

Operations Performance Metrics Monthly Report



August 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 September 9, 2020.

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August 2020 Operations Performance Highlights

- Peak load of 29,685 MW occurred on 08/10/2020 HB 17
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 25.25 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 August
- 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.

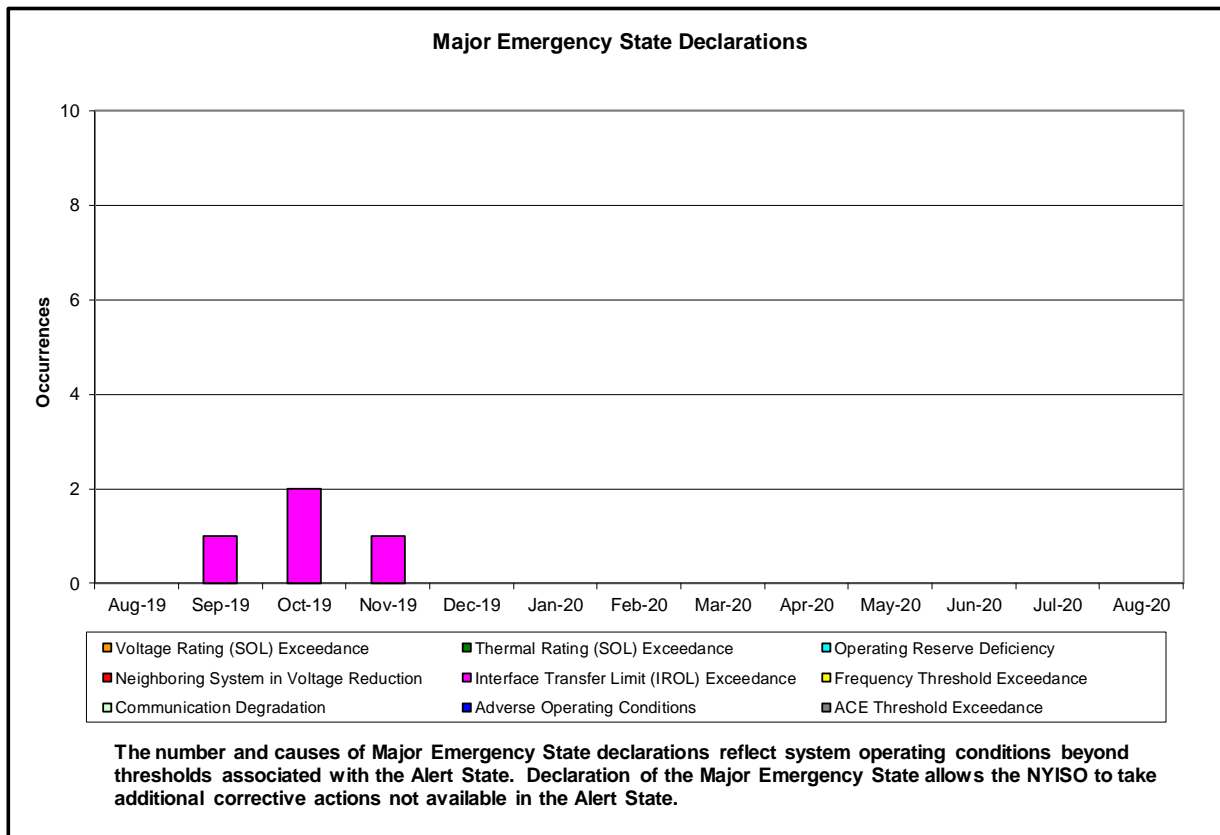
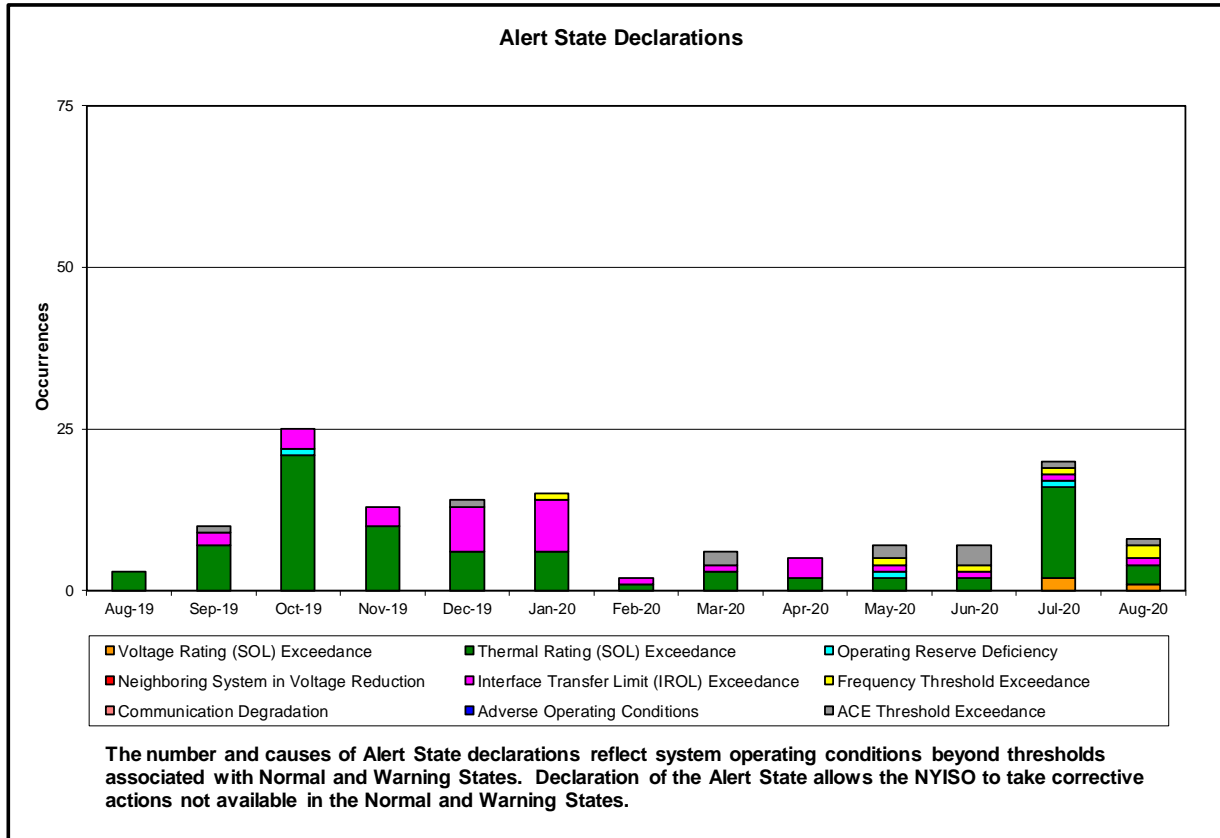
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	(\$0.19)	\$2.75
NY Savings from PJM-NY Coordinated Transaction Scheduling	(\$0.16)	(\$0.57)
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.65	\$1.69
Total NY Savings	\$0.30	\$3.87
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.49	\$1.66
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.16	\$0.34
Total Regional Savings	\$0.65	\$2.00

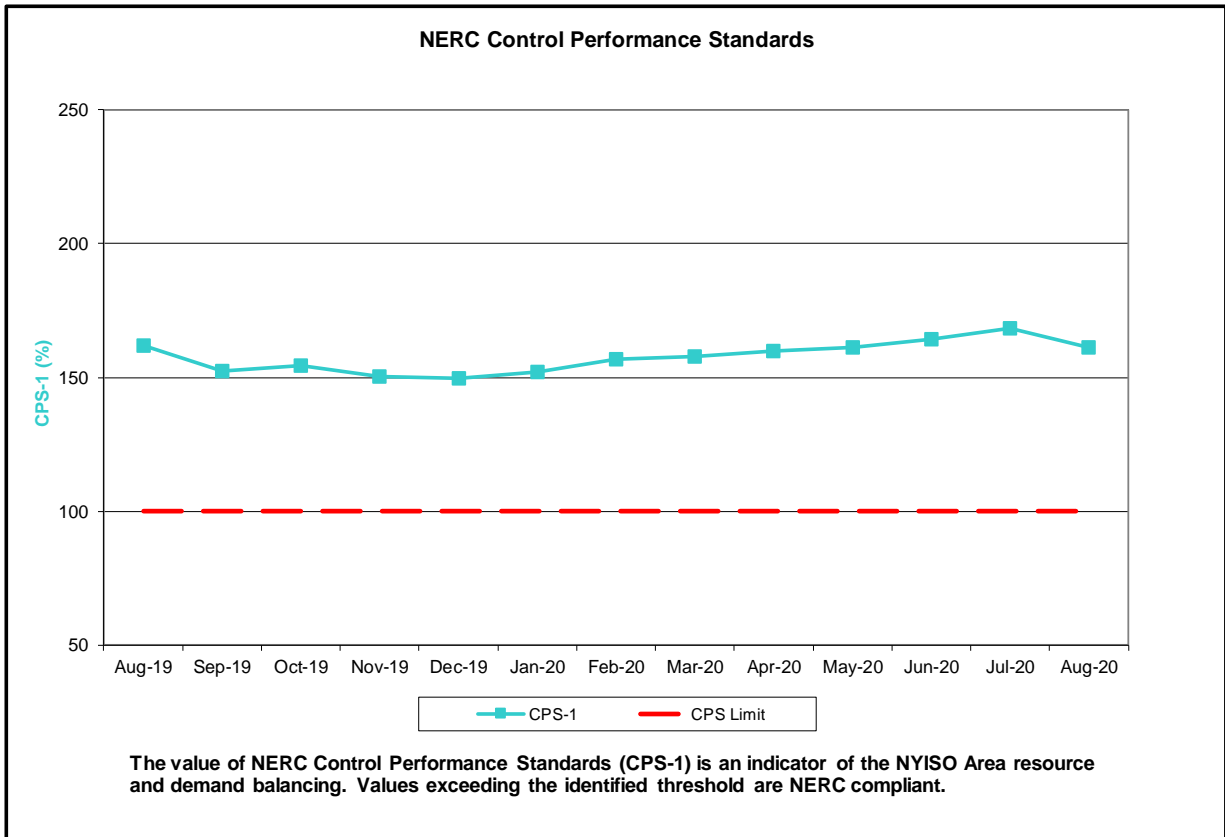
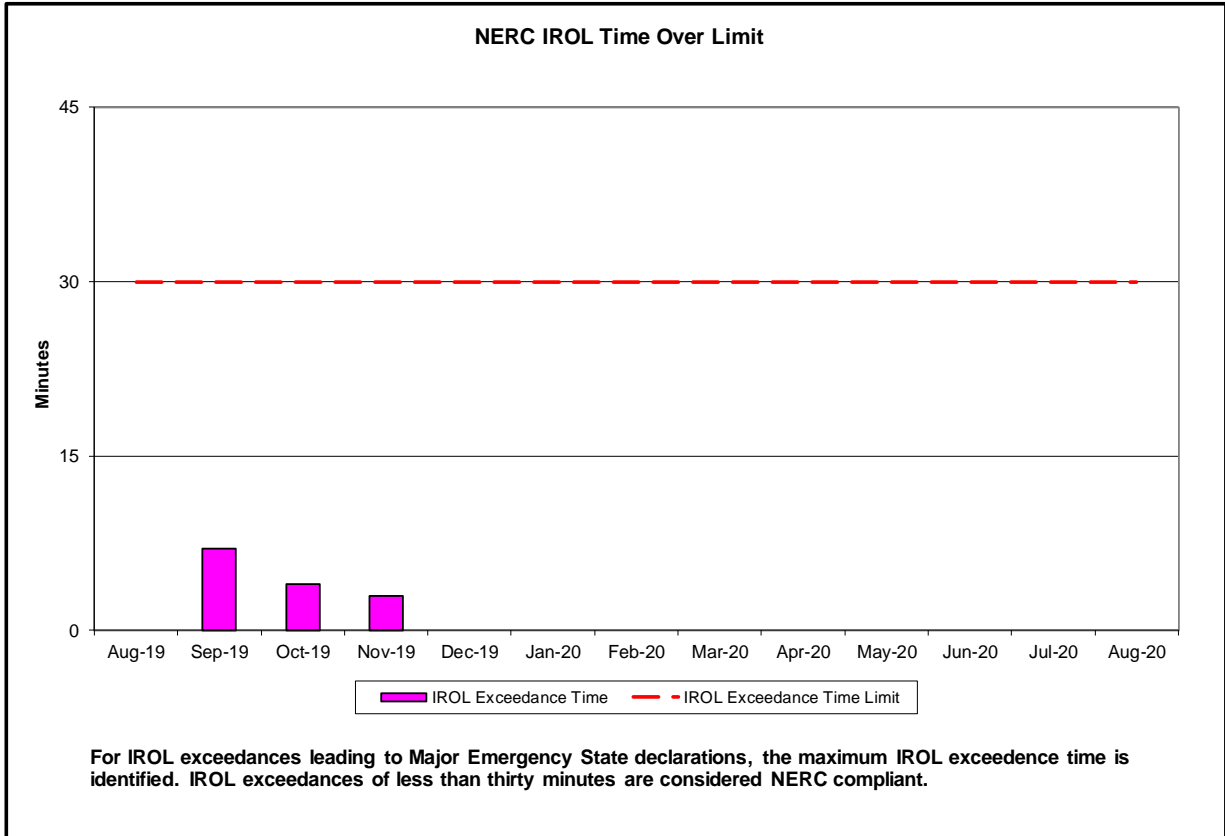
- Statewide uplift cost monthly average was (\$0.33)/MWh
- The following table identifies the Monthly ICAP spot market prices and the price delta.

