



Operations Performance Metrics Monthly Report

A Report by the
New York Independent System Operator







August 2025

*Prepared by NYISO Operations Analysis and Services, based on settlements
initial invoice data collected on or before September 9, 2025.*

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August 2025 Highlights

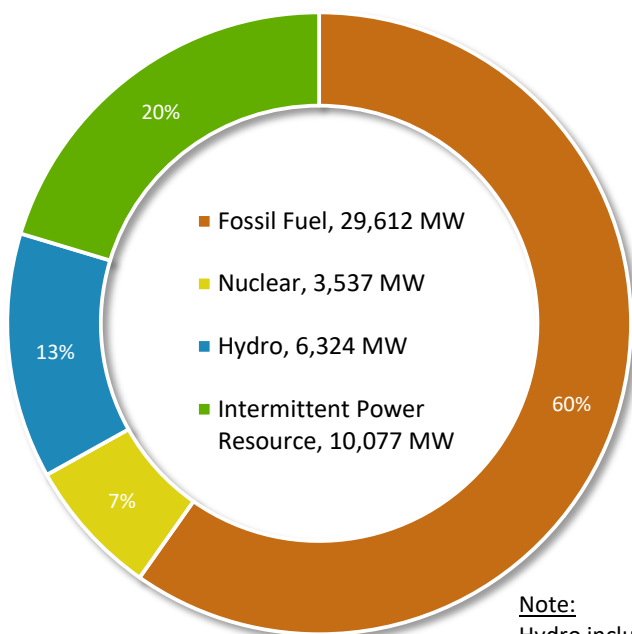
|  | |  | |
|---|---|---|---|
| Monthly Metered Load | | Historical Metered Load Peaks | |
| Peak Load | Minimum Load | Summer 2025 Peak Load | All-Time Summer Peak Load |
| 27,720 MW 08/12/2025 HB 18 | 12,364 MW 08/31/2025 HB 09 | 31,857 MW 06/24/2025 HB 18 | 33,956 MW 07/19/2013 HB 16 |
| Monthly Intermittent Resource Peaks | | Historical Intermittent Resource Peaks | |
|  |  |  |  |
| Peak Wind | Peak Solar (FTM+BTM) | All-Time Peak Wind | All-Time Peak Solar (FTM+BTM) |
| 1,356 MW 08/28/2025 HB 07 | 4,655 MW 08/02/2025 HB 12 | 2,309 MW 12/16/2024 HB 23 | 4,809 MW 04/17/2025 HB 12 |

Notable NYCA System Events

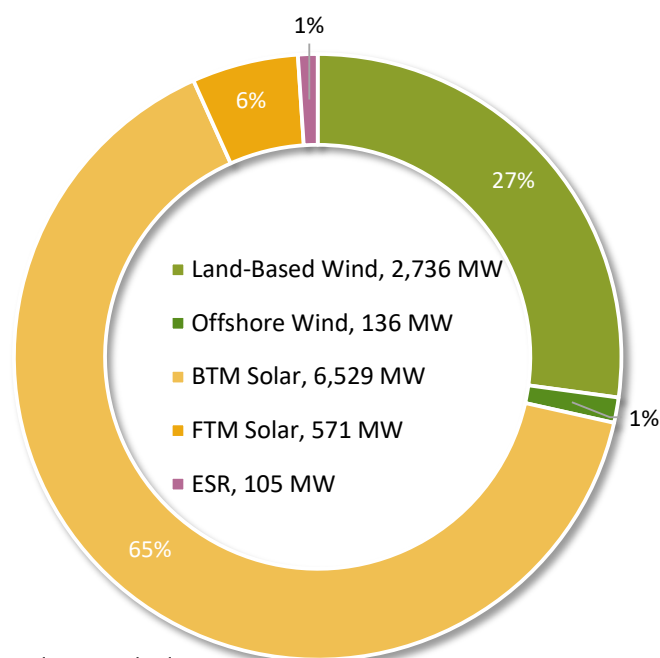
- A Mid-August heat wave occurred on 8/10-8/12 affecting most of upstate and western New York. Real-time loads were below the seasonal baseline peak load forecasts.

NYCA Generation Mix

Generation Nameplate
by Fuel Type

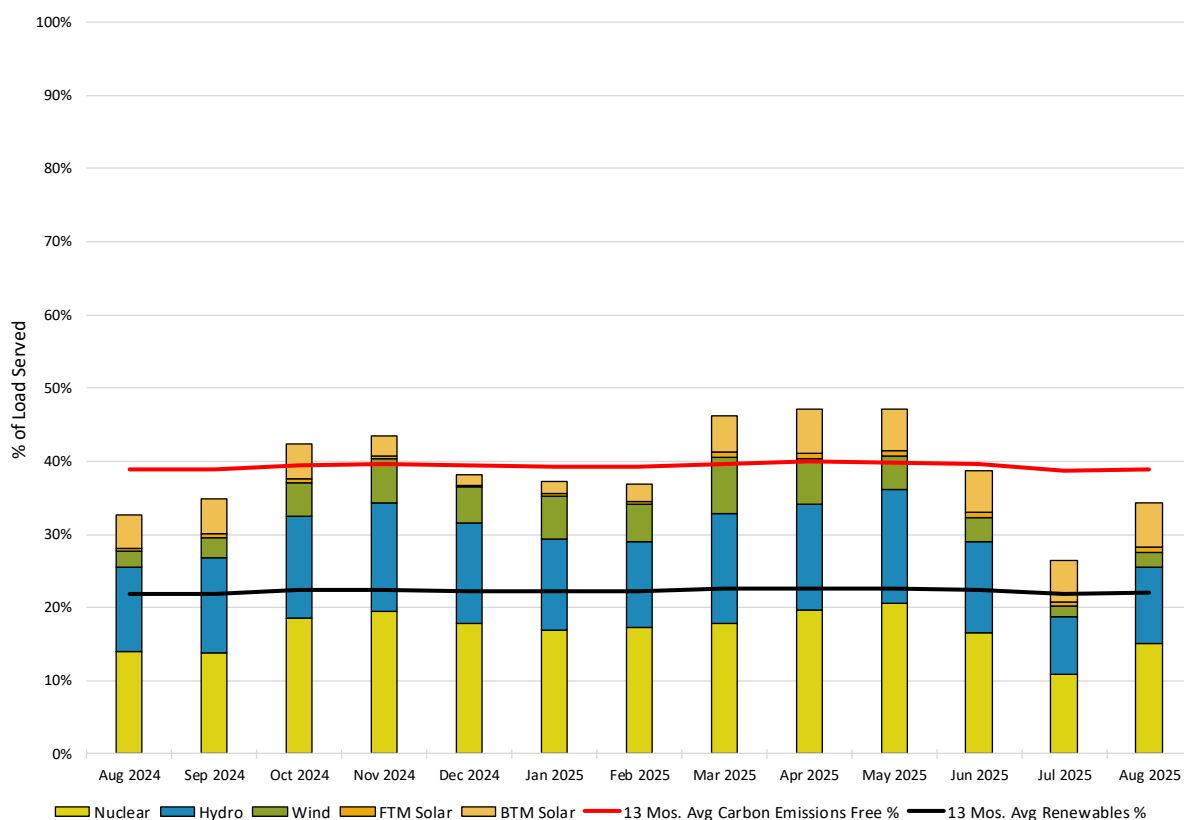


Intermittent Power
Resource Nameplate



Note:
Hydro includes pumped storage hydro
ESR includes LESR

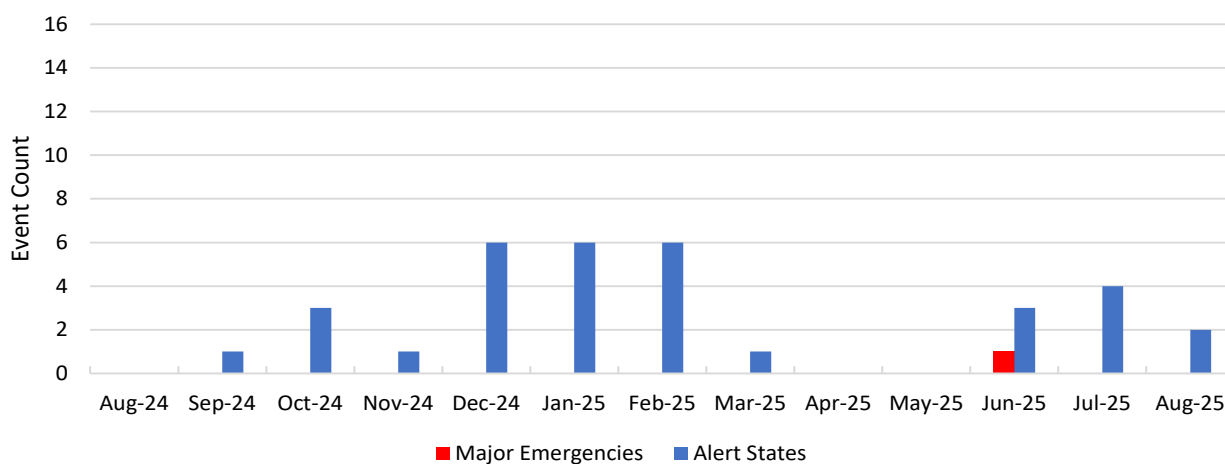
NYCA Load Served by Emissions-Free NYCA Generation



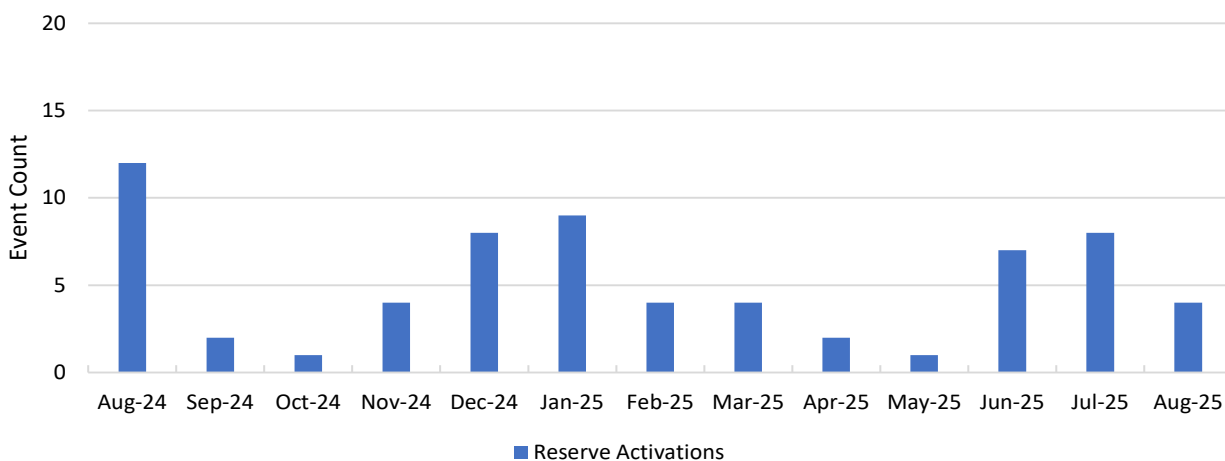
Reliability Performance Metrics

See [Appendix A](#) for metric definitions

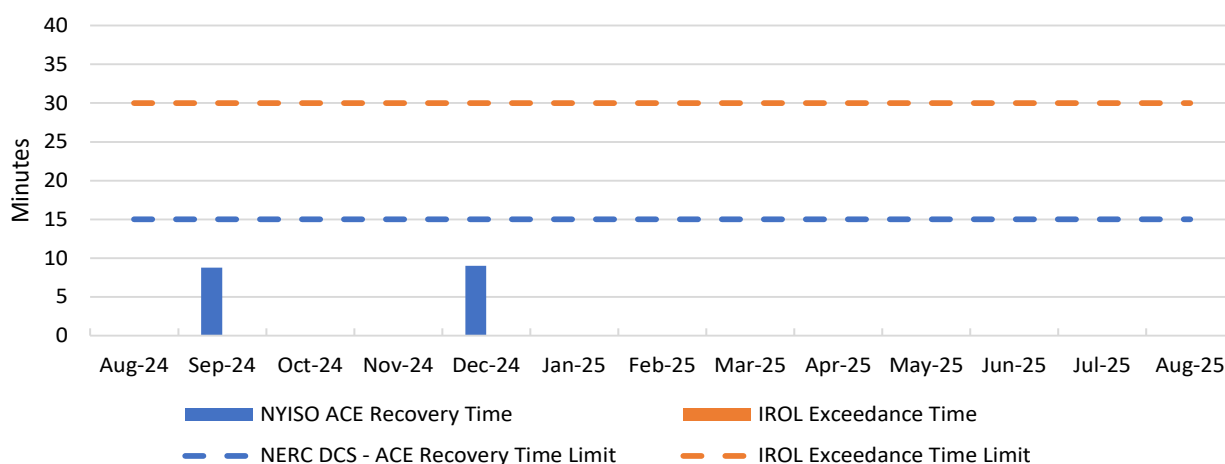
Major Emergency State & Alert State Declarations



