April 14, 2025

VIA ELECTRONIC DELIVERY

Hon. Rory M. Christian
Chair
New York State Public Service Commission
Three Empire State Plaza, 20th Floor
Albany, New York 12201-2222

Re: Affordability Standard

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

Dear Chair Christian:

This letter responds to the March 10, 2025, letter from Michael B. Mager Counsel to Multiple Intervenors submitted to Chair Christian and the March 26, 2025, response from Jessica Waldorf, Chief of Staff and Director of Policy Implementation for the Department of Public Service (DPS). I agree with the comments submitted by Multiple Intevenors and was disappointed with the DPS response. This letter explains why I was disappointed in the DPS letter and the DPS response to the Climate Leadership & Community Protection Act (CLCPA) implementation to date. I offer recommendations for consideration of costs relative to future implementation.

Multiple Intervenor Comments

The Multiple Intervenor (MI) letter explains that:

> On May 12, 2022, the Commission issued an "Order on Implementation of the Climate Leadership and Community Protection Act" ("Order") that states: "Since investments required to implement the CLCPA are becoming a significant driver of utility rate increases, it is critical for DPS Staff to provide the Commission and the public with

specific cost-based information to understand the impact of these capital investments on ratepayers as part of our core obligation to ensure just and reasonable rates."

The MI letter goes on to quote the requirement that directs (at page 46) DPS Staff to present information on CLCPA costs annually:

> Staff is directed to present to the Commission an annual informational item detailing the Commission's actions and DPS' activities associated with overall compliance with the CLCPA mandates. This presentation shall include, but not be limited to … the cost and benefits to ratepayers of CLCPA investments over the prior calendar year, including the purchase of RECs and ORECs by LSEs, the costs of local and bulk transmission facilities constructed for purposes of facilitating compliance with CLCPA targets, and the cost recovery associated with NE:NY and other energy efficiency programs implemented by the Utilities and NYSERDA.

The MI letter makes the point that DPS is behind schedule:

> On July 20, 2023, DPS Staff presented its "First Annual Informational Report on Overall Implementation of the Climate Leadership and Community Protection Act" ("First Annual Report") in compliance with the Commission's Order in Case 22-M-0149. While Multiple Intervenors could take issue with numerous costs that were excluded from quantification in the First Annual Report, DPS Staff estimated (at page 29) that by the end of 2022, the Commission already had authorized an eye-popping $43.756 billion in CLCPA-related costs.
>
> Unfortunately, however, there has been no second report from DPS Staff providing public information as to CLCPA implementation costs, in clear violation of the Order. Inasmuch as the First Annual Report was filed on July 20, 2023, the second such report was expected sometime in July 2024. On December 17, 2024 – approximately five months past the report's expected due date – DPS Staff filed a letter in this proceeding informing of a delay. In the letter, Staff states that it "anticipates presenting this report in 2025." To date, the Commission has taken no action in response to the letter, and the

public is left wondering whether a report that was directed to be filed annually – and, therefore, was due in July 2024 – will be filed at any point in 2025.

I welcomed the Multiple Intervenor letter because I hoped that it would prompt a reply addressing affordability issues and the schedule for the required reports. I am a retired air pollution meteorologist who started working at the interface between the electric utility industry and New York regulatory agencies starting in 1981. I still regularly provides personal comments on energy and environment topics for regulatory proceedings and policy proposals. As the author of the Pragmatic Environmentalist of New York blog I have followed the CLCPA since it was first proposed, submitted comments on the CLCPA implementation plan, and have written over 500 articles about New York's net-zero transition.

I am convinced that implementation of the New York CLCPA net-zero mandates will do more harm than good if the future electric system relies only on wind, solar, and energy storage because of reliability and affordability risks. I hoped that the Multiple Intervenor letter would prompt a reply addressing affordability issues. Unfortunately, the reply letter was unresponsive in that regard.

