

Operations Performance Metrics Monthly Report



July 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 August 8, 2011.

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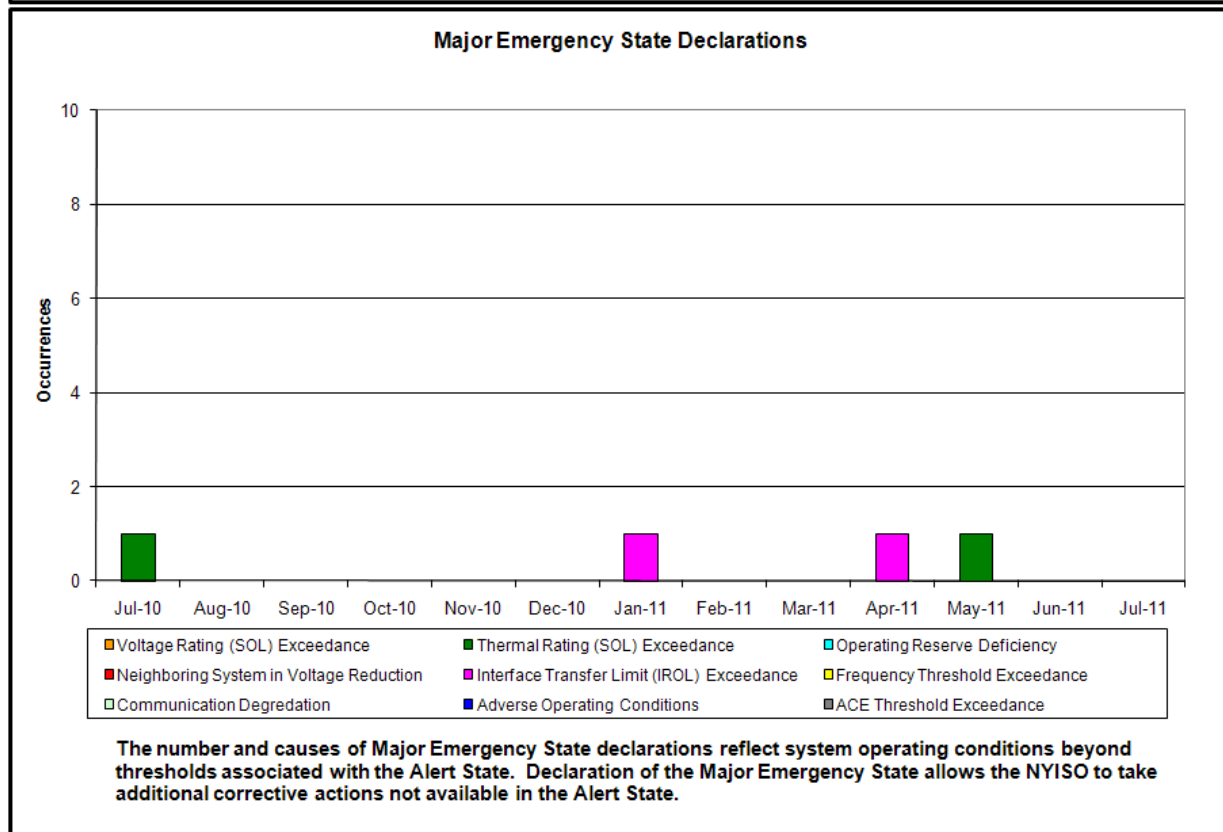
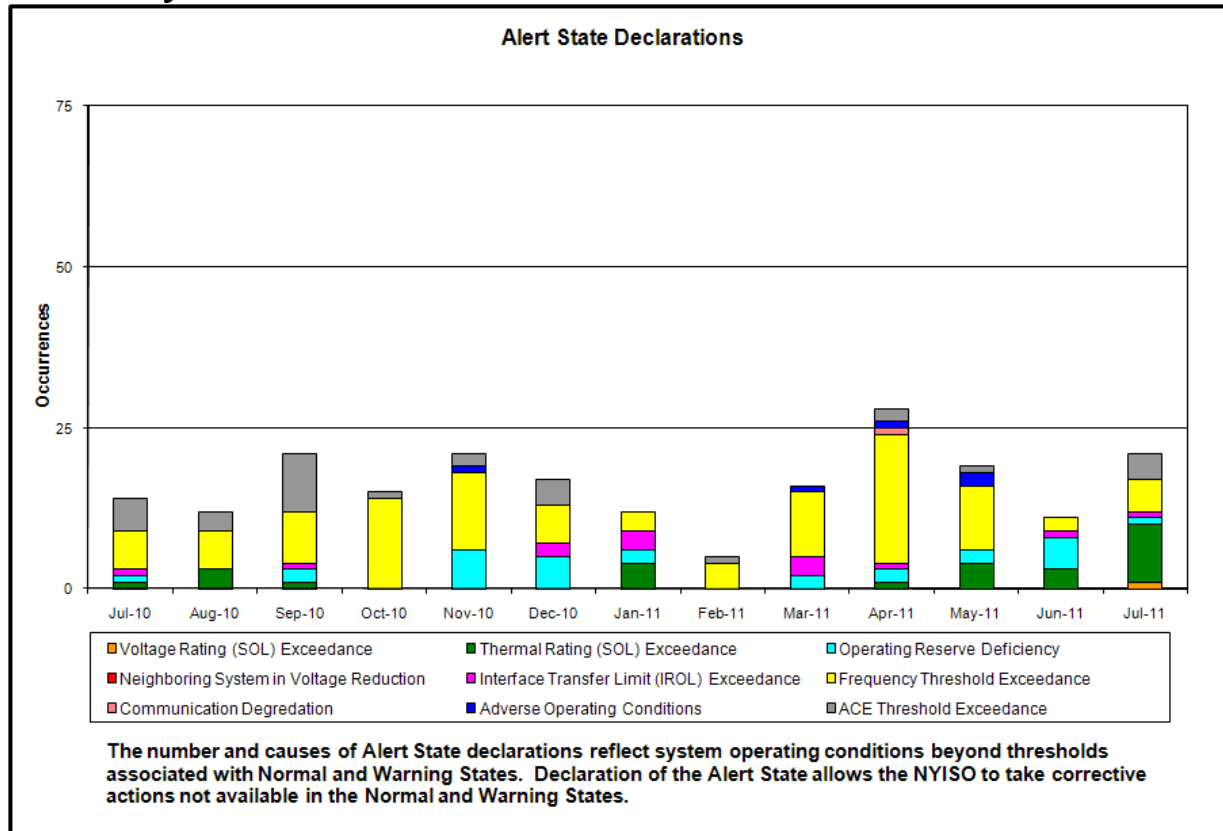
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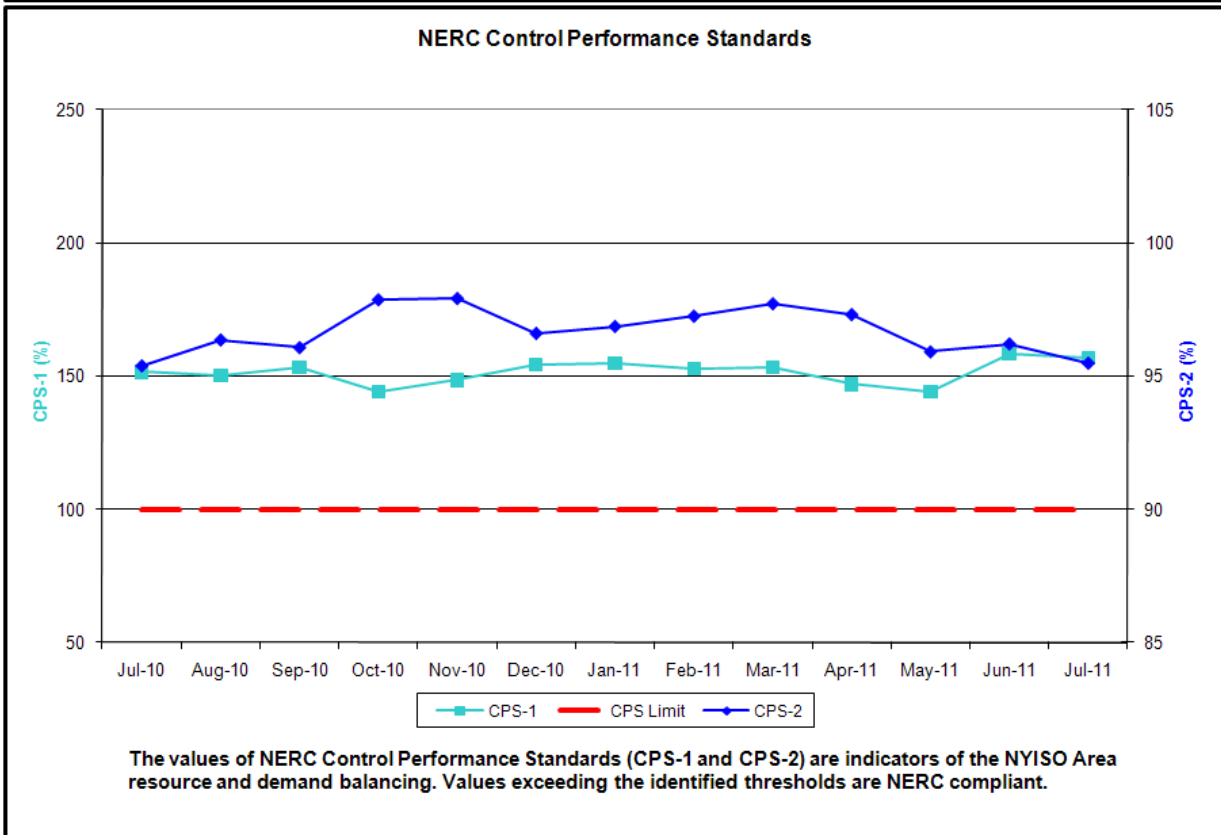
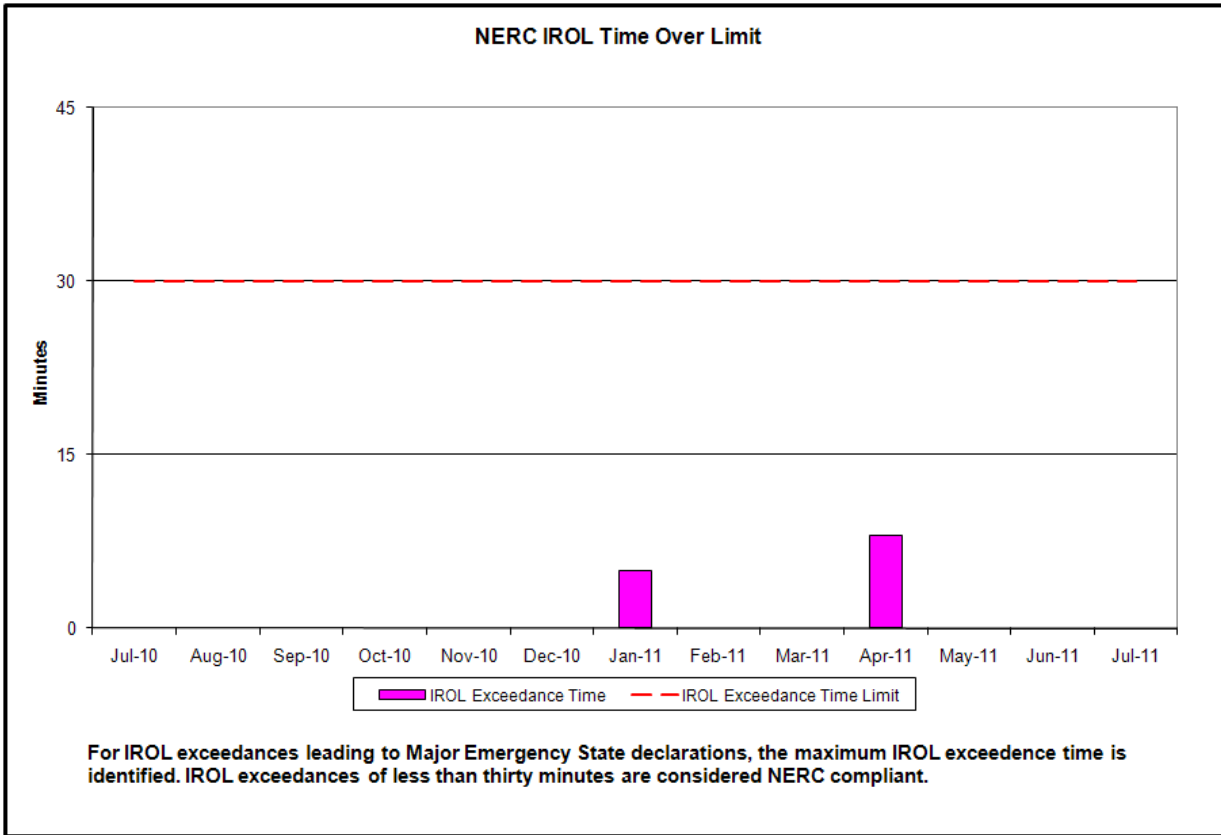
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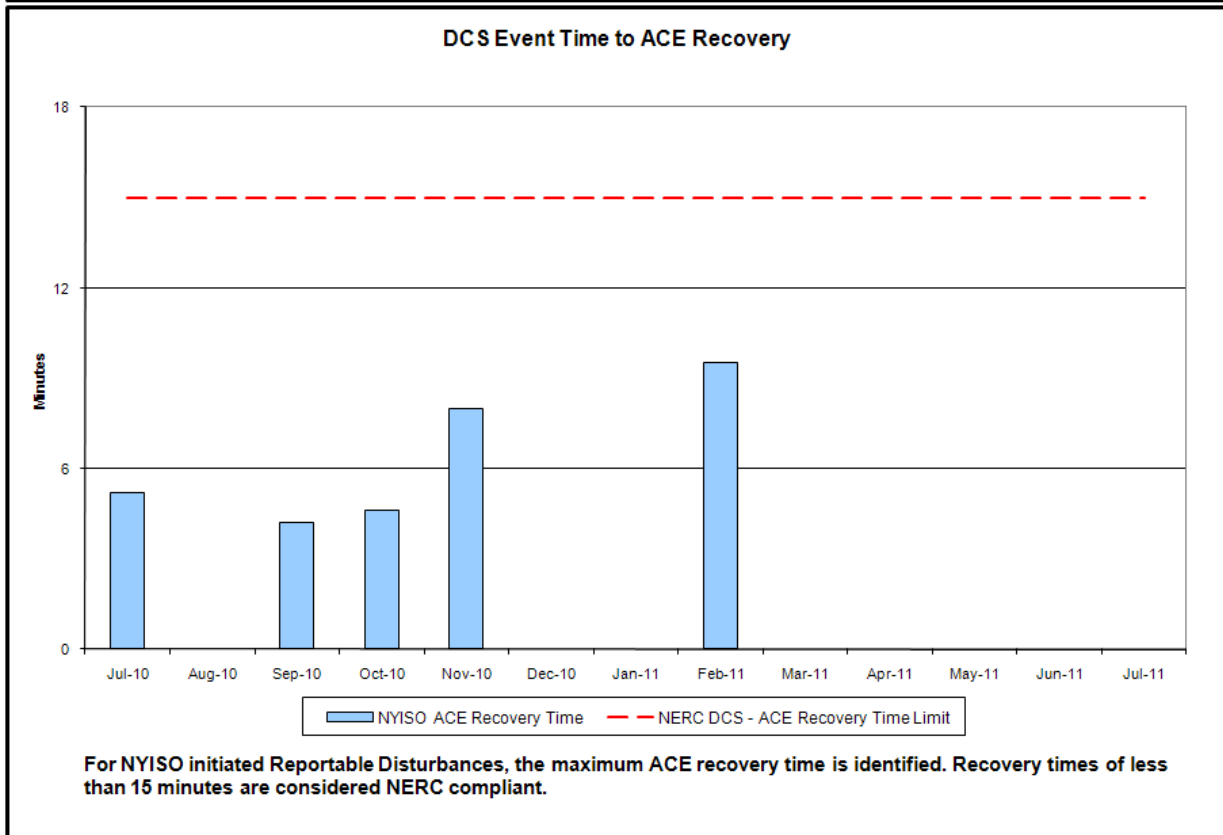
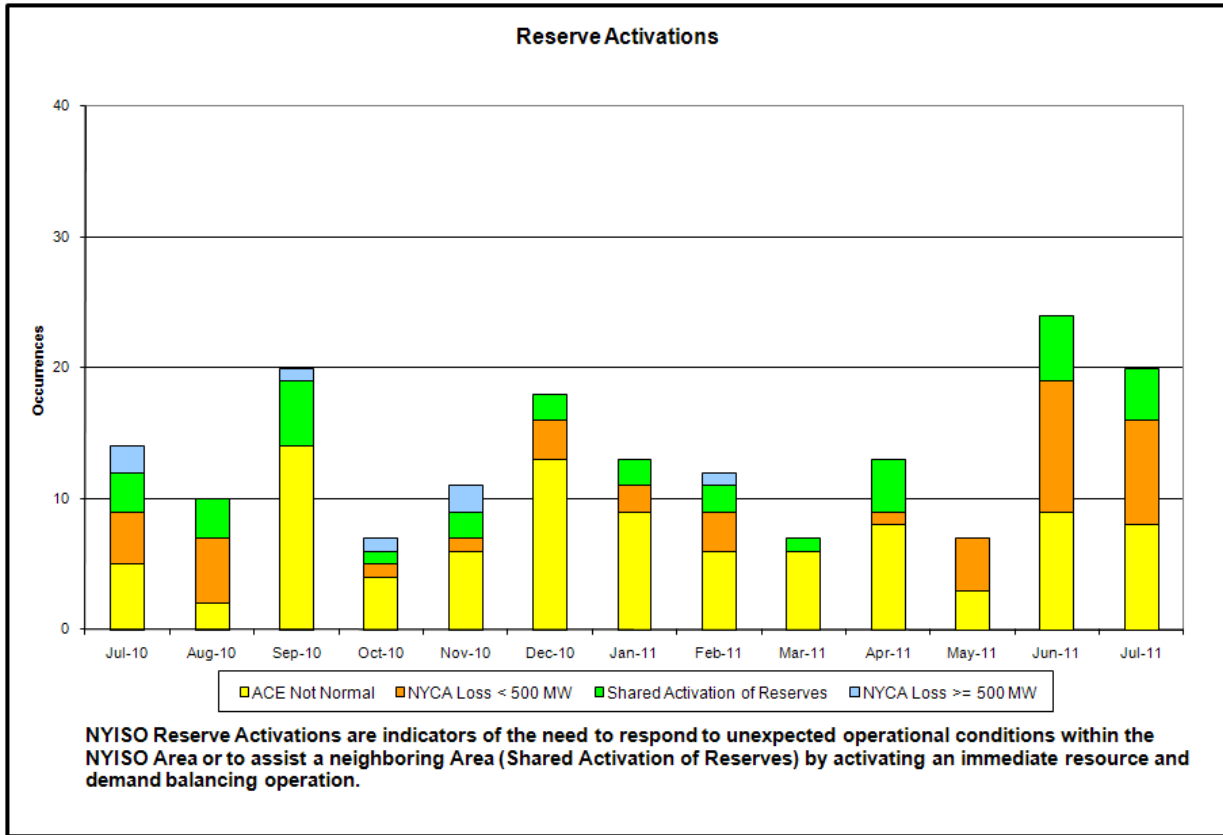
July 2011 Operations Performance Highlights

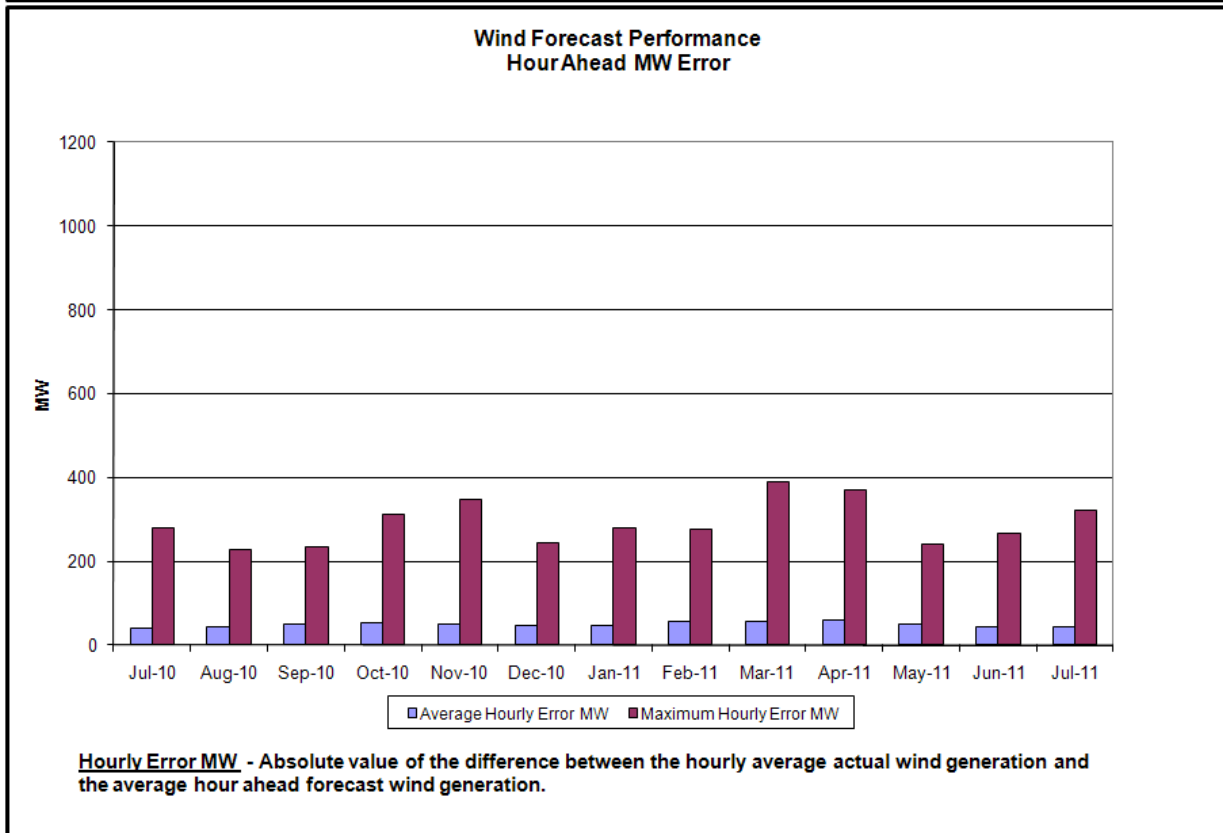
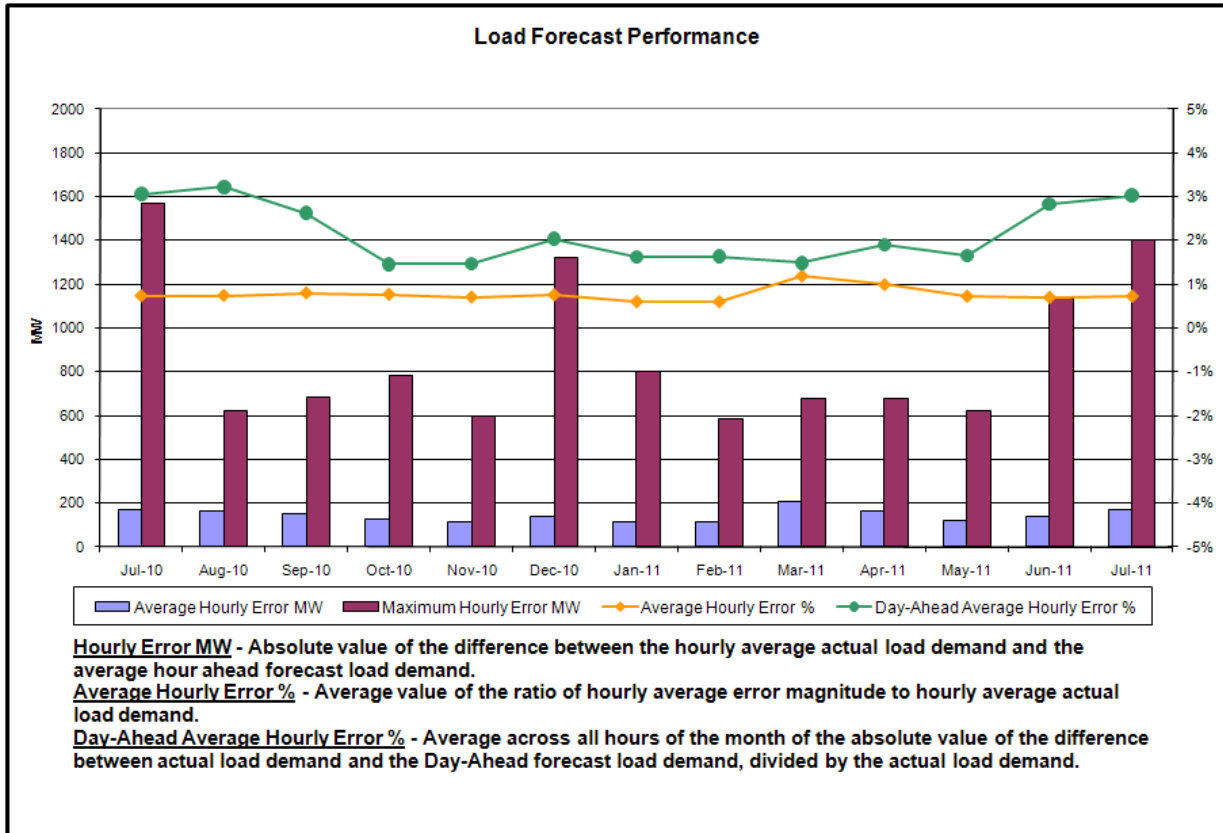
- Peak load of 33,865 MW occurred on 7/22/2011 HB 15
