COMMENTS OF THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC. on the New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule

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I. Introduction

The New York Independent System Operator, Inc. ("NYISO") is an independent not-for-profit corporation responsible for operating the power grid in New York, planning for the future of the power grid, providing non-discriminatory access to transmission service, and administering wholesale markets for electricity and transmission products in New York. The NYISO manages the flow of electricity across more than 11,000 miles of high-voltage transmission lines and the dispatch of more than 700 electric power generators serving New York on a minute-to-minute basis, balancing supply and demand throughout the state. The NYISO's mission is to serve the public interest and provide benefit to consumers by maintaining and enhancing regional reliability; operating open, fair and competitive wholesale electricity markets; planning the power system for the future; and providing factual information to policymakers, stakeholders, and investors in the power system.

NYISO operates in accordance with tariffs, accepted by the Federal Energy Regulatory Commission ("FERC"), to administer open and non-discriminatory access to the electric grid, competitive markets for the sale and purchase of energy and capacity, and payments for ancillary services necessary for the reliable operation of the bulk electric grid. To maintain electric system reliability, the NYISO's planning process continuously analyzes resource adequacy and transmission security, so that there are enough generation resources and transmission facilities to serve expected consumption and reliably operate the grid. The NYISO plans the bulk electric system to meet the performance requirements under the mandatory reliability standards of the North American Electric Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC"), and the New York State Reliability Council ("NYSRC"). These reliability standards are enforceable under federal and state laws. Together, these standards comprise the nation's strictest set of reliability standards designed to promote reliability for New York consumers, including specific reliability rules for the New York City metropolitan area. Violating these mandatory standards results in reliability needs and jeopardizes the reliable operation of the electric system, including delivery to consumers.

¹ Section 215 of the Federal Power Act, as amended by the Energy Policy Act of 2005, allows the State of New York to establish rules that result in greater reliability within the State.

On November 20, 2023, the Environmental Protection Agency ("EPA") issued a supplemental notice of proposed rulemaking soliciting comments on whether to include mechanisms to address potential grid reliability needs that may arise during implementation of its final rules.² The NYISO appreciates this opportunity to comment on the continued reliable operation of the electricity system and mechanisms for environmental regulations to work in parallel with electric system operation. The NYISO offers its comments based on extensive experience maintaining electric system reliability in New York State and experience working with the New York State Department of Environmental Conservation ("NYSDEC"), the New York Department of Public Service ("NYDPS"), and the New York State Energy Research and Development Authority ("NYSERDA").

II. Planning for the Future Electric System Facilitates Ongoing Reliability

New Yorkers have long enjoyed reliable electric service and will expect the same level of service to continue into the future. Reliable, on-demand electric service supports every aspect of New Yorkers' daily lives and is vital to the state's economy. A diverse resource mix that integrates sufficient levels of predictable, reliable, and dispatchable generators promotes grid resilience and minimizes the risk of power disruptions. This resilience is increasingly important as extreme weather conditions place power systems across the nation at risk of not reliably serving electricity customers.

A dramatic shift is changing how electricity is produced, stored, transmitted, and consumed throughout New York State. State laws, led by the Climate Leadership and Community Protection Act ("CLCPA") passed in 2019, are driving the addition of significant renewable generation, storage, transmission, and electric consumption shifts. However, the CLCPA, and other state policies, are also driving the retirement or reduced operation of carbon dioxide emitting generation (*i.e.*, largely fossil fuel-fired generators, referred to herein as "fossil generators"). Today, these same fossil generators provide the vast majority of flexible, dispatchable electricity that is critical to meeting the needs of daily life and maintaining electric system reliability around the clock. Fossil generators located within the New York Control Area (NYCA) supply significant amounts of electricity for consumers and protect system reliability by responding quickly to rapid system changes. Achieving these clean energy mandates and maintaining the reliability and resilience of the electric system demands that the NYISO, electric-system stakeholders, and policymakers work collaboratively to plan for the reduced operation of existing emitting electric generators and, at the same time, develop and integrate the types of resources needed to maintain the reliable electric system that consumers require.

One of the primary ways that the NYISO plans for this transition is through its biennial Reliability Planning Process. These transparent planning studies consist of a Reliability Needs Assessment ("RNA"), which identifies any reliability deficiency issues, or reliability needs, over the next ten years and, following the publication of the RNA, the NYISO produces a Comprehensive Reliability Plan ("CRP"), which provides the plan necessary to maintain

² Published in the Federal Register at 88 Fed. Reg. 80682 (November 20, 2023).

reliability for the ten-year horizon. Both studies include significant engagement with stakeholders and policymakers to complete the NYISO's extensive review of electric system reliability.

The NYISO identifies reliability needs by applying mandatory and enforceable rules established by international, national, regional, and New York State-specific reliability standards organizations. The standards examine two key aspects of reliability:

- 1. Adequacy: The ability of the electric systems to supply the aggregate electrical demand and energy requirements of their customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.
- 2. Security: The ability of the electric systems to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.

