

Operations Performance Metrics Monthly Report



February 2014 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 March 10, 2014.

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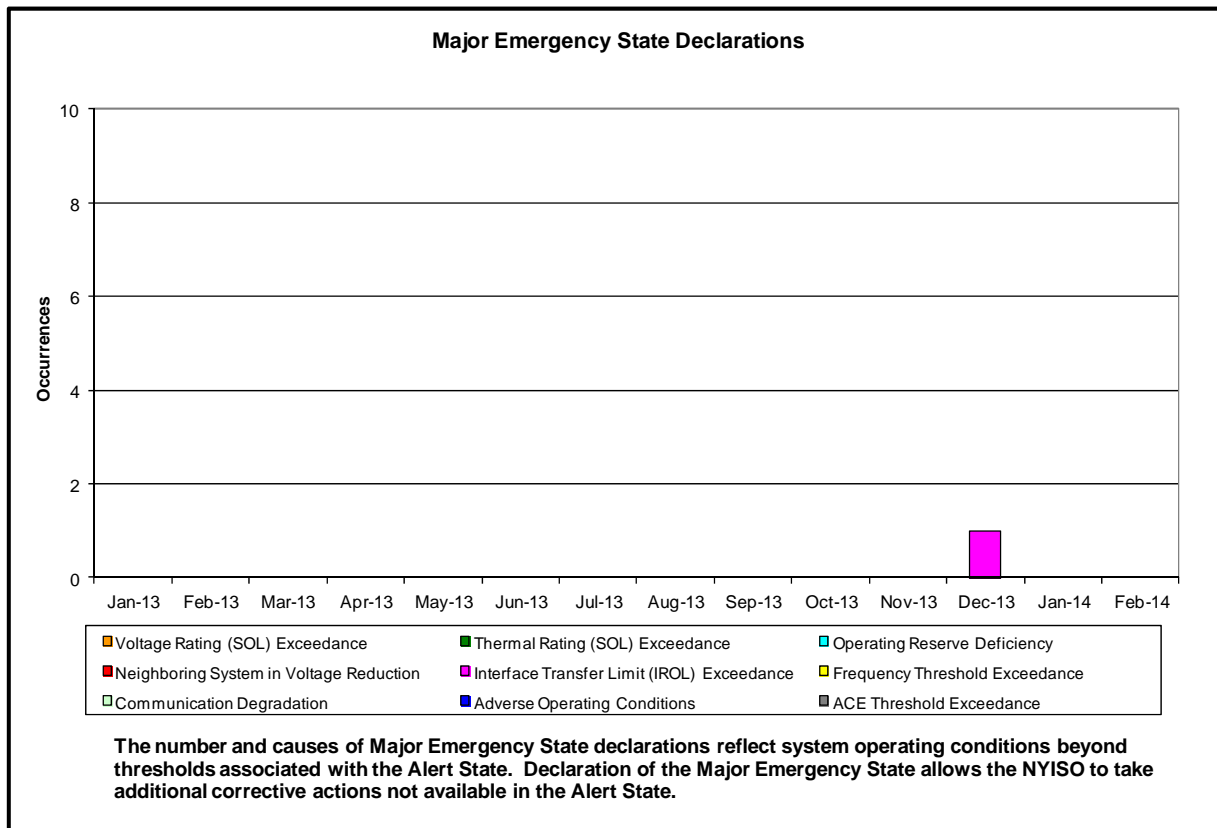
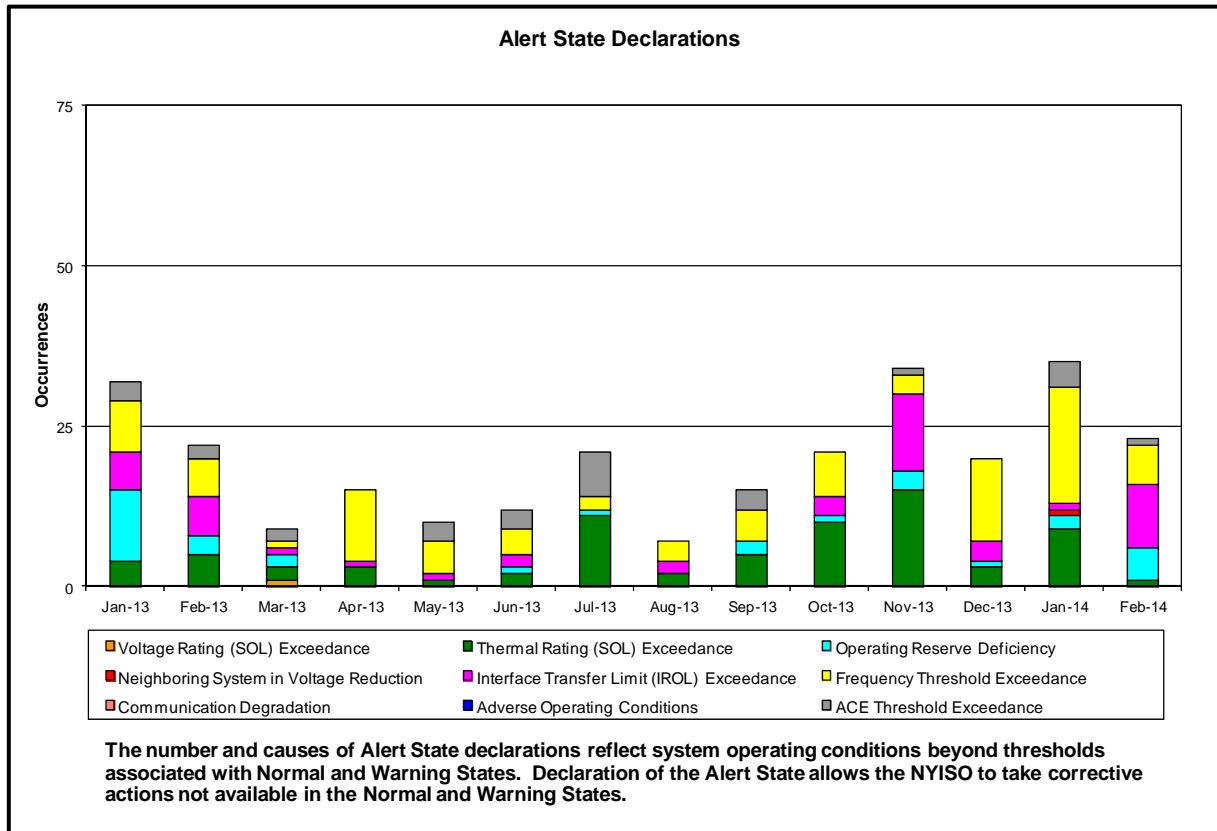
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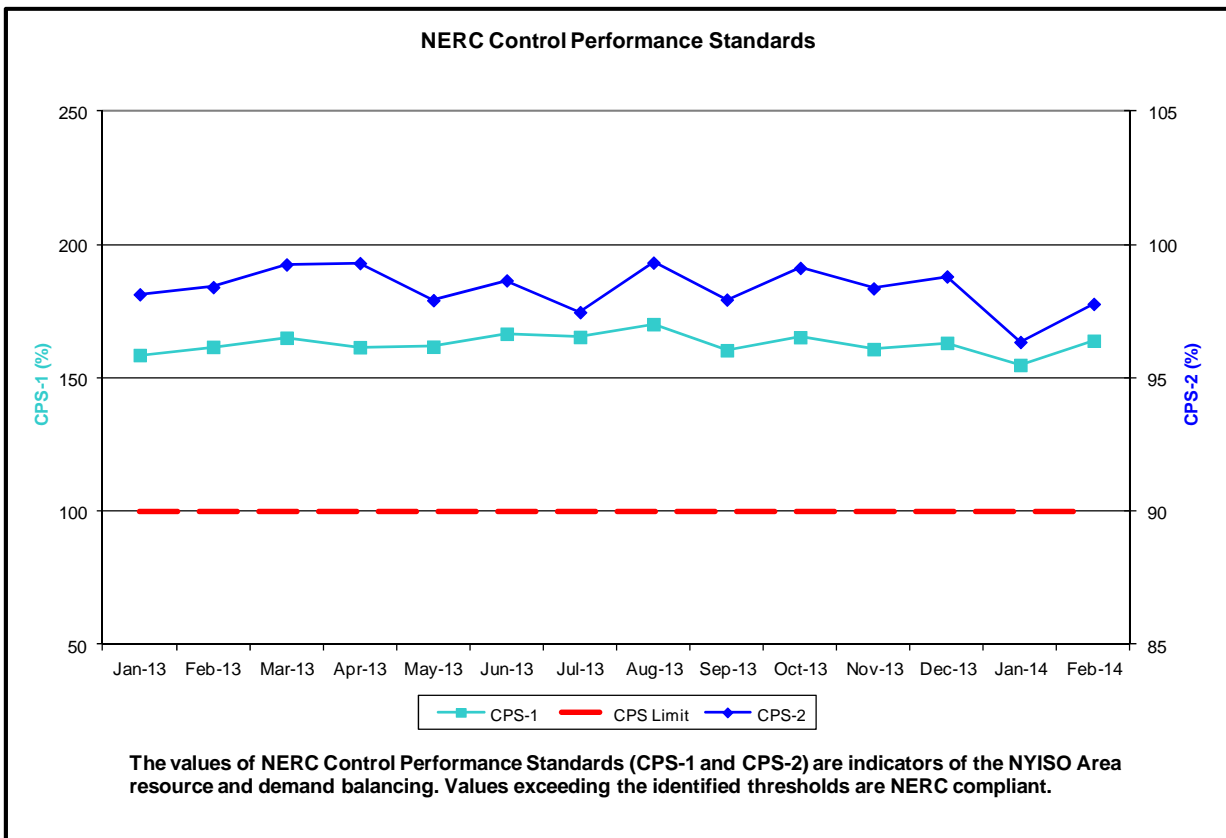
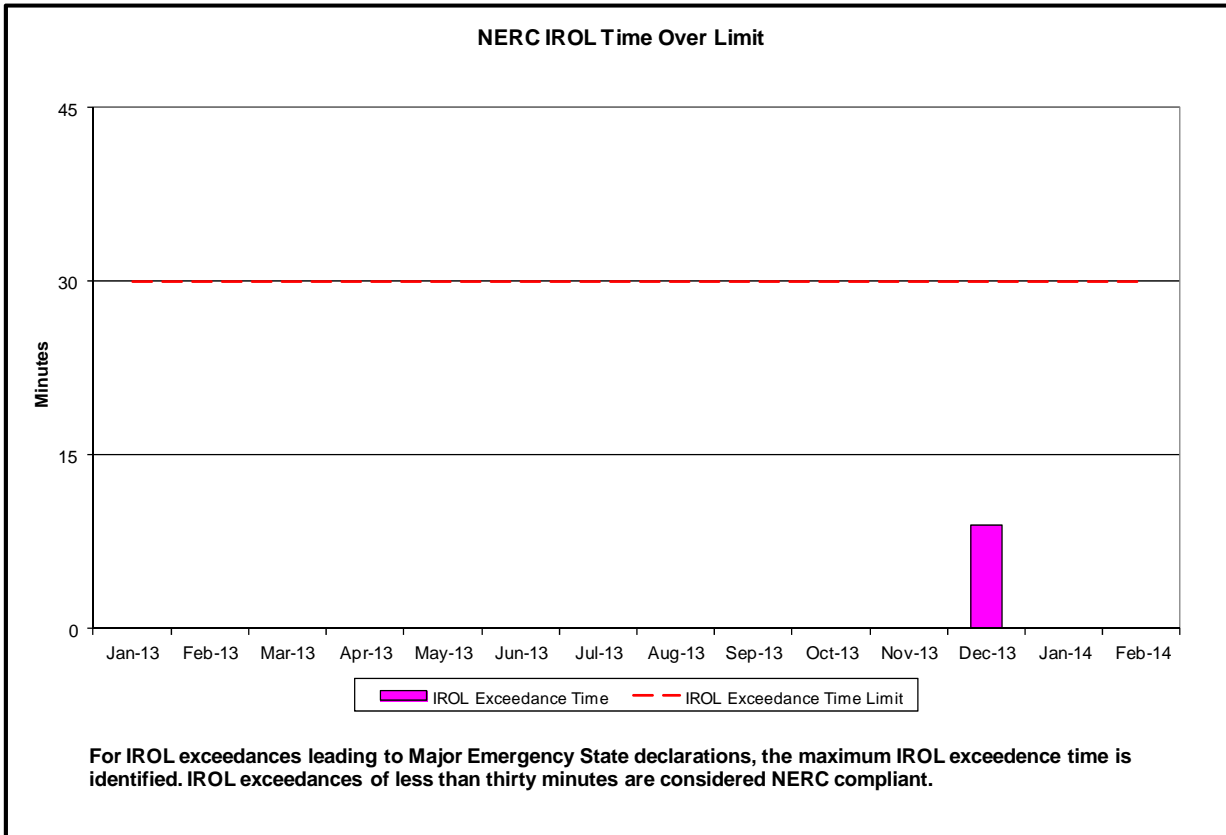
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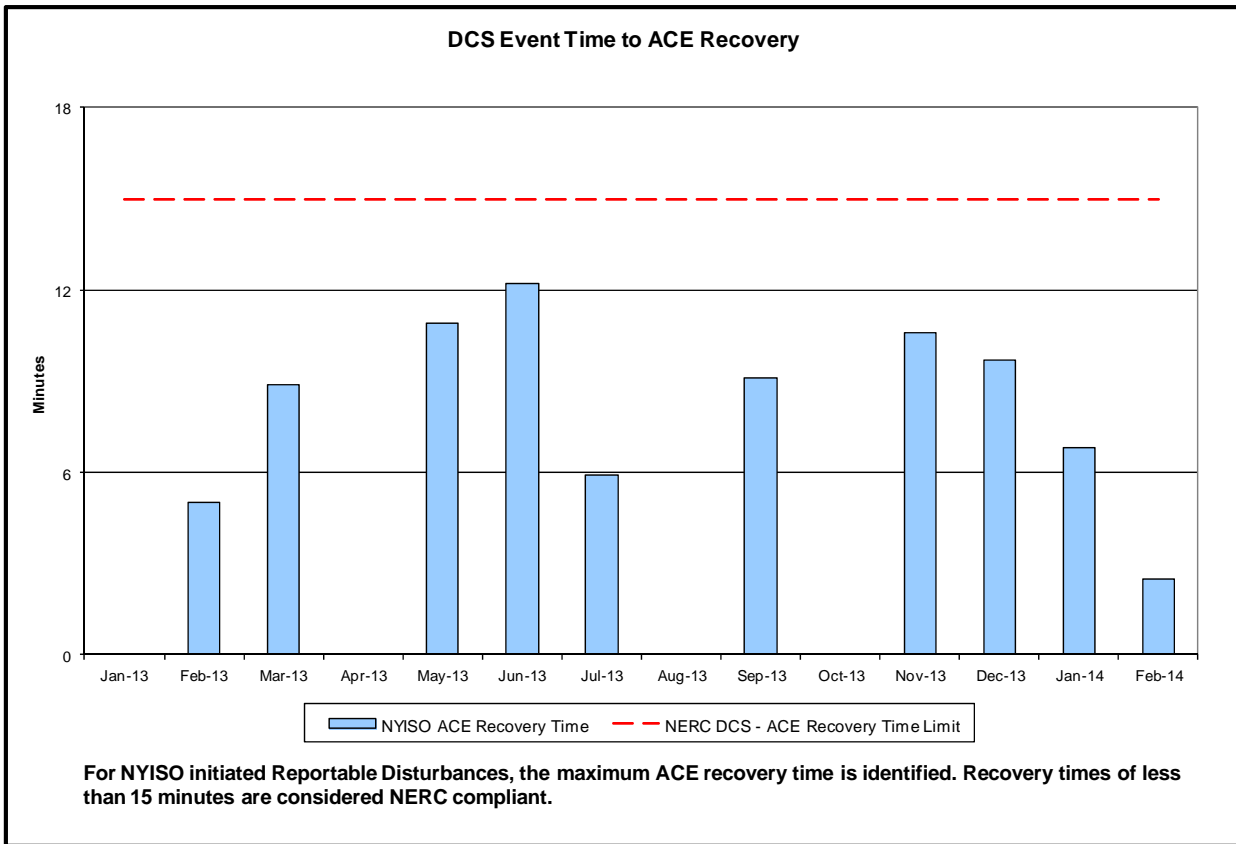
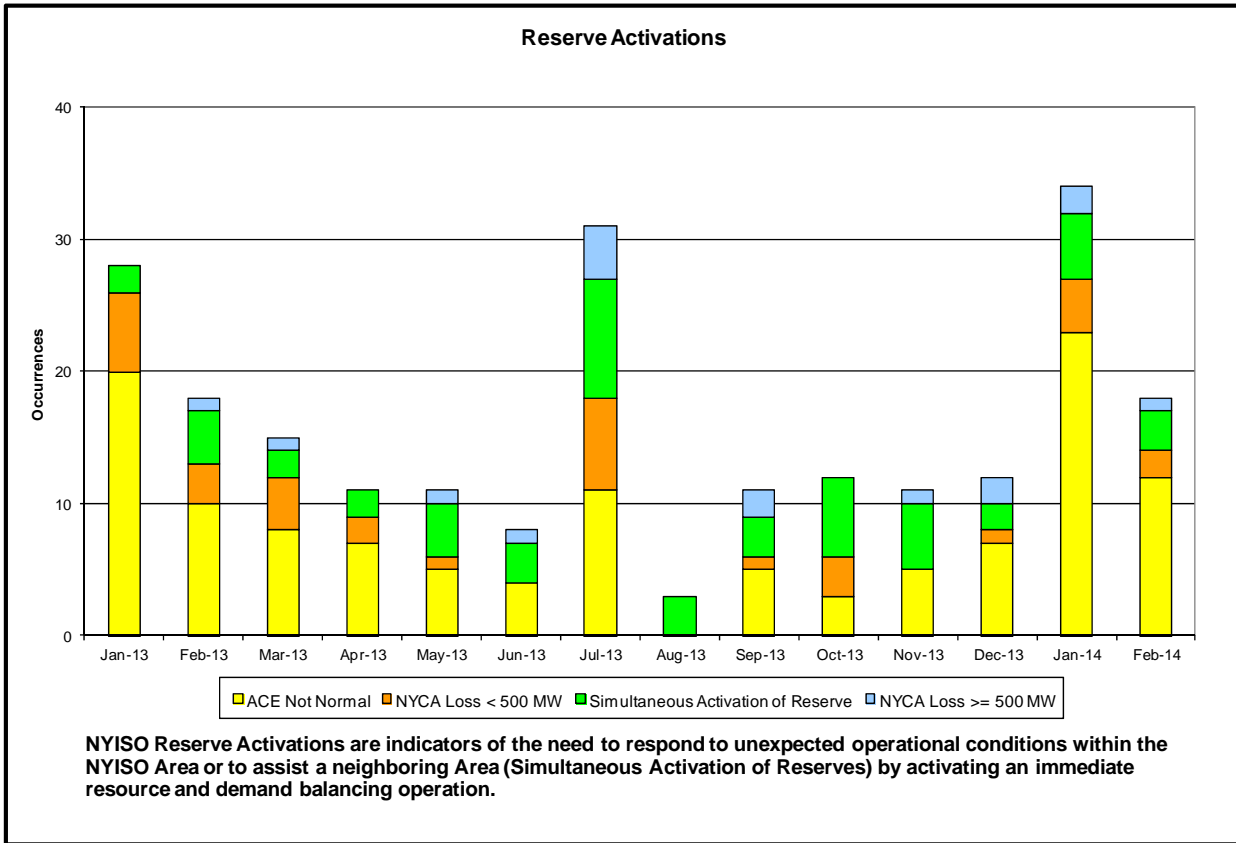
February 2014 Operations Performance Highlights

