



Operations Performance Metrics Monthly Report

A Report by the New York Independent System Operator

November 2025

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data collected on or before December 6, 2025.

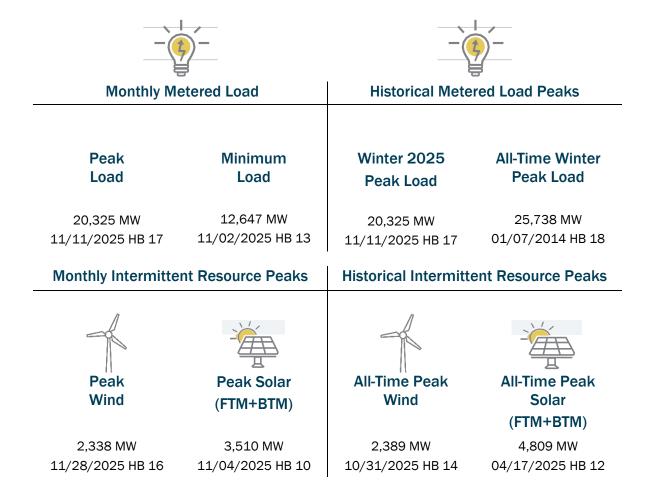


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November 2025 Highlights

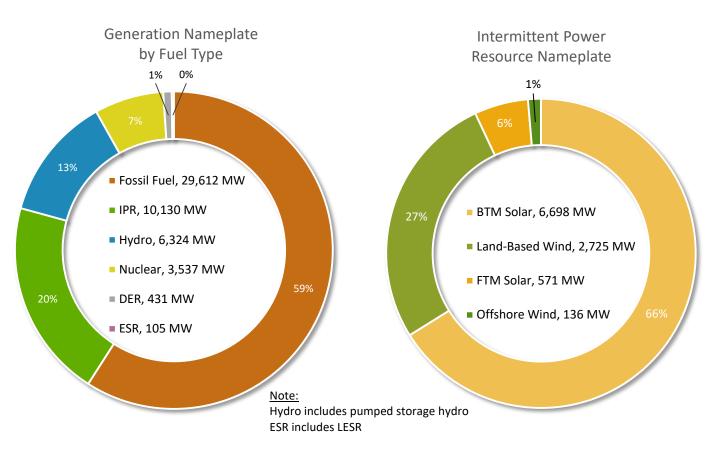


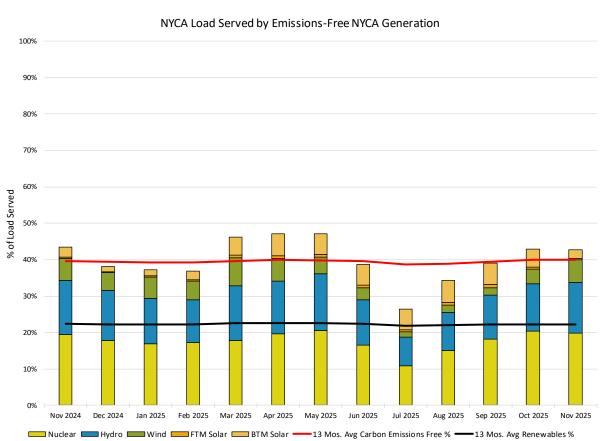
Notable NYCA System Events

- On 11/11 HB23 NYISO declared an Alert State and reduced power flows to 90% of ratings due to a level K-9 intensity solar storm, terminating 11/12 HB5.
- WillisAnnex-Patnode 230kV (#WPN2), Edic-AustinRoad 345kV (#11), AustinRoad-Adirondack 345kV (#13), and Haverstock-Adirondack 345kV (#HA2) transmission facilities associated with Smart Path Connect were placed in-service incrementally throughout November 2025.