- All-time summer capability period peak load of 33,939 MW occurred on 8/2/2006 HB13
- EDRP/SCR resources were activated on 7/21/2011 and 7/22/2011 in response to high demand conditions
- Implemented intra-hour scheduling on the HQ Chateauguay interface on 7/27/2011
- 45 hours of Thunder Storm Alerts were declared
- **Continued Levels of Clockwise Lake Erie Loop Flows**
 - Decrease in clockwise Lake Erie circulation in July
 - 99 hours of NERC TLR level 3 curtailments

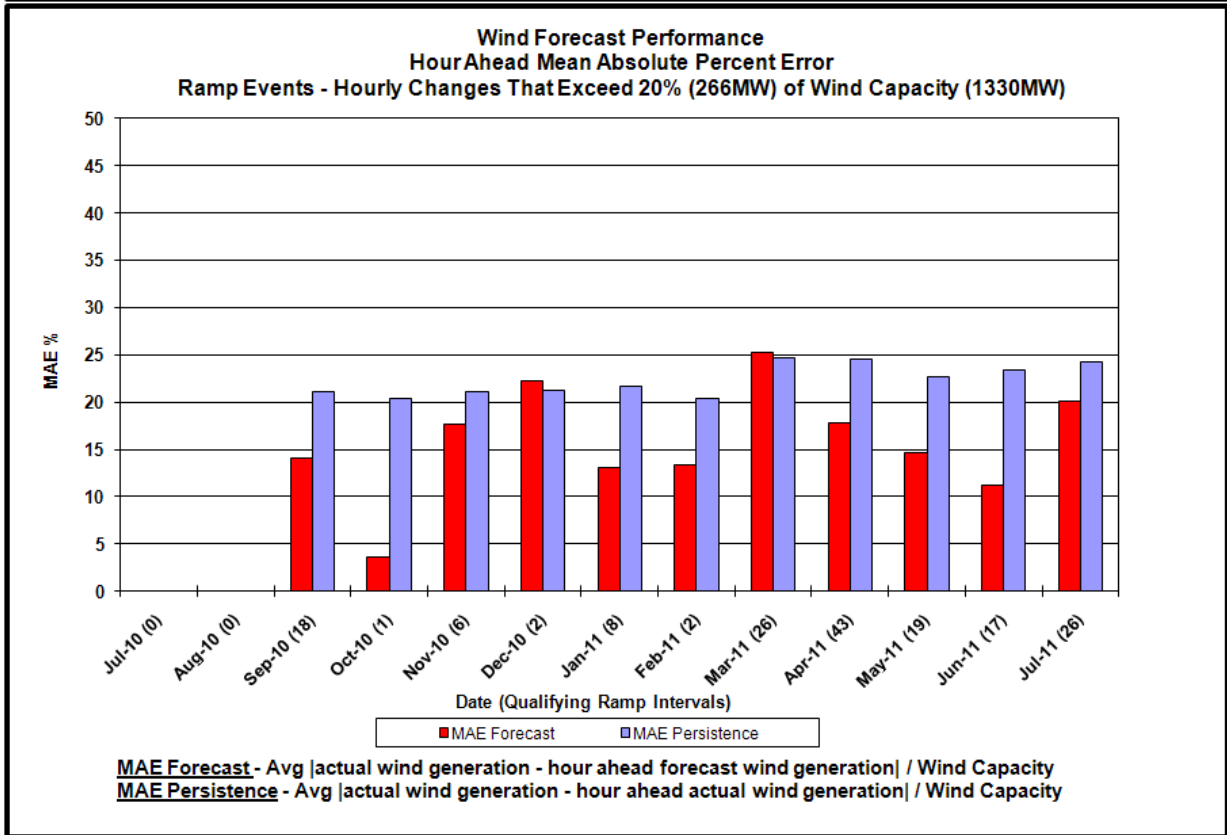
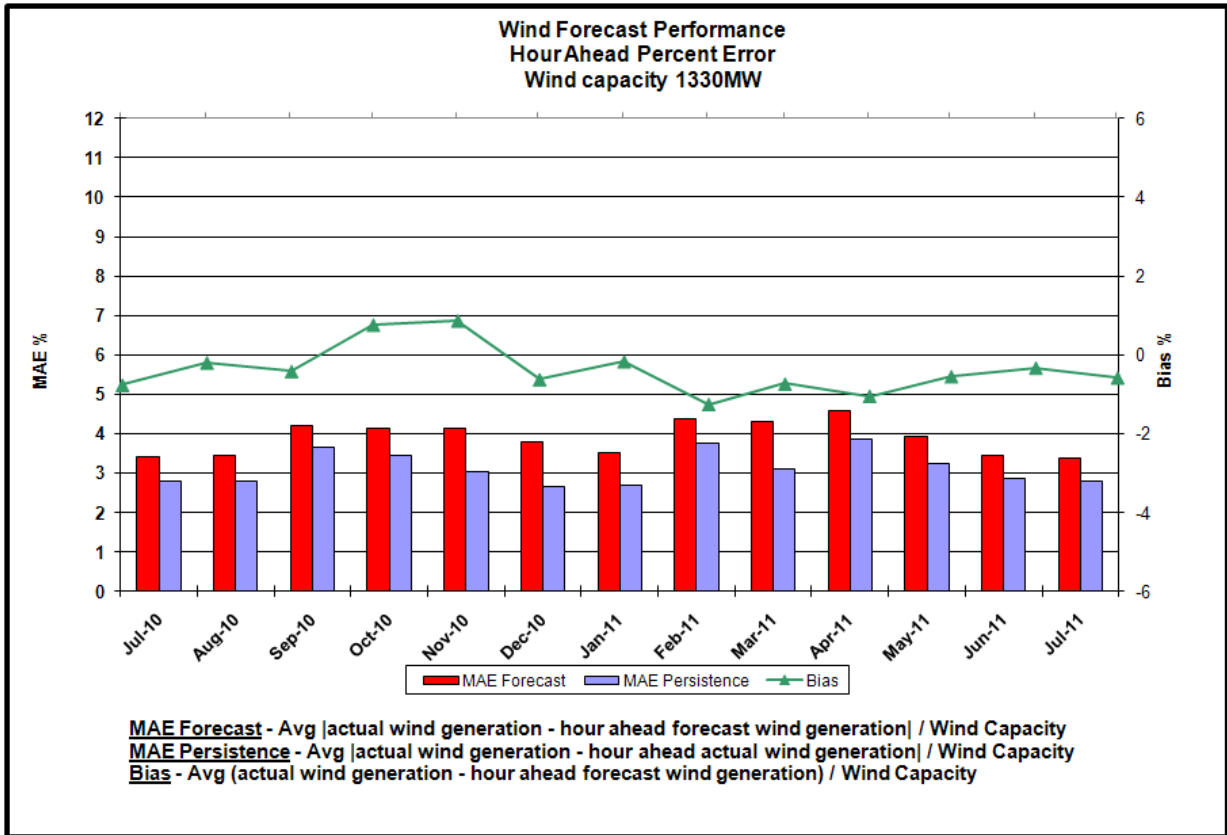
Reliability Performance Metrics

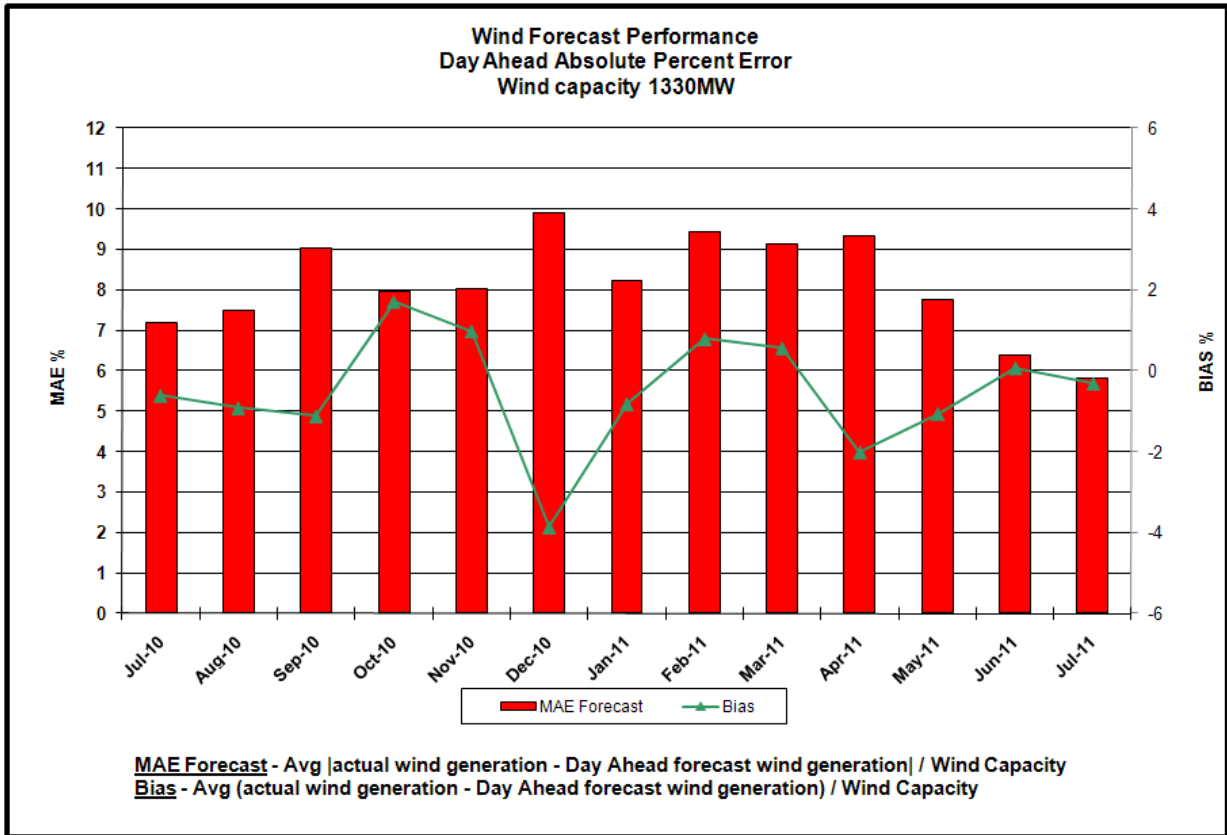


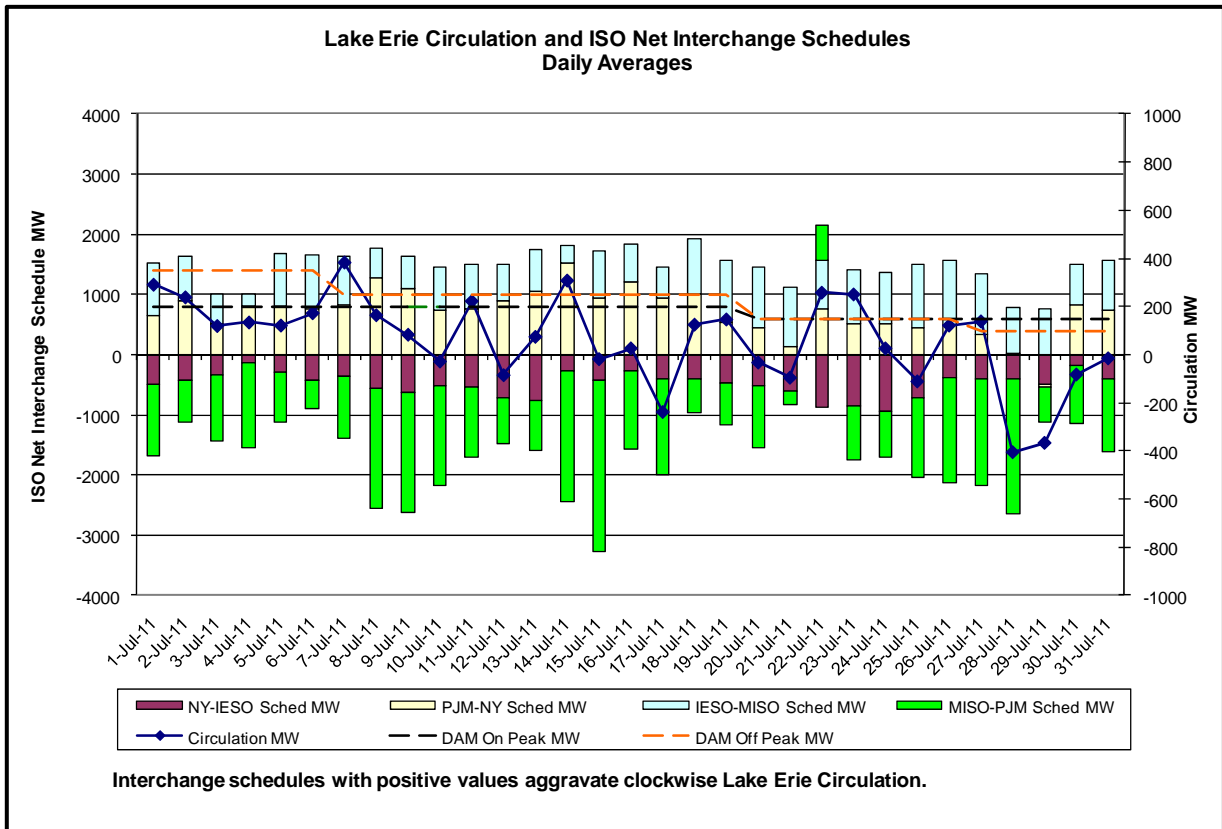
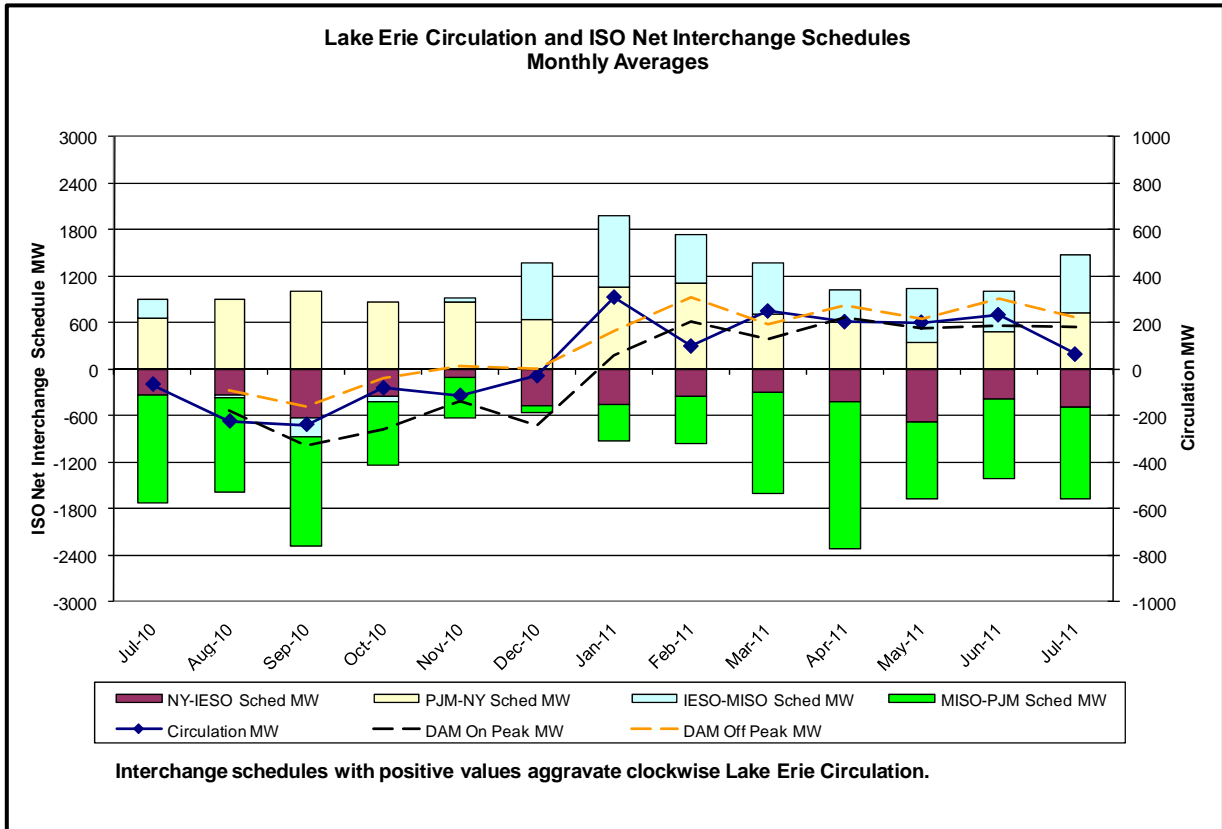




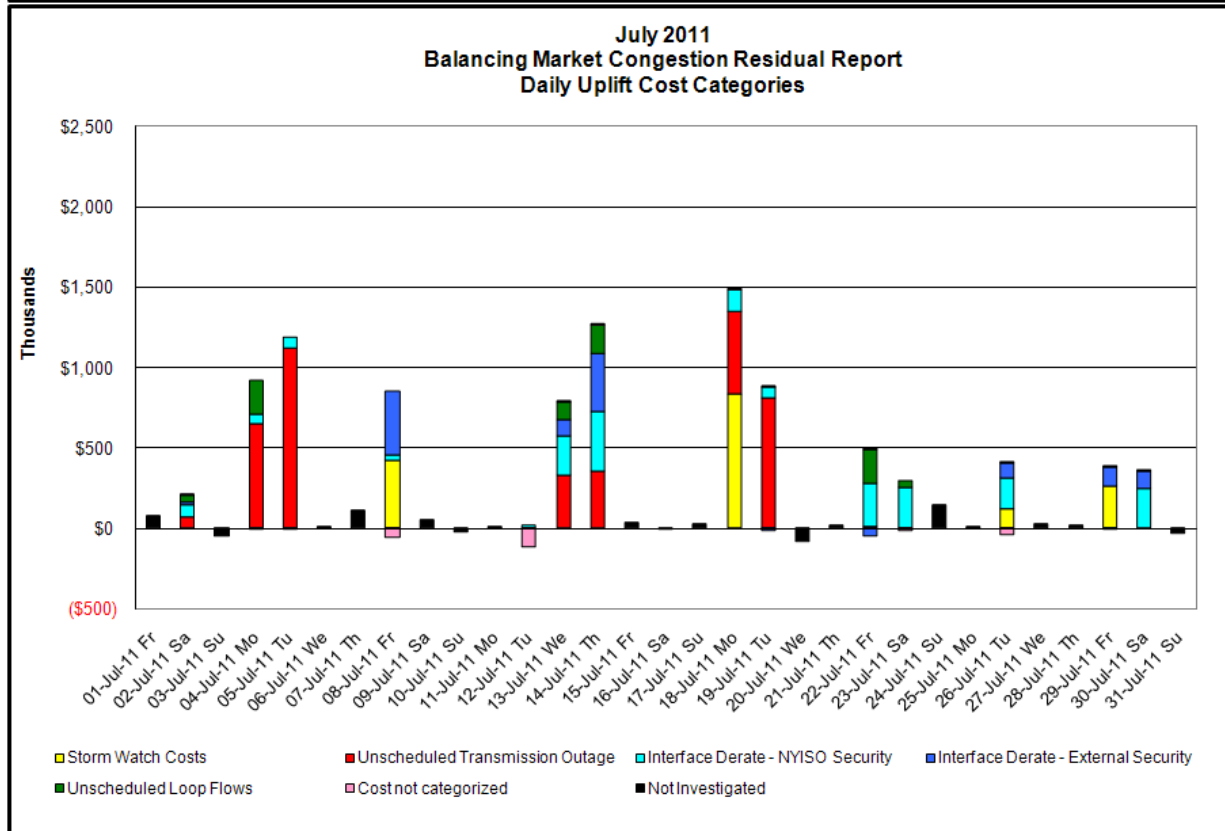
