

Operations Performance Metrics Monthly Report



January 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 February 10, 2014.

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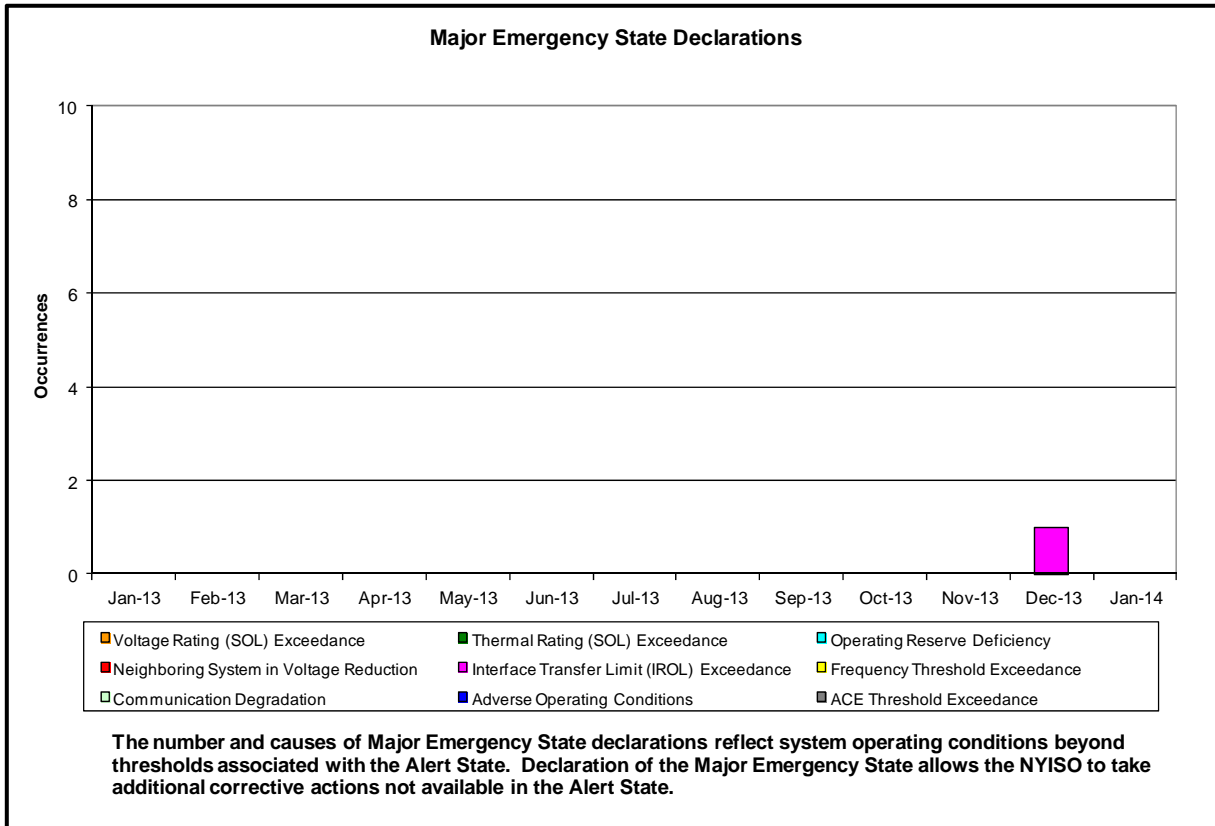
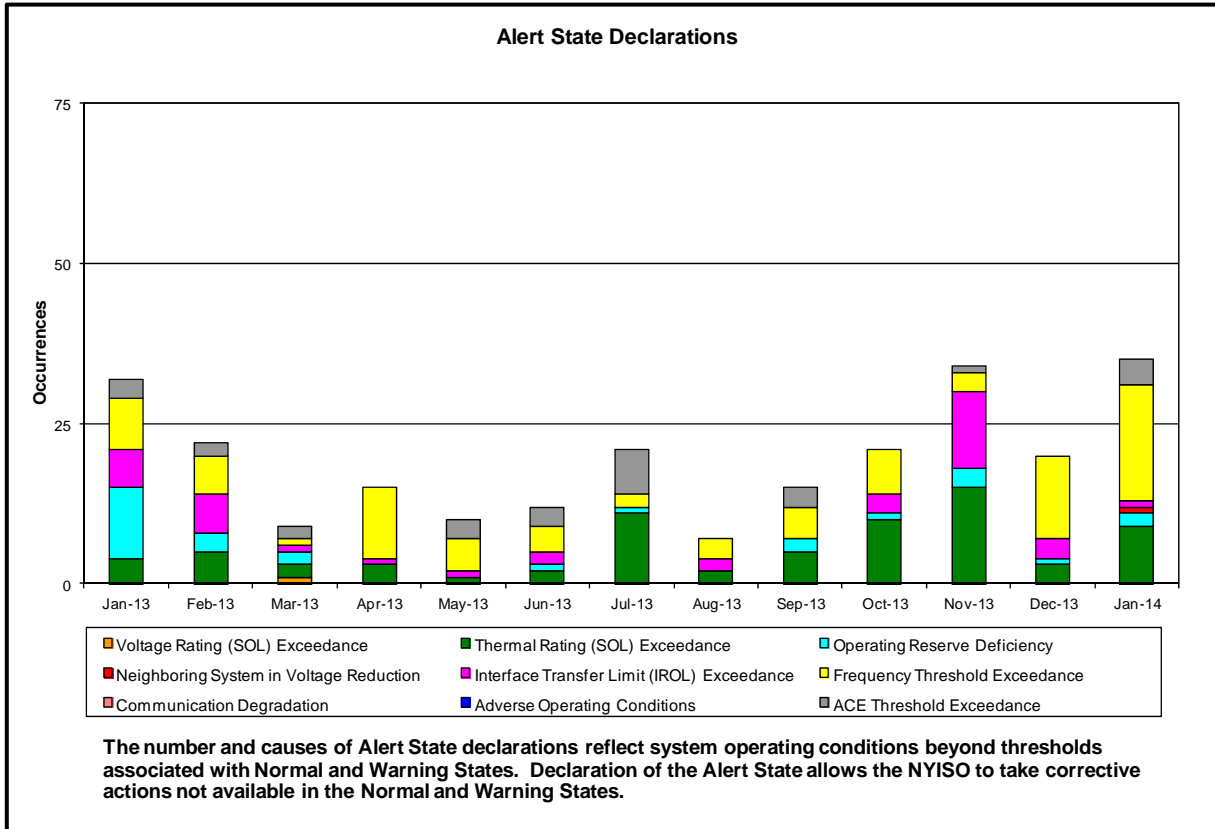
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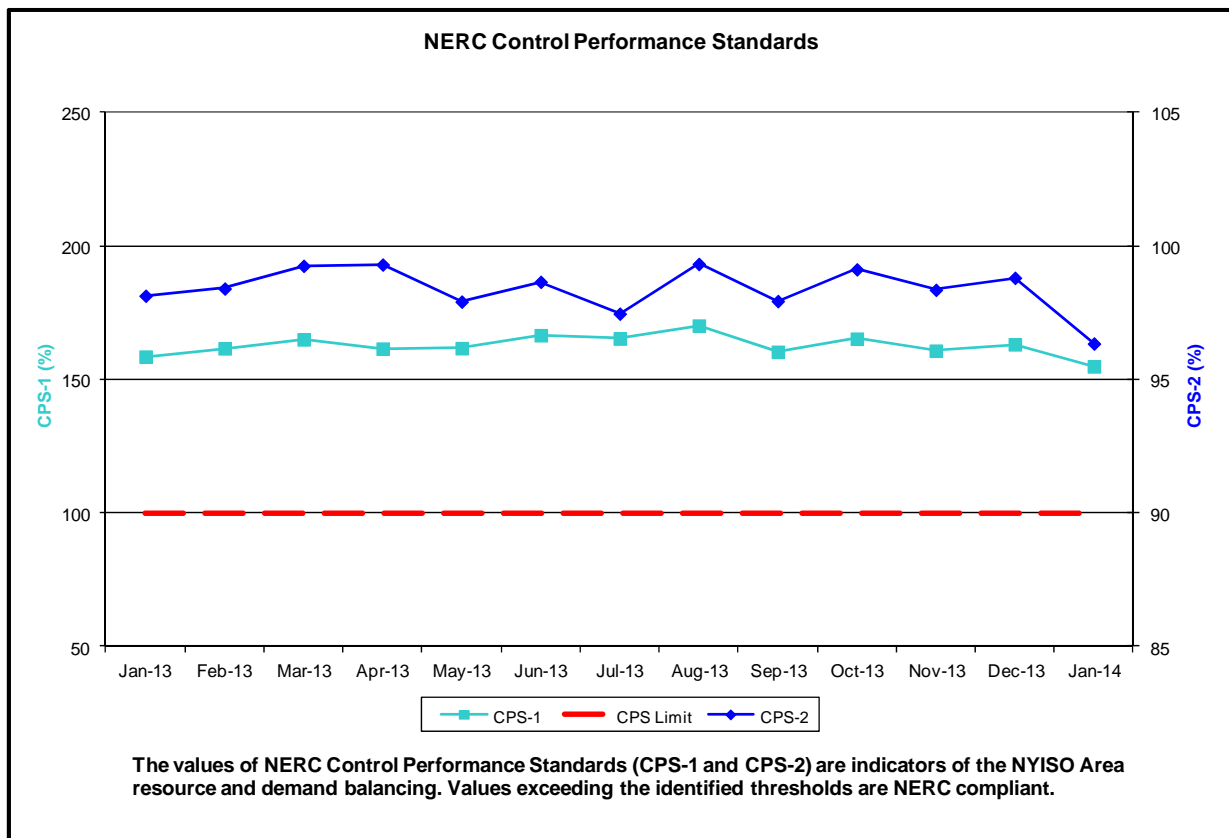
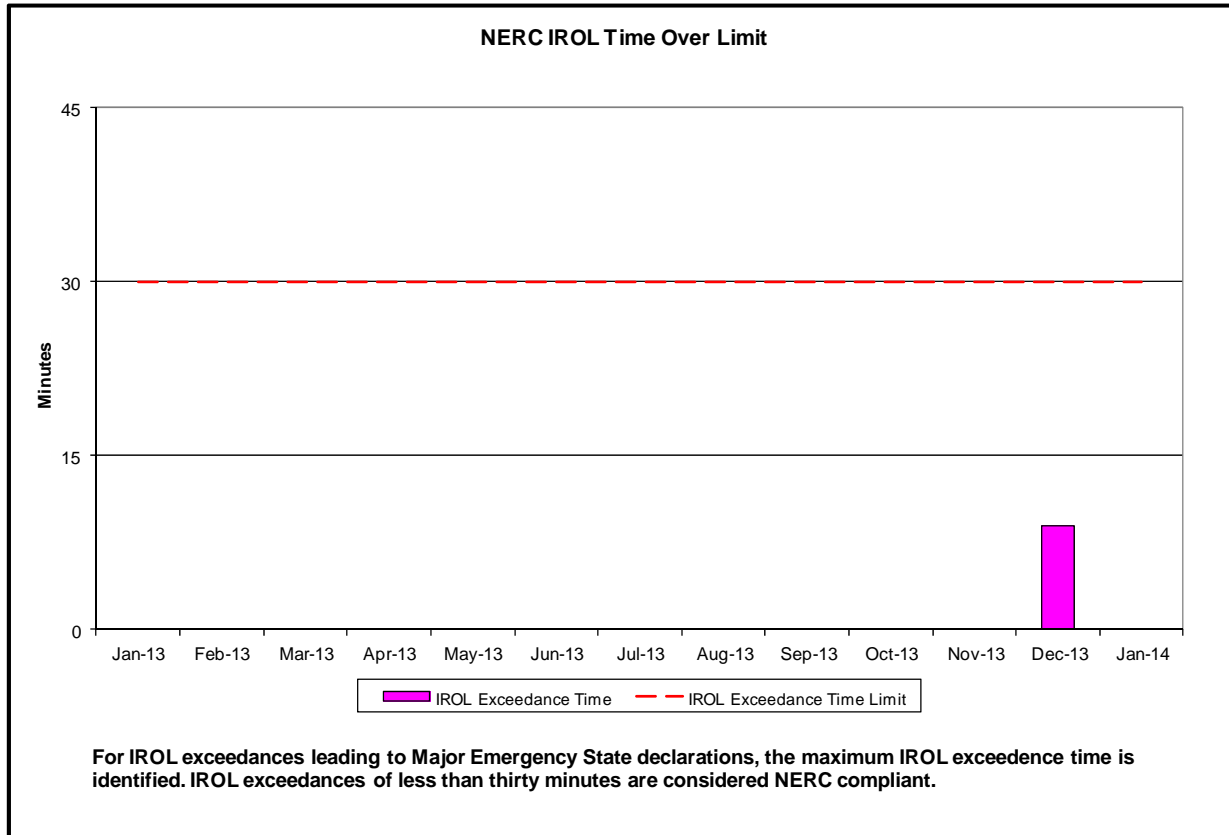
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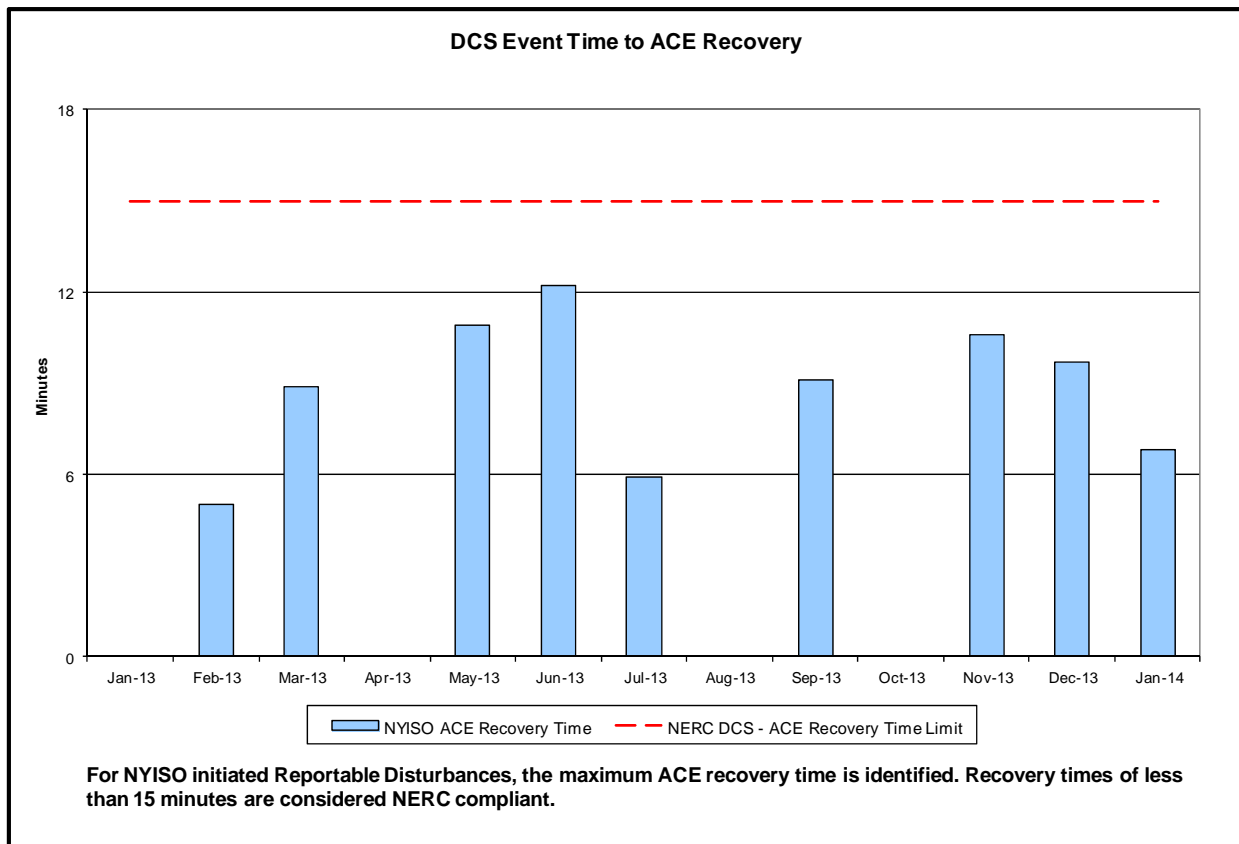
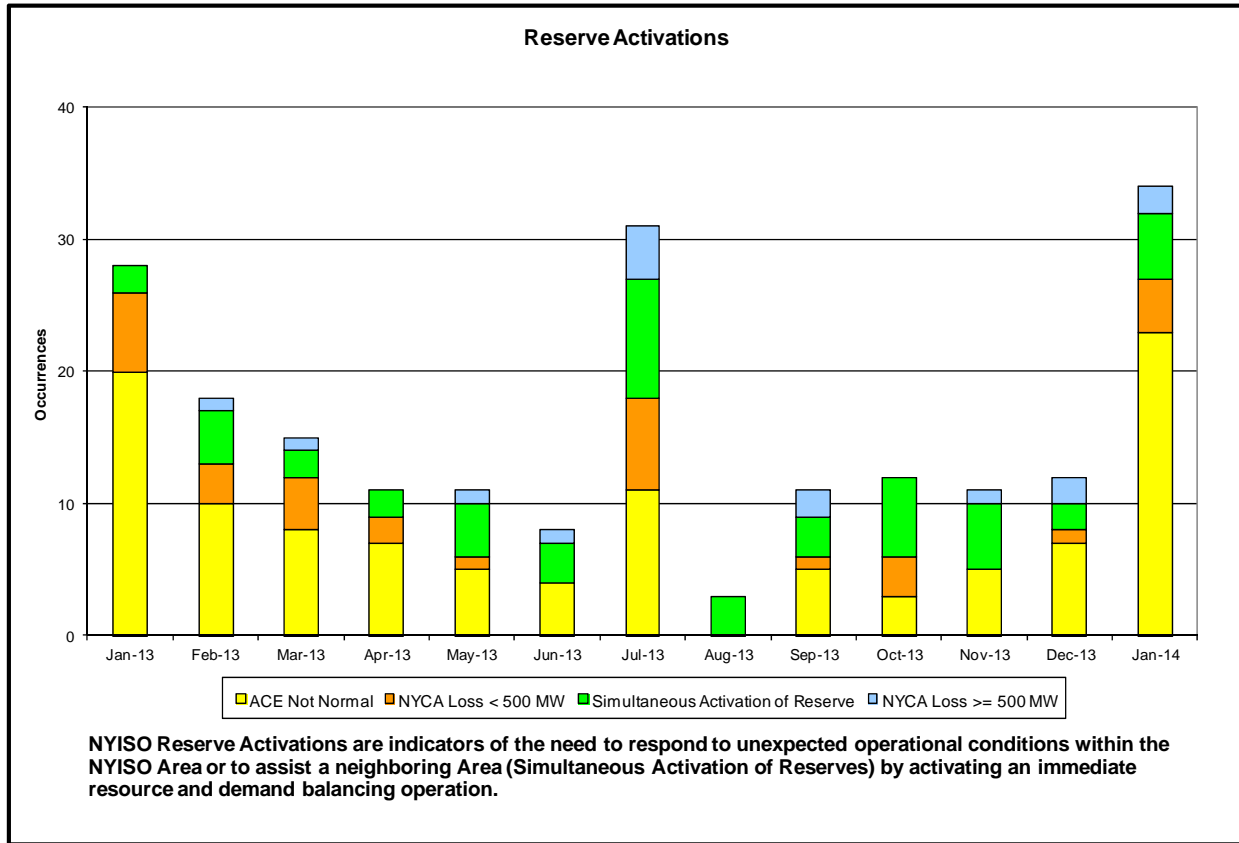
January 2014 Operations Performance Highlights