DPS Reply Letter

The March 26, 2025 response from Jessica Waldorf of DPS was disappointing because it is condescending, was treated as an obligation, and does not address the cost issues. It is condescending because Mr. Mager and Multiple Intervenors are aware of the history and where to find the Integration Analysis. The description of the first draft Clean Energy Standard (CES) Biennial Review opens with the clause "Earlier this year" for a document released last summer which suggests that the text was copied from another document to fulfill the obligation to provide a response. The typographical error suggests that the response was not considered an opportunity to address the affordability problems raised. This comment addresses the cost issues.

Even though the DPS response letter did not adequately respond to affordability issues, some of the statements are revealing. For example, consider this paragraph:

> In 2023, the Commission approved the Department of Public Service (Department) Staffs First Informational Report on Overall Implementation of the CLCPA (First Informational Report), which summarizes the annual costs and benefits to ratepayers of CLCPA-related programs. The First Informational Report's data and analysis can be found within the presentation provided to the Commission or within the full report also provided to the Commission. It is important to note that the costs included in the report do not reflect approved spending in the 2023 and 2024 calendar years, and do not disaggregate funding that would have incurred under programs that existed prior to the CLCPA.

The last sentence notes that the report does not "disaggregate funding that would have incurred under programs that existed prior to the CLCPA." This is an important caveat that is hidden in the Integration Analysis results. Most of the results presented in the Integration Analysis spreadsheet were relative to a reference case. In this type of analysis the purpose is to consider the impacts of proposed policies relative to a business as usual case without those policies. The Integration Analysis did not include a modeling scenario that excludes all the costs of CLCPA implementation. Instead costs presented are relative to a Reference Case that is described as "Business as usual plus implemented policies" and includes the following programs that existed prior to the CLCPA:

- Growth in housing units, population, commercial square footage, and GDP
- Federal appliance standards
- Economic fuel switching
- New York State bioheat mandate
- Estimate of New Efficiency, New York Energy Efficiency achieved by funded programs: HCR+NYPA, DPS (IOUs), LIPA, NYSERDA CEF (assumes market transformation maintains level of efficiency and electrification post-2025)
- Funded building electrification (4% HP stock share by 2030)
- Corporate Average Fuel Economy (CAFE) standards
- Zero-emission vehicle mandate (8% LDV ZEV stock share by 2030)
- Clean Energy Standard (70x30), including technology carveouts: (6 GW of behind-the-meter solar by 2025, 3 GW of battery storage by 2030, 9 GW of offshore wind by 2035, 1.25 GW of Tier 4 renewables by 2030)

This is important because the Hochul Administration mantra developed by the New York State Energy Research & Development Authority (NYSERDA) that the "costs of inaction are more than the costs of action" is deliberately misleading. It relies in part on excluding the costs of the programs that existed before the CLCPA, which is important in this context. I believe that I represent most New Yorkers when I say I want to know the costs to meet the CLCPA goals like the 100% zero emissions electricity by 2040 and 40% lower GHG emissions by 2030 mandates. The particular program that gets New York there does not matter. I want to know the total costs to meet the mandates not just the costs of the unique CLCPA components.

The DPS response letter exposes the lack of urgency by the Department and NYSERDA to respond to the affordability reporting mandates. This shortcoming is commonplace throughout the implementation process and has affordability implications.

The biggest unacknowledged affordability risk associated with glacial pace of agency progress is addressed in Case 15-E-0302 – Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and Clean Energy Standard. Responsible New York agencies all agree that new Dispatchable Emissions-Free Resource (DEFR) technologies are needed to make a solar and wind-reliant electric energy system viable during extended periods of low wind and solar resource availability. Case 15-E-0302 is supposed to address this technology. I believe the only likely viable DEFR backup technology is nuclear generation despite its costs because it is the only candidate resource that is technologically ready, can be expanded as needed, and does not suffer from limitations of the Second Law of Thermodynamics.

Every day that the DEFR approach is delayed the costs associated with what may be a false solution increase. If the only viable DEFR solution is nuclear, then the wind, solar, and energy storage approach cannot be implemented without nuclear power. Nuclear power works best as a baseload resource so using it solely as DEFR backup is inappropriate. Developing baseload nuclear eliminates the need for a huge DEFR backup resource and means that the "build as much as we can as fast as we can" wind and solar buildout currently in progress is unnecessary. When all the costs associated with the proposed Scoping Plan wind, solar, and energy storage approach

are compared to an electric system based on nuclear I believe that nuclear will be cheaper especially if life expectancies are considered.

