Written Statement

Gavin J. Donohue, Climate Action Council Member Adopted Climate Action Council ("CAC") Scoping Plan

December 19, 2022

I. Overview

Two years ago, I was appointed to the State's Climate Action Council. The Climate Leadership and Community Protection Act ("CLCPA") requires an economy-wide approach to addressing climate change and decarbonization, coupled with mandates to deliver 70% of New York's energy from renewable resources by 2030 and 100% emissions-free electricity supply by 2040 ("100 by 40 target"). The Scoping Plan ("Plan") was intended to inform New York residents and businesses about measures necessary to meet the requirements of the CLCPA. While the Council is required to update the Plan at least once every five years, it is essential that the inaugural Plan is practical, comprehensive, and contains provisions that send investment signals necessary to achieve the CLCPA's requirements in a reliable and cost-effective manner. There is no backup plan to this one, and the manner in which the document is structured does not achieve the expectations set two years ago.

I am voting against the final Plan since it remains significantly lacking in these core areas, with additional concerns as discussed below:

- Reliability is inadequately addressed, putting New York at risk for economy crushing blackouts and potential public safety risks.
- High energy costs for energy consumers and the impact on their cost of living and on the competitiveness of New York businesses.
- Insufficient programs to keep benefits of existing renewable facilities in this state.
- Leaping to moratoriums and bans instead of developing innovative technologies.
- Undefined wording and the lack of a glossary of terms creates ambiguity in some of the Plan's language.

To help raise awareness for these concerns and ensure that New York's clean energy transition is done in a more responsible manner, IPPNY, along with the New York State AFL-CIO, the New York State Building & Construction Trades Council, and Business Council of New York State, formed a unique coalition to develop a set of seven principles¹ to advance New York's clean energy goals and establish the criteria to be met by the Plan. This coalition put productive and positive ideas on the table to make the Plan better. Unfortunately, these principles were insufficiently addressed by the Council and the Plan.

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¹ Advancing New York State's Clean Energy Goals

II. Reliability

A. NYISO's Warnings on Future Reliability Concerns, especially for New York City, and Calls for Dispatchable Emissions-Free Resources

Having an electricity grid that meets the CLCPA emissions and technology specific standards is not a victory if it results in rolling blackouts. This Plan does not have adequate safeguards to ensure system reliability.

The New York Independent System Operator ("NYISO") is required to operate the wholesale electricity market in New York to the strictest reliability standards in the nation. The most recent 2021-2040 System and Resource Outlook ("Outlook") study, released by the NYISO just a few months ago, makes it clear that, as today's dispatchable energy resources retire and are replaced by intermittent renewable resources, maintaining near-future system reliability will require significant transmission and distribution system expansion. The study demonstrated that, to meet the targets of the CLCPA, more than 111 gigawatts ("GW") of total installed generation capacity will be needed by 2040, 95 GW of which must be new generation. ² To put these numbers into perspective, 1 GW is enough to power roughly 750,000 homes. Further, the total amount of generation on the State's system today is roughly 41 GW³ and only 12.9 GW of generation has been added since 1999.⁴

The invention and installation of a new class of non-energy storage-based technology that is both dispatchable and emissions-free – also known as dispatchable emissions-free resources ("DEFRs") - will be necessary to meeting our climate goals. According to the Outlook, 27-45 GW of DEFRs will be required by 2040. Any delay or failed materialization of these critical assets will breach the State's federally required reliability margins and jeopardize achievement of the State's clean energy goals.

Most concerning in the near-term is the NYISO's continually tightening reliability margins, which are a measure of system reliability. The NYISO 2022 Reliability Needs Assessment finds that the State will have tightening reliability margins over the next ten years, within New York City in particular, as it approaches a transmission security margin of zero. The main reason for this trend is the retirement of generators due to the New York State Department of Environmental Conservation's ("DEC") "Peaker Rule." *Although the Champlain Hudson Power Express ("CHPE") transmission line project, estimated to be completed by 2026, may ease this trend, it is not required to deliver installed capacity to New York City in the winter. Further, New York City and the rest of the State are anticipated to have increasing demand due to end use electrification between 2032 and 2034.