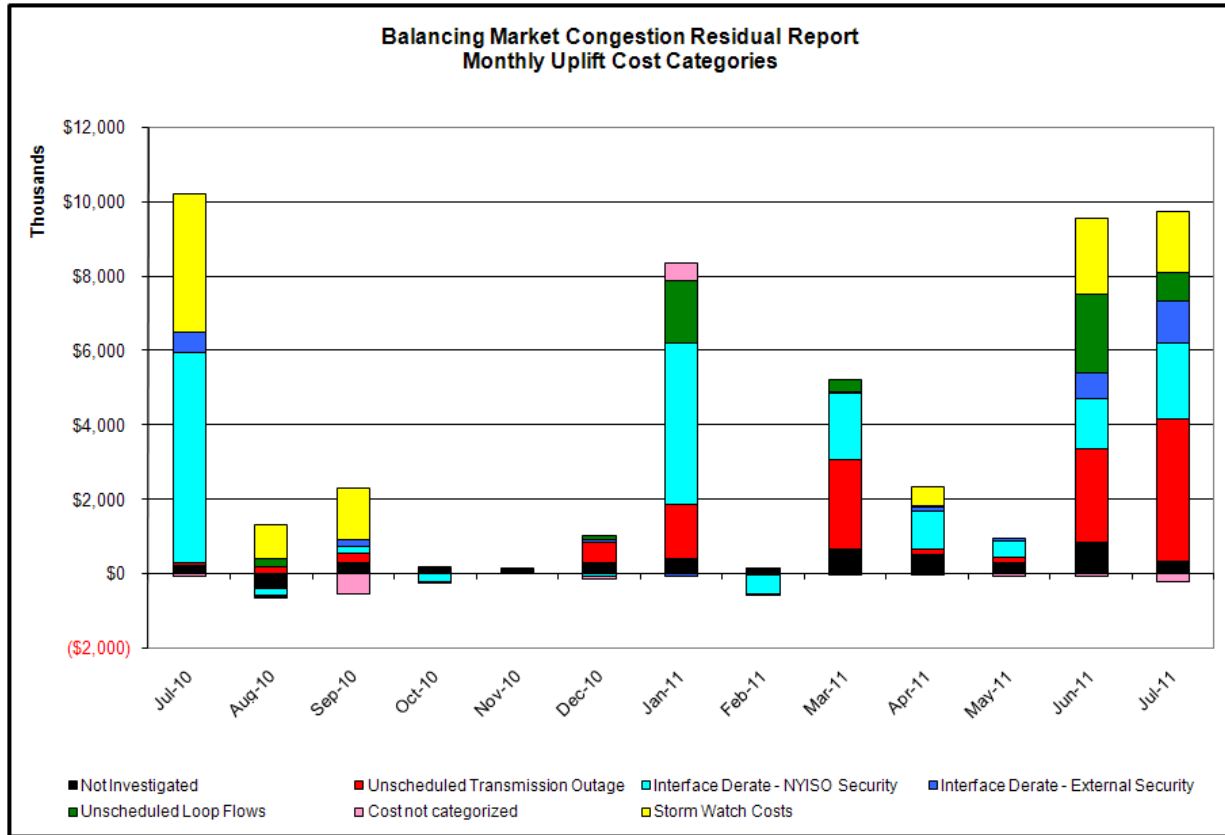








Market Performance Metrics



Day's investigated in July: 2, 4, 5, 8, 12, 13, 14, 18, 19, 22, 23, 26, 29, 30

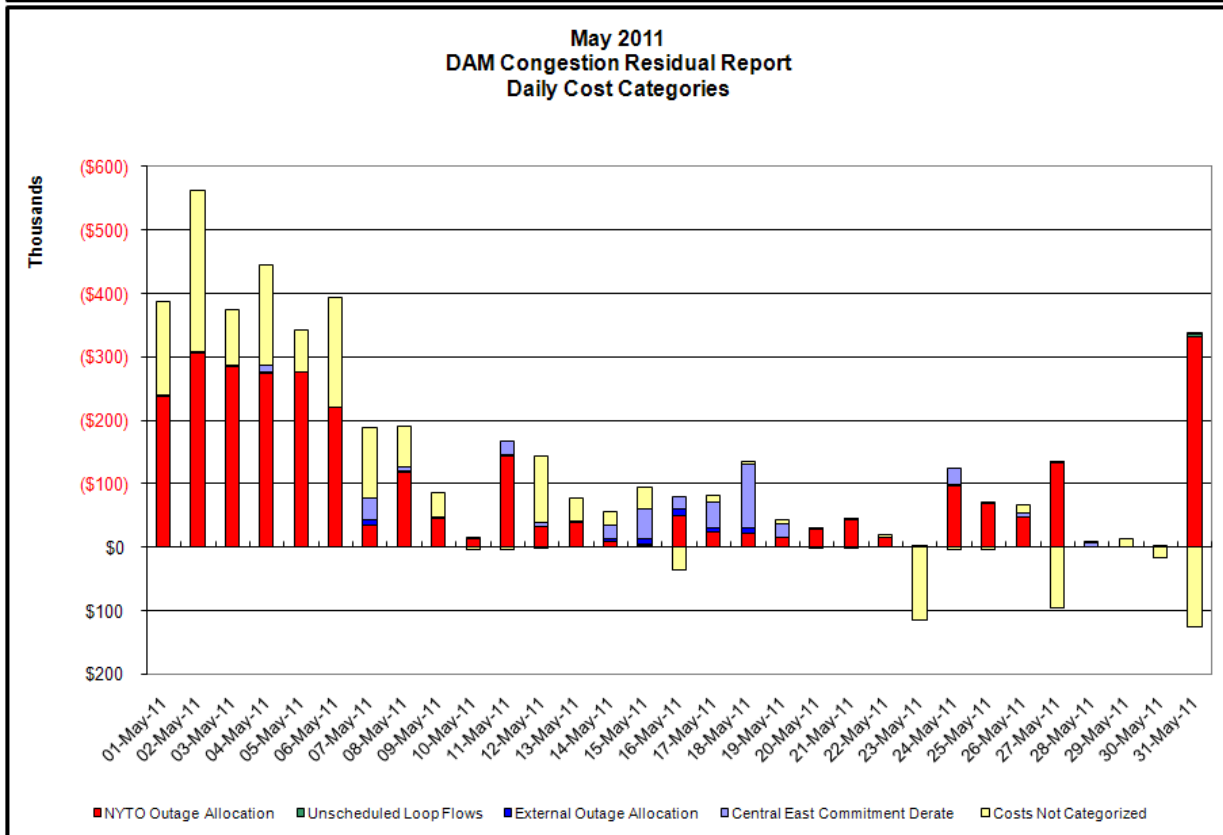
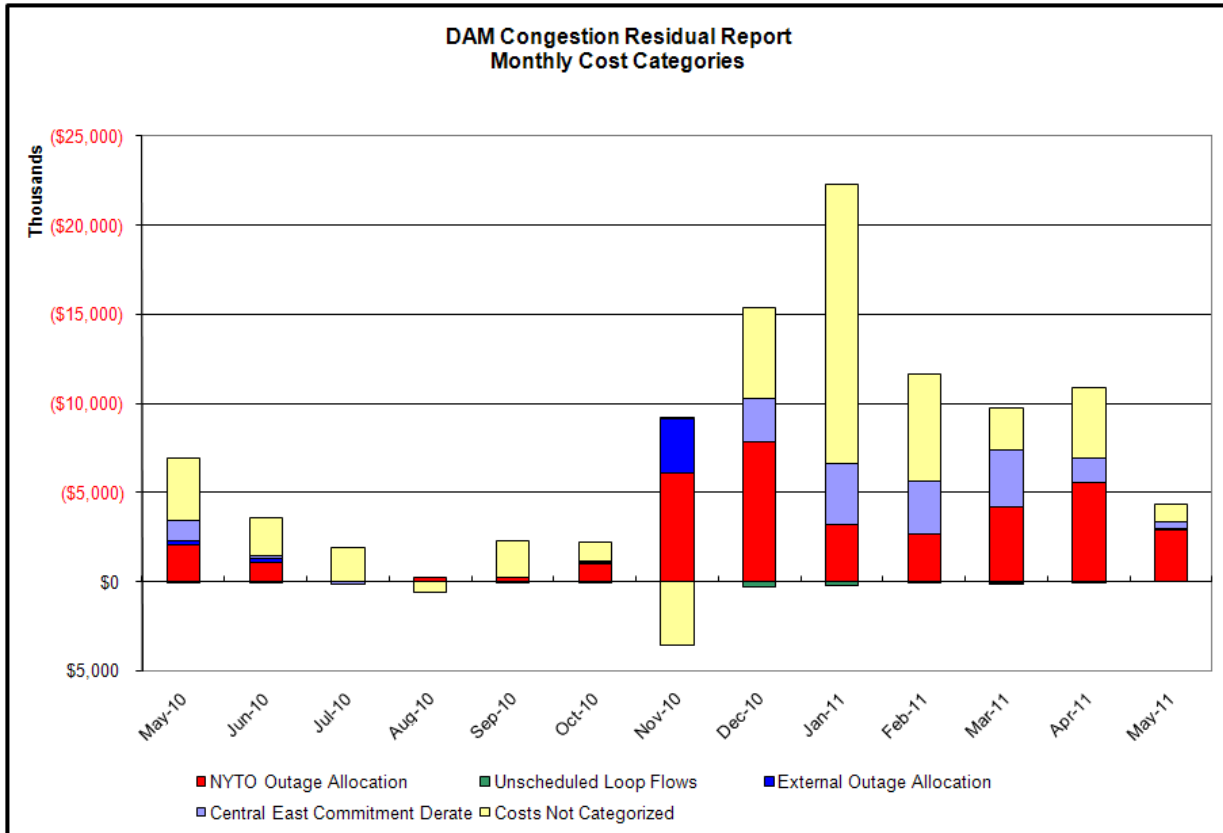
Event	Date (yyyy)	Hours	Description
	7/2/2011	16-21	Forced outage Roseton-Hurley Avenue 345kV (#303)
	7/2/2011	16-21	Derate Leeds-Pleasant Valley 345kv (#92) for I/o Athens-Pleasant Valley 345kV (#91)
	7/2/2011	18-21	HQ_CHAT-NY Scheduling Limit
	7/2/2011	17-21	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#92)
	7/4/2011	10-22	Forced outage Roseton-Hurley Avenue 345kV (#303)
	7/4/2011	10, 18, 19, 22, 23	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB (#RNS2)