Key to the evaluation of generator compliance with environmental regulations, the NYISO's long-term planning process removes all generators that will have to deactivate to comply with emission regulations or have indicated their intent to deactivate in compliance plans submitted to environmental regulators, *e.g.*, generator compliance plans submitted to the NYSDEC in response to the "Peaker Rule," as discussed further below. If reliability needs are identified in the RNA, then the CRP will include the results of a solicitation for market-based and regulatory backstop solutions to address those needs. Solutions can take the form of any generation and resource type, including demand response and storage, as well as new local and bulk level transmission solutions. In addition, the NYISO also performs quarterly reliability assessments that focus on the next five years, evaluates the impacts of generators that intend to retire, and posts a report for each quarterly assessment. If needs are identified in the next three years, the NYISO solicits market-based solutions from developers and regulatory backstop solutions from transmission owners to maintain reliability if market-based solutions are not available.³ The reports for each of these processes are reviewed with stakeholders and posted on the NYISO website.⁴

The NYISO's planning processes strive to produce market-based solutions to identified needs whenever possible. This allows developers and investors to respond to the needs and price signals in the NYISO's markets and to assume the risks of such investments, which avoids imposing those risks on rate-paying consumers. The NYISO also identifies the Responsible Transmission Owner(s) for each Reliability Need and requests that those Transmission Owners submit regulated backstop solutions in the event they are needed to maintain bulk power system

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³ If a quarterly reliability assessment identifies needs in years four or five, those needs will be evaluated further in the next RNA.

⁴ See, e.g., 2022 RNA, available at <u>2022 RNA</u>, 2023-2032 CRP, available at <u>2023-2032 CRP</u>, Short-Term Assessment of Reliability: 2023 Quarter 2, available at <u>2023 Q2 STAR</u>, and Short-Term Reliability Process Report: 2025 Near-Term Reliability Need, available at <u>2025 Near-Term Reliability Need Report</u>. See generally, 2023 Power Trends, A Balanced Approach to a Clean and Reliable Grid New York ISO, The New York ISO Annual Grid & Markets Report, available at <u>2023 Power Trends</u>.

reliability. Other interested entities may also submit alternative regulated solutions to address the identified Reliability Needs.

These NYISO reports provide insight to federal and state regulators, reliability organizations, and investors regarding the reliability impacts of environmental regulations and policies impacting power generation resources in New York. Through these processes, the NYISO continuously monitors and reports on the development and implementation of environmental regulations and policies impacting power generation resources in New York based on its mandate to maintain reliability for the state's bulk electric system.

III. Environmental Regulations that Drive Generators to Retire Must Coordinate Retirements with New Generation to Protect System Reliability

Environmental, or other public policy, regulations are already driving the retirement of existing electric generators in New York State. To facilitate continued electric system reliability, new and modified environmental regulations must allow a sufficient fleet of new, compliant generation resources, with the appropriate reliability attributes, to be *available before* the existing, generators retire voluntarily or are forced out of service. An essential step to facilitate the orderly transition from traditional generators to emission-free electricity is promulgation of environmental regulations with defined milestones and ample lead time for new resource development. Proposing environmental regulations with defined milestones helps protect electric system reliability by allowing the existing reliability processes to more accurately review and evaluate reliability needs. For example, firm regulatory milestones that define emission limits to be achieved on specified dates and compliance plan obligations that require generators to describe their approach to compliance give the NYISO planning processes essential information to consider and share with stakeholders.

The NYISO strongly encourages the EPA, and to the extent appropriate, the state agencies that the EPA works with, to pursue new or amended regulations to implement emissions reductions in an orderly, predictable manner with effective mechanisms for independent system operators and regional transmission organizations ("ISOs/RTOs") to assess electric system reliability impacts. The NYISO and the NYSDEC were able to effectively execute this exact approach while the NYSDEC developed the Peaker Rule in 2018-2019.⁵ In this case, the NYISO and other interested stakeholders evaluated a proposed rule in its early stages, assessed potential electric system impacts, used the conclusions from such evaluations to shape an environmental regulation that supported the NYSDEC's objectives, and immediately started planning for the reliable implementation of the regulation without jeopardizing electric system reliability. This approach allowed the NYISO to include the effects of regulations in its reliability planning processes to address any reliability needs before generation would retire under the new regulations.

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⁵ See Ozone Seasons Oxides of Nitrogen (NOx) Emission Limits for Simple Cycle and Regenerative Combustion Turbines, referred to as the "Peaker Rule," available at 6 NYRCC Part 227-3.

