Operations Performance Metrics Monthly Report



June 2014 Report

Operations & Reliability Department New York Independent System Operator



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June 2014 Operations Performance Highlights

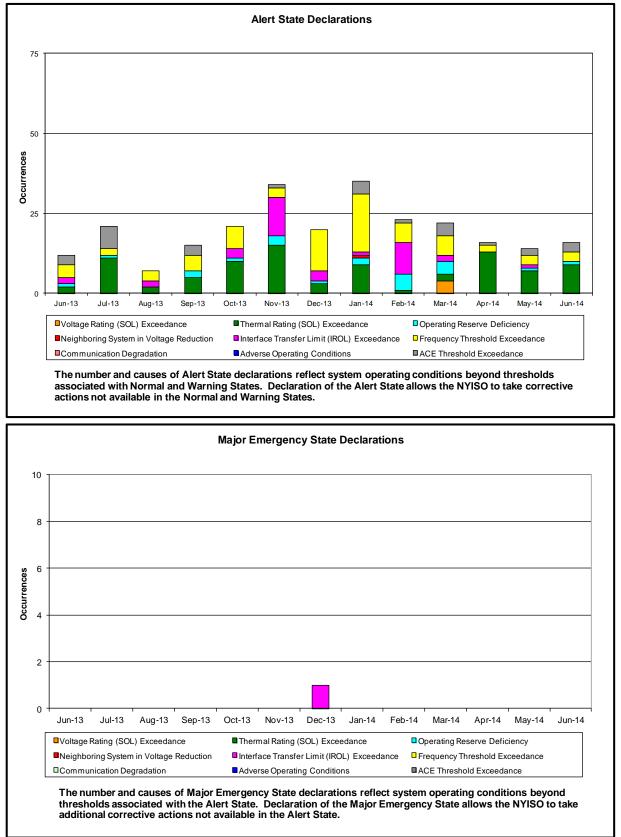
- Peak load of 27,183 MW occurred on 6/30/2014 HB 16
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 17 hours of Thunder Storm Alerts were declared
 - Reestablished M2M during Storm Watch with revised rules 6/11/2014
- 0 hours of NERC TLR level 3 curtailment
- Broader Regional Market Coordination monthly value was \$0.03M
- Broader Regional Market Coordination year-to-date value was \$6.15M
- Statewide uplift cost monthly average was \$(0.53)/MWh
- Ability to update and modify fuel price for fuel indexing with the Day-Ahead bid became available on 6/29/2014
- The following table identifies the Monthly ICAP spot market prices by locality and the price changes from the prior month,

Spot Auction Price		Lower Hudson Valley	New York City	Long Island
Results	NYCA	Zones	Zone	Zone
July 2014 Spot Price	\$6.21	\$12.35	\$18.84	\$6.44
Change from Prior	(\$0.11			
Month)	(\$0.03)	(\$0.15)	\$0.02

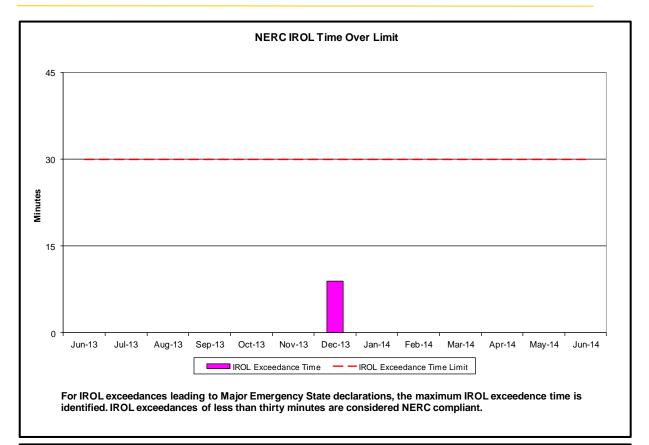
- NYCA The -\$0.11 change in price is primarily driven by a 19.7 MW increase in SCR UCAP and a 18.2 MW ICAP increase in ISONE imports.
- NYC The -\$0.15 change in price is primarily driven by a 8.6 MW increase in SCR UCAP