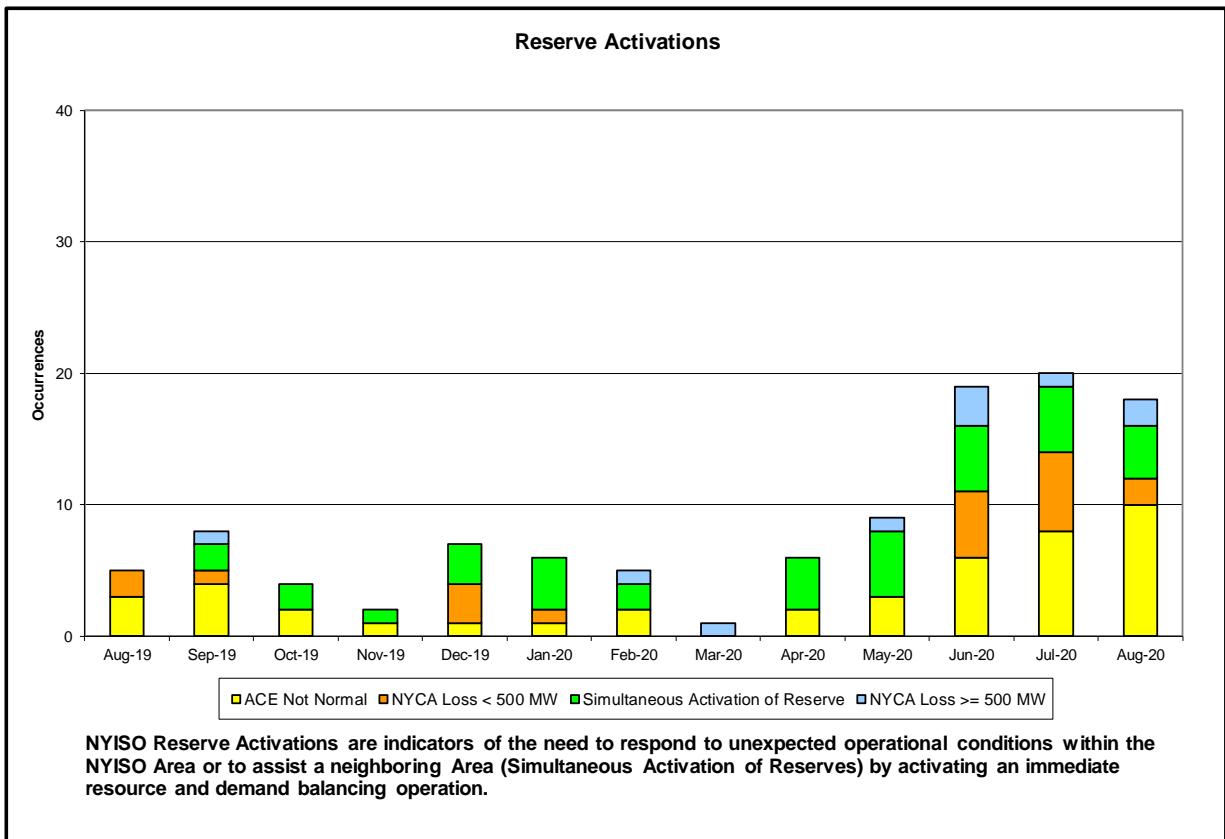
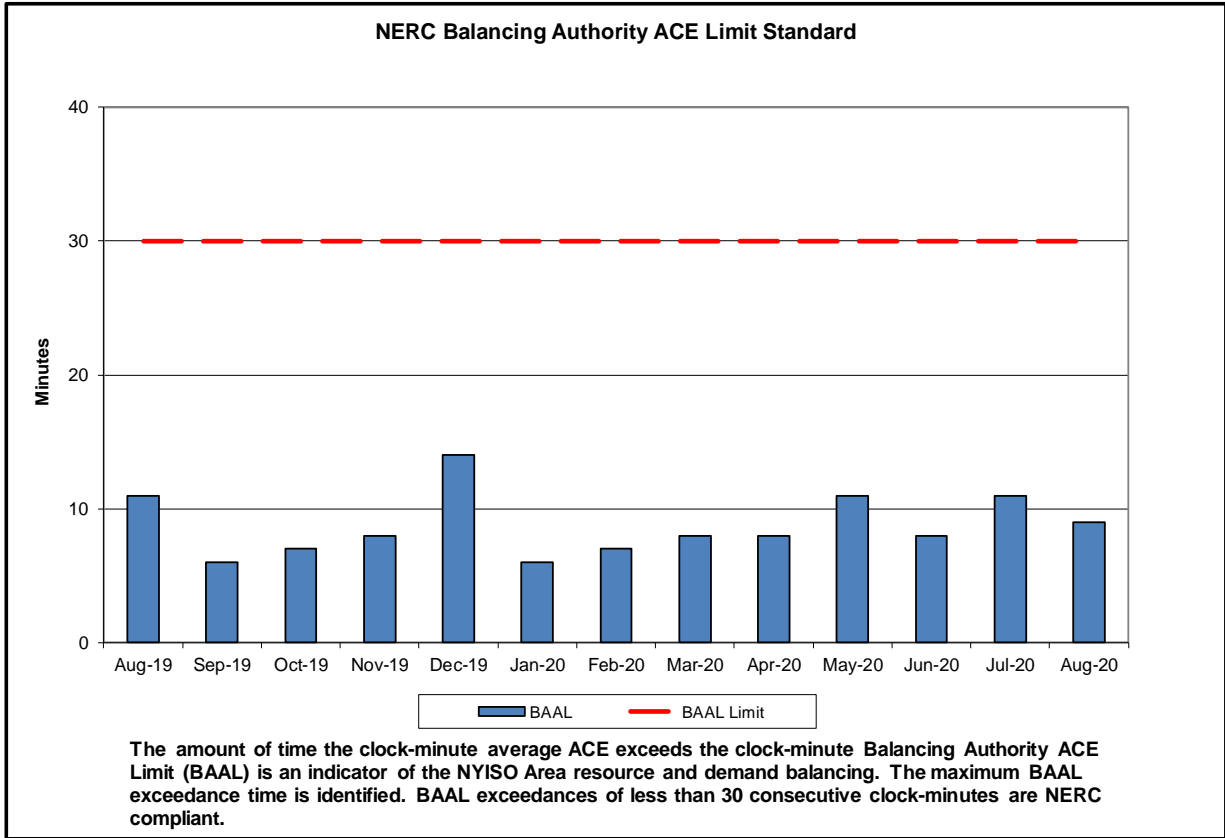
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
September 2020 Spot Price	\$2.78	\$2.78	\$18.62	\$5.18
August 2020 Spot Price	\$2.37	\$2.37	\$18.72	\$5.17
Delta	\$0.41	\$0.41	(\$0.10)	\$0.01

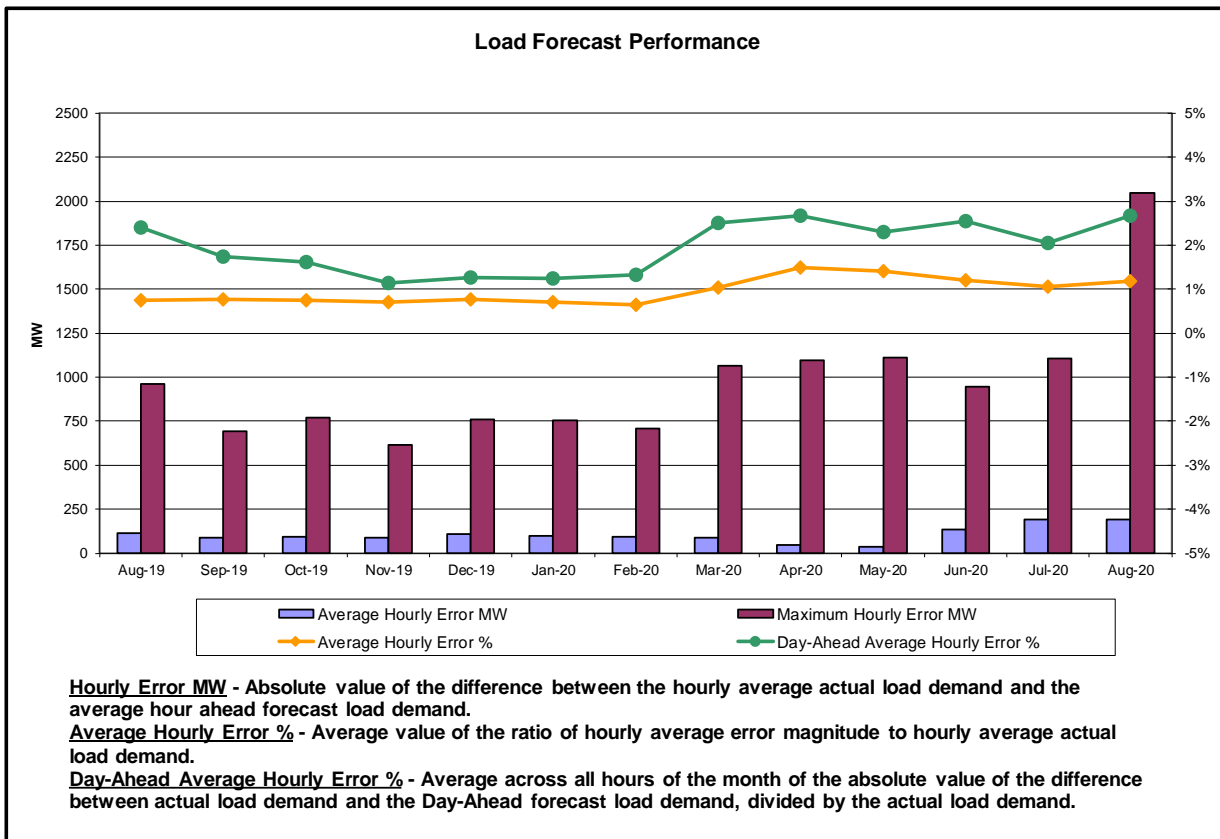
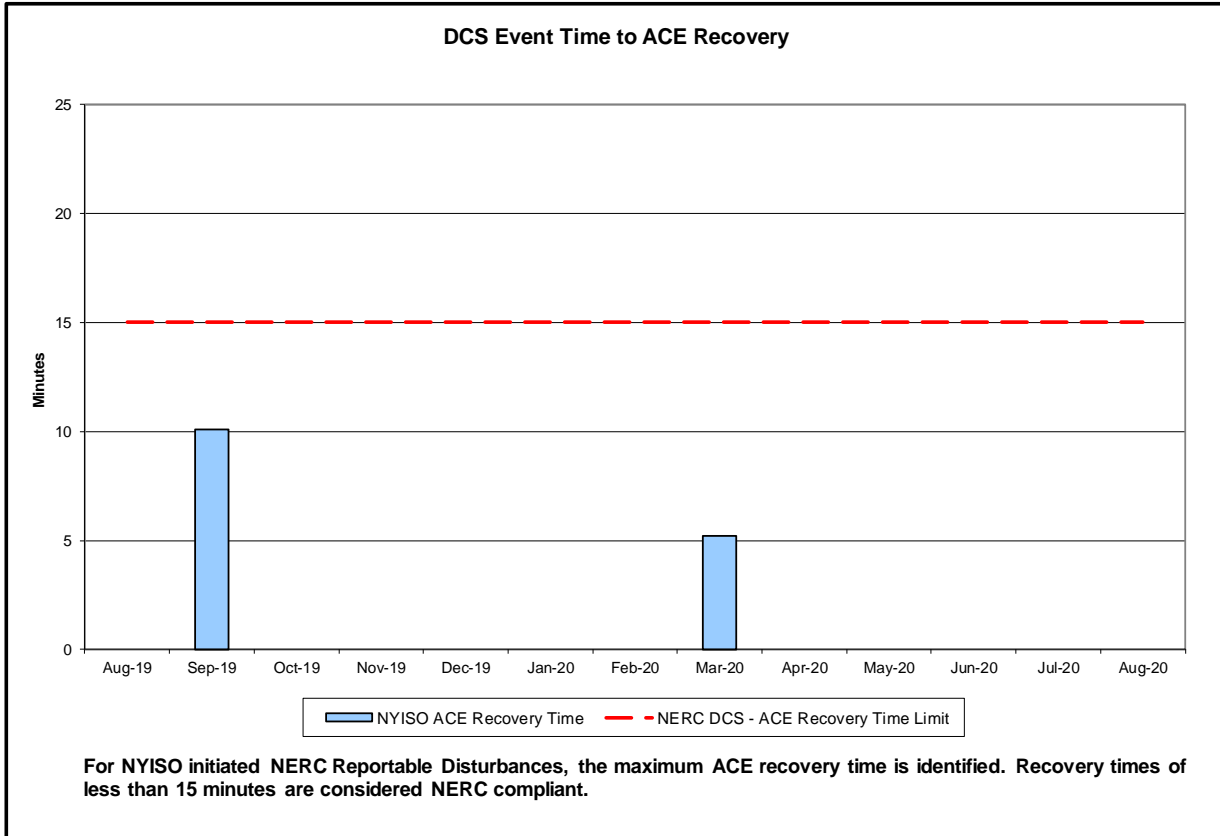
- Lower Hudson Valley – Price increased by \$0.41 due to a decrease in Net Imports.
- NYCA – Price increased by \$0.41 due to a decrease in Net Imports.

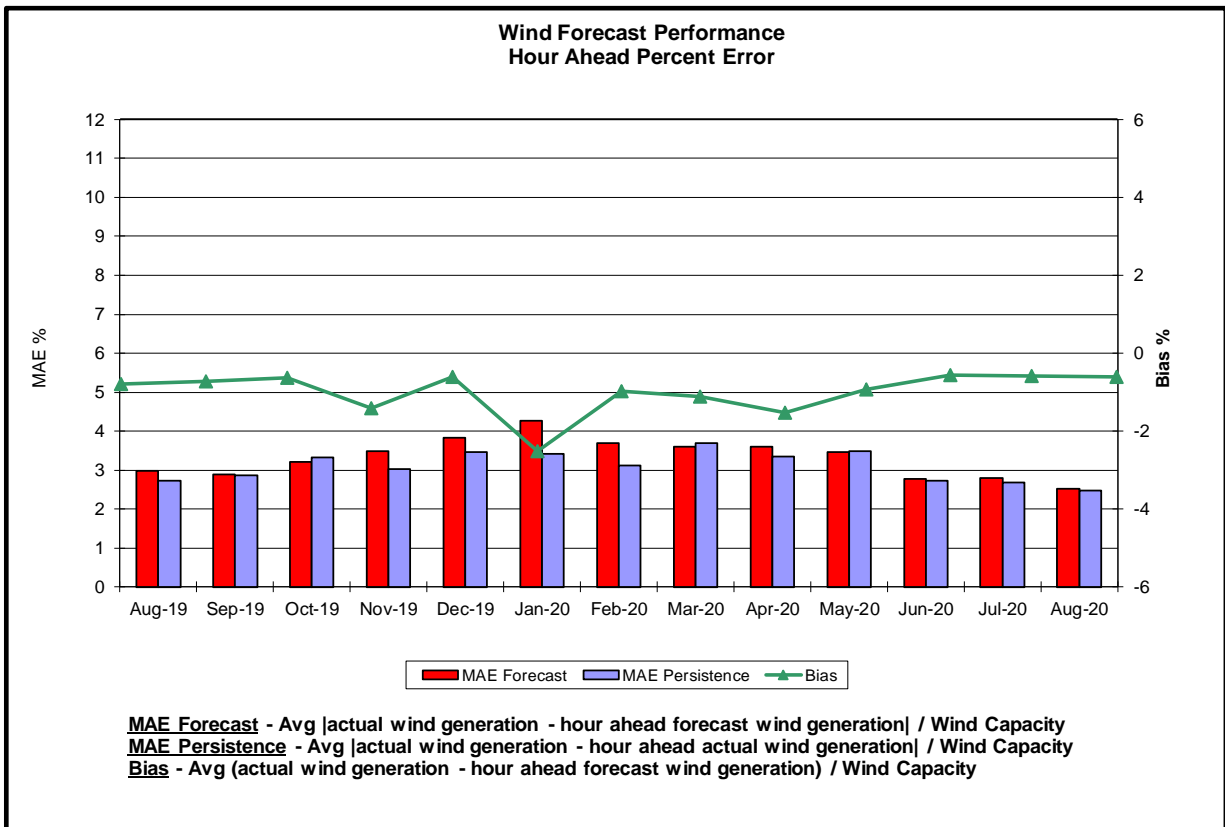
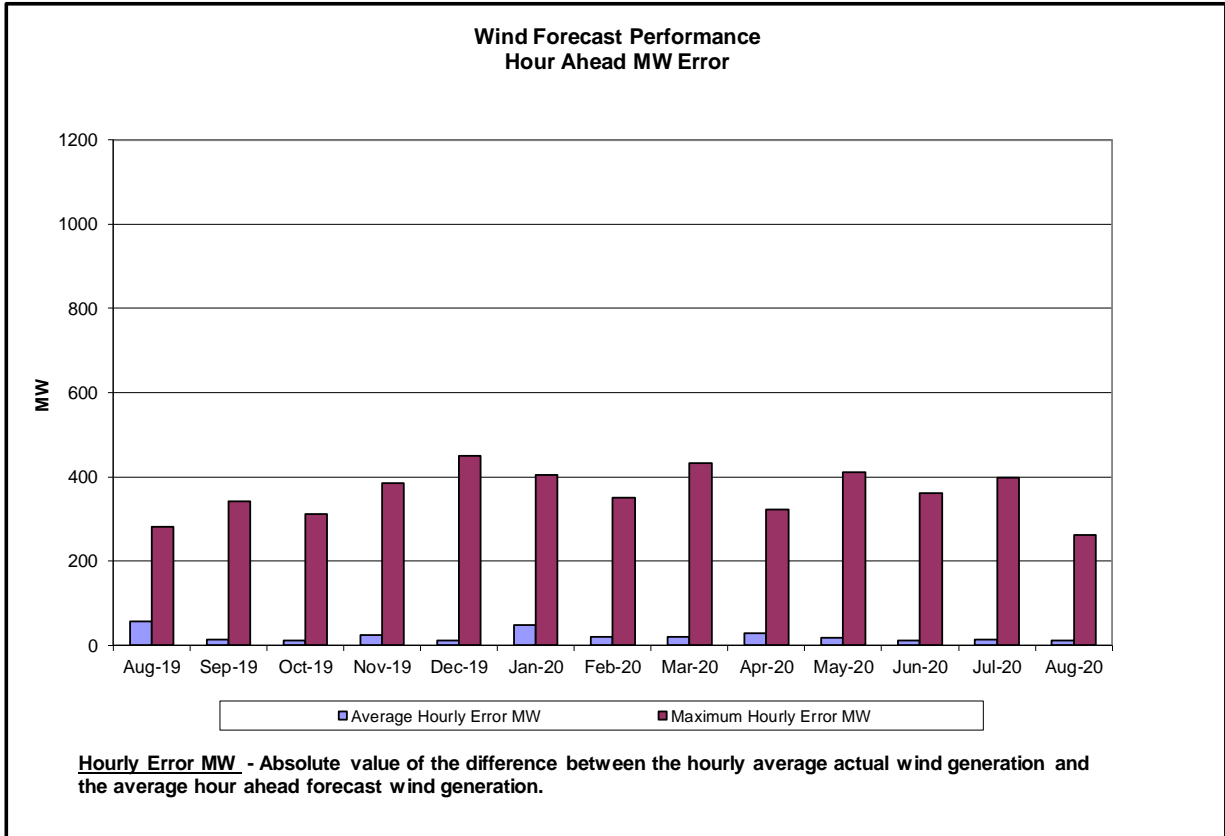
Reliability Performance Metrics