NYCA Generation Mix



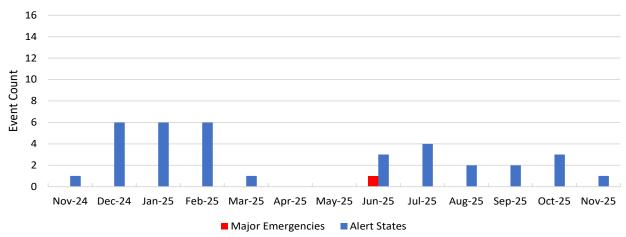




Reliability Performance Metrics

See Appendix A for metric definitions

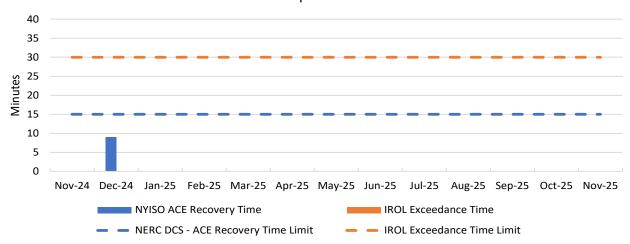




Reserve Activations

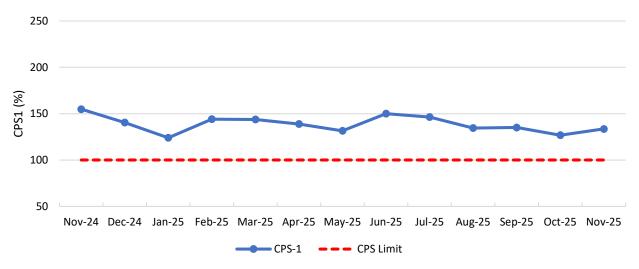


NERC IROL and DCS Reportable Violation Minutes





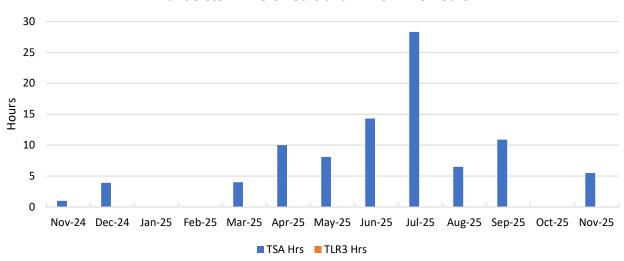
NERC Control Performance Standard



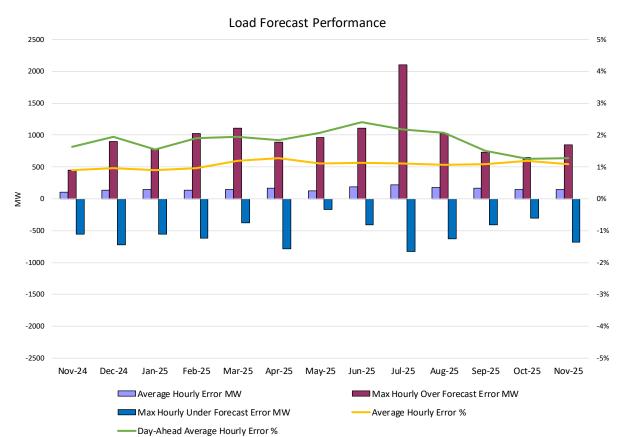
NERC Balancing Authority ACE Limit Standard