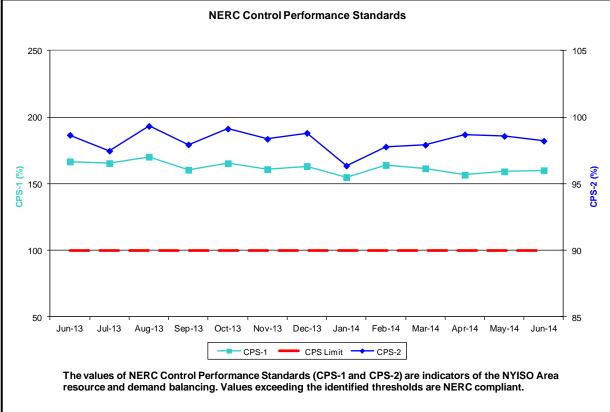


Reliability Performance Metrics

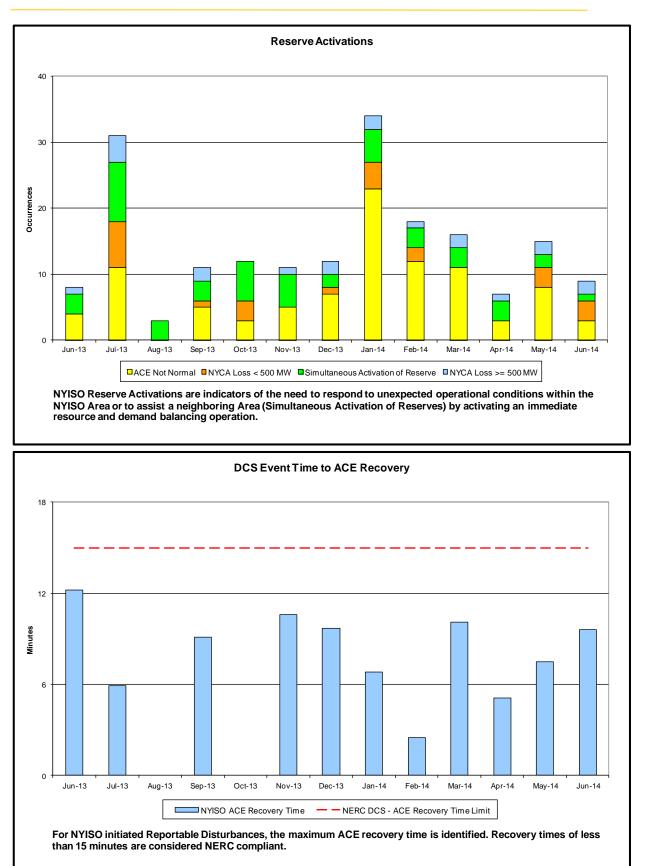




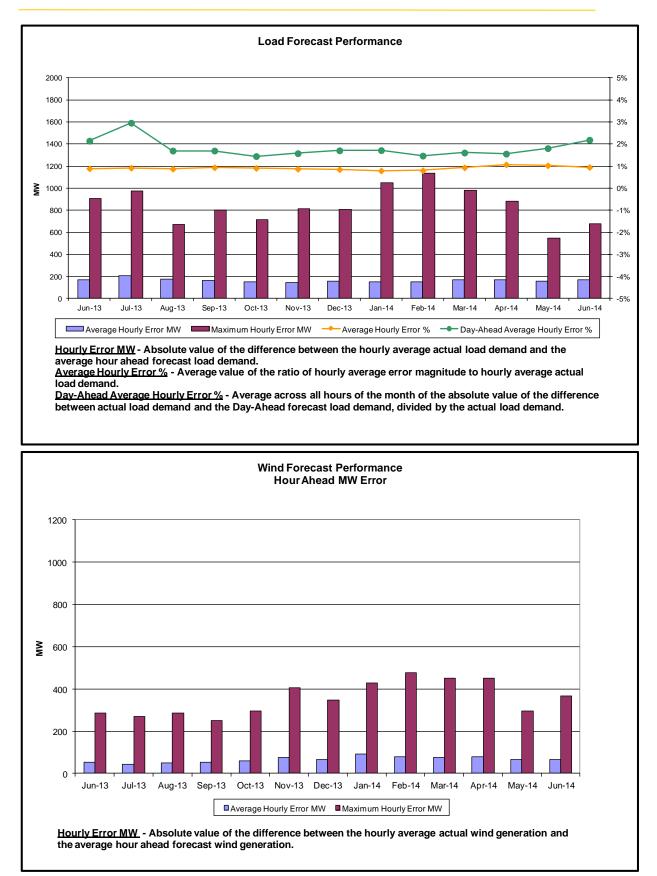




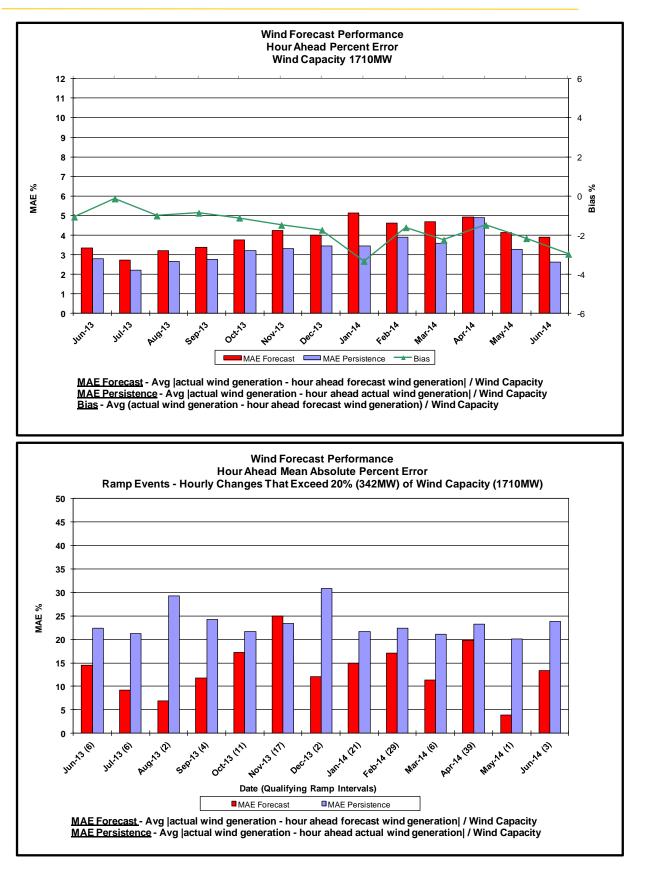




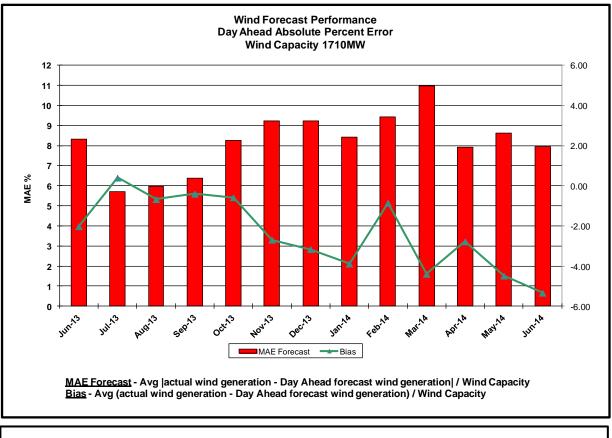


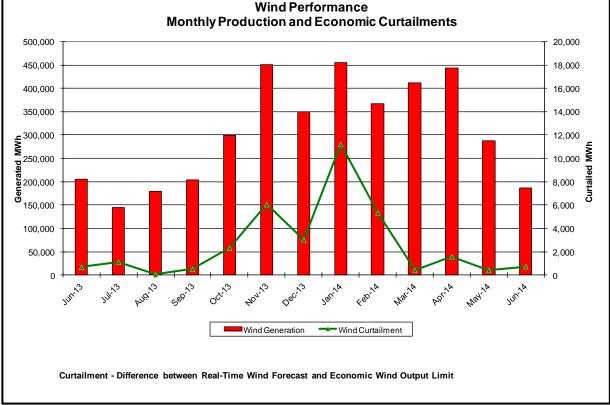




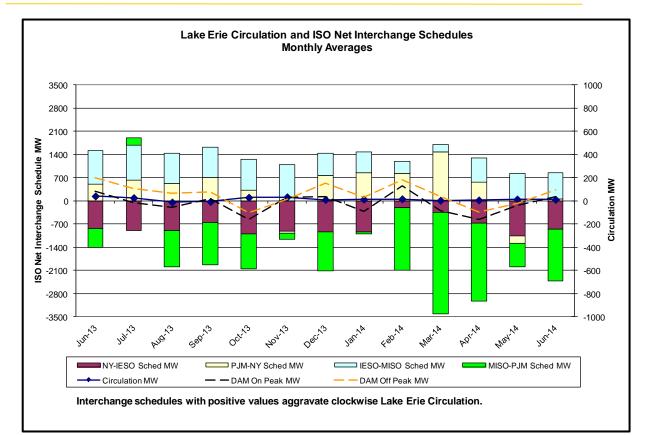


