

Operations Performance Metrics Monthly Report



July 2014 Report

Operations & Reliability Department New York Independent System Operator

Prepared by NYISO Operations Analysis and Services, based on settlements initial settlement data collected on or before August 9, 2014.

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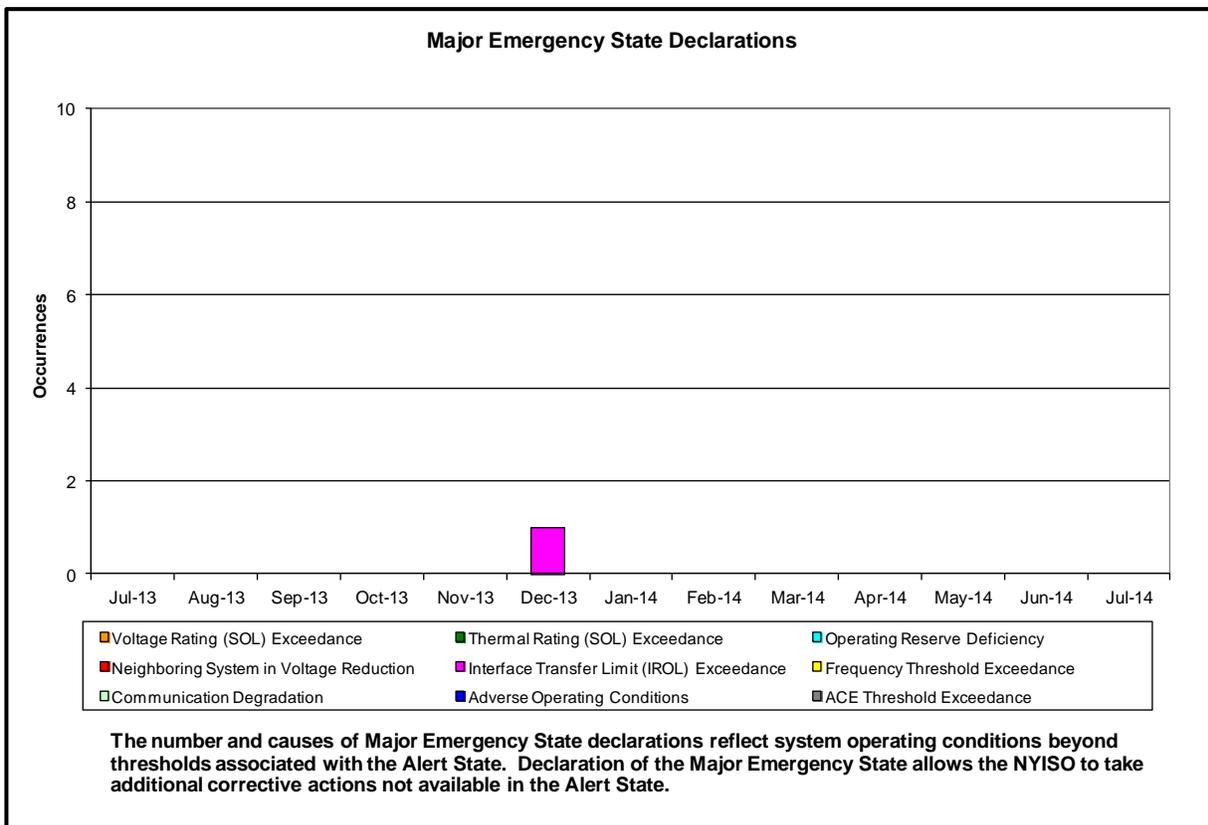
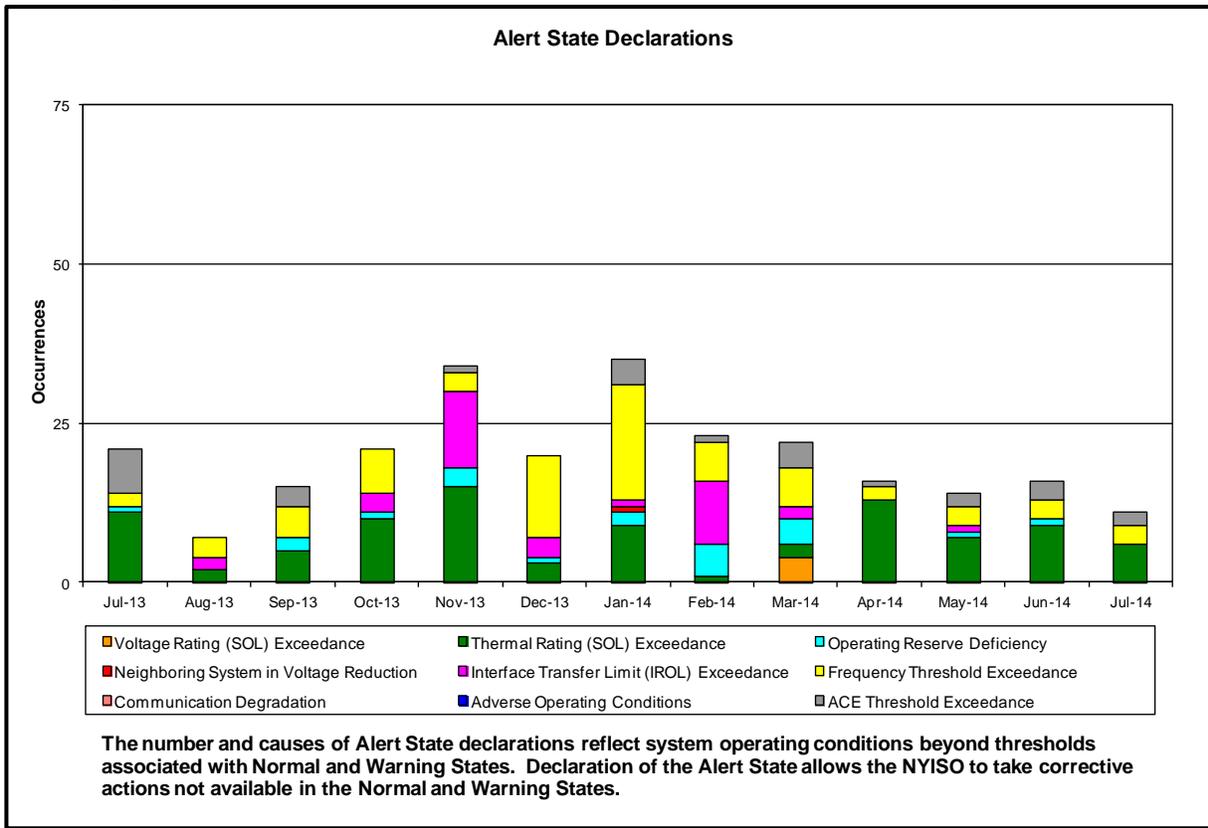
July 2014 Operations Performance Highlights

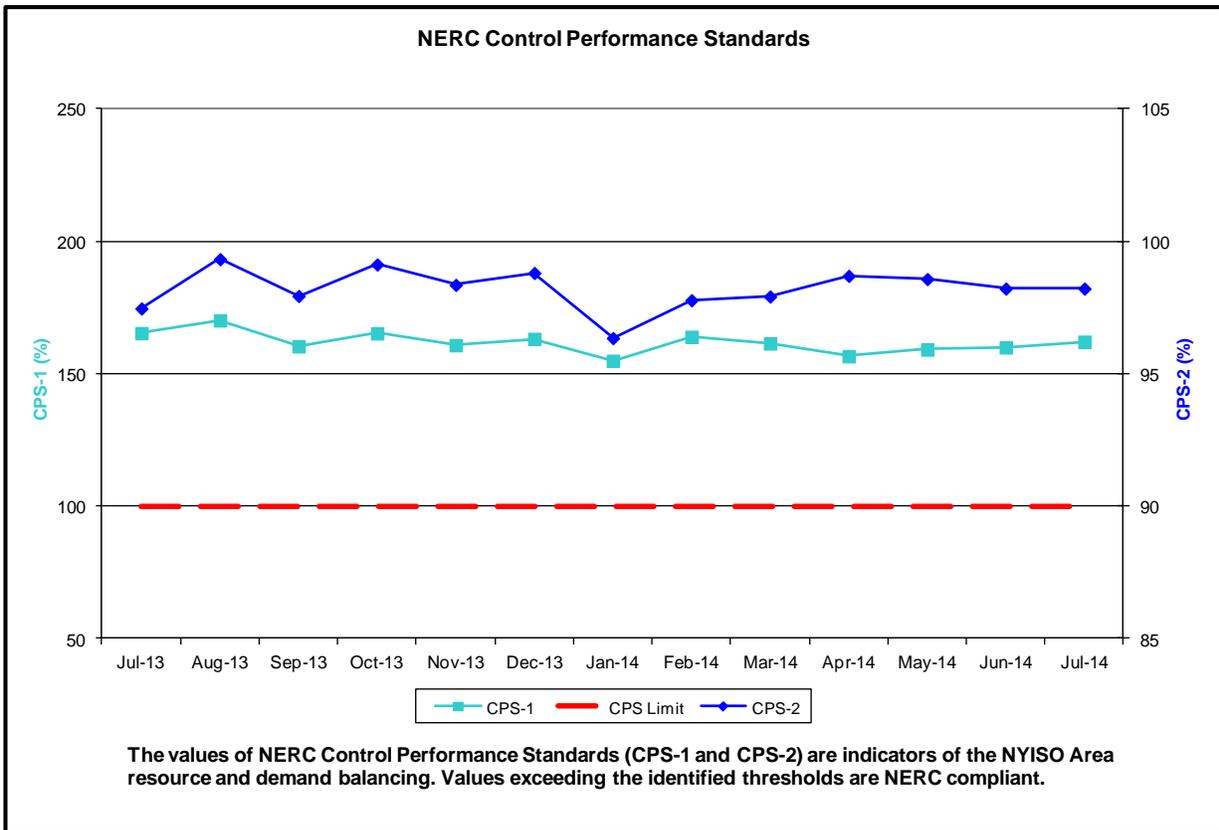
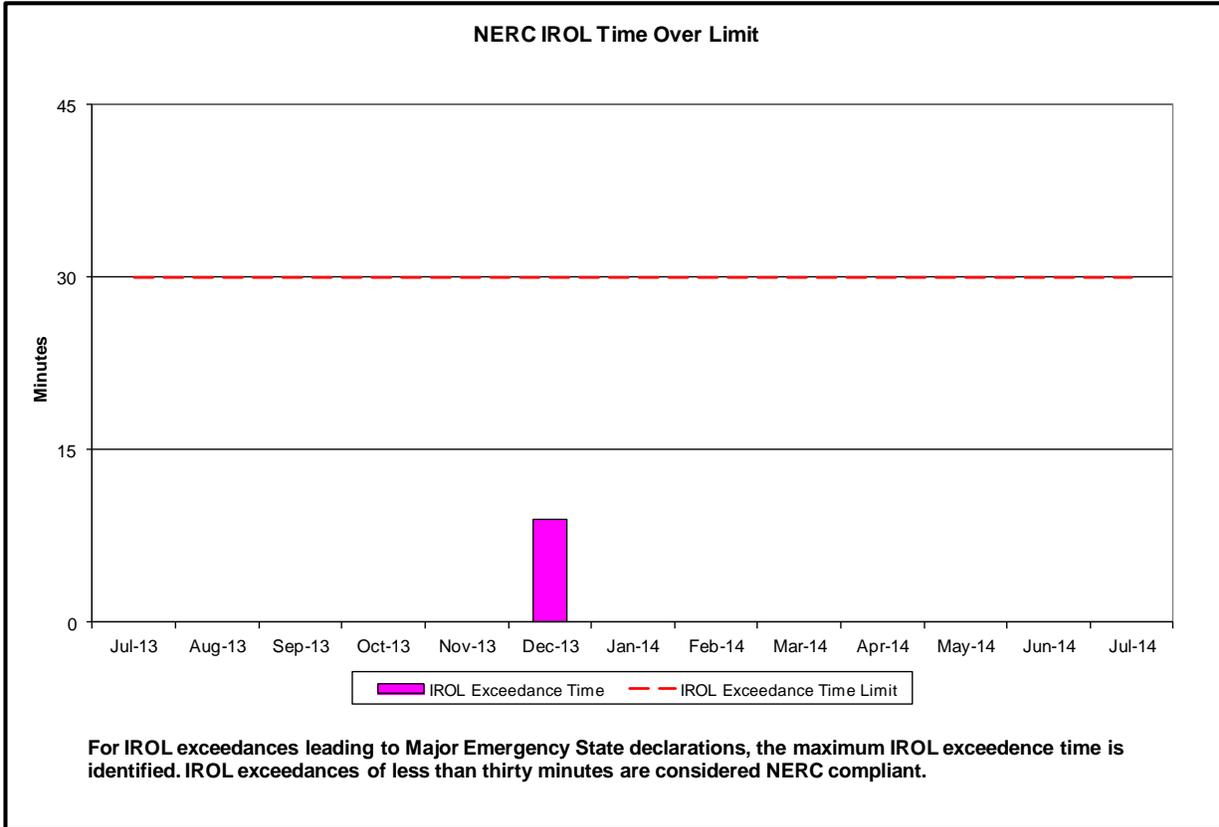
- Peak load of 29,331 MW occurred on 7/1/2014 HB 16
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 35 hours of Thunder Storm Alerts were declared
- 1 hours of NERC TLR level 3 curtailment
- Broader Regional Market Coordination monthly value was \$0.51M
- Broader Regional Market Coordination year-to-date value was \$6.66M
- Statewide uplift cost monthly average was \$(0.55)/MWh
- The following table identifies the Monthly ICAP spot market prices by locality and the price changes from the prior month,

