Operations Performance Metrics Monthly Report









January 2013 Report

Operations & Reliability Department New York Independent System Operator



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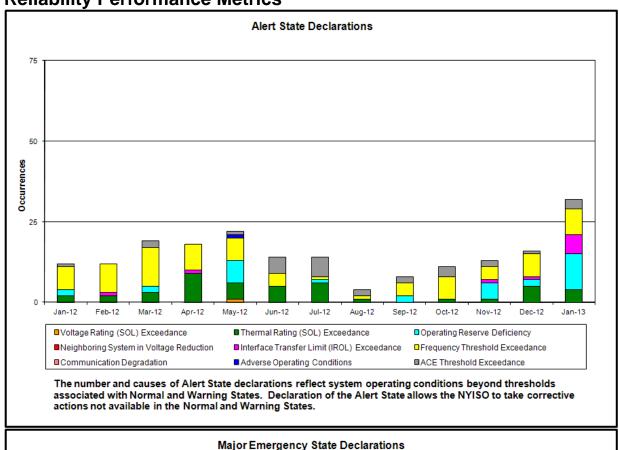


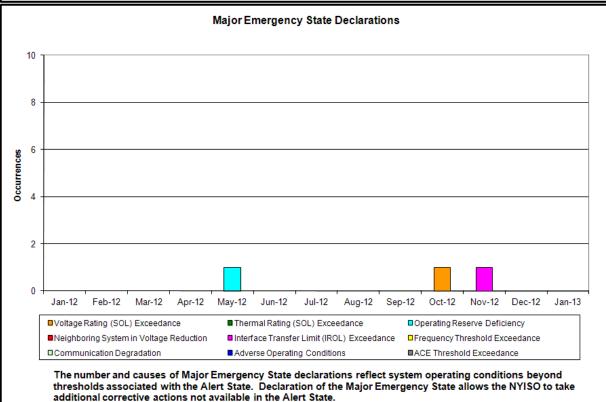
January 2013 Operations Performance Highlights

- Peak load of 24,658 MW occurred on 1/24/2013 HB 18
- All-time winter capability period peak load of 25,541 MW occurred on 12/20/2004 HB17
- No hours of Thunder Storm Alerts were declared
- Two hours of NERC TLR level 3 curtailments
- PJM Market-to-Market coordination initiated on 1/15/2013
- Significant cold temperatures during January 21-27