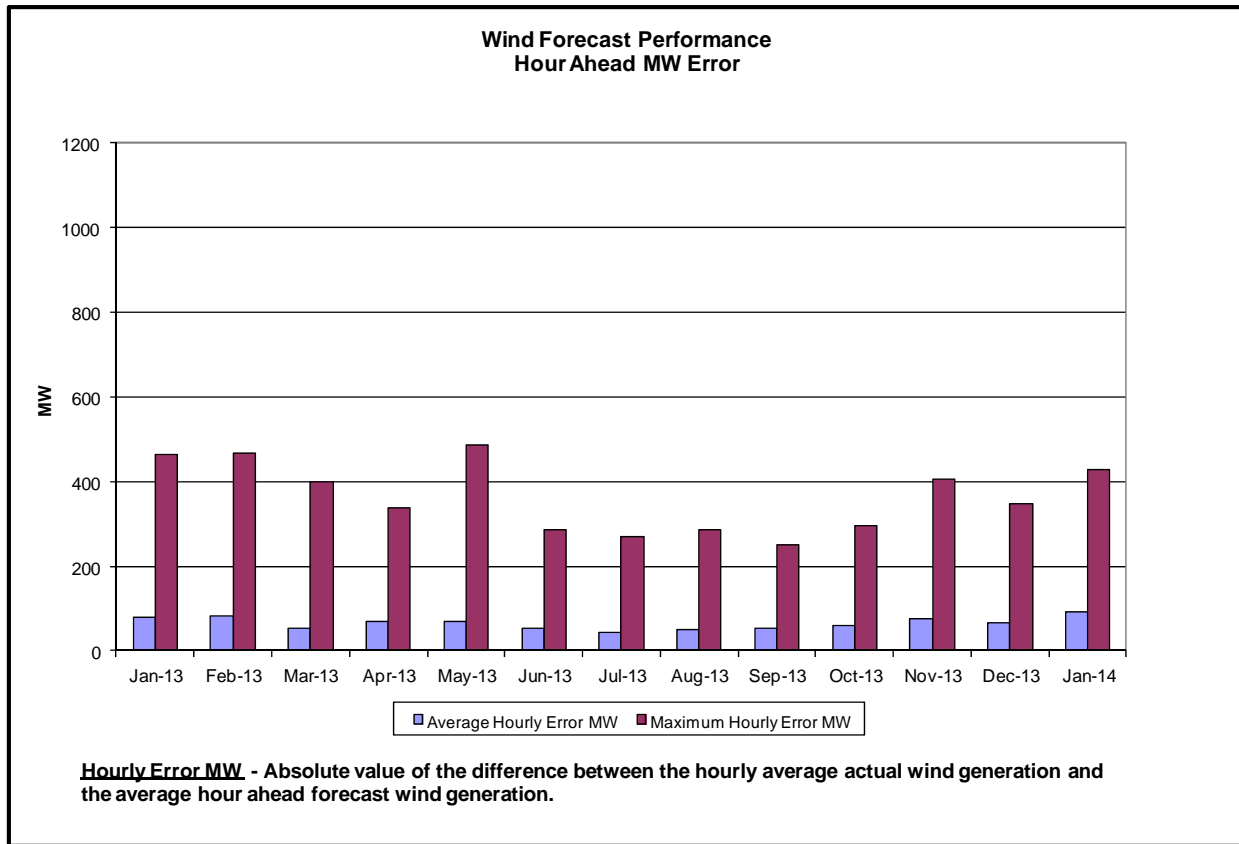
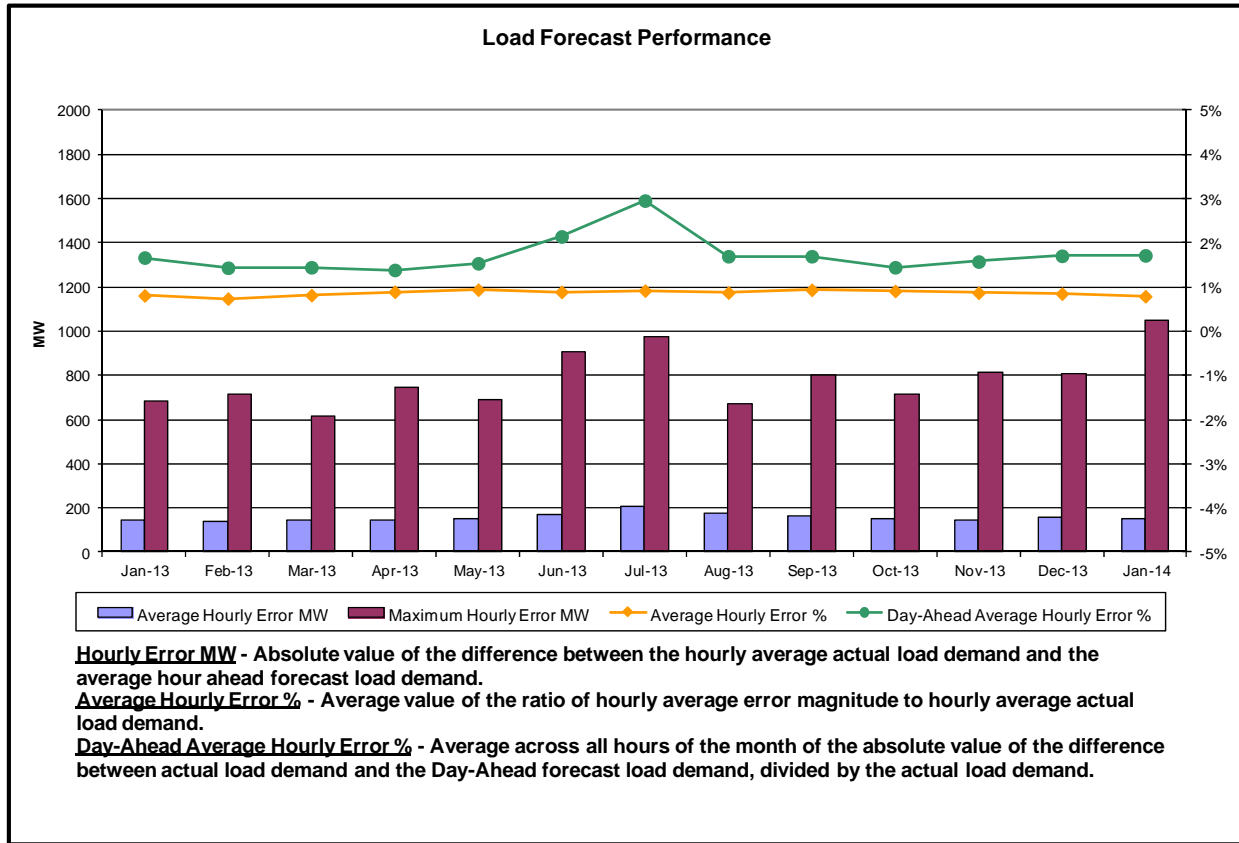
- Peak load of 25,738 MW occurred on 1/7/2014 HB 18
 - Demand response resources activated on 1/7/2014
- All-time winter capability period peak load of 25,738 MW occurred on 1/7/2014 HB 18
- 0 hours of Thunder Storm Alerts was declared
- 0 hours of NERC TLR level 3 curtailment
- Broader Regional Market Coordination monthly value was \$3.58M
- Broader Regional Market Coordination year-to-date value was \$3.58M
- Statewide uplift cost monthly average was \$(1.73)/MWh
- Local reliability uplift cost monthly average was \$1.38/MWh