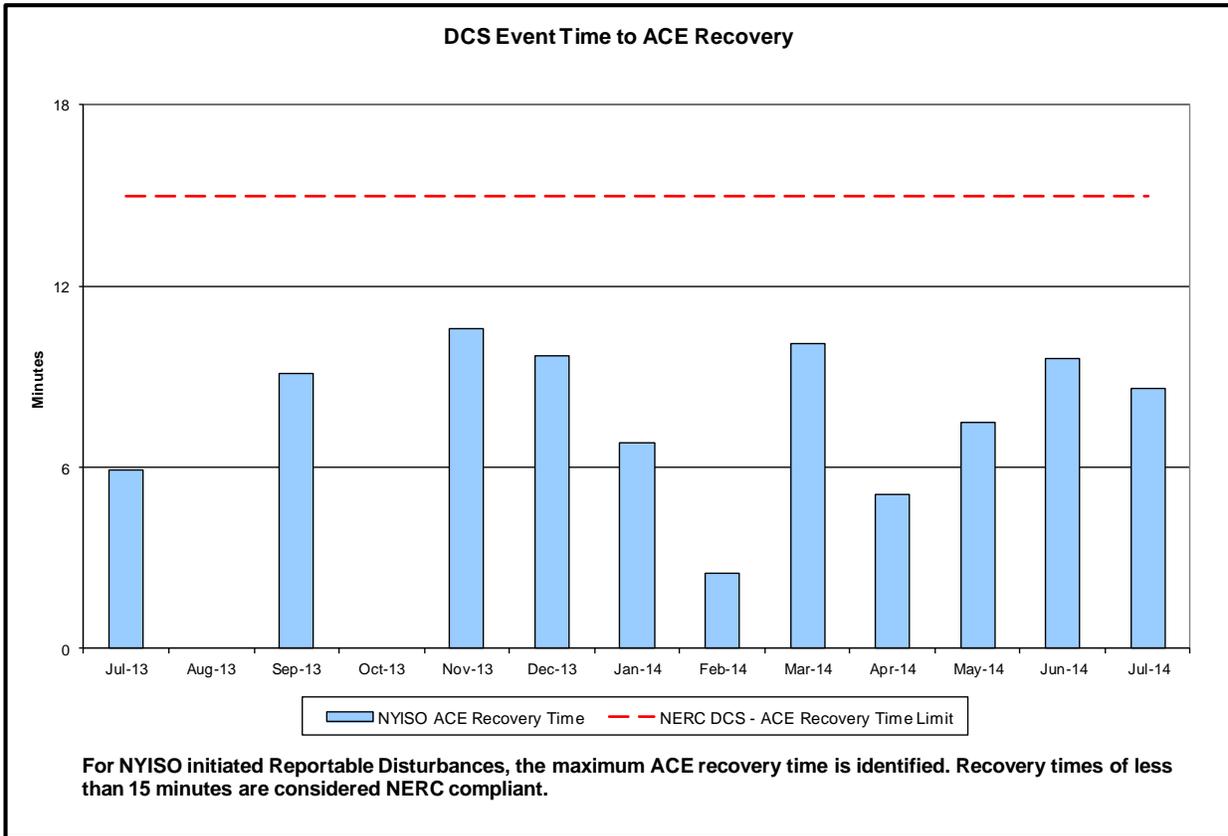
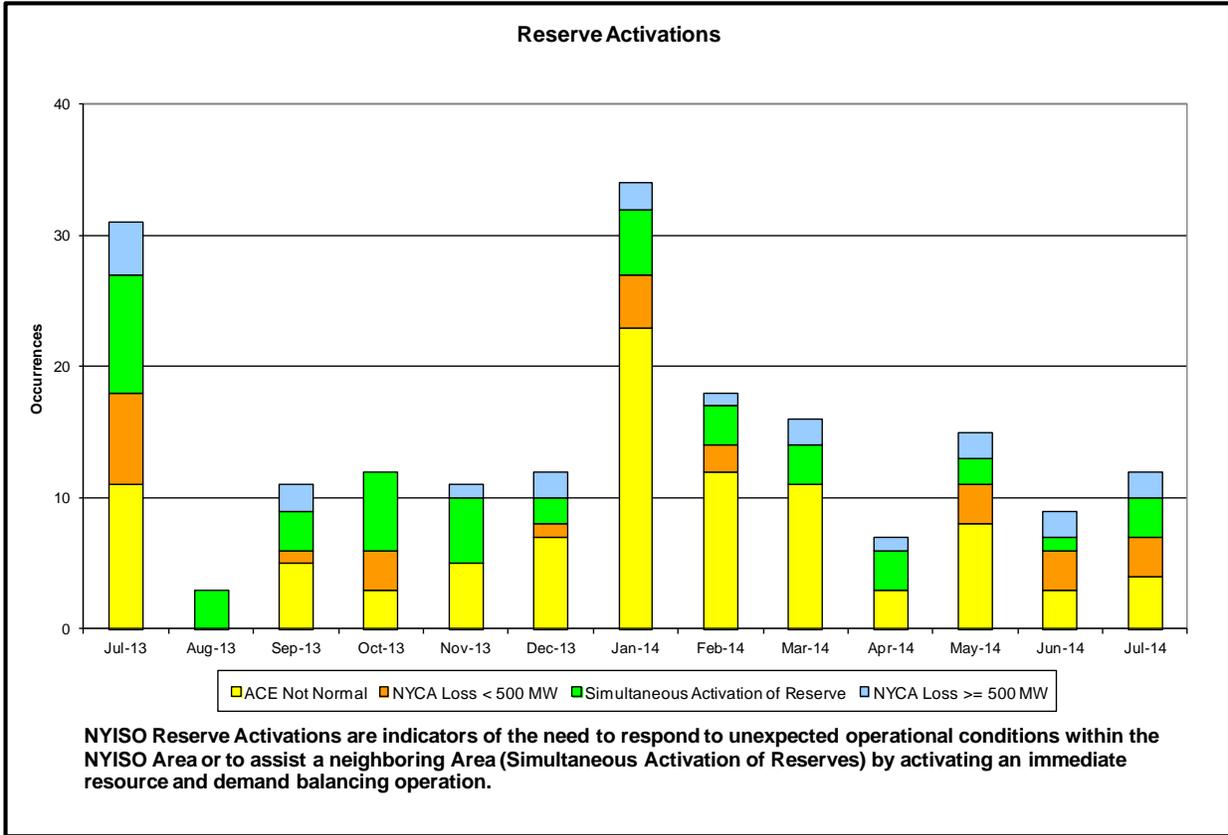
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
August 2014 Spot Price	\$5.80	\$12.25	\$18.56	\$6.47
Change from Prior Month	(\$0.30)	(\$0.07)	(\$0.13)	\$0.01

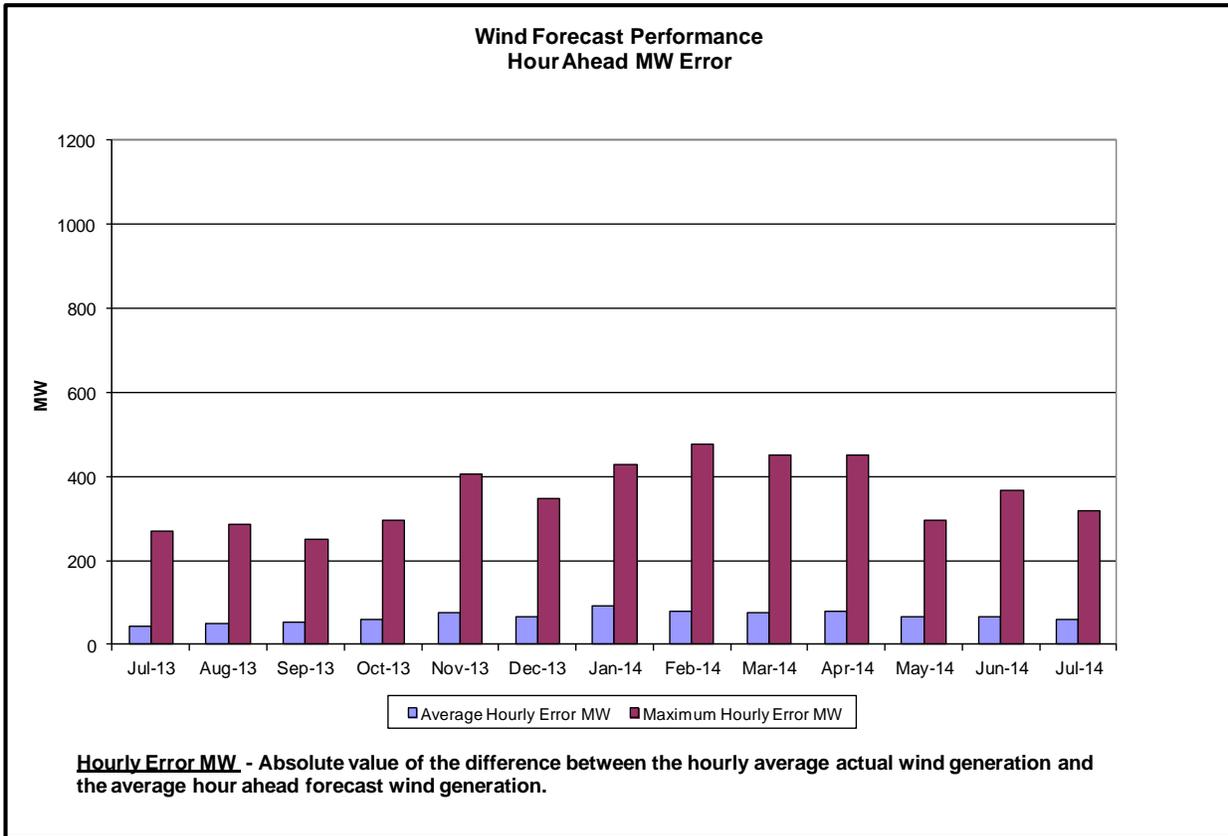
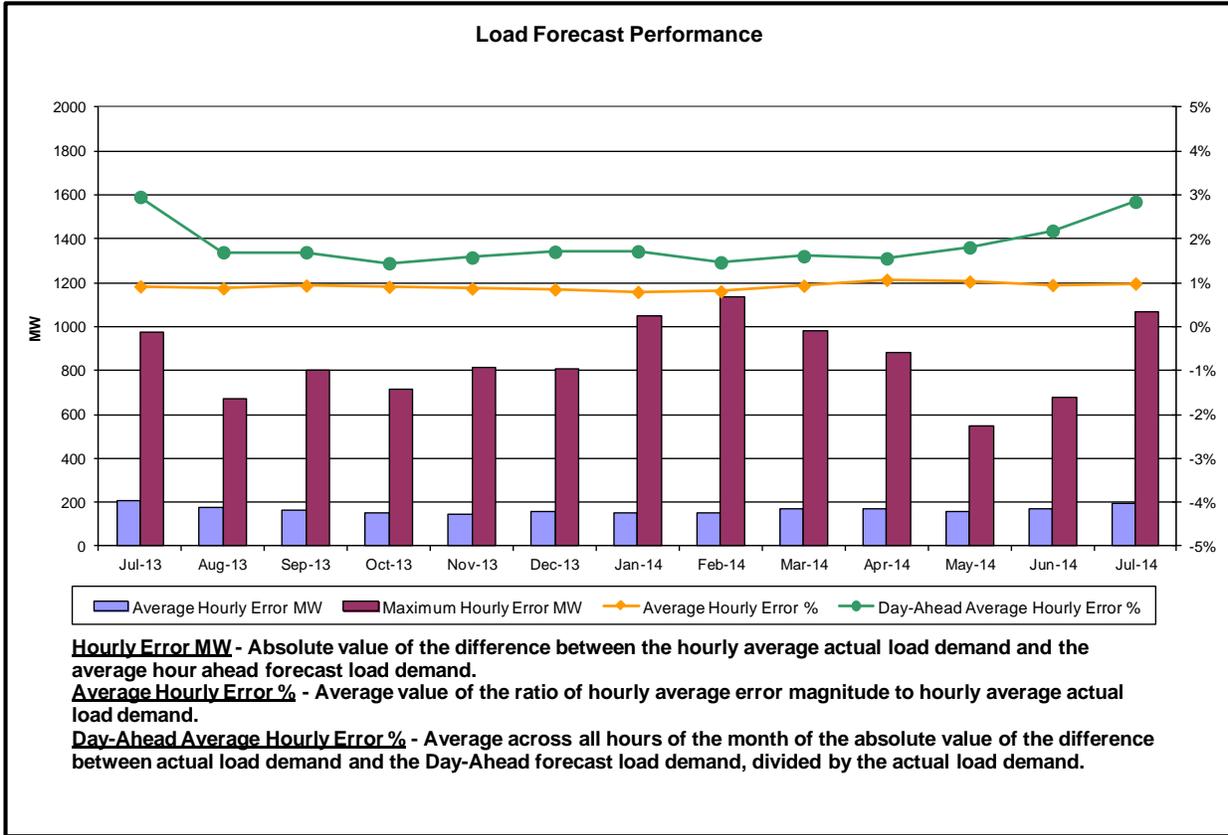
- NYCA - Price is reduced by \$0.30 due to an increase in Generation UCAP of 87.3 MW and an increase in imports by 88.4 MW UCAP, mostly from PJM.
- NYC - Price is reduced by \$0.13 due to 12.5 MW increase in Generation UCAP