Given the complexities of the net-zero transition it is probably inevitable that Agency staff would be unable to fulfill the reporting mandates. Clearly, this suggests that actually implanting the control strategies necessary to meet the CLCPA mandates on the schedule required is similarly impossible. All these delays affect affordability.

The last substantive paragraph of the DPS response letter stated:

> In addition to the First Informational Report, the integration analysis performed for the CLCPA Scoping Plan contains detailed cost information related to the implementation of the CLCPA. The integration analysis can be found on the Climate Act website. Additionally, the next State Energy Plan that is currently under development, will include an update to this prior analysis from the Scoping Plan, and incorporate new information on the potential effects of the policies included in the State Energy Plan on energy costs for consumers.

Integration Analysis Annex 2 provides the "detailed cost information". Jim Shultz referred to the Scoping Plan as "a true masterpiece in how to hide what is important under an avalanche of words designed to make people never want to read it." The Integration Analysis cost information is in a massive spreadsheet that is the quantitative equivalent to the Scoping Plan. It may be detailed but it most certainly does not provide an easily accessible compilation for all the energy use and emission reduction strategies proposed that includes assumptions, expected costs, and projected emission reductions. In particular, the documentation does not provide explicit information to determine what costs are specifically included in the Reference Case or provide sufficient information to "disaggregate funding that would have incurred under programs that existed prior to the CLCPA." As a result, it is impossible to parse out individual strategy costs.

Recommendation 1: Improve the Stakeholder Process

This raises an important issue for the Commission. The stakeholder process for the CLCPA is broken because NYSERDA and other state agencies treat it as an obligation and not an

opportunity. NYSERDA claims that there was "robust public input" during the draft Scoping Plan process that "included 11 public hearings across the State and more than 35,000 written comments" that supposedly were read, summarized, and presented to the Climate Action Council. The problem is that Agency staff screened the comments for the Climate Action Council and there is no publicly available documentation of their work. They only presented generalities at meetings and did not summarize specific comments. I believe that any comments that questioned the narrative espoused by CLCPA proponents were ignored and there is no evidence that I am wrong.

The biggest shortcoming in the lack of response to comments regarding the work of the New York Independent System Operator (NYISO). The NYISO mission is "Ensure power system reliability and competitive markets for NY in a clean energy future". As part of that responsibility NYISO performed in-depth analyses of power system data and made projections showing estimated changes as a result of the CLCPA. There are significant differences between the NYISO projections and the Integration Analysis that have never been reconciled in an open and transparent public forum. NYISO has never revealed its cost estimates for the transition and that information would either provide reassurance that the Integration Analysis electric system transition estimates are supportable or suggest they need to be improved.

I recently found an example of how a stakeholder process should work. The Santa Clara County Rapid Transit Development Project includes a master plan for transportation for Silicon Valley. An interview with the founding manager notes: "Part of the plan is a four-year public stakeholder review process. In the reviews, if the public came up with good ideas, the ideas went into the plan. If an idea wasn't good, we had the responsibility of explaining why."[1]

That commitment to responding to comments is sorely needed in New York. In my opinion, NYSERDA should have provided a public response to all the substantive comments made regarding the CLCPA and the on-going Energy Plan. A publicly available summary describing specific comments, their response to the issues raised, and the recommendation describing the

[1] "California's High-Speed Rail Visionary" Bill Buchanan, *Trains,* Volume 85, No. 1, January 2025, pages 30-37.

comments should be provided to the Climate Action Council, Energy Planning Board, the Commission, and the public is necessary to fulfill the claim that there is a robust stakeholder process. This documentation is necessary to assure public confidence in CLCPA implementation. If the State is to have any credibility regarding their stakeholder process, then they must provide better documentation showing that all the comments were considered and addressed.