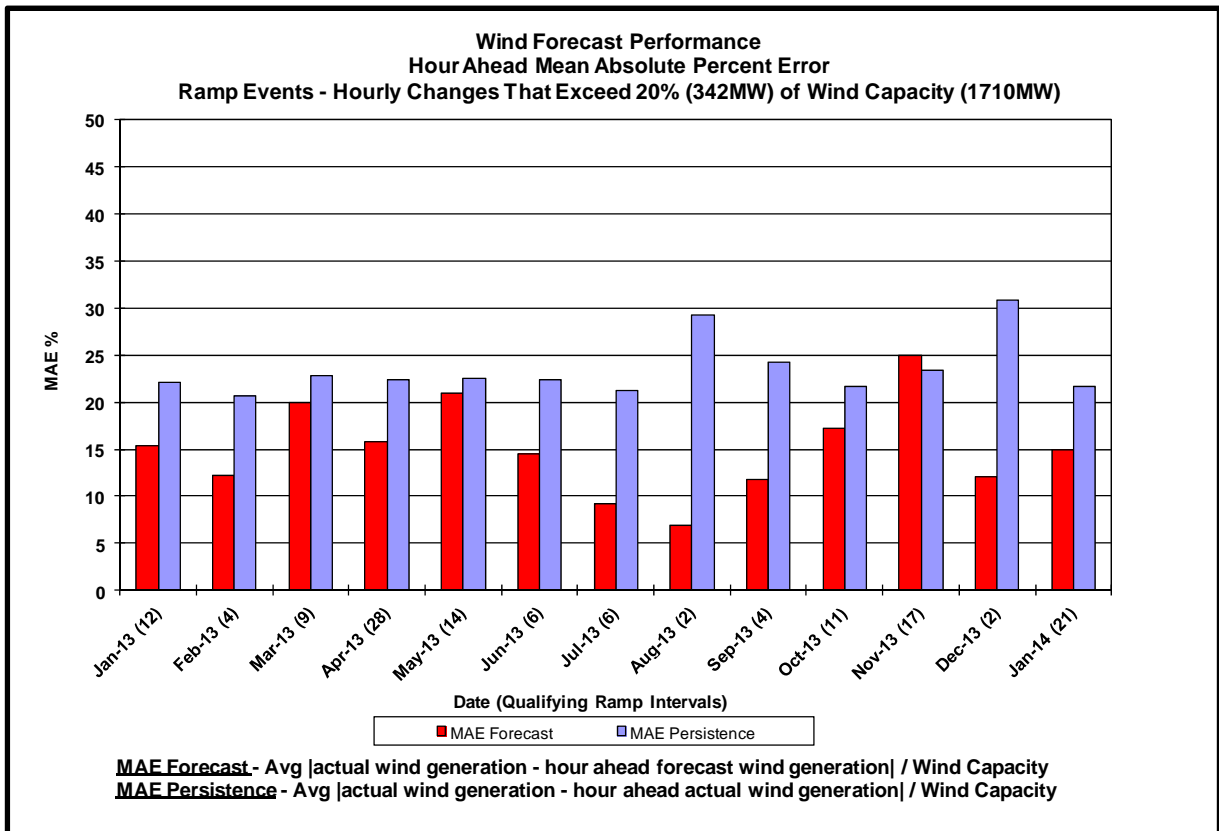
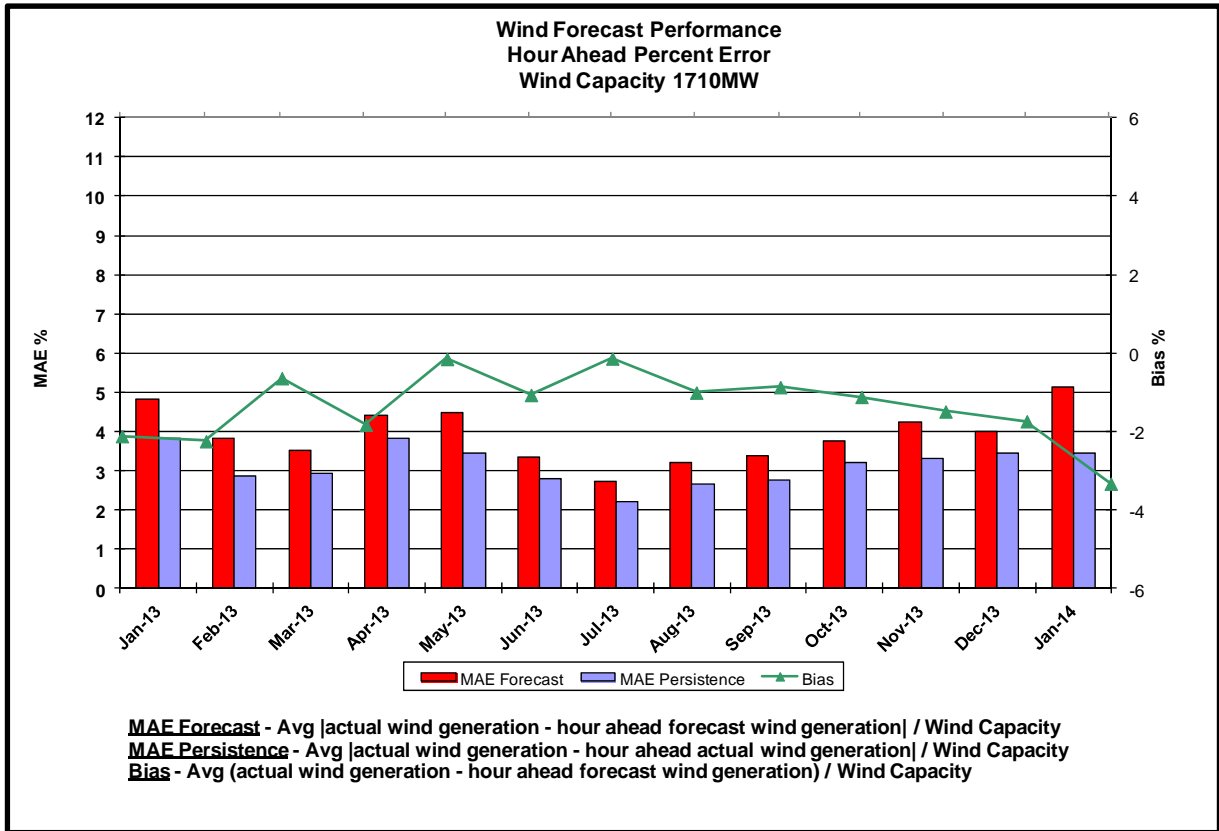
- Reliability Performance Metrics

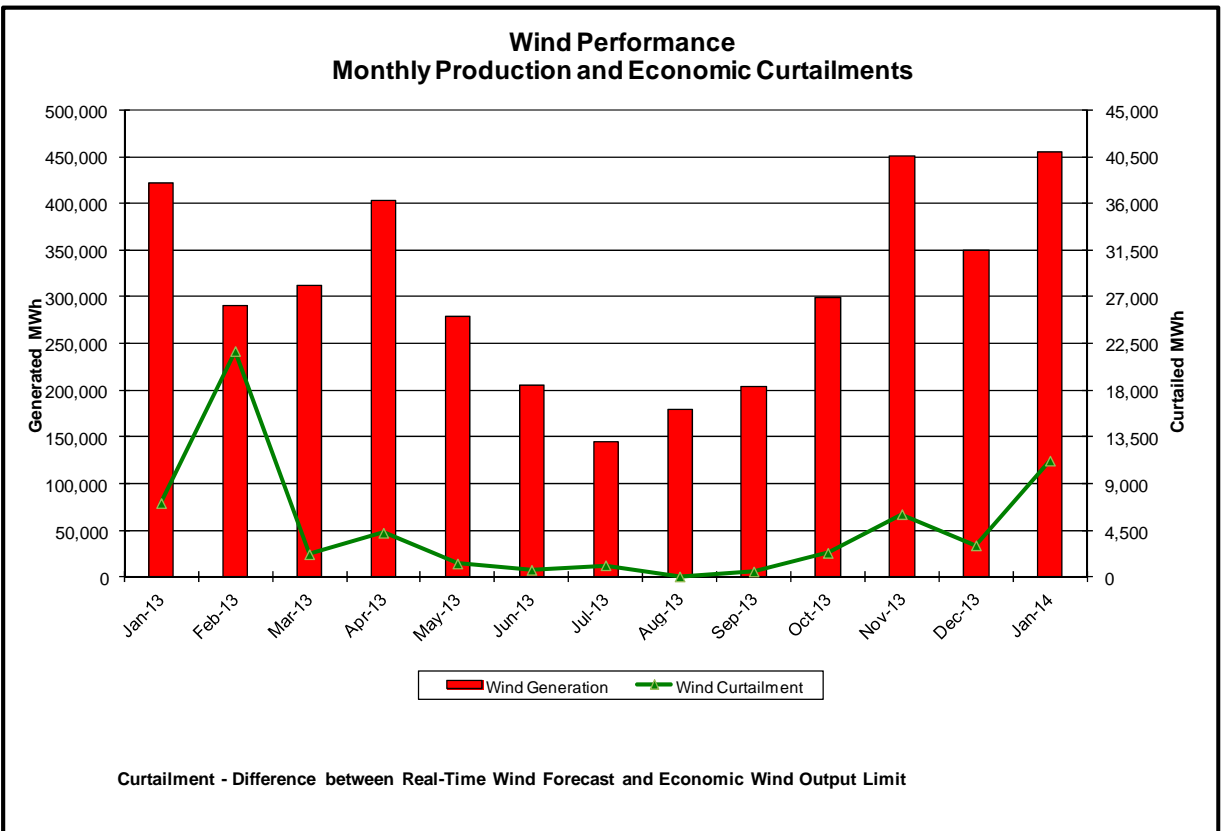
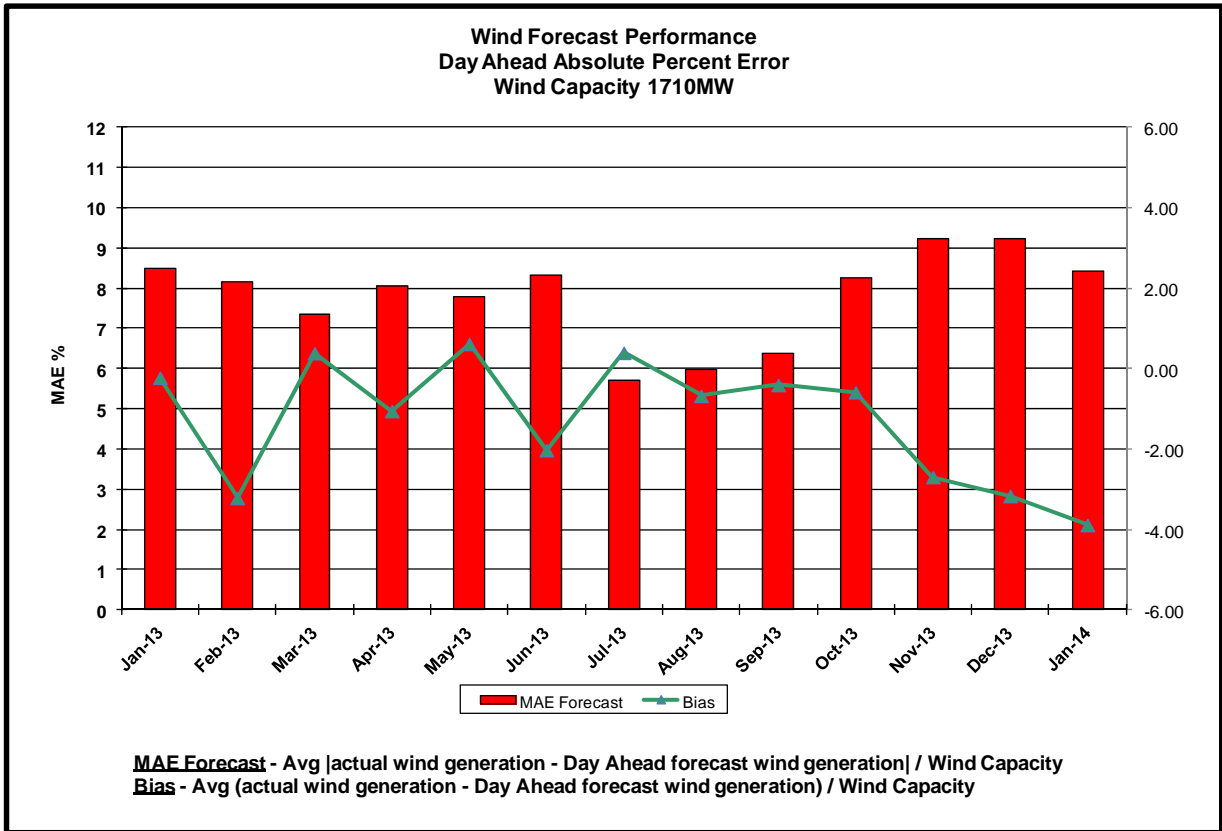


