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

Independent Intervenors

Roger Caiazza, Richard Ellenbogen, Constantine Kontogiannis, And Francis Menton

Filing Concerning the Need for Safety Valve Provisions Regarding the
Implementation of the Public Service Law Section 66-P(4) Mandate for Climate
Leadership & Community Protection Act

August 11, 2025

Position

Roger Caiazza, Richard Ellenbogen, Constatine Kontogiannis, and Francis
Menton ("Independent Intervenors") have filed testimony in the Niagara Mohawk
Power Corporation (NMPC) dba National Grid¹ and the Consolidated Edison
Company of New York² rate cases. We argued that Public Service Law (PSL)
Section 66-P³, Establishment of a renewable energy program, includes bounds on
implementation that have not been considered in the rate cases. The Department of
Public Service (DPS) staff response to our arguments boils down to rate cases are not
the appropriate forum to consider limitations of the renewable energy program. This
filing argues that 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 should address this issue.

The Public Service Commission (PSC or Commission) has not adequately addressed their broad mandate to ensure access to safe, reliable utility service at just and reasonable rates relative to all the Climate Leadership and Community Protection Act (CLCPA) mandates incorporated in recent rate cases. The

¹ https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=24-E-0322https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=24-E-0322

² https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=25-E-0072

³ https://newyork.public.law/laws/n.y._public_service_law_section_66-p#b-that-by-the-year-two-thousand-forty-collectively-the-%E2%80%9Ctargets

provisions in Public Service Law ("PSL") 66-P that requires the Commission to establish a program to meet the 2030 mandate that a minimum of 70% of the statewide electric generation is generated by renewable energy systems; and the 2040 requirement that the statewide electrical demand system will be zero emissions, also includes safety valve provisions. The Commission is empowered by this statute to temporarily suspend or modify these obligations if, after conducting an appropriate hearing, it finds that PSL 66-P impedes the provision of safe and adequate electric service. Our filing explains that the utility customers in arrears provision has been exceeded so it would be appropriate to conduct a hearing.

This submittal includes the primary filing, two exhibits documenting the customers in arrears safety valve trigger, and five supporting exhibits. The primary filing argues that Public Service Law Section 66-p(4) contains safety valve provisions that allow the Public Service Commission to "temporarily suspend or modify the obligations" of renewable energy programs if they impede safe and adequate service, impair existing obligations, or cause significant increases in arrears or service disconnections. Exhibit 1 - Trend in Company Customers in Arrears documents trends in utility customer payment delinquencies and provides baseline data for the customers in arrears safety valve trigger. Exhibit 2 - Customers in Arrears is a spreadsheet that contains the detailed analytical data on utility arrears across New York's major distribution companies.

The remainder of the exhibits support the need for the filing, additional circumstances that demonstrate that the broad mandate to ensure access to safe, reliable utility service at just and reasonable rates has not been addressed in the current implementation process, a demonstration that the current approach is increasing Greenhouse Gas (GHG) emissions, and a recommendation for an alternative approach. Exhibit 3 - Affordability-Focused Recommendations outlines specific policy recommendations to address energy affordability concerns, including proposals for cost transparency, alternative funding mechanisms, and enhanced lowincome programs. Exhibit 4 - Resource Gap Characterization analyzes gaps between CLCPA mandates and available resources, potentially addressing both financial and infrastructure capacity constraints. Exhibit 5 – Dispatchable Emissions-Free Resources explains that the need for a resource that is not currently commercially available risks investments in false solutions that calls for a pause in implementation. Exhibit 6 - Electrification Increases Emissions presents analysis demonstrating that certain electrification strategies may paradoxically increase emissions. Finally, Exhibit 7 - Alternative Approach proposes alternative implementation pathways that could achieve climate goals while maintaining affordability and reliability.

This filing advances five key arguments that the Commission should conduct a hearing to temporarily suspend or modify the PSL 66-P obligations because the present approach impedes the provision of safe and adequate electric service. Current

data on customer arrears and service disconnections demonstrates that New York may already meet thresholds for invoking PSL Section 66-p(4) safety valves. With utility arrears reaching \$1.8 billion and affecting 1.2 million households, CLCPA implementation is creating significant affordability burdens.⁴ The Commission has failed to provide comprehensive cost reporting required under its own orders, making it impossible to assess true ratepayer impacts⁵. The proposed transition to weather-dependent renewable resources poses unacceptable reliability risks that warrant safety valve consideration⁶.

These issues need to be addressed as soon as possible. The current implementation process is based on an unaffordable CLCPA implementation strategy that sacrifices grid reliability without producing the stated environmental benefits.

