

Operations Performance Metrics Monthly Report



April 2011 Report

Operations & Reliability Department New York Independent System Operator

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data obtained on or before May 9.

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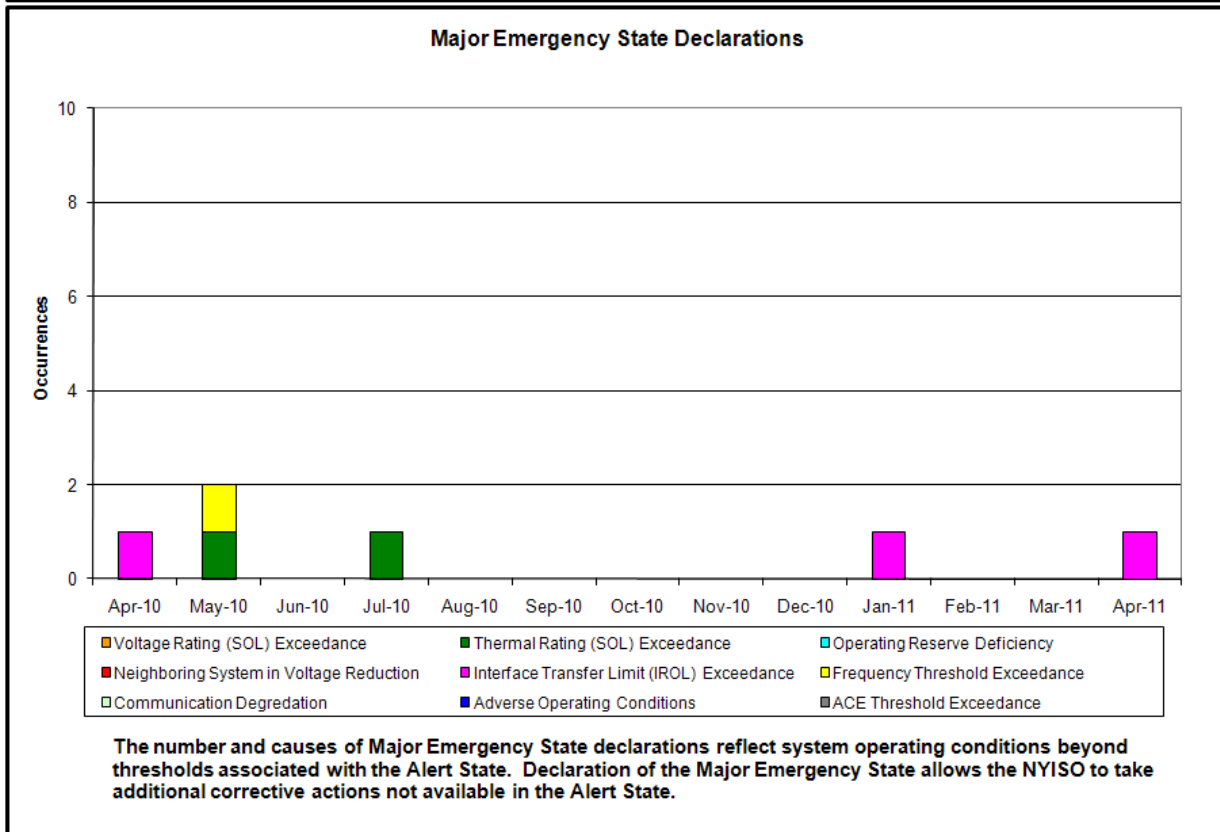
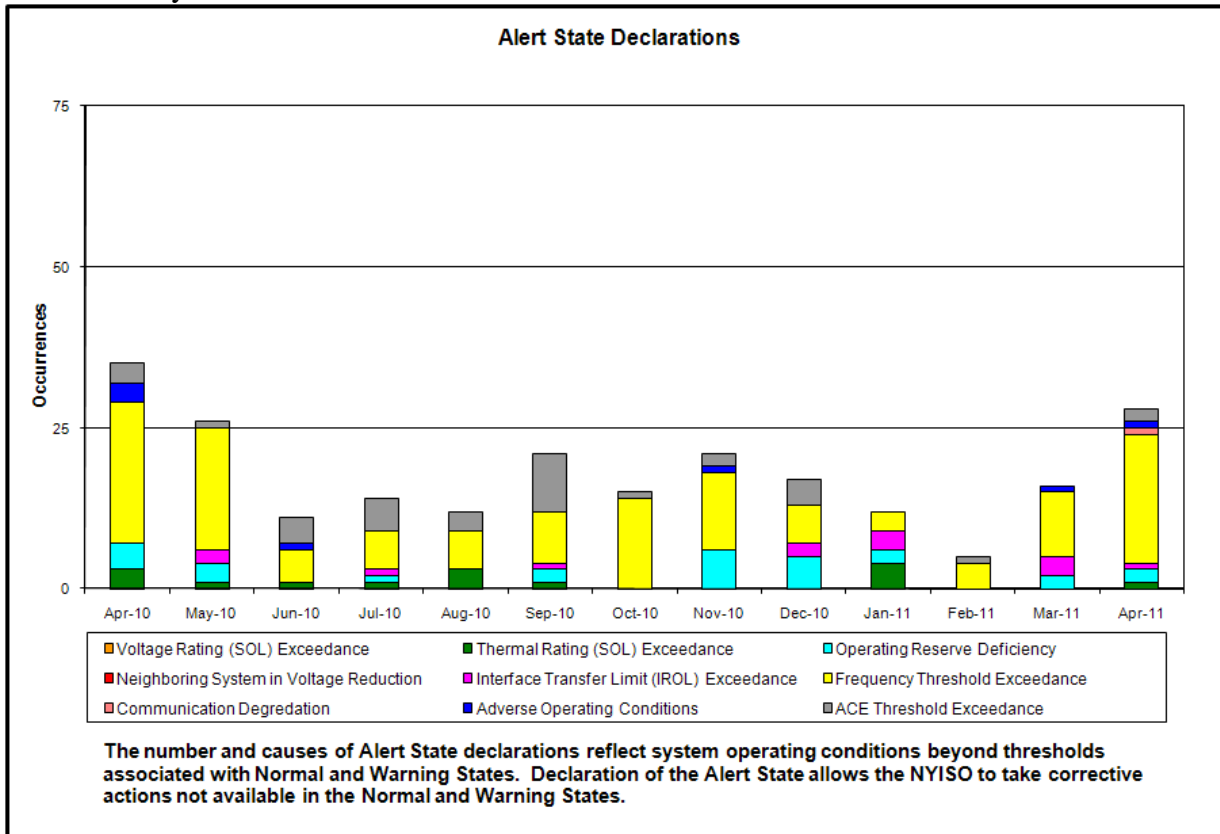
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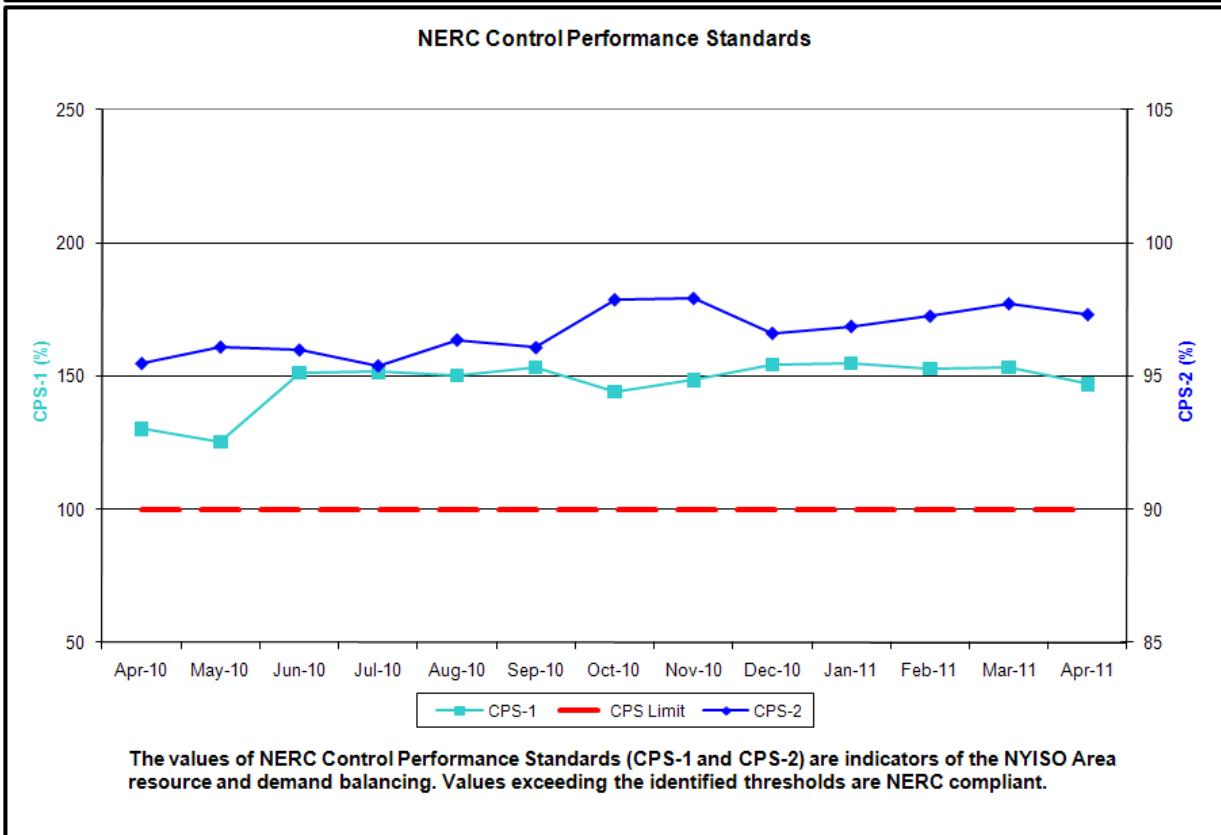
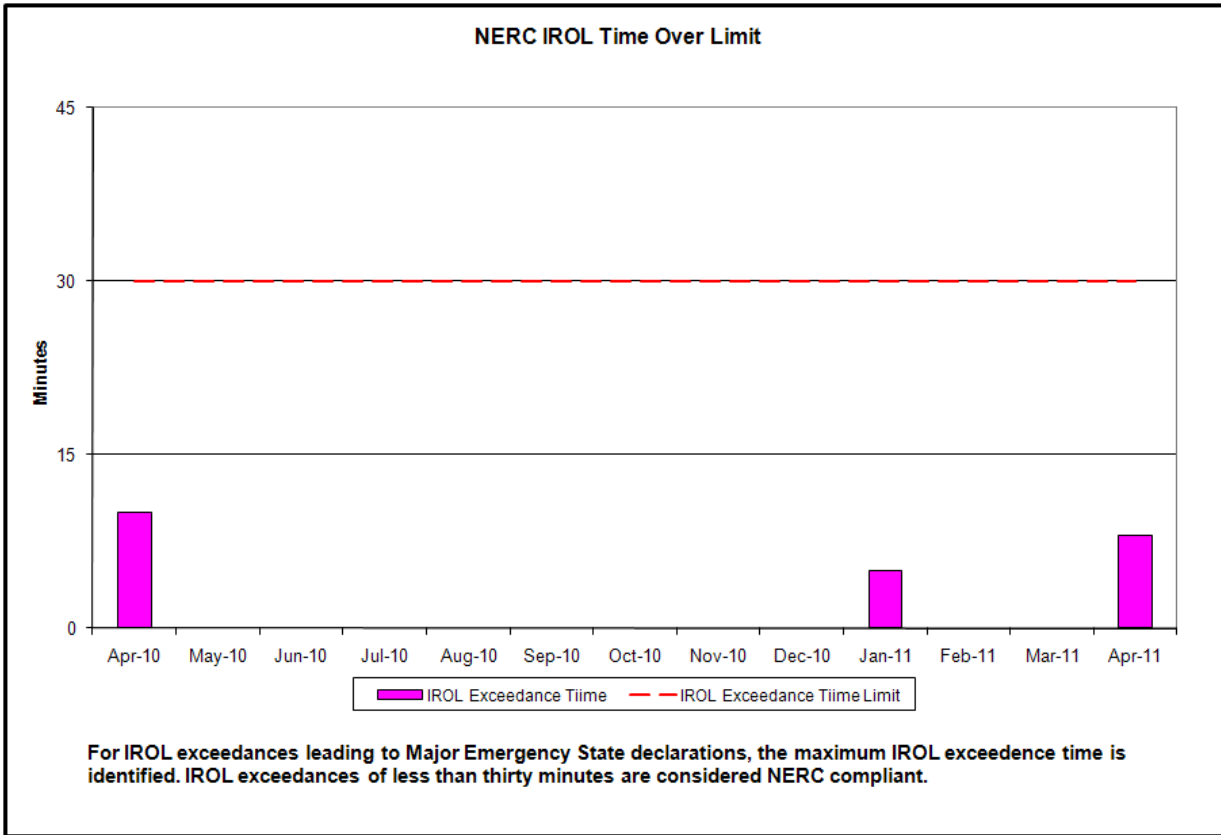
