Operations Performance Metrics Monthly Report









October 2012 Report

Operations & Reliability Department New York Independent System Operator



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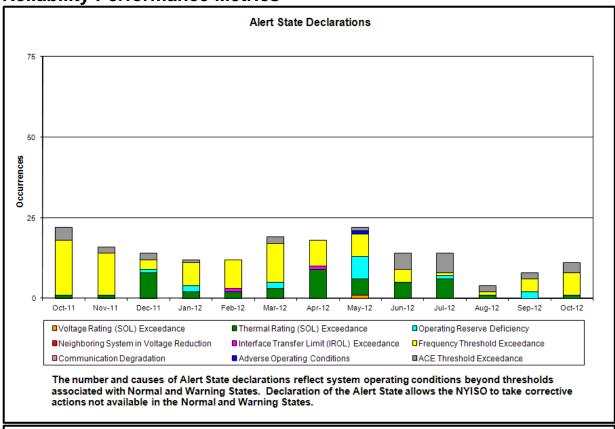


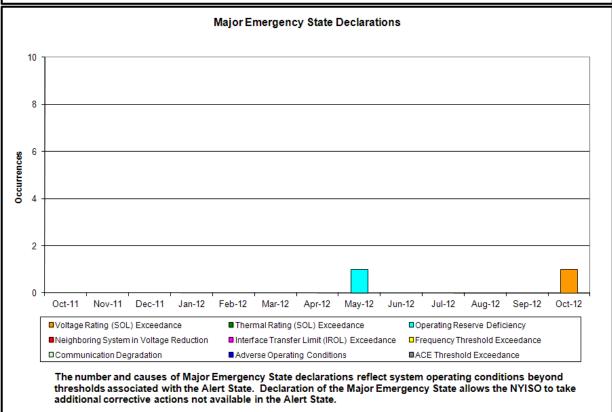
October 2012 Operations Performance Highlights

- Peak load of 21,479 MW occurred on 10/4/2012 HB 19
- All-time summer capability period peak load of 33,939 MW occurred on 8/2/2006 HB13
- 35 hours of Thunder Storm Alerts were declared
- No hours of NERC TLR level 3 curtailments
- Intra-hourly scheduling on Neptune implemented on 10/30/2012
- Significant impacts due to Hurricane Sandy beginning with 10/29/2012
 - Lowest hourly average NYCA load 9,771 MW on 10/30/2012 HB 4
- Correction applied to the Central-Capital DAM Congestion values for "TCC & Day Ahead Market" chart for trailing months

