

Operations Performance Metrics Monthly Report



November 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 December 10, 2012.

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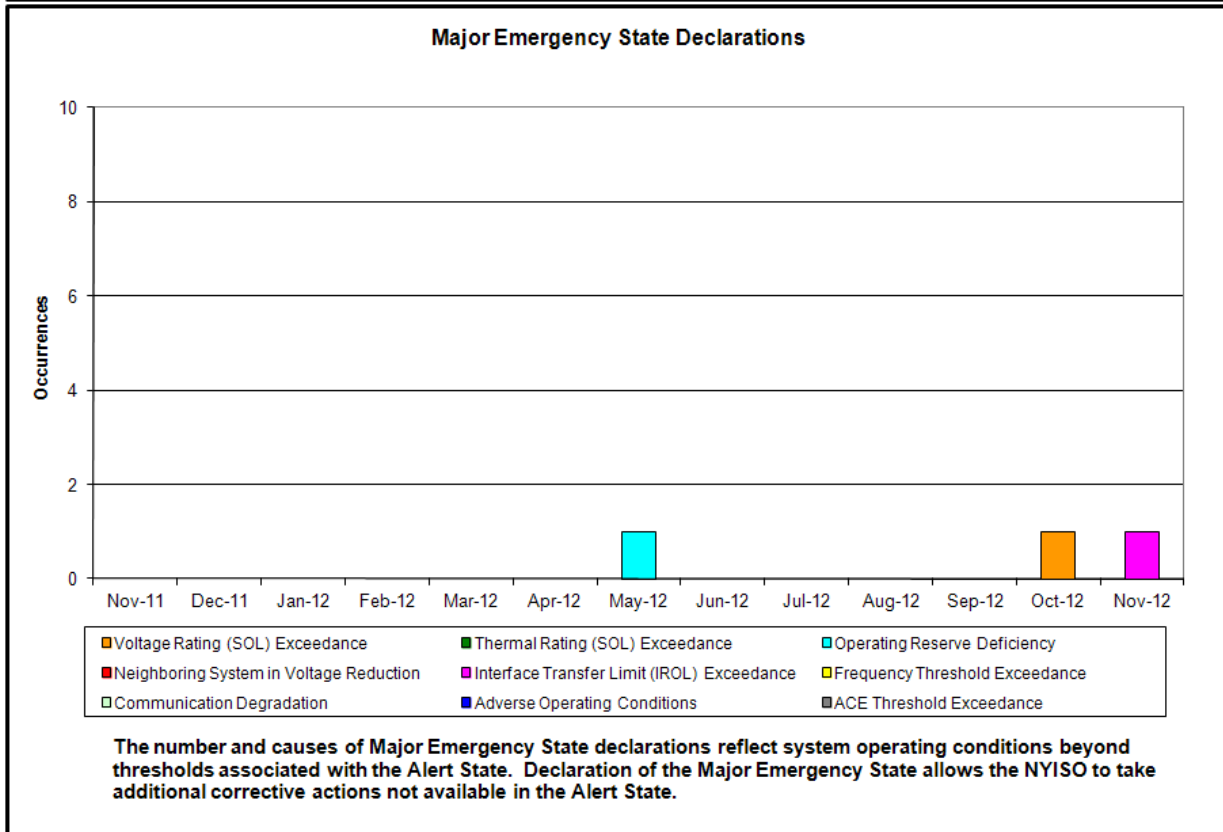
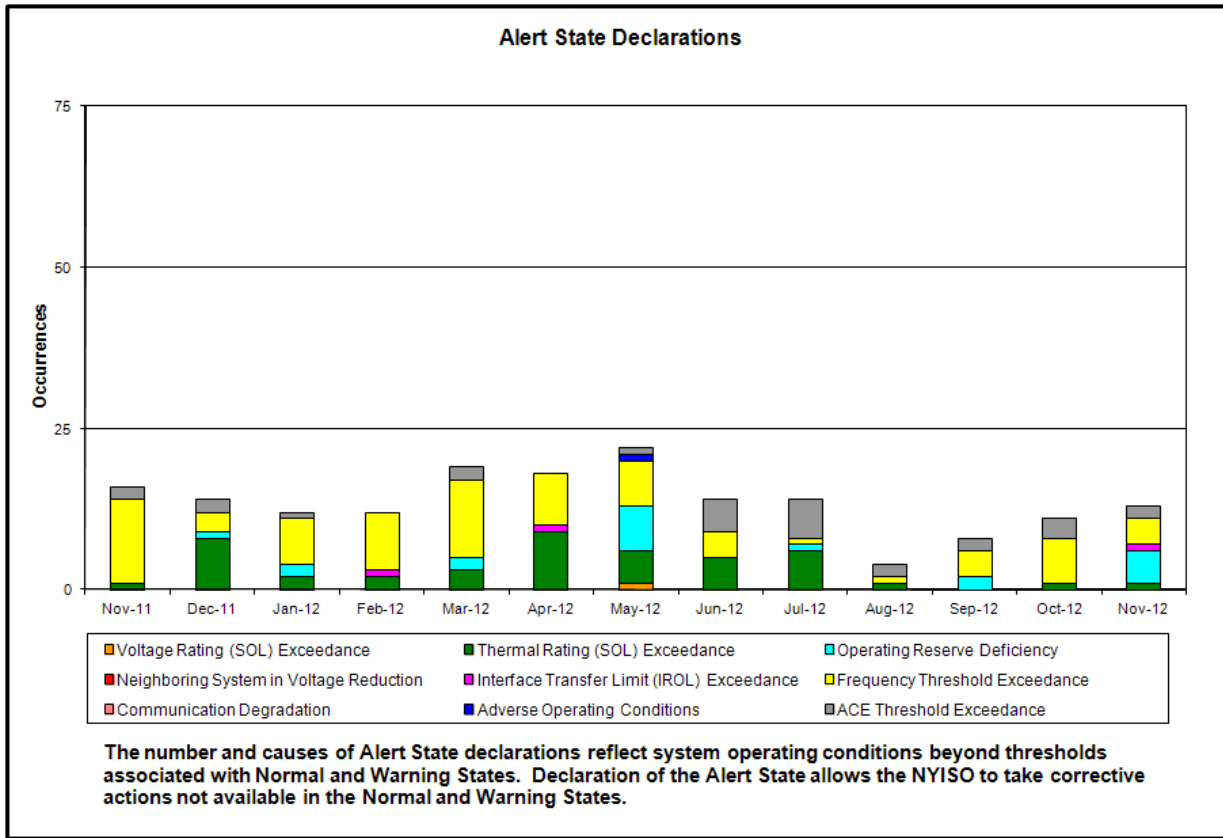
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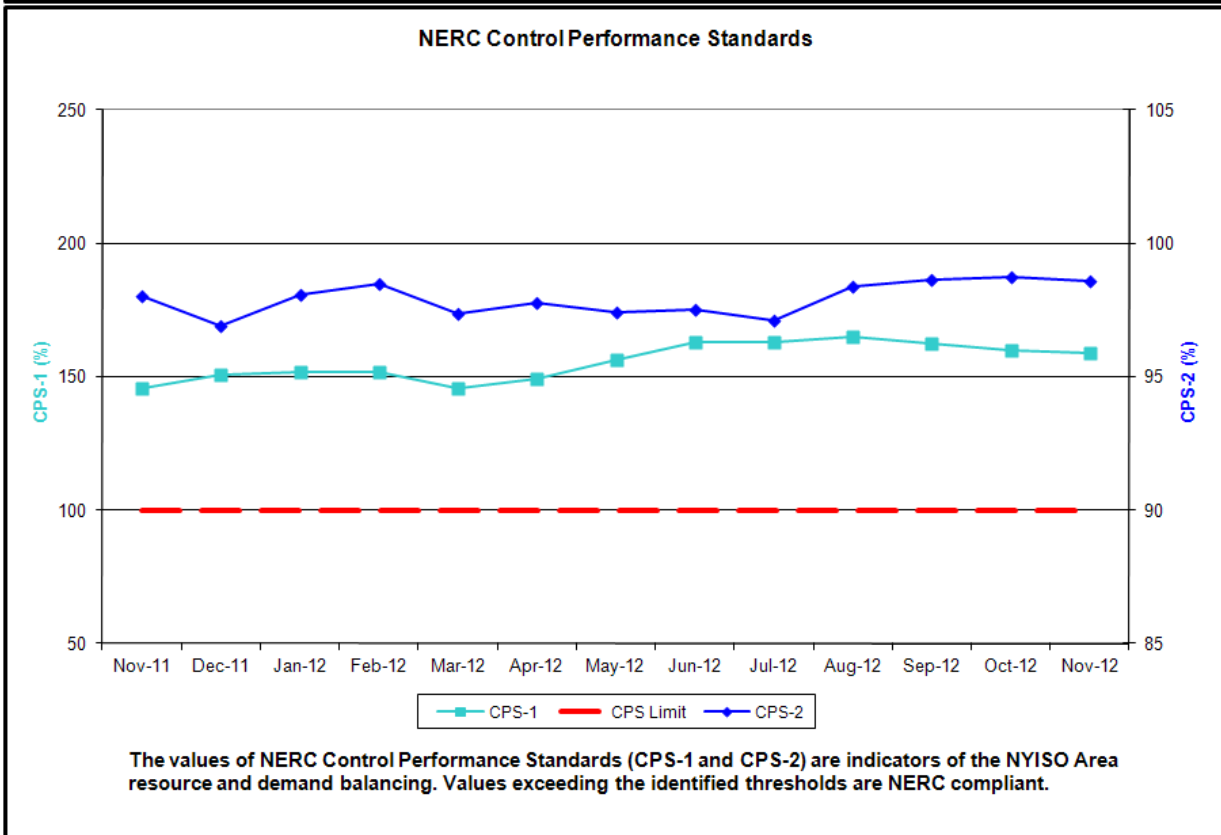
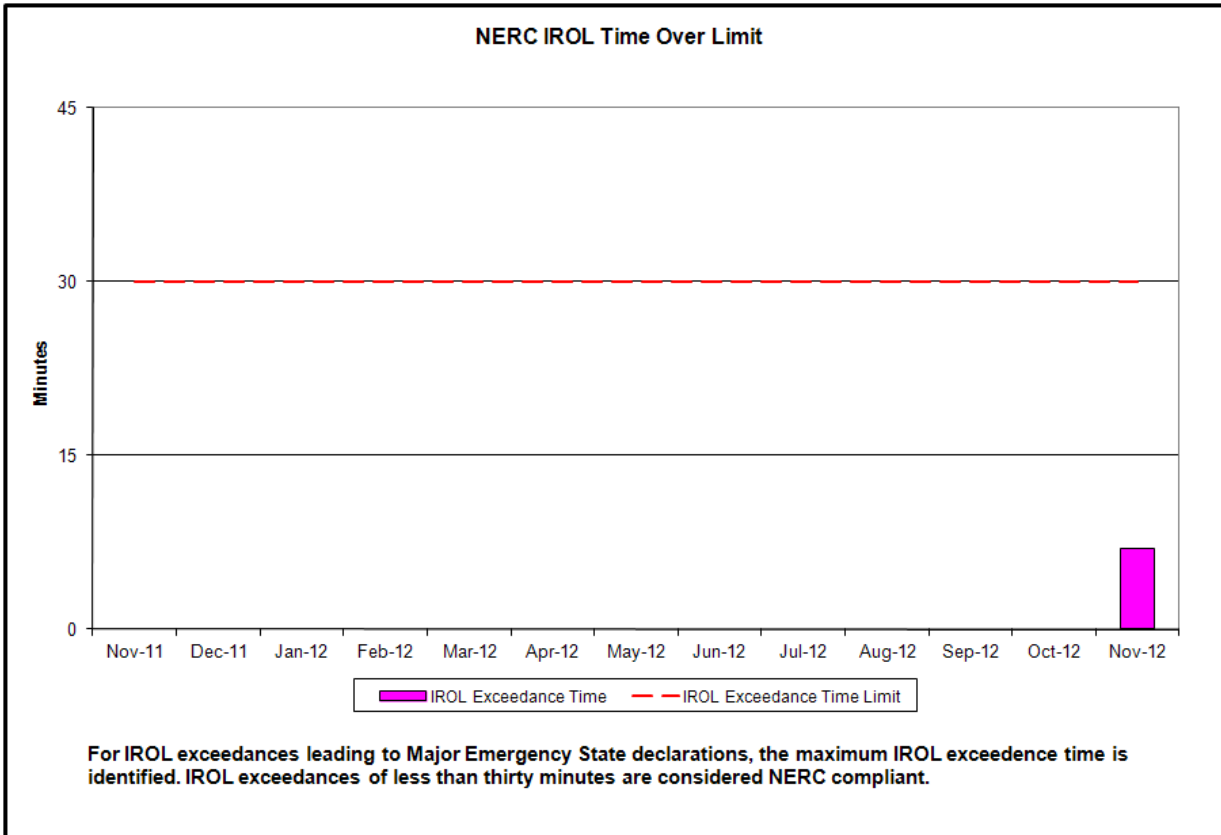
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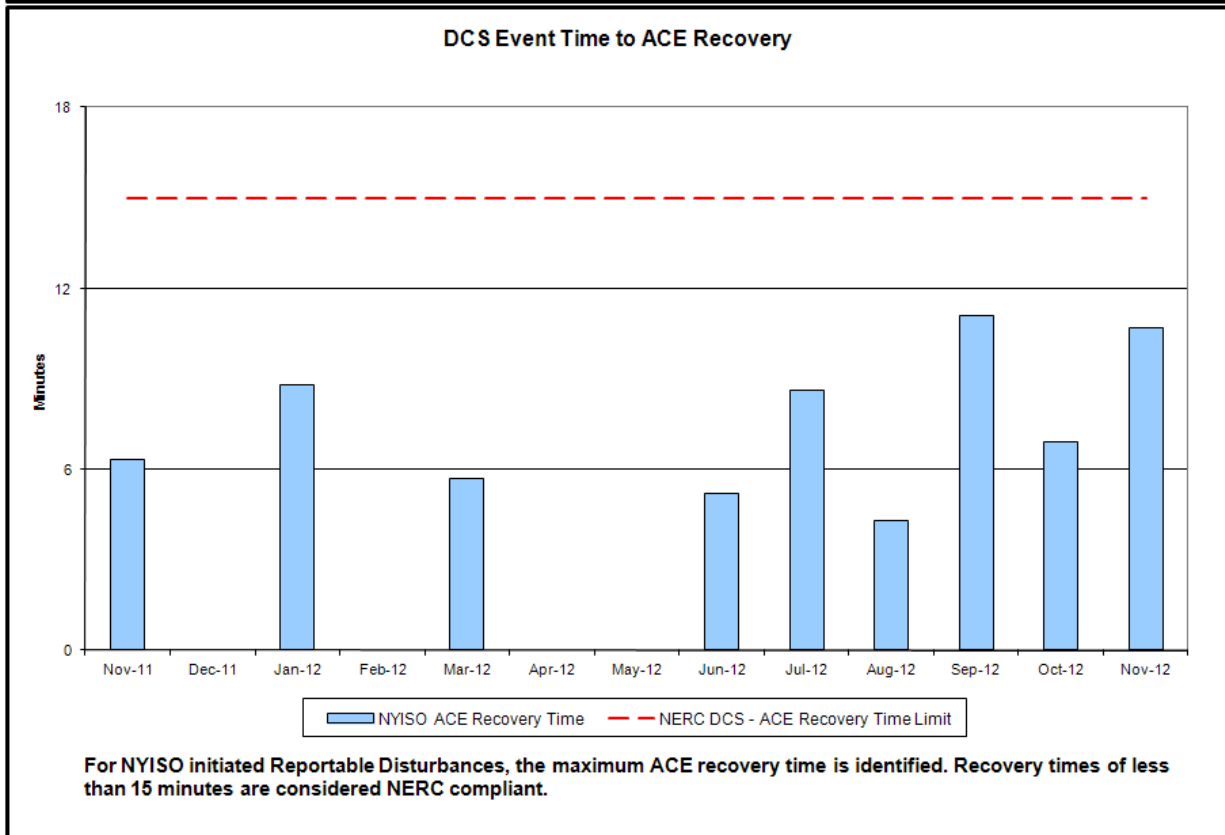
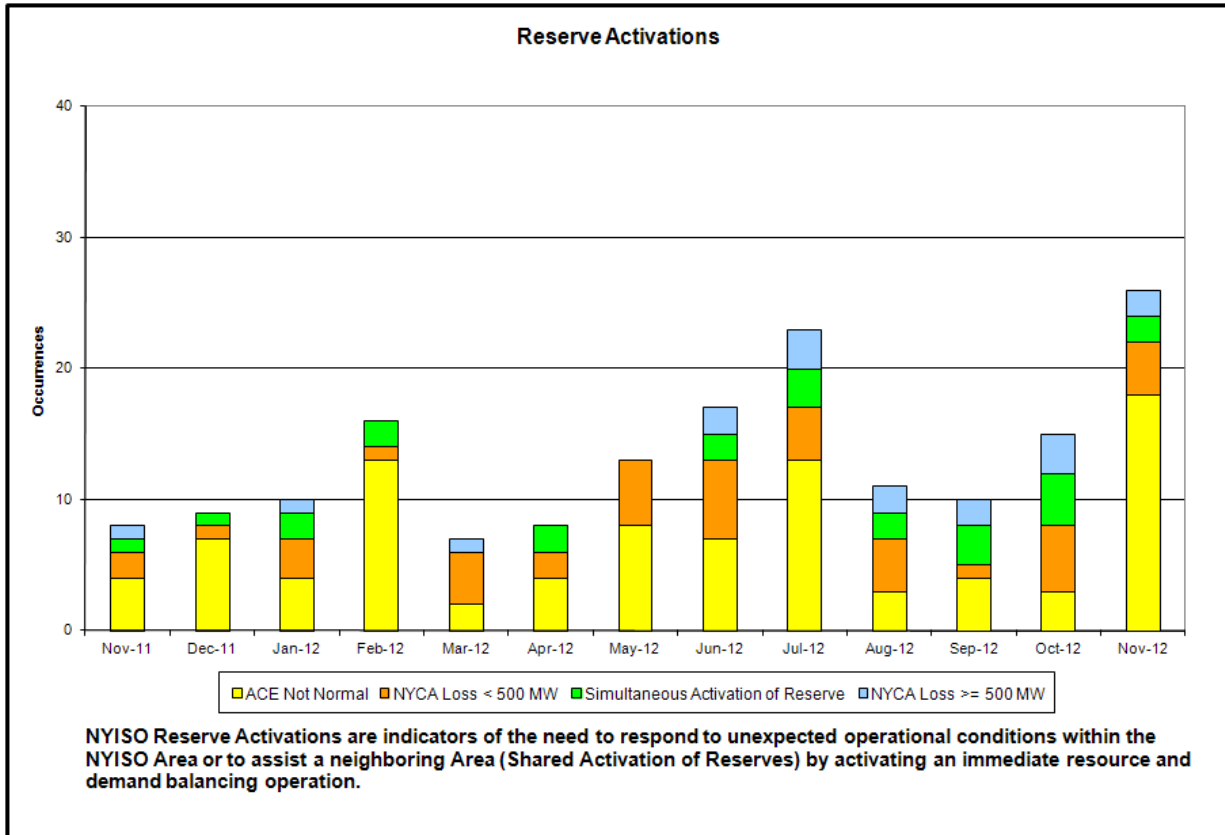
November 2012 Operations Performance Highlights