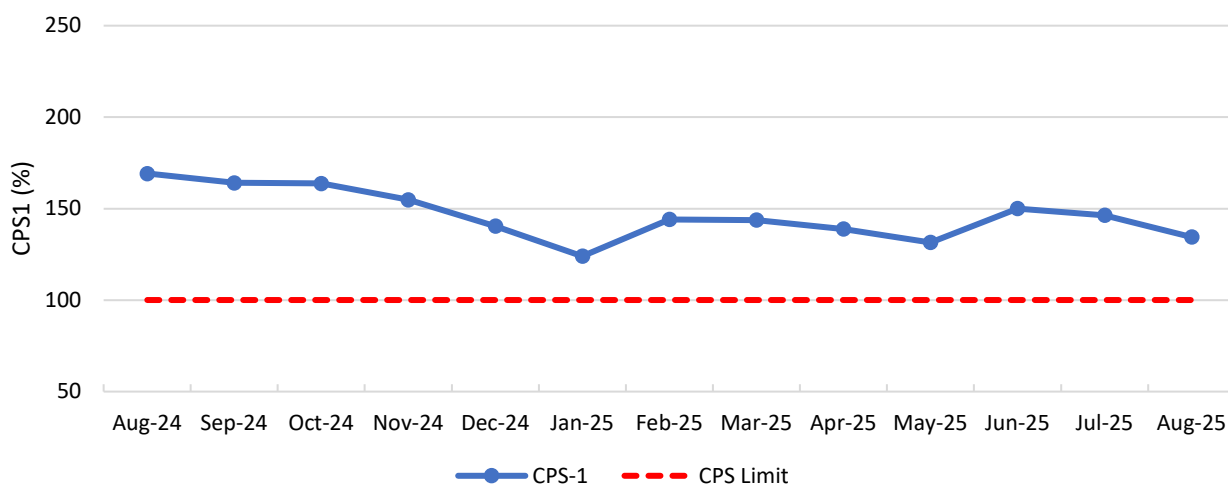
Reserve Activations



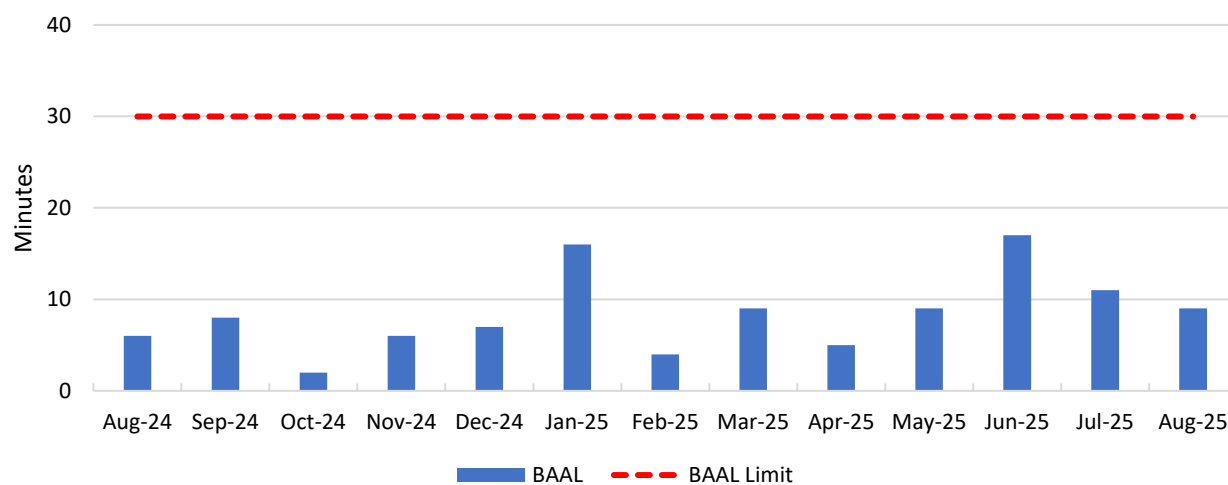
NERC IROL and DCS Reportable Violation Minutes



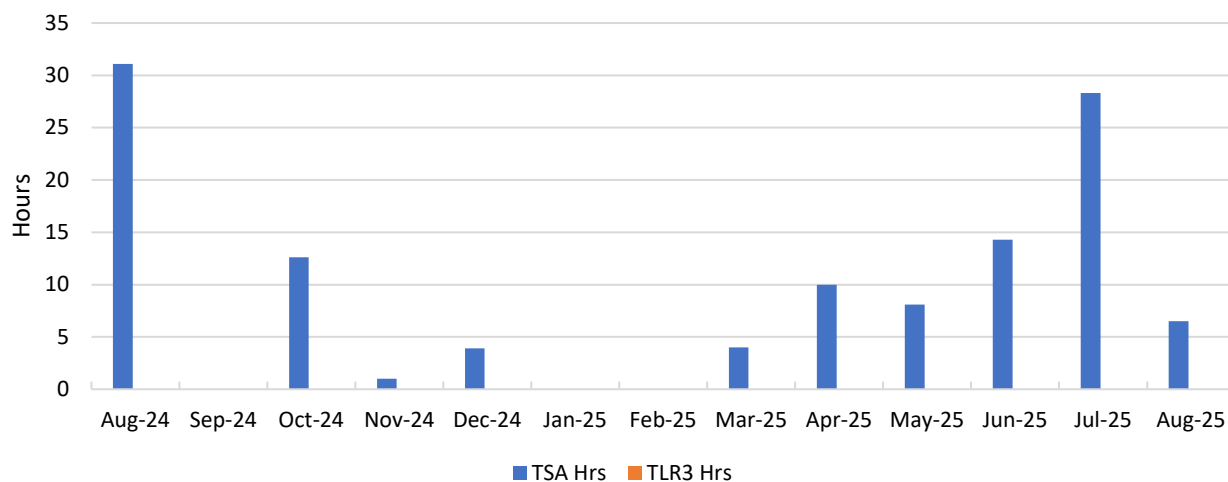
NERC Control Performance Standard

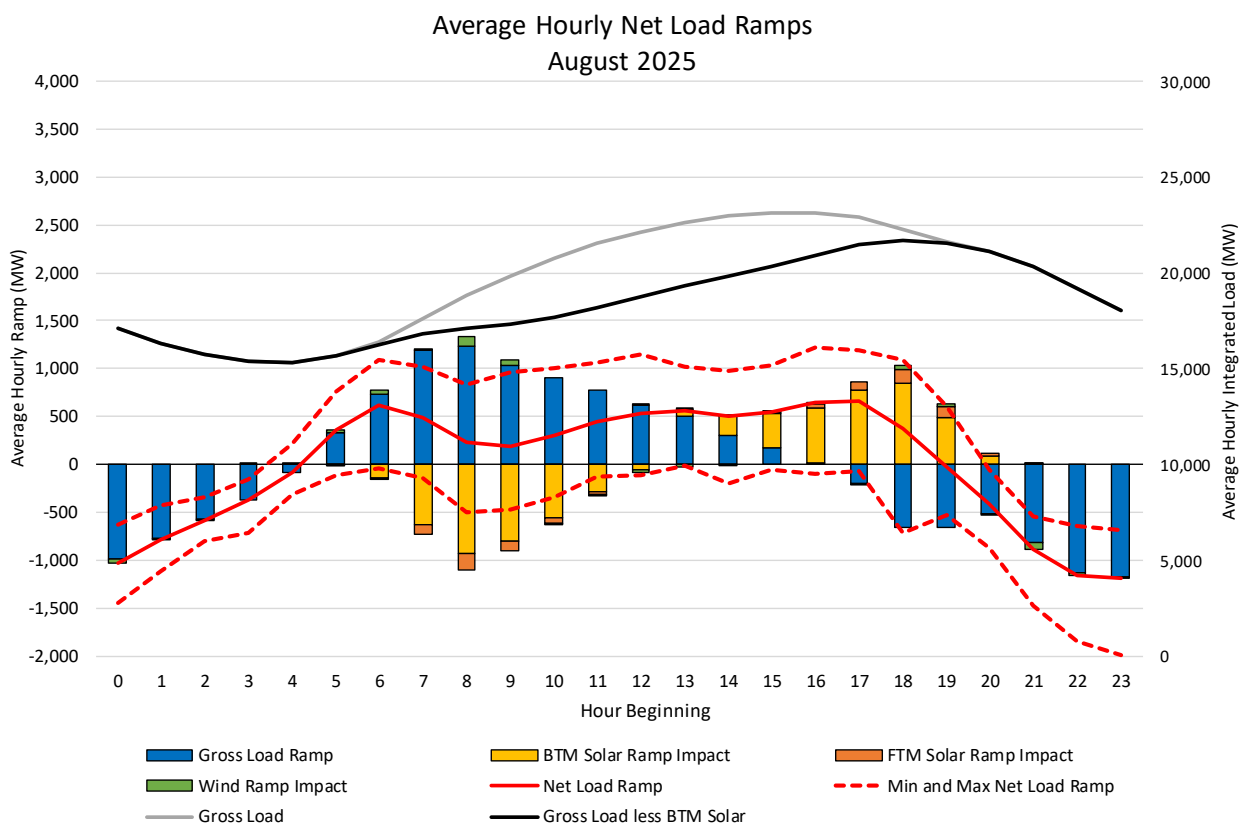
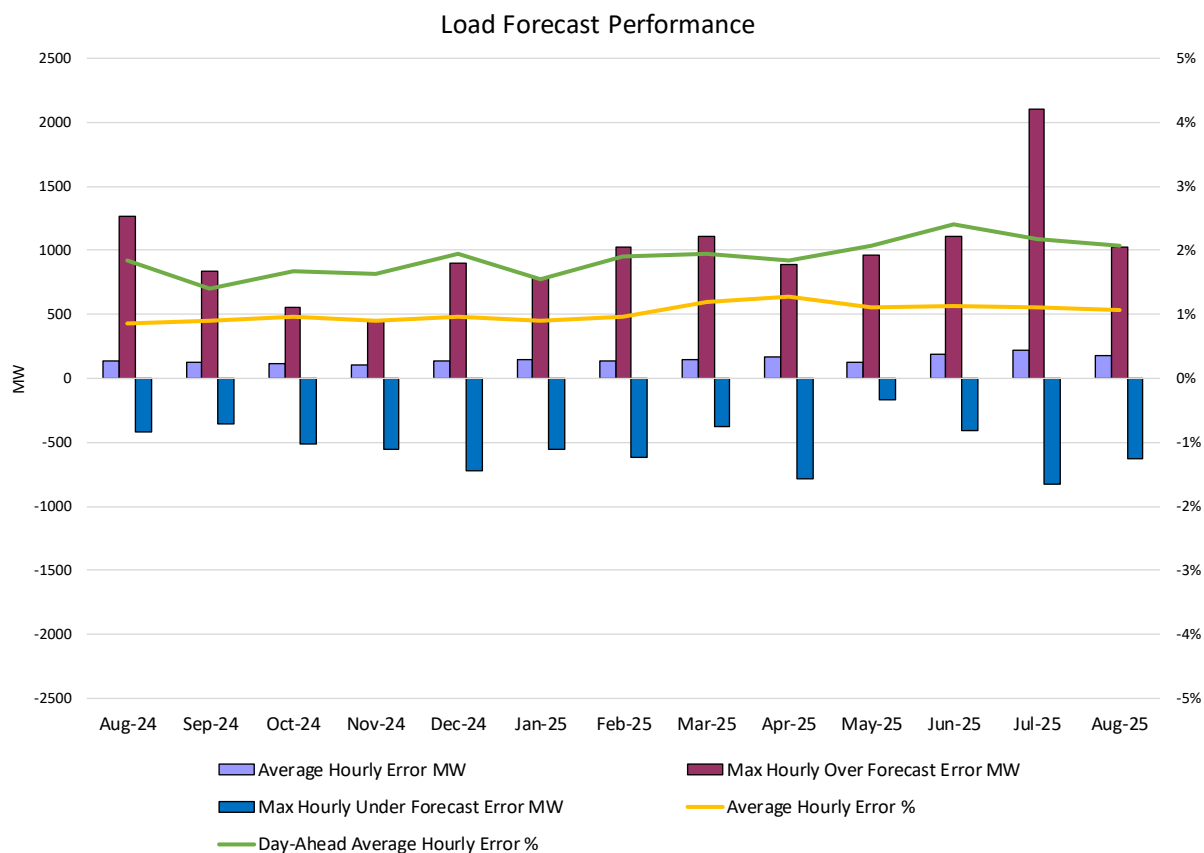


