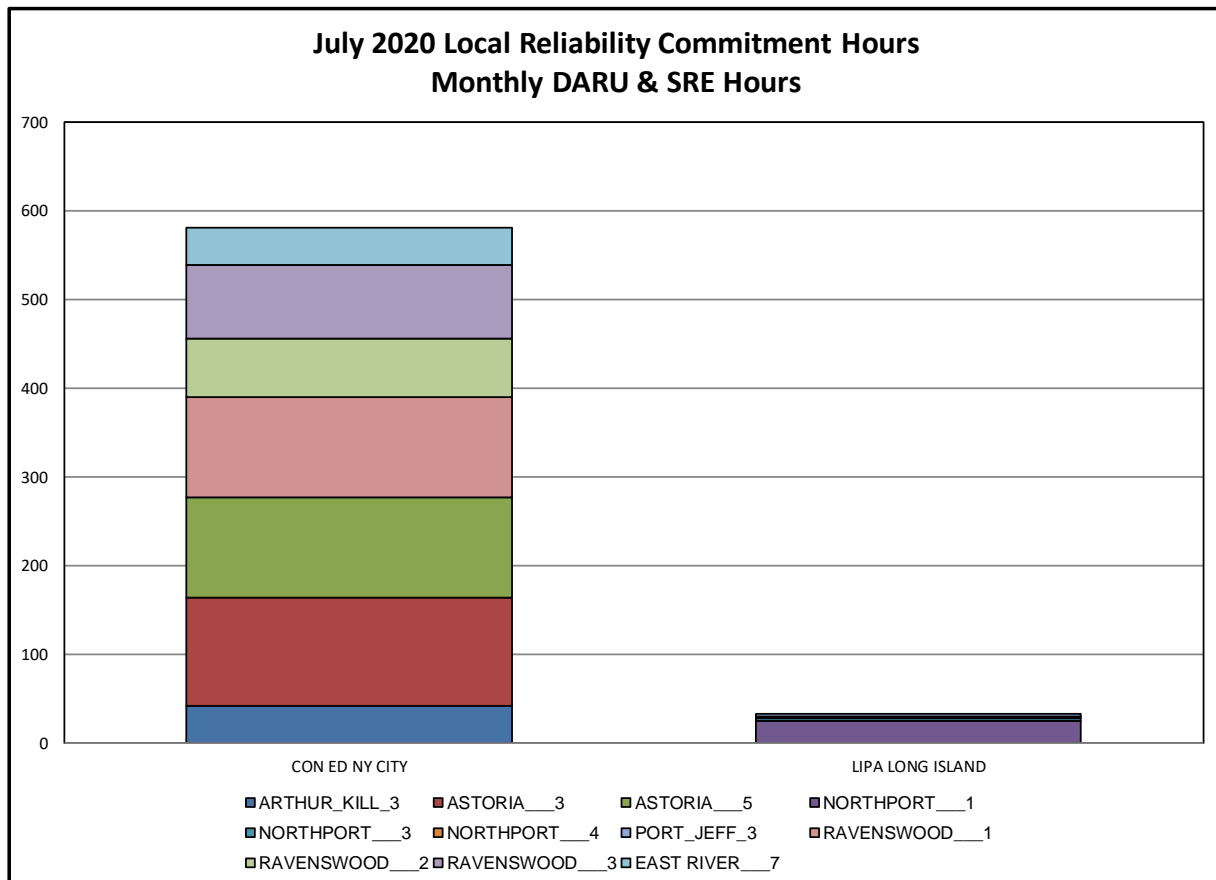
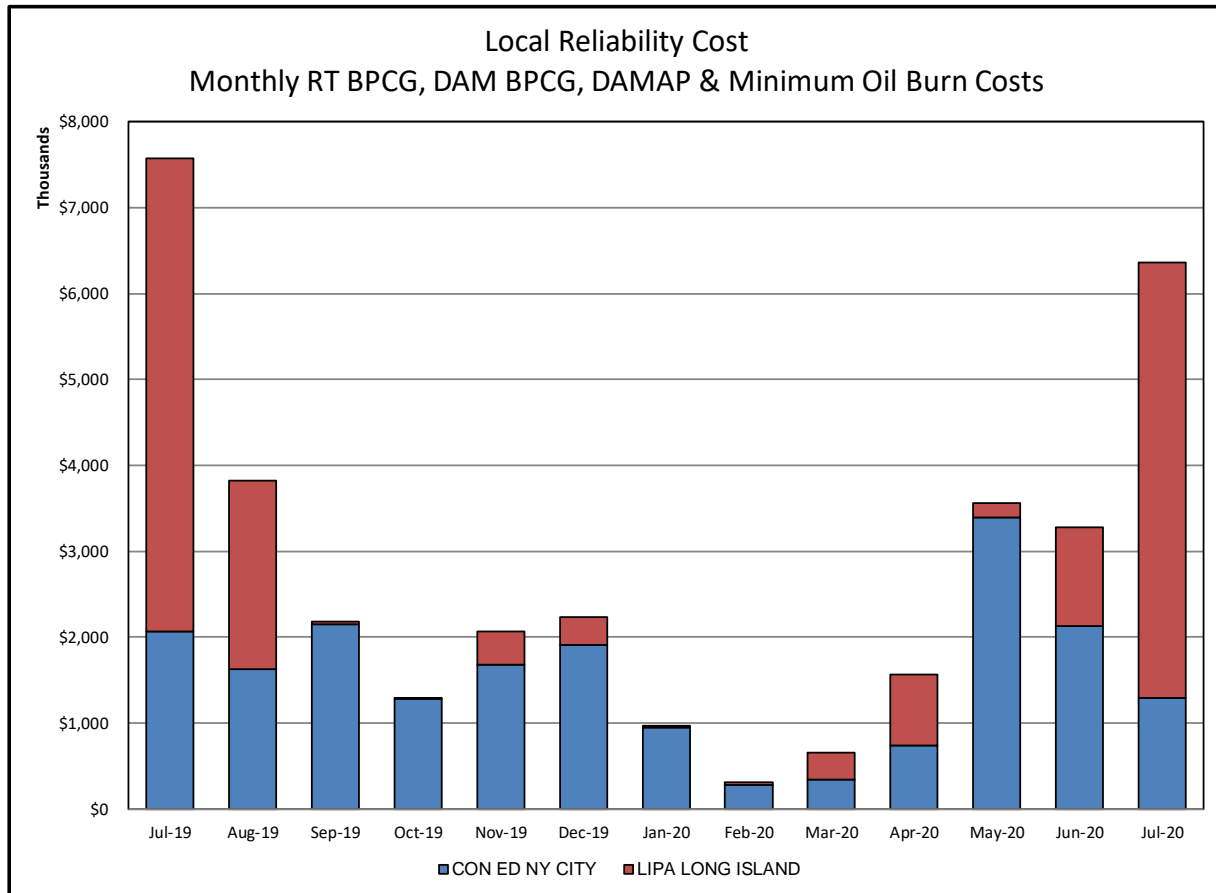
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

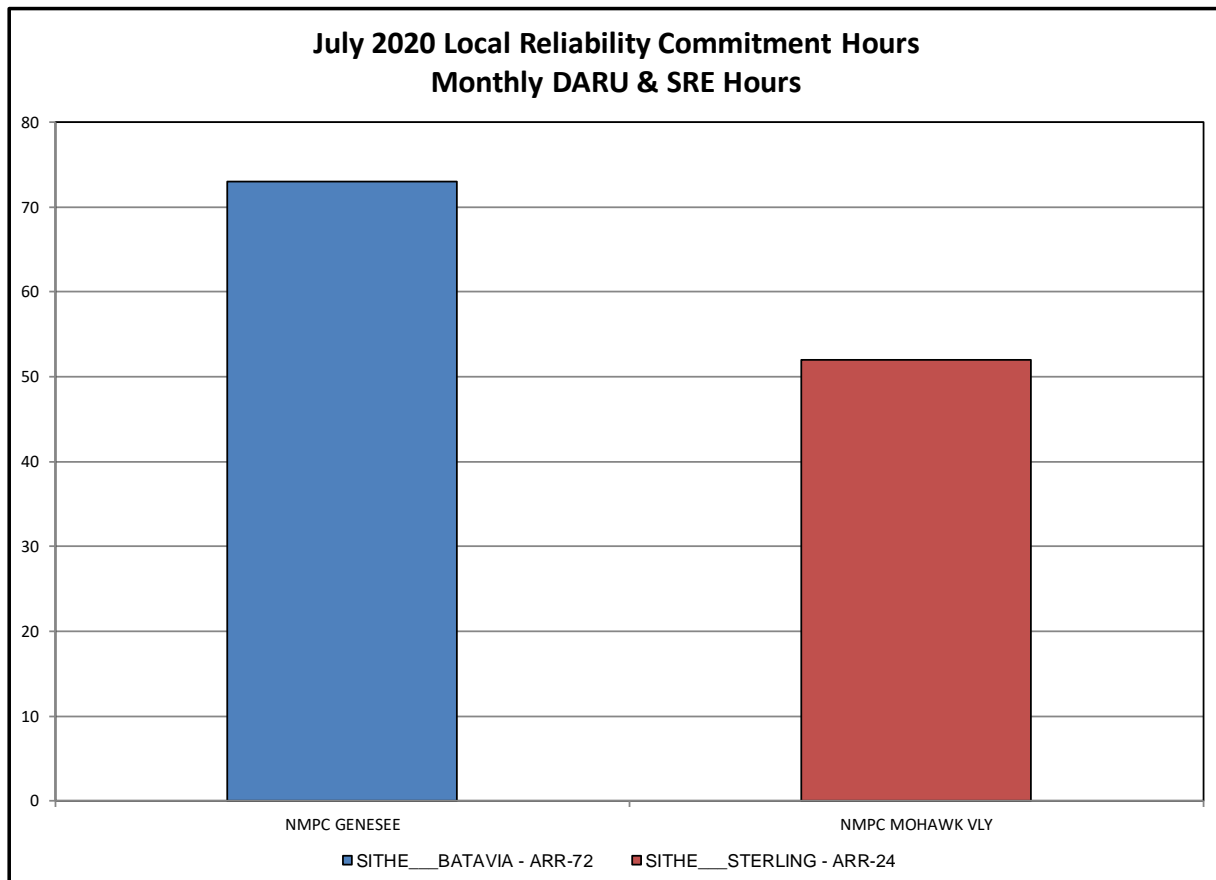
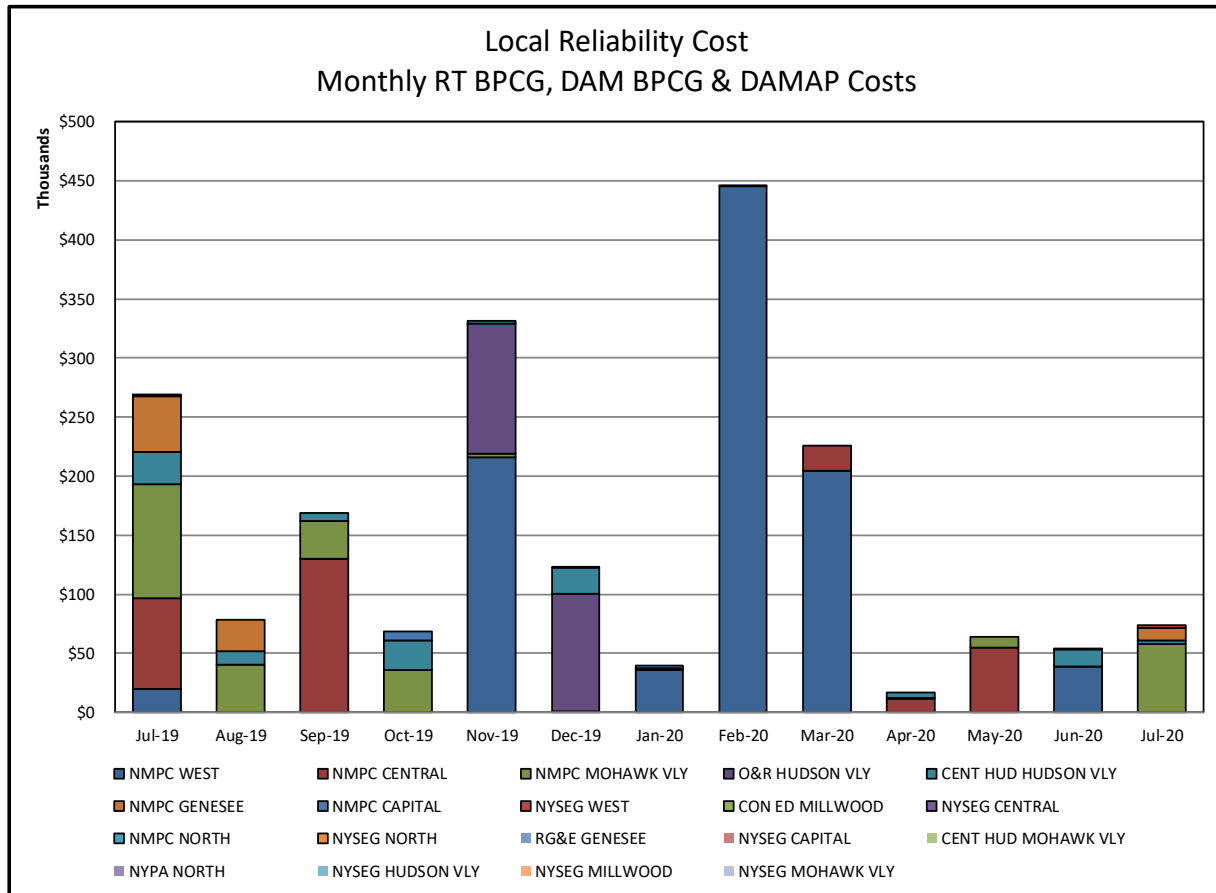


Day-Ahead Market Congestion Residual Categories

<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.	

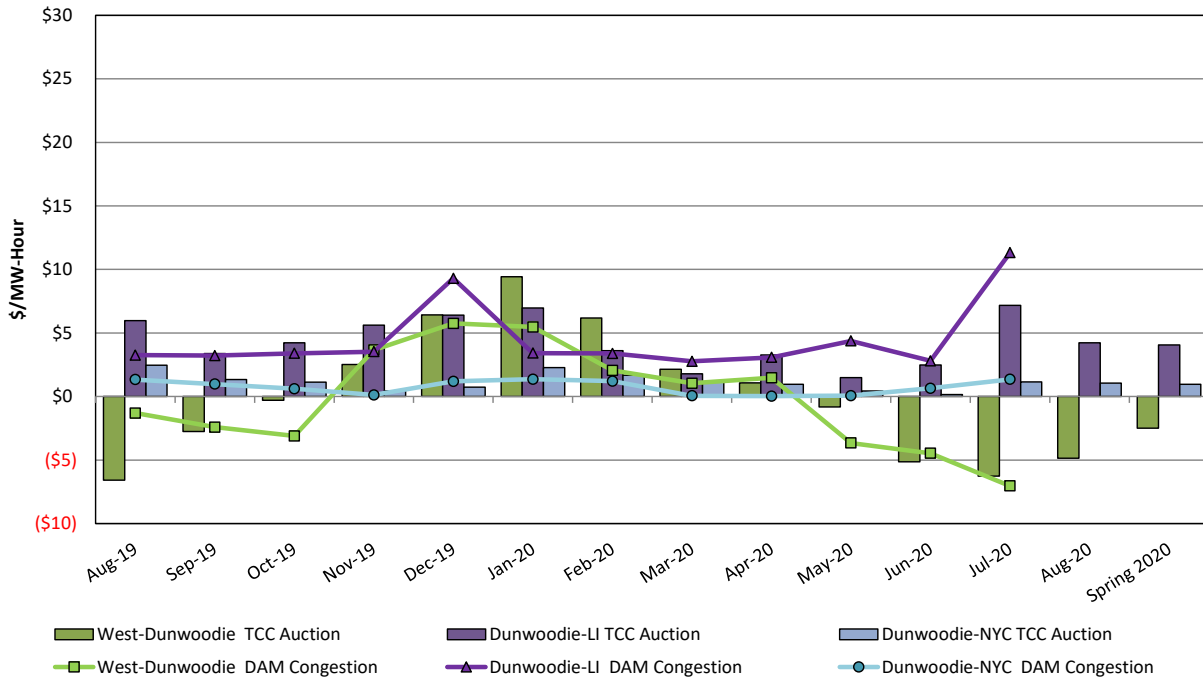






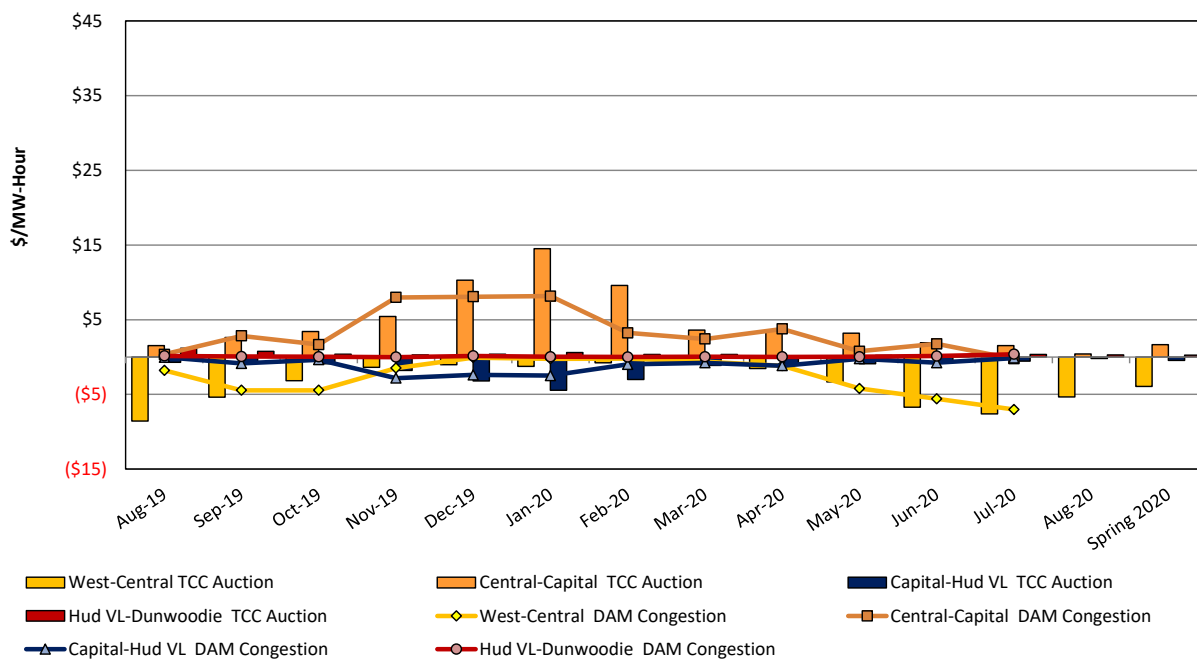
TCC & Day Ahead Market Selected Internal Path Congestion

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



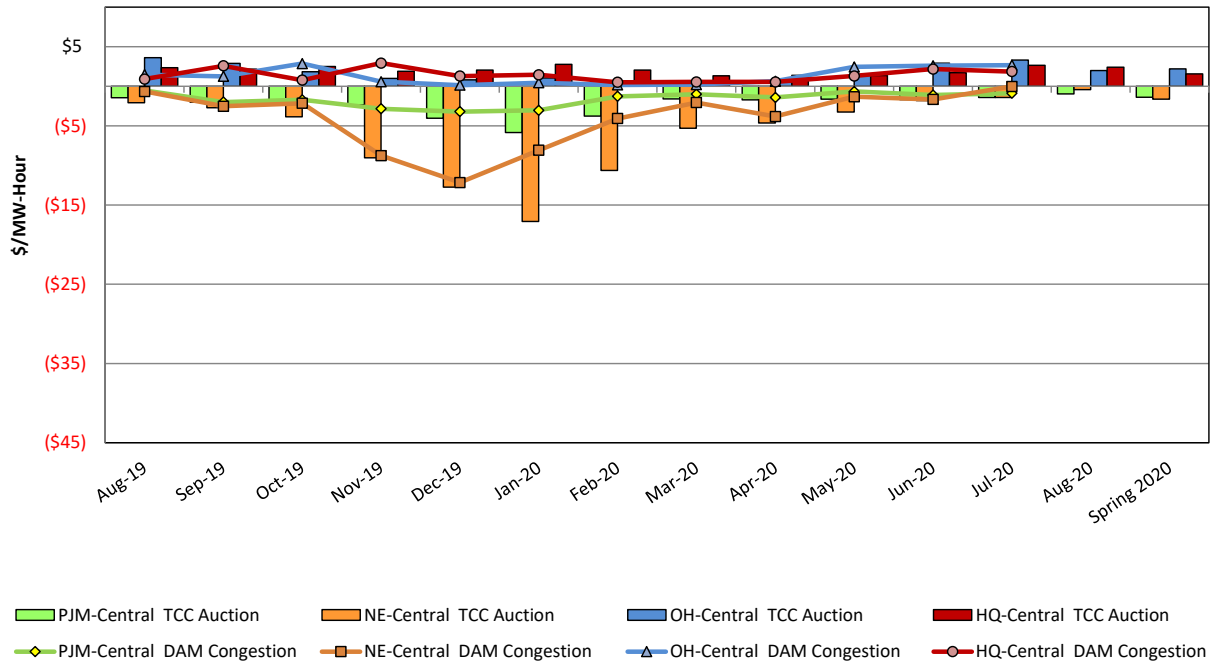
TCC & Day Ahead Market West to Dunwoodie Path Congestion

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

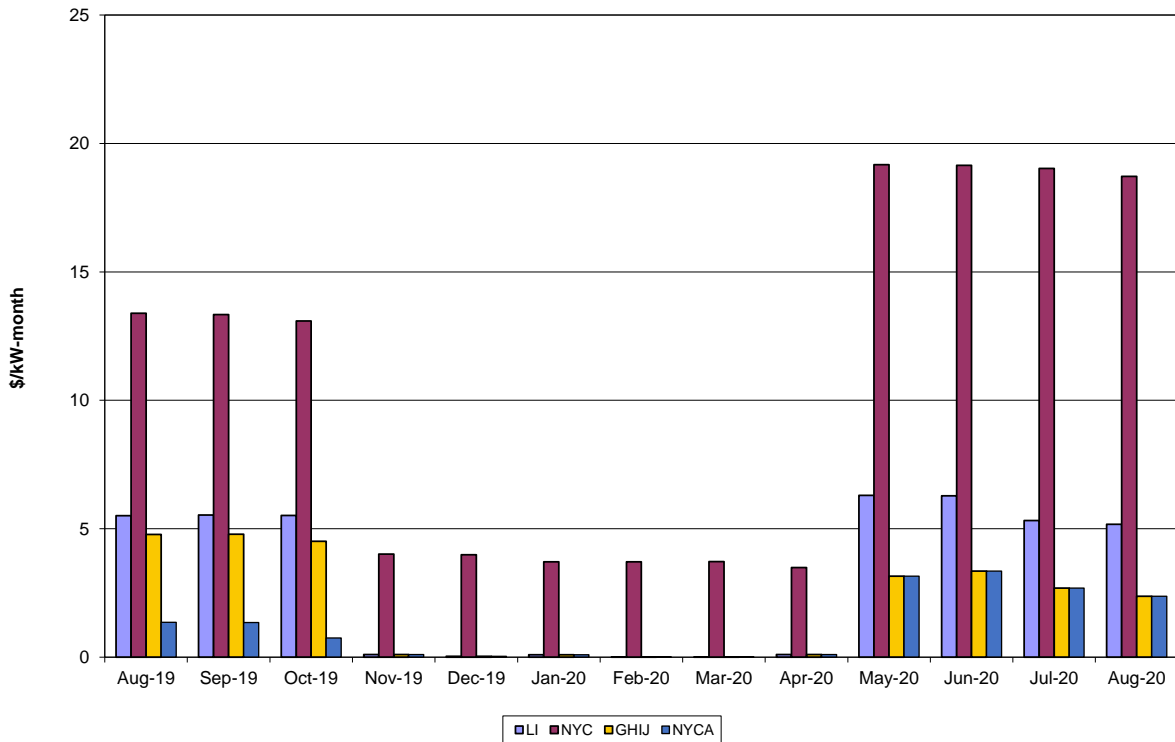


TCC & Day Ahead Market Selected External Path Congestion

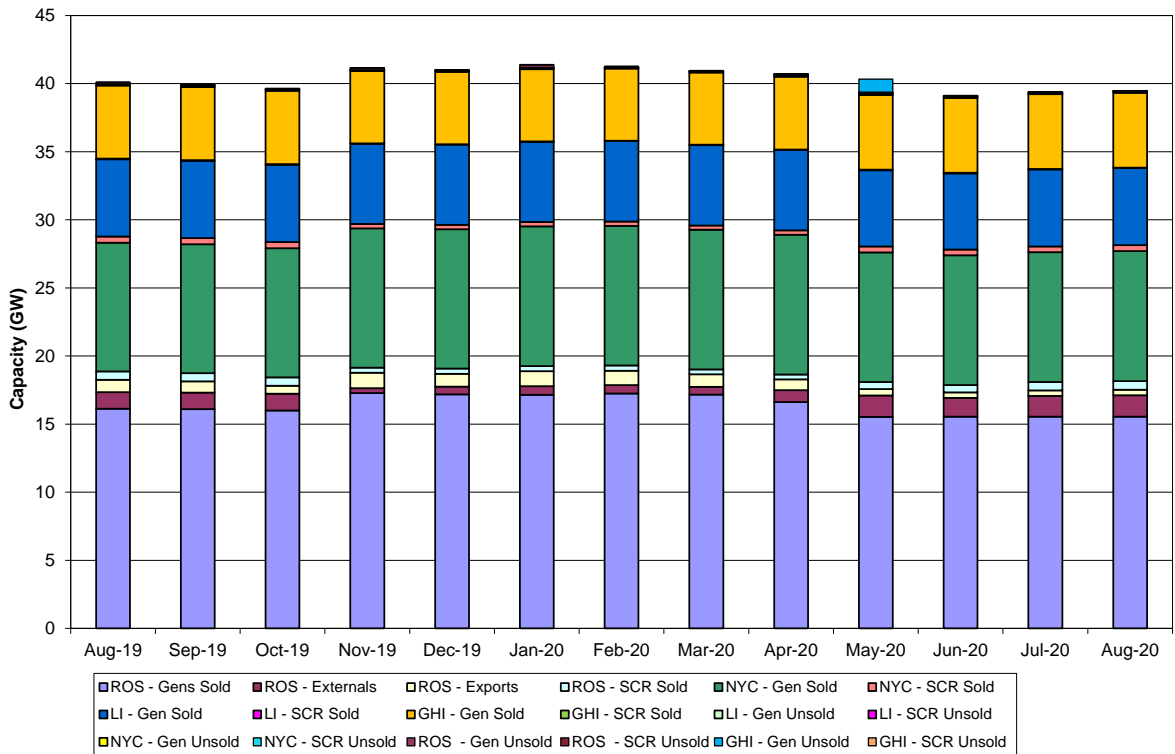
TCC Monthly Reconfiguration Auction vs. Monthly DAM Average
with Spring 2020 Centralized TCC Auction Six-Month Average



ICAP Spot Market Clearing Price



UCAP Sales

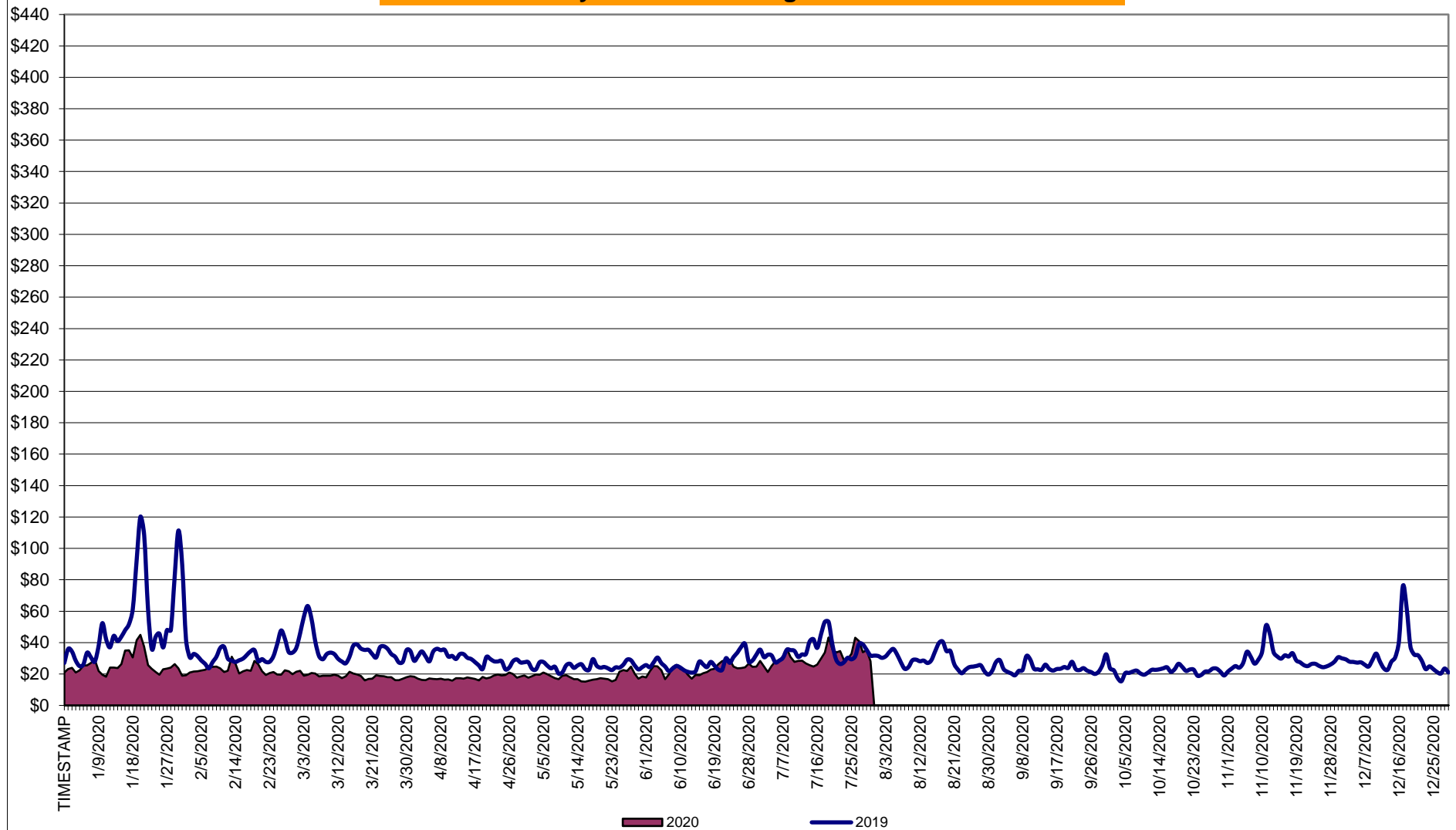


Market Performance Highlights

July 2020

- LBMP for July is \$28.86/MWh; higher than \$21.36/MWh in June 2020 and lower than \$33.18/MWh in July 2019.
 - Day Ahead and Real Time Load Weighted LBMPs are higher compared to June.
- July 2020 average year-to-date monthly cost of \$24.11/MWh is a 33% decrease from \$35.75/MWh in July 2019.
- Average daily sendout is 530 GWh/day in July; higher than 430 GWh/day in June 2020 and lower than 539 GWh/day in July 2019.
- Natural gas prices and distillate prices are higher compared to the previous month.
 - Natural Gas (Transco Z6 NY) was \$1.69 /MMBtu, up from \$1.44/MMBtu in June.
 - Natural gas prices are down 22.5% year-over-year.
 - Jet Kerosene Gulf Coast was \$8.00/MMBtu, up from \$7.30/MMBtu in June.
 - Ultra Low Sulfur No.2 Diesel NY Harbor was \$8.85/MMBtu, up from \$8.05/MMBtu in June.
 - Distillate prices are down 39.5% year-over-year.
- Uplift per MWh is higher compared to the previous month.
 - Uplift (not including NYISO cost of operations) is \$0.07/MWh; higher than (\$0.05)/MWh in June.
 - Local Reliability Share is \$0.38/MWh, higher than \$0.24/MWh in June.
 - Statewide Share is (\$0.31)/MWh, lower than (\$0.29)/MWh in June.
 - TSA \$ per NYC MWh is \$0.18/MWh.
 - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than June.

Daily NYISO Average Cost/MWh (Energy & Ancillary Services)*
2019 Annual Average \$32.59/MWh
July 2019 YTD Average \$35.75/MWh
July 2020 YTD Average \$23.93/MWh



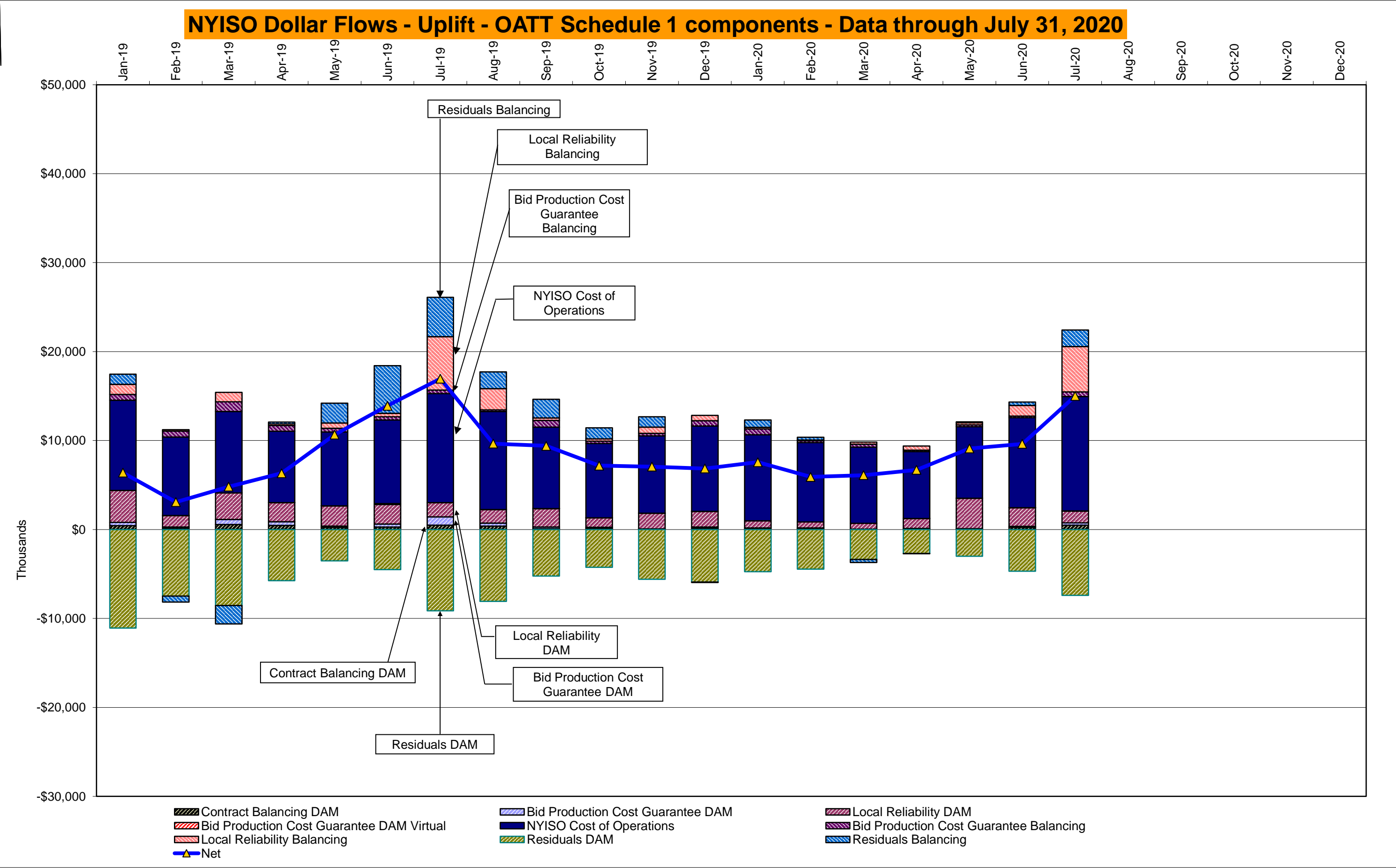
* Excludes ICAP payments.