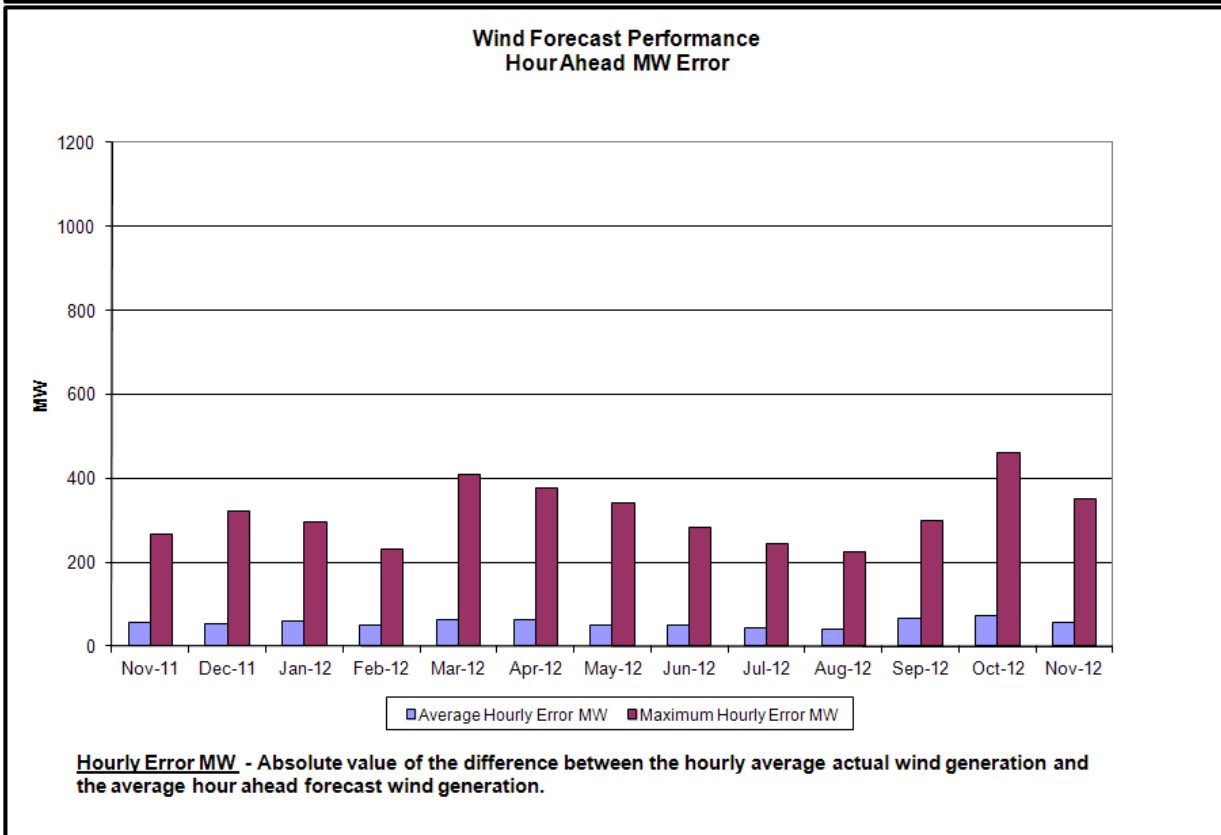
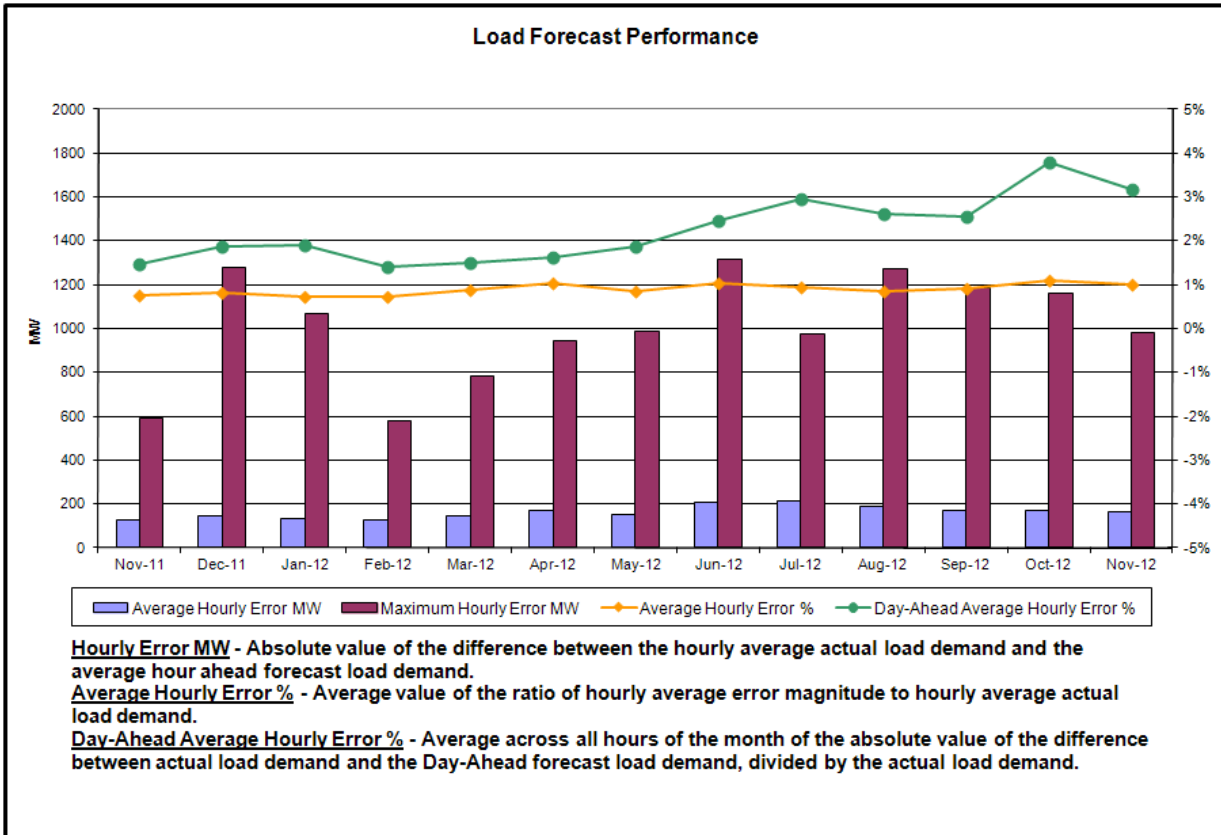
- Peak load of 22,282 MW occurred on 11/27/2012 HB 17
- All-time winter capability period peak load of 25,541 MW occurred on 12/20/2004 HB17
- No hours of Thunder Storm Alerts were declared
- 36 hours of NERC TLR level 3 curtailments
- Significant impacts due to Hurricane Sandy
- Linden VFT rating increased to +/-315MW on 11/1/2012
- Linden VFT 15-minute scheduling available on 11/28/2012

