# Operations Performance Metrics Monthly Report









## September 2020 Report

## Operations & Reliability Department New York Independent System Operator



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## **September 2020 Operations Performance Highlights**

- Peak load of 24,237 MW occurred on 09/10/2020 HB 16
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 0 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.
- Effective 09/01/2020, the NYISO implemented updated regulation requirements and updated the <u>web posting</u> detailing the regulation requirements.
- The following table identifies the estimated production cost savings associated with the Broader Regional Market initiatives.

	Current Month	Year-to-Date
	Value (\$M)	Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$0.04	\$2.79
NY Savings from PJM-NY Coordinated Transaction Scheduling	(\$0.07)	\$0.64
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.27	\$1.96
Total NY Savings	\$0.24	\$5.39
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.11	\$1.77
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.06	\$0.41
Total Regional Savings	\$0.17	\$2.18

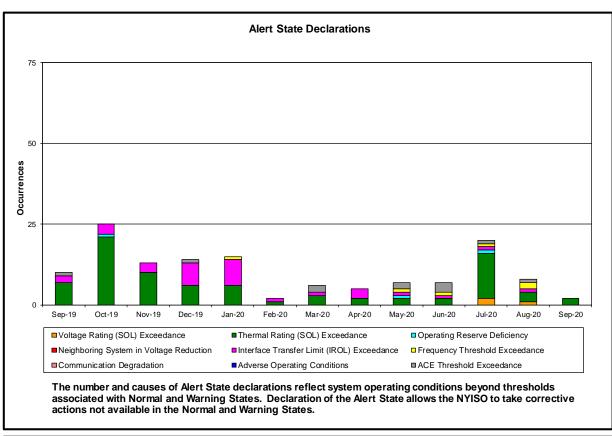
- Statewide uplift cost monthly average was (\$0.28)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

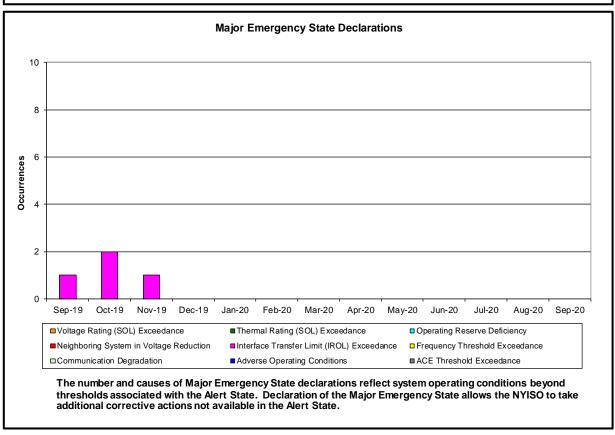
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
October 2020 Spot Price	\$2.03	\$2.03	\$18.15	\$5.21
September 2020 Spot Price	\$2.78	\$2.78	\$18.62	\$5.18
Delta	(\$0.75)	(\$0.75)	(\$0.47)	\$0.03

- NYCA Price decreased by \$0.75 due to an increase in Net Imports.
- Lower Hudson Valley Price decreased by \$0.75 due to an increase in Net Imports.
- NYC Price decreased by \$0.47 due to an increase in SCR UCAP Available.

