

Operations Performance Metrics Monthly Report



June 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 July 9, 2021.

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June 2021 Operations Performance Highlights

- Peak load of 30,919 MW occurred on 06/29/2021 HB 17
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 19 hours of Thunder Storm Alerts were declared
- 0 hours of NERC TLR level 3 curtailment
- 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.

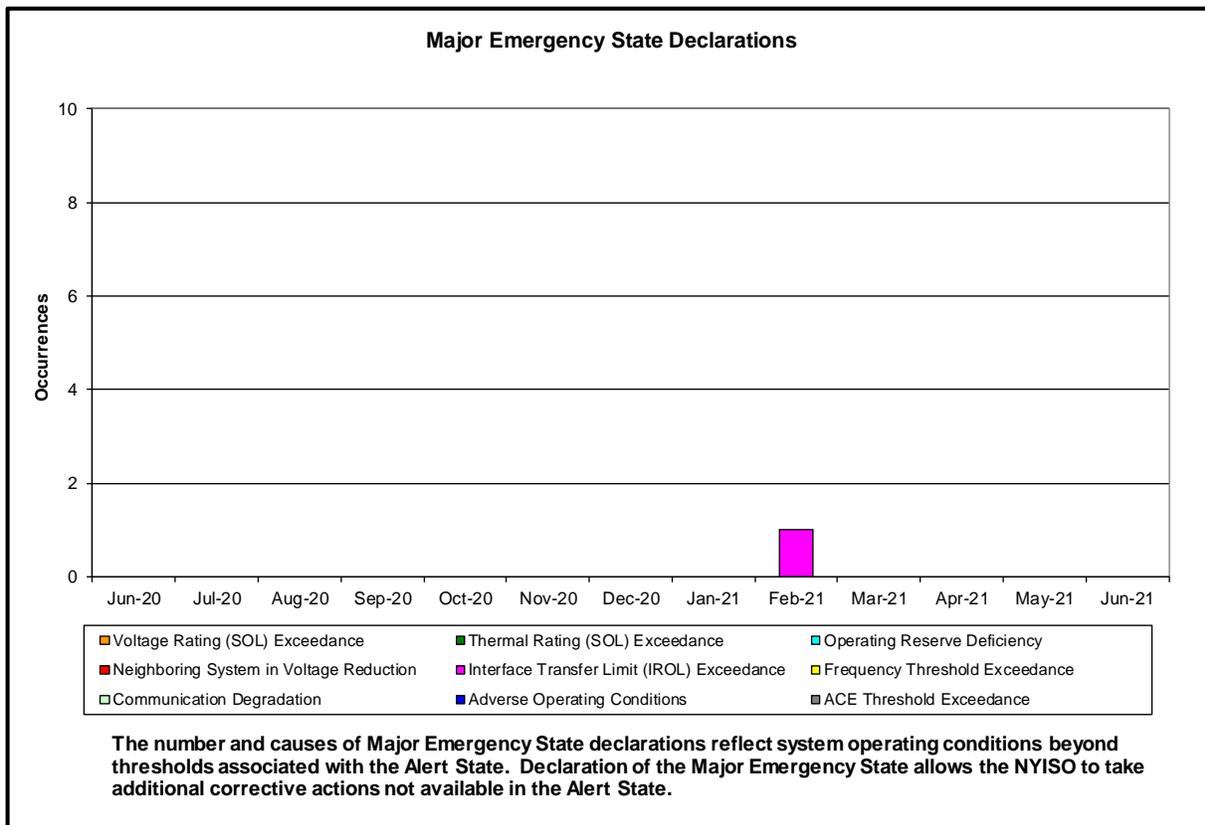
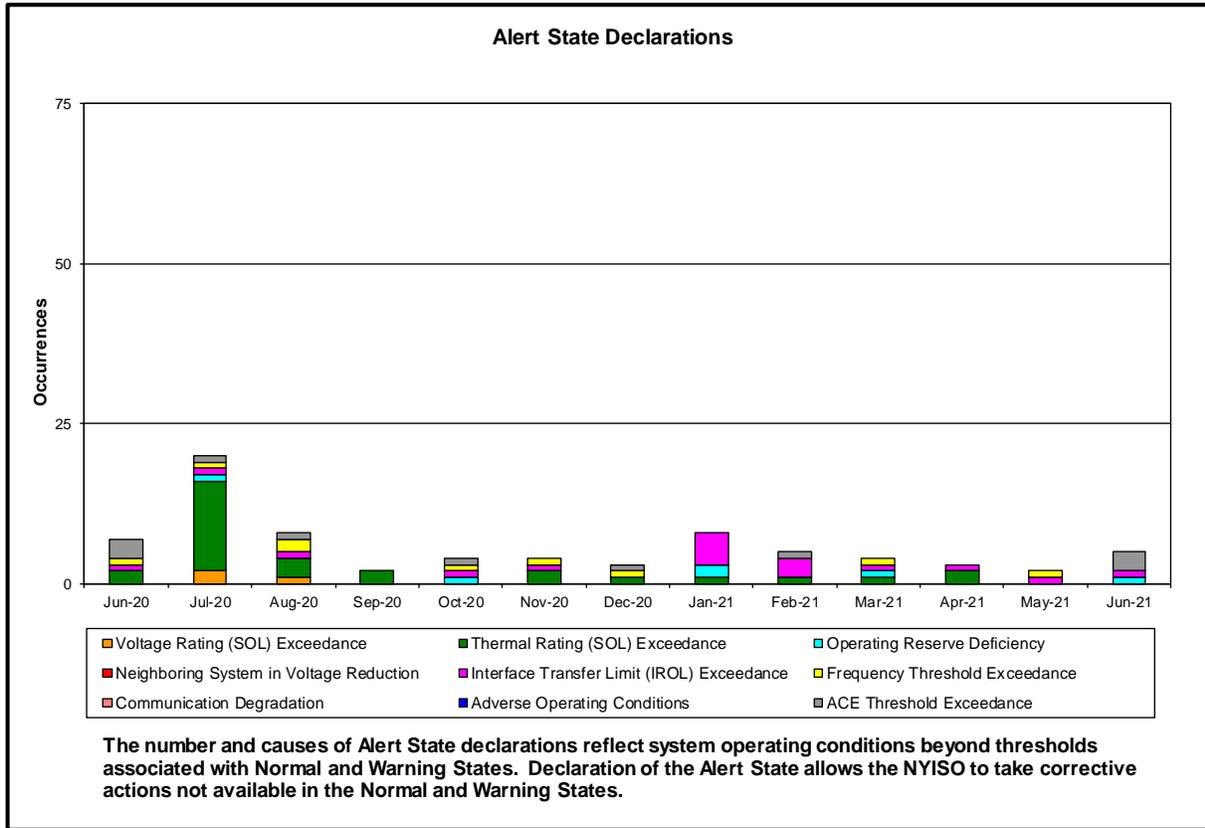
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$0.04	\$11.20
NY Savings from PJM-NY Coordinated Transaction Scheduling	\$0.09	\$1.15
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.33	(\$2.30)
Total NY Savings	\$0.46	\$10.05
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.84	\$2.72
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.16	(\$0.21)
Total Regional Savings	\$0.99	\$2.51

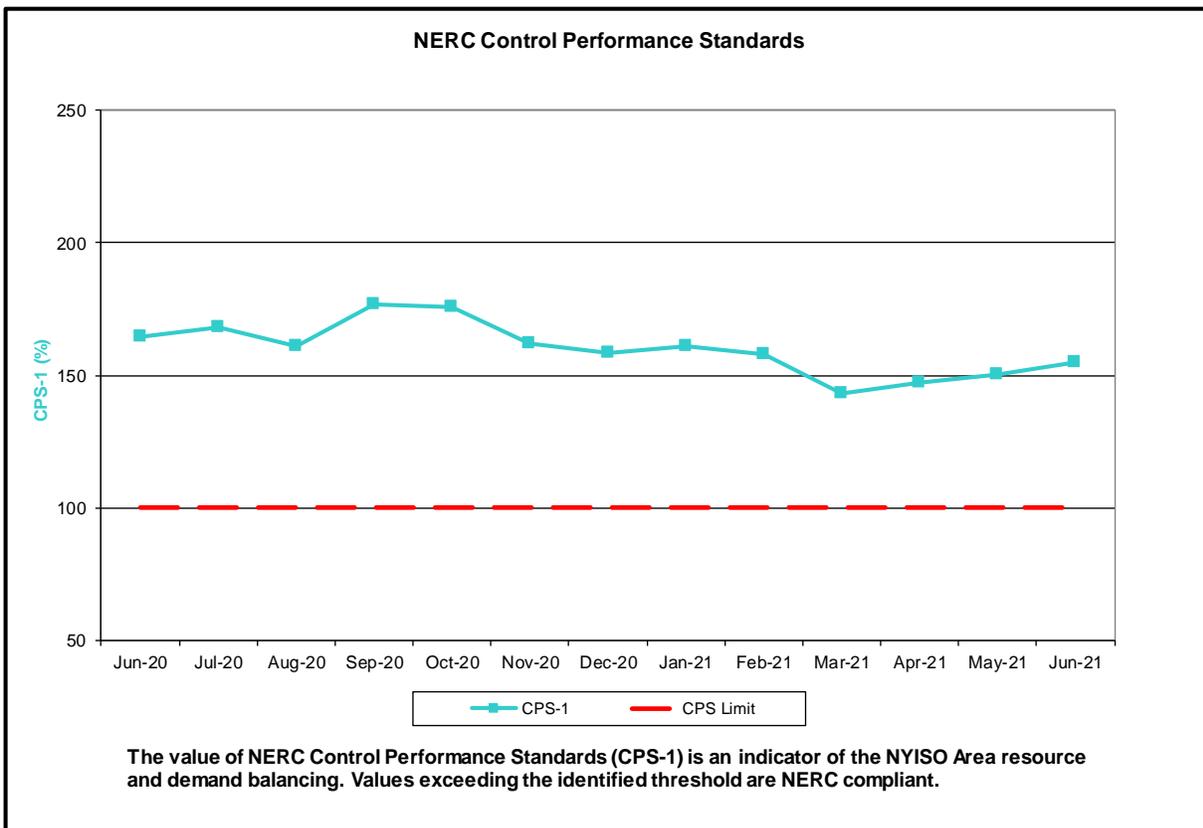
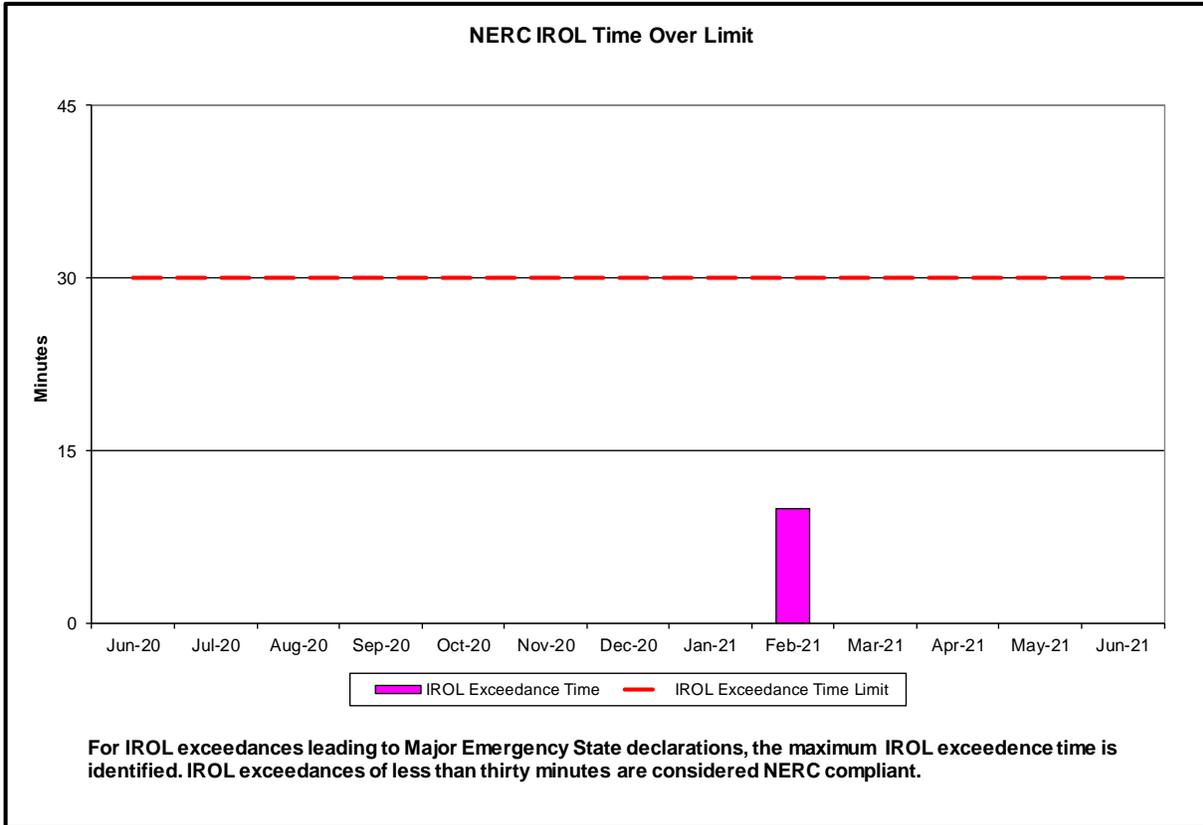
- Statewide uplift cost monthly average was (\$0.68)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

