New York ISO
Independent System Operator

Summer 2025 Capacity Assessment

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OPERATING COMMITTEE:

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Agenda

- Key Observations
- Summer Capacity Assessment
- Summer Preparedness
- Infrastructure Updates

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Key Observations

- **Projected capacity margins for normal and extreme weather conditions without emergency operating actions**
    - 997 MW - capacity margin for baseline peak forecast conditions
    - -1,082 MW - capacity margin for 90-10 peak forecast conditions
    - -2,768 MW - capacity margin for 99-1 peak forecast conditions

- **Projected capacity margins for normal and extreme weather conditions with up to 3,159 MW of emergency operating actions**
    - 4,156 MW - capacity margin for baseline peak forecast conditions
    - 2,077 MW - capacity margin for 90-10 peak forecast conditions
    - 391 MW - capacity margin for 99-1 peak forecast conditions

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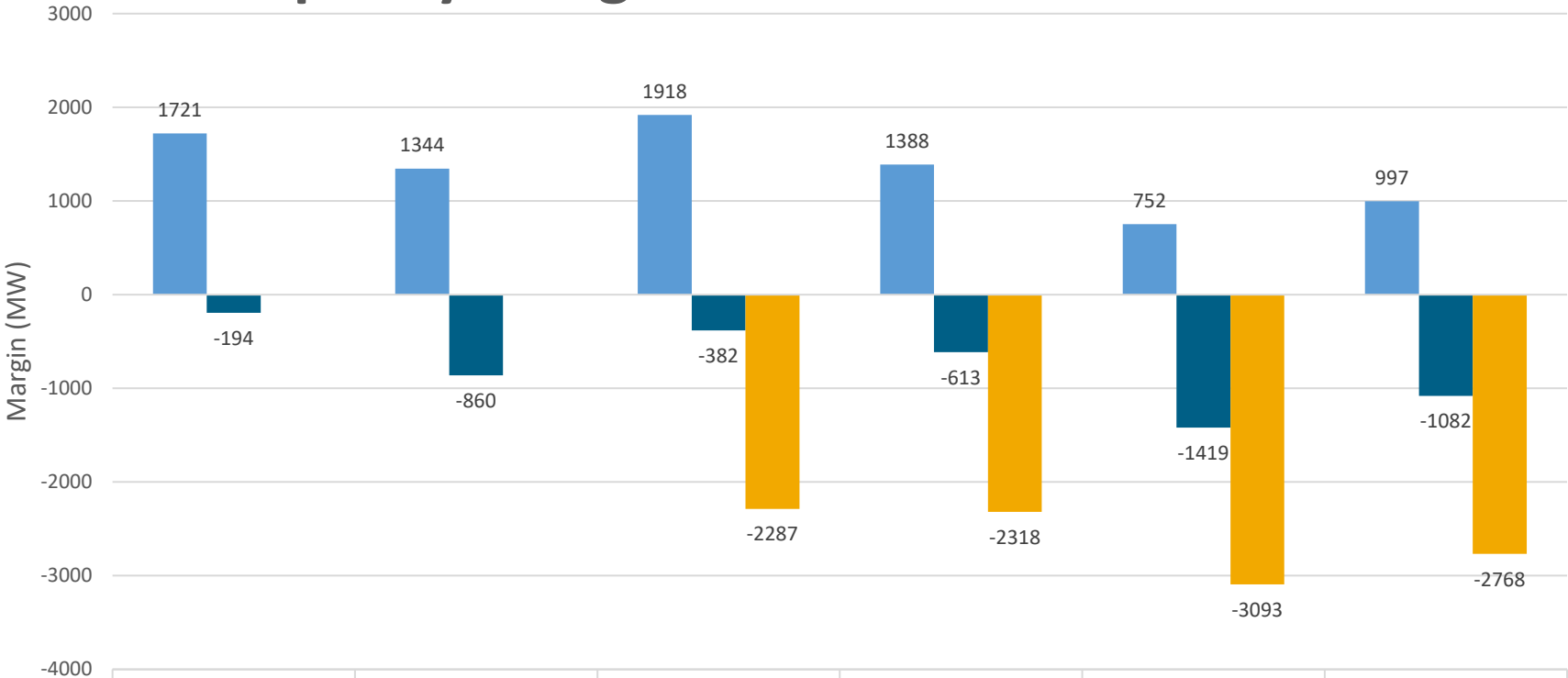
Capacity Margins: Summer 2020 - 2025