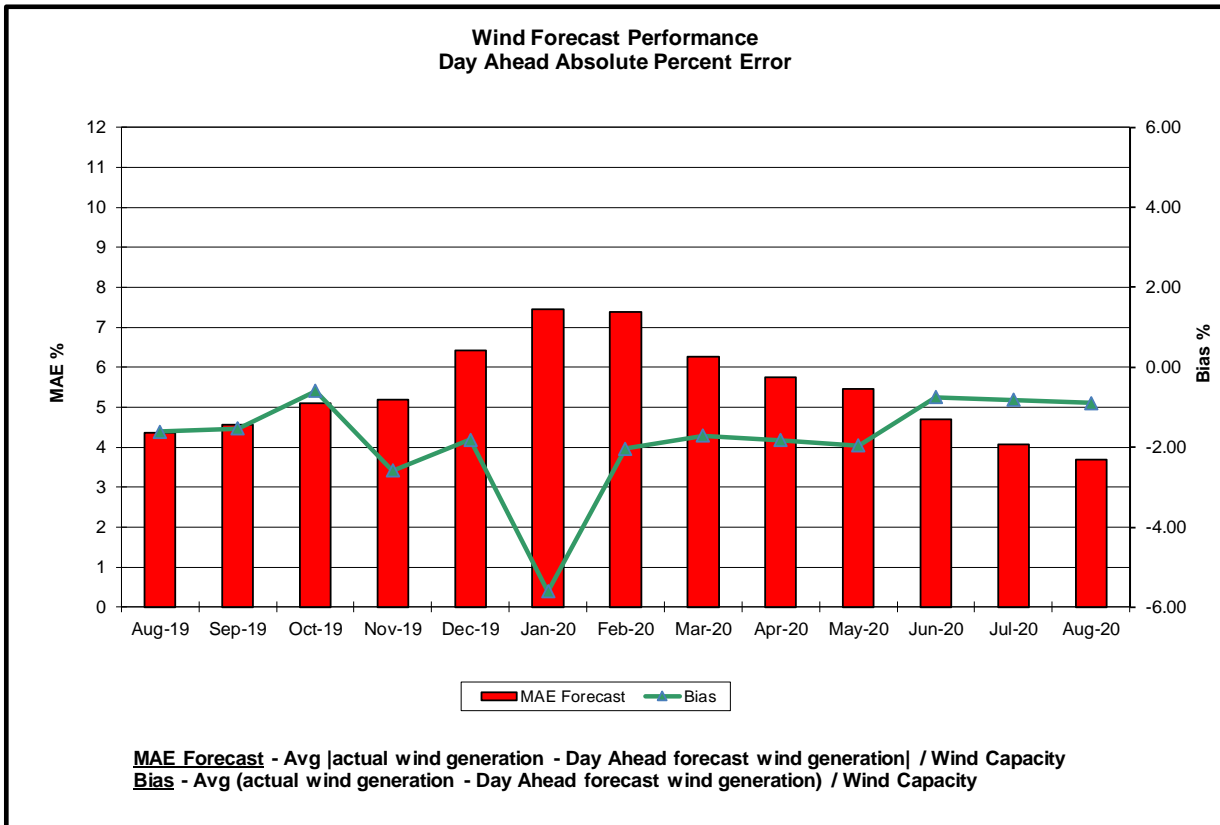
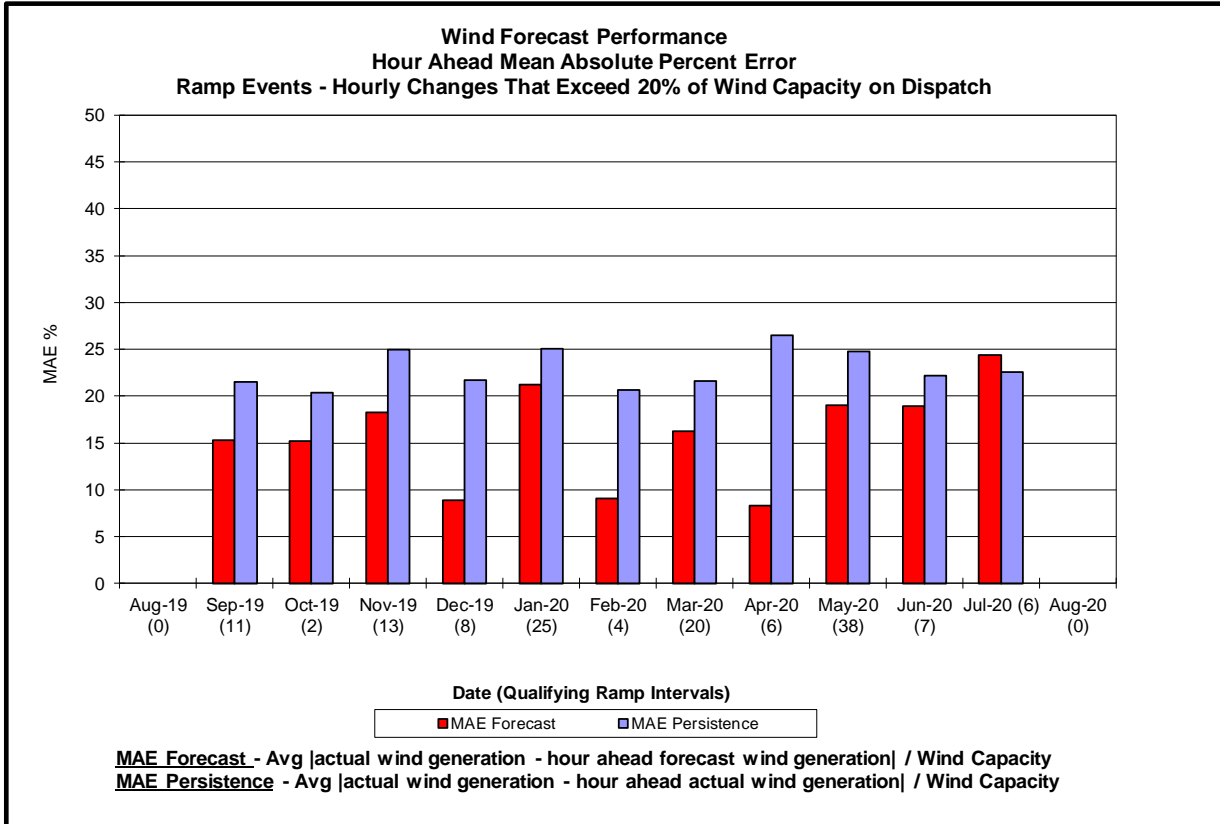


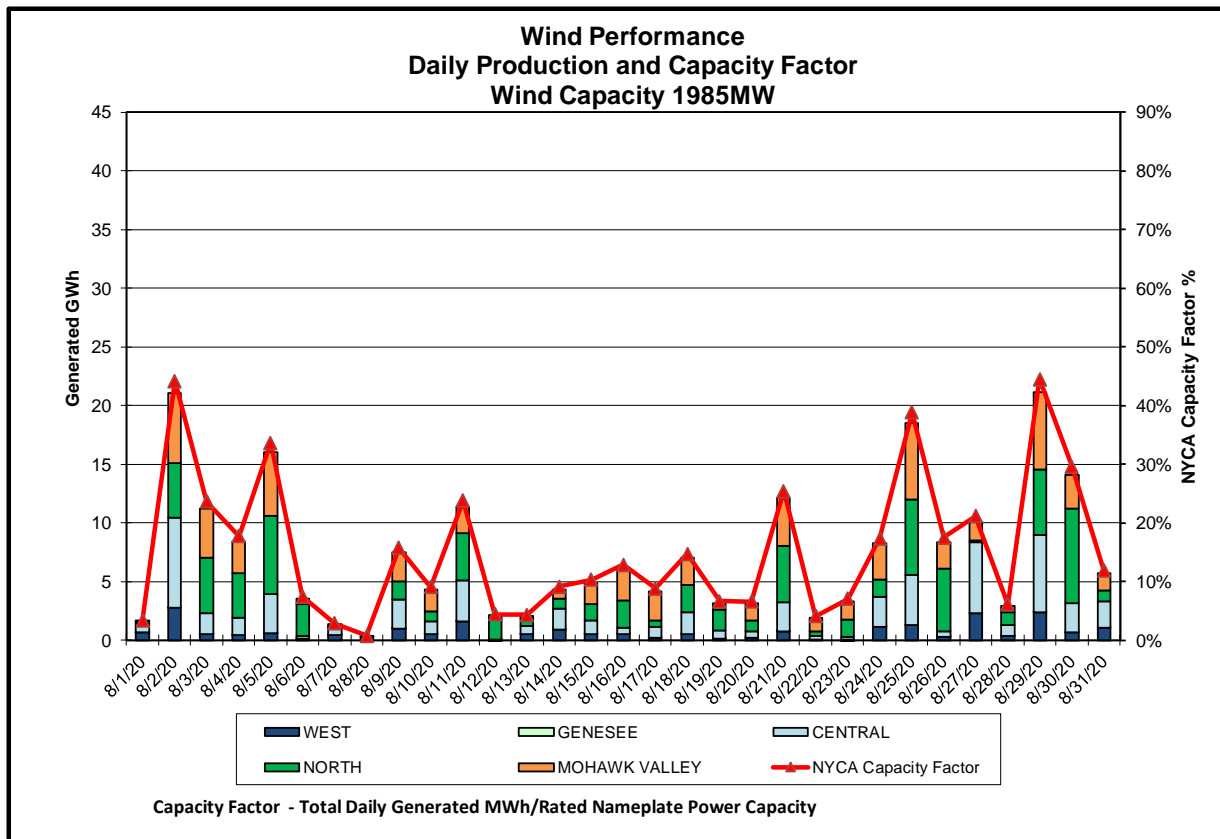
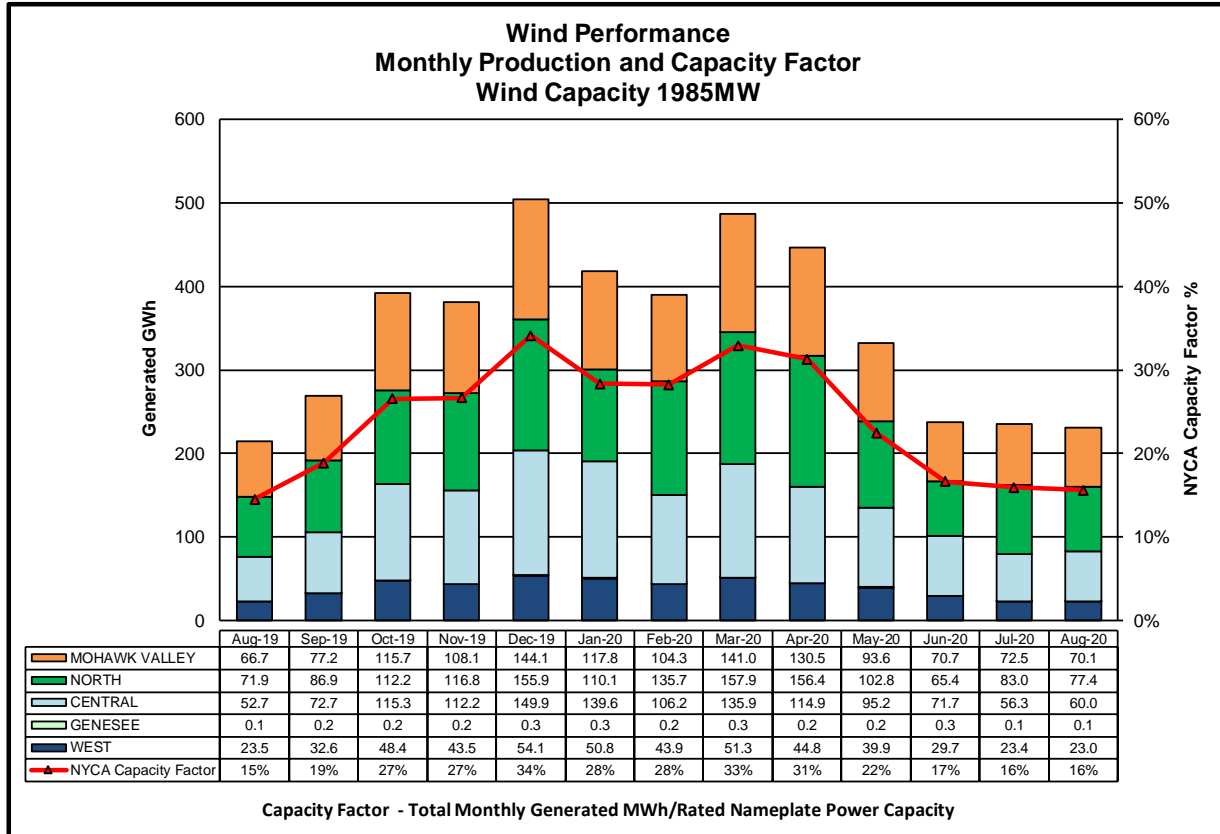


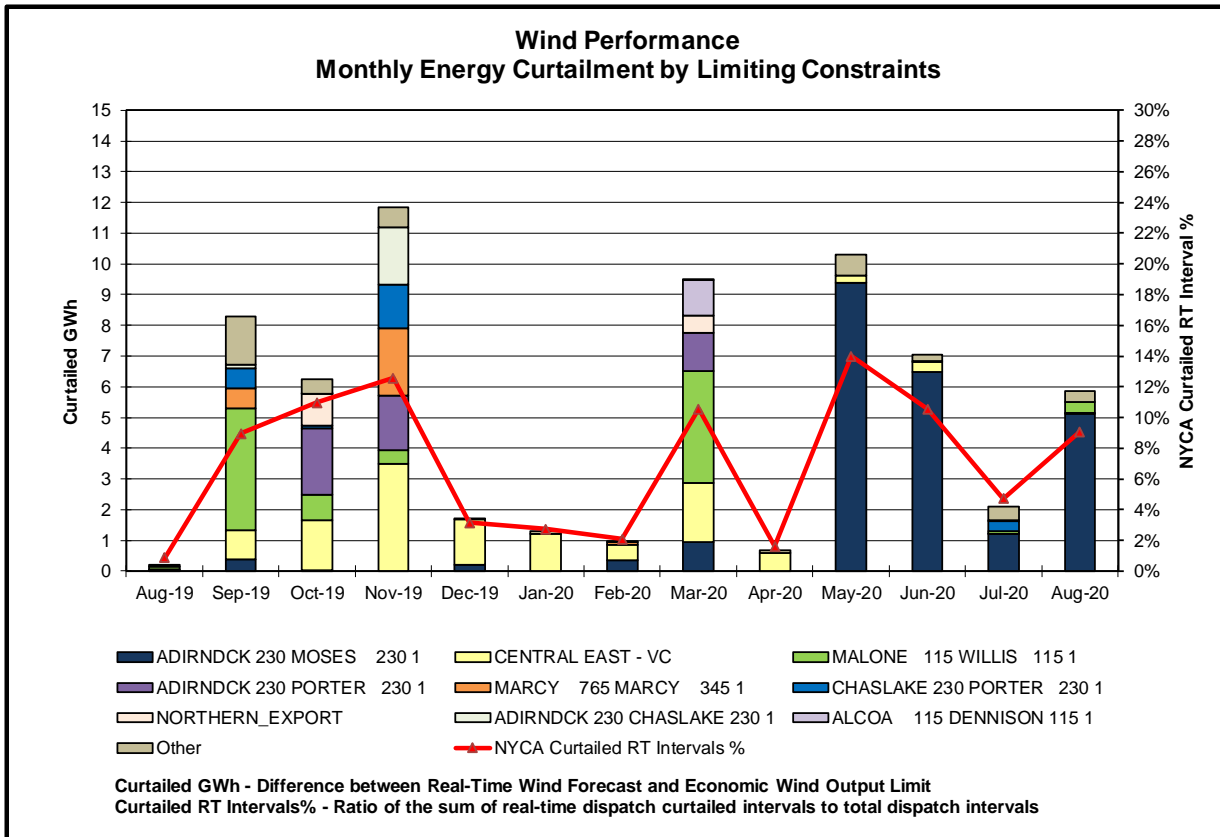
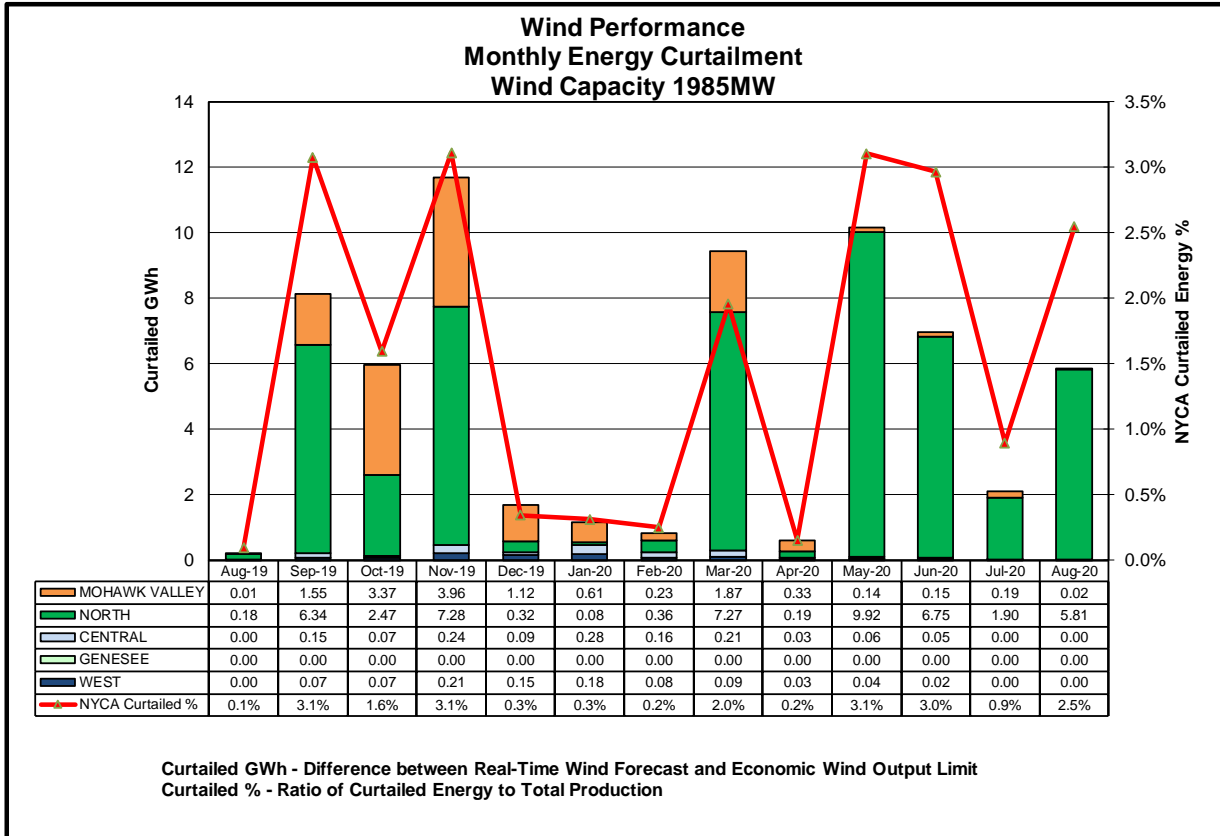