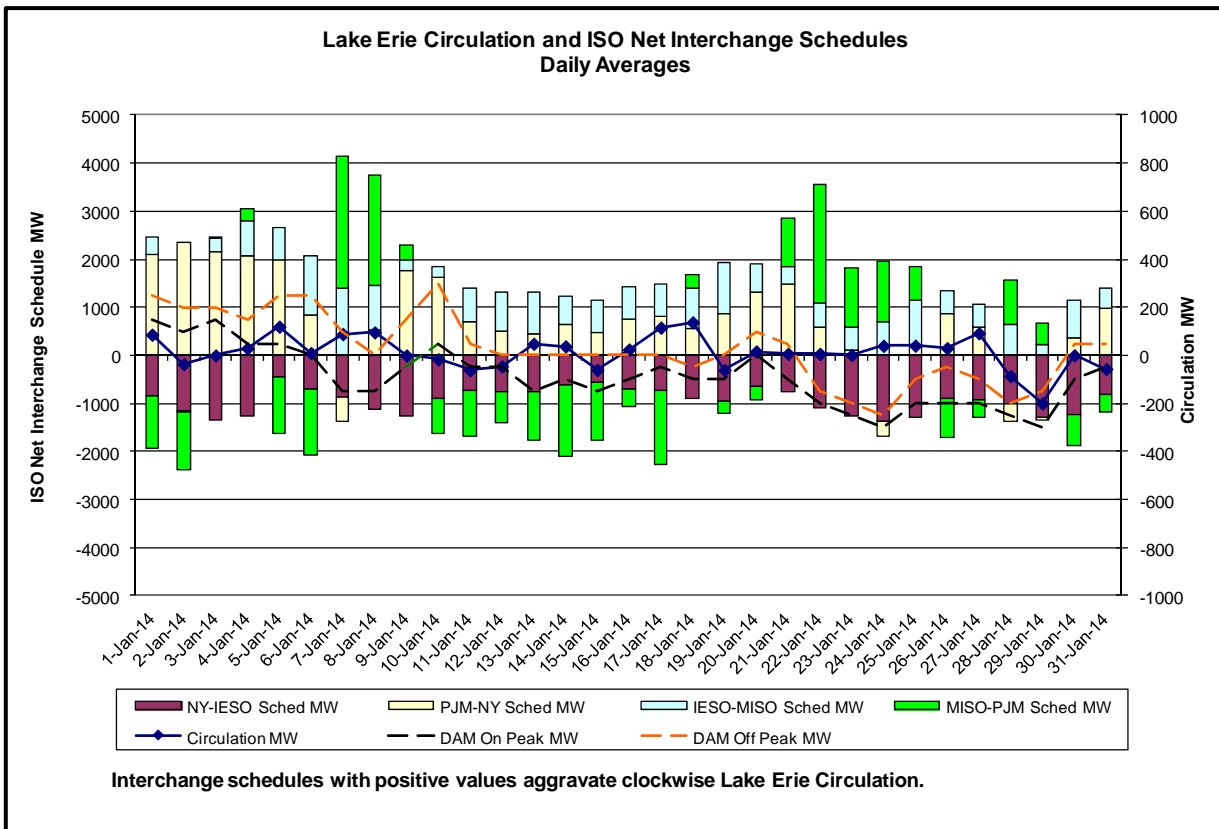
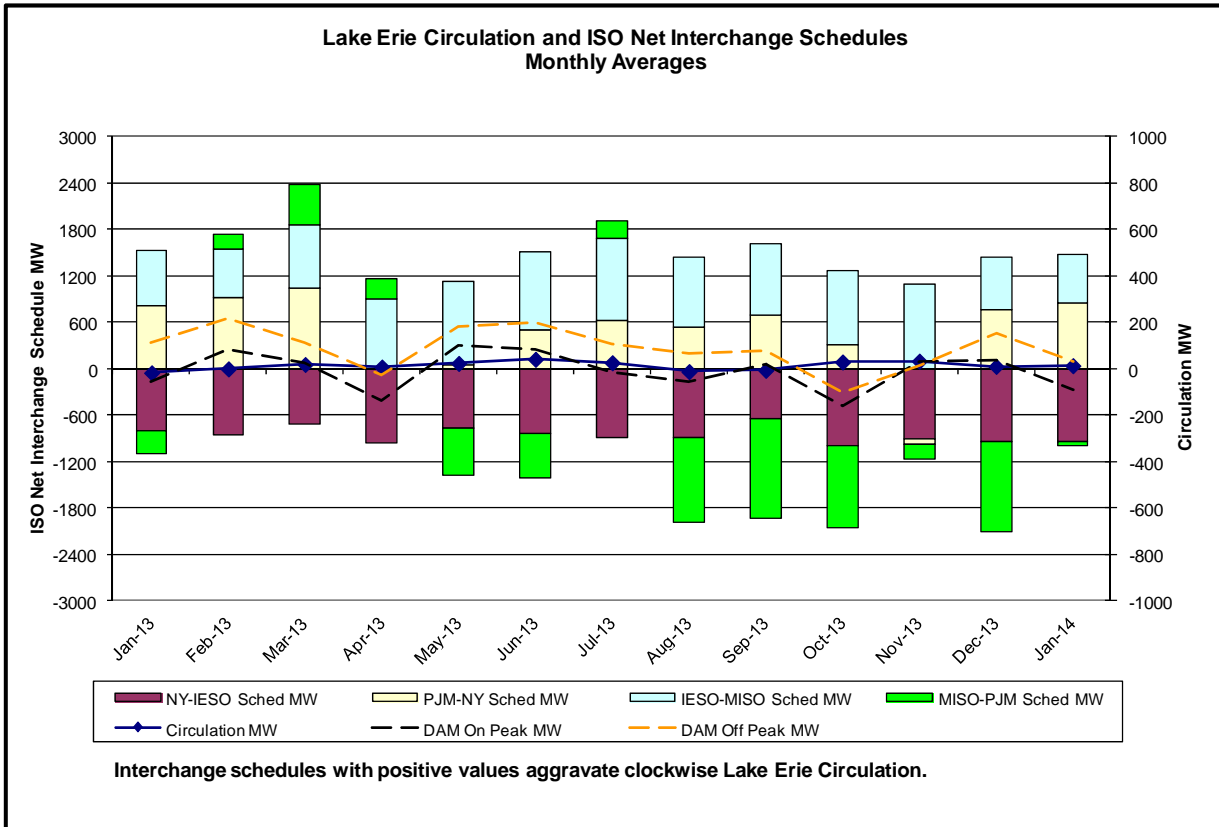




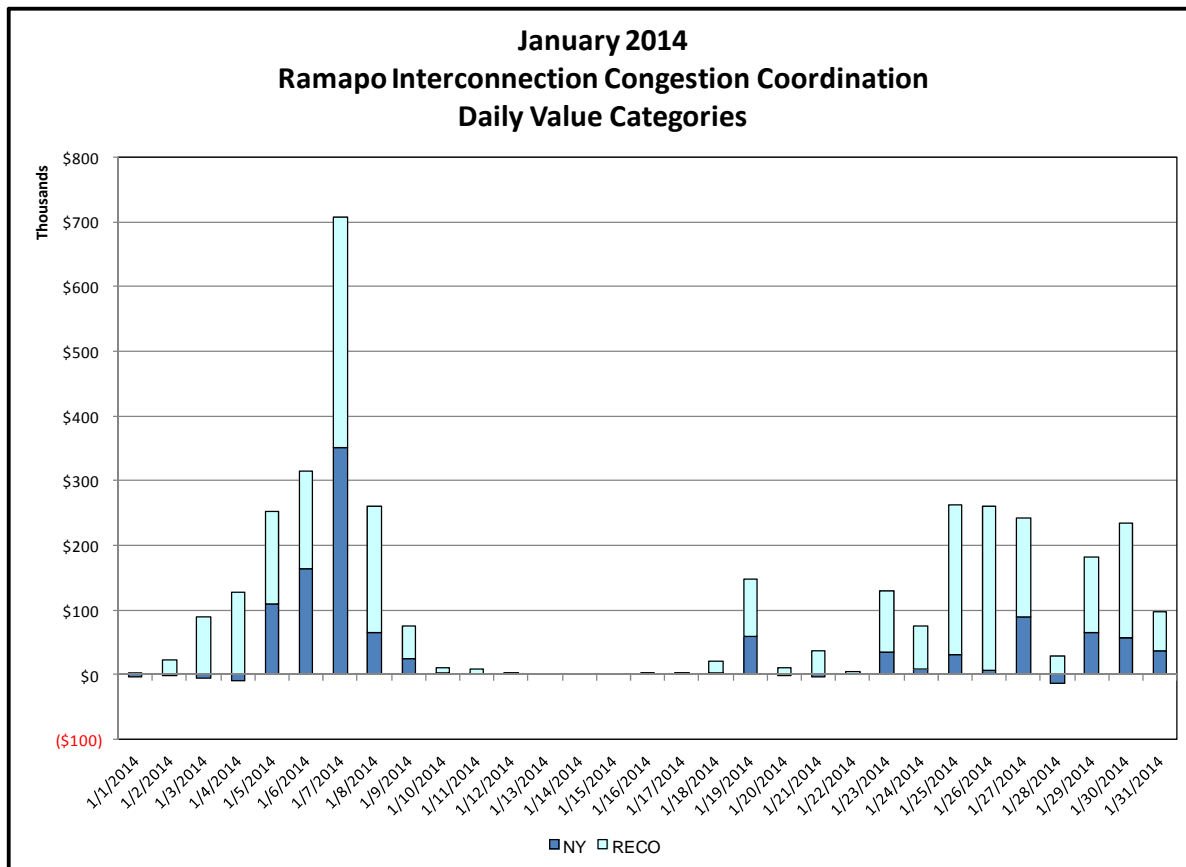
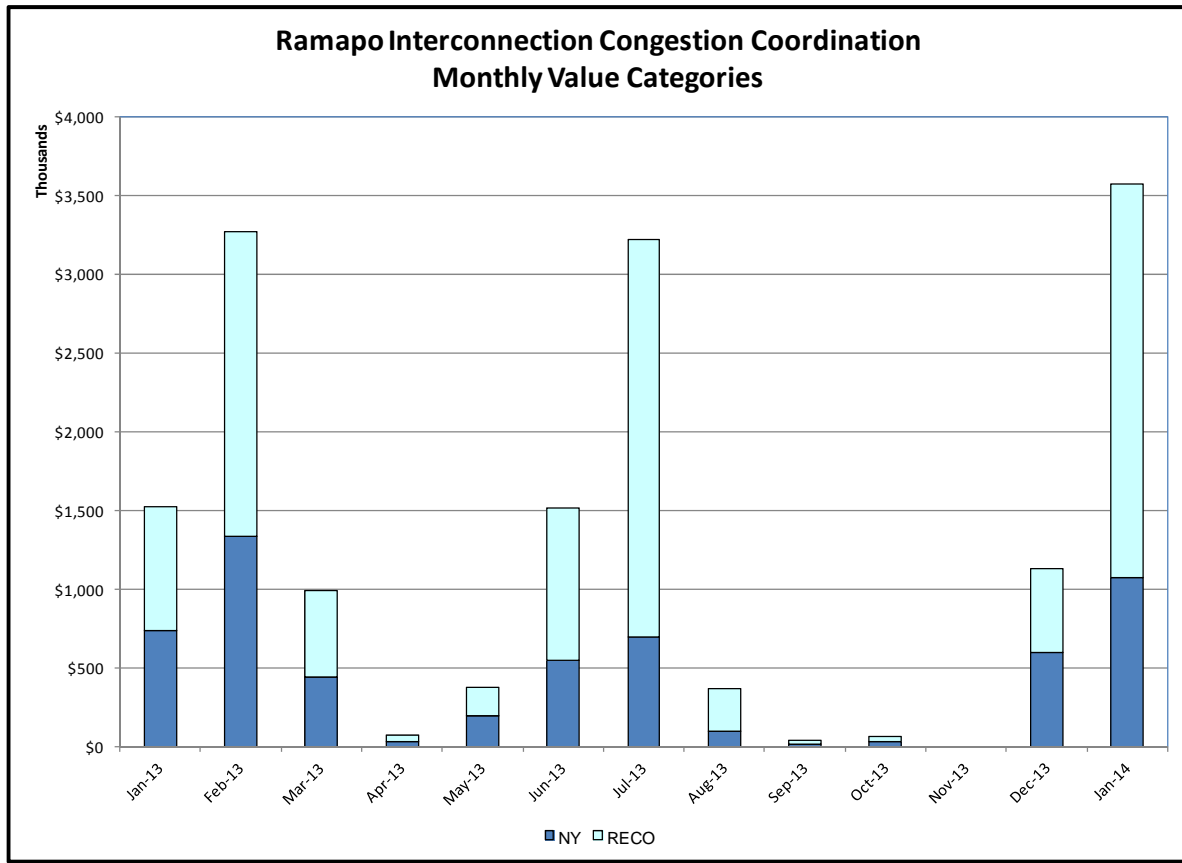