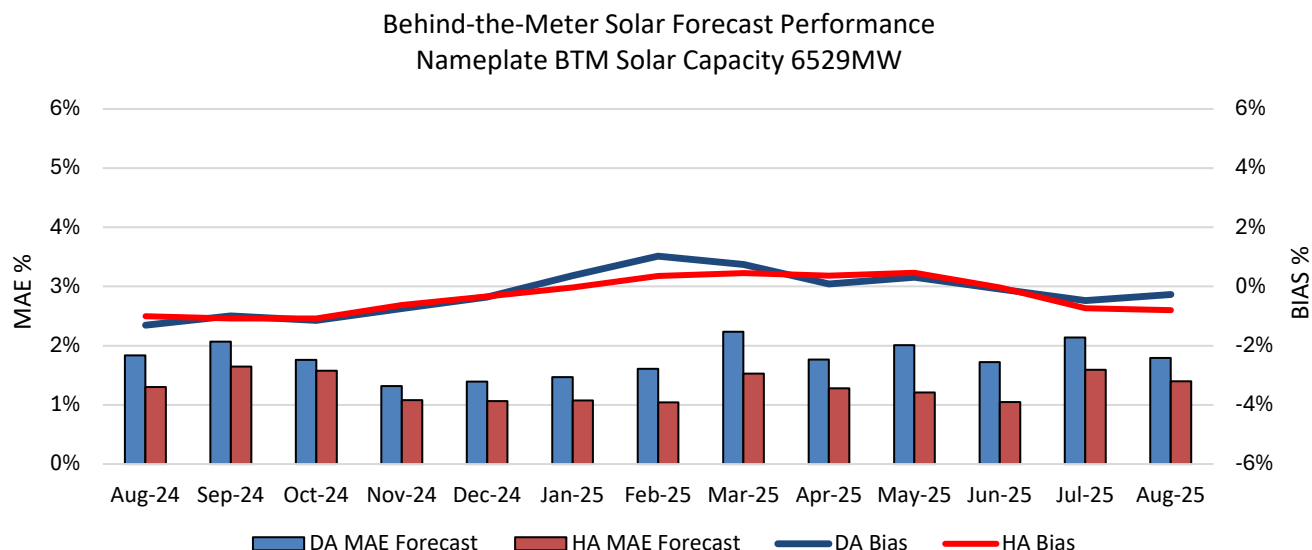
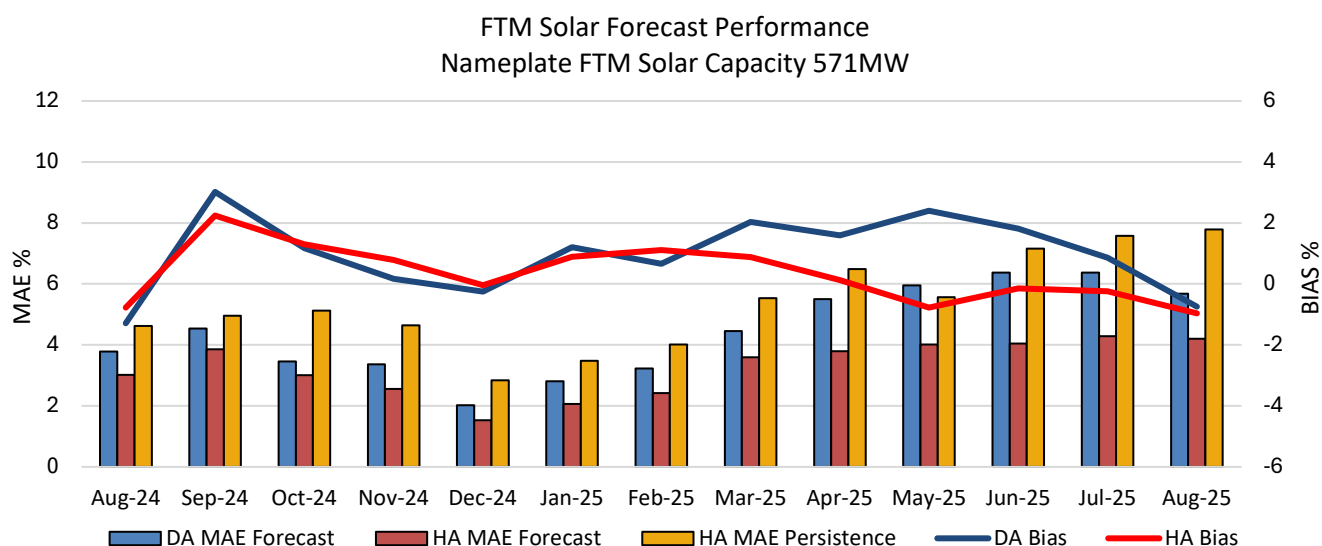
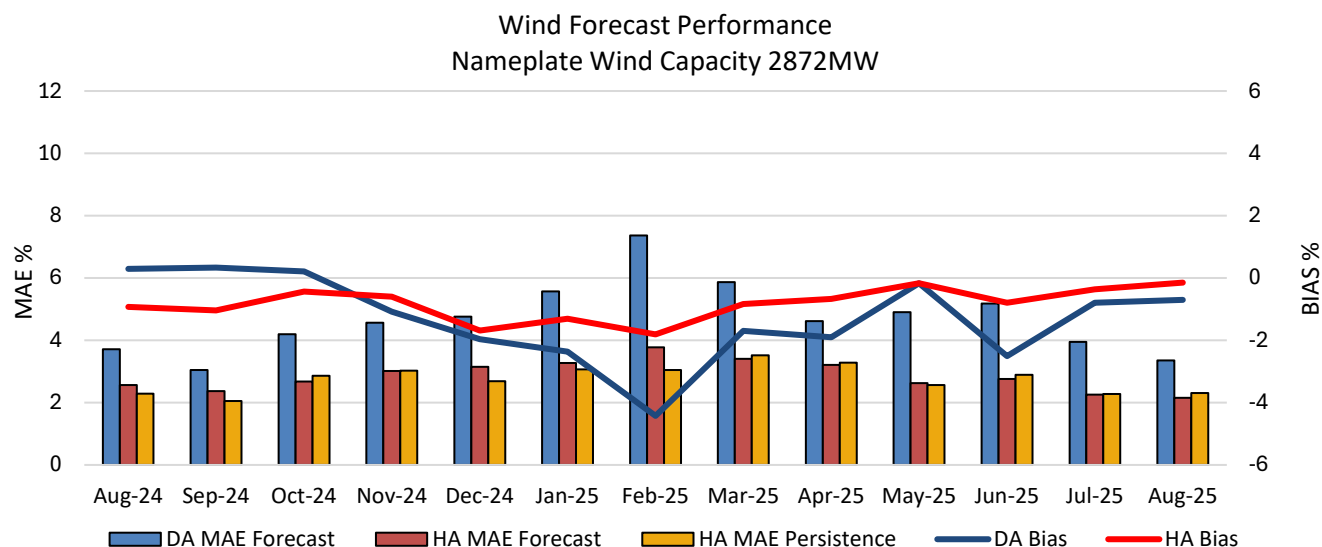
NERC Balancing Authority ACE Limit Standard



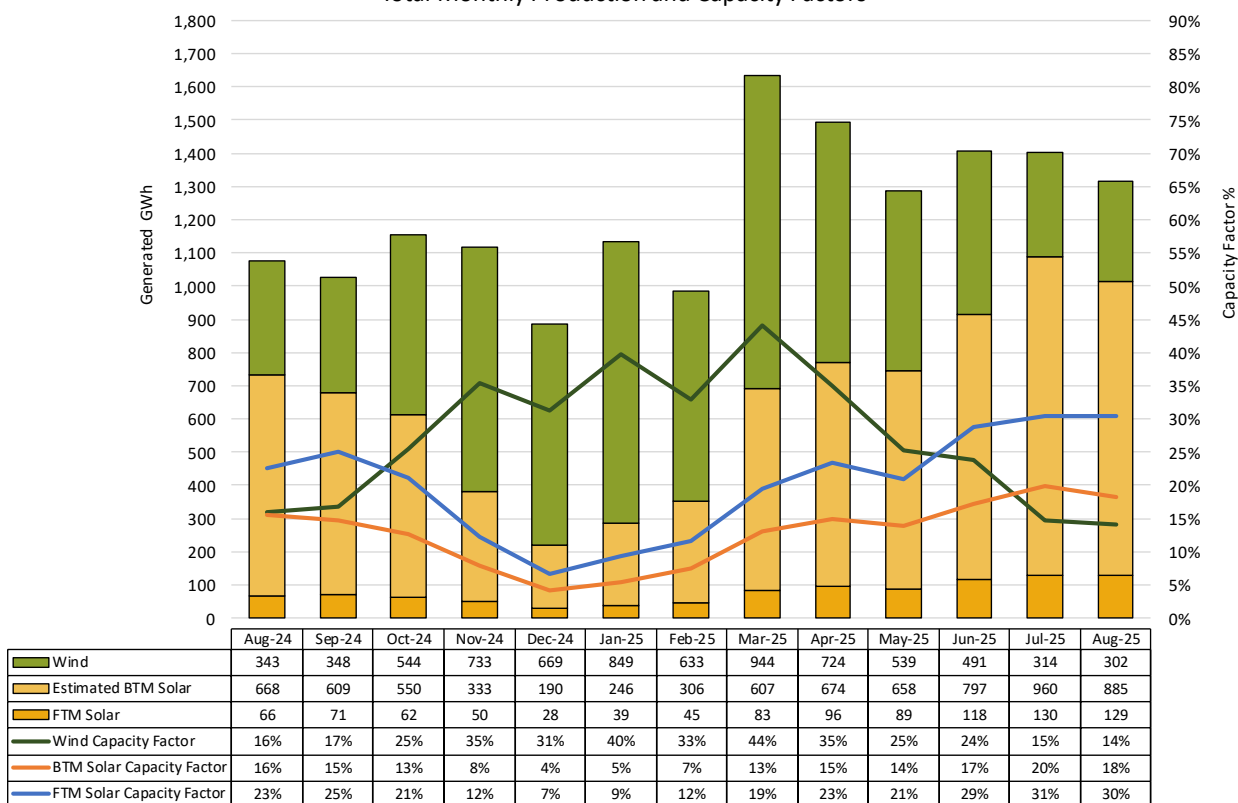
Thunderstorm Alert Hours and NERC TLR-3 Hours