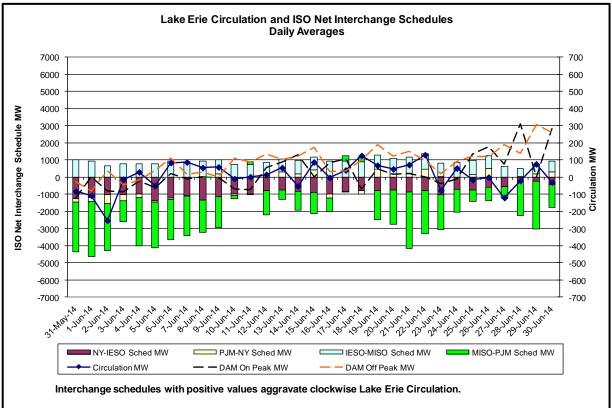




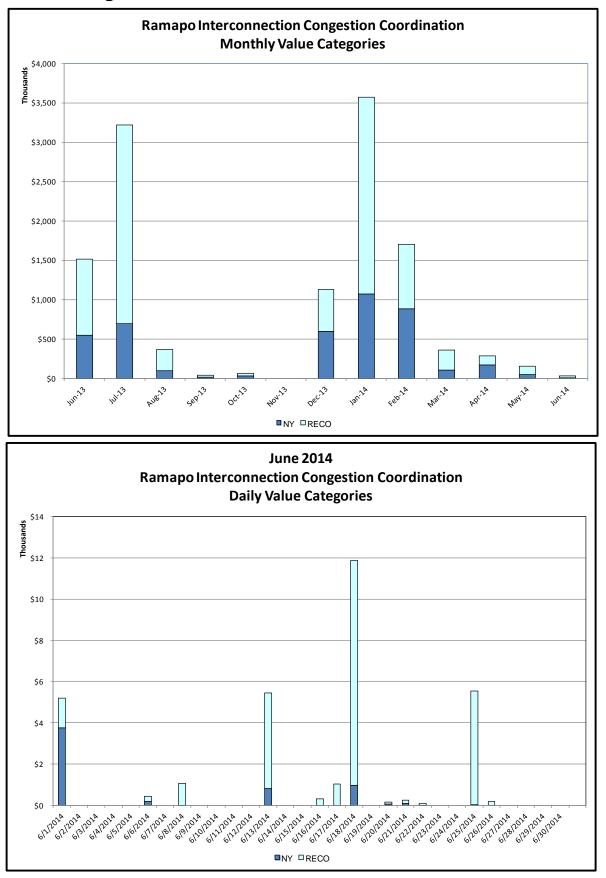












Broader Regional Market Performance Metrics



Ramapo Interconnection Congestion Coordination

<u>Category</u> NY

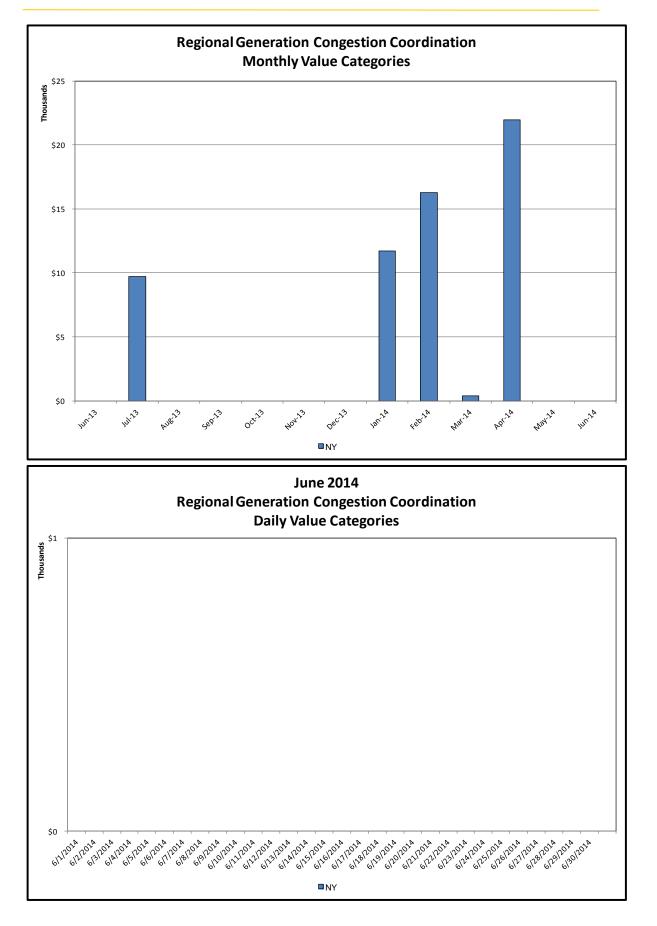
RECO

Description

Represents the value NY realizes from Market-to-Market Ramapo Coordination. When