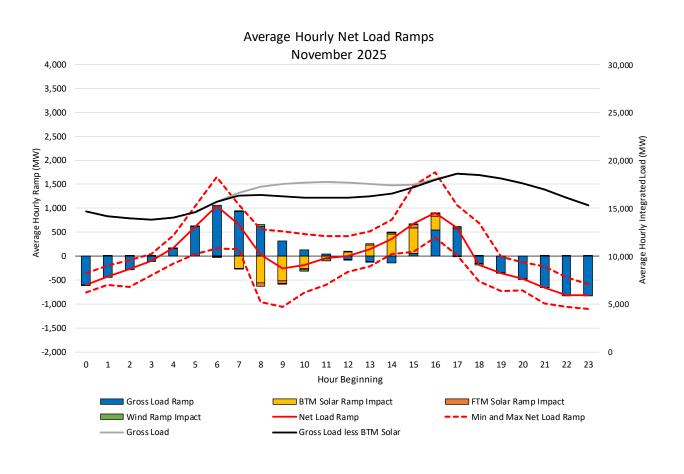


Thunderstorm Alert Hours and NERC TLR-3 Hours



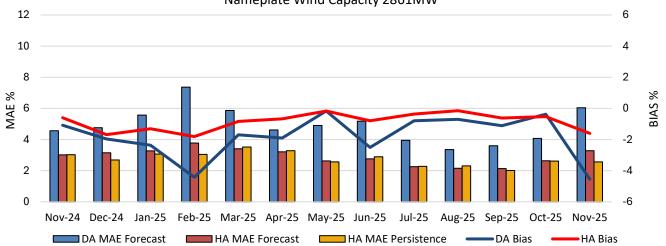




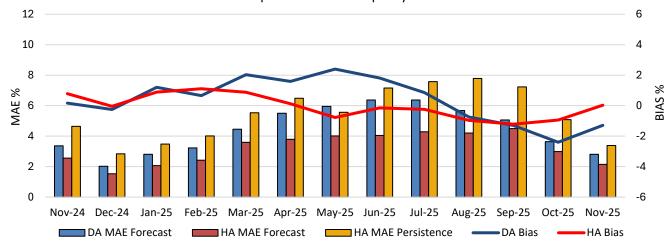




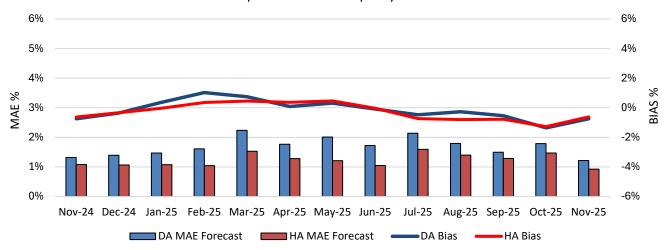
Wind Forecast Performance Nameplate Wind Capacity 2861MW



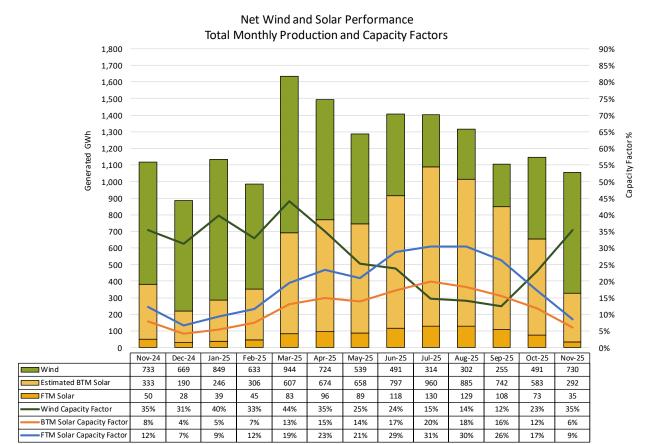
FTM Solar Forecast Performance Nameplate FTM Solar Capacity 571MW

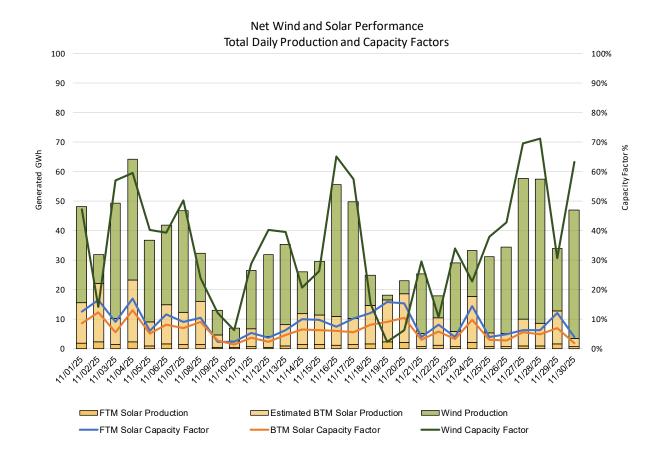


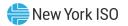
Behind-the-Meter Solar Forecast Performance Nameplate BTM Solar Capacity 6698MW



