September 15, 2023

Luly Massaro Clerk, Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

Dear Commissioners:

We the undersigned stakeholders, representing environmental advocates and renewable energy developers, customers and other energy service providers, submit the following comments regarding Public Utilities Commission ("PUC" or the "Commission") Docket No. 22-01-NG (the "Future of Gas" docket), and what in our view must be accomplished in this docket to make the process worthwhile and successful.

The purpose of this docket is to investigate the future of Rhode Island's gas distribution system in light of the Act on Climate, which requires Rhode Island to reduce its greenhouse gas ("GHG") emissions 10% below 1990 levels by 2020; 45% by 2030; 80% by 2040; and achieve net-zero emissions by 2050. Reducing and ultimately eliminating emissions from Rhode Island's heating sector and doing so in a manner that minimizes costs to utility consumers and the state, is a formidable policy challenge.

We thank the Commission for your efforts to proactively plan for the transformation of Rhode Island's heating sector in light of the Act on Climate, and for your consideration of these comments.

Process and Design of Pathways Analysis

Stakeholder group materials should be circulated well in advance of meetings.

Members of the stakeholder group should receive presentations and other materials well ahead of stakeholder committee meetings. This docket involves complicated questions of policy, including comparisons of different potential policy approaches in terms of economic and emissions impacts. Stakeholders come from a variety of backgrounds and come to this process with varying levels of knowledge on topics relevant to this docket. We are able to provide better and more useful input into the process when we have sufficient time to read and consider any materials that will be discussed at meetings. We thank the facilitators for their attention to this issue, and the progress that has been made in distributing materials further in advance of meetings.

The Commission should apply lessons learned from Massachusetts.

The Commission should apply the lessons learned from Massachusetts' Future of Gas Docket.² In the Massachusetts docket, gas distribution companies were given too much control over the process, resulting in a biased report and the need to essentially "reboot" the docket in 2023. While gas distribution companies like Rhode Island Energy have expertise in gas utility

² Mass. Dep't of Pub. Utils. Docket No. 20-80.

¹ R.I. Gen. Laws § 42-6.2-2.

operation, they are publicly traded corporations with strong incentives to increase profit for their shareholders. They cannot be allowed to lead the design of their own regulatory scheme and must be treated as just one of many important stakeholders. In Rhode Island's Future of Gas docket, there is risk of undue utility influence over the pathways analysis, which is being conducted by a consultant hired and paid for by Rhode Island Energy.

The Commission, Commission staff, and facilitators have indicated that they are aware of the flaws with the Massachusetts process and intend to apply lessons learned to this proceeding. We appreciate these comments and ask that the Commission be vigilant in its oversight of the pathways analysis in order to ensure that we avoid the pitfalls of the Massachusetts process.

The assumptions underlying modeled pathways must be made clear.

Where a scenario is not consistent with existing state energy policy, or achieving a pathway modeled in a given case would require changes to statute or regulation, the analysis must be explicit about that assumption and the required change. To the extent possible the modeled pathways should also be contextualized within the RI State Energy Plan³ and the upcoming update to the state's Greenhouse Gas Emissions Reduction Plan.

If a modeled pathway is not consistent with the state's GHG emissions reduction mandates—either because it explicitly does not achieve net-zero emissions by 2050 or relies on unrealistic modelling assumptions to reach net-zero by 2050—it is counterproductive to the PUC making essential and timely decisions. Pathways that rely on unproven gas alternatives should make clear their assumptions regarding the technology, supply, and provenance of such fuels. Assumptions about how much emissions reductions should be achieved in the transportation sector must be held constant across all scenarios to enable an apples-to-apples comparison. Accelerating transportation emissions reductions in one pathway but not another must not be used as a method to obscure insufficient emissions reductions from the gas sector.

Equity must be included in modelling and comparing different policy pathways.

All Rhode Island residents have a right to a clean and healthy environment. Yet, too often, the health impacts and other burdens of fossil fuel use and fossil fuel infrastructure have fallen disproportionately on communities of color, low-income neighborhoods, and limited English proficient communities. As we decarbonize our heating sector and wind down our gas distribution system, there is a risk that these communities—already the most burdened by energy costs⁴—will be left paying even higher costs to support a shrinking gas system that they can least afford to transition away from.

³ R.I. Office of Energy Res., *Energy 2035: Rhode Island State Energy Plan* (2015), *available at* https://planning.ri.gov/sites/g/files/xkgbur826/files/documents/LU/energy/energy15.pdf.

⁴ Energy burden is defined as the percentage of gross household income spent on energy costs. According to the U.S. Department of Energy, the national average energy burden for low-income households is 8.6%, three times higher than for non-low-income households, which is estimated at 3%. *See* Dep't of Energy, *Low-Income Community Energy Solutions* (last visited Sep. 14, 2023), https://www.energy.gov/scep/slsc/low-income-community-energy-solutions.