experiencing congestion, this includes (1) the estimated savings to NY for additional deliveries into NY, plus (2) PJM compensation to NY for additional deliveries into PJM (as compared to the Ramapo Target level, excluding RECO). This is net of any settlements to PJM when they are congested.

Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 5018. This includes (1) the estimated reduction in NYCA congestion due to the PJM delivery of RECO over Ramapo 5018, plus (2) PJM compensation to NY for NYCA congestion for the under-delivery or inability to deliver service to RECO load over Ramapo 5018.







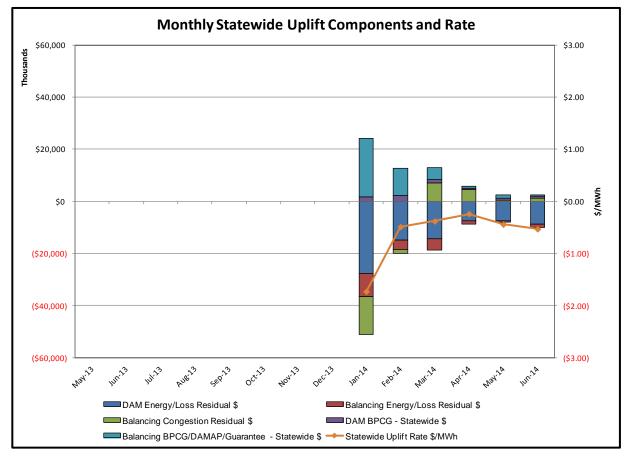
Regional Generation Congestion Coordination