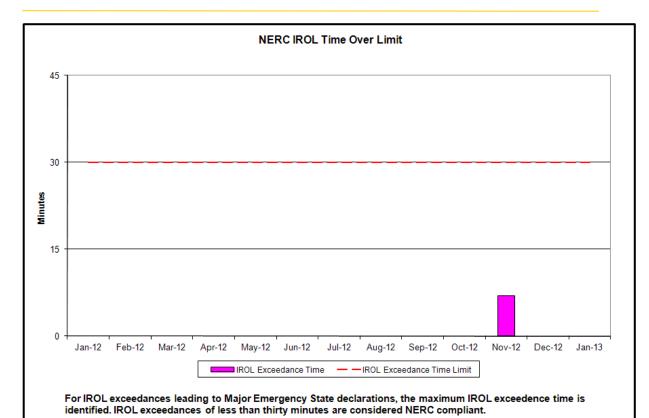


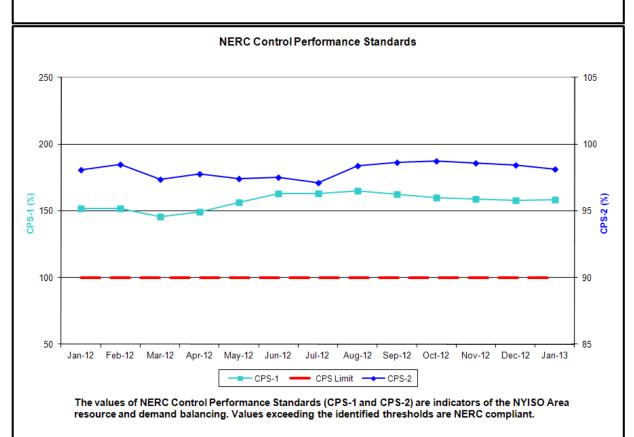
Reliability Performance Metrics



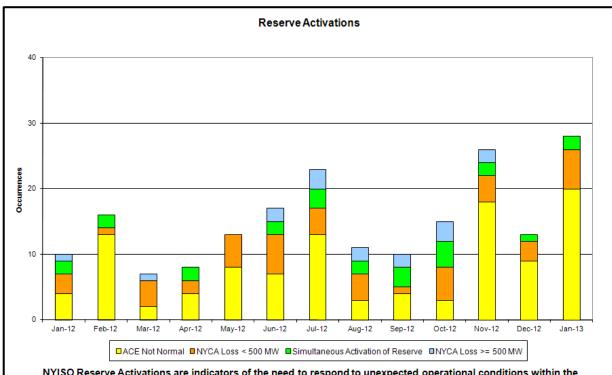




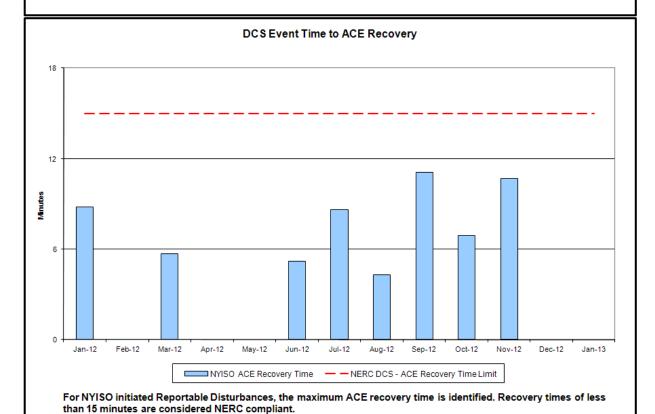




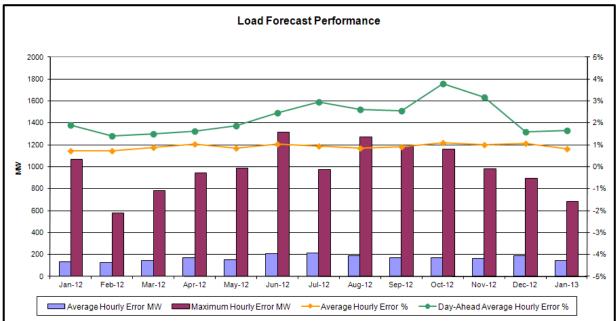




NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.



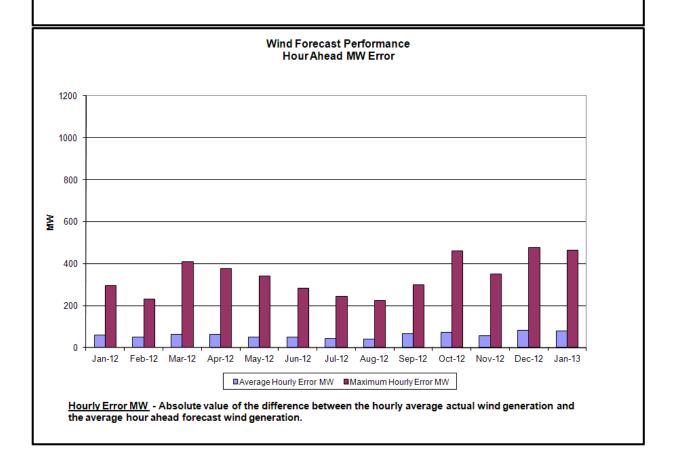




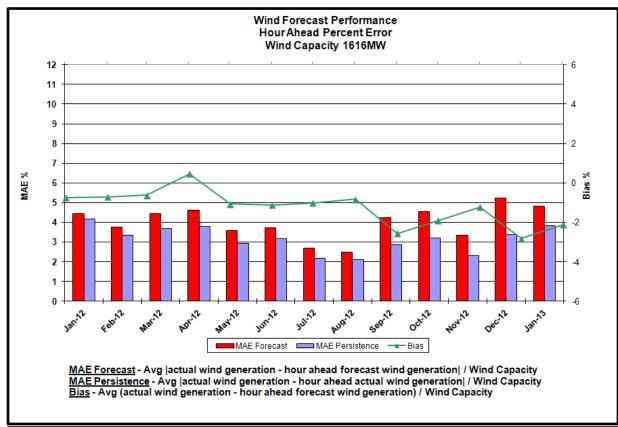
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

