2022 Reliability Needs Assessment (RNA) Report Highlights Risks to Future Reliability

The 2022 RNA finds that thinning reliability margins over the next decade present increased challenges to reliability, depending on new generation and transmission projects as well as changes in energy demand, policy drivers, and extreme weather.

Key Takeaways

 New York City faces the greatest risk from limited generation and transmission with reliability margins projected at just 50 MW in 2025.

New York City RELIABILITY MARGINS 50 MW in 2025



 The Champlain Hudson Power Express (CHPE), bringing clean power from Hydro Quebec to NYC, is proposed to come into service by 2026. If CHPE is delayed, the absence of this resource could result in risks to reliability by 2028.



 Extreme events such as heatwaves, cold snaps, or gas shortages, could result in deficiencies to serve demand statewide, especially in New York City. This outlook could improve as more resources and transmission are added beyond what is currently planned.



 As the grid transitions to intermittent generation and electrification of demand, at least 17,000 MW of fossil-fuel generating capacity may be needed in order to reliably supply electricity on high-demand, "peak" days.

Mitigating & Resolving Risks

» The wholesale electricity markets administered by the NYISO are an important tool to help mitigate identified risks. The markets send appropriate price signals for new market entry and retention of resources that assist in maintaining reliability.

Potential risks identified in the analyses may be resolved by:



Expected new capacity resources coming into service on schedule.



Construction of additional transmission facilities completed on schedule.



Increased energy-efficiency and programs that

and programs that reduce demand when needed.





Report Highlights Risks to Future Reliability

Reliability Risk Scenarios





NYC reliability margin narrows to 50 MW due to "peaker" retirements

2026

2023

2025





Gas shortages and extreme

winter weather could trigger

reliability concerns starting

as early as 2029 and extend

for years to come

Potential reliability risks in prolonged heatwave

scenarios

2028-2029

2031-2032

Reliability concerns arise if CHPE is delayed beyond 2026



Expected New York City reliability margin to be roughly 100 MW under assumed conditions

Next steps

- ✓ The NYISO will continue to assess the reliability of the bulk grid through the guarterly Short-Term Assessment of Reliability (STAR).
- ✓ Although the 2022 RNA did not find immediate reliability needs, thinning reliability margins noted in the report require the NYISO to closely track changes and assumptions in future demand forecasts.
- ✓ In 2023, the NYISO will issue the **2022-2032 Comprehensive Reliability** Plan and will continue to perform quarterly reliability assessments to capture any changes.

Thinning Margins

» Even the slightest deviations from expected conditions, load forecasts, or project delays could trigger future reliability needs, including:



Delays in expected transmission and generation capacity expansion



Extreme weather and higher-thanexpected demand



Unplanned generator retirements or outages



Gas pipeline shortages that could result in reliability concerns during winter cold snaps

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