	7/4/2011	15-17, 20	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#92)
	7/5/2011	10-18	Forced outage Roseton-Hurley Avenue 345kV (#303)
	7/5/2011	17	NYCA DNI Ramp Limit
	7/8/2011	12-21	Thunder Storm Alert
	7/8/2011	12, 13	Derate Astoria West/Queensbridge/Vernon
	7/8/2011	15	NE_AC-NY Scheduling Limit
	7/8/2011	13-21	HQ_CHAT-NY Scheduling Limit
	7/12/2011	13	NYCA DNI Ramp Limit
	7/12/2011	20, 22, 23	Derate Greenwood/Staten Island
	7/13/2011	18-23	Forced outage Athens-Pleasant Valley 345kV (#91)
	7/13/2011	15-16	Uprate Central East
	7/13/2011	0, 1, 20, 21	Derate Greenwood/Staten Island
	7/13/2011	19-23	Derate Leeds-Pleasant Valley 345kv (#92) for I/o SCB:Roseton
	7/13/2011	20-23	HQ_CHAT-NY Scheduling Limit
	7/13/2011	19	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Athens-Pleasant Valley (#91)
	7/14/2011	8-19	Forced outage Athens-Pleasant Valley 345kV (#91)
	7/14/2011	17, 23	NYCA DNI Ramp Limit
	7/14/2011	8-19	Derate Leeds-Pleasant Valley 345kV (#92) for I/o SCB:Roseton
	7/14/2011	8-19, 23	HQ_CHAT-NY Scheduling Limit
	7/14/2011	8, 14-16	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#92)
	7/18/2011	10-20, 22-23	Thunder Storm Alert
	7/18/2011	7, 10-14, 18-23	Forced outage Sprainbrook-East Garden City 345kV (#Y49)
	7/18/2011	16, 22, 23	NYCA DNI Ramp Limit
	7/19/2011	0-3	Forced outage Dunwoodie-Shore Road 345kV (#Y50)
	7/19/2011	6-8, 10-14, 16, 18, 20, 21, 23	Forced outage Sprainbrook-East Garden City 345kV (#Y49)