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

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					
NTAC	0.91	0.70	0.86	0.91	1.05	0.95	1.24					
Reserve	0.46	0.43	0.47	0.50	0.53	0.45	0.39					
Regulation	0.09	0.08	0.09	0.08	0.10	0.08	0.06					
NYISO Cost of Operations	0.68	0.69	0.68	0.66	0.71	0.74	0.76					
FERC Fee Recovery	0.08	0.09	0.09	0.10	0.11	0.09	0.06					
Uplift	(0.15)	(0.23)	(0.19)	(0.08)	0.09	(0.05)	0.07					
Uplift: Local Reliability Share	0.07	0.06	0.07	0.14	0.32	0.24	0.38					
Uplift: Statewide Share	(0.22)	(0.29)	(0.26)	(0.21)	(0.23)	(0.29)	(0.31)					
Voltage Support and Black Start	0.44	0.44	0.44	0.43	0.45	0.45	0.46					
Avg Monthly Cost	27.29	23.32	19.55	18.38	19.16	24.09	31.91					
 Avg YTD Cost	27.29	25.40	23.48	22.38	21.82	22.21	24.11					
 TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.04	0.18					
 2019	<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	50.93	33.51	34.91	28.01	23.10	24.43	33.18	27.83	22.22	20.84	27.39	29.52
NTAC	0.51	0.69	0.98	1.16	0.72	1.08	1.01	0.98	0.48	0.57	0.88	0.77
Reserve	0.54	0.51	0.55	0.63	0.63	0.50	0.44	0.49	0.50	0.62	0.50	0.44
Regulation	0.13	0.11	0.10	0.33	0.13	0.09	0.07	0.09	0.09	0.13	0.11	0.10
NYISO Cost of Operations	0.68	0.68	0.69	0.69	0.68	0.69	0.70	0.70	0.69	0.67	0.67	0.67
FERC Fee Recovery	0.08	0.09	0.09	0.10	0.10	0.08	0.06	0.07	0.09	0.09	0.09	0.08
Uplift	(0.25)	(0.44)	(0.33)	(0.15)	0.13	0.07	(0.06)	(0.20)	(0.13)	(0.09)	(0.13)	(0.19)
Uplift: Local Reliability Share	0.32	0.11	0.31	0.20	0.23	0.19	0.44	0.25	0.17	0.11	0.19	0.17
Uplift: Statewide Share	(0.57)	(0.55)	(0.64)	(0.35)	(0.11)	(0.12)	(0.50)	(0.45)	(0.30)	(0.20)	(0.31)	(0.35)
Voltage Support and Black Start	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.37	0.36
Avg Monthly Cost	52.99	35.51	37.38	31.16	25.88	27.32	35.78	30.33	24.32	23.21	29.89	31.76
 Avg YTD Cost	52.99	44.93	42.54	40.12	37.57	35.76	35.75	34.96	33.88	32.94	32.69	32.59
 TSA \$ per NYC MWh	0.00	0.00	0.01	0.01	0.19	0.77	1.00	0.33	0.43	0.00	0.00	0.00

* Excludes ICAP payments.
Market Mitigation and Analysis
Prepared: 8/10/2020 1:37 PM

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



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>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					
DAM LSE Internal LBMP Energy Sales	56%	56%	59%	54%	55%	58%	65%					
DAM External TC LBMP Energy Sales	6%	5%	5%	7%	4%	3%	2%					
DAM Bilateral - Internal Bilaterals	30%	30%	27%	30%	31%	29%	26%					
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	6%	6%	6%	5%	3%					
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%					
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%	2%	2%					
<u>Balancing Energy Market MWh</u>	-26,753	-142,168	144,076	22,599	-137,565	-180,149	403,914					
Balancing Energy LSE Internal LBMP Energy Sales	-1080%	-221%	-85%	-884%	-187%	-134%	85%					
Balancing Energy External TC LBMP Energy Sales	1156%	181%	240%	1233%	137%	99%	35%					
Balancing Energy Bilateral - Internal Bilaterals	62%	5%	12%	55%	12%	7%	2%					
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%					
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	127%	16%	18%	92%	12%	5%	2%					
Balancing Energy Bilateral - Wheel Through Bilaterals	-365%	-81%	-85%	-396%	-74%	-77%	-24%					
<u>Transactions Summary</u>												
LBMP	62%	62%	65%	61%	59%	62%	68%					
Internal Bilaterals	31%	31%	27%	30%	32%	30%	26%					
Import Bilaterals	5%	5%	6%	6%	6%	5%	3%					
Export Bilaterals	2%	2%	2%	2%	2%	2%	1%					
Wheels Through	0%	1%	0%	0%	0%	1%	1%					
<u>Market Share of Total Load</u>												
Day Ahead Market	100.2%	101.1%	98.9%	99.8%	101.2%	101.3%	97.6%					
Balancing Energy +	-0.2%	-1.1%	1.1%	0.2%	-1.2%	-1.3%	2.4%					
Total MWH	14,167,856	13,030,501	12,640,075	11,394,989	11,324,755	13,645,029	17,033,251					
Average Daily Energy Sendout/Month GWh	423	417	375	344	345	430	530					

<u>2019</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>	15,299,458	13,391,383	13,527,834	11,811,029	12,521,583	13,723,372	17,416,589	16,379,968	13,588,715	12,567,821	13,036,152	14,345,711
DAM LSE Internal LBMP Energy Sales	57%	57%	59%	59%	57%	58%	64%	63%	58%	57%	54%	56%
DAM External TC LBMP Energy Sales	6%	5%	3%	1%	3%	3%	3%	3%	3%	4%	6%	6%
DAM Bilateral - Internal Bilaterals	29%	30%	30%	31%	32%	29%	26%	26%	30%	32%	32%	30%
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	5%	5%	6%	5%	4%	4%	5%	5%	5%	5%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
DAM Bilateral - Wheel Through Bilaterals	2%	2%	2%	2%	1%	2%	2%	2%	2%	1%	1%	1%
<u>Balancing Energy Market MWh</u>	-322,442	-323,188	-261,217	-218,482	-392,699	-102,044	103,628	-514,102	-247,267	-112,057	-17,421	46,828
Balancing Energy LSE Internal LBMP Energy Sales	-120%	-126%	-138%	-178%	-150%	-264%	-2%	-119%	-163%	-346%	-1332%	-480%
Balancing Energy External TC LBMP Energy Sales	65%	67%	82%	113%	68%	233%	199%	41%	93%	266%	1435%	699%
Balancing Energy Bilateral - Internal Bilaterals	-4%	-1%	-3%	2%	1%	0%	5%	0%	-4%	6%	103%	39%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	3%	7%	6%	7%	2%	8%	8%	1%	6%	25%	170%	70%
Balancing Energy Bilateral - Wheel Through Bilaterals	-45%	-47%	-47%	-44%	-21%	-77%	-125%	-23%	-31%	-52%	-476%	-229%
<u>Transactions Summary</u>												
LBMP	63%	62%	61%	60%	59%	62%	68%	65%	61%	61%	60%	63%
Internal Bilaterals	29%	30%	30%	31%	33%	30%	25%	27%	30%	32%	32%	30%
Import Bilaterals	5%	5%	6%	6%	6%	5%	4%	5%	5%	5%	5%	5%
Export Bilaterals	1%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
Wheels Through	1%	1%	1%	1%	0%	1%	1%	1%	2%	0%	0%	0%
<u>Market Share of Total Load</u>												
Day Ahead Market	102.2%	102.5%	102.0%	101.9%	103.2%	100.7%	99.4%	103.2%	101.9%	100.9%	100.1%	99.7%
Balancing Energy +	-2.2%	-2.5%	-2.0%	-1.9%	-3.2%	-0.7%	0.6%	-3.2%	-1.9%	-0.9%	-0.1%	0.3%
Total MWH	14,977,016	13,068,195	13,266,617	11,592,547	12,128,884	13,621,328	17,520,217	15,865,866	13,341,448	12,455,764	13,018,731	14,392,539
Average Daily Energy Sendout/Month GWh	449	436	411	371	373	429	539	487	419	377	401	427

+ 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 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					
Standard Deviation	\$7.43	\$4.45	\$3.21	\$2.71	\$3.55	\$6.40	\$10.45					
Load Weighted Price **	\$22.77	\$19.84	\$16.36	\$14.86	\$15.37	\$20.28	\$27.94					
<u>RTC LBMP</u>												
Price *	\$22.86	\$21.48	\$16.48	\$16.23	\$17.46	\$20.84	\$30.70					
Standard Deviation	\$9.33	\$53.30	\$4.84	\$5.17	\$8.61	\$11.26	\$17.92					
Load Weighted Price **	\$23.50	\$21.94	\$16.74	\$16.44	\$17.89	\$22.01	\$32.92					
<u>REAL TIME LBMP</u>												
Price *	\$22.53	\$19.29	\$16.24	\$14.14	\$14.90	\$18.35	\$26.56					
Standard Deviation	\$11.90	\$8.68	\$7.48	\$6.98	\$8.35	\$9.33	\$16.45					
Load Weighted Price **	\$23.20	\$19.68	\$16.58	\$14.35	\$15.42	\$19.46	\$28.27					
Average Daily Energy Sendout/Month GWh	423	417	375	344	345	430	530					

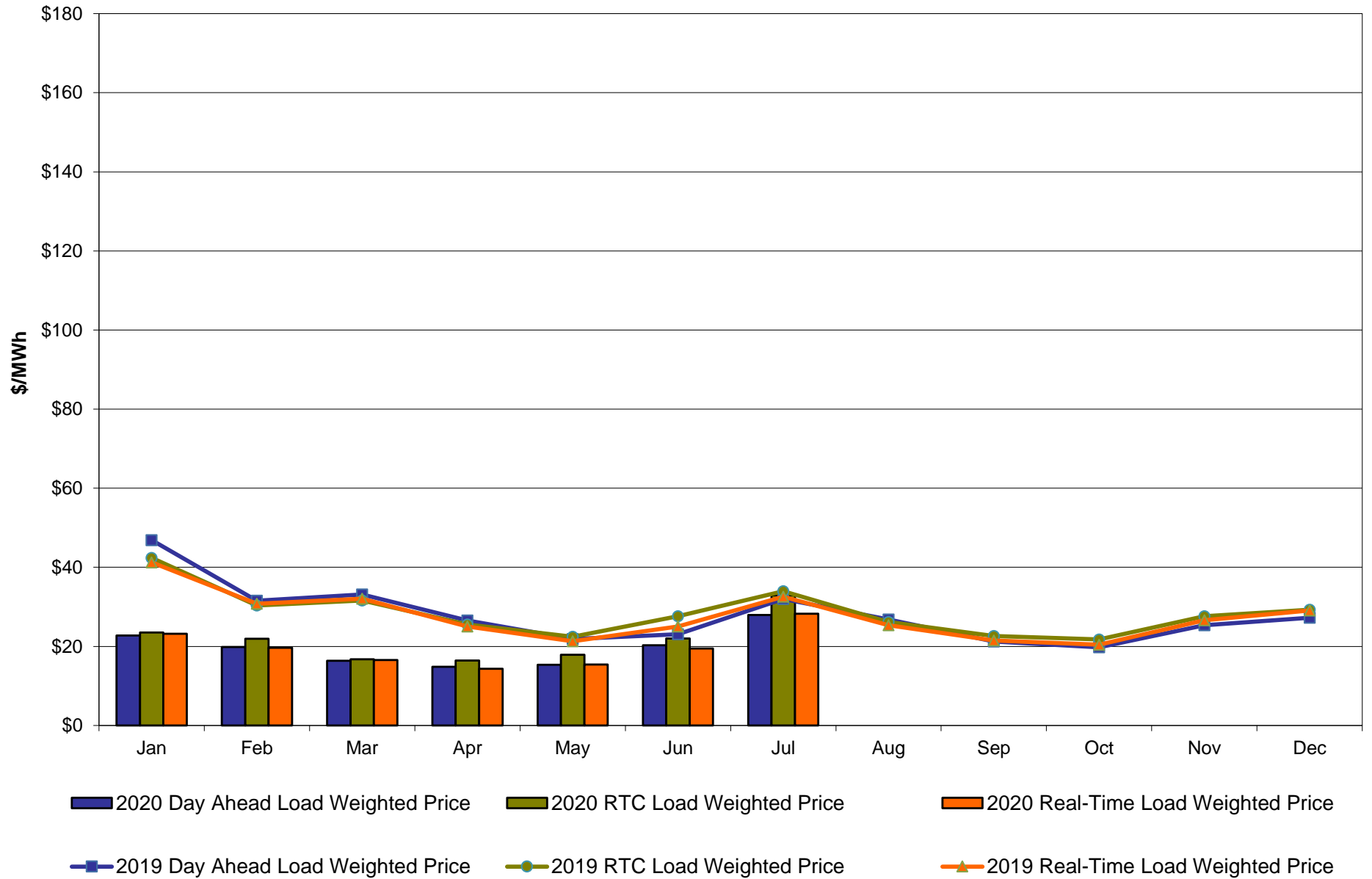
NYISO Markets 2019 Energy Statistics

	<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 *	\$45.01	\$30.66	\$32.34	\$25.97	\$21.16	\$21.79	\$30.16	\$25.35	\$20.45	\$19.18	\$24.65	\$26.29
Standard Deviation	\$25.67	\$12.86	\$9.30	\$6.32	\$5.89	\$7.28	\$12.06	\$8.73	\$5.57	\$5.09	\$7.73	\$11.81
Load Weighted Price **	\$46.88	\$31.53	\$33.14	\$26.57	\$21.89	\$23.04	\$31.98	\$26.83	\$21.23	\$19.77	\$25.36	\$27.22
<u>RTC LBMP</u>												
Price *	\$40.86	\$29.74	\$31.04	\$25.07	\$21.88	\$25.67	\$32.23	\$24.92	\$21.70	\$20.92	\$26.82	\$28.17
Standard Deviation	\$23.02	\$10.79	\$8.48	\$7.53	\$8.01	\$23.45	\$21.96	\$14.96	\$9.22	\$13.95	\$10.37	\$16.26
Load Weighted Price **	\$42.39	\$30.32	\$31.62	\$25.54	\$22.44	\$27.64	\$33.92	\$26.14	\$22.60	\$21.76	\$27.64	\$29.24
<u>REAL TIME LBMP</u>												
Price *	\$39.54	\$30.13	\$31.46	\$24.47	\$20.56	\$23.30	\$30.77	\$24.01	\$20.49	\$19.53	\$25.82	\$27.81
Standard Deviation	\$26.03	\$13.77	\$12.54	\$17.27	\$10.35	\$17.49	\$20.63	\$12.36	\$9.62	\$12.02	\$11.60	\$19.64
Load Weighted Price **	\$41.24	\$30.80	\$32.06	\$25.06	\$21.28	\$25.05	\$32.53	\$25.34	\$21.50	\$20.43	\$26.64	\$29.05
Average Daily Energy Sendout/Month GWh	449	436	411	371	373	429	539	487	419	377	401	427

* Average zonal load weighted prices.

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

NYISO Monthly Average Internal LBMPs 2019- 2020

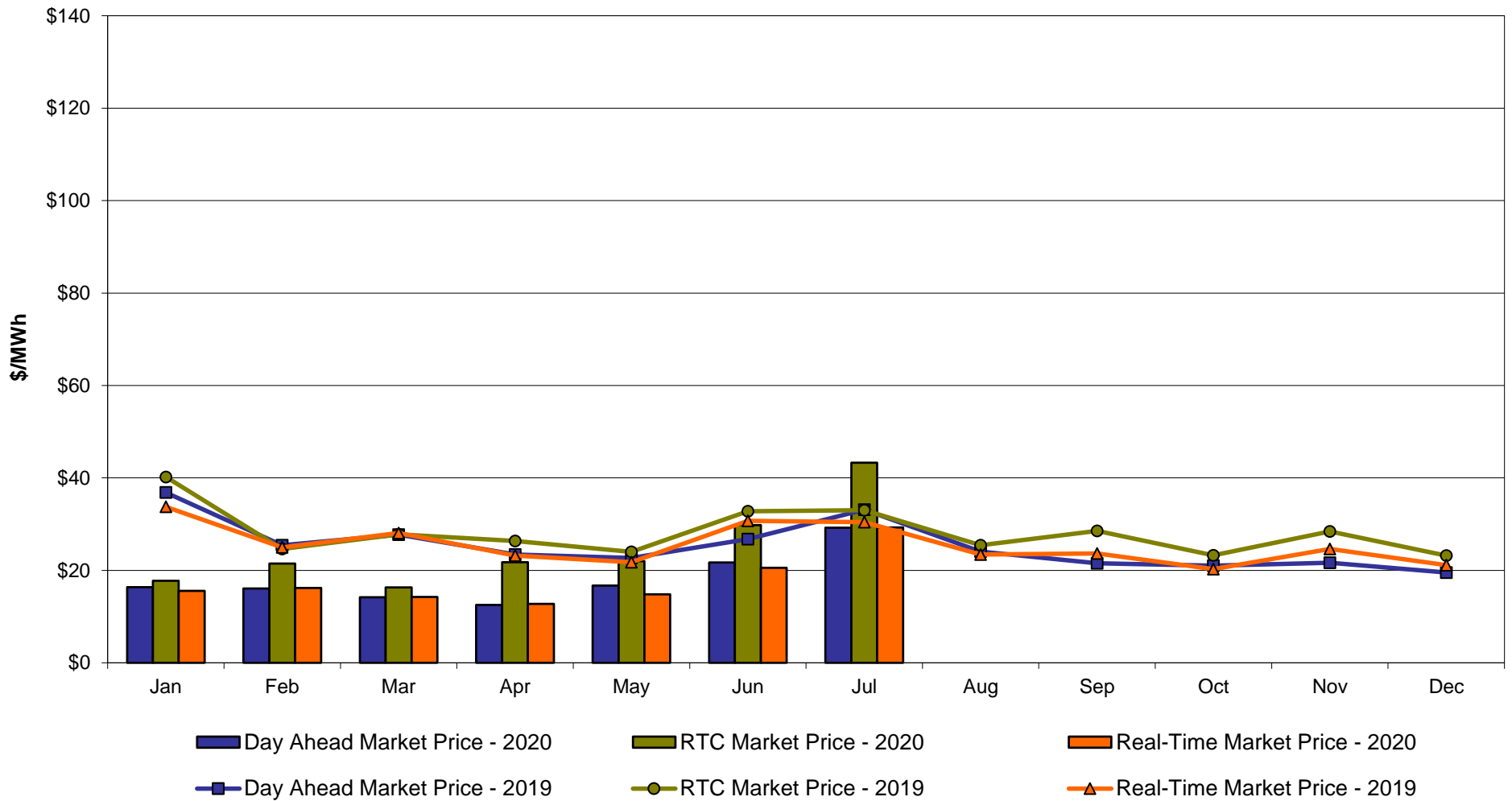


July 2020 Zonal LBMP Statistics for NYISO (\$/MWh)

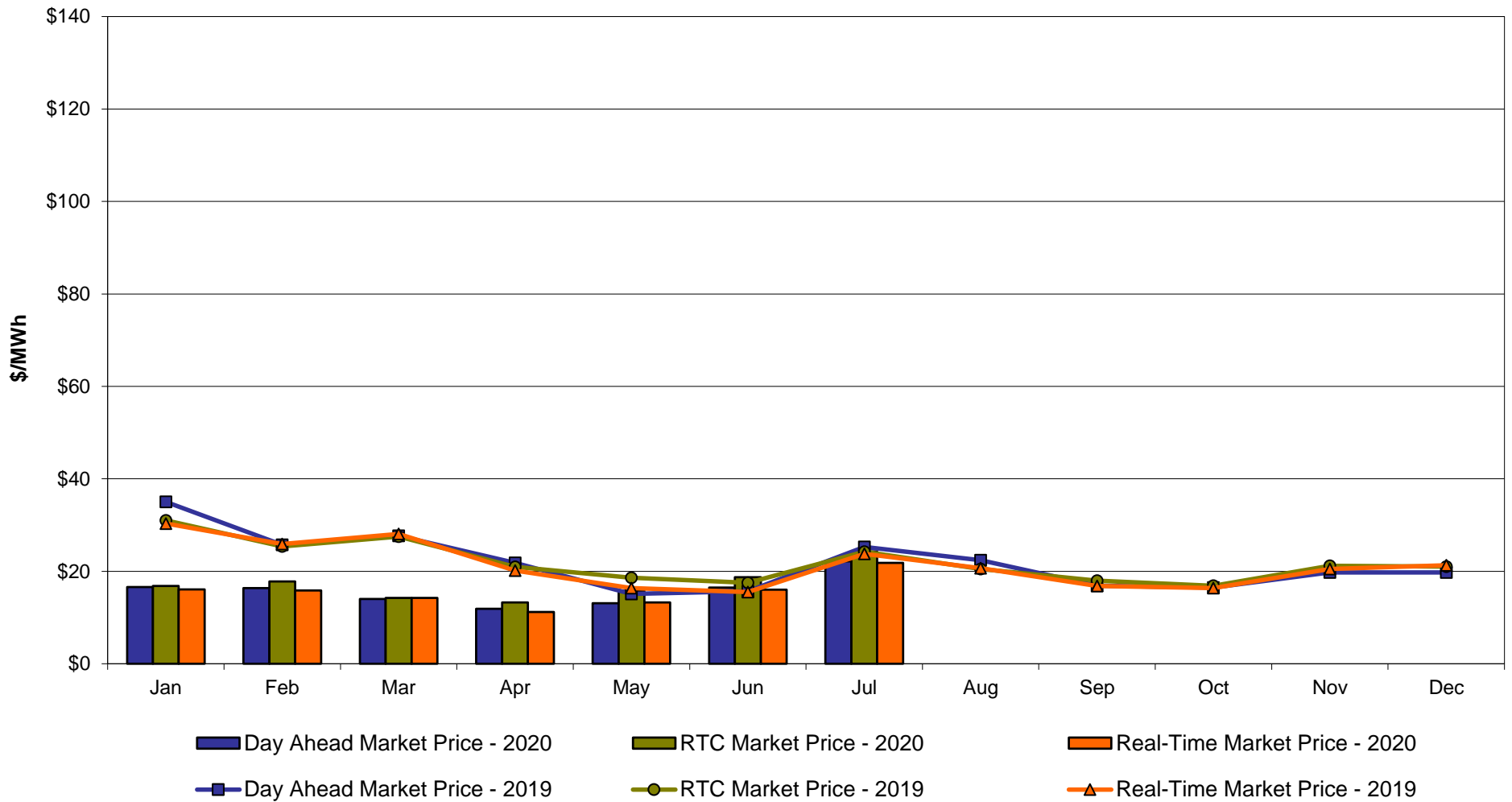
	<u>WEST</u> <u>Zone A</u>	<u>GENESEE</u> <u>Zone B</u>	<u>NORTH</u> <u>Zone D</u>	<u>CENTRAL</u> <u>Zone C</u>	<u>MOHAWK</u> <u>VALLEY</u> <u>Zone E</u>	<u>CAPITAL</u> <u>Zone F</u>	<u>HUDSON</u> <u>VALLEY</u> <u>Zone G</u>	<u>MILLWOOD</u> <u>Zone H</u>	<u>DUNWOODIE</u> <u>Zone I</u>	<u>NEW YORK</u> <u>CITY</u> <u>Zone J</u>	<u>LONG</u> <u>ISLAND</u> <u>Zone K</u>
<u>DAY AHEAD LBMP</u>											
Unweighted Price *	29.23	22.29	17.59	22.18	22.10	22.74	23.17	24.51	23.96	25.50	35.96
Standard Deviation	16.38	9.41	5.90	7.35	7.21	7.06	7.02	11.67	8.03	8.83	20.98
<u>RTC LBMP</u>											
Unweighted Price *	43.28	27.97	21.05	24.28	23.69	24.28	24.52	27.14	25.95	28.71	42.19
Standard Deviation	50.57	31.68	15.38	11.04	10.45	9.90	10.12	17.63	12.02	14.63	51.34
<u>REAL TIME LBMP</u>											
Unweighted Price *	29.28	23.79	18.58	21.84	21.70	22.28	22.56	24.83	23.82	26.60	35.00
Standard Deviation	27.36	20.98	19.56	9.70	9.69	9.24	9.59	15.42	10.56	13.03	59.71
	<u>ONTARIO</u> <u>IESO</u>	<u>HYDRO</u> <u>QUEBEC</u> <u>(Wheel)</u>	<u>HYDRO</u> <u>QUEBEC</u> <u>(Import/Export)</u>	<u>PJM</u>	<u>NEW</u> <u>ENGLAND</u>	<u>CROSS</u> <u>SOUND</u> <u>CABLE</u> <u>Controllable</u> <u>Line</u>	<u>NORTHPORT-</u> <u>NORWALK</u> <u>Controllable</u> <u>Line</u>	<u>NEPTUNE</u> <u>Controllable</u> <u>Line</u>	<u>LINDEN VFT</u> <u>Controllable</u> <u>Line</u>	<u>HUDSON</u> <u>Controllable</u> <u>Line</u>	<u>Dennison</u> <u>Controllable</u> <u>Line</u>
	<u>Zone O</u>	<u>Zone M</u>	<u>Zone M</u>	<u>Zone P</u>	<u>Zone N</u>						
<u>DAY AHEAD LBMP</u>											
Unweighted Price *	18.73	19.02	19.02	18.73	23.02	23.63	47.01	24.49	17.10	24.04	27.39
Standard Deviation	5.47	6.04	6.04	5.47	7.76	8.32	41.71	7.46	5.63	7.54	14.73
<u>RTC LBMP</u>											
Unweighted Price *	18.45	21.10	21.10	18.45	23.66	26.47	54.47	28.32	19.29	25.73	29.88
Standard Deviation	16.14	9.28	9.28	16.14	11.98	15.83	68.75	40.23	38.44	11.53	41.66
<u>REAL TIME LBMP</u>											
Unweighted Price *	18.27	18.63	18.63	18.27	21.47	22.39	45.67	25.06	15.67	23.85	27.11
Standard Deviation	13.03	15.37	15.37	13.03	11.00	11.77	68.34	57.85	40.55	10.34	58.07

* Straight LBMP averages

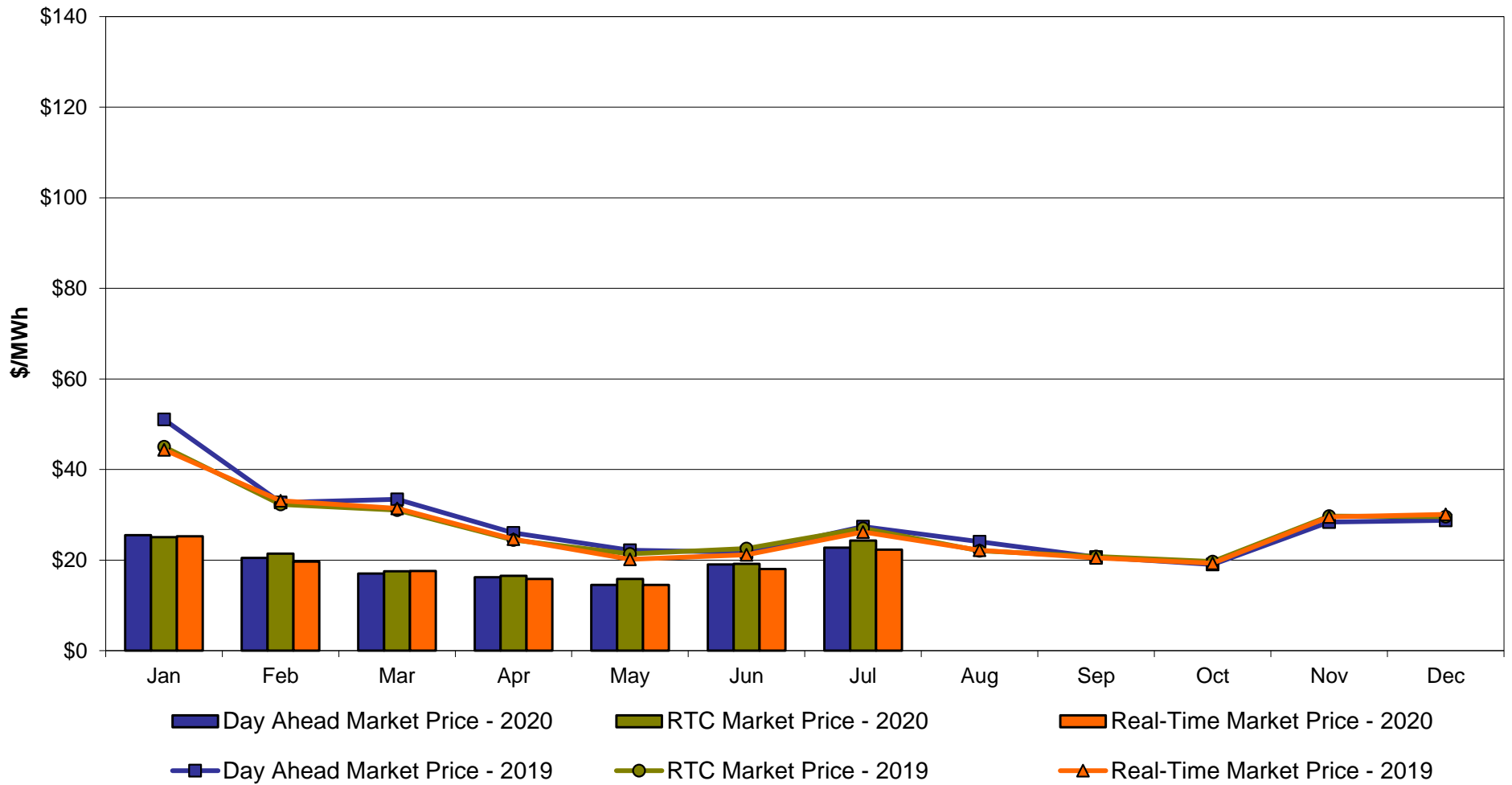
West Zone A **Monthly Average LBMP Prices 2019 - 2020**



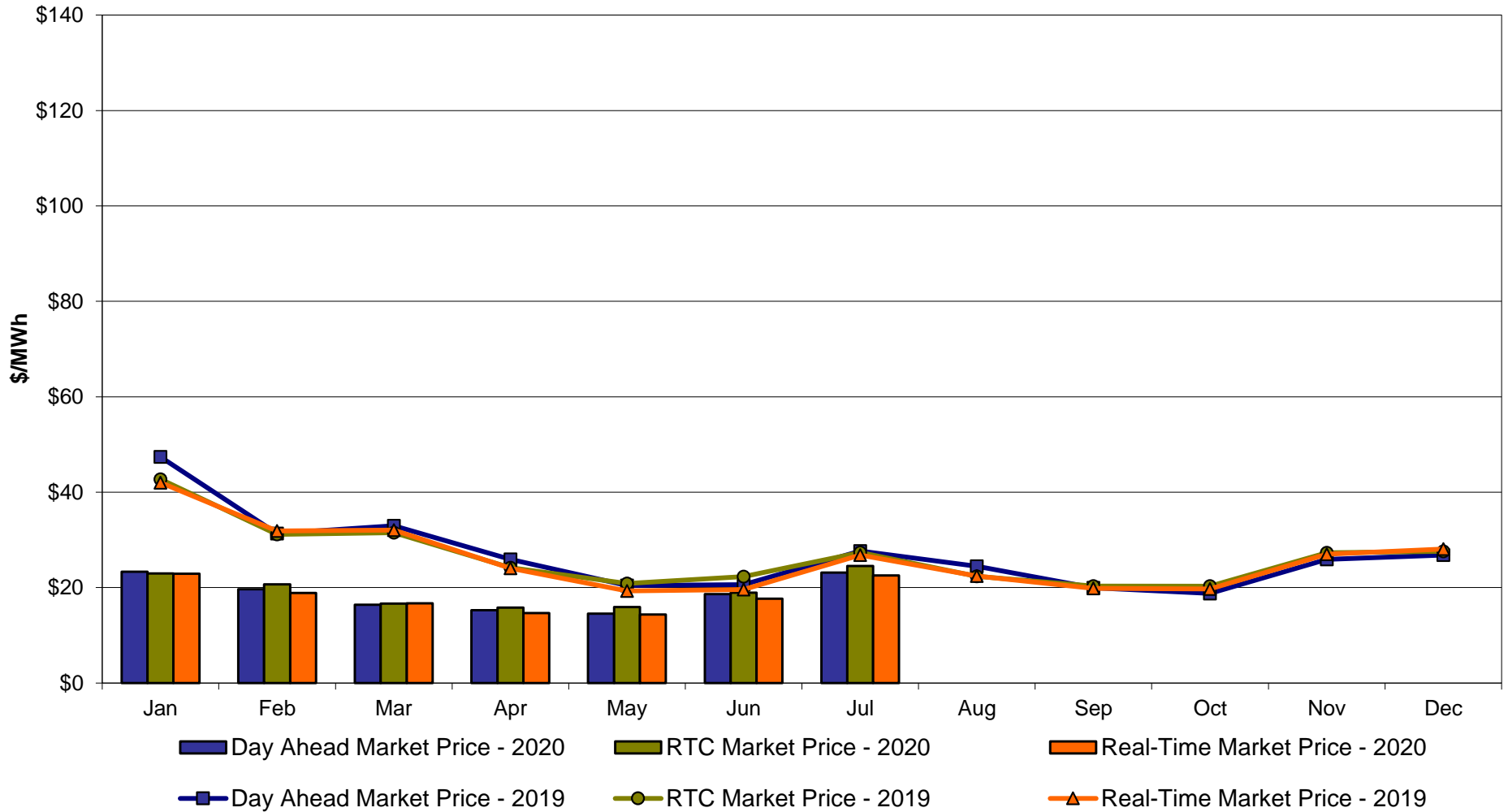
Central Zone C
Monthly Average LBMP Prices 2019 - 2020



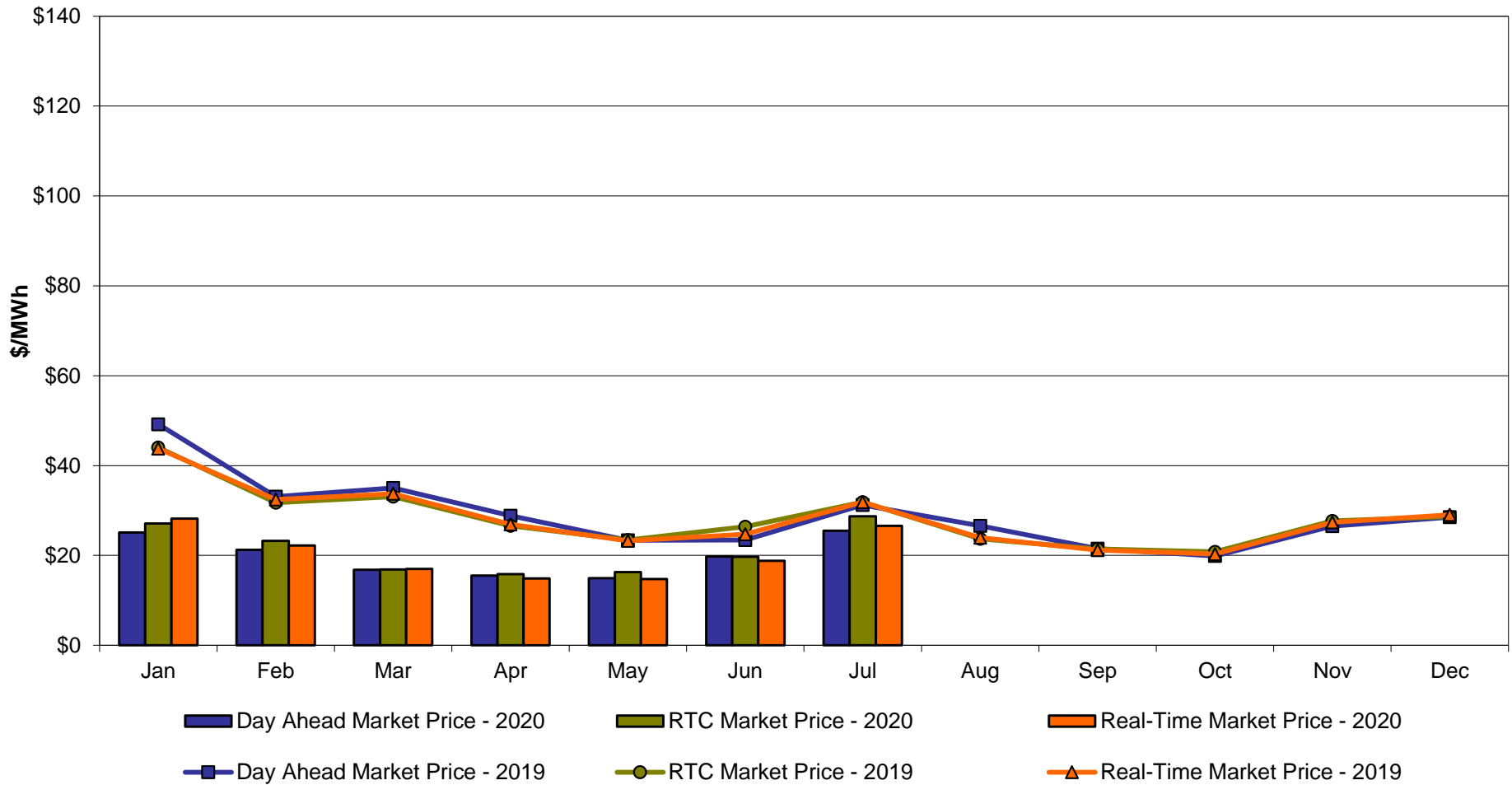
Capital Zone F **Monthly Average LBMP Prices 2019 - 2020**