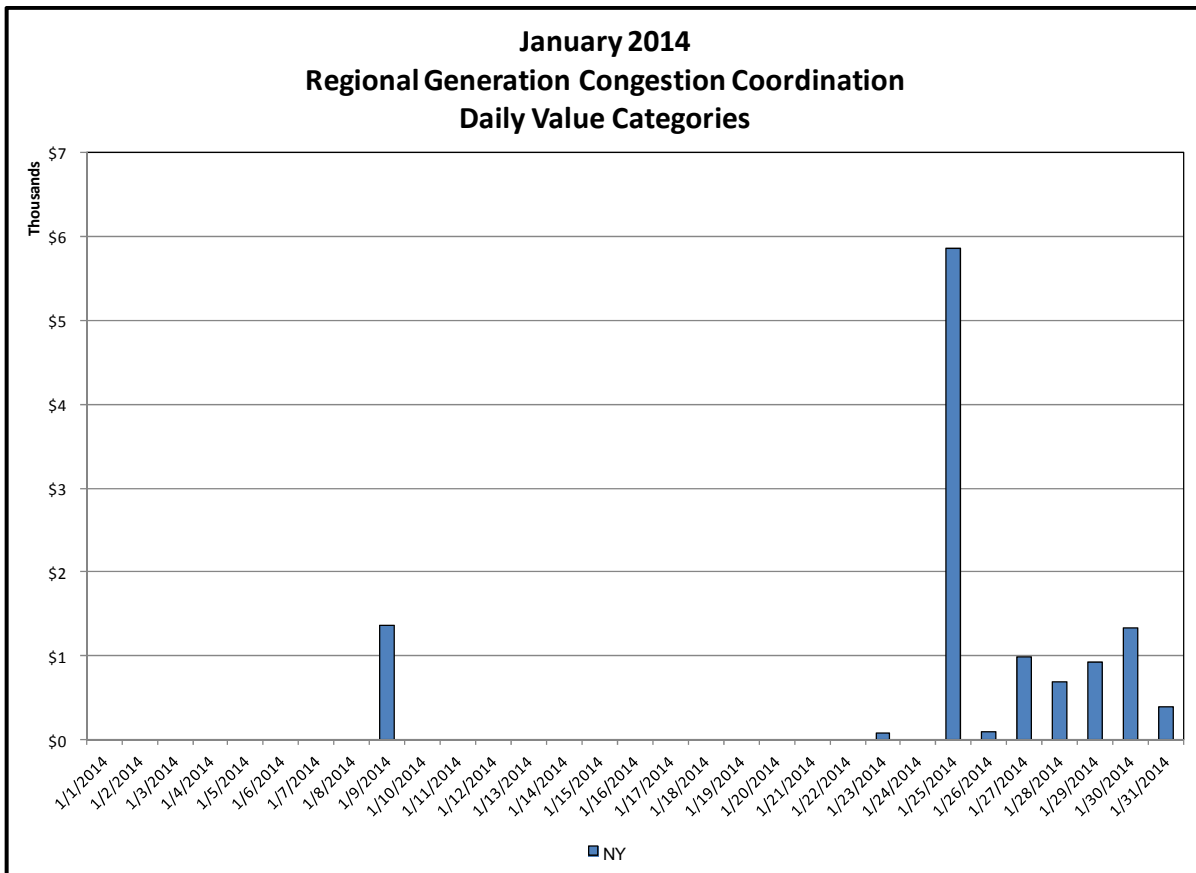
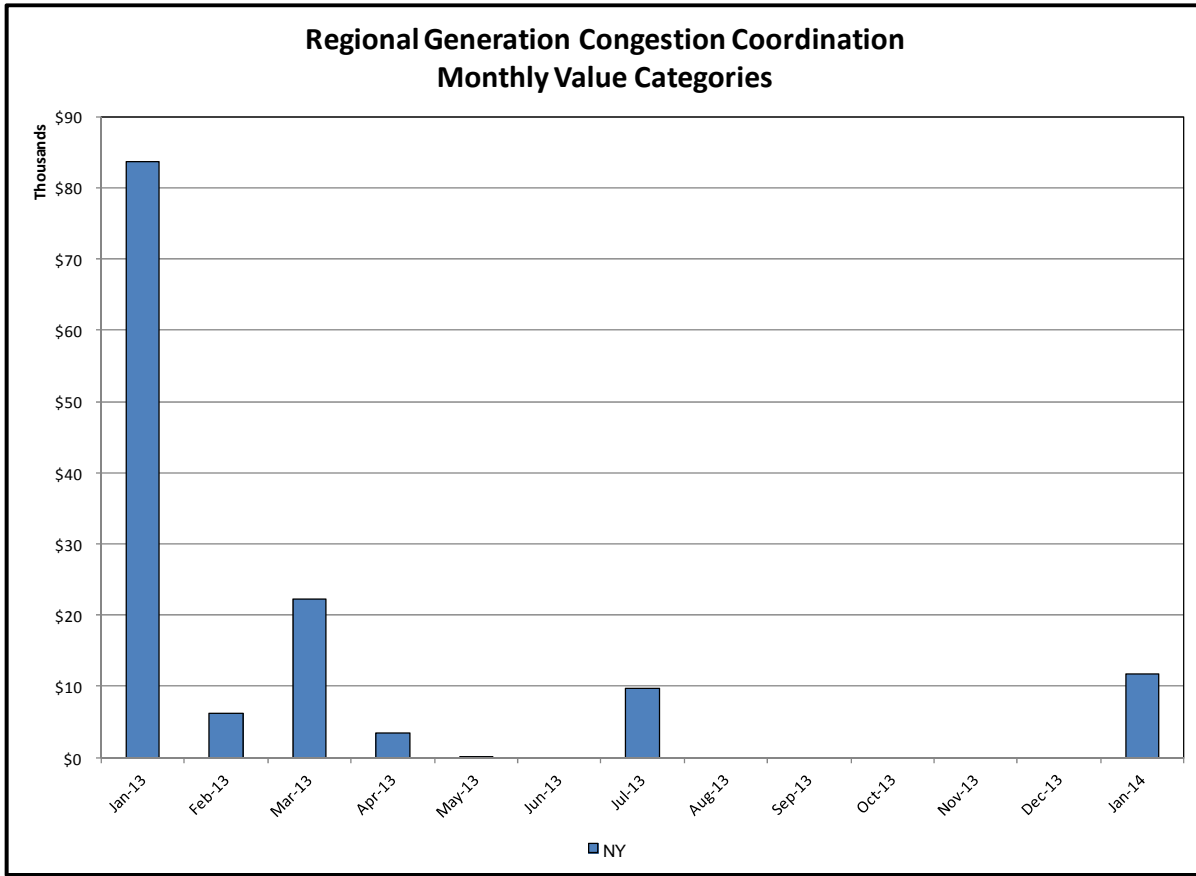


Broader Regional Market Performance Metrics



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

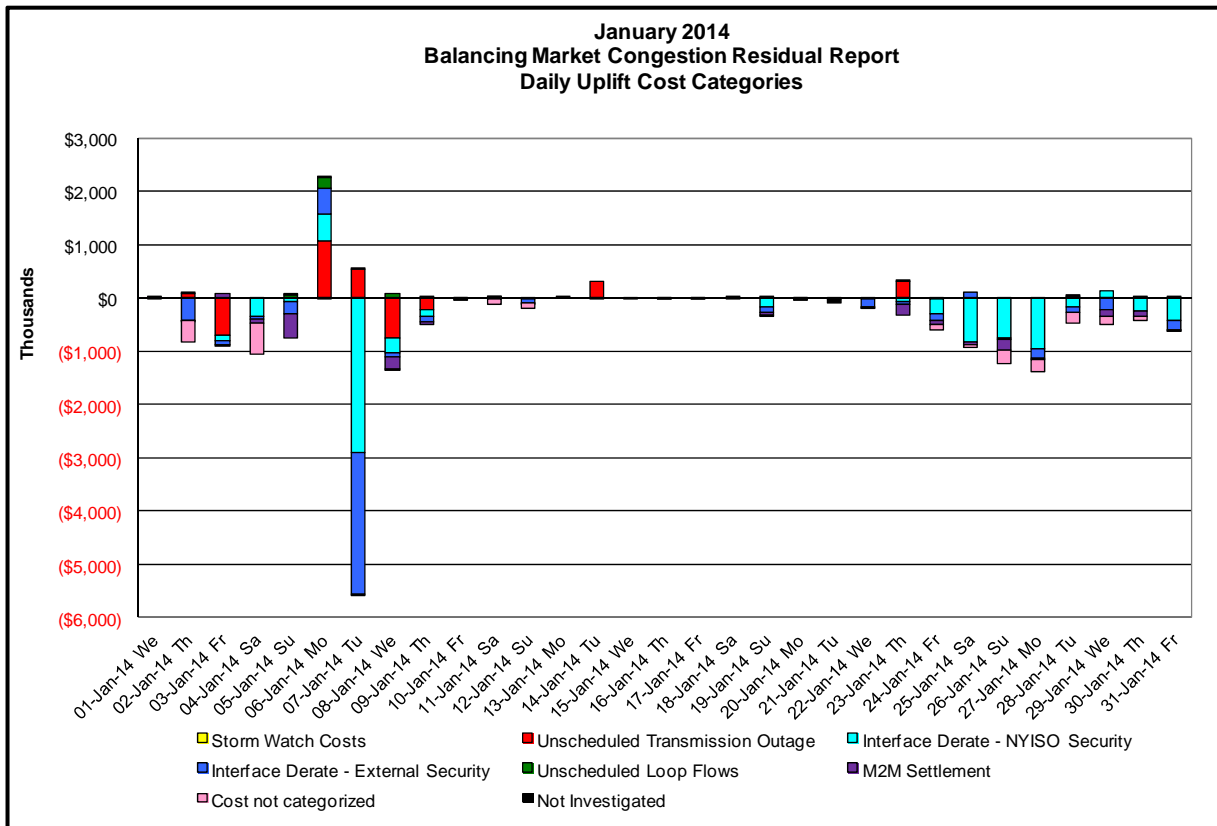
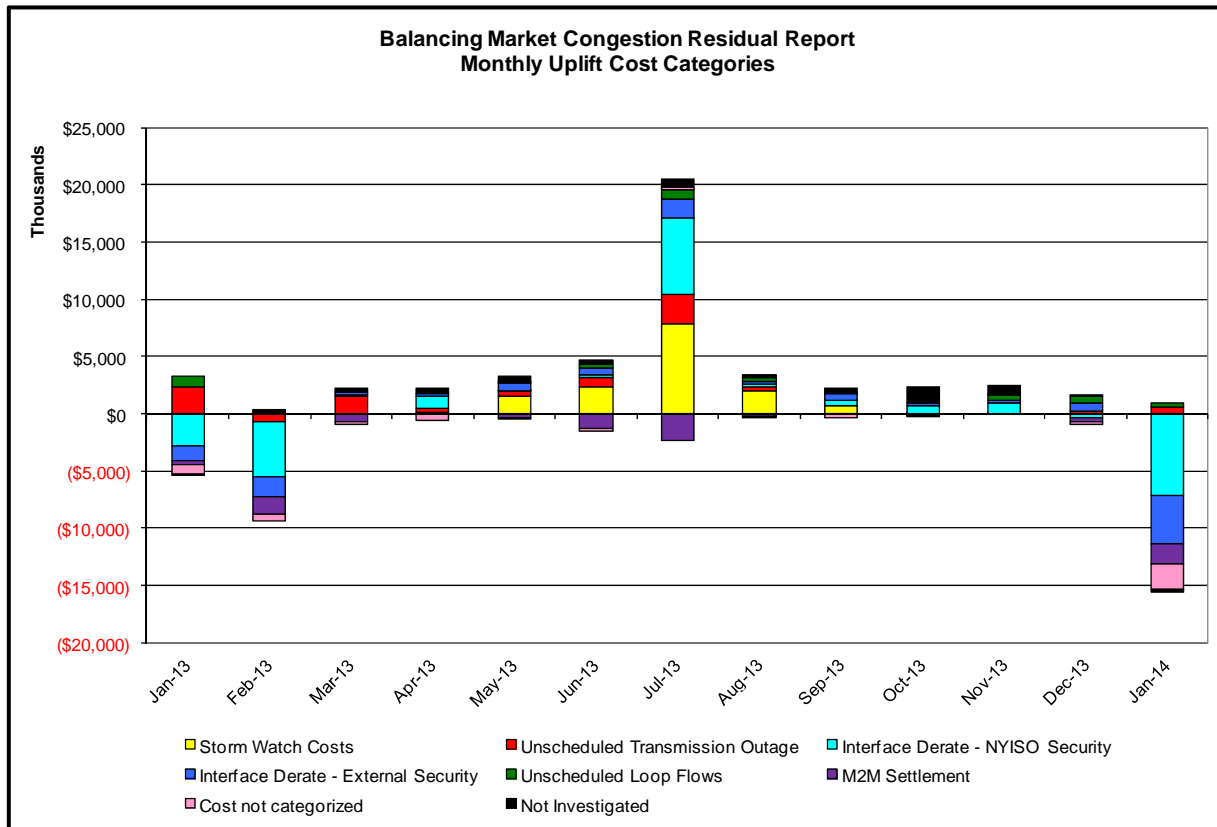
Category