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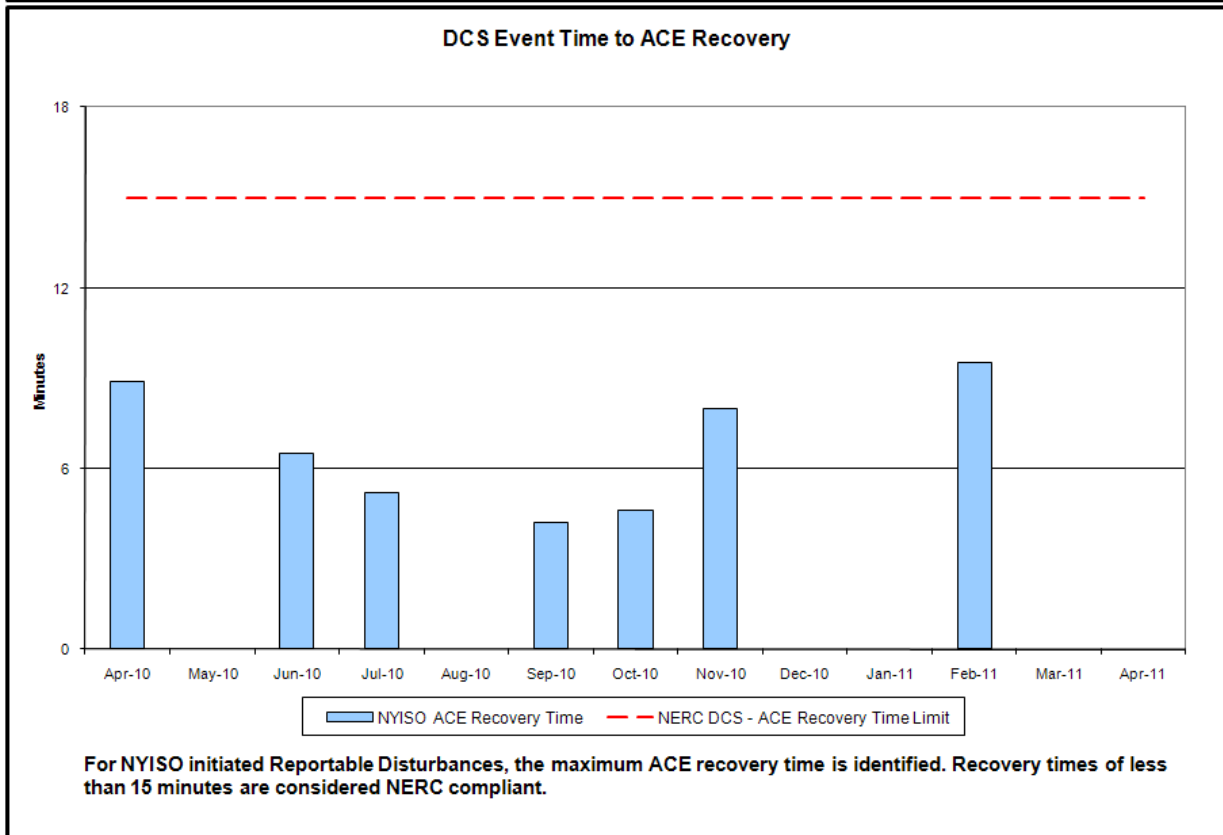
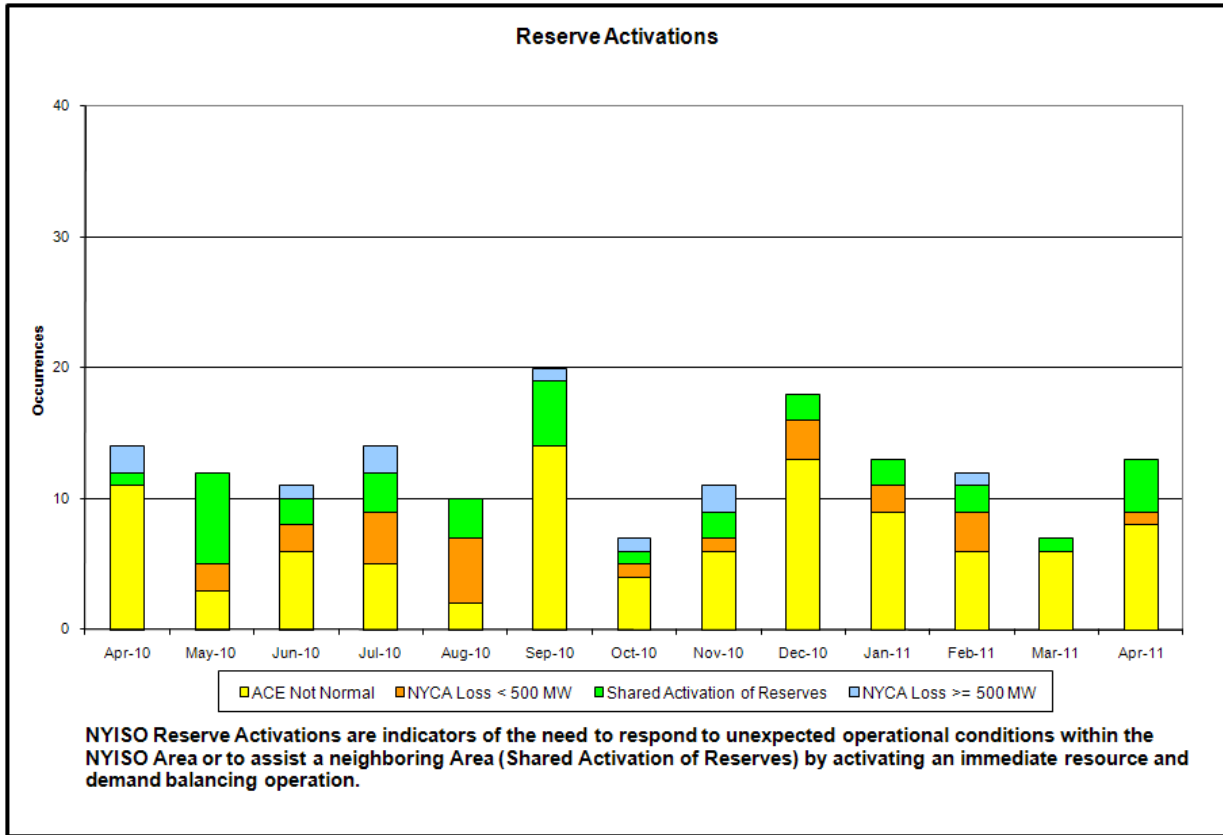
April 2011 Operations Performance Highlights

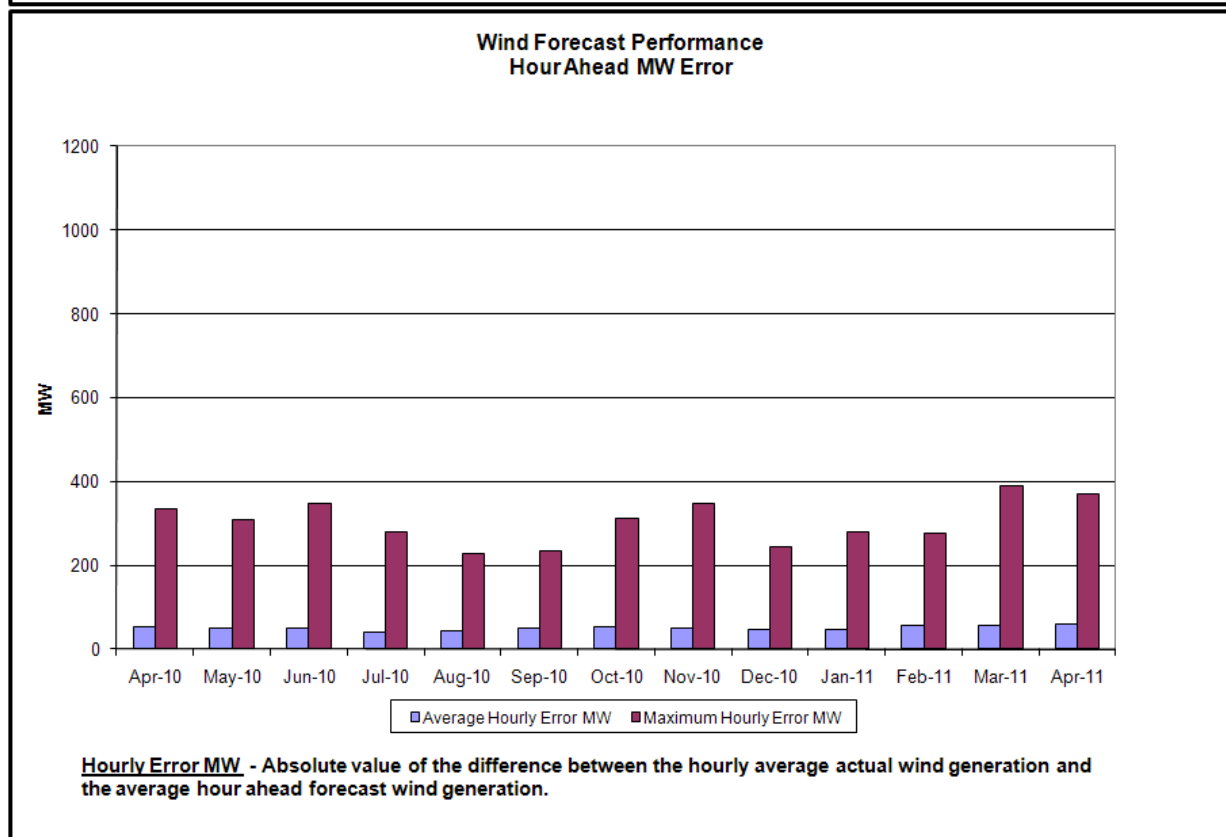
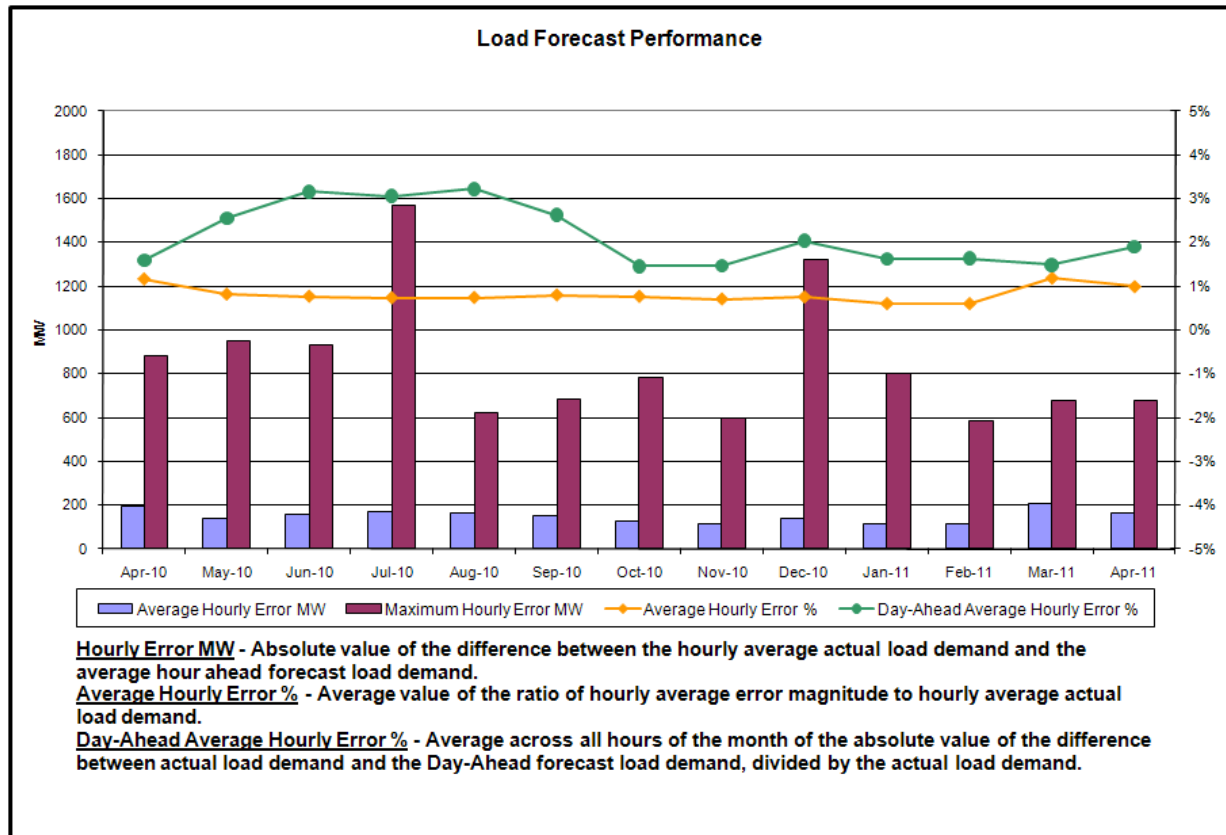
- Peak load of 20,172 MW occurred on 4/27/2011 HB14
- All-time winter capability period peak load of 25,541 MW occurred on 12/20/2004 HB17
- A Major Emergency was declared on April 22 when Central East interface power transfers exceeded the associated voltage transfer limit following a 1,400MW source contingency in ISONE.
