

Operations Performance Metrics Monthly Report



June 2022 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 11, 2022.

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June 2022 Operations Performance Highlights

- June 2022 peak load of 24,563 MW occurred on 6/30/2022 HB 17
- Summer 2022 capability period peak load to date of 27,046 MW occurred on 5/31/2022 HB 17
- All-time summer capability period peak load of 33,956 MW occurred on 07/19/2013 HB 16
- 1.1 hours of Thunderstorm 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.
- NYISO began securing Niagara 345/230kV transformer banks AT4 & AT5 in the Real-Time Market on 06/01/2022 and in the Day-Ahead Market execution occurring on 06/02/2022 for the 06/03/2022 market day.

The following table identifies the estimated production cost savings associated with the Broader Regional Market initiatives.

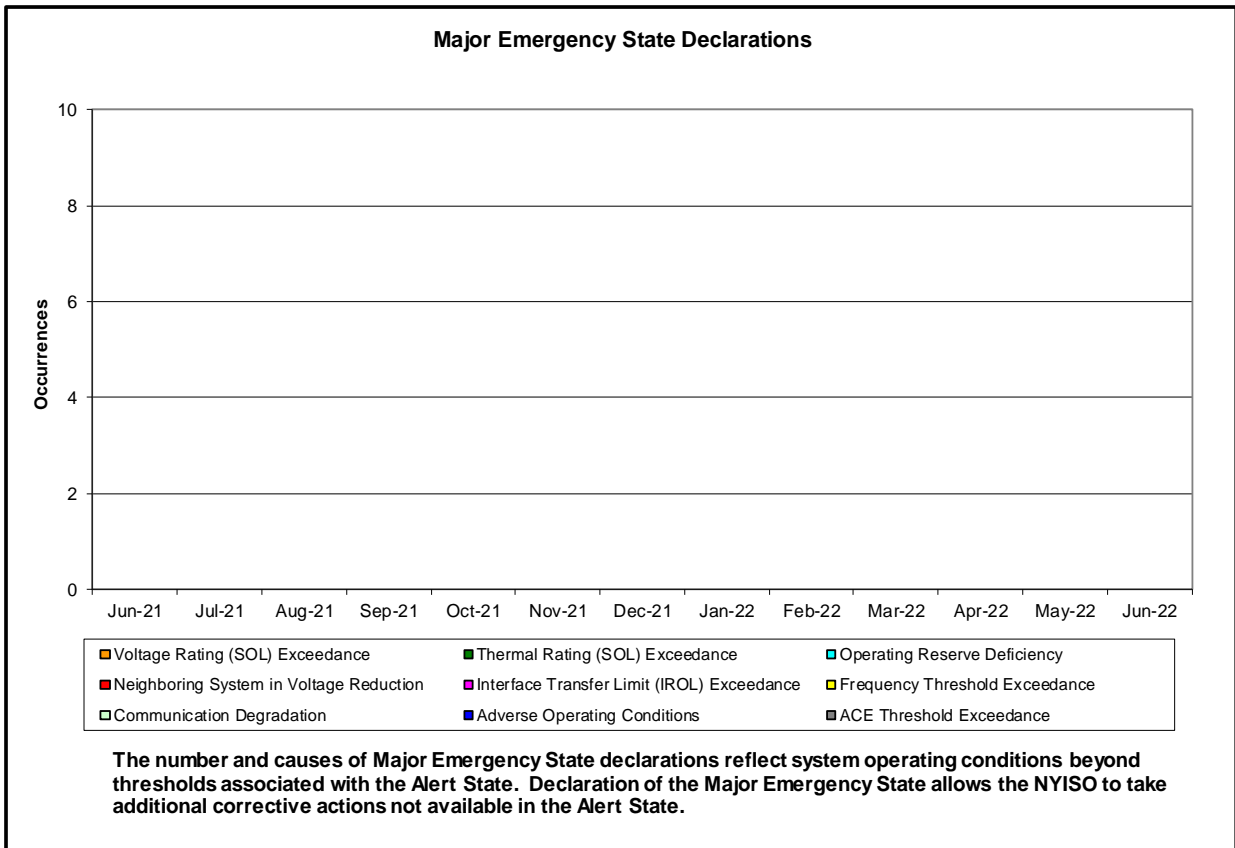
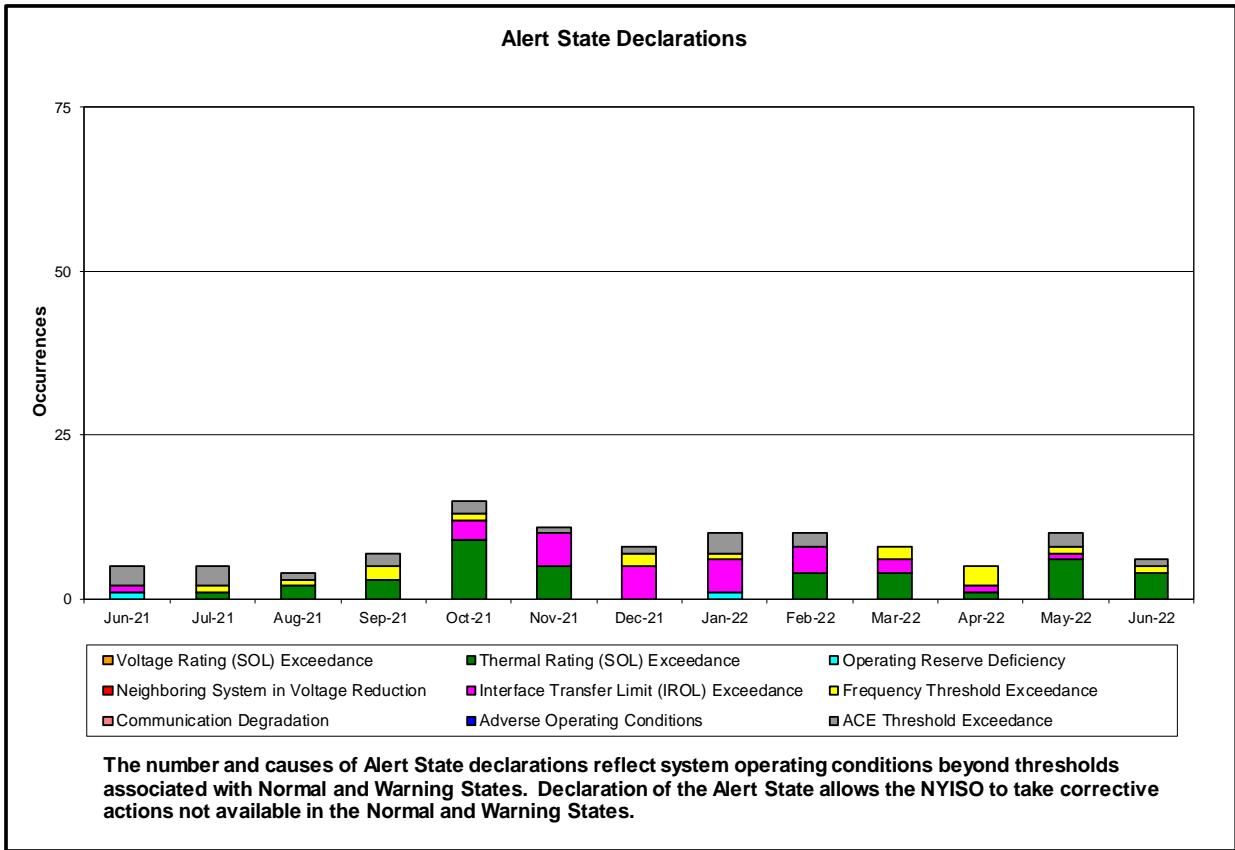
	Current Month Value (\$M)	Year-to-Date Value (\$M)
NY Savings from PJM-NY Congestion Coordination	\$2.79	\$23.15
NY Savings from PJM-NY Coordinated Transaction Scheduling	\$0.55	(\$0.59)
NY Savings from NE-NY Coordinated Transaction Scheduling	\$0.97	\$3.66
Total NY Savings	\$4.31	\$26.22
Regional Savings from PJM-NY Coordinated Transaction Scheduling	\$0.90	\$3.88
Regional Savings from NE-NY Coordinated Transaction Scheduling	\$0.24	\$2.17
Total Regional Savings	\$1.14	\$6.05

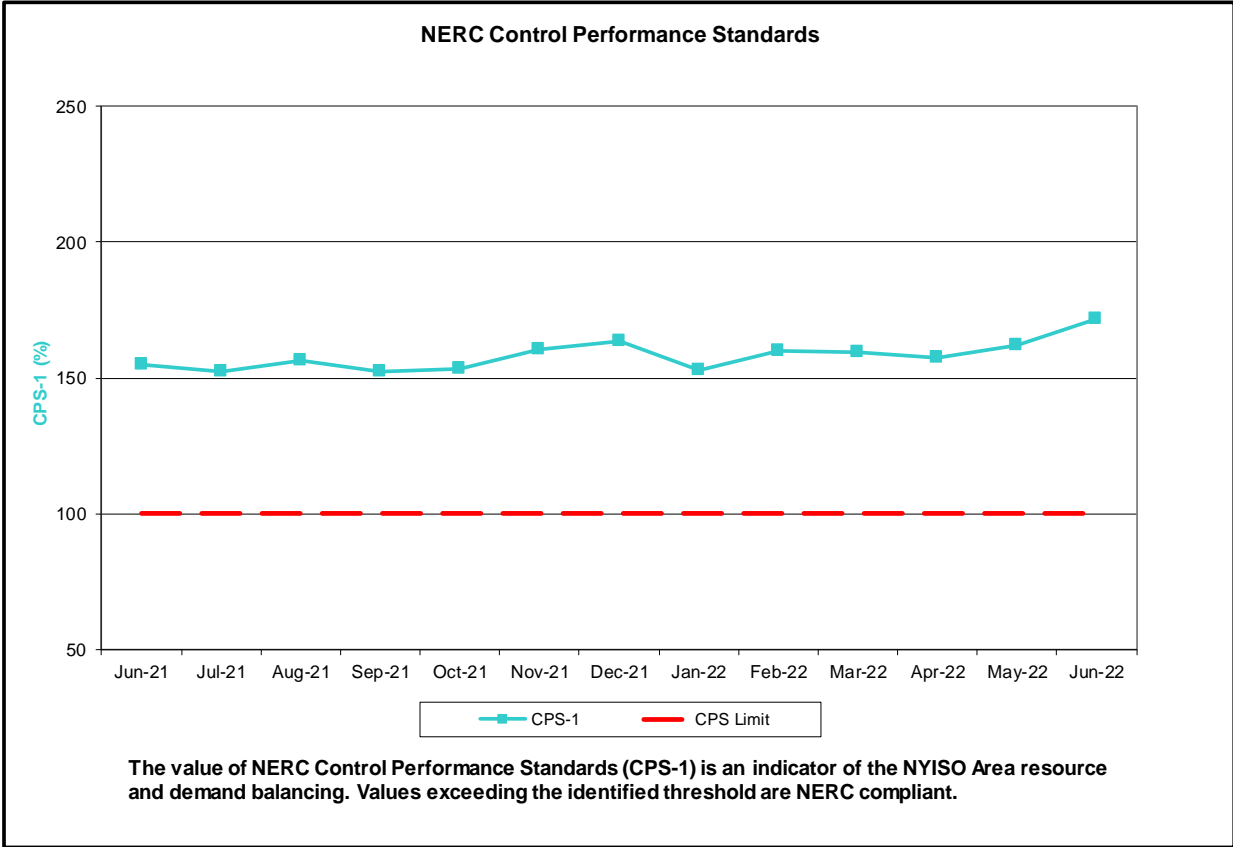
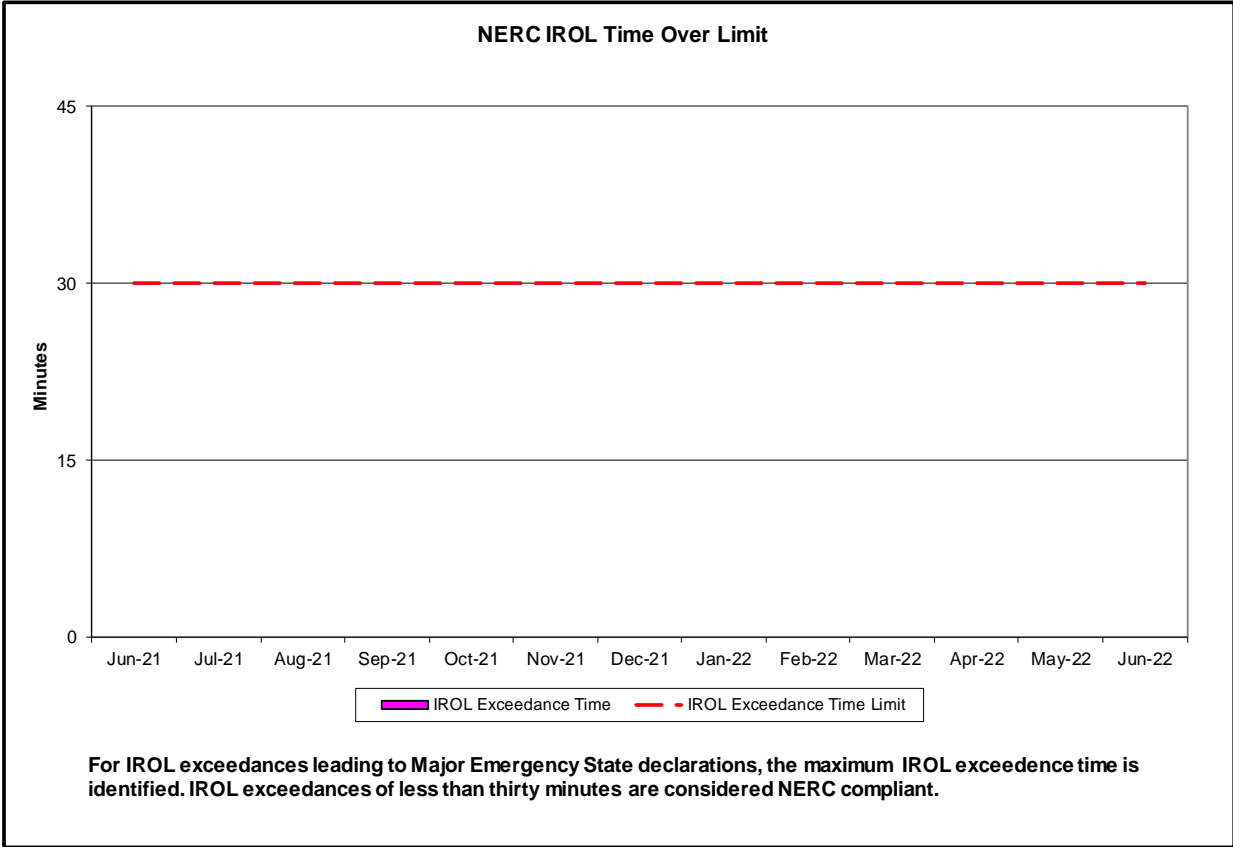
- Statewide uplift cost monthly average was (\$1.07)/MWh.
- The following table identifies the Monthly ICAP spot market prices and the price delta.

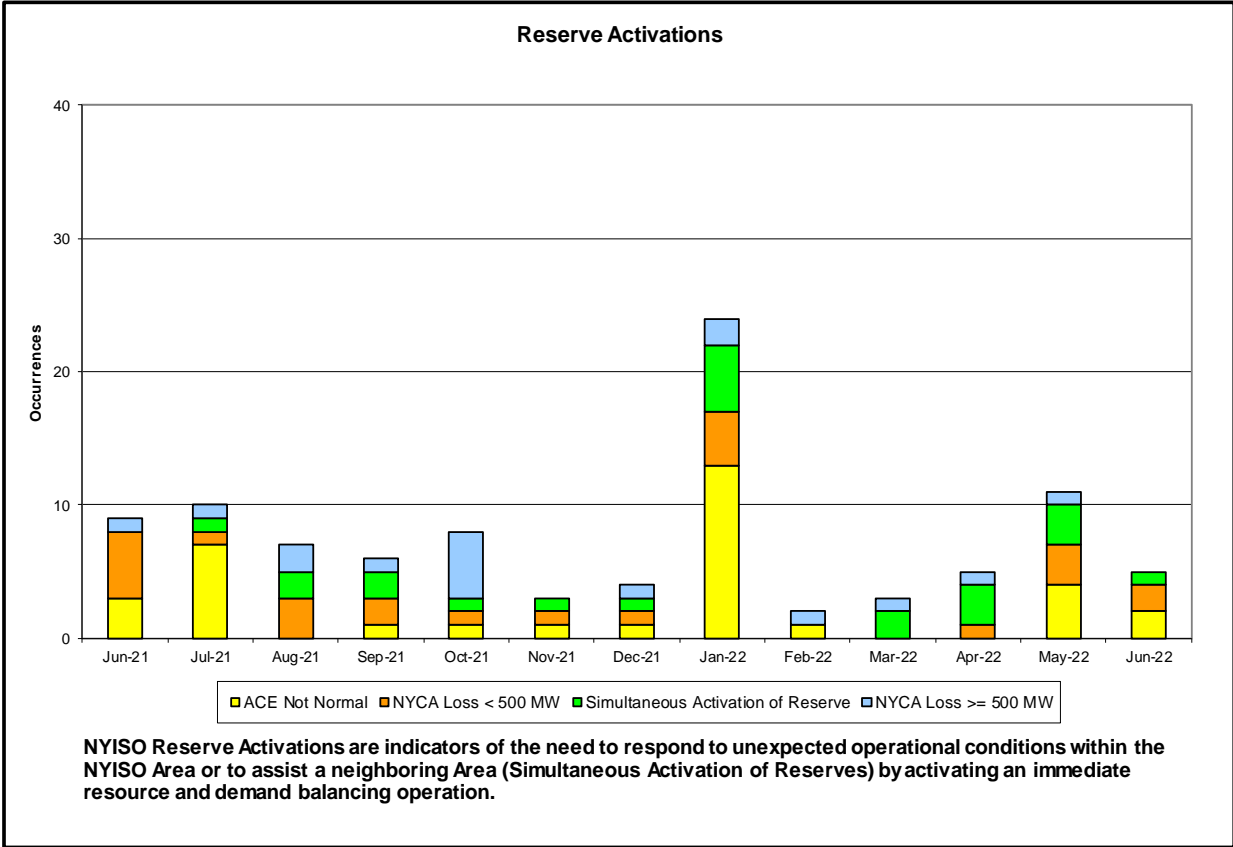
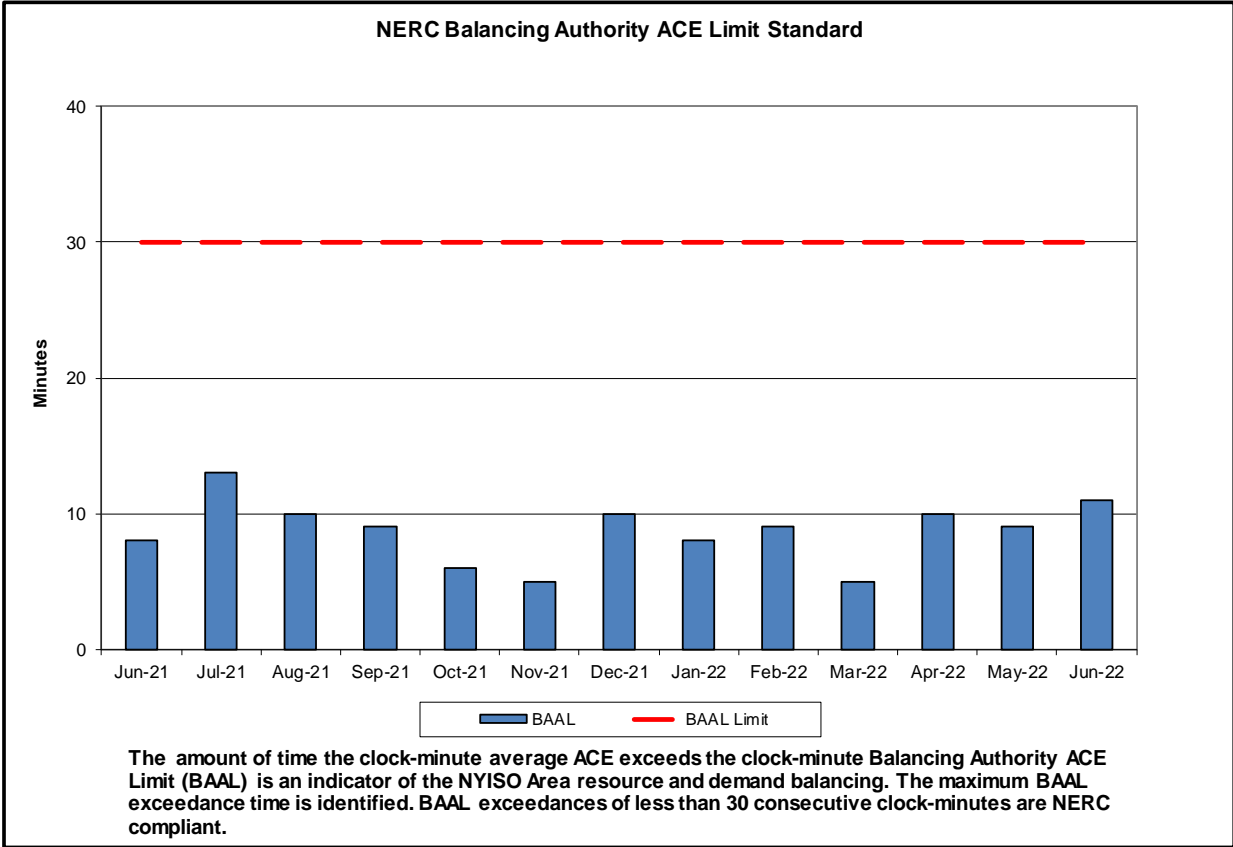
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
July 2022 Spot Price	\$3.32	\$3.32	\$3.55	\$6.71
June 2022 Spot Price	\$3.33	\$3.33	\$3.51	\$6.74
Delta	(\$0.01)	(\$0.01)	\$0.04	(\$0.03)