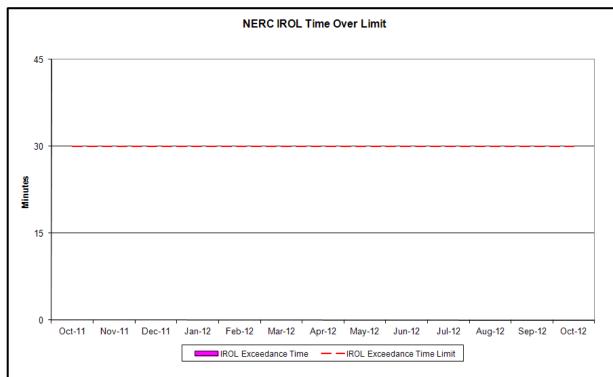


Reliability Performance Metrics

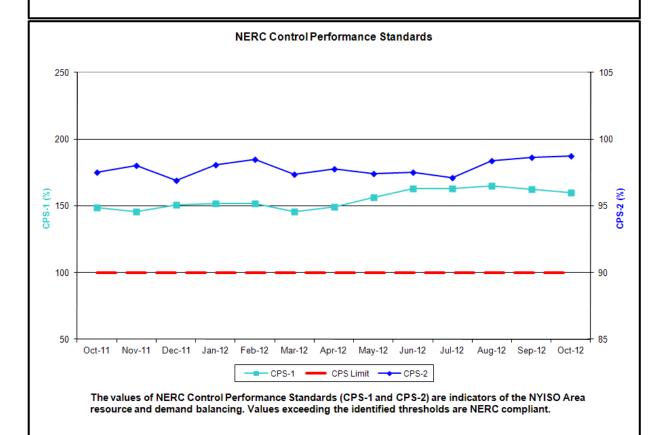




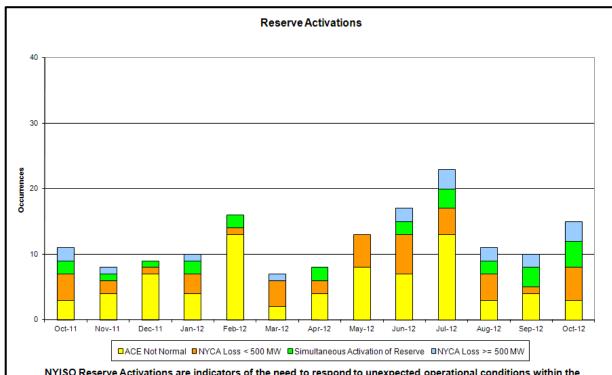




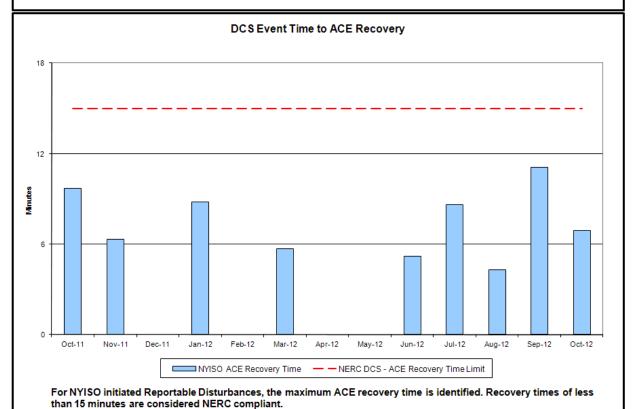
For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedence time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.



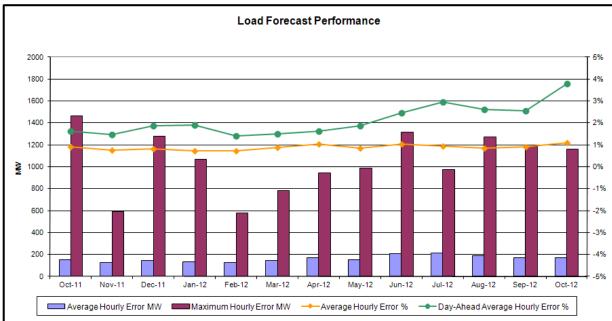




NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.