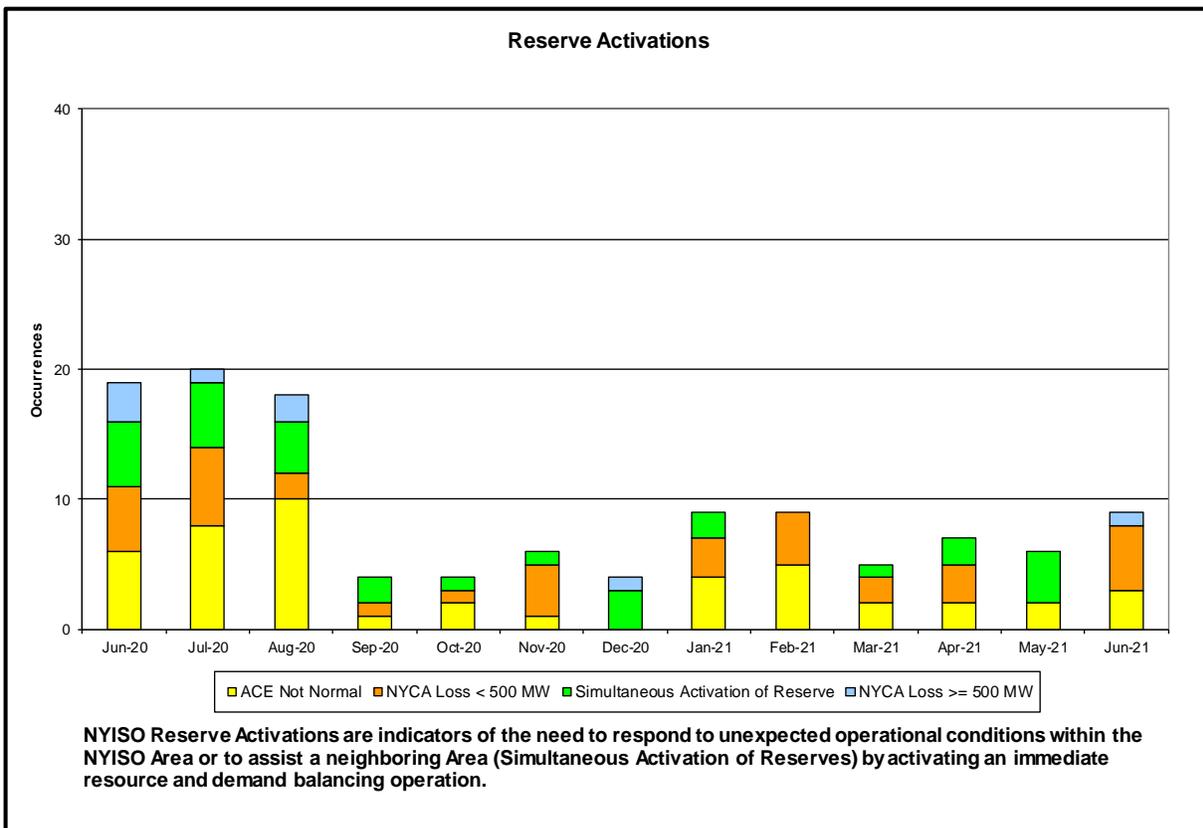
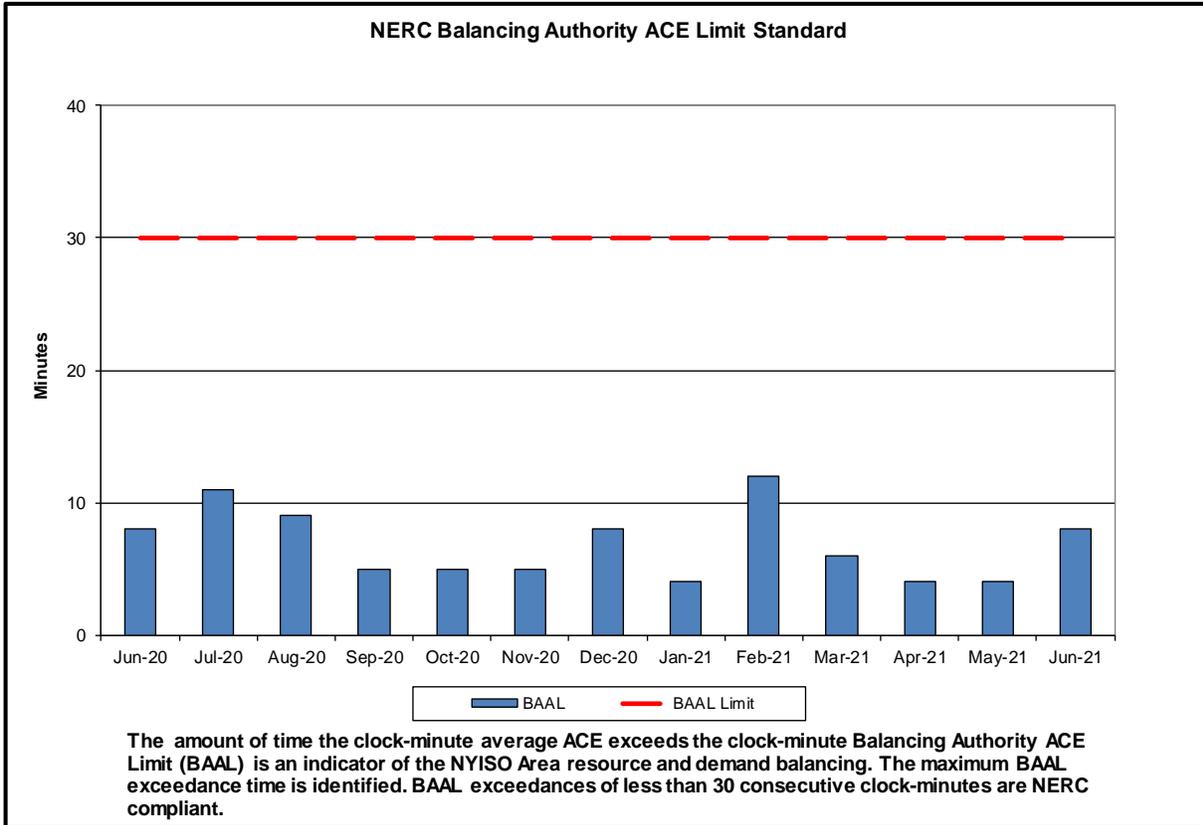
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
July 2021 Spot Price	\$5.50	\$5.50	\$5.50	\$9.29
June 2021 Spot Price	\$5.32	\$5.32	\$5.32	\$9.34
Delta	\$0.18	\$0.18	\$0.18	(\$0.05)

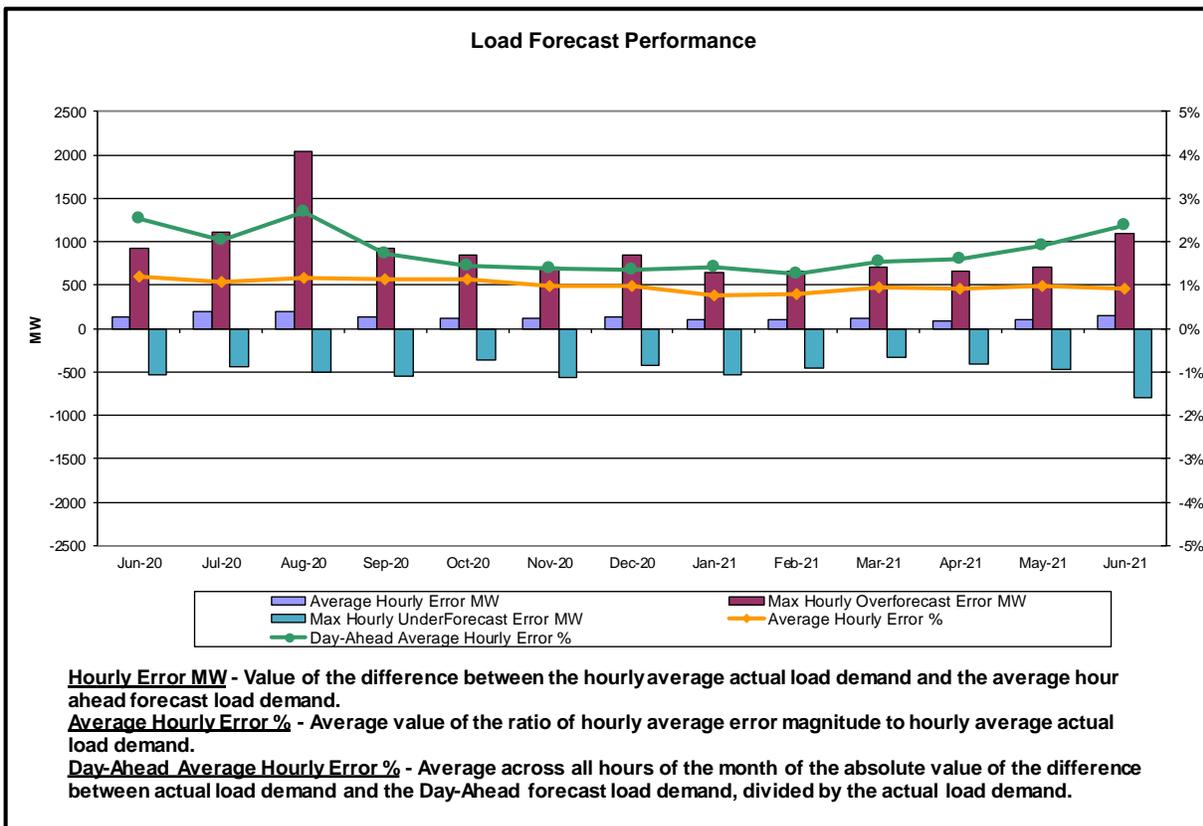
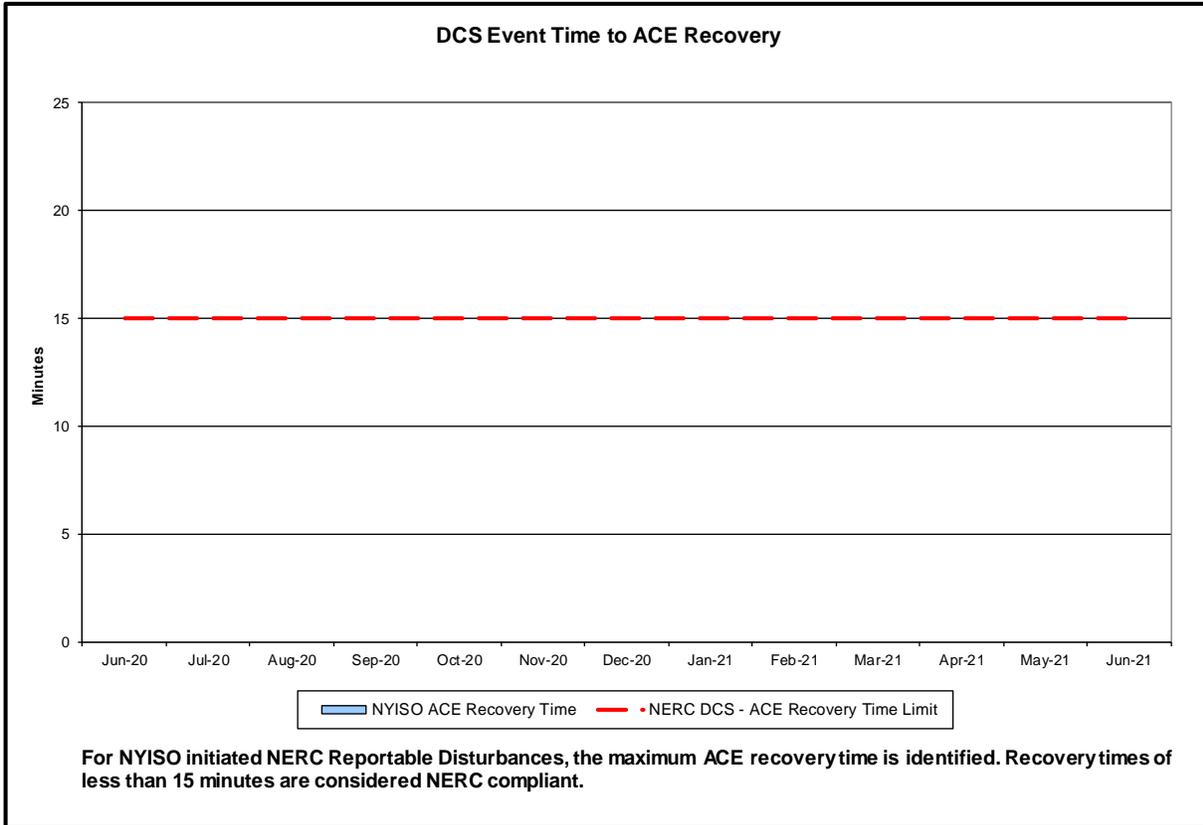
- NYCA, Lower Hudson Valley (GHIJ), and New York City (NYC) localities experienced a \$0.18 clearing price increase due to an increase in unsold MWs in Rest-of-State (ROS).

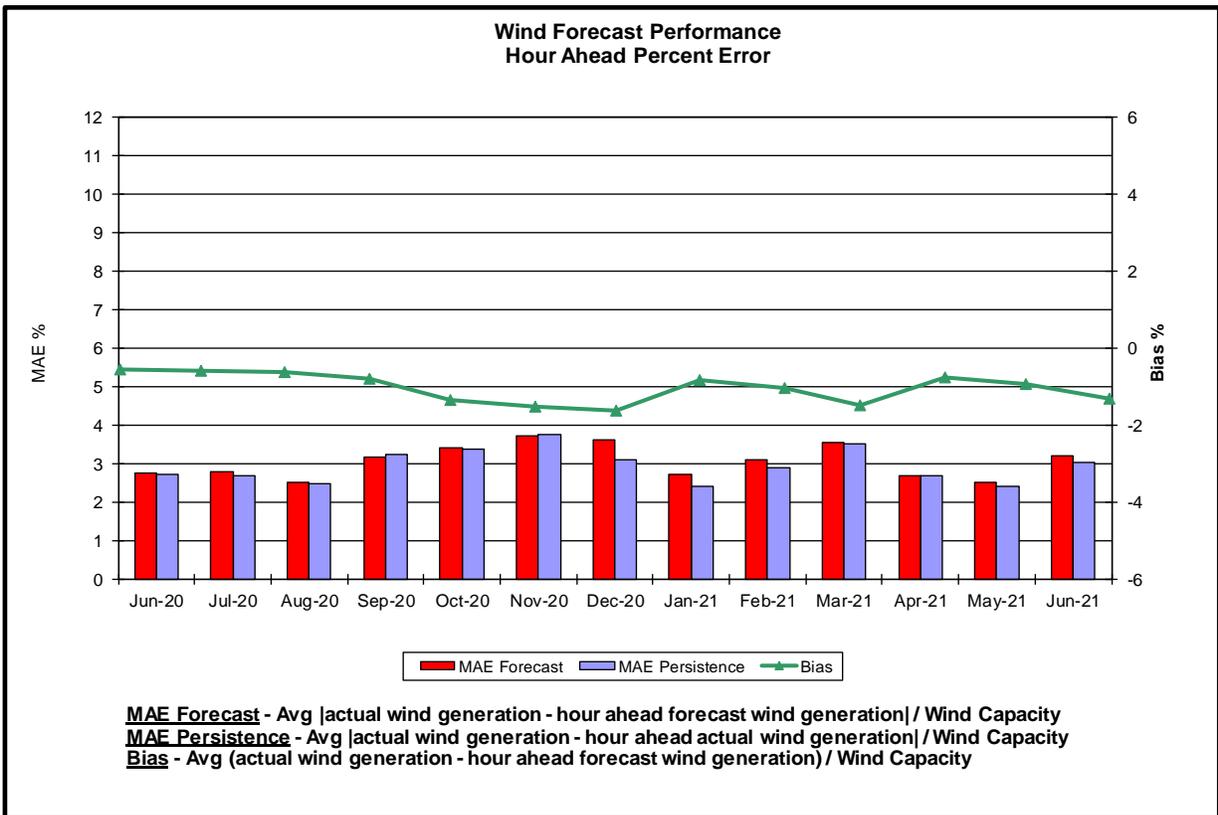
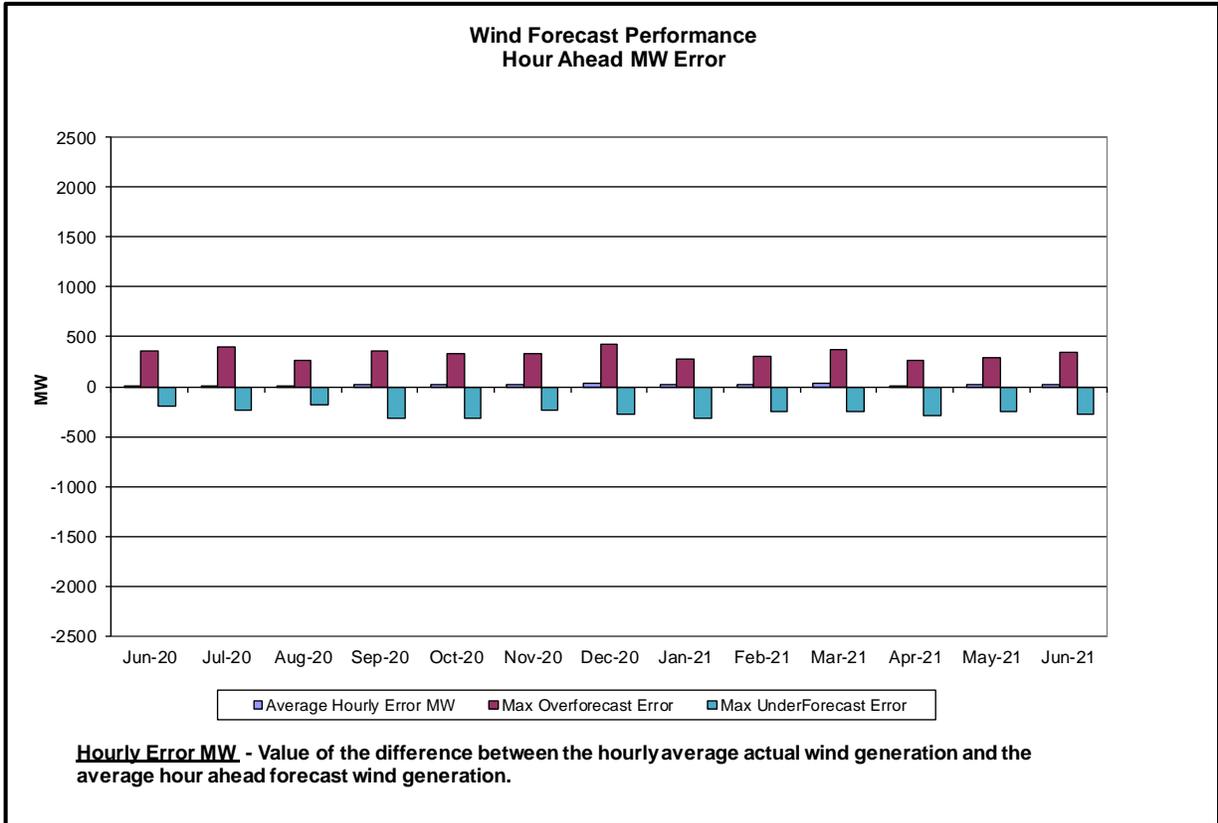
Reliability Performance Metrics