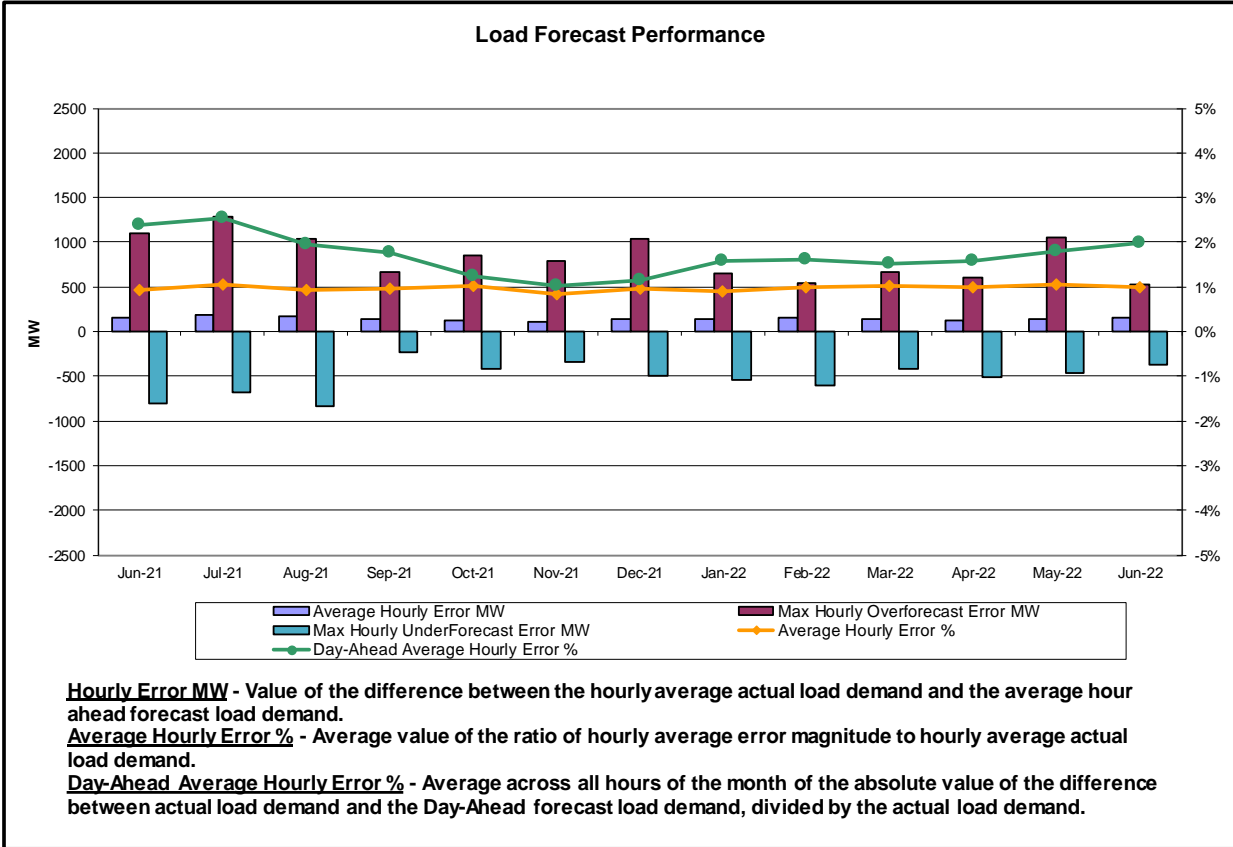
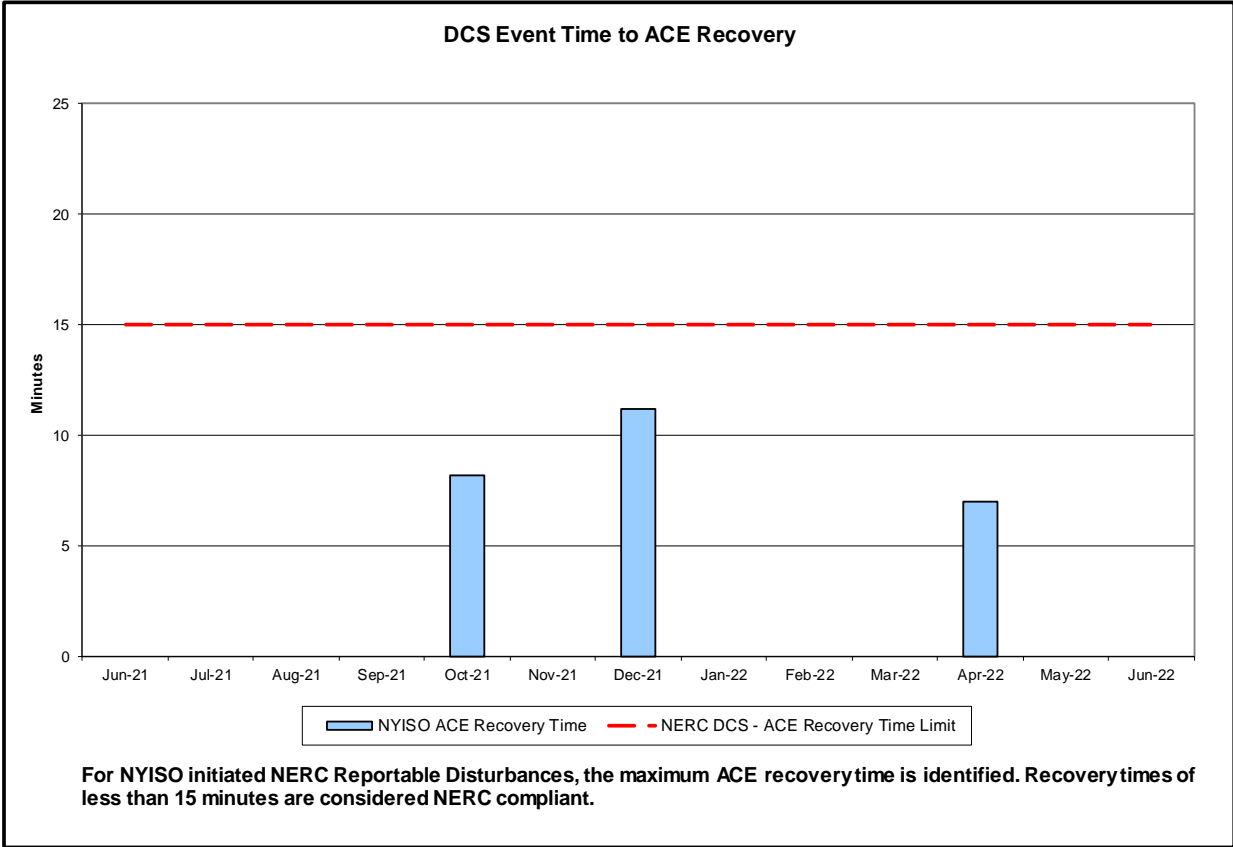
- No significant changes in market clearing price occurred since the June 2022 spot auction.

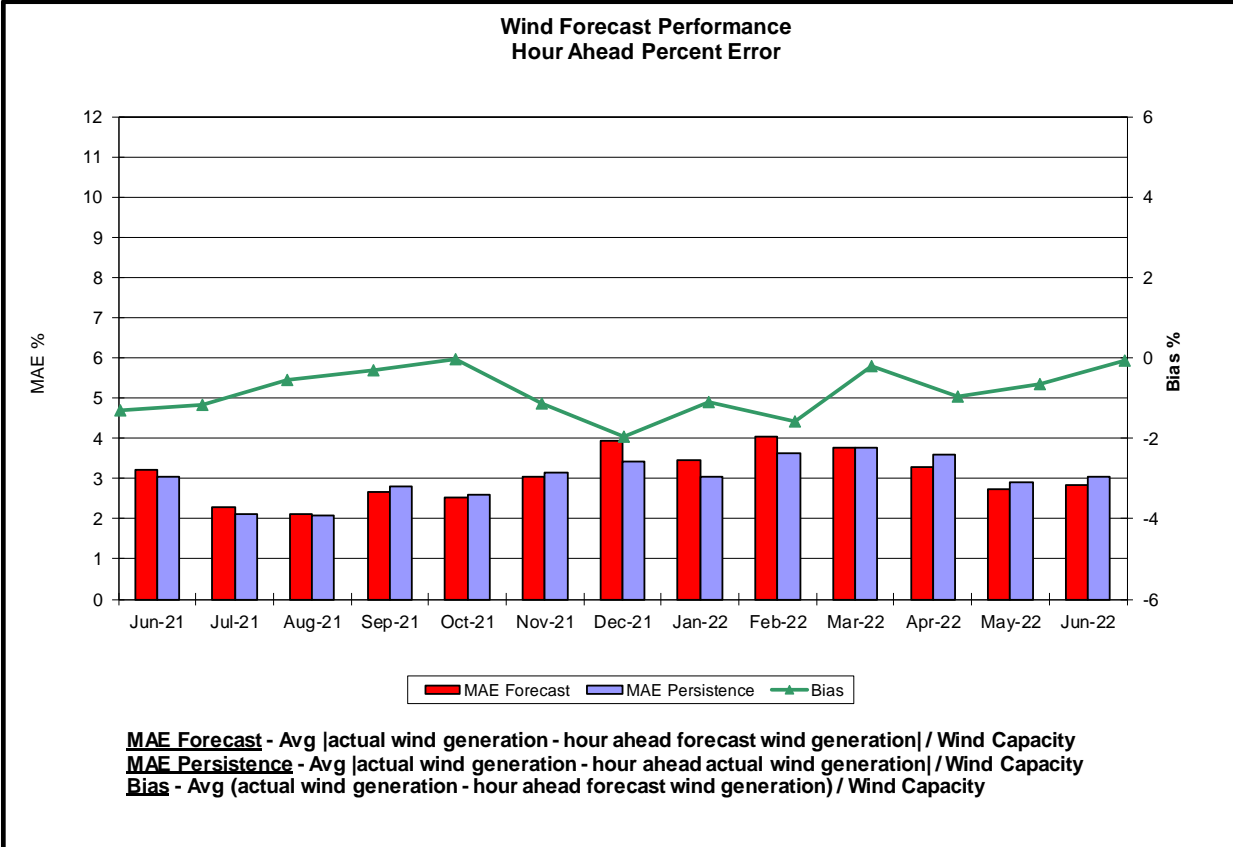
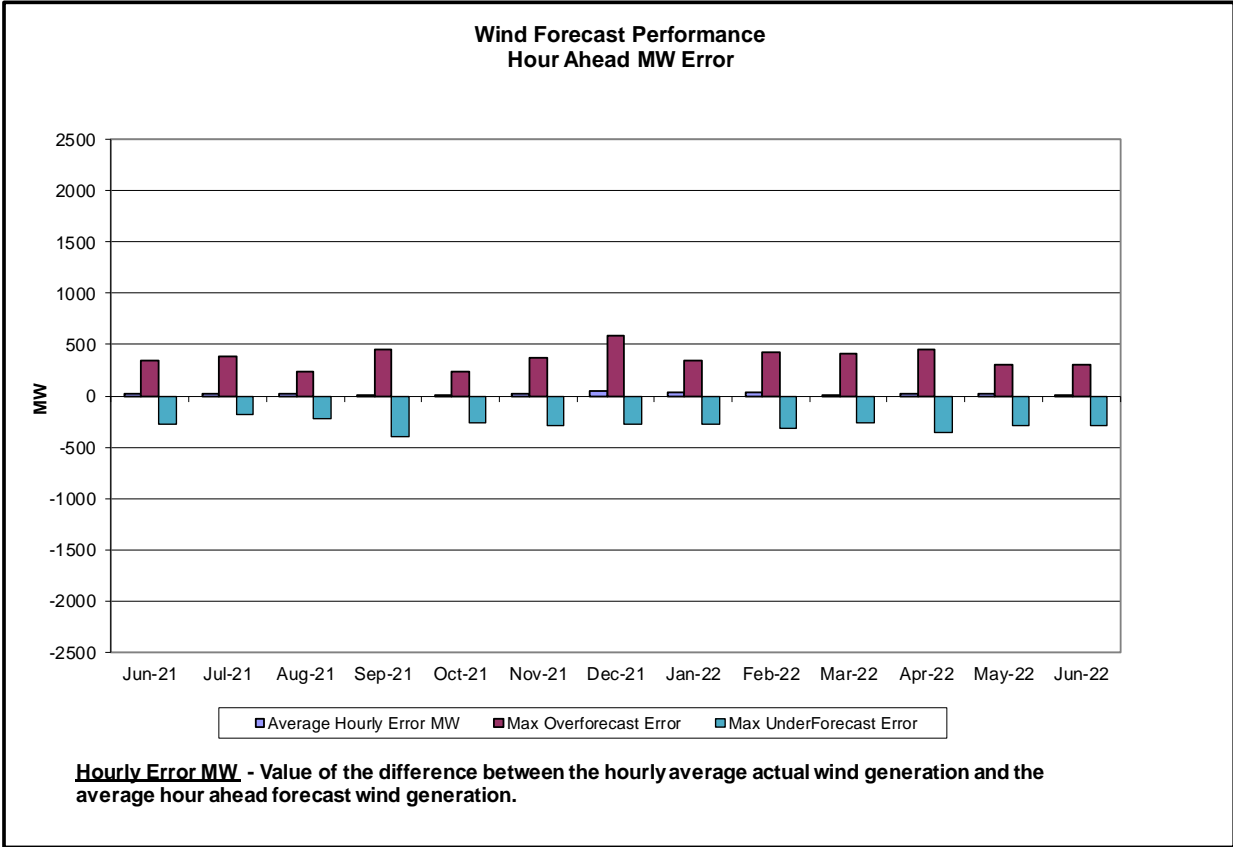
Reliability Performance Metrics

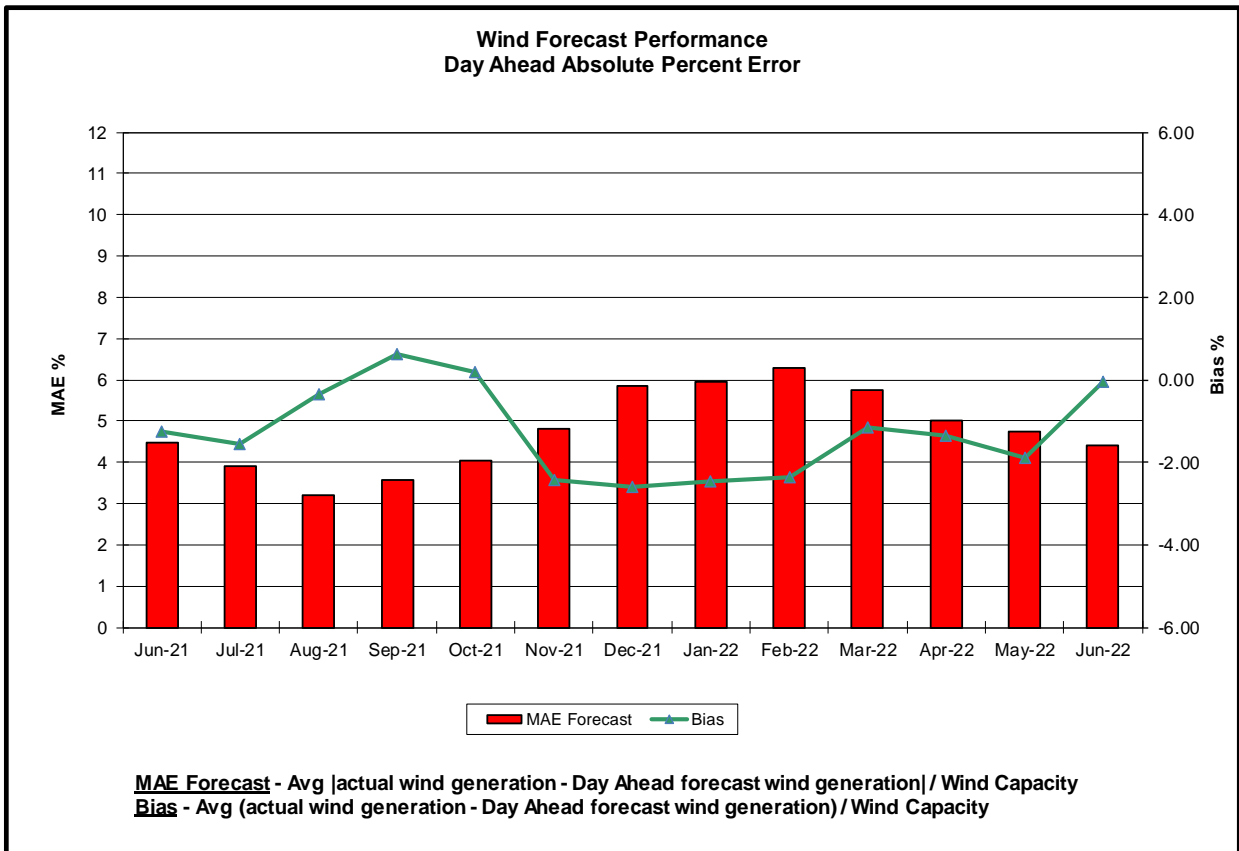
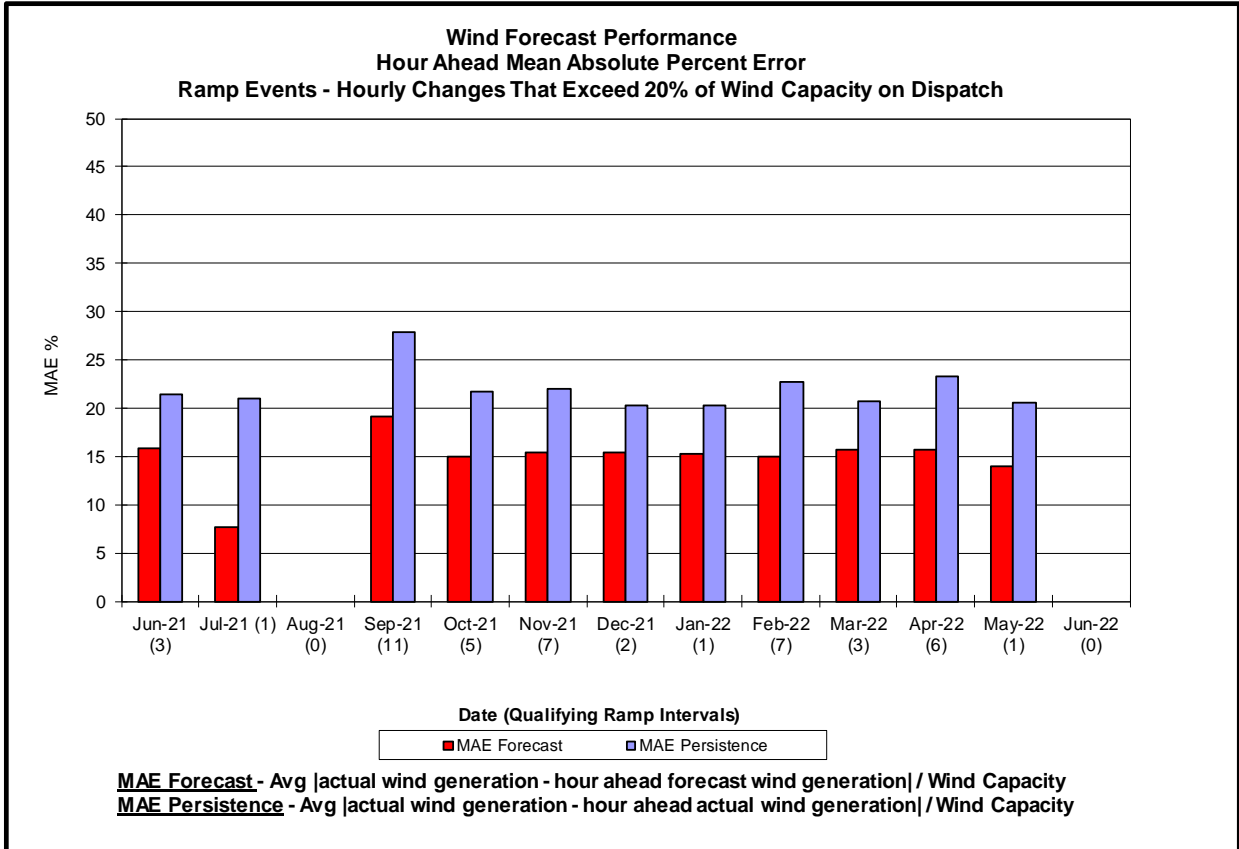