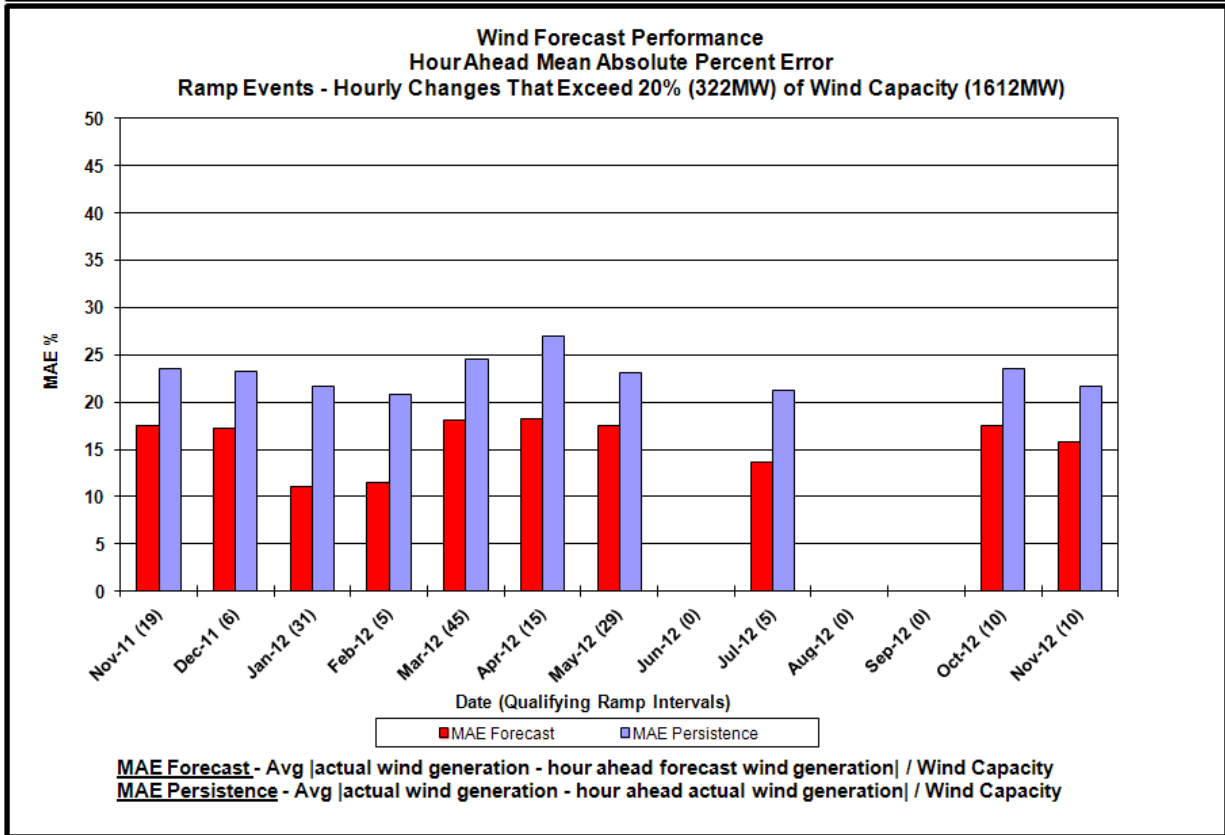
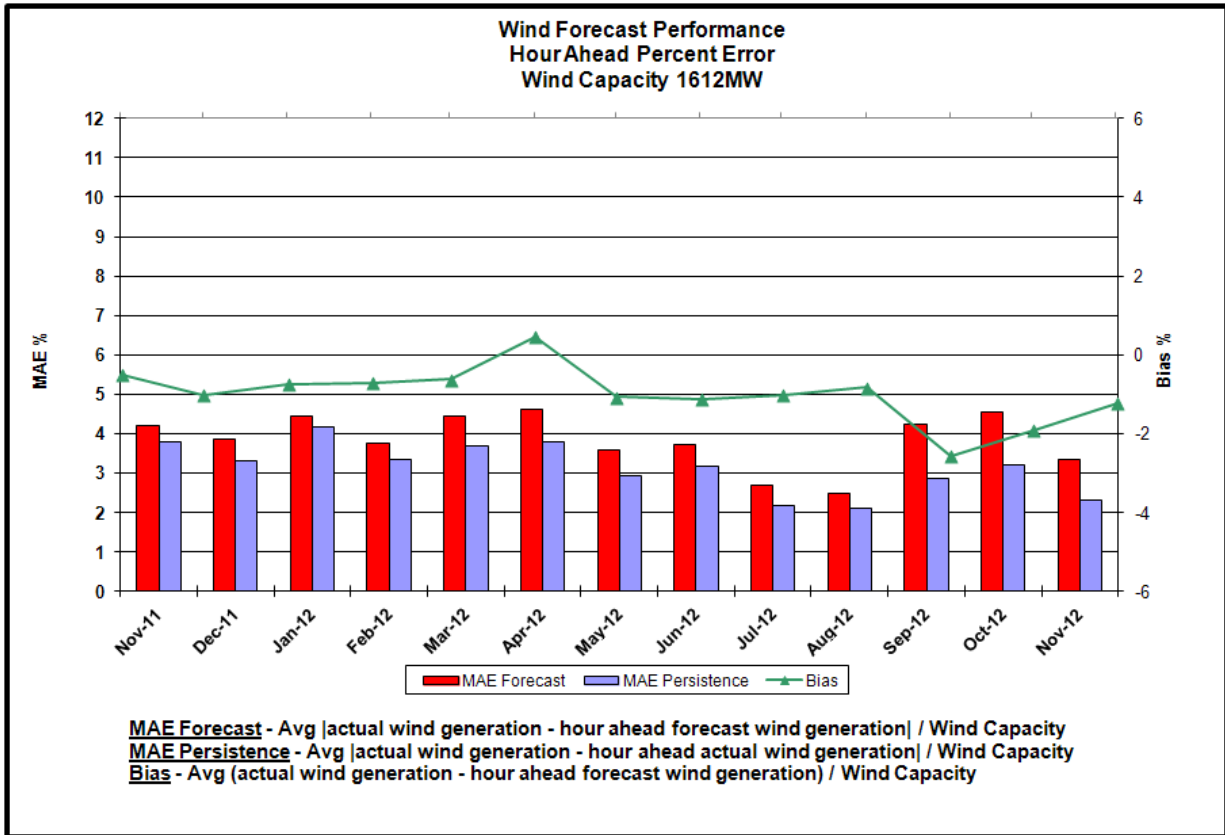
Reliability Performance Metrics