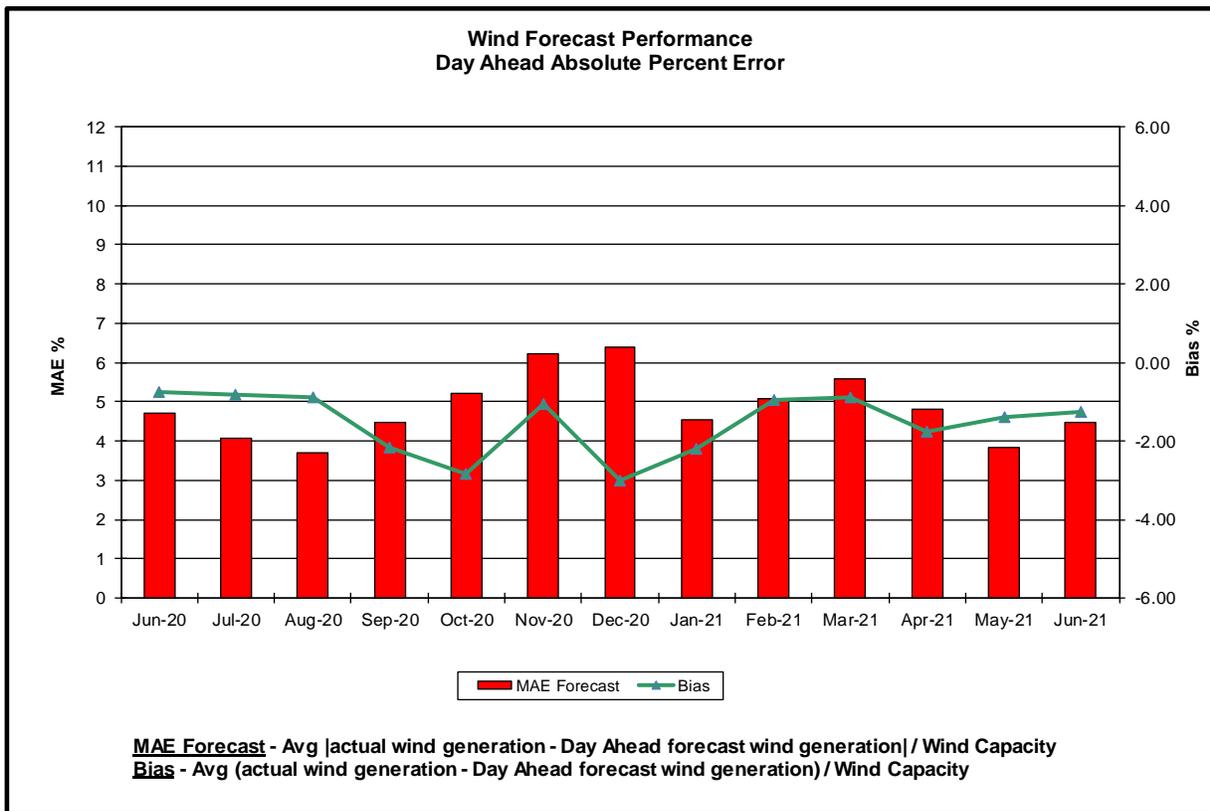
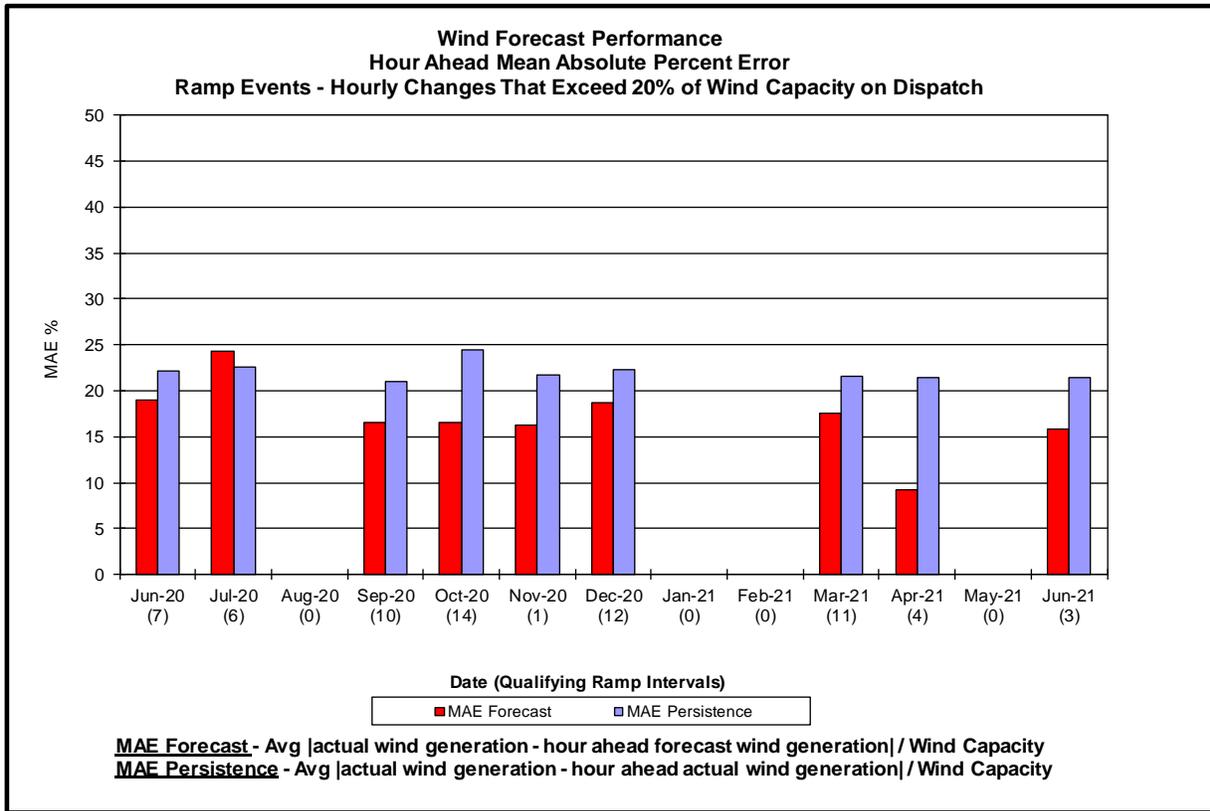


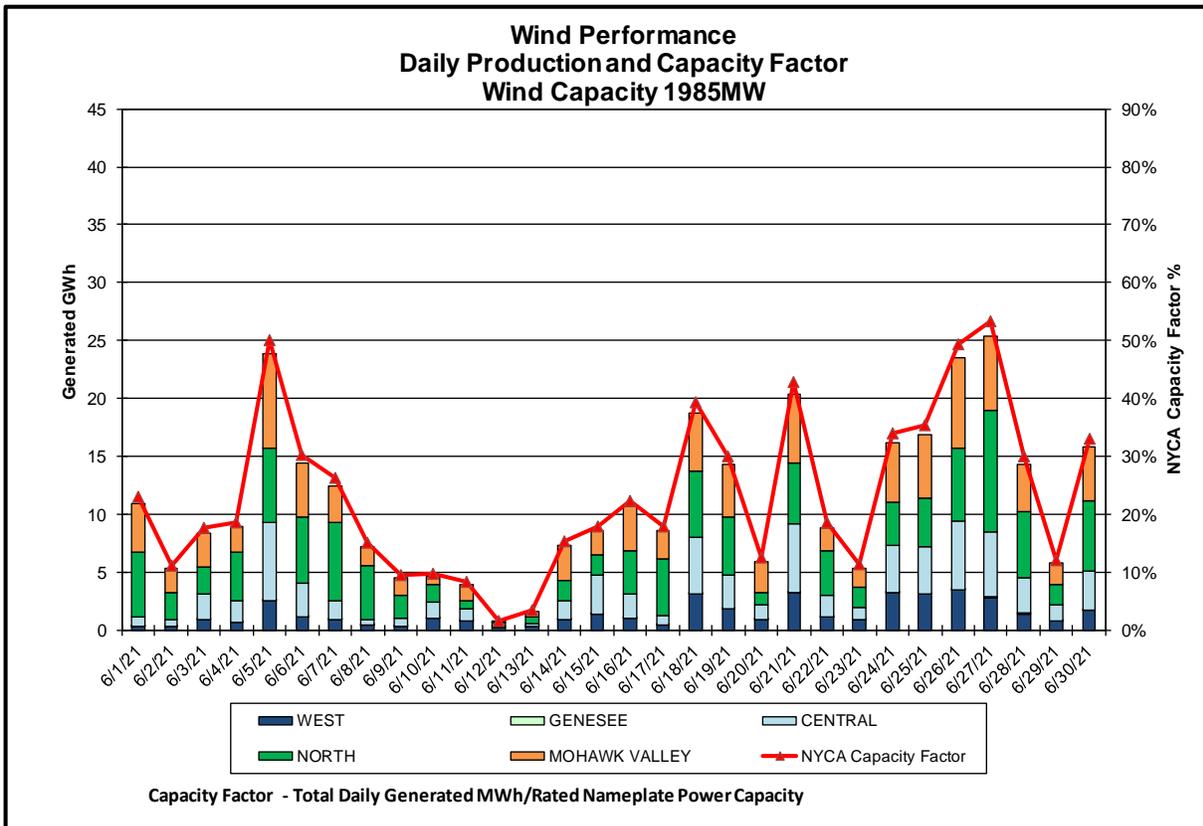
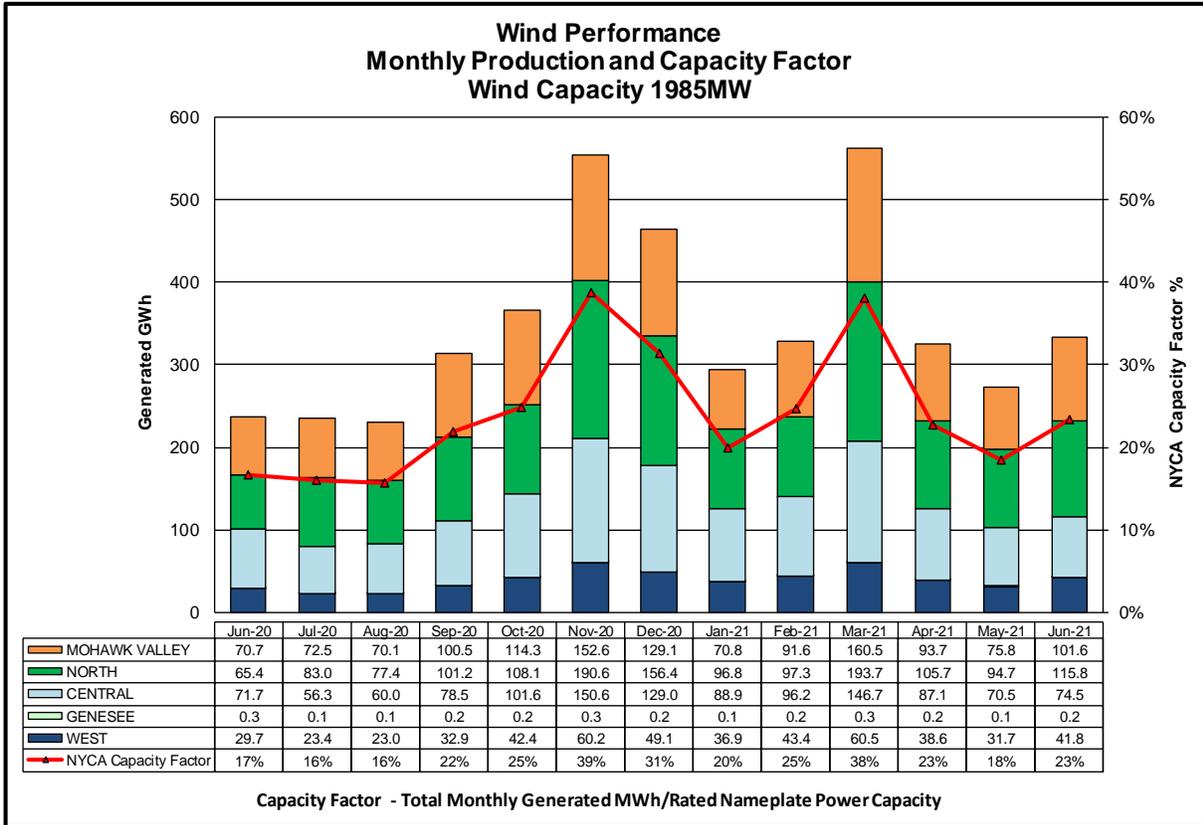


