October 10, 2025

Via Email

Kirk Dixon
Operating Committee Liaison
New York Independent System Operator
10 Krey Blvd, Rensselaer, NY
518-356-6223
kdixon@nyiso.com

Dear Mr. Dixon,

Earthjustice appreciates the opportunity to provide comments to the draft 2025–2034 Comprehensive Reliability Plan shared with stakeholders for the October 7, 2025 ESPWG/TPAS meeting.[1] We also appreciate the discussions during recent ESPWG/TPAS stakeholder meetings. Below, we identify matters for your consideration as the CRP is finalized.

Our comments generally request additional precision and context in the recently added Executive Summary.[2] We identify certain portions of the Executive Summary that are unsupported by the CRP and ask that these portions be removed. We also ask that the Executive Summary make clear that the rigorous reliability metrics generally accepted by regulators and industry demonstrate that the statewide system is far more protective than required by standard thresholds. In these circumstances, moreover, the economic burden on New Yorkers of overinvestment should be raised in the Executive Summary. These issues bring into question the CRP's call for immediate investment in dispatchable generation, which in any event is unsupported in the CRP analysis and vague as to type, location, size, and other details. We thus request that this too be withdrawn.

1. The CRP Should Explain the Economic Toll of Overinvestment.

NYISO rightly intends to "continue to be actively engaged with stakeholders and policymakers on the path to a reliable, affordable, and lower emissions grid for New York."[3] To that end, we ask that the Executive Summary explain the cost implications associated with overinvestment. This explanation is critical to contextualize the choices, recommendations, "pathways," analyses, and statements in the CRP.

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[1] NYISO, *2025–2034 Comprehensive Reliability Plan* (Draft for Discussion at October 7, 2025 ESPWG/TPAS Meeting) ("CRP"), https://www.nyiso.com/documents/20142/54279226/11a_Draft_2025-2034-Comprehensive-Reliability-Plan_ESPWG_100725.pdf/f07d18e9-cd56-0482-b500-517e1f218eaf.

[2] The discussion of the Executive Summary also pertains to the "Conclusions and Recommended Actions" section, which appears to largely duplicate portions of the Executive Summary.

[3] CRP at 84.

One can overspend on risk reduction. There are diminishing marginal benefits to spending more money to reduce reliability risks.[4] The diminishing marginal benefits are particularly salient where the system is already resource adequate. At a certain point, spending money results in costs with basically no benefit.

NYISO, stakeholders, and policymakers must be wary of looking to the CRP to impose further economic burdens on New Yorkers. The CRP identifies no actionable Reliability Needs and no violations of reliability criteria for the next ten years.[5] Meanwhile, as discussed in the next section, rigorous reliability metrics reveal that the statewide system is significantly more protective than the standards applied by industry and called for by regulators. As such, the watchword on further expenditures should be caution, not haste.

2. The CRP Should Properly Discuss the Loss of Load Expectation and Other Accepted Metrics, and It Should Adequately Define the "System Margin" on Which the Document Relies.

NYISO ordinarily analyzes reliability using sophisticated software that performs probabilistic simulations across many scenarios with a Monte Carlo approach.[6] In fact, for each year studied, NYISO's ordinary process runs its model 2,000 times at each of seven different levels of demand, for a total of 14,000 replications for each year studied.[7] The simulations identify circumstances that could most stress the system, while also predicting how the system's fleet of resources will perform. The software calculates reliability metrics such as loss of load expectation (LOLE), loss of load hours (LOLH), and expected unserved energy (EUE).[8]

Those metrics are generally accepted by industry and regulators. The New York State Reliability Council (NYSRC) requires NYISO to plan so that NYISO expects no more than one event in ten years during which demand exceeds supply.[9] As a working group of the NYSRC explains, "The majority of North America markets use the LOLE metric as the basis of their

[4] *See N.Y. Indep. Sys. Op., Inc.*, 165 FERC ¶ 61,011, at P 76 (2018).

[5] *See* CRP at 8, 32.

[6] NYISO, *2024 Reliability Needs Assessment* at 41 (2024), https://www.nyiso.com/documents/20142/2248793/2024-RNA-Report.pdf.

[7] NYISO, *2024 Long-Term Resource Adequacy Assessment for NYSRC* at 9 (Feb. 6, 2025), https://www.nysrc.org/wp-content/uploads/2025/02/A.3-R2-2024-NY-Long-Term-Resource-Adequacy-Assessment.pdf [hereinafter NYISO's 2024 Resource Adequacy Assessment for NYRSC].

[8] For definitions of these terms, see New York State Reliability Council, *Reliability Rules & Compliance Manual: For Planning and Operating the New York State Power System* at 146 (June 14, 2024), https://www.nysrc.org/wp-content/uploads/2024/07/RRC-Manual-V47-final-7-2-24.pdf.

