

February 18, 2021

VIA ELECTRONIC MAIL

EEHPanel@nyserda.ny.gov

Commissioner RuthAnne Visnauskas
Chair, Energy Efficiency and Housing Advisory Panel
Of The Climate Action Council

RE: Comments of the Utility Consultation Group on the Energy Efficiency and Housing Advisory Panel's Recommendations to Substantially Reduce Greenhouse Gas Emissions from the Building Sector

Dear Chair Visnauskas,

On behalf of the Utility Consultation Group (“UCG”),¹ please accept the following comments for consideration as the Energy Efficiency and Housing Panel (the “EE&H Panel”) continues to prepare its policy recommendations for the Climate Action Council (the “CAC”). More specifically, and as solicited by the EE&H Panel, these comments outline certain recommended modifications to the EE&H Panel’s “preliminary draft recommendations to meet New York’s [Climate Leadership & Community Protection Act (‘CLCPA’)] goals in the buildings sector” as presented at a public forum on February 4, 2021.² Consistent with the UCG’s stated and continued support of New York’s clean energy and climate goals, these comments build on their prior commitment to be leaders in working toward a cleaner energy system with reduced greenhouse gas emissions.

I. The UCG Supports The State’s Clean Energy And Climate Goals

The State has recognized the value that New York’s investor-owned utilities can bring to achieve the State’s clean energy and climate goals, including the CLCPA targets.³ The UCG already provides that value and plays key roles in administering energy-efficiency programs, providing clean energy offerings to customers, including heating electrification offerings from some of the UCG, and, through those efforts, avoiding the emissions of many million tons of

¹ For purposes of these comments, the UCG includes the following: The Brooklyn Union Gas Company d/b/a National Grid NY; Central Hudson Gas & Electric Corporation; Consolidated Edison Company of New York, Inc.; KeySpan Gas East Corporation d/b/a National Grid; Municipal Electric Utilities Association; National Fuel Gas Distribution Corporation; New York State Electric & Gas Corporation; Niagara Mohawk Power Corporation d/b/a National Grid; Orange and Rockland Utilities, Inc.; and Rochester Gas & Electric Corporation.

² Energy Efficiency and Housing: Public Engagement Session Presentation (Dated Feb. 4, 2021), available at: <https://climate.ny.gov/-/media/CLCPA/Files/2021-02-04-EEH-Public-Engagement-Session.pdf>, at 21 (requesting a variety of feedback on the EE&H Panel’s recommendations, including “recommendations you would like to see the Panel modify? Or Drop?” and any concerns about the draft recommendations).

³ See e.g. Chapter 58 (Part JJJ) of the laws of 2020, § 7 (2) (the “Accelerated Renewable Energy Growth and Community Benefit Act”) (calling upon the New York State Public Service Commission (the “PSC”), in consultation with, among others, investor-owned utilities, to conduct a comprehensive study of the State’s bulk, distribution, and local electric transmission infrastructure).

greenhouse gases over the past decade. The UCG remains committed to this longstanding role and continue to work collaboratively with the State and the CAC and its advisory panels, thereby increasing the likelihood that the CLCPA clean energy and climate goals will be met in a timely, reliable and cost-effective manner.

To that end, the UCG supports efforts to allow their customers to benefit from the transition to a cleaner energy future and agree that resources should be provided to allow greater opportunities for participation in energy-efficiency programs and access to low- and no-carbon energy alternatives including heating electrification offerings.

II. EE&H Panel Draft Recommendations Designed To Overcome Financial, Economic, and Awareness Obstacles To Clean Energy Are Appropriately Seeing The Barriers From The Customer's Perspective

The UCG understands that the state is focusing on deep energy efficiency retrofits and electrification as two of the key strategies to lowering greenhouse gas emissions from buildings. Critical to customer acceptance of these and other techniques and technologies will be addressing barriers from the customer's perspective. The UCG supports taking steps to lower the near-term adoption cost of these and other low- and no-carbon technologies, some of which are included in the EE&H Panel recommendations, including publishing 'how-to' case studies of heating electrification for many different building typologies, and providing incentives to support energy efficiency, electrification, including Air Source Heat Pumps, hybrid heating systems and other low- and no- carbon measures. More work may be needed to identify sources of funding that can help to ease the transition for New Yorkers and lower costs, specifically to make the transition economically attractive from the customer's perspective. We encourage the state to support efforts that can lower energy costs, such as modifying the property tax treatment of utility infrastructure investments (particularly clean energy-focused investments like the ones addressed herein and by the EE&H Panel), providing state funds, and joining together with other states to seek federal funding to support this transition.