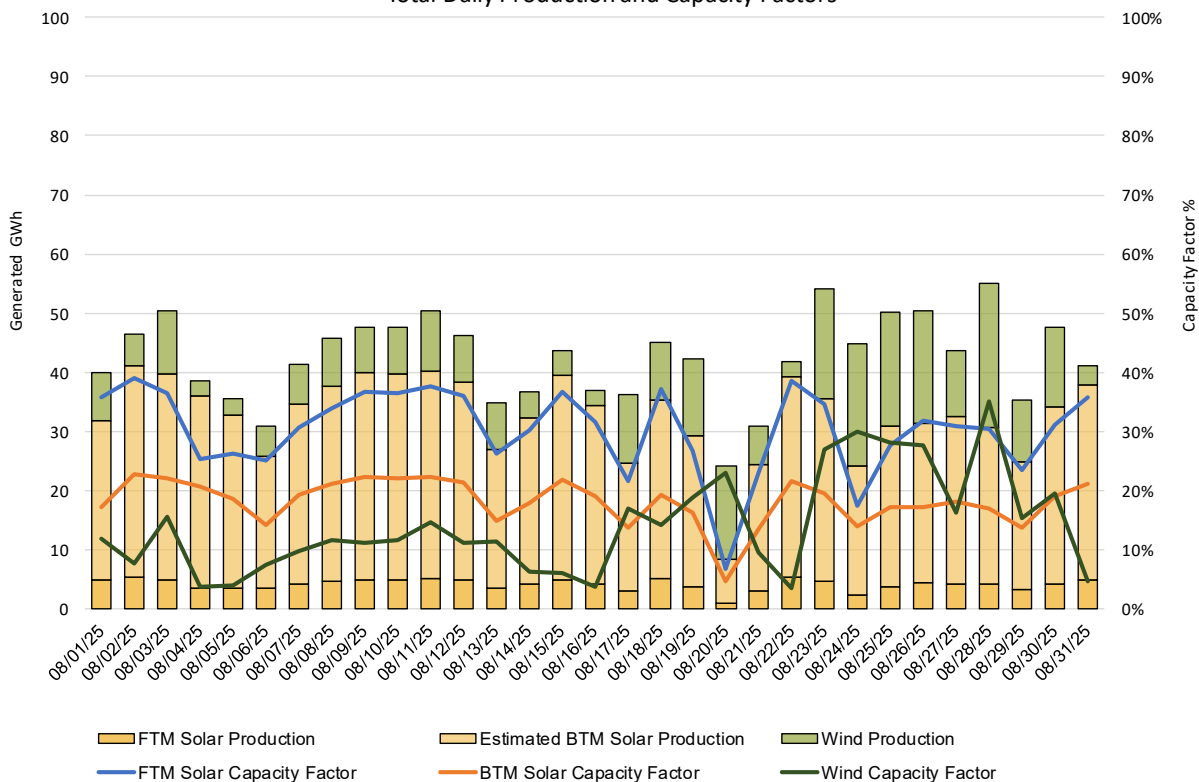




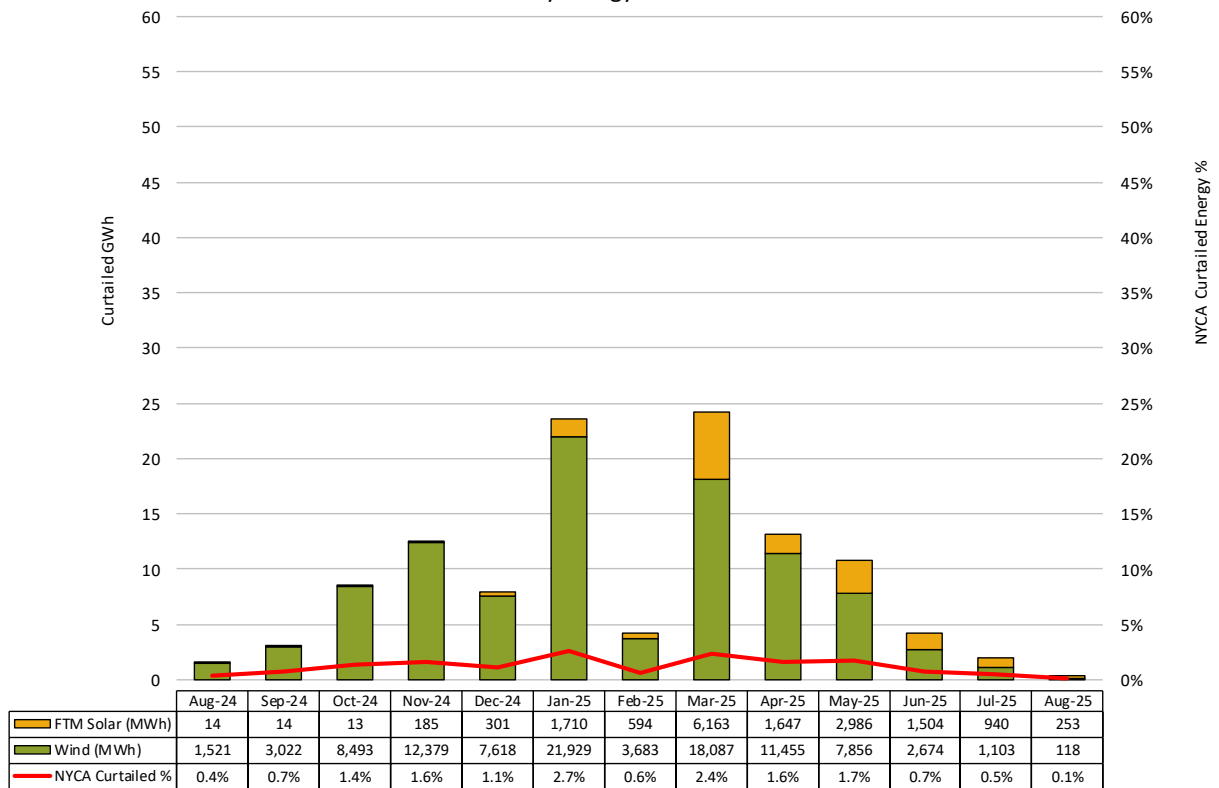
Net Wind and Solar Performance Total Monthly Production and Capacity Factors



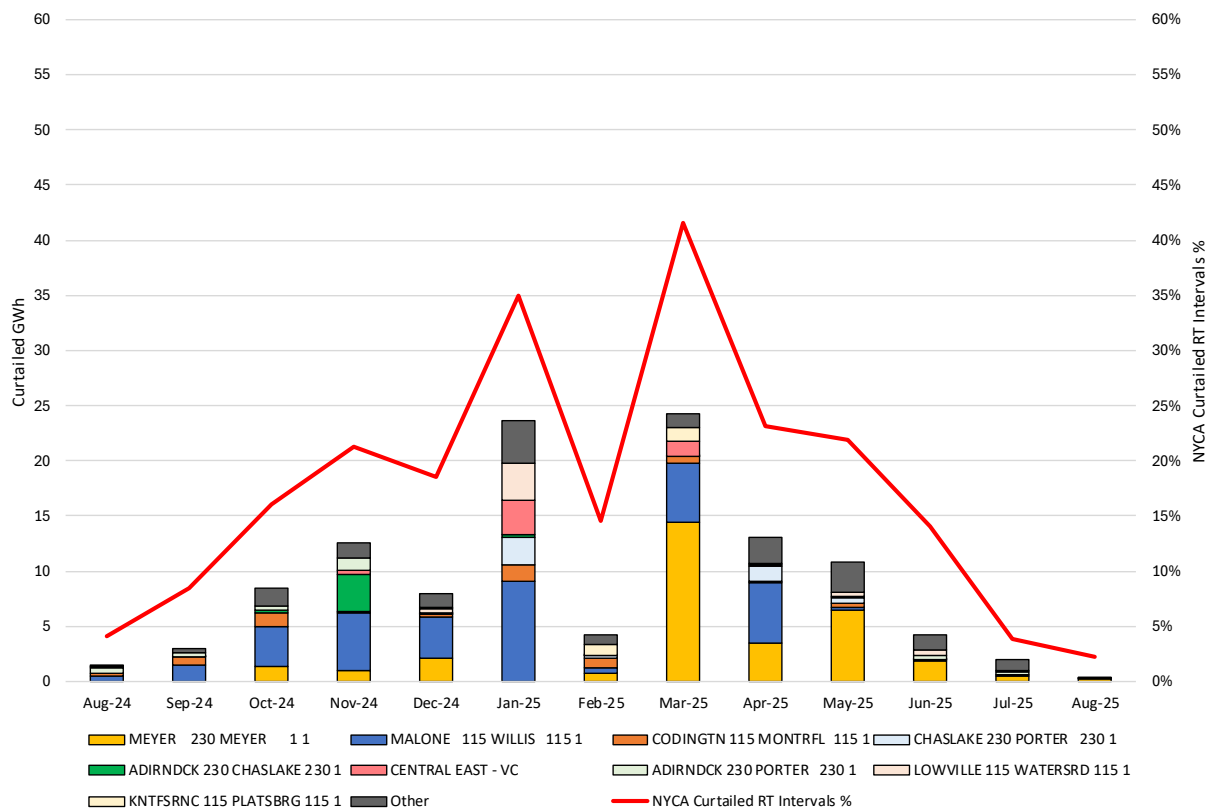
Net Wind and Solar Performance Total Daily Production and Capacity Factors