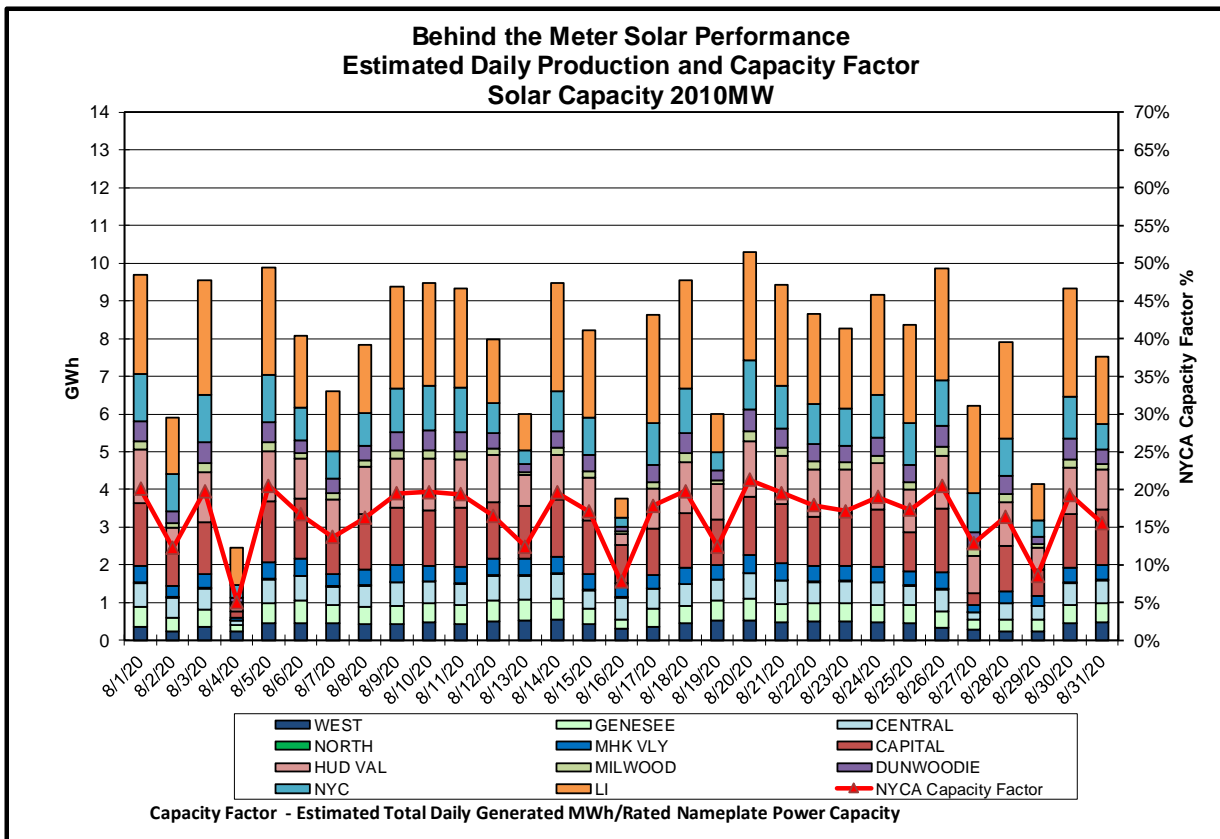
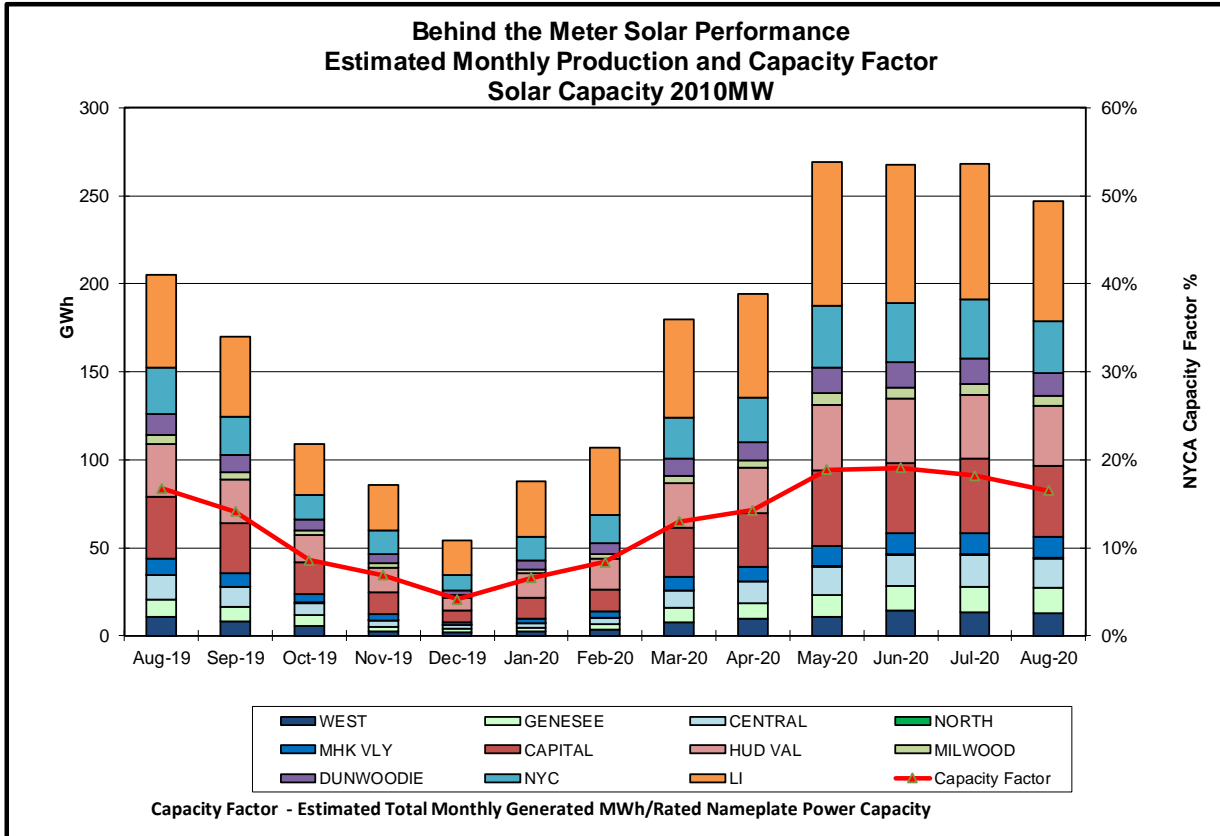


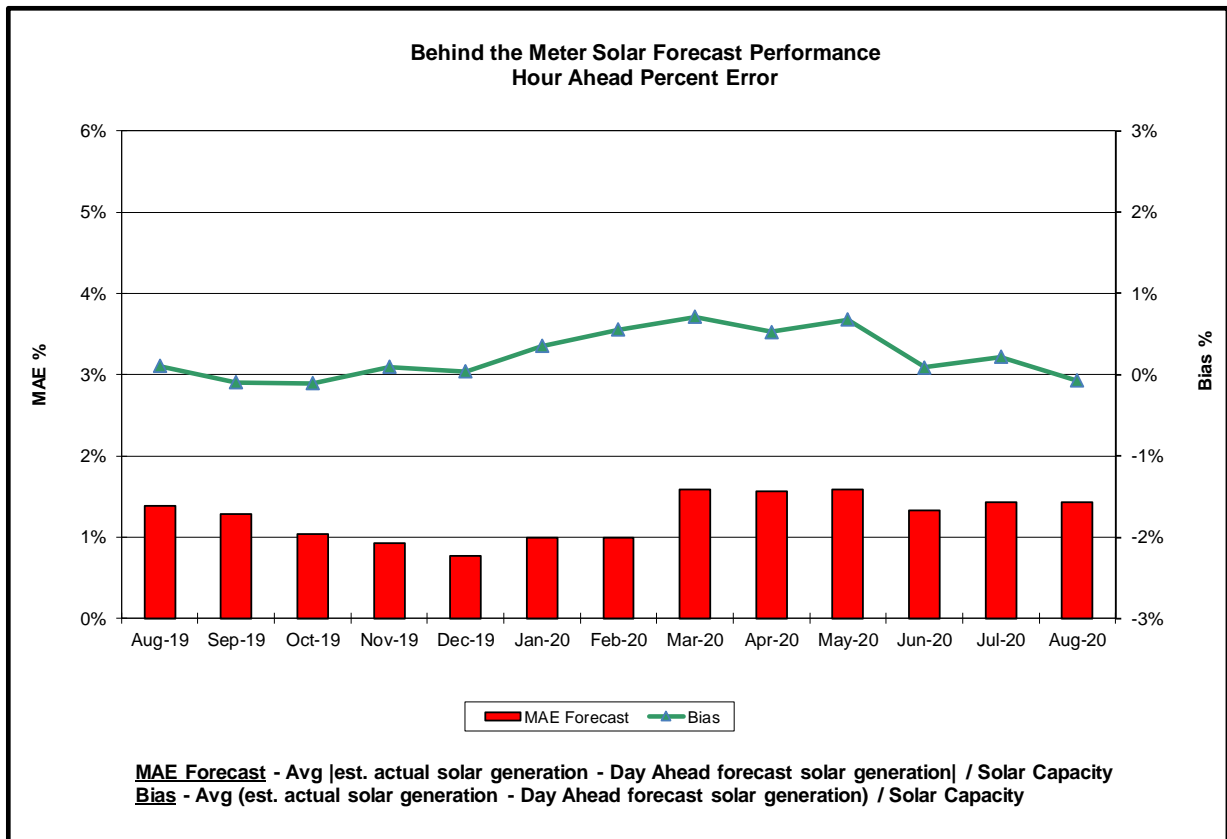
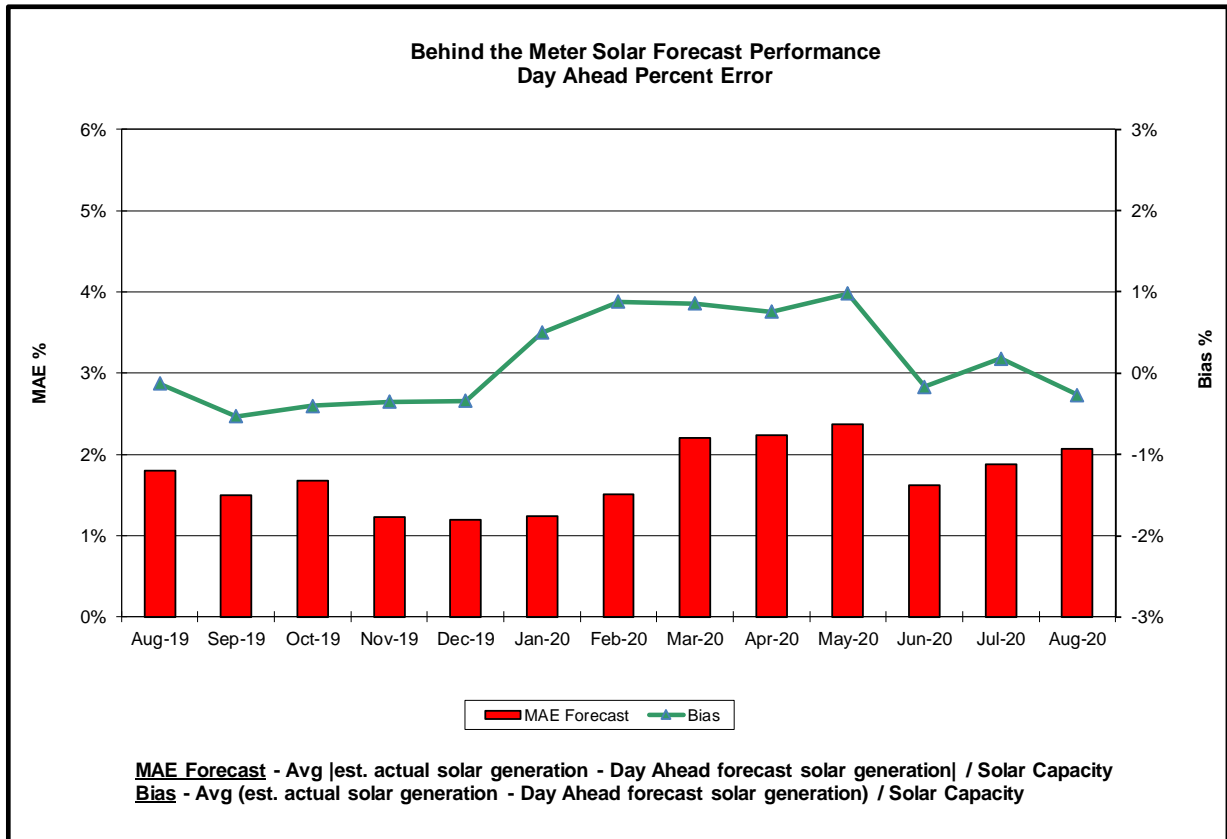