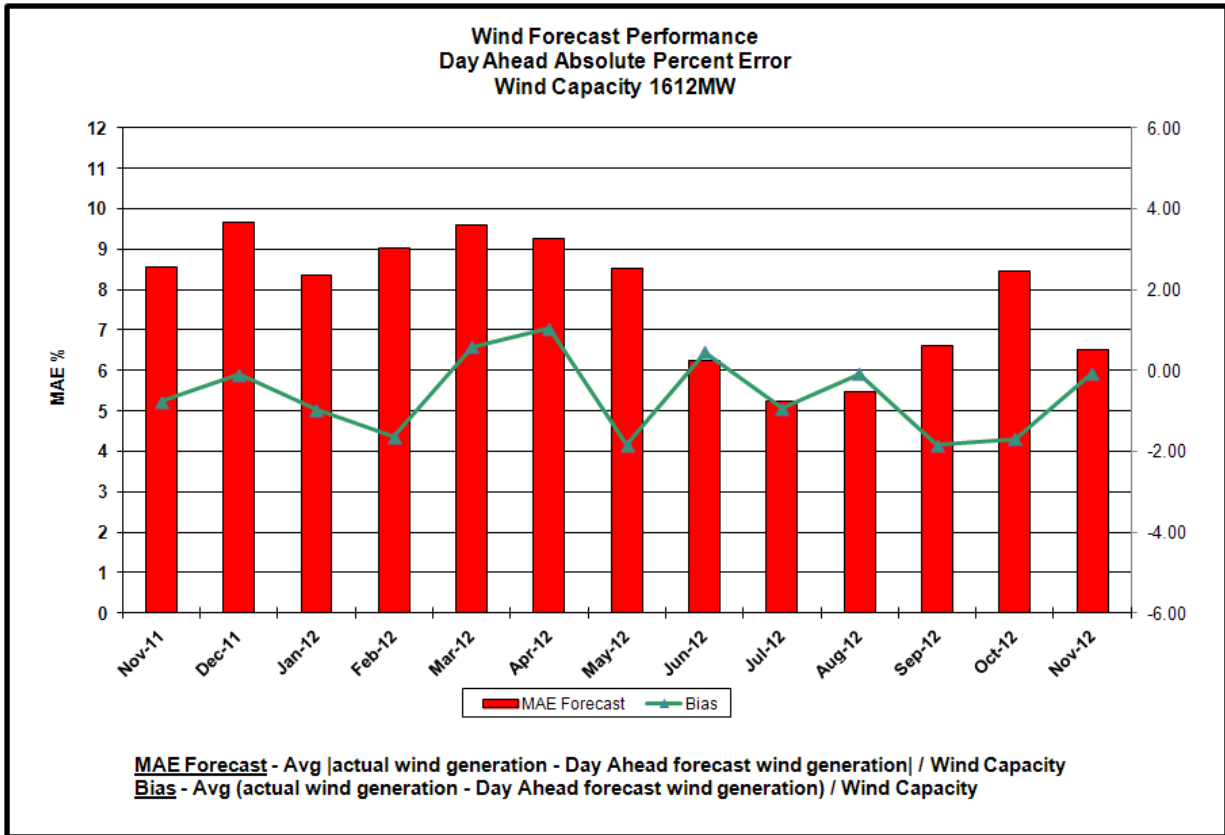


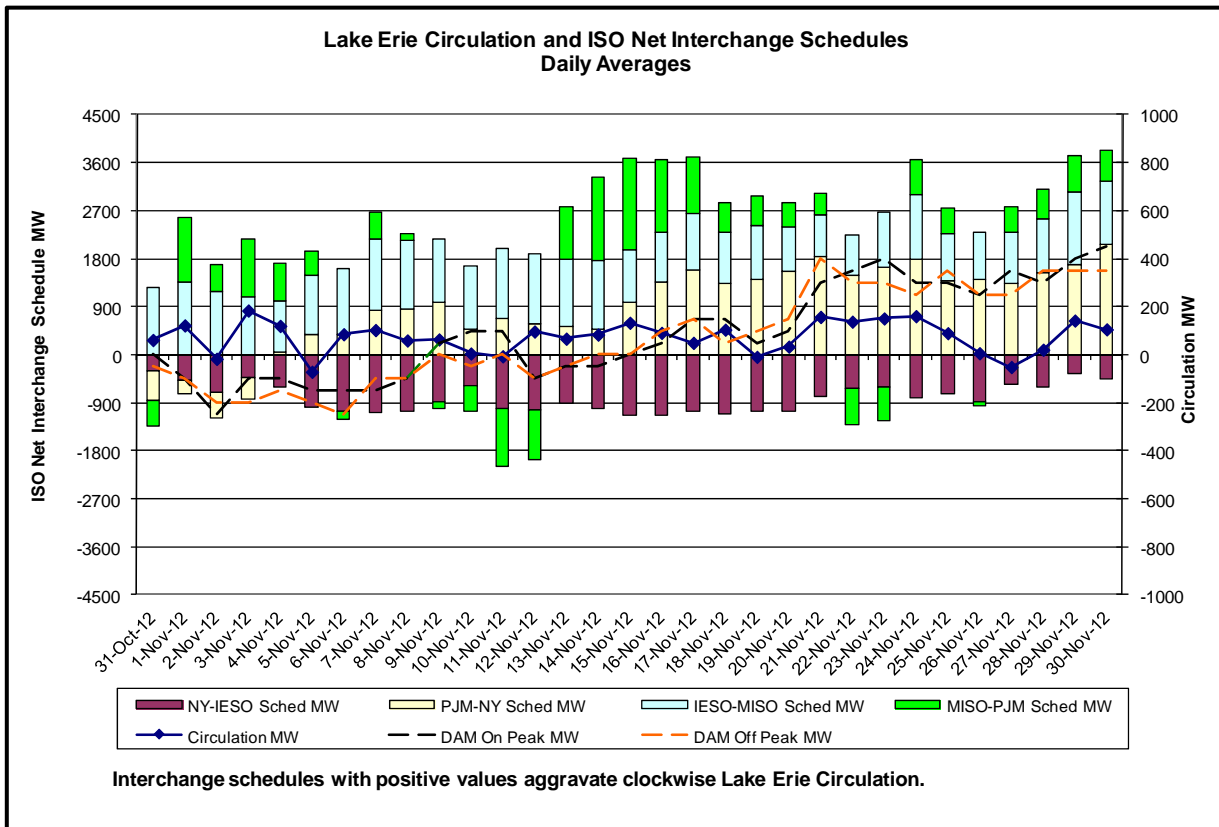
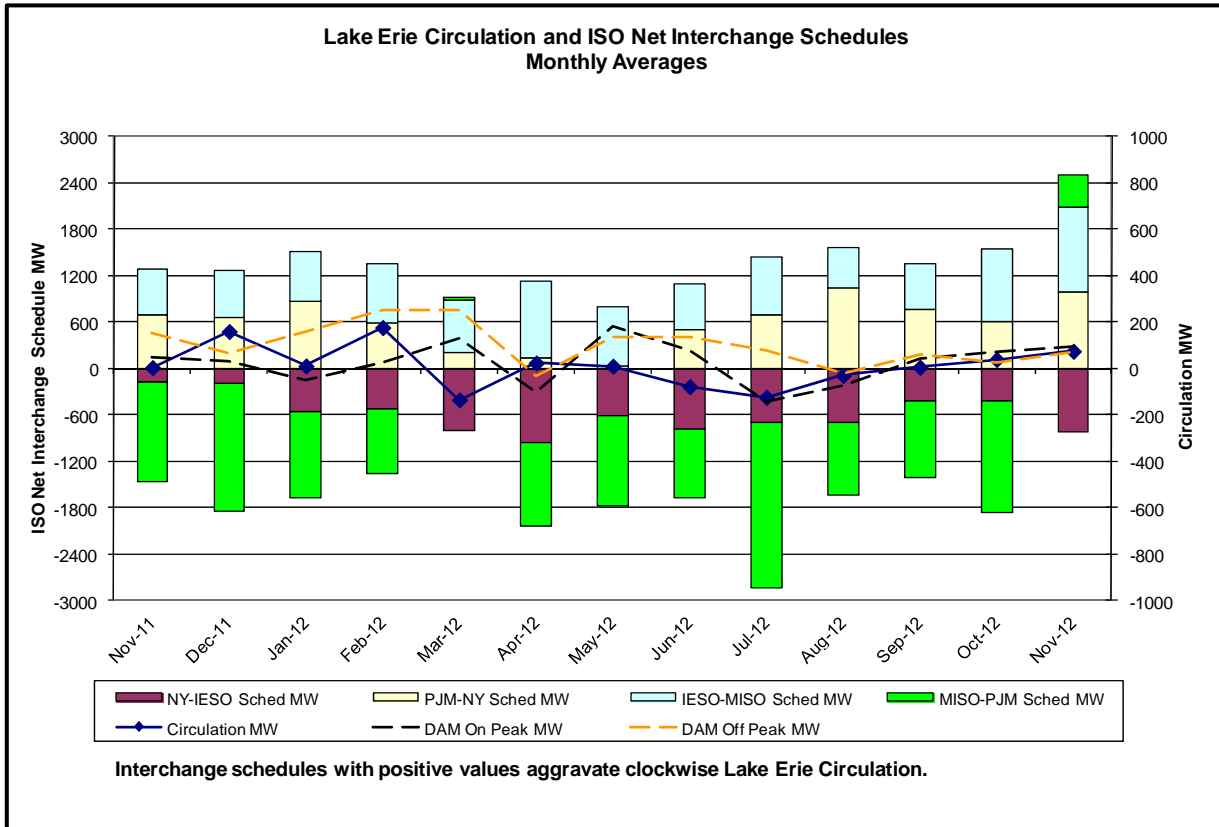