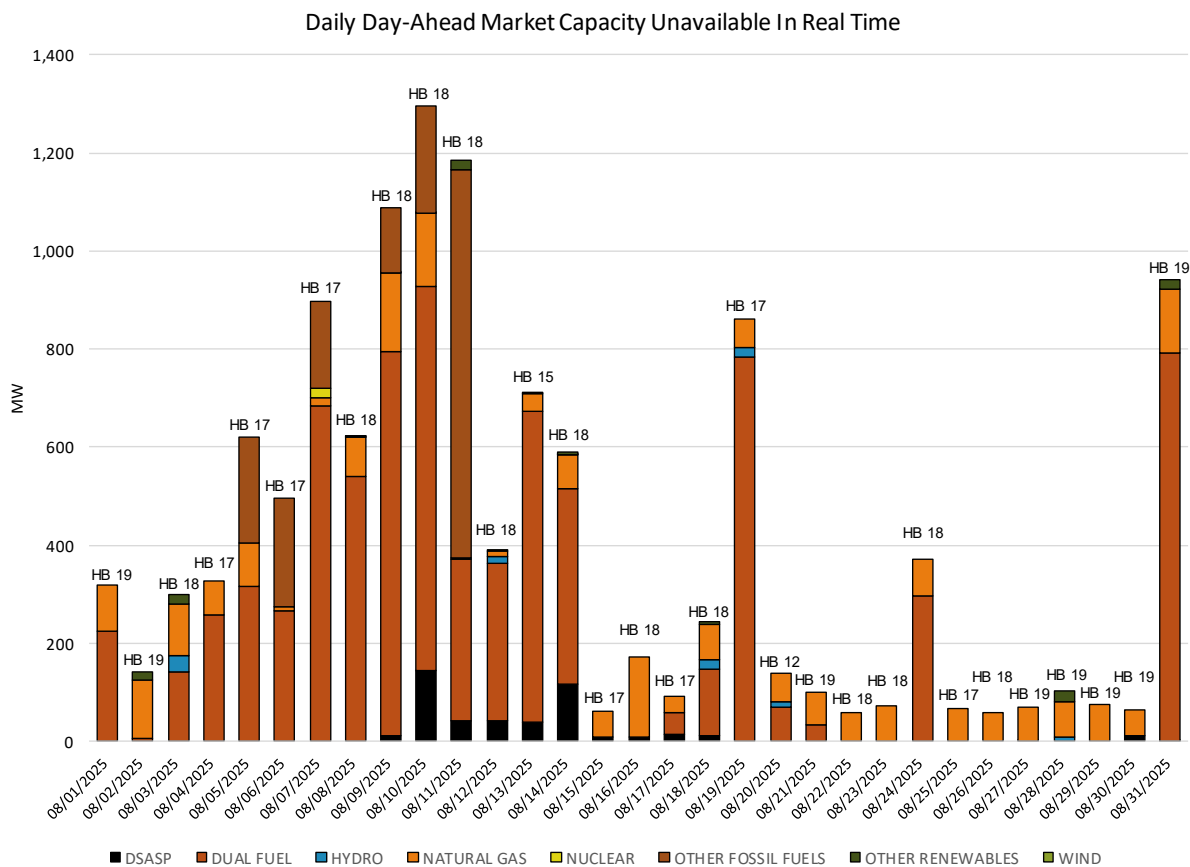
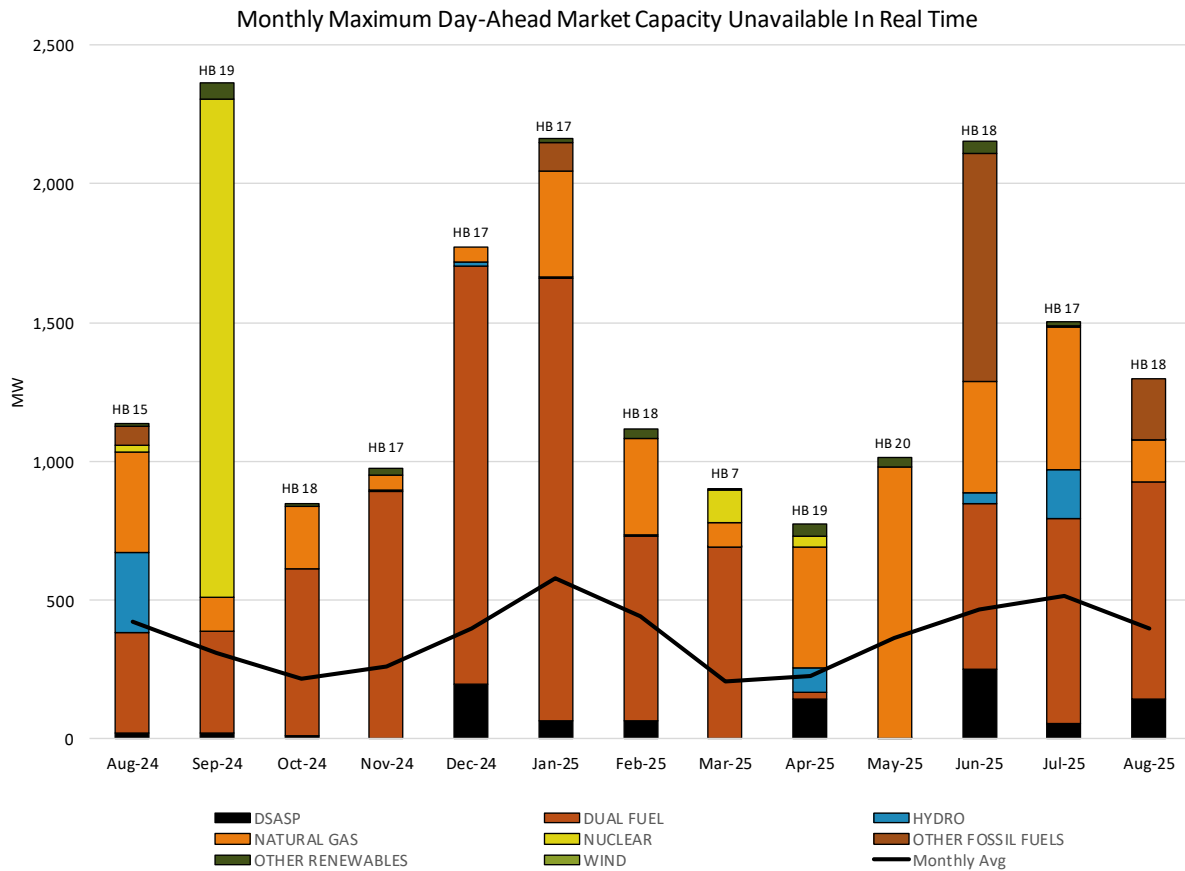


Net Wind and FTM Solar Performance Monthly Energy Curtailment

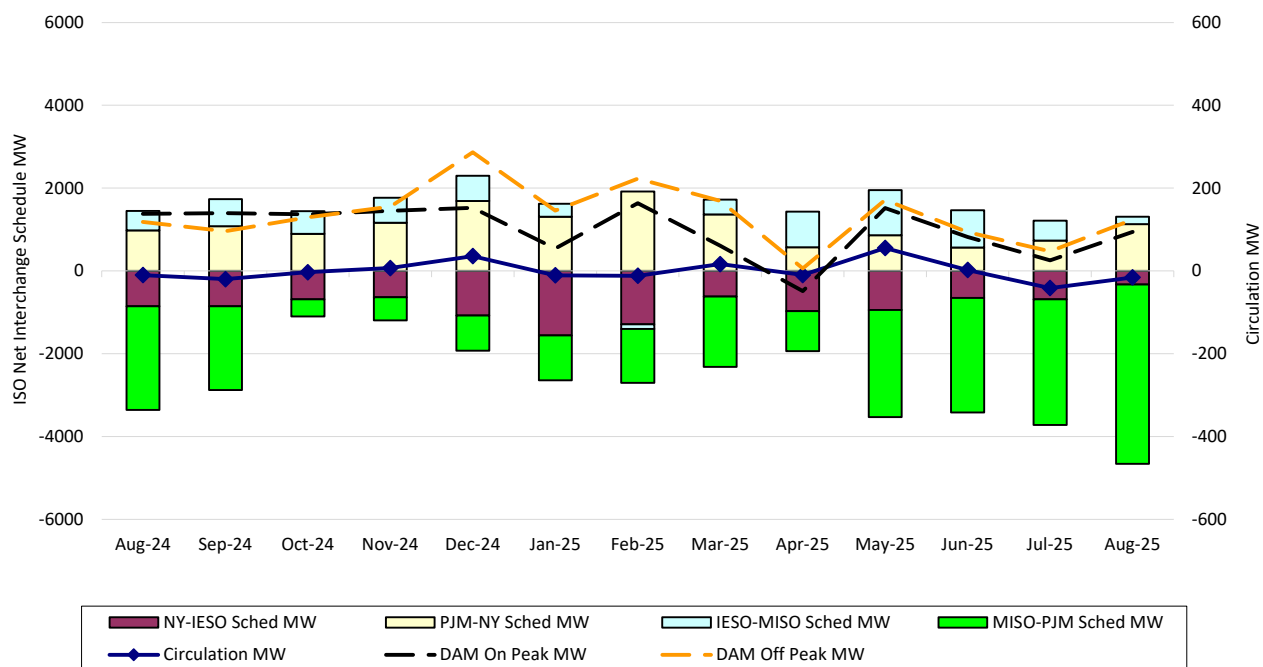


Net Wind and FTM Solar Performance Monthly Energy Curtailment by Limiting Constraint



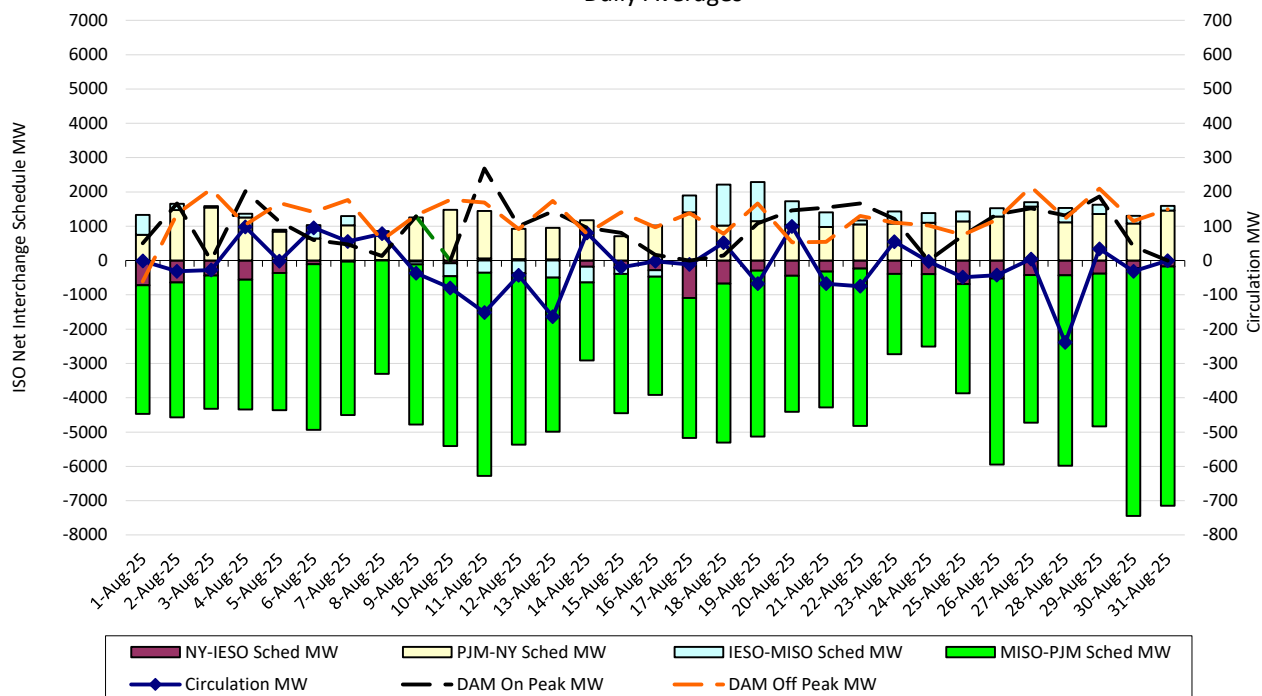


Lake Erie Circulation and ISO Net Interchange Schedules
Monthly Averages



Interchange schedules with positive values aggravate clockwise Lake Erie Circulation.

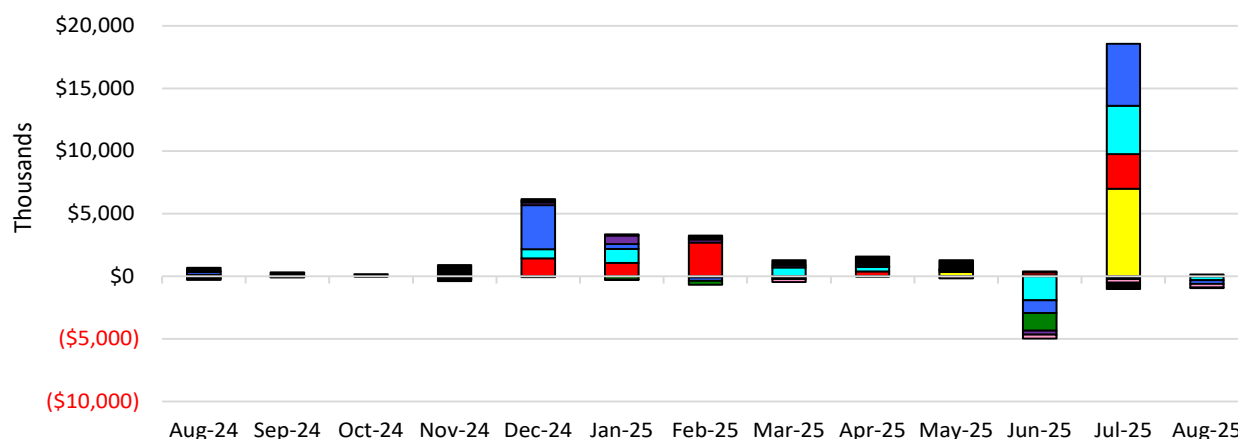
Lake Erie Circulation and ISO Net Interchange Schedules
Daily Averages



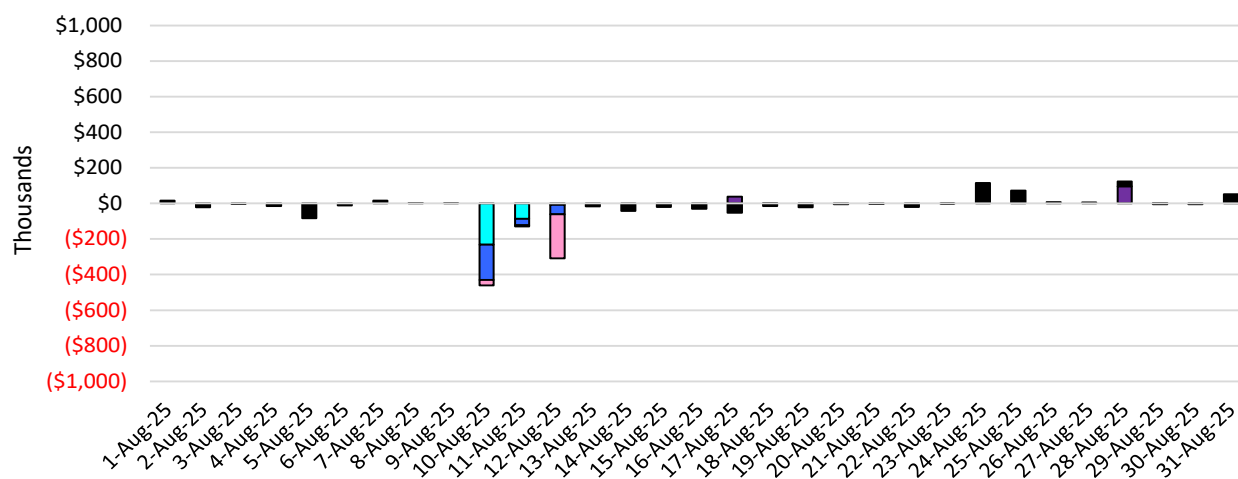
Interchange schedules with positive values aggravate clockwise Lake Erie Circulation.