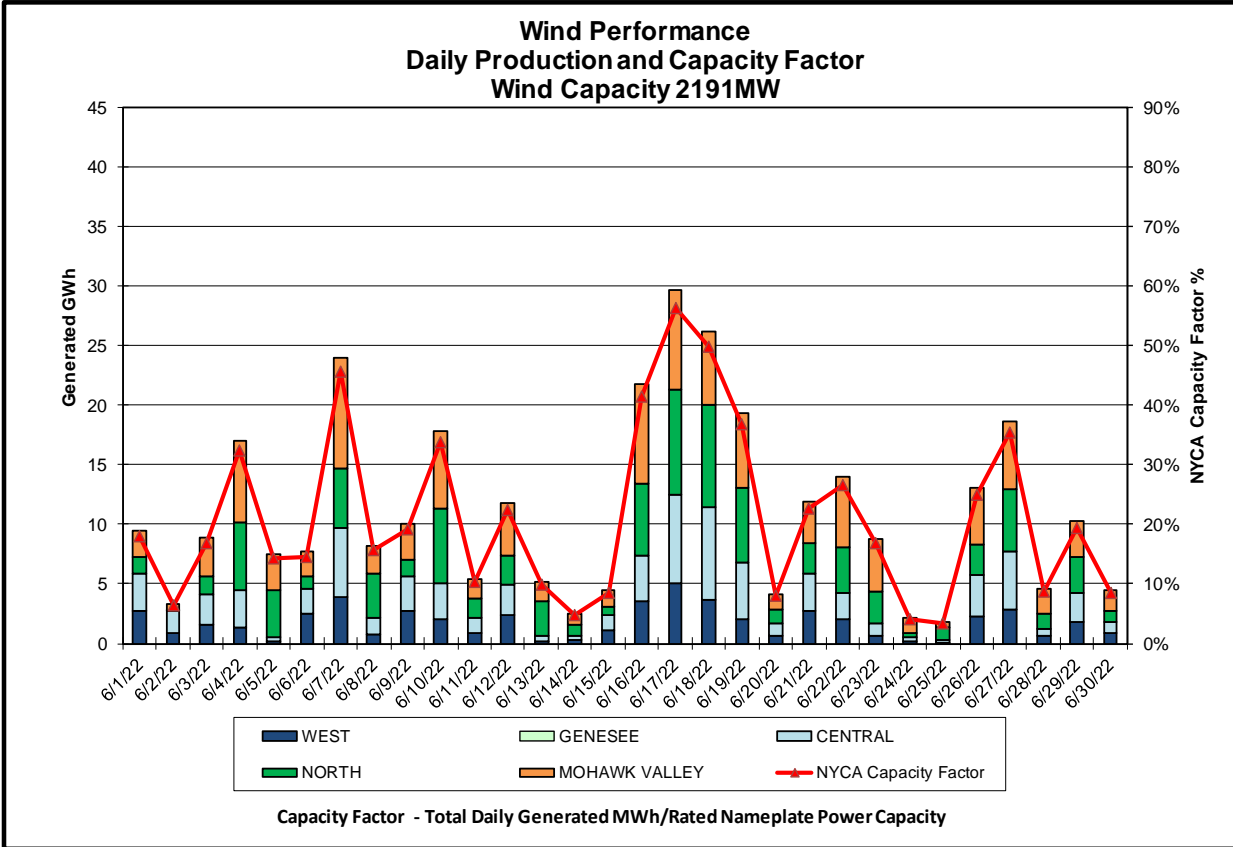
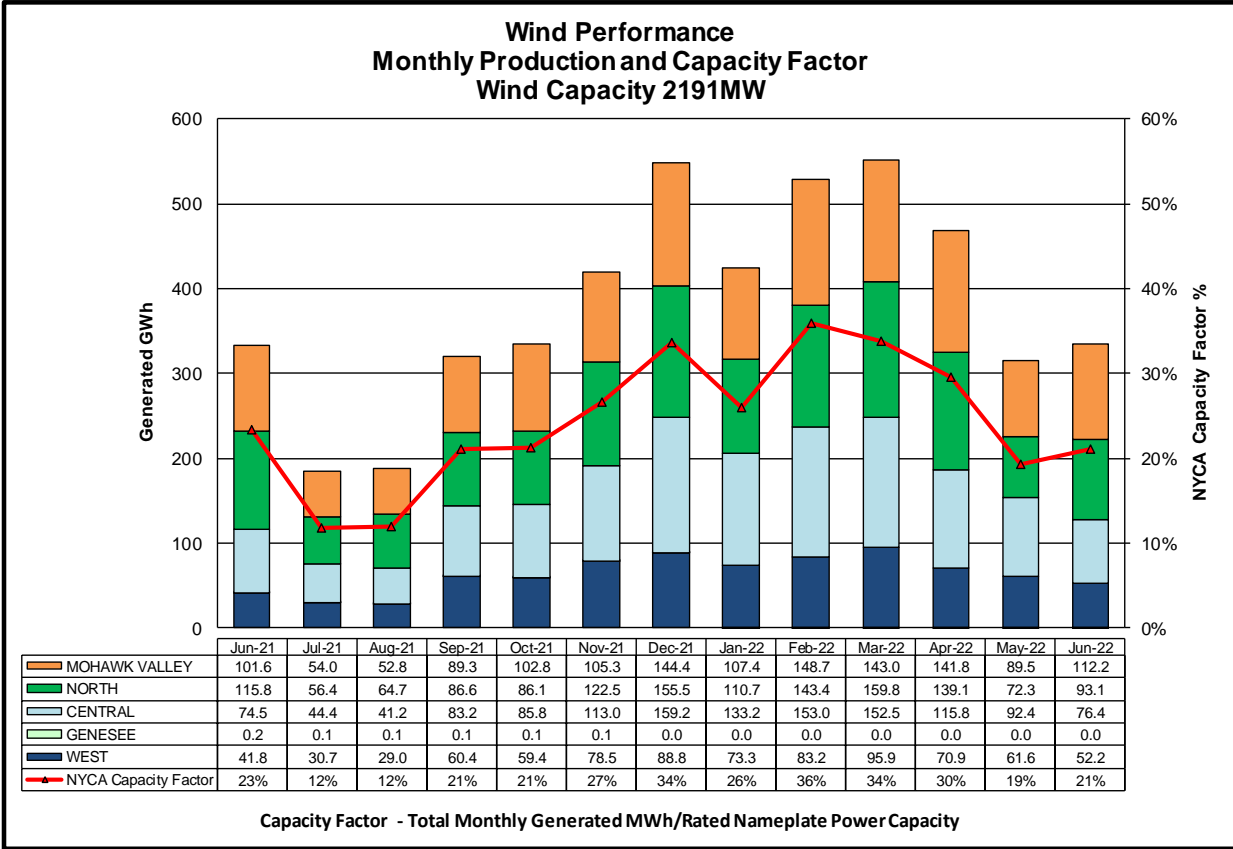


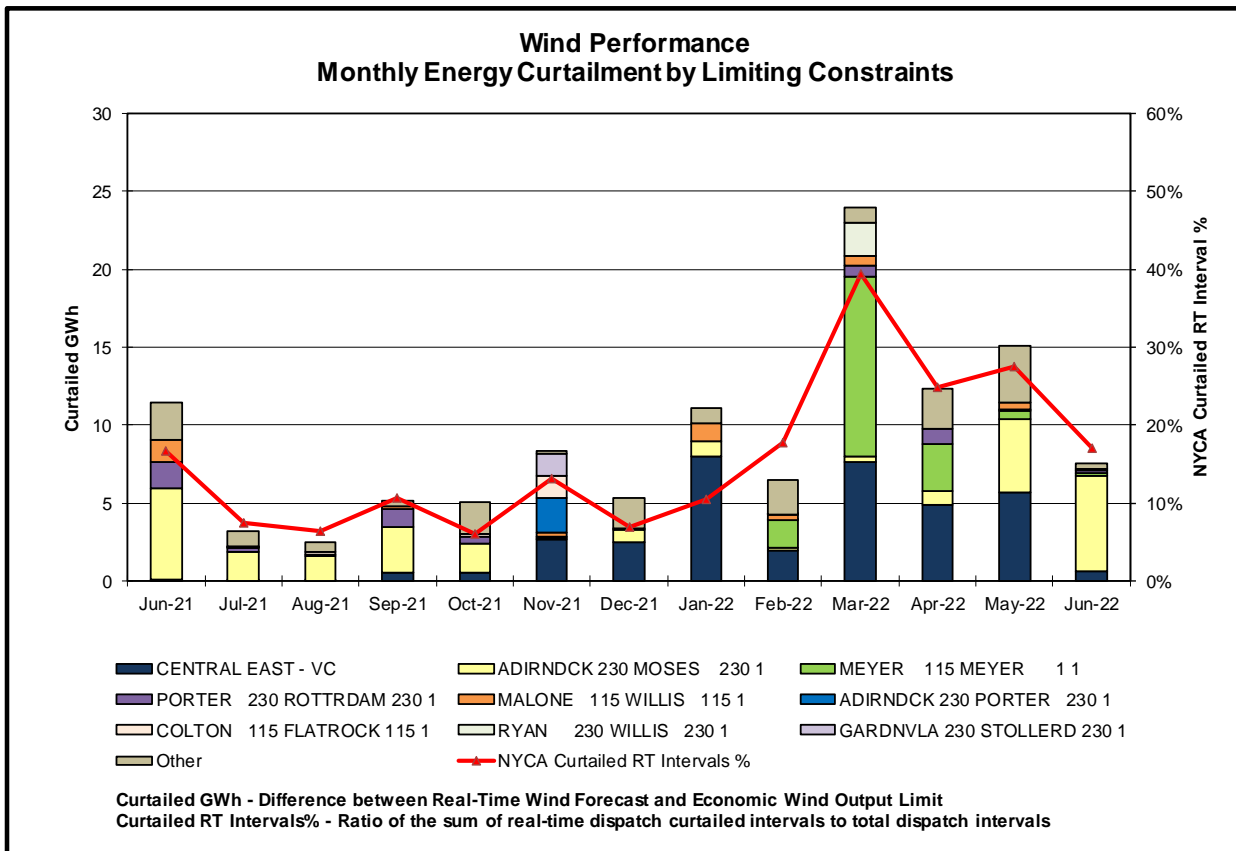
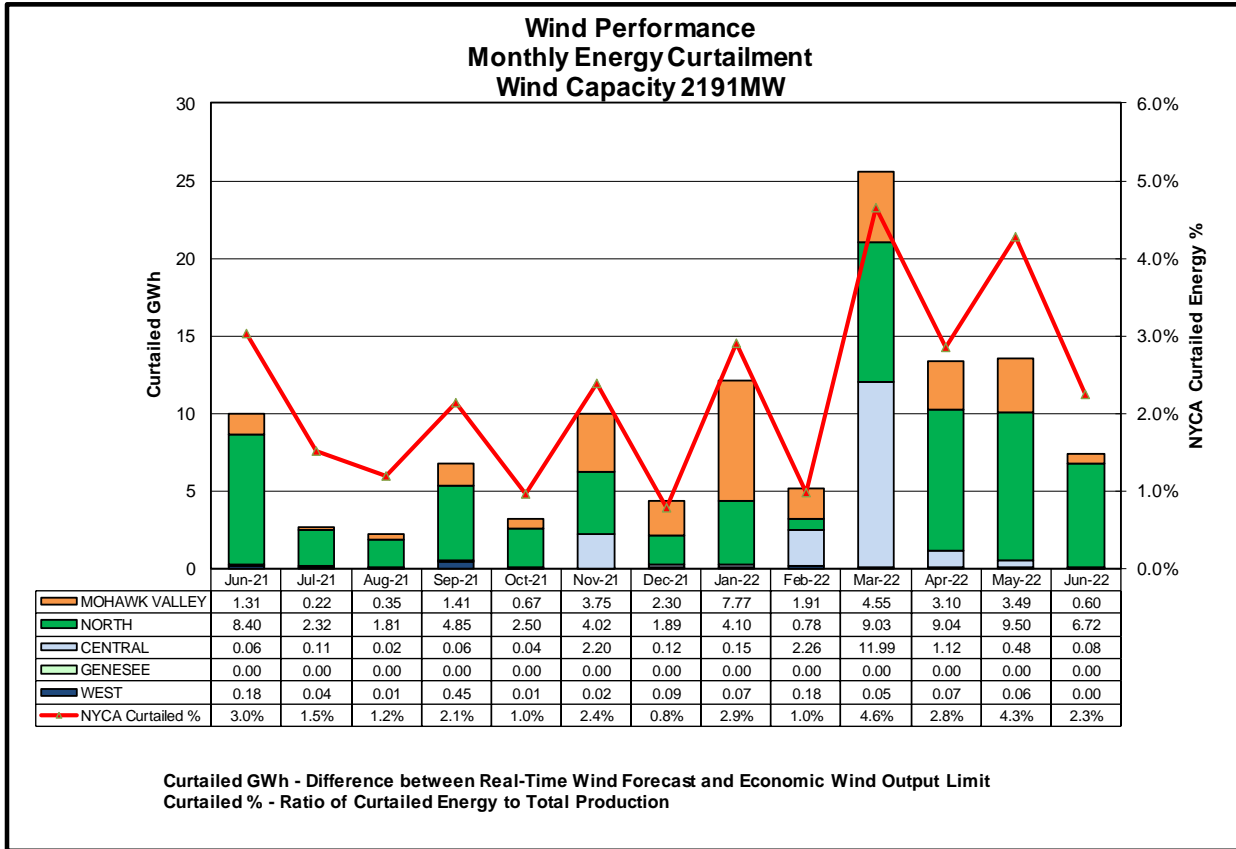


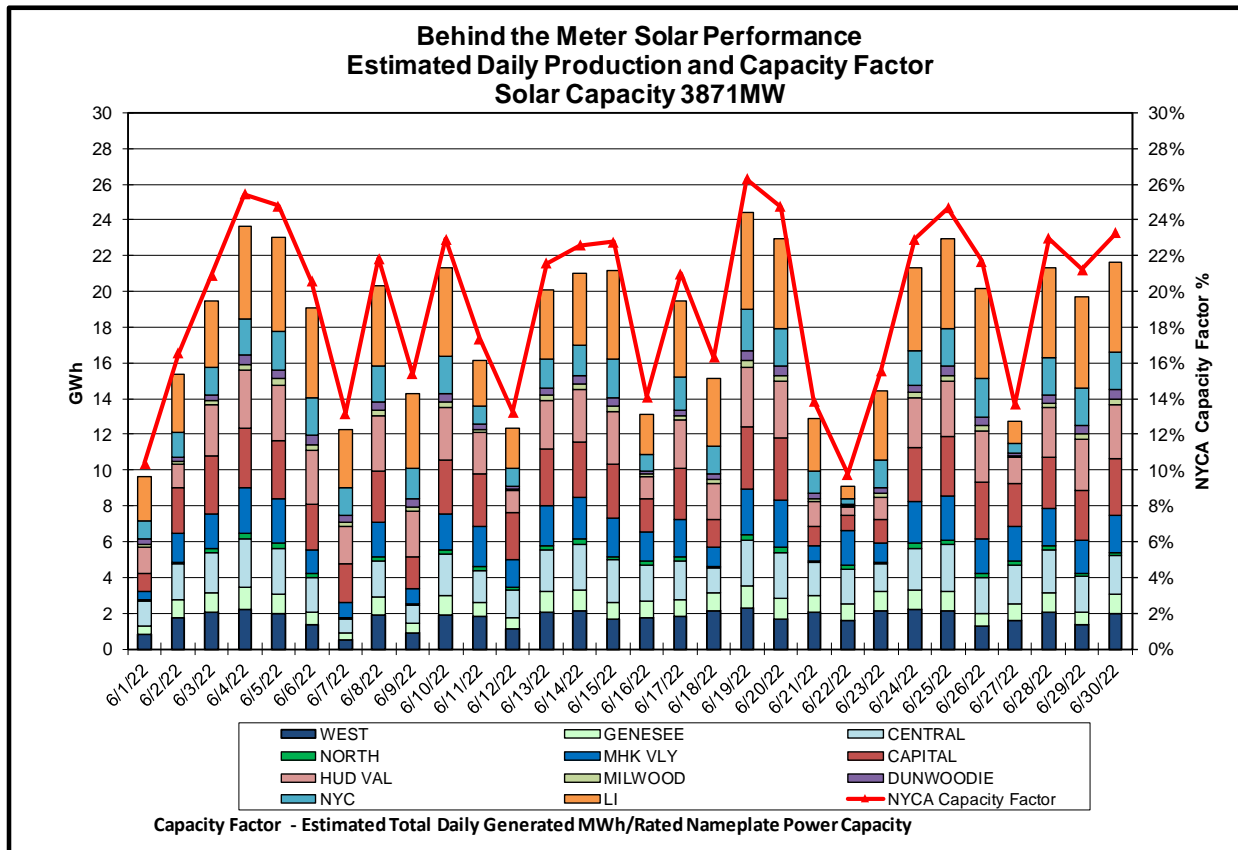
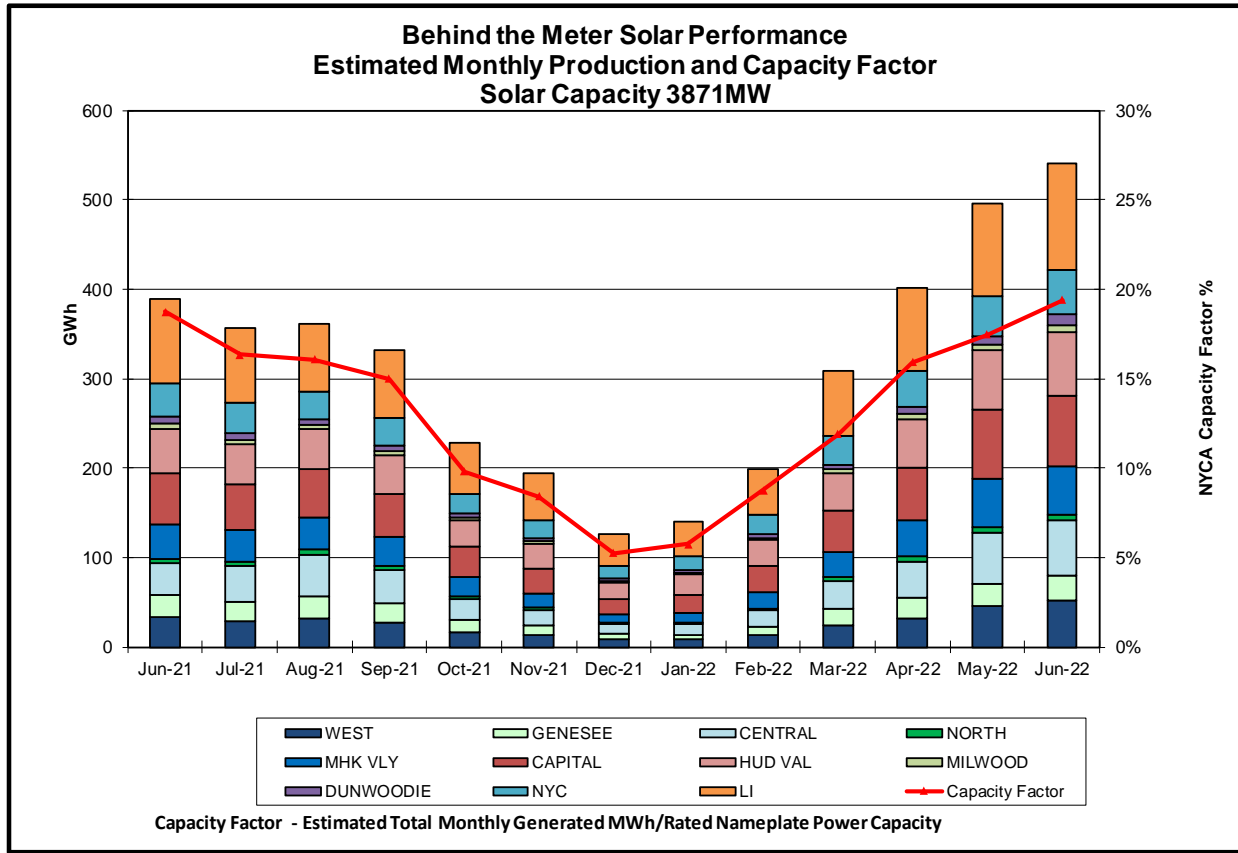