Background

Our Con Ed testimony⁷ described the backgrounds of the Independent Intervenors. Caiazza is a retired utility meteorologist, with extensive electric energy and environmental regulatory analysis experience who authors the Pragmatic

⁴ https://states.aarp.org/new-york/aarp-ny-pulp-1-2m-nys-households-60-days-behind-on-utility-bills-need-relief-in-state-budget

⁵ https://pragmaticenvironmentalistofnewyork.blog/wp-content/uploads/2025/07/affordability-and-reliability-focused-recommendations-in-dps-dmm-system-1.pdf

 $^{^6\} https://pragmaticenvironmentalistofnewyork.blog/2025/04/12/implication-of-assessment-of-extreme-renewable-resource-lulls/$

⁷ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b00A8A397-0000-C583-B297-FFB518192E7A%7d

Environmentalist of New York blog⁸. Ellenbogen is an electrical engineer who is President of Allied Converters where he has pioneered how "green" manufacturing can work. Constantine Kontogiannis is an engineer who has decades of experience providing energy consulting services. Menton is a retired lawyer and now writes articles at his Manhattan Contrarian⁹ blog that analyze New York's energy transition.

We share the common opinion that the Climate Leadership & Community

Protection Act (CLCPA) net-zero transition simply cannot work as proposed and will
do far more harm than good. We decided to become involved with utility rate cases
because we do not think that our messaging has been acknowledged, much less
addressed and because all of us are directly affected by either of the cases. This filing
is another attempt to force the Public Service Commission to consider safety valve
provisions on the implementation of the PSL Section 66-P component of CLCPA
implementation.

We believe that the Climate Act's selective choice of metrics for affordability, reliability, and sustainability/environmental impacts fail to provide a complete picture of the impacts associated with the net-zero transition. Our intervention to date has focused on the technical aspects of implementation. We accept that challenging the CLCPA itself in a rate case is inappropriate. However, it is now clear that technical

⁸ http://pragmaticenvironmentalistofnewyork.blog/

⁹ https://www.manhattancontrarian.com/

problems make implementation of the Climate Act mandates inappropriate because of the observed challenges. There are significant costs and reliability impacts associated with implementing the CLCPA in the rate cases but there are no criteria for affordability, reliability, or environmental impacts. This must change.

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The Order¹⁰ implementing this proceeding states:

The Commission has quickly taken action related to items within its jurisdiction to help put the State on a path to meet the aggressive CLCPA targets. However, in consideration of the scope of the CLCPA and the extensive work necessary to achieve its mandates, continuous monitoring of the progress made will be crucial to ensure the State remains on track to achieve these objectives. In addition, there are existing policies that will need to be reviewed, and new policies that will need to be developed, to further the enablement of the CLCPA. This proceeding will be the forum for such policy development. By this Order, the Commission institutes this new proceeding to both track and assess the advancements made towards meeting the CLCPA mandates and provide policy guidance, as necessary, for the additional actions needed to help achieve the objectives of the CLCPA.

¹⁰ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b5F73F855-B506-41B3-AB05-3CF66F736497%7d

To this point, New York State (NYS) monitoring of progress has focused solely on achieving mandates of the CLCPA. It has become increasingly clear, however, that the enablement of the CLCPA cannot disregard affordability, should not affect reliability, and must not cause significant deterioration of the environment. The Independent Intervenors maintain that the first step towards addressing those objectives is to define criteria for acceptable cost increases, reliability risks, and environmental impacts. Because this Proceeding was instituted to track and assess CLCPA implementation mandates, it should develop policy guidance and the necessary acceptability criteria.

Affordability Criteria

It is disappointing that the focus on achieving the CLCPA mandates has not acknowledged that there are limitations imposed by affordability. Simply put, there is a limit to how much the state can afford to spend on those mandates. It is unacceptable because there are Public Service Law affordability limitations in place that have been ignored to date.

Public Service Law Section 66-P¹¹ Establishment of a Renewable Energy

Program includes provisions for bounds on implementation. Section 66-p (4) states:

 11 https://newyork.public.law/laws/n.y._public_service_law_section_66-p#b-that-by-the-year-two-thousand-forty-collectively-the-%E2%80%9Ctargets

"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".

PSL 66-p (4) Status

The Public Safety Law section 66-p (4) affordability criteria for consideration of suspension or modification is a "significant increase in arrears or service disconnections that the commission determines is related to the program". In the rate case proceedings, the Independent Intervenors evaluated the status of this metric. In our statement in opposition¹² to the Niagara Mohawk Power Corporation dba National Grid (NMPC) rate case Joint Proposal (JP) proceeding we found that between 2019 the last year before the CLCPA was implemented and the most recent year, there were 200,415 customers with arrears greater than 60 days, and at the end of 2024 there were 234.255 customers in arrears which is an increase of 33,840 or

 $^{^{12}}$ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b90D1CF96-0000-C870-8CDA-76A5D2AAFB1A%7d

17% increase. The standard deviation of the number of customers in arrears from 2010 to 2019 is 16,467. Because the observed difference, 33,840 is greater than two times the standard deviations the increase is "significant". In our testimony¹³ in the Con ed rate case we included an exhibit¹⁴ that found that the annual average number of customers in arrears greater than 60 days was 294,709 in 2019 the last year before the CLCPA was implemented and the average in 2024 was 468,108 customers in arrears which is an increase of 173,398 or a 59% increase. The standard deviation of the number of customers in arrears from 2010 to 2019 is 26,570. Because the observed difference, 173,398 is greater than two times the standard deviation the increase is statistically "significant".