Market Performance Metrics

Balancing Market Congestion Residual
Monthly Uplift Cost Categories



Daily Uplift Cost Categories



Real-Time Balancing Market Congestion Residual Categories

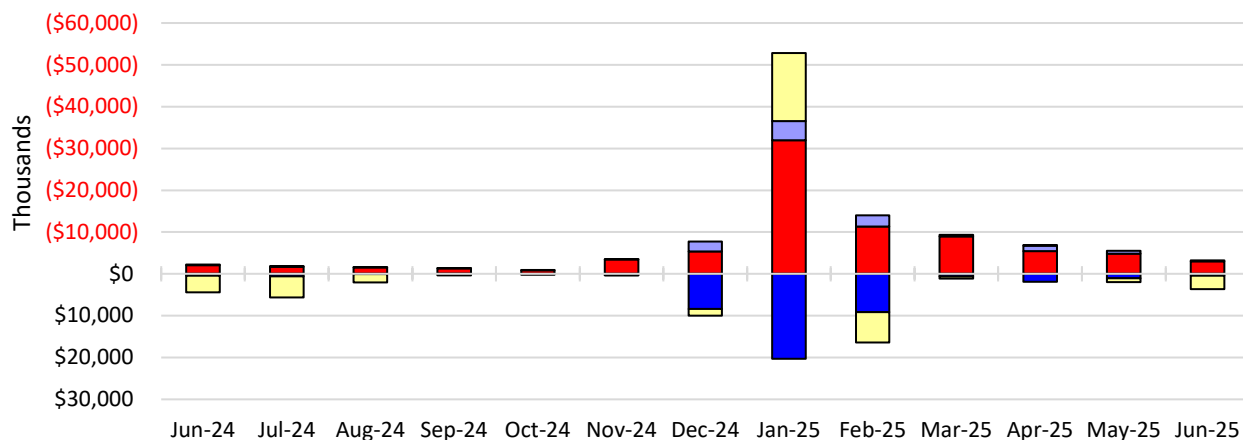
| Category | Cost Assignment | Events Types | Event Examples |
|--|-----------------|---|--|
| Storm Watch | Zone J | Thunderstorm Alert (TSA) | TSA Activations |
| Transmission Outage Mismatch | Market-wide | Changes in DAM to RTM transfers related to transmission outage mismatch | Forced Line Outages, Unit AVR Outages, Early Line Return from Outage |
| Interface/Facility Rerate - NYISO Security | Market-wide | Changes in DAM to RTM transfers not related to transmission outage | Interface/Facility Rerates due to RTM voltages |
| Interface Rerate - External Security | Market-wide | Changes 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 Lake Erie Loop Flow exceeding +/-125MW |
| M2M Settlement | Market-wide | Settlement result inclusive of coordinated redispatch and Ramapo flowgates | |
| Cost Not Categorized | Market-wide | | |
| Not Investigated | Market-wide | | |

Monthly Balancing Market Congestion Report Assumptions/Notes

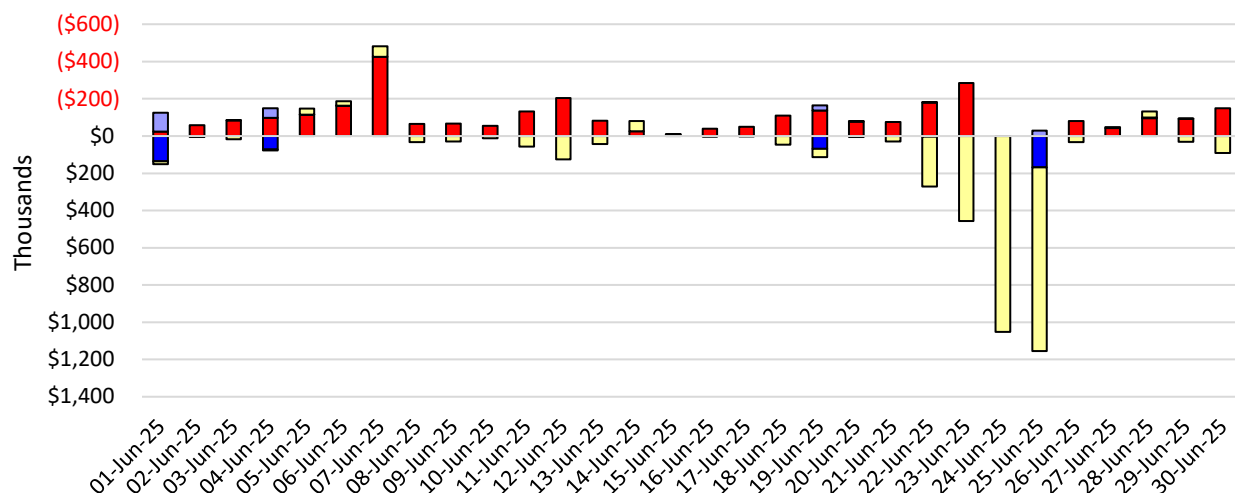
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

| Days investigated in August: 10,11,12 | | | |
|---------------------------------------|-----------------|----------|---|
| Event | Date (yyyymmdd) | Hours | Description |
| | 8/10/2025 | 12 | NYCA DNI Ramp Limit |
| | 8/10/2025 | 20-22 | Derate Malone-Willis 115kV (#1-910) I/o SIN:ALCOA R8105 & GEN |
| | 8/10/2025 | 20-22 | Derate Newbridge-Stewart Ave 138kV (#463) |
| | 8/10/2025 | 20,21 | Derate Greenlawn-Syosset 138kV (#676) I/o NRTHPORT-ELWOOD___138_681 |
| | 8/10/2025 | 21 | Derate Elwood-Greenlawn 138kV (#673) I/o NRTHPORT-ELWOOD___138_681 |
| | 8/10/2025 | 20-22 | Derate Barrett-Freeport 138kV (#459) |
| | 8/10/2025 | 12 | Uprate Goethals-Gowanus 345kV (#25) |
| | 8/10/2025 | 17-19 | Uprate Scriba-Volney 345kV (#20) I/o SCRIBA___-VOLNEY___345_21 |
| | 8/10/2025 | 12 | NE_AC Active DNI Ramp Limit |
| | 8/10/2025 | 1,2,5,19 | PJM_AC - NY Scheduling Limit |
| | 8/10/2025 | 19 | NE_AC - NY Scheduling Limit |
| | 8/10/2025 | 19-22 | HQ_CHAT - NY Scheduling Limit |
| | 8/11/2025 | 13-17 | Uprate Goethals-Gowanus 345kV (#25) |
| | 8/11/2025 | 19 | Derate Barrett-Freeport 138kV (#459) |
| | 8/11/2025 | 13,14,23 | HQ_CHAT - NY Scheduling Limit |
| | 8/11/2025 | 9,17,18 | IESO_AC Active DNI Ramp Limit |
| | 8/11/2025 | 19 | PJM_AC Active DNI Ramp Limit |
| | 8/11/2025 | 15 | NE_AC Active DNI Ramp Limit |
| | 8/12/2025 | 0 | NYCA DNI Ramp Limit |
| | 8/12/2025 | 0,11,12 | HQ_CHAT - NY Scheduling Limit |
| | 8/12/2025 | 0 | IESO_AC Active DNI Ramp Limit |