III. In Light Of Potential Impacts On Low-Moderate Income Customers, The EE&H Panel Should Pause Recommending Actions That Would Constrain Customers From Installing Natural Gas Equipment In Buildings Until The Study Proposed By The EE&H Panel To Consider The Impact Of A Clean Energy Model On These Customers, Safety, Reliability, And Affordability Is Completed

New Yorkers have a wide variety of energy needs associated with the buildings in which they live and work. These energy needs vary based on, among other factors, the types of buildings (*e.g.*, residential versus commercial) and their location within such a geographically diverse state. As a result, the UCG is focusing on identifying the various ways their customers will be affected by switching the fuel that provides their heat, powers their cooking appliances, and effectuates industrial processes. For example, the UCG and other stakeholders have studied and continue to study whether and how the older buildings that are prevalent throughout the State may be retrofitted to accommodate electric heating because these building typologies can prove particularly challenging and expensive, compounding the economic struggles faced by Low-Moderate-Income ("LMI") customers and property owners in disadvantaged communities.

In addition to acknowledging high up-front conversion costs, the New York State Energy Research and Development Authority (“NYSERDA”) noted other barriers to be overcome for electrification to proliferate, including the “lack of awareness among consumers and lack of market infrastructure”⁴ Both of these limitations will have the potential to disproportionately impact LMI customers, especially regarding access to the information necessary to comply with heating electrification policies. NYSERDA noted that the affordability of natural gas makes it a more economic option compared to electrification among residents for home heating and hot water.⁵

These energy needs and conversion costs must be better understood, and prescriptive policies that limit or eliminate access to natural gas or seek to raise the cost of gas service should be thoroughly considered because they may have unintended consequences such as unprecedented and unmitigated impacts on New Yorkers, particularly LMI customers. Because of the complexity of this transition, the EE&H Panel is proposing a recommendation to perform a planning study to examine how to manage the coordination of new and existing technologies as the state moves to a cleaner energy model, with particular emphasis on LMI customers, safety, reliability and affordability; the UCG strongly supports performing such a study. Further, if not done in a thoughtful and measured manner, these types of policies may result in unequal access to energy supplies based on an individual customer’s financial wherewithal. For these reasons, the UCG believes that sufficient information must first be developed before customers are constrained from installing natural gas equipment in the building sector; proposing such constraints should be paused until the results of the planning study recommended by the EE&H Panel are available.

IV. The EE&H Panel Recommends The Advancement Of New Technologies Through R&D And Demonstrations To Achieve CLCPA Targets, And Should Consider Inclusion of Technologies That Can Leverage Existing, Reliable Natural Gas Infrastructure In Those Technology Development Roadmaps

The EE&H Panel includes a draft recommendation to support R&D and demonstration projects to advance the reduction of greenhouse gas emissions from buildings, but do not mention R&D or demonstration projects that could leverage the significant investments made in the gas distribution systems in the state. Even as New York customers use less natural gas, the existing gas transmission and distribution system is a valuable asset that will remain in place and enable a reliable and resilient energy pathway, particularly in “hard-to-electrify use-cases.” Further, as recent third-party studies of the potential approaches to achieve the State’s 2040 net zero carbon emissions goal for the electric generation sector have noted, having some form of low- or no-carbon renewable gaseous fuel (*e.g.*, renewable natural gas [“RNG”] and/or green hydrogen produced from renewable electricity [“hydrogen”]) that is delivered through existing natural gas infrastructure will reduce the total cost of achieving the 2040 goal, thereby significantly increasing the cost effectiveness of the State’s clean energy and climate efforts, along with other benefits such as electric system reliability and resiliency.⁶ Moreover, the Department of Public Service Staff

⁴ NYSERDA, *Toward a Clean Energy Future: Strategic Outlook 2021-2024* (Released Feb. 2021), available at: <https://www.nyserdanyc.gov/-/media/Files/About/Strategic-Plan/strategic-outlook.pdf>, at 49 (the “Strategic Plan”).

⁵ NYSERDA has also noted that the affordability of natural gas makes it favorable among business and industrial users where natural gas’s ability to produce high-quality and high heat for process applications is prized and where there are few or no commercially available electric solutions available on the market.

⁶ See *e.g.* Energy + Environmental Economics, *New York State Decarbonization Pathways Analysis, Summary of Draft Findings* (Dated June 24, 2020), available at: <https://climate.ny.gov/Meetings-and-Materials> (Last Accessed Feb. 15,

(“Staff”) recently issued a gas system planning proposal that details Staff’s similar belief that existing natural gas infrastructure will continue to have a purpose in the State’s energy future, including for the transport of RNG.⁷