This filing expands the analysis to document the trend in customers in arrears using statewide quarterly residential collection data submitted by New York State's ten largest distribution utility companies in Open Data NY. In addition to individual utility company estimates, the statewide totals were evaluated.

Exhibit 1 documents the calculation methodology and references the spreadsheet (Exhibit 2) used for the calculations. This analysis found that the combined statewide results and four of the ten utilities had a statistically significant increase in customers in arrears since the start of the CLCPA (Table 1). These results

¹³ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b00A8A397-0000-C583-B297-FFB518192E7A%7d

¹⁴ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b10A8A397-0000-C939-A6B8-C9654683215F%7d

exceed the PSL 66-p(4) threshold. Therefore, the PSC should conduct a hearing to consider whether it is appropriate to "temporarily suspend or modify the obligations" of the CLCPA transition.

Table 1: Summary of Analyses of Customers in Arrears More Than 60 Days

Was the difference between the annual average of the customers in arrears more than 60 days in 2019 and 2024 greater than two standard deviations of the 2011- 2019 data

CE: Consolidated Edison	Yes, significant
PSEG: Public Service Enterprise Group	No
CH: Central Hudson Gas & Electric	Yes, significant
NGrid-LI: National Grid Long Island - Natural Gas and power plants	No
NGrid-NY: National Grid Metro - Natural gas to Brooklyn,, Queens, and Staten Island	Yes, significant
NGrid-Upstate: Niagara Mohawk	Yes, significant
OR: Orange & Rockland	No
NYSEG: New York State Electric and Gas	No
RG&E: Rochester Gas & Electric	No
NFG: National Fuel Gas - Natural Gas	No
Statewide	Yes, significant

There is an important caveat. The Public Safety Law section 66-p (4) criteria for consideration of suspension or modification is a "significant increase in arrears or service disconnections that the commission determines is related to the program".

The information in Department of Public Service annual informational report¹⁵ required as part of Case 22-M-0149 is needed to determine if the increase is related to

 $^{^{15}}$ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B20E17489-0000-C114-AD41-8089369DB6F3%7D

the CLCPA program. The DPS has not provided that report since July 2023 so only information through 2022 is available. That is too short a period to be used for this evaluation.

DPS Response

In the Independent Intervenor rate case filings for NMPC and Consolidated Edison, we concluded that because there was a significant increase in the number of customers in arrears, that it is inappropriate for the utility companies to invest in Climate Act programs until the PSC holds a hearing to determine if CLCPA implementation should be suspended or modified. We also recommended that the PSC define the criteria for the Section 66-p(4) safety valves and institute a tracking system,

The DPS Staff Reply Statement in Support of the NMPC Joint Proposal¹⁶ addressed our recommendations in our Statement in Opposition to the Joint Proposal dated May 14, 2025. The following quotes the relevant text in the Reply Statement with our annotated comments. For readability the footnotes are not included. The following is the introduction to the response.

 $^{^{16}}$ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b307DFE96-0000-C920-8C36-0DF8FF24591B%7d

A Statement in Opposition to the Joint Proposal filed by Roger Caiazza and Constantine Kontogiannis (Caiazza and Kontogiannis) raises various issues, which will be addressed in turn, below. However, the issues alleged by Caiazza and Kontogiannis largely concern the CLCPA. The CLCPA, adopted in 2019, established a nation-leading effort to reduce greenhouse gas emissions and respond to the effects thereof across New York State.

As discussed in Staff's Initial Statement in Support, the text of the CLCPA includes directives for the Commission. CLCPA §7(2) requires the Commission to consider whether its decisions are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits established in article 75 of the environmental conservation law.

The following text makes the point that DPS must follow the law. However, they ignore the inconvenient fact that PSL-66(p) is a law too. By not acknowledging the PSL 66-P(4) provision <u>DPS</u> fails their "broad mandate to ensure access to safe, reliable utility service at just and reasonable rates."

Further, pursuant to CLCPA §7(3), the Commission shall not disproportionately burden disadvantaged communities and shall prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities. Caiazza and Kontogiannis' arguments regarding the CLCPA

ignore the fact that the aforementioned provisions of the CLCPA are statutory requirements that the Commission is obligated to comply with.

The DPS Staff Statement explicitly supports our argument that this Proceeding is the appropriate venue to consider our safety valve concerns when they stated ". The Commission has instituted a proceeding to address the CLCPA, and Caiazza and Kontogiannis' statewide concerns are more appropriately addressed in that proceeding."

The DPS response addressed our recommendations in other locations. The following paragraph acknowledges our analysis¹⁴ that showed that the number of NMPC customers in arrears has significantly increased since the start of the CLCPA. The reference to the fact that it is "not clear how much the CLCPA costs affected the number of customers in arrears" inappropriately devalues the analysis because it does not recognize that the reason it is not clear is because DPS has not updated its mandated reports in over a year.