DAM Congestion Residual Monthly Cost Categories



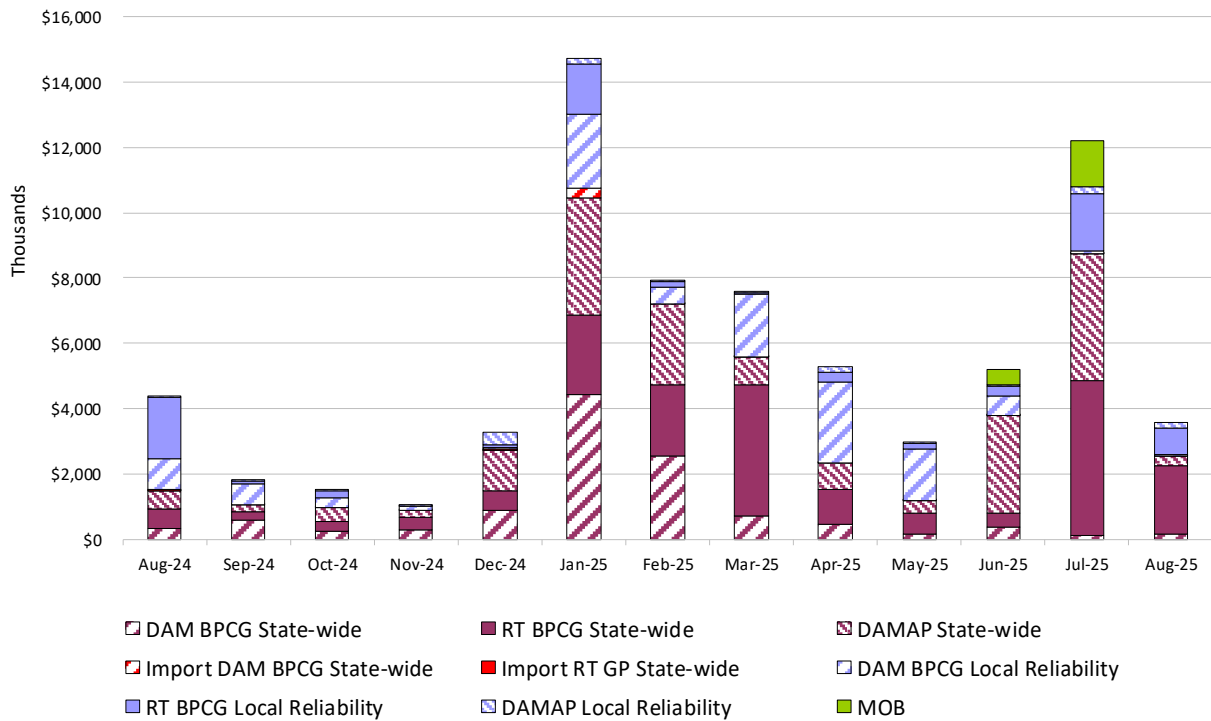
Daily Cost Categories



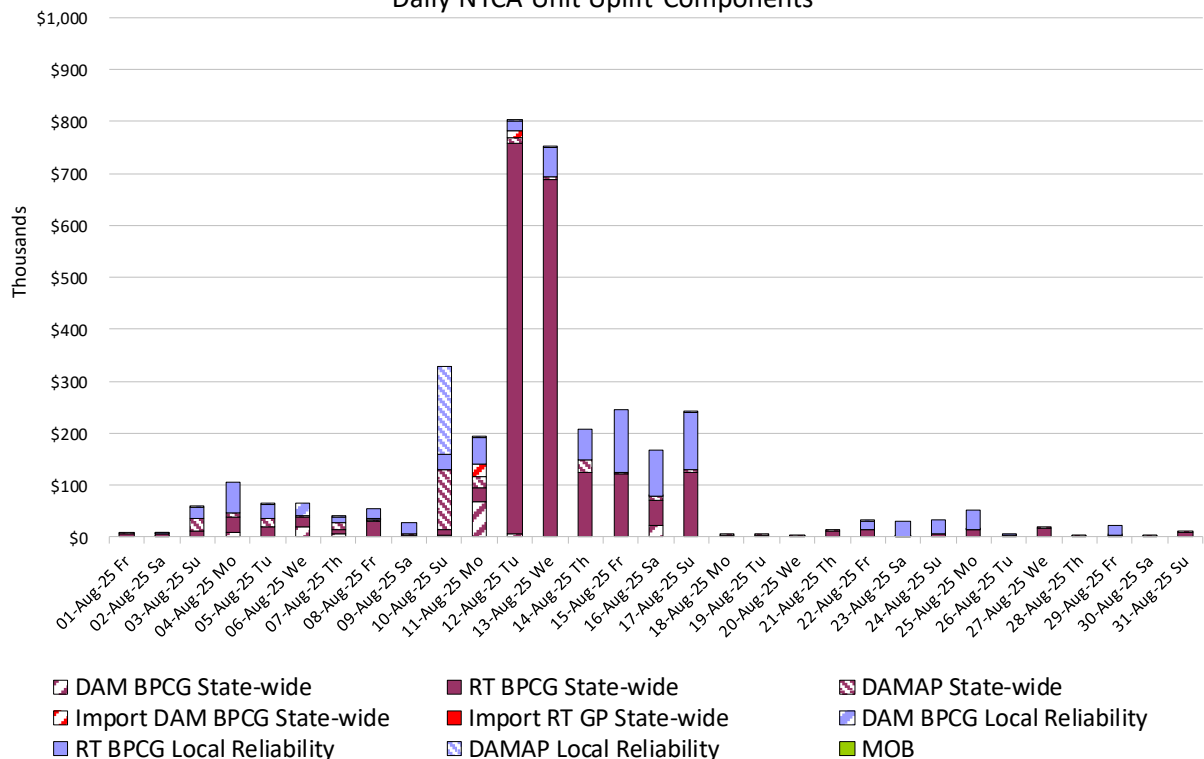
DAM Congestion Residual Categories

| Category | Cost Assignment | Events Types | Event Examples |
|---|-------------------------------------|--|--|
| 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. |
| Incremental TCC/External Outage Impacts | All TO by Monthly Allocation Factor | Allocation associated with transmission equipment status change caused by change in status of external equipment or change in status of equipment associated with Incremental TCC. | Tie line required out-of-service by TO of neighboring control area. |
| Central East Commitment Rerate | All TO by Monthly Allocation Factor | Changes in the DAM Central East_VC limit as compared to the TCC Auction limit, which are not associated with transmission line outages. | |
| Cost Not Categorized | All TO by Monthly Allocation Factor | | |

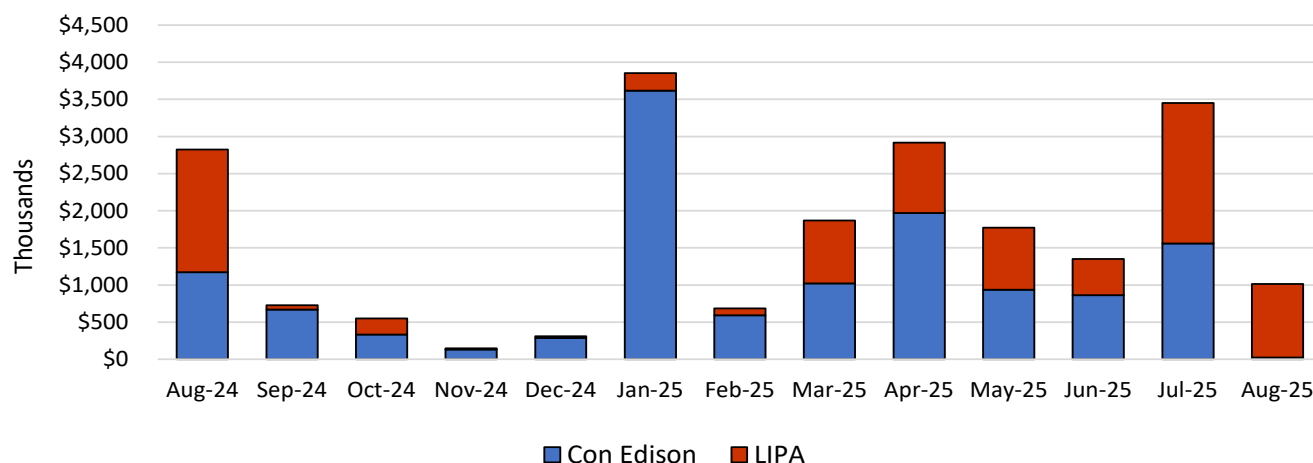
Monthly Power Supplier Uplift Components



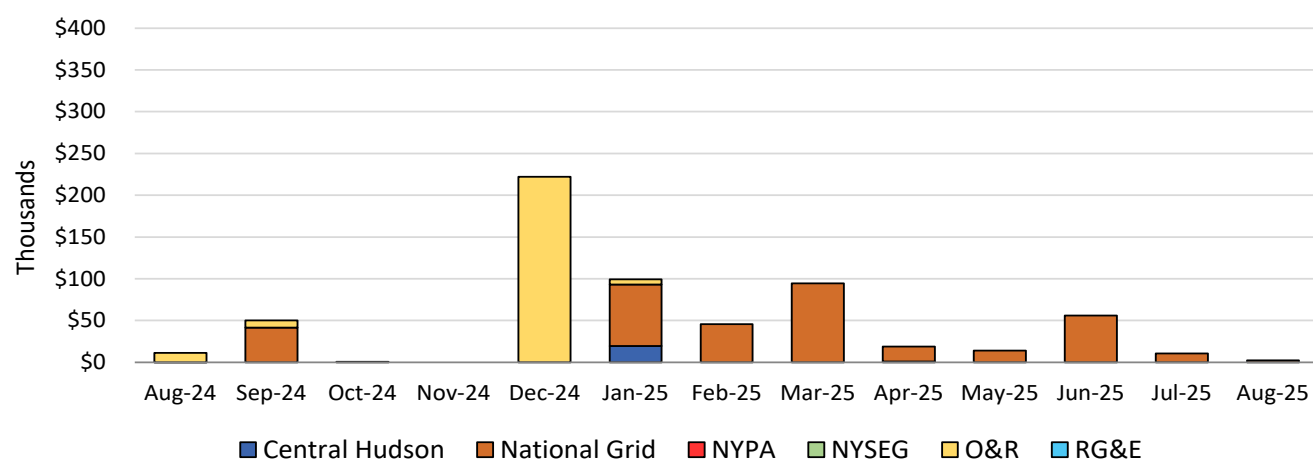
August 2025 Daily NYCA Unit Uplift Components



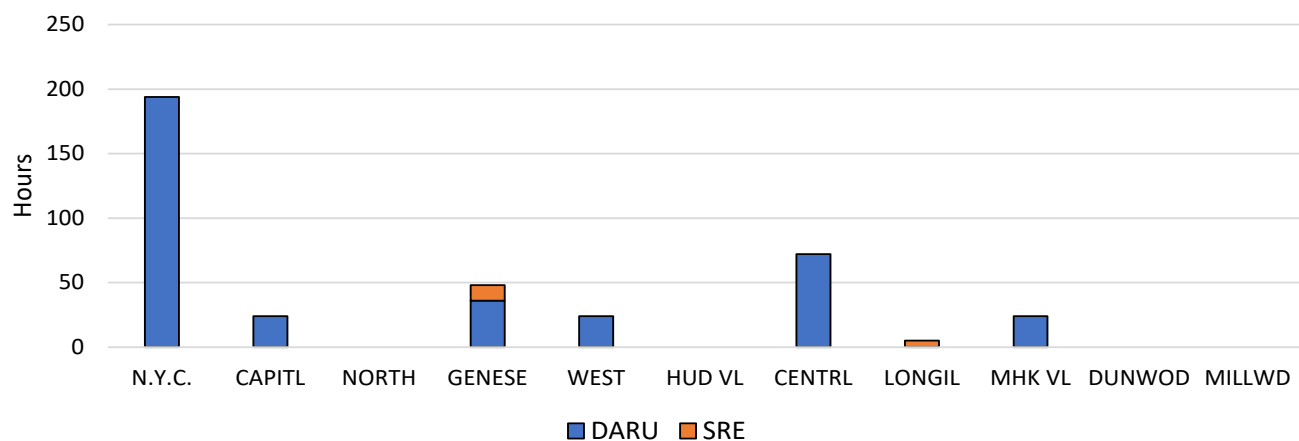
Local Reliability Cost - NYC & LONGIL Monthly RT BPCG, DAM BPCG, DAMAP & Minimum Oil Burn Costs



