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June 14, 2021

Mark D. Marini, Secretary
Sarah Smegal, Hearing Officer
Massachusetts Department of Public Utilities
One South Station, 5th Floor
Boston, Massachusetts 02110

Via Email: dpu.efiling@mass.gov

Re: D.P.U. 20-80, Investigation by the Department of Public Utilities on its Own Motion into the Role of Gas Local Distribution Companies as the Commonwealth Achieves its Target 2050 Climate Goals

Dear Secretary Marini and Hearing Officer Smegal:

On behalf of the undersigned cities, towns, municipal agencies and officials (collectively, “Municipalities”) and the undersigned regional planning associations, the Emmett Environmental Law & Policy Clinic respectfully submits these comments regarding the Department of Public Utilities (“DPU”) investigation into the role of local gas distribution companies (“LDCs”) as the Commonwealth achieves its 2050 climate mandates (DPU docket 20-80).¹ Innovative thinking, diverse expertise, and multiple perspectives are required to ensure a positive transition from natural gas to a low-carbon future. This proceeding provides an opportunity to begin a meaningful dialogue and identify strategies for adapting the roles that natural gas and LDCs will play in sustaining affordable, reliable, safe and equitable access to energy while meeting the Commonwealth’s greenhouse gas (“GHG”) emission reductions mandates.

Cities and town across Massachusetts are committed to reducing greenhouse gas emissions, with targets that include reaching net zero and 80% reductions by 2050. Even without such commitments, municipalities are critical partners in achieving the Commonwealth’s net zero mandate. Reducing GHG emissions from the building sector in particular implicates the interests of every community, both as direct energy consumers and as representatives of, and advocates for, their inhabitants. Towns and cities are on the front line with respect to engaging residents, permitting energy infrastructure projects and providing many essential services. These obligations lend municipalities a key role in making sure that municipal services, individuals and

¹ Massachusetts is a leader in setting ambitious, and binding, greenhouse gas (“GHG”) emission reduction targets, including a commitment to reduce emissions at least 85% below 1990 levels, and to achieve net zero emissions, by 2050.

businesses can function safely, reliably and equitably during the transition to a low or no-carbon energy future.

For reasons such as this, neither the DPU nor the LDCs should attempt to devise and manage this transition on their own; they need to coordinate with municipalities. Local and regional governments are at the nexus of many issues that will be addressed in this proceeding, including assuring affordable housing stock, reducing environmental and energy justice burdens, scheduling infrastructure projects, promoting public health, and reducing GHG emissions. Municipalities therefore have a unique interest in, and perspective on, this proceeding and should be engaged as partners in promoting and stewarding the transition of buildings to clean energy sources.

These comments outline several framing principles that should be integrated into this investigation's analysis. As discussed in more detail below:

1. Municipalities should be treated as the critical partners they are in promoting and stewarding an orderly transition of local building stocks to alternative energy sources in light of their special interests in this proceeding, including as drivers of decarbonization, hosts of thermal energy infrastructure, representatives of residents and local health and safety service providers.
2. This proceeding is an opportunity to layout a comprehensive roadmap, including pilot and demonstration projects, for an orderly, cost-effective and equitable transition to decarbonized natural gas and building sectors. Existing and future investments in thermal infrastructure should be proactively managed in accordance with medium- and long-term decarbonization schedules to maintain affordable, reliable, safe and equitable service to ratepayers. This could include consideration of mechanisms to pre-distribute anticipated future decommissioning or retirement costs over a longer temporal period to reduce impacts on ratepayers left at the "tail" of the gas system.
3. Modeling and other scenario planning should assume building decarbonization starts in the short- to medium-term and results in near full decarbonization of the building sector by 2050; and
4. The analysis of future pathways for natural gas and LDCs should not be constrained by today's laws but rather should envision "best" scenarios and, as needed, identify legal changes necessary to achieve them. The analysis should also consider impacts of legal changes that could constrain the operations of LDCs and use of thermal gas, such as changes in depreciation schedules and caps on sectoral GHG emissions.

Given that there has not been a formal stakeholder process to-date, this letter is not in response to a specific request for comments. To that end, the Municipalities respectfully request that DPU provide for meaningful opportunities for comment throughout this proceeding, including providing input on draft and final versions of any report prepared by consultants in this proceeding. To the extent that there are stakeholder meetings or informal consultations with

consultants, LDCs, DPU or others, the Municipalities request to be notified of such conversations and provided an opportunity to participate.

I. Municipalities Should be Considered Partners in Promoting and Stewarding an Orderly Transition of Local Building Stocks to Alternative Energy Sources

At least fifteen Massachusetts municipalities share the Commonwealth’s commitment to reach net zero emissions by 2050 and others are pursuing their own significant GHG emissions reductions, such as 80% below 1990 levels by 2050.² As reflected in recent laws and policies, achieving these goals will require reducing GHG emissions from all sectors of the economy, including the energy and building sectors.³

Meeting these state and local climate commitments will also require coordination and partnership between state agencies, LDCs, and municipalities, especially to promote building decarbonization while minimizing disruption to municipal infrastructure. For example, LDCs should consult with municipalities to identify locations for pilot and demonstration zero carbon energy projects, conduct community outreach and education, and distribute technical and financial assistance.