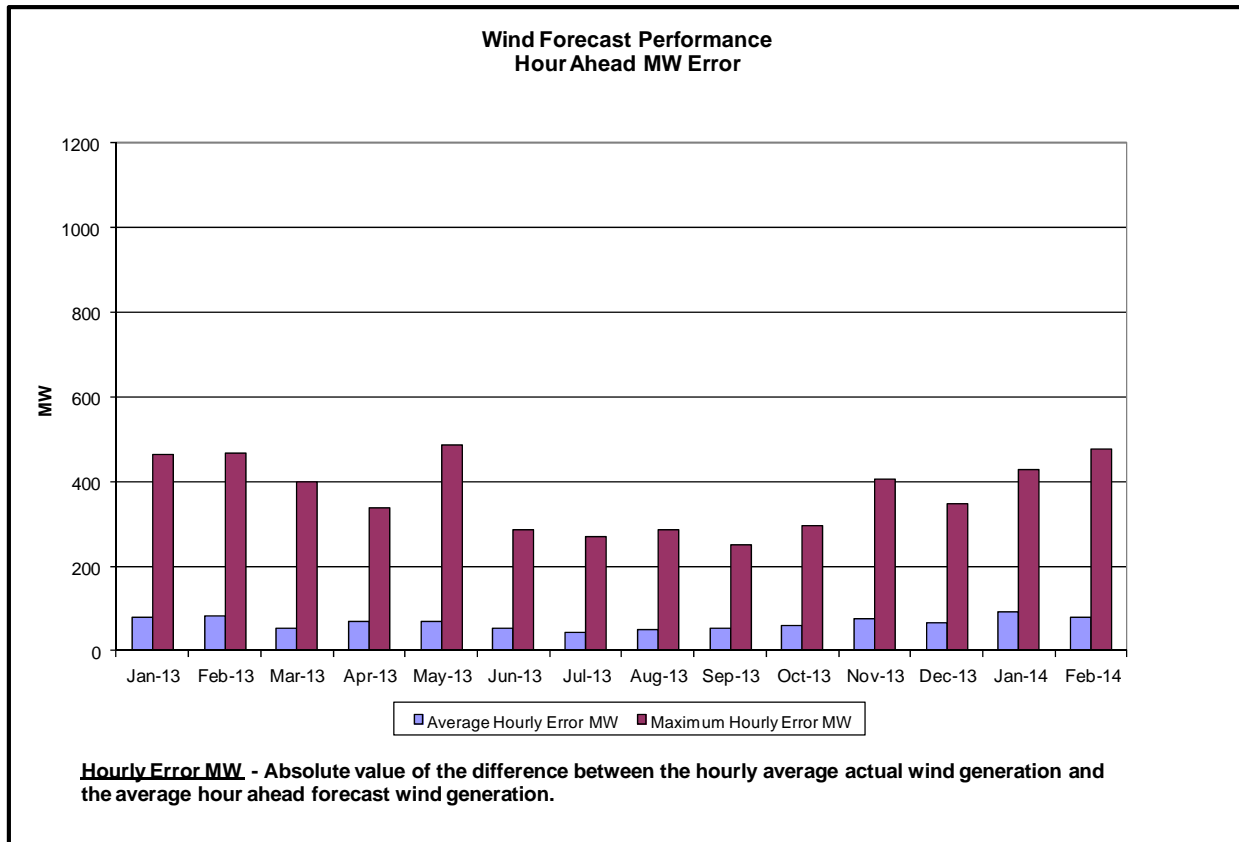
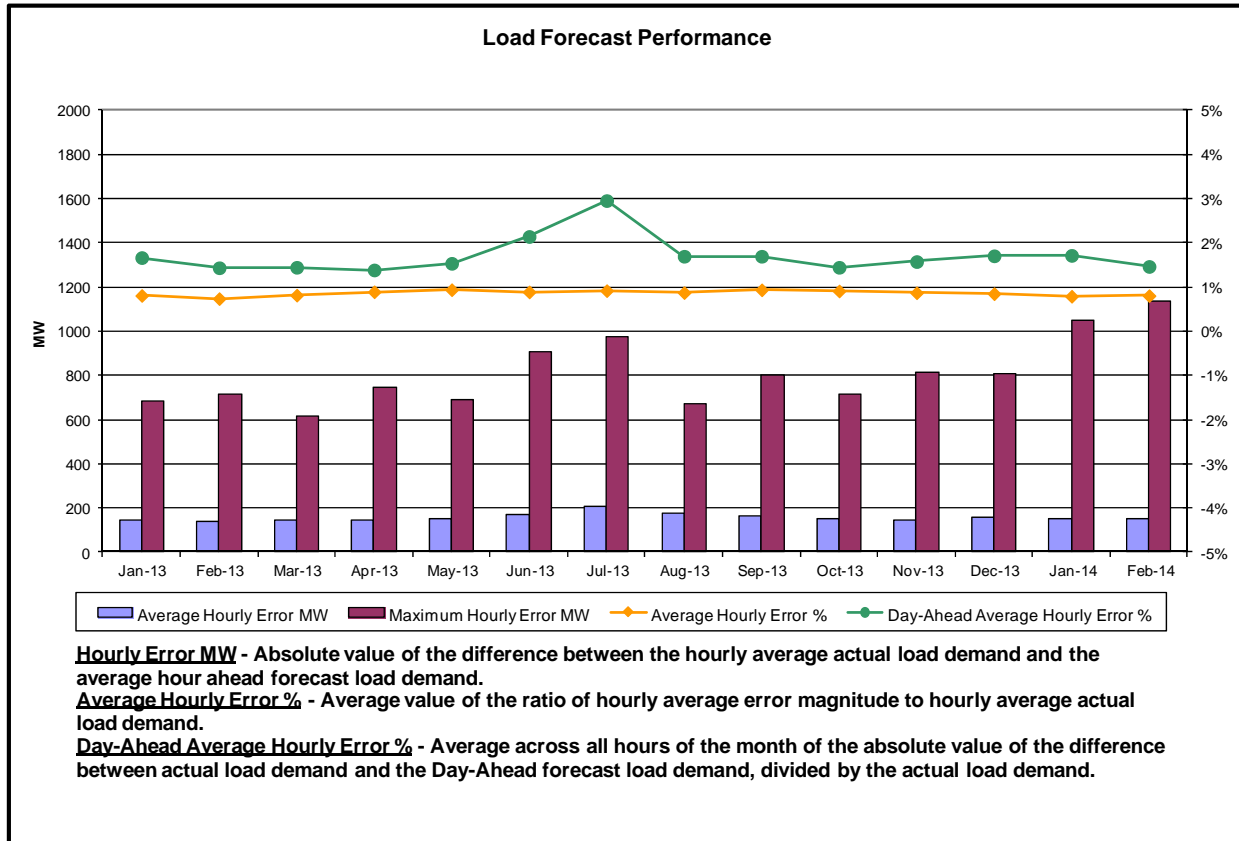
- Peak load of 23,487 MW occurred on 2/11/2014 HB 18
- All-time winter capability period peak load of 25,738 MW occurred on 1/7/2014 HB 18
- 3 hours of Thunder Storm Alerts were declared
- 7 hours of NERC TLR level 3 curtailment
- Broader Regional Market Coordination monthly value was \$1.72M
 - Branchburg-Ramapo 500kV (#5018) circuit out-of-service 2/7 – 2/23
- Broader Regional Market Coordination year-to-date value was \$5.30M
- Statewide uplift cost monthly average was \$(0.49)/MWh
- Local reliability uplift cost monthly average was \$0.73/MWh
- NYPA completed project to separate the Moses-Willis MW-1 and MW-2 circuits on 2/13. NYISO will no longer evaluate the MW-1 and MW-2 common tower contingency, as reflected in the Emergency Operations Manual.