Supported by these studies and the Staff proposal, the EE&H Panel should consider and recommend the cost-saving measures associated with the use of existing natural gas infrastructure to deliver low- or no-carbon renewable fuels to customers. The existing gas infrastructure could enable innovative solutions such as low- or no-carbon renewable fuels like RNG⁸ and green hydrogen⁹ via the proven natural gas infrastructure and related technologies like hybrid high efficiency gas furnace/electric air source heat pump systems to timely and cost-effectively meet the State’s clean energy and climate goals. The hybrid approach also affords increased energy system resiliency, particularly for emergency heat during widespread storm or weather events when hybrid solutions systems are coupled with battery storage and/or fuel cell power capabilities. Indeed, the consultants Energy + Environmental Economics have recognized the problems that could arise as a result of precluding New York from incorporating new low- and no-carbon fuel technologies into its energy mix, including impacts on system reliability and higher energy prices.¹⁰ To encourage the continued development of these and other innovative technologies, the EE&H Panel should recommend the advancement of low- and no-carbon gas technologies and further recommend that the State fund or otherwise support those technologies to advance

2021) (the “E3 Report Presentation”); Energy + Environmental Economics, *Pathways to Deep Decarbonization in New York State* (Dated June 24, 2020), available at: <https://climate.ny.gov/Climate-Resources> (Last Accessed Feb. 15, 2020) (the “E3 Report”); The Brattle Group, *New York’s Evolution to a Zero Emission Power System—Modeling Operations and Investment through 2040 Including Alternative Scenarios* (Dated June 22, 2020), available at: <https://www.nyiso.com/documents/20142/13245925/Brattle%20New%20York%20Electric%20Grid%20Evolution%20Study%20-%20June%202020.pdf/69397029-ffed-6fa9-cff8-c49240eb6f9d> (Last Accessed Feb. 15, 2021) (the “Brattle Report”). This result follows from a reduced need for total additional renewable generation. Additionally, a balance of lower emission options within the home, including keeping natural gas and the natural gas system in the mix, will ensure continued reliability and can help mitigate transmission buildout to the level of a winter heating peak and preserve needed resilience benefits for consumers in cold climates.

⁷ See Case 20-G-0131, *Proceeding on Motion of the Commission in Regard to Gas Planning Procedures*, Staff Gas System Planning Process Proposal (Filed Feb. 12, 2021), at 2, 14-15, 17, and 27.

⁸ Currently, it is estimated that New York has an annual RNG technical production capacity of 271 Bcf (*see* American Gas Foundation, *Renewable Sources of Natural Gas: Supply and Emissions Reduction Assessment*, at 68).

⁹ The short-term peaking of intermittent renewable generation presents the opportunity to capitalize on the generation and storage of green hydrogen to “help meet GHG reduction goals and address the problematic curtailments and depressed power prices that can arise due to overproduction of renewables.” (Utility Dive, *Propelling the transition: Green hydrogen could be the final piece in a zero-emissions future* [Dated Aug. 17, 2020], available at: <https://www.utilitydive.com/news/propelling-the-transition-green-hydrogen-could-be-the-final-piece-in-a-zer/581025/> [Last Accessed Feb. 15, 2021]).

¹⁰ See *e.g.* E3 Report, at 45. For example, E3’s report and presentation to the CAC last year concluded with the important acknowledgment that flexibility along multiple heating sources (*i.e.*, RNG and electric) is key to maintaining system reliability and reducing cost, particularly when faced with the difficult challenge during New York’s winter periods of high heating loads and low renewable energy production (E3 Report, at 45).

decarbonization goals in line with recent efforts at the federal level¹¹ and globally.¹² In fact, such recommendations would be consistent with ongoing research partnerships in New York.¹³

A recommendation that results in an “electrify-everything” policy has the potential to drive up the cost of new generation and associated electric transmission and would necessitate a corresponding proliferation of energy storage to support system reliability if there are extended periods when the output of renewable generation is very low. For example, installing the amount of battery energy storage needed to maintain system reliability during extended seasonal mismatches between energy demand and supply would require massive and costly investments in batteries and associated storage projects. In contrast, and as outlined above, adapting existing natural gas delivery systems to accommodate RNG or hydrogen for delivery to dispatchable power plants or to dual-fuel electric/low-carbon fuel heat pumps at customer premises may be a more feasible solution during a period of low renewable generation. Additionally, for some hard-to-electrify segments (*e.g.*, specific industrial processes; older, historic buildings prevalent in New York City), access to a low- or no-carbon fuel delivered through a modified natural gas delivery system may be the most timely and cost-effective path to decarbonization.

In support of an EE&H Panel recommendation to advance R&D and demonstration projects related to low- and no-carbon gas technologies, the UCG intends to expand their ongoing efforts to support customers in reducing their fossil fuel footprint through energy-efficiency programs that reduce natural gas use and prepare customers for efficient, well-planned low- or no-carbon initiatives through, for example, insulation and building envelope measures. This will allow tailored, flexible approaches to timely and cost-effectively achieve CLCPA targets across the State’s diverse building stock and different socioeconomic classes and geographic locations.