D. The Provisions of PSL § 66-p Are Not Applicable to This Proceeding In their Statement, Caiazza and Kontogiannis assert that the Joint Proposal does not acknowledge PSL § 66-p(4). The subject of PSL § 66-p is the requirement for the Commission to establish a renewable energy

¹⁴ https://pragmaticenvironmentalistofnewyork.blog/2025/05/14/niagara-mohawk-rate-case-ignores-opportunity-to-pause-climate-act/

program. Caiazza and Kontogiannis contend that they have significant reliability and affordability concerns related to the programs that support the CLCPA in the Joint Proposal. To support this claim, Caiazza and Kontogiannis cite to an increased number of customers in arrears; however, they note that it is "not clear how much the CLCPA costs affected the number of customers in arrears." Ultimately, Caiazza and Kontogiannis conclude that their concern supports the suspension of the CLCPA and any CLCPA-related programs in the Joint Proposal, pursuant to PSL §66-p(4).

The DPS Staff made several other points in response to our Statement. There are unmentioned conflicting obligations in the following. Both the DPS and the company seeking the rate increases do have an obligation to provide safe, reliable utility service at just and reasonable rates. Apparently DPS staff are not willing to establish the criteria for what that means.

First, the assertion that the Joint Proposal does not acknowledge PSL §66-p(4) is not a failing of the Joint Proposal. Neither the Joint Proposal nor the Signatory Parties have the power or authority to direct the Commission to conduct a hearing to consider a suspension of the CLCPA or CLCPA-related programs pursuant to PSL §66-p(4).

Second, there are numerous generic proceedings that were initiated or expanded to comply with the directive for the Commission to establish a renewable energy program.

In the preceding paragraph, the DPS staff response deflected responsibility for addressing PSL 66-p(4) by saying that there are other proceedings. We used Perplexity AI to prepare Exhibit 2 that documents references to affordability and reliability recommendations in the New York Department of Public Service (DPS) Document and Matter Management (DMM) System. The search for references to PSL 66-p(4) found four stakeholder letters and comments, two business and industry filings, six government and oversight filings, and noted that the PSC imposed affordability provisions in four rate cases.

The July 2024 Office of the State Comptroller (OSC) audit¹⁵ referenced in Exhibit 2 warns that neither DPS nor NYSERDA has produced a *comprehensive* estimate of total CLCPA implementation cost, leaving ratepayers the de-facto funders. OSC *recommends* that PSC:

"assess the extent to which ratepayers can reasonably assume responsibility";

 $^{^{15}\} https://www.osc.ny.gov/files/state-agencies/audits/pdf/sga-2024-22s4.pdf$

- "identify alternative funding sources" (federal, State budget, carbon revenues);
- craft a backup plan should affordability thresholds be exceeded.

Exhibit 2 documents a disturbing lack of urgency by DPS to address affordability issues related to the renewable energy program. DPS did not respond to the OSC Audit for six months and then referenced an existing program. There has been no action on the commitment to address the OSC tasks despite DPS Chair Rory Christian's January 2025 response¹⁶ that commits the Commission to those tasks and highlights the existing 6% energy-burden target as its affordability yardstick.

The DPS Staff Statement tries to explain away the finding that the number of customers in arrears has increased significantly since the start of the Climate Act by saying that there are outreach programs: "Additionally, regarding Caiazza and Kontogiannis' statements regarding arrears, the Joint Proposal includes provisions that require additional outreach to customers who have unresolved arrears." That is treating the symptoms and not the disease.

The final paragraph passes the buck for boundary limit responsibility. As shown in Appendix 2 the issue has been raised but DPS has not addressed the clear need to address PSL §66-p(4).

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 $^{^{16}\} https://www.osc.ny.gov/files/state-agencies/audits/pdf/sga-2024-22s4-response PSC.pdf$

Finally, the concerns raised by Caiazza and Kontogiannis are likely not limited to the Niagara Mohawk service territory and the programs implemented by Niagara Mohawk and are potentially state-wide concerns. Caiazza and Kontogiannis' position that the Commission should suspend the CLCPA-related programming is outside the scope of the rate case and more properly addressed in the generic proceedings that are related to the renewable energy programs.

Affordability

With utility arrears reaching \$1.8 billion and affecting 1.2 million households, CLCPA implementation is creating significant affordability burdens.¹⁷ The example criterion in this filing is for affordability using the customers in arrears metric. The Public Service Commission has a target energy burden set at or below 6 percent of household income for all low-income households in New York State. However, there are limitations regarding its use as a CLCPA affordability metric.

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 $^{^{17}\} https://states.aarp.org/new-york/aarp-ny-pulp-1-2m-nys-households-60-days-behind-on-utility-bills-need-relief-in-state-budget$

The six percent target was included as part of Public Service Commission (PSC) Case Number: 14-M-0565¹⁸, 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 Findings¹⁹ 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

 $^{^{18}\} https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?Mattercaseno=14-M-0565$

¹⁹ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bBC2F31C9-B563-4DD6-B1EA-81A830B77276%7d

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 energy burden statistics cited in the Staff Report suggest a significant energy divide exists for low-income households. About 2.3 million households are at or below 200% of FPL, with an energy affordability "gap," i.e., an average annual energy burden above the 6% level. Approximately 1.4 million of these households receive a HEAP benefit; however, for the 2013-2014 program year, only about 316,000 of those households received a benefit for utility service.