Infrastructure expansion takes time and faces substantial obstacles. The 2040 resource needs are many times what's required by 2030 and will necessitate a much faster expansion than in any point in history to meet the CLCPA targets. The markets in place are the most efficient and effective method of achieving this outcome, but the historic precedent and sheer expanse of the undertaking is worth considering. Unfortunately, these challenges were not sufficiently stressed and understood throughout this two-year Scoping Plan process. There is no timetable within the Plan or from the State saying when and how DEFRs will be available. We not only must determine what these DEFR-eligible alternative fuel technologies are, but we also need have a market to attract investment in New York, require time to

² NYISO 2021-2040 System and Resource Outlook, "2021-2040 Outlook Report"

³ NYISO 2022 Load & Capacity Data Report, "2022 Gold Book" at pg. 4.

⁴ 2021-2040 Outlook Report at pg. 7.

⁵ Subpart 227-3 - Ozone Season Oxides of Nitrogen (NOx) Emission Limits for Simple Cycle and Regenerative Combustion Turbines

build them, obtain permits, and get them commercially operational by 2040. Getting from 2030 to 2040 will take "magic," and that means we, as a Council, did not do our jobs since figuring out how to get to 2040 reliably is exactly what the law requires.

The Plan calls for increasing beneficial electrification, which will ultimately increase electrical system demand. The NYISO finds that, if any one of a number of planned transmission projects (such as CHPE) is delayed, DEFRs are not deployed on an immense scale, or there are unexpected generator retirements, then the State will be forced to take actions inconsistent with the CLCPA goals. These actions include the delayed retirement of peaking generators pursuant to the DEC's Peaker Rule or importing additional fossil-fueled energy from outside of the State. NYISO reliability actions may take place even before the State's anticipated switch to a winter peaking system in 2034, and the associated fuel security challenges will exacerbate reliability problems. And, that's without the NYISO ever evaluating the impact of electrifying Con Edison's massive steam system in New York City.

Further complicating the matter, the Public Service Commission ("PSC") has not acted on an August 18, 2021, Petition of Independent Power Producers of New York, Inc., New York State Building & Construction Trades Council and New York State AFL-CIO for the Establishment of a Zero Emissions Energy Systems Program Under the Clean Energy Standard ("CES") ("IPPNY-Unions Petition") (PSC Case 15-E-0302). The petition urges the creation of a market-based program to develop DEFRs to maintain reliability in support of the 100 by 40 target. The Plan does not acknowledge this petition as a viable near-term solution. The following projects demonstrated the technical viability of DEFRs, such as hydrogen, thereby paving the way for the PSC to act on the IPPNY-Unions Petition.

By way of background, New York is leveraging approximately \$10 billion in federal funding available for green hydrogen research and development under the Infrastructure Investment and Jobs Act. The State has announced agreements with Connecticut, Massachusetts, New Jersey, Maine, and Rhode Island, along with a coalition of approximately 100 diverse stakeholders, to develop a proposal to become one of at least four regional clean hydrogen hubs designated through the United States Department of Energy's Regional Clean Hydrogen Hubs program. This work is intended to advance each state's leadership in clean hydrogen infrastructure deployment and supports the CLCPA's goal to reduce greenhouse gas ("GHG") emissions 85% by 2050. Further, this effort is intended to result in new projects to scale hydrogen production and retrofits to the State's existing infrastructure, which will potentially create thousands of jobs while reducing emissions by transitioning the generation portfolio within this state to lower-emitting fuels.