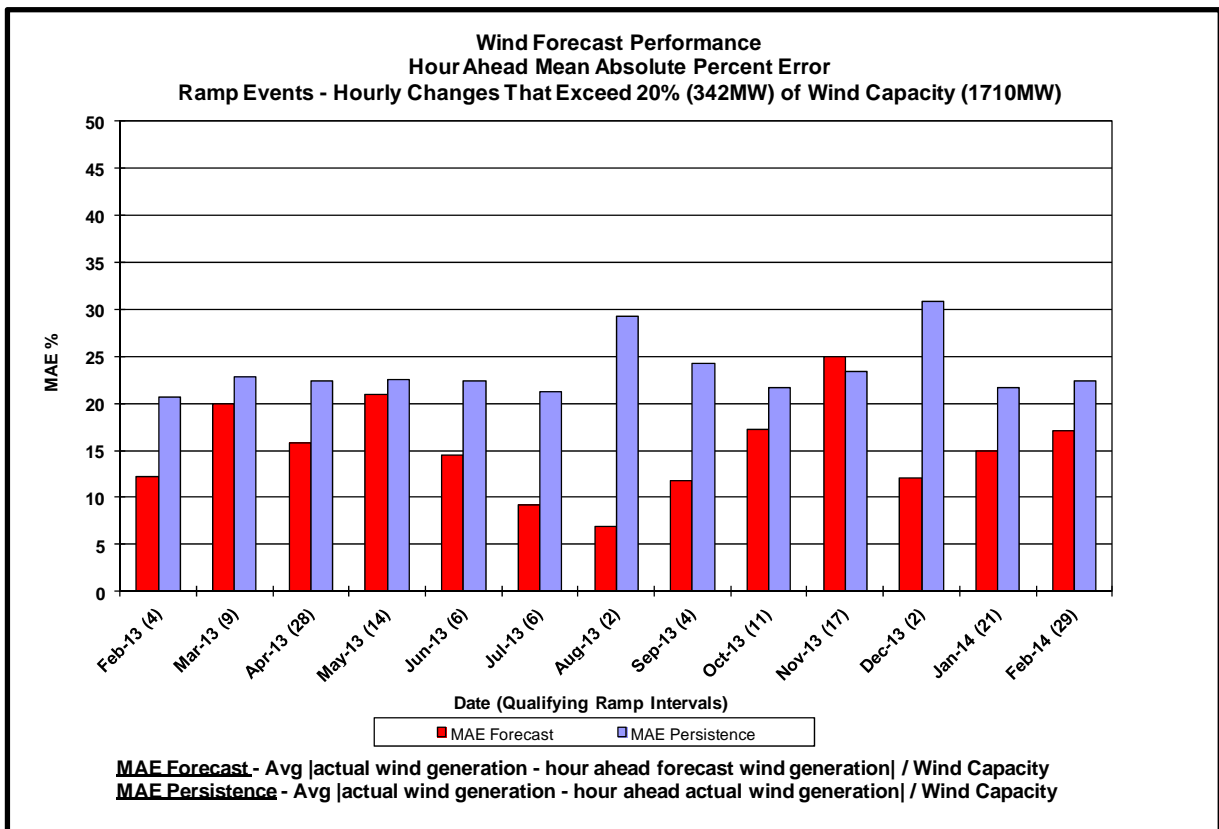
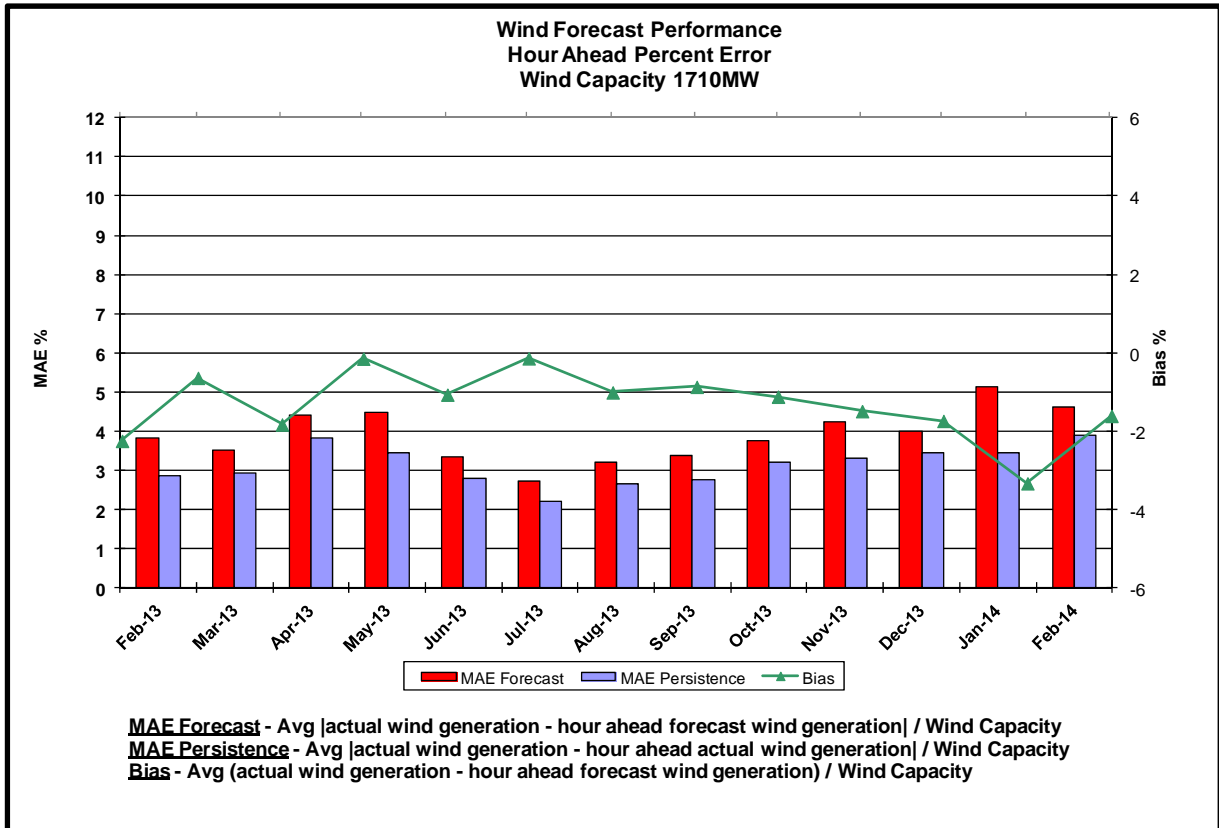
- Reliability Performance Metrics

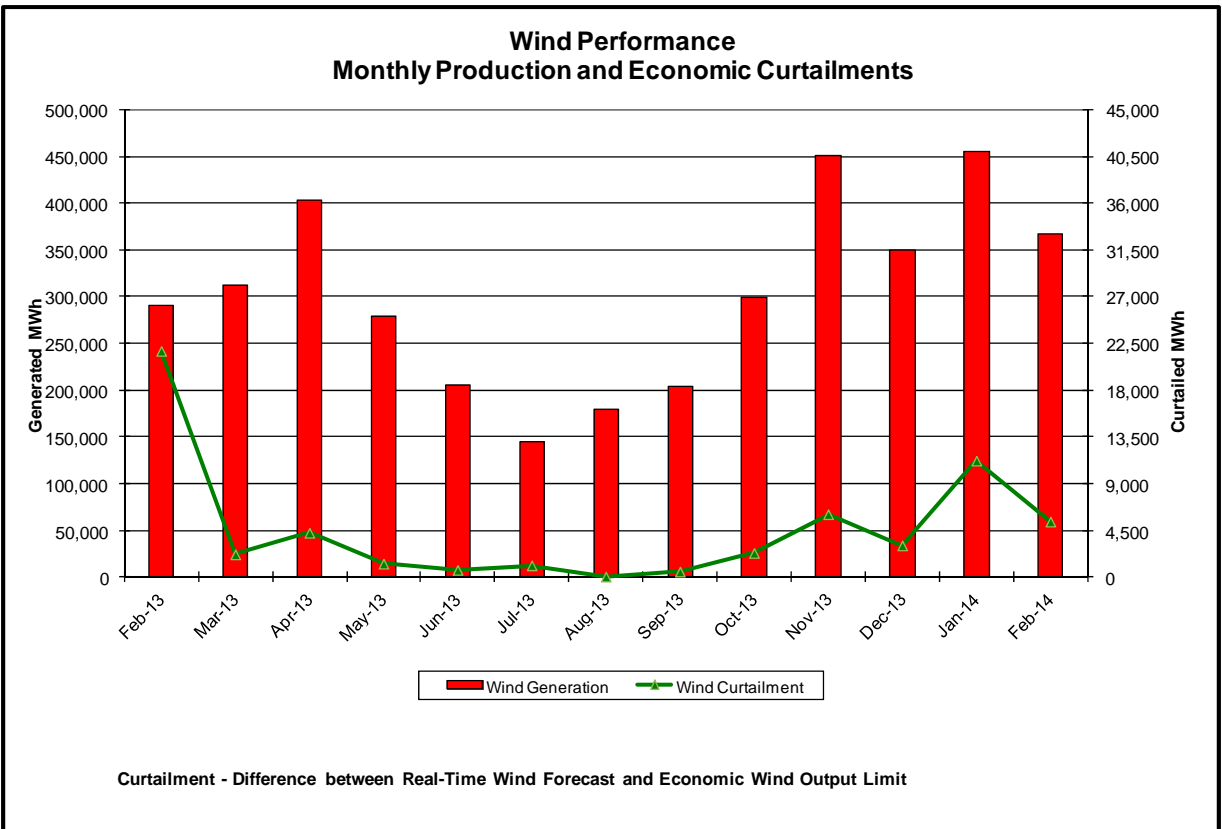
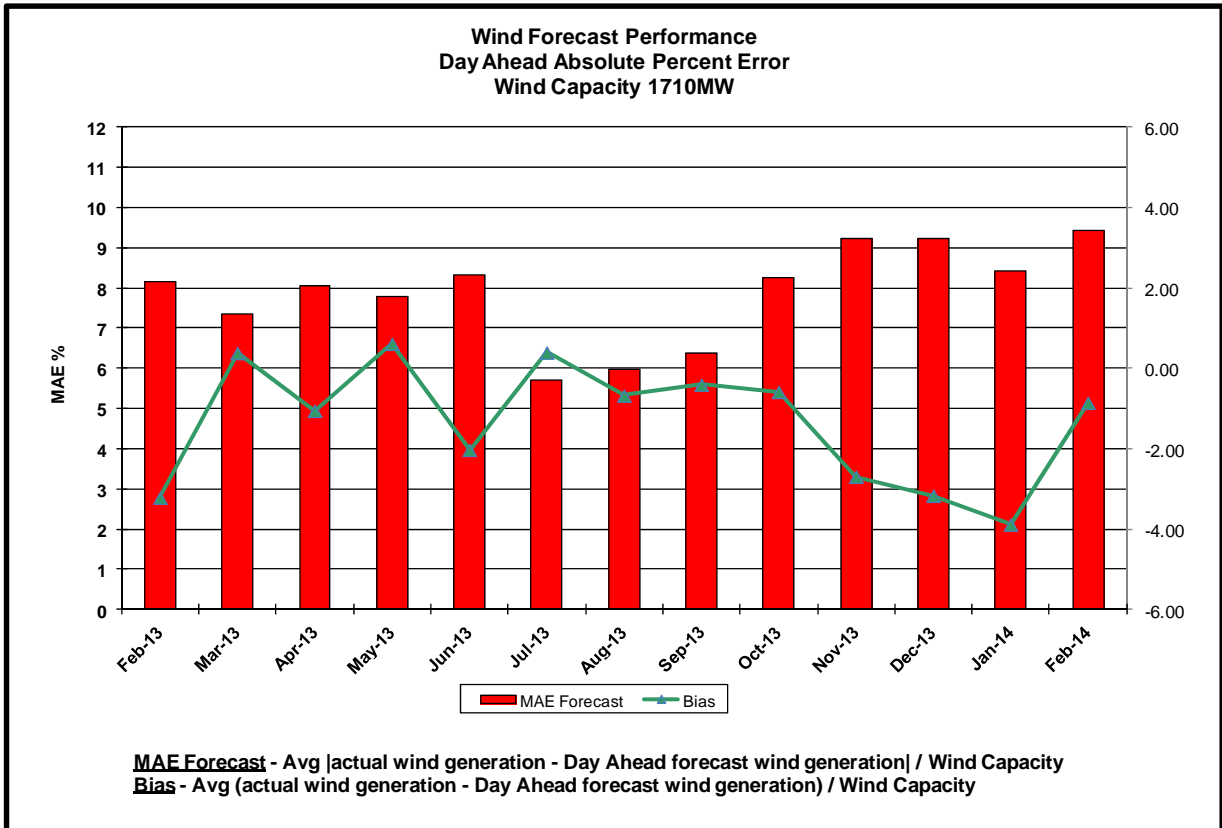