	Summer 20	Summer 21	Summer 22	Summer 23	Summer 24	Summer 25
Baseline	1721	1344	1918	1388	752	997
90/10	-194	-860	-382	-613	-1419	-1082
99/1			-2287	-2318	-3093	-2768

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2024 & 2025 Summer Capacity Assessment & Comparison

Line	Item	2024	2025		
		Baseline Forecast	Baseline Forecast	90th Percentile Forecast	99th Percentile Forecast
1a	Summer Generation Capacity[1]	37,867	37,682	37,682	37,682
1b	SCR - ICAP Values	1,281	1,487	1,487	1,487
1c	Net Purchases & Sales	1,585	1,769	1,769	1,769
1	**Total Capacity Resources**	**40,733**	**40,937**	**40,937**	**40,937**
2	Assumed Unavailable Capacity (Gen + SCR)[2,3]	-5,819	-5,850	-6,166	-6,368
3 = 1 + 2	**Net Capacity Resources**	**34,913**	**35,088**	**34,771**	**34,569**
4	Peak Load Forecast	31,541	31,471	33,233	34,717
5	Operating Reserve Requirement	2,620	2,620	2,620	2,620
6 = 4+5	**Total Capacity Requirement**	**34,161**	**34,091**	**35,853**	**37,337**
7 = 3 - 6	**Capacity Margin[4]**	**752**	**997**	**-1,082**	**-2,768**

1. Reflects the 2025 Gold Book existing capacity plus projected changes during the summer of 2024, as well as known outages.
2. Derates: 2129 MW for wind, 540 MW for Hydro, 2284 MW for thermal units, 367 MW for FTM solar, 32 MW for Energy Storage, and 498 MW for SCRs.
3. 90th / 99th Percentile Capacity include an additional 316 MW / 519 MW of derates for thermal units operating in extreme temperatures.
4. It is expected that there may be up to an additional 3159 MW available under Emergency Operating Procedures.
5. Depending on market conditions, additional economic energy may be available during seasonal peak load conditions.

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Southeastern New York[1]: Summer Transmission Security - Base Case

Line	Item	2025 Baseline Forecast	2025 90th Percentile Forecast	2025 99th Percentile Forecast
1a	Available Generation Capacity Resources	13,421	13,421	13,421
1b	Net ICAP External Imports	315	315	315
1c	Transmission Capability from UPNY to SENY (N-1-1)	4,500	4,500	4,500
1d	Transmission Capability, Long Island to SENY	0	0	0
1	**Total Capability**	**18,236**	**18,236**	**18,236**
2	**Assumed Unavailable Capacity (Gen.)[2,3]**	**-1,111**	**-1,259**	**-1,346**
3 = (1+2)	**Total Capability**	**17,125**	**16,976**	**16,890**
4	**Load Forecast in Zones G to J[4]**	15,288	15,896	16,517
5 = (3-4)	**Capacity Margin w/o SCR**	**1,837**	**1,081**	**373**
6	**Effective SCR GHIJ[5]**	**294**	**294**	**294**
7 = (5+6)	**Capacity Margin w/ SCR**	**2,130**	**1,374**	**666**

1. Southeast Region (SENY) includes Zones G to J.
2. Derates: 41 MW for Hydro, 15 MW for energy storage, 1055 MW for thermal units.
3. 90th / 99th Percentile Capacity includes an additional 148 MW / 235 MW of derates for thermal units operating in extreme temperatures.
4. Load forecasts include addition of PJM RECO load.
5. SCR Derates: 276 MW.