Governor Kathy Hochul and Senator Chuck Schumer are working to establish New York as a green hydrogen hub, so why is the Plan not definitive on these efforts and why does it not use the hydrogen hub and NYPA project as examples to develop other DEFRs? Since the Plan does not go far enough in this space, it could send unintended messages that New York is not interested in clean energy jobs, innovation, and technology development and could lead the Federal Government to choose another state to be the green hydrogen hub instead of New York.

A fellow Council member, the New York Power Authority ("NYPA"), recently conducted a pilot project to blend hydrogen and natural gas at one of its facilities. In September of this year, NYPA released the results of this project, which showed reductions in carbon dioxide, nitrogen oxides, and ammonia slip.⁹

⁶ 2022 Gold Book at pg. 12.

⁷ The Evolution and Future of the Con Edison Steam System – NYISO 2022

⁸ https://www.nyserda.ny.gov/Researchers-and-Policymakers/Hydrogen

⁹ https://www.epri.com/research/products/00000003002025166

These results were achieved with no apparent damage to the turbine due to operation on hydrogen blends. Additionally, Constellation's Nine Mile Point Nuclear Power Station recently received ¹⁰ a \$12.5 million grant from the New York State Energy Research and Development Authority ("NYSERDA") to demonstrate nuclear-produced hydrogen through electrolysis to provide on-site hydrogen needs and fuel for a clean peak power generation resource paired with a long duration hydrogen storage unit.

B. Avoiding Moratoriums

We need a plan, not a ban. The Plan should not impose bans on fuels, appliances, and facilities, especially where such bans would sacrifice reliability, cost-efficiency, and resiliency. We need a plan that creates a responsible transition to lower emissions and helps consumers with upfront costs while maintaining health and safety. At the same time, the Plan must secure the economic benefit of the creation of investment opportunities in the development and use of innovative emissions-reducing fuels and technologies, while maintaining and creating high-quality jobs in this state.

All emissions-reduction technologies should be considered. Foundational fuels and associated infrastructure, like the State's robust natural gas system, are necessary to ensure ongoing reliability. Zero-emitting fuels will help decrease GHG emissions, while potentially maintaining the same infrastructure. The State is already putting time and money into developing this option, as discussed above, and should be open to pursuing other needed solutions as well. Use of low- and no-carbon technologies will be important to ensure reliability and resiliency and to decarbonize hard (and in some cases impossible) to electrify sectors, particularly in colder climate regions of the State. The needs of all New Yorkers, which must rely on the availability of affordable, reliable natural gas to make their products and pay their employees and their taxes, is not given enough consideration in this Plan.

C. Regulatory Uncertainty and Lack of Rulemaking for DEC Title V Permits

The lack of regulations to implement CLCPA Section 7 is also a real threat to reliability. The DEC is using guidelines and policies without the certainty that the needed regulations would provide and are without equitable compliance with the statute. In 2021, 47% of the State's electricity was generated by fossilfueled resources. Downstate that number was 89%. With such a high percentage of New York's electricity coming from natural gas and low-sulfur oil, permitting predictability is a necessity for system reliability. Private investment can lower emissions, improve reliability, reduce consumer costs, and facilitate more renewables. Existing facilities, which need permit renewals and meet current permit requirements, should know exactly how DEC will evaluate permit applications. The Title V permit process is a five-year one, and additional permit reviews can be accomplished before the 100 by 40 target. This uncertainty impacts both operations and capital decision-making for affected facilities and erodes their ability to contribute to the reliability of the existing electric system.