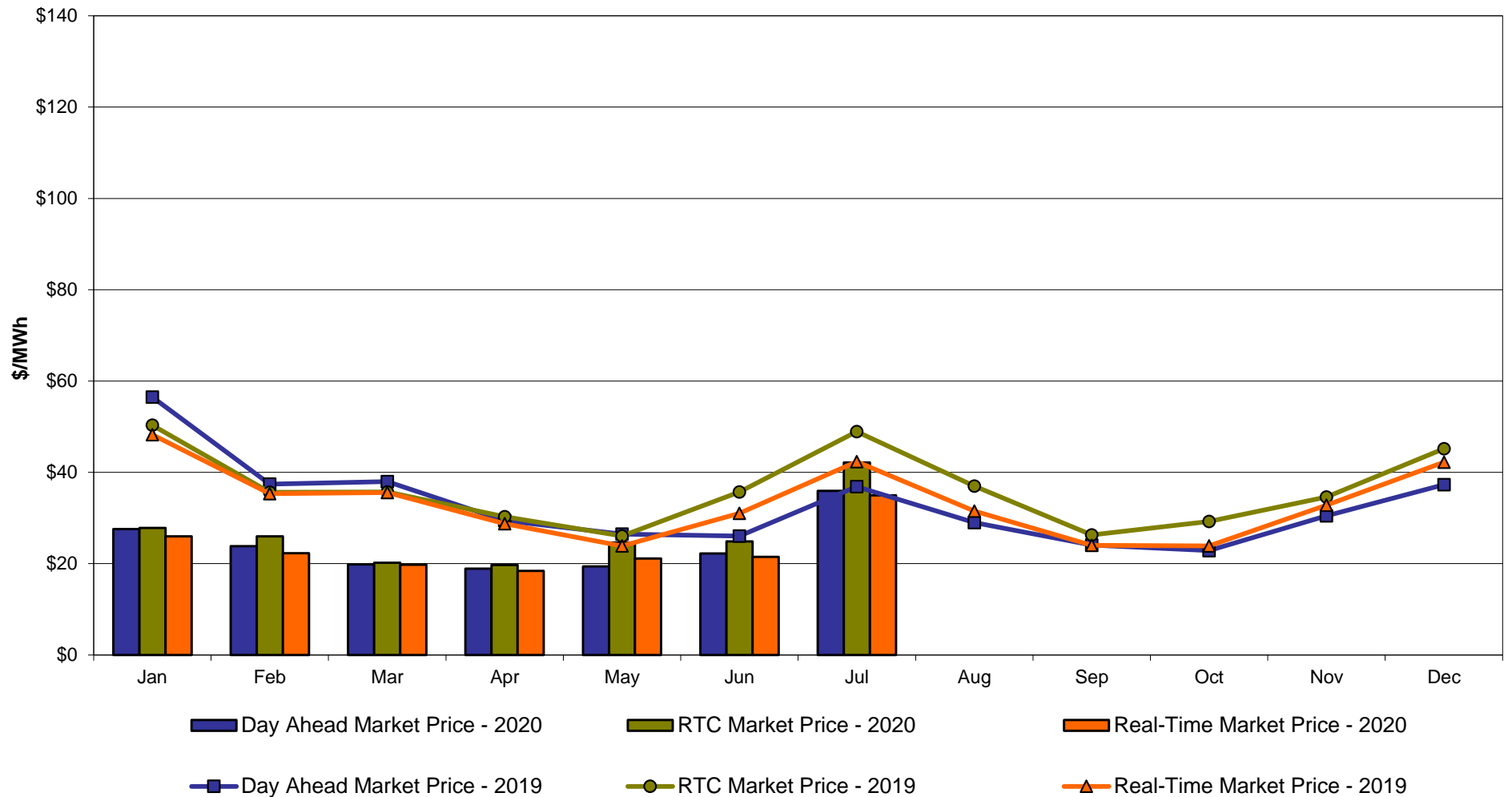
Hudson Valley Zone G Monthly Average LBMP Prices 2019 - 2020



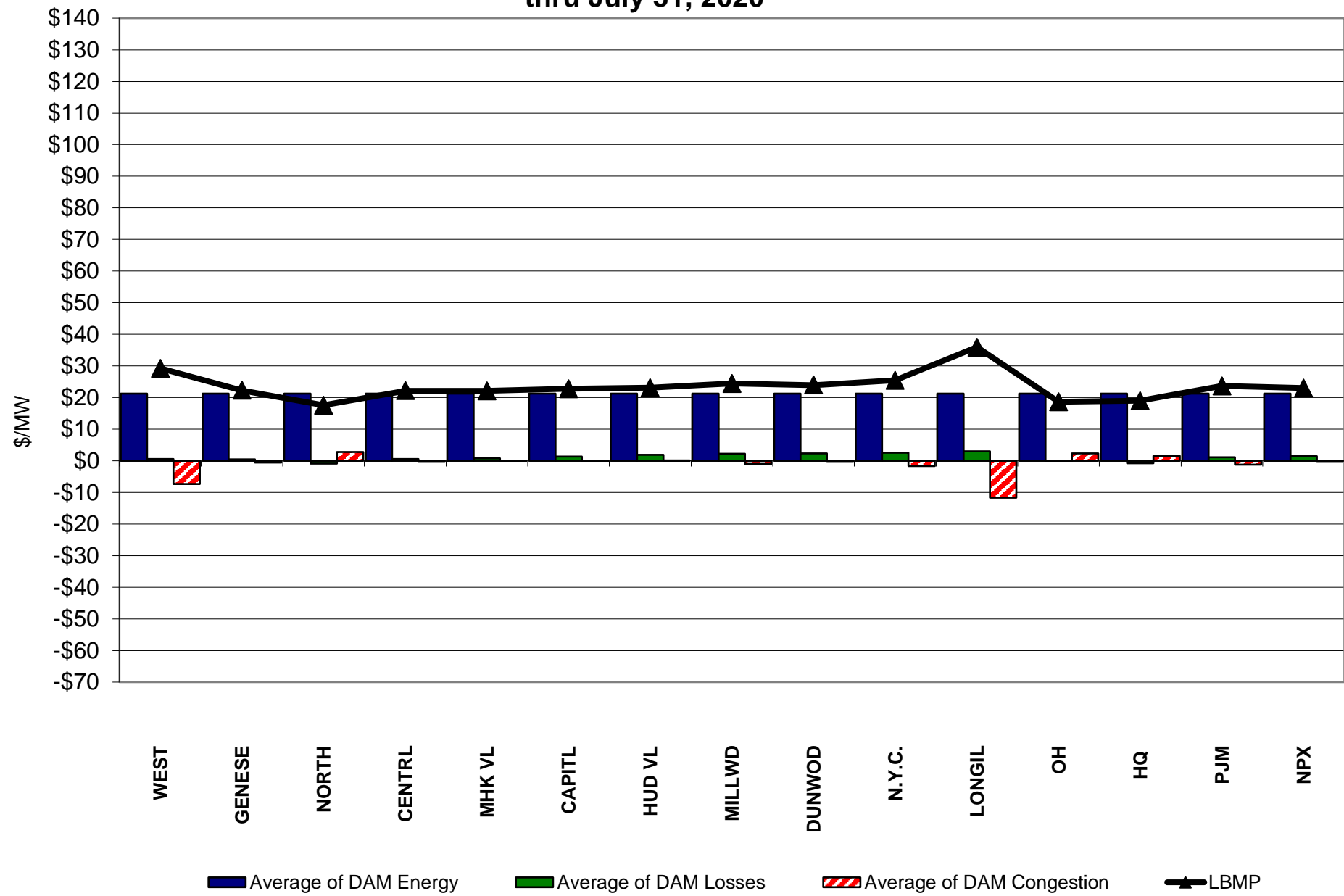
NYC Zone J Monthly Average LBMP Prices 2019 - 2020



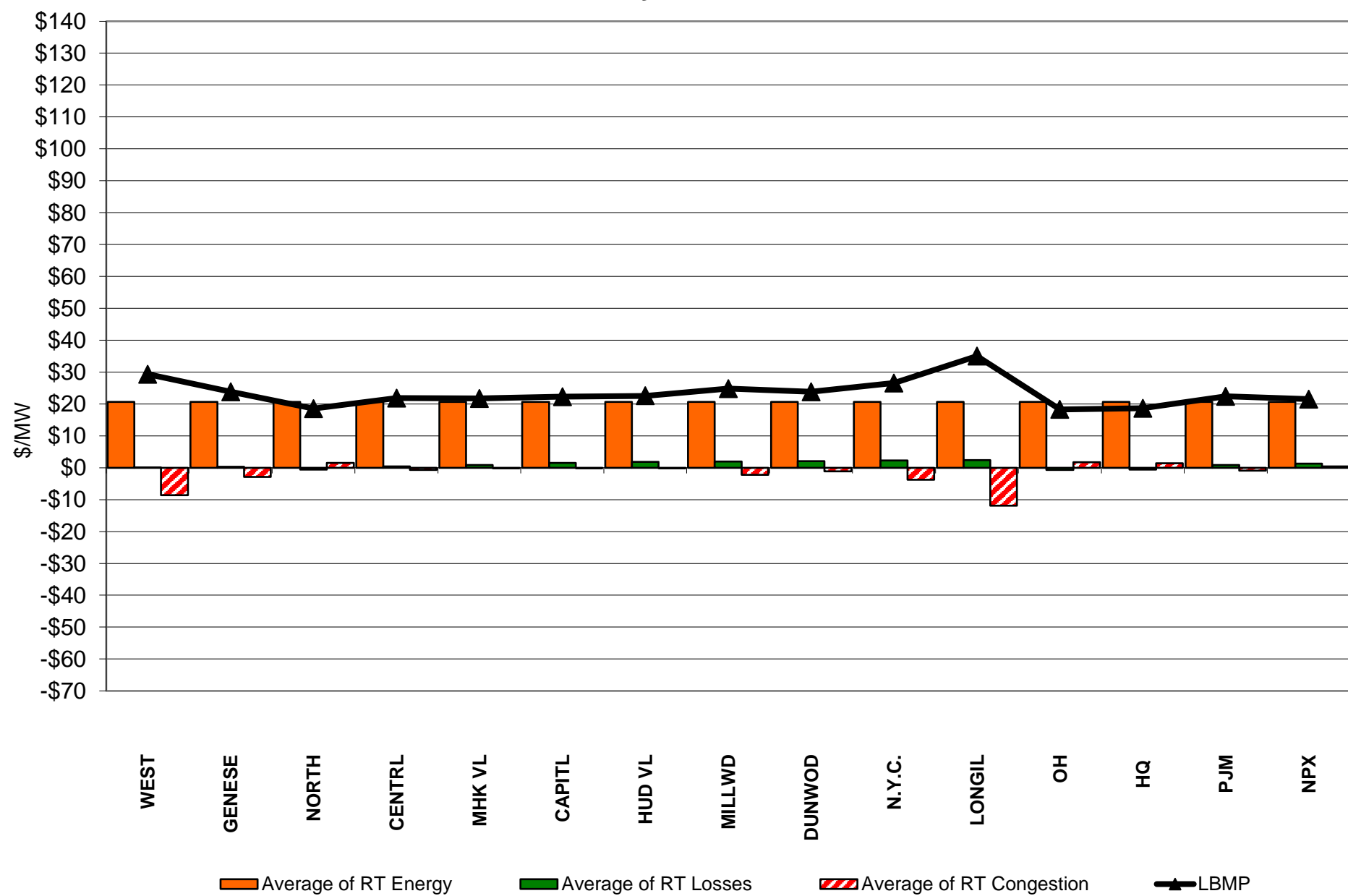
Long Island Zone K Monthly Average LBMP Prices 2019 - 2020



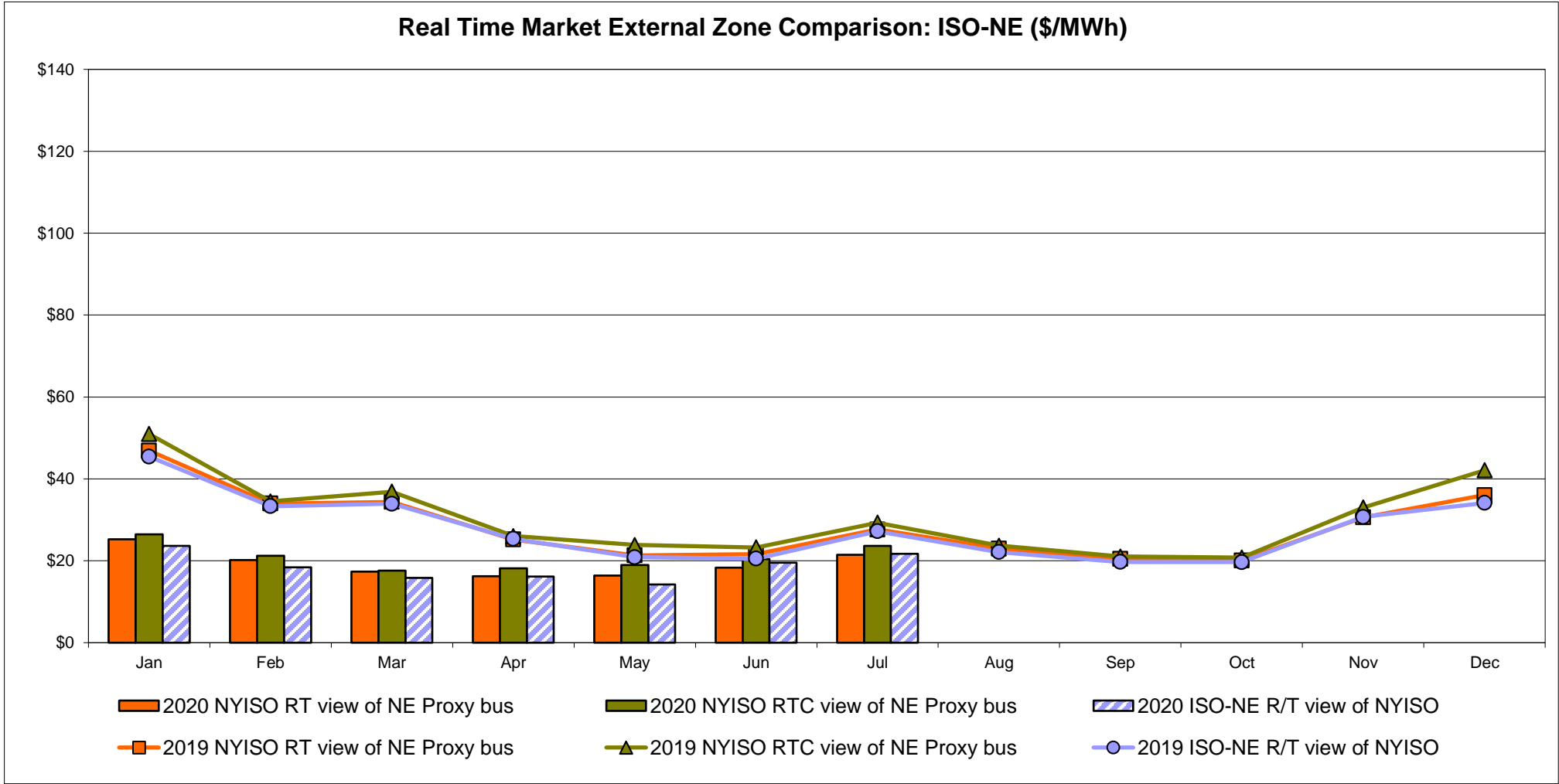
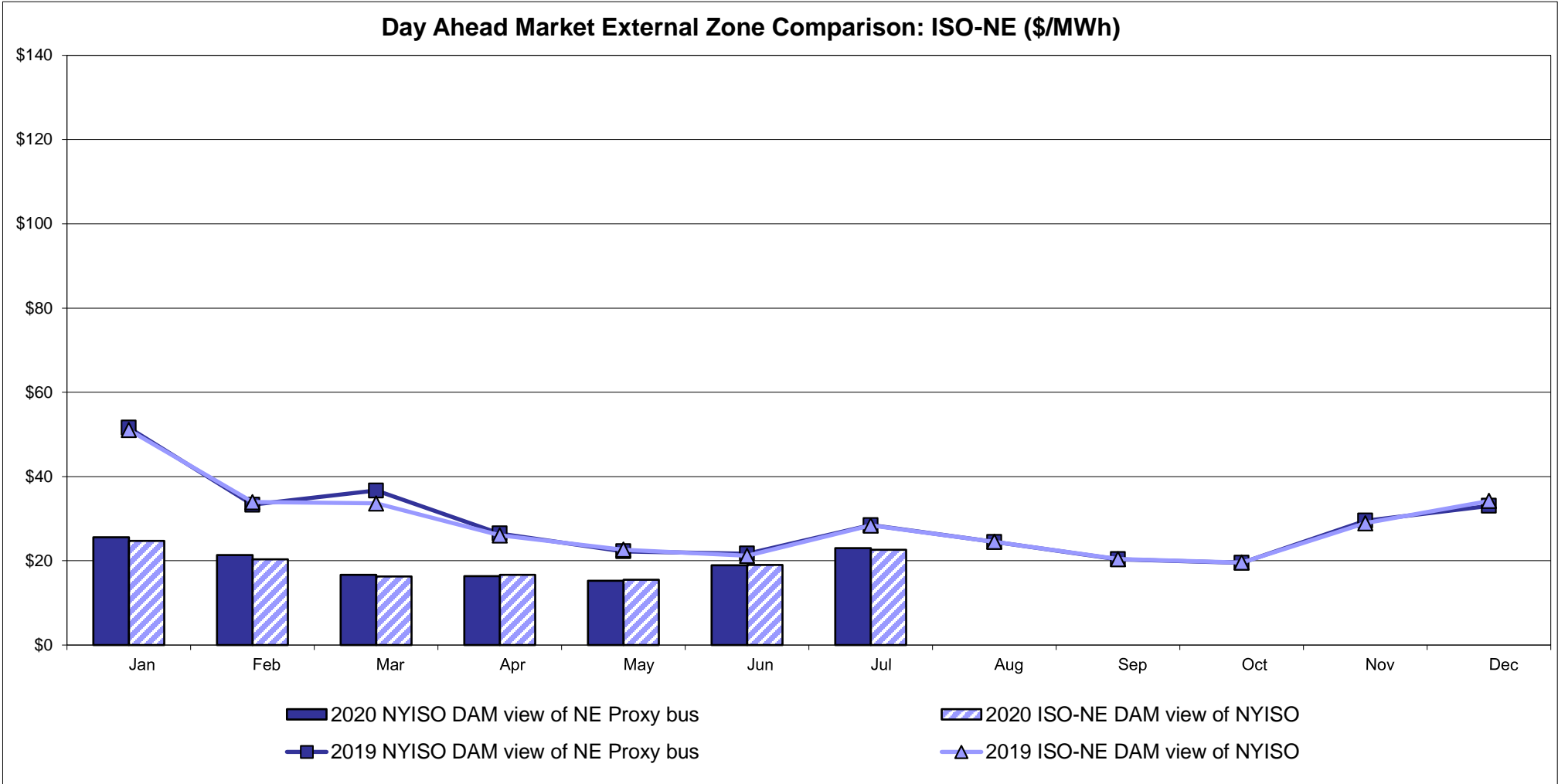
**DAM Zonal Unweighted Monthly Average LBMP Components
thru July 31, 2020**



**RT Zonal Unweighted Monthly Average LBMP Components
thru July 31, 2020**

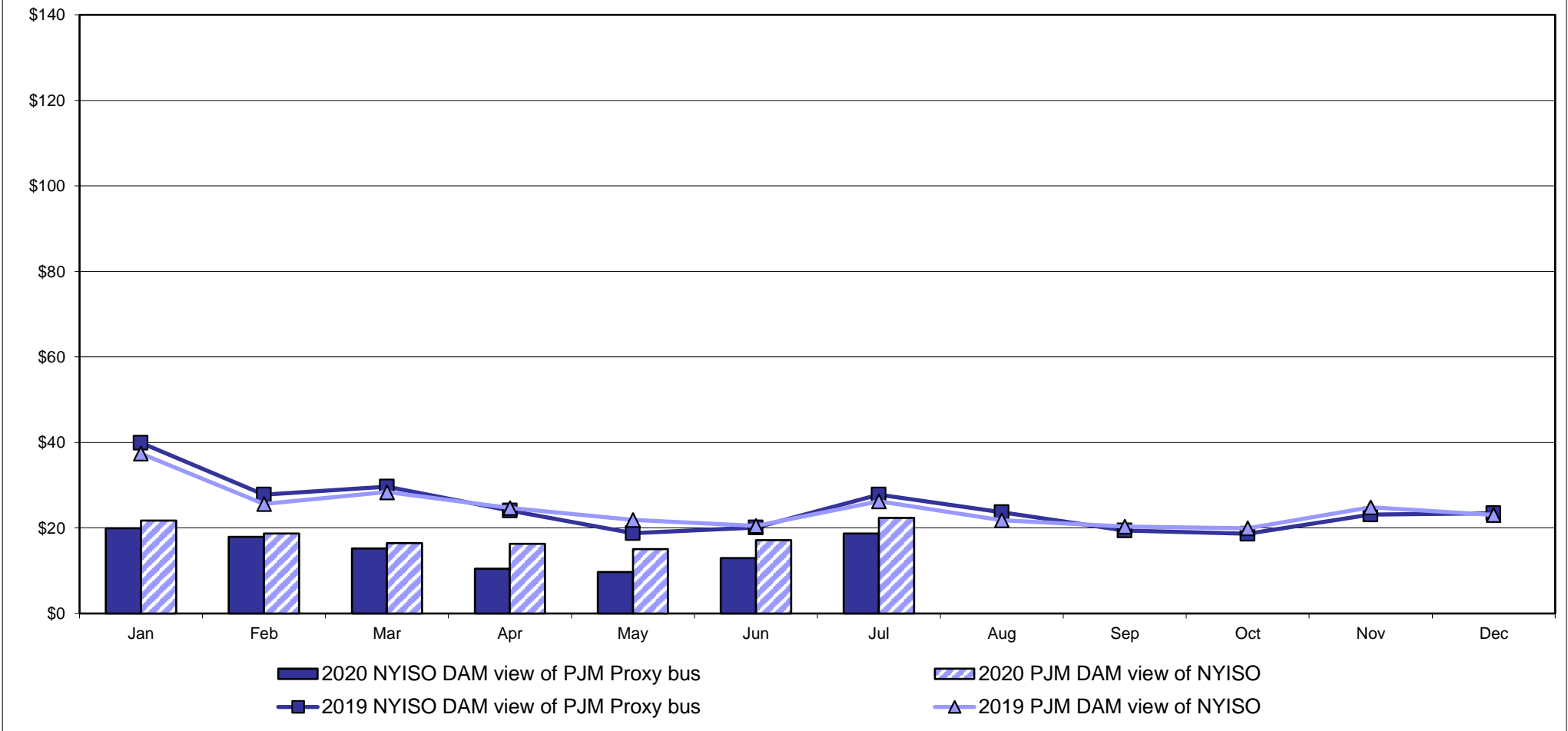


External Comparison ISO-New England

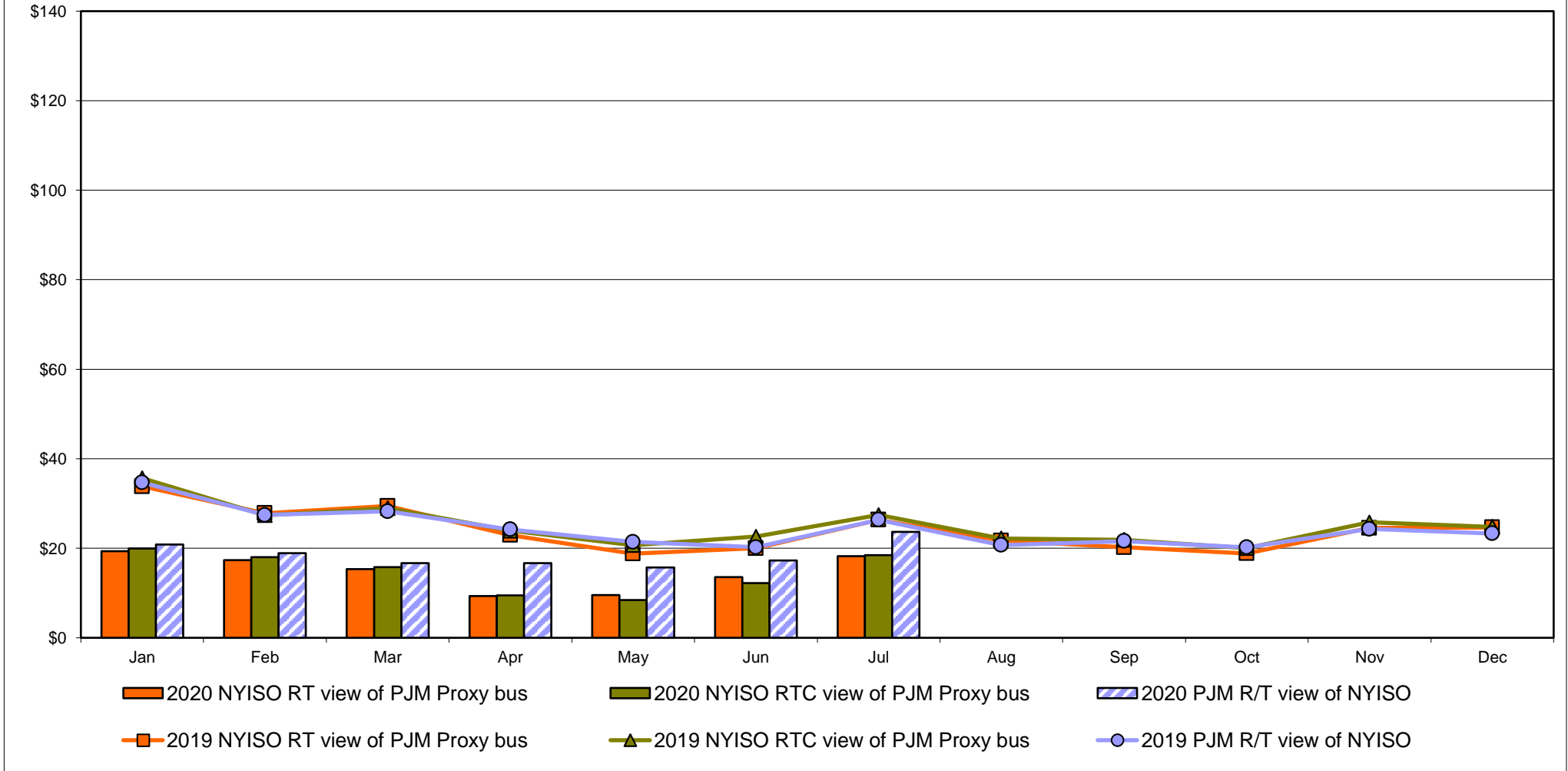


External Comparison PJM

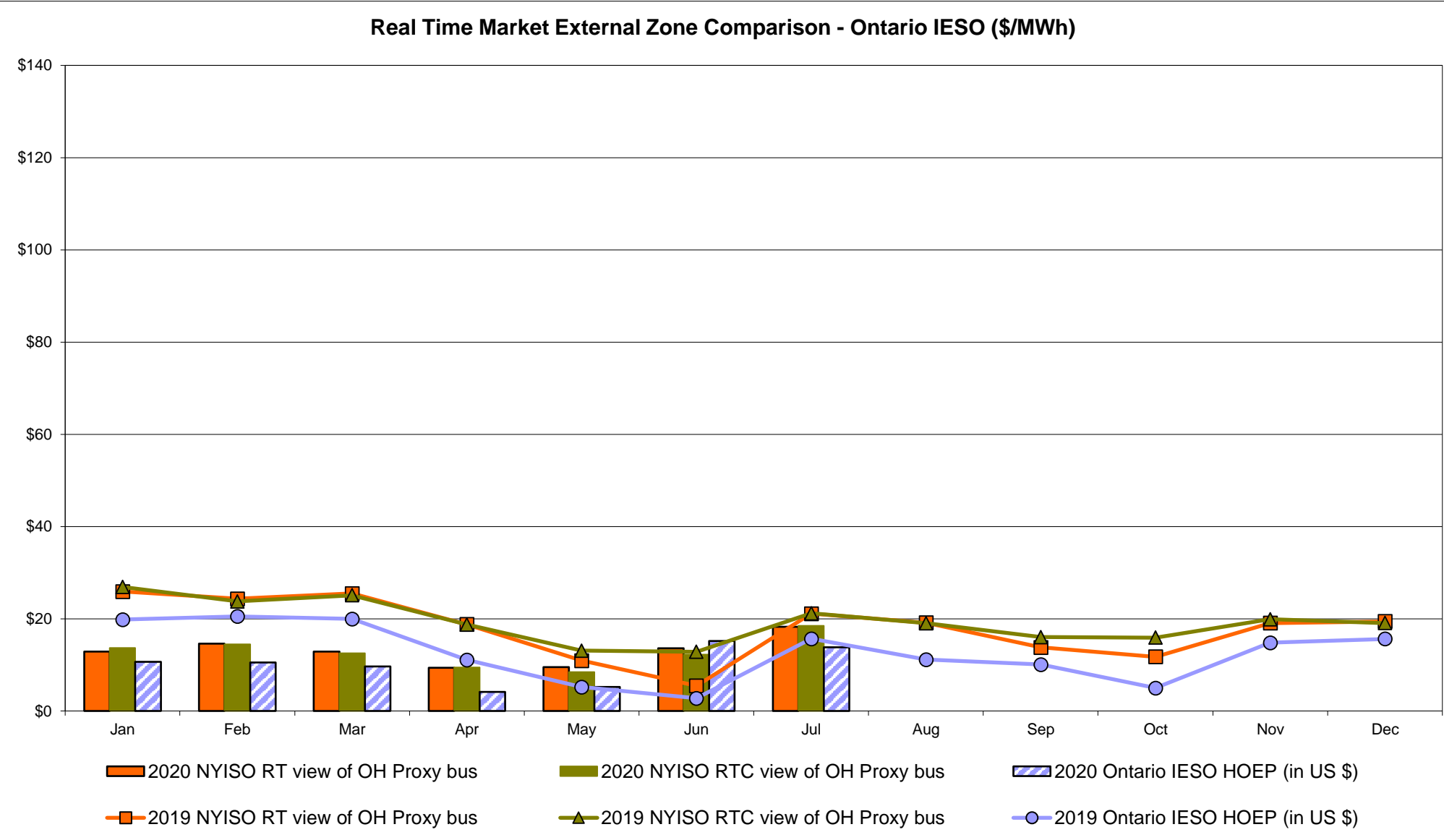
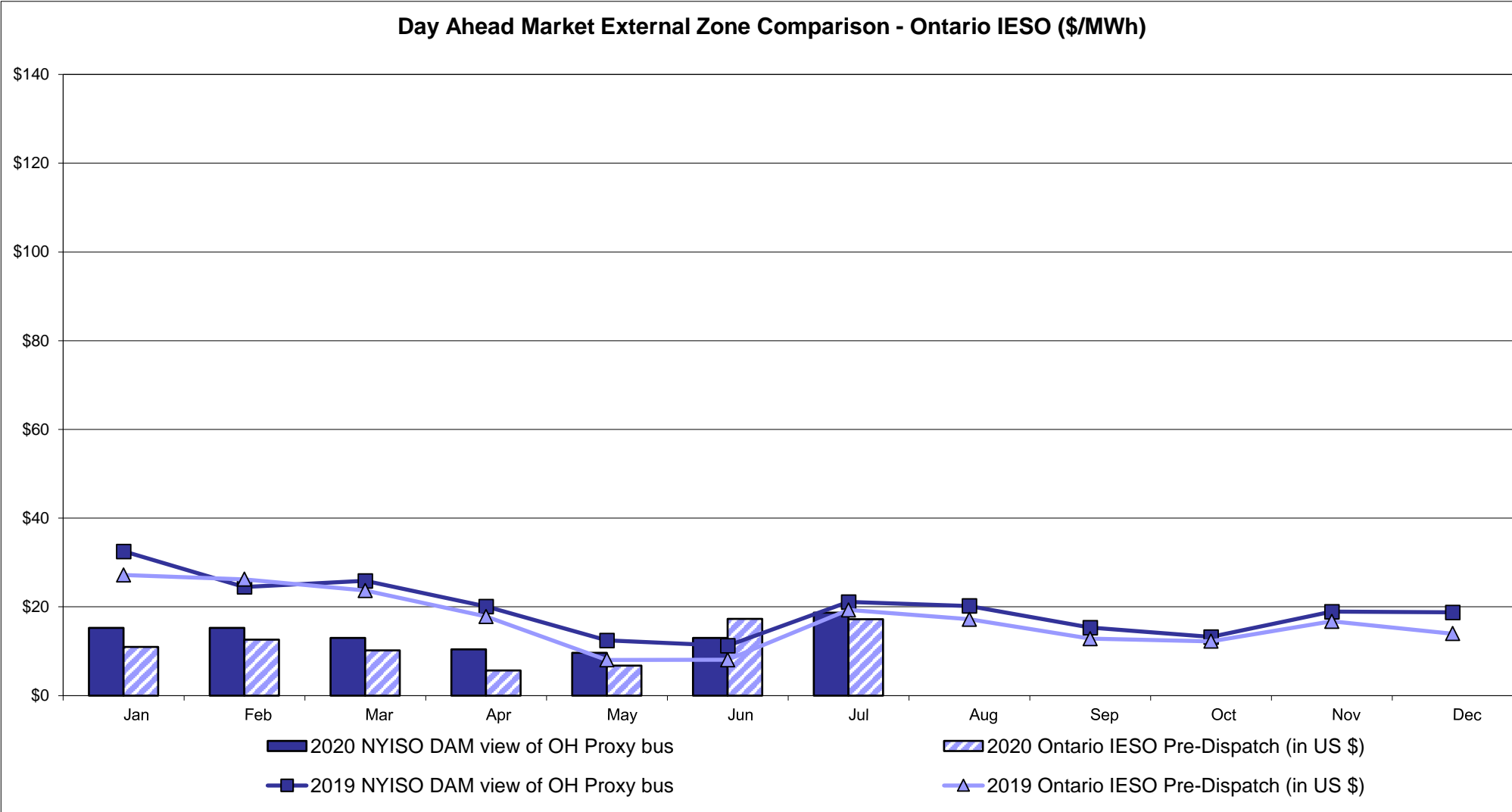
Day Ahead Market External Zone Comparison - PJM (\$/MWh)