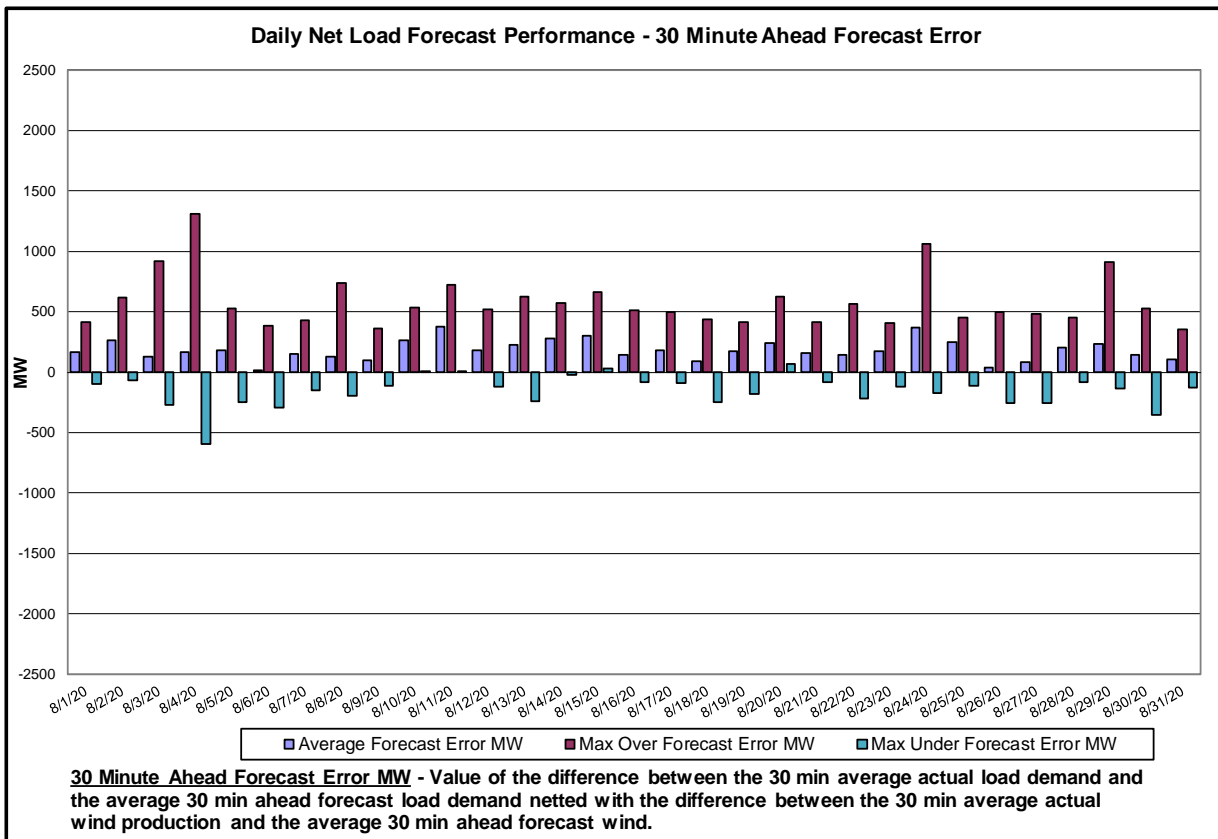
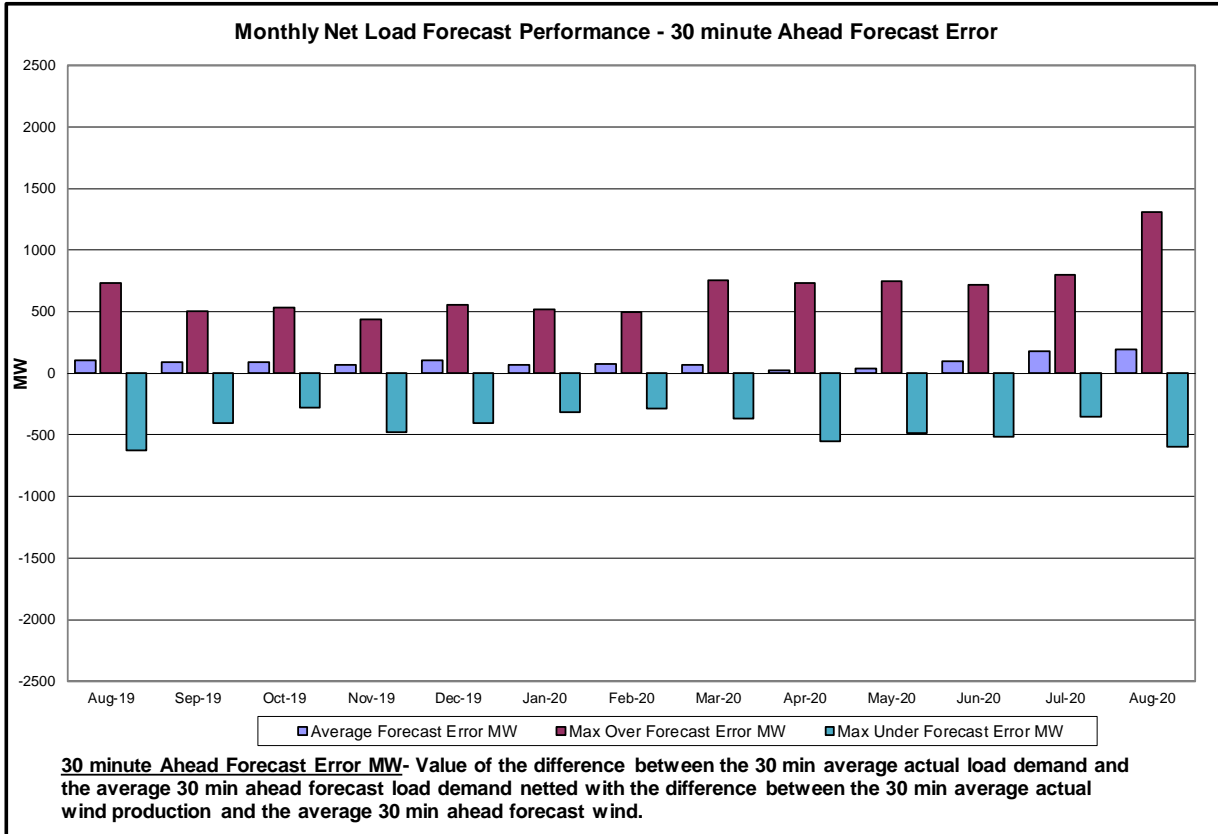


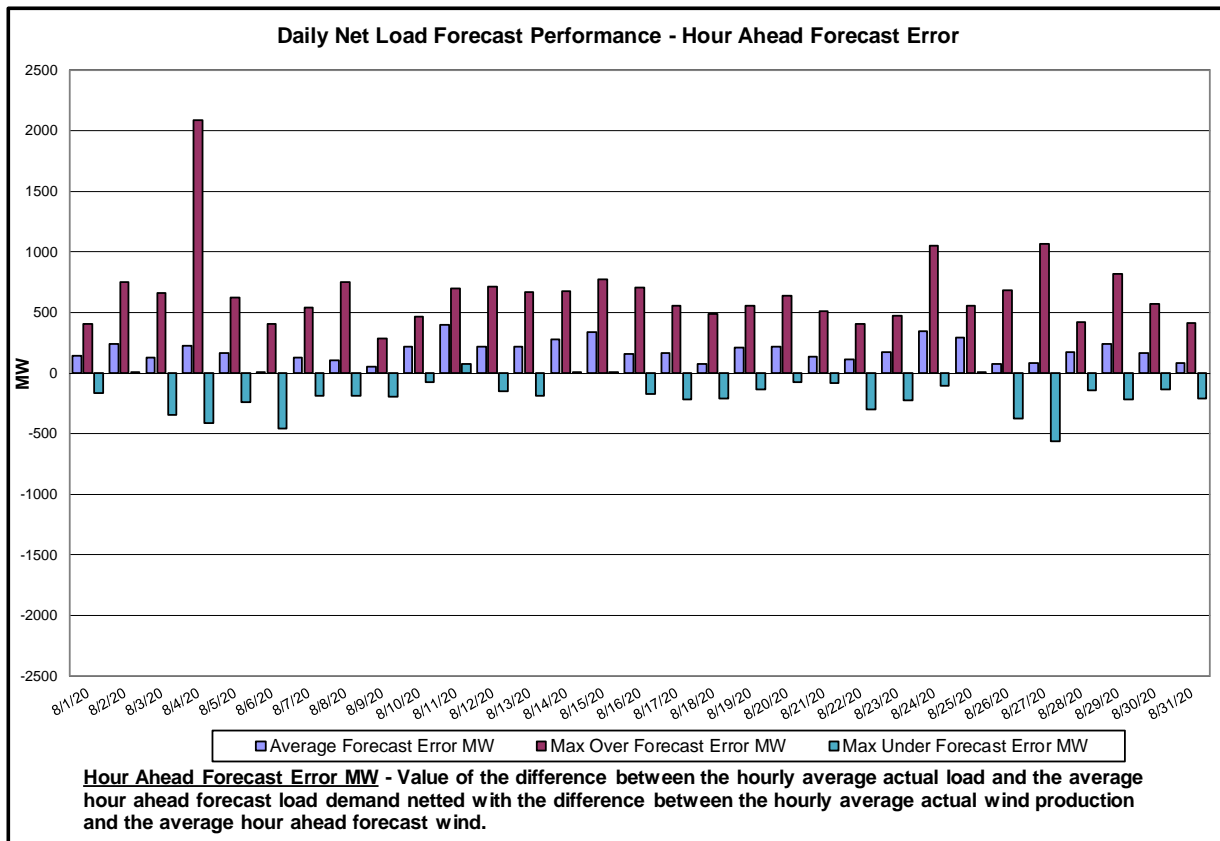
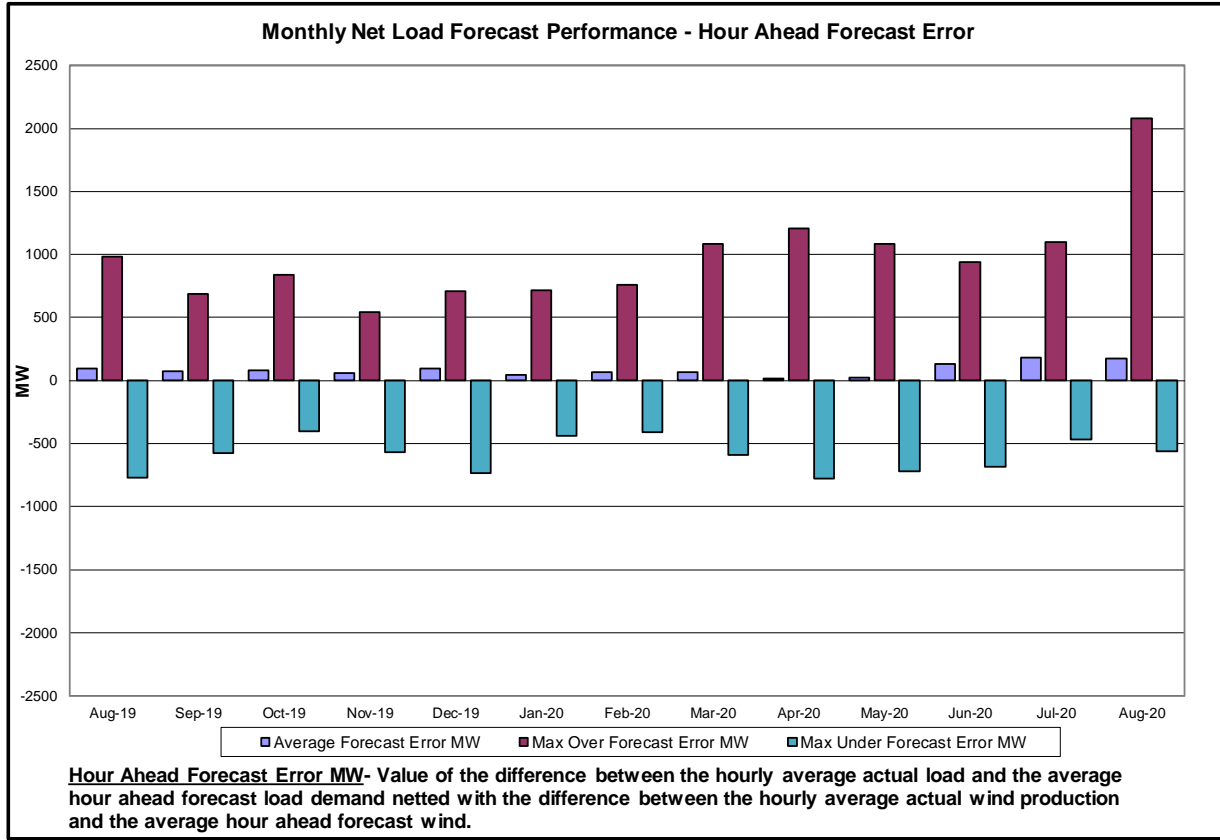


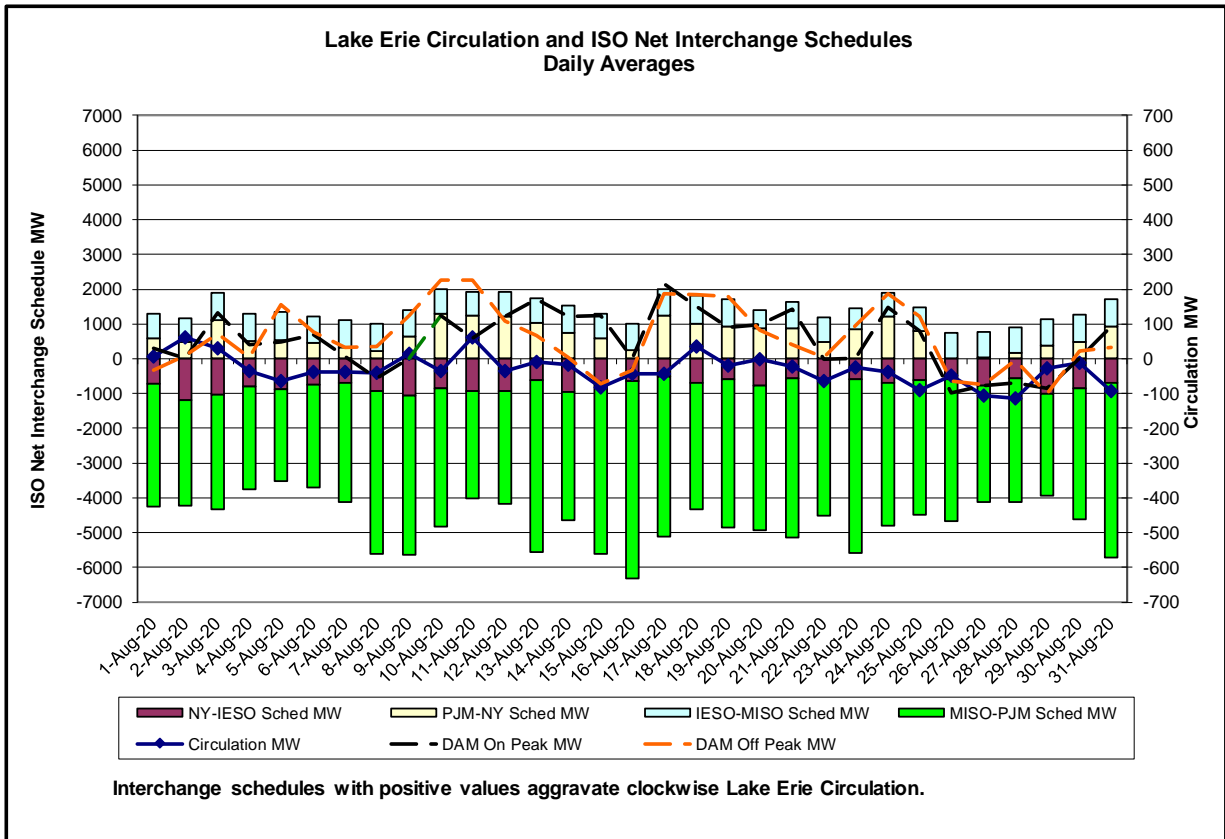
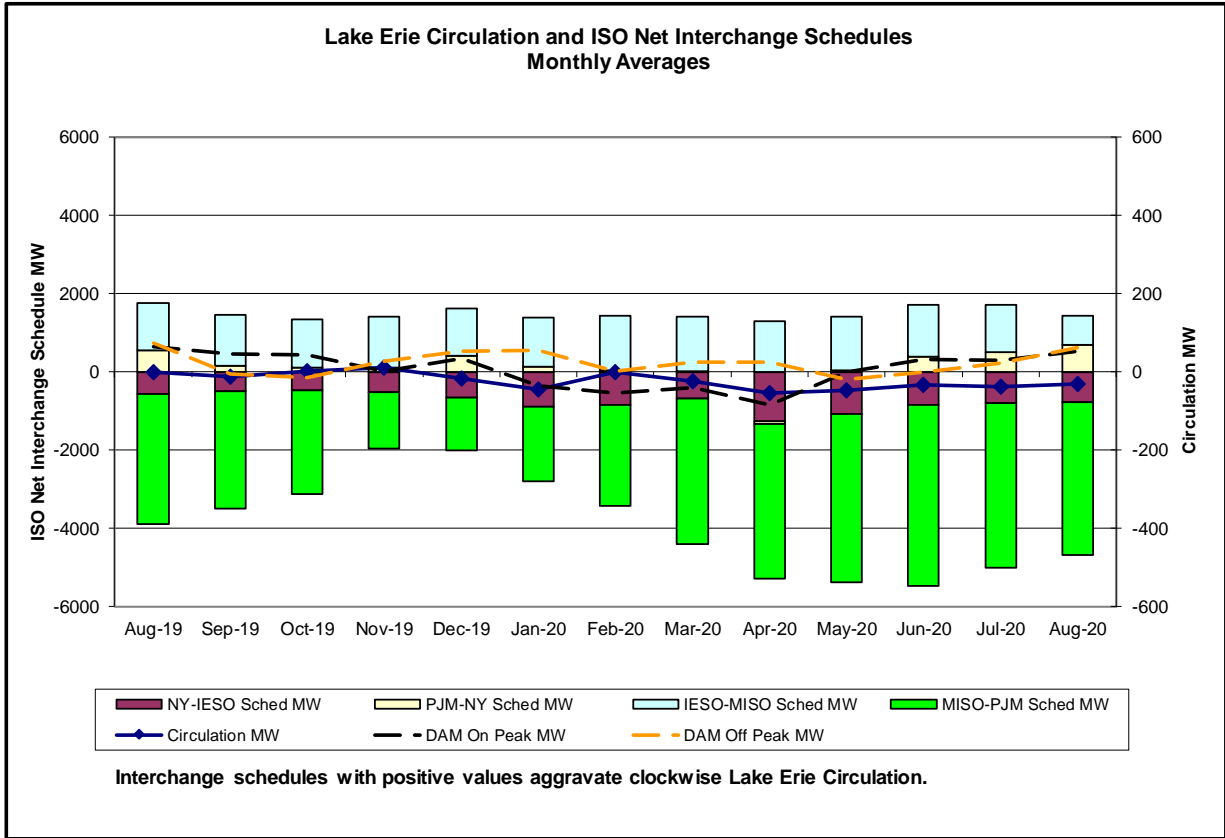