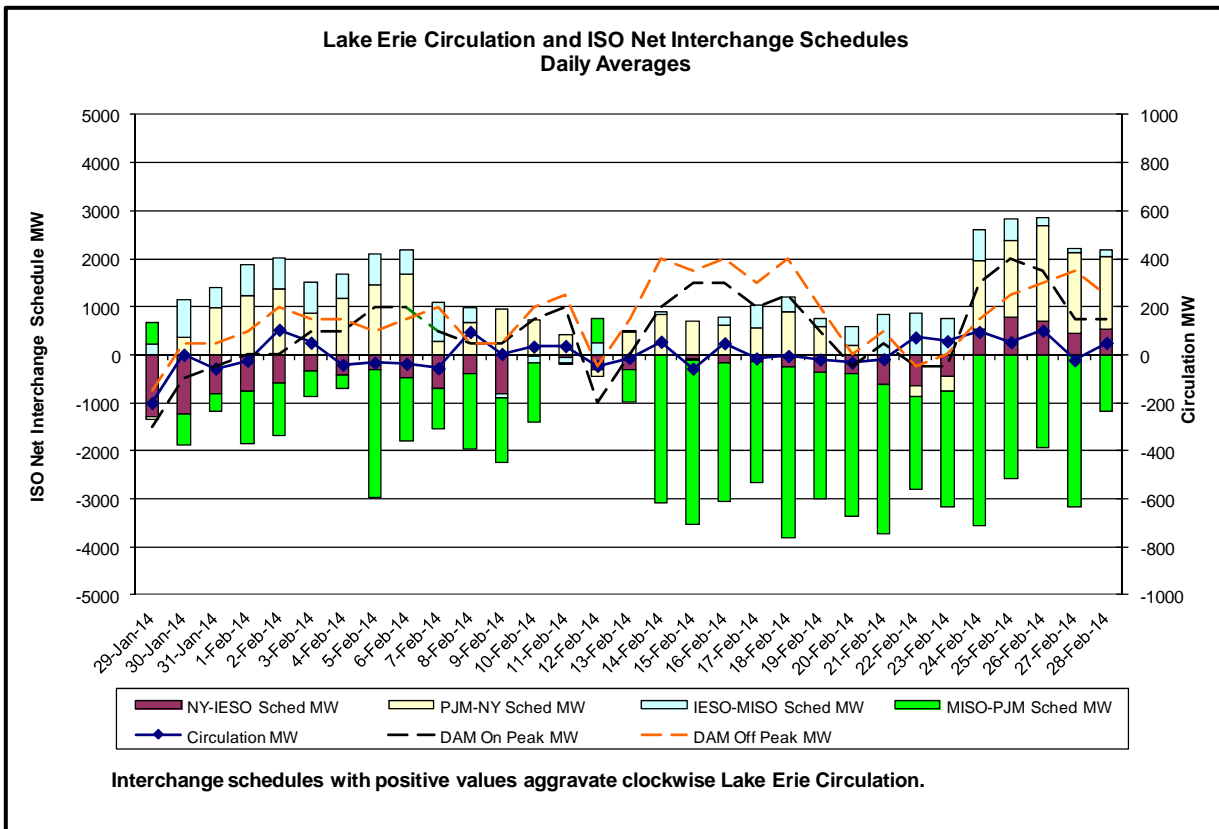
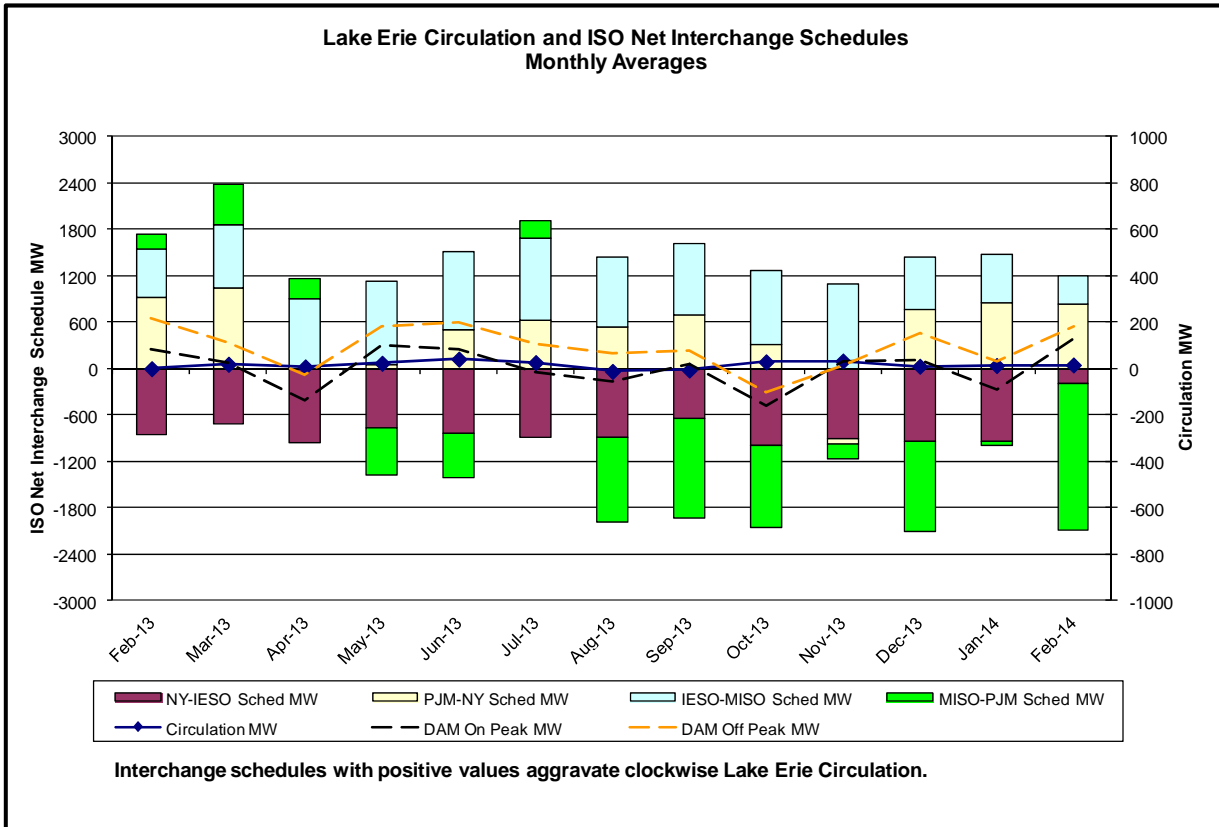




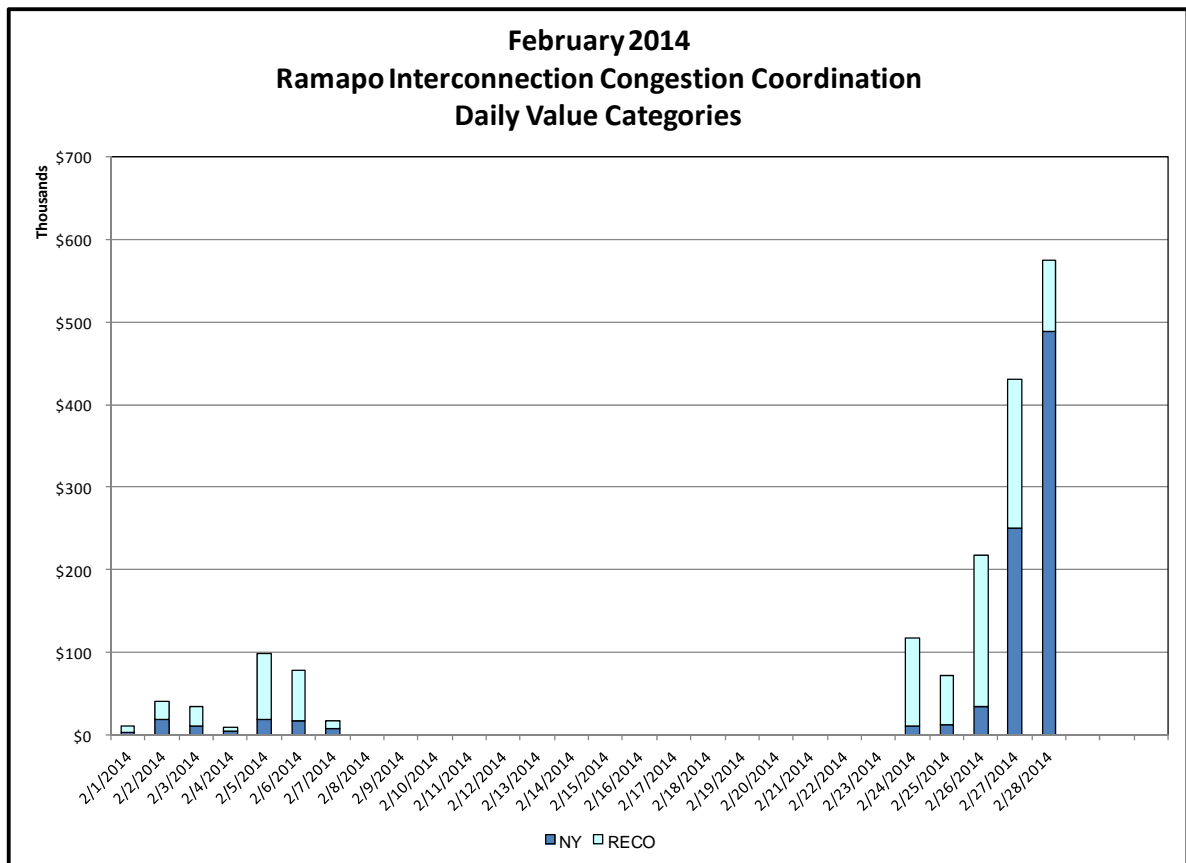
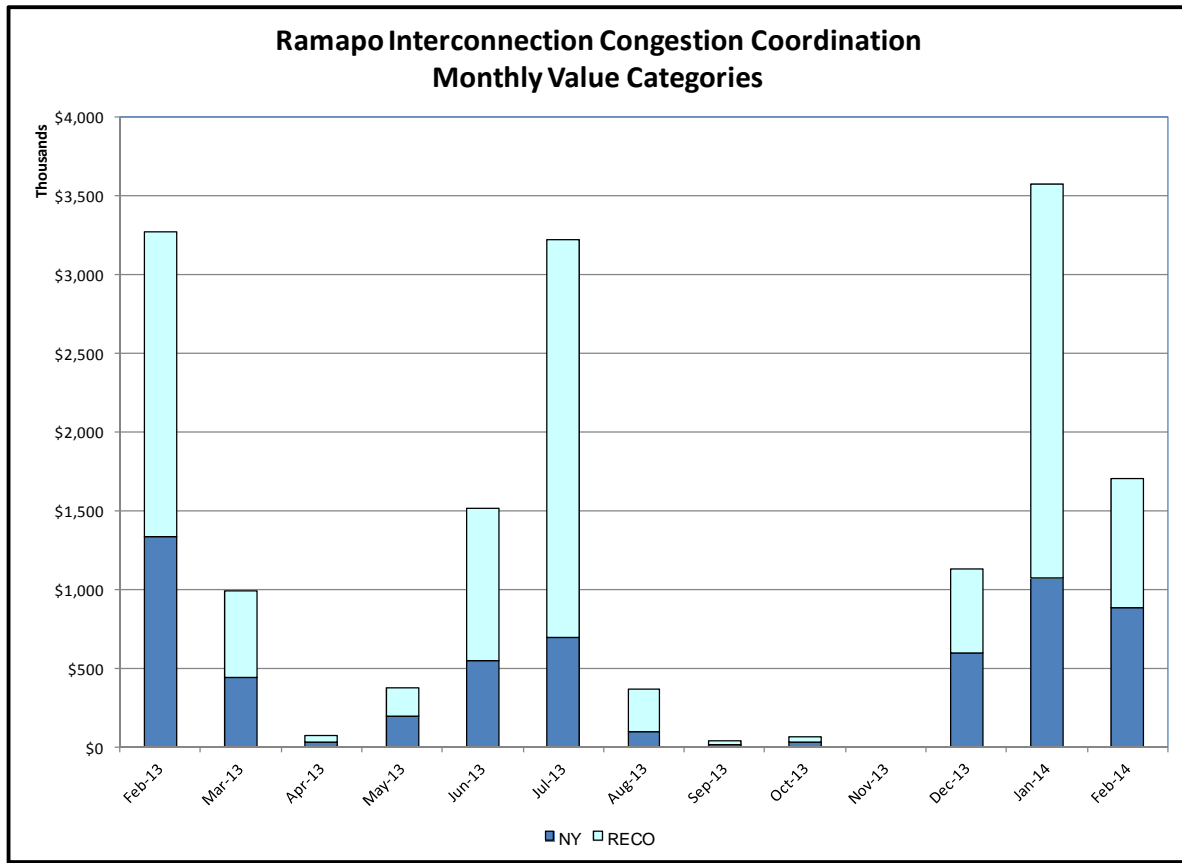