[9] *See id.* at 13, 16. The requirement is actually stated in "event-days." The use of "event-days" is more protective than looking solely at events because it accounts for an event stretching across multiple days. For example, if a single incident stretches across 3 days, it would be recorded as 3 event-days. This helps ensure that the metric is evaluating the duration of resource adequacy events as well as their frequency, though the metric does not examine duration at an intra-day granularity. An incident spanning any portion of a day would be recorded as 1 event-day. Another metric, loss of load hours, or LOLH, examines hourly duration. *See id.* at 146.

resource adequacy criteria."[10] Many countries in Western Europe use LOLH, and Australia uses EUE.[11] With NYISO's help, the NYSRC working group published thresholds for each metric, reproduced in Figure 1 below.

Figure 1: Published Thresholds from NYSRC Working Group

	LOLE	LOLH	EUE
Threshold	0.1 event/year	0.34 hours/year	235 MWh/year
Explanation	No more than one event in ten years in which demand exceeds supply	No more than 0.34 hours in a year during which demand exceeds supply	No more than 235 MWh unserved in a year because demand exceeds supply

Source: NYSRC Whitepaper at 5.

If the LOLE, LOLH, or EUE is below those thresholds, the system is more protective than necessary to meet the threshold.

The CRP reveals that, on all three metrics, statewide figures are far more protective than called for by the thresholds. At nearly one expected event in twenty years, the CRP reveals that the system-wide LOLE in year 2034 is almost twice as protective as the industry standard. And in each preceding year, the LOLE is even more protective than in 2034. For example, during years 2027 through 2030, the LOLE reflects an expectation of just one event in one hundred years. Overall, the CRP reveals that the system has between 192% and 1,250% of the industry standard protection against loss of load events; between 264% and 2,125% of the protection against loss of load hours; and significantly fewer hours of expected unserved energy than the threshold.[12] This is shown in Figure 2.

Figure 2: NYISO's CRP Metrics Compared to Published Thresholds from NYSRC Working Group

Year	LOLE		LOLH		EUE	
	CRP Metric	% Protective	CRP Metric	% Protective	CRP Metric	Threshold Diff.
2026	0.015	667%	0.036	944%	8	227
2027	0.007	1429%	0.016	2,125%	4	231
2028	0.009	1,111%	0.021	1,619%	5	230
2029	0.01	1,000%	0.025	1,360%	7	228
2030	0.008	1,250%	0.016	2,125%	6	229
2031	0.019	526%	0.044	773%	22	213
2032	0.024	417%	0.059	576%	32	203
2033	0.029	345%	0.073	466%	43	192
2034	0.052	192%	0.129	264%	75	160

Sources: CRP at 72–76; NYSRC Whitepaper at 5.

For example, consider year 2029. The CRP Metric for LOLE in 2029 is 0.01 event/year. That is one-tenth the industry standard threshold of 0.1 event/year, and equates to an expectation of one event every hundred years. Or, put another way, the LOLE in 2029 has 1,000% of the

[10] NYSRC Resource Adequacy Working Grp., *Resource Adequacy Metrics and Their Applications* at 4 (Apr. 20, 2020), https://www.nysrc.org/wp-content/uploads/2023/03/Resource-Adequacy-Metric-Report-Final-4-20-20206431.pdf [hereinafter NYSRC Whitepaper].

[11] *Id.*

[12] CRP at 72–76.

protection called for by the industry standard (0.1/0.01=1,000%). The LOLH in 2029 equates to an expectation of 90 seconds during the year in which demand exceeds supply. That is 1,360% of the protection called for by the threshold (0.34/0.025=1,360%). And in 2029, the CRP reports expected unserved energy of 7 MWh, which is 228 MWh below the 235 MWh threshold.

None of this context, though, is included in the Executive Summary of the CRP. Instead, the Executive Summary begins by speaking of "profound reliability challenges" and "undermine[d] confidence in future supply," describing a "margin for error [that] is extremely narrow" and warning that "most plausible futures point to significant reliability shortfalls within the next ten years."[13] The Executive Summary goes on to include other such statements too. Neither the Executive Summary nor the remainder of the CRP reconciles those statements with the rigorous LOLE, LOLH, and EUE metrics found towards the end of the CRP, all of which point toward adequate resources and reliability. The Executive Summary, like the rest of the CRP, also fails to identify whose confidence is purportedly undermined, fails to identify the purportedly narrow "margin for error," fails to explain the basis for determining which futures are plausible, and fails to assess the probability that a future scenario will transpire.

Creating further confusion, the Executive Summary does not explain the "system margin" on which the section and its recommendations depend. In the Executive Summary, the graph entitled "Plausible Range of Statewide System Margins" and the various discussions of shortfalls and deficits turn on the "system margin" metric, yet the section does not define the term or explain its assumptions.[14] This absence of necessary context creates an unneeded obstacle to understanding the information being presented. As it stands, NYISO first defines the "system margin" on page 32 of the CRP, leaving open the possibility that readers of the Executive Summary will come to their own conclusion about NYISO's meaning. We ask that NYISO explain in the Executive Summary that this margin does not take into account a variety of resources and mechanisms available to NYISO to ensure sufficient supply to meet demand.[15] NYISO could, for example, use the definition it recently employed in a report to the NYRSC: "Statewide system margin measures the ability to supply firm load for specific system conditions (usually the summer peak and winter peak demand with typical generator availability) without the use of emergency operating procedures" and "while fully maintaining operating reserves."[16]

Relatedly, the CRP states that "[c]urrent criteria measure resource adequacy only after assuming the full utilization of emergency operating procedures, effectively planning for operators to rely on extraordinary measures as routine practice."[17] But the difference between the margin metric employed in the CRP and current criteria is not whether operators are expected to use emergency operating procedures "as routine practice," but instead whether the metric takes these procedures into account in assessing resource adequacy. We request NYISO clarify the discussion. And to the extent NYISO recommends expenditures sufficient to achieve a positive "system

[13] *Id.* at 8.