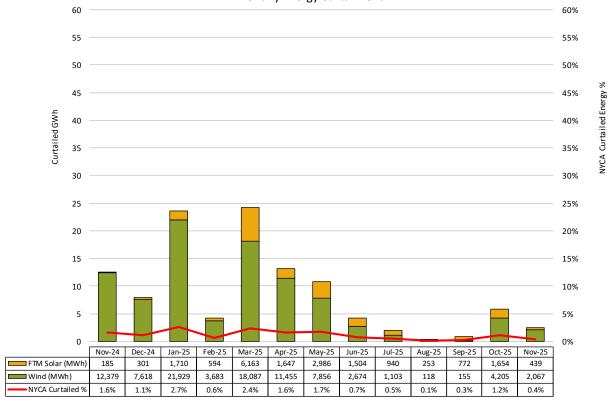




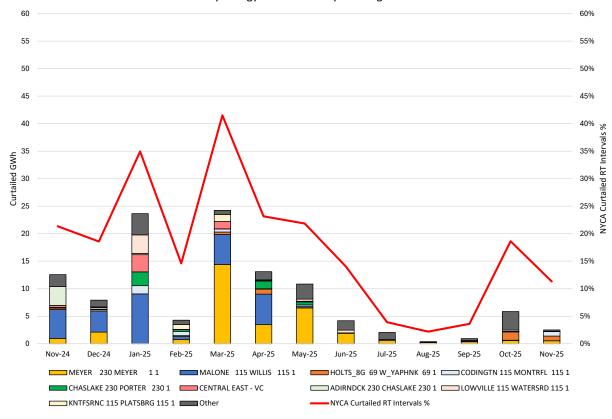


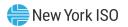


Net Wind and FTM Solar Performance Monthly Energy Curtailment

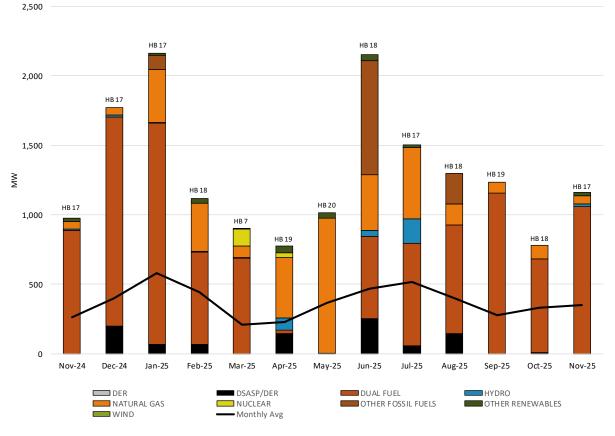


Net Wind and FTM Solar Performance Monthly Energy Curtailment by Limiting Constraint