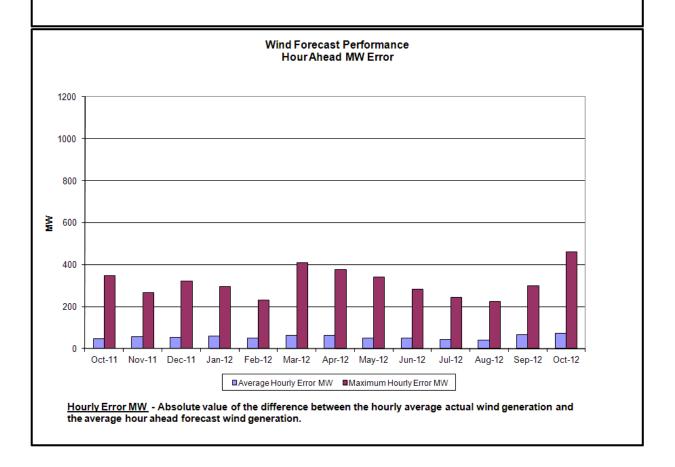




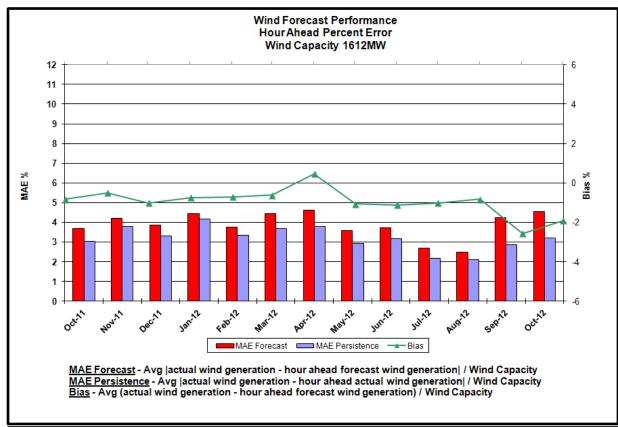
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

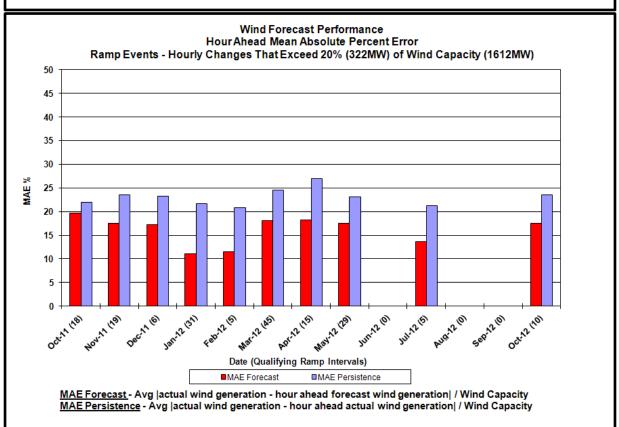
<u>Average Hourly Error %</u> - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

<u>Day-Ahead Average Hourly Error %</u> - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