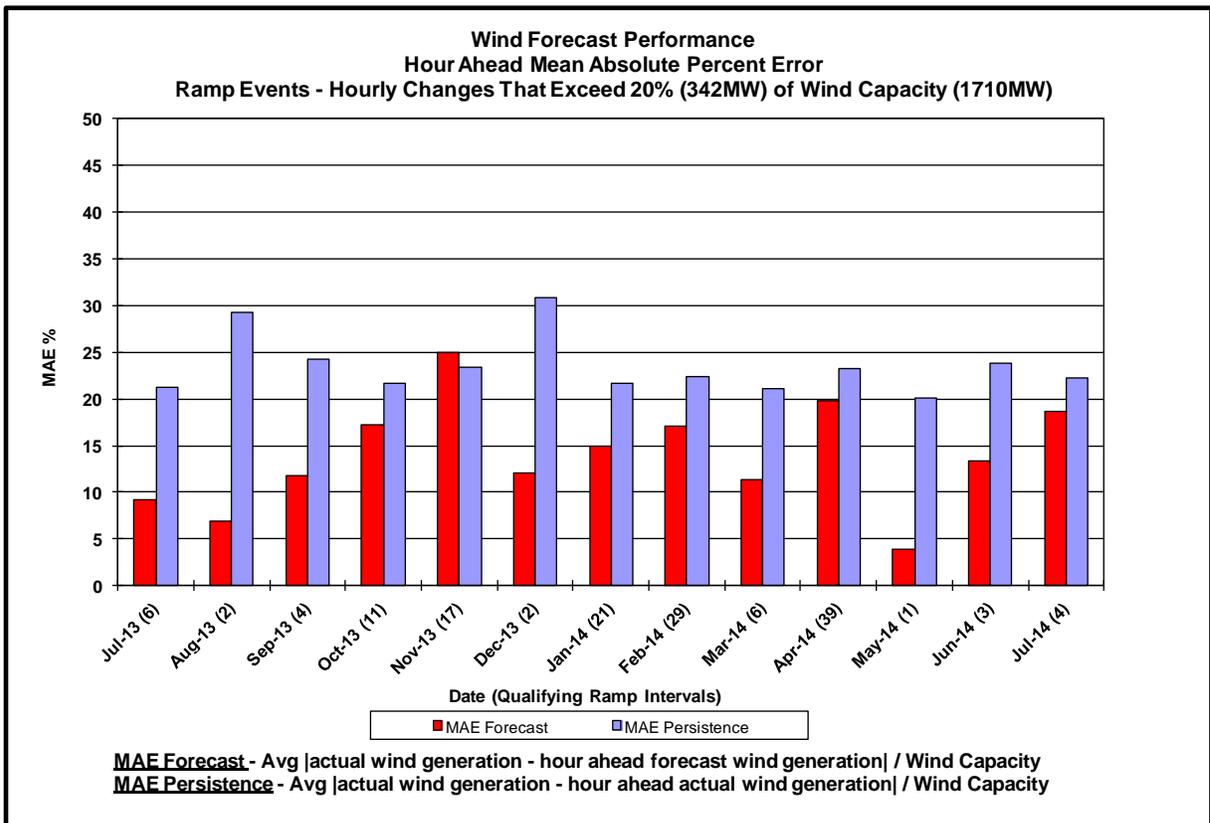
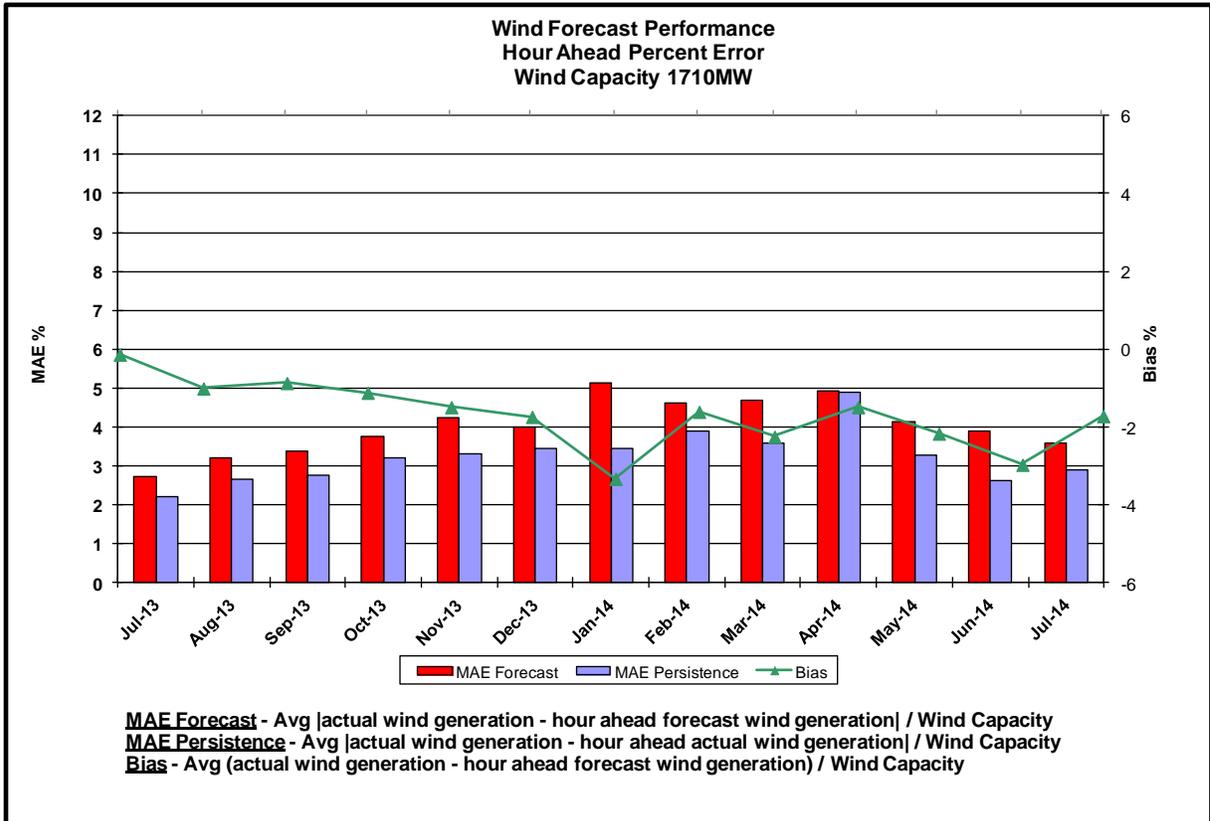
Reliability Performance Metrics

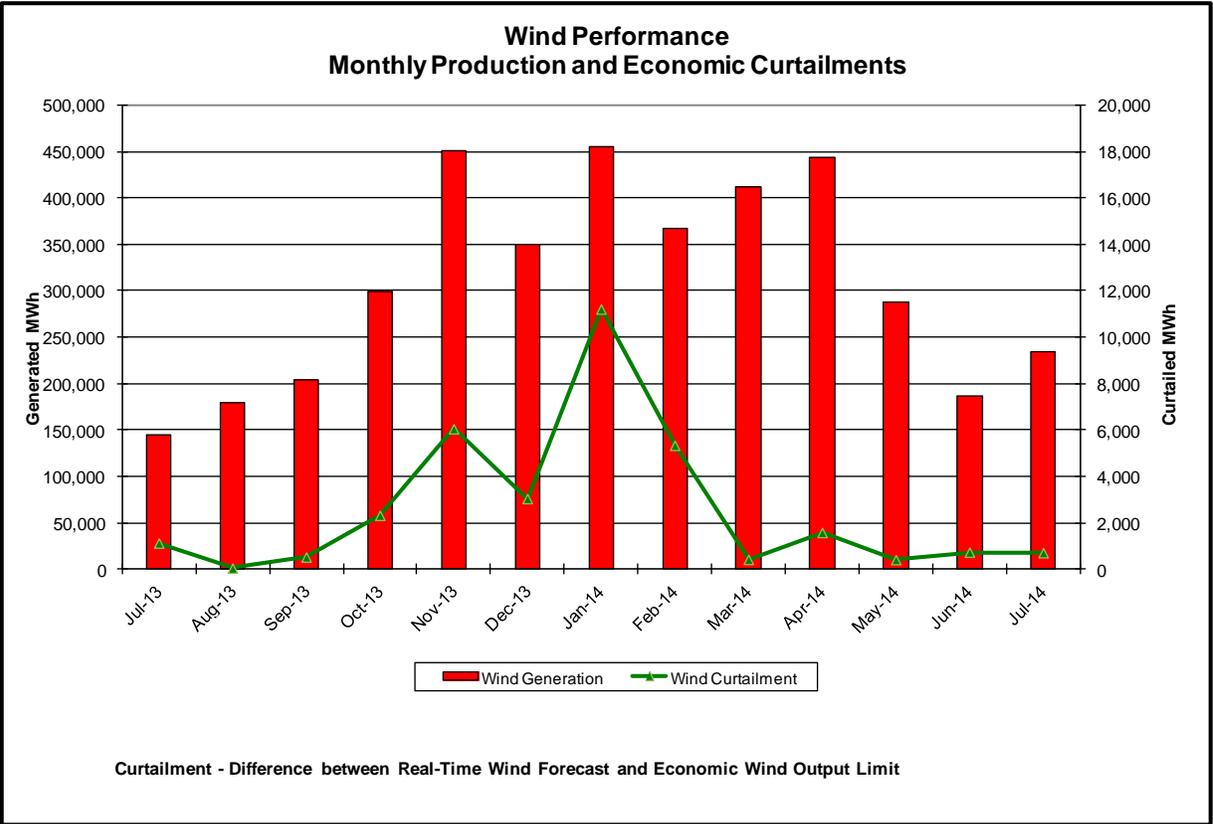
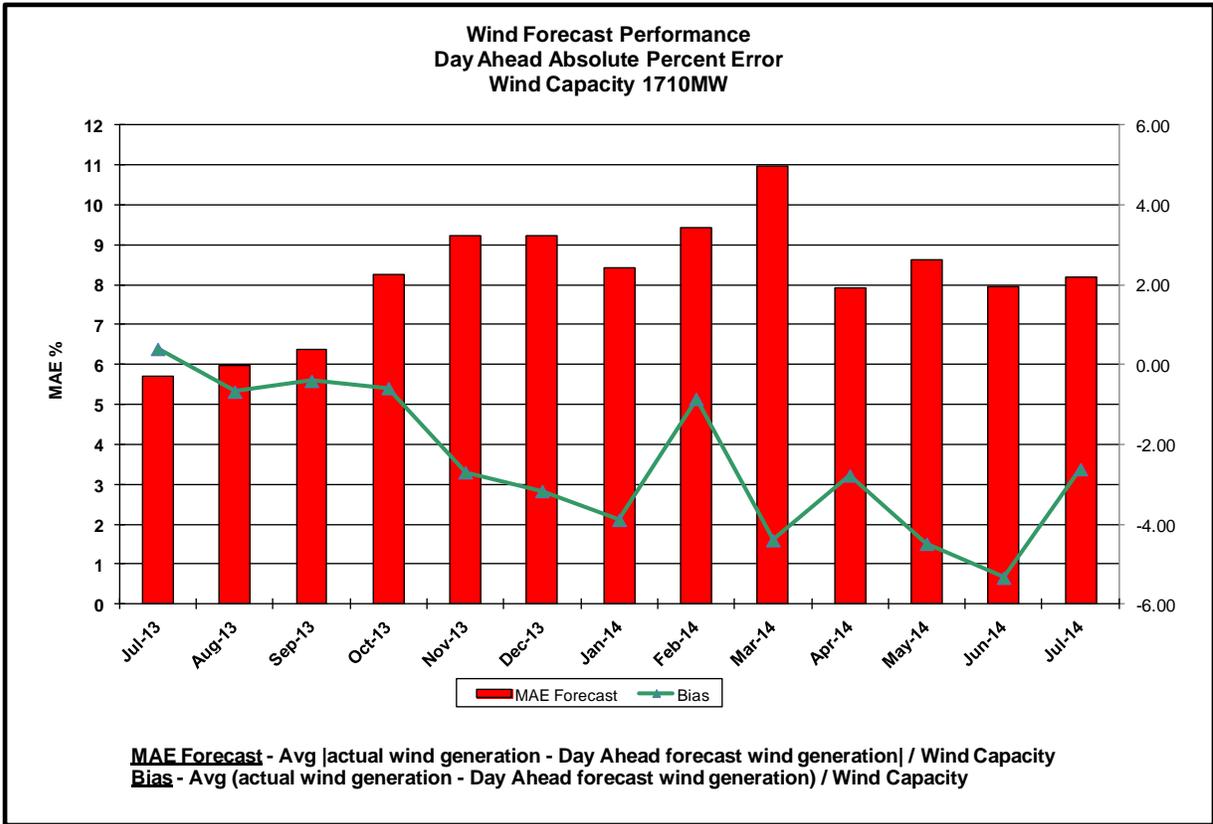