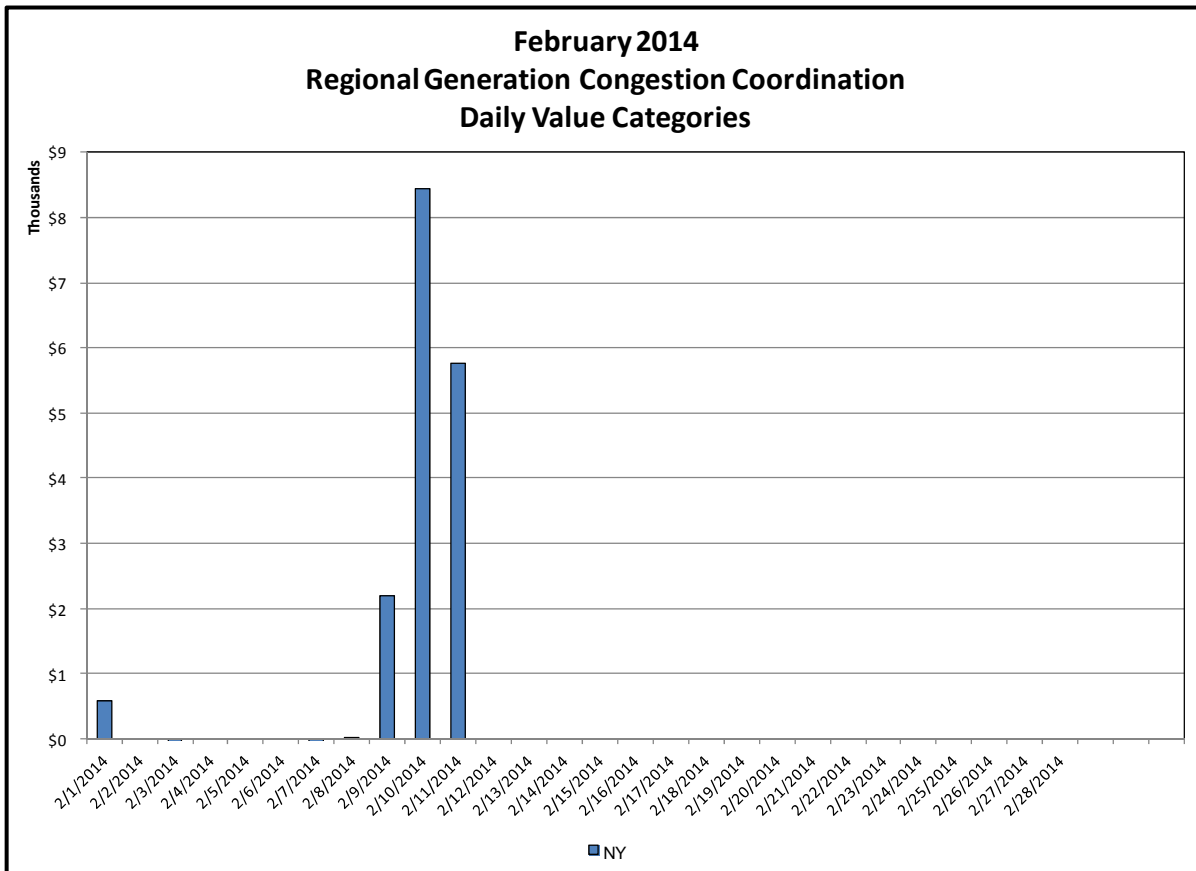
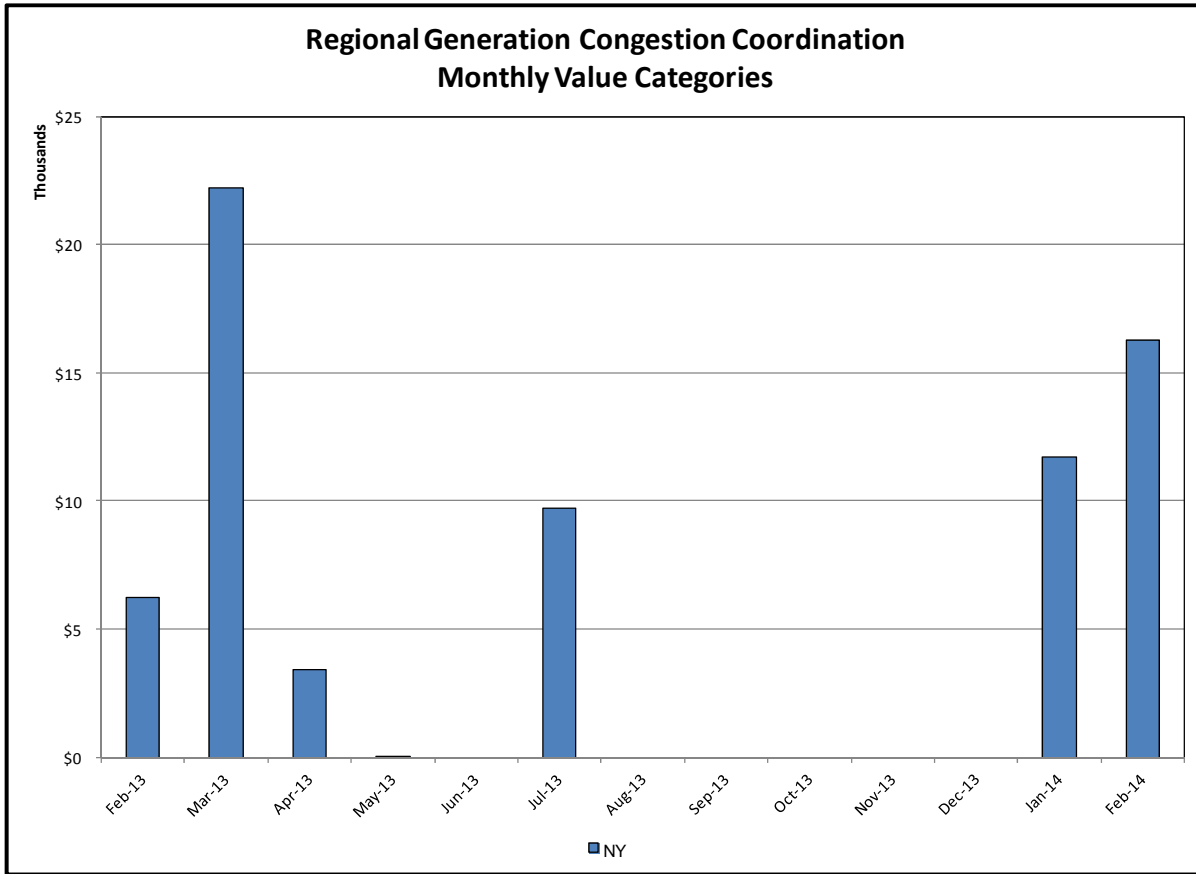


Broader Regional Market Performance Metrics



Ramapo Interconnection Congestion Coordination

<u>Category</u>	<u>Description</u>
NY	Represents the value NY realizes from Market-to-Market Ramapo Coordination. When experiencing congestion, this includes (1) the estimated savings to NY for additional deliveries into NY, plus (2) PJM compensation to NY for additional deliveries into PJM (as compared to the Ramapo Target level, excluding RECO). This is net of any settlements to PJM when they are congested.
RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 5018. This includes (1) the estimated reduction in NYCA congestion due to the PJM delivery of RECO over Ramapo 5018, plus (2) PJM compensation to NY for NYCA congestion for the under-delivery or inability to deliver service to RECO load over Ramapo 5018.



Regional Generation Congestion Coordination

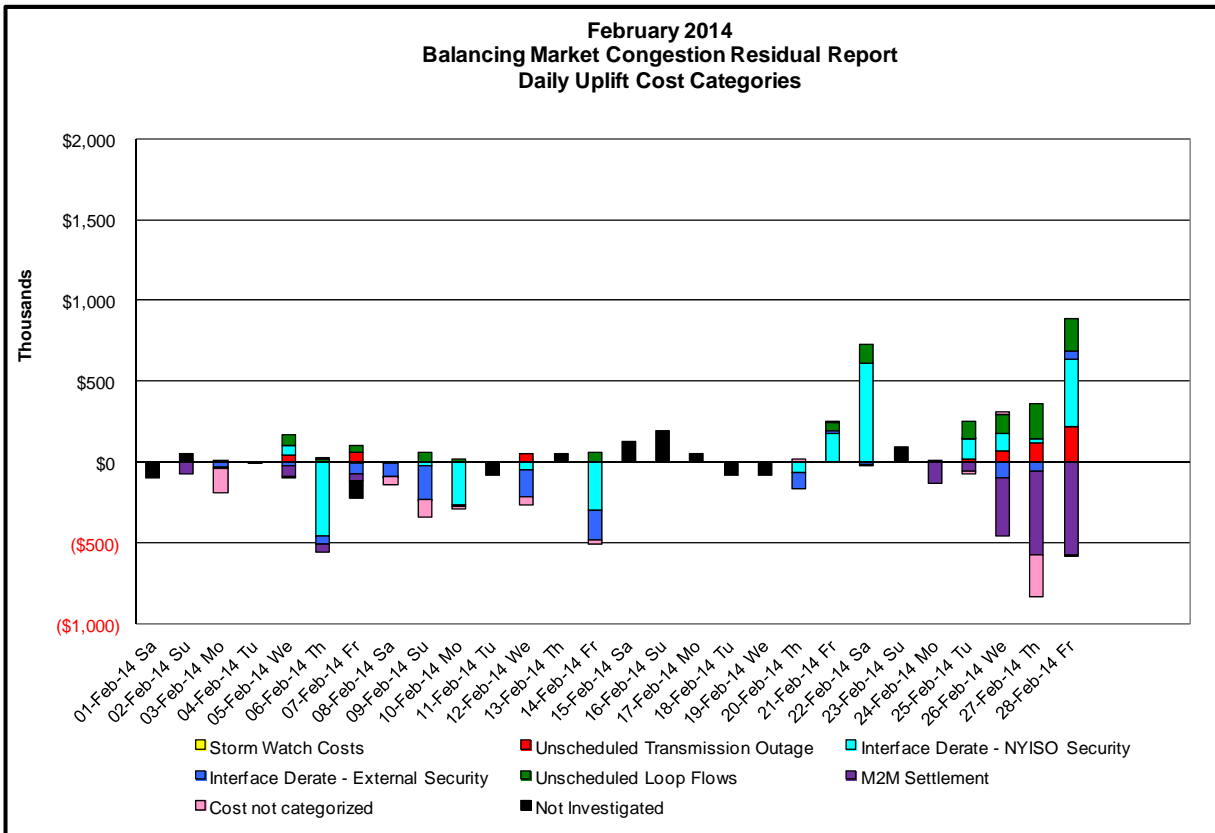
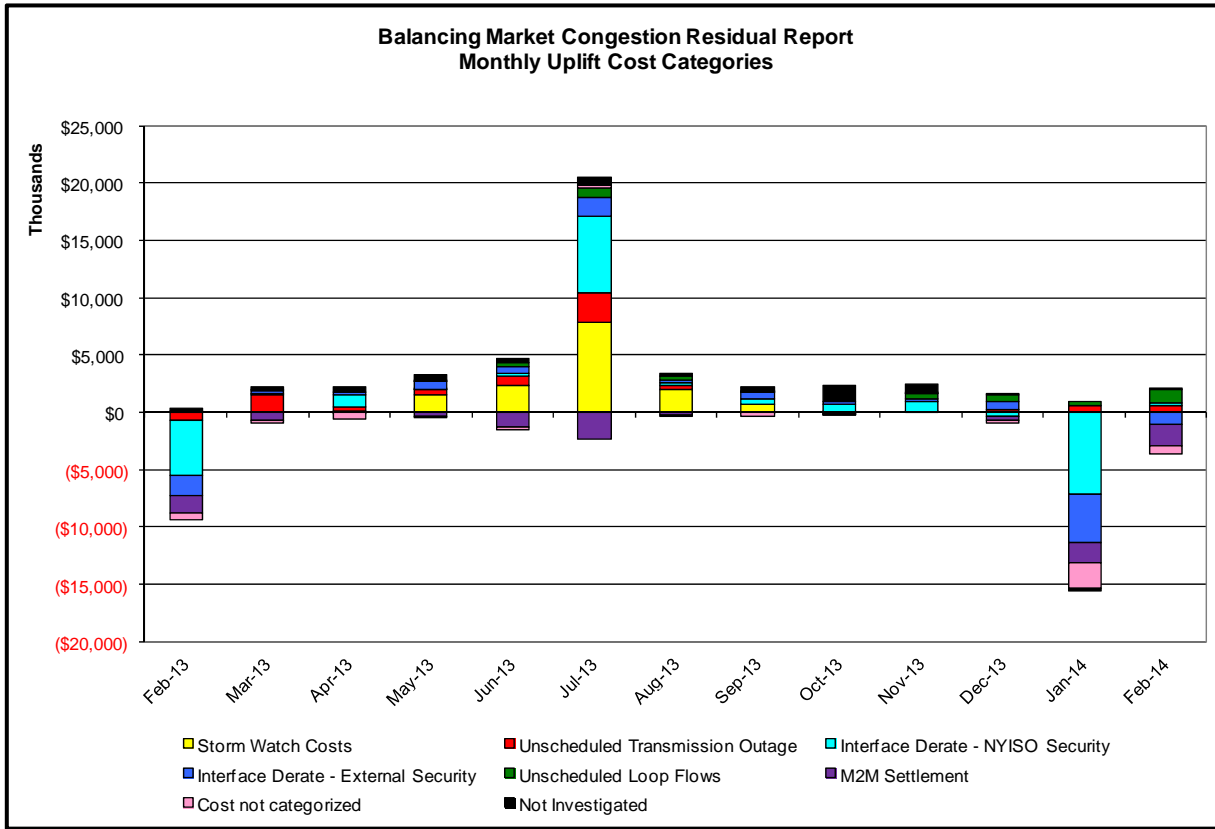
Category