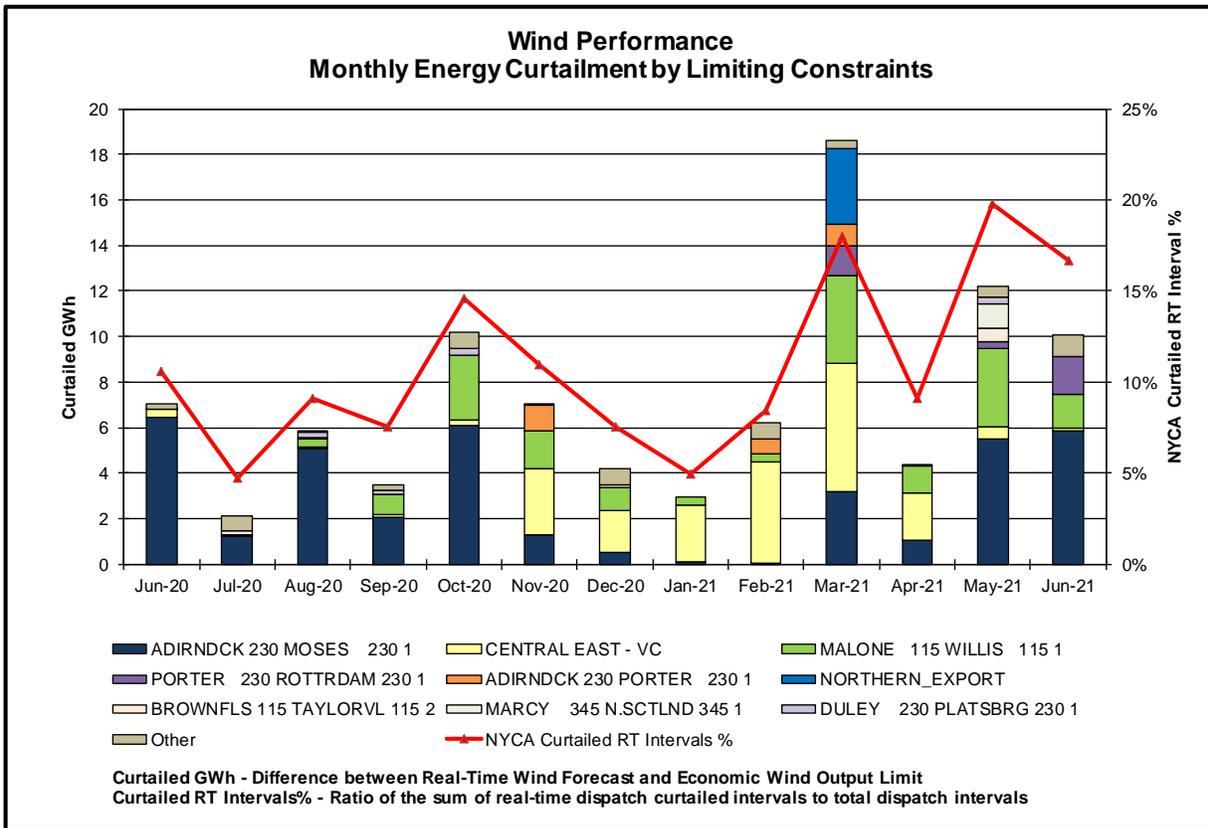
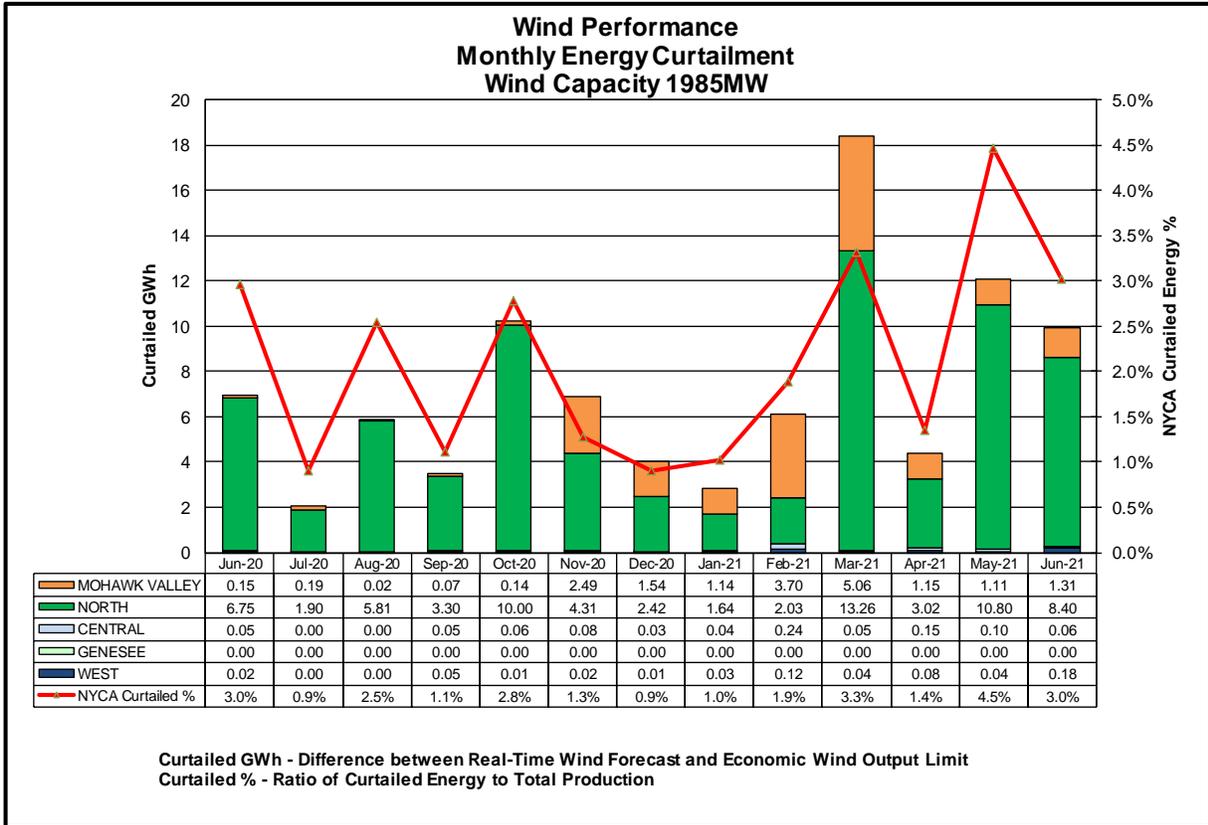


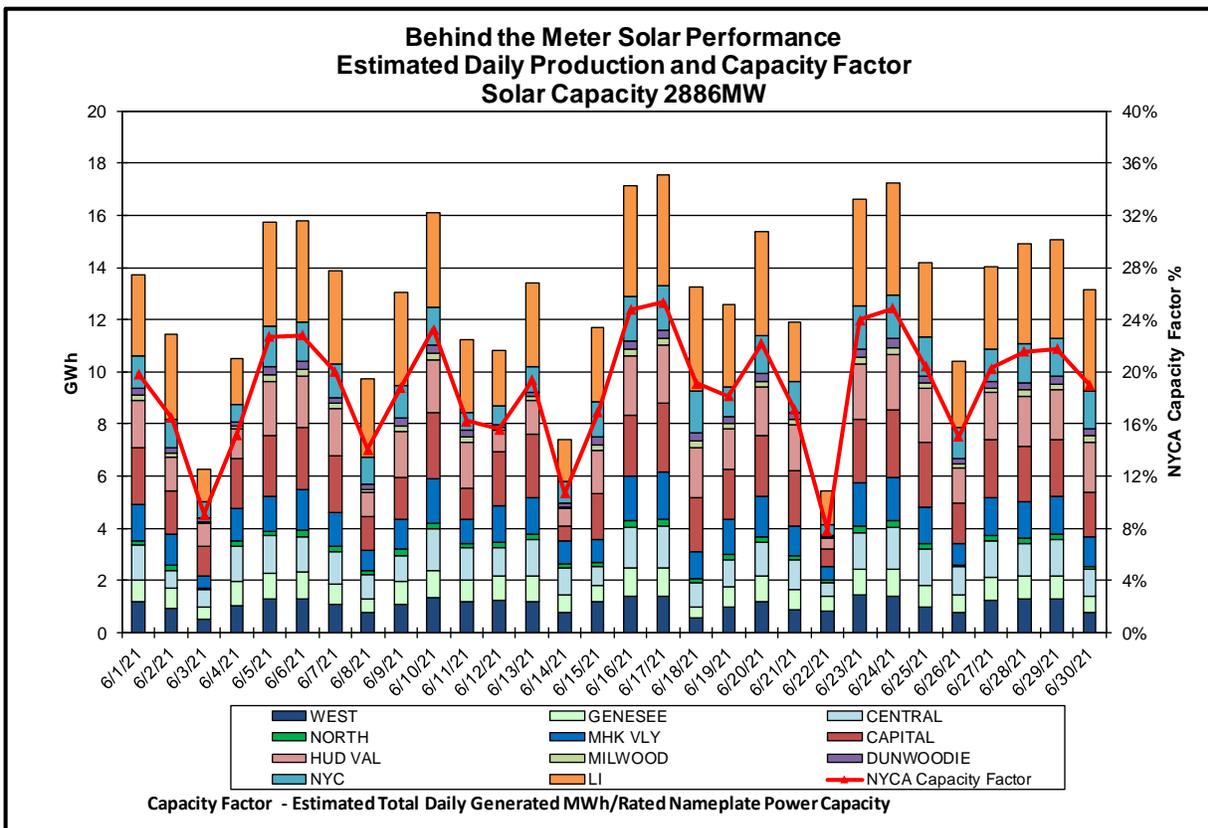
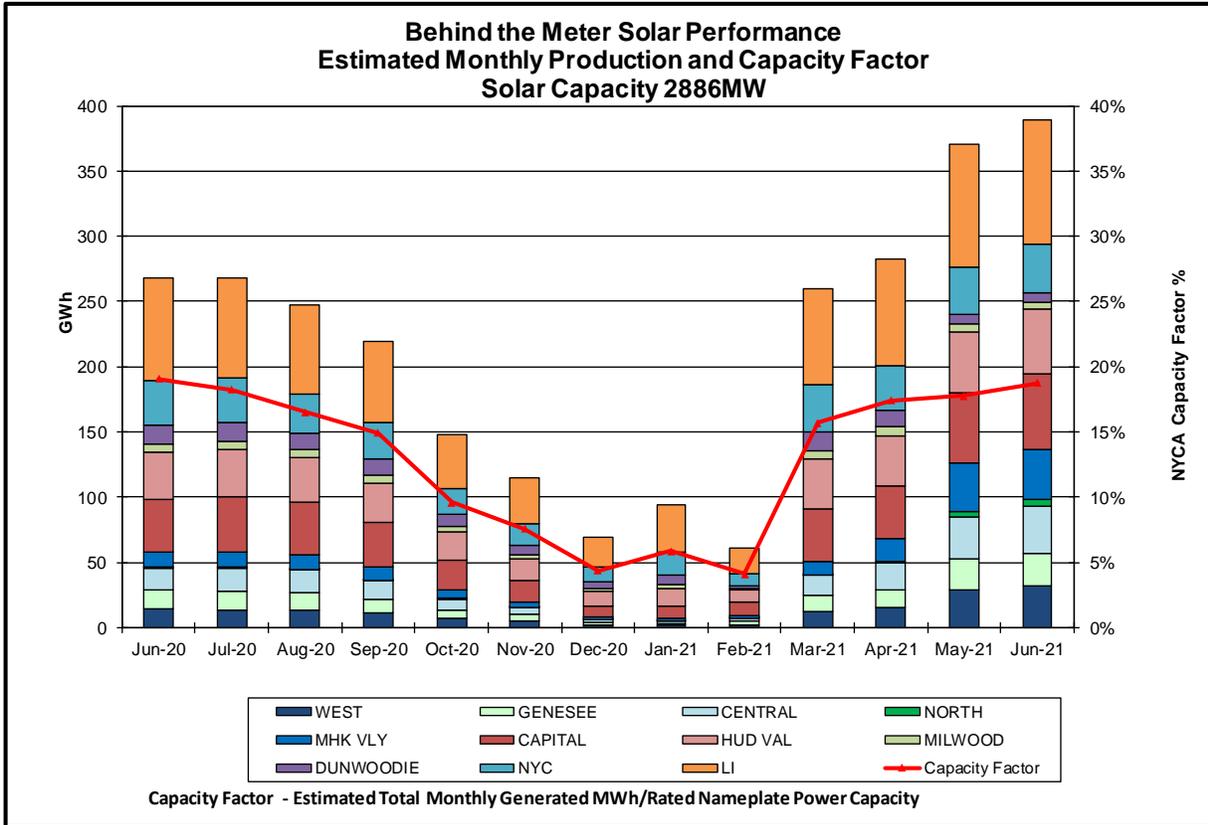


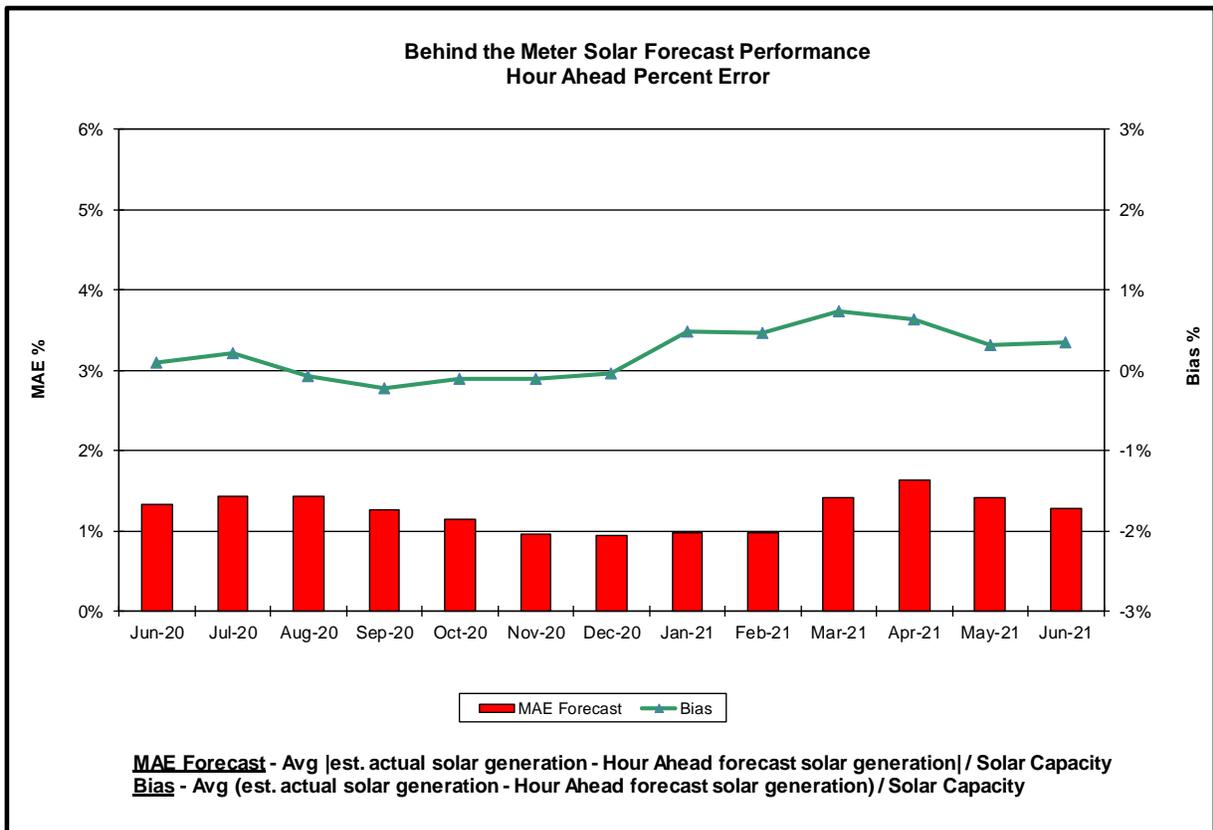
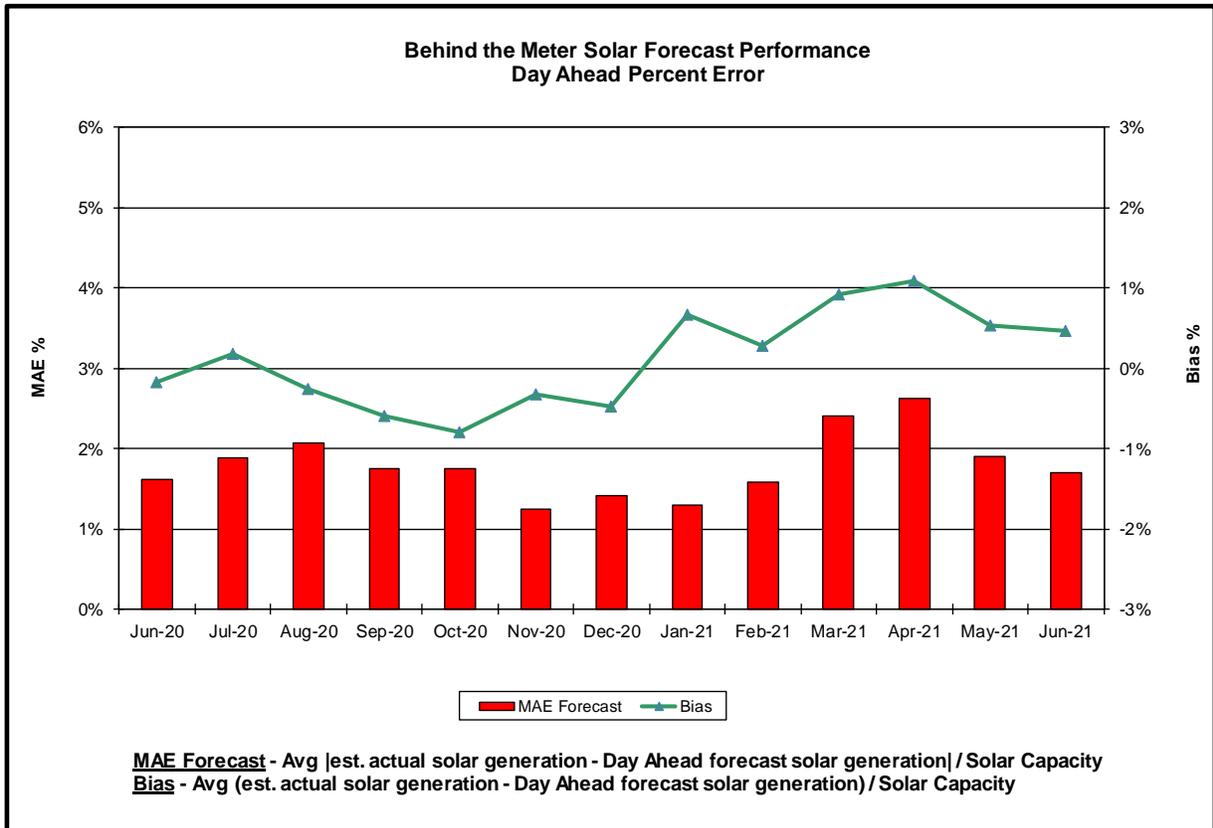