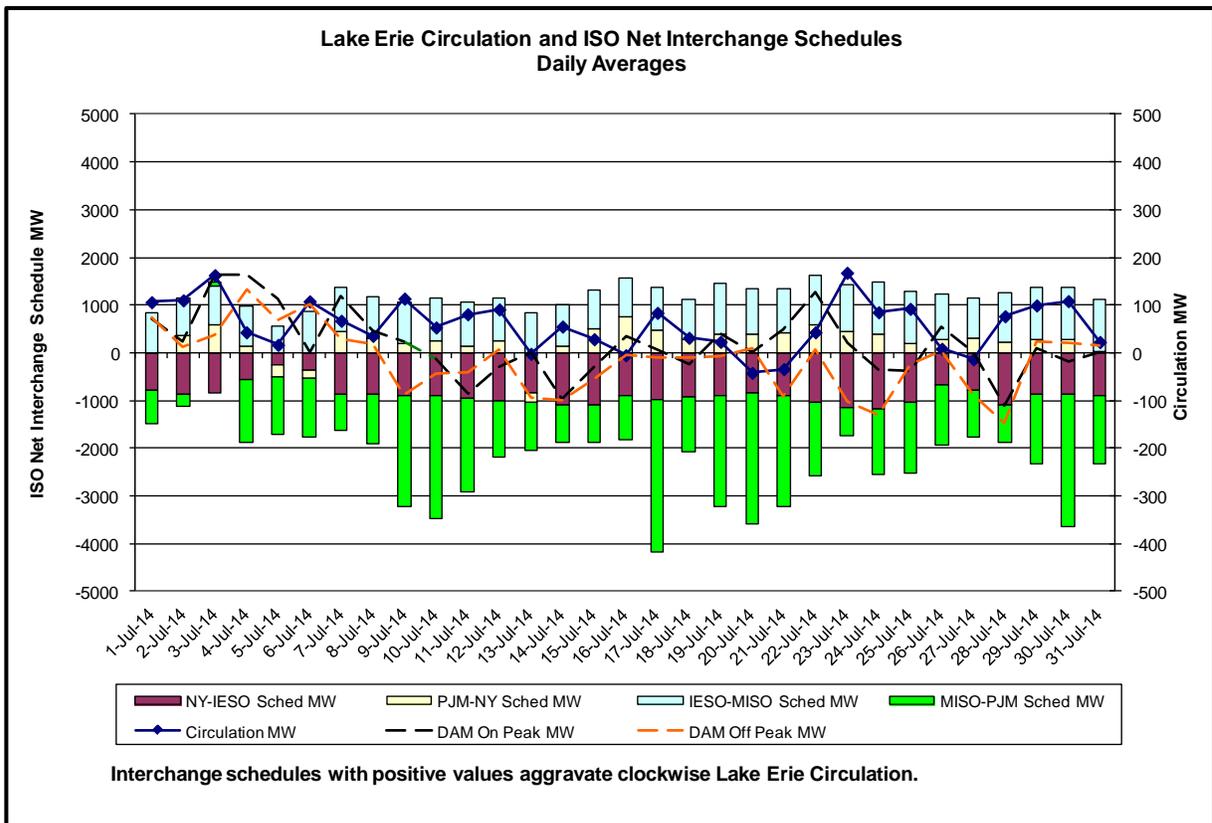
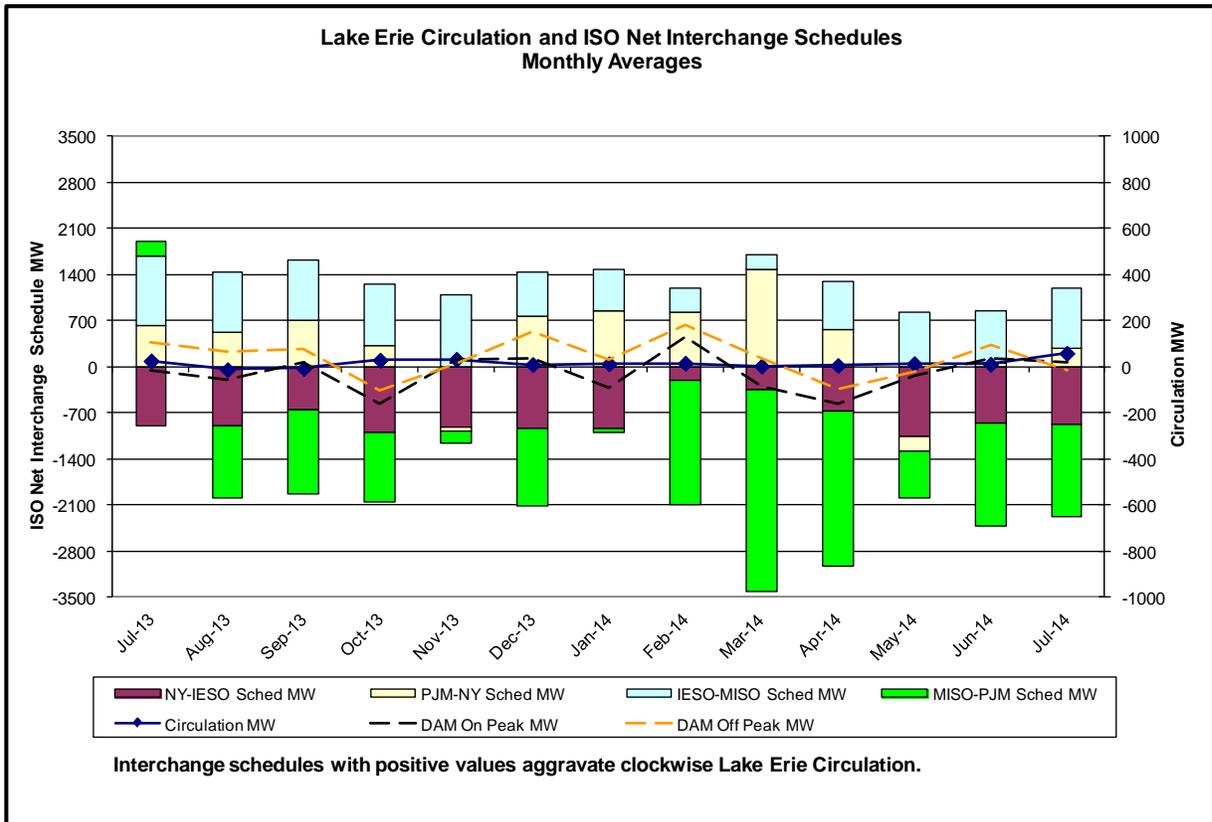




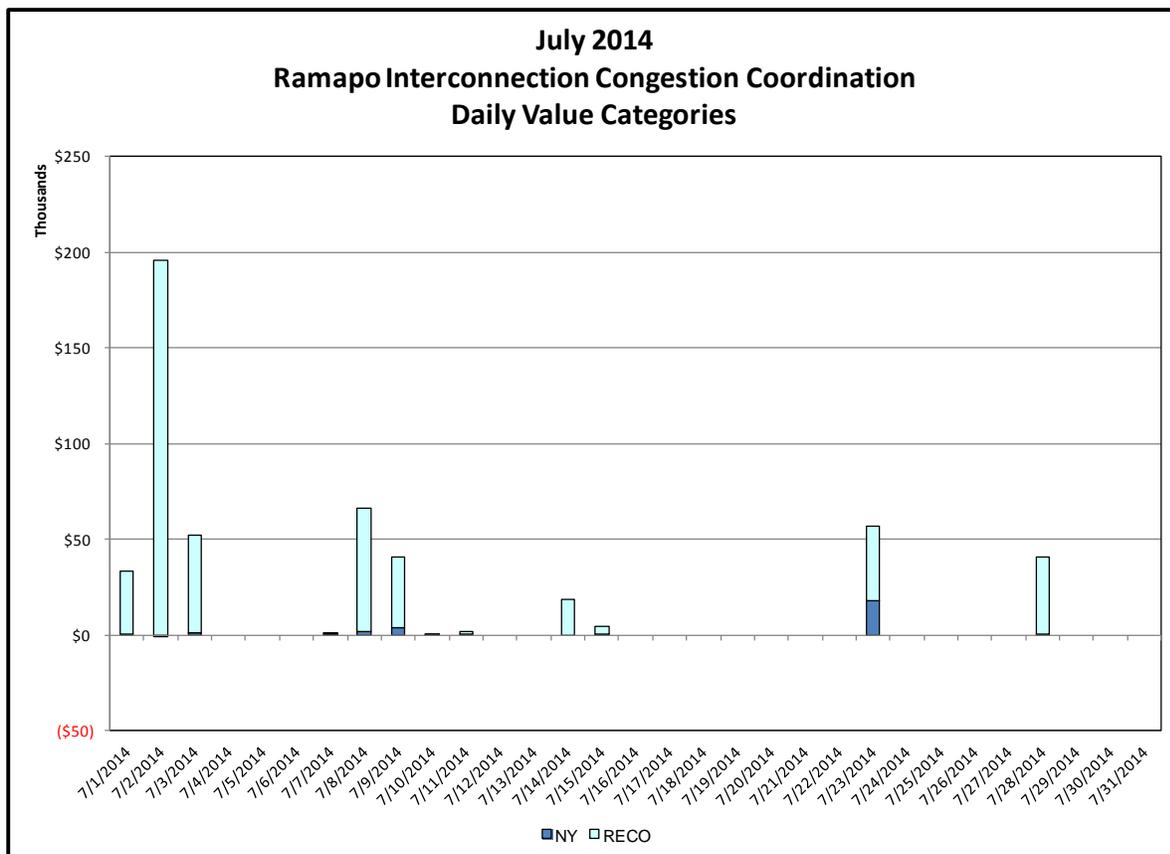
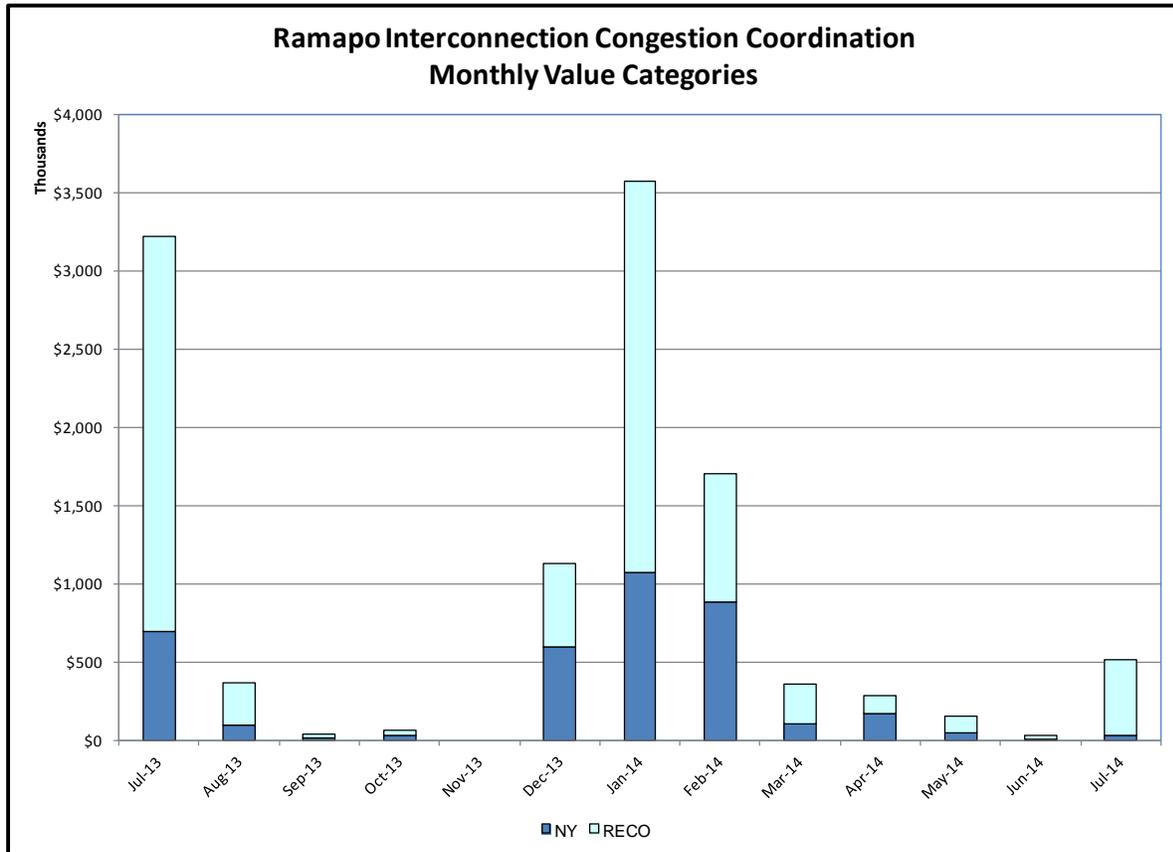