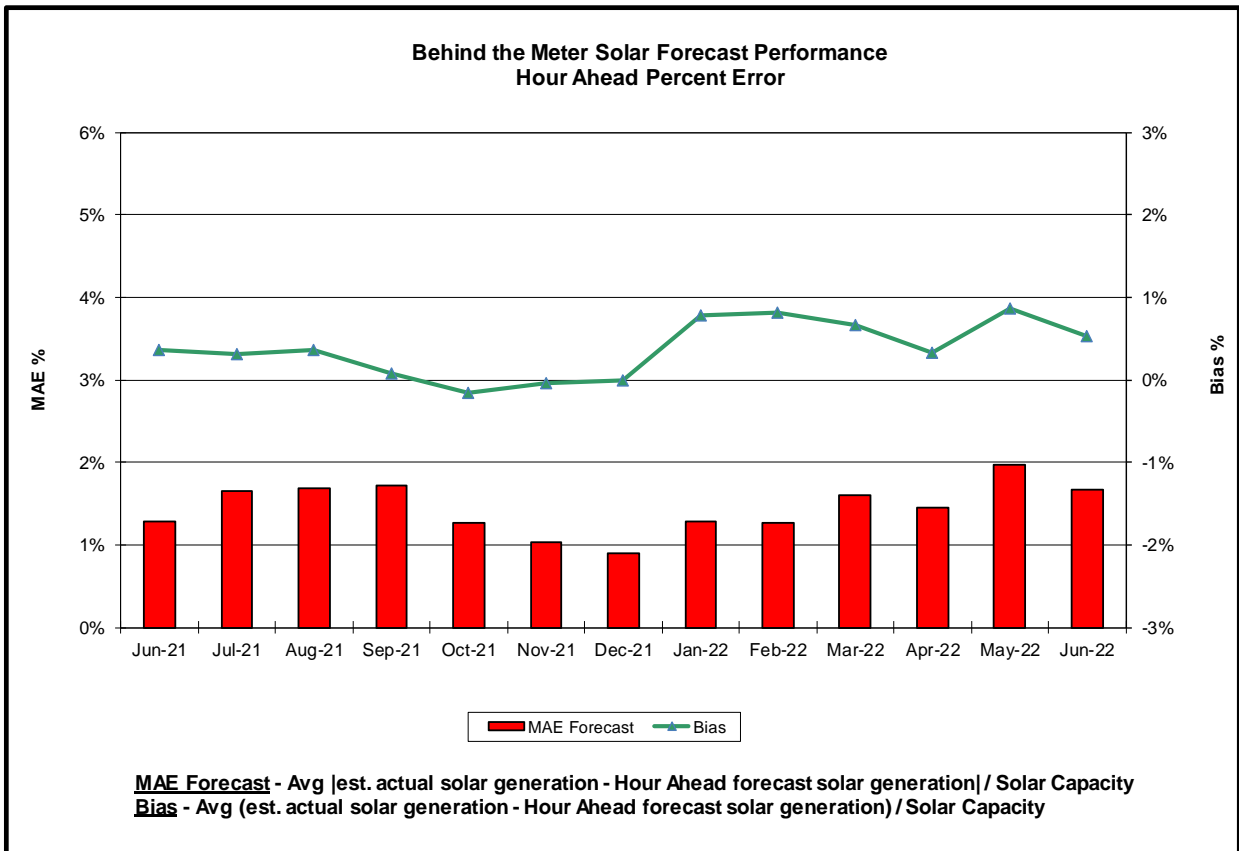
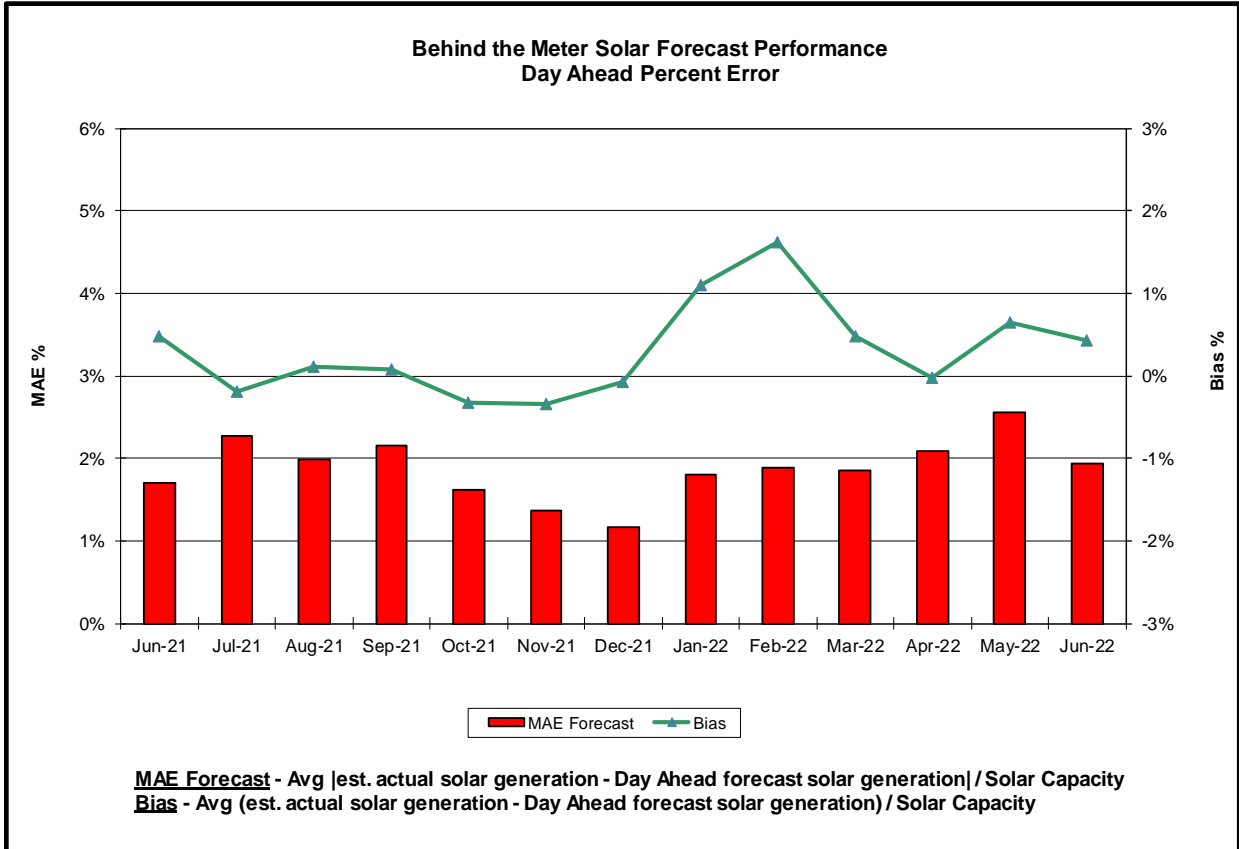


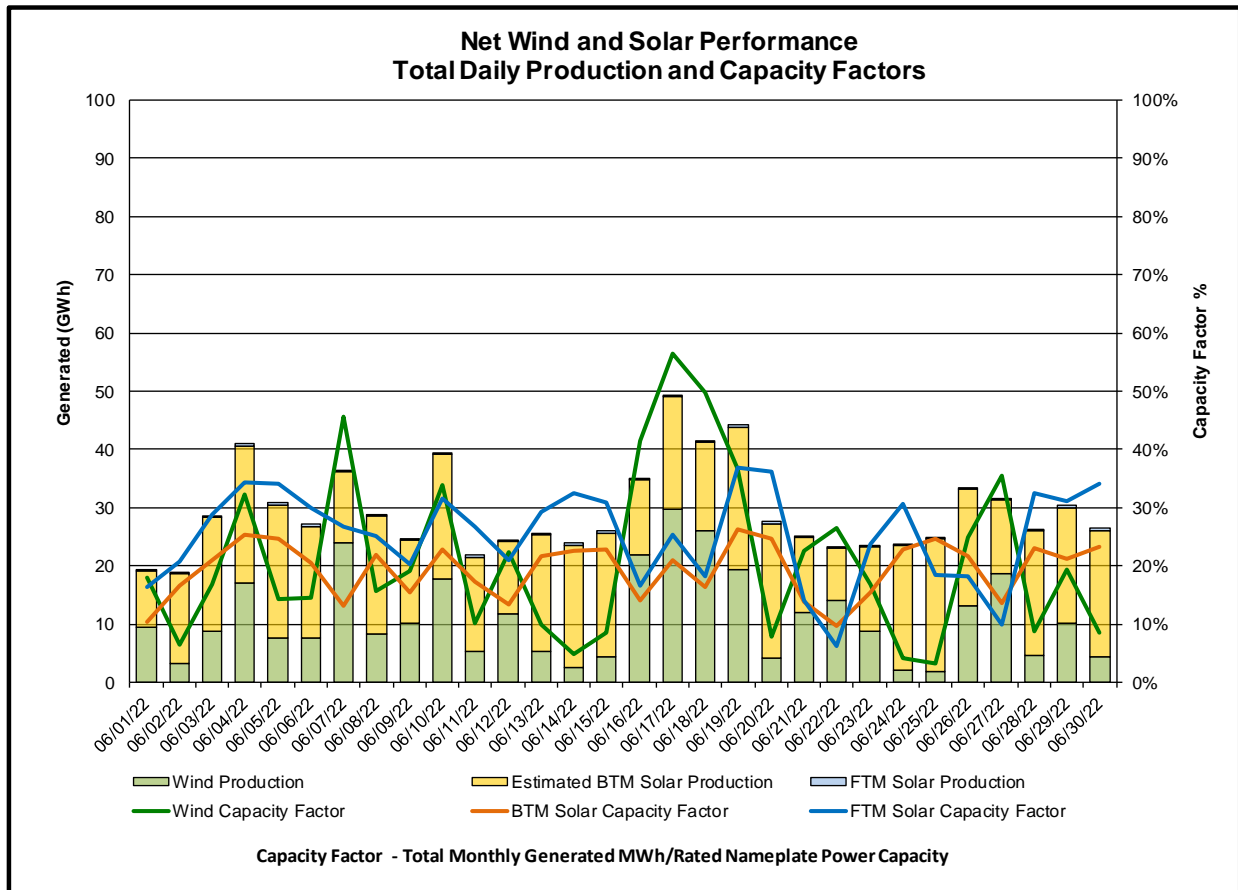
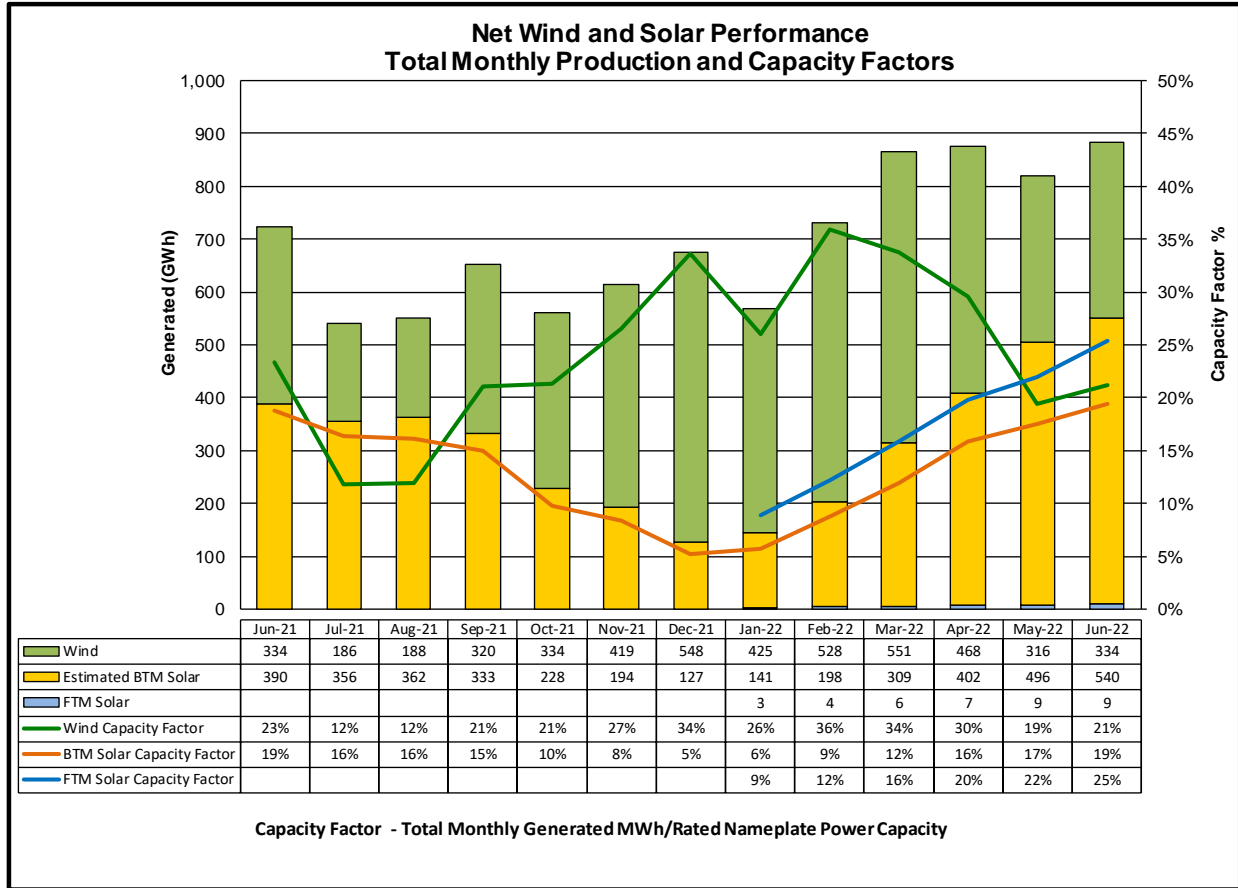


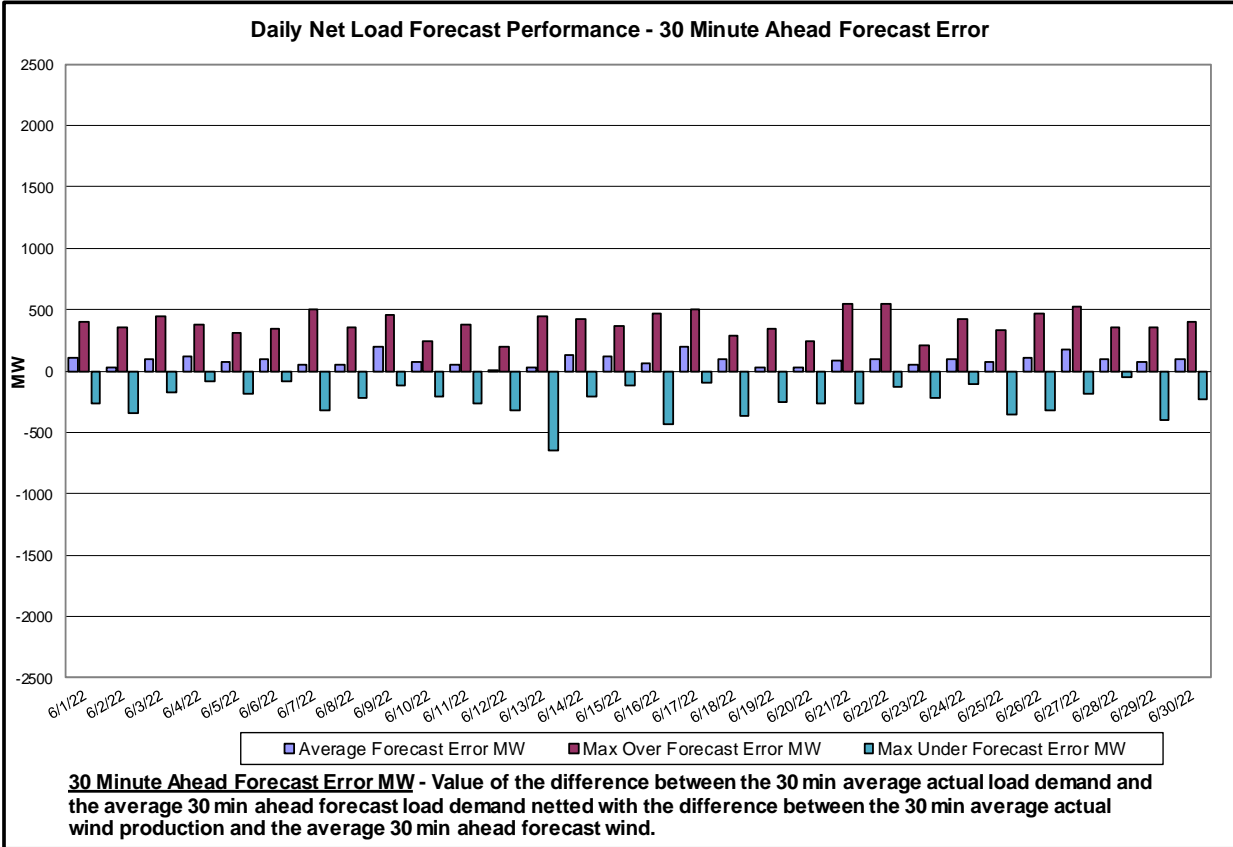
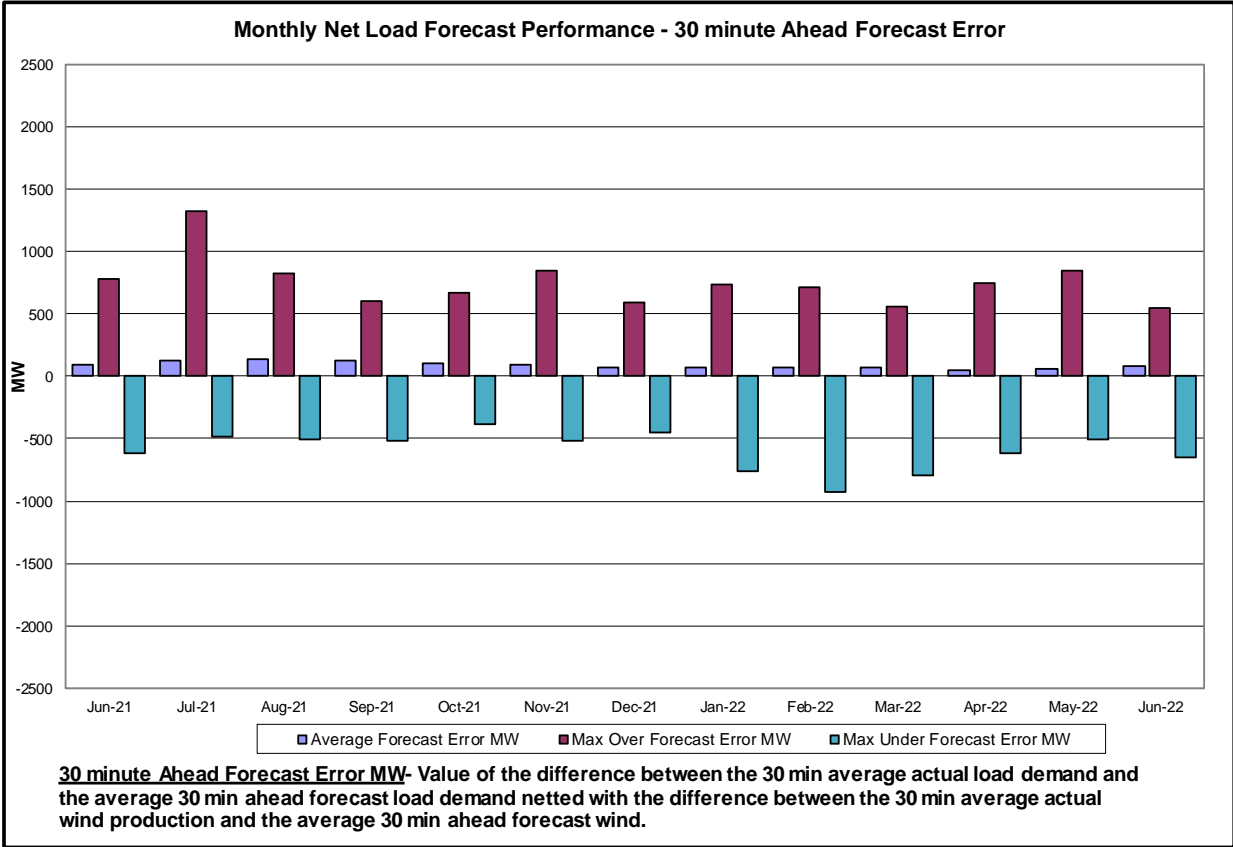