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

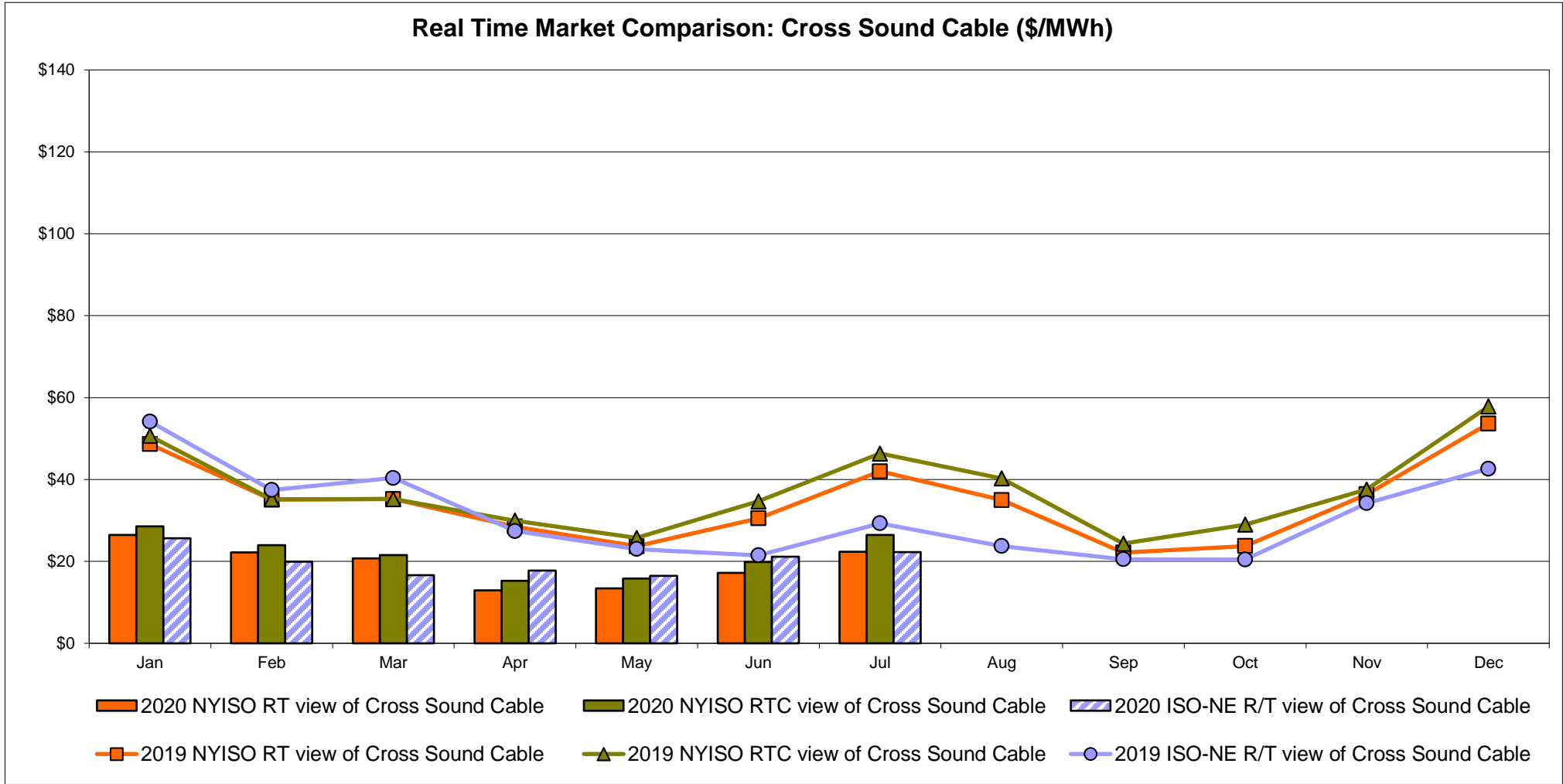
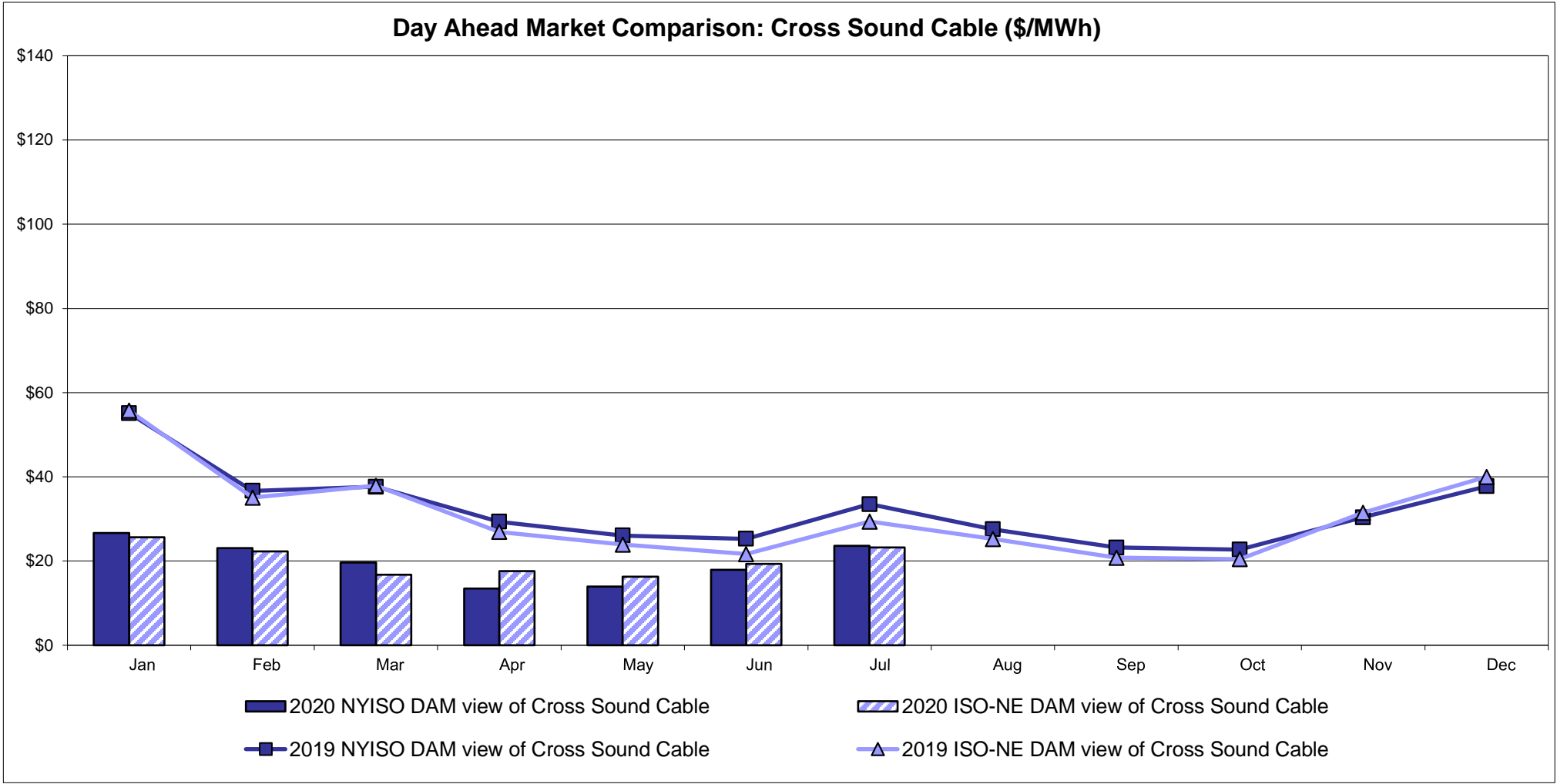


External Comparison Ontario IESO



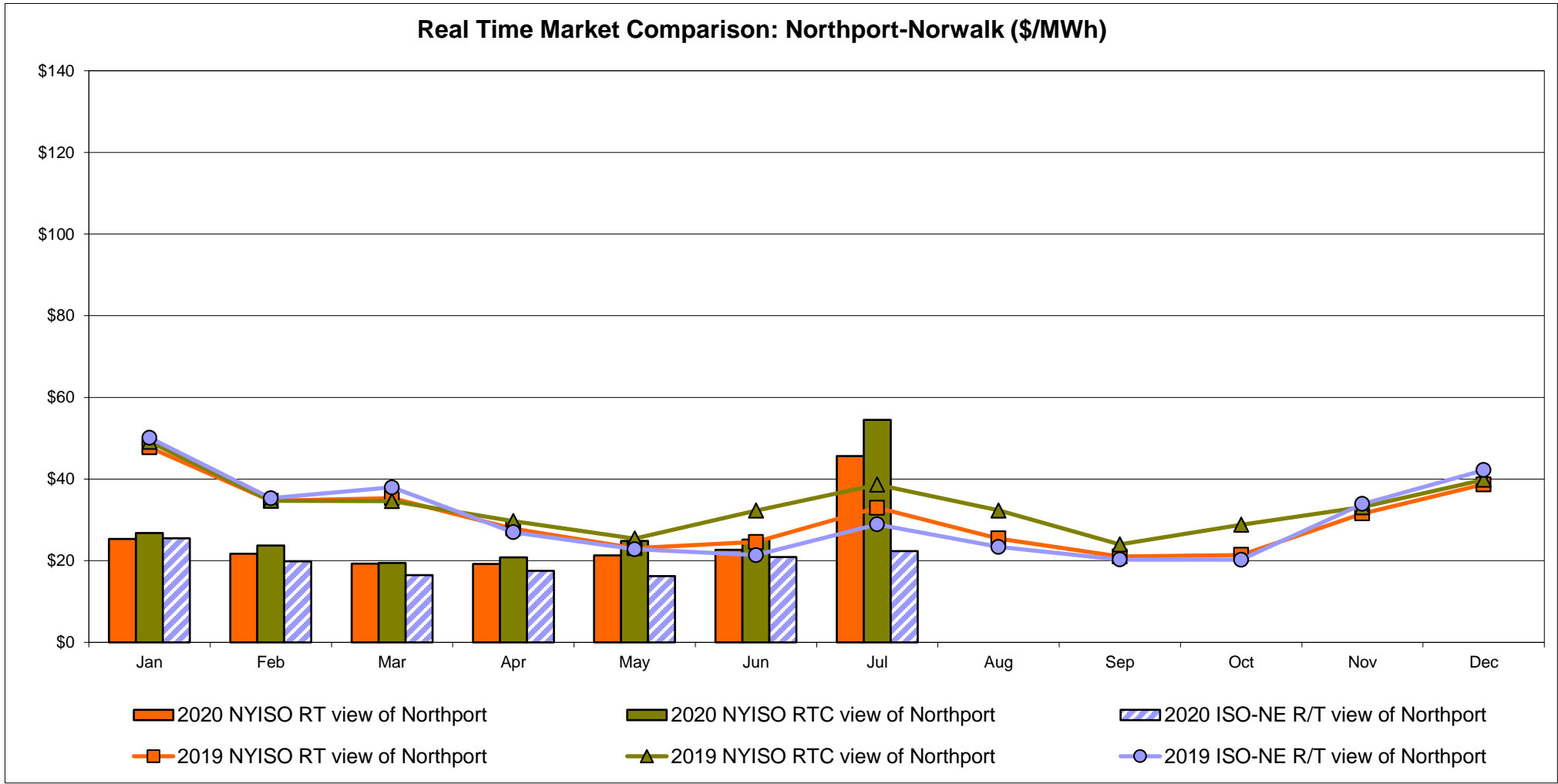
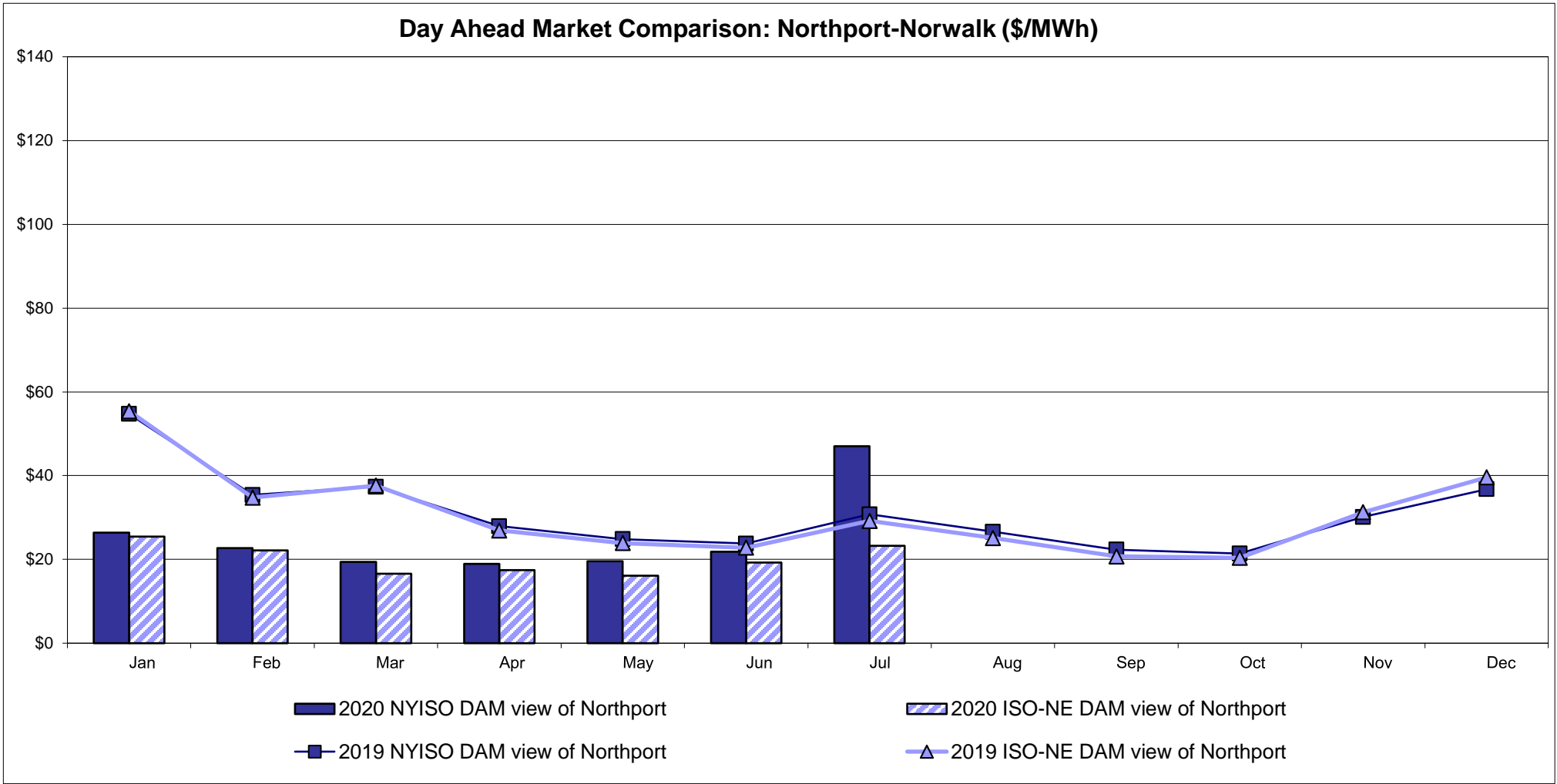
Notes: Exchange factor used for July 2020 was 0.740905386382159 to US
HOEP: Hourly Ontario Energy Price
Pre-Dispatch: Projected Energy Price

External Controllable Line: Cross Sound Cable (New England)



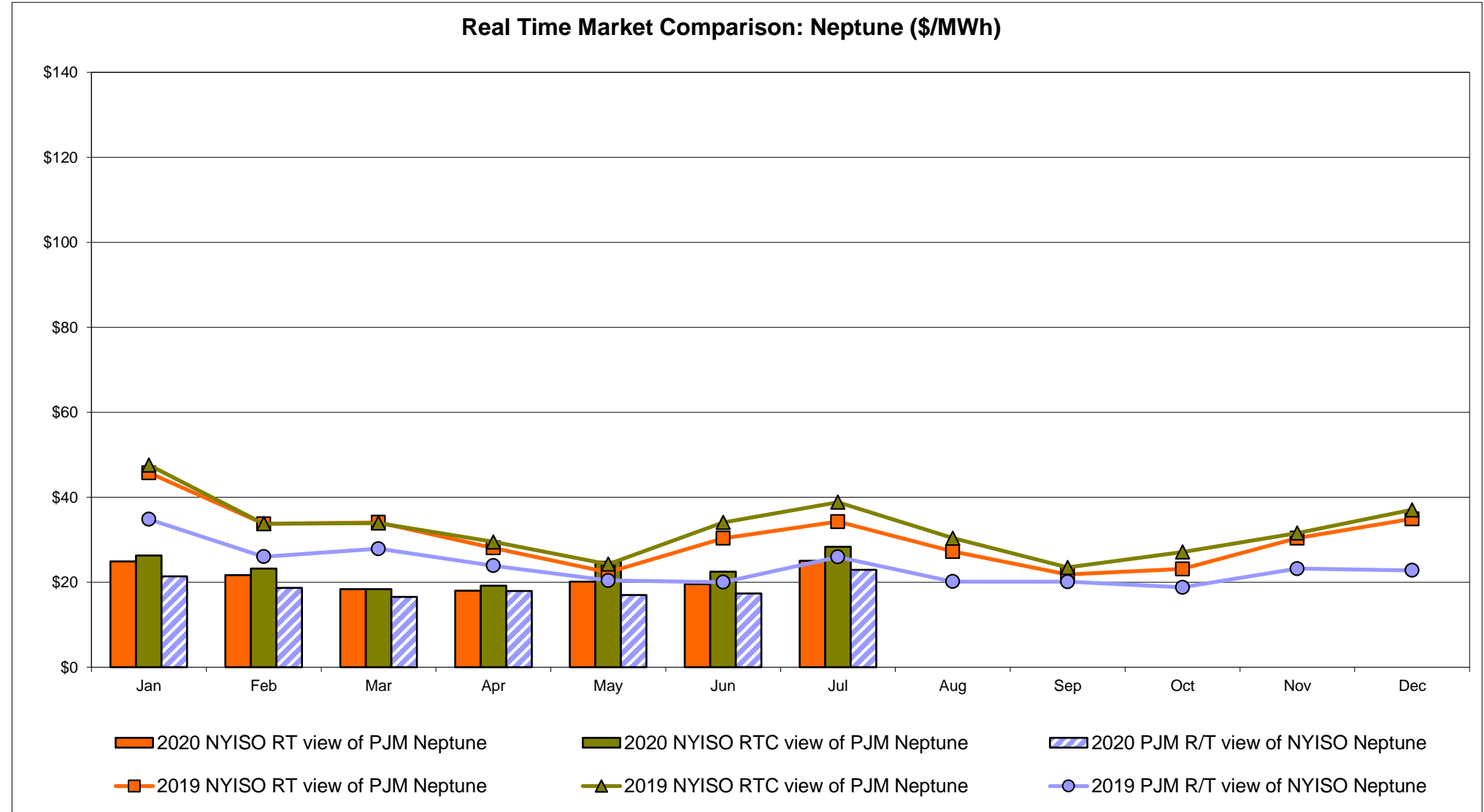
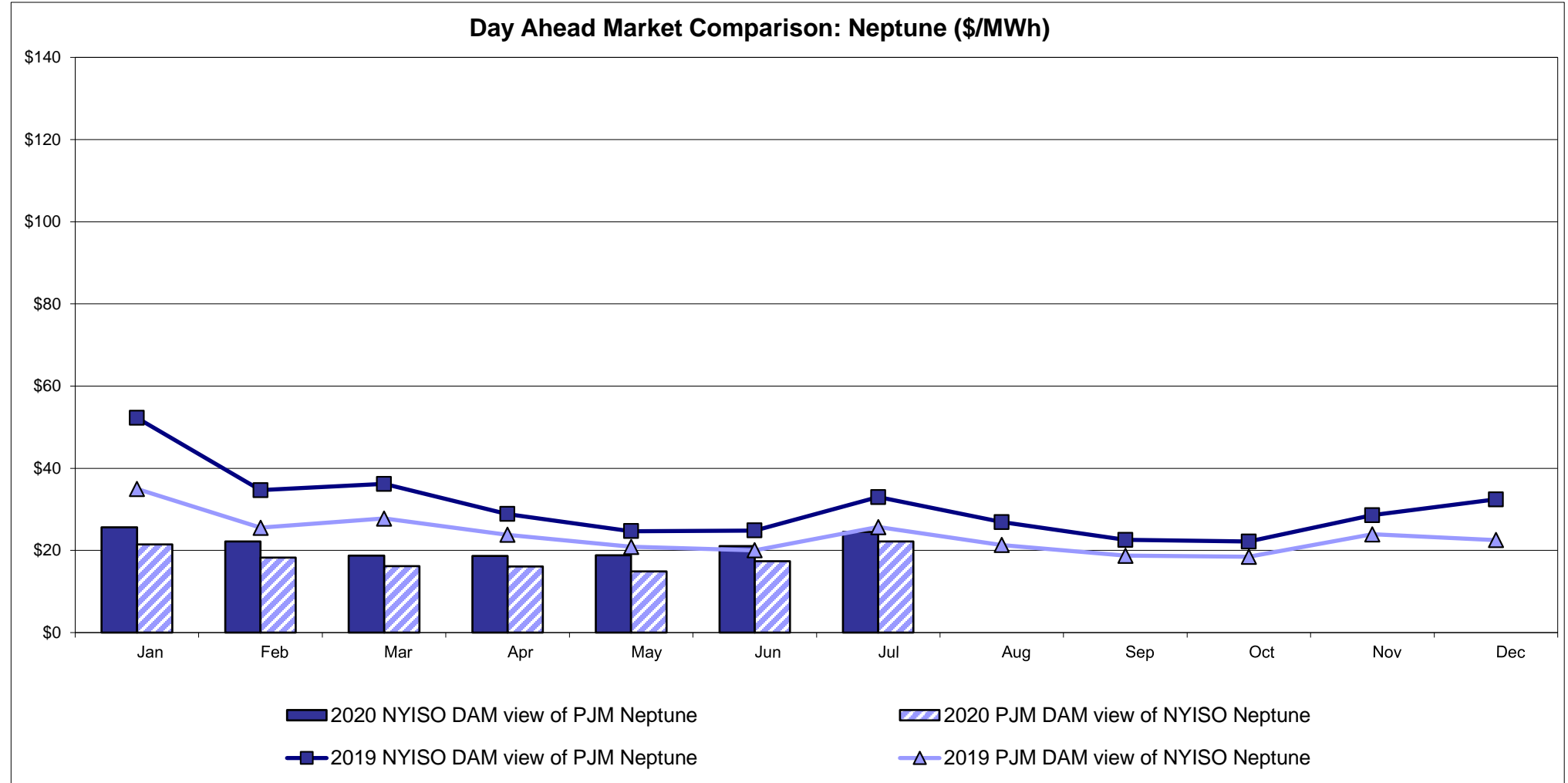
Note:
ISO-NE Forecast is an advisory posting @ 18:00 day before.
The DAM and R/T prices at the Shorham 13899 interface are used for ISO-NE.
The DAM and R/T prices at the CSC interface are used for NYISO.

External Controllable Line: Northport - Norwalk (New England)

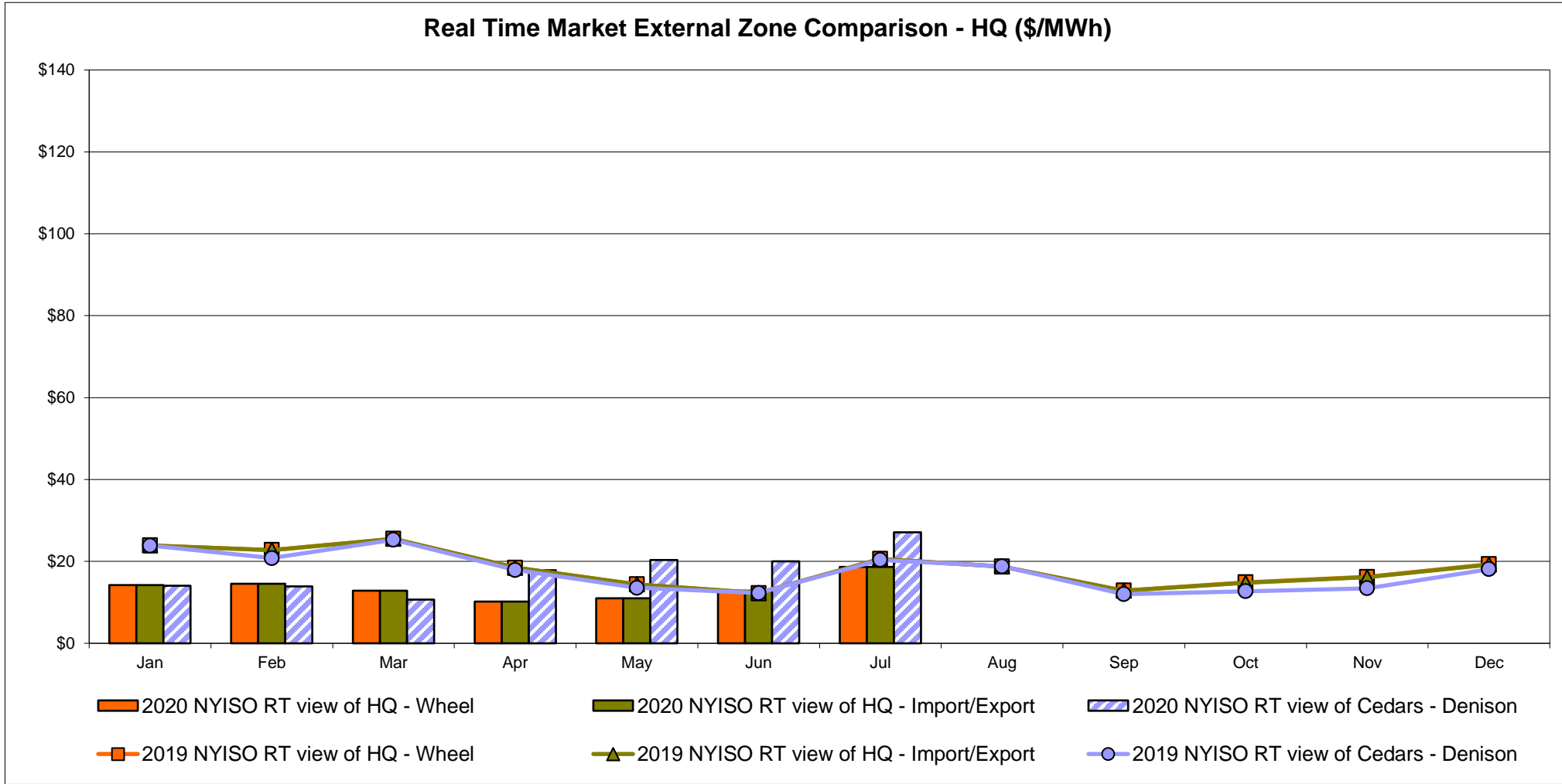
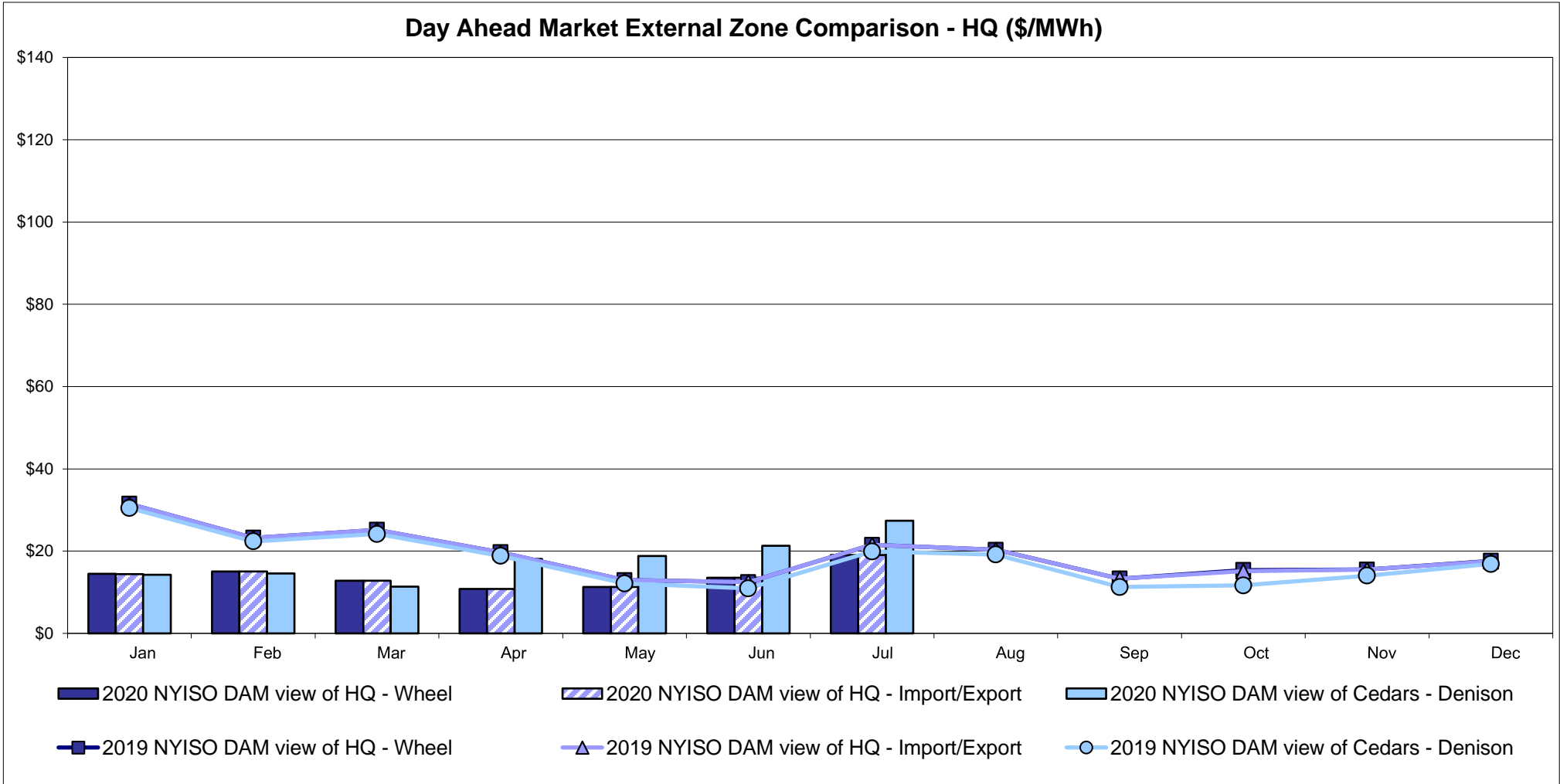


Note:
ISO-NE Forecast is an advisory posting @ 18:00 day before.
The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.
The DAM and R/T prices at the 1385 interface are used for NYISO.

External Controllable Line: Neptune (PJM)

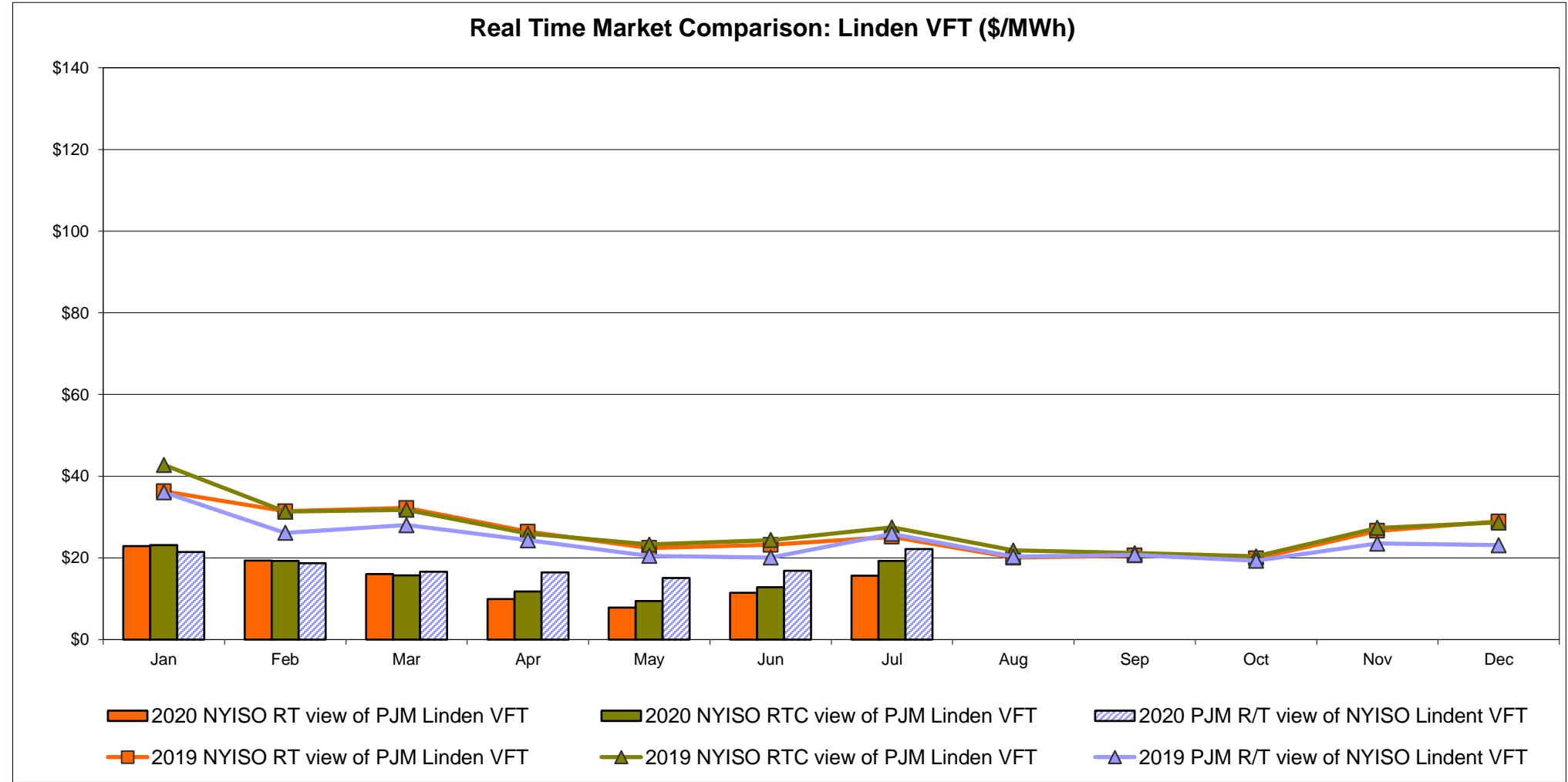
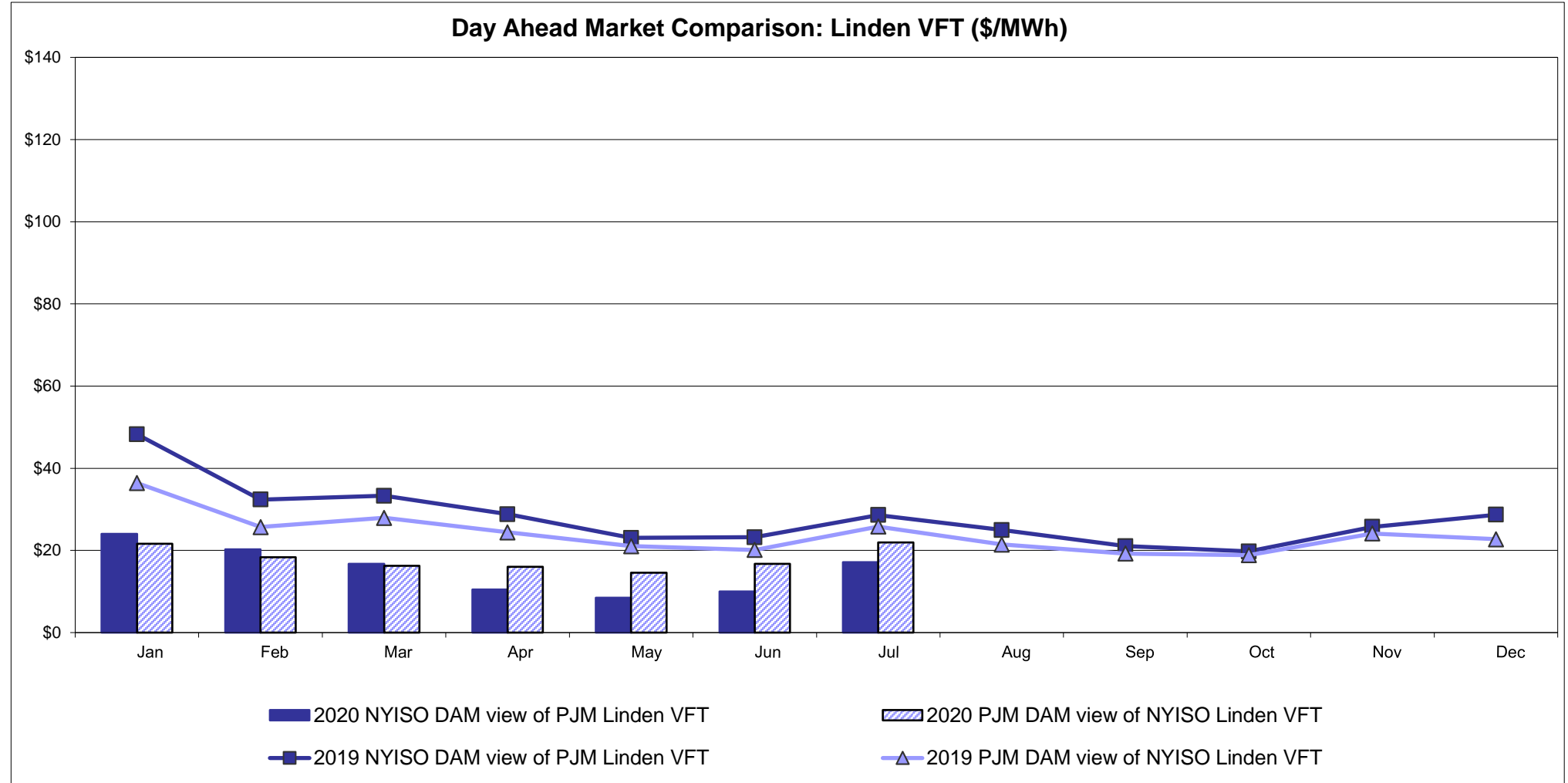