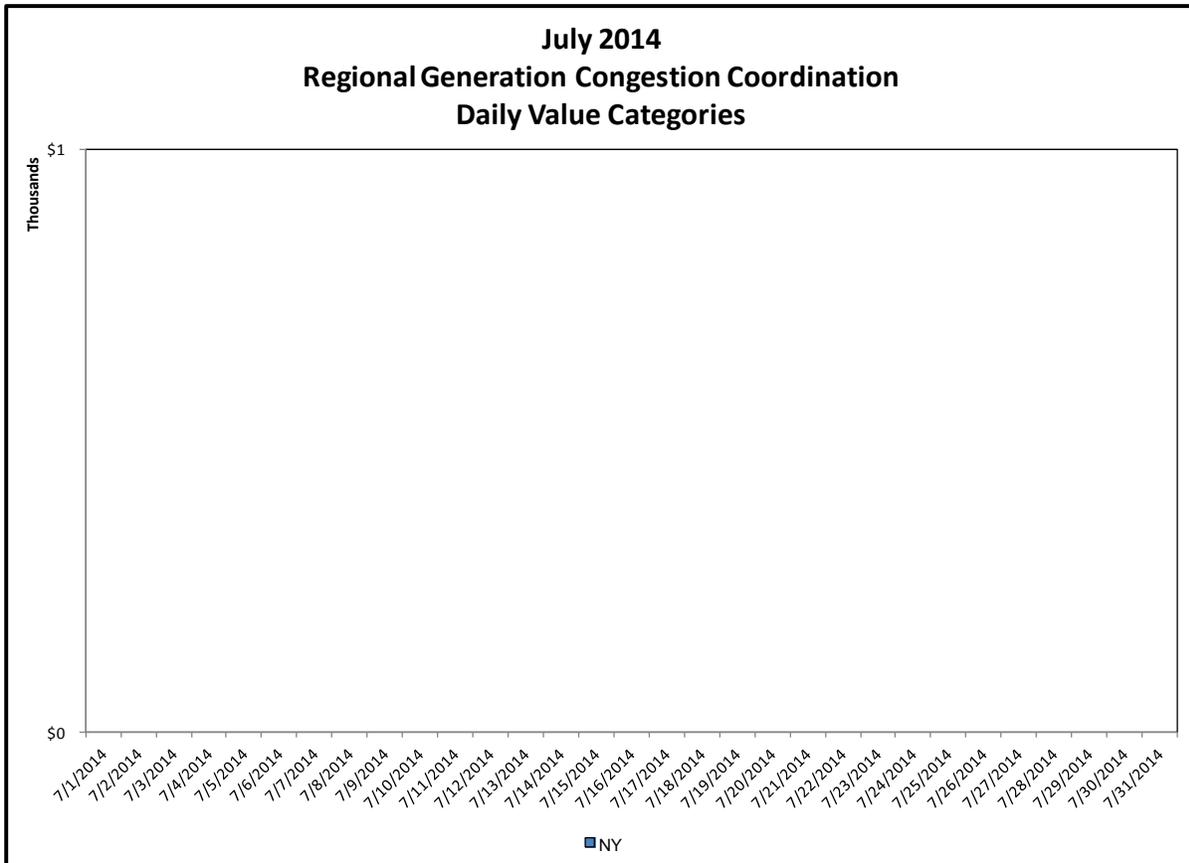
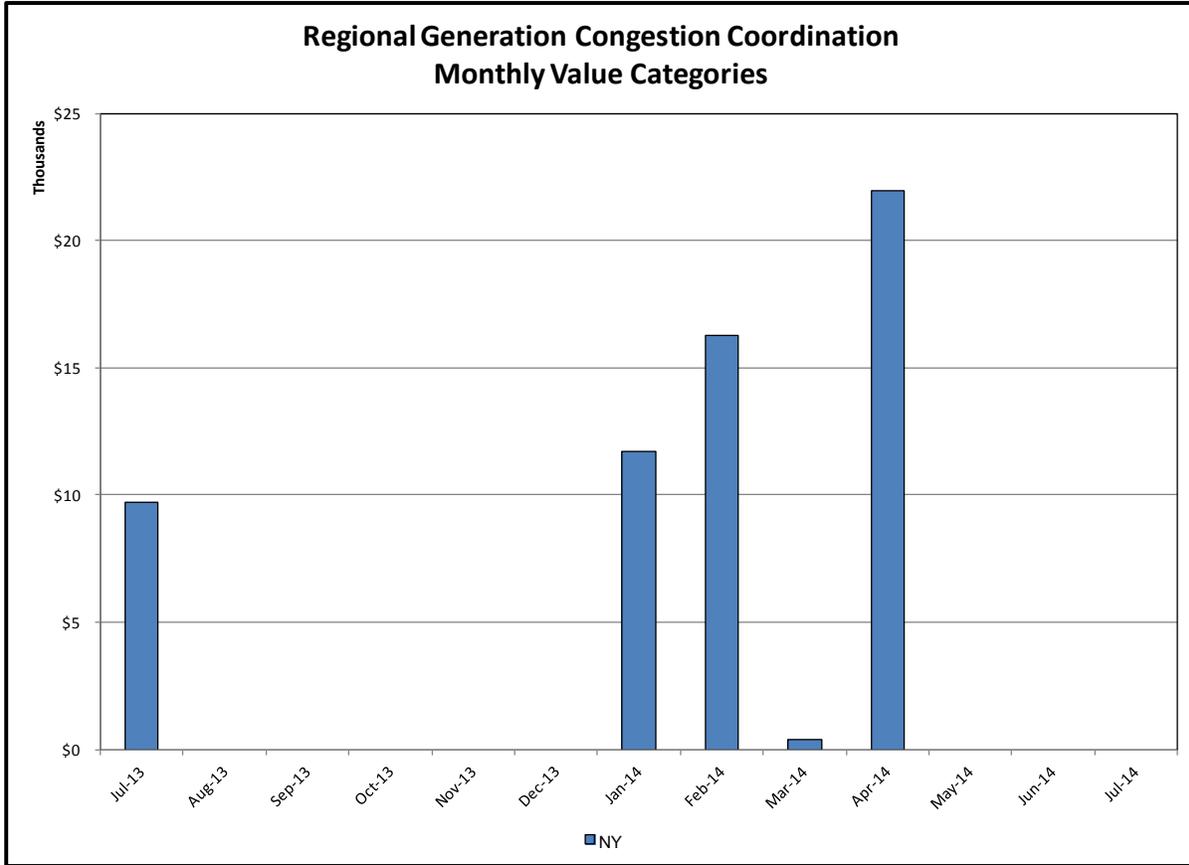


Broader Regional Market Performance Metrics



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

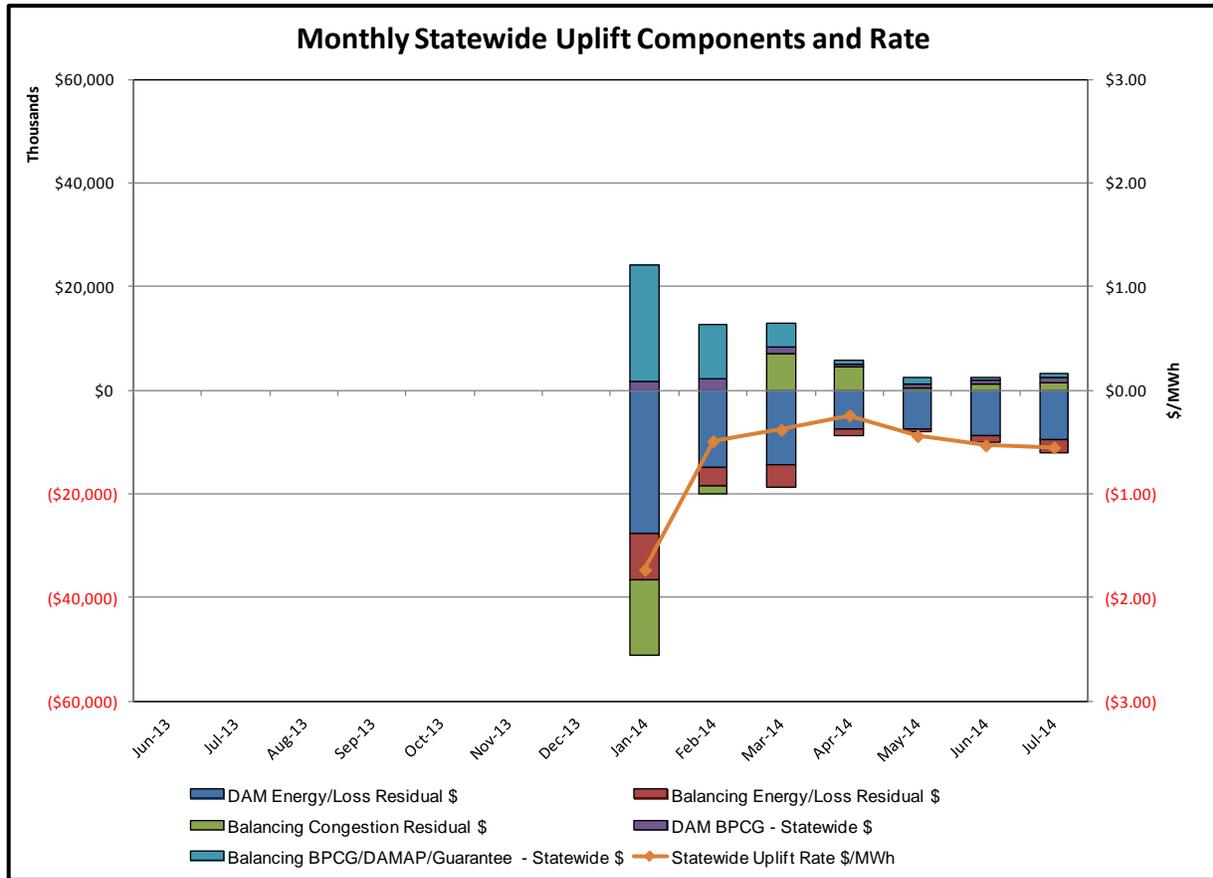
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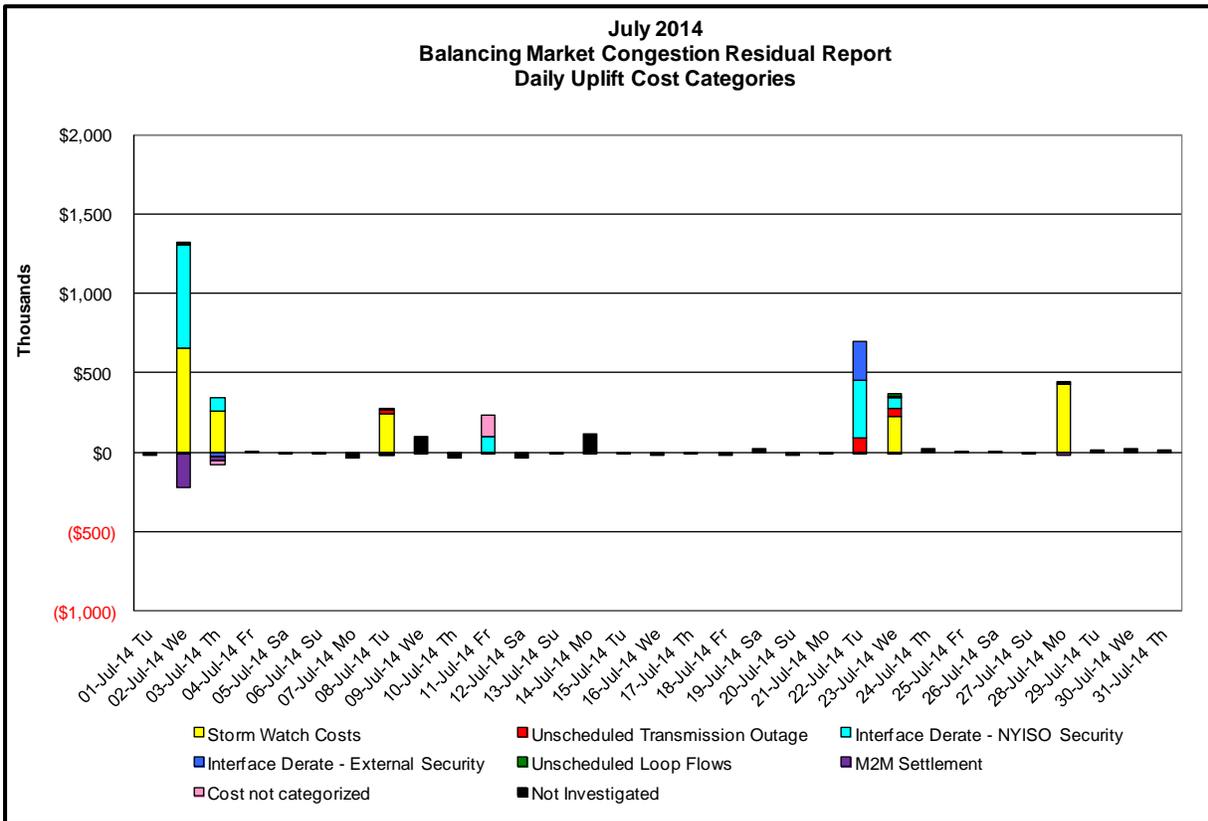
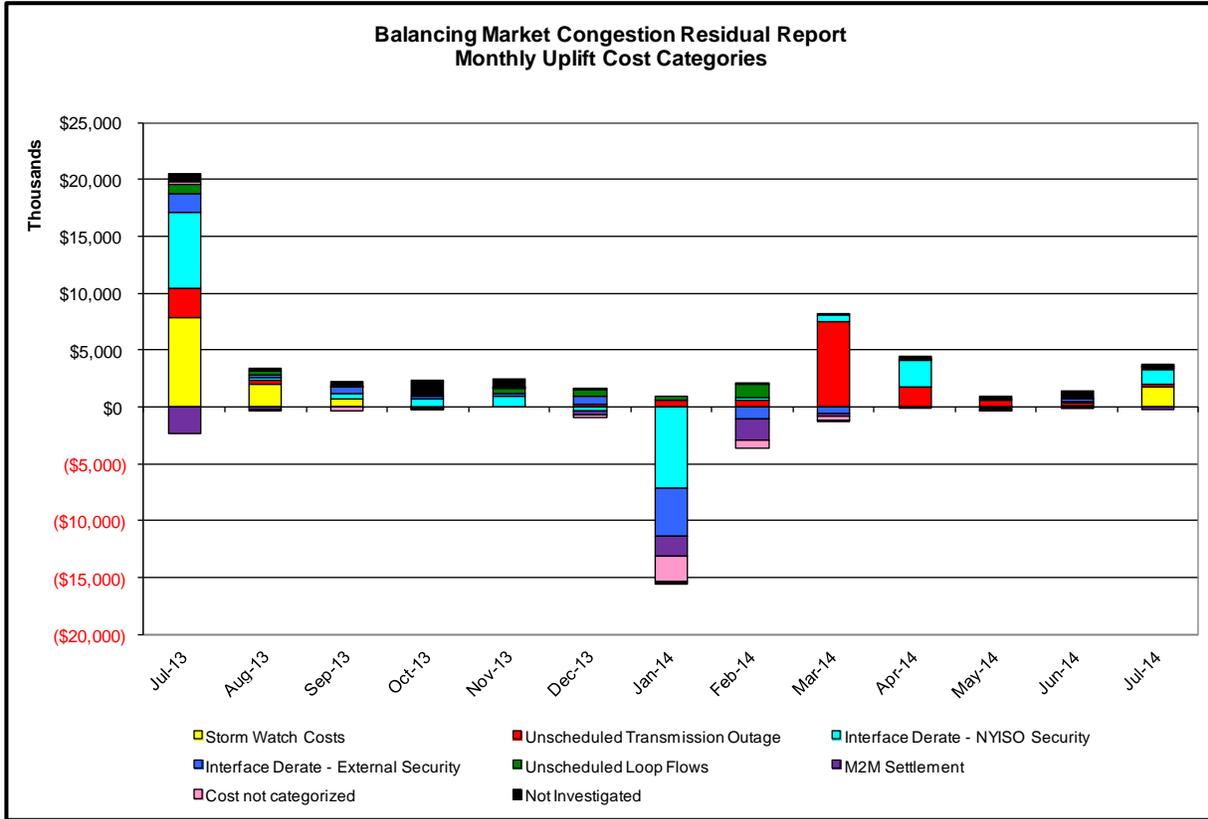
NY