Equity must be centered in policies and pathways to net-zero, reversing the disproportionate burdens on frontline communities, and developing partnerships with these communities so that they can lead the transition to clean heating at affordable prices. The pathways must account for the differences between customers in different classes and reflect the impact of each scenario on customers in each class or category, including low- to moderate-income utility consumers and renters. The economic, environmental, and equity benefits of the transition to clean heat must all be properly accounted for in the proposed comprehensive cost benefit analysis for this docket.

However, while it is illustrative to see how customer energy bills would change across scenarios over time under current policies and regulatory approach, it's also worth noting that the policies and regulatory approach for utility cost recovery and cost allocation can, and likely will, change over time. Any analysis of future customer energy bills under the current policy and regulatory paradigm should make this point explicitly clear—there are an unlimited number of ways to allocate the costs of the building decarbonization transition and the current regulatory approach is not set in stone.

Docket Outcomes

Recommendations should be sufficient to achieve a pathway consistent with state policy and identify clear responsibilities for action.

Recommendations included in a final report should be actionable, with both a clearly identified entity that would act and a clear timeline for action. In the case where it is not clear that a recommendation can be executed (e.g., it depends on federal action or action by another entity outside of Rhode Island), the report should identify the fallbacks that would be needed to achieve the proposed pathway.

Where possible, recommendations should be measurable and paired with the appropriate metrics. The report should also present the potential limits or obstacles to meeting the recommendations (and what the source of that barrier is, such as legislative, shareholder, regulator, etc.).

The Commission must act quickly and independently on recommended action items within its control.

When a final report is produced in this docket, it must be used as a roadmap for action and not become another government report that is produced only to sit on a shelf. Rhode Island must work urgently to decarbonize our heating sector, as every day that we wait to act increases the size of the challenge. While heating sector decarbonization is a challenge that will require action from the Governor, many other executive branch agencies, and the General Assembly, the Commission will play a key role in facilitating the necessary transformation as the regulator of the state's public utilities.

Under the Act on Climate, addressing climate impacts falls within the "powers, duties, and obligations" of all state agencies, and each agency is required to "exercise among its purposes in the exercise of its existing authority" the purposes of the Act on Climate "pertaining to climate change mitigation, adaptation, and resilience in so far as climate change affects its mission,

duties, responsibilities, projects, or programs."⁵ The law further grants each agency "the authority to promulgate rules and regulations necessary to meet the greenhouse gas emission reduction mandate."⁶

The Commission is already empowered—and required—to implement the Act on Climate. It should therefore act promptly to implement Future of Gas policy recommendations that fall under its jurisdiction without waiting for direction from the legislature or the Governor. In addition to exercise of its rulemaking authority, the Commission should take all possible steps under the current statutory and regulatory scheme to ensure that recurring gas proceedings like forecasting and supply planning, long term contracts for gas supply, Infrastructure, Safety, and Reliability planning, and rate cases are oriented toward an orderly winding down of the gas distribution system rather than continued expansion.

The Commission must work with the General Assembly and other state agencies to implement other recommended action items within its purview.

If the final report recommends actions that align with the responsibilities of the PUC but exceed its current jurisdiction, it is incumbent upon the Commission to actively advocate for the passage of legislation by the General Assembly granting them the requisite authority to carry out these recommended actions.

Additionally, it is crucial for the PUC to collaborate with Rhode Island's Executive Climate Change Coordinating Council ("EC4") rather than operating in isolation. Concurrently with the ongoing docket proceedings, the EC4 is engaged in developing their 2025 Climate Strategy as well as a Priority Climate Action Plan for EPA grant funding, both of which will include policy actions to meet the Act on Climate. Therefore, it is essential for the PUC to uphold ongoing communication with the EC4 to ensure that policy recommendations from both entities are in sync.

Policies must be consistent with interim and final Act on Climate mandates.

The emissions reduction requirements of the Act on Climate are mandatory and enforceable. The purpose of this proceeding therefore must be to determine the best policy pathways to achieving those reductions, not to determine whether we will achieve those reductions.

In addition to requiring net-zero emissions by 2050, the Act on Climate requires that interim levels of emissions reductions be achieved by 2030 and 2040. It's important that policy actions are consistent with each mandate. For instance, policies that enable the achievement of the 2030 mandate but make it much more difficult to achieve the 2050 mandate are not helpful.

Evidence indicates that electrification is the best path forward.

Experts in decarbonization agree that widespread, aggressive electrification is the best path forward to cost effective achievement of elimination of GHG emissions.⁷ In comparison to

⁵ R.I. Gen. Laws § 42-6.2-8.

⁶ *Id*.

