

VIA ELECTRONIC SUBMISSION

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CC: Climate Action Council members

RE: Central Hudson Gas & Electric Comments in Response to the Draft Scoping Plan

Introduction

The Climate Action Council's Draft Scoping Plan ("Scoping Plan" or "Plan") was published on December 31, 2021 to establish an initial framework aimed at achieving New York State's climate policy objectives, as set forth within the Climate Leadership and Community Protection Act (CLCPA). The CLCPA requires that the Scoping Plan be finalized by January 1, 2023, and that it be reviewed and updated at least every five years¹. Through a combination of public hearings and written comments, the Climate Action Council has sought input to refine and improve its Scoping Plan.

The Scoping Plan clearly defines the scientific consensus on the projected short and long-term impacts of Climate Change, both on the global ecosystem and human civilization. Central Hudson recognizes the urgent need to take meaningful actions aimed at significantly reducing carbon emissions and protecting the environment. As a transmission and distribution utility serving approximately 400,000 electricity and natural gas customers across the State's Mid-Hudson River Valley, we are advocating for State policies that are in the best interest of our customers and the communities we serve. Central Hudson submits these comments to provide our expertise and perspectives in support of the Climate Action Council's efforts.

 ¹ Environmental Conservation Law at § 75-0103(15).
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Central Hudson's Core Principles

In its review and assessment of the Scoping Plan, Central Hudson has developed four principles we believe are vital to a successful transformation to a low-carbon economy. Our comments are organized in the context of these principles.

1. The electric power grid must meet New York's energy needs at all times;

Although often taken for granted, reliability is not automatic. Continual access to electricity is critical to the health and safety of New Yorkers and functioning of the State's economy. New York's energy systems have complex interactions and operations, and their reliability is a result of careful, methodical planning that considers the long lead times needed for construction of new generation resources, dependent fuel sources, day-to-day dispatch and balancing of resources, and adequacy of transmission & distribution facilities. The New York Independent System Operator (NYISO), the State's gas and electric utilities, and the New York State Reliability Council (NYSRC) play crucial roles in maintaining that reliability.

It is imperative that the transition to clean generation is accomplished in a thoughtful and wellsequenced manner. Renewable generation sources such as wind and solar are inherently intermittent and can only supply energy at certain times. This intermittency needs to be balanced with other resources that can be dispatched immediately and produce for extended periods of time. Deployment of energy storage will need to grow exponentially but can only meet part of this need. In its 2022 Power Trends report², the NYISO projects that even after increasing the State's energy storage capacity to roughly 15 times³⁴ what it is today, 10% of the State's electrical demand in 2040 would be unmet without long-duration dispatchable emission-free resources (DEFR) such as hydrogen and renewable natural gas. As recognized by the Scoping Plan, these technology solutions must be better defined within State policy and advanced with urgency. However, these types of resources are not currently commercially available and there is uncertainty about whether these "linchpin" technologies will be available at acceptable cost, quality, and quantity when needed. Most importantly, it is crucial that conventional generation resources needed for rebalancing and reliability are not retired before adequate and reliable emission-free or carbon-neutral replacements are ready for service.

2. New Yorkers' livelihoods must be enhanced, not harmed by this transition;

In the course of reviewing the Scoping Plan, Central Hudson encountered many gaps in information and uncertainty about how the studies were conducted and we have been unable to properly assess and

² https://www.nyiso.com/documents/20142/2223020/2022-Power-Trends-Report.pdf/d1f9eca5-b278-c445-2f3f-edd959611903?t=1654689893527

³ Nameplate capacity of all storage within NYCA totaling 638MW, NYISO Gold Book 2022, Table I-12a, https://www.nyiso.com/documents/20142/2226333/2022-Gold-Book-Final-Public.pdf/cd2fb218-fd1e-8428-7f19-df3e0cf4df3e?t=1651089370185

⁴ Approximately 9.5GW storage capacity projected in 2040, NYISO Power Trends 2022, Figure 7 https://www.nyiso.com/documents/20142/2223020/2022-Power-Trends-Report.pdf/d1f9eca5-b278-c445-2f3f-edd959611903?t=1654689893527

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confirm the economic projections. The Scoping Plan focuses on the positive net benefits of clean energy investments, where benefits include the societal value of the Scoping Plan's reduction of global Greenhouse Gas (GHG) emissions plus reductions in regional health care costs stemming from better local air quality and healthier lifestyles, and where costs are the direct investment and operating costs to NYS residents and businesses. Given the enormous scale of these estimates, it is especially important that the assumptions, results, and policy conclusions be transparent to all New Yorkers who are affected. The Final Scoping Plan should include sufficient transparency, including workpapers, supporting calculations, and assumptions, so that the analysis is replicable, and the methods and results are open to review. Costs and benefits should be presented in a manner that is evident and clear to those who are affected and/or are asked to pay for the investments. More visibility into the specific costs and benefits associated with each recommended action is also crucial for prioritization.