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





Day's investigated in July: 2,3,8,11,22,23,28

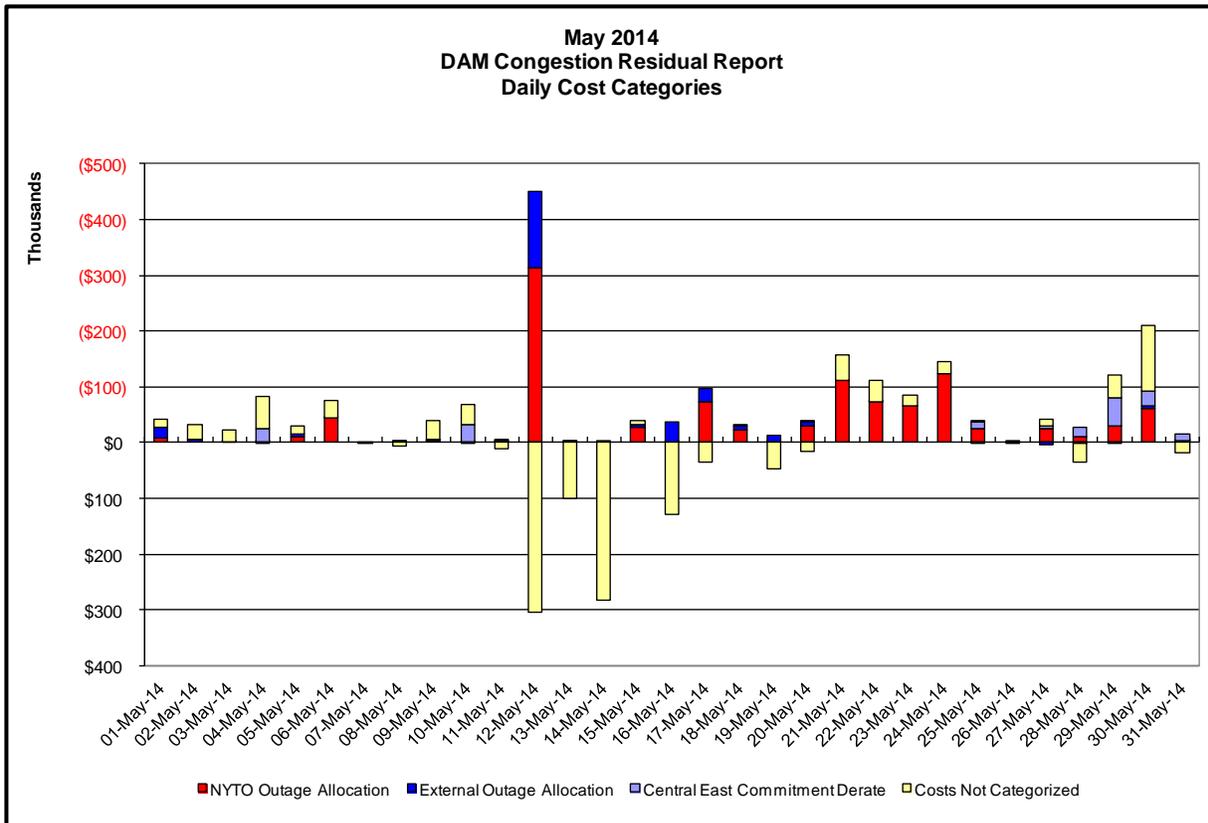
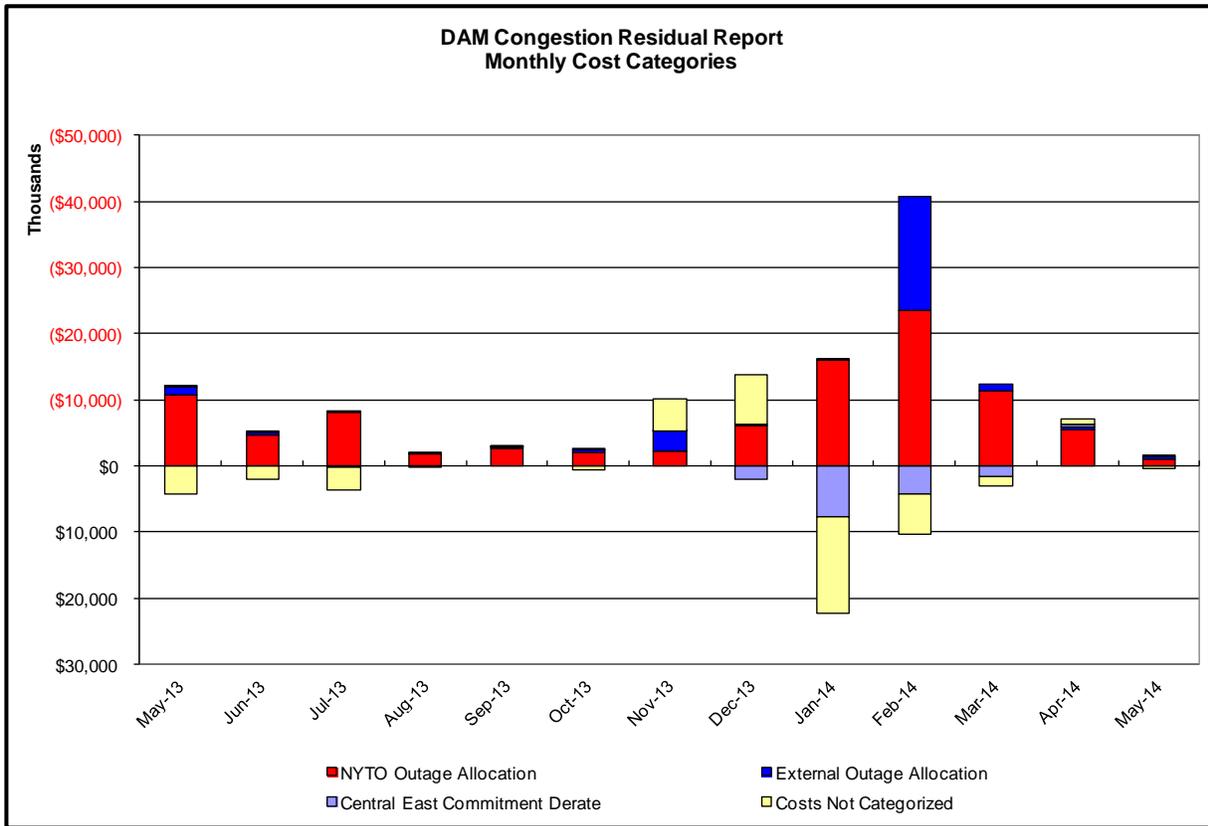
Event	Date (yyyymmdd)	Hours	Description
	7/2/2014	13-21	Thunder storm Alert
	7/2/2014	14	Derate E179St-Heil Gate 138kV (#15053)
	7/2/2014	12-18	Derate Farragut-Gowanus 345kV (#42)
	7/2/2014	14	Derate Gowanus-Greenwood 138kV (#42231)
	7/2/2014	11,17	Derate Gowanus-Greenwood 138kV (#42232)
	7/2/2014	2,23	IESO_AC DNI Ramp Limit
	7/2/2014	13	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Niagara-Packard 230kV (#61)
	7/3/2014	17-21	Thunder storm Alert
	7/3/2014	15-17	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK(RNS2):Y49 & M29
	7/3/2014	16-18	Derate Farragut-Gowanus 345kV (#42)
	7/3/2014	0,6	IESO_AC DNI Ramp Limit
	7/8/2014	19-23	Thunder storm Alert
	7/8/2014	16	Forced outage Chateaugay DC 2 Pole Trip
	7/8/2014	15	Forced outage Vernon-Queensbridge 138kV (#31282)
	7/8/2014	14	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK(RNS2):Y49 & M29
	7/8/2014	14	Derate Freshkills 345/138kV (#TA1) for I/o SCB:FRESHKILLS(6)
	7/8/2014	17	Uprate Pleasant Valley-Leeds 345kV (#92) for I/o Athens-Pleasant Valley 345kV (#91)
	7/8/2014	17	NYCA DNI Ramp Limit
	7/8/2014	14,15	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Huntley-Sawyer 230kV (#80)
	7/11/2014	14,15	Derate Dunwoodie-Shore Road 345kV (#Y50) for I/o SCB:SPBK(RNS2):Y49 & M29
	7/11/2014	14,15,17	Derate Gowanus-Greenwood 138kV (#42231) for I/o TWR:GOETHALS 22 & 21
	7/11/2014	14,15,17	Derate Gowanus-Greenwood 138kV (#42232) for I/o TWR:GOETHALS 22 & 21
	7/22/2014	13	Forced outage Teall Avenue-Oswego 115kV (#10/13-ST)
	7/22/2014	16-21	Derate Huntley-Sawyer 230kV (#80) for I/o Huntley-Sawyer 230kV (#79)
	7/22/2014	14-16	Derate Niagara-Packard 230kV (#61) for I/o TWR:PACKARD 62 & BP76
	7/22/2014	15,18	HQ_Cedars-NY Scheduling Limit
	7/22/2014	14,18	NE_NNC1385 - NY Scheduling Limit
	7/23/2014	17-23	Thunder storm Alert
	7/23/2014	9-17	Forced outage Northport 1385-Northport 138kV (#1385)
	7/23/2014	22,23	NYCA DNI Ramp Limit
	7/23/2014	10-17	Derate Huntley-Sawyer 230kV (#80) for I/o Huntley-Sawyer 230kV (#79)
	7/23/2014	16-17	Derate Gowanus-Greenwood 138kV (#42232) for I/o SCB:GOWANUS(2):41&42231
	7/23/2014	10,11	HQ_Cedars-NY Scheduling Limit
	7/23/2014	10-14	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Huntley-Sawyer 230kV (#80)
	7/23/2014	11,13,14	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Packard-Sawyer 230kV (#78)
	7/28/2014	15-19	Thunder storm Alert
	7/28/2014	20	NYCA DNI Ramp Limit
	7/28/2014	1	IESO_AC DNI Ramp Limit
	7/28/2014	9	IESO_AC-NY Scheduling Limit

Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories

Category	Cost Assignment	Events Types	Event Examples
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	

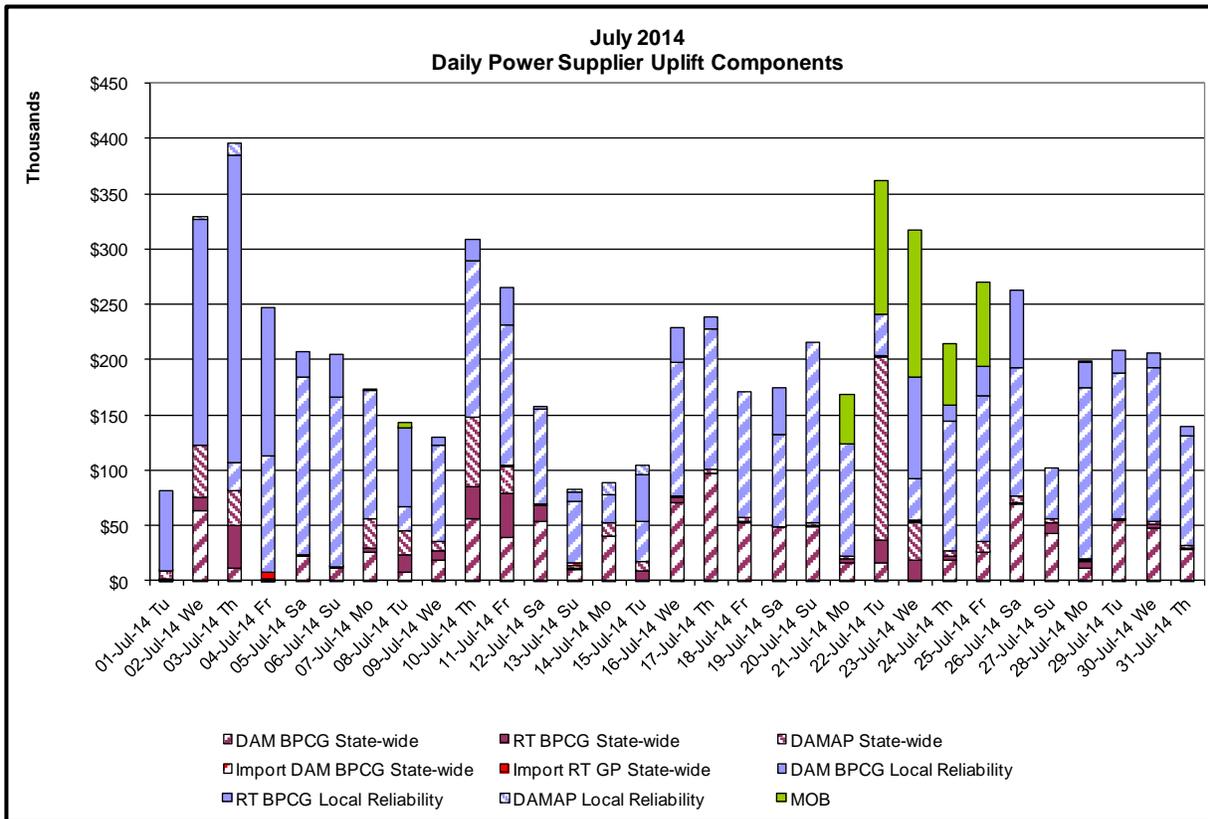
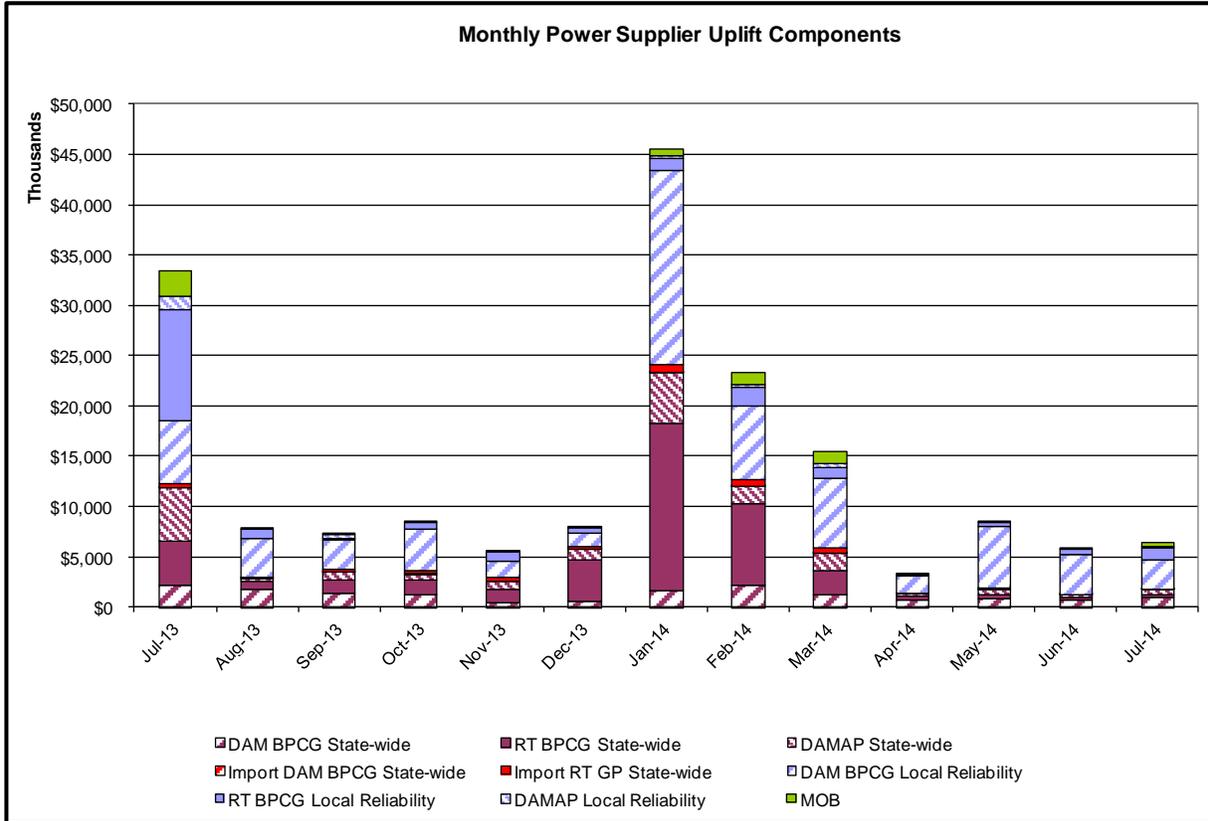
Monthly Balancing Market Congestion Report Assumptions/Notes

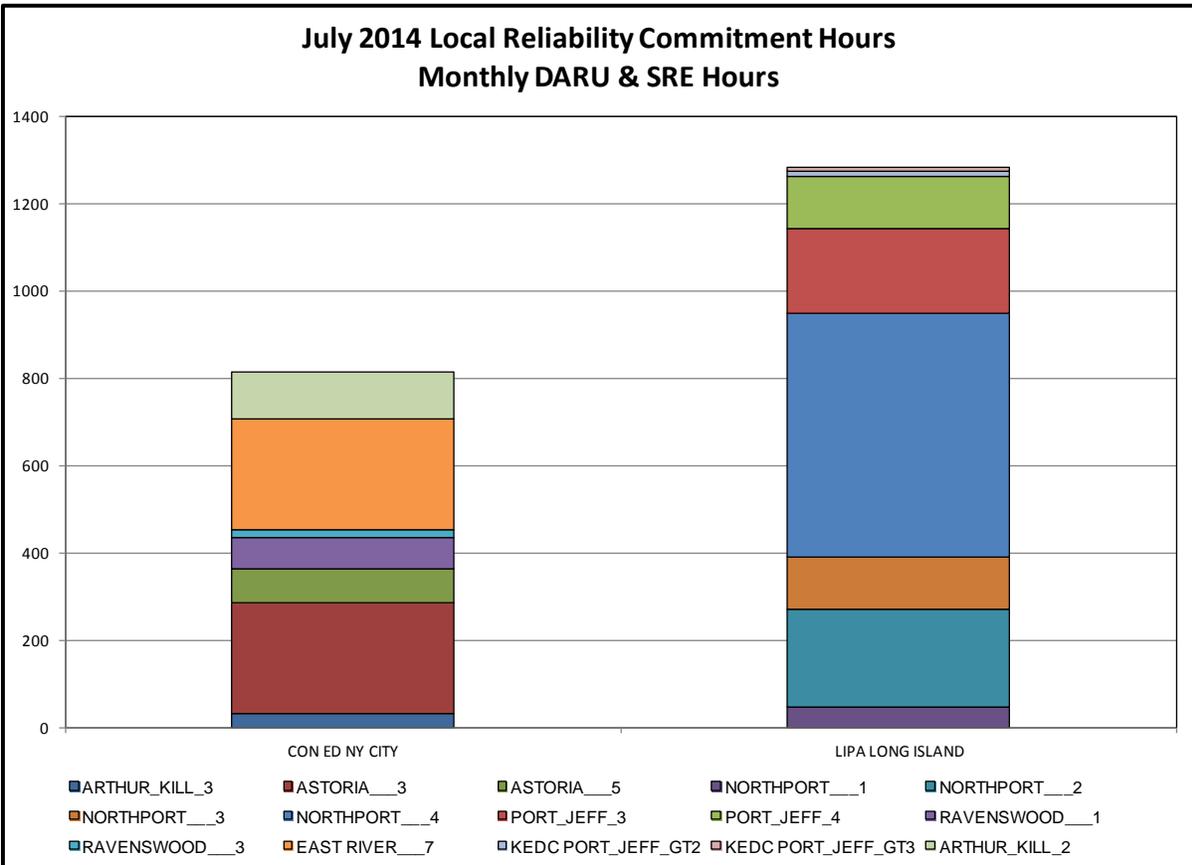
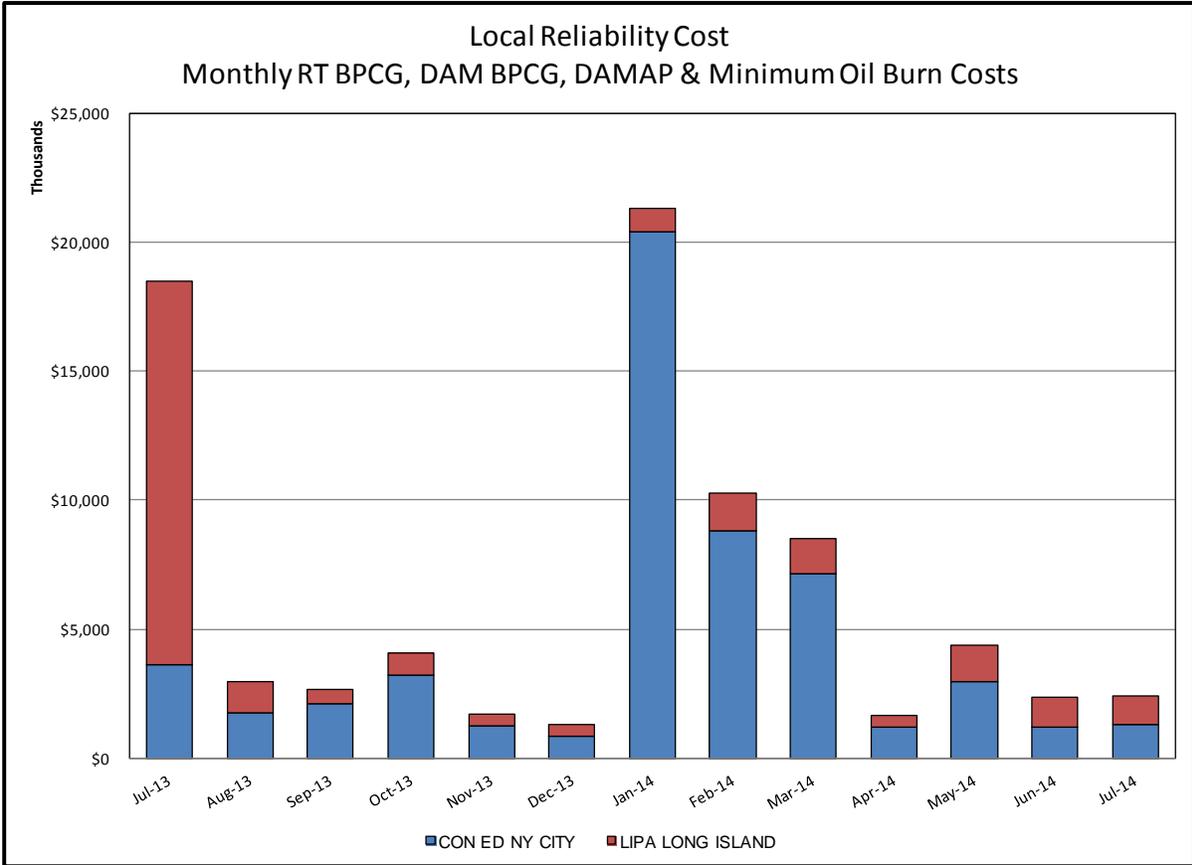
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