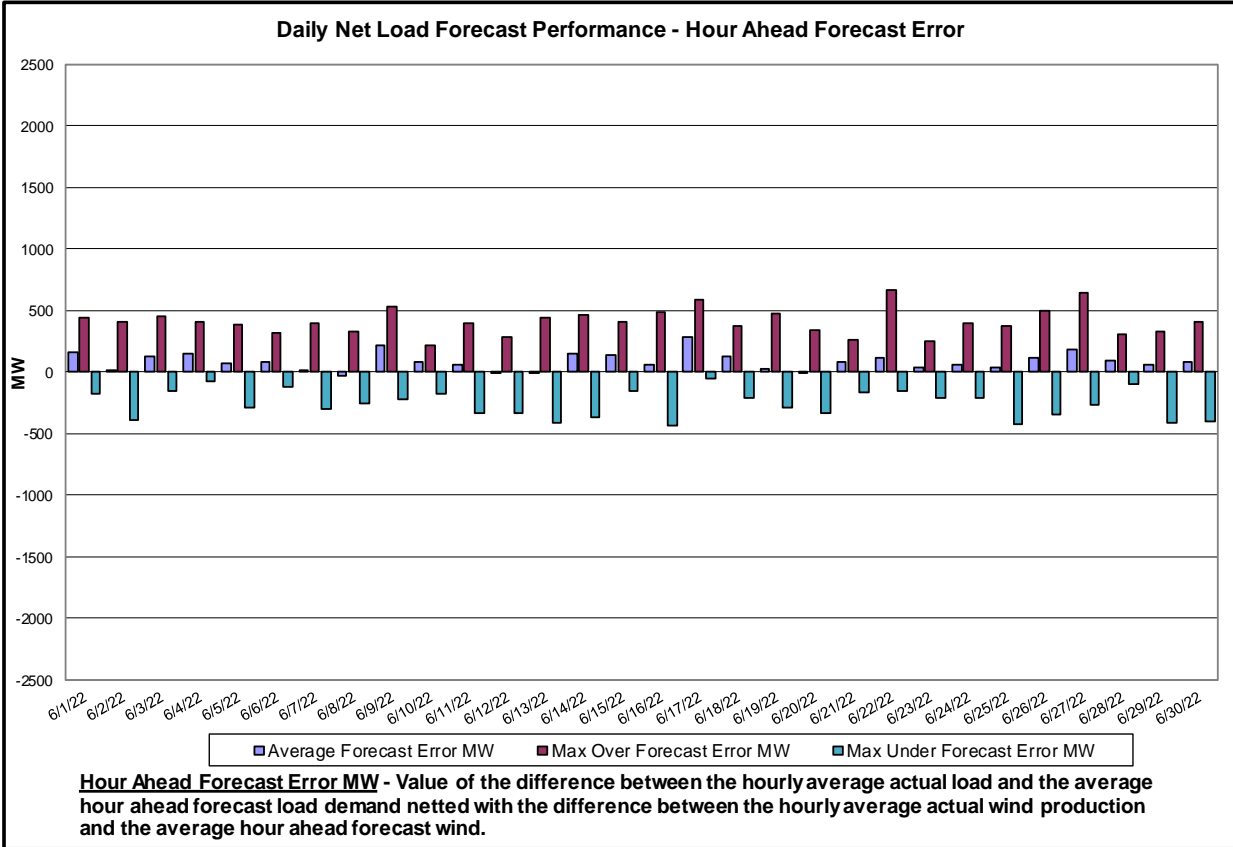
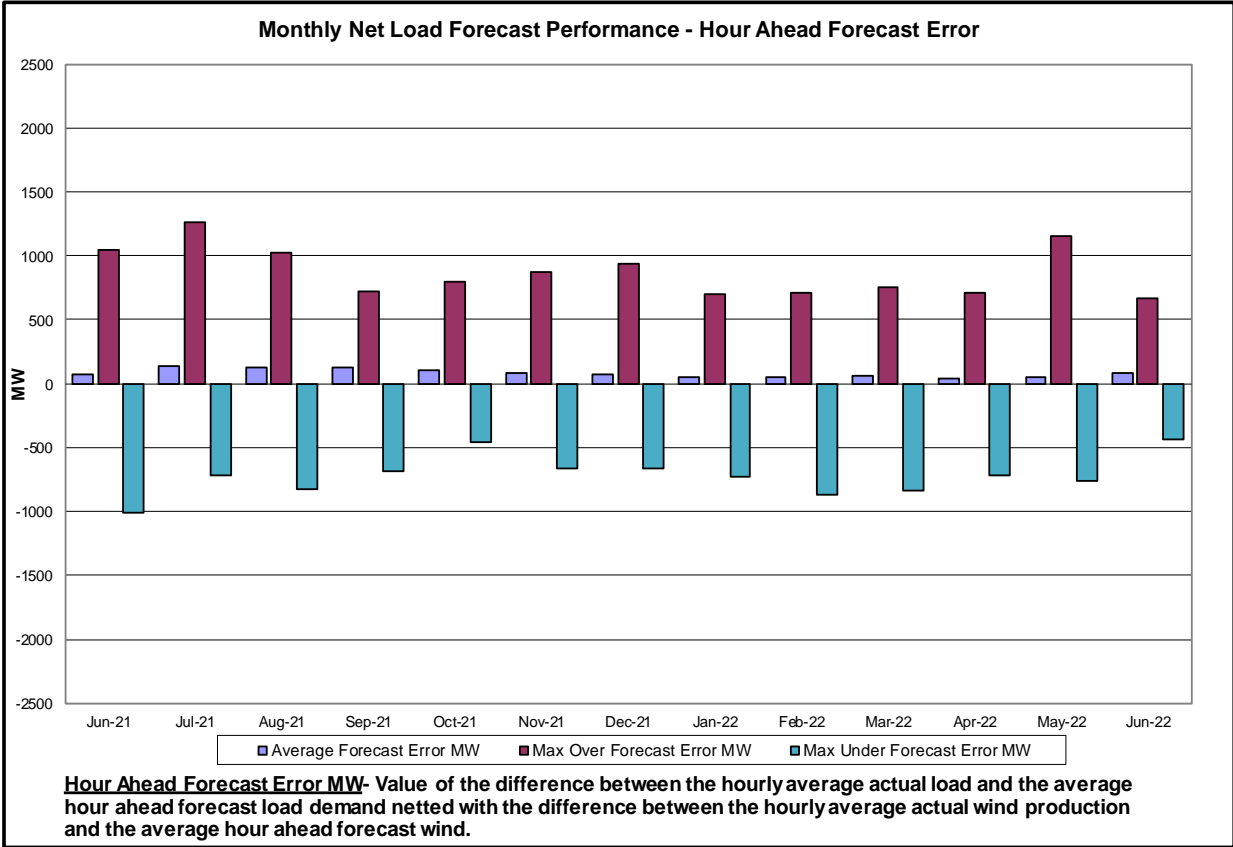


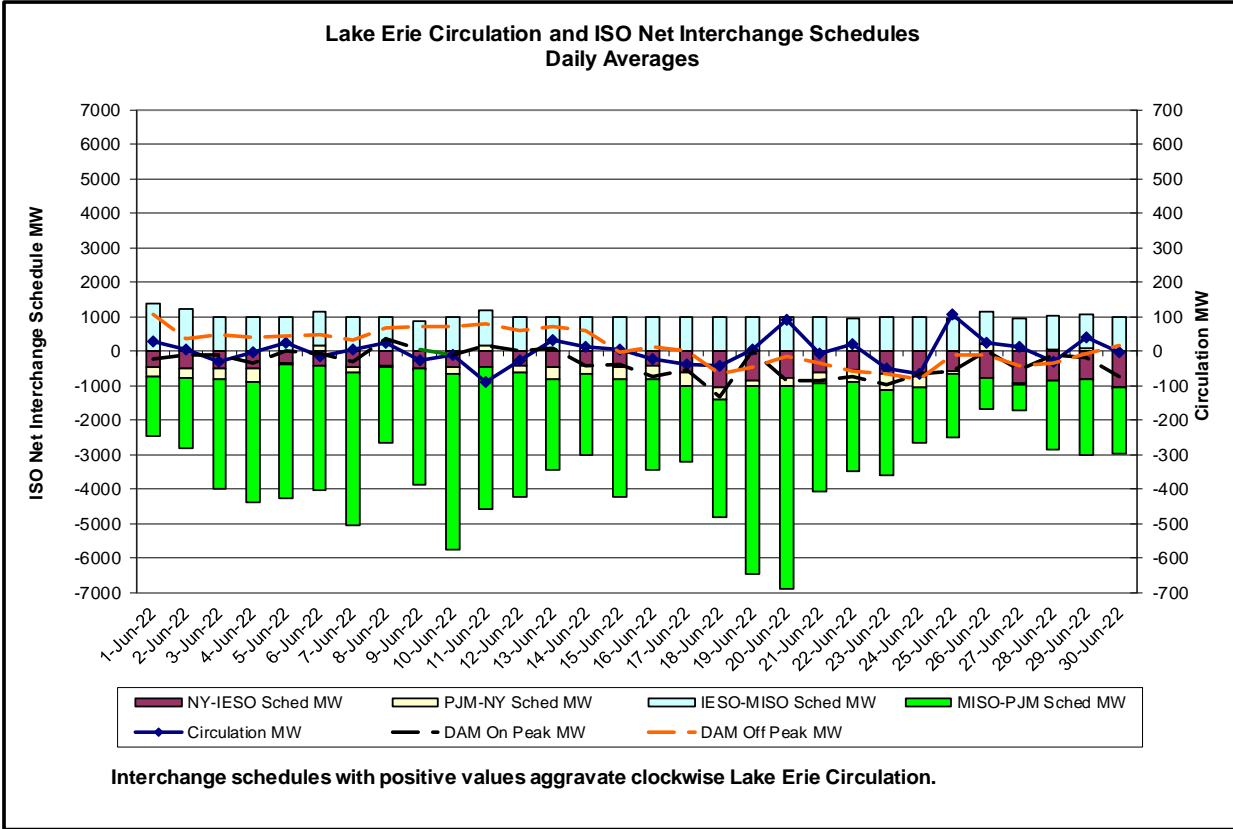
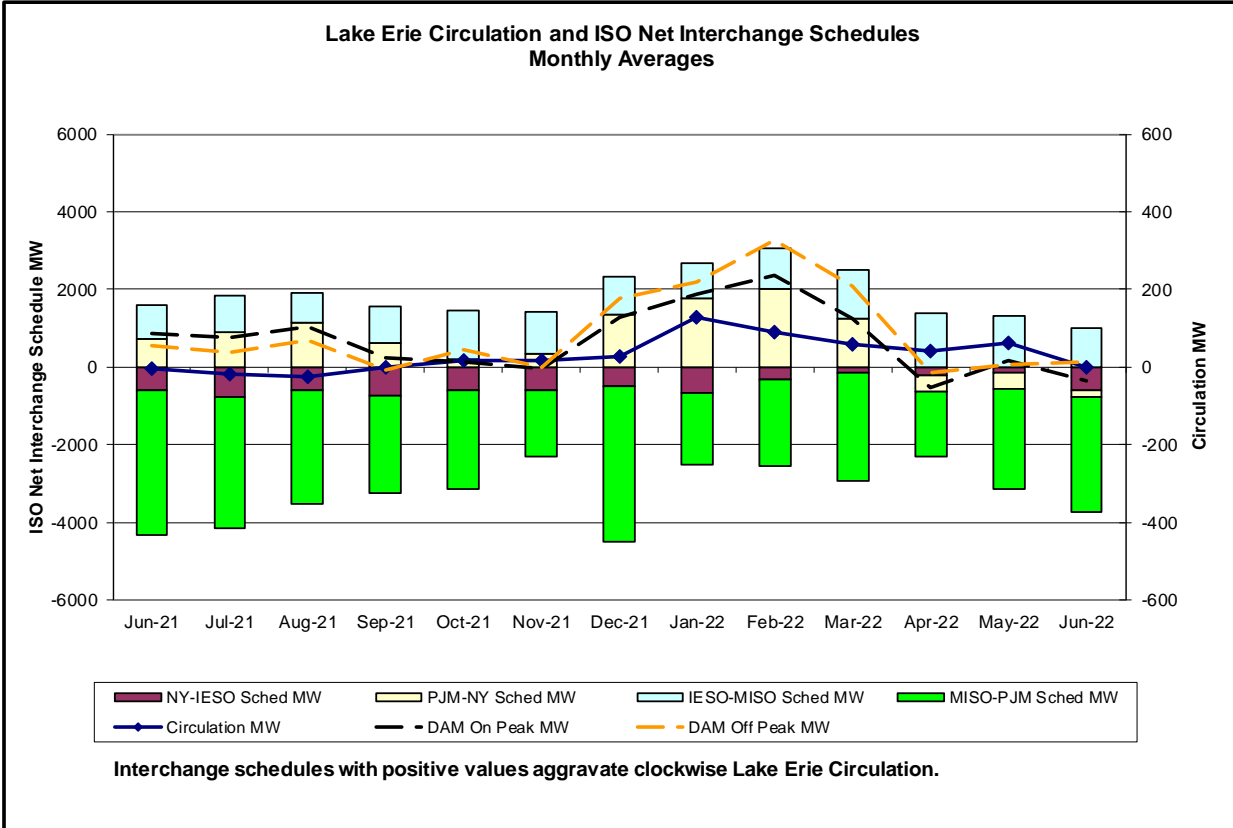




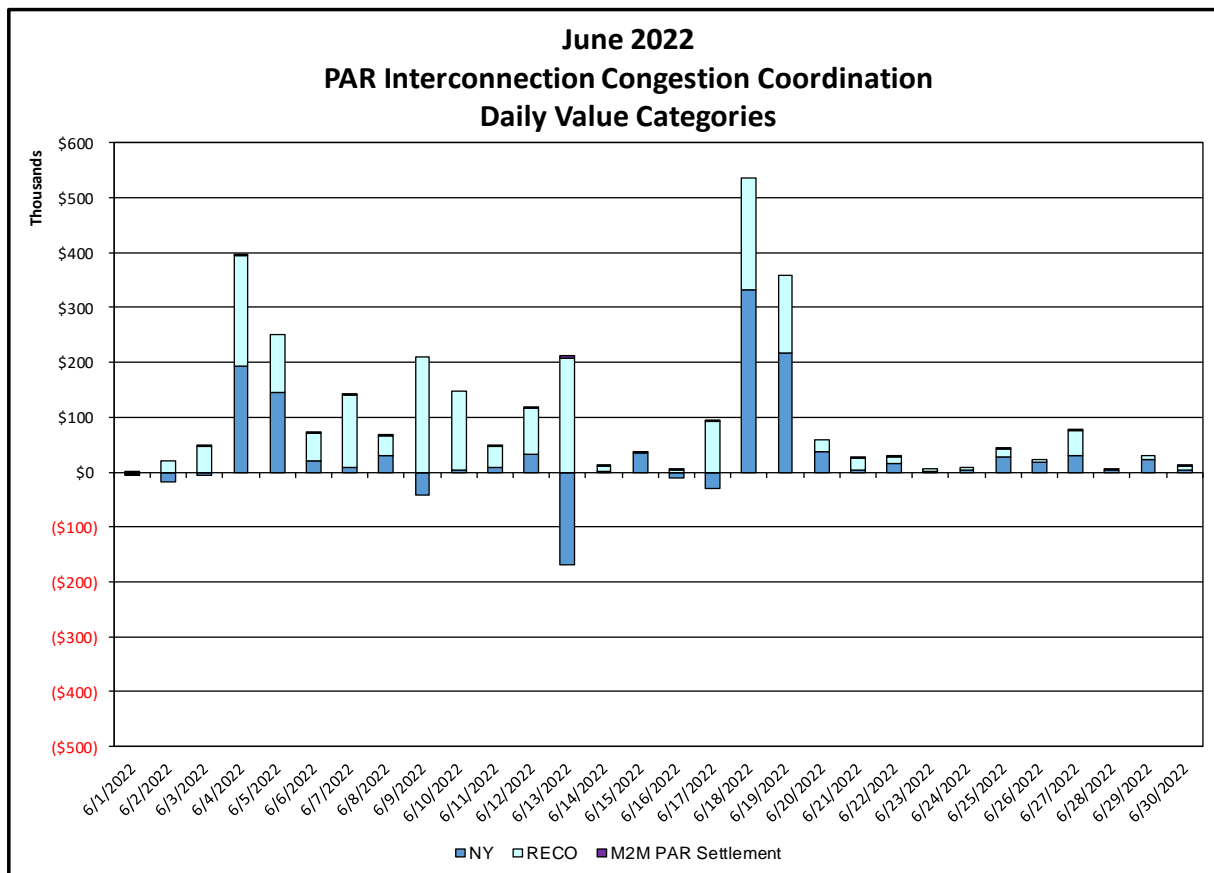
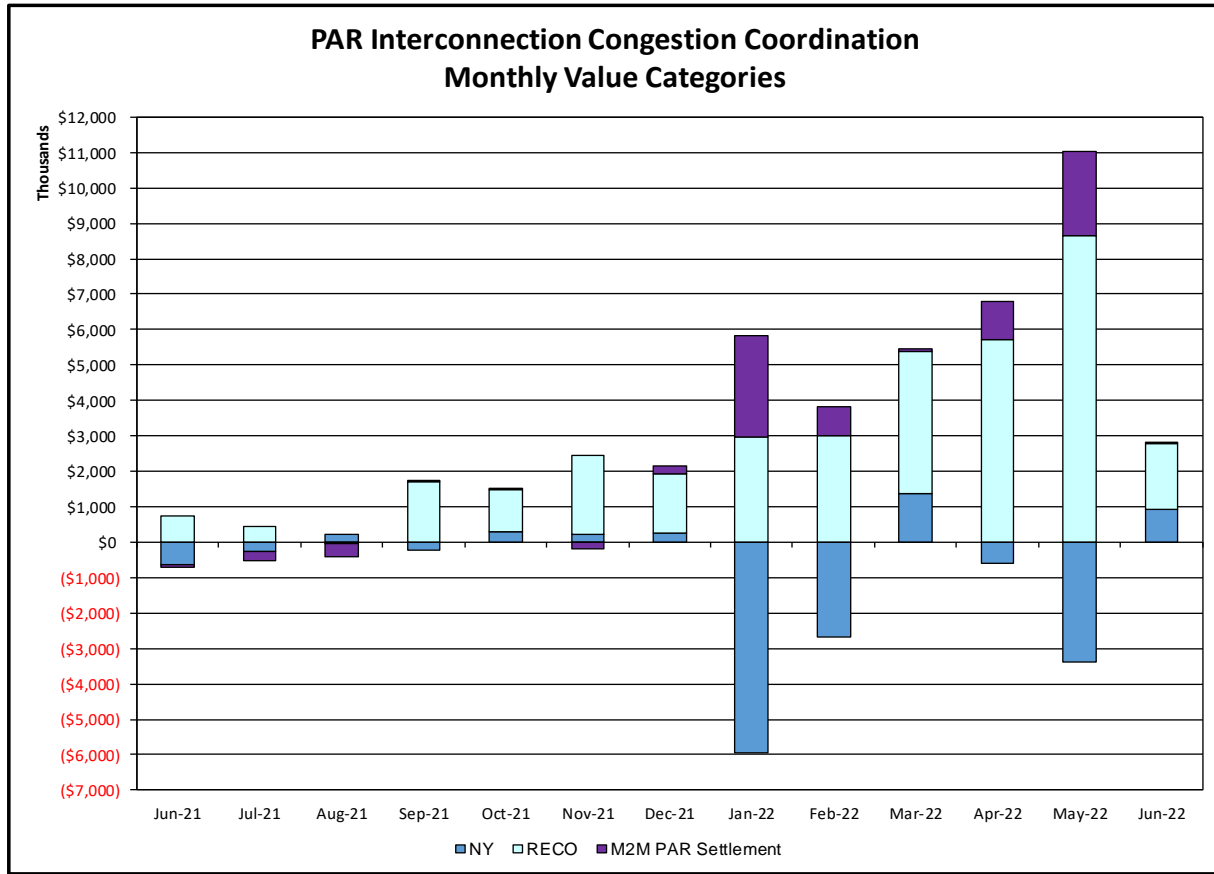