While there are certainly significant benefits associated with the transition to clean energy, the projected costs to achieve them are cause for concern. According to economic modeling in the Scoping Plan, the present value of direct costs to New York residents and businesses of achieving the CLCPA's goals are approximately \$300 billion. When converted to real dollars (i.e., not discounted), the direct costs incurred would be one and a half to two times as high. Furthermore, these costs are described in terms of the <u>incremental cost</u> of achieving the Scoping Plan's objectives relative to other climate-related mandates that are already underway. *In other words, foundational efforts such as the Clean Energy Standard, NY-Sun, zero emission vehicle legislation and rules, changes in building codes and standards, and many other legislative and regulatory directives are excluded from the Draft Scoping Plan's \$300 billion estimate.⁵*

To date, the State has not yet established a comprehensive strategy to fund the incremental investments needed to achieve CLCPA. Public Service Commissioner John Howard cautioned during the May Commission session, "The legislature, either through its silence or total lack of actions, has given this commission nearly the exclusive responsibility to reach into New Yorkers' pockets to pay for the CLCPA mandates." Funding CLCPA investments solely through utility bills would lead to unsustainable cost increases that would simultaneously discourage electrification. Utility bills are also not an appropriate vehicle to fund such a far-reaching and economy-wide transformation. The \$300 billion cost estimate in the Scoping Plan is seemingly predicated on a bottom-up analysis of specific types of new investments occurring at specific times. While it is not the responsibility of the Climate Action Council to secure funding, the Final Scoping Plan needs to be transparent about these assumptions so that the need for funding outside of utility bills can be better evaluated and acted upon by stakeholders and policy makers.

The Scoping Plan contemplates the very real possibility that the costs associated with implementing CLCPA would place New York at an economic disadvantage to other jurisdictions which do not have the same policies. This could lead to both economic and emissions leakage, whereby economic activity in the State is diminished and displaced by activity outside the State with likely increased emissions. This

 ⁵ See Draft Scoping Plan at pages 13-17.
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effect would lead not only to a failure to achieve the CLCPA's climate objectives but would result in decreased economic output, increased unemployment, and a variety of associated socioeconomic repercussions for the State's residents. Energy Intense Trade Exposed industries in particular cannot absorb significant additional energy costs brought on by climate policies. Furthermore, many industries that rely on high temperature processes simply don't have economical or commercially available electrification options. The Scoping Plan does not introduce a framework or propose any concrete safeguards to ensure that leakage does not occur as policies are rolled out. The clean energy transition must support, not harm the economy of the State. This element of the transformation needs to be better developed and be among the highest priorities of the Final Scoping Plan.

3. We must reduce emissions at the lowest-possible cost;

Implementation of the CLCPA will be costly, and the State must prioritize solutions that reduce emissions at the lowest possible cost to New Yorkers. Energy efficiency continues to be the most costeffective way to reduce emissions. Investments in both electric and natural gas energy efficiency programs should be expanded to reach the full market potential for cost-effective projects and help to manage growing electric demand. Central Hudson does not support the draft Scoping Plan's recommendation to eliminate incentives for customers who are considering the option of installing highefficiency gas heating equipment. This equipment delivers real and measurable reductions in carbon emissions, and removing these incentives now would encourage customers to install lower cost, lower efficiency natural gas equipment options that are still widely available in the market. It would be counterproductive and undermine programs that consistently deliver substantial reductions to carbon emissions each year.

Policies to promote the development of clean generation also need to be prioritized based on cost. For example, large scale renewables produce energy at a lower cost than smaller distributed resources due to their economies of scale. Distributed energy resources also receive proportionally larger subsidies in New York through the Value of Distributed Energy Resources Value Stack mechanism than those available to large scale renewables. Utility ownership of large-scale renewables, which is currently not permitted in New York, has been shown to further reduce the lifetime cost of energy generated from these resources.⁶ Utilities have a lower cost of capital (both equity and debt), would retain the residual value for the benefit of customers, and would allow for direct PSC oversight.

The Scoping Plan contemplates several economy-wide strategies to achieve the carbon reductions required to meet CLCPA. Central Hudson advocates for a flexible, technology agnostic, market-based approach that is predicated on the lifecycle global warming impact of the emissions source. Using a carbon fee sends a clear price signal and effectively values emissions externalities that are not traditionally included in market prices. If such an approach is used, pricing should be established

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⁶ Large Scale Renewable Energy Development in New York: Options and Assessment, prepared by New York State Research & Development Authority

https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-E-0302&submit=Search#

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uniformly across all fuels (diesel, propane, heating oil) as simultaneously as possible to minimize counterproductive incentives while promoting the least cost reductions across the broader economy. Furthermore, such pricing schemes need to account for existing emissions-related taxes, surcharges, or subsidy collections built into energy rates which have significantly grown throughout years of clean energy mandates. The price signal resulting from the sum total of emissions reduction programs should be consistent with each fuel's lifecycle environmental impact and not distorted by the existence of additive programs. Revenues from carbon pricing should be used to fund investments that are needed to facilitate the achievement of CLCPA goals.