Recommendation 2: Define Safety Valve Affordability Criteria

I recommend that the PSC define acceptable affordability criteria, publicly track the parameters for the criteria, and be prepared to pause implementation if the criteria are exceeded for the safety valve conditions in Public Service Law.

> The Order initiating this Proceeding mentions New York Public Service Law § 66-p (4). "Establishment of a renewable energy program" that includes safety valve conditions for affordability and reliability. Section 66-p (4) states: "The commission may temporarily suspend or modify the obligations under such program provided that the commission, after conducting a hearing as provided in section twenty of this chapter, makes a finding that the program impedes the provision of safe and adequate electric service; the program is likely to impair existing obligations and agreements; and/or that there is a significant increase in arrears or service disconnections that the commission determines is related to the program".

I believe that as part of the Scoping Plan the Climate Action Council should have developed criteria for the PSC to consider affordability and reliability. That did not happen, so it is incumbent upon the Commission to define "safe and adequate electric service" and "significant increase in arrears or service disconnections" as part of this Proceeding. This is necessary so that there is a clearly defined standard for the temporarily suspending or modifying the provisions of Section 66-p (4).

The affordability criterion is implicit in the "significant increase in arrears or service disconnections". I recommend that as part of the Proceeding the Commission define it. For example, Addressing Energy Poverty in the US offers possible criteria:

> According to the U.S. Department of Energy, the average energy burden for low-income households is 8.6%. That is three times higher than for non-low income households, which is about 3%. And according to the Kleinman Center for Energy Policy at University of Pennsylvania, more than one-third of US households are experiencing "energy poverty," having difficulty affording the energy they need to keep the lights on and heat and cool their home.

To do this work in this context New York would have to define its energy poverty targets and track them. Once the standard is defined, the status of the standard in New York should be monitored and made publicly available, and a threshold for acceptability established. For example, if the New York state low-income standard is 8.6% and the baseline energy burden level is 9%, then if the average energy burden increases to 10% provisions to temporarily suspend or modify the obligations should be triggered.

For consistency with Part 66-p (4) the number of utility accounts in arrears and service disconnections should be tracked. If the historical trends of those parameters are developed, then the criteria for significant increases could be determined. However, there is a major issue with this approach. Increases of ratepayers in arrears or getting disconnected is directly related to the cost and costs can increase for reasons unrelated to the CLCPA implementation. Fuel costs are a major driver of costs. The Energy Information Administration noted in August 2022 that fuel price volatility can be affected by storms, unplanned pipeline maintenance and outages, significant departures from normal weather, changes in inventory levels, availability of substitute fuels, changes in imports or exports, and other sudden changes in demand.

The Public Service Commission has an existing target energy burden set at or below 6 percent of household income for all low-income households in New York State. Reviewing it raises questions about its suitability for this purpose.

The six percent target was included as part of Public Service Commission (PSC) Case Number**:** 14-M-0565, the Proceeding on Motion of the Commission to Examine Programs to Address Energy Affordability for Low Income Utility Customers. According to the PSC: "The primary purposes of the proceeding are to standardize utility low-income programs to reflect best practices where appropriate, streamline the regulatory process, and ensure consistency with the Commission's statutory and policy objectives." On May 20, 2016 the Order Adopting Low Income Program Modifications and Directing Utility Findings adopted "a policy that an energy burden at or below 6% of household income shall be the target level for all 2.3 million low income households in New York."

The order notes that:

> There is no universal measure of energy affordability; however, a widely accepted principle is that total shelter costs should not exceed 30% of income. For example, this percentage is often used by lenders to determine affordability of mortgage payments. It is further reasonable to expect that utility costs should not exceed 20% of shelter costs, leading to the conclusion that an affordable energy burden should be at or below 6% of household income (20% x 30% = 6%). A 6% energy burden is the target energy burden used for affordability programs in several states (e.g., New Jersey and Ohio), and thus appears to be reasonable. It also corresponds to what U.S. Energy Information Administration data reflects is the upper end of middle- and upper-income customer household energy burdens (generally in the range of 1 to 5%). The Commission therefore adopts a policy that an energy burden at or below 6% of household income shall be the target level for all low-income customers. The policy applies to customers who heat with electricity or natural gas.