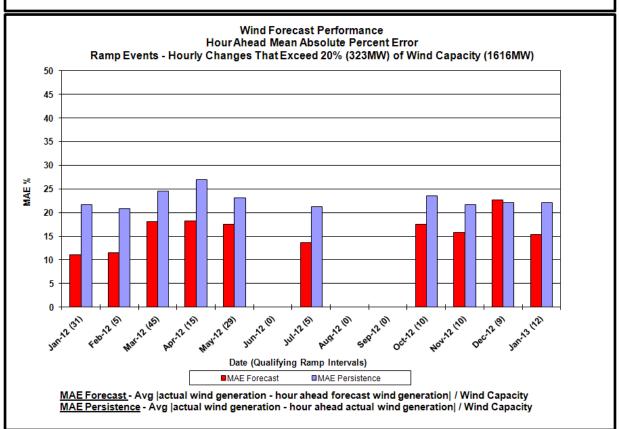
<u>Average Hourly Error %</u> - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

<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.

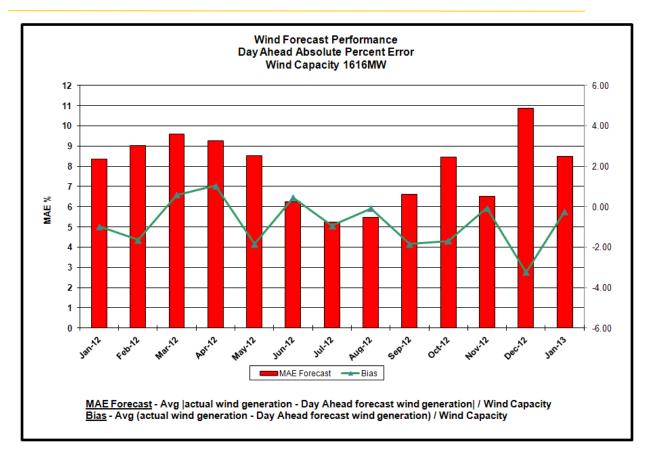




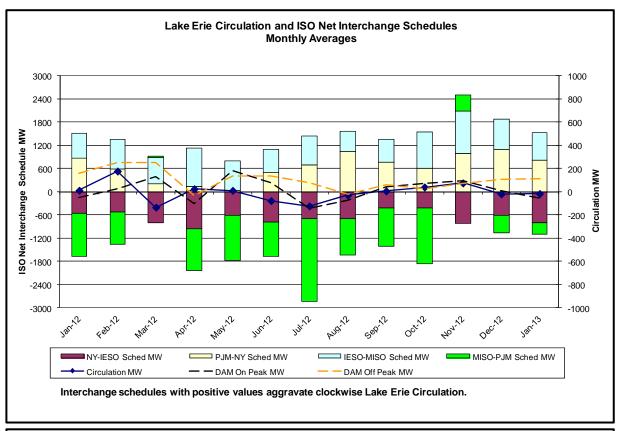


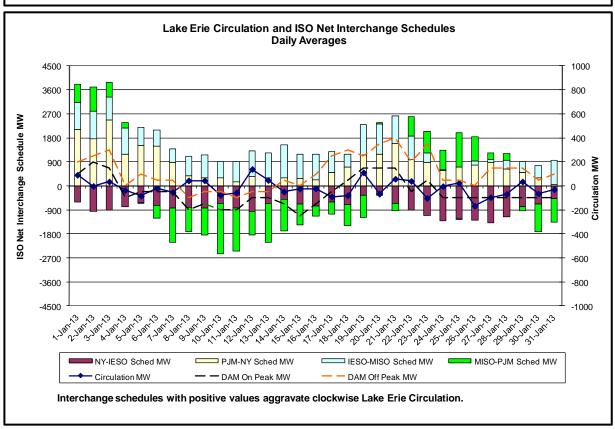






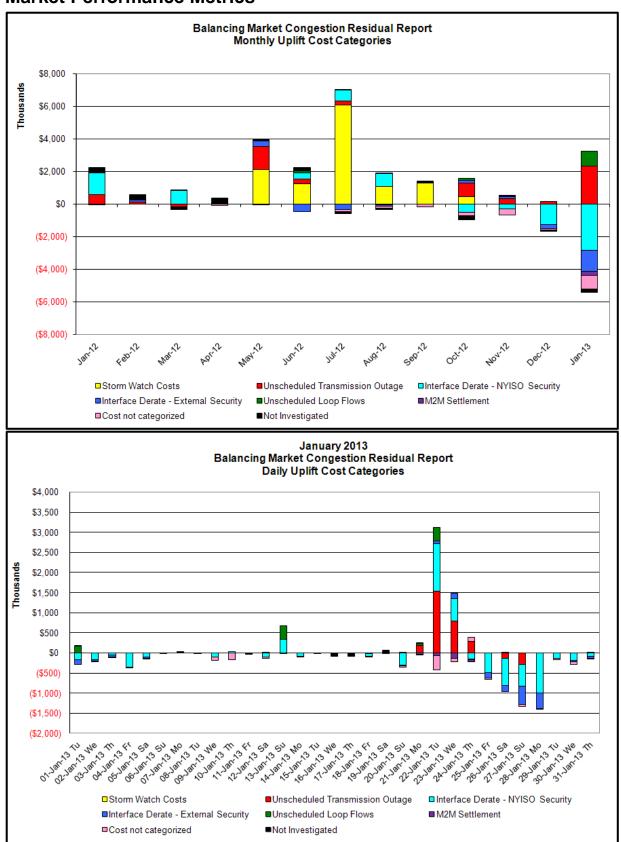








Market Performance Metrics





Event	Description	January Dates
	Early return Clarks Corners-Lafayette 345kV (#4-46)	18
	Early return East Garden City 345/138kV (#BK1,PAR1)	26,27
	Forced outage Dunwoodie_345_138kV (#BK S1_W73)	22-24
	Forced outage East Garden City Bank (#2)	23
	Forced outage Hudson-Farragut 345kV (#C3403)	24
	Forced outage Oakdale-Clarks Corners 345kV (#36)	21
	Forced outage Sprainbrook-Dunwoodie 138kV (#99942)	21
	Derate Astoria West/Queensbridge/Vernon	21
	Derate Central East	5,12,13,22-24
	Derate Dunwoodie-Shore Road 345kV (#Y50)	22-24
	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK (RNS2): Y49 & M29	21,23,24
	Derate Dysinger East	22,23
	Derate East 13th StAstoria Annex 345kV (#Q35M) for SCB FARR E. 8E W/ 10W O/S	23,24
	Derate East 13th StAstoria Annex 345kV (#Q35M) for SIN:B47, E.13th BK 16&17	18,22-24
	Derate Farragut-Hudson 138kV (#32077)	13,22-24
	Derate Gowanus-Goethals 345kV (#26)	18
	Derate Gowanus-Greenwood 138kV (#42232)	22,24
	Derate Greenwood-Vernon 138kV (#31231) for I/o TWR:GOETHALS 22,21,A2253	10,18,21