- **Reduced Levels of Clockwise Lake Erie Loop Flows**
 - Increased PJM-MISO exports
 - Reduced IESO-MISO exports
 - 94 hours of NERC TLR level 3 curtailments

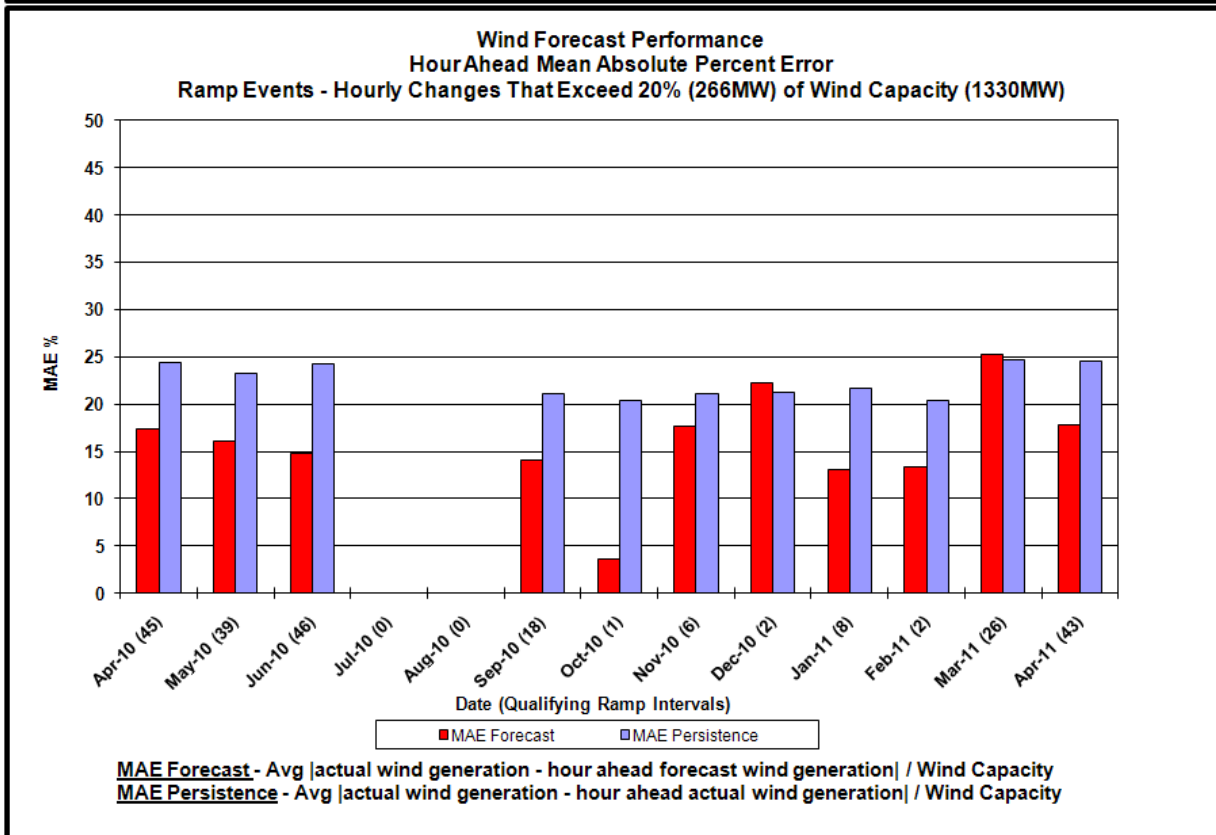
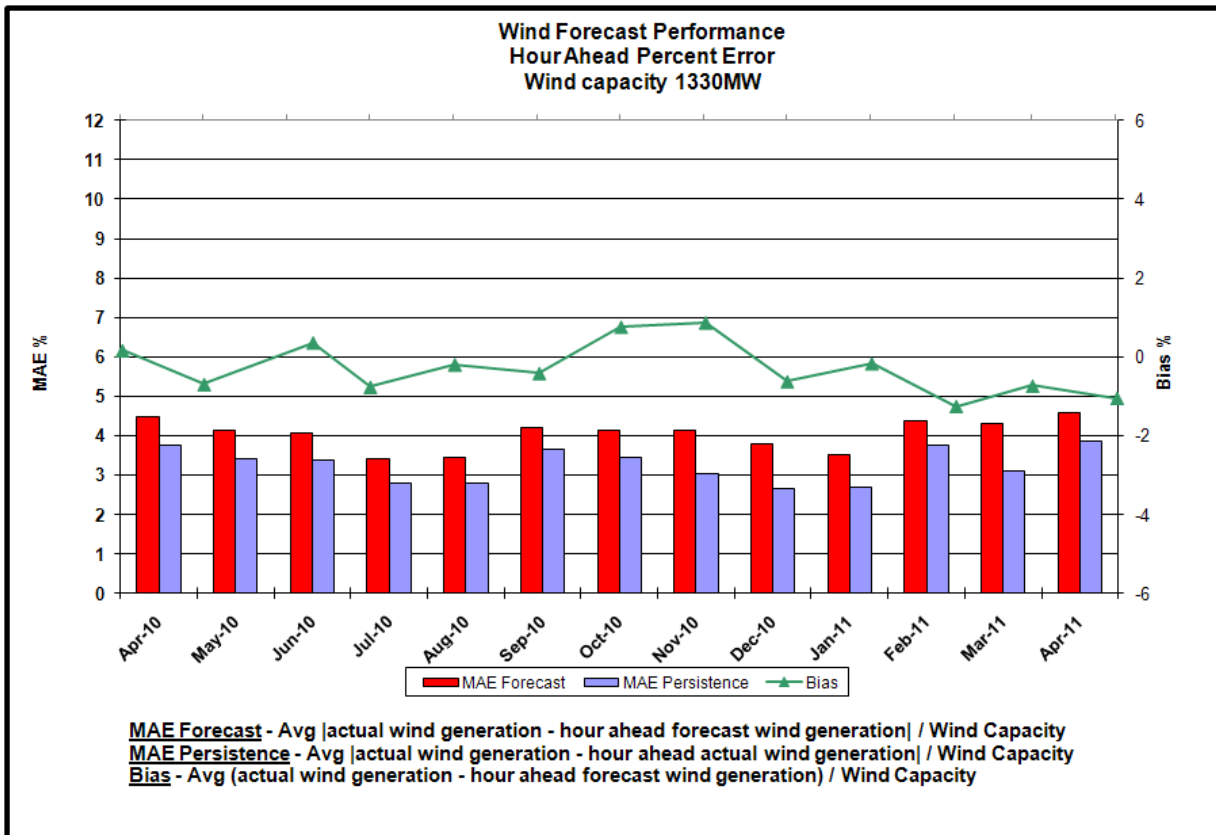
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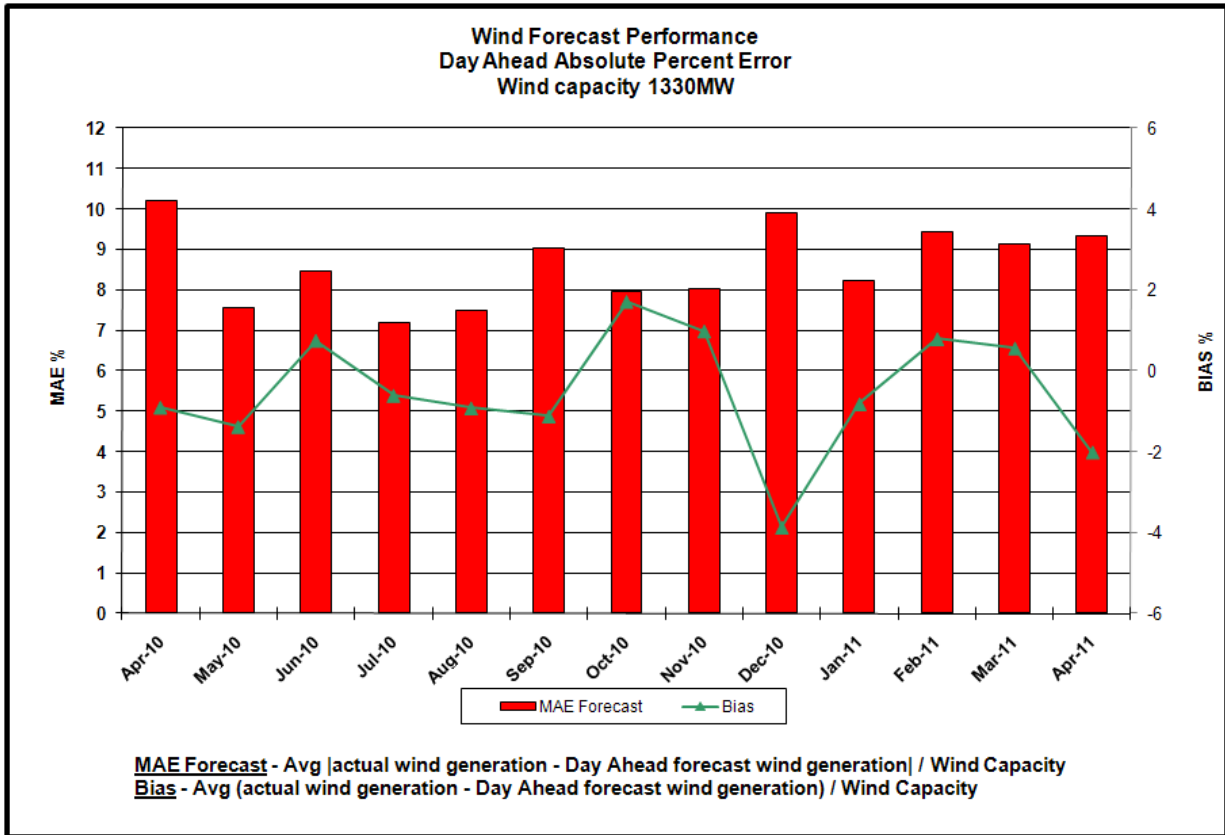


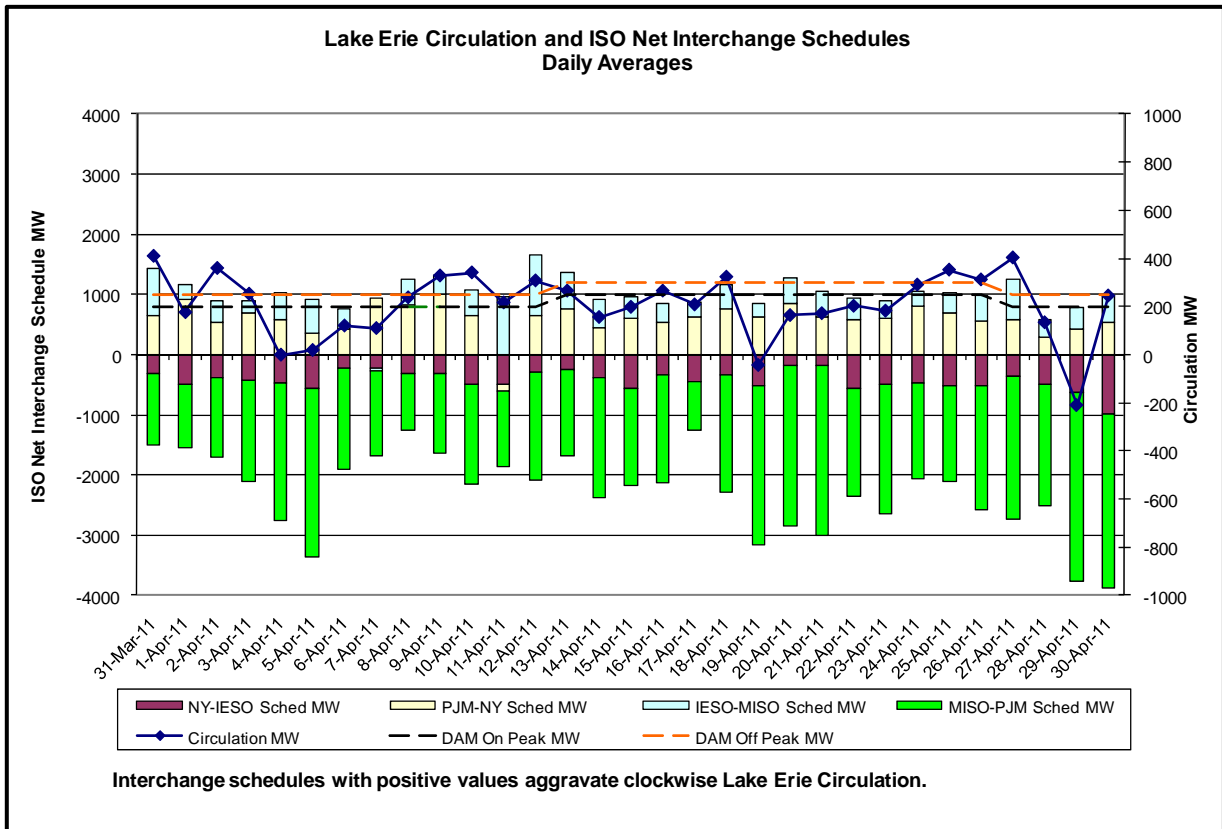
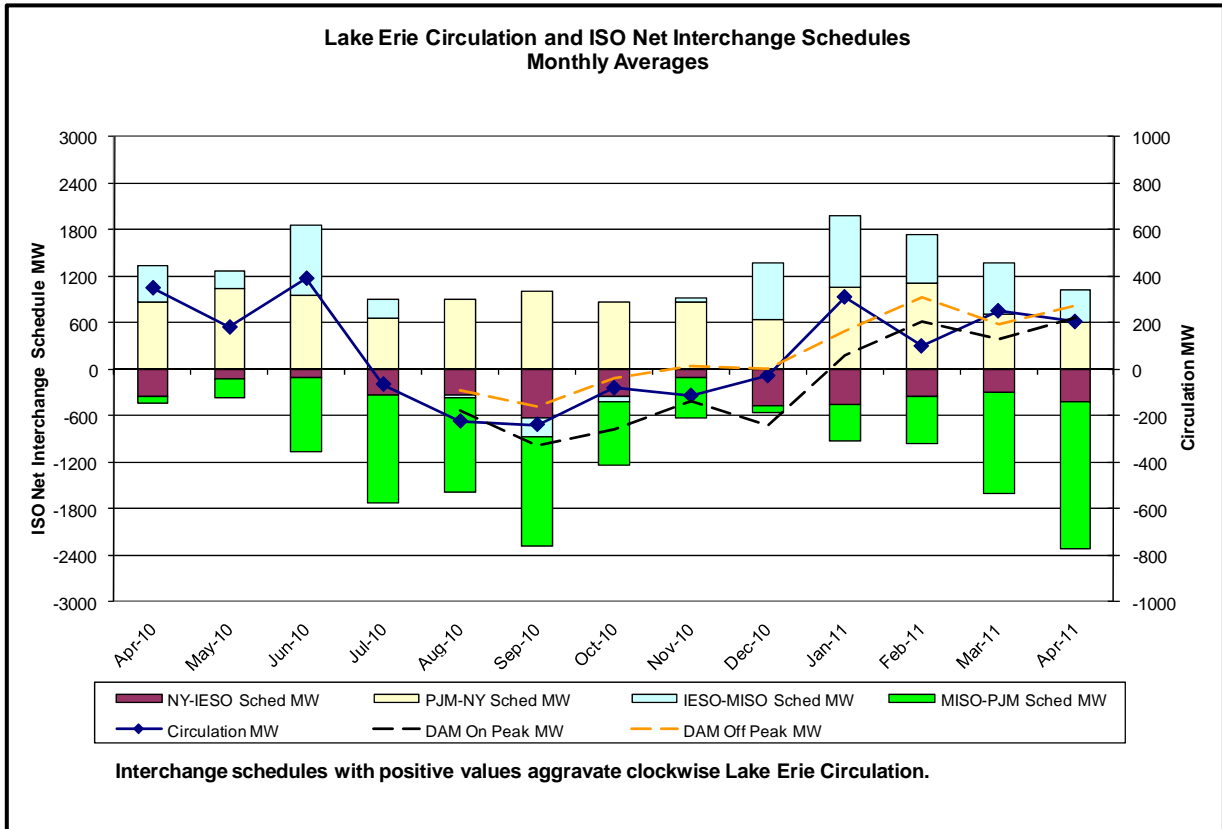