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



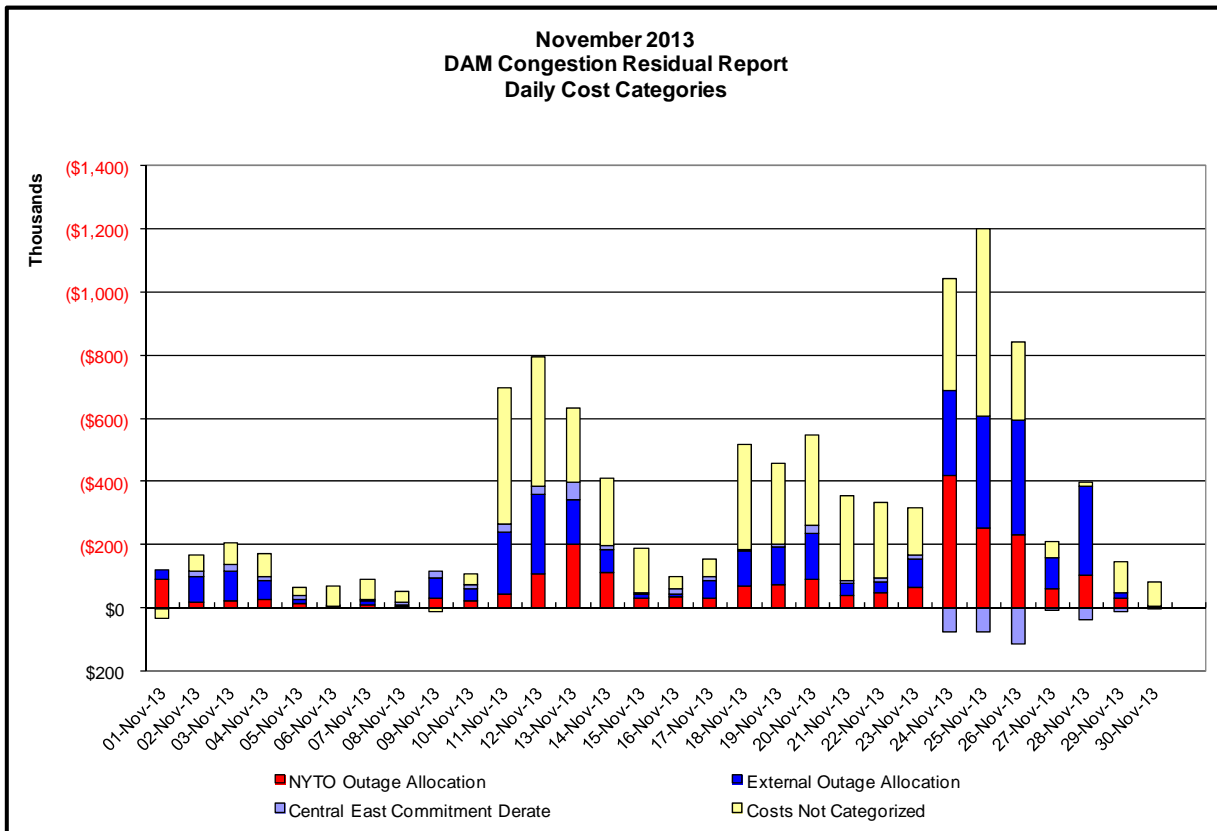
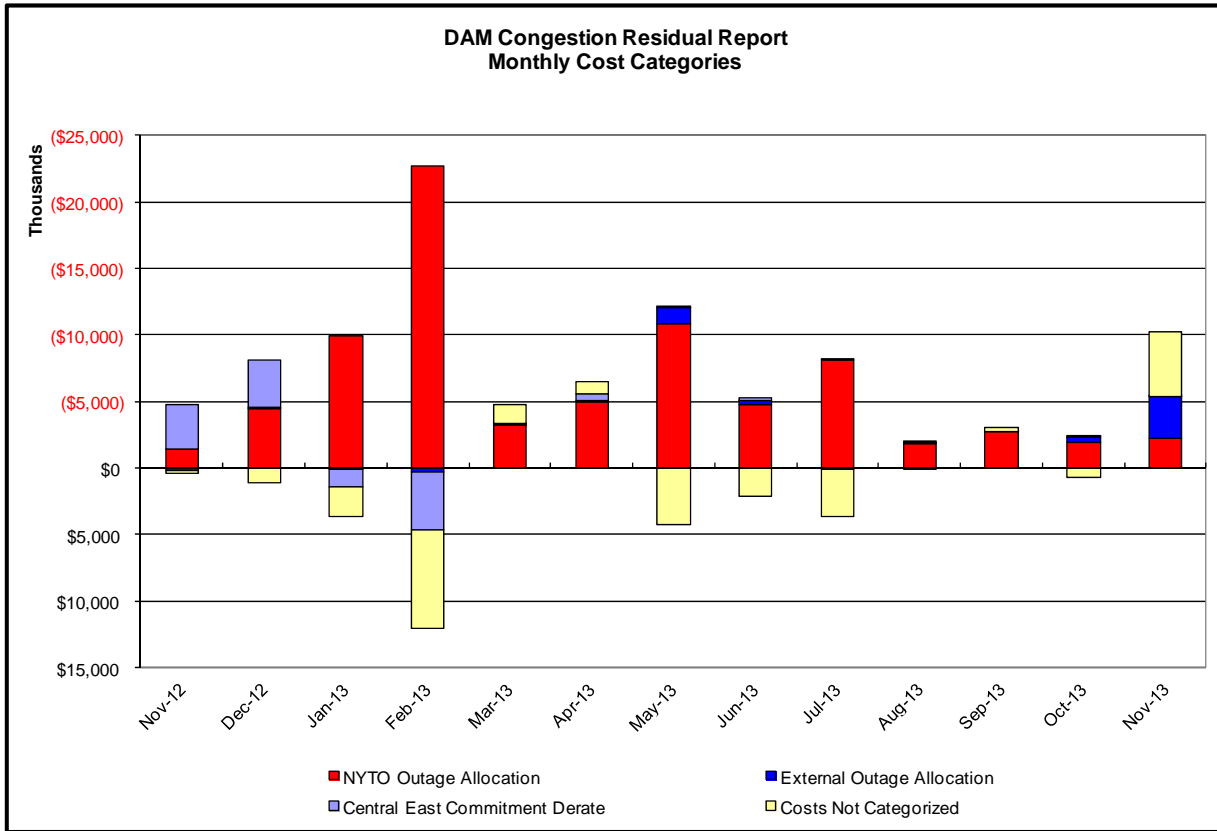
Event	Description	January Dates
	Early return to service Astoria Annex - East 13th Street 345kV (#Q35L)	24
	Early return to service Freeport-Barrett 138kV (#459)	8,9
	Early return to service Hudson-Farragut 345kV (#C3403)	3
	Extended outage Hudson-Farragut 345kV (#C3403)	2
	Extended outage Long Mountain-Pleasant Valley 345kV (#398)	14
	Forced outage PJM Neptune	3
	Forced outage Sprainbrook-East Garden City 345kV (#Y49)	6,7
	Forced outage Sprainbrook-West 49th Street 345kV (#M52)	23,24
	Forced outage Valley Stream-Jamaica 138kV (#901 L_M)	23
	Derate AstoriaE-Hellgate 138kv (#34052)	2
	Derate Central East	5,6,8,11,19,28,30
	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK(RNS2): Y49 & M29	3,5
	Derate Dysinger East	24
	Derate East 179th Street-HellGate East 138kV (#15054)	24,29
	Derate East Garden City-Valley Stream 138kV (#262) for I/o BUS:BARRETT 292 & 459 & G2	22,28,29,30
	Derate Farragut-Rainey 345kV (#61)	23,24
	Derate Farragut-Rainey 345kV (#63)	23
	Derate Freeport-Newbridge 138kV (#461)	2,7,22,28,30
	Derate Gardenville-Stolle Road 230kV (#66) for I/o TWR:GRADENVILLE 79 & 80	6
	Derate Huntley-Sawyer 230kV (#80) for I/o Sawyer-SUNY BUF 230kV (#79)	28
	Derate Kent Avenue-Vernon 138kV (#31232-1)	23
	Derate Kent Avenue-Vernon 138kV (31232-1) for I/o SCB:GOWANUS(16):42&26	23,24
	Derate Kent Avenue-Vernon 138kV (31232-1) for I/o SCB:GOWANUS(22):42231&G27&BEC	23
	Derate Kent Avenue-Vernon 138kV (31232-1) for I/o SCB:GOWANUS(8):26&CG&VFT	24
	Derate Kent Ave-Vernon 138kV (#31232-1) for I/o TWR:GOETHALS 22& 21& A2253	7
	Derate MottHaven-Dunwoodie 345kV (#71) for I/o MottHaven-Dunwoodie 345kV (#72)	24,29
	Derate Niagara-Packard 230kV (#61) for I/o TWR:PACKARD 62 & BP76	6
	Derate Queensbridge-Vernon 138kV (#31282)	23
	Derate Rainey-Vernon 138kV (#36311)	25
	Derate West 49th Street-Sprainbrook 345kV (#M51)	24
	Derate West 49th Street-Sprainbrook 345kV (#M51) for I/o SCB:SPBK(RS3):W75 & 99941	27-30
	NYCA DNI Ramp Limit	3-9,12,19,22-31
	Uprate Central East	3-9,19,22-31
	Uprate MottHaven-Dunwoodie 345kV (#71) for I/o MottHaven-Dunwoodie 345kV (#72)	27-29
	Uprate West 49th Street-Sprainbrook 345kV (#M51) for I/o SCB:SPBK(RS3):W75 & 99941	24-27,31
	HQ_CEDARS-NY Scheduling Limit	6,7,12
	HQ_CHAT DNI Ramp Limit	22-27,29,31
	HQ_CHAT Scheduling Limit	7,28
	IESO_AC DNI Ramp Limit	2,8,12,15,31
	IESO_AC-NY Scheduling Limit	2,7,9
	NE_AC - NY Scheduling Limit	4-6,9,19,31
	NE_AC DNI Ramp Limit	2,7,19,25,26,28
	NE_NNC1385 - NY Scheduling Limit	2,3,6-9,12,25
	PJM_AC DNI Ramp Limit	6-8,22-25,28,29
	PJM_AC-NY Scheduling Limit	2,7
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East	5,6,8,11,19,28,30,31