[14] *See, e.g.*, *id.* at 8, 13–14.

[15] In addition, NYISO does not define the term "system margin" in the glossary to the CRP. *See* CRP at Appendix A. We ask that NYISO define the term in the glossary.

[16] NYISO's 2024 Resource Adequacy Assessment for NYRSC at 4.

[17] CRP at 15.

margin" in peak load scenarios without the use of emergency operating procedures, NYISO ought to make the economic cost of that endeavor clear to stakeholders and policymakers.

There may be some role in NYISO's planning processes for the scenario analysis and "system margin" included in the CRP. But unless and until the CRP scenario analysis matches the rigor of LOLE and other accepted metrics, the CRP's scenario analysis cannot ground statements meant to inform stakeholders and policymakers where those statements are both controverted by the rigorous metrics and unsupported by analysis. We therefore ask that the above-mentioned statements in the Executive Summary be removed. At minimum, we ask that the Executive Summary discuss the significant reliability protection evinced by rigorous and accepted metrics.

3. The CRP Should Be Resource Neutral in the Absence of an Analytical Basis to Be Otherwise.

According to the Executive Summary, "the system may need several thousands of MW of new dispatchable generation."[18] The CRP, however, contains no analysis that supports the claimed need for new dispatchable generation. The CRP also does not discuss the amount, location, type, or other details of this claimed potential need for new dispatchable generation.

During the October 7, 2025 stakeholder call, NYISO staff was asked about the empirical basis for the asserted potential need for dispatchable generation, and the support, if any, in the CRP. The response was, roughly, as follows: in a high load scenario, after inclusion of the renewables and storage currently in the queue, and after discounting those resources' capacity contributions based on system conditions, some amount of "perfect capacity" may still be needed.

That responsive statement is supported in the document,[19] but that statement does not support the Executive Summary's claimed potential need for new dispatchable generation. For one thing, dispatchable generation is not the same thing as perfect capacity,[20] as was evident to New Yorkers during Winter Storm Elliott, when gas production froze and gas supply problems almost caused catastrophic shortfalls. The distinction extends beyond the physical and into the economic realm too, as NYISO's recent capacity accreditation work on non-firm fuel indicates. Moreover, there are a variety of ways to obtain capacity, with dispatchable generation being one such approach and, for example, terrestrial renewables with co-located storage being another, and offshore wind's very high capacity factor being yet another way. And if NYISO is interested in speed, the dozens of gigawatts of renewables waiting in NYISO's queue can be contrasted with the backlog in the supply chain for gas-burning generators.

Rather than the unsupported statement about the potential need for new dispatchable generation, we request the Executive Summary simply state NYISO's responsive observation offered during the stakeholder call on the potential need for perfect capacity. And in any event, it

[18] *Id.* at 8, 14.

[19] *See, e.g.*, *id.* at 66.

[20] *See* NYISO's 2024 Resource Adequacy Assessment for NYRSC at 25 (" 'Perfect capacity' is capacity that is not derated (*e.g.*, due to ambient temperature or unit unavailability), not subject to energy durations limitations (*i.e.*, available at maximum capacity every hour of the study year), and not tested for transmission security or interface impacts.").

is important to also include that this potential need for perfect capacity almost completely disappears in the moderate and low demand scenarios.

4. The CRP Should Explain Why NYISO Identifies Certain Futures as Plausible.

Much of the CRP, and especially the Executive Summary, turns on what NYISO characterizes as "plausible futures." But the CRP does not explain the basis for NYISO's determination of which future scenarios are plausible. The CRP also contains no factors to provide context on how NYISO reached its decision on which futures are plausible. There is thus no ability for a stakeholder or policymaker to gauge the reasonableness of NYISO's determination of plausible futures. This type of untestable opinion is inadequate to serve the purpose for which the CRP was designed. We request NYISO explain how it decided on the set of plausible futures.

Finally, we ask that the discussion on the impact of additional renewable resources clarify that the associated capacity contributions are already discounted to reflect system conditions.[21] The nameplate capacity may also be included to clearly indicate the extent of discounting.

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Thank you for your consideration of these suggestions. We are available to discuss and we look forward to continued engagement.

Sincerely,

/s/ Michael Lenoff

Michael Lenoff
Senior Attorney
Earthjustice
202-660-0519
mlenoff@earthjustice.org
He/Him

[21] CRP at 52.