4. All emission reduction solutions should be on the table; and right now, they're not.

State policy needs to remain flexible enough to adjust to real-world conditions, both to allow for the development of new technologies which provide previously unavailable pathways to reducing emissions and for course-correction for programs or solutions that are currently proposed that may, given time, not work. An energy system that is supported by a diverse mix of resource types tends to be more resilient and reliable as different resources are affected differently by environmental and economic factors. The decarbonization strategy within the Scoping Plan calls for heavy reliance on intermittent renewables along with near-full electrification across every sector of the economy. While renewable generation and strategic electrification should be foundational to achieving the State's climate goals, the extent to which these strategies are pursued needs to be balanced with the realities (and constraints) of implementation. Furthermore, if favored technologies, market development, and/or behavioral changes that are assumed in the Plan prove to be infeasible or unaffordable, they must be reconsidered. Given that the CLCPA calls for updates at least every five years, this eventuality is already anticipated. It may be prudent in the initial 5-year period to focus more clearly on and prioritize recommendations that are the most impactful and or cost-effective, based on input from stakeholders and commenters to this Plan.

The Scoping Plan calls for decommissioning of much of the natural gas system, with virtually no mention of the ability of that system to play a constructive role in the implementation of the CLCPA. The gas distribution system can and should be utilized as one of several decarbonization tools available to the State. While early electrification efforts have been successful through the NYS Clean Heat program, majority adoption of electric heating will be significantly more challenging, particularly for certain industries and building types that cannot electrify operations or cannot do so in a cost-effective manner. Keeping the gas system available for (but not solely for) those customers while decarbonizing the fuel it transports through leak reduction, renewable natural gas (RNG), and green hydrogen will be good for New York's economy and the environment. A pathway that leverages existing gas infrastructure investments to achieve decarbonization is likely to be a more cost-effective, lower risk way to achieve emissions reductions called for by the CLCPA, while supporting overall energy system reliability. Additionally, the biogenic origins of sustainably sourced RNG should be recognized for their benefits to the environment as they do not increase global warming and should not be considered to have any marginal damage value.

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Customer preferences and behaviors need to be better accounted for within the Final Scoping Plan. The recommendations within the plan presume that the state's residents and businesses will rapidly adopt new technologies at a rate that is consistent with policy objectives without establishing a comprehensive engagement and education plan. The CLCPA targets will require that the entire population of the state embrace clean energy in some form, going well beyond the early adopters and early majority of customers that are more likely to make changes on their own. The experience within Central Hudson's "transportation mode alternative" non-pipeline alternatives, which requires 100% of customers in a targeted neighborhood to convert to heat pumps and decommission all gas equipment in the home, can exemplify the challenges of reaching the full population. Due to the nature of the TMA's, these customers are selected by the utility based on their location and are not necessarily customers who would have chosen to participate in a heat pump program or respond to recruitment efforts. Even when the utility offered to cover the full conversion cost, new appliances, and provide cash bonuses, less than half of customers were willing to forego their gas service. This experience not only suggests that customers place a high value on having natural gas service, but also that persuading all, or even most, customers to make significant lifestyle changes will present challenges that need to be better addressed in the Final Scoping plan.

Nuclear generation is an emissions free, reliable resource with 24/7 availability and low lifecycle energy production costs that also lacks many of the challenges associated with reliance on intermittent resources or the grid-side investments needed to enable them. The NYISO Power Trends 2022 Report projects that nuclear generation will contribute approximately 9% of winter energy production statewide in 2040. While the Scoping Plan encourages further consideration of nuclear subsidies prior to the end of the Zero Emissions Credit program in 2029, it lacks any evaluation of expanding nuclear generation as a tool in meeting CLCPA goals. Development of nuclear energy in New York State should be considered in combination with other emissions-free or net-zero emissions technologies. The decision on whether to move forward with such development should be based on a transparent benefit cost analysis that includes a holistic assessment of safety and environmental factors.

Conclusion

Central Hudson recognizes the urgent need to take significant actions in support of the State's clean energy transformation. We also appreciate the challenge that has been put before the Climate Action Council in developing a comprehensive plan that can effectively achieve the most aggressive clean energy targets in the nation in such a short timeframe. We stand ready to work with members of the Climate Action Council, policy makers, and legislators to implement solutions that adequately balance climate objectives with the energy needs of New Yorkers. Navigating this transformation effectively is essential to protect the environment, the State's economy, and the health and well-being of all New Yorkers. Central Hudson urges the Climate Action Council to take the above recommendations into account when developing the Final Scoping Plan.

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Respectfully Submitted,

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