The Order notes that reducing this energy burden will be a challenge: Closing such a wide gap for 2.3 million low-income households is a non-trivial pursuit, and will require a comprehensive effort that involves all of the tools at the state's disposal, including, but not limited to, utility ratepayer-funded programs. A central role in achieving energy affordability

for low income customers is played by the financial assistance programs administered by the Office of Temporary and Disability Assistance (OTDA), including the Home Energy Assistance Program (HEAP). Another important role is played by low income energy efficiency programs such as the Weatherization Assistance Program administered by New York State Homes and Community Renewal (HCR) and the ratepayer—funded EmPower-NY program administered by the New York State Energy Research and Development Authority (NYSERDA). Utility ratepayer funded programs also include the rate discount programs under discussion here, as well as investments designed to create opportunities for low income households to benefit from the cost savings offered by DER.

The Order goes on to offer suggestions to close the gap. It argues that a holistic approach among many state agencies is needed. For that to work there must be better coordination "among the various governmental and private agencies" that address this issue. The Order suggests that "achieving an optimal design will require building new partnerships and new mechanisms for identifying and enrolling eligible households".

The most tangible aspect of the Order to address the energy burden problem was to establish low-income bill discount programs for each of the major electric and gas utilities. This included standardization of utility energy affordability

programs statewide to "reflect best practices where appropriate, streamlining of rate cases, and greater consistency between the programs and the Commission's statutory and policy objectives." That recommendation is treating the symptoms and not the disease.

On Augst 13, 2021 a press release describing the expansion of the low-income affordability program noted:

To reach the target of no more than a 6 percent energy burden for low-income New Yorkers, it would be necessary to coordinate and leverage all available resources at the State's disposal, including multiple sources of financial assistance to lower customers' bills, energy efficiency measures to reduce usage, and access to clean energy sources to lower the cost of the energy itself. As part of the Commission's decision, Commission staff will work closely with other entities, including OTDA and the utilities, to ensure that low-income customers receive the assistance they need.

The utility companies submit quarterly reports documenting the number of low-income customers receiving discounts and the amount of money distributed. However, we 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 metric

is that it only applies to electric and gas utility customers. Citizens who heat with fuel oil, propane, or wood are not covered.

These affordability issues must be considered by this Proceeding.

Reliability

PSL 66-P Establishment of a Renewable Energy Program mandates implementation of a program to require that 70% of electric generation be generated by renewable energy systems and that by 2040 the statewide electrical demand system will be zero emissions. In other words, PSL 66-P requires programs that will meet the CLCPA 2030 and 2040 electric system requirements.

There is an analogous safety valve for these provisions that also has not been addressed. Public Service Law Section 66-P²⁰ Establishment of a Renewable Energy Program includes provisions for bounds on implementation of the program to meet the 2030 and 2040 targets. PSL 66-p(2),b states "The commission may, in designing the program, modify the obligations of jurisdictional load serving entities and/or the targets upon consideration of the factors described in this subdivision."

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 $^{^{20}}$ https://newyork.public.law/laws/n.y._public_service_law_section_66-p#b-that-by-the-year-two-thousand-forty-collectively-the-%E2%80%9Ctargets

Similar criteria to the affordability limits should also be established for "consideration of the factors" that affect reliability. To date the only apparent implementation plan is to deploy as many renewable energy resources as possible as quickly as possible. The recently released Draft State Energy Plan²¹ provides an outline of emission reduction strategies that NYSERDA believes will meet the CLCPA net-zero mandates. However, in the opinion of the Independent Intervenors, NYSERDA has not included a satisfactory feasibility analysis nor a deployment plan in their work to date.

A robust feasibility analysis²² "marries sound demand forecasting with multi-metric evaluation of candidate resource portfolios across plausible futures". Our review of the reliability feasibility summaries and references included in this document are based on a Perplexity²³ query using the following prompt on July 24, 2025: "describe feasibility analysis framework for an electric resource-planning projections"). On the face of it the Energy Plan Pathways Analysis meets most of the criteria described. However, there are many more challenges when dealing with a wind, solar, and storage reliant electric grid. A follow up query for

 $^{^{21}\} https://energyplan.ny.gov/Plans/Draft-2025-Energy-Plan$

²² https://www.perplexity.ai/search/describe-a-feasibility-analysi-0Wl0uUmbTzyW3HwIVSTBHA

²³ <u>https://www.perplexity.ai/</u>

necessary feasibility analysis modifications for wind and solar dependent modifications explains that there are reliability considerations

The Perplexity main takeaway statement says:

When planning electric systems that depend primarily on wind and solar resources, feasibility analysis must fundamentally shift from capacity-driven planning to **variability-centric planning**. This transformation requires enhanced temporal modeling, sophisticated weather integration, multi-layered storage analysis, and probabilistic resource adequacy assessments to manage the inherent intermittency and weather-dependence of these resources.