⁷ Eric Larson et al., *Net Zero America: Potential Pathways, Infrastructure, and Impacts* (Oct. 2021), *available at* https://netzeroamerica.princeton.edu/img/Princeton%20NZA%20FINAL%20REPORT%20SUMMARY%20(29Oct

pathways which continue reliance on methane and hydrogen, use of air- and ground-source heat pumps has been shown to be the least-cost solution to achieving net-zero GHG emissions.⁸

Biomethane (sometimes called "renewable natural gas" or "RNG") is not a truly decarbonized gas, and there is little cost-effective supply. First, methane is a potent GHG regardless of the source. Further, there is insufficient evidence to support the claim that biomethane is a zero-emissions fuel over the course of its lifecycle. As a potent GHG, even small leaks of methane are significant. Methane is an extremely potent GHG, with a Global Warming Potential 86 times that of carbon dioxide per unit mass in the short term. In fact, research has shown that even with ongoing efforts to replace gas distribution infrastructure, atmospheric methane concentrations have not decreased, suggesting that end-use appliances and technology are responsible for a more significant amount of leaks than anticipated 1213

Even if non-fossil derived methane could be captured and delivered to the point of combustion without leaking, there is no indication that sufficient cost-effective supply capacity exists. There remain significant concerns as to the actual feasibility of incorporating biomethane as a primary energy source given the lack of quantity of such fuel. While there may be a role for hydrogen in limited circumstances, the fact remains that it is simply too volatile a fuel to pipe throughout our streets and into our homes. Any limited applications for hydrogen will have to be limited to those in sectors and industries which cannot be electrified.

GHG emissions accounting is evolving as new technologies and methodologies for evaluating emissions come about. As it pertains to hydrogen, emissions accounting must consider the inputs required to produce hydrogen (including electricity and/or fossil fuels) and the outputs of the hydrogen production process (including GHG emissions). Further, cost-effective energy planning must identify and account for the required infrastructure for the production, processing, and storage of hydrogen on the appropriate timescale for each scenario and for the required pipeline infrastructure for hydrogen, including which—if any—natural gas infrastructure is

⁸ Ben Haley et al., *Deep Decarbonization Pathways Analysis for Washington State* (Dec. 2016), *available at* https://www.governor.wa.gov/sites/default/files/Deep_Decarbonization_Pathways_Analysis_for_Washington_State.pdf.

^{2021).}pdf.

⁹ U.S. Env't Prot. Agency, *Overview of Greenhouse Gases* (May 16, 2022), https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane.

¹⁰ Maryann Sargent et al., *Majority of US Urban Natural Gas Emissions Unaccounted for in Inventories* (Oct. 2021), *available at* https://www.pnas.org/doi/full/10.1073/pnas.2105804118.

¹¹ See Stockholm Envtl. Inst. & Brown Univ. Climate and Dev. Lab, *Deeper Decarbonization in the Ocean State: The 2019 Rhode Island Greenhouse Gas Reduction Study* 20–23 (2019) (indicating that Rhode Island's GHG emissions inventories may be drastically underestimating emissions from methane leaks from the gas distribution system), *available at* https://www.sei.org/wp-content/uploads/2019/09/deeper-decarbonization-in-the-ocean-state.pdf.

¹³ Maryann Sargent et al., *supra*, note 9.

¹⁴ The American Gas Foundation and ICF's optimistic High Resource Potential case estimates a nationwide biomethane supply limit of about 3,800 TBTU/year, which is about 80 percent of recent US residential methane consumption and less than one quarter of the methane used in buildings and industry. *See* Am. Gas Found., *Renewable Sources of Natual Gas* (Dec. 2019), *available at* https://www.gasfoundation.org/wp-content/uploads/2019/12/AGF-2019-RNG-Study-Full-Report-FINAL-12-18-19.pdf.

repurposed for carrying hydrogen, as well as associated investments required for that infrastructure. ¹⁵ For those applications which cannot be electrified, hydrogen should be produced only from clean resources and only from excess clean energy left over after other needs are met.

We thank the Commission for their efforts to date in working toward a path to Rhode Island's clean energy future in Docket No. 22-01-NG. We are confident that, with additional work and incorporation of the principles recommended herein, together we will be able to ensure a path forward for Rhode Island's building sector which will enable the State to achieve our mandate to eliminate GHG emissions in a just and economic manner. We look forward to the next phases of this matter.

Sincerely,

James Crowley, Conservation Law Foundation Amanda Barker, Green Energy Consumers Alliance Sue AnderBois, The Nature Conservancy Sarah Krame, Sierra Club Peter Trafton, Environment Council of Rhode Island Ben Butterworth and Emily Koo, Acadia Center Seth Handy, Handy Law

Cc: Matt Nelson and Michelle Pham, Apex Analytics Docket 22-01-NG Service List

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¹⁵ Asa Hopkins et al., *Scoping a Future of Gas Study* 10 (Jan. 2021), *available at* https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/13118067.