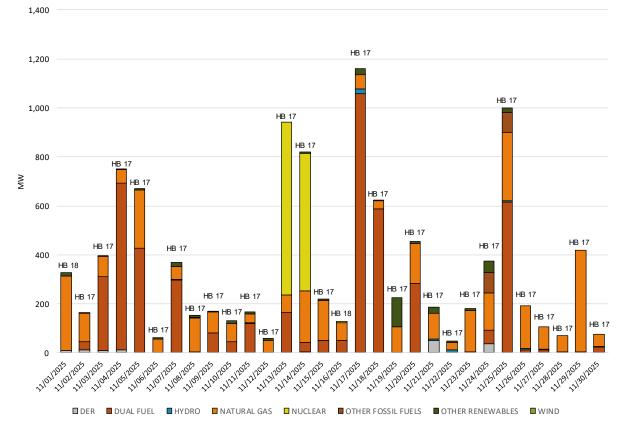






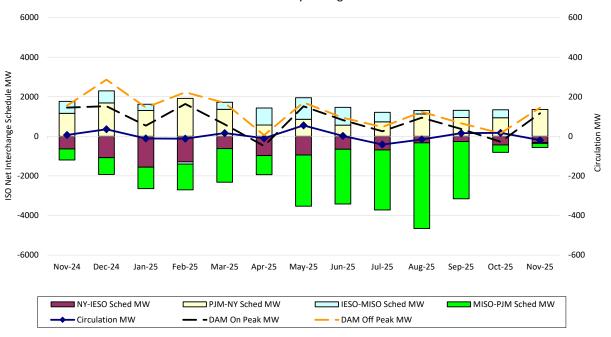


Daily Day-Ahead Market Capacity Unavailable In Real Time

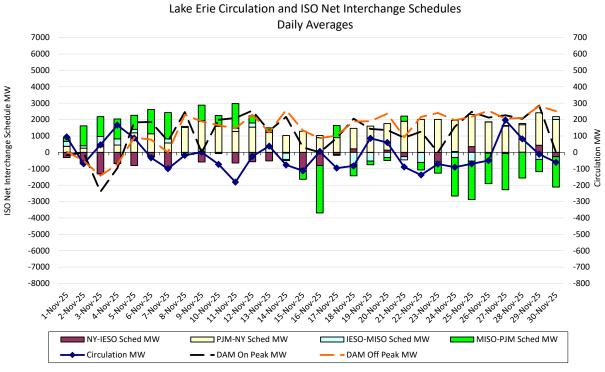




Lake Erie Circulation and ISO Net Interchange Schedules **Monthly Averages**



Interchange schedules with positive values aggravate clockwise Lake Erie Circulation.

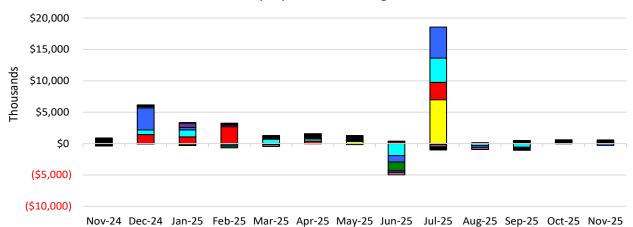


 $Interchange\ schedules\ with\ positive\ values\ aggravate\ clockwise\ Lake\ Erie\ Circulation.$