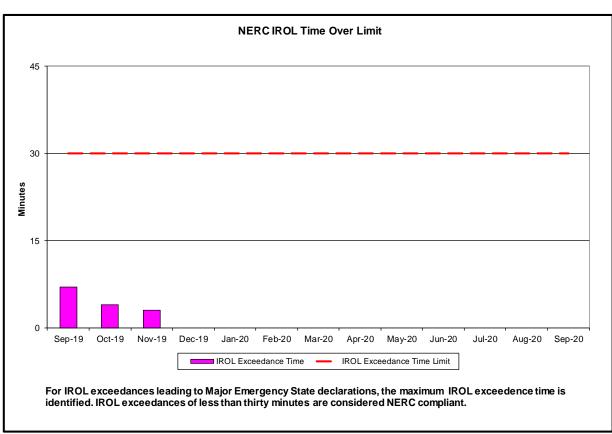


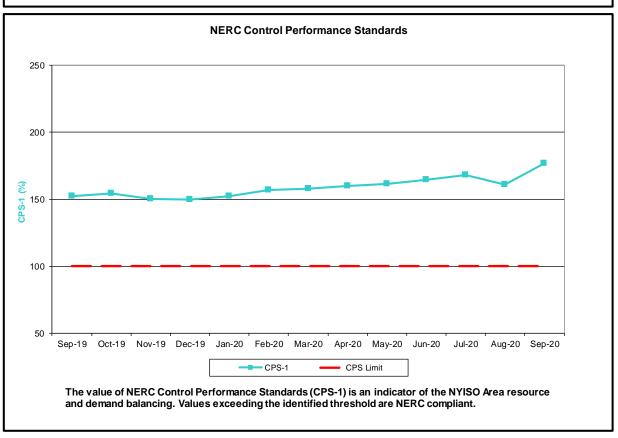
## **Reliability Performance Metrics**



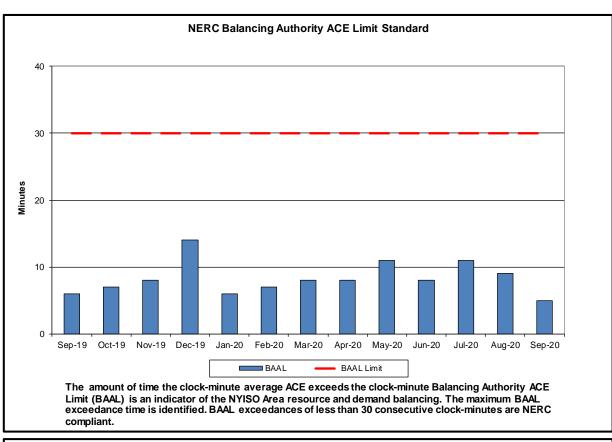


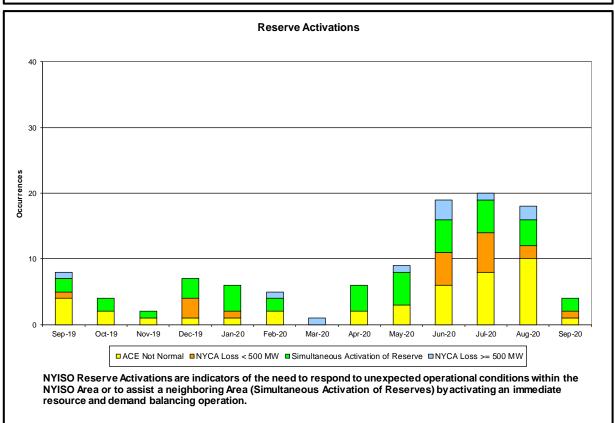




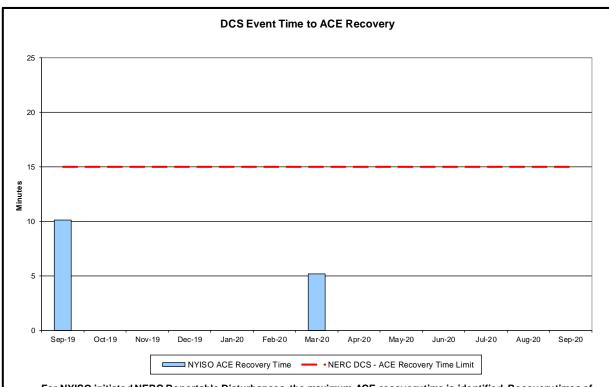


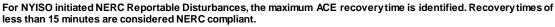


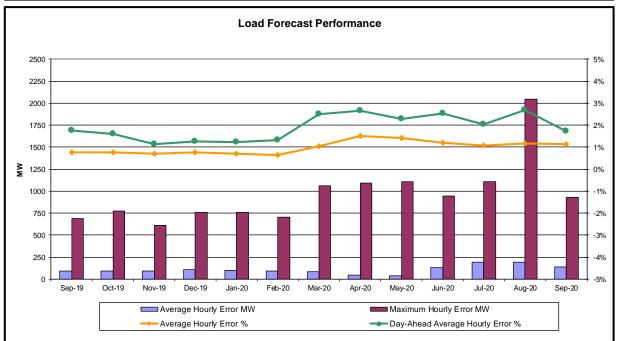










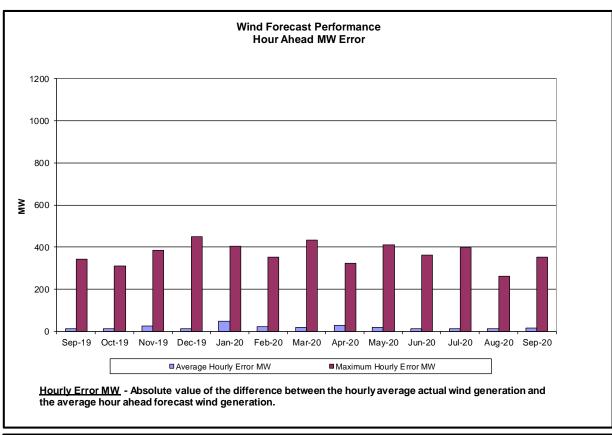


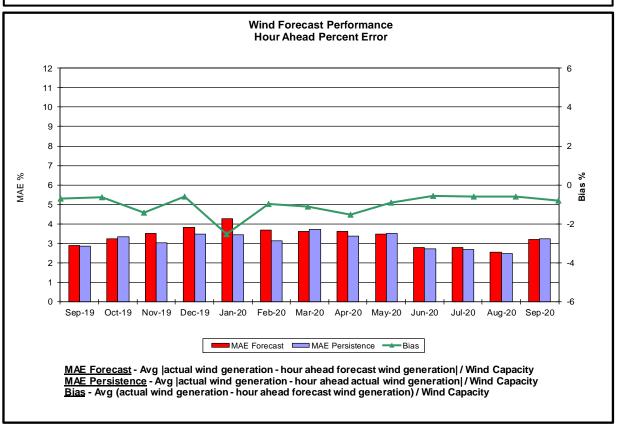
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