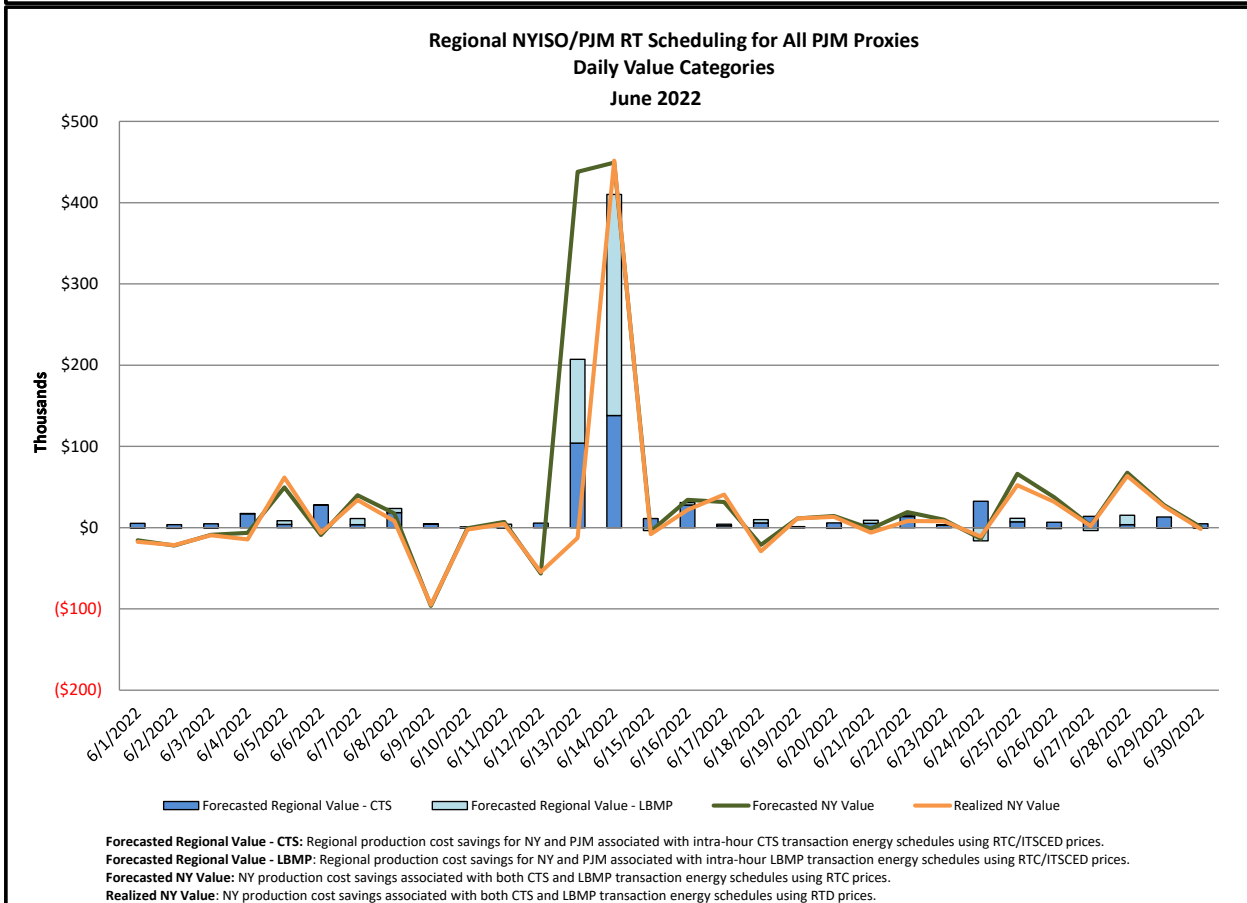
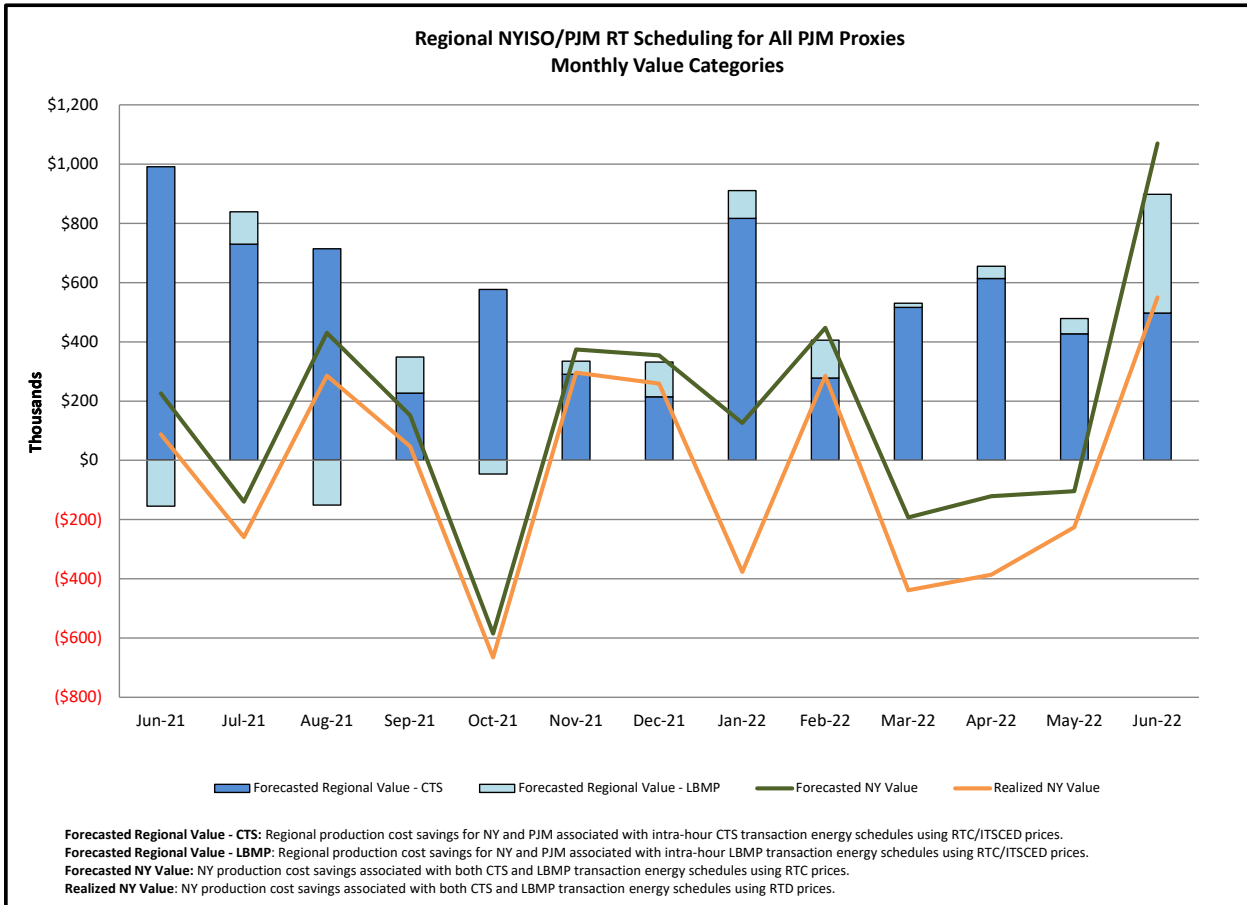


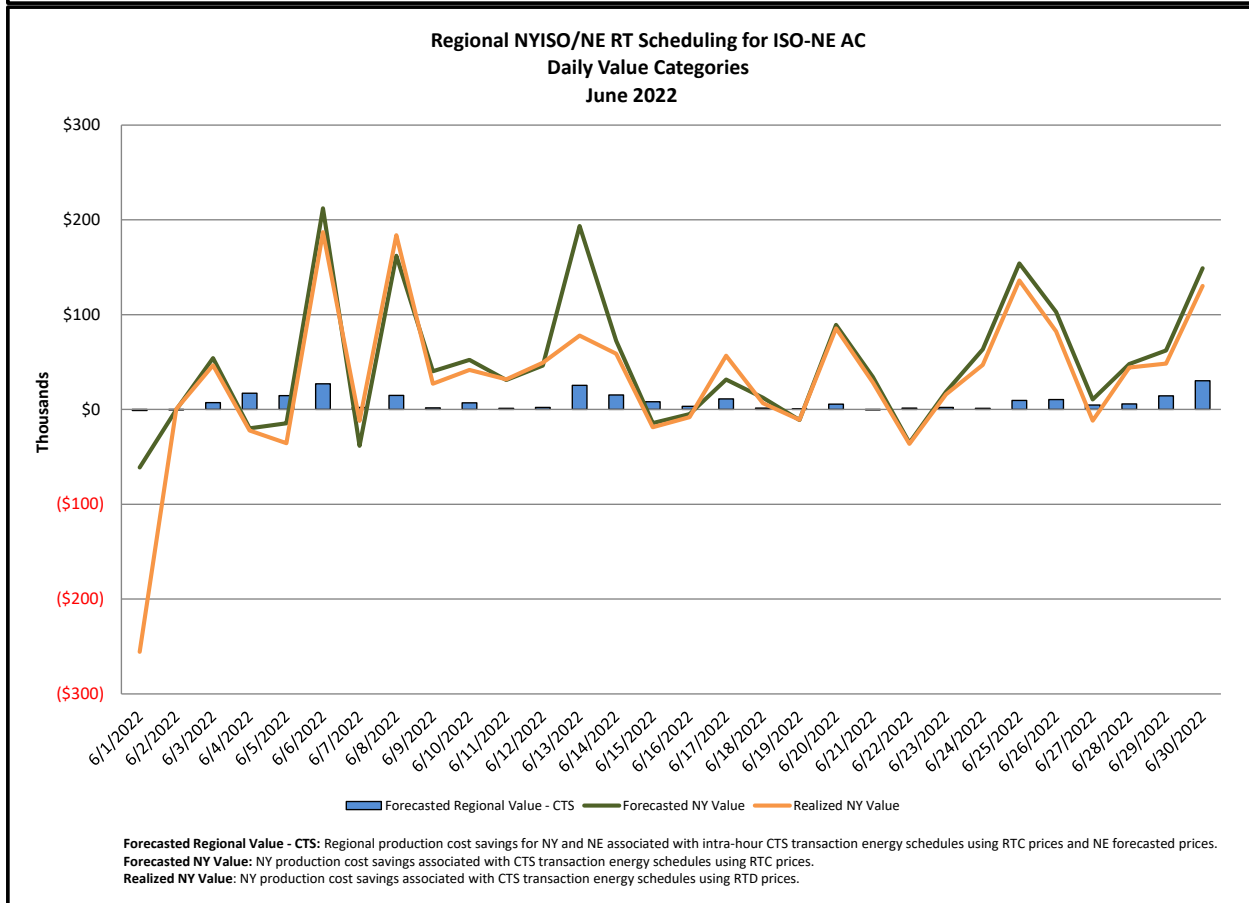
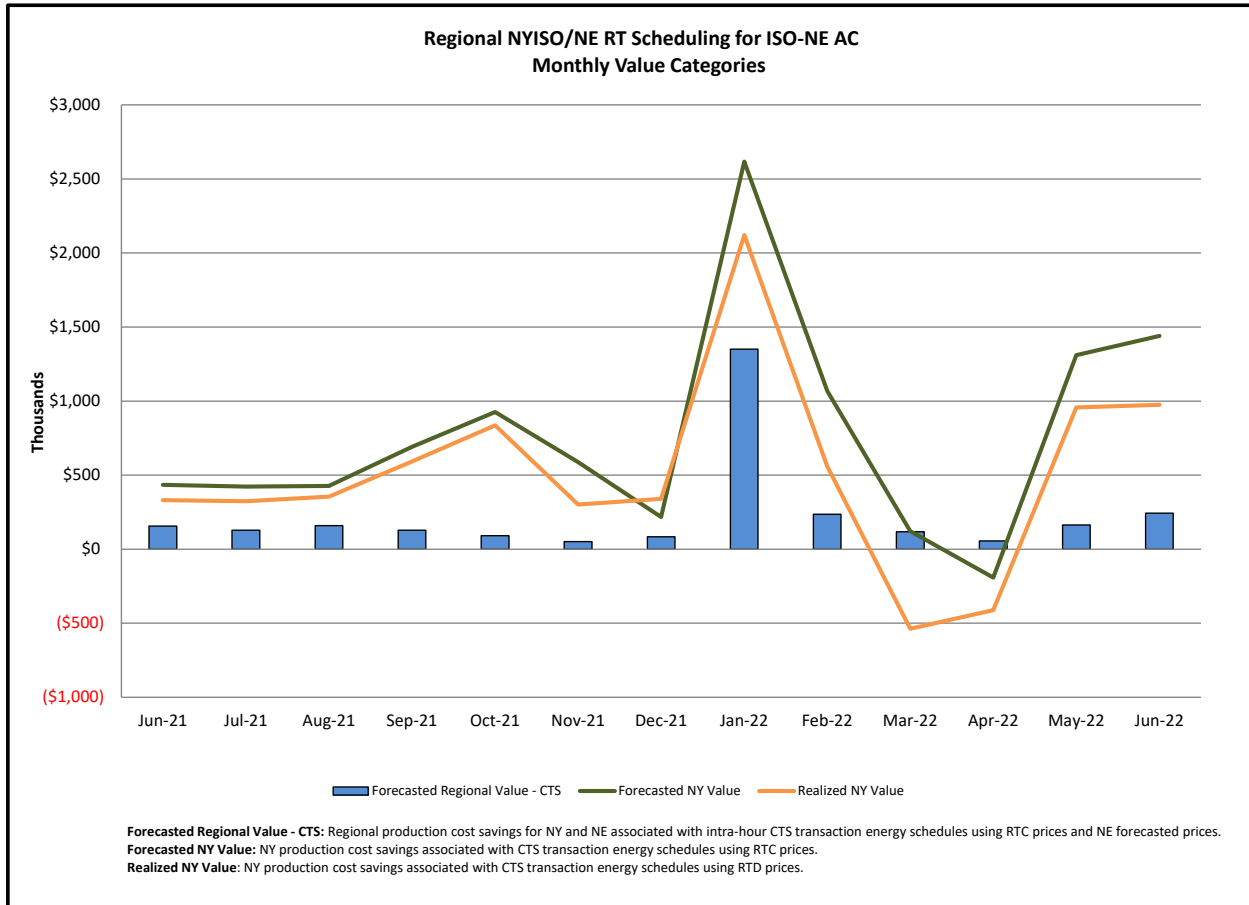
Broader Regional Market Performance Metrics



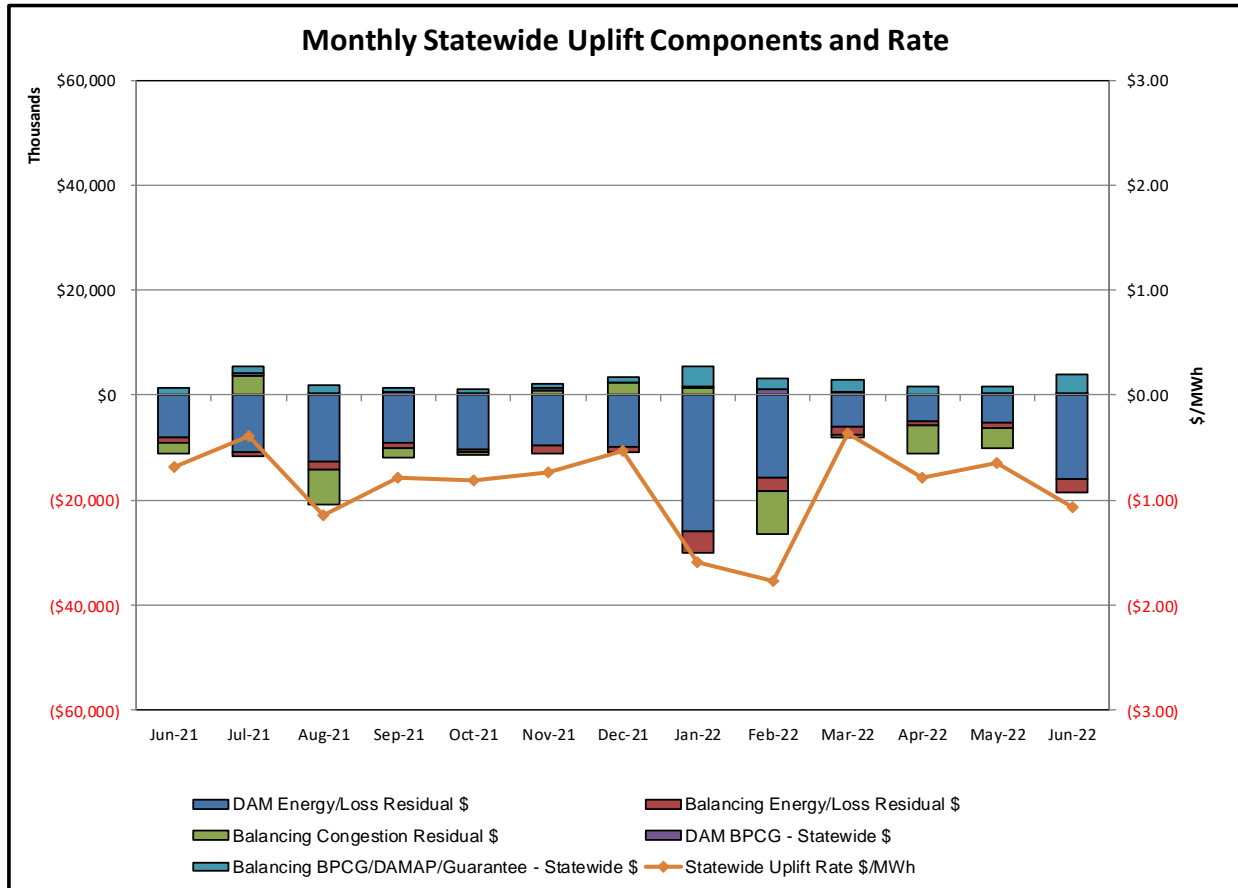
PAR Interconnection Congestion Coordination

