# Operations Performance Metrics Monthly Report









## May 2012 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 June 8, 2012.



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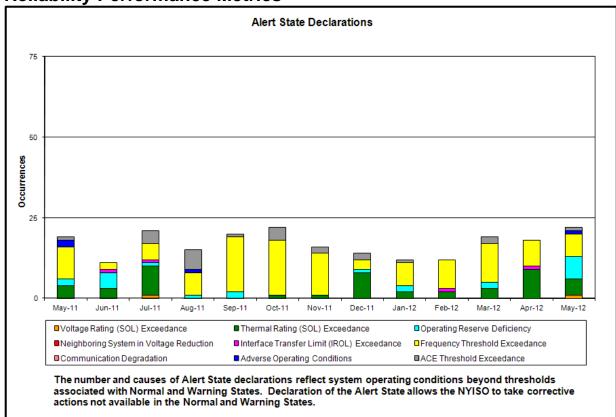


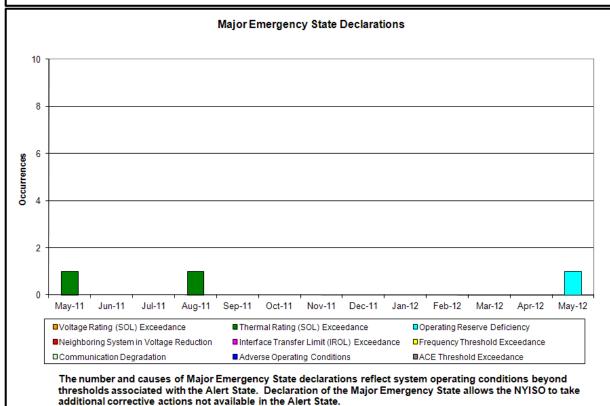
### **May 2012 Operations Performance Highlights**

- Peak load of 28,242 MW occurred on 5/29/2012 HB 12
- All-time summer capability period peak load of 33,939 MW occurred on 8/2/2006 HB13
- 34 hours of Thunder Storm Alerts were declared
- 81 hours of NERC TLR level 3 curtailments
- EDRP/SCR resources were activated on 5/29/2012