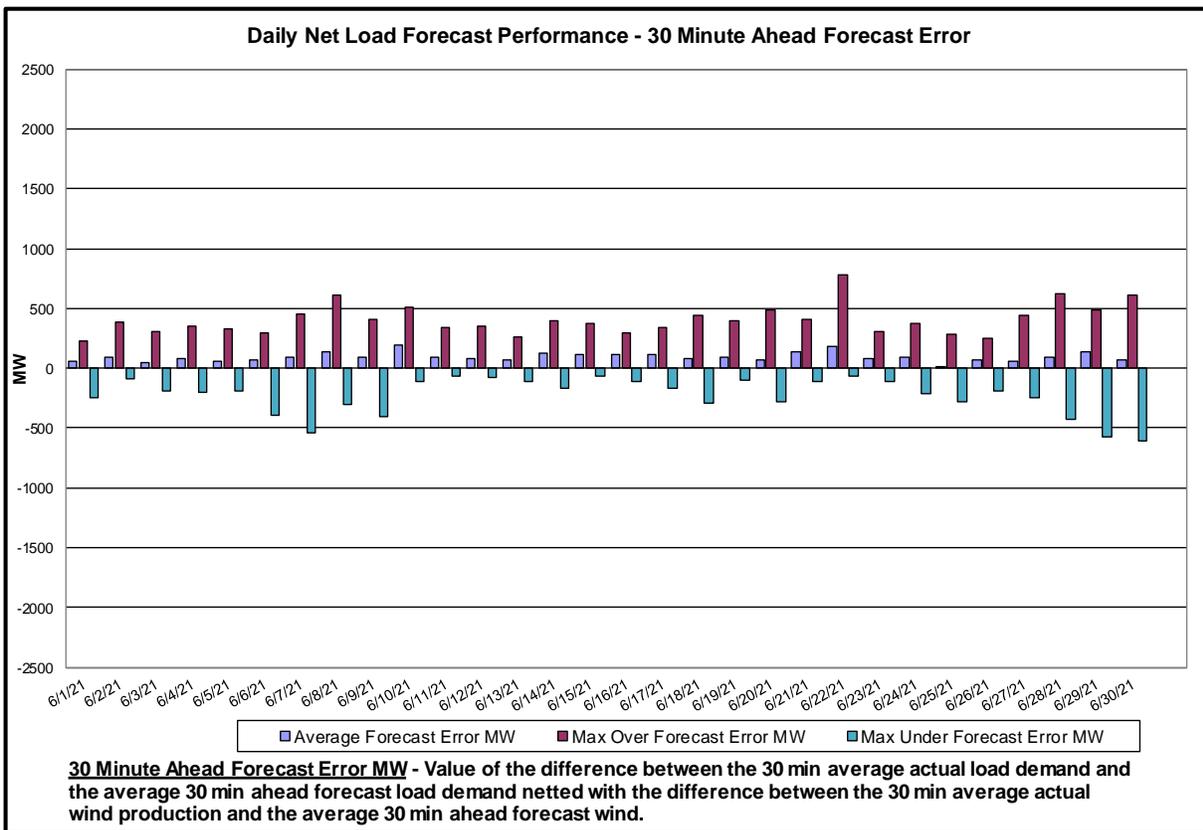
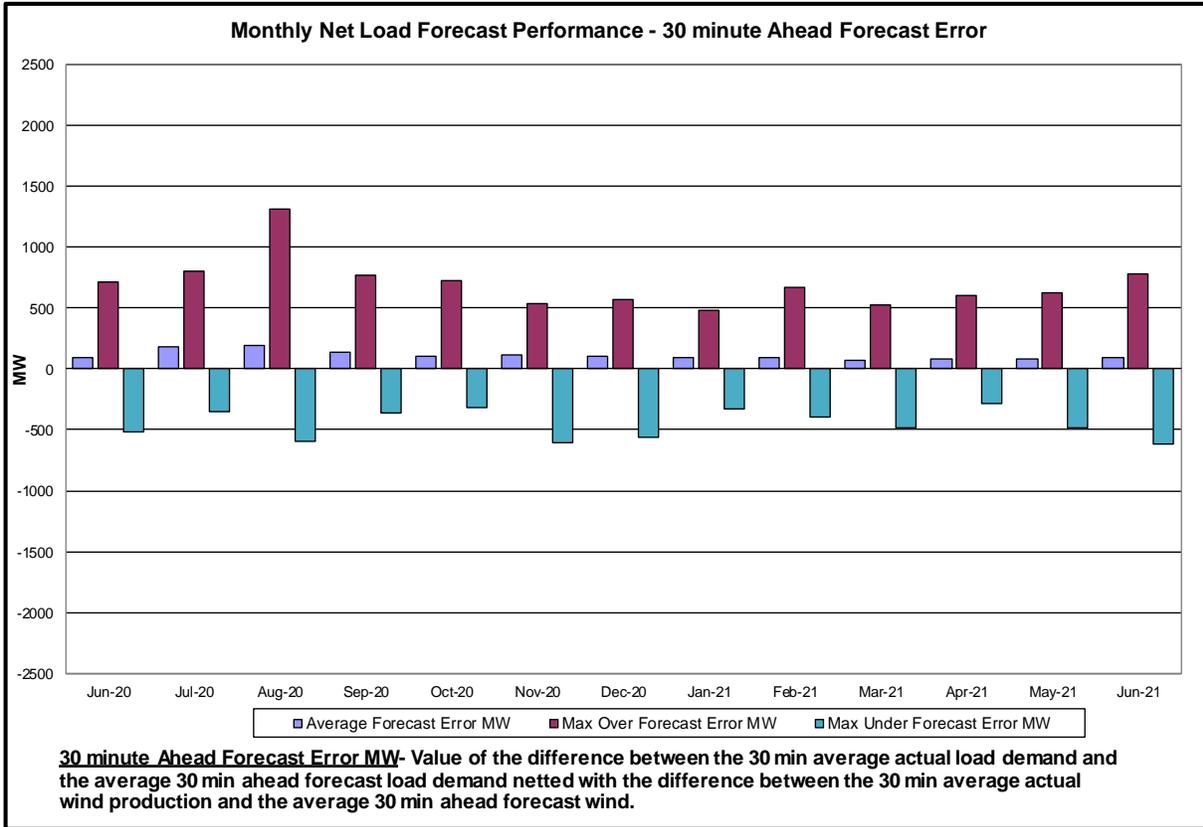


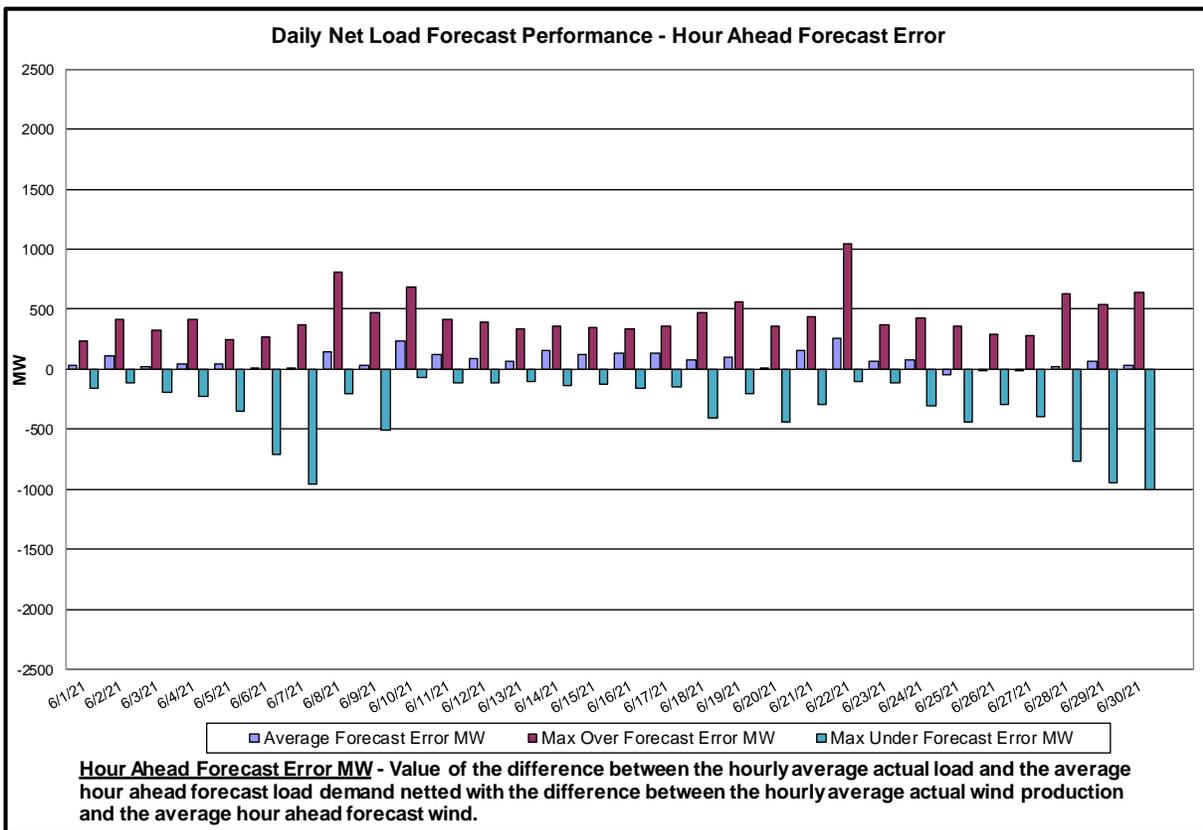
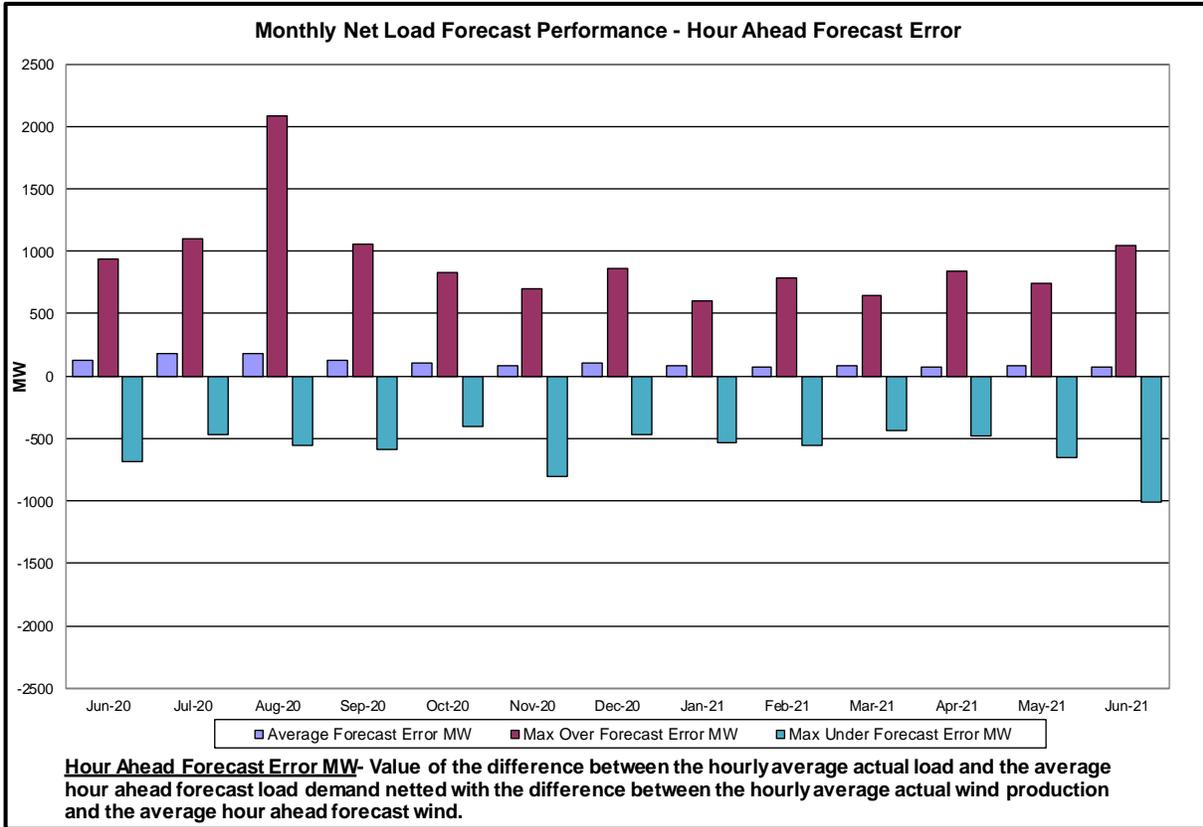