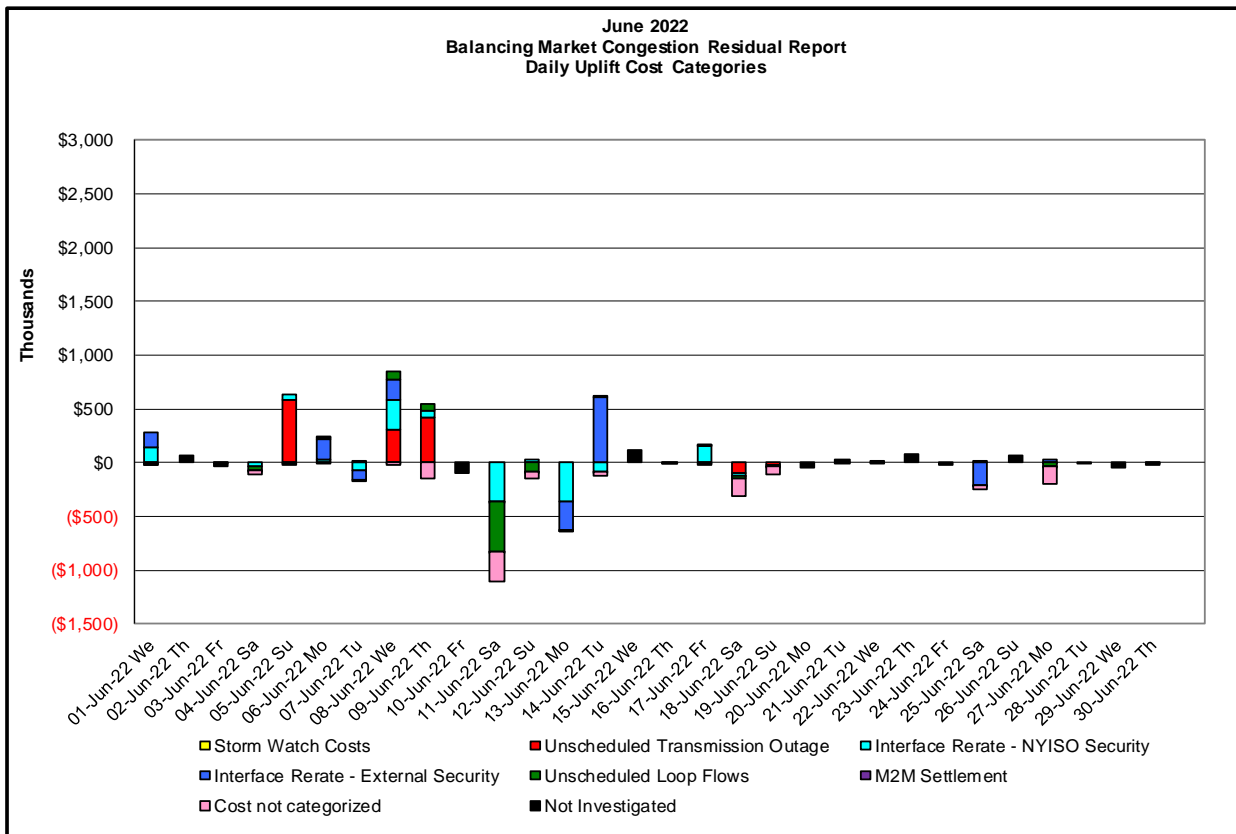
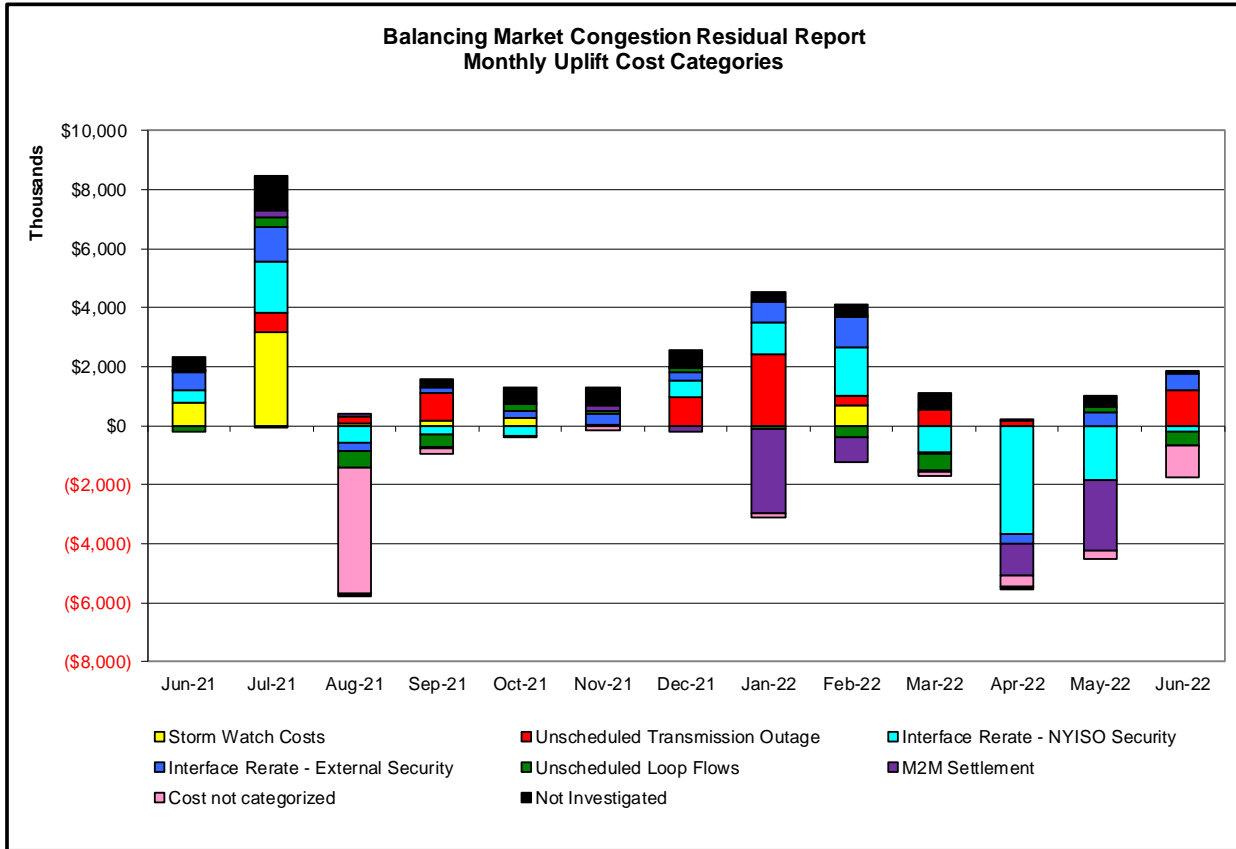
<u>Category</u>	<u>Description</u>
NY	Represents the value NY realizes from Market-to-Market PAR Coordination when experiencing congestion. This is the estimated savings to NY for additional deliveries into NY
RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo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





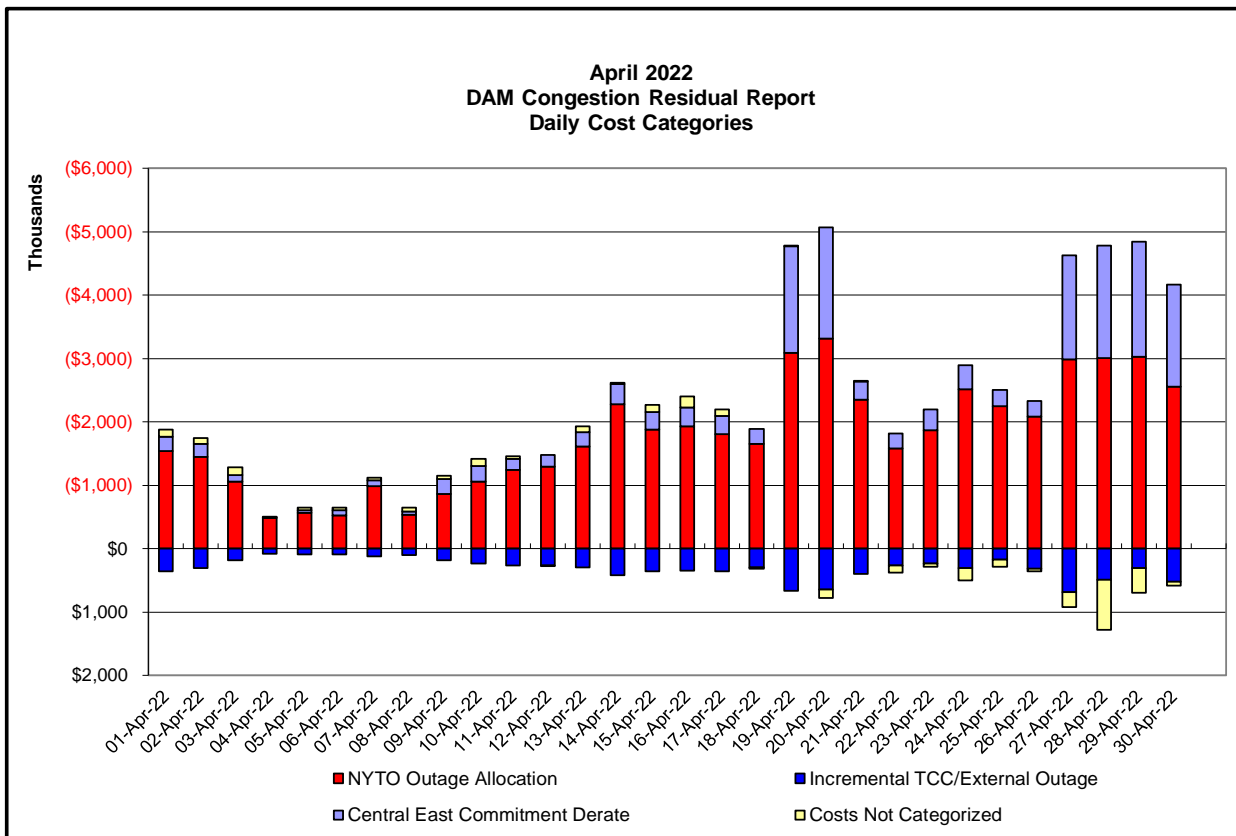
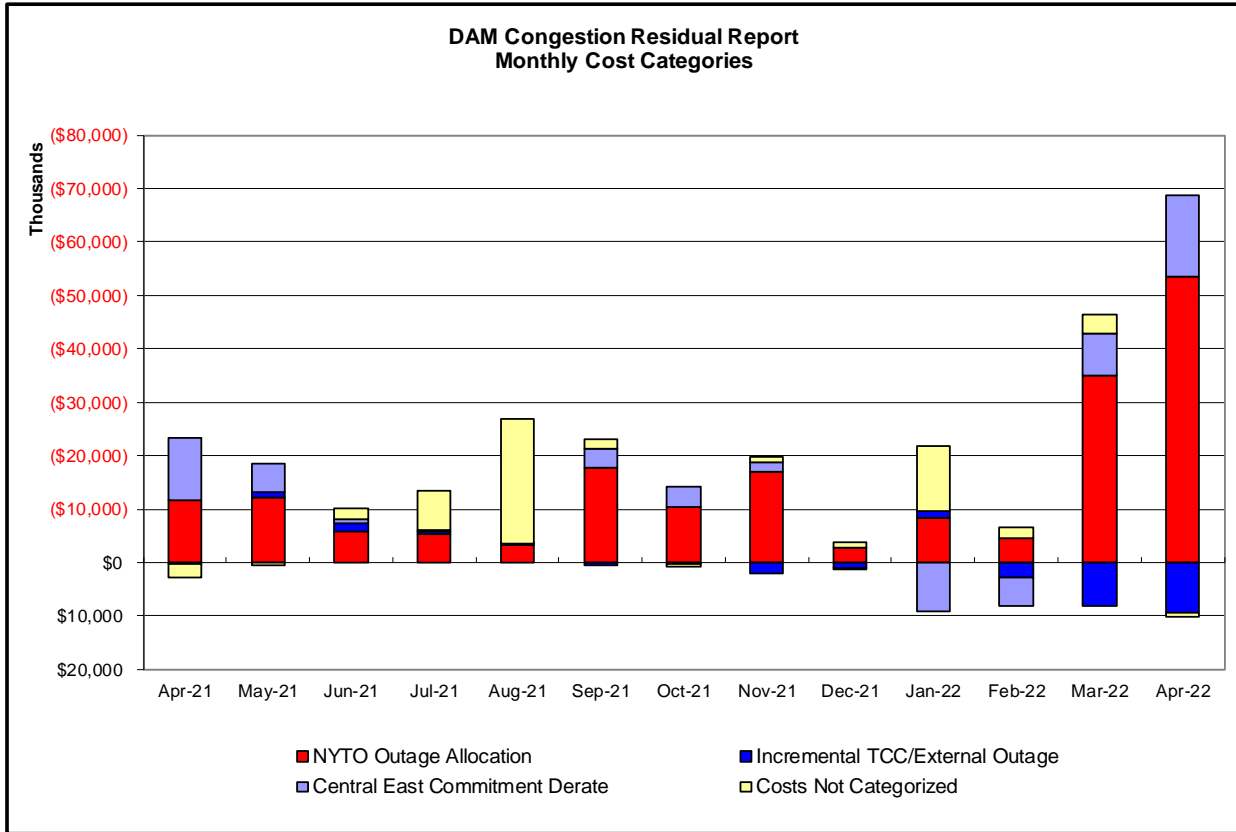
Day's investigated in June: 1,4,5,6,7,8,9,11,12,13,14,17,18,19,25,27		
Event	Description	June Dates
	Early Return to Service Marcy-Edic 345kV (#UE1-7)	18,19
	Forced Outage Niagara-Packard 115kV (#195)	5
	Forced Outage Pleasant Valley North Bus	8,9
	Derate Adirondack-Moses 230kV (#MA1) I/o SIN:MSU1&7040& HQ GN&LD PROXY	8,9,14,17
	Derate Central East	4-7,12,18
	Derate Greenbush-Regeneron 115kV (#9)	1
	Derate Greenbush-Regeneron 115kV (#9) I/o SEABROOK	1
	Derate Leeds-Hurly Avenue 345kV (#301) I/o TWR F30&W80&F31&W81	8,9,18
	Derate Pleasant Valley-Leeds 345kV (#92) I/o Athens-Pleasant Valley 345kV (#91)	17
	Derate Porter-Rotterdam 230kV (#30) I/o SEABROOK	1
	NYCA DNI Ramp Limit	1,5,6,8,12,13,27
	Uprate Central East	4,7-9,11-13,17-19
	Uprate Chestor-Shoemaker 138kV (#27) I/o TWR:Ramapo 76&77&BK1112	4,13
	Uprate ECWABALP-NiagaraBlvd 115kV (#182) I/o TWR:PACKARD 77&78	13
	Uprate Freshkills-Willowbrook 138kV (#29211)	13
	Uprate Leeds-New Scotland 345kV (#93) for I/o Leeds-New Scotland 345kV (#94)	11,18
	Uprate NiagaraBlvd-Packard 115kV (#181-922)	7,13
	Uprate NiagaraBlvd-Packard 115kV (#181-922) I/o \$SCB NIAG 3122 W/ND1 O/S	13
	Uprate NiagaraBlvd-Packard 115kV (#181-922) I/o SCB:DYSINGER(1B3211)ND2&DH2	13
	Uprate NiagaraBlvd-Packard 115kV (#181-922) I/o SCB:DYSINGER(1B3411)DES1_PAR	13
	Uprate Niagara-Packard 230kV (#61) I/o TWR:PACKARD 62 & BP76	13
	Uprate Niagara-Packard 230kV I/o TWR:PACKARD 62 & BP76	7
	Uprate Pleasant Valley-Athens 345kV (#91) I/o Leeds-Pleasant Valley 345kV (#92)	13
	Uprate Pleasant Valley-Leeds 345kV (#92) I/o Athens-Pleasant Valley 345kV (#91)	13,17
	Uprate Porter-Rotterdam 230kV (#30) I/o BUS:NSCTLD#77 14&2&93&BK2&C1&3	7
	Uprate Scriba-Volney 345kV (#20) I/o Scriba-Volney 345kV (#21)	14
	HQ_CEDARS-NY Scheduling Limit	14
	HQ_CHAT-NY Scheduling Limit	1,6-8,13,27
	IESO_AC-NY Scheduling Limit	11,17,25,27
	NE_AC Active DNI Ramp Limit	1,8,13,14
	NE_AC-NY Scheduling Limit	1,13,18
	NE_NNC1385-NY Scheduling Limit	7,25,27
	PJM_AC-NY Scheduling Limit	13,14,17
	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; Central East	1,4,5,9,11,12,18,19
	Lake Erie Circulation, DAM-RTM exceeds +/-125MW; West	6,8,9,14,17,25,27

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	

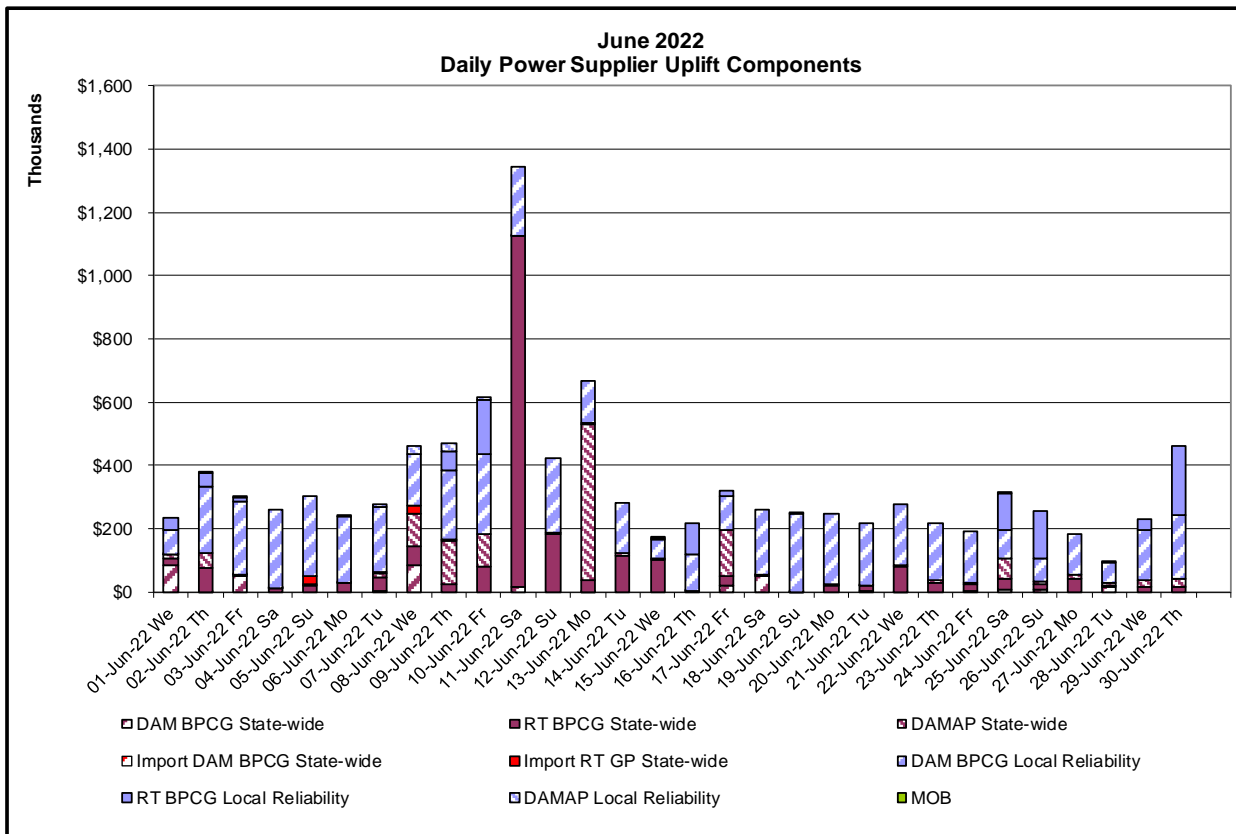
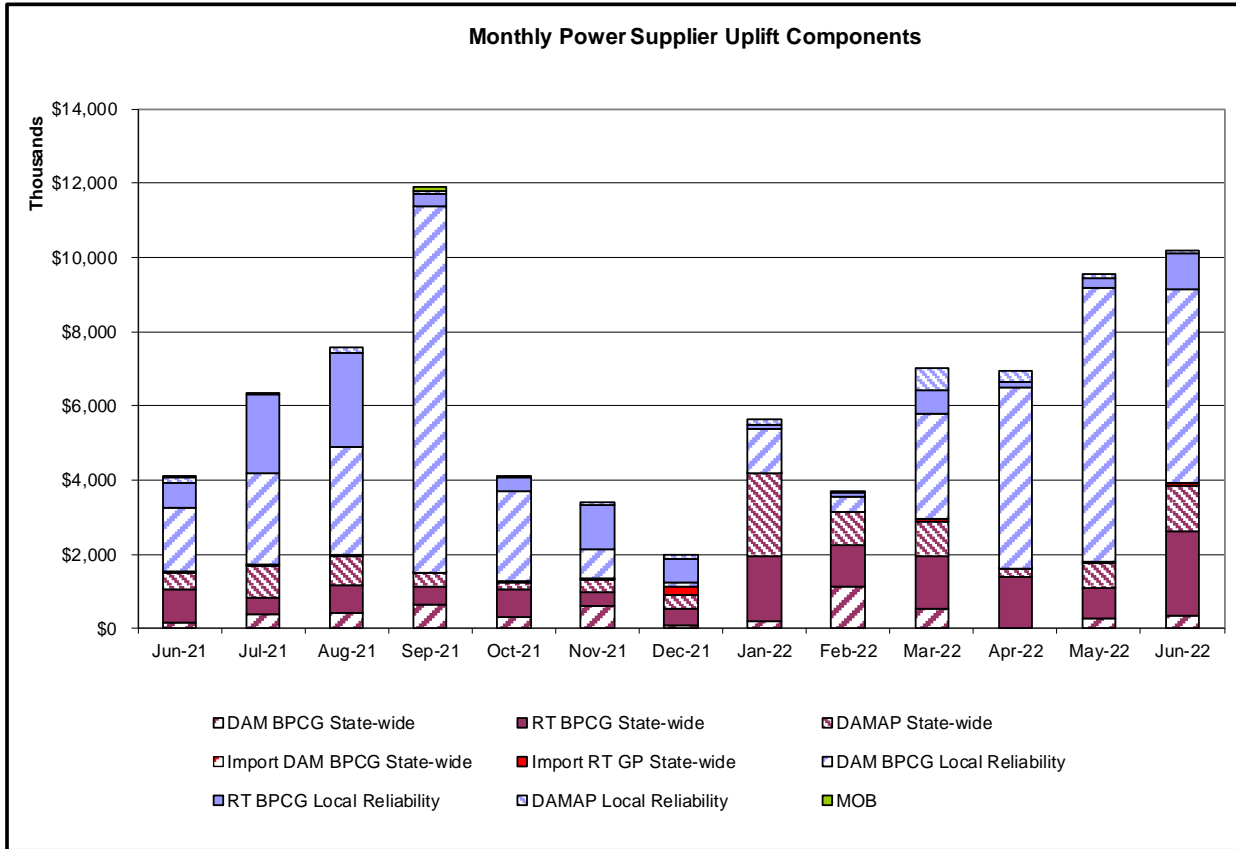
Monthly Balancing Market Congestion Report Assumptions/Notes