It cannot be emphasized enough that these are new challenges. Maintaining the balance between load and electric generation is an exceedingly difficult challenge and adding weather-dependent Inverter Based Resources (IBR) makes it much more difficult. In May 2025, the North American Energy Reliability Corporation (NERC) issued its highest alert to transmission owners, planners, and generator operators, urging an investigation into how deployed IBRs will respond to grid disturbances²⁴.

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Since 2016, NERC has analyzed numerous major events totaling more than 15,000 MW of unexpected generation reduction. These major events were not predicted through current planning processes. Furthermore, NERC studies were not able to replicate the system and resource behavior that occurred during the events, indicating systemic deficiencies in industry's ability to accurately represent the performance of IBR and study the effects of IBR on the bulk power system (BPS)²⁵

There are reliability implications related to these long-term planning concerns. The Public Service Commission presumes that the PSL 66-P Establishment of a Renewable Energy Program can be implemented reliably. However, the fact that there are major uncertainties associated with identifying how many required resources are needed during dark doldrums means that there are unacknowledged challenges to the presumption that the weather-dependent resources will ensure safe and adequate energy supply. Developing a strategy to deal with those periods is critical to providing power when it is needed the most. There are two overarching challenges. The first challenge is specifying how much long-duration dispatchable power is needed and the second is what technology will be used.

Long-Duration Dispatchable Power Requirements

Exhibit 4 describes the issues associated with the resource planning objective for dark doldrum episodes. The comparison of results from different evaluation periods indicates that the longer the evaluations period the more likely that the worst-case event will be discovered. New York has not done an analysis using the longest data evaluation period available. In the opinion of the Independent Intervenors, the worst-case planning episode will likely be based on a January 1961 dark doldrum episode. Until that period is evaluated then it is likely that we don't know how much energy will be required during the worst-case New York dark doldrum. The Independent Intervenors believe the goal of an evaluation over the longer period would be to define a probabilistic range of return periods for dark doldrum events similar to 100-year floods that could be used for electric system planning.

Even if a robust probabilistic parameter is developed and used for future resource planning it would not allay all our reliability concerns. Today's electric system resource planners for a conventional system base the amount of capacity that they think will be needed based on decades of observations of the fallibility of power plants. The result is that they know the probability there will be a shortage of available capacity to meet load when the installed reserve system capacity margin is a fixed percentage of the expected load very well. In New York State the

current installed reserve margin to meet the accepted probability of a loss of load expectation of an outage no more than once in ten years reliability metric is around 20%.

A fundamental observation is that there is no current expectation that the failure of conventional power plants will be correlated. We do not expect that many will fail at the same time. That in turn means that even if we decided to set the reliability metric based on a one in thirty-year probability instead of one in ten-year probability, that there would not be much of an increase in the installed reserve margin. This will change when the PSL 66-p renewable energy program is implemented.

Exhibit 4 provides background information explaining why incorporating weather variability needs to consider probabilistic metrics based on as long a record as possible. The insurmountable reliability concern is that we know that if an even longer period of record was used there would very likely be an even worse event of correlated low wind and solar resource availability. Instead of the confidence in the current planning process that increasing the lookback period will not markedly change the resources needed for the worst case, relying on weather-dependent resources means that inevitably there will be a period of extreme weather that requires markedly more resources. The costs to provide backup support for these events will be extraordinary and building excess capacity for a

very rare event will significantly add to those costs. It is likely that we cannot afford to invest in enough safety margin resources using existing technology. This trade-off means that eventually there will be a catastrophic blackout when the load exceeds the storage capacity. The proposed proceeding should define the acceptable risk for this reliability concern.

What Technology Will Be Used for Dark Doldrum Events?

The Public Service Commission presumes that the PSL 66-P Establishment of a Renewable Energy Program can be implemented reliably. However, that presumption does not address the fact that a new category of Dispatchable Emissions-Free Resources (DEFR) must be identified, tested, and deployed to provide energy during extended periods of low wind and solar resource availability. Exhibit 5 describes potential technologies. There is a real chance that nothing will be feasible. Furthermore, because the DEFR technologies have not been identified it is impossible to determine if they are affordable. Also note that DEFR capacity projections are on the order of all currently available fossil-fueled generation which suggests that the costs for any DEFR technology are going to be high.

The Independent Intervenors believe that it is inappropriate to continue to deploy renewable energy resources without considering two reliability issues

related to DEFRs. The first requirement is to define what reliability risks are acceptable for an electric system reliant upon weather-dependent resources. Secondly, the provisions of PSL 66-p(2),b that determine when the PSC should "modify the obligations of jurisdictional load serving entities and/or the targets" need to be defined and assessed relative to DEFR requirements. The specification of dark doldrum resource gap for planning and the requisite resources to address the resource gap must also be defined as part of the safety valve evaluation.

Environmental Impacts

The third component that requires safety valve metrics is environmental impacts. There are three relevant aspects of environmental impacts that must be addressed. CLCPA implementation does not consider that premature electrification before the electric grid becomes zero emissions will increase emissions. Secondly, it is necessary to consider life-cycle impacts. The third problem is that the cumulative impacts of the CLCPA have not been updated since September 2020 before the full extent of the wind, solar, and energy storage resources required was known. The failure to provide a environmental impact boundary condition means that these impacts are not being evaluated rationally.