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

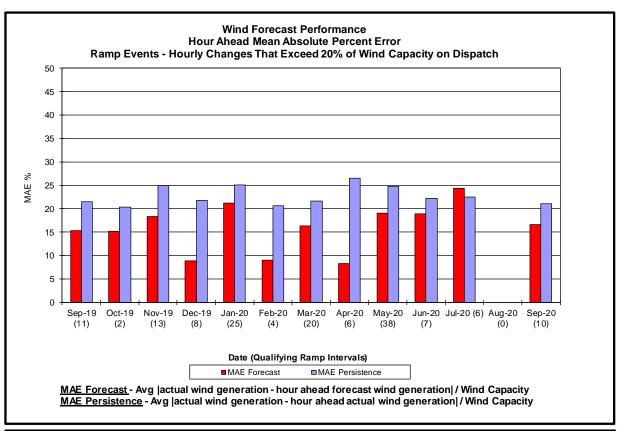
<u>Day-Ahead Average Hourly Error %</u> - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

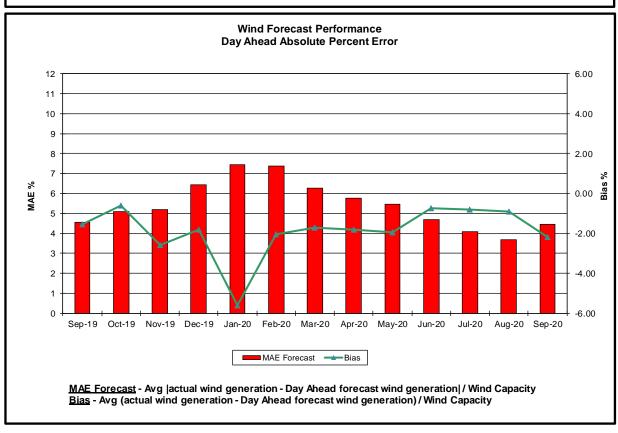




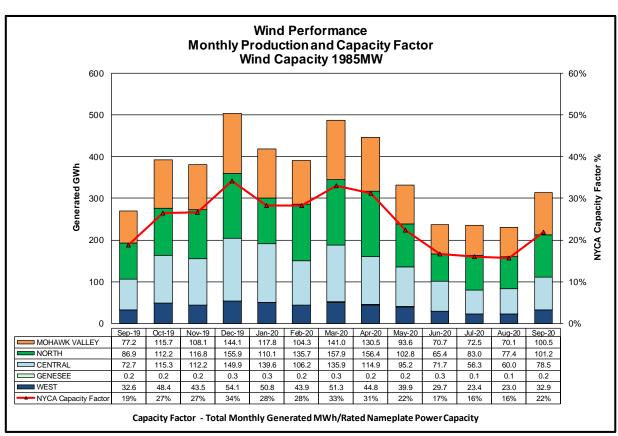


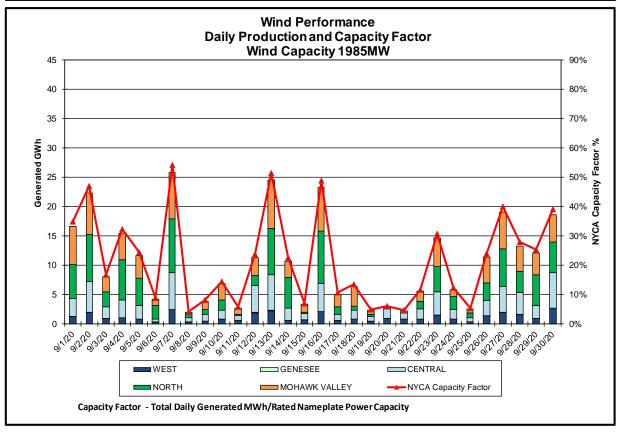




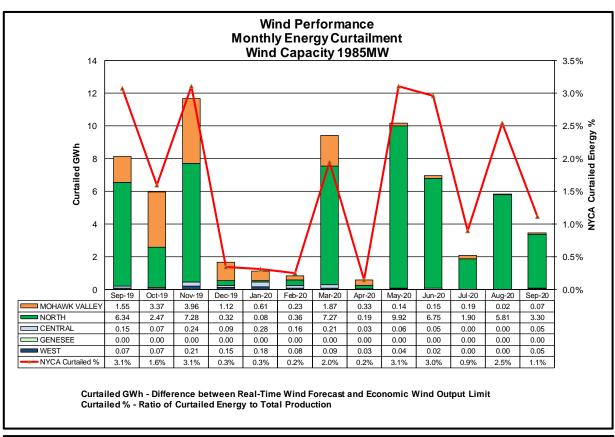


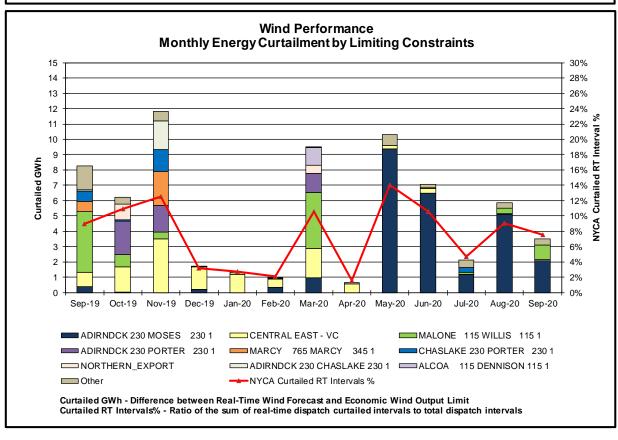