NY

Description

NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from the more efficient regional utilization of PJM's generation resources to directly address Western or Central NY transmission congestion.

Market Performance Metrics



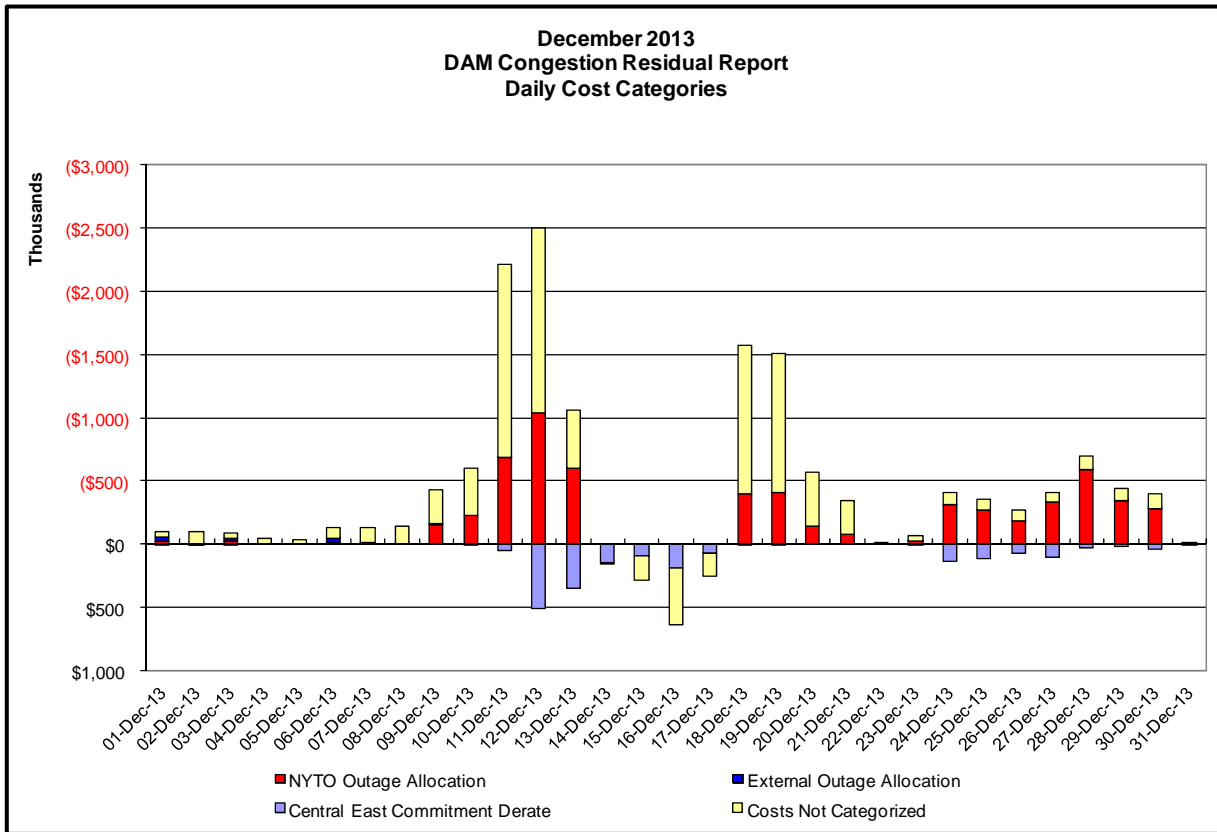
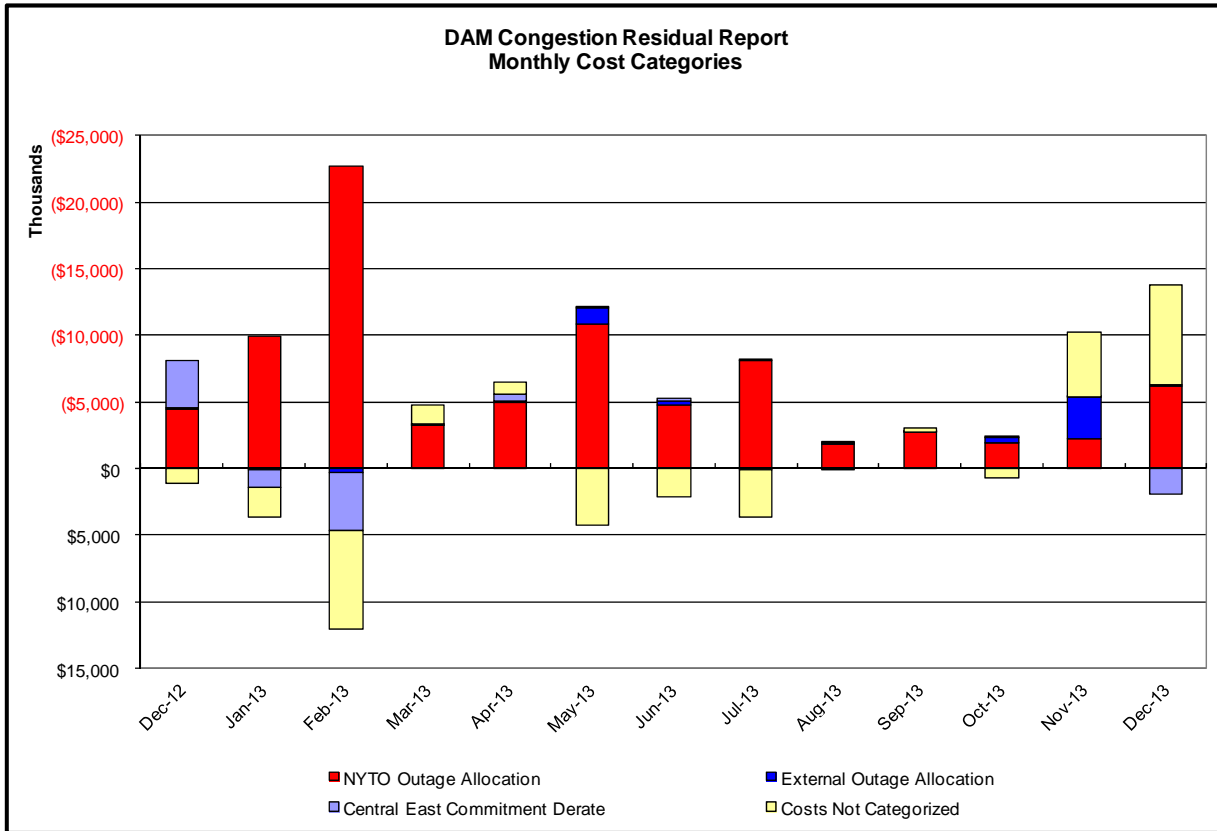
Event	Description	February Dates	
Red	Extended outage Gilboa-Fraser 345kV (#GF5-35)	25,26,27,28	
	Extended outage New Scotland-Marcy 345kV (#18)	5	
	Forced outage Branchburg-Ramapo 500kV (#5018), Ramapo 345_345 Par 4500	27	
	Forced outage East Garden City-Sprainbrook 345kV (#Y49)	12	
	Forced outage FreshKills-WillowBrook 138kV (#29211)	26	
	Forced outage of Valley Stream-Jamaica 138kV (#901)	7	
Cyan	Forced outage Ramapo 345_345 Par 4500	28	
	Derate Astoria East - Hellgate East 138kV (#34052)	12	
	Derate Central East	5,7,8,10,12,21,22,25,26,27,28	
	Derate East Garden City-Valley Stream 138kV (#262) for I/o BUS:BARRETT 292, 459 & G2	12	
	Derate East Garden City-Valley Stream 138kV (#262) for I/o SCB:NEWBRIDGE 1380, 461 & BK6	7	
	Derate Freeport-Newbridge 138kV (#461)	12,27,28	
	Derate Freshkills 345/138 Transformer (#TA1) for I/o Gowanus-Goethals 345kV (#26)	12	
	Derate Freshkills 345/138 Transformer (#TA1) for SCB:GOWANUS(16):42&26	5,12	
	Derate Jamaica-Lake Success 138kV (#903)	12	
	Derate Sprainbrook-East Garden City 345kV (#Y49)	21,22,25	
	NYCA DNI Ramp Limit	3,5,6,7,9,10,12,14,20,21,25,26,27,28	
	Uprate Central East	6,7,8,10,12,14,20,26,27	
	Uprate Dysinger East	6	
	Uprate Hudson Avenue-Jamaica 138kV (#701)	12,14	
	Uprate Motthaven-Dunwoodie 345kV (#72)	12	
	Blue	HQ_CHAT DNI Ramp Limit	3,12,26,27,28
		HQ_CHAT-NY Scheduling Limit	7,8,9,12
		IESO_AC DNI Ramp Limit	6,12,22,25,26
		IESO_AC-NY Scheduling Limit	25
		NE_AC DNI Ramp Limit	12,28
NE_AC-NY Scheduling Limit		3,5,6,7,8,9,14,20,21,25,26	
NE_NNC1385 - NY Scheduling Limit		6,9,14,20,25,26	
PJM_AC DNI Ramp Limit		7,9,12	
PJM_AC-NY Scheduling Limit		5,26,27,28	
Green		Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East	5,7,9,10,14,21,22,25,26,27,28
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Dysinger East	6	

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
M2M Settlement	Market-wide	Settlement result inclusive of coordinated redispatch and Ramapo flowgates	