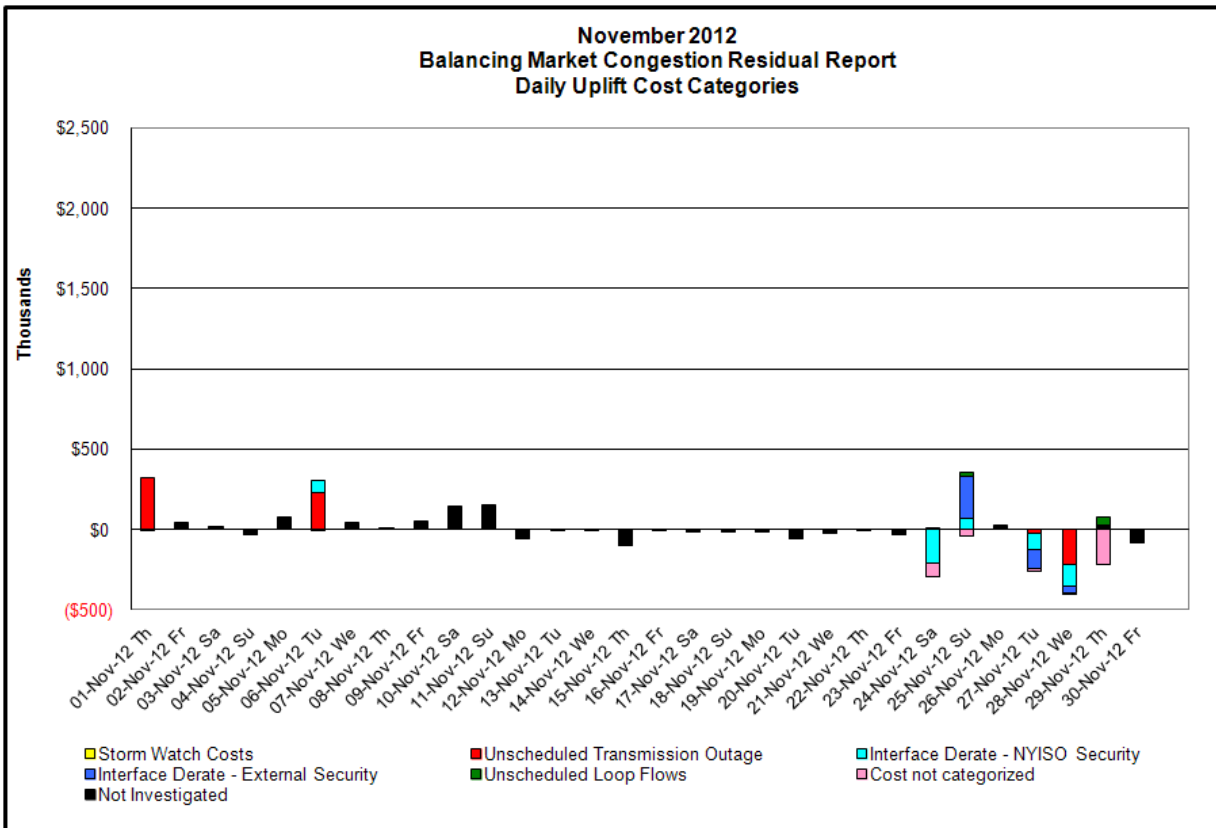
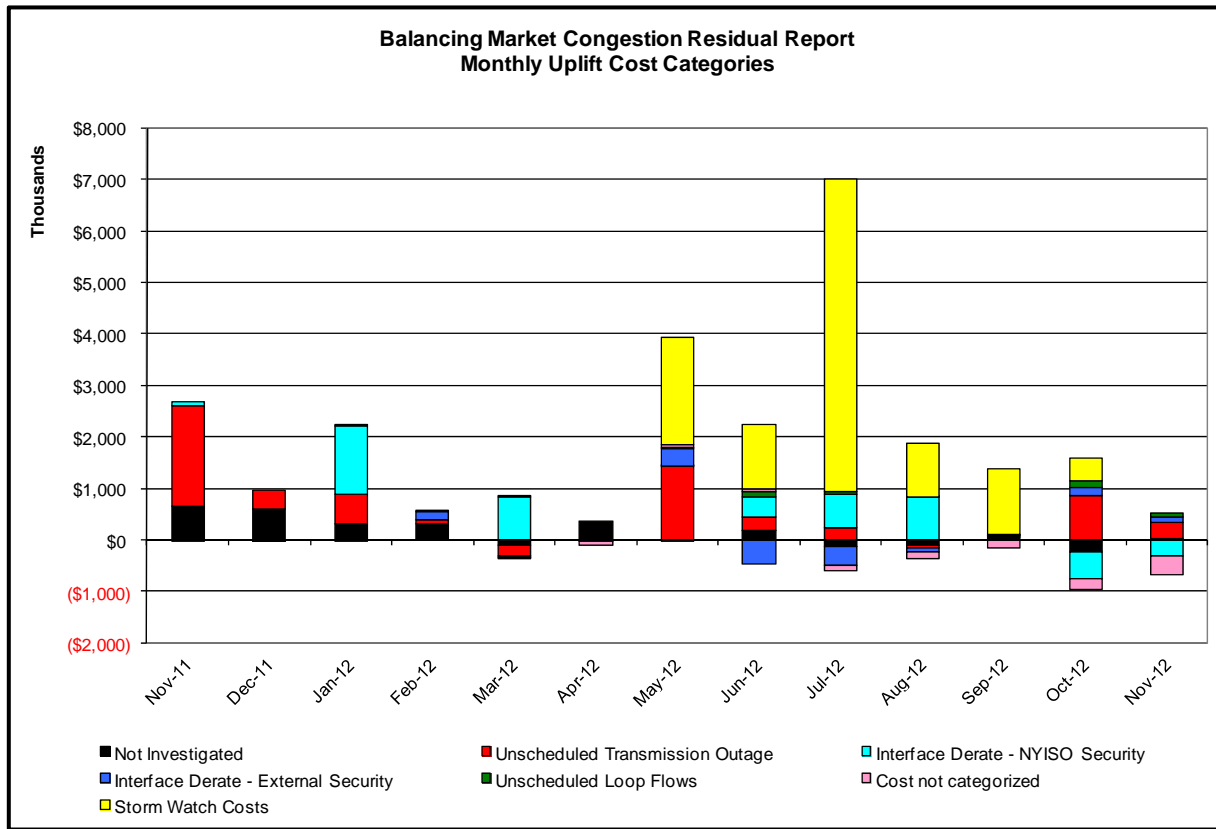