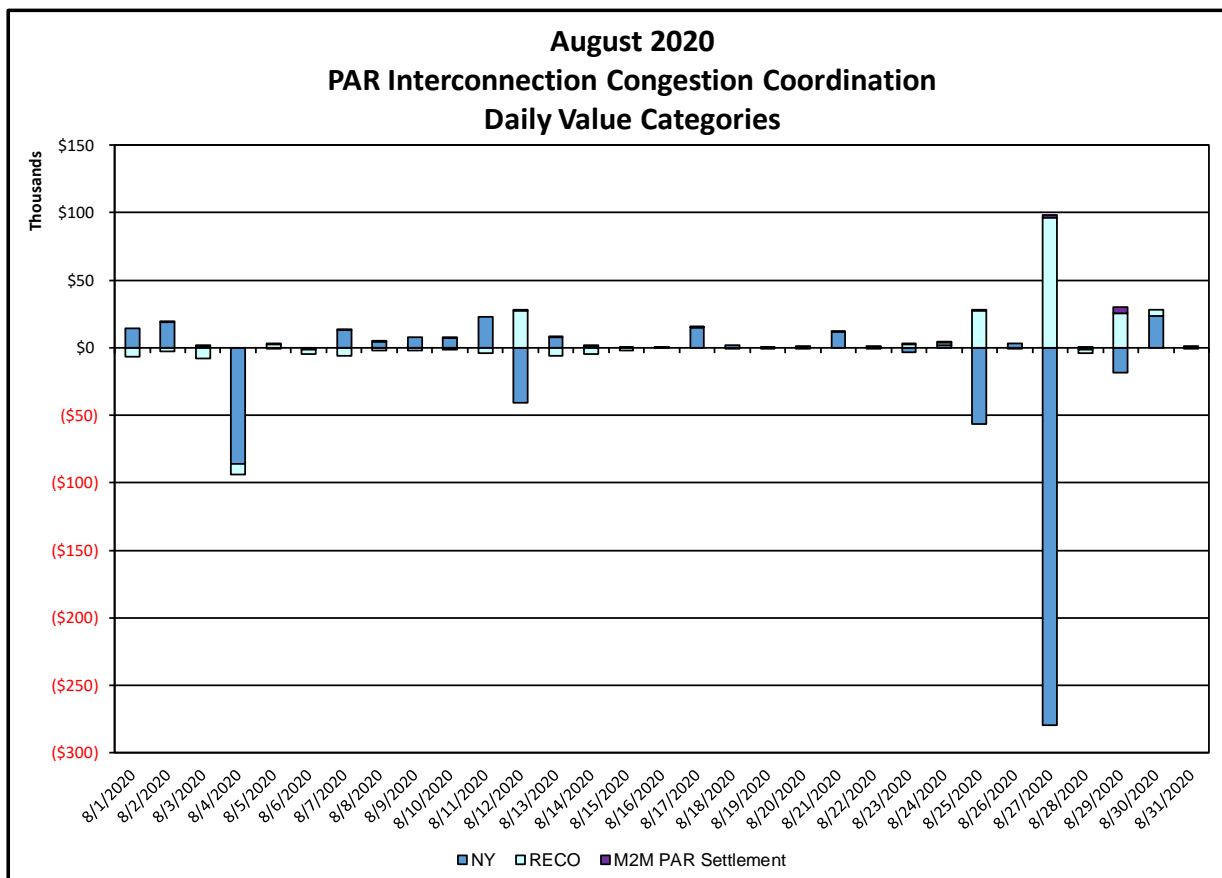
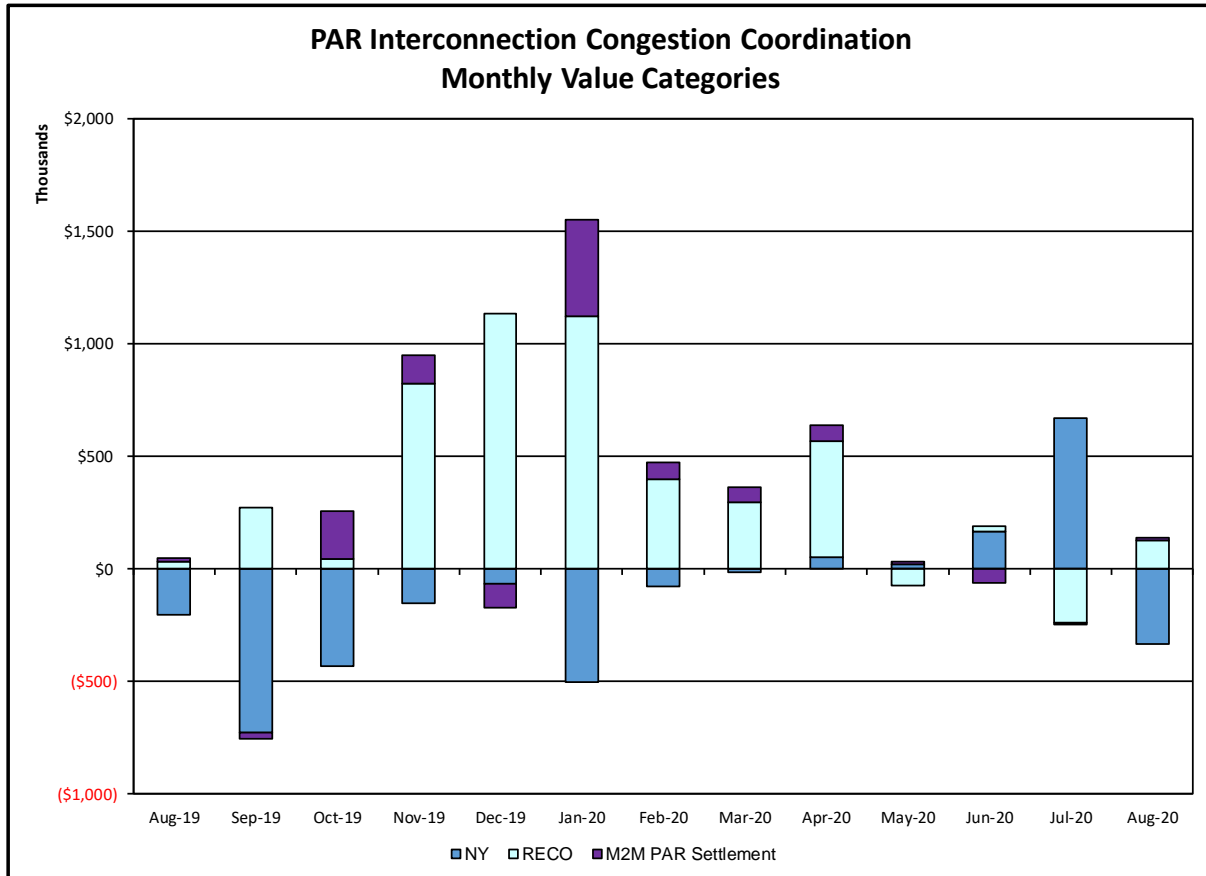






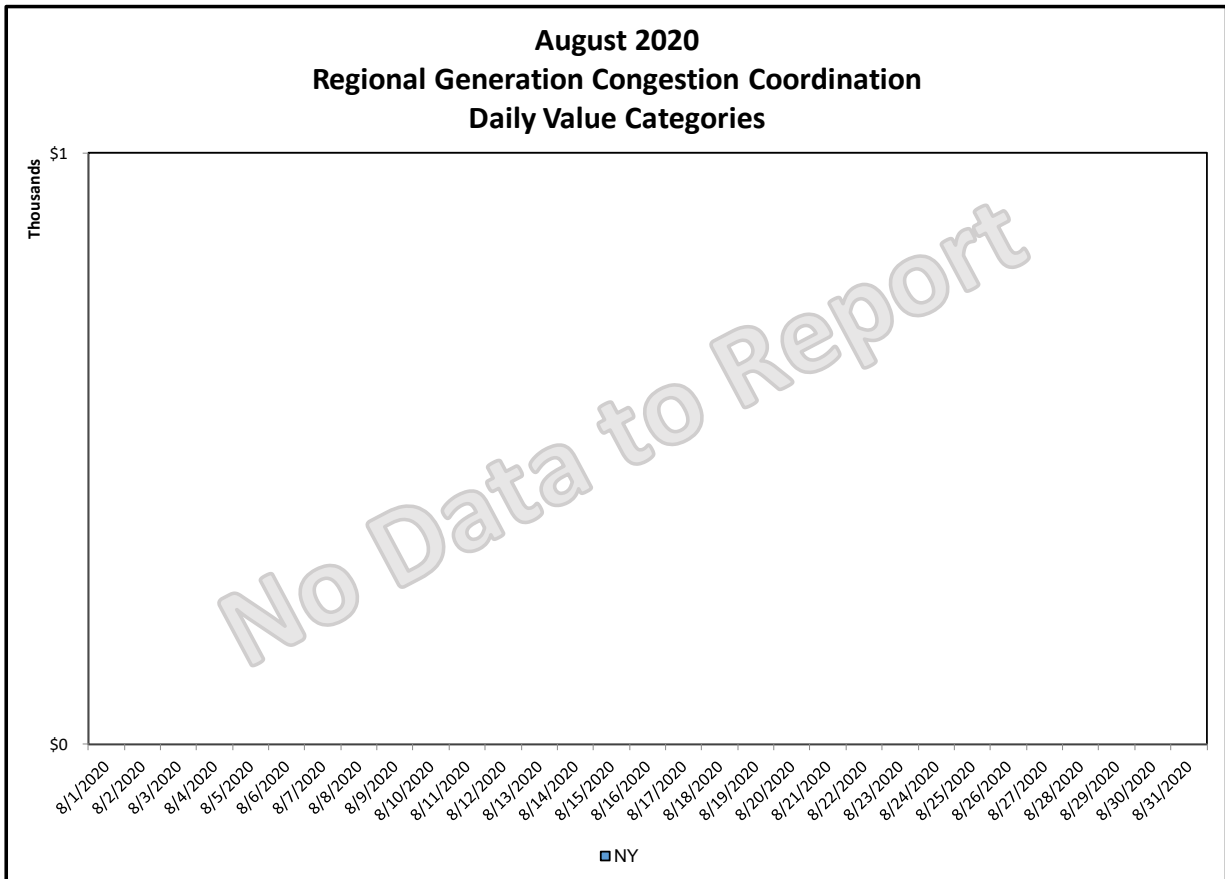
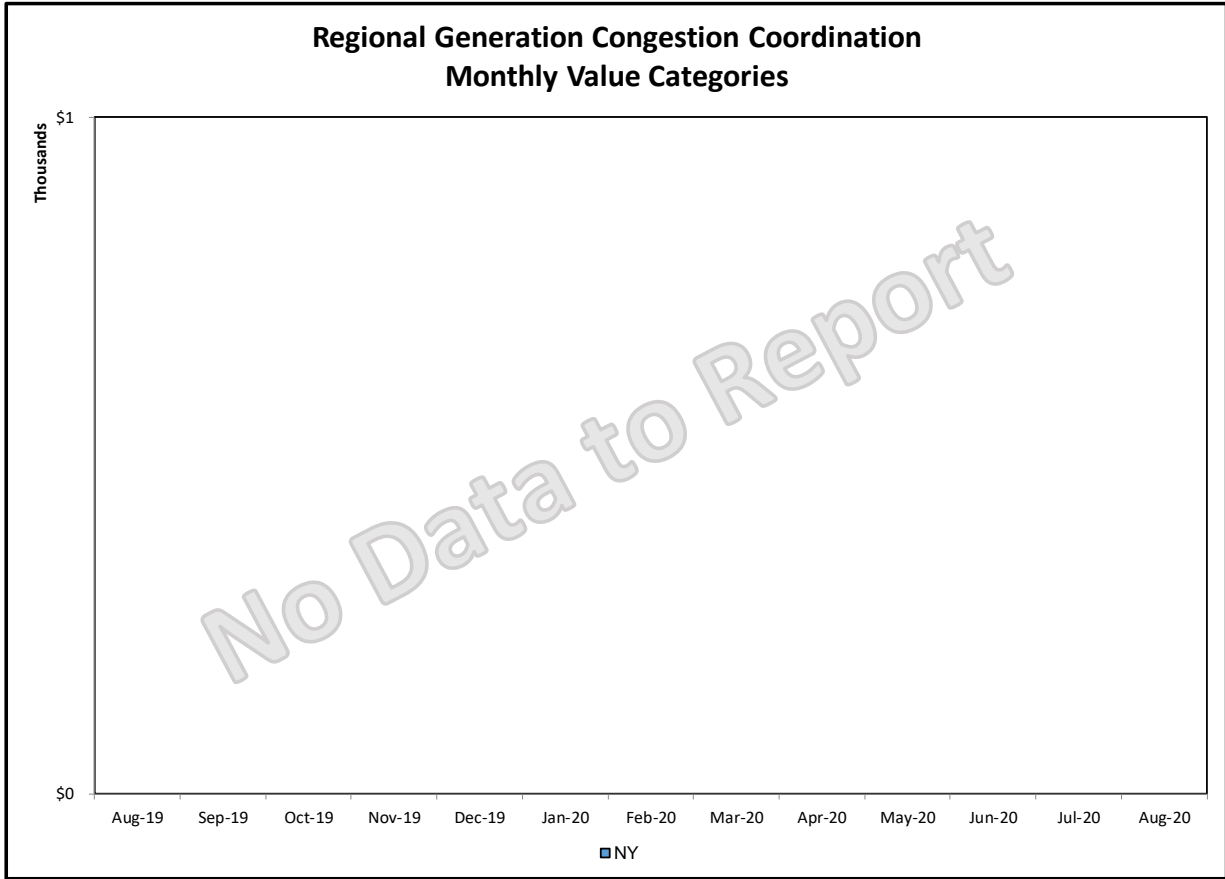


Broader Regional Market Performance Metrics



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.