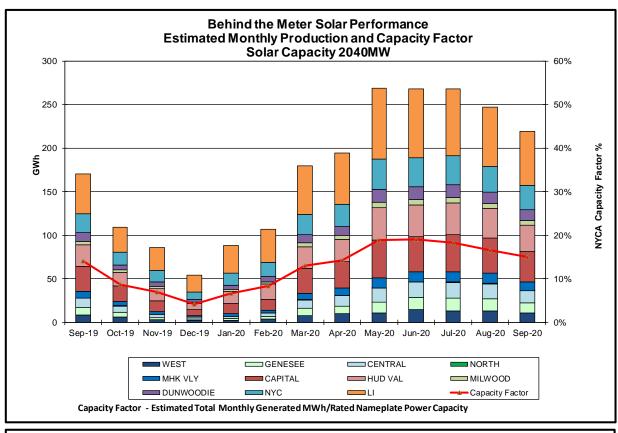


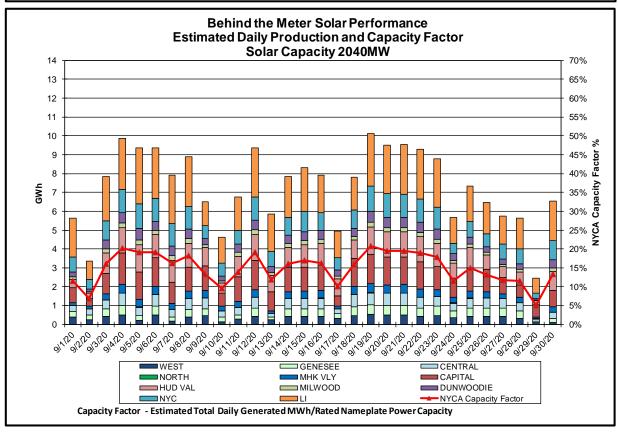




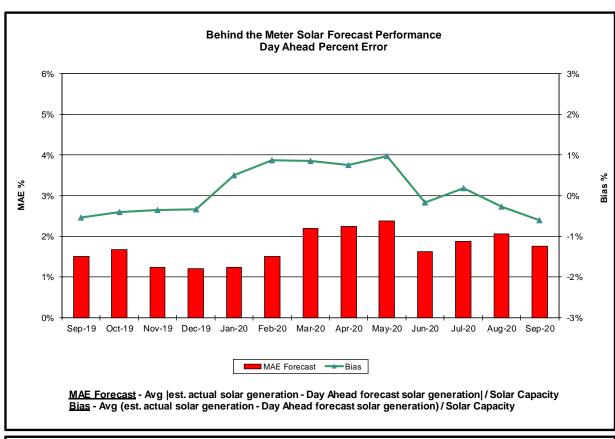


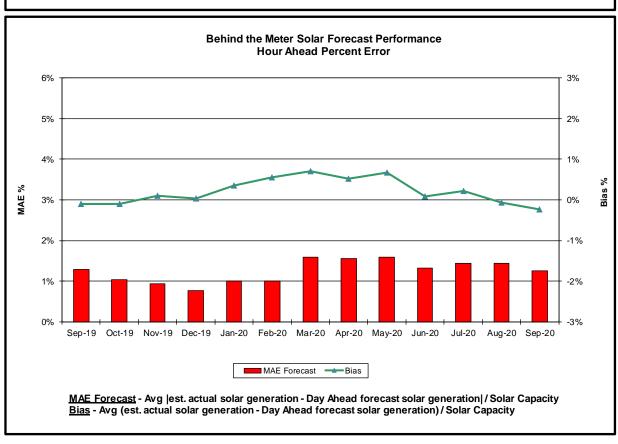




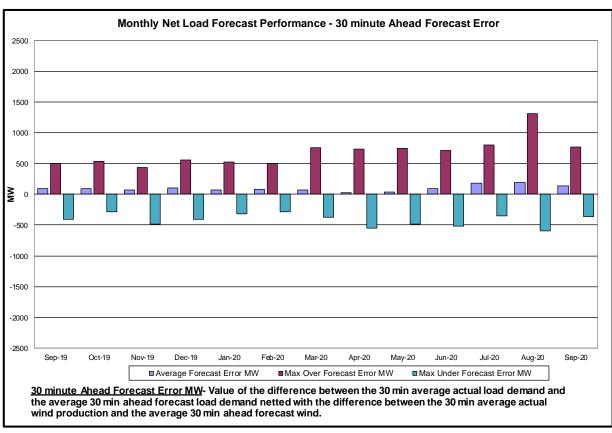


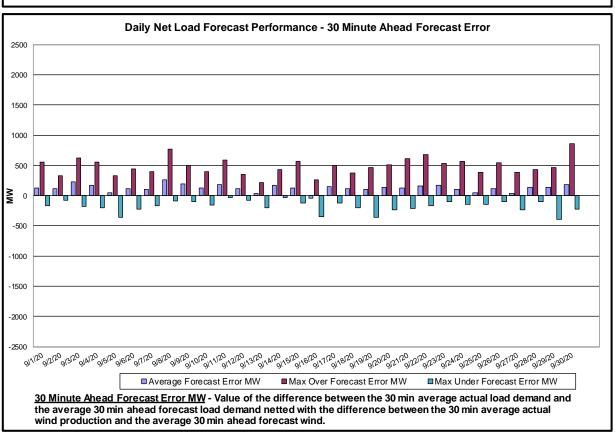




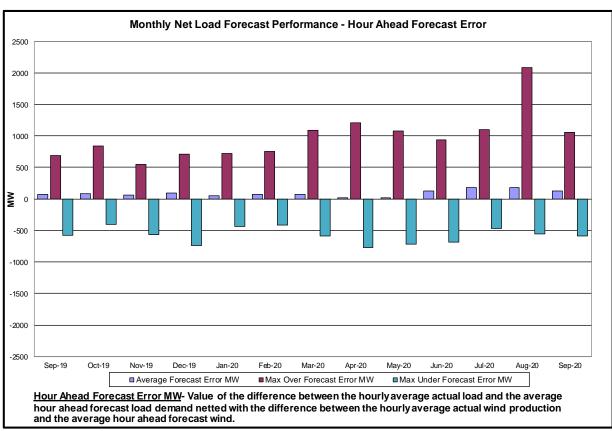


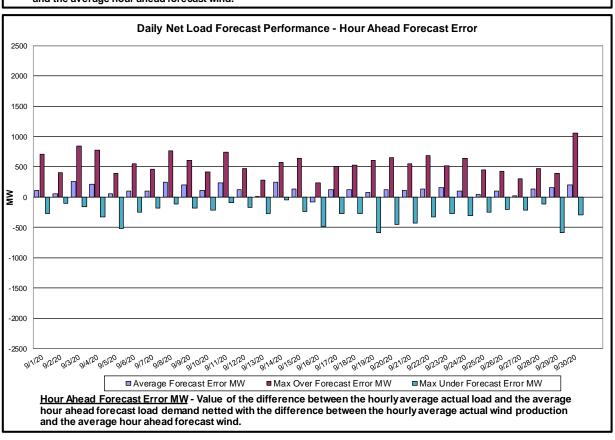




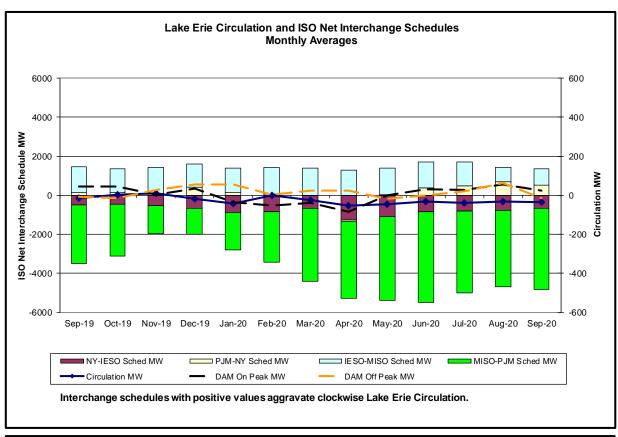


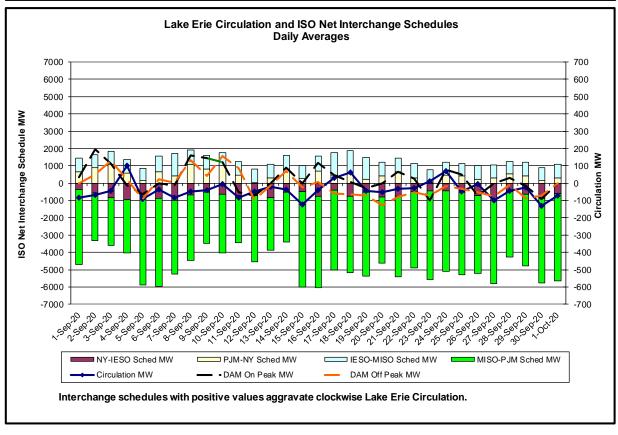