Market Performance Metrics



Day's investigated in November: 1,6,24,25,27,28,29

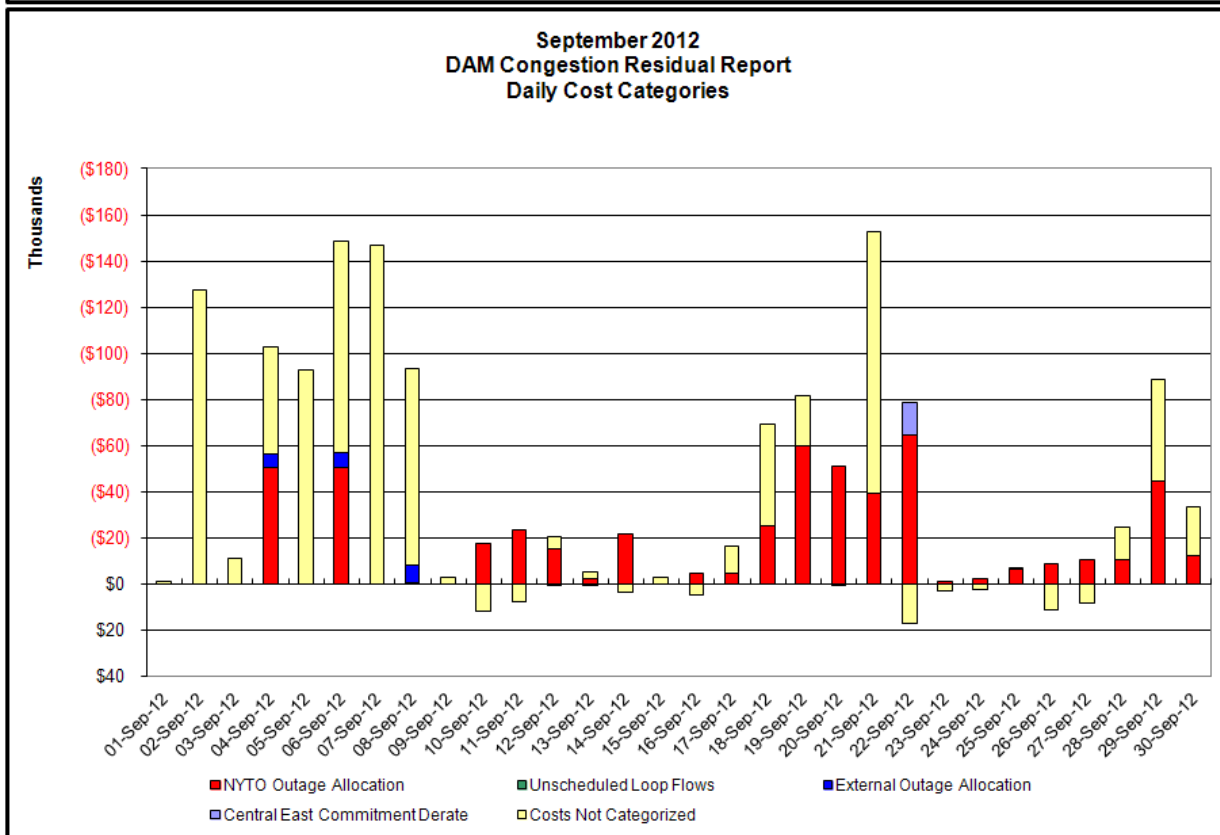
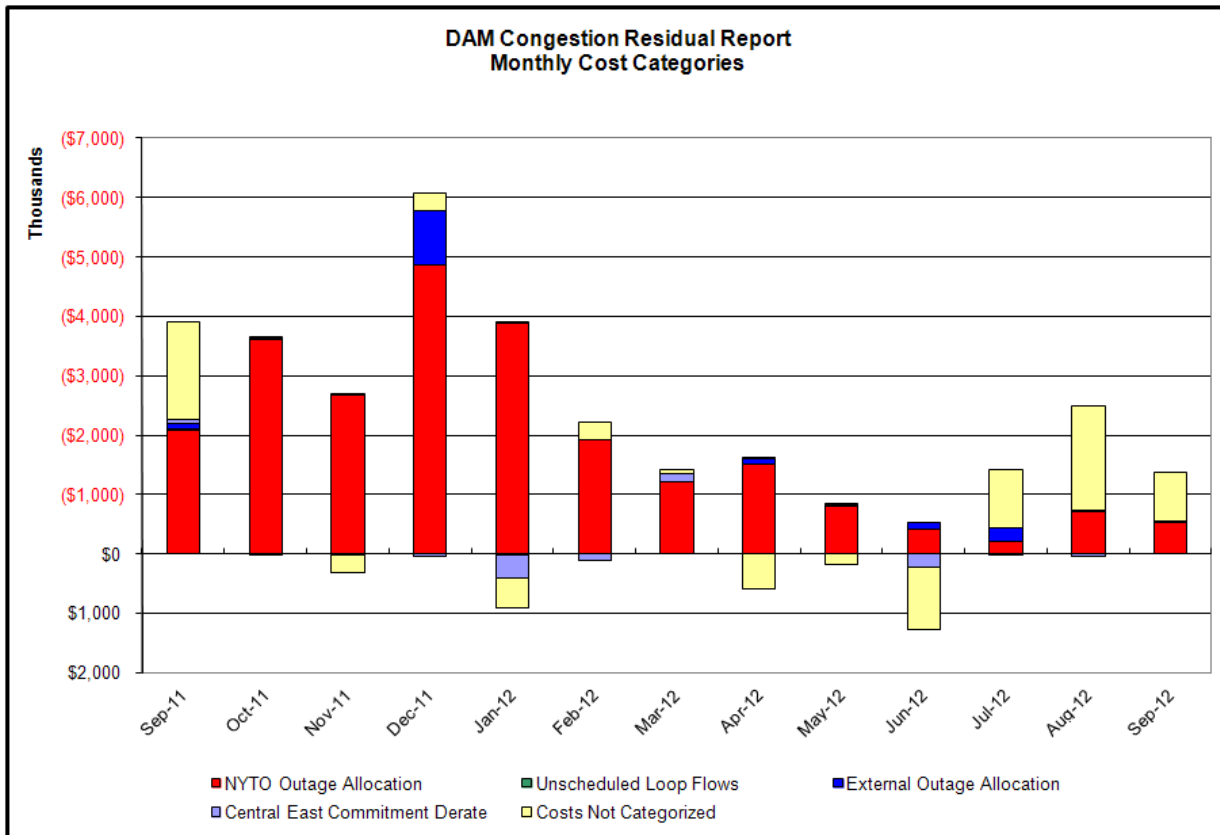
Event	Date (yyyymmdd)	Hours	Description
	11/1/2012	5,7,10,11,17,23	Forced outage Linden-Goethals 345kV (A2253), Hudson-Farragut 345kV (#B3402, #C3403)
	11/1/2012	13-18	Forced outage West 49th St.-East 13th St. 345kV (#M45, #M55)
	11/6/2012	17	Forced outage Pilgrim-Northport 138kV (#672, #679)
	11/6/2012	0-5,7-23	Forced outage Goethals-Freshkills 345kV (#21), Gowanus-Goethals 345kV (#26), Greenwood-Gowanus 138kV (#42231), Freshkill 345/138kV TB1
	11/6/2012	11-21,23	Forced outage Asotria Annex 138kV (#34091), Astoria Annex-East 13th St. 345kV (Q35M)
	11/6/2012	19-21	Derate Astoria West/Queensbridge/Vernon
	11/24/2012	0,18-21	Uprate Central East
	11/24/2012	21	Uprate Malone-Willis 115kV (#MW-1) for I/o TWR; WILLIS MW1, MW2
	11/24/2012	23	PJM_AC DNI Ramp Limit
	11/24/2012	0	NE_AC-NY Scheduling Limit
	11/24/2012	23	HQ_CHAT DNI Ramp Limit
	11/25/2012	1,4	Derate Central East
	11/25/2012	13-15,20,21	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK (RNS2):Y49 & M29
	11/25/2012	10,11,13-15,17-23	HQ_CHAT-NY Scheduling Limit
	11/25/2012	0,1	HQ_CHAT DNI Ramp Limit
	11/25/2012	23	IESO_AC DNI Ramp Limit
	11/25/2012	1,4,14	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East
	11/27/2012	14,15,21-23	Early return to service of Porter-Rotterdam 230kV (#30-PR)
	11/27/2012	7	Early return to service of Kintigh-Rochester 345kV (SR-1)
	11/27/2012	3,9-15,20,21	Uprate Central East
	11/27/2012	7	Uprate Dysinger East
	11/27/2012	7,10-12,17,20,21	NYCA DNI Ramp Limit
	11/27/2012	7,9	IESO_AC DNI Ramp Limit
	11/27/2012	7,9-16,18-20	NE_AC-NY Scheduling Limit
	11/28/2012	0-5,9-14,18-23	Early return to service of Porter-Rotterdam 230kV (#30-PR)
	11/28/2012	0-5,9-14	Early return to service of Rock Tavern-Coopers 345kV (#CRT-42)
	11/28/2012	0-5,9-13,23	Uprate Central East
	11/28/2012	5,6,21	NYCA DNI Ramp Limit
	11/28/2012	0,3-6,8,9	NE_AC-NY Scheduling Limit
	11/29/2012	20	Forced outage Pilgrim-Northport 138kV (#677)
	11/29/2012	2-5,8,21	Derate Central East
	11/29/2012	20,21	Derate Dysinger East
	11/29/2012	20	Derate Northport-Elwood 138kV (#681) for I/o BUS:Northport 677 & PS2 & G2
	11/29/2012	12	Uprate Greenwood-Gowanus 138kV (#42231) for I/o TWR:Goethals 22, 21, A2253
	11/29/2012	6	NYCA DNI Ramp Limit
	11/29/2012	20,21	HQ_CHAT-NY Scheduling Limit
	11/29/2012	2-5,8,20,21	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East, Dysinger East