The utility companies submit quarterly reports documenting the number of low-income customers receiving discounts and the amount of money distributed. However, I have been unable to find any documentation describing how many customers meet the 6% energy burden criteria, much less any information on how those numbers are changing. The biggest problem with this energy burden program is that it only applies to electric and gas utility customers. Citizens who heat with fuel oil, propane, or wood are not covered.

Clearly, if this parameter is to be used for a CLCPA affordability standard, then defining what is acceptable and what is not acceptable is necessary. Whatever affordability standard is chosen a clear reporting metric must be provided and frequent updates of the status of the implementation relative to the affordability standard provided.

Recommendation 3: Include All Costs to Meet CLCPA Mandates

I previously noted that the Scoping Plan prepared by NYSERDA did not present total costs to meet CLCPA mandates. The practice of comparing costs to a reference case that includes "already implemented" programs rather than a business as usual without any programs that are needed for New York to comply with the CLCPA mandates should not be repeated in this Proceeding. Affordability must be considered relative to consumer costs for all aspects of the net-zero transition mandated by the CLCPA.

Observation: Fuel Volatility Is Not a Renewable Energy Benefit

There is a related issue that I want to address. The primary mission of the New York State Department of Public Service is to ensure affordable, safe, secure, and reliable access to electric, gas, steam, telecommunications, and water services for New York State's residential and business consumers, at just and reasonable rates, while protecting the natural environment. Despite increasing evidence that CLCPA mandates are incompatible with the consumer goals of affordable, safe, secure, and reliable access, DPS staff are publicly supporting affordability aspects of the CLCPA when it is clear that New York cannot meaningfully affect global warming.

For example, the December 18, 2024 New York Assembly Committee on Energy public hearing enabled legislators to question NYSERDA and DPS staff about CLCPA progress. Jessica Waldorf was asked what impact CLCPA GHG emission reductions would have given that New York emissions are smaller than the observed annual increases in global GHG emissions. Waldorf said that there are other reasons "to build renewable energy resources in New York that are not just related to emissions." Her response claimed price volatility was one of those reasons.

> The other thing I would say about energy security is price volatility. Customers are beholden to the whims of the fossil fuel industry and the up and down markets that we see from fossil fuels. Localizing our energy production and renewables allows us for price stability. That is definitely a benefit of building resources here.

I presume that the basis of these claims is that renewable energy will be cheaper and less volatile because a renewable energy dependent electric system will have less unstable fuel costs resulting in cheaper and more secure energy. This in turn is based on three presumptions: fuel prices are volatile because of global markets, renewables would eliminate this cost driver, and renewables would not introduce their own volatility drivers.

The US Energy Information Administration (EIA) noted in June 2024 that fossil fuel price volatility has shown significant changes over time, with recent years experiencing particularly high levels of volatility: "In 2022, natural gas price volatility reached extreme levels, with historical volatility peaking at 171% in February 2022, the highest since at least 1994." Note that EIA is only discussing natural gas volatility which has become a much larger electric generating fuel source in recent years. In my opinion, the increasing reliance on a single fuel could be the fundamental reason for the observed increase in volatility.

In any case, the New York agency global market argument picks just one driver for fuel price volatility. The EIA gave other reasons for natural gas variability in August 2022:

> Increased uncertainty about market conditions that affect natural gas supply and demand can result in high price volatility. Events that have contributed to changing market conditions include:
>
> - Production freeze-offs
> - Storms
> - Unplanned pipeline maintenance and outages
> - Significant departures from normal weather
> - Changes in inventory levels
> - Availability of substitute fuels

- Changes in imports or exports
- Other sudden changes in demand

> U.S. natural gas prices are typically more volatile during the first quarter of a year because of the fluctuating demand for natural gas for space heating as weather changes. Factors that contributed to heightened volatility in the first three months of this year include:
>
> - Weather-driven fluctuations in natural gas demand
> - Declining natural gas production in January and February
> - Declines in Lower 48 states' working natural gas levels
> - Record U.S. LNG exports to Europe to help offset reduced natural gas supplies from Russia

Of the eight events that contribute to changing market conditions and fuel volatility is the only one is related to global market conditions. In addition, the EIA results suggest that renewables would not eliminate fuel volatility.