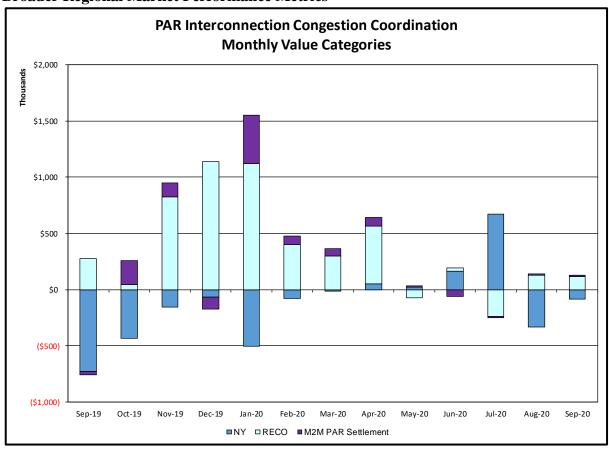


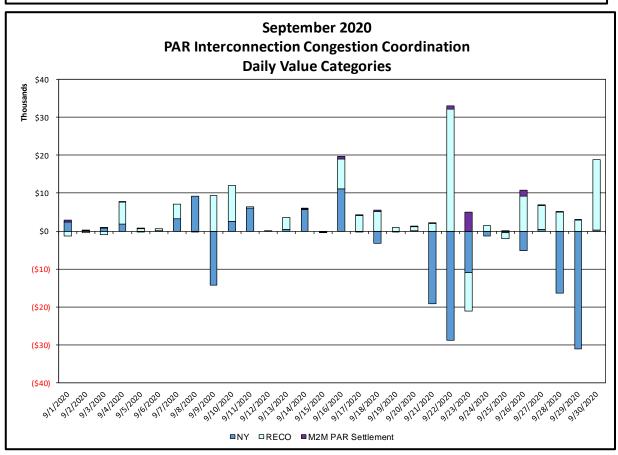






## **Broader Regional Market Performance Metrics**







### PAR Interconnection Congestion Coordination

<u>Category</u> <u>Description</u>

NY Represents the value NY realizes from Market-to-Market PAR Coordination when

experiencing congestion. This is the estimated savings to NY for additional deliveries into NY