When drafting regulations, the NYISO encourages the EPA to include specific regulatory milestones, e.g., compliance plan due dates or new emission limit effective dates, with sufficient lead times to allow review in the NYISO's, or another ISO's/RTO's, long-term reliability planning processes. At the same time, such regulations should include a mechanism to allow generators, which would otherwise shutdown, to continue to operate to temporarily address identified reliability needs while necessary non-emitting generators, storage resources, and the transmission infrastructure are developed to address those reliability needs.⁶ As the NYISO did with its evaluation of the Peaker Rule, if environmental regulations drive the reduction of fossil generation, the NYISO's reliability planning processes remove generators that have indicated their intent to deactivate, or to reduce operations, including modeling as "out-of-service" generators that lack authority to operate in their current equipment configuration past a date certain (e.g., due to a new or amended environmental law or regulation). This process allows market-based and regulated reliability solutions of all types, including generation, transmission, and demand-side measures, to be identified, timely permitted, constructed and enter service. However, if no replacement generator or other solution is available to timely address the need, the NYISO would then rely on an existing generator to continue operating to address the need until a permanent solution can be built.⁷ This approach should be adopted to allow an ISO/RTO to identify generation that would be unavailable under an emission regulation, to model their electric system reliability impacts, and to identify generators that may be needed to temporarily address reliability needs. Such a process provides the most efficient path to soliciting necessary solutions to facilitate compliance with environmental regulations and to maintain electric system reliability.

Consistent with the NYISO's recommendations, the NYISO supports the EPA's proposals to establish defined milestones and tracking systems and encourages the EPA to coordinate these efforts with the appropriate ISOs/RTOs. The proposals to require web posting of source designations, the proposal to require states to assign calendar dates to increments of process, and the requirement reporting beginning five years before a retirement date will all facilitate long-term planning for ISOs/RTOs as long as the timing is coordinated with relevant planning processes. As discussed above, allowing ISOs/RTOs planning processes to accurately consider in advance when generators will retire or reduce operation in response to environmental regulation facilitates the development of long-term, market-based, and regulated solutions of all types, including generation, transmission, and demand-side measures to protect electric system reliability.

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⁶ See e.g., 6 NYCRR Part 227-3.6 (a generating resource that plans to deactivate but is needed for electric system reliability "may be designated as a reliability source by the NYISO or by the local transmission/distribution owner to temporarily resolve a reliability need" and "may continue to operate without complying with the applicable emissions limits of this Subpart until" other specified conditions are met.).

⁷ If existing generators are required to remain in service and no replacement generation emerges, the state may be forced to rely on old, inefficient fossil generators. *See* the 2021-2030 Comprehensive Reliability Plan at p. 31.

IV. Environmental Regulations that Restrict or Limit Generator Operation Should Include a Reliability Safety Valve to Protect System Reliability

The NYISO also encourages the EPA to include a reliability "safety valve" that would allow a specific electric generator to operate in exceedance of its emission limits in an emergency. As discussed above, traditional emitting generation, typically fossil-fuel fired, provides much of the flexible, dispatchable electricity that is critical to maintaining electric system reliability and serving consumer demands. If an environmental regulation limits the operation of these resources, as opposed to requiring them to retire, the resources may be needed to maintain electric system reliability at a time when their emission restrictions would not allow them to produce electricity. A reliability safety valve could support electric system reliability by permitting an electric generator to operate when needed by an ISO/RTO to maintain reliability but when emission limits may otherwise prevent their operation. Such operations may be required from time to time because of extreme weather, generator or transmission outages, or other circumstances. Compliance requirements could be structured to allow increased operation through emissions averaging among similar units at a facility or over extended periods of time, while in emergency situations. Reliability safety valves could allow generating resources to operate in violation of emission limits to protect the health, safety, and welfare of society.

The NYISO recommends the use of a reliability safety valve process to provide appropriate flexibility to address situations where, because of an unanticipated catastrophic event, there is a conflict between environmental requirements and the maintenance of electric system reliability.

V. Coordination with ISOs/RTOs is Necessary to Protect Electric System Reliability

The NYISO encourages the EPA to provide the opportunity for ISOs/RTOs to review electric grid reliability concerns during the drafting of environmental regulations, to rely on the expertise of the ISOs/RTOs to determine if electric generators are needed to maintain system reliability, and, on a case-by-case basis, the permit modification process for specific resources. The EPA should work with the ISOs/RTOs and all relevant parties each time it is called upon to impose more restrictive emission standards to avoid conflicts between maintaining electric reliability and complying with the new standards. If the amount of electric generating capacity in excess of the absolute minimum needed to maintain reliability is reduced to the point where the flexibility needed to support grid reliability and resilience is at risk, case-by-case reviews may be required by an ISO/RTO to understand the potential impact on electric system reliability if a generator will be required to reduce operation or retire in response to an environmental regulation. Under certain circumstances, ISOs/RTOs may require specific generators to remain available to maintain electric system reliability. The EPA should rely on the ISOs'/RTOs' expertise to analyze grid reliability impacts stemming from emission regulations.

ISOs and RTOs are independent entities that are well-positioned to effectively review the potential reliability impacts of environmental regulations and generator compliance plans at regional levels. Recognizing the various impacts on the electric system when implementing

environmental regulations could avoid, or at least mitigate, potential electric grid reliability issues.

VI. Conclusion

The NYISO appreciates this opportunity to comment on mechanisms to protect electric system reliability. Accordingly, the NYISO respectfully requests that EPA consider these comments when preparing a final rule.

Respectfully submitted,

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