External Comparison Hydro-Quebec

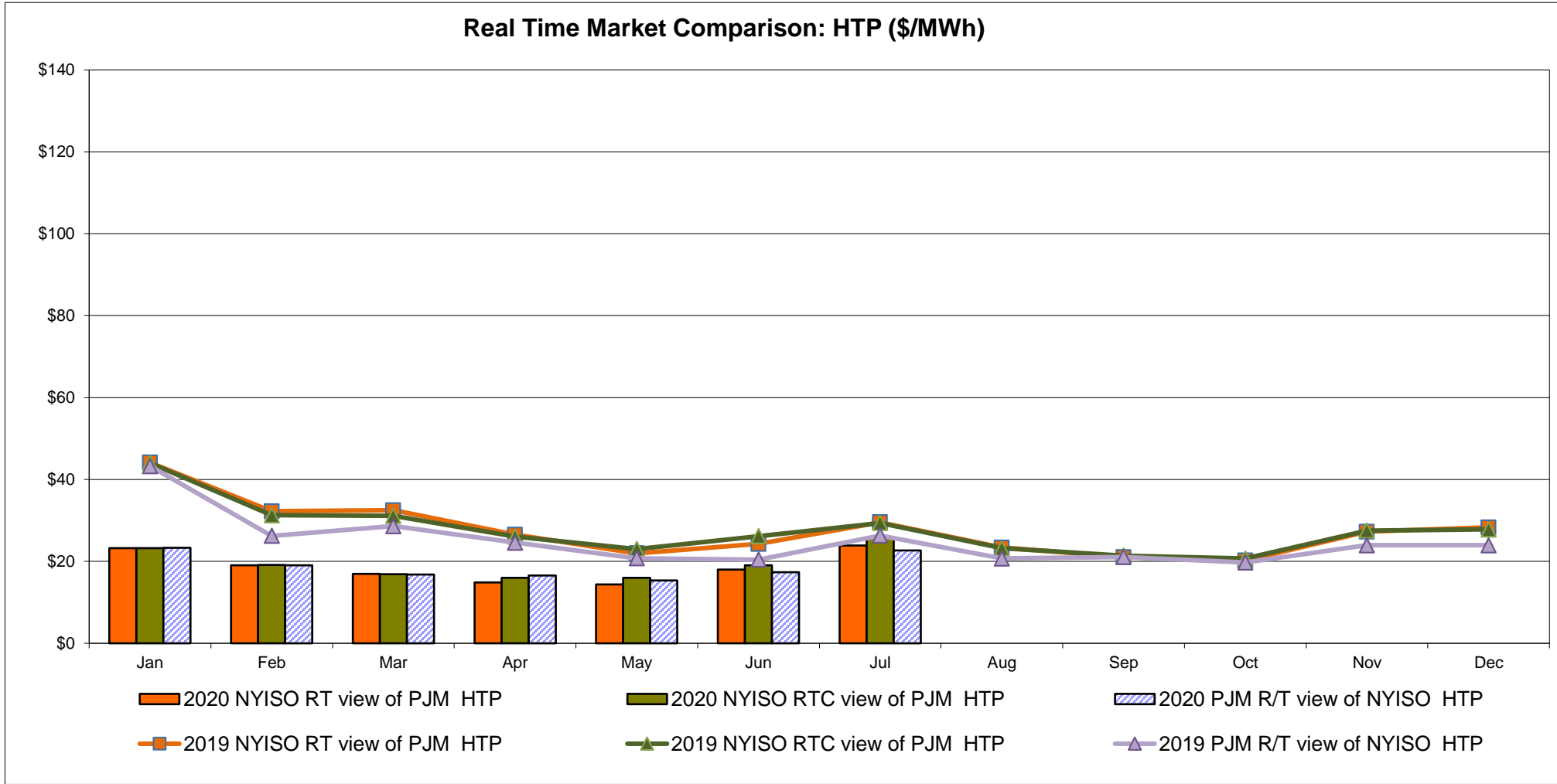
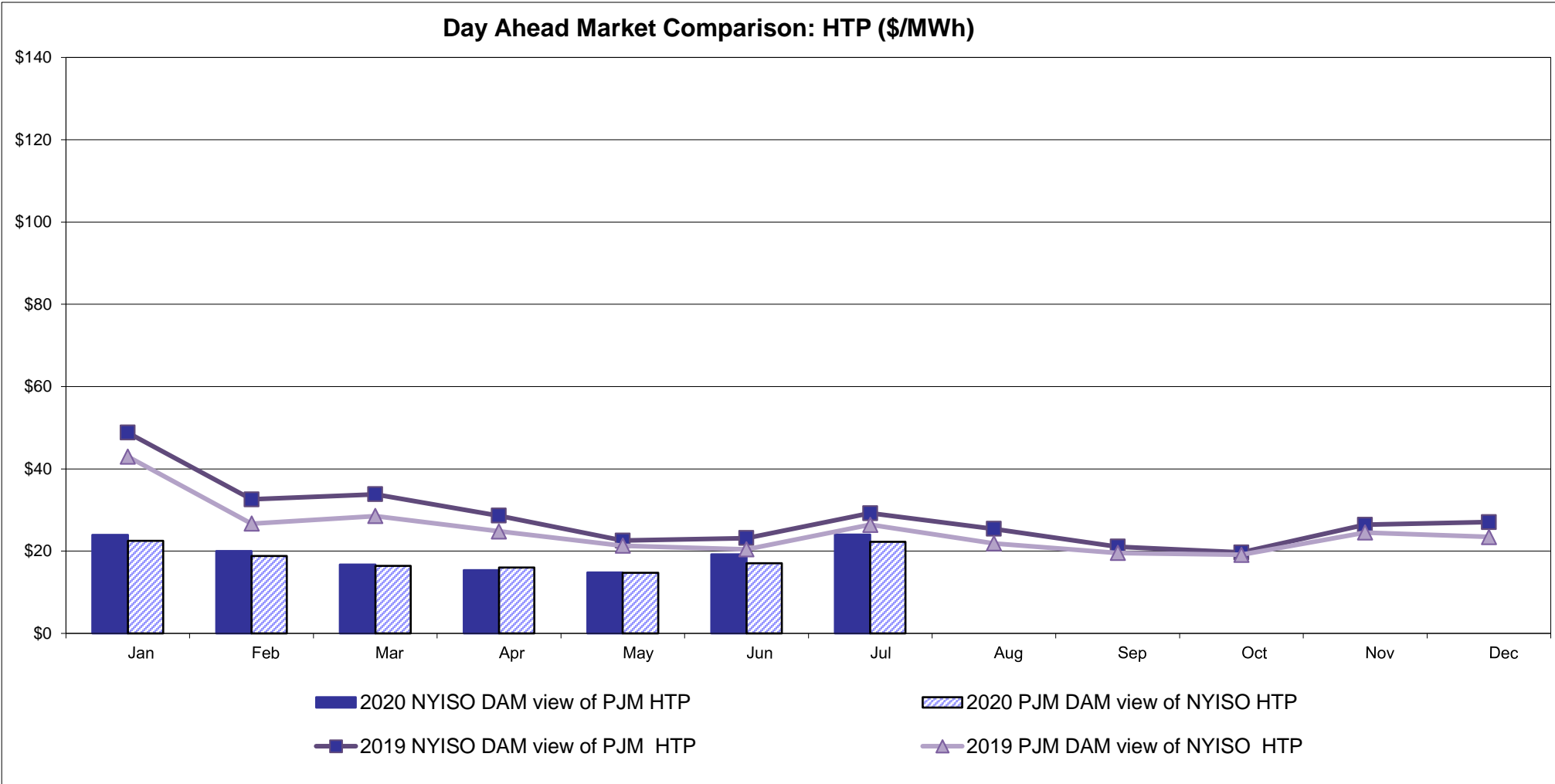


Note:
Hydro-Quebec Prices are unavailable.

External Controllable Line: Linden VFT (PJM)



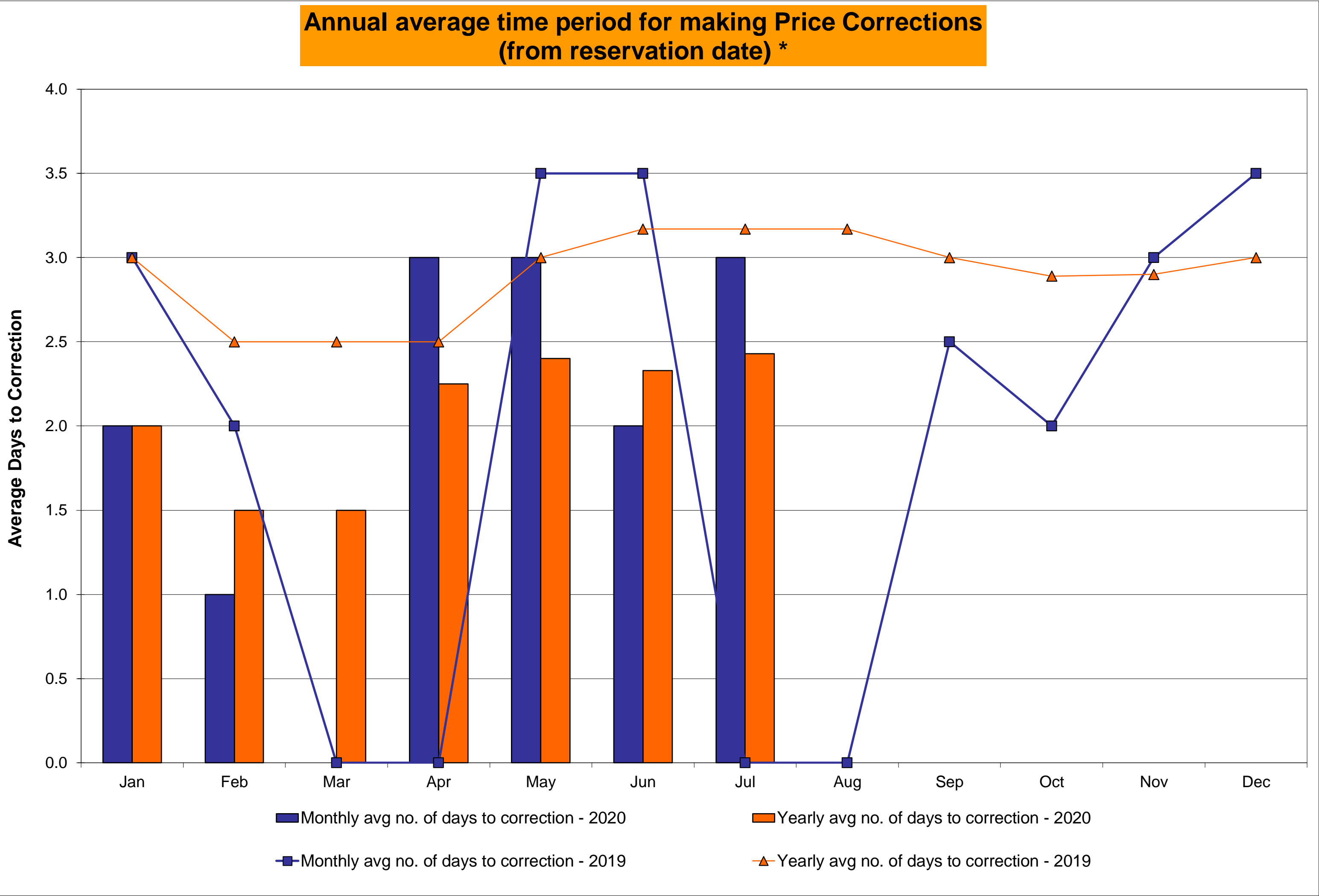
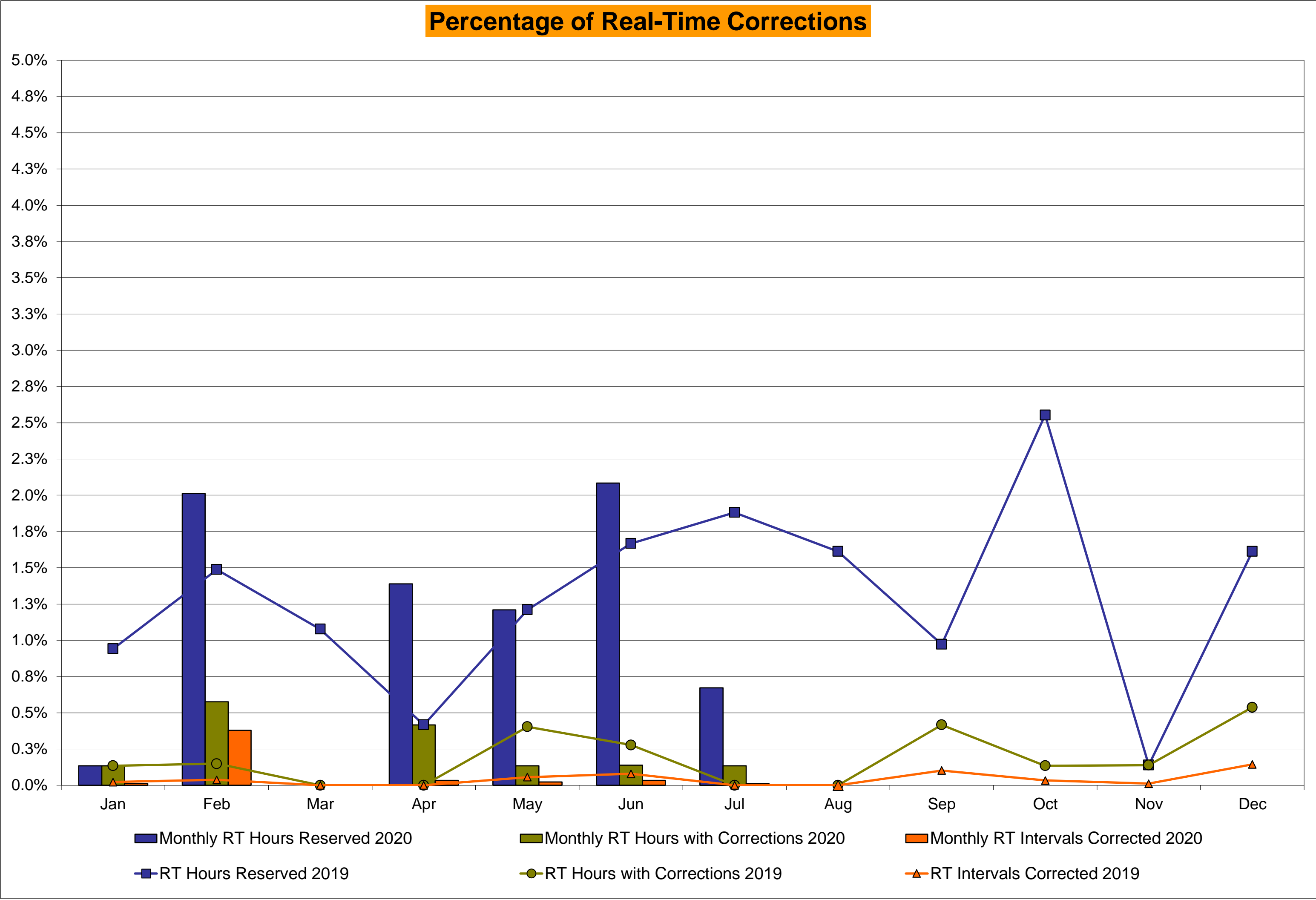
External Controllable Line: Hudson (PJM)



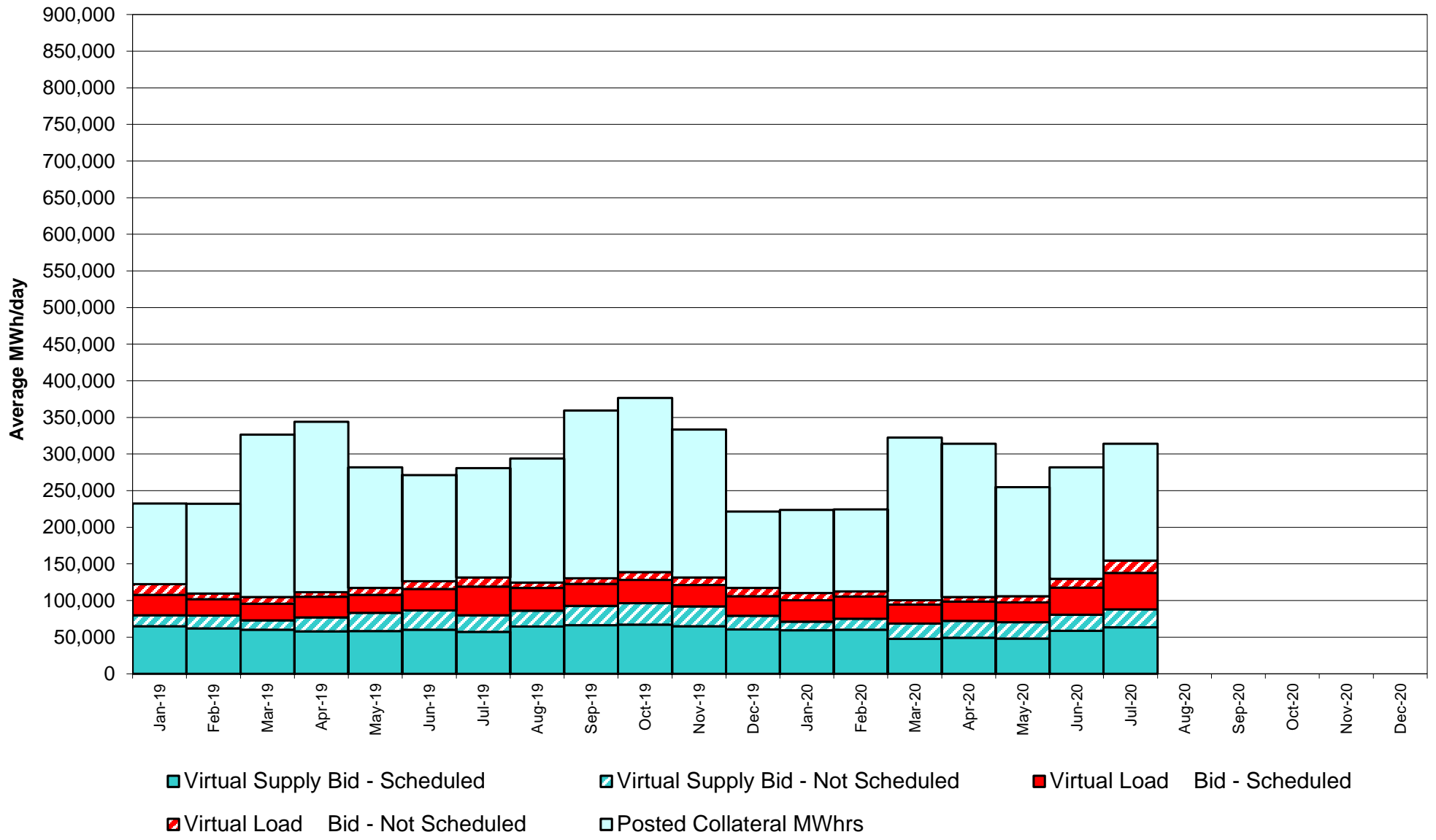
NYISO Real Time Price Correction Statistics

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					
Number of hours	in the month	744	696	743	720	744	720	744					
% of hours with corrections	in the month	0.13%	0.57%	0.00%	0.42%	0.13%	0.14%	0.13%					
% of hours with corrections	year-to-date	0.13%	0.35%	0.23%	0.28%	0.25%	0.23%	0.22%					
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	1	32	0	3	2	3	1					
Number of intervals	in the month	9,088	8,460	9,011	8,776	9,030	8,826	9,128					
% of intervals corrected	in the month	0.01%	0.38%	0.00%	0.03%	0.02%	0.03%	0.01%					
% of intervals corrected	year-to-date	0.01%	0.19%	0.12%	0.10%	0.09%	0.08%	0.07%					
<u>Hours Reserved</u>													
Number of hours reserved	in the month	1	14	0	10	9	15	5					
Number of hours	in the month	744	696	743	720	744	720	744					
% of hours reserved	in the month	0.13%	2.01%	0.00%	1.39%	1.21%	2.08%	0.67%					
% of hours reserved	year-to-date	0.13%	1.04%	0.69%	0.86%	0.93%	1.12%	1.06%					
<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					
Avg. number of days to correction	year-to-date	2.00	1.50	1.50	2.25	2.40	2.33	2.43					
<u>Days Without Corrections</u>													
Days without corrections	in the month	30	28	31	28	30	29	30					
Days without corrections	year-to-date	30	58	89	117	147	176	206					
2019		<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	1	0	0	3	2	0	0	3	1	1	4
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours with corrections	in the month	0.13%	0.15%	0.00%	0.00%	0.40%	0.28%	0.00%	0.00%	0.42%	0.13%	0.14%	0.54%
% of hours with corrections	year-to-date	0.13%	0.14%	0.09%	0.07%	0.14%	0.16%	0.14%	0.12%	0.15%	0.15%	0.15%	0.18%
<u>Interval Corrections</u>													
Number of intervals corrected	in the month	2	3	0	0	5	7	0	0	9	3	1	13
Number of intervals	in the month	9,071	8,131	9,008	8,750	9,033	8,863	9,243	9,048	8,820	9,087	8,788	9,021
% of intervals corrected	in the month	0.02%	0.04%	0.00%	0.00%	0.06%	0.08%	0.00%	0.00%	0.10%	0.03%	0.01%	0.14%
% of intervals corrected	year-to-date	0.02%	0.03%	0.02%	0.01%	0.02%	0.03%	0.03%	0.02%	0.03%	0.03%	0.03%	0.04%
<u>Hours Reserved</u>													
Number of hours reserved	in the month	7	10	8	3	9	12	14	12	7	19	1	12
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours reserved	in the month	0.94%	1.49%	1.08%	0.42%	1.21%	1.67%	1.88%	1.61%	0.97%	2.55%	0.14%	1.61%
% of hours reserved	year-to-date	0.94%	1.20%	1.16%	0.97%	1.02%	1.13%	1.24%	1.29%	1.25%	1.38%	1.27%	1.30%
<u>Days to Correction</u> *													
Avg. number of days to correction	in the month	3.00	2.00	0.00	0.00	3.50	3.50	0.00	0.00	2.50	2.00	3.00	3.50
Avg. number of days to correction	year-to-date	3.00	2.50	2.50	2.50	3.00	3.17	3.17	3.17	3.00	2.89	2.90	3.00
<u>Days Without Corrections</u>													
Days without corrections	in the month	30	27	31	30	29	28	31	31	28	30	29	29
Days without corrections	year-to-date	30	57	88	118	147	175	206	237	265	295	324	353

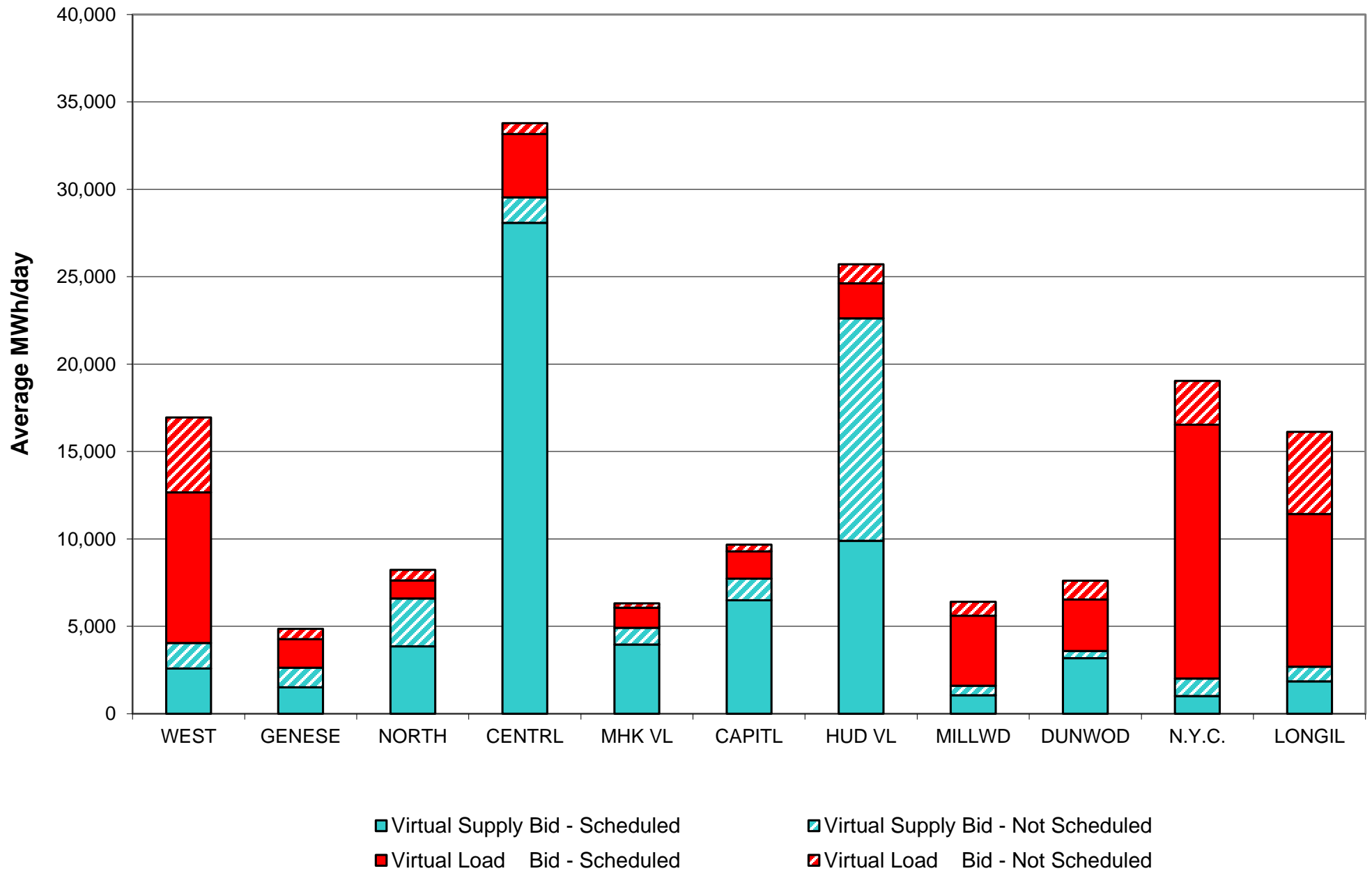
*Calendar days from reservation date; for June 2018 forward, business days from market date



NYISO Virtual Trading Average MWh per day



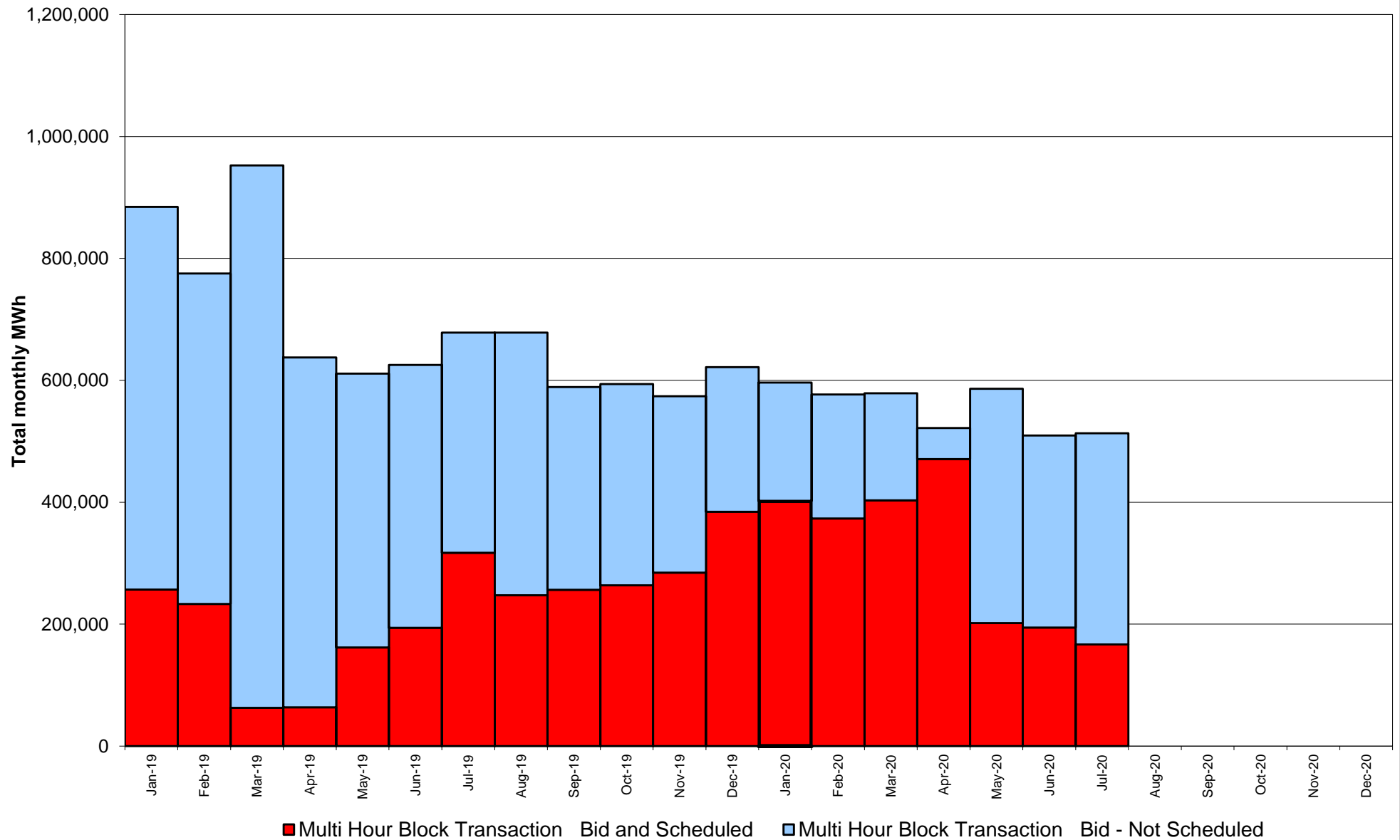
Virtual Load and Supply Zonal Statistics through July 31, 2020



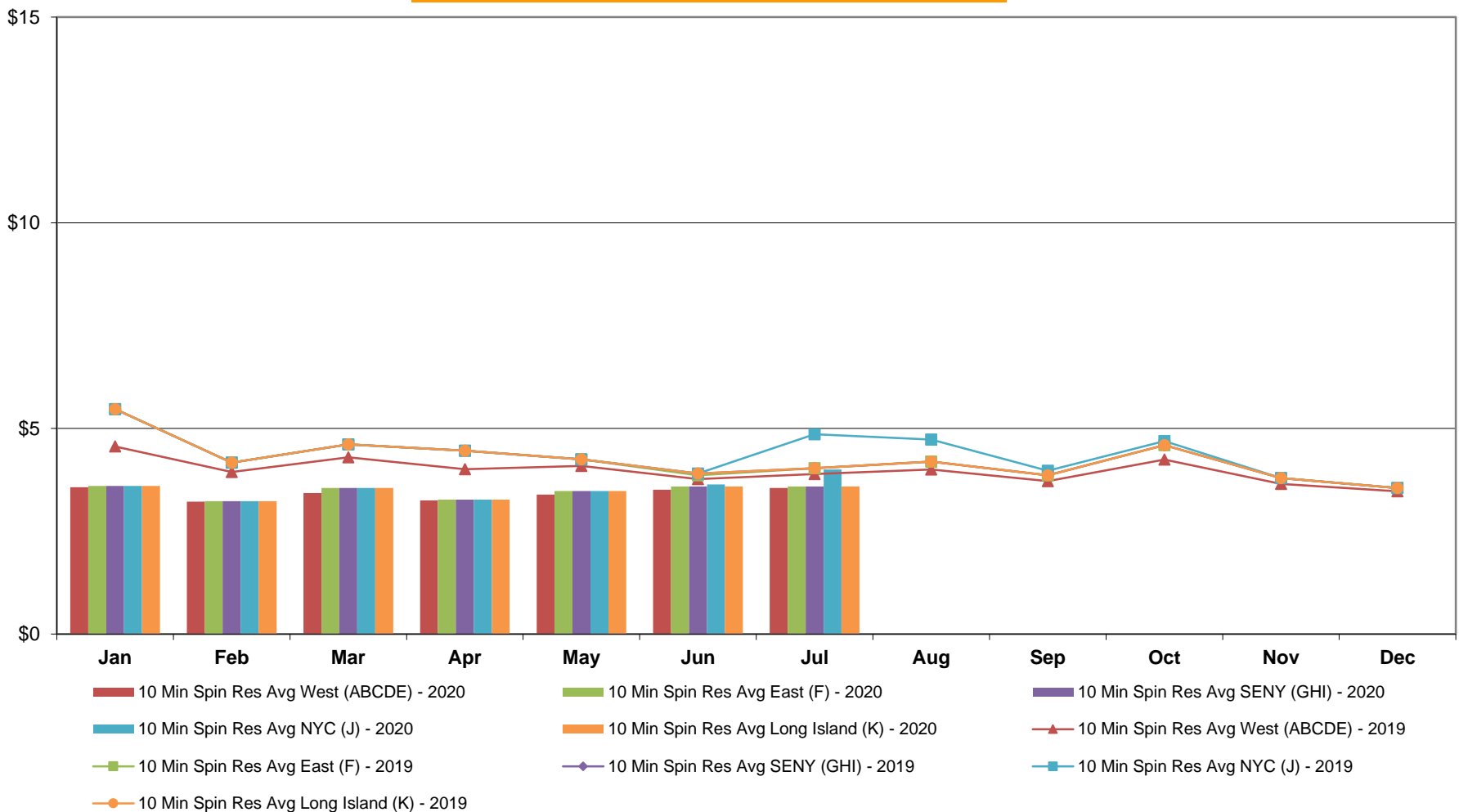
Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2020