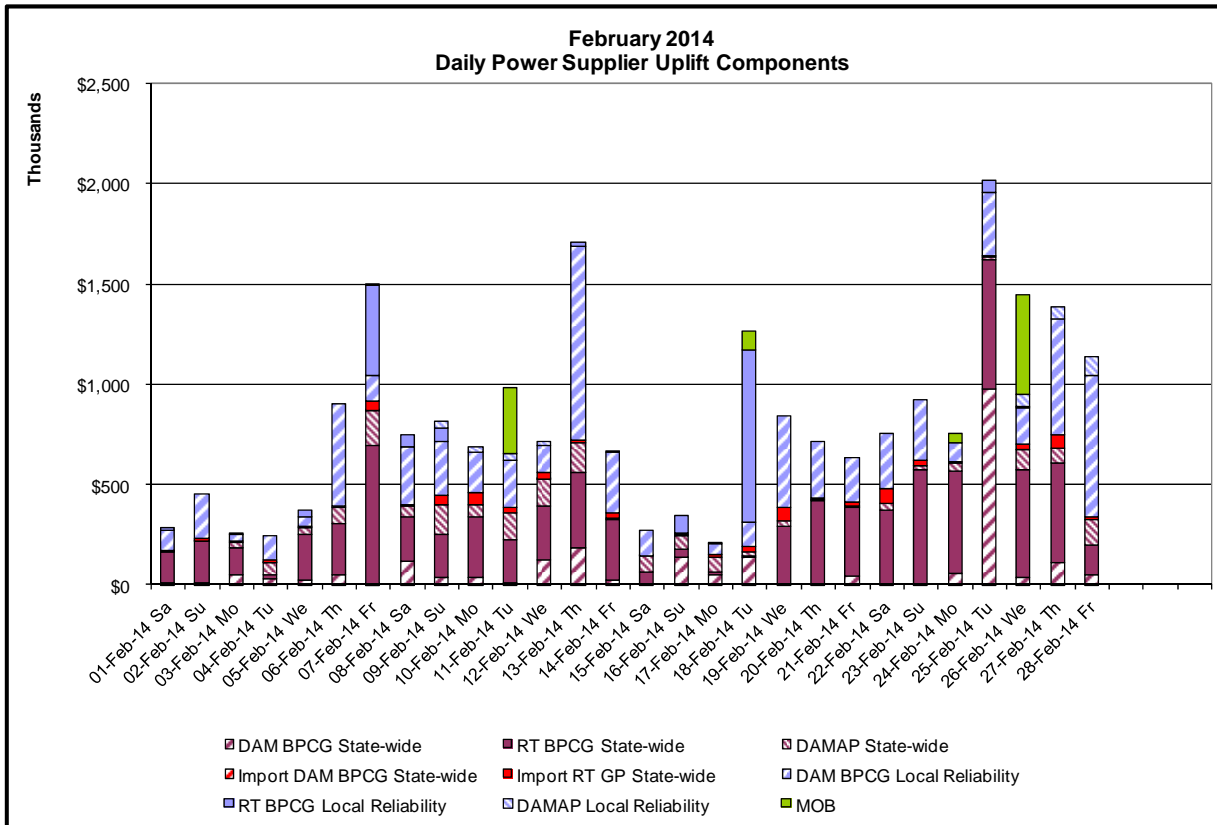
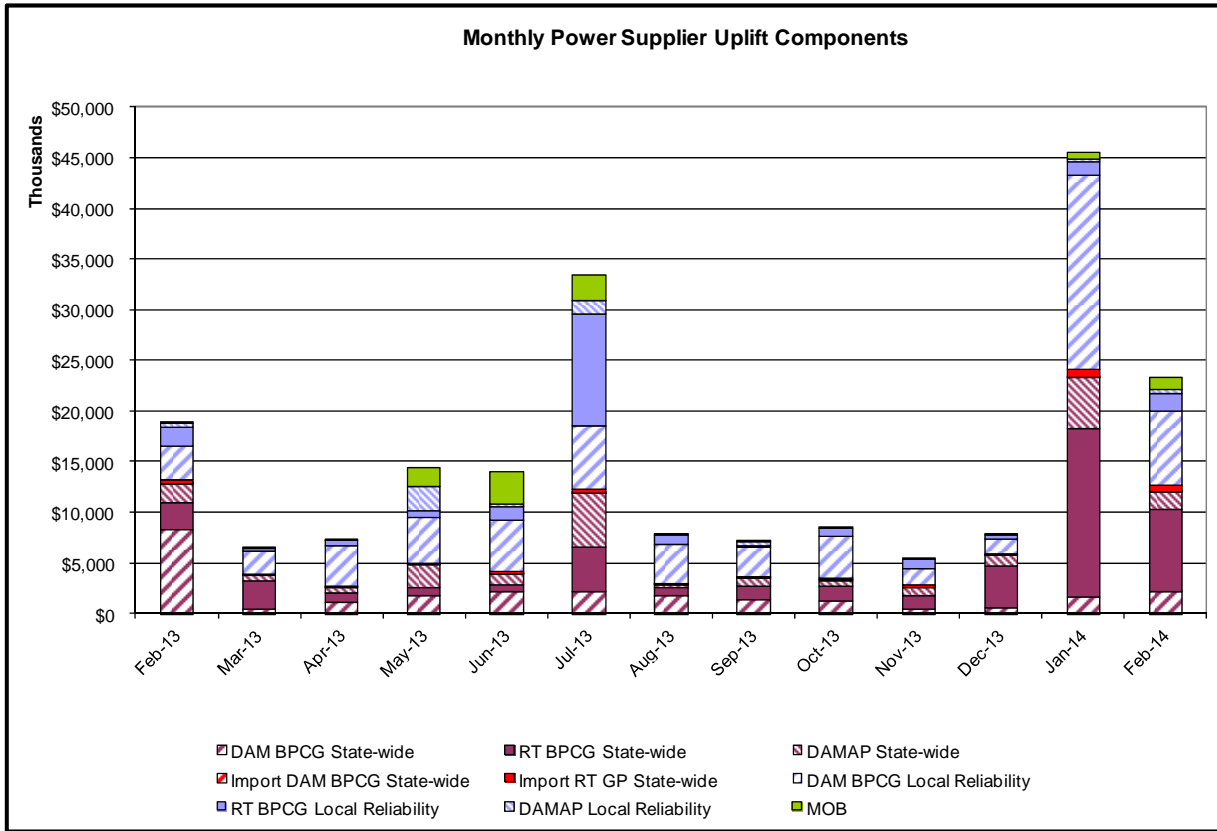
Monthly Balancing Market Congestion Report Assumptions/Notes

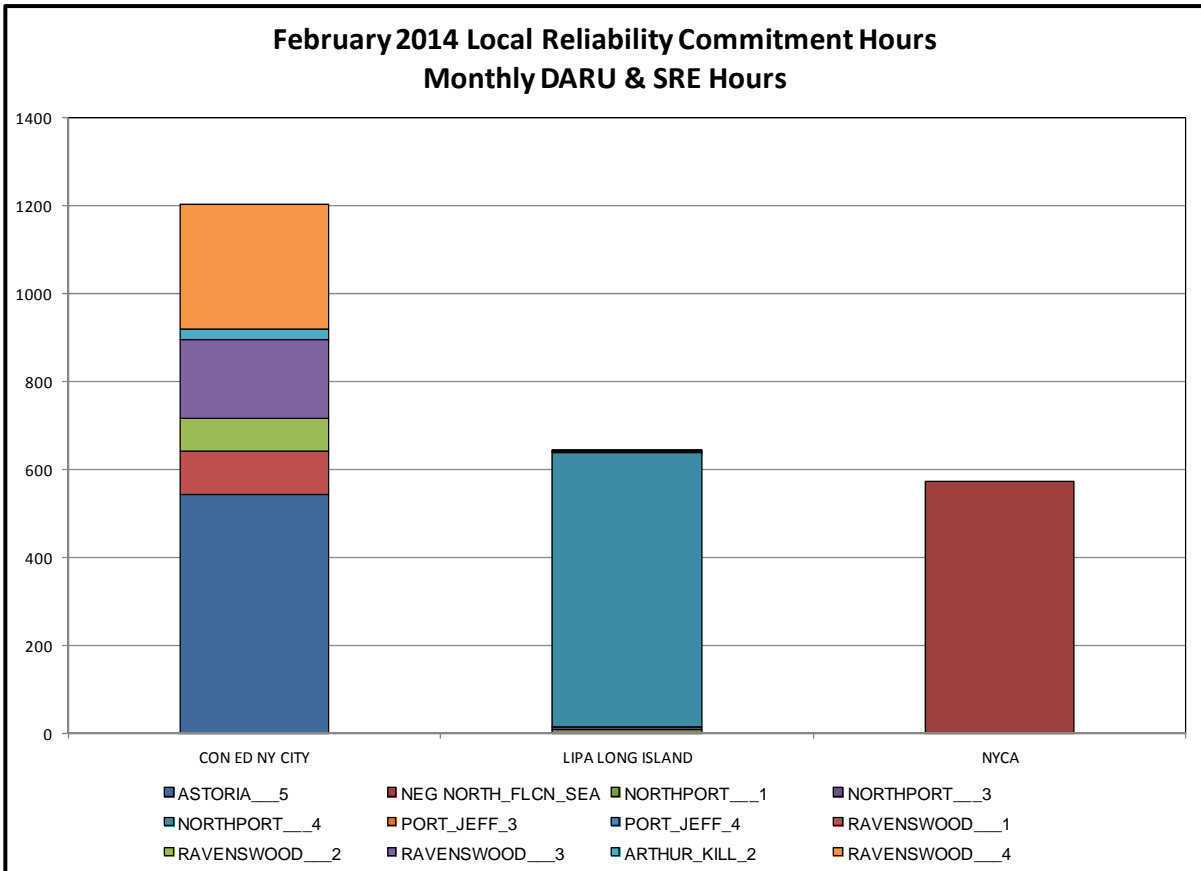
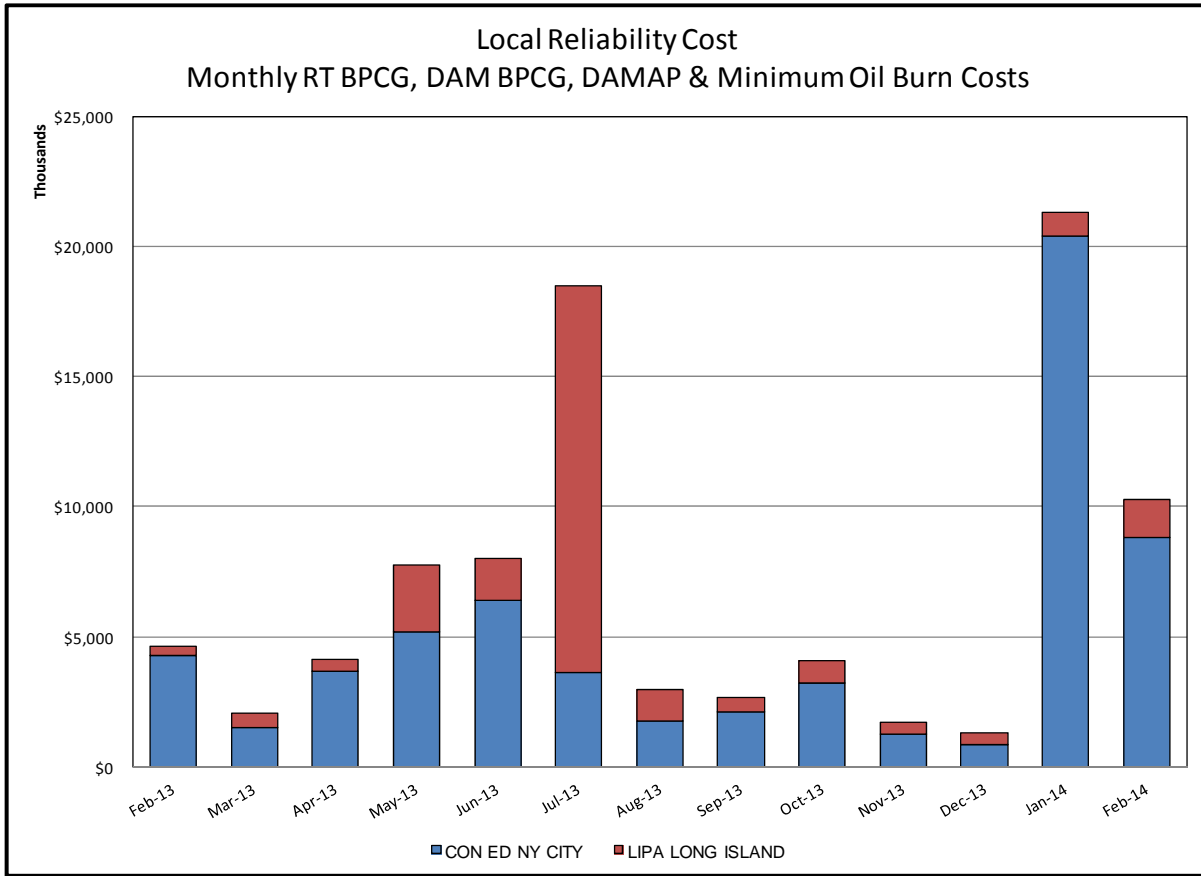
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