RECO Represents the value of PJM's obligation to deliver 80% of service to RECO load over

Ramapo 5018. This is the estimated reduction in NYCA congestion due to the PJM delivery

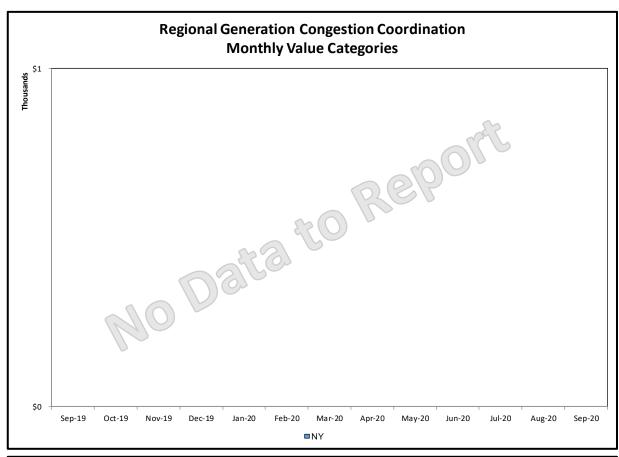
of RECO over Ramapo 5018.

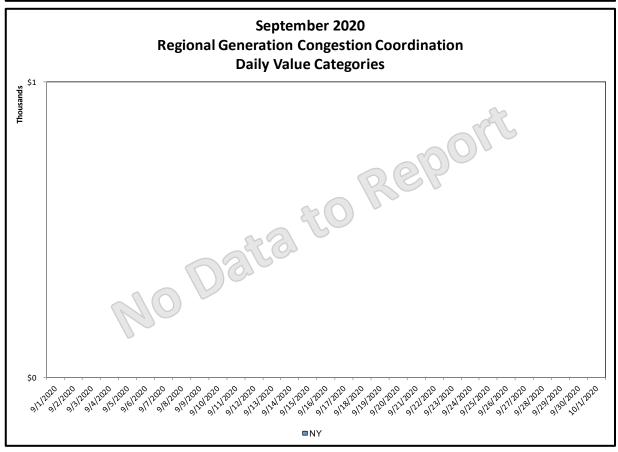
M2M PAR Settlement Market-to-Market PAR Coordination settlement on coordinated flowgates. Through April 2017