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

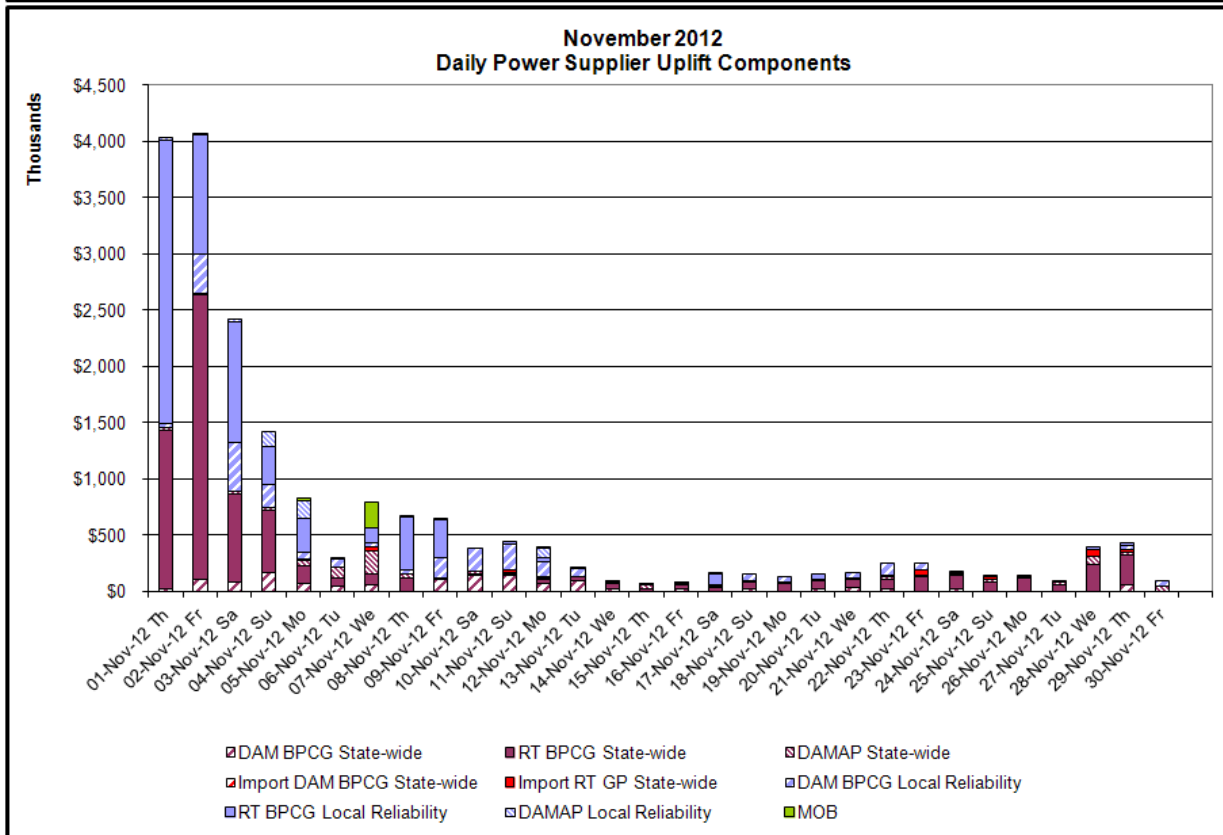
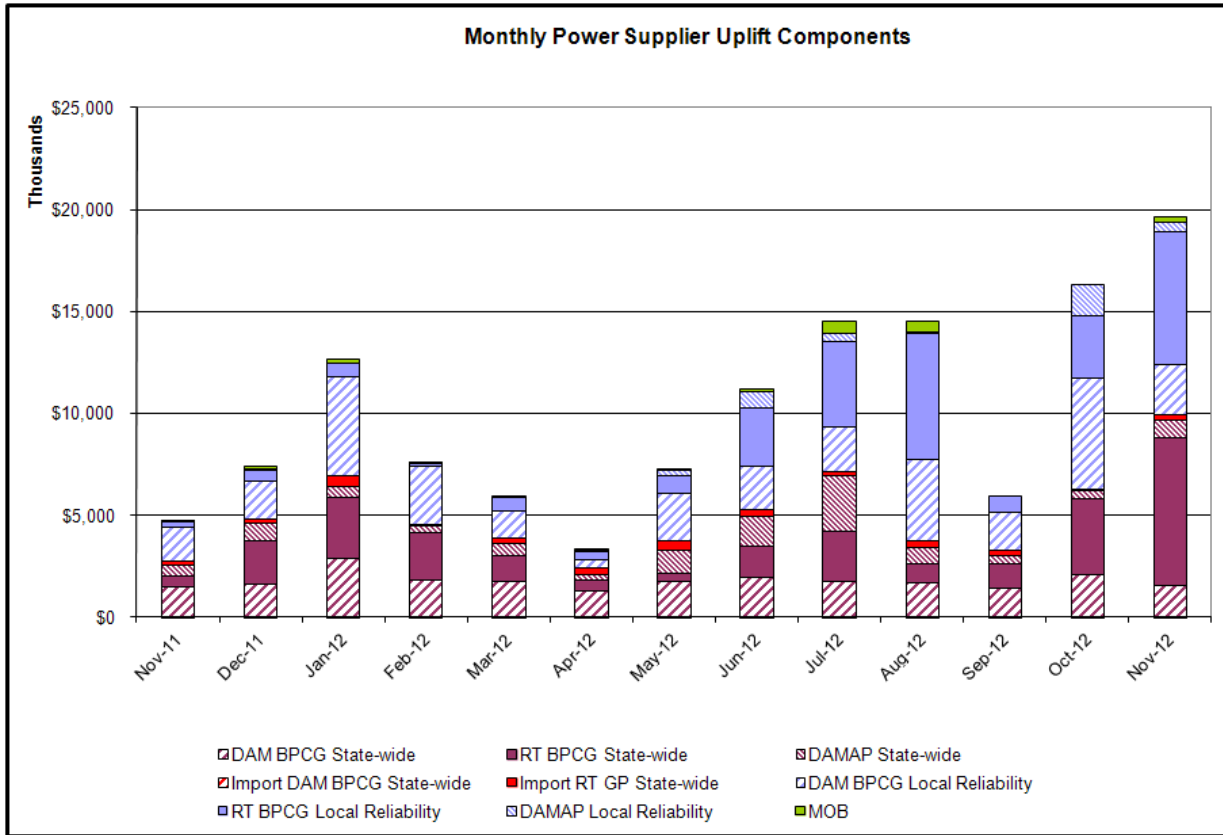
Monthly Balancing Market Congestion Report Assumptions/Notes

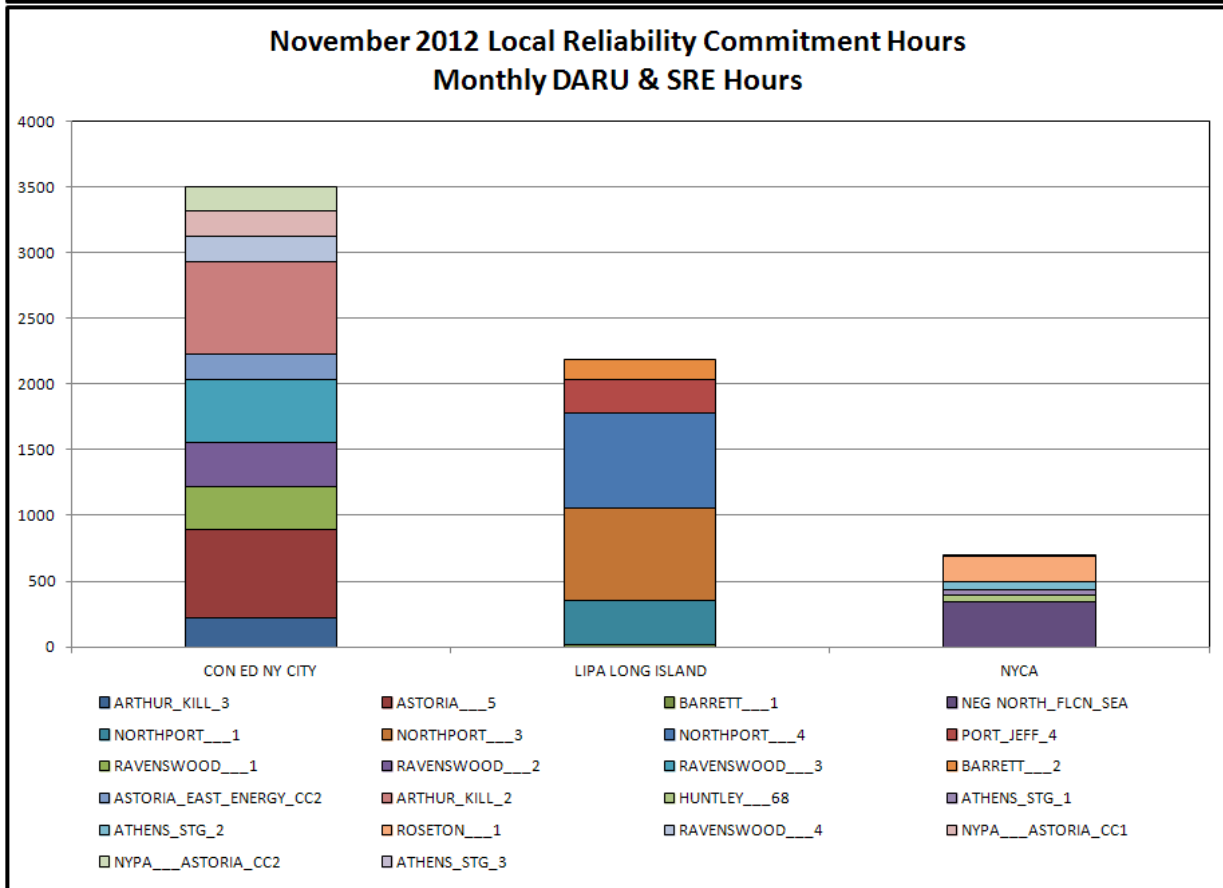
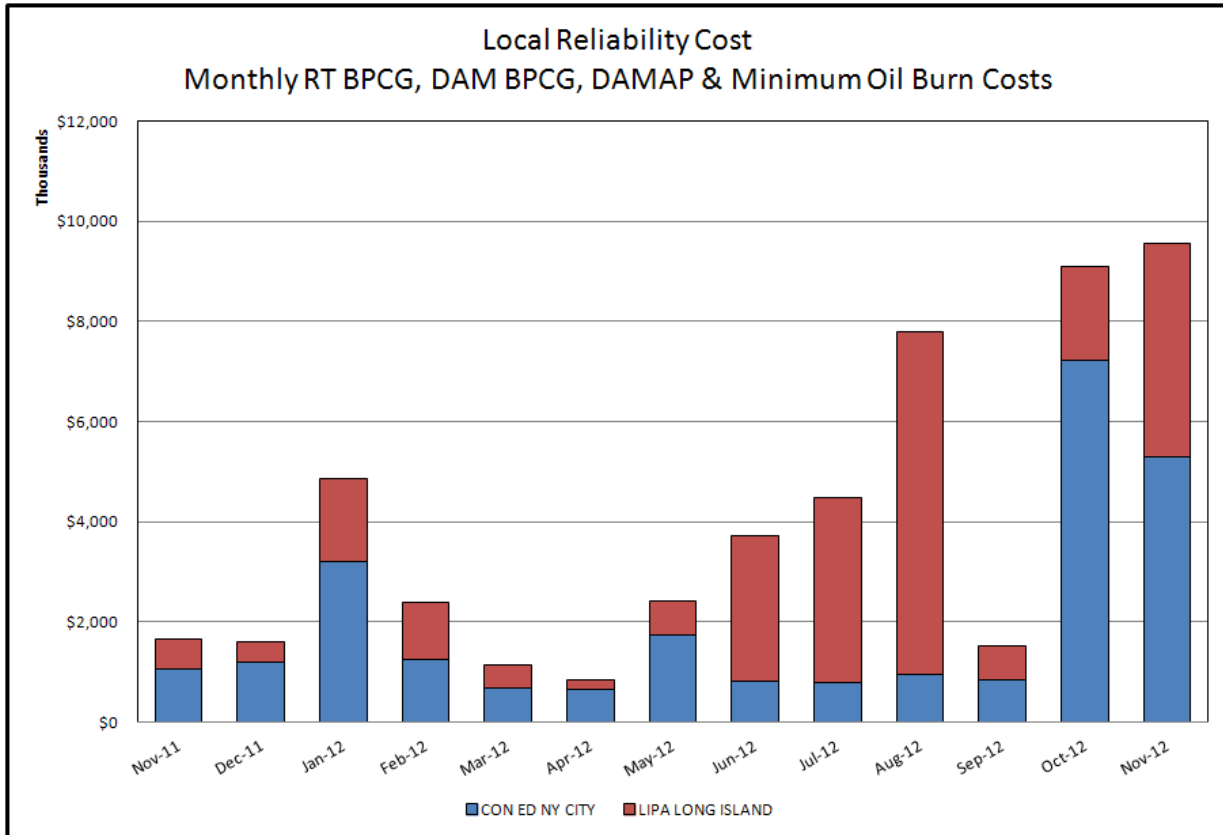
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) At a minimum those days with \$ 100 K/HR, shortfall of \$200 K/Day or more, or surplus of \$ 100 K/Day or more are investigated
- 3) Uplift costs associated with multiple event types are apportioned equally by hour
- 4) Investigations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

