Operations Performance Metrics Monthly Report









November 2011 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 December 8, 2011.



Table of Contents

- Highlights
 - Operations Performance

Reliability Performance Metrics

- Alert State Declarations
- Major Emergency State Declarations
- IROL Exceedance Times
- Balancing Area Control Performance
- Reserve Activations
- Disturbance Recovery Times
- Load Forecasting Performance
- Wind Forecasting Performance
- Lake Erie Circulation and ISO Schedules

Market Performance Metrics

- RTM Congestion Residuals Monthly Trend
- RTM Congestion Residuals Daily Costs
- RTM Congestion Residuals Event Summary
- RTM Congestion Residuals Cost Categories
- DAM Congestion Residuals Monthly Trend
- DAM Congestion Residuals Daily Costs
- DAM Congestion Residuals Cost Categories
- NYCA Unit Uplift Components Monthly Trend
- NYCA Unit Uplift Components Daily Costs
- Local Reliability Costs Monthly Trend & Commitment Hours
- ICAP Spot Market Clearing Price
- UCAP Awards

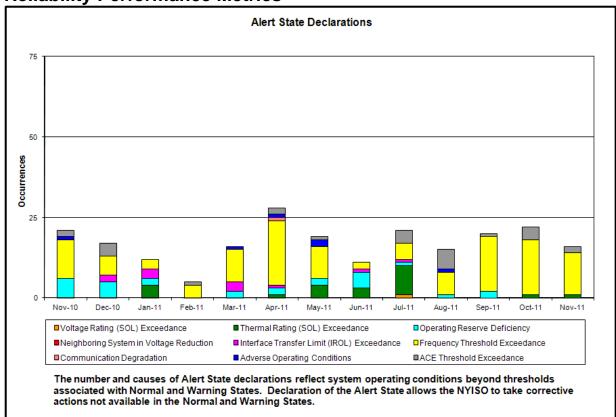


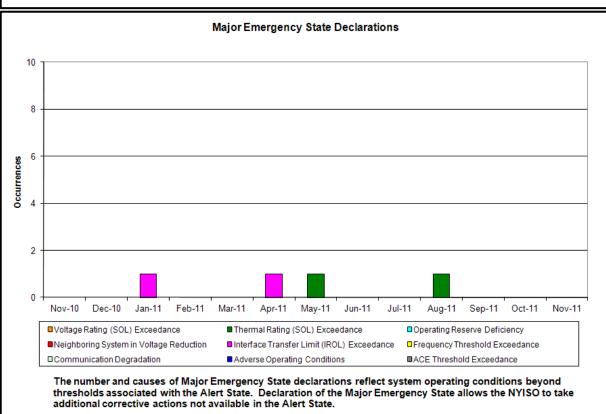
November 2011 Operations Performance Highlights

- Peak load of 21,541 MW occurred on 11/22/2011 HB 17
- All-time winter capability period peak load of 25,541 MW occurred on 12/20/2004 HB 17
- 0 hours of Thunder Storm Alerts were declared.
- Lake Erie Loop Flows Reduce to Average Zero
 - 2 hours of NERC TLR level 3 curtailments
- Simultaneous, Beck Niagara and Beck Packard outages are scheduled for Fall 2011, beginning December 5 and ending December 16
- Effective 12/1/2011 HQ intra-hour ramp will increase from 50MW to 100 MW for each 15 minute interval (see revised TB#158 for details). Also, HQTE will increase the intra-hour scheduling capability from +/-100MW to +/-125MW.