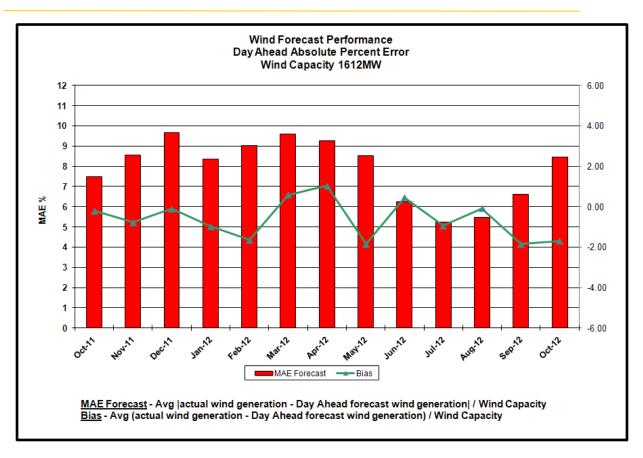




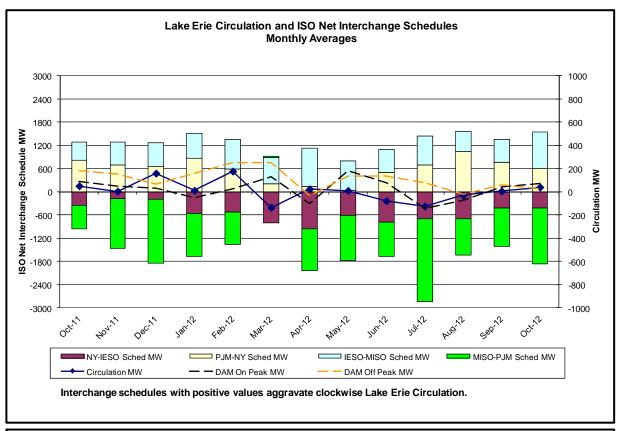


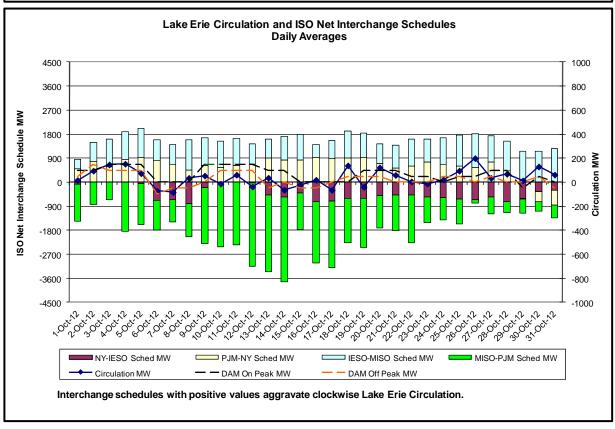






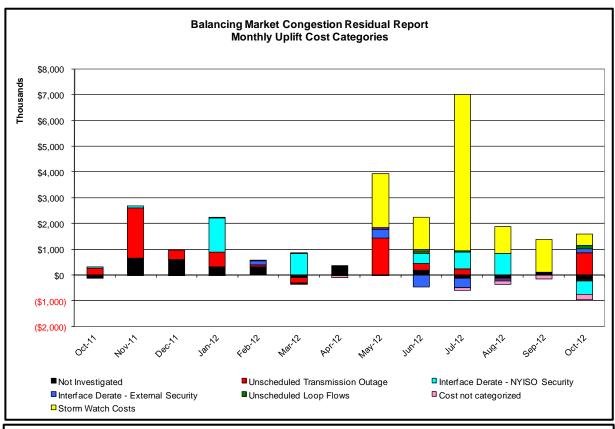


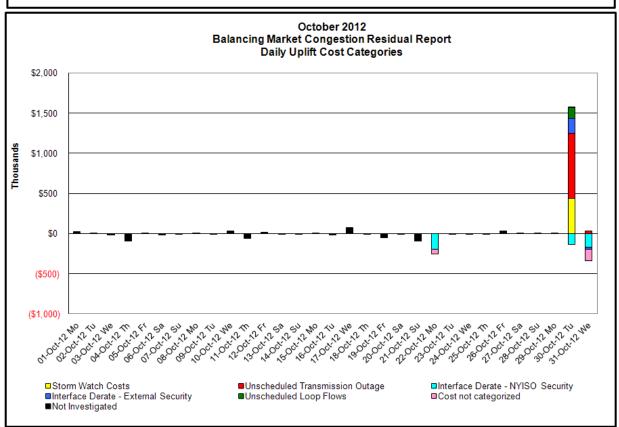






Market Performance Metrics







| Day's investigated in October: 22,30,31 | | | |
|---|----------------------------|-------------|---|
| Event | vent Date (yyyymmdd) Hours | | Description |
| 10/22/2012 6,8- | | 6,8-11 | Uprate Hudson Avenue-Jamaica 138kV (#702) |
| 10/22/2012 7 | | 7 | NYCA DNI Ramp Limit |
| 10/22/2012 10-11 | | 10-11 | Uprate Astoria Annex-Astoria 138kV (#34091) SCB:JAMAICA(18)702&TB4&901L&M |
| 10/22/2012 11,13 | | 11,13 | Uprate MottHaven-Dunwoodie 345kV (#72) |
| | 10/22/2012 | 14 | Uprate MottHaven-Dunwoodie 345kV (#72) for I/o TWR:69, J3410, 70, K3411, BK258 |
| | 10/30/2012 | 10-12,14-18 | Thunder Storm Alert |
| | | | Forced outage Linden-Goethals 345kV (#A2253), Hudson-Farragut 345kV (#B3402, #C3403), Farragut-E.13th St |
| 10/30/2012 | | 8 | 345kv(#45,46,48) |
| | | | |
| | | | Forced outage Gowanus-Goethals 345kV (#25,26), Goethals-FreshKills 345kV (#21,22),FoxHills-Willowbrook 138kV (#29212- |
| | 10/30/2012 | | 2), FoxHills-Greenwood 138kV (29232), FreshKills-Willowbrook 138kV (29212-1), Vernon-Greenwood 138kV (#31231) |
| 10/30/2012 6,19,20,22,2 | | | NYCA DNI Ramp Limit |
| | 10/30/2012 | | NE_AC DNI Ramp Limit |
| 10/30/2012 11-14 | | 11-14,16 | Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Niagara-Packard 230kV (#62) & (#61) |