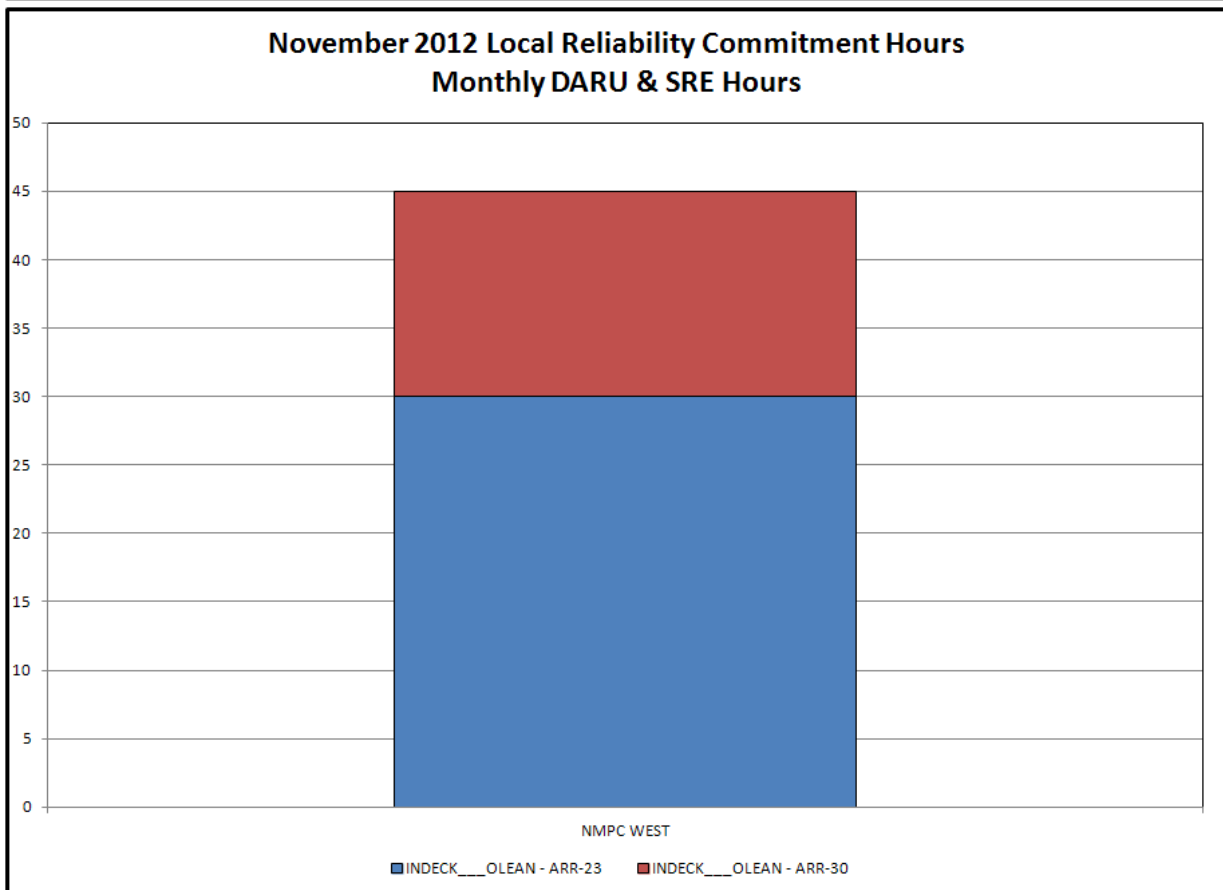
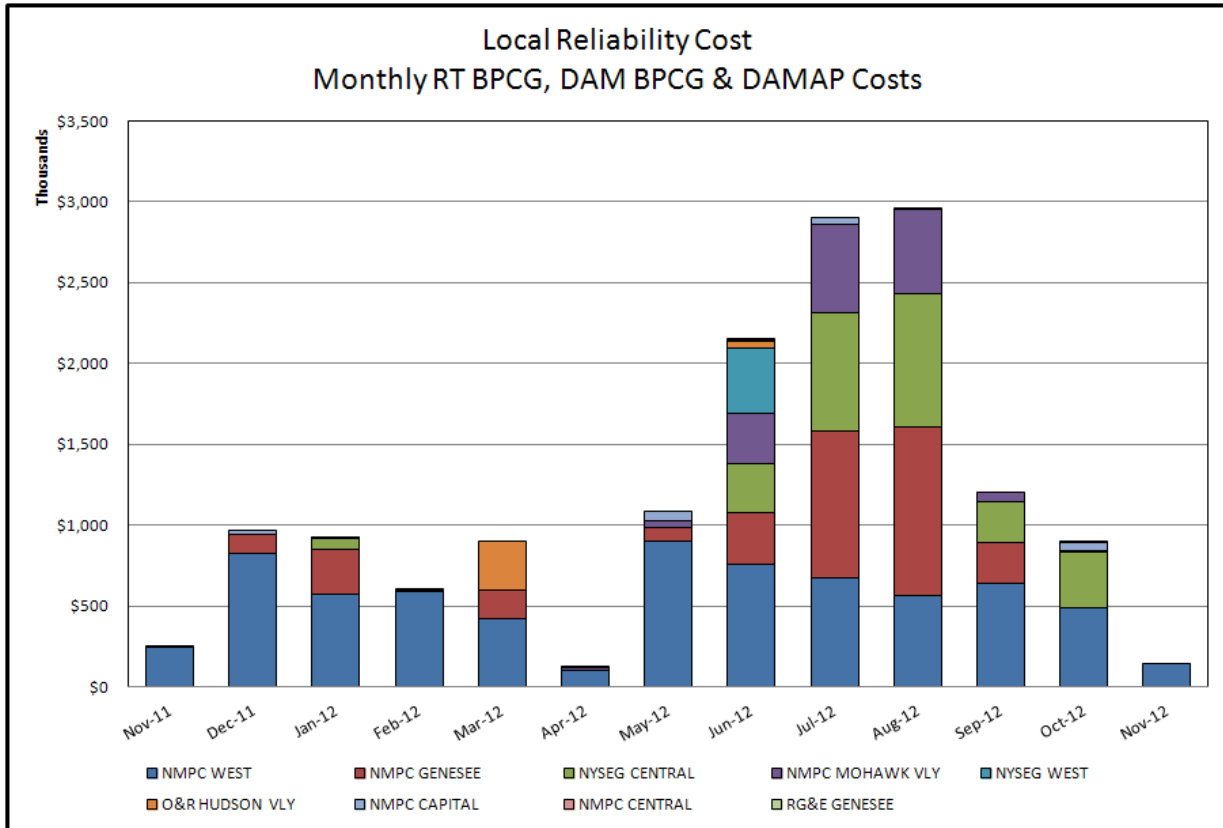


Day-Ahead Market Congestion Residual Categories

<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.	

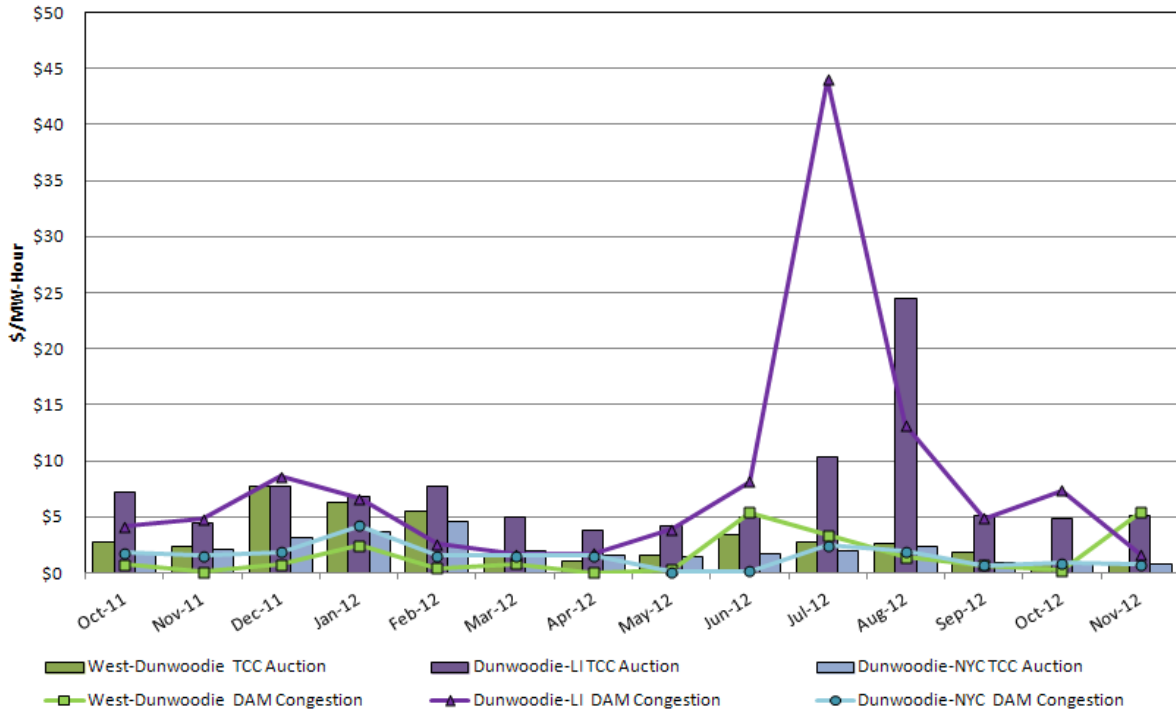






TCC & Day Ahead Market Selected Internal Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average



TCC & Day Ahead Market West to Dunwoodie Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average