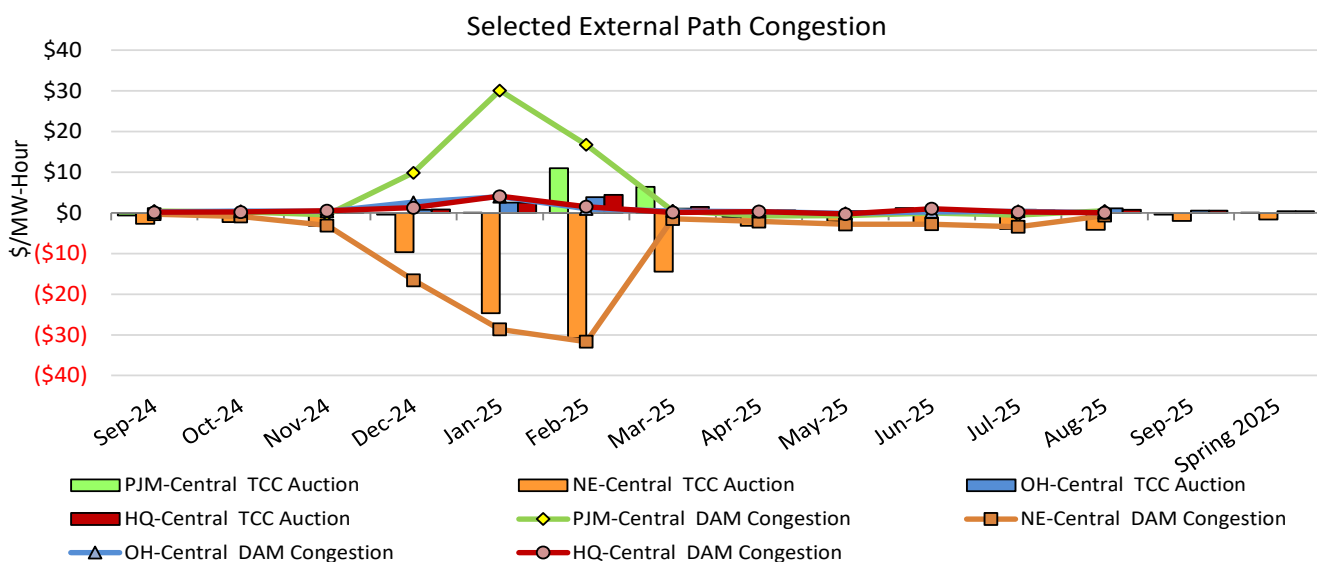
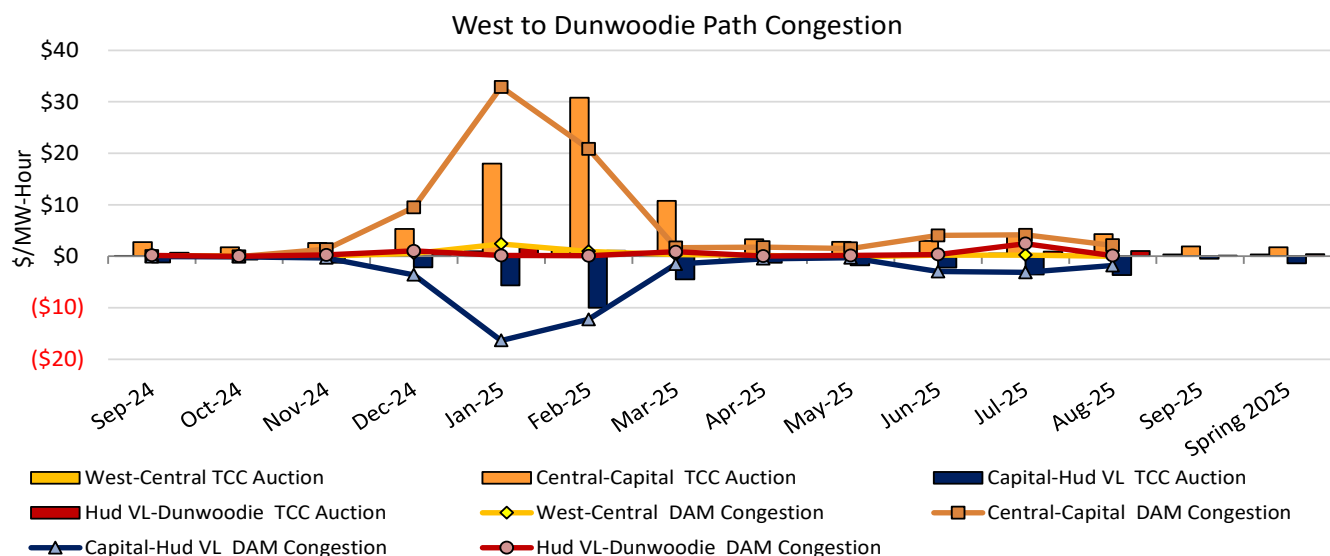
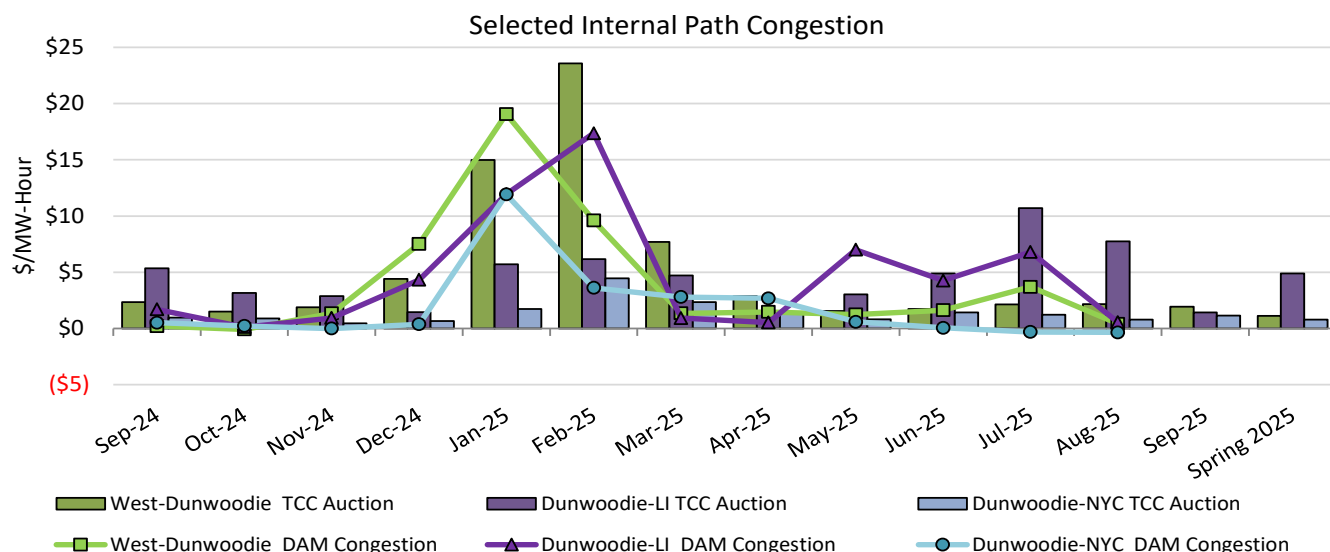
Local Reliability Cost - Rest of State Monthly RT BPCG, DAM BPCG & DAMAP Costs

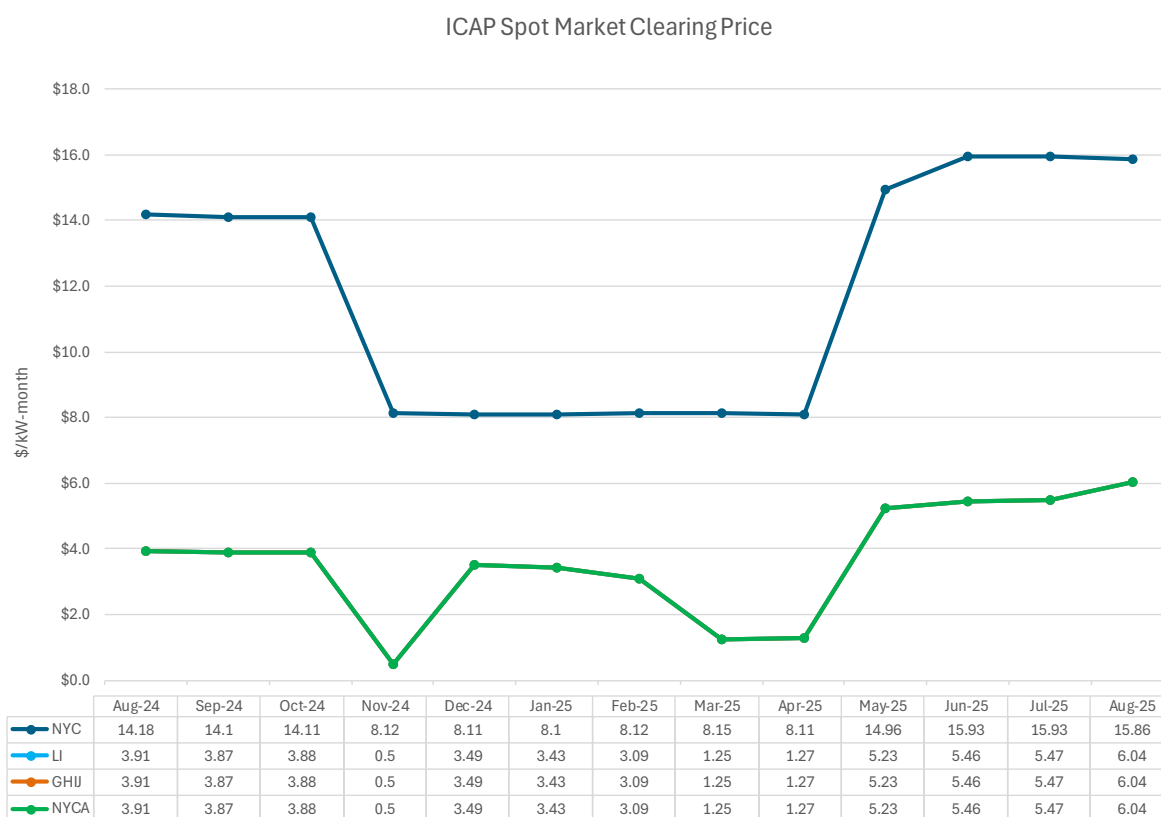


Local Reliability Commitments August 2025 DARU & SRE Hours



TCC Monthly Reconfiguration Auction vs. Monthly DAM Average with Spring 2025 Centralized TCC Auction Six-Month Average





Price Change Summary:

Price increase in LI was driven by a decrease in generation capacity. Price increase in NYCA was driven by a decrease in generation capacity and an increase in exports.

Appendix A –Metric Definitions

- **Alert State:** The number of Alert State declarations reflect system operating conditions beyond thresholds associated with Normal and Warning States. Declaration of the Alert State allows the NYISO to take corrective actions not available in the Normal and Warning States.
- **Average Hourly Error %:** Average value of the ratio of hourly average error magnitude to hourly average actual load demand.
- **Capacity Factor:** The ratio of actual energy produced to the maximum energy that could have produced if operating at full capacity continuously during the same period.
- **Curtailed Energy:** Difference between real-time wind/FTM solar forecast and economic wind/FTM solar output limit.
- **Curtailed Energy %:** The ratio of curtailed energy to total energy production.
- **Day-Ahead Average Hourly Error %:** 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.
- **Day-Ahead Bias:** Avg (actual generation – Day-Ahead forecast generation) / capacity
- **Day-Ahead MAE Forecast Error:** Avg |actual generation – Day-Ahead forecast generation| / Capacity
- **Day-Ahead Market Capacity Unavailable:** Unavailable capacity is calculated as the difference of Day-Ahead Market capacity including SRE relative to the real-time (RT) capacity during RT peak load hour.
- **Disturbance Control Standard Event Time:** For NYISO initiated NERC Reportable Disturbances, the maximum ACE recovery time is identified. Recovery times less than 15 minutes are considered NERC compliant.
- **Hour-Ahead Bias:** Avg (actual generation – Hour-Ahead forecast generation) / capacity
- **Hour-Ahead MAE Forecast Error:** Avg |actual generation – Hour-Ahead forecast generation| / Capacity
- **Hour-Ahead MAE Persistence Error:** Avg |actual generation – Hour-Ahead actual generation| / Capacity
- **Hourly Error MW:** Value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.
- **Major Emergency:** The number of Major Emergency State declarations reflect system operating conditions beyond thresholds associated with the Alert State. Declaration of the Major Emergency State allows the NYISO to take additional corrective actions not available in the Alert State.
- **NERC Balancing Authority ACE Limit Standard:** The amount of time the clock-minute average ACE exceeds the clock-minute Balancing Authority ACE Limit (BAAL) is an indicator of the NYISO Area resource and demand balancing. The maximum BAAL exceedance time is identified. BAAL exceedances of less than 30 consecutive clock-minutes are NERC compliant.
- **NERC Control Performance Standard:** The value of NERC Control Performance Standard 1 (CPS-1) is an indicator of the NYISO Area resource and demand balancing. CPS-1 values greater than 100% are considered NERC compliant.
- **NERC IROL Time Over Limit:** For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedance time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.
- **NERC Transmission Loading Relief (TLR):** Value represents the number of hours in which the NYISO requested TLR level 3 curtailments to provide transmission constraint relief.
- **Net Load:** Defined as Gross load less wind and solar generation.
- **Net Load Ramp:** Average value of the difference in load demand between the previous and current hour. Wind and solar ramps are negated to indicate their impact on Net load ramp.
- **Reserve Activation:** NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Simultaneous Activation of Reserves) by activating an immediate resource and demand balancing operation.
- **Thunderstorm Alert (TSA):** TSA is declared by NYISO when severe operating conditions are detected. A predetermined set of pre-and post-contingency constraints are passed to the RTC and RTD programs while TSA is in effect. Value represents number of hours TSA was active.
- **13 Month Trailing Avg Carbon Emissions Free %:** Sum of internal NYCA generation from Nuclear, Hydro, Wind, Solar resources divided by Gross Load. Gross load is defined as metered load plus BTM solar estimated actuals.
- **13 Month Trailing Avg Renewables %:** Sum of internal NYCA generation from Hydro, Wind, Solar resources divided by Gross Load. Gross load is defined as metered load plus BTM solar estimated actuals.

Appendix B –NYISO Information Resources

- [Annual Renewable Energy Performance Metrics](#)
- [Demand Response - NYISO](#)
- [Energy Market & Operational Data](#)
- [FERC Order 844 Zonal and Resource Specific Uplift Reports](#)
- [Installed Capacity Market Data](#)
- [Load & Capacity Data Report \(Gold Book\)](#)
- [Operating Committee - NYISO](#)
- [Systems Operations Advisory Subcommittee Report](#)
- [Transmission Congestion Contracts Market Data](#)