<u>Category</u> NY

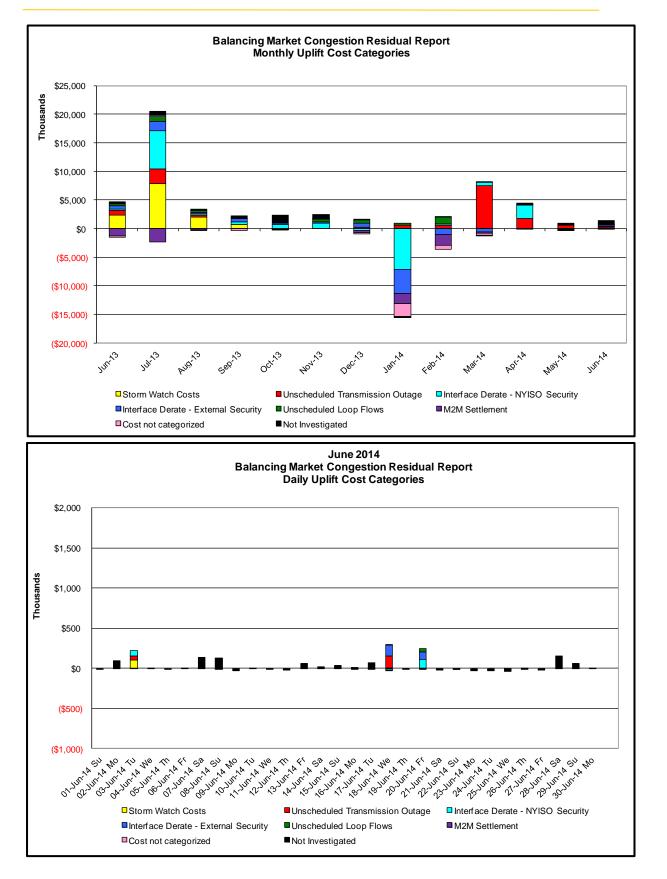
 $\underline{\textit{Description}}$ NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from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