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Zone J, NYC: Summer Transmission Security - Base Case

Line	Item	2025 Baseline Forecast	2025 90th Percentile Forecast	2025 99th Percentile Forecast
1a	Available Generation Capacity Resources	8,683	8,683	8,683
1b	Net ICAP External Imports	315	315	315
1c	Transmission Capability, Sprainbrook/Dunwoodie Interface (N-1-1)	2,875	2,875	2,875
1d	Transmission Capability, A/B/C	0	0	0
1	**Total Capability**	**11,873**	**11,873**	**11,873**
2	Assumed Unavailable Capacity (Gen.)[1,2]	-697	-831	-899
3 = (1+2)	**Total Capability**	**11,176**	**11,042**	**10,973**
4	Load Forecast in Zone J	10,764	11,122	11,566
5 = (3-4)	**Capacity Margin w/o SCR**	**412**	**-80**	**-593**
6	Effective SCR J[3]	238	238	238
7 = (5+6)	**Capacity Margin w/ SCR**	**650**	**158**	**-354**

1. Derates: 15 MW for energy storage, 682 MW for thermal units.
2. 90th / 99th Percentile Capacity includes an additional 134 MW / 202 MW of derates for thermal units operating in extreme temperatures.
3. SCR Derates: 240 MW.

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Zone K, Long Island: Summer Transmission Security - Base Case

Line	Item	2025 Baseline Forecast	2025 90th Percentile Forecast	2025 99th Percentile Forecast
1a	Available Generation Capacity Resources	6,450	6,450	6,450
1b	Transmission Capability on Y49/Y50/901/903 (N-1-1)	275	275	275
1c	Transmission Capability, Neptune	660	660	660
1d	Transmission Capability, Cross Sound Cable	300	300	300
1	**Total Capability**	**7,685**	**7,685**	**7,685**
2	**Assumed Unavailable Capacity (Gen.)[1,2]**	**-564**	**-628**	**-674**
3 = (1+2)	**Total Capability**	**7,121**	**7,057**	**7,011**
4	**Load Forecast in Zone K**	5,003	5,402	5,717
5 = (3-4)	**Capacity Margin w/o SCR**	**2,118**	**1,655**	**1,294**
6	**Effective SCR K[3]**	**15**	**15**	**15**
7 = (5+6)	**Capacity Margin w/ SCR**	**2,133**	**1,670**	**1,309**

1. Derates: 109 MW for wind, 55 MW for FTM solar, 400 MW for thermal units.
2. 90th / 99th Percentile Capacity includes an additional 64 MW / 110 MW of derates for thermal units operating in extreme temperatures.
3. SCR Derates: 16 MW.

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2024 Emergency Operating Procedures

Procedure	Effect	2025 MW Value
Emergency Demand Response Programs	Load Impact	**1**
Voltage Reductions	Load Impact	**524**
Voluntary Industrial Curtailment	Load Impact	**250**
General Public Appeals	Load Impact	**74**
Emergency Purchases	Additional Resources	**1,000**
Thirty Minute Reserves to Zero	Allow Operating Reserve to Decrease to Largest Single Contingency	**1,310**
Total Emergency Operating Procedures		**3,159**

Note: The procedures listed above are not an exhaustive list of operator actions available to avoid load shed.

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Summer 2025 Operational Preparedness

- Weekly fuel surveys indicate oil and dual fuel capability generation have sufficient start-of-summer oil inventories.
- ISO Operations coordination of transmission and generation maintenance outages helps mitigate the reliability impact of such outages during hot weather periods.

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Generation Additions

Station Name	Nameplate MW
Morris Ridge Solar	177
Calverton Solar	36
Arthur Kill Energy Storage	15
Total Additions	228

*Includes new capacity since Summer 2024 and nameplate capacity of resources expected in before July 1.

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Generation Deactivations*

Station Name	Nameplate MW
Glenwood GT 01	-16
West Babylon 4 CT	-52
Shoreham 2 CT	-19
Coxsackie GT	-22
59th St GT 1	-17
Madison Wind Power	-12
Total Deactivations	**-138**

*Generation deactivations include capacity changes since Summer 2024

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Transmission Operations

Equipment	Voltage (kV)	Status
Hudson-Farragut B3402	345	Out-of-Service
Marion-Farragut C3403	345	Out-of-Service
Sprainbrook/Dunwoodie Series Reactors	345	In-Service
Marcy South Series Capacitors	345	In-Service
Lovett Station (new)	345	In-Service
Dover PAR (new)	345	In-Service
Gowanus-Greenwood PAR (new)	138	In-Service
Goethals-Foxhills PAR (new)	138	In-Service

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Our Mission & Vision

Mission

Ensure power system reliability and competitive markets for New York in a clean energy future

Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

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