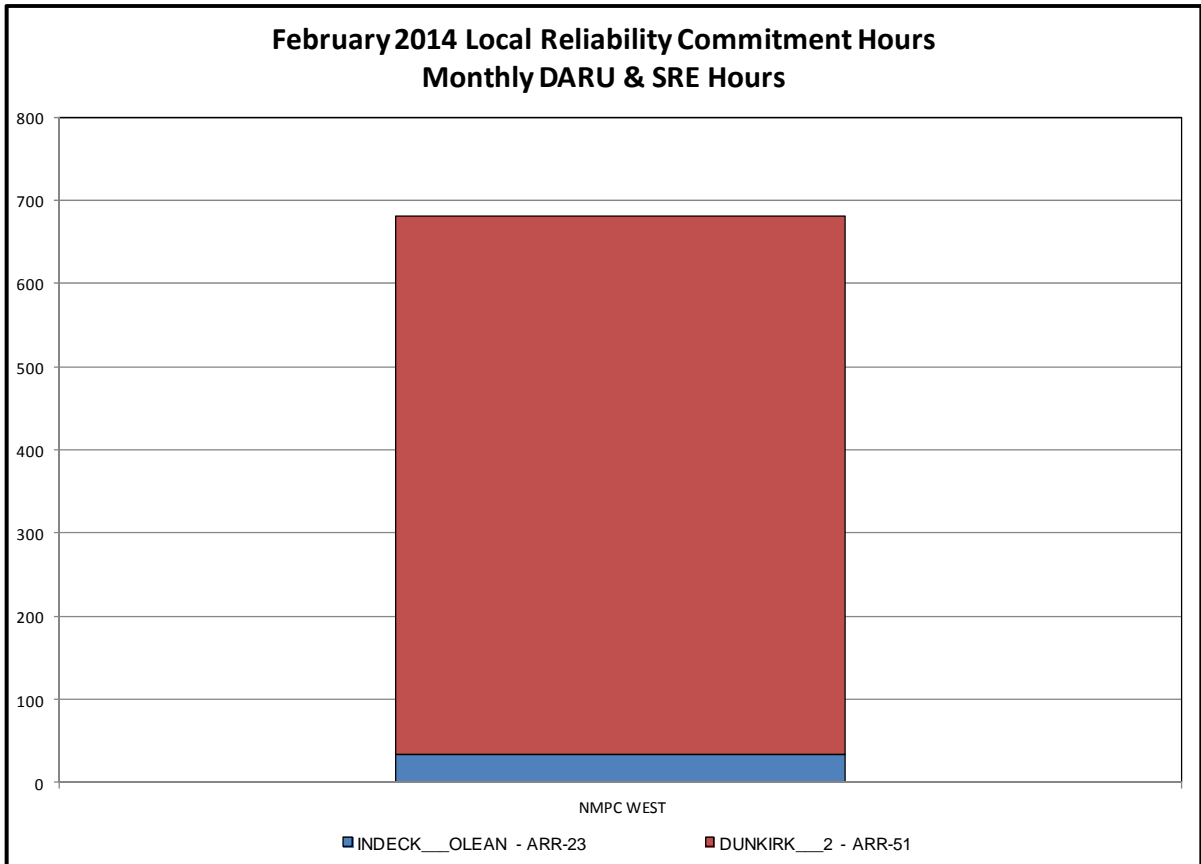
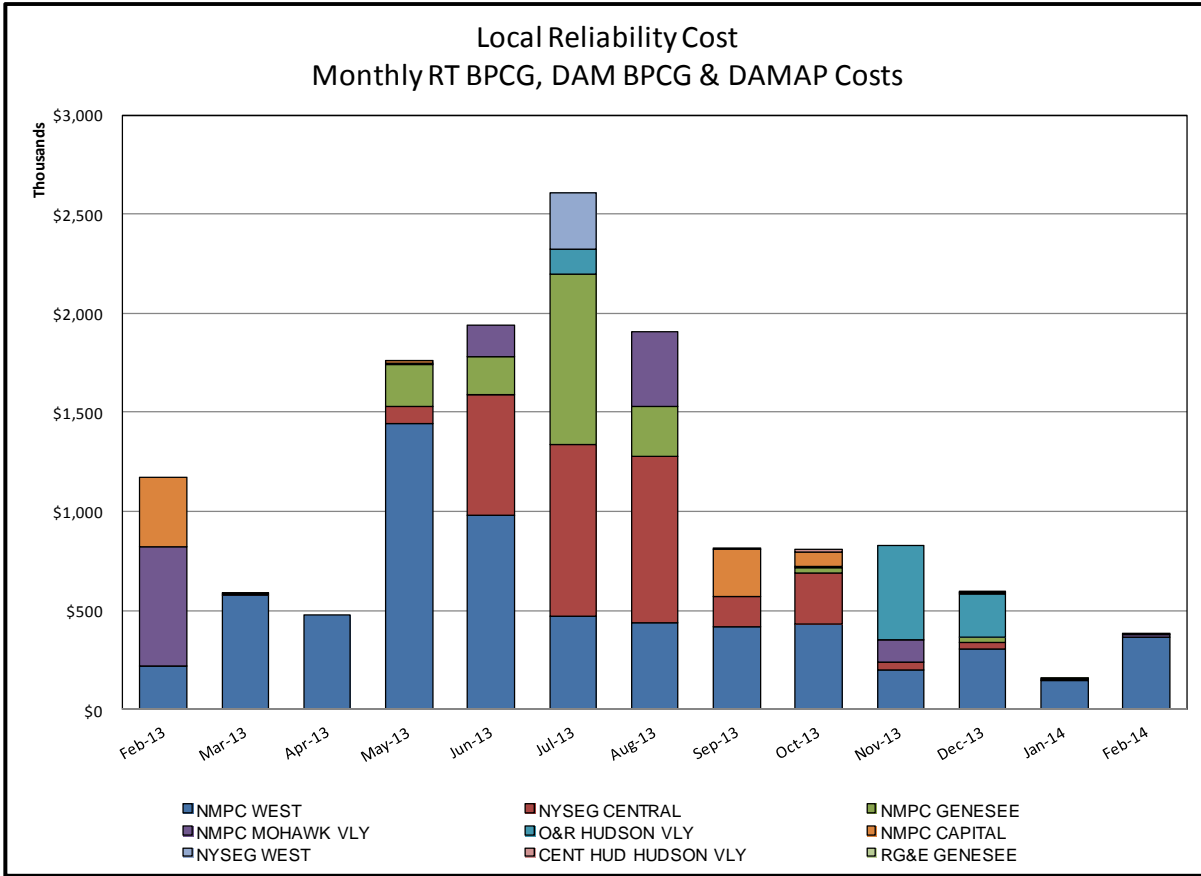


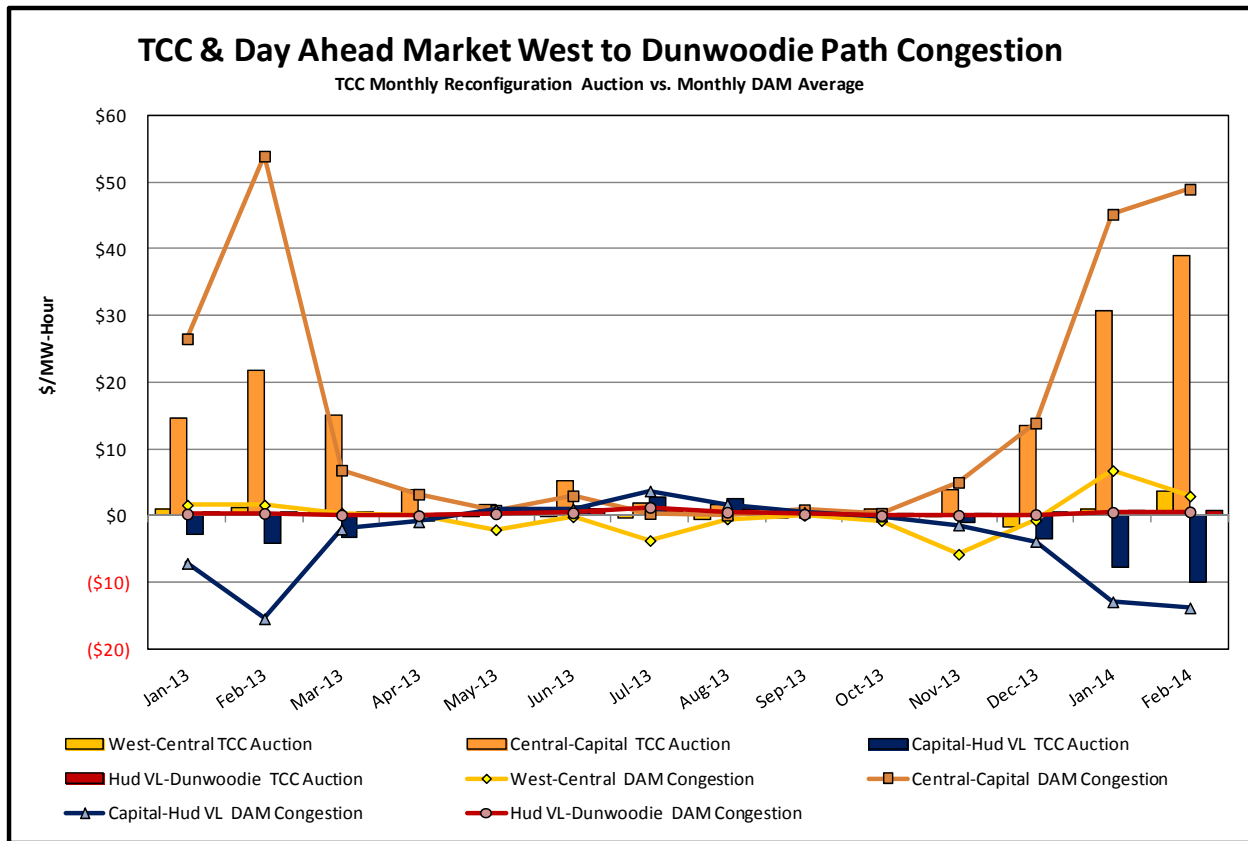
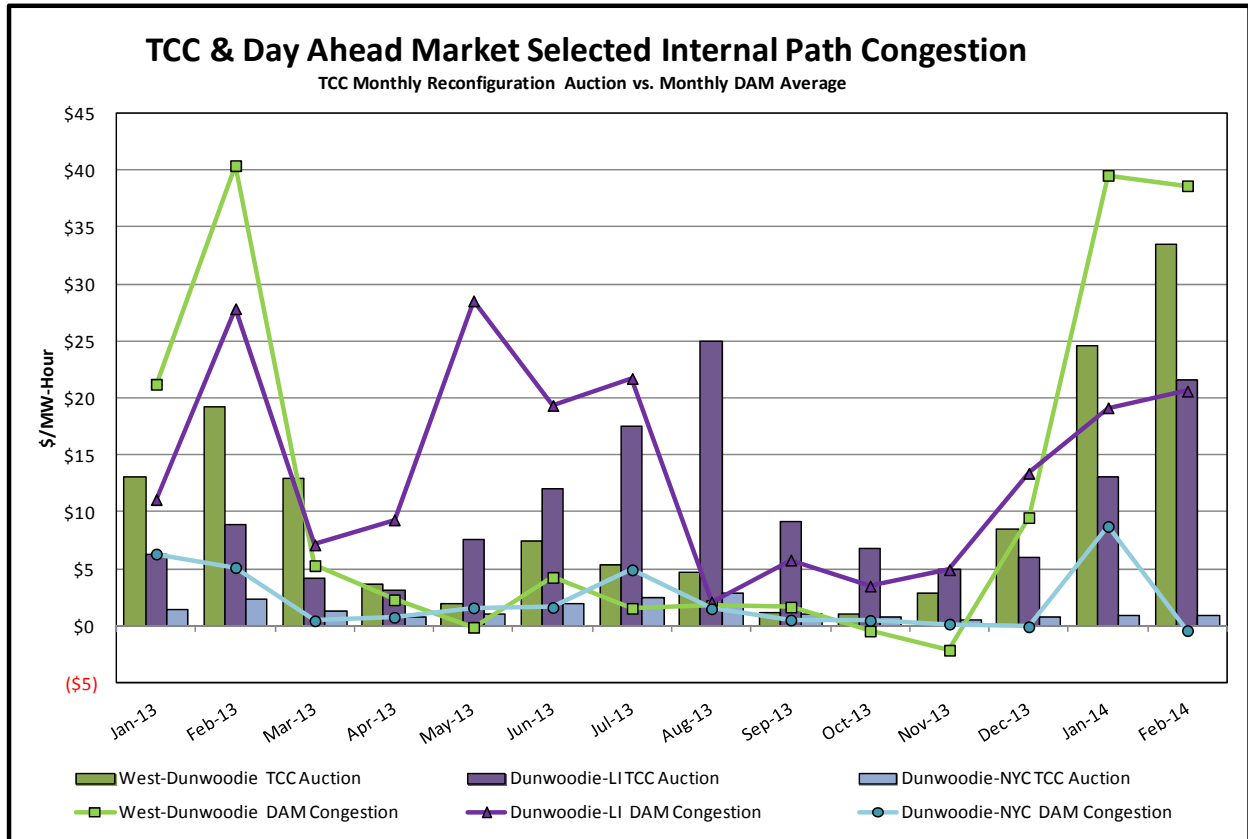
Day-Ahead Market Congestion Residual Categories

<u>Category</u>	<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.
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 External Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average