		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-20	7,809	1,328	1,765	984		MHK VL	Jan-20	747	77	2,155	793		DUNWOD	Jan-20	1,120	241	3,191	370
	Feb-20	8,213	1,248	2,597	947			Feb-20	724	88	2,339	504			Feb-20	536	298	3,782	368
	Mar-20	9,155	1,778	1,637	1,236			Mar-20	481	97	2,455	542			Mar-20	766	109	3,143	282
	Apr-20	10,056	2,032	1,542	1,018			Apr-20	577	86	2,599	888			Apr-20	1,185	423	2,336	504
	May-20	7,943	3,322	2,105	3,397			May-20	586	70	1,878	287			May-20	1,114	196	2,373	323
	Jun-20	8,014	3,448	1,729	1,706			Jun-20	746	100	2,597	770			Jun-20	1,893	1,124	2,881	789
	Jul-20	8,616	4,286	2,582	1,469			Jul-20	1,144	250	3,965	951			Jul-20	2,944	1,069	3,181	416
	Aug-20							Aug-20							Aug-20				
	Sep-20							Sep-20							Sep-20				
	Oct-20							Oct-20							Oct-20				
	Nov-20							Nov-20							Nov-20				
	Dec-20							Dec-20							Dec-20				
GENESE	Jan-20	553	131	1,749	995		CAPITL	Jan-20	1,772	539	3,324	1,235		N.Y.C.	Jan-20	6,699	2,678	2,148	1,639
	Feb-20	534	79	2,082	640			Feb-20	2,046	418	3,149	673			Feb-20	9,452	1,841	1,316	1,894
	Mar-20	397	46	2,294	550			Mar-20	1,446	443	3,181	837			Mar-20	4,317	1,126	1,676	2,571
	Apr-20	422	42	2,940	622			Apr-20	2,367	825	3,335	928			Apr-20	2,089	546	1,864	2,269
	May-20	356	47	2,051	618			May-20	1,982	151	2,597	541			May-20	2,759	548	1,692	1,049
	Jun-20	949	163	2,238	939			Jun-20	1,622	328	2,994	472			Jun-20	6,448	1,621	1,273	889
	Jul-20	1,633	590	1,508	1,123			Jul-20	1,547	392	6,489	1,247			Jul-20	14,514	2,512	1,013	1,005
	Aug-20							Aug-20							Aug-20				
	Sep-20							Sep-20							Sep-20				
	Oct-20							Oct-20							Oct-20				
	Nov-20							Nov-20							Nov-20				
	Dec-20							Dec-20							Dec-20				
NORTH	Jan-20	811	206	5,038	1,765		HUD VL	Jan-20	891	1,274	7,573	2,206		LONGIL	Jan-20	5,640	2,824	2,246	1,109
	Feb-20	402	276	5,144	2,014			Feb-20	886	722	8,517	5,838			Feb-20	4,795	1,683	1,678	1,217
	Mar-20	335	293	5,075	2,315			Mar-20	944	634	6,811	10,029			Mar-20	5,402	1,429	1,602	1,683
	Apr-20	321	210	5,153	2,057			Apr-20	1,001	813	5,955	12,414			Apr-20	5,033	1,036	1,620	1,672
	May-20	2,305	381	3,547	1,757			May-20	1,088	806	5,998	12,839			May-20	5,948	2,125	1,844	1,045
	Jun-20	1,277	696	3,692	2,128			Jun-20	1,877	745	9,825	12,284			Jun-20	8,361	2,434	1,568	809
	Jul-20	1,031	612	3,848	2,745			Jul-20	2,011	1,091	9,899	12,718			Jul-20	8,727	4,710	1,853	840
	Aug-20							Aug-20							Aug-20				
	Sep-20							Sep-20							Sep-20				
	Oct-20							Oct-20							Oct-20				
	Nov-20							Nov-20							Nov-20				
	Dec-20							Dec-20							Dec-20				
CENTRL	Jan-20	3,050	214	28,503	541		MILLWD	Jan-20	270	68	1,646	213		NYISO	Jan-20	29,361	9,580	59,340	11,849
	Feb-20	2,567	118	27,919	487			Feb-20	281	68	1,811	229			Feb-20	30,434	6,838	60,334	14,811
	Mar-20	2,340	113	17,986	481			Mar-20	494	19	1,844	174			Mar-20	26,077	6,087	47,704	20,700
	Apr-20	2,568	131	20,490	491			Apr-20	563	55	1,510	90			Apr-20	26,181	6,200	49,344	22,953
	May-20	2,736	296	22,414	414			May-20	502	198	1,442	76			May-20	27,319	8,140	47,941	22,346
	Jun-20	4,053	770	28,114	903			Jun-20	1,756	558	1,789	312			Jun-20	36,995	11,988	58,701	22,003
	Jul-20	3,622	620	28,085	1,455			Jul-20	4,003	800	1,054	553			Jul-20	49,792	16,933	63,478	24,522
	Aug-20							Aug-20							Aug-20				
	Sep-20							Sep-20							Sep-20				
	Oct-20							Oct-20							Oct-20				
	Nov-20							Nov-20							Nov-20				
	Dec-20							Dec-20							Dec-20				

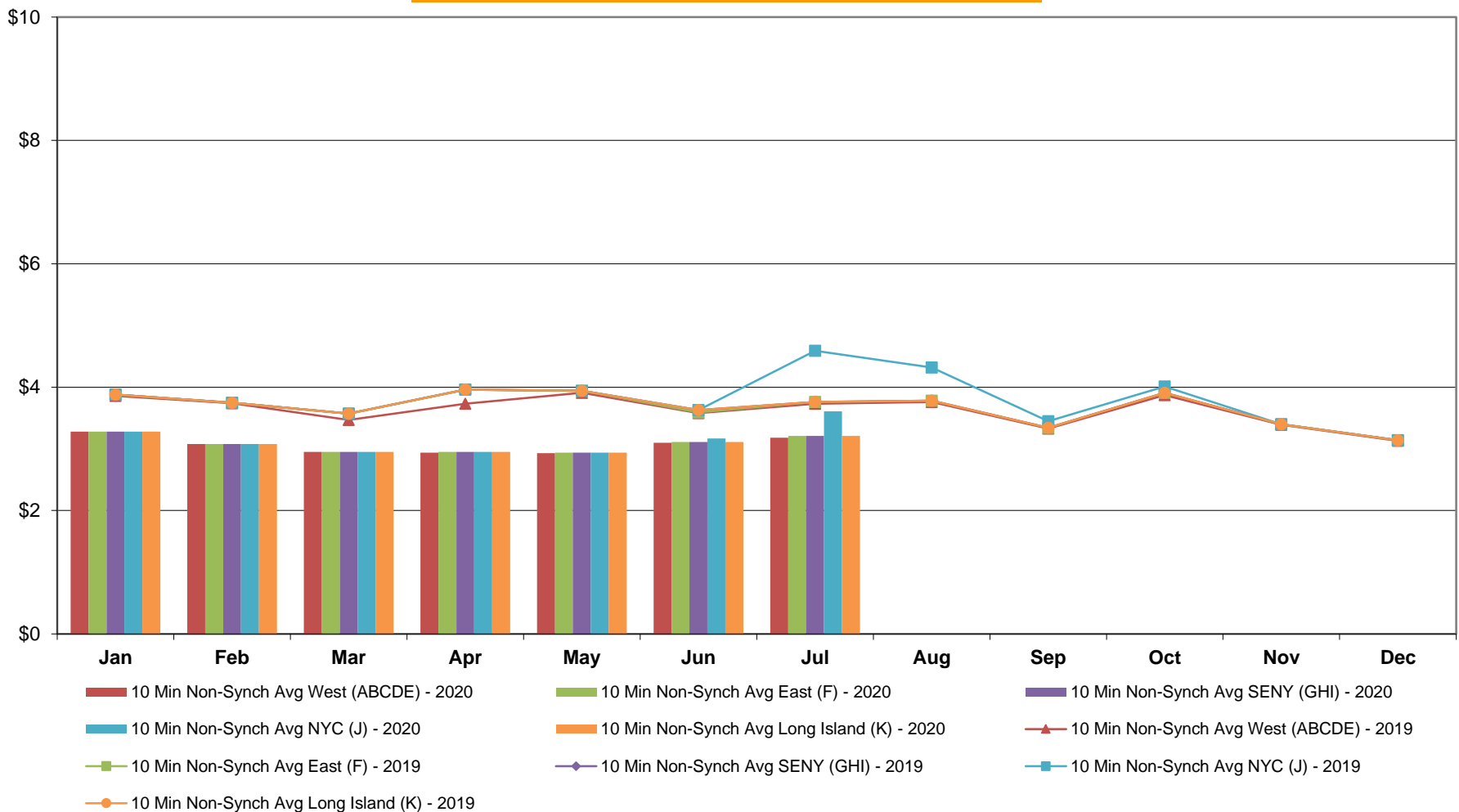
NYISO Multi Hour Block Transactions Monthly Total MWh



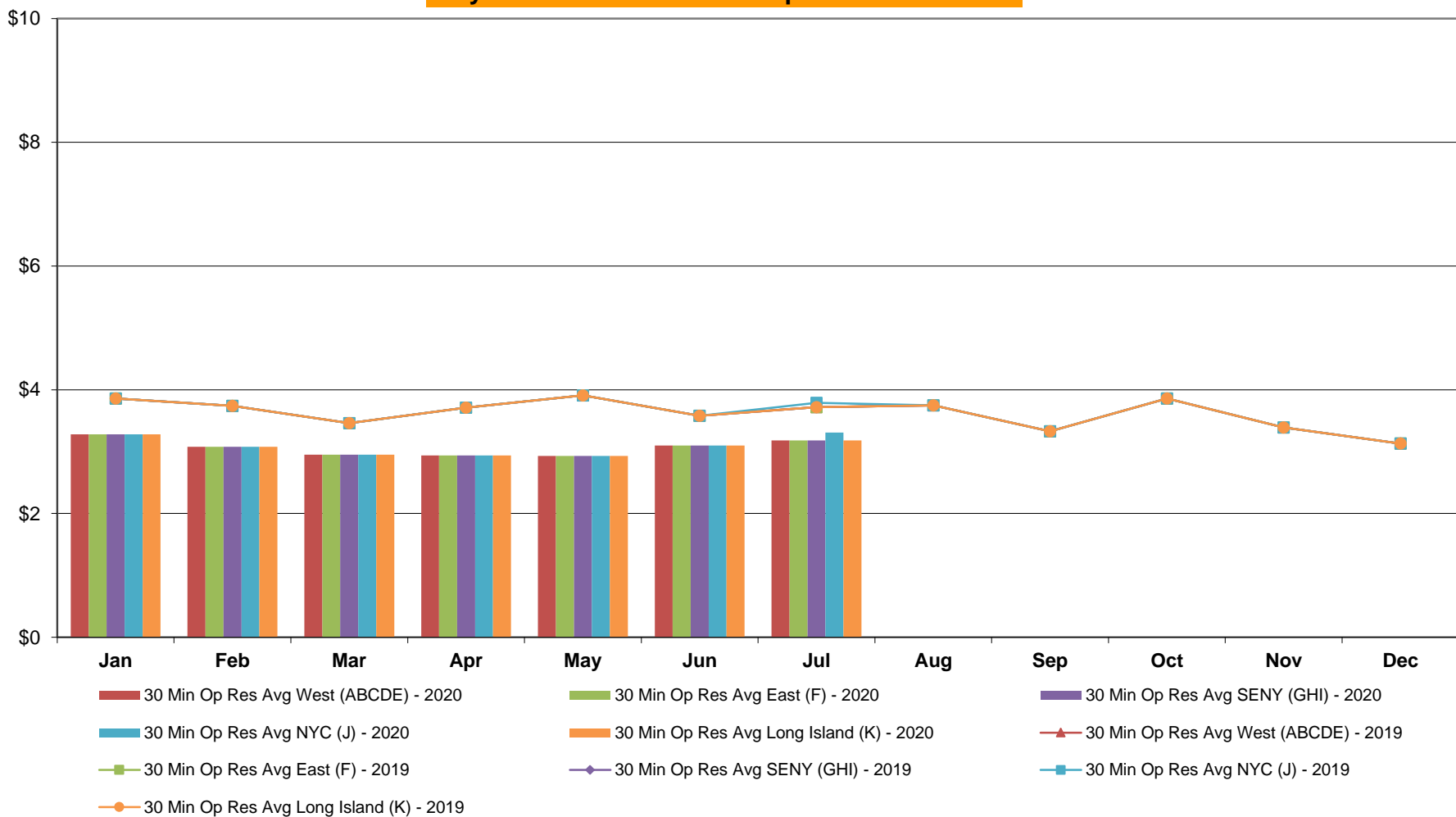
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - 10 Min Spin 2019 - 2020**



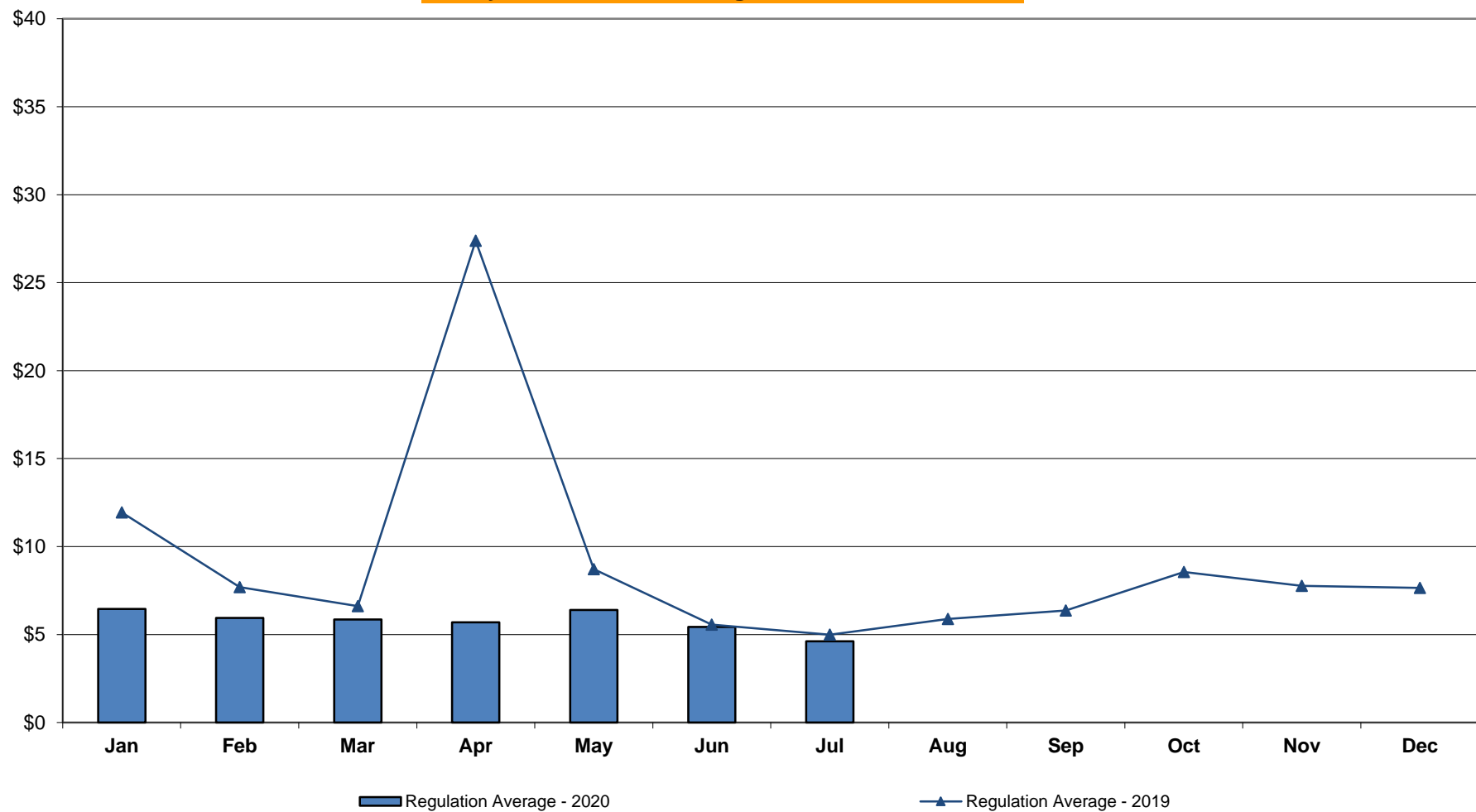
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - 10 Min Non-Synch 2019 - 2020**



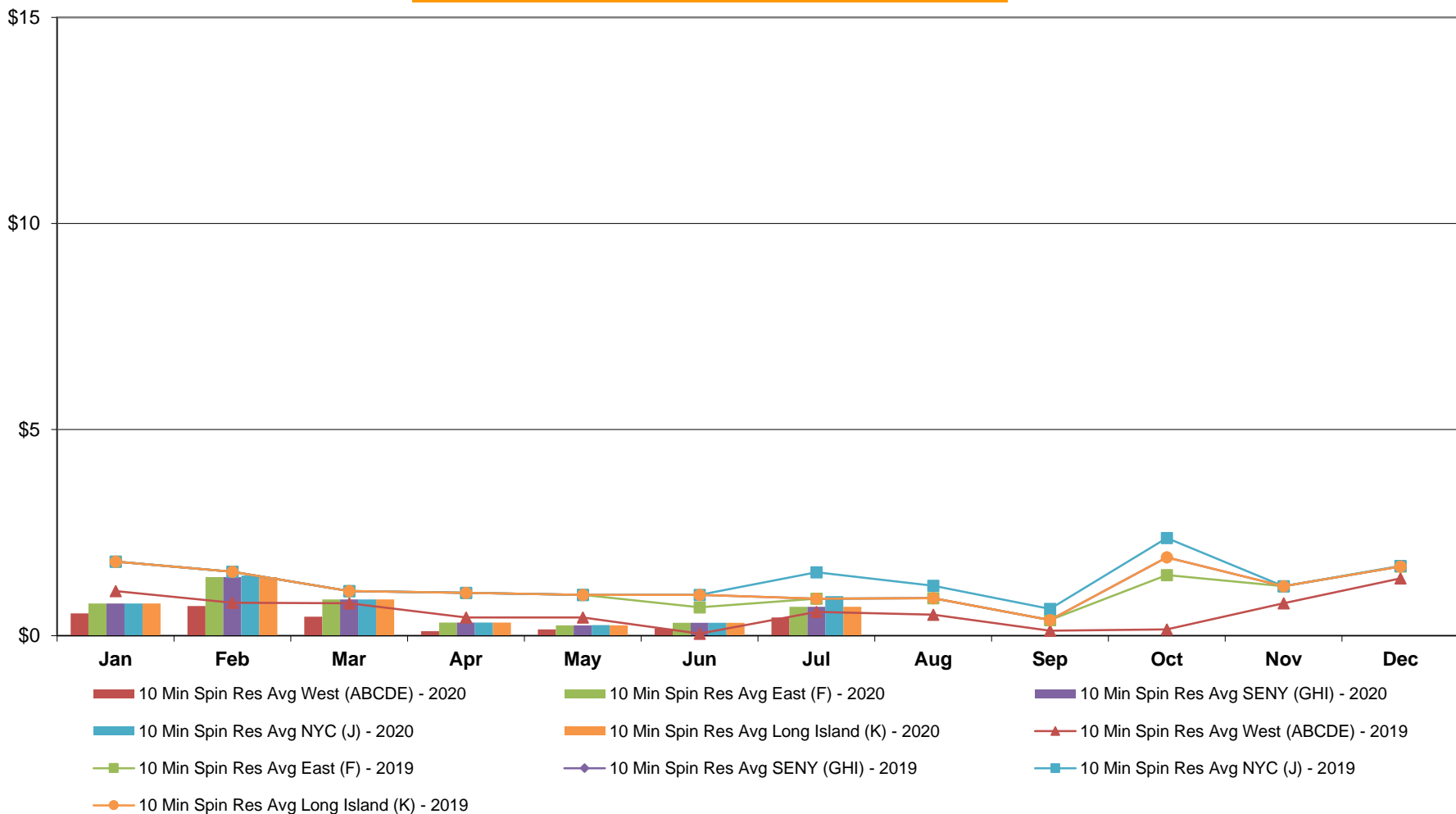
NYISO Monthly Average Ancillary Service Prices **Day Ahead Market - 30 Min Op Res 2019 - 2020**



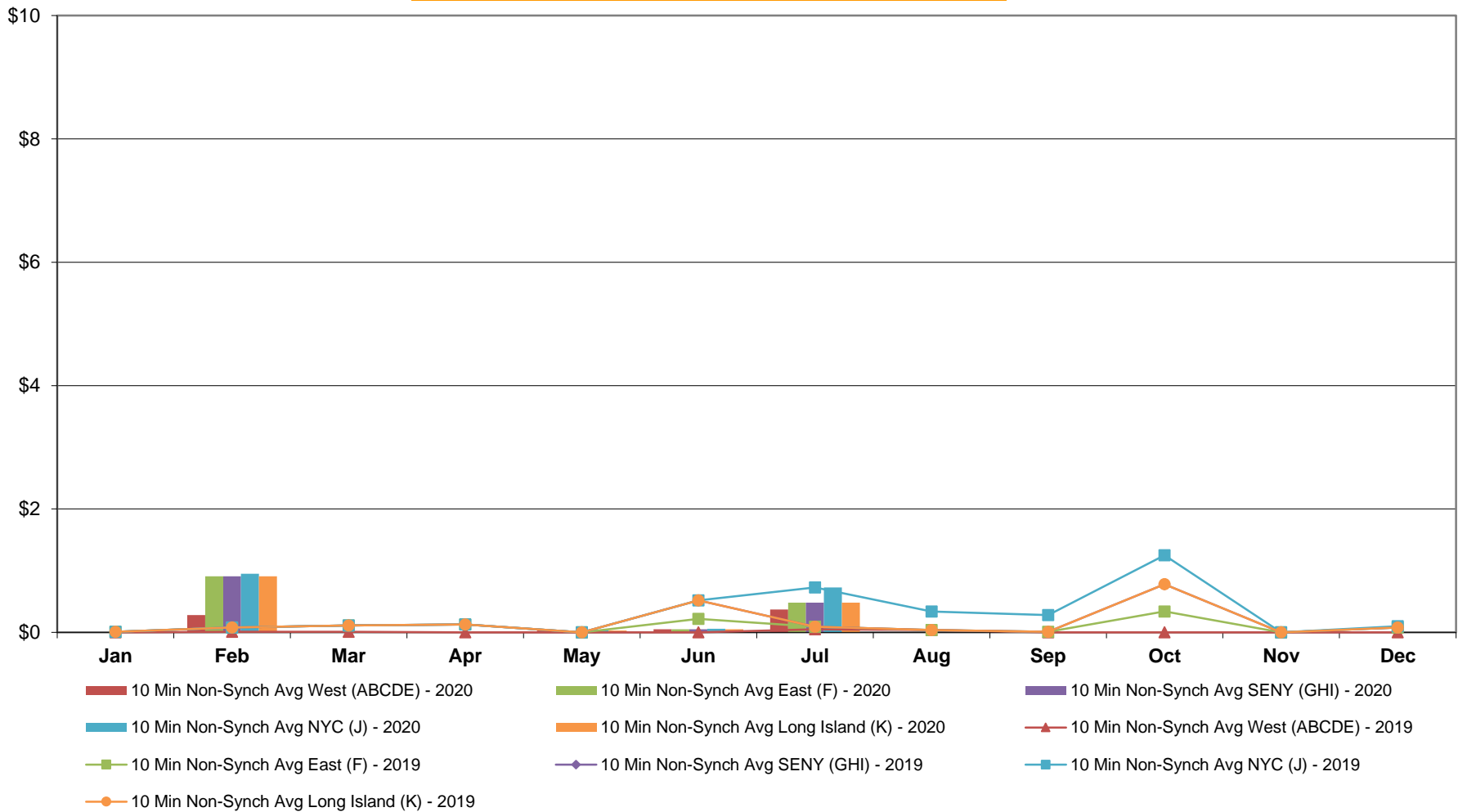
**NYISO Monthly Average Ancillary Service Prices
Day Ahead Market - Regulation 2019 - 2020**



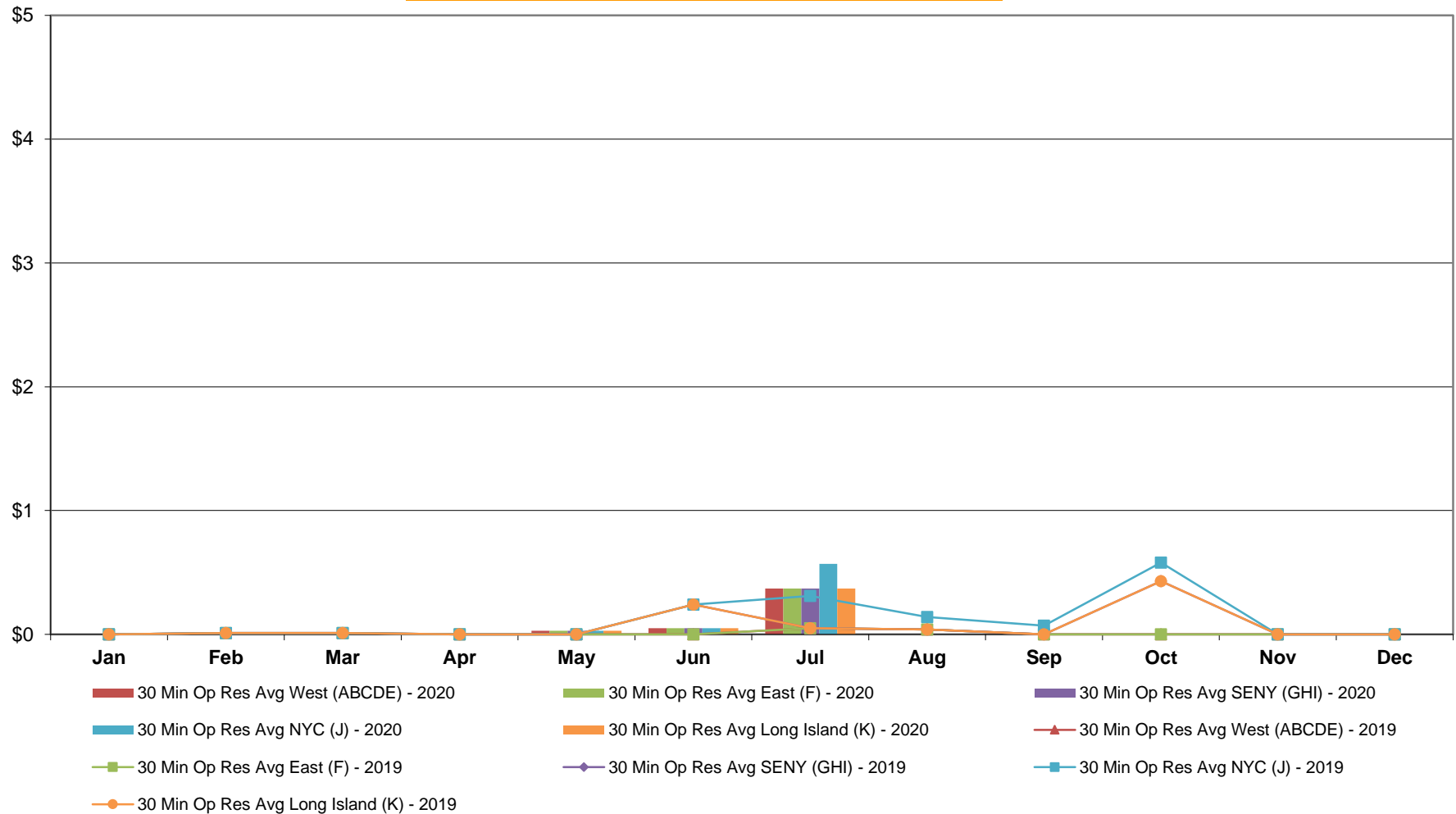
NYISO Monthly Average Ancillary Service Prices RTC Market - 10 Min Spin 2019 - 2020



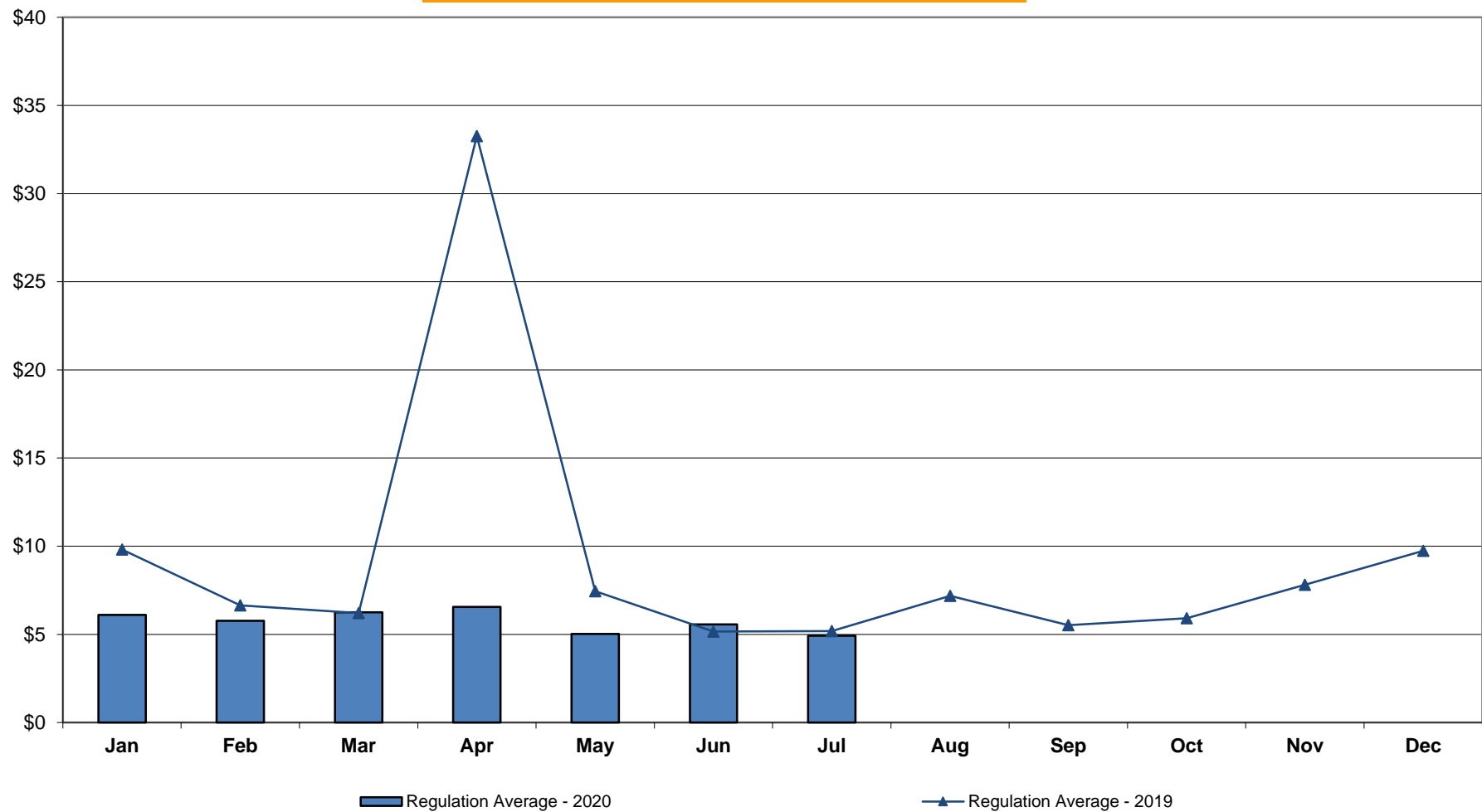
**NYISO Monthly Average Ancillary Service Prices
RTC Market - 10 Min Non-Synch 2019 - 2020**



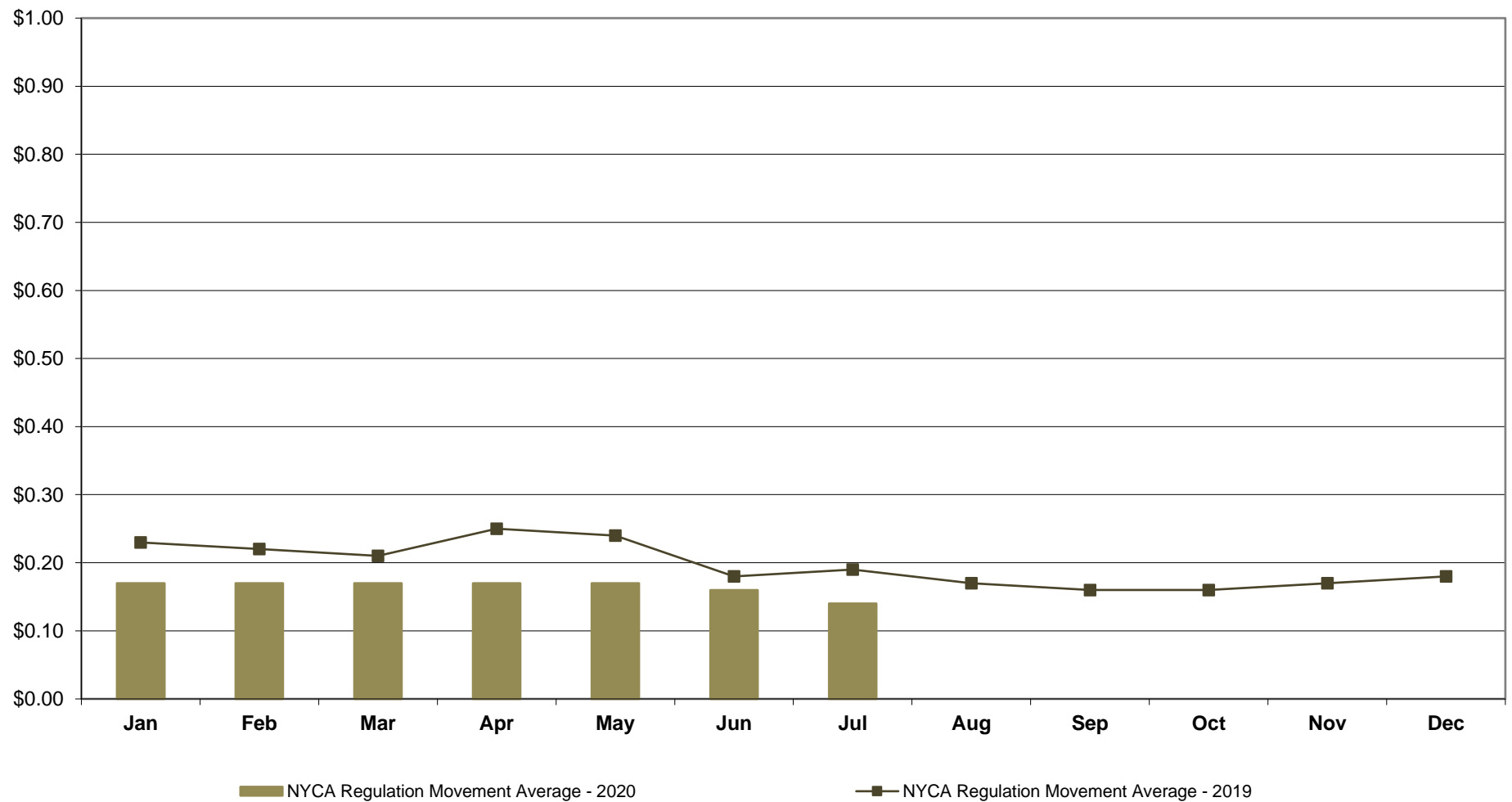
NYISO Monthly Average Ancillary Service Prices RTC Market - 30 Min Op Res 2019 - 2020



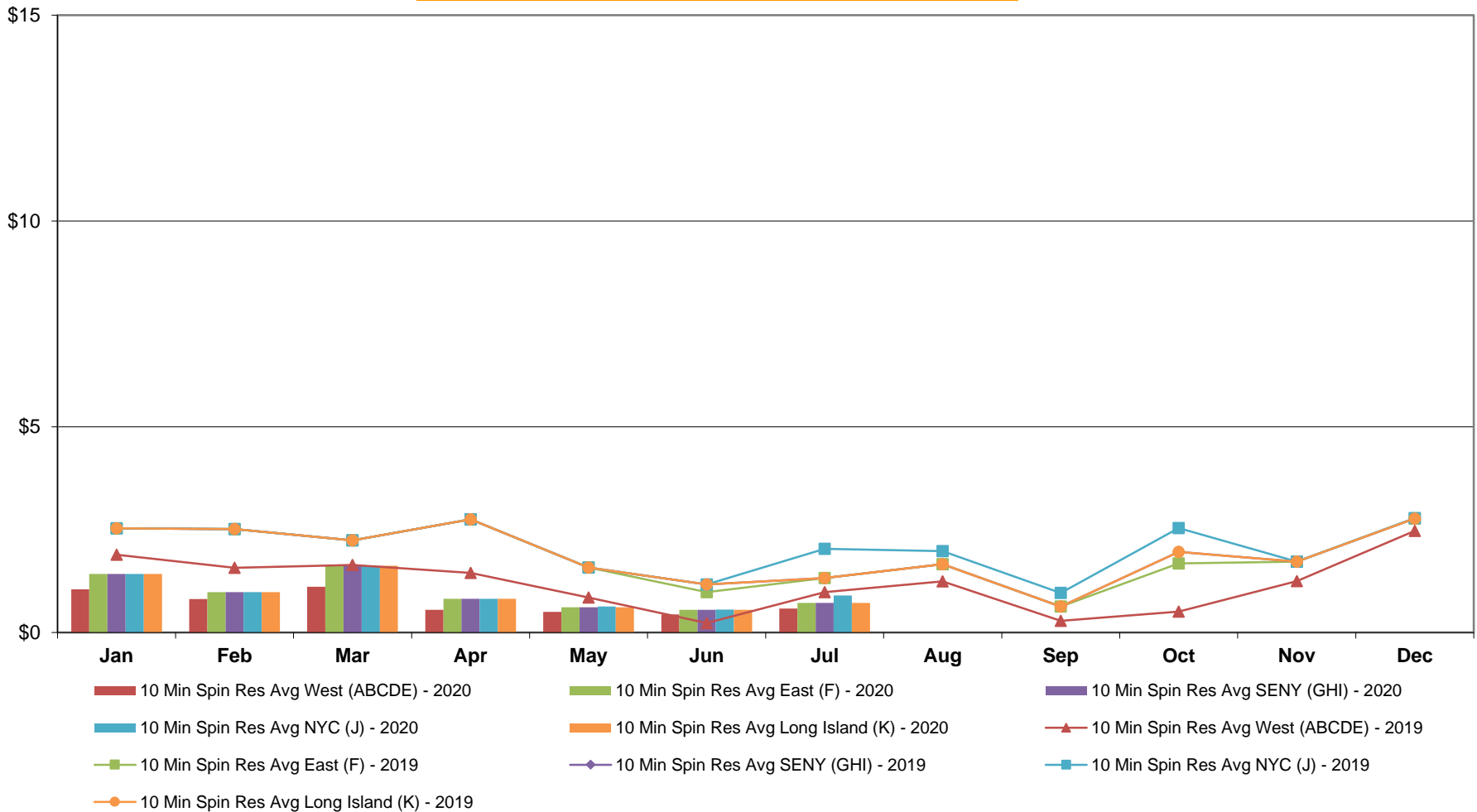
**NYISO Monthly Average Ancillary Service Prices
RTC Market - Regulation 2019 - 2020**