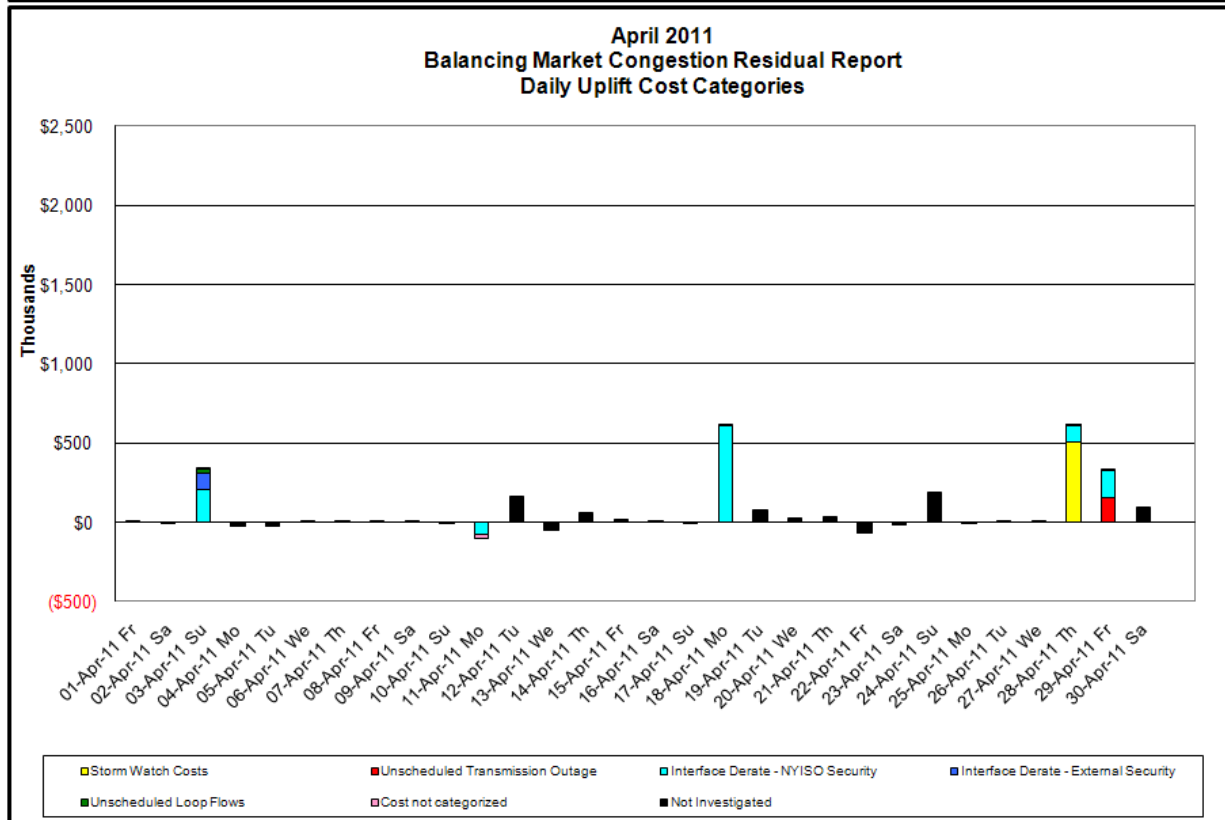
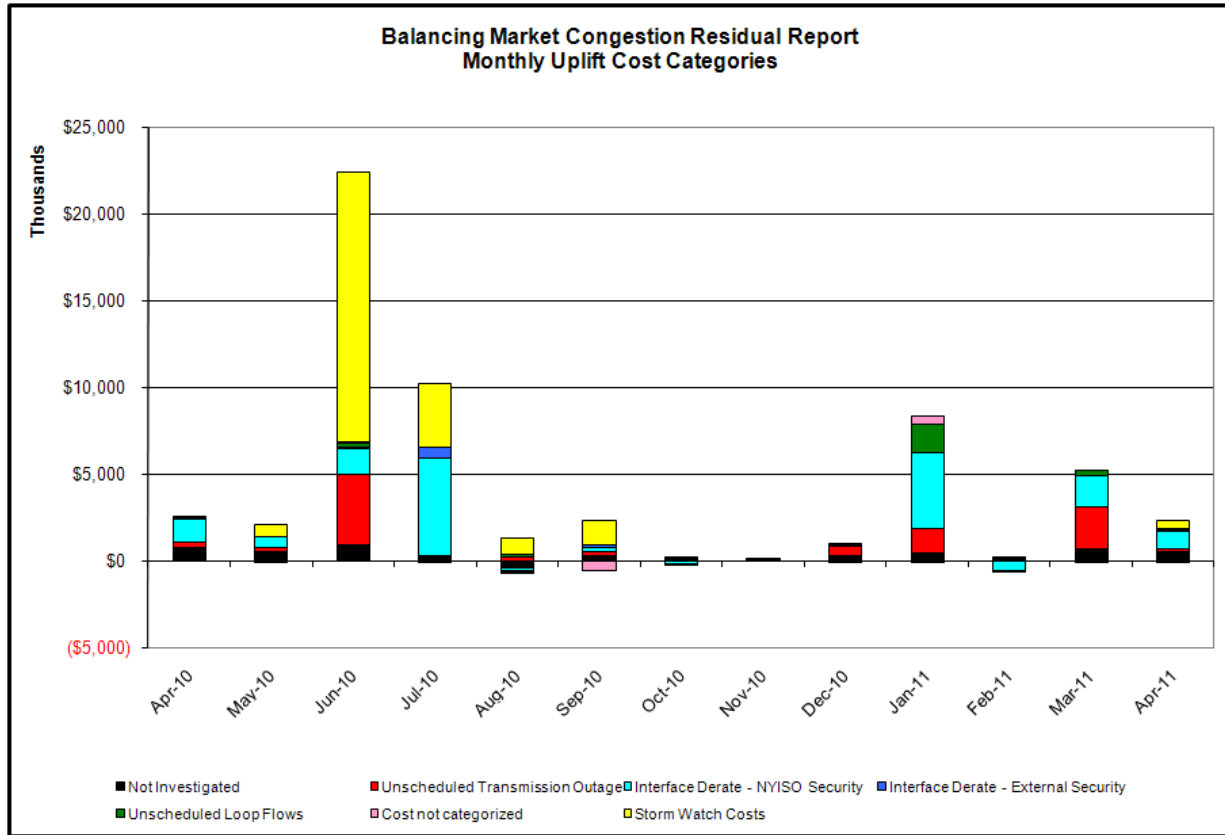








Market Performance Metrics



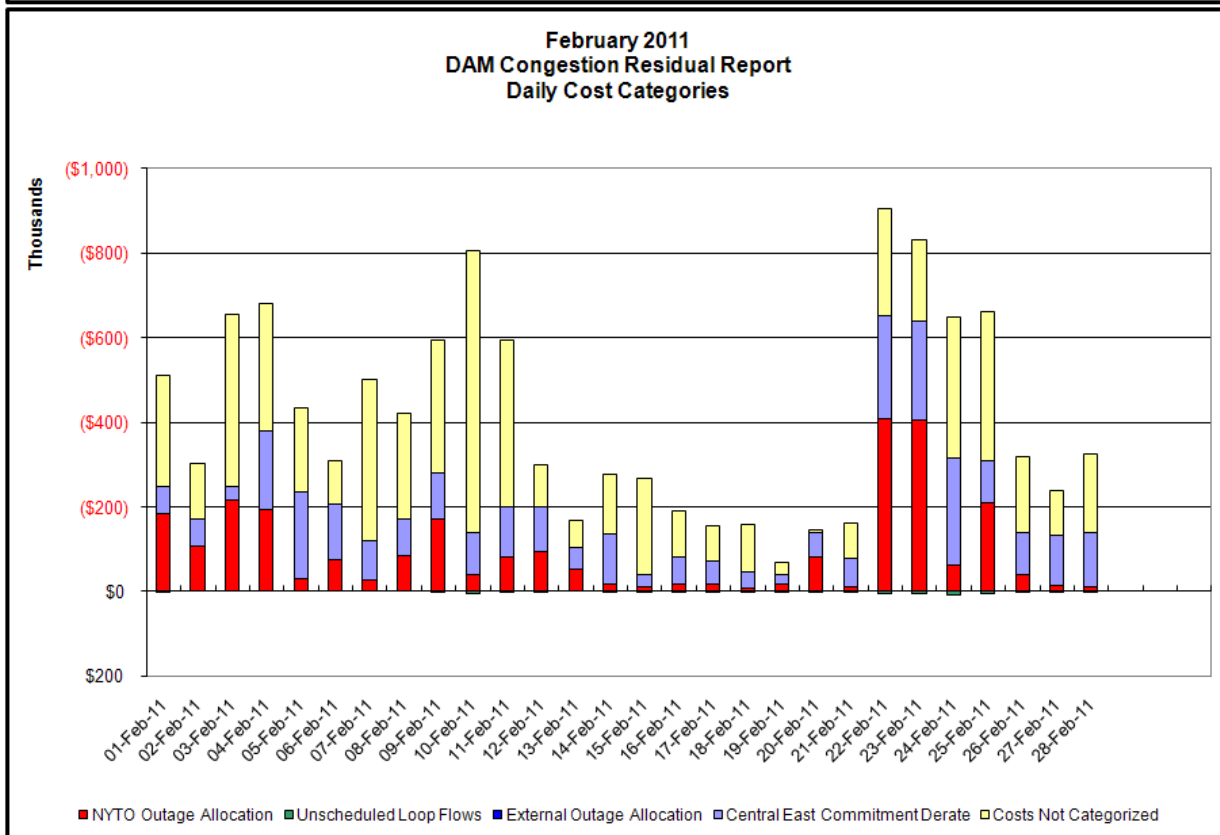
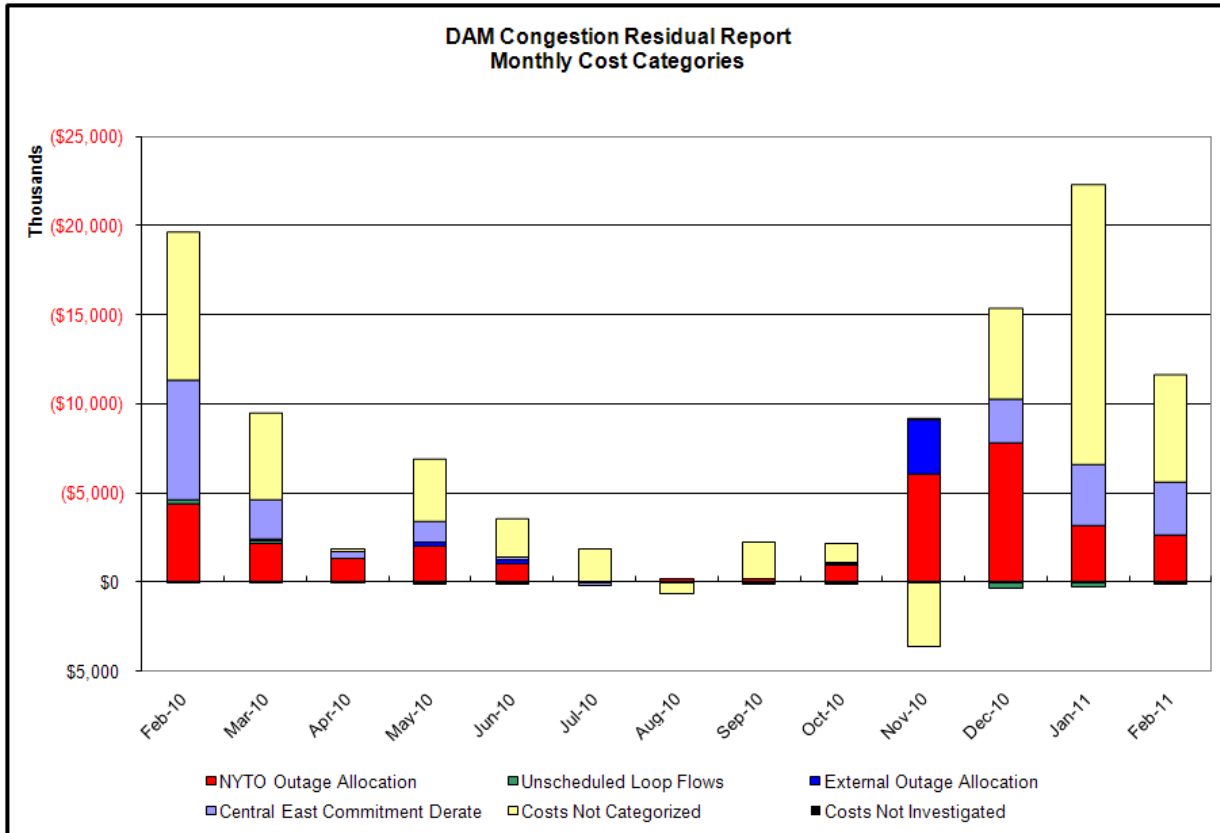
Day's investigated in April: 3, 11, 18, 28, 29			
Event	Date (yyyyr)	Hours	Description
	4/3/2011	11, 19, 20	NYCA DNI Ramp Limit
	4/3/2011	9-11, 18-20	Derate Leeds-Pleasant Valley 345kV (#92) for I/o Leeds-Hurley Avenue 345kV (#301)
	4/3/2011	19	HQ DNI Ramp Limit
	4/3/2011	20	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#92)