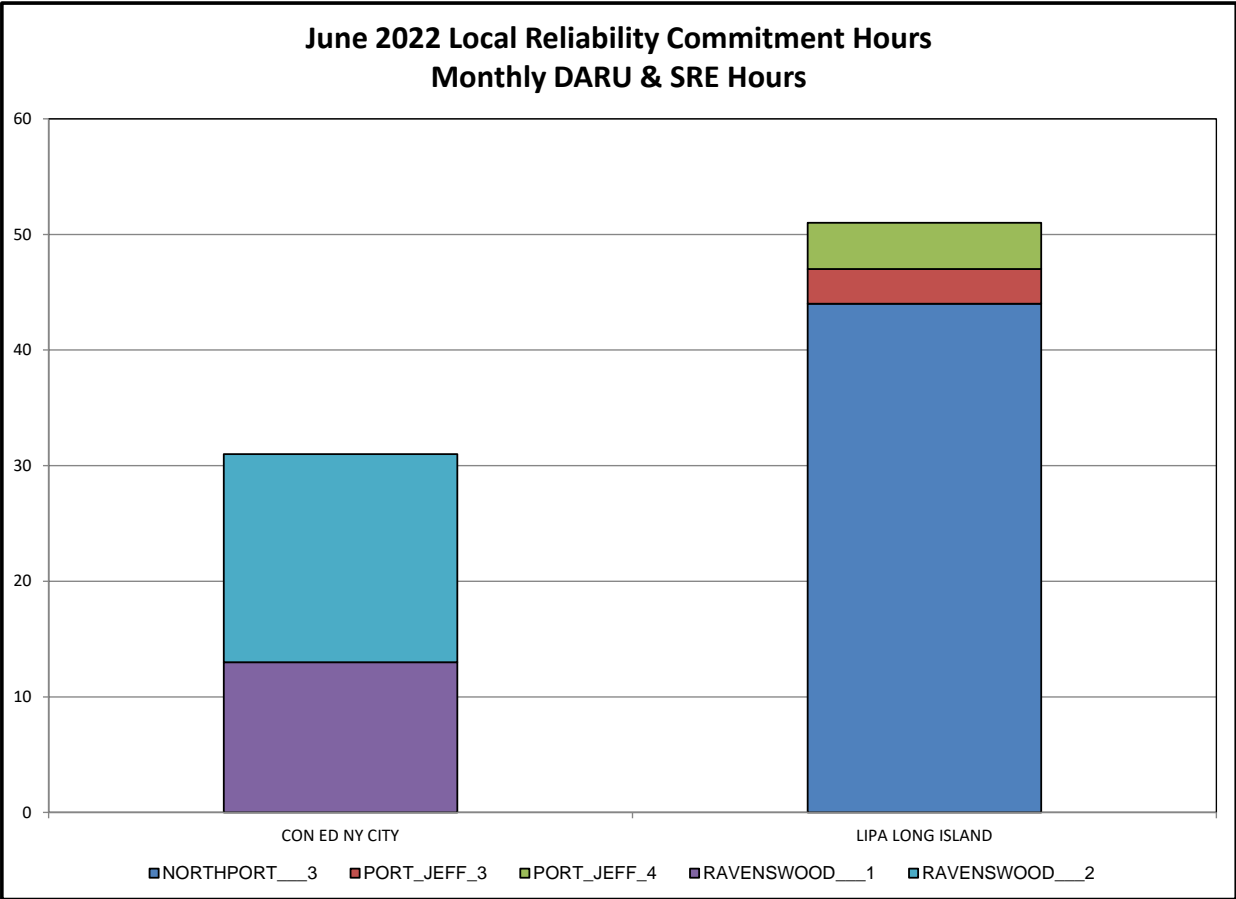
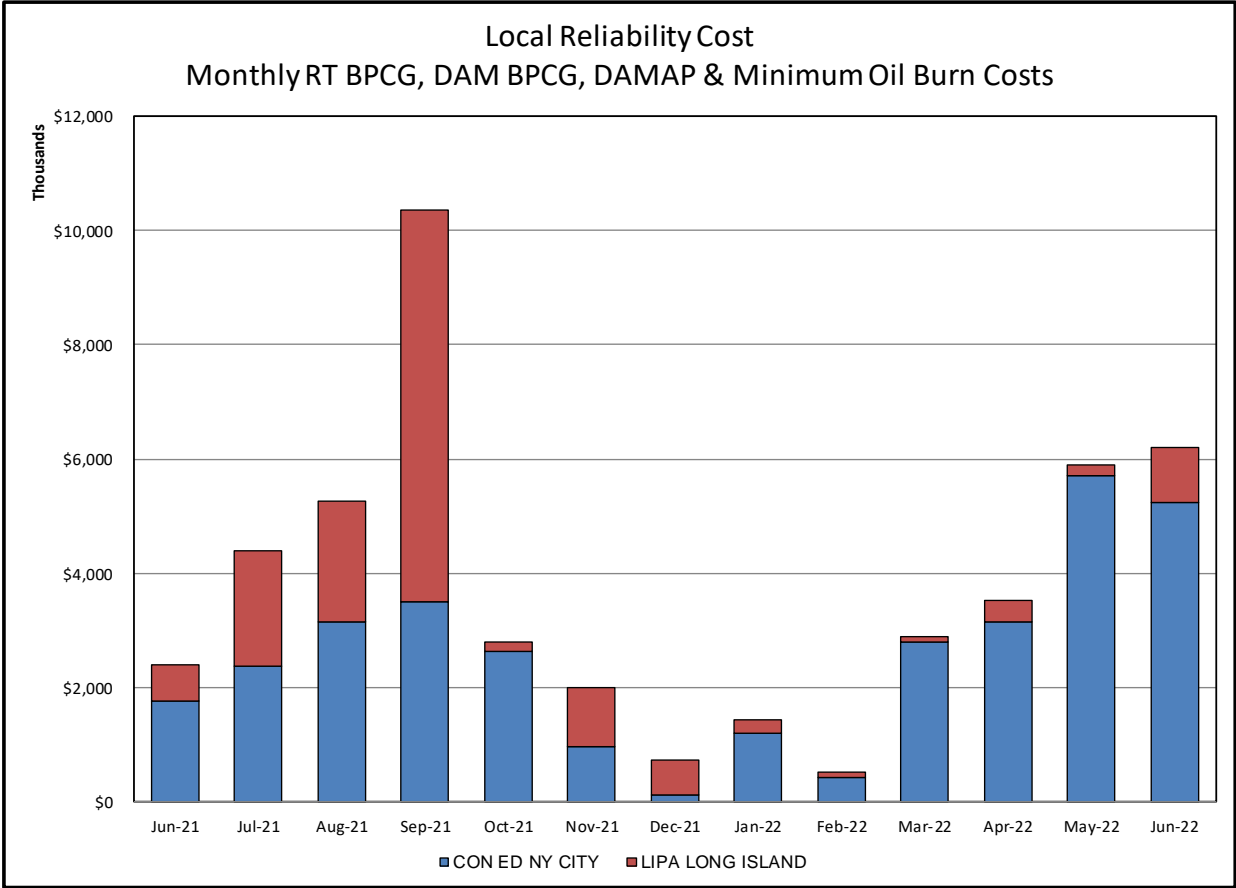
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

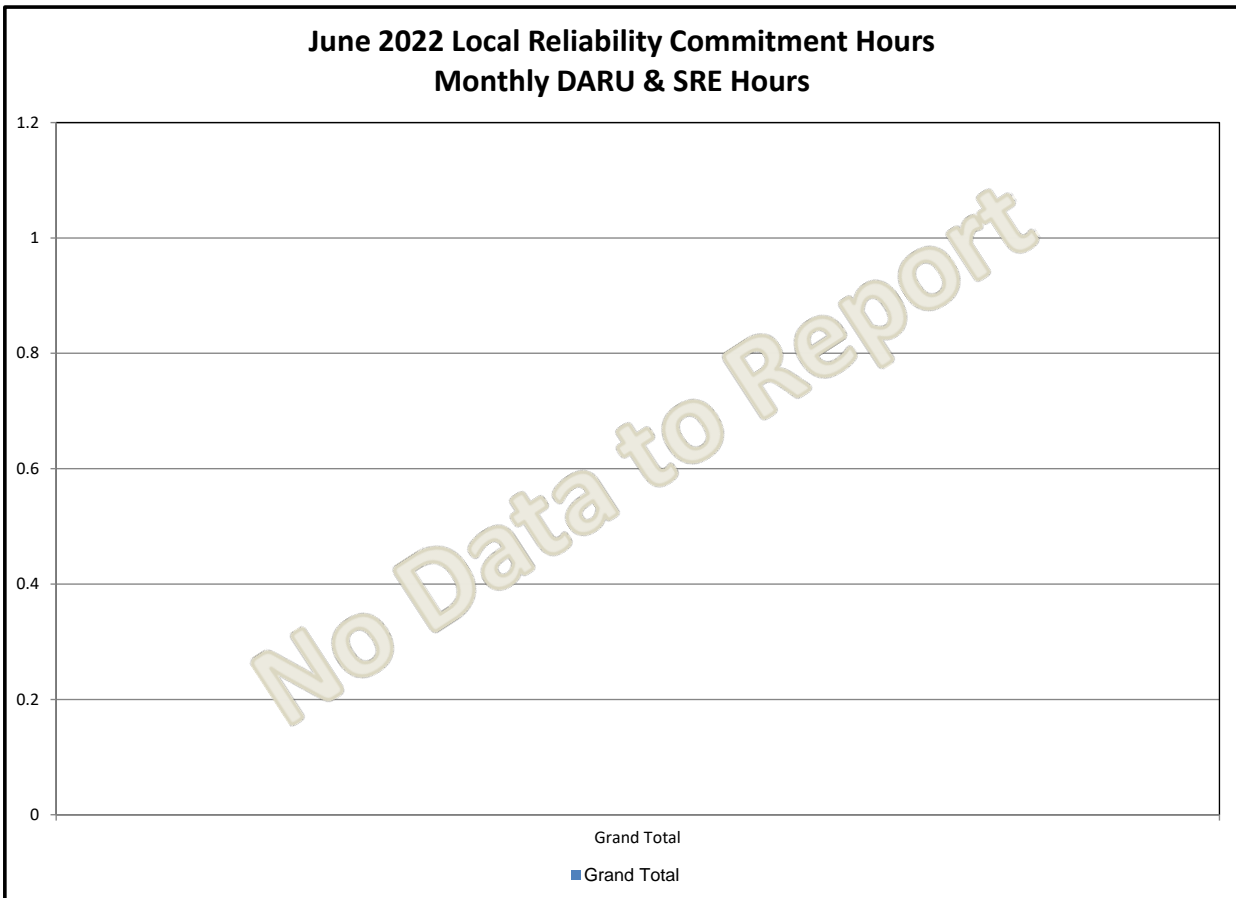
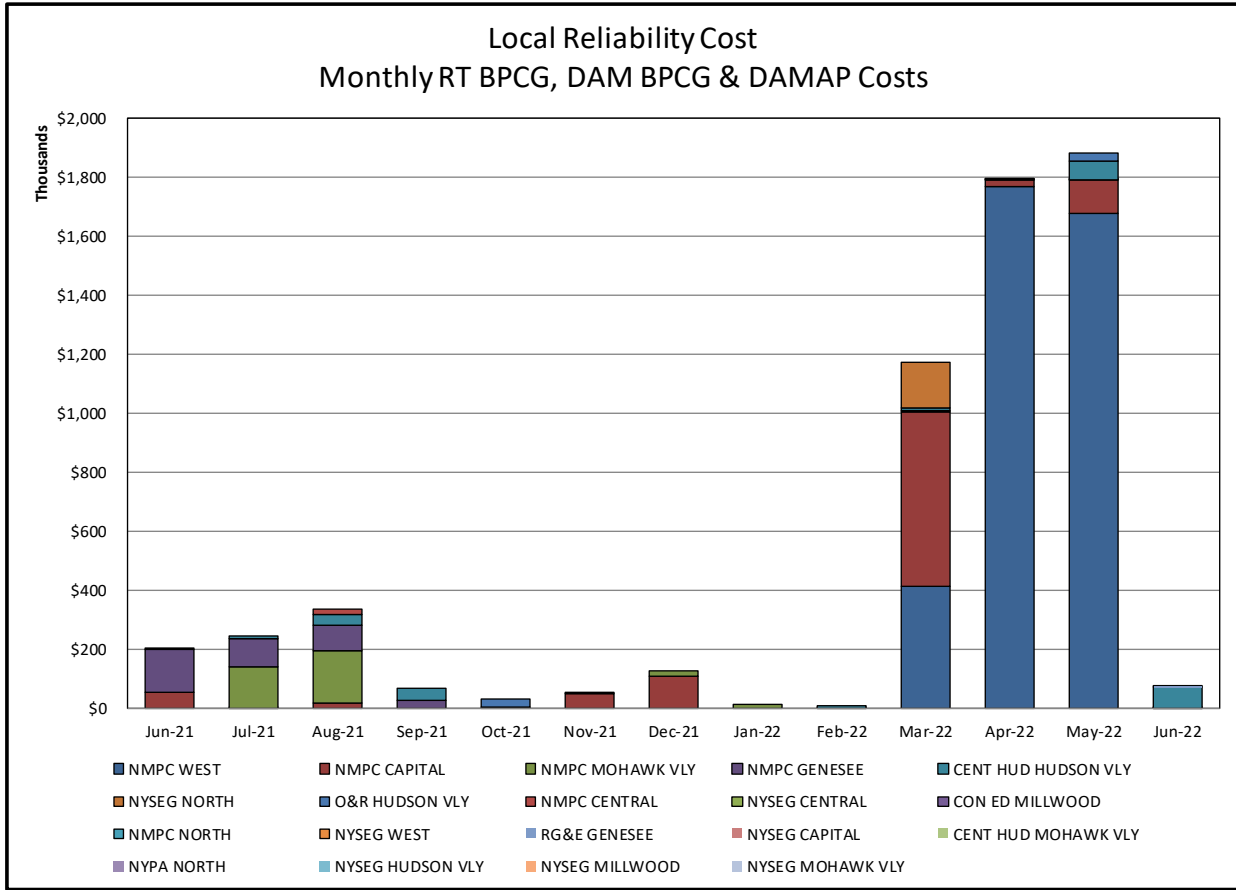


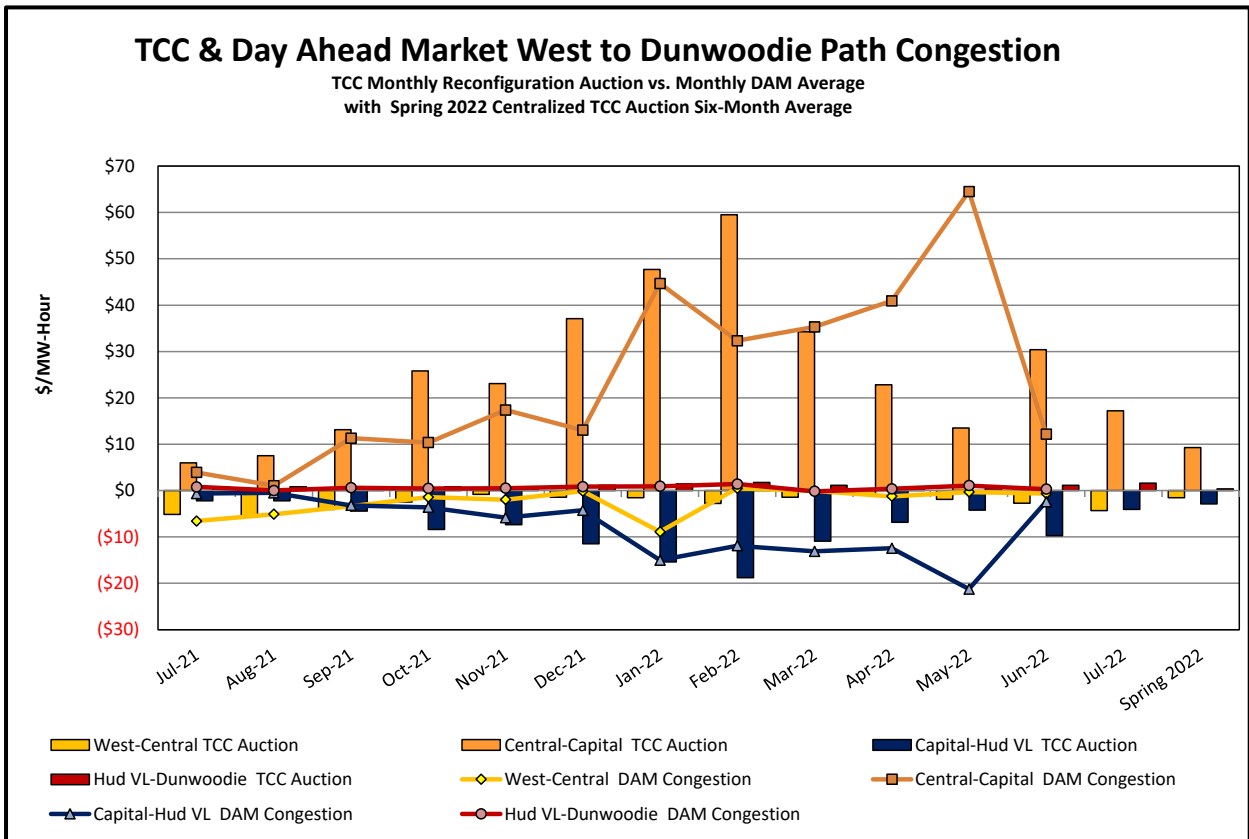
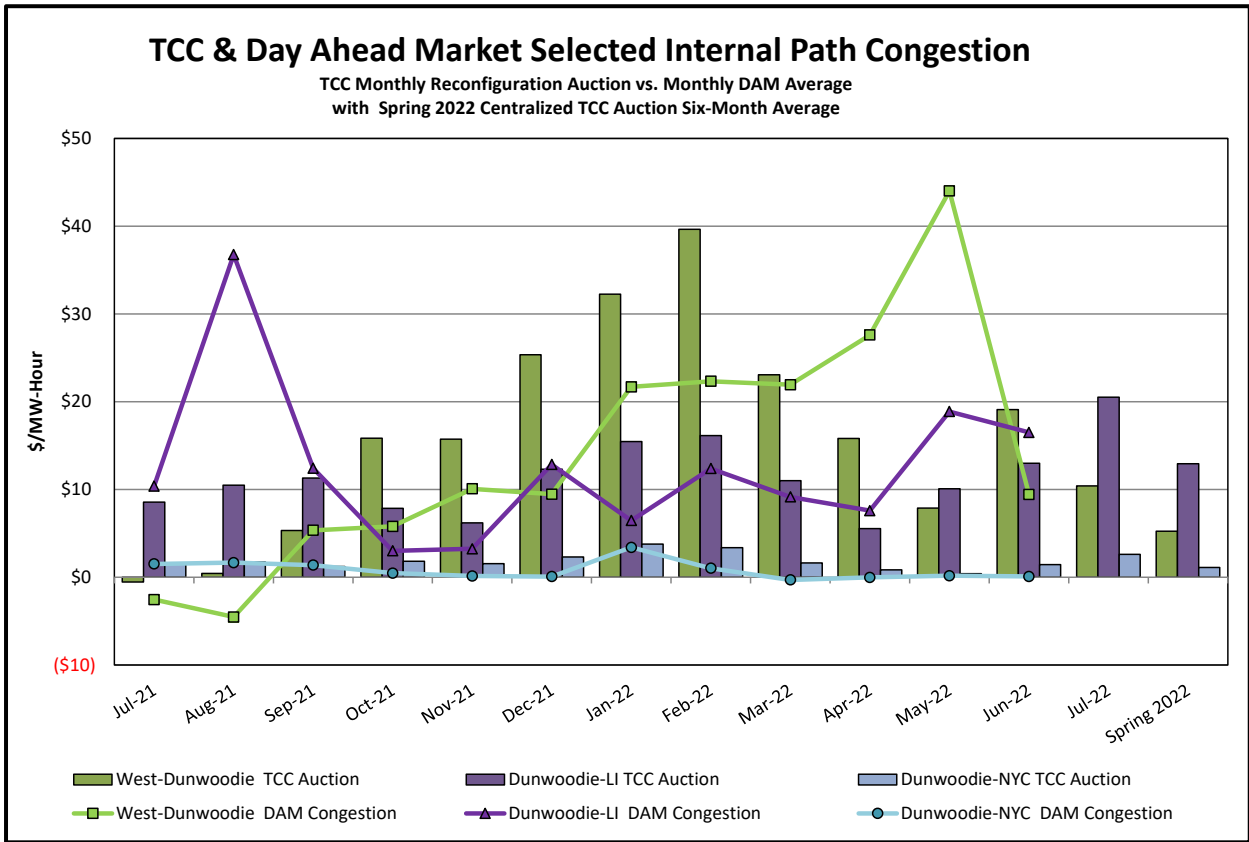
Day-Ahead Market Congestion Residual Categories

<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 External Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average
with Spring 2022 Centralized TCC Auction Six-Month Average