Until the DEC promulgates regulations by 2024 to enforce the CLCPA's provisions, the DEC should make permit decisions based upon existing requirements. This would be consistent with a phased-in approach for CLCPA Section 7 determinations. That approach should be using DEC's existing rules for the Regional Greenhouse Gas Initiative and the Greenhouse Gas Performance Standard, along with the current DEC Commissioner's (CP-29) – DEC Policy for Environmental Justice for identified environmental justice areas until it is updated. This method should remain in place until regulations are promulgated to provide detailed guidance on implementation of CLCPA Section 7. One regulation is needed to address Section

¹⁰ https://www.nyserda.ny.gov/About/Newsroom/2022-Announcements/2022-09-08-Governor-Hochul-Announces-Millions-in-Awards-for-Five-Energy-Storage-Projects

¹¹ NYISO Power Trends 2022, The Path to a Reliable, Greener Grid for New York at pg. 25

7(2) requirements for whether permit applications for facilities are consistent with the CLCPA's statewide GHG emission reduction targets. The other regulation would implement the provisions of Section 7(3) regarding not disproportionately burdening disadvantaged communities, after the finalization and adoption of the Climate Justice Working Group's criteria, list, and map for what constitutes a disadvantaged community.

III. Higher Energy Costs for ALL New Yorkers

A. Consumer Cost Analysis and Minimizing Upfront Consumer Costs

Although NYSERDA's Integration Analysis looked at the "total potential costs and potential economic and non-economic benefits of the Plan," as required by the CLCPA, this macroeconomic examination of societal costs and benefits does not yield practical information for consumers. This analysis is not enough for energy consumers to fully understand the impact the Plan will have on their energy bills and the economy. The CLCPA also requires analysis of the cost of implementing the Plan's proposed emissions reduction measures, and the quantification of these costs is less clear.

It is irresponsible to put out a plan to achieve the CLCPA's goals while at the same time preventing New Yorkers from understanding the impact on their energy bills and the economy. We are in a period when electricity bills are expected to increase by 30-40% and the Plan's lack of mentioning on how it will impact ratepayers is disappointing and a missed opportunity. The Plan lacks an independent, transparent, unbiased, comprehensive consumer cost impact analysis and quantification of the expense that will ultimately be borne by New York's residents through increased fees, taxes, and energy bills. For the past two years, I have asked for this cost analysis. I teamed up with 64 statewide organizations requesting an analysis, ¹² and we were told that one would happen when specific programs were implemented. Our border state New Jersey conducted a ratepayer impact study; after two years, why won't New York? Not only does the Plan lack this consumer cost study, but it does not overtly acknowledge the need for one.

Given the lack of understanding about what impact the practical costs of implementing the Plan will have on energy consumers' bills, it is unclear if energy consumers will be provided with the sufficient tools to be able to afford the \$295 billion that was indicated by the macroeconomic analysis. Furthermore, it remains to be seen when and how energy consumers will realize the \$495 billion in benefits that the Plan is expected to provide.

It has been estimated that \$15 billion annually will be needed to comply with the CLCPA. Additionally, we need a more concrete understanding of how the \$70 billion New York hopes to receive from the Inflation Reduction Act and the \$4.2 billion from the Environmental Bond Act will affect generation investment and consumer affordability and to understand what the timetable and application processes will be.

Electrifying our grid is going to take a buildout multiple times the size of the current system and will be a costly process that will not happen overnight. New York residents could be paying anywhere from \$25,000-50,000 just to retrofit their homes to comply with the new energy standards and recommendations in the Plan, and that does not even include the cost of potential future needed system upgrades that will appear on their electric bill.

¹² Letter in support of Multiple Intervenors' Request for a Quantitative Analysis of the Costs of CLCPA Compliance

The Plan points to an economy-wide cap & invest program as a way to raise revenue to pay for its provisions. Notable economists believe that putting a price on carbon is an effective way to cover costs of implementation, which would foster needed innovation to help meet the goals of the CLCPA. However, these programs do not reduce or avoid their upfront costs for energy consumers for complying with the Plan, and it is unknown how the revenue will be used when available.

B. Public Power Also Would Increase Consumer Costs.

The Plan implies that utilities can upgrade generation; the wording needs to be clear that independent power producers are the ones to upgrade generation. It needs to recognize the PSC's Case 22-M-0149 - Proceeding on Motion of the Commission Assessing Implementation of and Compliance with the Requirements and Targets of the Climate Leadership and Community Protection Act. Within this case, the PSC received comments against utilities coming back into the generation business. Further, NYPA provided testimony at the New York State Assembly's July 28, 2022, public hearing that it will not come back into the renewable generation business and, instead, will continue to focus on its statutory obligations for new transmission and electric vehicle charging stations.