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	

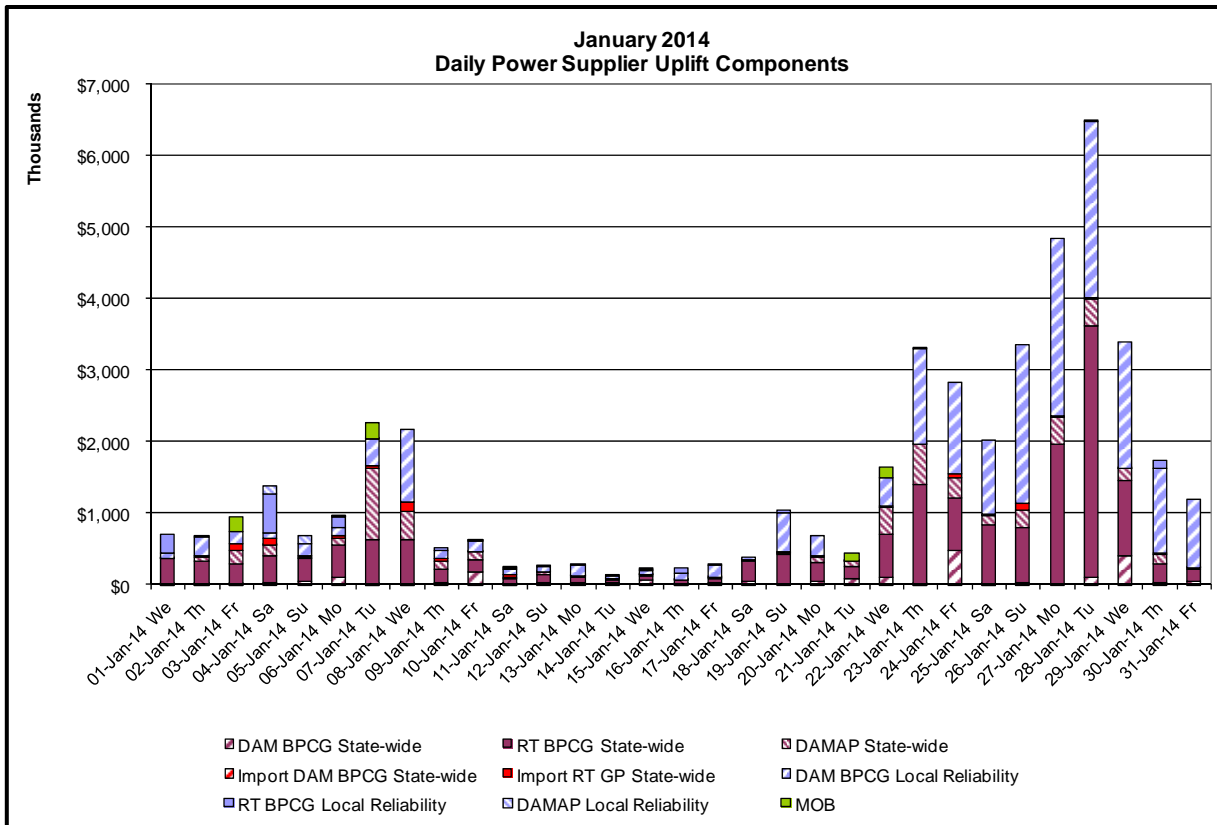
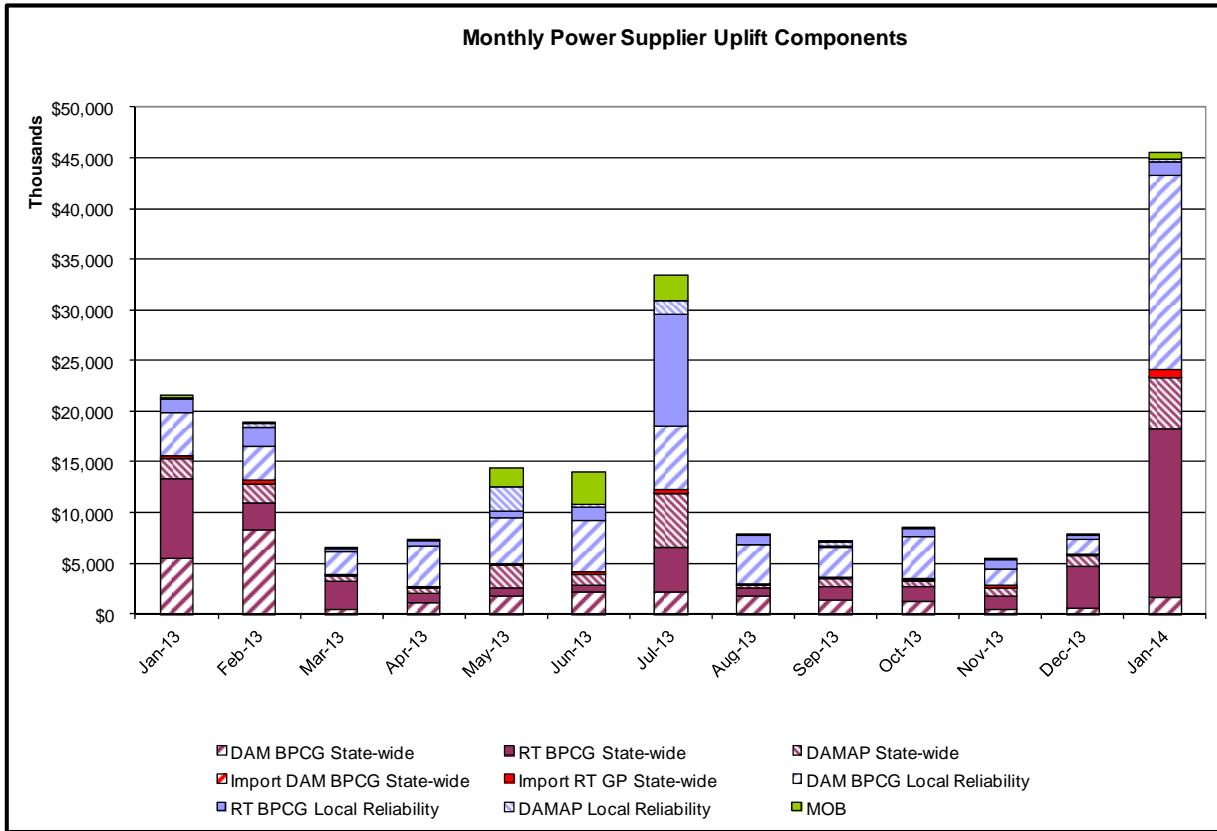
Monthly Balancing Market Congestion Report Assumptions/Notes

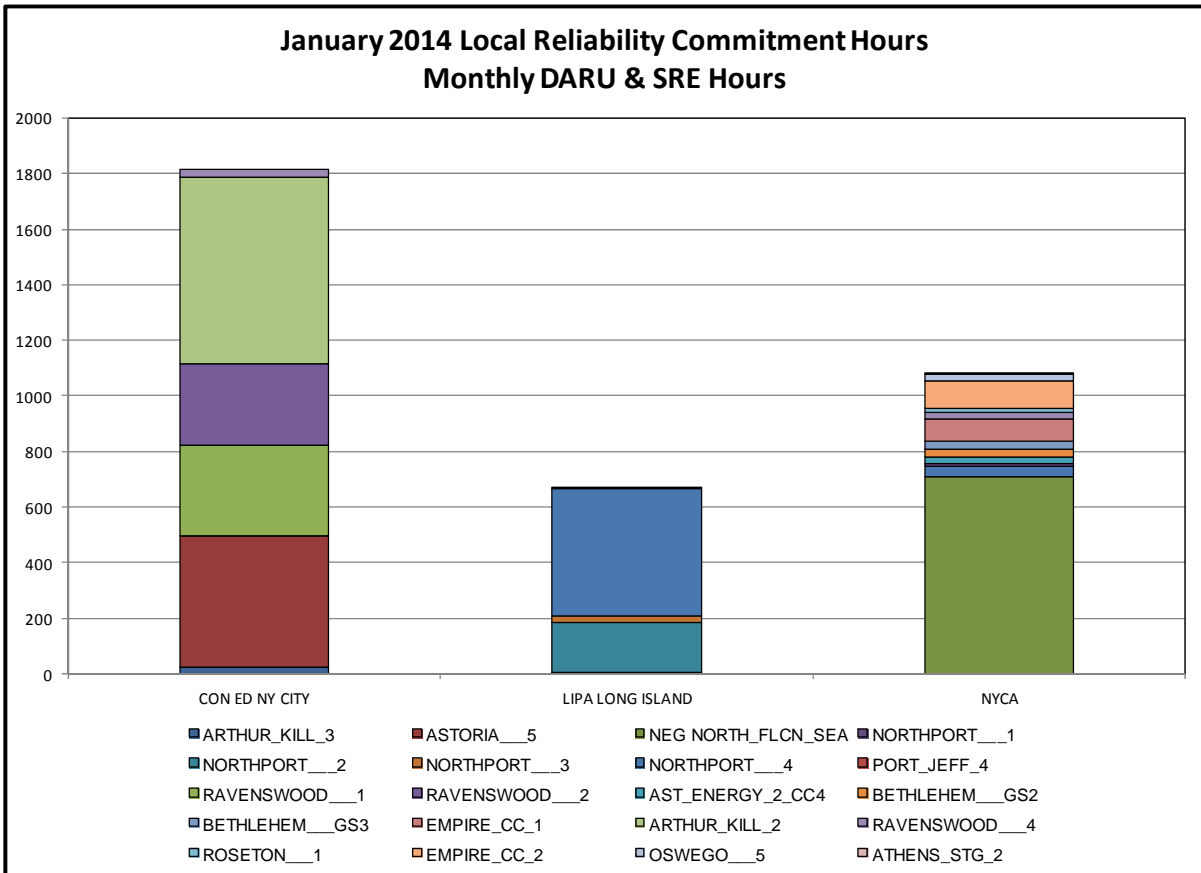
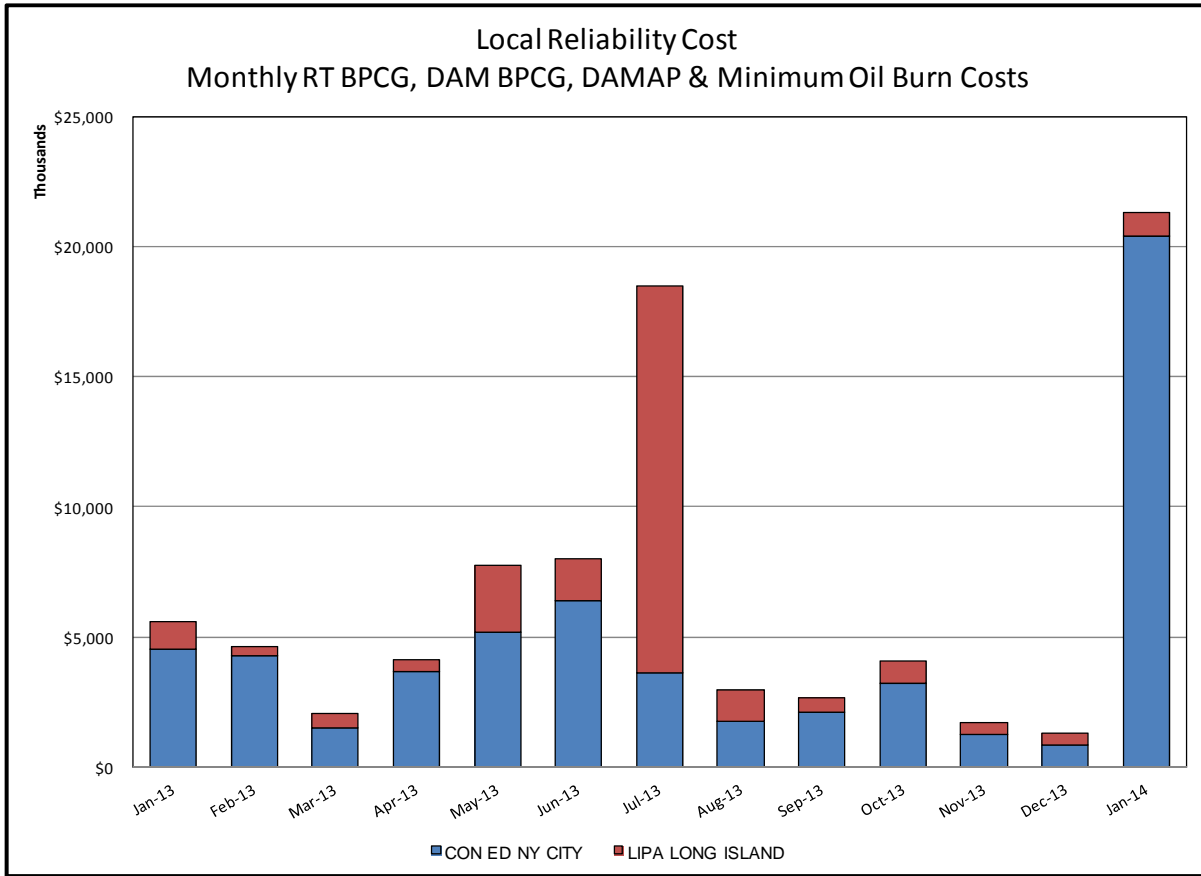
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