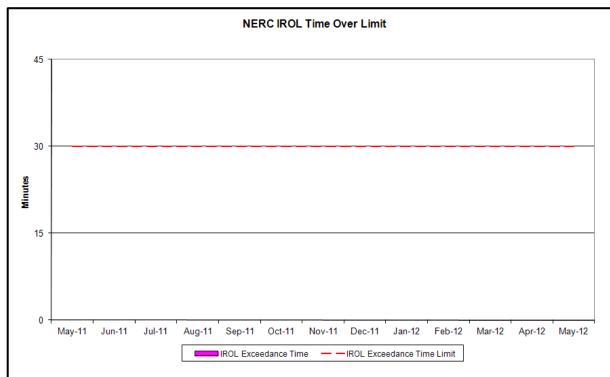


#### **Reliability Performance Metrics**

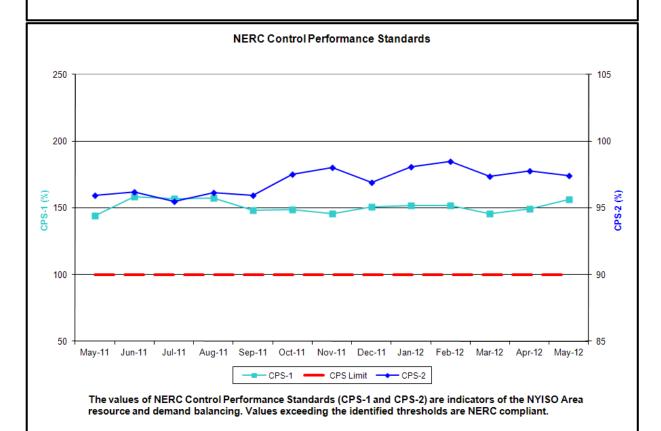




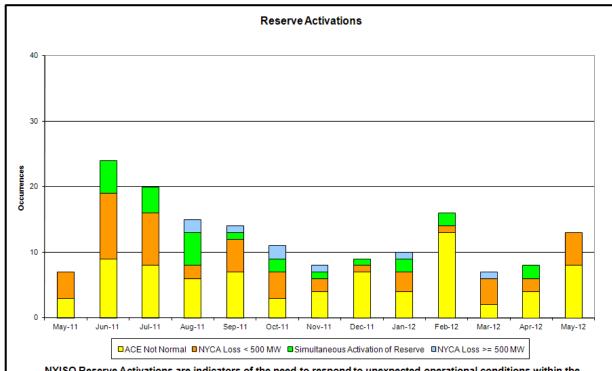




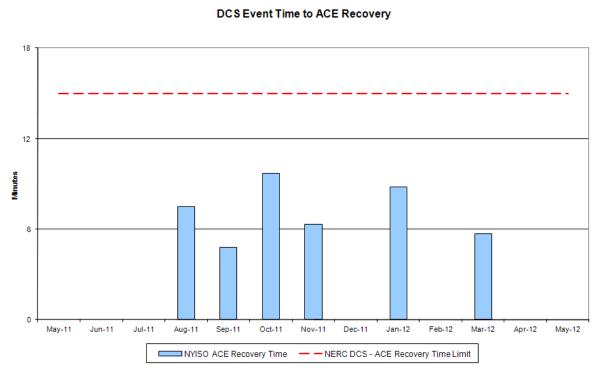
For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedence time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.





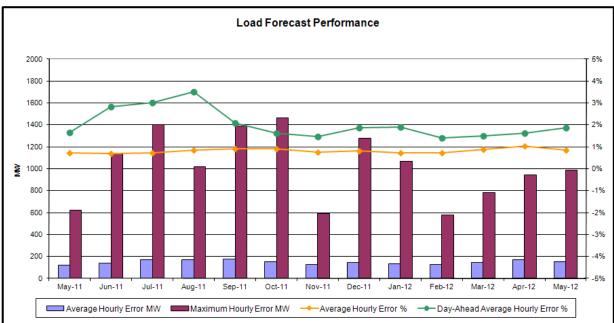


NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.



For NYISO initiated Reportable Disturbances, the maximum ACE recovery time is identified. Recovery times of less than 15 minutes are considered NERC compliant.

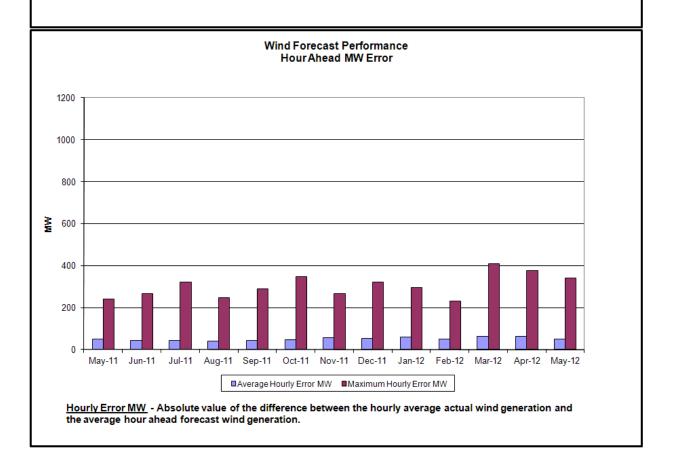




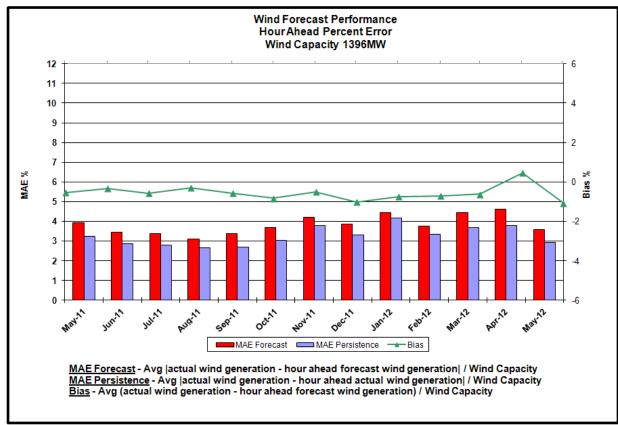
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

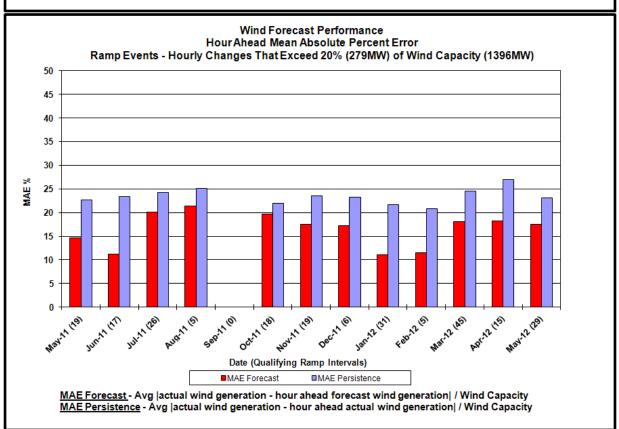
<u>Average Hourly Error %</u> - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

<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.