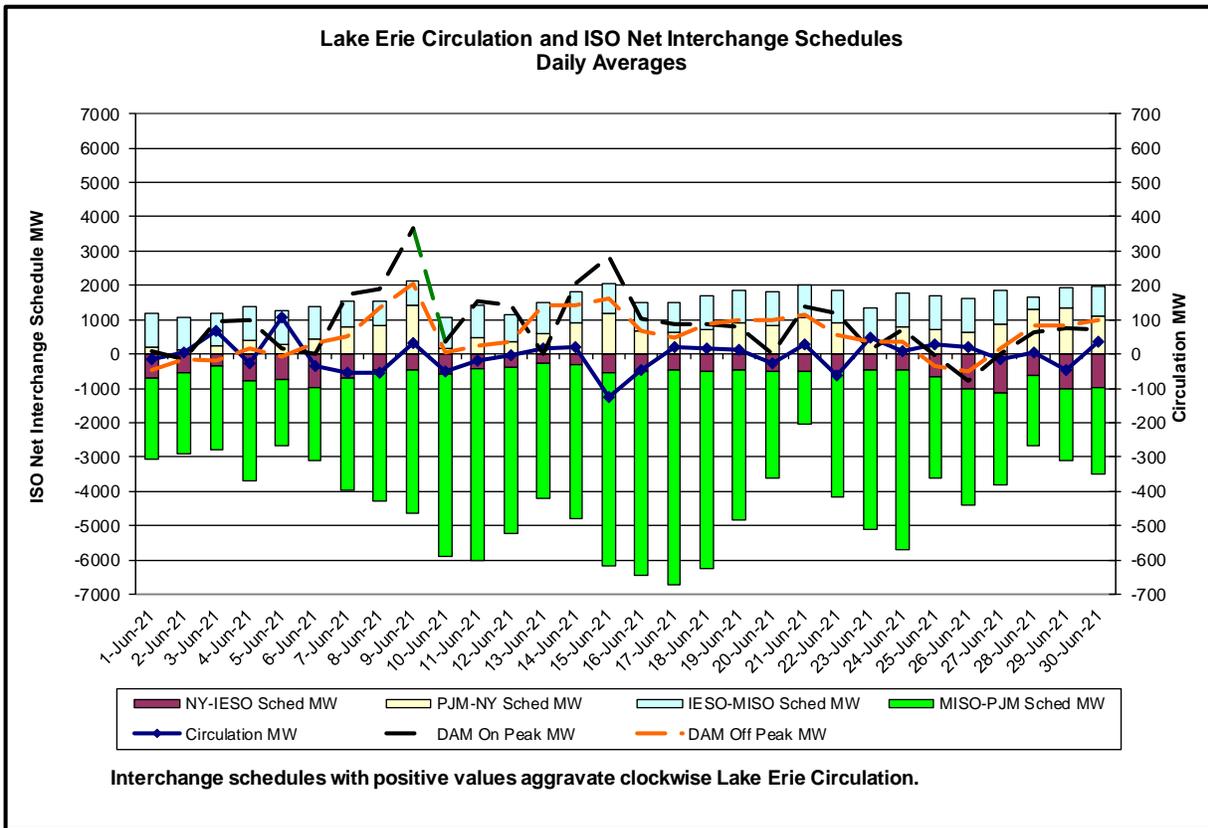
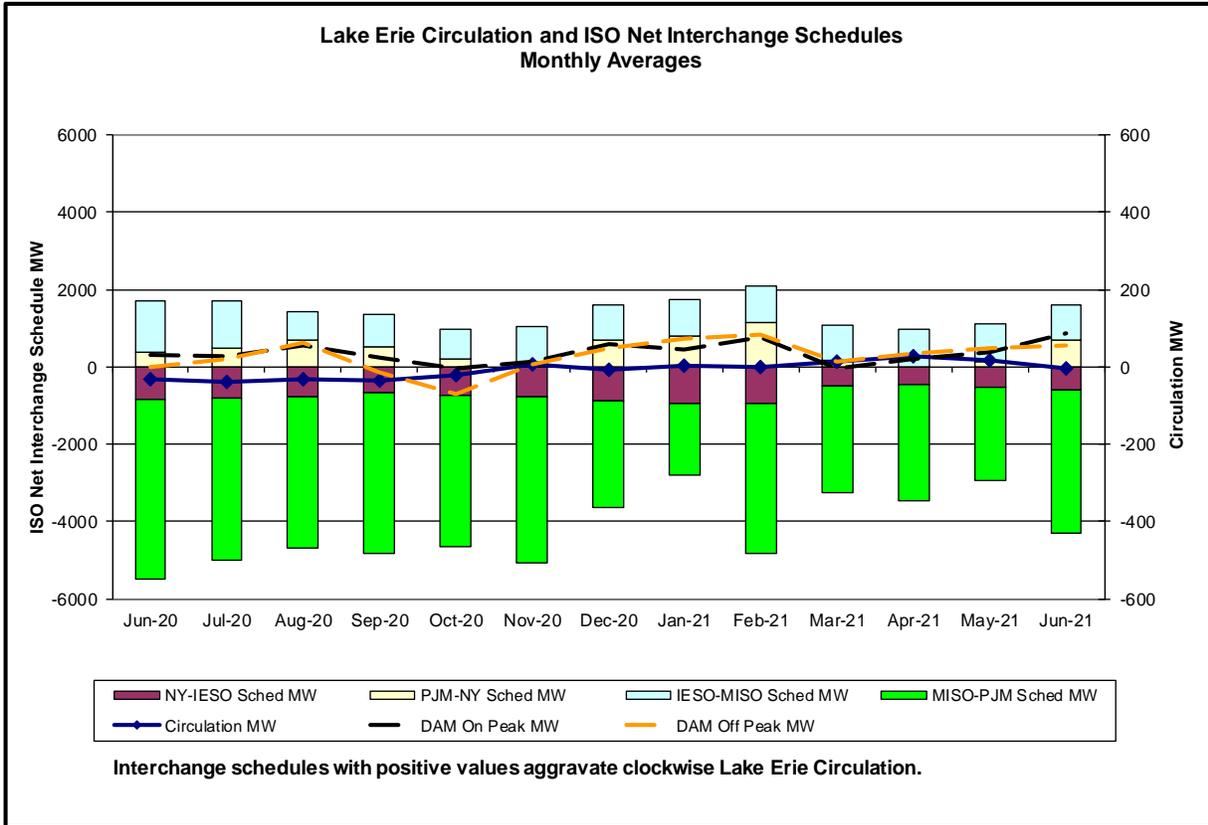




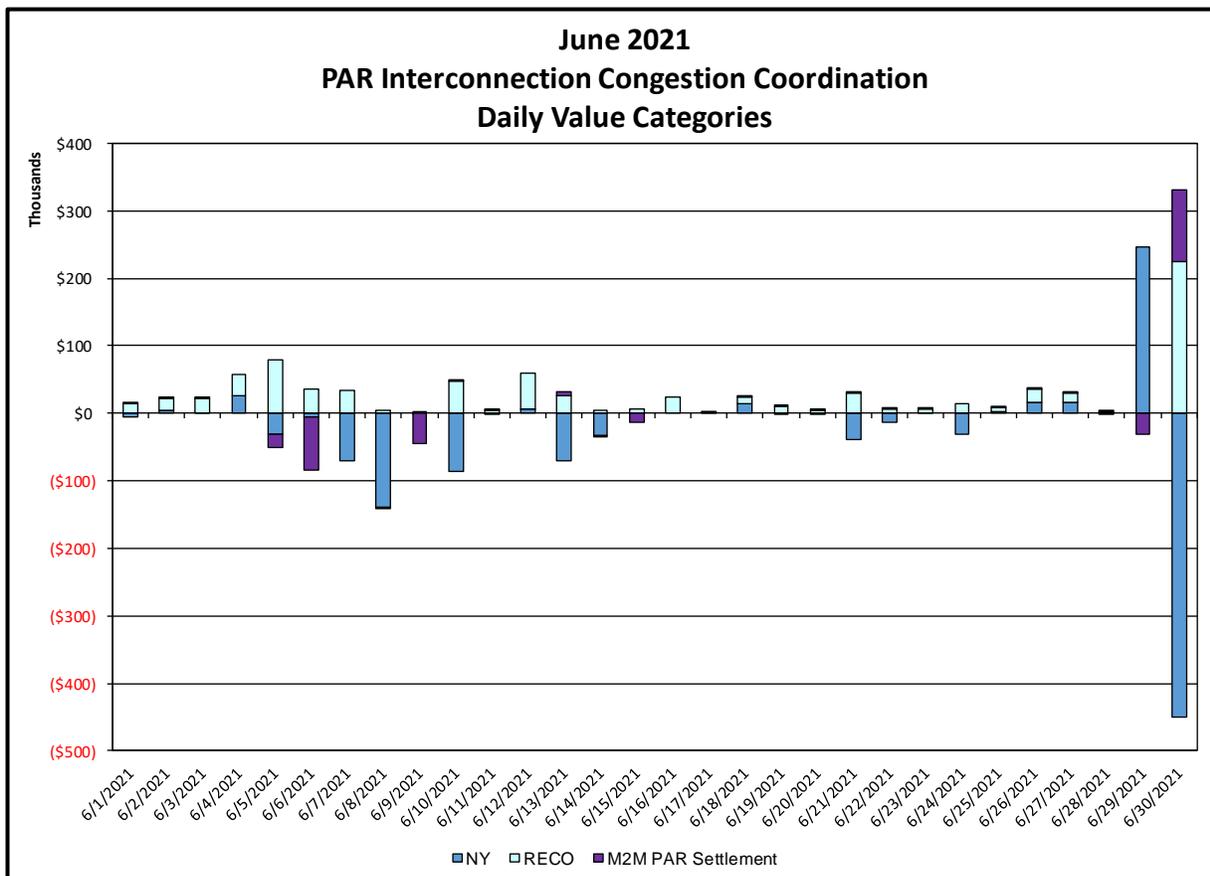
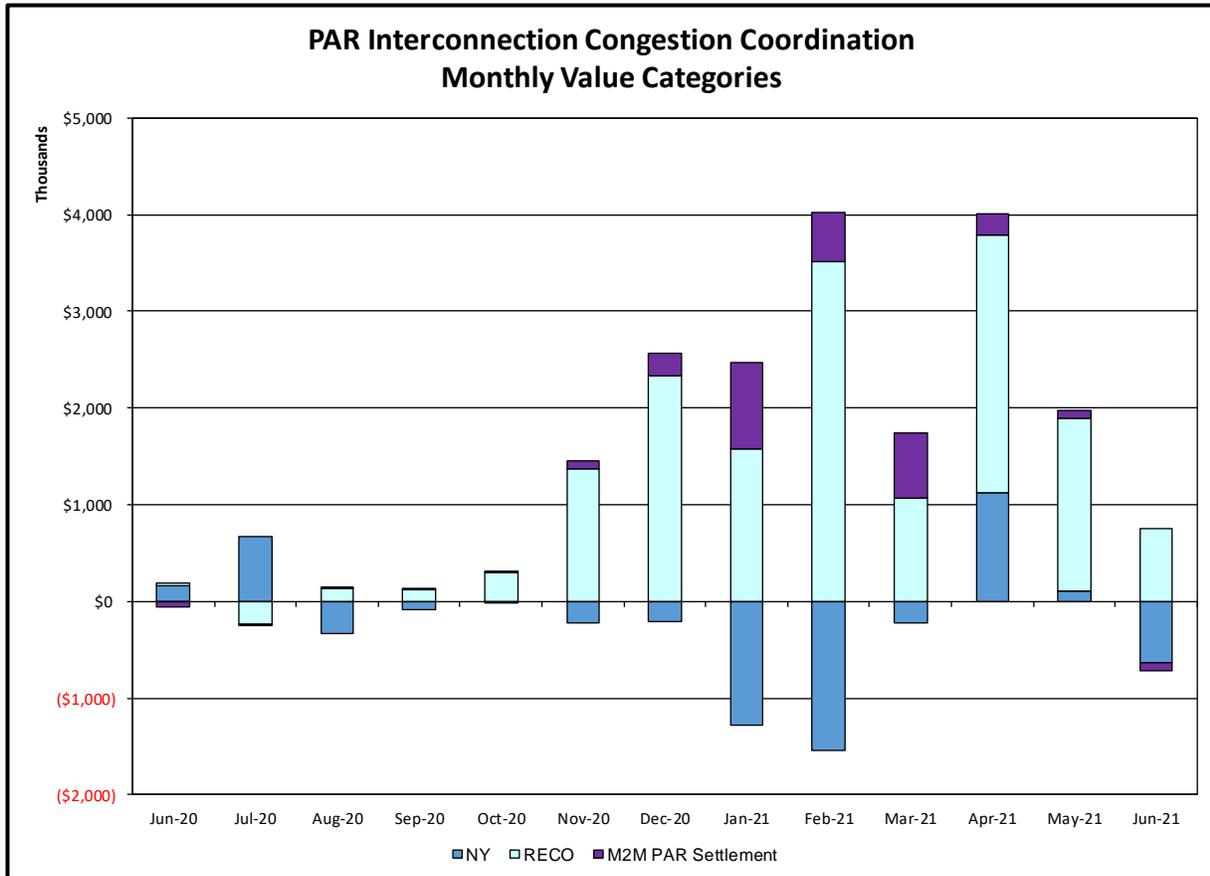