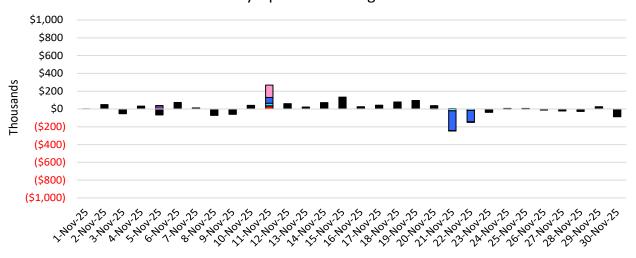


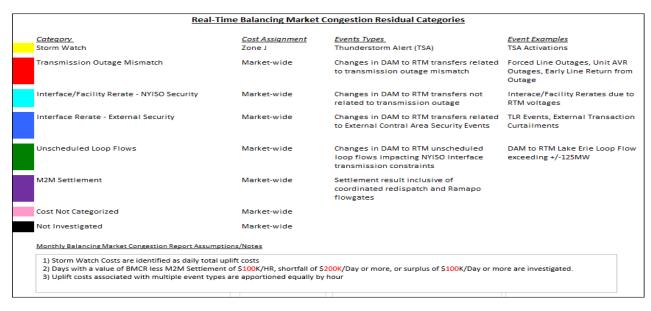
Market Performance Metrics

Balancing Market Congestion Residual Monthly Uplift Cost Categories



Daily Uplift Cost Categories



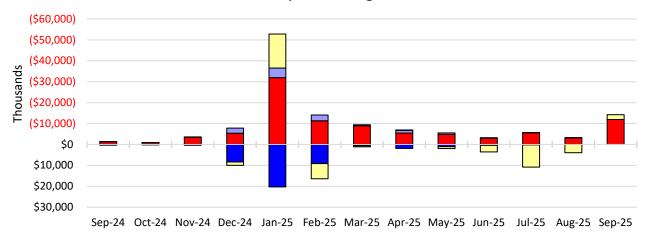




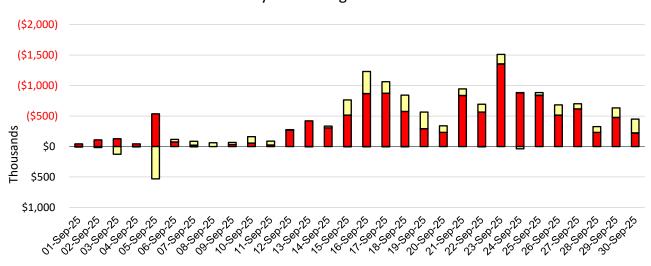
Days inv	Days investigated in November:11,21,22					
vent	Date (yyyymmdd)	Hours	Description			
	11/11/2025 15		Forced Outage Newbridge-Duffy Ave 345kV (#501)			
	11/11/2025 15		Forced Outage Neptune-Duffy Ave 345kV (#Neptune)			
	11/11/2025 16 [NYCA Active DNI Ramp Limit			
	11/11/2025 23		Derate Astoria Annex-Astoria East 138kV (#34091)			
	11/11/2025	23	Derate Freeport-Newbridge 138kV (#461)			
	11/11/2025	23	Derate Goethals-Linden Co-Gen 345kV (#G23L)			
	11/11/2025	23	Derate Lake Success-Shore Road 138kV (#368)			
	11/11/2025	23	Derate Northport-Piligrim 138kV (#672) I/o NRTHPORT-PILGRIM138_677			
	11/11/2025	23	Derate Scriba-Volney 345kV (#20) I/o SCRIBAVOLNEY 345_21			
	11/11/2025	16,19	HQ_CHAT - NY Scheduling Limit			
	11/11/2025	21,22	NE_NNC1385 - NY Scheduling Limit			
	11/11/2025	16	PJM_AC Active DNI Ramp Limit			
	11/11/2025	23	NE_AC Active DNI Ramp Limit			
	11/21/2025	18	Forced Outage Northport-Pilgrim 138kV (#679)			
	11/21/2025	12,13	NYCA Active DNI Ramp Limit			
	11/21/2025	3	Uprate Central East - VC			
	11/21/2025	10-15,21	NE_AC - NY Scheduling Limit			
	11/21/2025	3,4,12,14-16,21-23	PJM_AC - NY Scheduling Limit			
	11/21/2025	4,12,16	PJM_AC Active DNI Ramp Limit			
	11/21/2025		NE_NNC1385 - NY Scheduling Limit			
	11/22/2025		NYCA Active DNI Ramp Limit			
	11/22/2025	0-4,8,15,19,21-23	PJM_AC - NY Scheduling Limit			
	11/22/2025	3,4,8-11	NE_AC - NY Scheduling Limit			
	11/22/2025	4	PJM AC Active DNI Ramp			