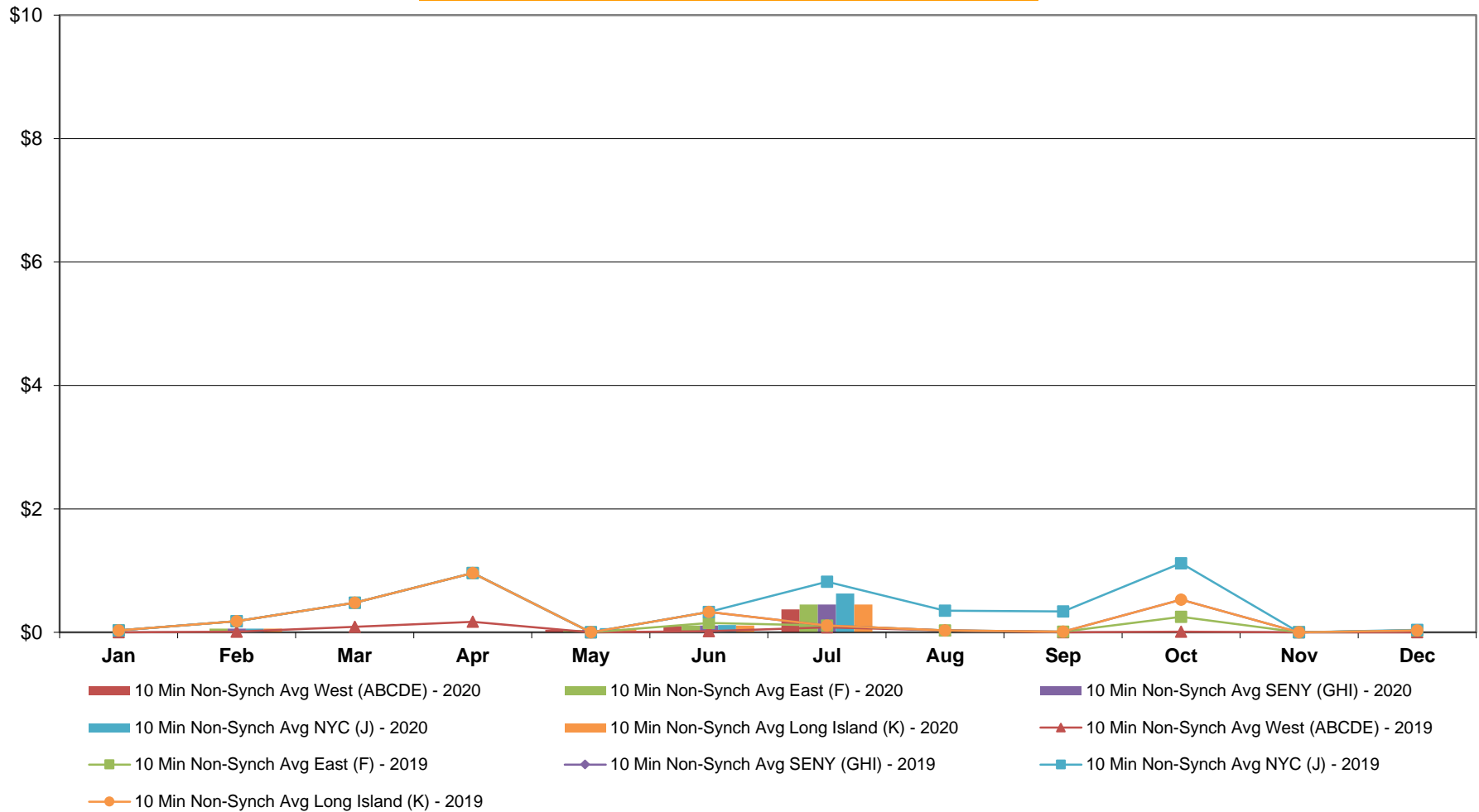
NYISO Monthly Average Ancillary Service Prices RTC Market - Regulation Movement 2019 - 2020



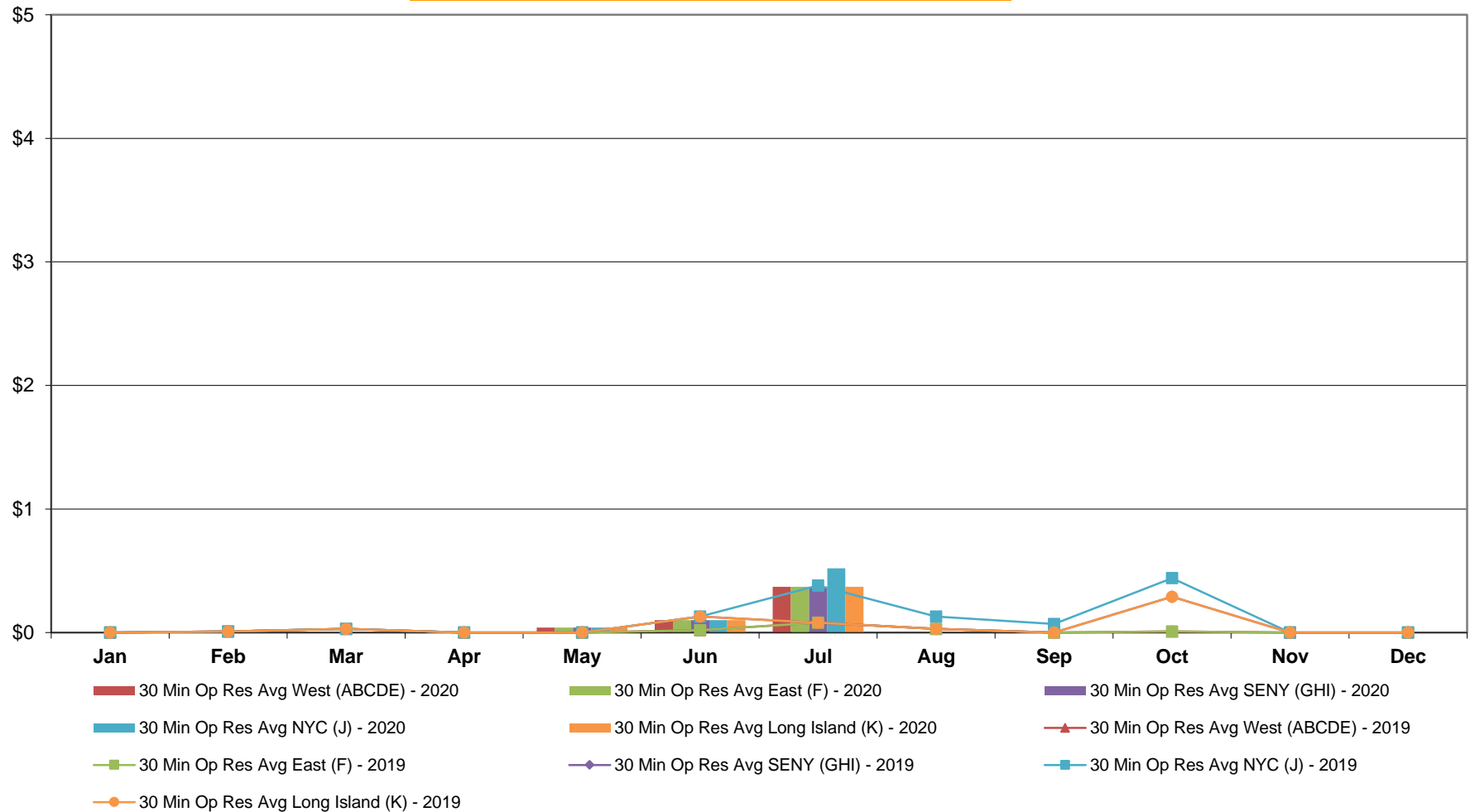
NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Spin 2019 - 2020



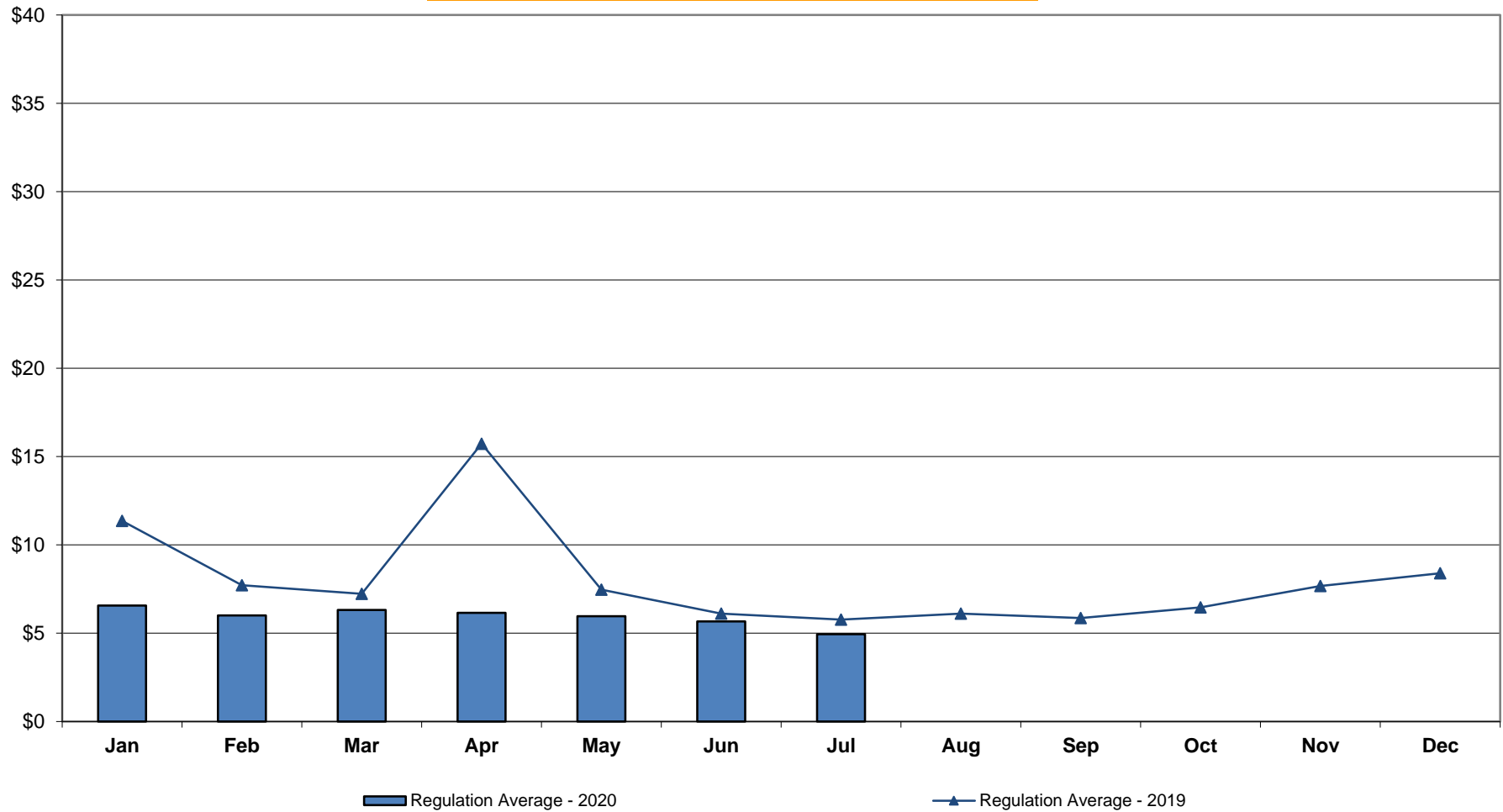
NYISO Monthly Average Ancillary Service Prices Real Time Market - 10 Min Non-Synch 2019 - 2020



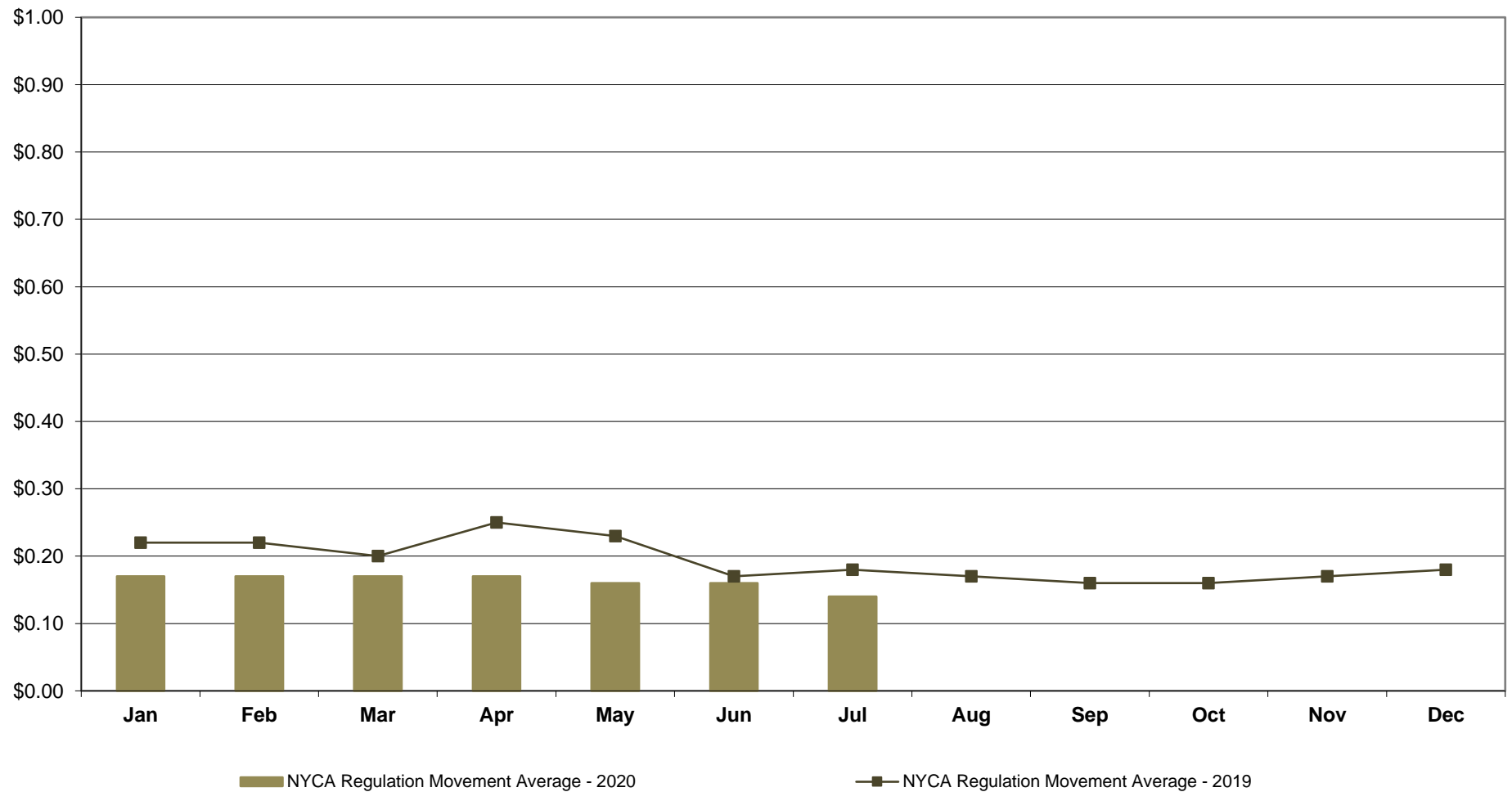
**NYISO Monthly Average Ancillary Service Prices
Real Time Market - 30 Min Op Res 2019 - 2020**



**NYISO Monthly Average Ancillary Service Prices
Real Time Market - Regulation 2019 - 2020**



NYISO Monthly Average Ancillary Service Prices Real Time Market - Regulation Movement 2019 - 2020



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

<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					
10 Min Spin NYC (J)	3.60	3.23	3.55	3.27	3.48	3.64	4.00					
10 Min Spin SENY (GHI)	3.60	3.23	3.55	3.27	3.48	3.59	3.59					
10 Min Spin East (F)	3.60	3.23	3.55	3.27	3.48	3.59	3.59					
10 Min Spin West (ABCDE)	3.57	3.22	3.43	3.25	3.39	3.51	3.55					
10 Min Non Synch Long Island (K)	3.28	3.08	2.95	2.95	2.94	3.11	3.21					
10 Min Non Synch NYC (J)	3.28	3.08	2.95	2.95	2.94	3.17	3.61					
10 Min Non Synch SENY (GHI)	3.28	3.08	2.95	2.95	2.94	3.11	3.21					
10 Min Non Synch East (F)	3.28	3.08	2.95	2.95	2.94	3.11	3.21					
10 Min Non Synch West (ABCDE)	3.28	3.08	2.95	2.94	2.93	3.10	3.18					
30 Min Long Island (K)	3.28	3.08	2.95	2.94	2.93	3.10	3.18					
30 Min NYC (J)	3.28	3.08	2.95	2.94	2.93	3.10	3.31					
30 Min SENY (GHI)	3.28	3.08	2.95	2.94	2.93	3.10	3.18					
30 Min East (F)	3.28	3.08	2.95	2.94	2.93	3.10	3.18					
30 Min West (ABCDE)	3.28	3.08	2.95	2.94	2.93	3.10	3.18					
Regulation	6.46	5.94	5.86	5.70	6.40	5.44	4.61					
<u>2019</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)	5.47	5.47	4.61	4.46	4.25	4.25	4.25	4.19	3.86	4.59	3.79	3.55
10 Min Spin NYC (J)	5.47	5.47	4.61	4.46	4.25	4.25	4.25	4.73	3.97	4.69	3.79	3.55
10 Min Spin SENY (GHI)	5.47	4.17	4.61	4.46	4.25	3.90	4.03	4.19	3.86	4.59	3.79	3.55
10 Min Spin East (F)	5.47	4.17	4.61	4.46	4.25	3.86	4.03	4.19	3.86	4.59	3.79	3.55
10 Min Spin West (ABCDE)	4.56	3.94	4.30	4.01	4.09	3.77	3.89	4.00	3.72	4.24	3.65	3.47
10 Min Non Synch Long Island (K)	3.88	3.88	3.57	3.96	3.94	3.94	3.94	3.78	3.34	3.91	3.40	3.14
10 Min Non Synch NYC (J)	3.88	3.88	3.57	3.96	3.94	3.94	3.94	4.32	3.45	4.01	3.40	3.14
10 Min Non Synch SENY (GHI)	3.88	3.75	3.57	3.96	3.94	3.63	3.76	3.78	3.34	3.91	3.40	3.14
10 Min Non Synch East (F)	3.88	3.75	3.57	3.96	3.94	3.59	3.76	3.78	3.34	3.91	3.40	3.14
10 Min Non Synch West (ABCDE)	3.86	3.74	3.47	3.73	3.91	3.58	3.73	3.76	3.33	3.87	3.39	3.13
30 Min Long Island (K)	3.86	3.86	3.46	3.71	3.91	3.91	3.91	3.75	3.33	3.86	3.39	3.13
30 Min NYC (J)	3.86	3.86	3.46	3.71	3.91	3.91	3.91	3.75	3.33	3.86	3.39	3.13
30 Min SENY (GHI)	3.86	3.74	3.46	3.71	3.91	3.58	3.72	3.75	3.33	3.86	3.39	3.13
30 Min East (F)	3.86	3.74	3.46	3.71	3.91	3.58	3.72	3.75	3.33	3.86	3.39	3.13
30 Min West (ABCDE)	3.86	3.74	3.46	3.71	3.91	3.58	3.72	3.75	3.33	3.86	3.39	3.13
Regulation	11.94	7.69	6.62	27.38	8.71	5.57	4.99	5.89	6.36	8.55	7.77	7.65

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

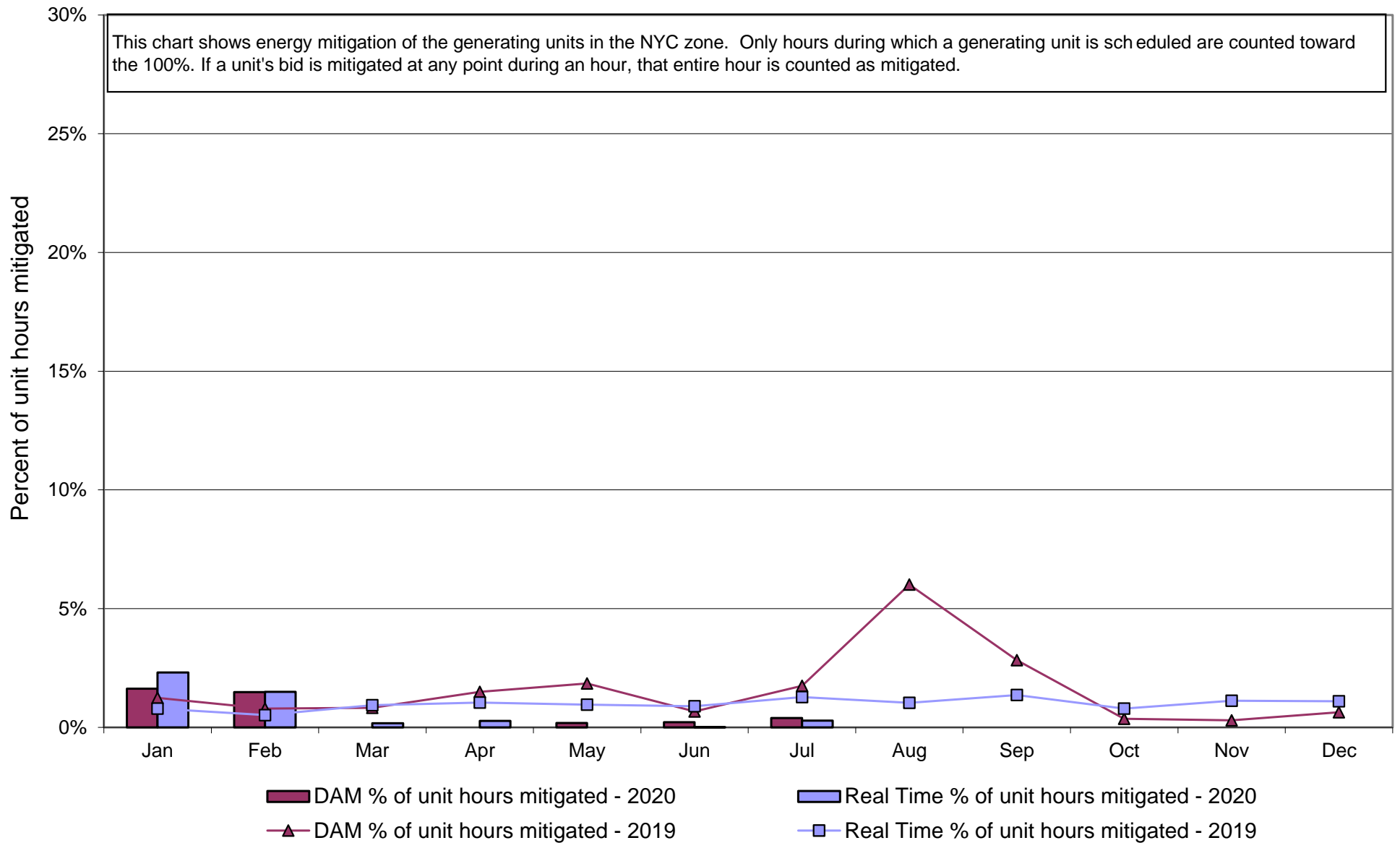
<u>2020</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>RTC Market</u>												
10 Min Spin Long Island (K)	0.78	1.42	0.88	0.32	0.25	0.31	0.70					
10 Min Spin NYC (J)	0.78	1.46	0.88	0.32	0.26	0.31	0.96					
10 Min Spin SENY (GHI)	0.78	1.42	0.88	0.32	0.25	0.31	0.70					
10 Min Spin East (F)	0.78	1.42	0.88	0.32	0.25	0.31	0.70					
10 Min Spin West (ABCDE)	0.54	0.72	0.46	0.11	0.15	0.17	0.44					
10 Min Non Synch Long Island (K)	0.00	0.91	0.00	0.00	0.03	0.05	0.48					
10 Min Non Synch NYC (J)	0.00	0.95	0.00	0.00	0.04	0.06	0.73					
10 Min Non Synch SENY (GHI)	0.00	0.91	0.00	0.00	0.03	0.05	0.48					
10 Min Non Synch East (F)	0.00	0.91	0.00	0.00	0.03	0.05	0.48					
10 Min Non Synch West (ABCDE)	0.00	0.28	0.00	0.00	0.03	0.05	0.37					
30 Min Long Island (K)	0.00	0.01	0.00	0.00	0.03	0.05	0.37					
30 Min NYC (J)	0.00	0.01	0.00	0.00	0.03	0.05	0.57					
30 Min SENY (GHI)	0.00	0.01	0.00	0.00	0.03	0.05	0.37					
30 Min East (F)	0.00	0.01	0.00	0.00	0.03	0.05	0.37					
30 Min West (ABCDE)	0.00	0.01	0.00	0.00	0.03	0.05	0.37					
Regulation	6.11	5.77	6.25	6.56	5.02	5.56	4.92					
NYCA Regulation Movement	0.17	0.17	0.17	0.17	0.17	0.16	0.14					
<u>2019</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)	1.80	1.80	1.08	1.04	0.99	0.99	0.99	0.91	0.38	1.90	1.20	1.68
10 Min Spin NYC (J)	1.80	1.80	1.08	1.04	0.99	0.99	0.99	1.21	0.65	2.37	1.20	1.69
10 Min Spin SENY (GHI)	1.80	1.55	1.08	1.04	0.99	0.99	0.90	0.91	0.38	1.90	1.20	1.68
10 Min Spin East (F)	1.80	1.55	1.08	1.04	0.99	0.69	0.90	0.91	0.38	1.47	1.20	1.68
10 Min Spin West (ABCDE)	1.08	0.80	0.79	0.44	0.44	0.05	0.58	0.51	0.12	0.15	0.79	1.39
10 Min Non Synch Long Island (K)	0.01	0.01	0.11	0.13	0.00	0.00	0.00	0.04	0.01	0.78	0.00	0.08
10 Min Non Synch NYC (J)	0.01	0.01	0.11	0.13	0.00	0.00	0.00	0.34	0.28	1.25	0.00	0.10
10 Min Non Synch SENY (GHI)	0.01	0.08	0.11	0.13	0.00	0.52	0.09	0.04	0.01	0.78	0.00	0.08
10 Min Non Synch East (F)	0.01	0.08	0.11	0.13	0.00	0.22	0.09	0.04	0.01	0.34	0.00	0.08
10 Min Non Synch West (ABCDE)	0.00	0.01	0.01	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00
30 Min Long Island (K)	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.00	0.43	0.00	0.00
30 Min NYC (J)	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.14	0.07	0.58	0.00	0.00
30 Min SENY (GHI)	0.00	0.01	0.01	0.00	0.00	0.24	0.05	0.04	0.00	0.43	0.00	0.00
30 Min East (F)	0.00	0.01	0.01	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00
30 Min West (ABCDE)	0.00	0.01	0.01	0.00	0.00	0.00	0.05	0.04	0.00	0.00	0.00	0.00
Regulation	9.81	6.64	6.21	33.26	7.45	5.16	5.19	7.19	5.52	5.91	7.81	9.74
NYCA Regulation Movement	0.23	0.22	0.21	0.25	0.24	0.18	0.19	0.17	0.16	0.16	0.17	0.18

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

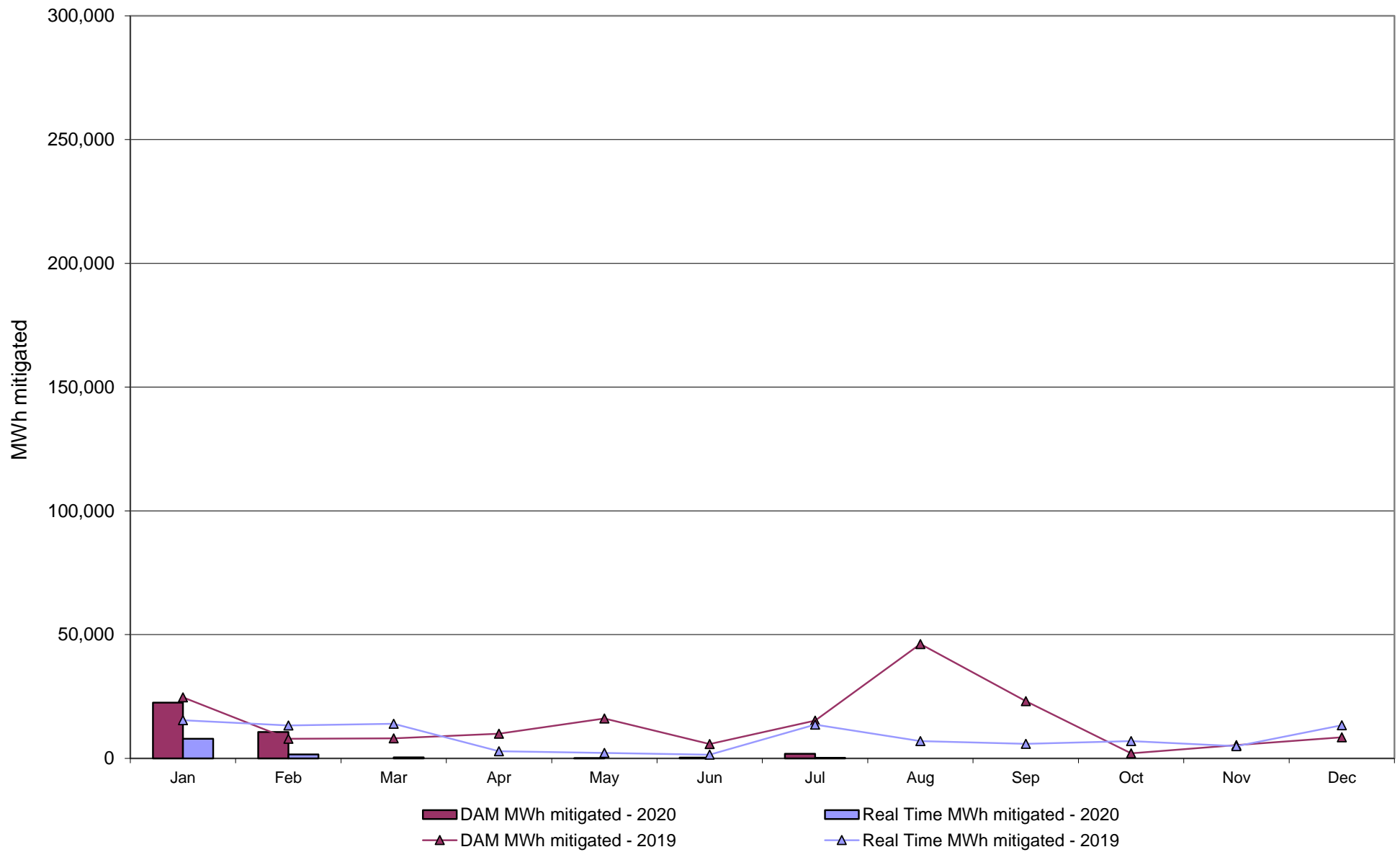
<u>2020</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<u>Real Time Market</u>												
10 Min Spin Long Island (K)	1.42	0.98	1.62	0.82	0.61	0.55	0.72					
10 Min Spin NYC (J)	1.42	0.98	1.62	0.82	0.63	0.56	0.90					
10 Min Spin SENY (GHI)	1.42	0.98	1.62	0.82	0.61	0.55	0.72					
10 Min Spin East (F)	1.42	0.98	1.62	0.82	0.61	0.55	0.72					
10 Min Spin West (ABCDE)	1.05	0.81	1.11	0.55	0.50	0.44	0.58					
10 Min Non Synch Long Island (K)	0.00	0.06	0.00	0.00	0.04	0.11	0.45					
10 Min Non Synch NYC (J)	0.00	0.06	0.00	0.00	0.07	0.12	0.63					
10 Min Non Synch SENY (GHI)	0.00	0.06	0.00	0.00	0.04	0.11	0.45					
10 Min Non Synch East (F)	0.00	0.06	0.00	0.00	0.04	0.11	0.45					
10 Min Non Synch West (ABCDE)	0.00	0.00	0.00	0.00	0.04	0.10	0.37					
30 Min Long Island (K)	0.00	0.00	0.00	0.00	0.04	0.10	0.37					
30 Min NYC (J)	0.00	0.00	0.00	0.00	0.04	0.10	0.52					
30 Min SENY (GHI)	0.00	0.00	0.00	0.00	0.04	0.10	0.37					
30 Min East (F)	0.00	0.00	0.00	0.00	0.04	0.10	0.37					
30 Min West (ABCDE)	0.00	0.00	0.00	0.00	0.04	0.10	0.37					
Regulation	6.57	6.00	6.32	6.16	5.96	5.67	4.94					
NYCA Regulation Movement	0.17	0.17	0.17	0.17	0.16	0.16	0.14					
<u>2019</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)	2.53	2.53	2.24	2.75	1.58	1.58	1.58	1.66	0.63	1.96	1.72	2.77
10 Min Spin NYC (J)	2.53	2.53	2.24	2.75	1.58	1.58	1.58	1.98	0.96	2.54	1.72	2.78
10 Min Spin SENY (GHI)	2.53	2.51	2.24	2.75	1.58	1.17	1.32	1.66	0.63	1.96	1.72	2.77
10 Min Spin East (F)	2.53	2.51	2.24	2.75	1.58	0.98	1.32	1.66	0.63	1.68	1.72	2.77
10 Min Spin West (ABCDE)	1.89	1.57	1.64	1.45	0.85	0.23	0.98	1.24	0.28	0.51	1.25	2.47
10 Min Non Synch Long Island (K)	0.03	0.03	0.48	0.96	0.00	0.00	0.00	0.03	0.01	0.53	0.00	0.03
10 Min Non Synch NYC (J)	0.03	0.03	0.48	0.96	0.00	0.00	0.00	0.35	0.34	1.12	0.00	0.04
10 Min Non Synch SENY (GHI)	0.03	0.18	0.48	0.96	0.00	0.33	0.11	0.03	0.01	0.53	0.00	0.03
10 Min Non Synch East (F)	0.03	0.18	0.48	0.96	0.00	0.15	0.11	0.03	0.01	0.25	0.00	0.03
10 Min Non Synch West (ABCDE)	0.00	0.01	0.09	0.17	0.00	0.02	0.08	0.03	0.00	0.01	0.00	0.00
30 Min Long Island (K)	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.29	0.00	0.00
30 Min NYC (J)	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.13	0.07	0.44	0.00	0.00
30 Min SENY (GHI)	0.00	0.01	0.03	0.00	0.00	0.13	0.08	0.03	0.00	0.29	0.00	0.00
30 Min East (F)	0.00	0.01	0.03	0.00	0.00	0.02	0.08	0.03	0.00	0.01	0.00	0.00
30 Min West (ABCDE)	0.00	0.01	0.03	0.00	0.00	0.02	0.08	0.03	0.00	0.01	0.00	0.00
Regulation	11.36	7.72	7.23	15.73	7.47	6.11	5.77	6.11	5.86	6.47	7.67	8.40
NYCA Regulation Movement	0.22	0.22	0.20	0.25	0.23	0.17	0.18	0.17	0.16	0.16	0.17	0.18