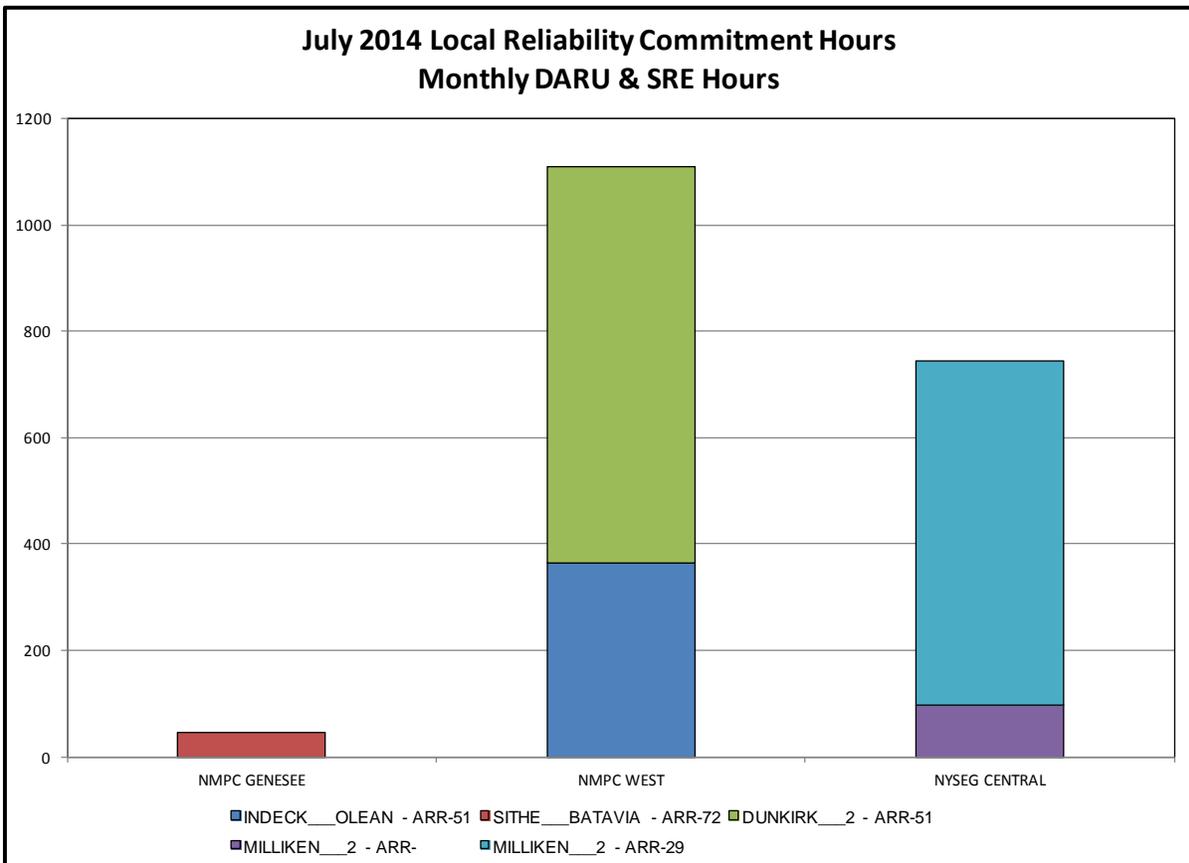
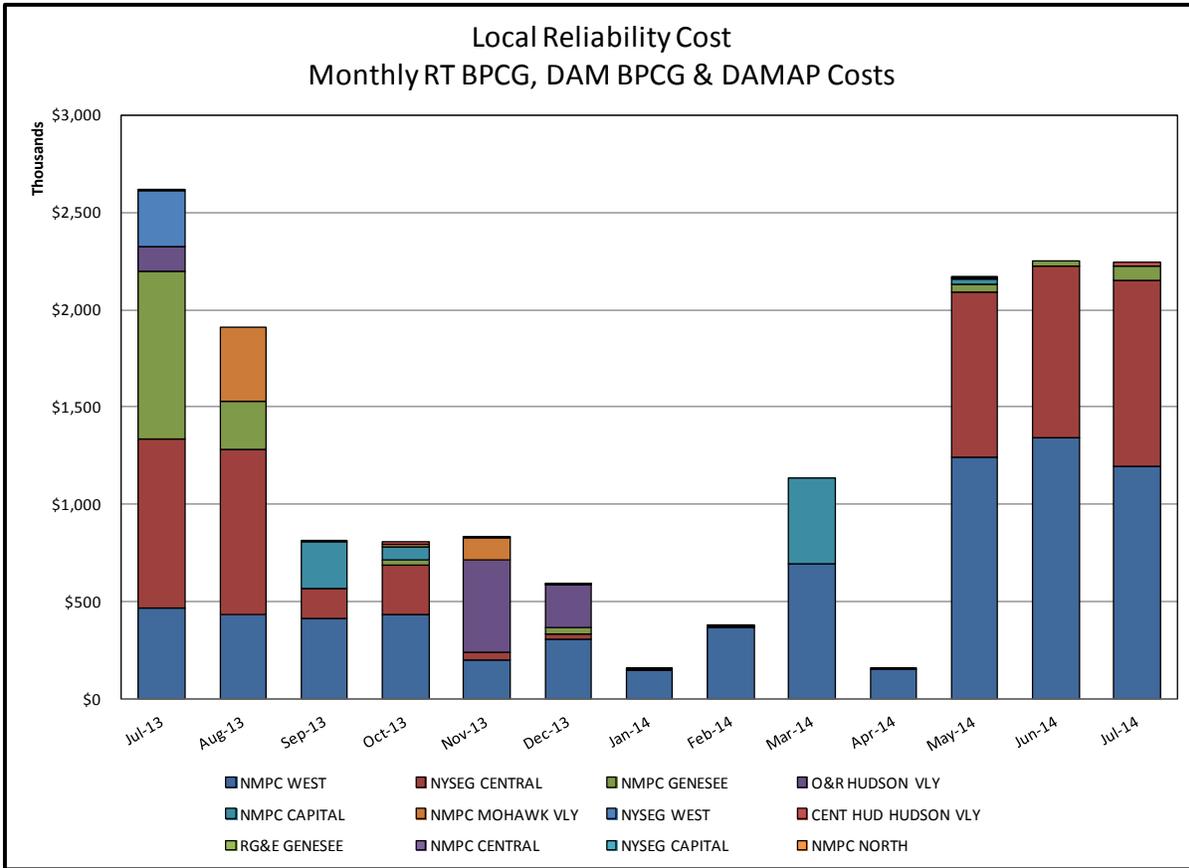


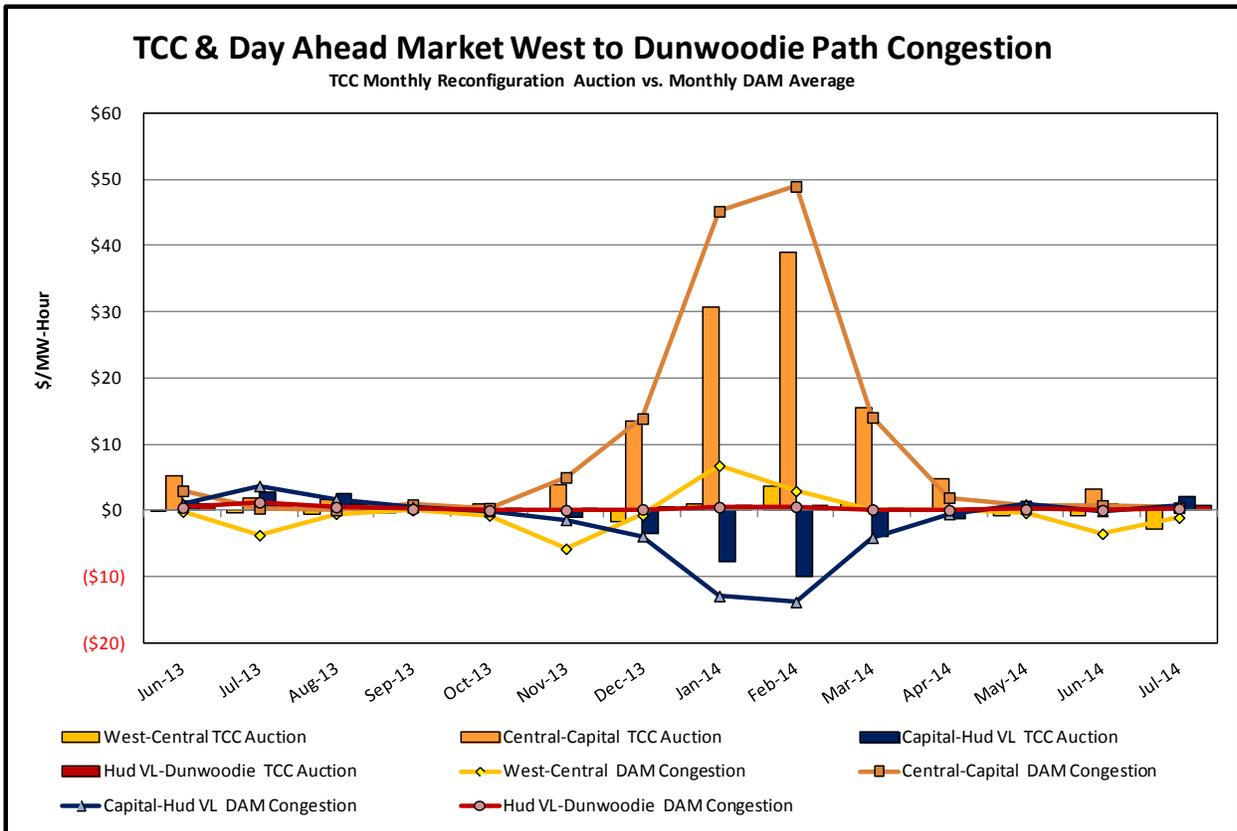
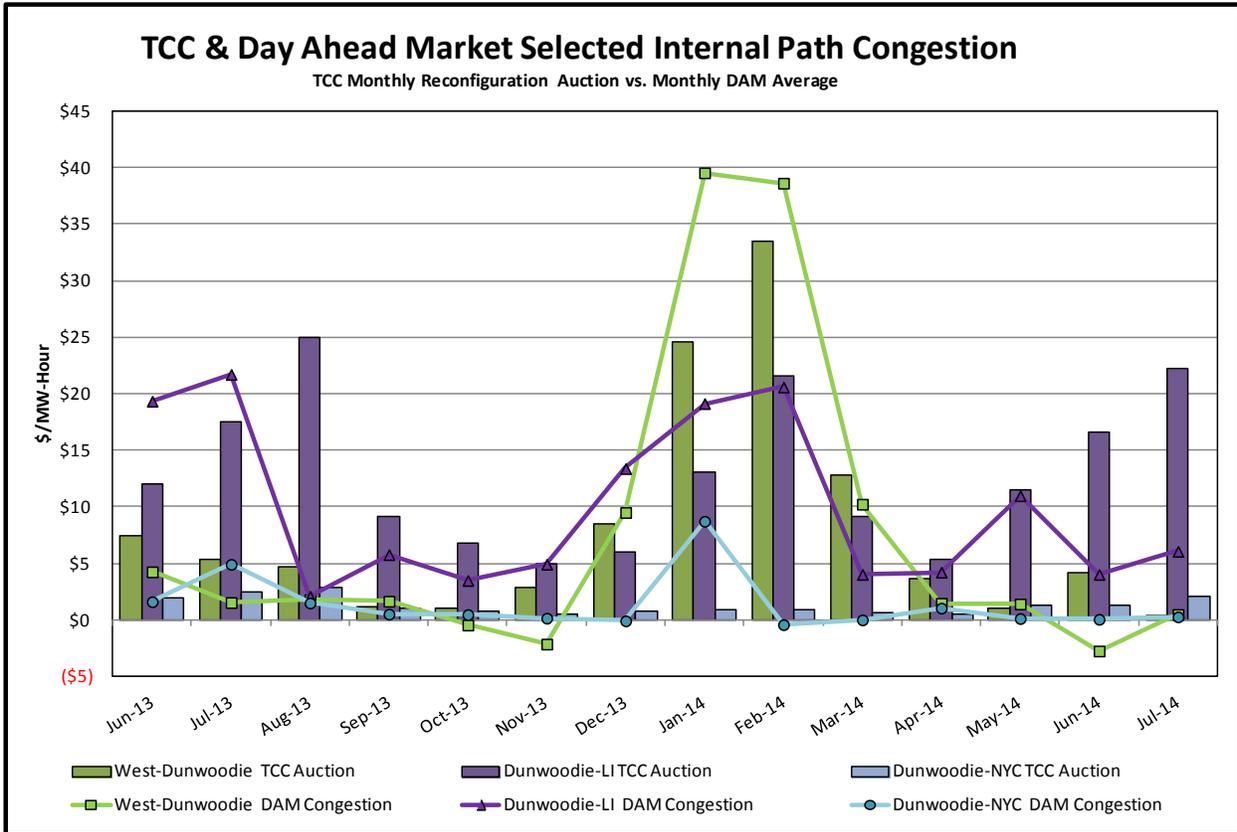
Day-Ahead Market Congestion Residual Categories

<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