LDCs should also coordinate with municipalities when scheduling non-emergency work to minimize disruptions to municipal infrastructure. Energy infrastructure work, including replacing pipes, repairing leaks and adding bore holes for heat pumps, can disrupt municipal streets and sidewalks, with ripple effects for local emergency service providers, businesses, and residents. The LDCs should consider how they will coordinate disruptive work, such as street openings, with both regularly scheduled municipal activities, such as fixing potholes, and special projects, such as replacing water or sewer pipes. Such coordination will benefit residents and present opportunities for cost efficiencies.

II. The Proceeding Should Include Proactive Planning to Ensure Affordable, Safe, Reliable and Equitable Service to Public and Private Ratepayers Throughout the Decarbonization Process

This proceeding is an opportunity to envision and promote an orderly, cost-effective and equitable transition to decarbonized natural gas and building sectors. This will require proactive planning to address potential disruptions from (i) ratepayer base contractions, where conversions

² Examples of municipalities with net zero, carbon neutrality or other greenhouse gas emission reduction targets include, but are not limited to, Amherst, Arlington, Beverly, Boston, Braintree, Brookline, Cambridge, Chelsea, Concord, Everett, Lexington, Malden, Medford, Melrose, Natick, Newburyport, Newton, Northampton, Quincy, Revere, Somerville, Springfield, Watertown, Wellesley, Westborough, Winchester and Winthrop.

³ For example, the recently enacted Act Creating a Next Generation Roadmap for Massachusetts Climate Policy directed the Secretary of the Executive office of Energy and Environmental Affairs (“EOEEA”) to “adopt sector-based statewide greenhouse gas emissions sublimits” to achieve the state’s emissions reduction limits, including for the “commercial and industrial heating and cooling, residential heating and cooling” and “natural gas distribution and service” sectors. In addition, EOEEA’s 2050 Decarbonization Roadmap identified four energy-sector “transformation strategies” that will be key in any pathway to reaching net zero by 2050, including “transitioning buildings, vehicles, and other end uses away from consuming fossil fuels” and “producing zero and low-carbon energy supplies.”

to non-gas energy sources may leave a smaller number of consumers to shoulder larger shares of fixed system infrastructure and administrative costs, and (ii) the risk that LDCs' financial losses from stranded or unprofitable gas infrastructure will be passed on to ratepayers. These rate increases also raise equity concerns: if improving efficiency and transitioning to other fuel sources requires capital-intensive retrofits, such as appliance replacements or heating system conversions, wealthier households will be most able to exit the system, leaving lower-income consumers and communities to pay the remaining costs.

Addressing these twin dynamics will require forward and innovative thinking. This could include consideration of mechanisms to expand LDCs' business models to include provision of alternative zero carbon thermal energy services, reduce infrastructure costs parallel to ratebase contractions, and redistribute tail costs of transitioning the gas system across more ratepayers. As discussed below, consideration of these ideas, which are illustrative rather than exhaustive, should not be bound by what is required or allowed under existing laws.

The Proceeding Should Consider Alternative Business Models and Revenue Streams for LDCs

Providing renewable, non-GHG emitting thermal services could allow LDCs to maintain, and even grow, their ratepayer base, thus mitigating risks of departures from the gas system that result in high and inequitable costs. For example, LDCs could retain current gas consumers by replacing their gas service with individual building heat pumps or networked geothermal systems; the latter approach is one that LDCs are already planning to test via pilot projects. The Legislature has recognized the value of exploring such options, authorizing DPU to approve "pilot projects for the development of utility-scale renewable thermal energy."⁴ Municipalities are important partners in locating and generating support for such projects.

The Proceeding Should Consider Options for Reducing Fixed Costs of the Gas System

DPU and the LDCs should work now to reduce existing and future fixed costs of natural gas infrastructure to minimize any financial and equitable disruptions posed by cost recovery for stranded assets, particularly in scenarios where those costs will be spread across smaller ratepayer bases. With regards to existing infrastructure, the proceeding should consider metrics for assessing targeted decommissioning and other methods to "right-size" the natural gas system. One example of such right-sizing would be to identify and encourage system exit for consumers whose real cost of service significantly exceeds collected rates, allowing LDCs to retire the lengths of pipeline that serve them. Making these assessments early would allow incurred losses from early retirement to be distributed across the relatively large near-term ratepayer bases. Looking ahead, any new investments in gas infrastructure, including decisions whether to repair or replace pipelines (using Gas Safety Enhancement Program funds or other financing), should be informed by the Commonwealth's GHG emission reduction mandates, DPU's directive to reduce GHG emissions, and limits on GHG emissions from the building and natural gas sectors.

⁴ An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy, Section 99.