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

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







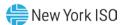


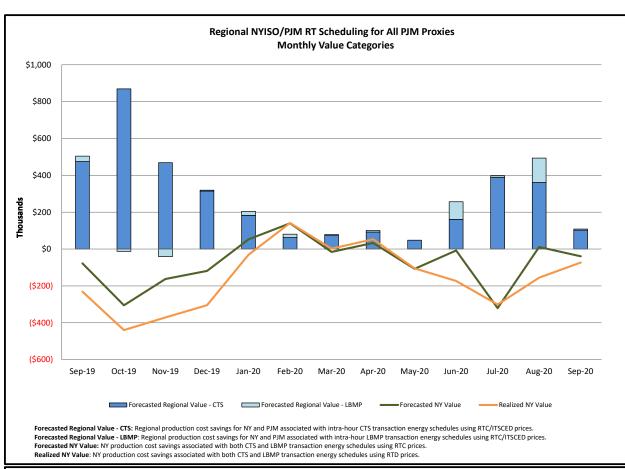
### **Regional Generation Congestion Coordination**

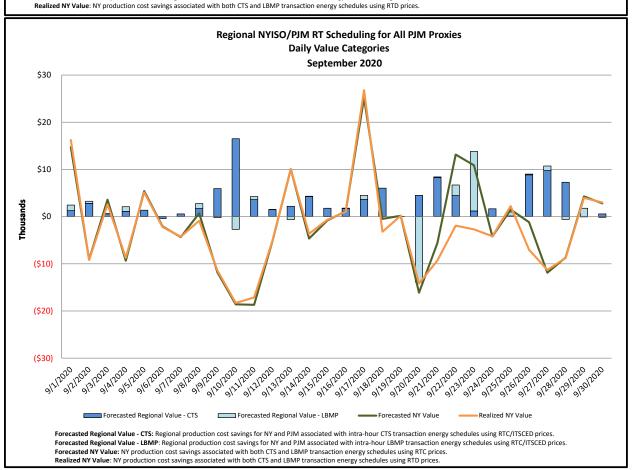
<u>Category</u> NY

#### <u>Description</u>

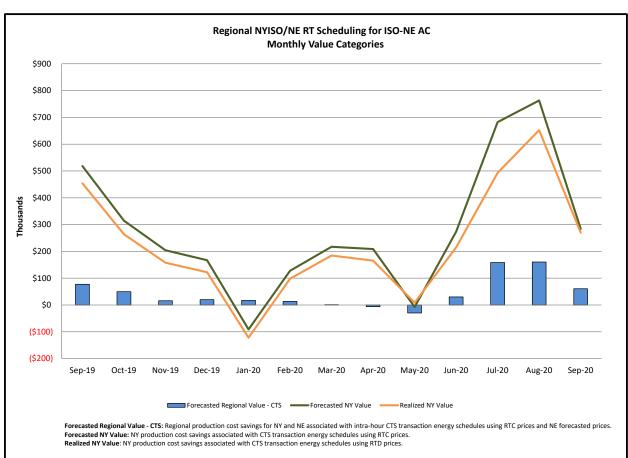
NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from the more efficient regional utilization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