	Derate Rainey-Vernon 138kV (#36311)	22
	Derate West 49th Street-SprainBrook 345kV (#M52) for I/o \$SCB Dunwoodie 7 W/W73 O/S	22-24
	Derate West 49th Street-SprainBrook 345kV (#M52) for I/o SCB: SPBK (RS3): W75 & 99941	21,22
	NYCA DNI Ramp Limit	1,3-5,13,14,18,20-26,28,29,31
	Uprate Central East	1-5,9,12-14,18,20-31
	Uprate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK (RNS2): Y49 & M29	18,20-22
	Uprate Dunwoodie-Shore Road 345kV (#Y50) for I/o Sprainbrook-East Garden City 345kV (#Y49)	20
	Uprate Fox Hills-Willow Brook 138kV (#29211)	12,14,18,22,31
	Uprate FreshKills-WillowBrook 138kV (#29212)	1
	Uprate Gowanus 138kV R14 for I/o TWR:Goethals	4,22,24-26,31
	Uprate Gowanus-Goethals 345kV (#26)	1
	Uprate Mott Haven-Dunwoodie 345kV (#72) for I/o Mott Haven-Dunwoodie 345kV (#71)	5
	Uprate Rainey Vernon 138kV (#36311)	27
	Uprate West 49th Street-SprainBrook 345kV (#M52) for I/o \$SCB Dunwoodie 7 W/W73 O/S	30
	Uprate West 49th Street-SprainBrook 345kV (#M52) for I/o SCB: SPBK (RS3): W75 & 99941	21
	HQ_CHAT DNI Ramp Limit	22,25
	HQ_CHAT-NY Scheduling Limit	26
	IESO_AC DNI Ramp Limit	3-5,21-26,30,31
	IESO_AC-NY Scheduling Limit	13
	NE_AC-NY Scheduling Limit	1-3,18,20-22,26-28,31
	PJM_AC DNI Ramp Limit	3,5,18,20
	PJM_AC-NY Scheduling Limit	1,2
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East	1,12,13,20-22
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Dysinger East	21,22