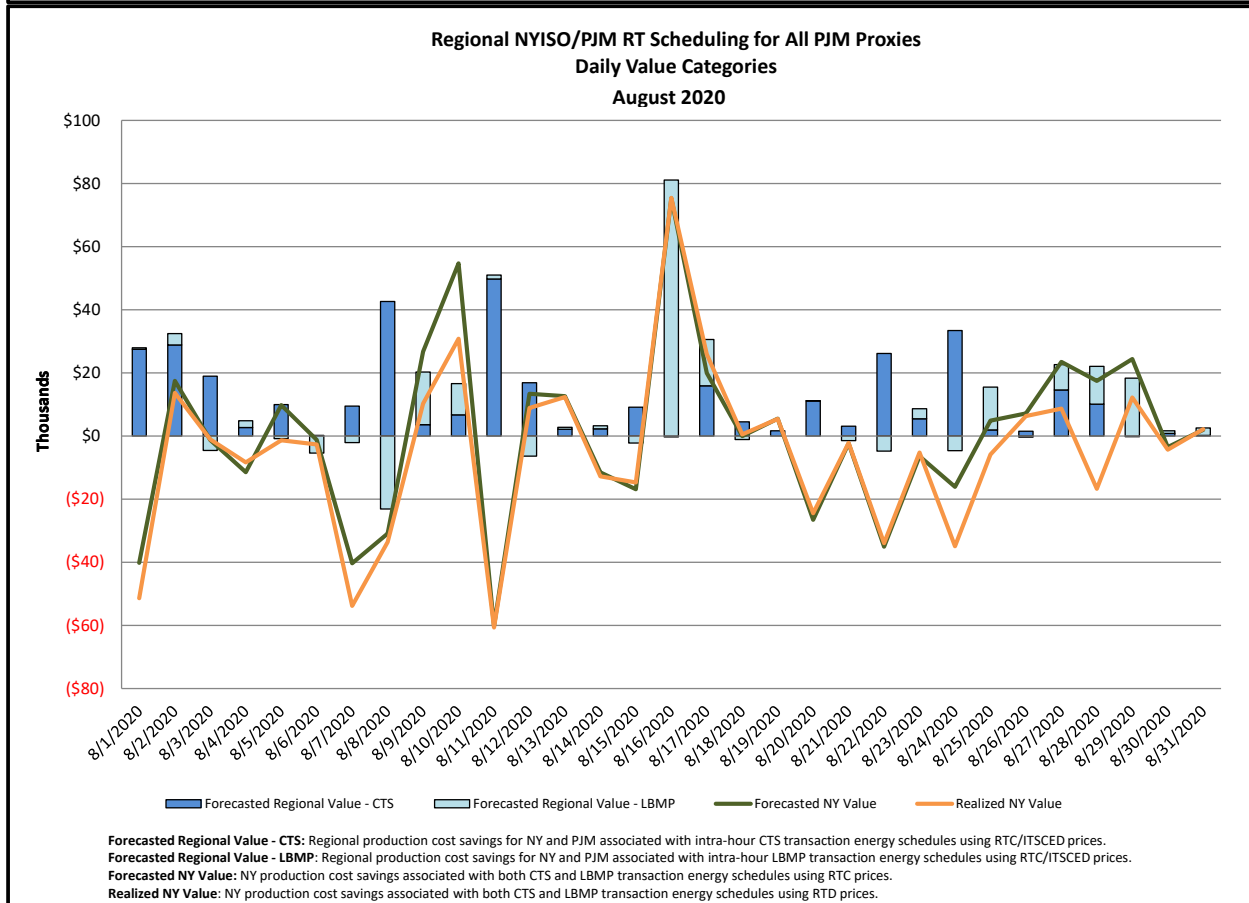
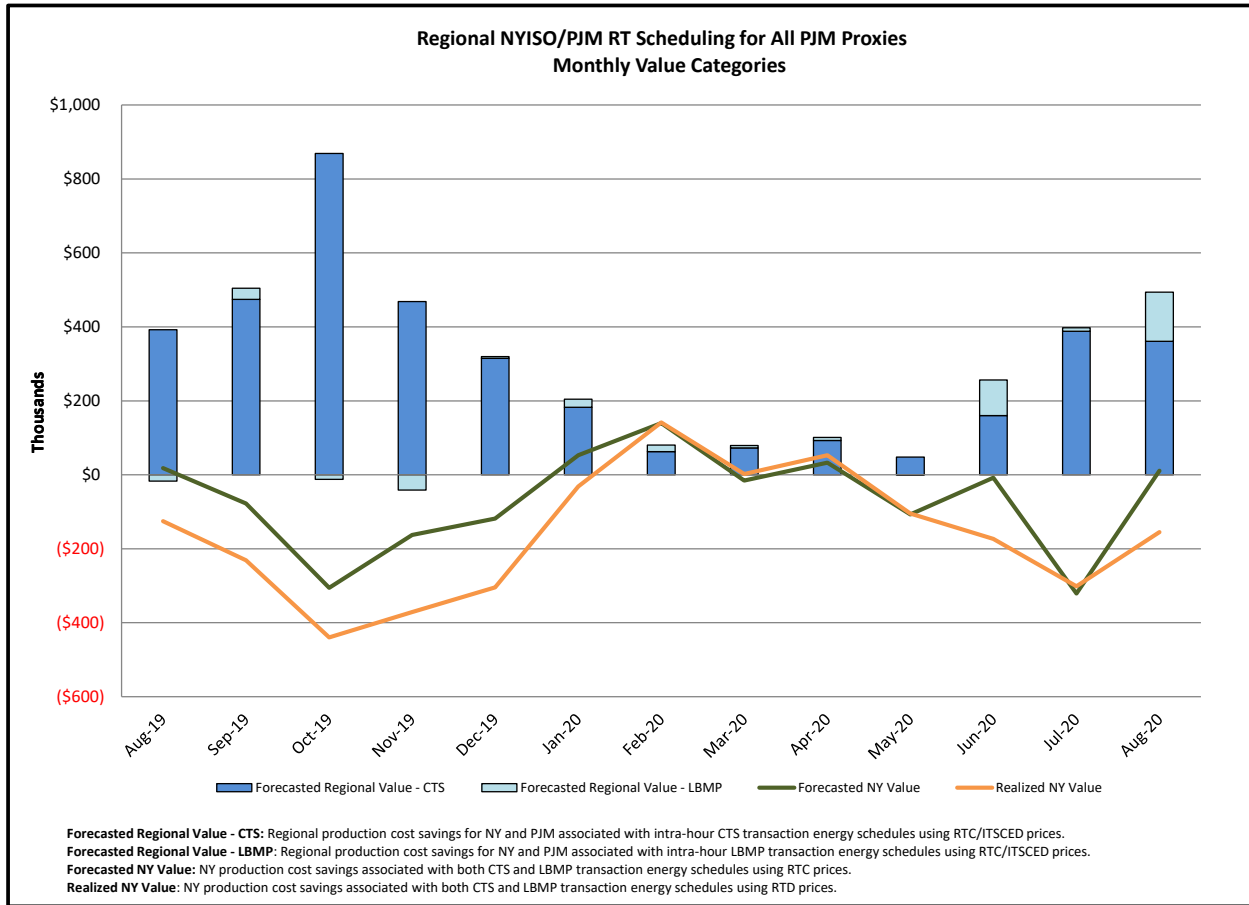
Regional Generation Congestion Coordination

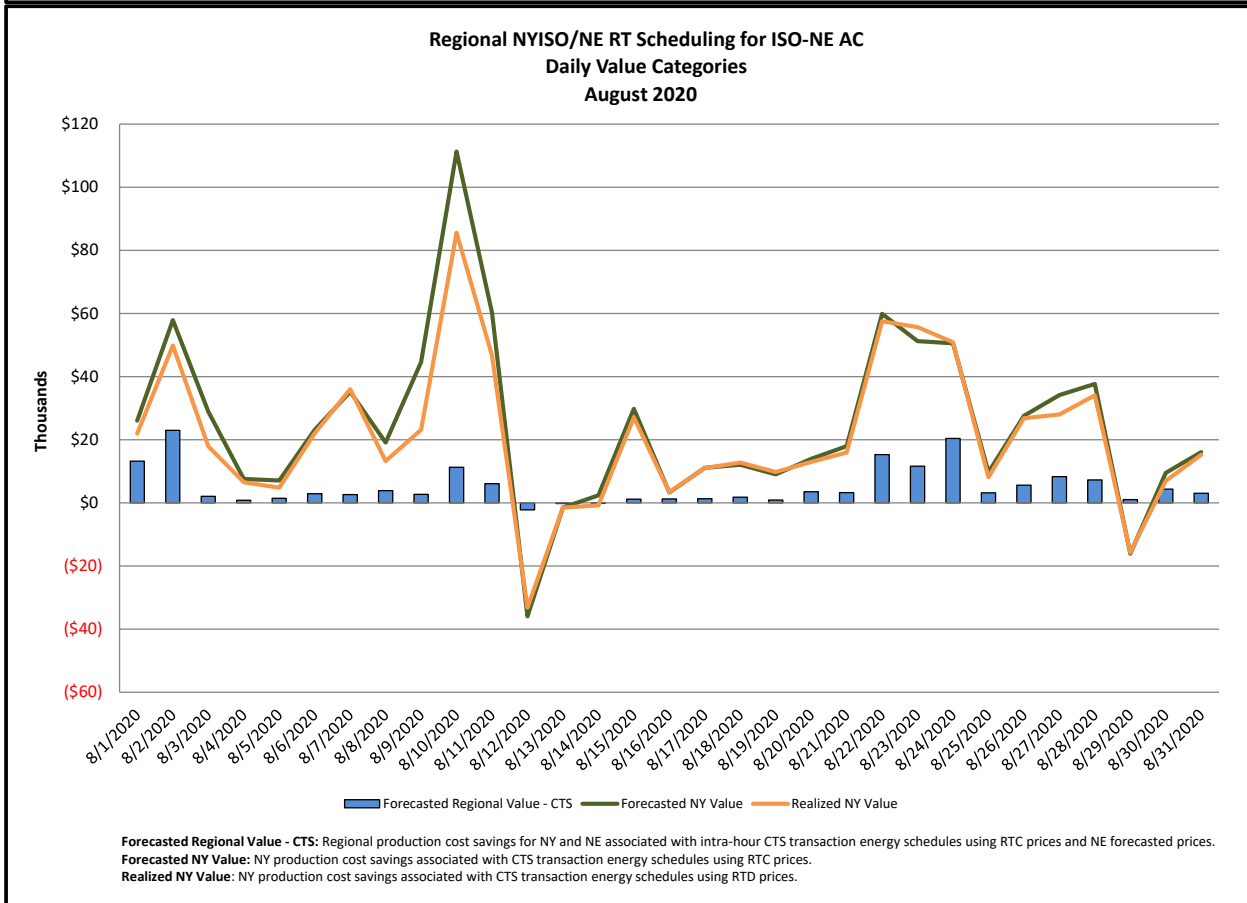
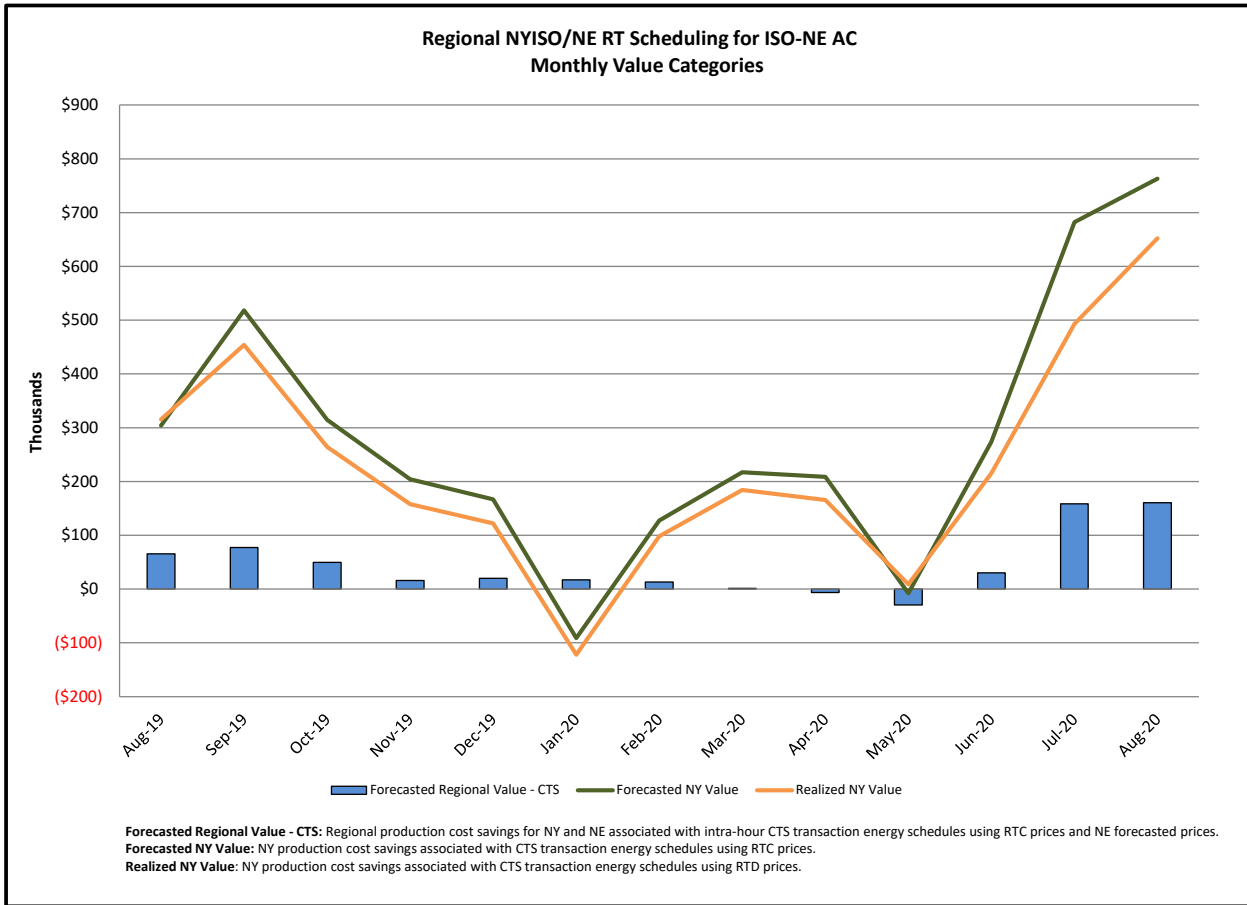
Category

