Solving NYC's Summer 2025 Electric System Reliability Need

NYISO's Q2 STAR report, published in July 2023, identified a reliability need of 446 megawatts on the grid in the New York City area starting in the summer of 2025. The reliability need reflects both the increasing demand for electricity and the unavailability of 1,617 megawatts of generators known as "peaker" plants.

About Peaker Plants

- Peaker plants generally operate during high demand periods on the grid, such as heat waves and extreme weather events such as 2022's Winter Storm Elliott.
- Owned by private companies, not by the NYISO, most peakers are located in NYC, Long Island, and lower Hudson Valley. Peakers help maintain resource adequacy and reliability in transmission-constrained areas. However, peakers also tend to be less efficient and higher emitting generators on a MWh basis.
- New York State Department of Environmental Conservation's (DEC) "peaker rule" requires peaker plants to close or install equipment that significantly reduces emissions.
- Based on these rules:
 - In May 2023: 1,027 MW of peaker capacity became unavailable
 - By May 2025: another 590 MW would become unavailable
- The DEC's Peaker Rule includes a provision to allow peakers to continue operating for up to two years, with a possible further two-year term if necessary to maintain reliability.
- The DEC's Peaker Rule allows the NYISO or local utility to identify and designate those resources needed for reliability.

Additions

& Uprates

2,034 MW

It is imperative that during this time of rapid change, we maintain the adequate supply necessary to meet a growing demand for electricity.

- 2023 Power Trends Report

Deactivations -4,705 MW



NYISO's Collaborative Process for Solving NYC's 446 MW Reliability Need

July 2023 NYISO's Q2 STAR declared a reliability need in NYC of 446 MW on the peak day of Summer 2025.As the local utility, Con Edison was responsible for proposing a regulated solution.

August-October 2023

NYISO also solicited marketbased solutions from developers.

October-November 2023 NYISO

received and evaluated two proposed solutions. Neither were found to be sufficient to fill the deficiency or able to be operational by the summer of 2025.

November 2023 Under the DEC Peaker Rule, NYISO designated Gowanus and Narrows peaker plants to remain available to temporarily resolve the reliability need beginning in summer 2025.



Solving NYC's Summer 2025 Reliability Need In accordance with reliability rules and NYISO's operating tariff

Proposed Solutions: Insufficient/Not Viable

The two proposals submitted to NYISO – a transmission line and a battery storage project – are not viable or sufficient to address New York City's 446-megawatt deficit in 2025.



•9-

Designated Solution: Temporary Retention of Gowanus & Narrow Generators



NYISO has determined that temporarily retaining the generators on the Gowanus 2 & 3 and Narrows 1 & 2 barges will sufficiently meet the 446 MW reliability need. The DEC's Peaker Rule allows these generators to remain in service to meet high consumer demand beyond May 2025 for an initial period of up to two years (May 1, 2027) until a permanent solution is in place.

NYISO's Rigorous Planning Process Supports a Reliable Electric System

Quarterly Short-Term Assessments of Reliability

Identifies reliability needs that may arise over a five-year period due to significant changes on the grid.

Reliability Needs Assessment

The RNA identifies reliability needs over a ten-year period with a focus on post-STARs study period (years 4-10).

Comprehensive Reliability Plan

The CRP integrates all reliability planning studies into a ten-year reliability plan for New York.

Permanent Solution



1,250 MW of Canadian hydro power to NYC

- Overall, the New York City reliability margin is expected to improve in 2026 if the Champlain Hudson Power Express (CHPE) connection from Quebec to New York City enters service on schedule in spring 2026.
- CHPE has received all major necessary permits, and several segments of the project are now under construction.
- Without the CHPE project in service or other offsetting changes or solutions, New York City's reliability margins continue to be deficient for the ten-year planning horizon.
- Through quarterly STAR studies, NYISO will continuously evaluate system reliability as changes occur and will carefully monitor the progress of the CHPE project toward completion.

To view NYISO's complete reliability solution report, visit <u>www.nyiso.com</u>

Reliably managing New York's power grid & wholesale energy markets since 1999