Currently, there is no shortage of private investment interest in New York. Further, there are sufficient projects in the works that would help push New York towards meeting its climate goals. These projects include over 50,000 MW of wind, solar, and battery storage in the NYISO's interconnection queue, proving that there is no need for public power to build renewables. There is no evidence that proposals submitted by independent power producers in response to solicitations are inadequate or that the CLCPA's requirements cannot be met by private developers. Lastly, not only would the introduction of public power raise costs for consumers, but also public utilities cannot get through the NYISO's interconnection process or the State's energy siting process any faster than private developers; in fact, they would go to the end of today's line, waiting for studies to be completed, so they would not help us get closer to our climate goals any quicker.

IV. <u>Missed Opportunities</u>

A. Preserving Existing Renewables

The Plan needs more provisions, beyond the CES Tier 2 Maintenance Program, to help ensure that the State's existing renewable energy baseline is strengthened by keeping existing renewable energy credits ("RECs") in this state. These existing renewable resources help ensure that current progress towards the State's targets under the law is maintained and that associated investment must be retained in a viable and sustainable manner.

The renewable energy baseline is lower than it was when the CES first started, and NYSERDA's Competitive Tier 2 Program has not done enough to regain that ground. Renewable companies are exporting their RECs to other regions, where they are compensated more. Today, exported RECs do not count towards CLCPA targets. At the same time, New York continues to import coal capacity from Pennsylvania.

If New York fails to take action to retain its renewable energy baseline, it may need to procure at least an additional 2,125 MW of new renewable energy just to maintain its current renewable status quo. That amount is in addition to the large volume of new resources needed to achieve the CLCPA's goals. Preserving our mix of existing renewable energy facilities and retaining and expanding other non-emitting facilities are as important as the investments that developers are making to grow the State's renewable energy and energy storage resource portfolio.

B. Unclear Wording Used by the Plan

There have been repeated assertions that a glossary of terms would be included within this Plan; however, I have yet to see it, and that creates ambiguity with some of the Plan's language.

The Plan uses the term "fossil natural gas," which is not defined by the CLCPA or existing law. Though "fossil natural gas" is defined within the Plan, the inconsistency with existing law creates a lack of clarity for the transition away from natural gas. The Plan should not pick winners and losers for a political agenda.

The Plan also introduces additional undefined terms, "proximate to" and "impacting," when referring to sources near disadvantaged communities. The CLCPA discusses actions within disadvantaged communities. Instead, the Public Service Law Article 10 regulations use the word "adjacent," which is a known and defined term.

V. <u>Support for a Clean Energy Future</u>

In conclusion, I have always supported a clean energy future, but we cannot rush it without addressing major concerns. Over the last 25 years, New York's generators have successfully reduced GHG emissions, as well as sulfur dioxide by 99%, nitrogen oxide by 92%, and carbon dioxide by 55%, while having an incredibly reliable grid. All solutions must be on the table to make achieving New York's climate goals more realistic and affordable. All agencies, commissions, public authorities, and boards must be involved, and coordination of their actions is essential to avoid pervasive regulatory uncertainty. The concerns I have laid out in this document show that, in an effort to achieve the CLCPA's ambitious objectives, we could severely jeopardize reliability, public safety, and cost affordability, if we do not transition the right way. No matter what the Scoping Plan says, at the end of the day, policy decisions will not be implemented in the market if it would cause New York reliability standards, the strictest in the nation, to be breached. New York needs innovation and subsequent cost-effective investment that complies with the 100 by 40 target, and reliability and affordability needs must be at the forefront of the Council and policymakers' deliberations in implementing the Plan.

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