NY

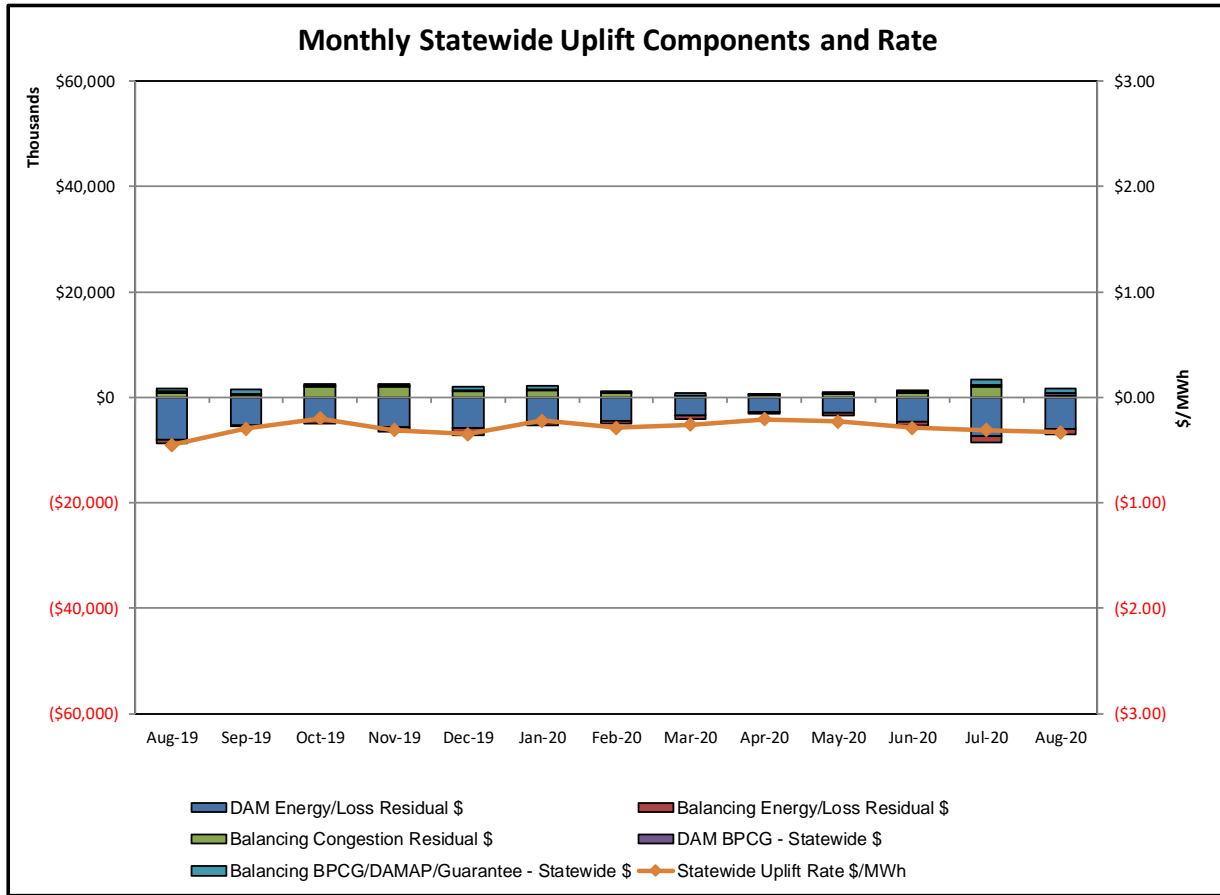
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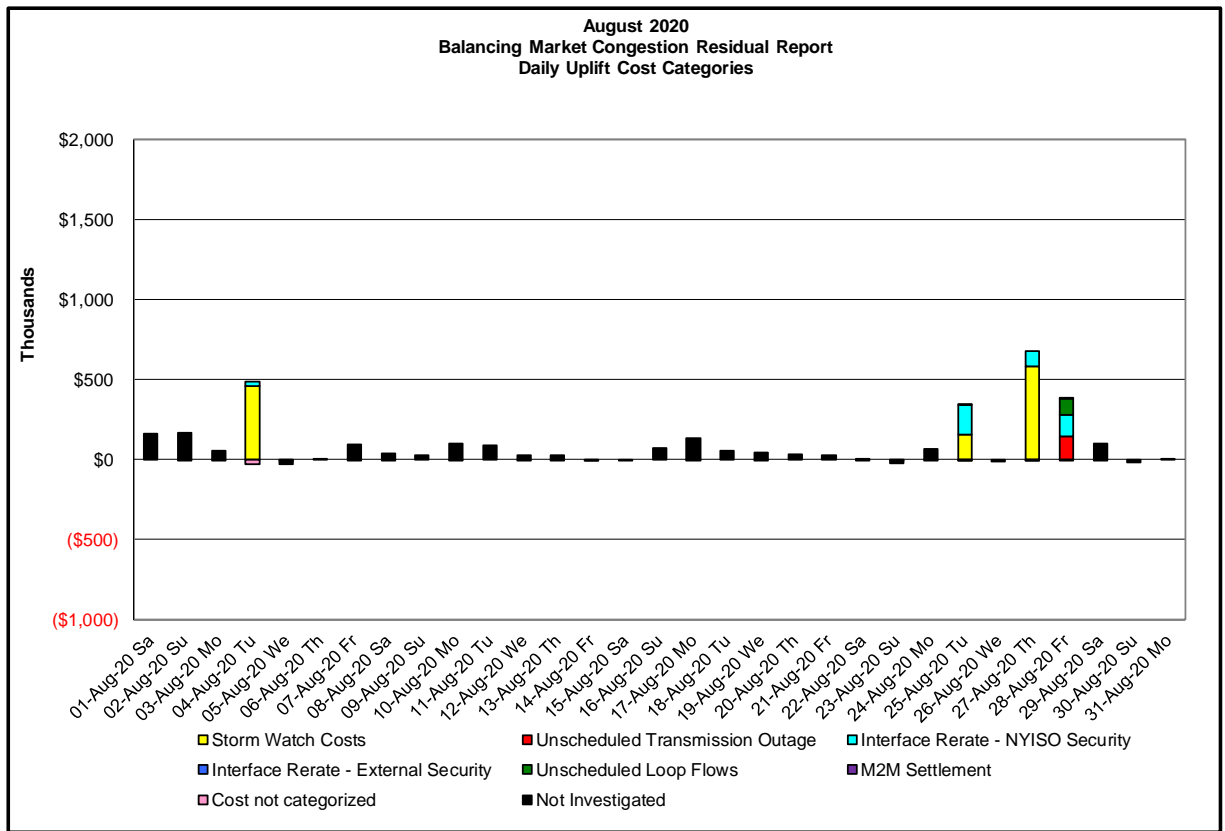
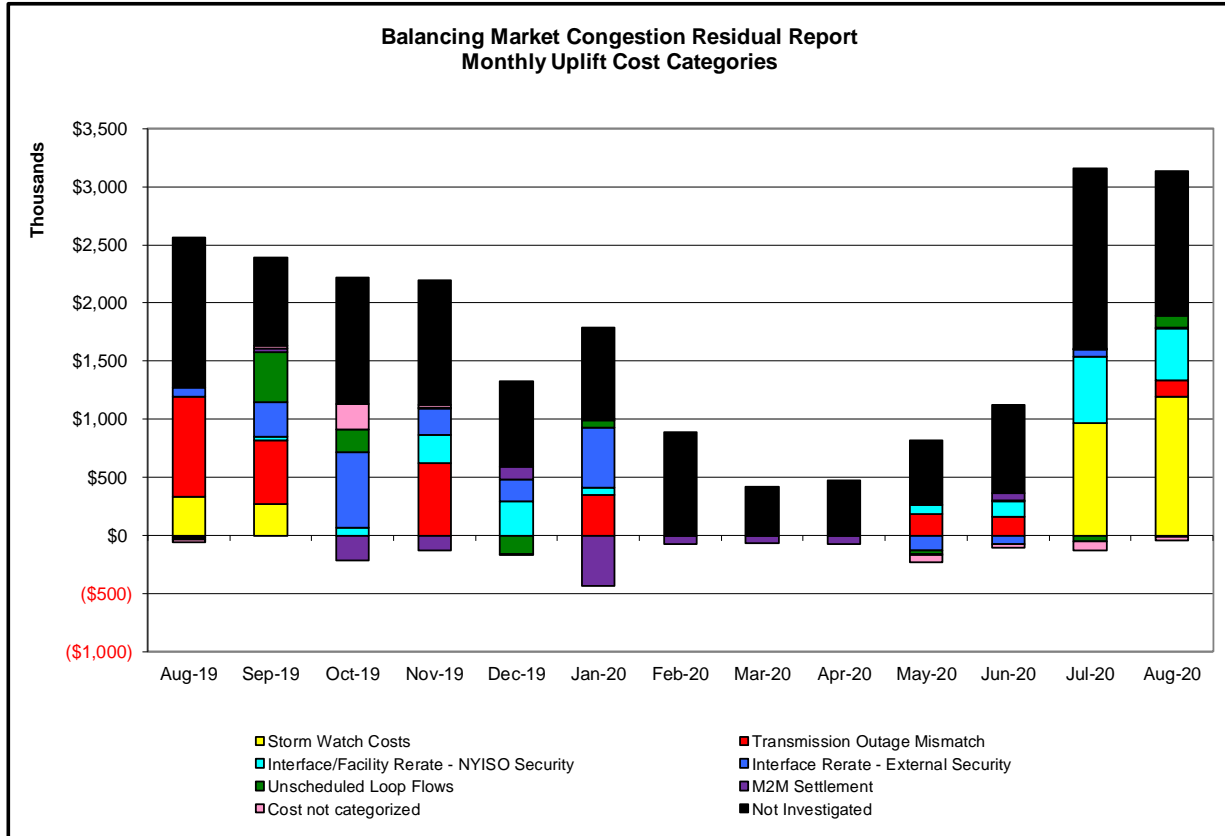
NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from the more efficient regional utilization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





Market Performance Metrics





Day's investigated in August: 4, 25, 27, 28

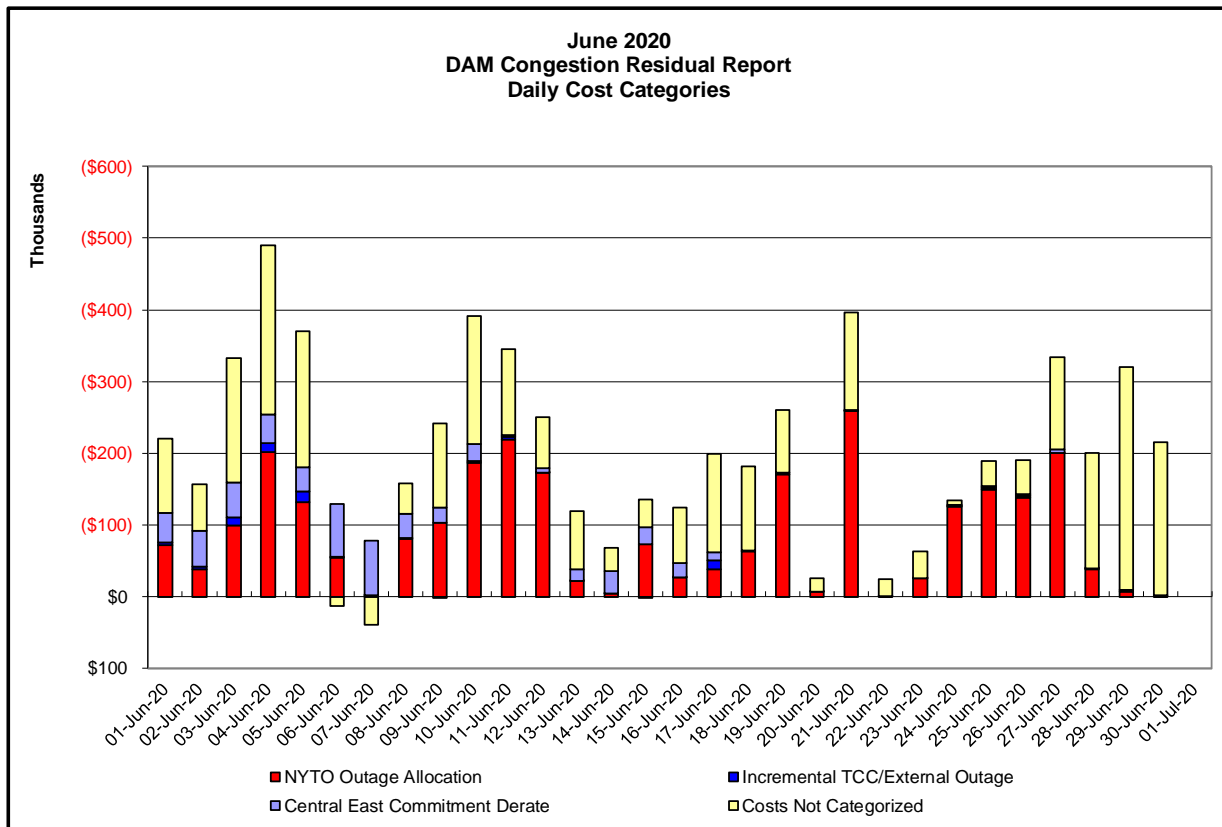
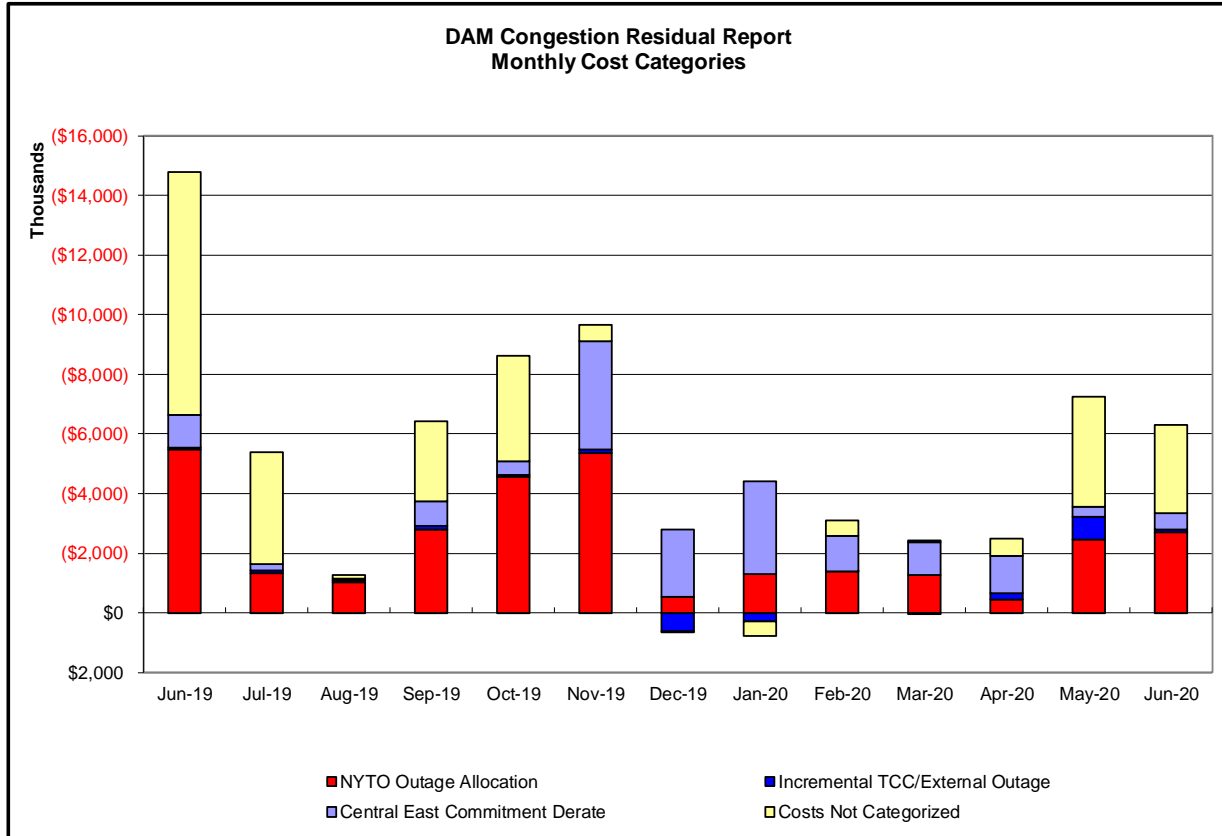
Event	Date (yyyymmdd)	Hours	Description
	8/4/2020	12-14, 16-18	Thunder Storm Alert, Chestror-Shoemaker 138kV (#27)
	8/4/2020	11-14	Thunder Storm Alert, Buchanan 345/138kV (#TA5)
	8/4/2020	14, 16	Derate of Moses-Adirondack 230kV (#MA1) for I/o SIN:MSU1&7040& HQ GN&LD PROXY
	8/25/2020	17-19	Thunder Storm Alert, Chestror-Shoemaker 138kV (#27), Buchanan 345/138kV (#TA5)
	8/25/2020	12, 14-16	Derate of Mott Haven-Dunwoodie 345kV (#71)
	8/25/2020	18, 19	Derate of East Garden City-Valley Stream 138 kV (#262) for I/o BUS:BARRETT 292&459&G2&IC9-12
	8/25/2020	12, 14-19	Derate of Moses-Adirondack 230kV (#MA1) for I/o SIN:MSU1&7040& HQ GN&LD PROXY
	8/25/2020	12, 14-17	Derate of Happaug-Pilgrim 138kV (#871) for I/o TWR:HOLTSVILLE 881& 882& 880
	8/25/2020	16	PJM Active DNI ramp Limit
	8/25/2020	16	NE AC Active DNI Ramp Limit
	8/27/2020	14-20	Thunder Storm Alert, Chestror-Shoemaker 138kV (#27)
	8/27/2020	13	Thunder Storm Alert, Buchanan 345/138kV (#TA5)
	8/27/2020	13	Thunder Storm Alert, Carls Place-East GardenCity 138kV (#361)
	8/27/2020	13	Thunder Storm Alert, East GardenCity-Roslyn 138kV (#362)
	8/27/2020	15, 16	Thunder Storm Alert, Leeds-Pleasant Valley 345kV (#92)
	8/27/2020	13, 15, 17, 18	Thunder Storm Alert, SprainBrook-East Garden City 345kV (#Y49)
	8/27/2020	13, 15, 17, 18	Thunder Storm Alert, Tremont 138kV/138kV (#BK11)
	8/27/2020	13-15	NYCA DNI Ramp Limit
	8/28/2020	11-20, 23	Forced outage NineMile-Clay 345kV (#8)
	8/28/2020	17, 18, 23	Derate Hauppauge-Pilgrim 138kV(871) for I/o TWR:HOLTSVILLE 881& 882& 880
	8/28/2020	11-16, 20, 23	Derate Mott Haven-Dunwoodie 345kV (#71)
	8/28/2020	12	Derate Niagara-Packard 230kV (#61) for I/o TWR:PACKARD 62 & BP76
	8/28/2020	11, 13-17	Derate Niagara-Packard 230kV (#62) for I/o TWR:NIAGARA 61 & 64
	8/28/2020	11, 12, 14-16	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.	