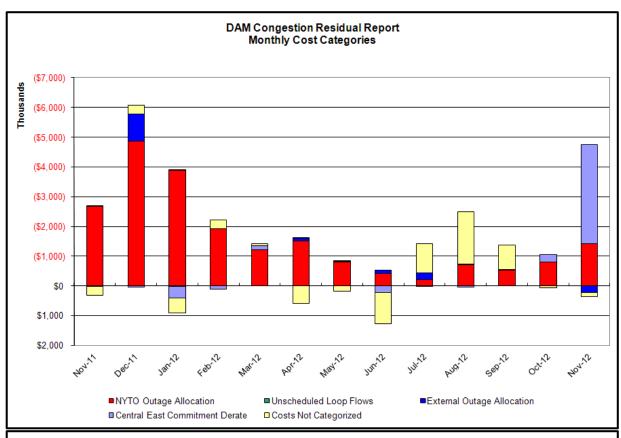


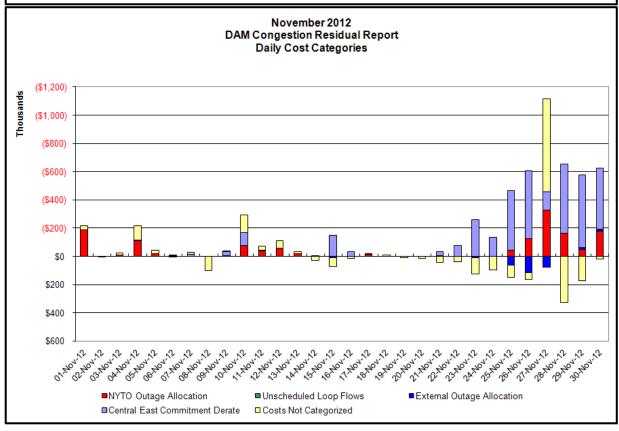
Cost Assignment Events Types **Event Examples** Category Storm Watch Thunderstorm Alert (TSA) **TSA Activations** Zone J Unscheduled Transmission Outage Market-wide Reduction in DAM to RTM transfers Forced Line Outage, related to unscheduled Unit AVR Outages transmission outage Interface Derate - NYISO Security Market-wide Reduction in DAM to RTM transfers Interface Derates due to not related to transmission outage RTM voltages Interface Derate - External Security Market-wide Reduction in DAM to RTM transfers TLR Events, related to External Control Area **External Transaction Security Events** Curtailments Unscheduled Loop Flows DAM to RTM Clockwise Market-wide Changes in DAM to RTM unscheduled loop flows impacting Lake Erie Loop Flows greater than 125 MW NYISO Interface transmission constraints **M2M Settlement** Market-wide Settlment result inclusive of coordianted 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 \$100 K/HR, shortfall of \$200 K/Day or more, or surplus of \$100 K/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> 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.			