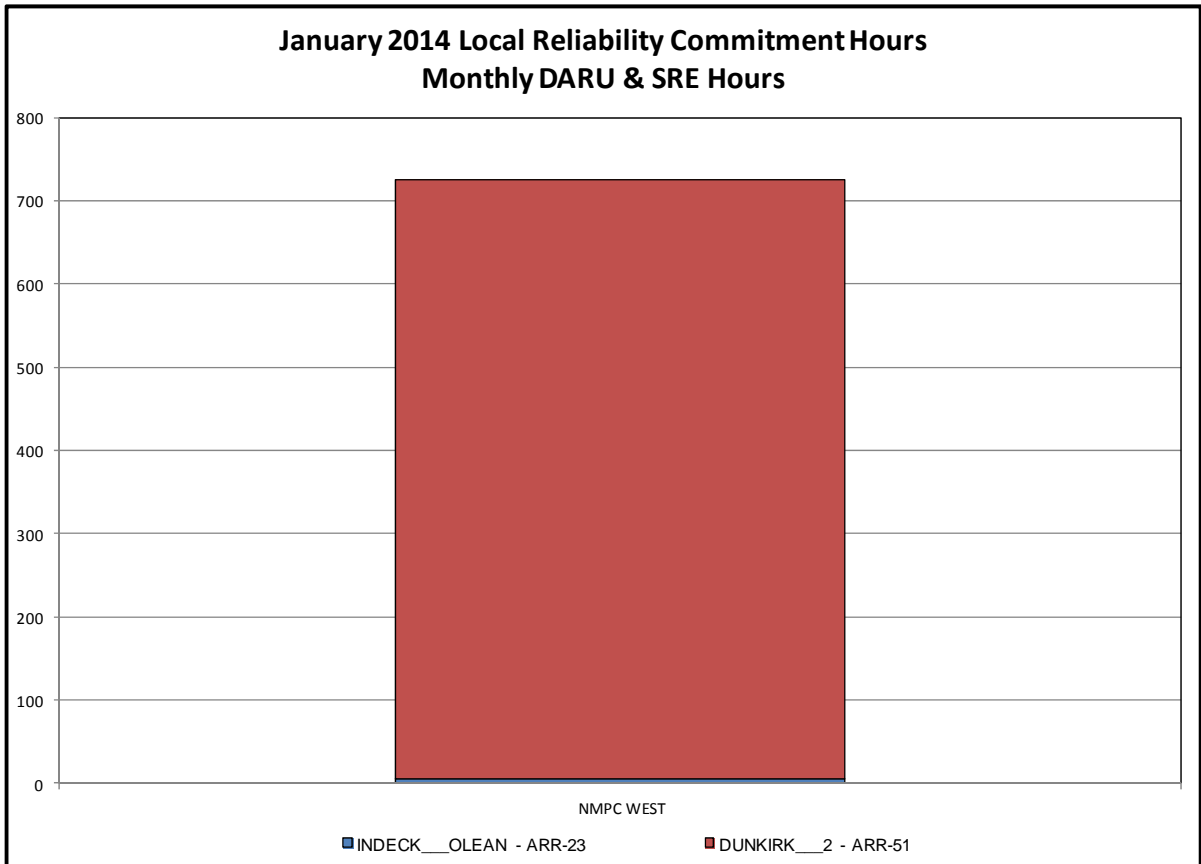
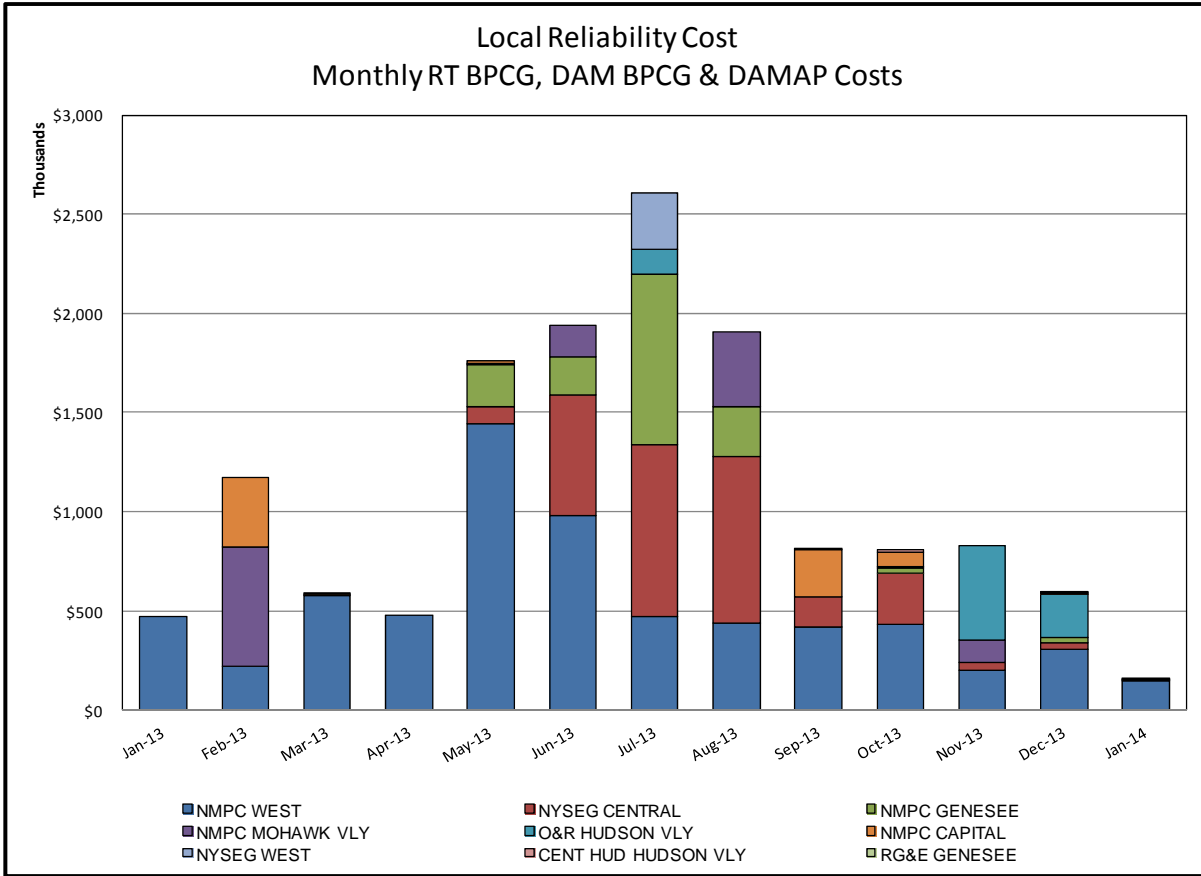


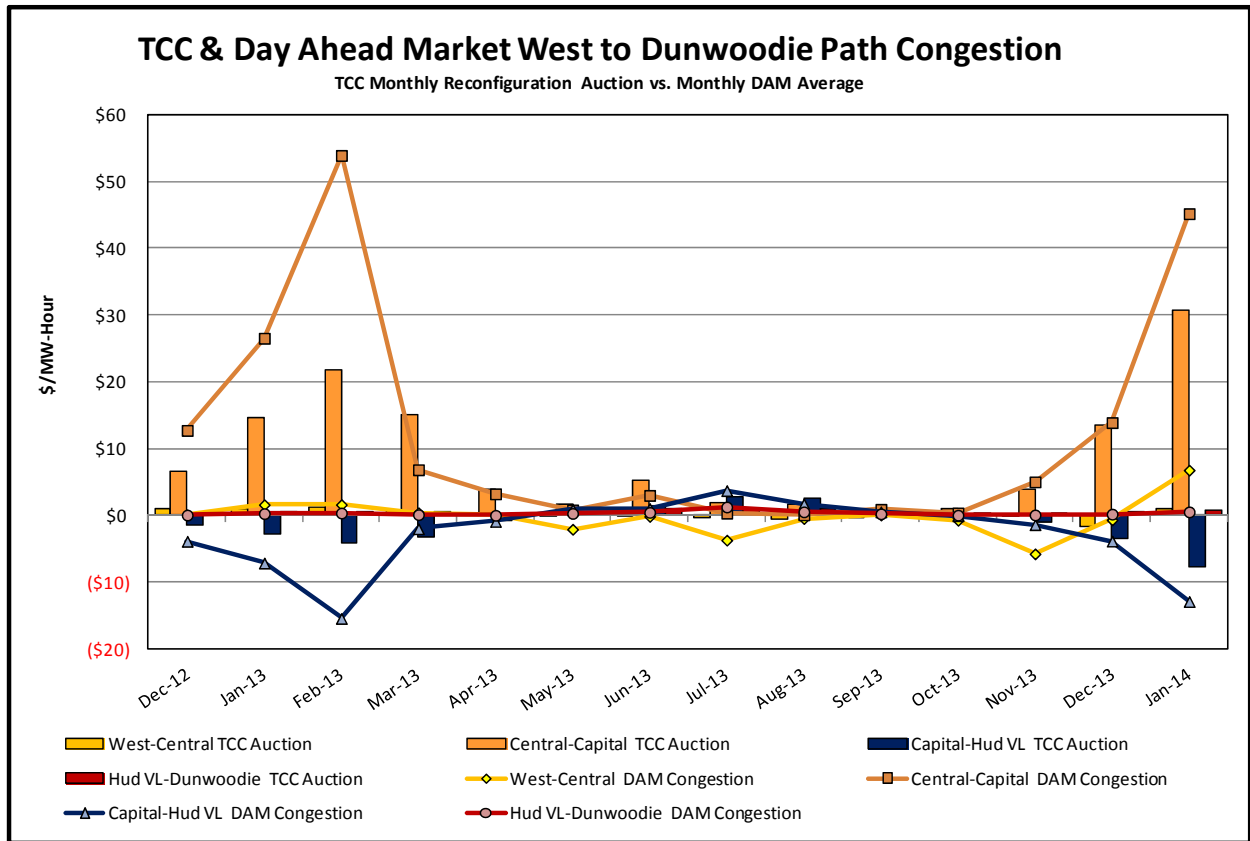
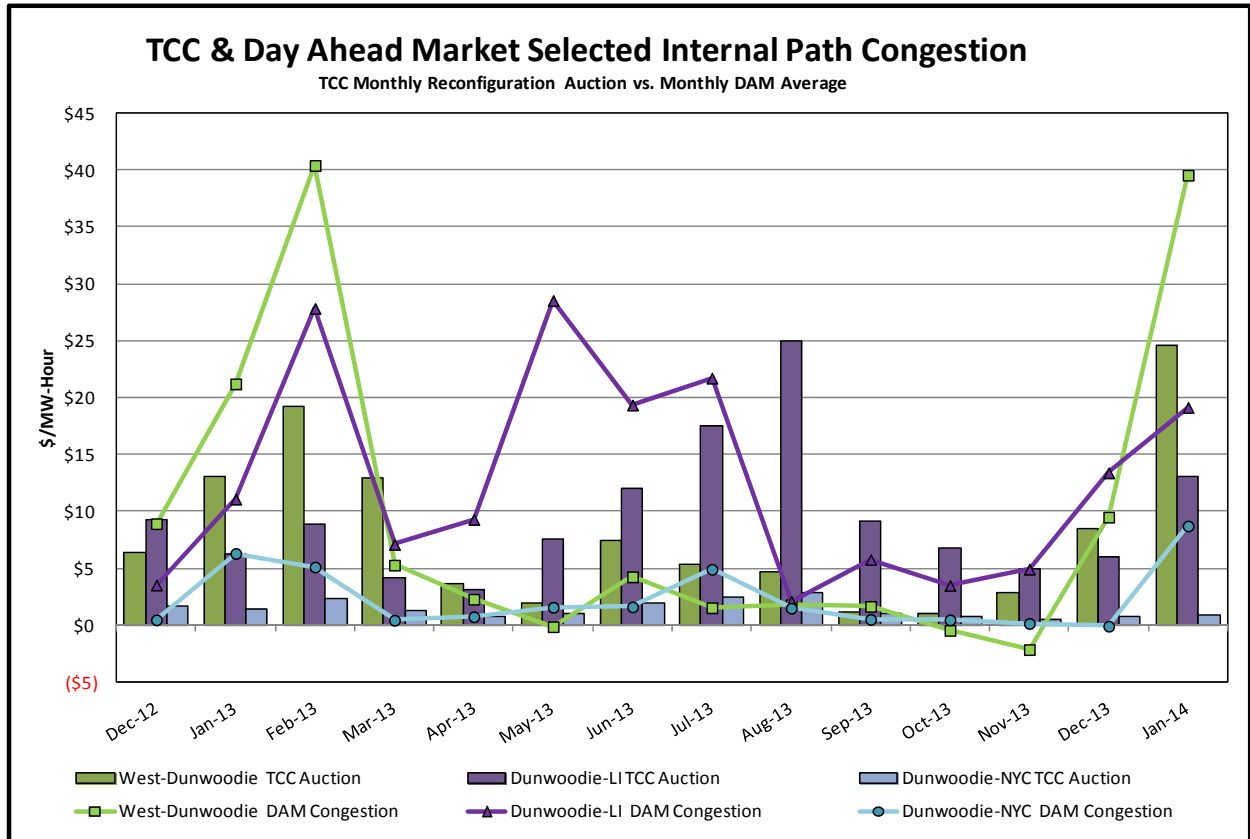
Day-Ahead Market Congestion Residual Categories

<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