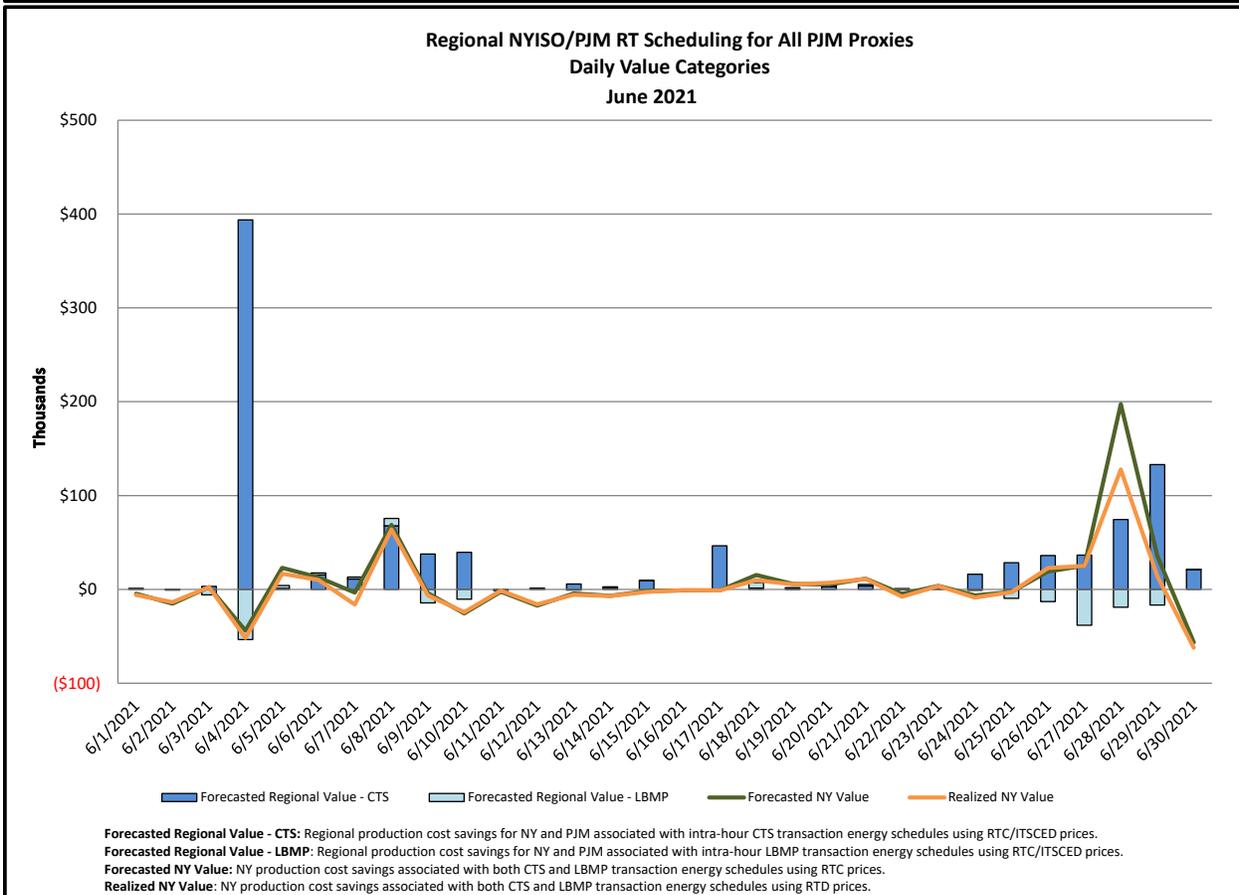
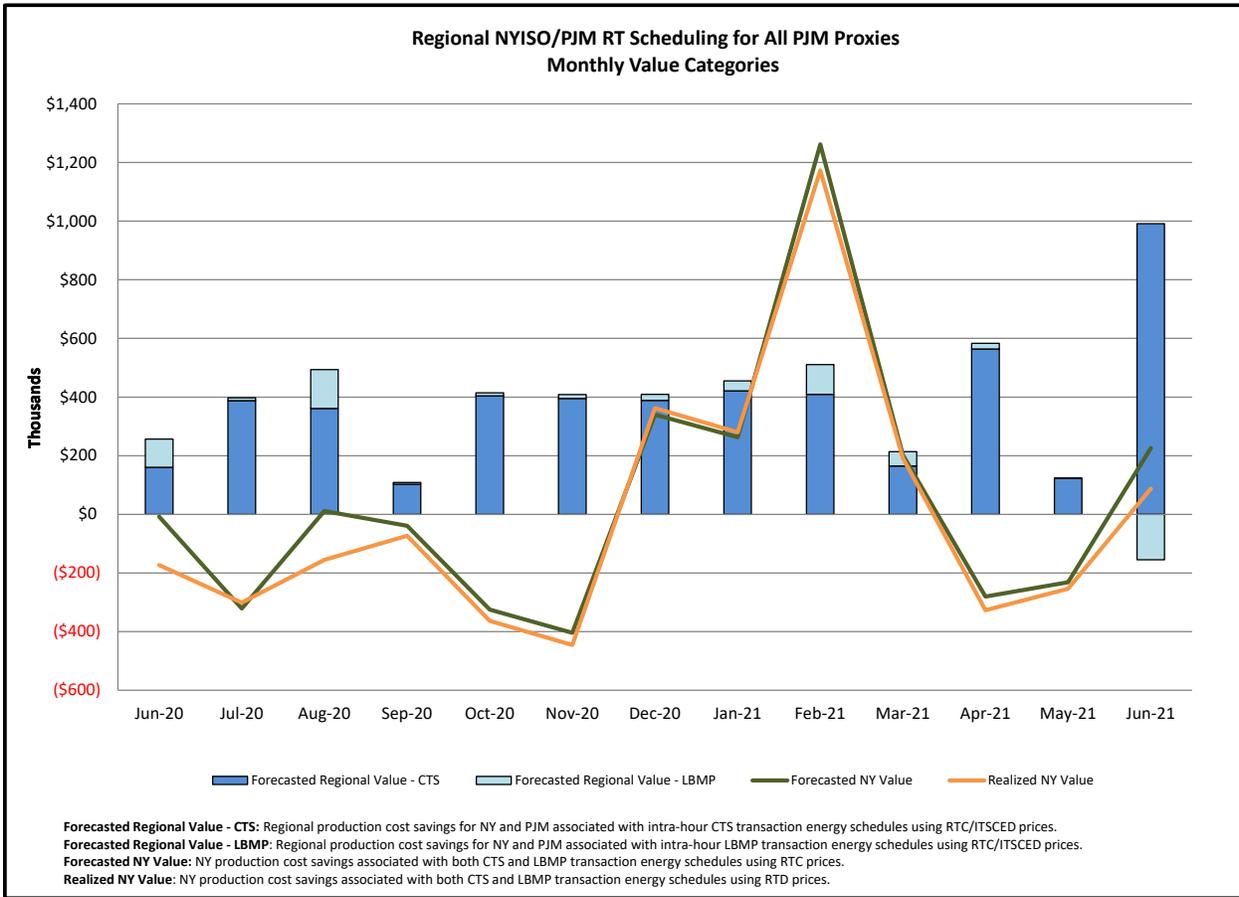


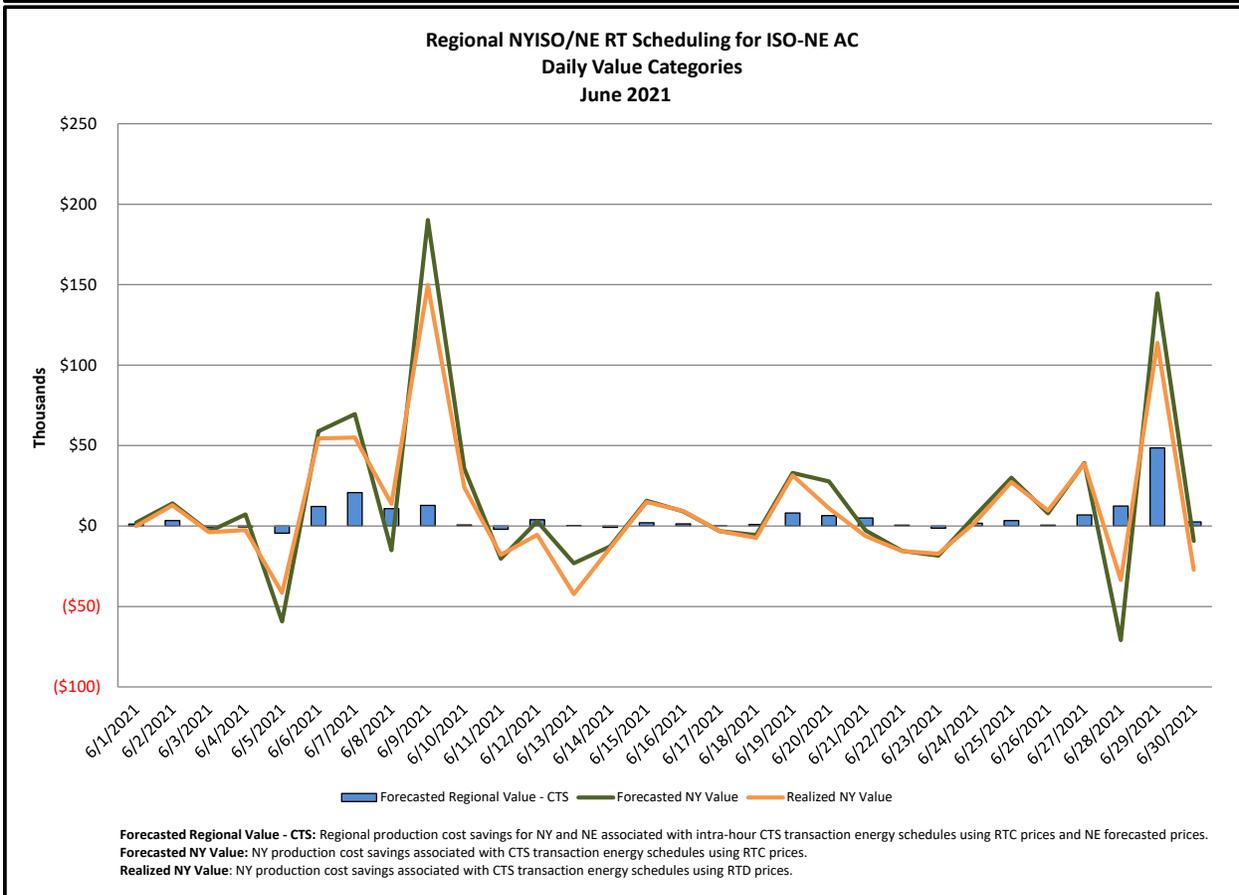
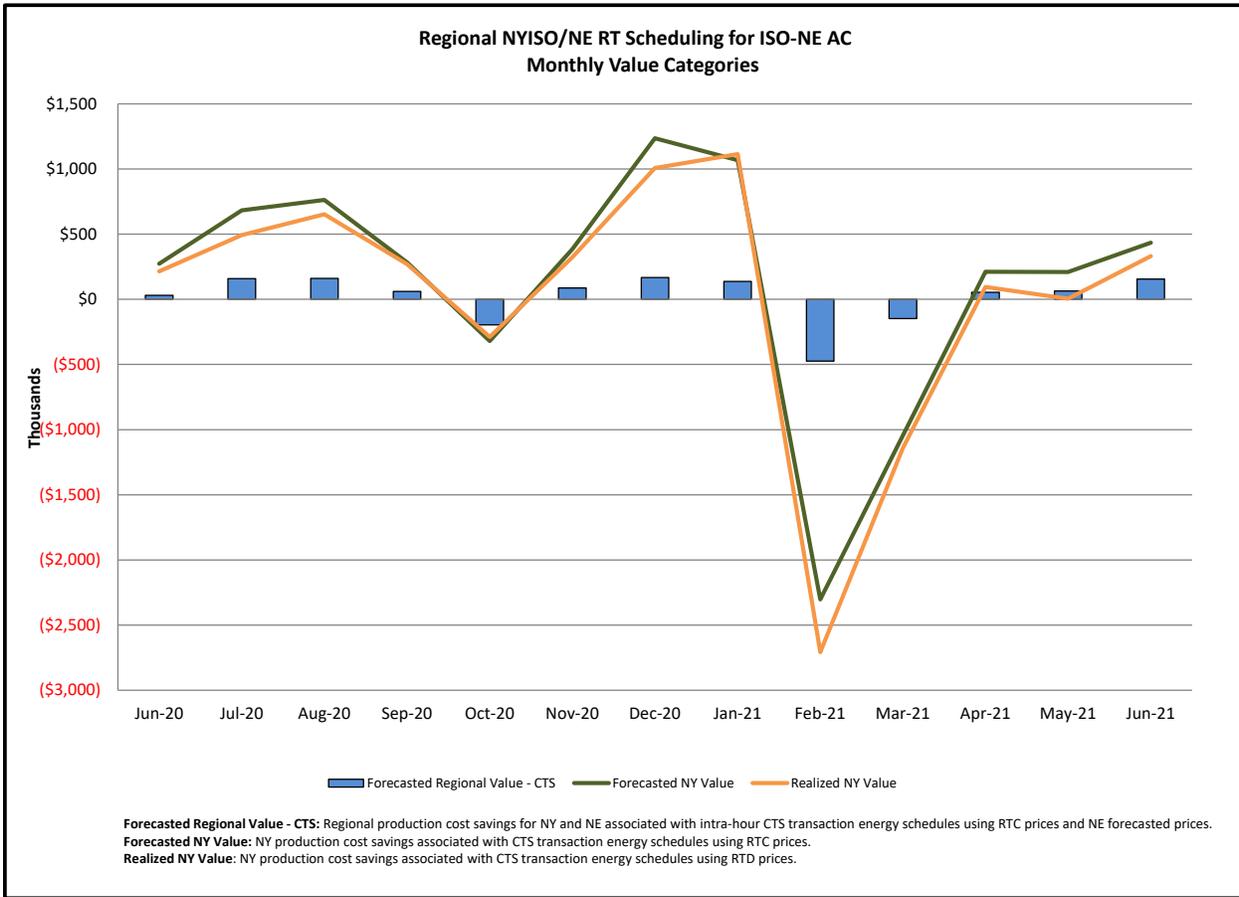
Broader Regional Market Performance Metrics



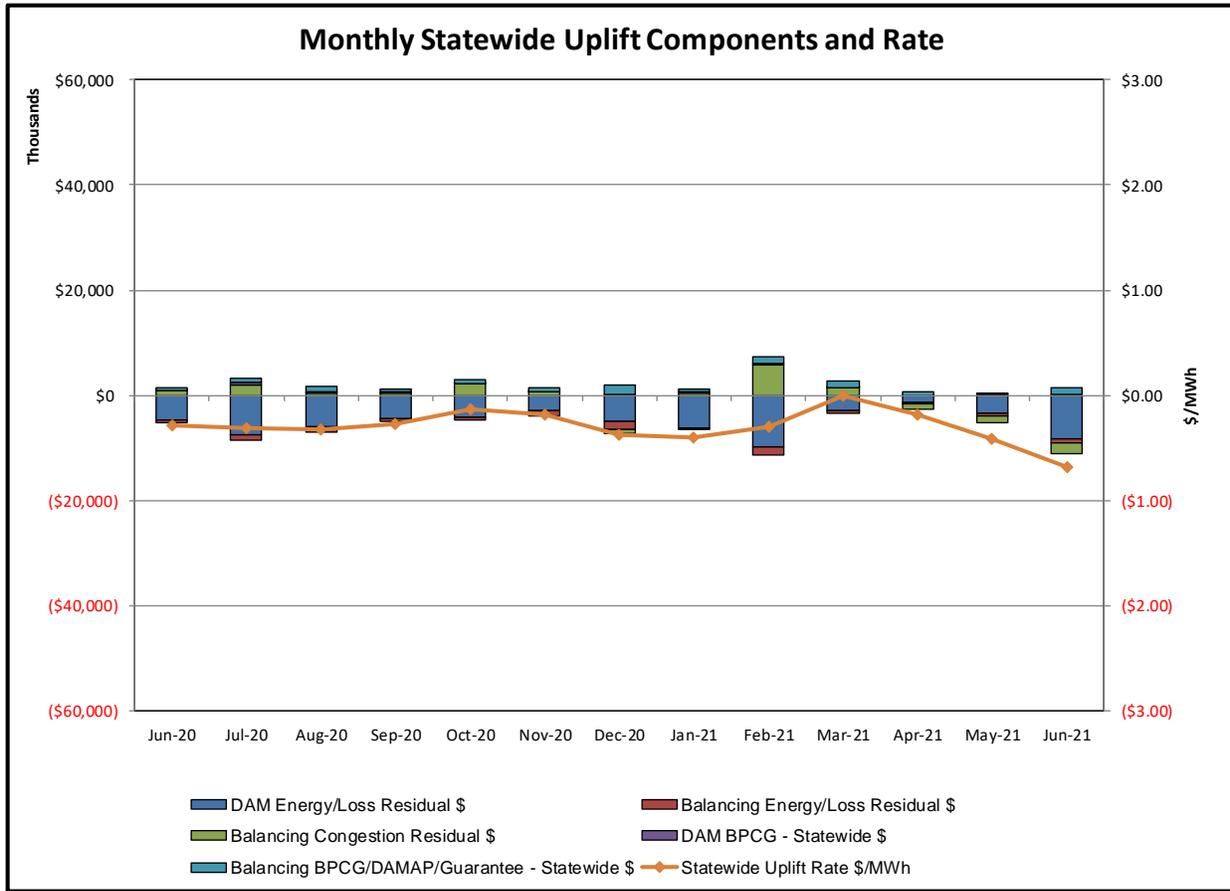
PAR Interconnection Congestion Coordination