¹¹ The United States Department of Energy recently allocated more than \$10 million to support a new industry collaborative, the HyBlend Project, to support accelerated research on blending hydrogen into natural gas distribution systems. The funds will primarily be allocated to six national laboratories, each with its own area of focus (*see* <https://www.nrel.gov/news/program/2020/hyblend-project-to-accelerate-potential-for-blending-hydrogen-in-natural-gas-pipelines.html> [last accessed February 18, 2021]). National Grid is involved in this project, as well as several other energy companies. The project’s high-level objectives include evaluation of: (i) hydrogen compatibility of pipeline materials, (ii) life-cycle emissions analysis of technologies; and (iii) techno-economic analysis to quantify costs.

¹² For example, the European Commission has issued a strategic road map with ambitious targets for hydrogen in Europe, acknowledging that hydrogen can be used as a feedstock, a fuel or an energy carrier and storage, and has many possible applications across industry, transport, power and building sectors (*see* https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf?utm_source=emailmarketing&utm_medium=email&utm_campaign=hydrogen_strategy [last accessed February 18, 2021]).

¹³ For example, NYSERDA, New York’s Stony Brook University, and National Grid are currently working on a first-of-its-kind demonstration in the United States that will include the production of hydrogen, by zero- or negative-carbon means, to be utilized for storage and power to gas. This project will produce hydrogen for use in National Grid’s gas distribution system, and any excess hydrogen produced will be sold to generate revenues to offset the costs incurred. Up to 10% of the hydrogen from the project can be blended with RNG for use as well. In addition, the Center on Global Energy Policy at Columbia University is partnering with National Grid on a new hydrogen program that will tackle three core aspects of hydrogen development and deployment: (i) technology and economics, (ii) use cases and applications, and (iii) policy design. The program will engage business, industry, and government leaders by creating a new technology lab and developing various hydrogen roadmaps.

V. Conclusion

The UCG can be key allies in achieving the state's decarbonization goals, and are already making great strides through utility-implemented energy efficiency programs. If electrification as one of the strategies to achieve decarbonization is to succeed, the state needs to consider the barriers to such investments from the perspective of the customer, and many of the recommendations from the EE&H Panel adopt a customer-centric approach. The EE&H Panel recommendation to undertake a holistic study to examine the potential disparate and significant impact that the clean energy transition could have on LMI customers, and the exploration of R&D and demonstration projects associated with low- or no-carbon emerging gas technologies that would allow for the continued use of existing, cost-effective, and reliable natural gas infrastructure to meet the CLCPA targets are valuable actions. The planning study related to the clean energy transition should be completed before setting forth recommendations that would constrain customers from installing natural gas equipment. In the meantime, the UCG will remain at the forefront of supporting and implementing New York's clean energy and climate goals.

The UCG appreciates the opportunity to provide these comments and welcome any questions or further discussion.

Sincerely,

**The Brooklyn Union Gas Company
d/b/a National Grid NY; KeySpan
Gas East Corporation d/b/a National
Grid; Niagara Mohawk Power
Corporation d/b/a National Grid**

/s/ Margaret Janzen

Margaret Janzen
Director – Strategy & Regulation
Niagara Mohawk Power Corporation
d/b/a National Grid
175 East Old country road
Hicksville, NY 11566
(516) 545-3292

**Central Hudson Gas & Electric
Corporation**

/s/ Anthony Campagiorni, Esq.

Anthony Campagiorni, Esq.
Vice-President, Customer Services and Gas
Operations

Central Hudson Gas & Electric Corporation
284 South Avenue
Poughkeepsie, New York 12601
(845) 486-5201
(914) 589-6146

Consolidated Edison Company of New York, Inc.

/s/ Christopher Raup

Christopher Raup
Director, State Regulatory Affairs
Consolidated Edison Company of New York, Inc.
4 Irving Place
New York, NY 10009
(212) 460-3651

Municipal Electric Utilities Association

/s/ Christopher Wentlent

Christopher Wentlent
Consultant, MEUA
Municipal Electric Utilities Association
6652 Hammersmith Drive
East Syracuse, NY 13057
(315) 453-7851

National Fuel Gas Distribution Corporation

/s/ Joseph Del Vecchio

Joseph Del Vecchio
Vice President & Chief Regulatory Counsel
National Fuel Gas Distribution Corporation
6363 Main Street
Williamsville, NY 14221-5887
(716) 857-7237

**New York State Electric & Gas
Corporation and
Rochester Gas & Electric Corporation**

/s/ Joseph Syta

Joseph Syta
Vice President, Controller & Treasurer
New York State Electric & Gas Corporation
and
Rochester Gas & Electric Corporation
755 Brooks Ave
Rochester, NY 14619
(585) 342-0802

Orange and Rockland Utilities, Inc.

/s/ Orville Cocking

Orville Cocking
Vice President – Operations
Orange & Rockland
390 West Route 59
Spring Valley, NY 10977