NYISO In City Energy Mitigation - AMP (NYC Zone) 2019 - 2020

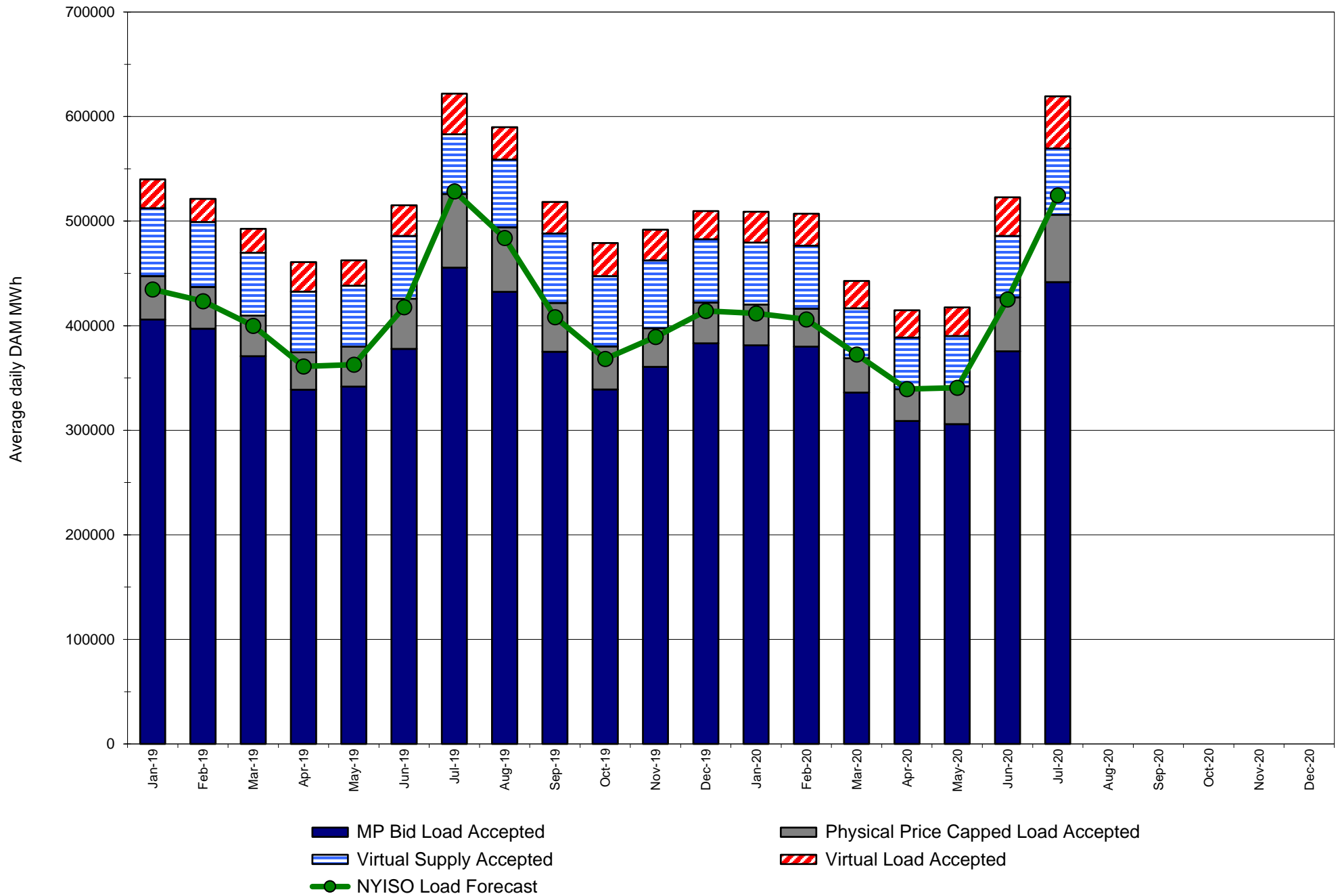
Percentage of committed unit-hours mitigated



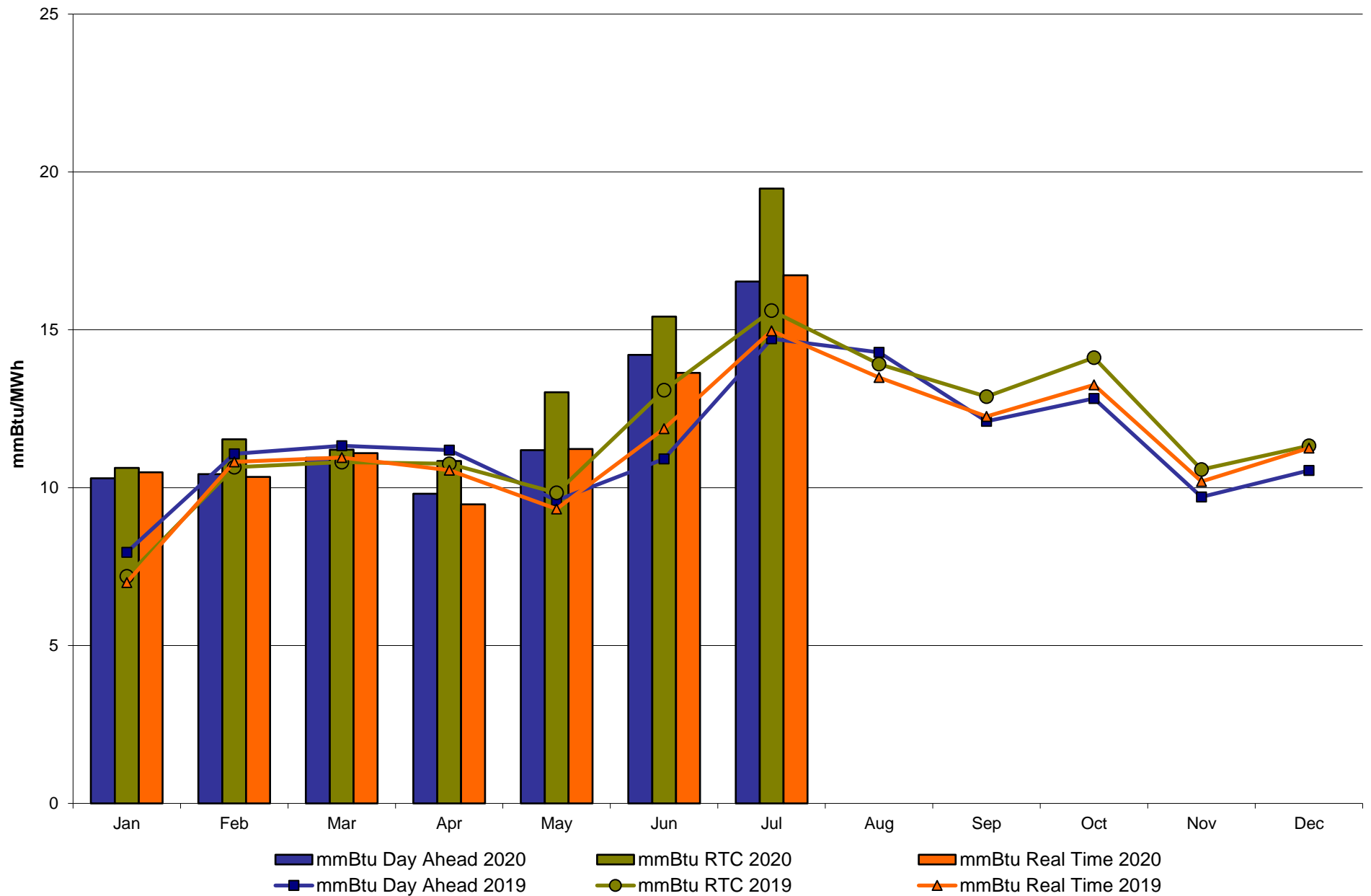
NYISO In City Energy Mitigation (NYC Zone) 2019 - 2020
Monthly megawatt hours mitigated



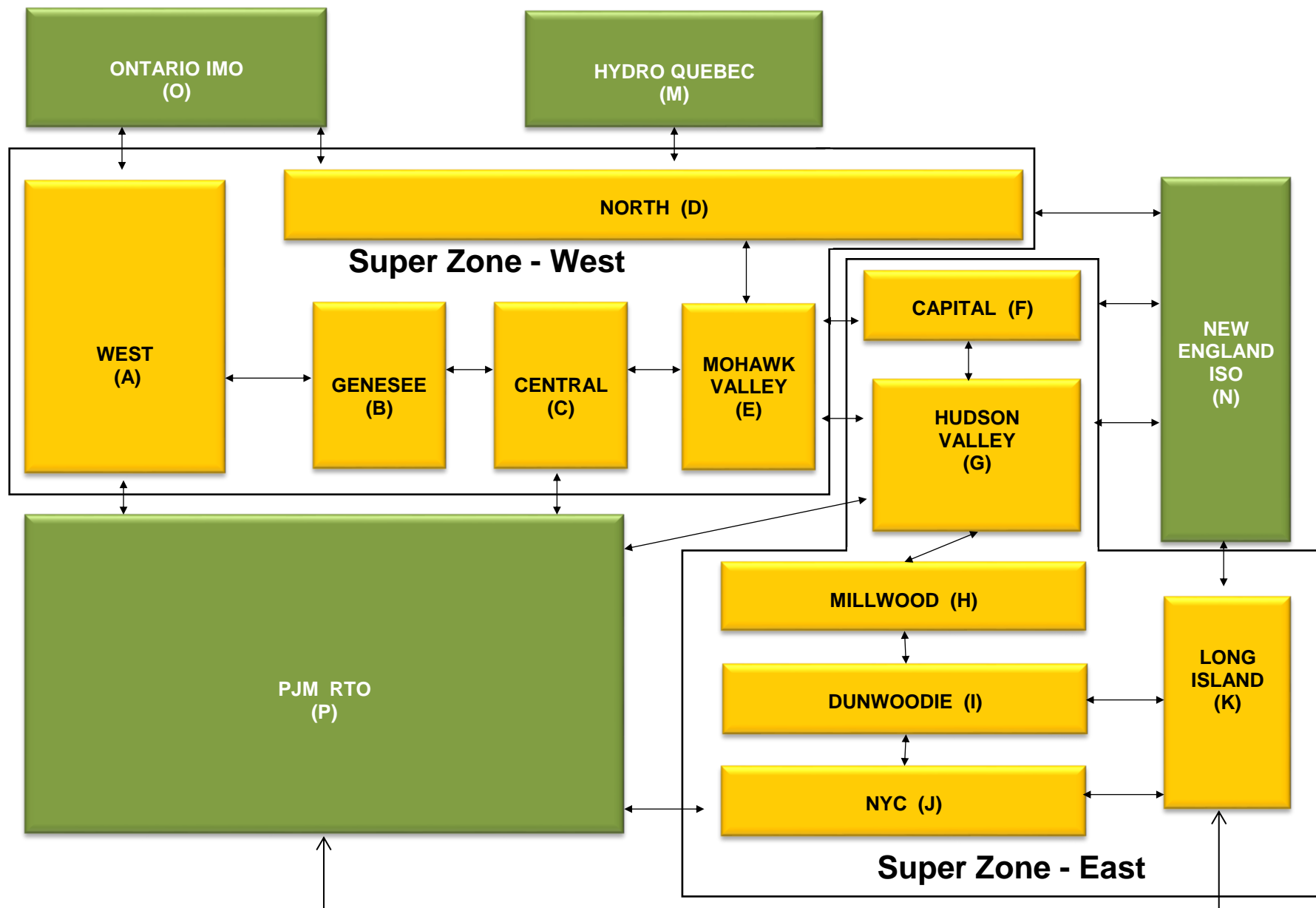
NYISO Average Daily DAM Load Bid Summary



Monthly Implied Heat Rate 2019-2020



NYISO LBMP ZONES

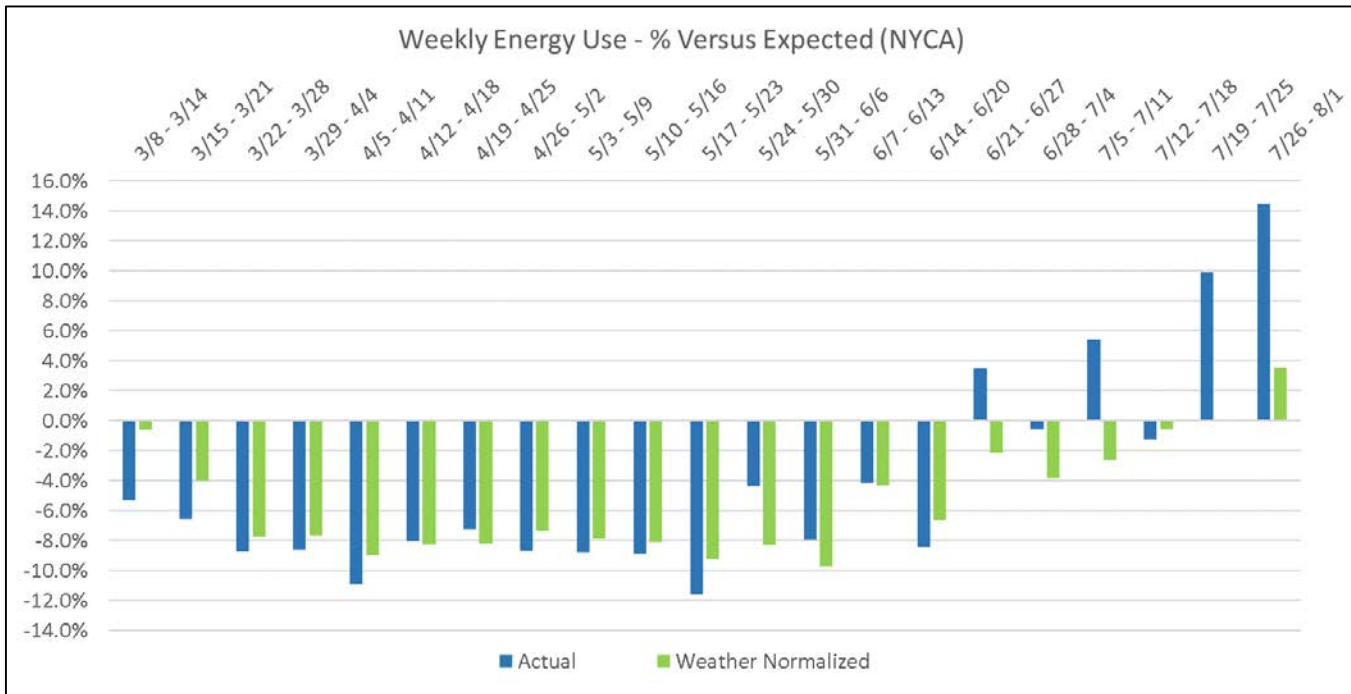


Billing Codes for Chart C

<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

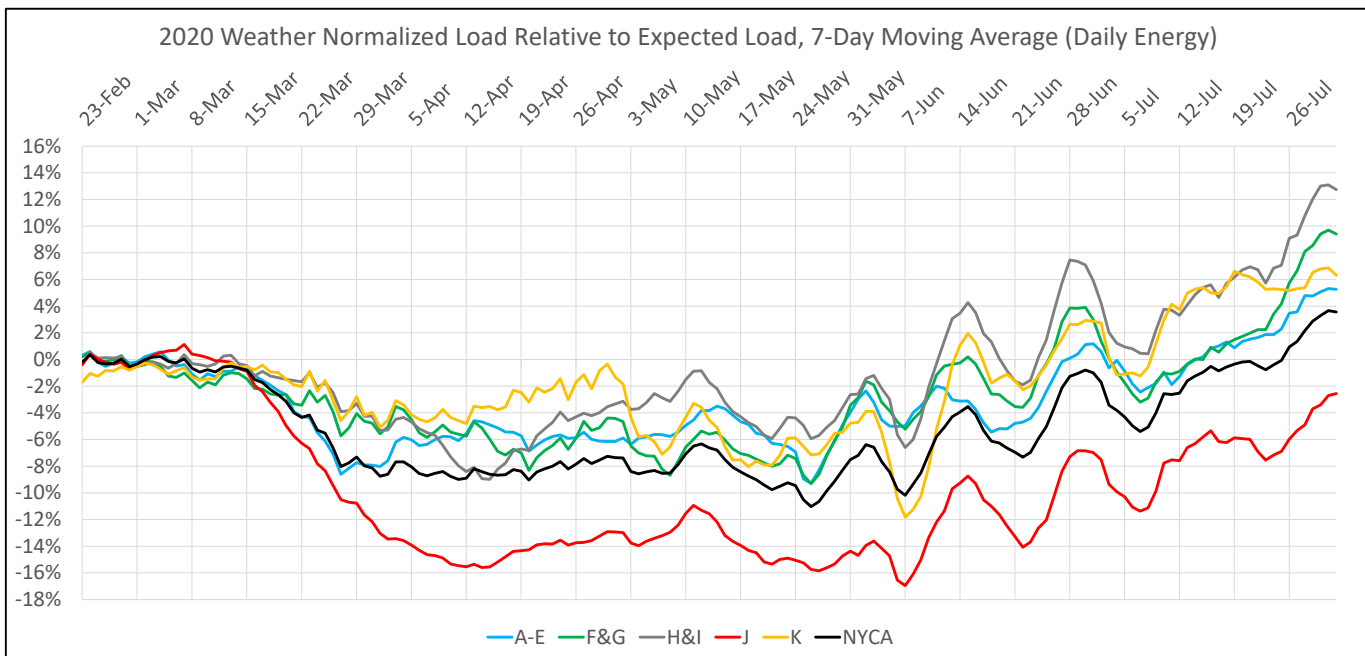
COVID-19: Estimated Load Impacts

NYCA Weekly Energy Impacts versus Expected*



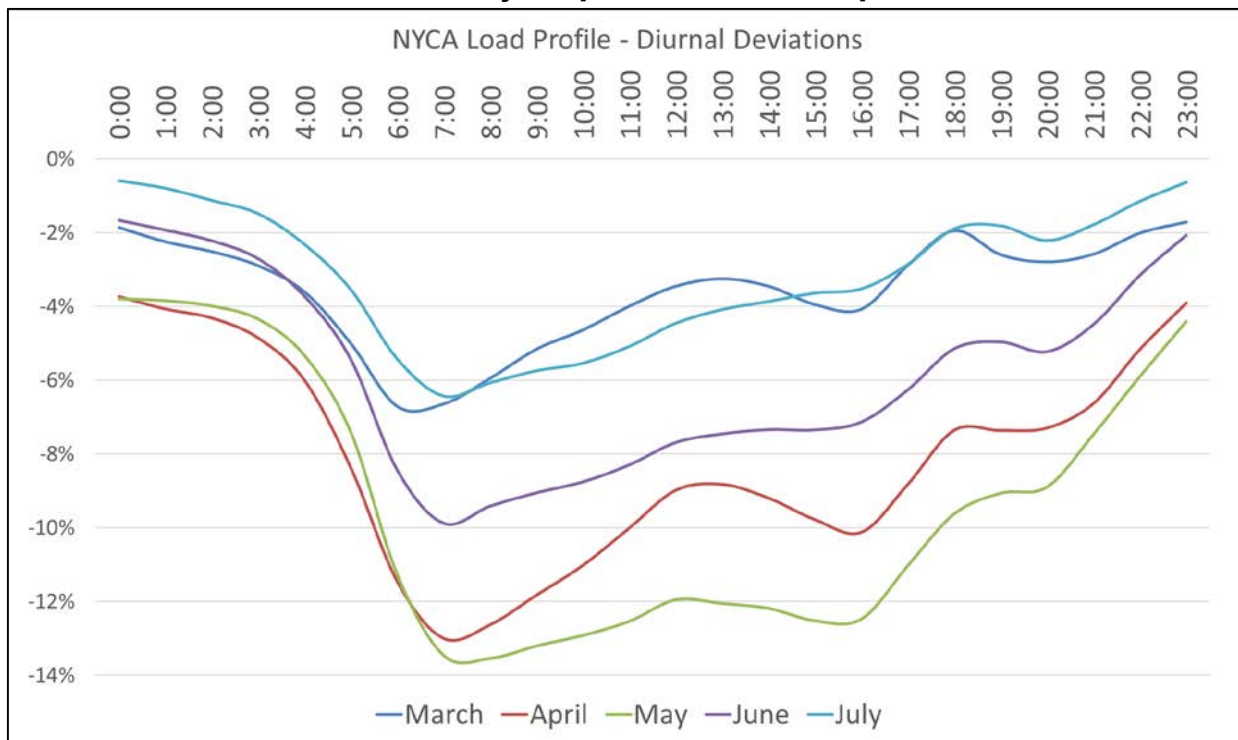
* Green bars indicate COVID-19 impact

Regional Energy Impacts



COVID-19: Estimated Load Impacts

NYCA Hourly Impacts versus Expected*



* Includes Weekdays and Weekends

Percent Deviations

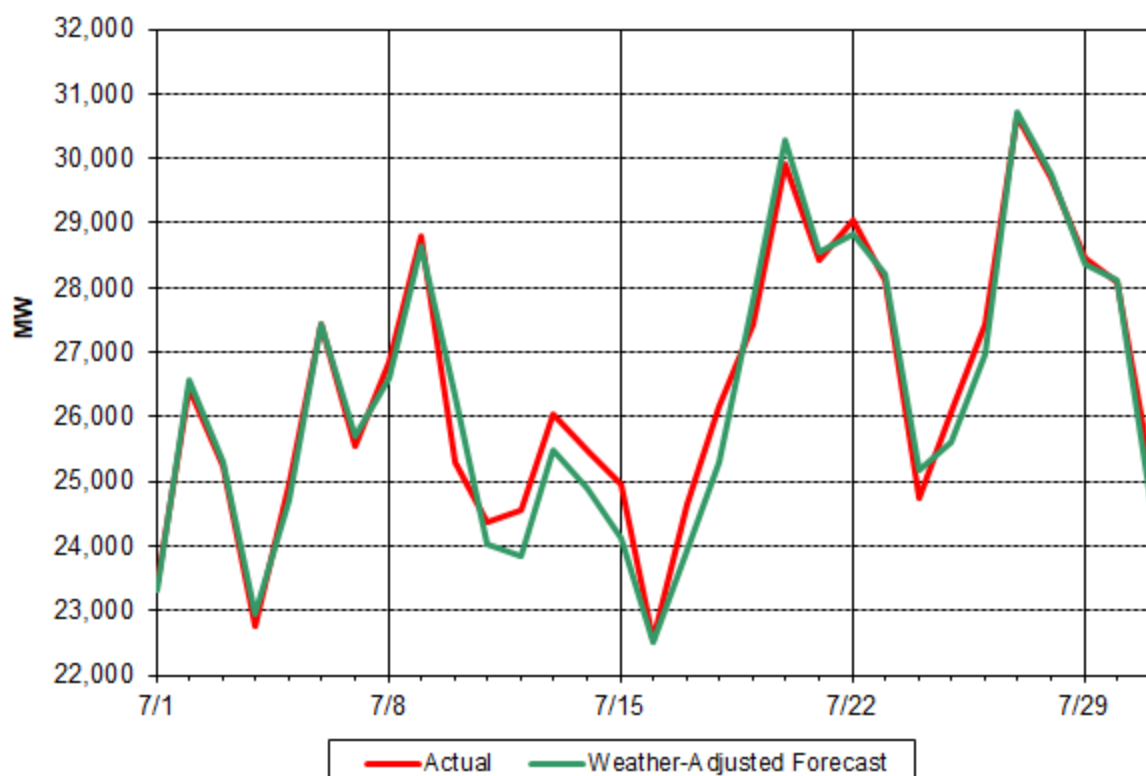
Hour	March	April	May	June	July
0:00	-2%	-4%	-4%	-2%	-1%
1:00	-2%	-4%	-4%	-2%	-1%
2:00	-3%	-4%	-4%	-2%	-1%
3:00	-3%	-5%	-4%	-3%	-1%
4:00	-4%	-6%	-5%	-4%	-2%
5:00	-5%	-8%	-7%	-5%	-4%
6:00	-7%	-11%	-11%	-8%	-5%
7:00	-7%	-13%	-13%	-10%	-6%
8:00	-6%	-13%	-14%	-9%	-6%
9:00	-5%	-12%	-13%	-9%	-6%
10:00	-5%	-11%	-13%	-9%	-6%
11:00	-4%	-10%	-13%	-8%	-5%
12:00	-3%	-9%	-12%	-8%	-4%
13:00	-3%	-9%	-12%	-7%	-4%
14:00	-3%	-9%	-12%	-7%	-4%
15:00	-4%	-10%	-13%	-7%	-4%
16:00	-4%	-10%	-12%	-7%	-4%
17:00	-3%	-9%	-11%	-6%	-3%
18:00	-2%	-7%	-10%	-5%	-2%
19:00	-3%	-7%	-9%	-5%	-2%
20:00	-3%	-7%	-9%	-5%	-2%
21:00	-3%	-7%	-7%	-4%	-2%
22:00	-2%	-5%	-6%	-3%	-1%
23:00	-2%	-4%	-4%	-2%	-1%

MW Deviations

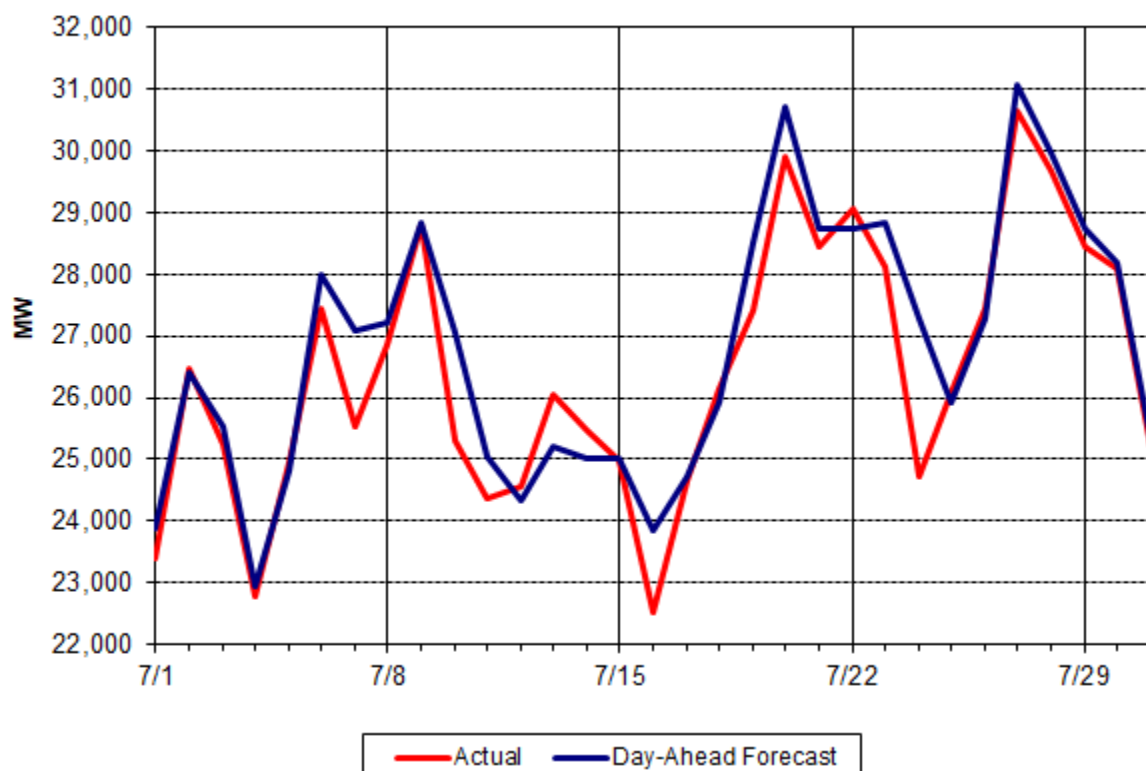
Hour	March	April	May	June	July
0:00	-261	-502	-513	-264	-114
1:00	-306	-530	-498	-291	-145
2:00	-336	-551	-503	-323	-198
3:00	-386	-617	-541	-386	-255
4:00	-487	-775	-669	-532	-397
5:00	-712	-1140	-970	-799	-620
6:00	-1042	-1686	-1588	-1330	-999
7:00	-1093	-2027	-2038	-1691	-1275
8:00	-1002	-2029	-2137	-1708	-1283
9:00	-871	-1916	-2129	-1716	-1281
10:00	-781	-1785	-2111	-1720	-1294
11:00	-667	-1610	-2069	-1677	-1233
12:00	-571	-1432	-1982	-1588	-1110
13:00	-533	-1397	-2011	-1570	-1041
14:00	-562	-1448	-2039	-1565	-1001
15:00	-644	-1540	-2107	-1586	-953
16:00	-672	-1612	-2125	-1559	-932
17:00	-485	-1424	-1898	-1371	-757
18:00	-332	-1192	-1652	-1107	-491
19:00	-454	-1211	-1545	-1038	-456
20:00	-485	-1217	-1518	-1064	-540
21:00	-431	-1068	-1237	-891	-423
22:00	-317	-781	-914	-587	-256
23:00	-253	-552	-633	-355	-131

Peak Hour

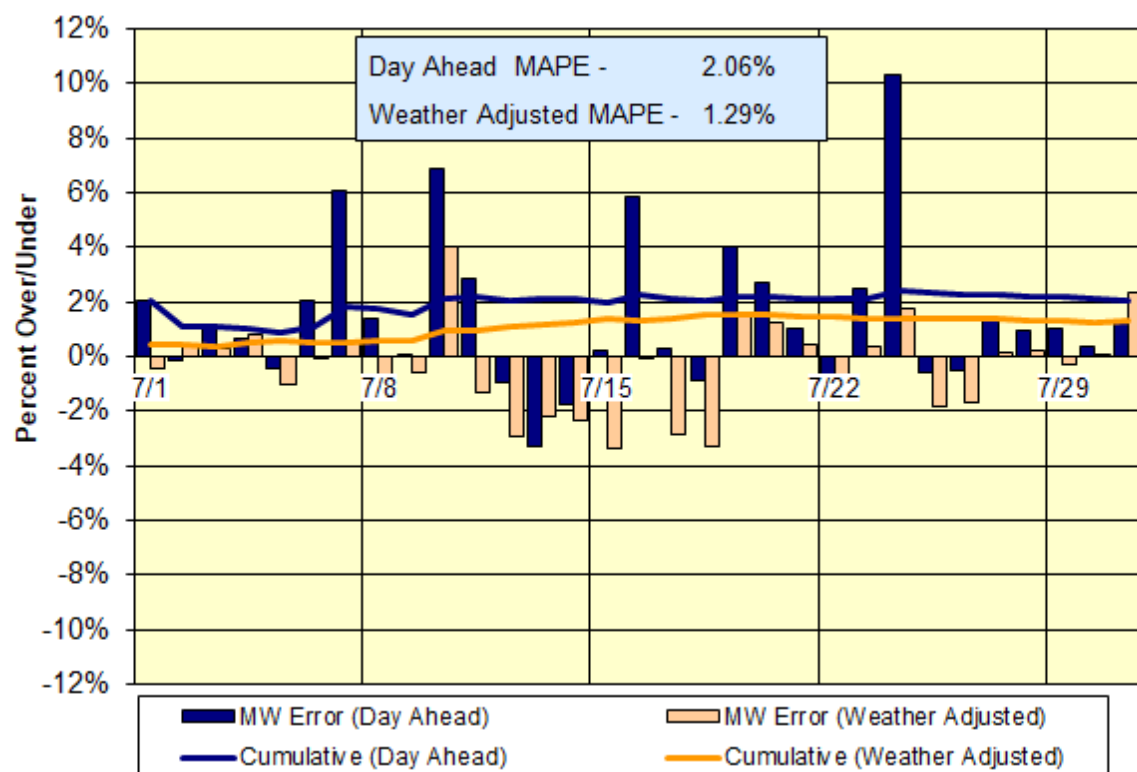
NYISO Daily Peak Load - July 2020
Actual vs. Weather-Adjusted Forecast



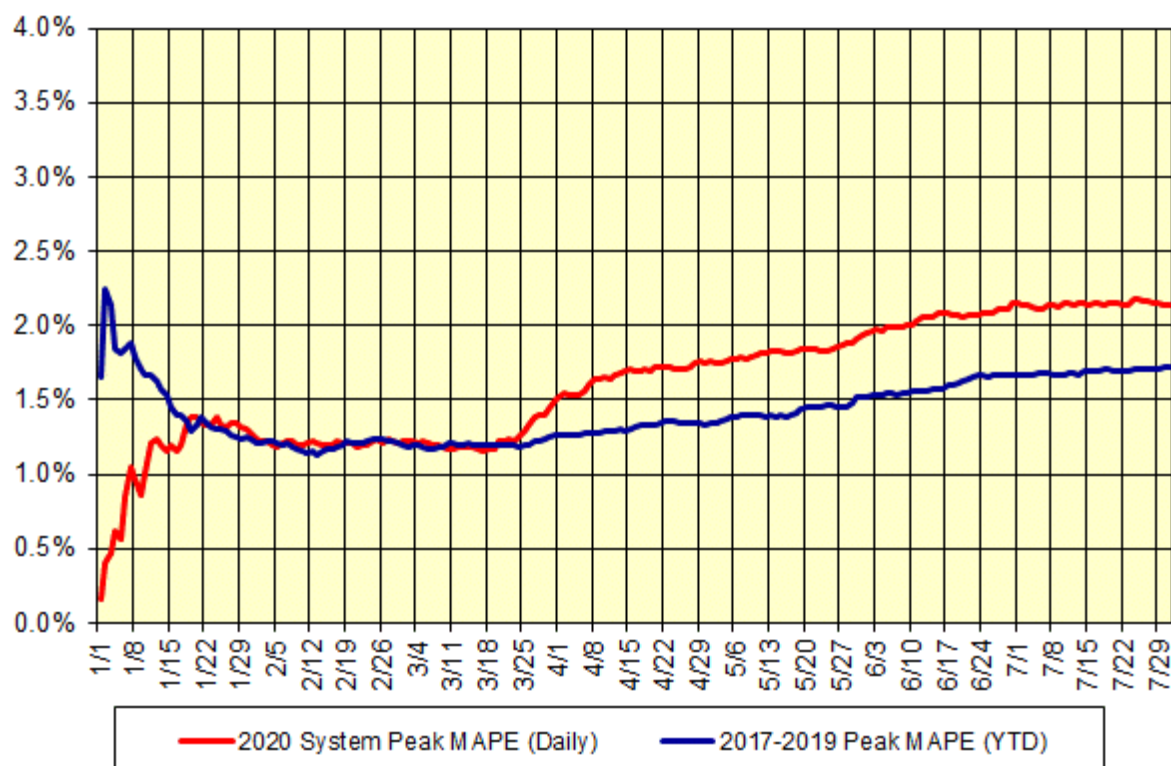
NYISO Daily Peak Load - July 2020
Actual vs. Forecast



Day Ahead Peak Forecast - July 2020 Percent Error - Actual & Weather-Adjusted



Day-Ahead Forecast Accuracy - Cumulative Performance 2020 Year-to-Date



**Summary Description of Regulatory Filings, Investigations,
Rulemakings and Related Orders in NYISO Matters – July 2020**

Filing Date	Filing Summary	Docket	Order Date	Order Summary
04/07/2020	NYISO compliance filing in response to the 02/20/2020 order re: the proposed Renewable Exemption under the buyer-side capacity market power mitigation measures	ER16-1404-001 ER16-1404-002	07/17/2020	Order accepted subject to condition NYISO's 04/07/2020 compliance filing in response to the 02/20/2020 order with the conditionally accepted tariff revisions to be effective for the Class Year 2019
05/18/2020	NYISO 205 filing on behalf of New York State Electric & Gas Corporation ("NYSEG") of an Engineering and Procurement Agreement (SA 2534) between NYSEG and New York Transco, LLC	ER20-1844-000	07/13/2020	Order accepted agreement effective 04/23/2020, as requested
07/01/2020	IRC filing of NOI comments re: virtualization and cloud computing services	RM20-8-000		
07/07/2020	NYISO 205 filing re: tariff revisions to implement tailored availability metric rules	ER20-2337-000		
07/09/2020	NYISO filing re: response to deficiency letter concerning tariff revisions related to Part A enhancements under the buyer-side market mitigation rules	ER20-1718-001		
07/09/2020	NYISO filing re: January-June 2020 Client Semi Annual (CSA) Report filed with the New York Joint Commission On Public Ethics (JCOPE)	No Docket No.		
07/17/2020	NYISO filing re: motion for Commission action on its 02/18/2020 ESR compliance filing and 01/21/2020 rehearing request and request for shortened answer period	ER19-467-000		
07/21/2020	NYISO filing re: 2 nd Quarter 2020 Electric Quarterly Report	ER02-2001-000		No order to be issued
07/24/2020	NYISO filing on behalf of Niagara Mohawk Power Corporation ("NMPC") re: amendment to the 06/15/2020 NMPC compliance filing of revisions to its transmission service charge under NYISO OATT Sections 14.1 and 14.2	ER20-2051-001		
07/30/2020	NYISO 205 filing re: revisions to clarify the process of calculating the minimum installed capacity requirement and defining a new term: NYCA Peak Load Forecast	ER20-2555-000		