The Proceeding Should Consider How Existing and Future Funding Streams Can Support an Orderly Transition

In addition to managing avoidable late stage decarbonization costs, maintaining affordable long-term service may require efforts to spread “tail” costs temporally across more ratepayers. Some components of the natural gas system will need to be retired even if LDCs can re-purpose portions for alternative renewable, non-GHG emitting sources. If those costs are pushed off to the future, they could represent a large “tail” cost of the gas system, akin to a balloon payment at the end of the loan. Even for LDCs with a relatively stable or growing number of consumers, this could cause price spikes that impede affordability. Shrinking ratebases could further exacerbate this dynamic, leaving the last consumers on the gas system to shoulder disproportionate costs.

As part of this proceeding, DPU and the LDCs should model their costs, and timeframes, associated with meeting the Commonwealth’s decarbonization commitments. Using that data, this proceeding should develop proposals to reduce the threat of rate shocks, including mechanisms to shift “tail” costs in the transition forward in time to distribute those costs across more customers. Examples of financial tools to address loss reductions and temporal redistribution of costs include reduced returns on equity and accelerated depreciation for specific assets.

III. Independent Consultant Report and Other Analysis Should Be Premised Upon Assumptions of Near Full Building Sector Decarbonization

Significant reductions in the use of natural gas in the building sector will be required to meet the GHG emission targets set both by the Commonwealth and many municipalities. Therefore, any modeling or other assumptions regarding future conditions should be premised upon full, or near full, decarbonization of all segments of the building sector. Relatedly, the analysis in this proceeding should assume that such a transition will begin immediately, not years or even decades from now.

Net zero scenarios like the pipeline gas scenario in the Commonwealth’s 2050 decarbonization roadmap, which projects that gas will continue to comprise nearly half of all building energy use by 2050, should be given limited weight.⁵ Premising planning upon widespread natural gas use through mid-century would put state and municipal decarbonization commitments at risk. While the Commonwealth’s decarbonization requirements of net zero and 85% below 1990 levels by 2050 allows for *some* continued emitting activity in 2050, those emissions must be reserved for critical facilities and the hardest to abate activities.

Underestimating the pace or scope of building decarbonization could hamper strategies, such as long-term planning for rate adjustments to redistribute the costs of a shrinking consumer base, to maintain affordable, safe, reliable and equitable service. On the other hand, if decarbonization assumptions exceed the future reality of building sector decarbonization, any accrued extra costs can be spread across a larger rate base, thus reducing pricing impact on individual consumers.

⁵ Evolved Energy Research, *Energy Pathways to Deep Decarbonization: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study*, at 37.

IV. The Analysis of the Future Role of Natural Gas and LDCs Should Not be Constrained by Current Laws

This proceeding is an opportunity to envision the role that LDCs and natural gas will play in a net zero world. In doing so, the evaluation of pathways forward should assume that the laws and regulations that currently govern LDCs and thermal gas use will continue to evolve. This approach would allow the investigation to productively inform the Legislature's ongoing consideration of new legislation relevant to the future of natural gas the and role of LDCs.

Though complex, governance of the energy sector is not static, and has historically been informed and impacted by environmental and market objectives and law. Consider, for instance, DPU's 2008 order decoupling gas and electric utility revenues from the amount of energy delivered and the Electric Utility Restructuring Act of 1997's separation of generating facilities and delivery infrastructure ownership and creation of the Renewable Portfolio Standard. More recently, the Next-Generation Roadmap for Massachusetts Climate Policy Act included requirements for (i) DPU to prioritize equity, security, and greenhouse gas emissions reductions alongside traditional concerns about safety, affordability, and reliability in regulating service, (ii) EOEEA to adopt sectoral emissions sublimits for commercial, industrial, and residential heating and cooling, natural gas distribution and service, and industrial processes, and (iii) the Department of Energy Resources (DOER) to promulgate an opt-in net zero emissions stretch energy code.⁶

There will be additional changes. As just one example, the proposed Act Relative to the Future of Heat in the Commonwealth (S.2148) includes provisions that would: (i) provide alternative financing mechanisms, such as securitization, to fund transitions to non-emitting renewable thermal infrastructure; (ii) expand the use of Gas System Enhancement Plan funds to include utility-scale renewable thermal energy infrastructure; (iii) shift use of authorized funds from replacing leaking pipelines to repairing them for shorter lifespan extensions; (iv) authorize municipal aggregation for certain district energy; (v) limit the depreciation timeframe for recovering the cost of replacing leak-prone gas infrastructure; and (vi) create an alternative energy portfolio for gas companies.

In anticipation of a changing regulatory world, LDCs should explore and test new technologies and business models, including by working with municipalities to develop and deploy pilot and demonstration projects, educate and access consumers, and assure that changes to the energy system are equitable and accessible to all residents of the Commonwealth.

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Thank you for your attention to these comments. The Municipalities and regional planning associations look forward to ongoing opportunities to participate in this proceeding.

⁶ An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy, Sections 15, 9 and 31.

Respectfully submitted,



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