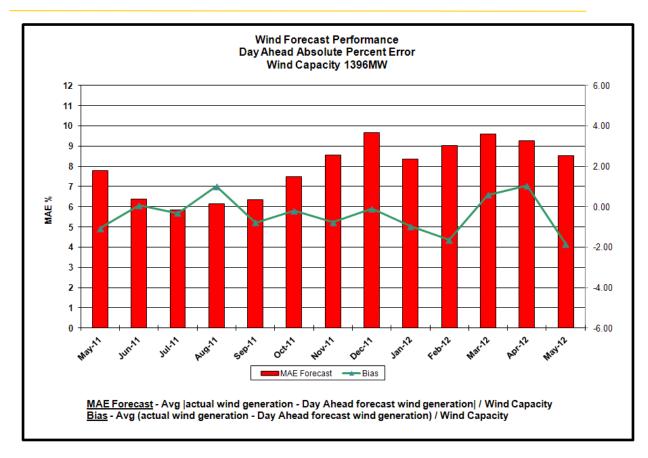




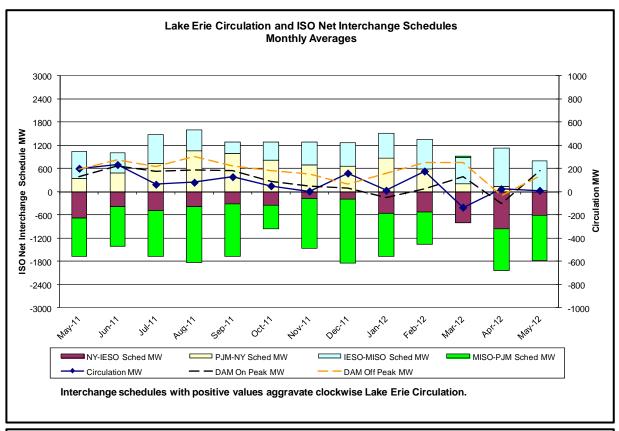


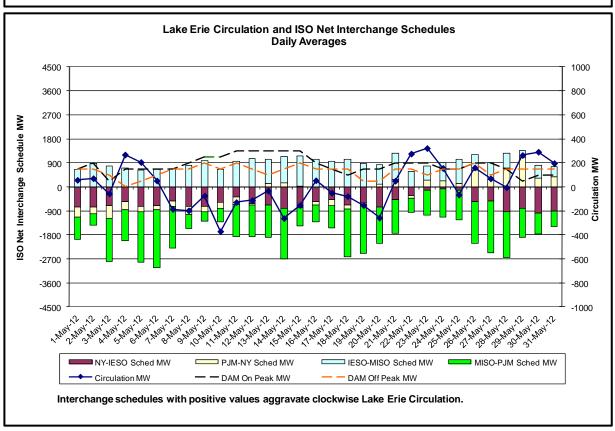






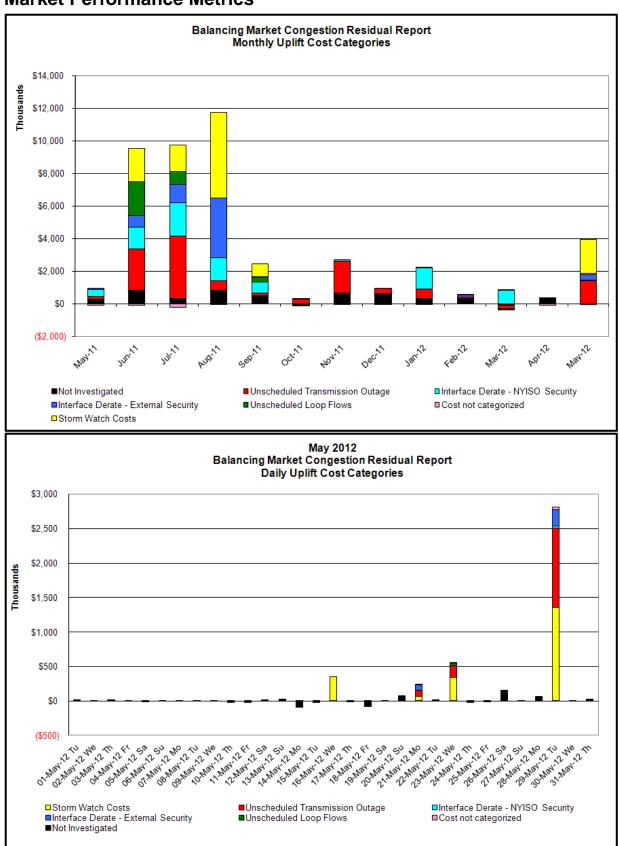








#### **Market Performance Metrics**



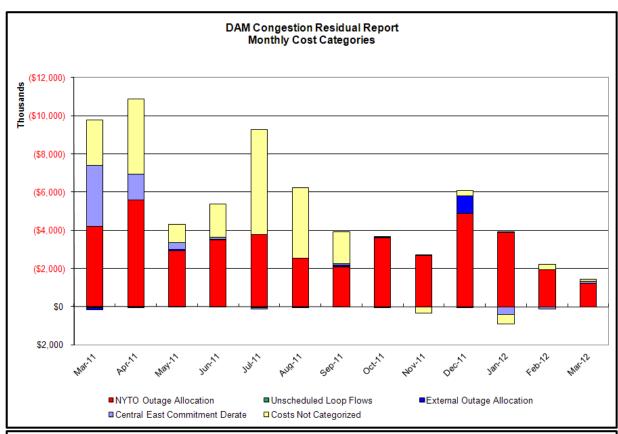


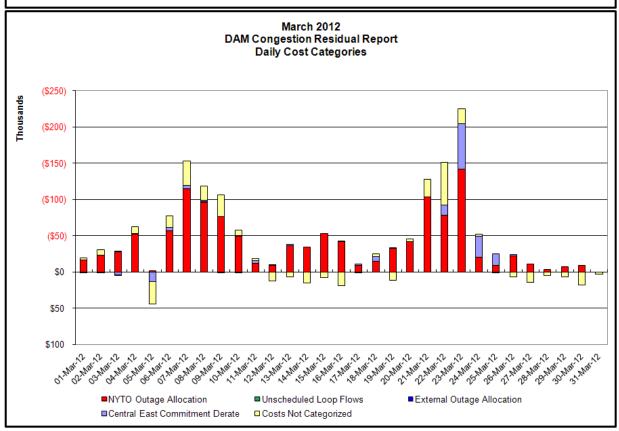
Day's investigated in May: 16,21,23,29			
Event	vent Date (yyyymm Hours		Description
	5/16/2012	14-20	Thunder Storm Alert
	5/21/2012	10-13	Thunder Storm Alert
	5/21/2012	10-12,15,16	Extended outage Willowbrook-Freshkills 138kV (#29211-2)
	5/21/2012		PJM DNI Ramp Limit
	5/21/2012		IESO_AC - NY Scheduling Limit
	5/21/2012	12,14-16	NE_AC - NY Scheduling Limit
	5/23/2012	13-18	Thunder Storm Alert
	5/23/2012	9-13	Forced outage Leeds-Hurley Avenue 345kV (#301)
	5/23/2012	12,13	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#92)
	5/29/2012	14-21	Thunder Storm Alert
	5/29/2012		Forced outage Hellgate-East 179th St 138kV (#15054), Hellgate-Astoria East 138kV (#34052)
	5/29/2012	10,13	Uprate Dunwoodie-Shore Road 345kV (#Y50) for SCB Sprainbrook RNS2 W/ RNS4 OUT
	5/29/2012		NYCA DNI Ramp Limit
	5/29/2012		NE_AC - NY Scheduling Limit
	5/29/2012	12	IESO_AC - NY Scheduling Limit

Deal Time Relevaing Market Congestion Residual (Unlift Coet) Categories								
Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories								
Category	Cost Assignment	Events Types	Event Examples					
Storm Watch	Zone J	Thunderstorm Alert (TSA)	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					
Monthly Balancing Market Congestion Report Assumptions/Notes								

- Storm Watch Costs are identified as daily total uplift costs
   At a minimum those days with \$100 K/HR, shortfall of \$200 K/Day or more, or surplus of \$100 K/Day or more are investigated
   Uplift costs associated with multiple event types are apportioned equally by hour
   Investigations began with Dec 2008. Prior months are reported as Not Investigated.









Day-Ahead Market Congestion Residual Categories							
Category NYTO Outage Allocation	<u>Cost Assignment</u> Responsible TO	<u>Events Types</u> Direct allocation to NYTO's responsible for transmission equipment status change.	Event Examples  DAM scheduled outage for equipment modeled inservice for the TCC Auction.				
Unscheduled Loop Flows	All TO by Monthly Allocation Factor	Residual impact of Lake Erie circulation, MW difference between the DAM and TCC Auction.	Lake Erie Loop Flow Assumptions				
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.					