	7/19/2011	0, 1, 7, 8	Derate Astoria West/Queensbridge/Vernon
	7/19/2011	14	Derate Leeds-Pleasant Valley 345kv (#92) for I/o Athens-Pleasant Valley 345kV (#91)
	7/19/2011	17	PJM_AC ACTIVE DNI Ramp Limit
	7/22/2011	16	Forced outage Astoria East-Corona 138kV (#34182)
	7/22/2011	1, 10, 12, 13, 18, 22	NYCA DNI Ramp Limit
	7/22/2011	7	Derate Astoria West/Queensbridge/Vernon [limit reduced to 315MW]
	7/22/2011	11, 15, 16, 19, 20	Derate Dysinger East
	7/22/2011	0, 1	Derate Greenwood/Staten Island
	7/22/2011	12, 13, 15, 16, 19, 21	Derate Athens-Pleasant Valley 345kV (#91) for I/o Leeds-Pleasant Valley 345kV (#92)
	7/22/2011	9	Uprate Central East
	7/22/2011	1, 12	PJM_AC ACTIVE DNI Ramp Limit
	7/22/2011	14, 19	HQ_CHAT-NY Scheduling Limit
	7/22/2011	8, 14	IESO_AC ACTIVE DNI Ramp Limit
	7/22/2011	18	NE_AC ACTIVE DNI Ramp Limit
	7/22/2011	11, 12, 13, 15, 16, 19-21	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Athens-Pleasant Valley (#92), Leeds-Pleasant Valley (#91), Dysinger East
	7/23/2011	10-15	Derate Astoria East/Corona/Jamaica
	7/23/2011	0, 9-15, 18, 19	Derate Dunwoodie-Shore Road 345kV (#Y50)
	7/23/2011	0-5, 9, 11, 19, 23	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o Neptune
	7/23/2011	12-14	Derate Leeds-New Scotland 345kV (#93) for I/o Leeds-New Scotland 345kV (#94)
	7/23/2011	9, 11-13, 15, 18, 19	Derate Leeds-Pleasant Valley 345kv (#92) for I/o Athens-Pleasant Valley 345kV (#91)
	7/23/2011	0, 9-11	Derate Mott Haven-Dunwoodie 345kV (#72)
	7/23/2011	11-14	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#91), Leeds-New Scotland (#93)
	7/26/2011	18-22	Thunder Storm Alert
	7/26/2011	16-18	Derate Leeds-New Scotland 345kV (#93) for I/o Leeds-New Scotland 345kV (#94)
	7/26/2011	19-22	HQ_CHAT-NY Scheduling Limit
	7/26/2011	17	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-New Scotland (#93)
	7/29/2011	16-20	Thunder Storm Alert
	7/29/2011	10, 23	NYCA DNI Ramp Limit
	7/29/2011	10, 13, 19, 23	PJM_AC ACTIVE DNI Ramp Limit
	7/29/2011	17-21	HQ_CHAT-NY Scheduling Limit
	7/30/2011	10-16	Derate Athens-Pleasant Valley 345kV (#91) for I/o Leeds-Hurley Avenue 345kV (#301)
	7/30/2011	0-2	PJM_AC ACTIVE DNI Ramp Limit

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.	