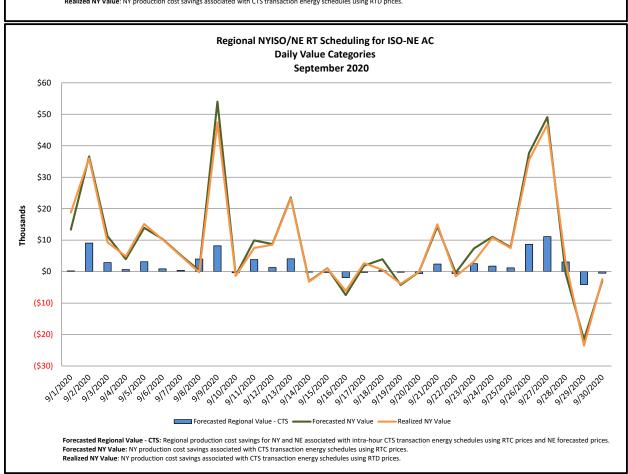






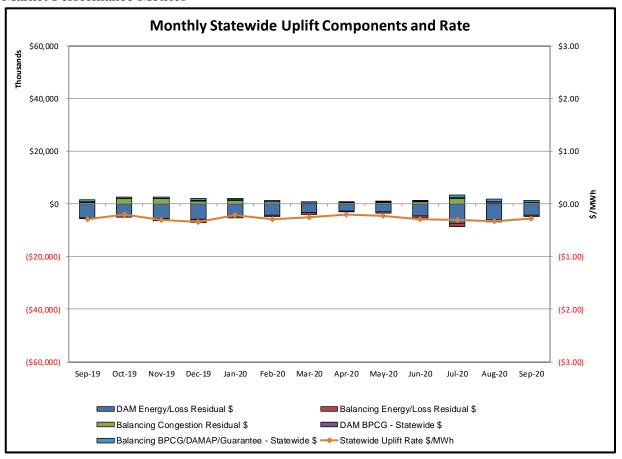




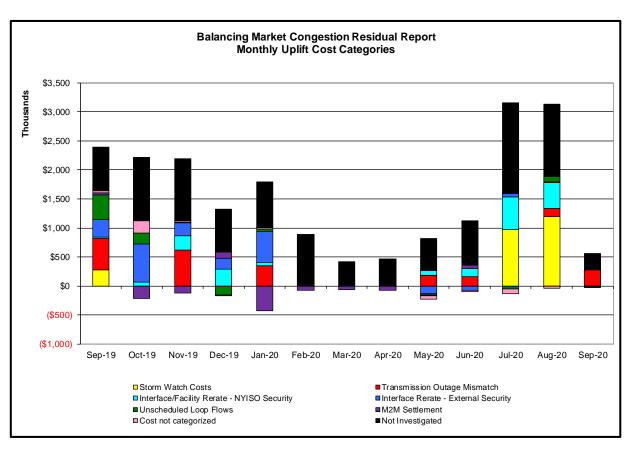


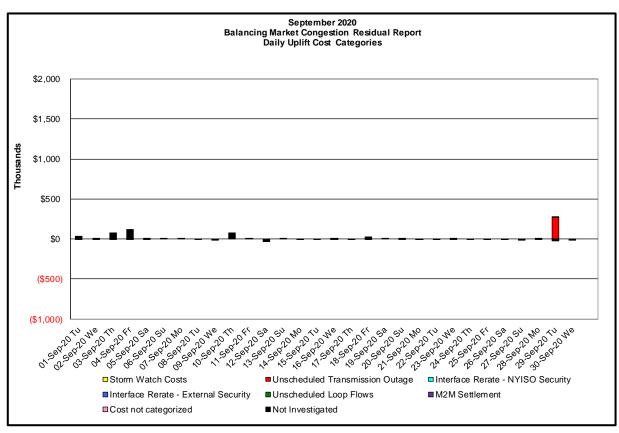


## Market Performance Metrics







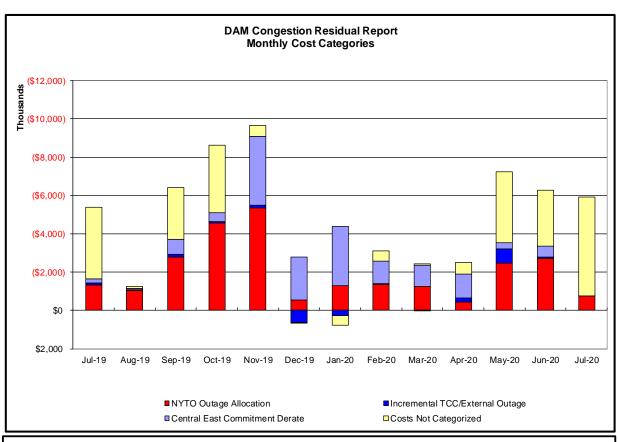


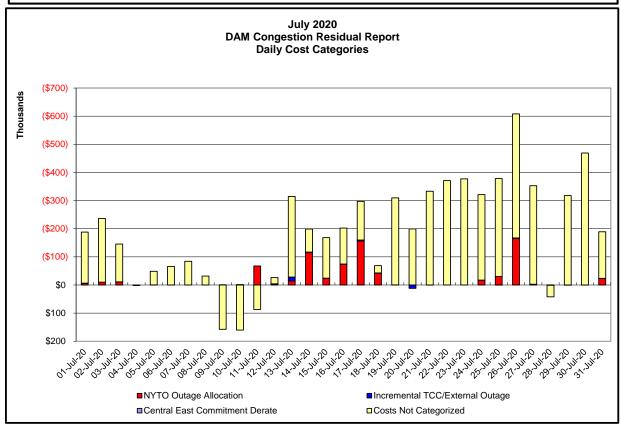


Day's investigated in September:29		er:29		
Event	Event Date (yyyymmdd) Hours		Description	
9/29/2020 7,8		7,8	Forced outage Scriba-Fitzpatrick 345kV (#FS-10)	
9/29/2020 7,8		7,8	Forced outage Fitzpatrick-Edic 345kV (#FE-1)	
	9/29/2020	17,18	Uprate Buffalo-Huntley 115kV (#130) for I/o SIN:Packard-Walck Rd 115kV (#129)	
	9/29/2020	17,18	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West	

<u>Category</u> Storm Watch	<u>Cost Assignment</u> Zone J	<u>Events Types</u> Thunderstorm Alert (TSA)	<u>Event Examples</u> 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 Rep	ort Assumptions/No	<u>ntes</u>	









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