Exhibit 6 describes our concern about premature electrification. PSL 66-P Establishment of a Renewable Energy Program mandates implementation of a

program to require that 70% of electric generation be generated by renewable energy systems and that by 2040 the statewide electrical demand system will be zero emissions. Currently, there is no implementation plan so building electrification is occurring before the electric energy provided is "zero-emissions". This planning failure has resulted in greater emissions from building heating because on-site heating with natural gas has fewer emissions than are currently available from electricity generated on the downstate grid. This is a particular problem vis-à-vis New York City's Local Law 97²⁶.

The Independent Intervenor Statement in Opposition to the Joint Proposal²⁷ in the NMPC rate case argued that CLCPA implementation programs have failed to consider other options that would largely satisfy its emission reduction mandates without a dramatic ratepayer impact. Exhibit 7 describes the proposed pragmati alternative approach that provides nearly as much environmental benefits at a much lower cost and reduced reliability risks.

There also is a serious deficiency regarding cumulative environmental impacts. Consistent with 6 New York Codes, Rules and Regulations (NYCRR) §617.9(a)(7), a Generic Environmental Impact Statement is the appropriate mechanism for assessing environmental impacts related to the Climate Act. On

 $^{26}\ https://www1.nyc.gov/assets/buildings/local_laws/ll97of2019.pdf$

²⁷ https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bE018D096-0000-CA68-8A63-B81728A7D76B%7d

September 17, 2020, the Final Supplemental Generic Environmental Impact
Statement (SGEIS) for the Climate Leadership and Community Protection Act²⁸
was released. It evaluated the environmental impacts associated with the
incremental resources expected to be needed to comply with the Climate Act and
built upon and incorporated by reference relevant material from four prior State
Environmental Quality Review Act (SEQRA) analyses. Each of the analyses
evaluated the environmental impact of the expected renewable energy resources
needed at the time the analysis was done. The most recent version considered the
impact not only of previous New York proceedings, but also initial projections of
the resources needed to meet the mandates of the CLCPA.

According to the 2020 SGEIS report:

Exhibit 2-5 summarizes the current renewable energy generation in New York, in addition to the offshore wind and distributed solar procurement goals, and the estimate of utility-scale solar capacity required to meet the meet the 70 by 30 goal. This SGEIS is evaluating a range of utility-scale solar that can maximize the competitive outcome, including up to an incremental 6,300 MW of utility-scale solar. Procurement of 5,800 MW of offshore wind by 2030 represents a portion of the 9,000 MW by 2035

²⁸ https://pragmaticenvironmentalistofnewyork.files.wordpress.com/2021/11/final-supplemental-generic-environmental-impact-statement-on-the-proposed-climate-leadership-and-community-protection-act.pdf

procurement goal. Distributed solar capacity by 2030 is expected to exceed the 6,000 MW by 2025 procurement goal by an additional 3,000 MW and would reduce the amount of installed capacity procured through Tier 1.

Table 2; 2020 SGEIS Exhibit 2-5 Expected Renewable Capacity

Exhibit 2-5 Expected Renewable Capacity

Renewable Energy Source	Contribution to 70 by 30 Capacity (MW)	Total New Capacity Under Proposed Action	Capacity Analyzed in Prior SEQRA Analyses (MW)	Incremental Increase Analyzed in this SGEIS
Existing and Contracted ¹	8,000	N/A	N/A	N/A
Utility-Scale Solar	11,100	$9,000 - 13,200^2$	6,865	2,100 - 6,300
Utility-Scale Onshore Wind	1,900	1,900	5,905	N/A
Offshore Wind	5,800	9,000	4,200	4,800
Distributed Solar	6,000 ³	6,000	3,000	6,000
Total CLCPA- Eligible Renewables	32,800	25,900 - 30,100	19,970	12,900 - 17,100

Source: NYSERDA. 2019. Clean Energy Standard Annual Progress Report: 2018 Compliance Year Final. December 2019. Accessed April 24, 2020. https://www.nyserda.ny.gov/-/media/Files/Programs/Clean-Energy-Standard/2019/Case-15-E00302-CES-2018-Annual-Progress-Report.pdf.

Notes:

Kev.

CLCPA = Climate Leadership and Community Protection Act

MW = megawatt N/A = not applicable

The problem is that the original expectations of renewable capacity for the Climate Act falls far short of the renewable capacity requirements in more recent assessments. Table 3 compares the capacity (MW) in the Table 3 with the 2021-

¹ Includes constructed and contracted utility-scale solar, distributed solar, onshore wind, hydropower, and imported renewable energy.

The 2016 SEIS analyzed approximately 2,700 to 6,900 MW of utility-scale solar capacity that could meet the 50 by 30 goal based on varying market conditions. This SGEIS assumes a similar range for utility-scale solar applied to the preliminary modeling from NYSERDA.

³ An additional 3,000 MW of distributed solar is included under Existing and Contracted.