DAM Congestion Residual Monthly Cost Categories



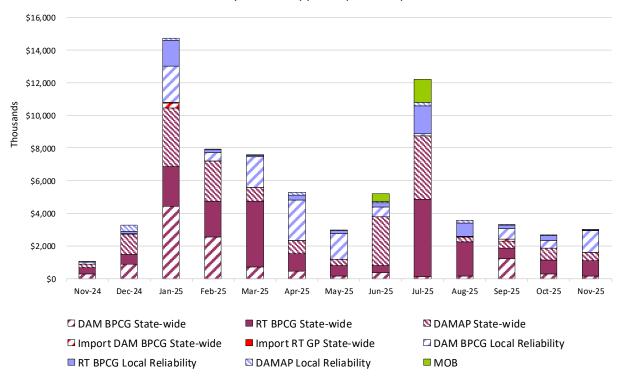
Daily Cost Categories

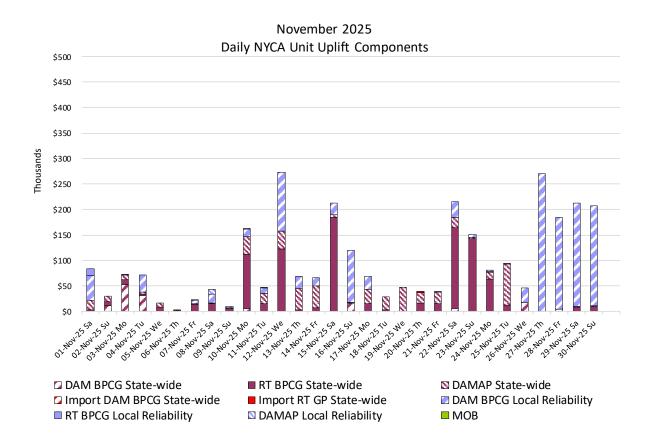


	DAM Congestion Residual Categories			
<u>Category</u> NYTO Outage Allocation	<u>Cost Assignment</u> Responsible TO	<u>Events Types</u> Direct allocation to NYTO's responsible for transmission equipment status change.	Event Examples DAM scheduled outage for equipment modeled inservice for the TCC Auction.	
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			



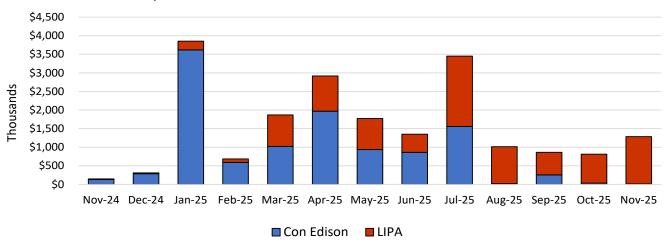
Monthly Power Supplier Uplift Components



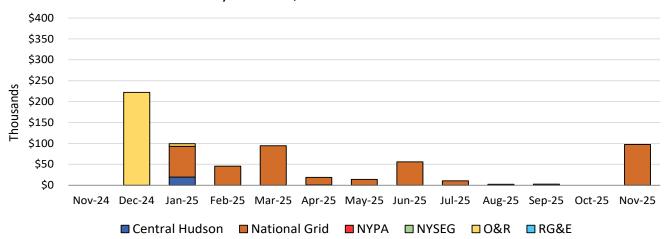




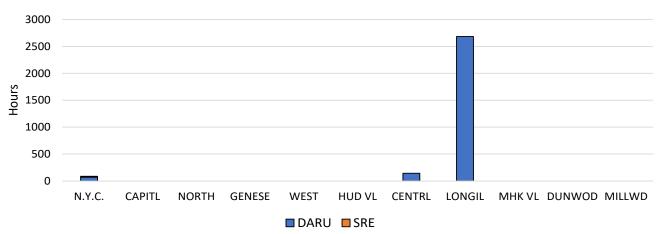
Local Reliability Cost - NYC & LONGIL Monthly RT BPCG, DAM BPCG, DAMAP & Minimum Oil Burn Costs



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



Local Reliability Commitments October 2025 DARU & SRE Hours



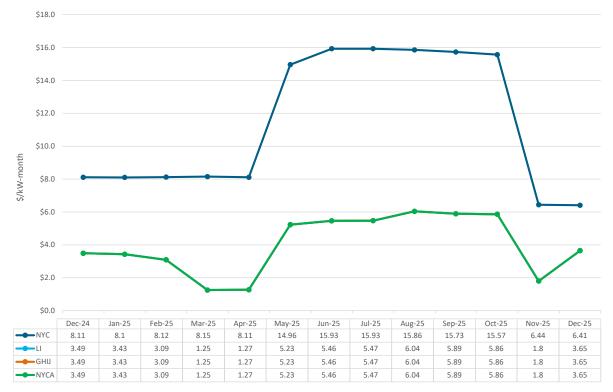


TCC Monthly Reconfiguration Auction vs. Monthly DAM Average with Autumn 2025 Centralized TCC Auction Six-Month Average





ICAP Spot Market Clearing Price



Price Change Summary:

Price increase in NYCA was driven by an increase in exports and a significant decrease in imports compared to the previous month.



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
- **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 clockminute 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