I believe that weather-driven renewables would increase volatility. In today's electric markets prices increase when seasonal load peaks and increasingly less efficient and more costly generators are called upon to supply electricity. In the future weather-reliant wind and solar electric system prices will increase every time that there is a resource lull and more expensive backup resources are called on. The frequency of resource lulls is more than the frequency of seasonal peaks so this will increase fuel volatility. Of bigger concern is that wind lulls correlate very well to peak seasonal loads which is sure to exacerbate prices during those conditions.

Jonathan A Lesser, PhD, President, Continental Economics, Inc., and Senior Fellow, National Center for Energy Analytics sums up reservations about the fuel volatility benefit argument and noted that if volatility is an issue there are existing methods to address it in an article in Regulation Magazine.

> Reduced fossil fuel price volatility is also not a social benefit. Moreover, there is no evidence that wind generation reduces fuel price volatility. Claimed reductions in price

> volatility are based on a simple—and incorrect—assumption that fossil fuel price volatility increases as demand increases. While it is certainly true that if demand for a good is reduced to zero there will be no volatility in its price, there is no evidence that wind development has reduced the volatility of fossil fuel prices. Besides, traditional hedging instruments can reduce price volatility to any level desired by consumers, at a lower cost and without the need for subsidies.

A final comment on affordability. There is a simple test for the claims that a wind and solar weather-reliant electric system can reduce costs. All that needs to be done is provide an example of a jurisdiction where the electric system has become reliant on such a system where consumer costs have gone down. The German Energiewende is the country's planned transition to a low-carbon, nuclear-free economy and is often cited as an example of what New York should do. However, the costs have certainly not gone down in Germany.

Conclusion

I submitted these comments because the letter responding to the issues raised by Multiple Intervenors did not address the issues raised and exemplifies the unsatisfactory stakeholder process associated with CLCPA implementation.

The Multiple Intervenor letter raised questions regarding affordability but the DPS March 26, 2025 letter did not adequately respond to the issues raised because it did not provide any specific timetable for releasing the overdue reports. It is not clear if they will be released in weeks, months, or delayed beyond the next gubernatorial election. "Later this year" is not adequate.

My biggest issue with the stakeholder process for all components of the CLCPA is that there is no documentation of the disposition of issues raised by stakeholders. My first recommendation is that NYSERDA and DPS prepare documentation that lists all the issues raised in submitted comments so that the Climate Action Council, the Energy Planning Board, the Commission and stakeholders can be assured that all issues raised have been considered. The documentation should list the issue, describe its relevance, and explain its disposition and the rationale if there is

a difference of opinion between the agency and the commenter. If there is inadequate documentation, then there is no assurance that stakeholder concerns have been considered.

My second recommendation is that criteria for the Section 66-p (4) of the Public Service law safety valves should be developed, and a tracking system implemented so that New Yorkers know whether we are on track for a net-zero transition that is affordable and will maintain current standards of reliability. When the criteria are in place and the tracking system indicates that the limits have been exceeded then the Commission would have a clear mandate to hold a hearing on implementation progress..

My final recommendation is that affordability metrics and reports on costs should include all costs necessary to meet CLCPA mandates including programs implemented before the CLCPA. Scoping Plan costs were presented relative to a reference case that gave a misleading impression of CLCPA costs. Clear documentation that lists all the emission strategies, the expected reductions, implementation schedule and expected costs is necessary.

I also observed that claims that the net-zero transition of the electric system will be more affordable than the existing system because of reduced fuel volatility do not stand up to scrutiny.

Thank you for considering the matters addressed in this letter.

Respectfully Submitted,

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cc: Hon. James S. Alesi
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bcc: Active Parties