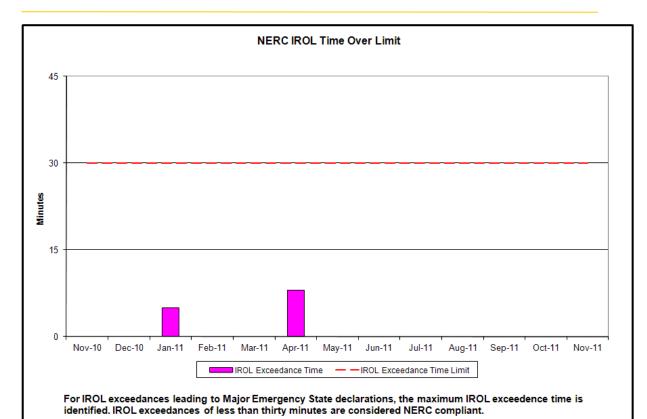


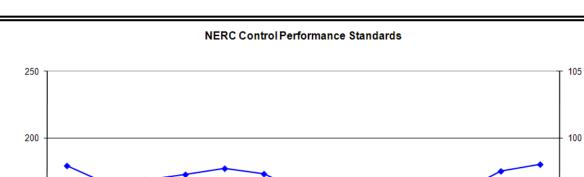
Reliability Performance Metrics

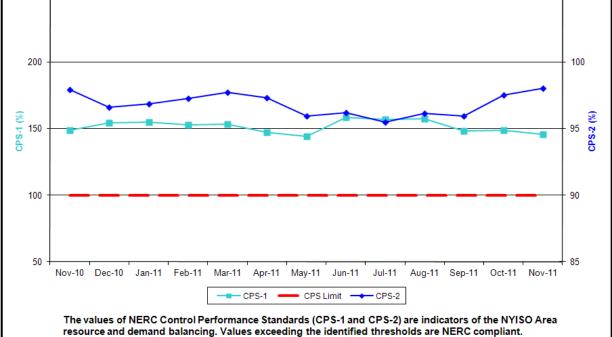




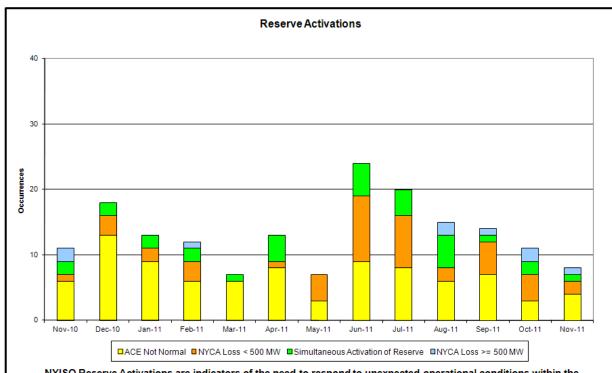




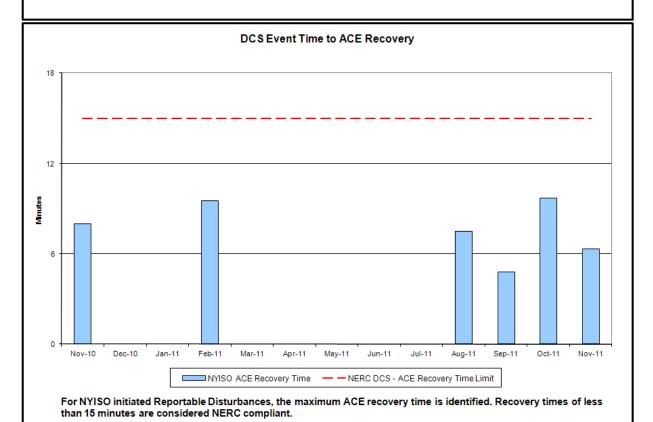




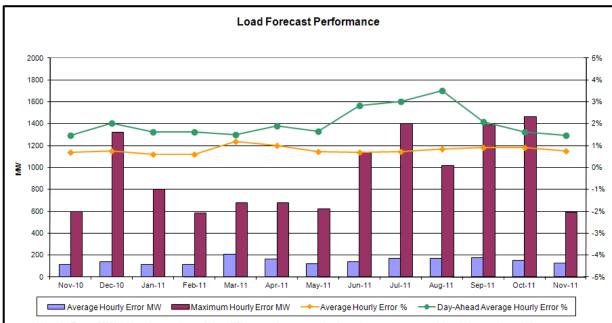




NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.



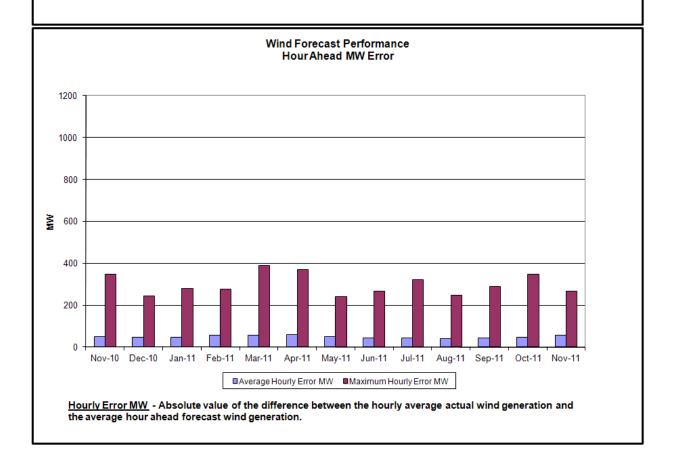




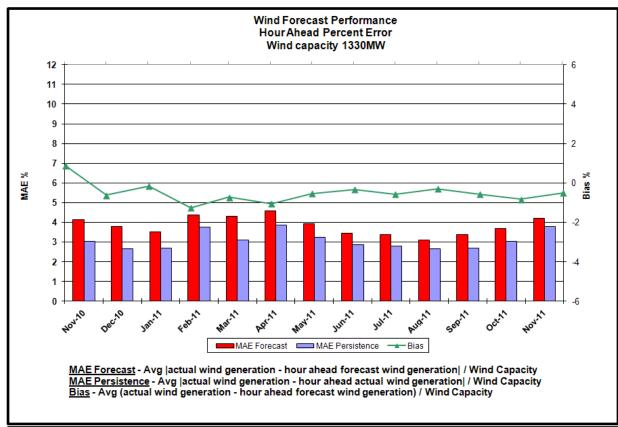
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