	4/11/2011	10-13, 17	Uprate Mott Haven-Dunwoodie 345kV (#71) for I/o Mott Haven-Dunwoodie 345kV (#72)
	4/11/2011	10	Uprate Central East
	4/11/2011	6	NYCA DNI Ramp Limit
	4/18/2011	8-10	Derate West 49th Street-Sprainbrook 345kV (#M52) for I/o SCB #RS3
	4/18/2011	8-11, 13-16, 20-21	Derate Greenwood-Vernon 138kV (#31231) for I/o TWR:GOETHALS 22, 21, A2253
	4/18/2011	8-11, 13-16, 21	Derate GowanusN-Greenwood 138kV (#42231)
	4/18/2011	8-11, 13, 15-16, 21	Derate Fox Hills-WillowBrook 138kV (#29212)
	4/18/2011	8-11, 13-21	Derate Farragut-Hudson Avenue 138kV (#32711)
	4/18/2011	10	Derate East 179th Street-Hellgate 138kV (#15053)
	4/18/2011	11, 17, 18	Derate East 179th Street-Hellgate 138kV (#15054)
	4/18/2011	11, 16-18, 21	Derate Dunwoodie-Shore Road 345kV (#Y50)
	4/28/2011	6, 8-15	Thunder Storm Alert
	4/28/2011	9, 10	Derate Fox Hills-WillowBrook 138kV (#29212-2)
	4/28/2011	20	HQ-NY Scheduling Limit
	4/29/2011	8-16	Extended outage Marcy-Volney 345kV (#19)
	4/29/2011	21	Derate Astoria East-Hellgate 138kV (#34052)
	4/29/2011	21	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SprainBrook-East Garden City 345kV (#Y49)
	4/29/2011	21	Derate East 179th Street-Hellgate 138kV (#15053)
	4/29/2011	8-10, 16-18, 21	Derate Fox Hills-WillowBrook 138kV (#29212-2)
	4/29/2011	14-15	Derate FreshKills-WillowBrook 138kV (#29212-1)
	4/29/2011	8-9, 12-18, 21	Derate Greenwood-Vernon 138kV (#31231) for I/o TWR:GOETHALS 22, 21, A2253
	4/29/2011	9, 12-15	Derate Rainey-Vernon 138kV (#36312)
	4/29/2011	8-9	Derate West 49th Street-Sprainbrook 345kV (#M52) for I/o SCB #RS3
	4/29/2011	21	Derate GowanusN-Greenwood 138kV (#42231)

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
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
- 3) Uplift costs associated with multiple event types are apportioned equally by hour
- 4) Investigations began with Dec 2008. Prior months are reported as Not Investigated.



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.
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.	