| | | | Extended forced outage Linden-Goethals 345kV (#A2253), Hudson-Farragut 345kV (#B3402, #C3403), Farragut-E.13th St |
| | 10/31/2012 | | 345kv(#45,46,48) |
| | 10/31/2012 | | Extended forced outage E 179th St -HellGate 138kV (#15055), Astoria EAstoria Annex 138kV (#34091) |
| | 10/31/2012 | | Extended forced outage NPX CSC & NPX 1385 |
| | 10/31/2012 | | NYCA DNI Ramp Limit |
| | 10/31/2012 | 9 | PJM DNI Ramp Limit |

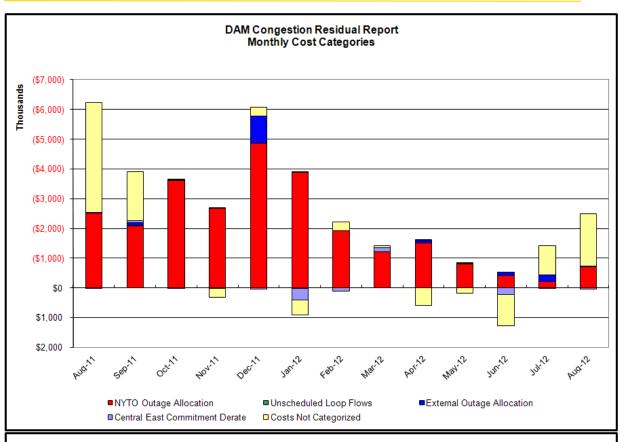
Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories

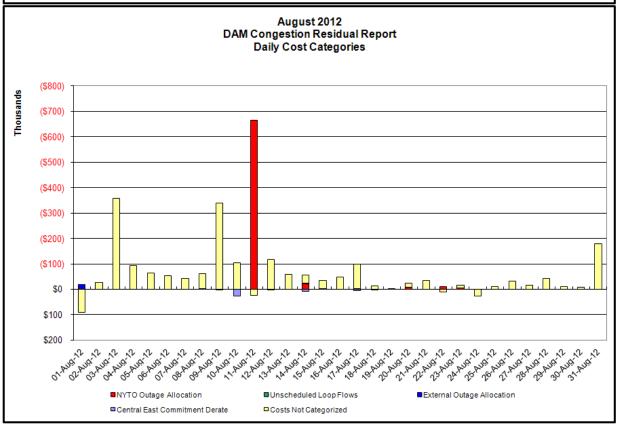
| <u>Category</u> Storm Watch | <u>Cost Assignment</u> Zone J | <u>Events Types</u> Thunderstorm Alert (TSA) | Event Examples TSA Activations |
|--------------------------------------|----------------------------------|---|---|
| Unscheduled Transmission Outage | Market-wide | Reduction in DAM to RTM 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 | | | | | | |
|-------------------------|---|--|--|---|--|--|--|
| Category NYTO Outage | Allocation | <u>Cost Assignment</u> Responsible TO | Events Types Direct allocation to NYTO's responsible for transmission equipment status change. | Event Examples DAM scheduled outage for equipment modeled inservice for the TCC Auction. | | | |
| Unscheduled I | 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 Outa | ge 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 C | ommitment 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. | | | | |