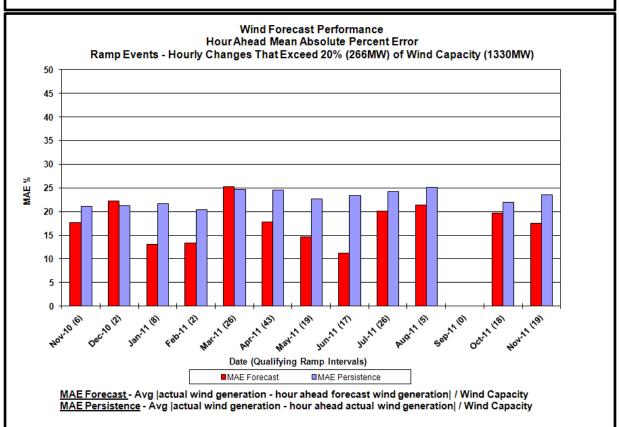
<u>Average Hourly Error %</u> - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

<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.

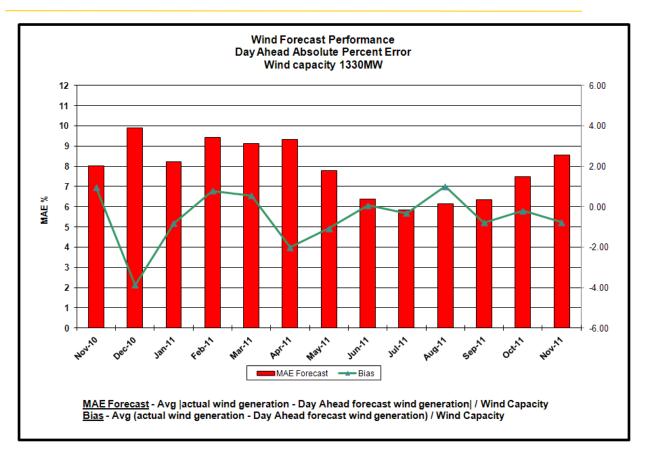




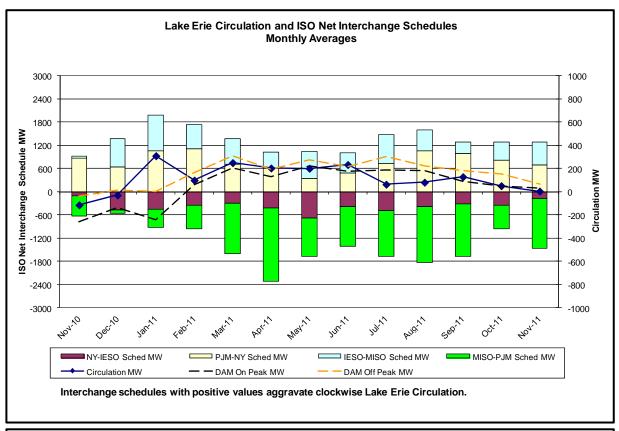


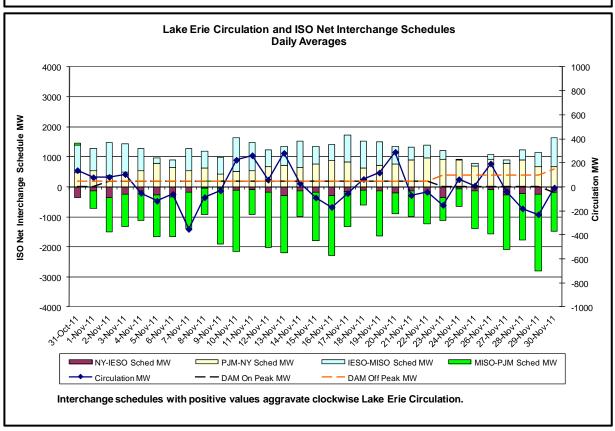






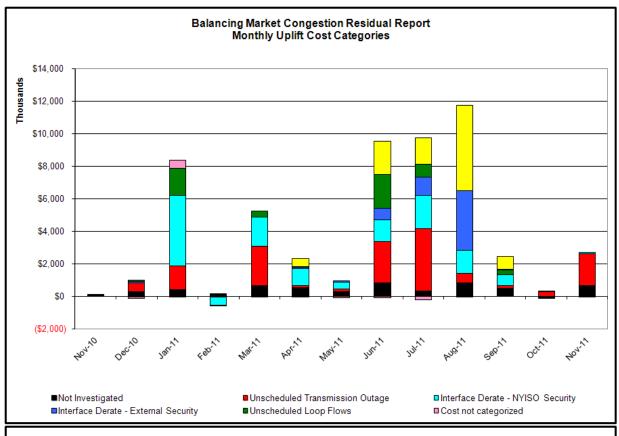


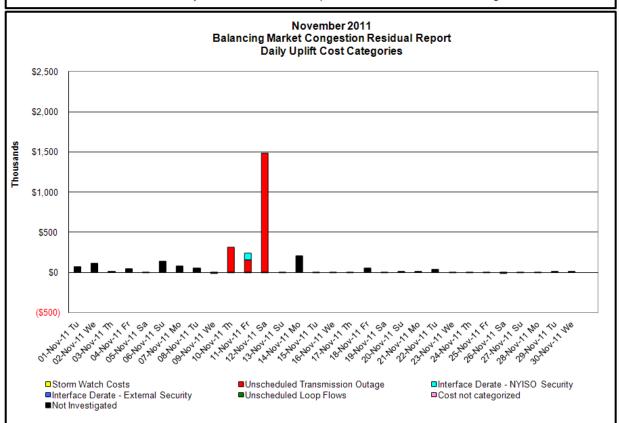






Market Performance Metrics







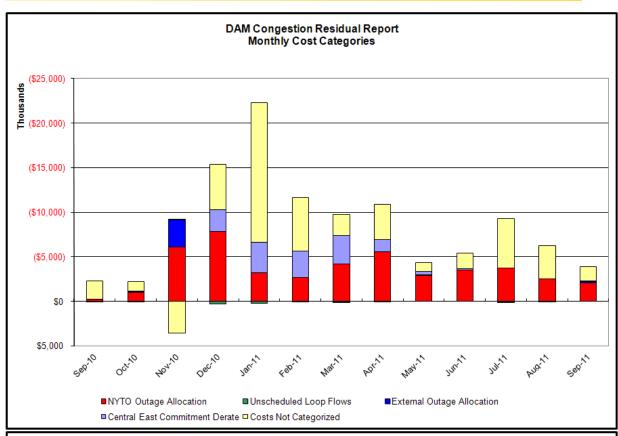
Day's investigated in November:10,11,12

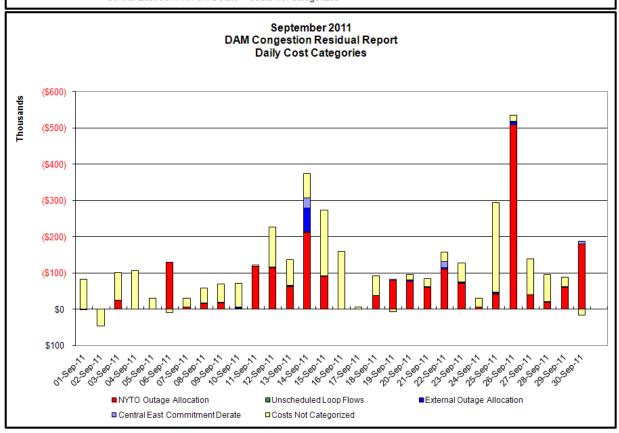
	Date		
Event	(yyyymmdd)	Hours	Description
	11/10/2011	16-23	Forced outage GowanusS-Greenwood 138kV (#42232)
	11/10/2011 17 Extended outage New Scotland-Edic Porter 345kV (Extended outage New Scotland-Edic Porter 345kV (#14)
11/10/2011 21-23 Forced outage Jamaica-Corona 138kV		Forced outage Jamaica-Corona 138kV (#18002)	
	11/11/2011	0-16	Forced outage GowanusS-Greenwood 138kV (#42232)
11/11/2011 8-		8-10	Derate Dunwoodie-Shore Road 345kV (#Y50)
			Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o Neptune
	11/11/2011	14-16	HVDC Tie Line
	11/11/2011	8,12-16	Derate East 179th Street-Hell Gate East 138kV (#15054)
	11/12/2011	0-21,23	Extended outage Sprainbrook-East Garden City 345kV (#Y49)

Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories								
<u>Category</u> 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					
Monthly Balancing Market Congestion Report Assumptions/Notes								

- 1) Storm Watch Costs are identified as daily total uplift costs
 2) 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	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.				
Unscheduled I	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 Outa	ge 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 C	ommitment 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.					