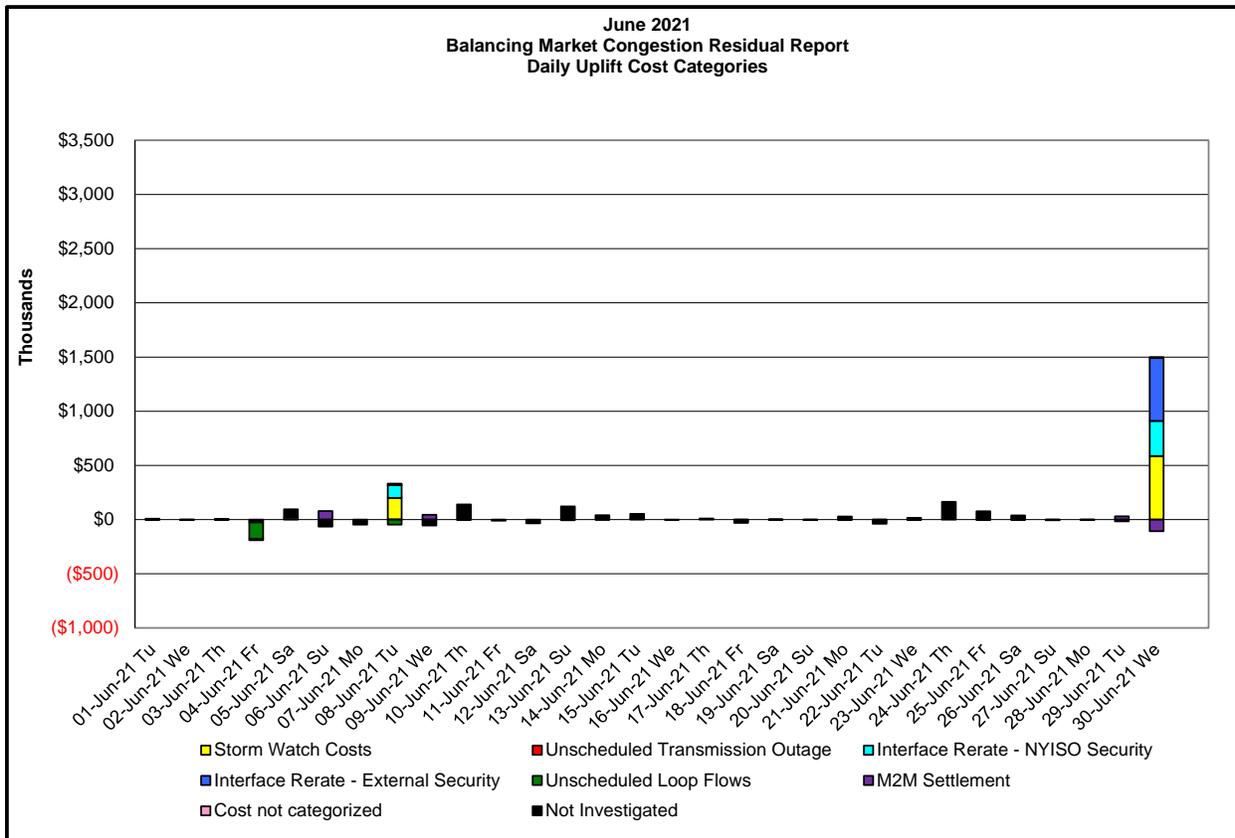
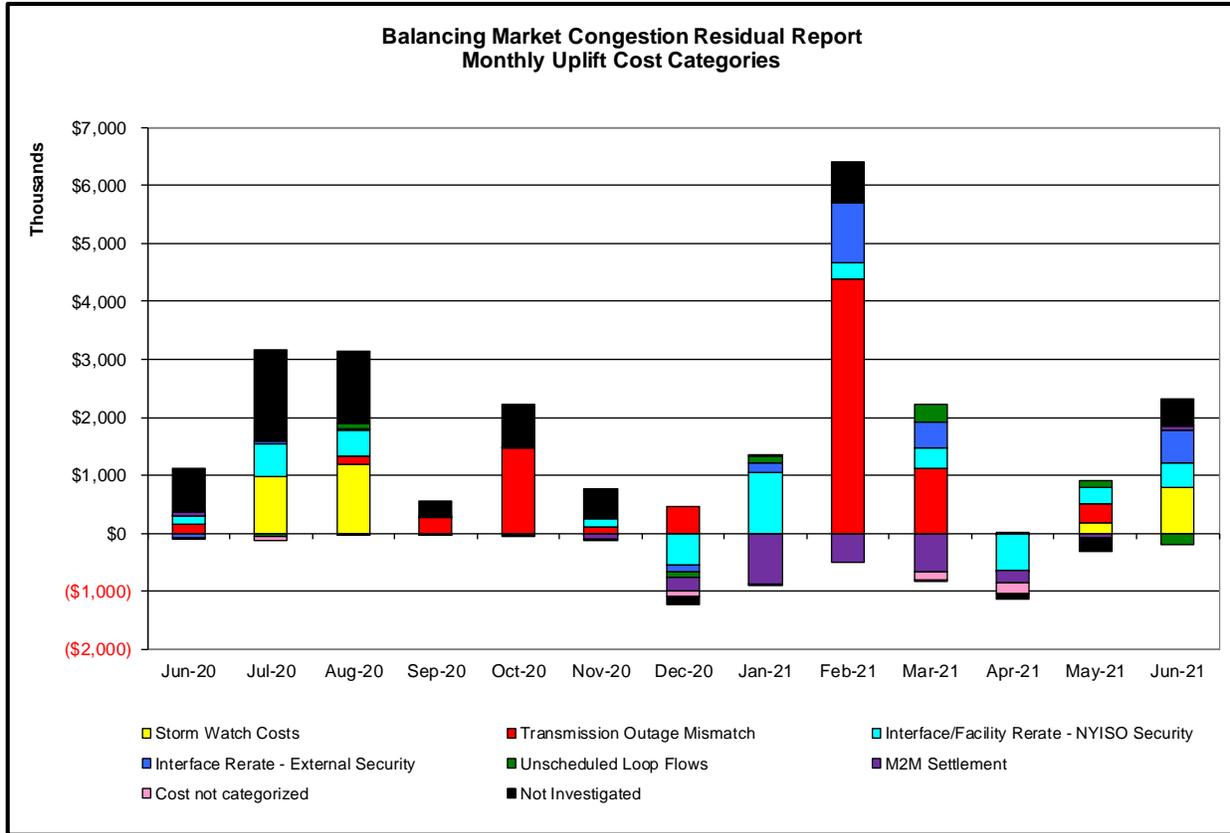
<u>Category</u>	<u>Description</u>
 NY	Represents the value NY realizes from Market-to-Market PAR Coordination when experiencing congestion. This is the estimated savings to NY for additional deliveries into NY
 RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 5018. This is the estimated reduction in NYCA congestion due to the PJM delivery of RECO over Ramapo 5018.
 M2M PAR Settlement	Market-to-Market PAR Coordination settlement on coordinated flowgates. Through April 2017 this value was included in the NY and RECO categories. The positive sign convention indicates settlement to NY while the negative indicates settlement to PJM.





Market Performance Metrics





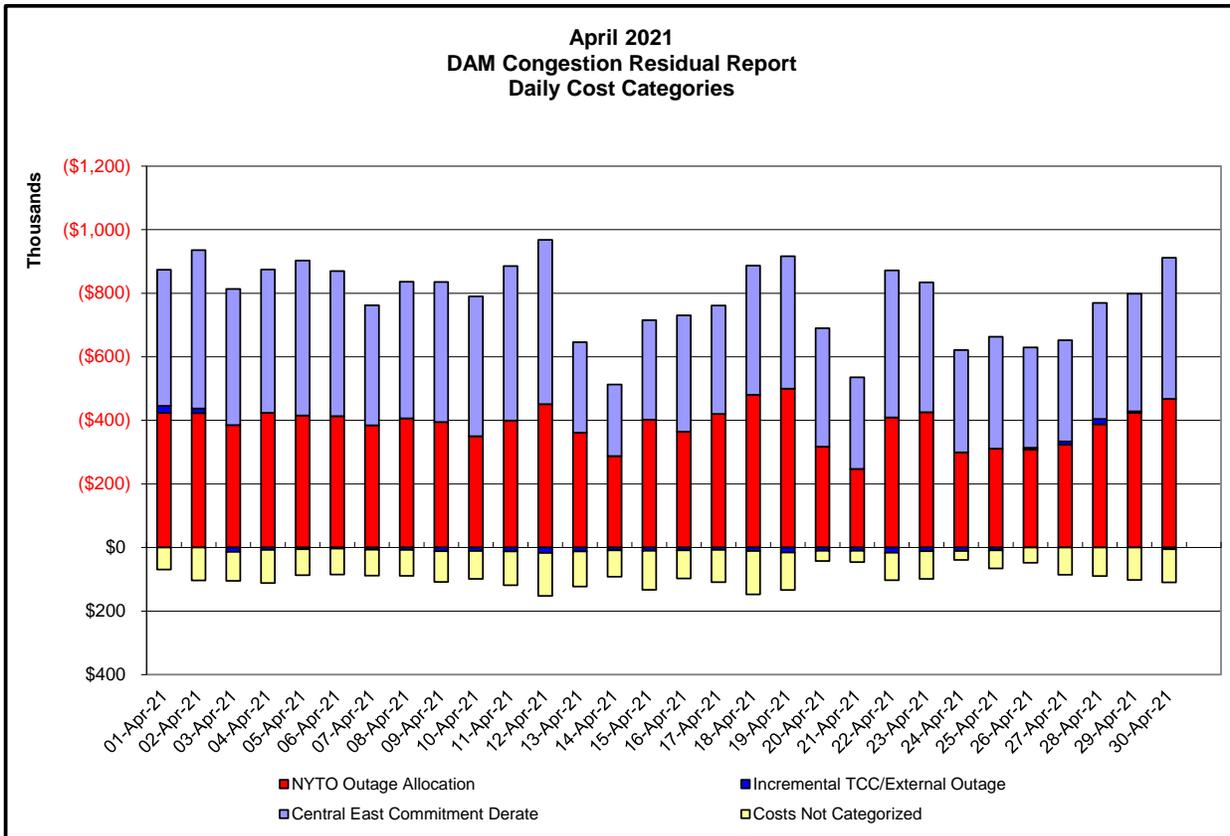
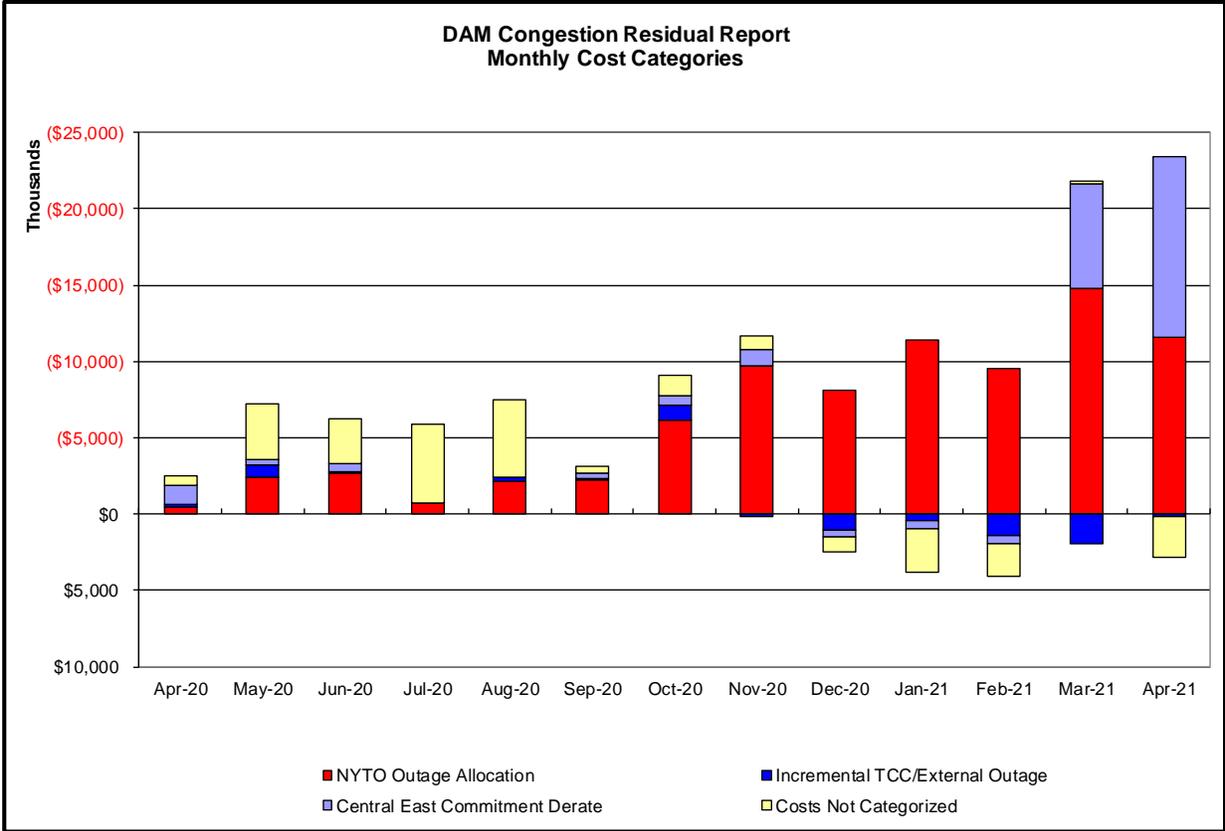
Day's investigated in June: 4,8,30			
Event	Date (yyyymmdd)	Hours	Description
	6/4/2021	23	Uprate Central East
	6/4/2021	16	PJM_AC DNI Ramp Limit
	6/4/2021	14-16	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	6/8/2021	14-18	Thunder Storm Alert, Buchanan North 345/138kV (Bank TA5)
	6/8/2021	14-17	Thunder Storm Alert, Chester-Shoemaker 138kV (#27)
	6/8/2021	17	NYCA DNI Ramp Limit
	6/8/2021	1,16	Derate Adirondack-Moses 230kV (#MA1) for I/o SIN:MSU1&7040& HQ GN&LD PROXY
	6/8/2021	1,14,15,18	Derate Porter-Rotterdam 230kV (#31) for I/o BUS:NSCTLD#77 14&2&93&BK2&C1&3
	6/8/2021	14-18,22,23	Derate Scriba-Volney 345kV (#20) I/o Scriba-Volney 345kV (#21)
	6/8/2021	9-11	Uprate East 179th Street-Hellgate 138kV (#15055)
	6/8/2021	7,9,10	Uprate Freshkills-Willowbrook 138kV (#29211)
	6/8/2021	11-13,19	Uprate Freshkills-Willowbrook 138kV (#29212)
	6/8/2021	13,19	Uprate Goethals-Gowanus 345kV (#25/#26)
	6/8/2021	9	Uprate Malone-Willis 115kV (#1-910) I/o ALCOA_PA-ALCOA 115 R8105
	6/8/2021	13,20-23	HQ_CHAT-NY Scheduling Limit
	6/8/2021	14	NE_AC DNI Ramp Limit
	6/8/2021	11	IESO_AC DNI Ramp Limit
	6/8/2021	7-9	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East
	6/8/2021	13	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West
	6/30/2021	17-21	Thunder Storm Alert, Buchanan North 345/138kV (Bank TA5)
	6/30/2021	17-20	Thunder Storm Alert, Chester-Shoemaker 138kV (#27)
	6/30/2021	17-19	Thunder Storm Alert, Pleasant Valley-Leeds 345kV (#92)
	6/30/2021	16-22	Thunder Storm Alert, HQ Scheduling Limits, curtailment for North Zone TSA
	6/30/2021	13,14,16	Derate Dunwoodie-Dunwoodie South 345kV (#W73) I/o Sprainbrook-Dunwoodie South 138kV (#99942)
	6/30/2021	10-16	Derate Roseton-East Fishkill 345kV (#RFK305) I/o TWR: Y88 & Y94 & TA5
	6/30/2021	23	Derate Greenwood-Vernon 138kV (#31231) I/o TWR:GOETHALS 22 & 21
	6/30/2021	16	Derate Pleasant Valley-Leeds 345kV (#92) I/o Athens-Pleasant Valley 345kV (#91)
	6/30/2021	2,4,5,6,12-16	Derate Porter-Rotterdam 230kV (#31) for I/o TWR:EDIC EF24-40& 30
	6/30/2021	9	Uprate Freshkills-Willowbrook 138kV (#29211) Base Case
	6/30/2021	8,9	Uprate Gowanus-Greenwood 138kV (#42231/#42232) Base Case
	6/30/2021	8	Uprate Gowanus-Greenwood 138kV (#42232) I/o TWR:GOETHALS 22 & 21
	6/30/2021	17,20,23	NYCA DNI Ramp Limit
	6/30/2021	23	HQ_CHAT DNI Ramp Limit
	6/30/2021	9,16-18	NE_AC-NY Scheduling Limit

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.	