2040 NYISO Outlook Scenario 1, the Scoping Plan Strategic Use of Low-Carbon Fuels Scenario and six scenarios in the July 2025 Draft State Energy Plan. There are inconsistencies in the categories but the massive increase in renewable resources is obvious. Onshore wind is projected capacity is 145% higher than analyzed, offshore wind expected capacity is 62% higher than analyzed, and solar is 241% higher than the maximum scenario expectation. In addition, no previous analysis considered the environmental impacts of massive energy storage facilities or the "zero-carbon firm resource" that the integrated analysis presumes will be provided by hydrogen resources. There will also be impacts associated with the necessary transmission system additions and upgrades.

Table 3: CLCPA Implementation 2040 Fuel Mix Capacity (MW) Compared to 2020 SGEIS Exhibit 2-5

Expected Renewable Capacity

			July 2025 New York State Energy Plan Scenarios					
2020 SGEIS Expected	2021-2040 NYISO Outlook	Scoping Plan Stratgic Use of Low-Carbon	No		Additional	Net Zero	Net Zero	Additional Action - Constrained Annual
Renewable Capacity	Scenario 1	Fuels	Action	Current Policies	Action	Α	В	Builds Sensitivity
Nuclear	3,364	3,355	1,272	3,305	3,305	3,305	3,305	3,305
Gas & FO	0	0	27,093	0	0	0	0	18,400
Zero-Carbon Firm	40,938	21,015	0	16,140	17,241	23,378	18,068	0
Biomass			330	0	0	0	0	0
In-State Hydro			4,280	4,280	4,621	4,621	4,621	4,644
Hydro Imports (Existing)	7,540	7,348	1,432	1,432	1,432	1,432	1,432	1,432
Hydro Imports (New)			0	1,250	1,250	1,250	1,250	1,250
Wind 7,805	19,087	12,242	3,168	8,302	8,866	15,701	15,701	6,939
Wind Imports			0	0	0	1,117	1,324	0
Offshore Wind 9,000	9,000	14,364	132	9,000	9,000	14,602	14,427	8,870
Solar 13,200	15,874	43,432	9,733	34,846	35,419	44,998	44,743	29,714
Battery Storage	11,450	12,149	4,443	9,324	9,356	11,401	11,130	8,764
Pumped Storage			1,407	1,407	1,407	1,407	1,407	1,407

There is no question that the updated projections of new resources should be addressed in an updated cumulative environmental impact statement. Considering the number of turbines and area covered by solar panels environmental impacts that may be acceptable for a limited number of facilities clearly could be issues with the larger numbers projected. Assuming onshore wind uses 3.3 MW turbines (average turbine size in the Article Ten queue in 2020), offshore wind uses 15 MW turbines per Empire Wind website⁸⁴, and that solar projects in the Article Ten queue in 2020 averaged 9.3 acres of equipment area per MW, we calculated the quantity of turbines and area covered for the maximum of the different scenarios. Current plans for CLCPA implementation call for up to 3,419 more onshore wind turbines, 358 more offshore wind turbines and 3,251 more acres covered with solar equipment.

The cumulative impacts of renewable energy development need to be addressed against an environmental acceptability metric. Individually there might not be unacceptable adverse environmental impacts. There might not be documented impacts of, for example, current offshore wind development killing whales, but without upfront analysis of the total impacts for all the projected development, it may turn out that over 14,000 MW of offshore wind would cumulatively stress whales to the point that deaths occur. Somewhere between the

⁸⁴ https://www.empirewind.com/about/technology/

loss of several whales and wiping out the endangered North American Right
Whale an acceptable impact should be defined and tracked with an established
outcome if the metric is exceeded.

Recommendations

On July 23, 2025, the New York State Energy Planning Board voted to release the latest edition of the State Energy Plan. The Summary for Policymakers "pending Board consideration" draft release at that time says the Energy Plan will be "Advancing abundant, reliable, affordable, and clean energy for New York". Until such time that those criteria are defined, that is nothing more than a political slogan. The Independent Intervenors recommend that it is time to establish specific affordability, reliability, and environmental impact criteria, set up a tracking mechanism for each, and formulate a mandatory course of action when the criteria are exceeded. This proceeding is the most appropriate venue to achieve those recommendations.

Conclusion

The DPS response to the need for affordability and reliability safety valves despite the existence of a legal mandate addressing those issues clearly is a failure to support the broad mandate to ensure access to safe, reliable utility service at just

and reasonable rates. Utility costs are the most significant manifestation of Climate Act implementation to ratepayers. DPS staff responsible for rate cases have thus far deferred accountability for exceeding the customers in arrears metric to someone else. Despite numerous filings and explicit OSC recommendations DPS has not updated the costs of implementation much less determined whether they are causing the observed increase in the number of customers in arrears and whether the increases are affordable. The Draft State Energy Plan projects (Table 3) between 16 GW and 23 GW of Zero Carbon Firm or DEFR is needed by 2040 and the NYISO projects that 41 GW will be needed. It is inconceivable that a reasonable reliability risk metric would not flag this as a hurdle for PSL 66-P implementation that requires the Commission to conduct a hearing on implementation. In the absence of metrics, the PSC can continue to ignore physics and continue on the present path. This must change.