Market Performance Metrics





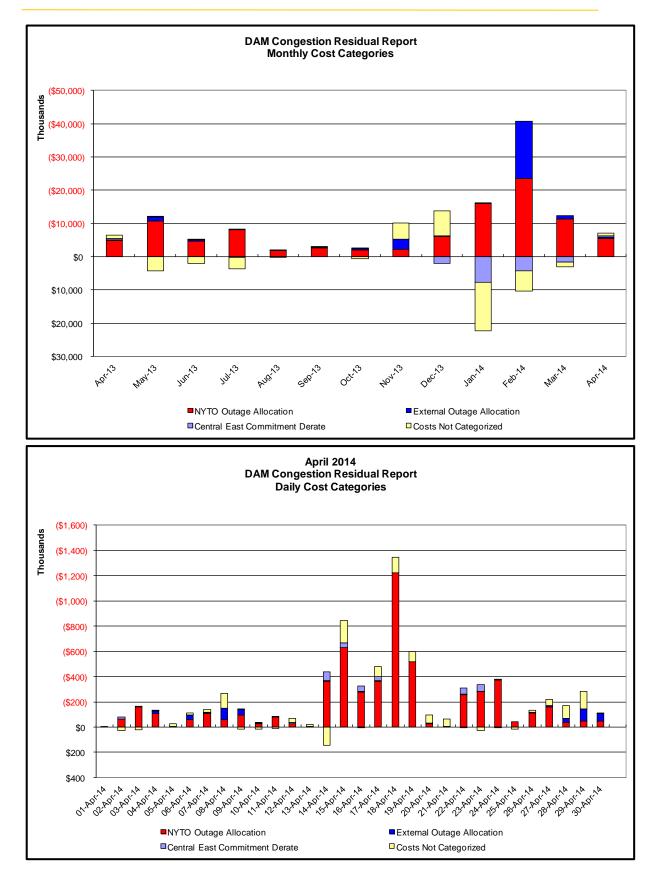




	nvestigated in June: 3	,18,20	
Event		Hours	Description
	6/3/2014	-	Thunder storm Alert
	6/3/2014	0,7-16	Forced outage Chateaugay DC Poles #1 & #2
	6/3/2014		Derate Gowanus-Greenwood 138kV (#42232) for I/o TWR:GOETHALS 22 & 21
	6/3/2014		Derate Niagara-Packard 230kV (#62) for I/o TWR:NIAGARA 61 & 64
	6/18/2014	-	Thunder storm Alert
	6/18/2014		Forced outage Moses-Adirondack 345kV (#MA2)
	6/18/2014		Forced outage Farragut-E13St Sta 345kV (#45) & W49 St-E13 St Sta 345kV (#M54)
	6/18/2014		Uprate Freeport-Newbridge 138kV (#461)
	6/18/2014	16,17	Uprate Freshkills-Willowbrook 138kV (#29211-2)
	6/18/2014	22	Derate Freshkills-Willowbrook 138kV (#29211-2) for I/o SCB:FRESHKILLS(6)
	6/18/2014		Uprate Gowanus-Greenwood 138kV (#42231)
	6/18/2014	15	Derate Gowanus-Greenwood 138kV (#42231) for I/o SCB:GOWANUS(14):42&42232
	6/18/2014	15	Derate Gowanus-Greenwood 138kV (#42232) for I/o SCB:GOWANUS(2):41&42231
	6/18/2014	21-23	Derate Gowanus-Greenwood 138kV (#42231) for I/o TWR:GOETHALS 22 & 21
	6/18/2014	21-23	Derate Gowanus-Greenwood 138kV (#42232) for I/o TWR:GOETHALS 22 & 21
	6/18/2014	13	Derate Leeds-New Scotland 345kV (#93-LN) for I/o New Scotland-Leeds 345kV (#94-LN)
	6/18/2014	16-18	Uprate Pleasant Valley-Leeds 345kV (#92) for I/o Athens-Pleasant Valley 345kV (#91)
	6/18/2014		NYCA DNI Ramp Limit
	6/18/2014	15,19,21,22	HQ Cedars-NY Scheduling Limit
	6/18/2014	11,12	PJM_AC - NY Scheduling Limit
	6/20/2014	22	Derate Central East
	6/20/2014	13,14	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o NEPTUNE HVDC TIE LINE
	6/20/2014	13-22	Derate Gowanus-Greenwood 138kV (#42231) for I/o TWR:GOETHALS 22 & 21
	6/20/2014		Derate Gowanus-Greenwood 138kV (#42232) for I/o TWR:GOETHALS 22 & 21
	6/20/2014		Derate Niagara-Packard 230kV (#61) for I/o TWR:NIAGARA 62 & BP76
	6/20/2014	14-16	Derate Niagara-Packard 230kV (#62) for I/o TWR:NIAGARA 61 & 64
	6/20/2014	9-11	IESO_AC DNI Ramp Limit
	6/20/2014	13-15,18	IESO_AC-NY Scheduling Limit
	6/20/2014	2-5	NE_AC-NY Scheduling Limit
	6/20/2014	15-23	NE_NNC1385-NY Scheduling Limit
	6/20/2014	21	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East
	6/20/2014	14	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Niagara-Packard 230kV (#61>)

Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories					
Category Storm Watch	<u>Cost Assignment</u> Zone J	<u>Events Types</u> Thunderstorm Alert (TSA)	<u>Event Examples</u> TSA Activations		
Unscheduled Transmission Outage	Market-wide	Reduction in DAM to RTM transfers related to unscheduled transmission outage	Forced Line Outage, Unit AVR Outages		
Interface Derate - NYISO Security	Market-wide	Reduction in DAM to RTM transfers not related to transmission outage	Interface Derates due to RTM voltages		
Interface Derate - External Security	Market-wide	Reduction 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 Clockwise Lake Erie Loop Flows greater than 125 MW		
M2M Settlement	Market-wide	SettIment result inclusive of coordinated redispatch and Ramapo flowgates			
Monthly Balancing Market Congestion Report Assumptions/Notes					
 Storm Watch Costs are identified as daily total uplift costs 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. Uplift costs associated with multiple event types are apportioned equally by hour 					







Day-Ahead Market Congestion Residual Categories

<u>Category</u> NYTO Outage Allocation	<u>Cost Assignment</u> Responsible TO	<u>Events Types</u> Direct allocation to NYTO's responsible for transmission equipment status change.	<u>Event Examples</u> DAM scheduled outage for equipment modeled in- service for the TCC Auction.
External Outage Allocation	All TO by Monthly Allocation Factor	Direct allocation to transmission equipment status change caused by change in status of external equipment.	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.	



