

Via Email

May 21, 2021

Sarah Smegal, Hearing Officer
Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

John K. Habib
Keegan Werlin
99 High Street, Suite 2900
Boston, MA 02110

RE: Considerations for LDC and Consultant Use of 2050 Roadmap and 2030 Clean Energy Climate Plan in D.P.U. 20-80

Dear Hearing Officer Smegal and Mr. Habib:

Acadia Center has followed with interest the progress of the petition of the Attorney General to the Department of Public Utilities (“DPU”), now docketed as D.P.U. 20-80, to investigate the role of gas local distribution companies (LDCs) as the Commonwealth works to achieve both its mandated 2030 and target 2050 climate goals. As a non-profit research and advocacy organization committed to advancing the clean energy future, Acadia Center is at the forefront of efforts to build clean, low-carbon, and consumer-friendly economies throughout the Northeast – and remains very interested in decarbonizing the economy of Massachusetts in compliance with the Global Warming Solutions Act and Next Generation Climate Roadmap targets.

Acadia Center was disappointed to learn, from a March 1, 2021 update letter to the DPU, that the initial stakeholder group for Phase 1 (the RFP for consultants) had been formed by the LDCs without any public notice or request for interested stakeholders to participate. Given that the update states LDCs are “continuing to develop a stakeholder process consistent with the directives of the Department in its Order,” Acadia Center hereby submits **our formal request to be included as an interested stakeholder** in upcoming processes. Please contact the undersigned with more information on how Acadia Center can be involved as an interested stakeholder.

Additionally, Acadia Center submits the following comments in support of the Department’s instruction to the LDCs that “... we do expect the LDCs to include relevant areas of inquiry raised by interested stakeholders following review of the Roadmaps¹, particularly to the extent such areas of inquiry were not anticipated by the Department prior to the publication of the Roadmaps” (Order on AGO Motion for Clarification, Feb 10, 2021, at 14). Any analysis of the future of the natural gas industry in Massachusetts must align with other climate and energy policy in the Commonwealth, including the Roadmaps, the renewable portfolio standard, the clean energy standard, the energy efficiency targets, and transportation and home & commercial electrification programs. With the enactment of the Next Generation Roadmap for Climate, the pace of decarbonization will be further accelerated from the timetable laid out by the

¹ Defined by the Department as the Executive Office of Energy and Environmental Affairs (“EEA”) 2050 Decarbonization Roadmap (“2050 Roadmap”) and 2030 Clean Energy and Climate Plan (“2030 CECP”). Order at 3.

Roadmaps– aiming for a 50% economy wide reduction in greenhouse gas emissions by 2030, instead of the 45% target considered by the 2030 CECP. Given this acceleration, Acadia Center believes that the following comments are even more crucial for contemplation by the LDCs and their consultant(s).

Acadia Center has extensively reviewed the Roadmaps and notes the following:

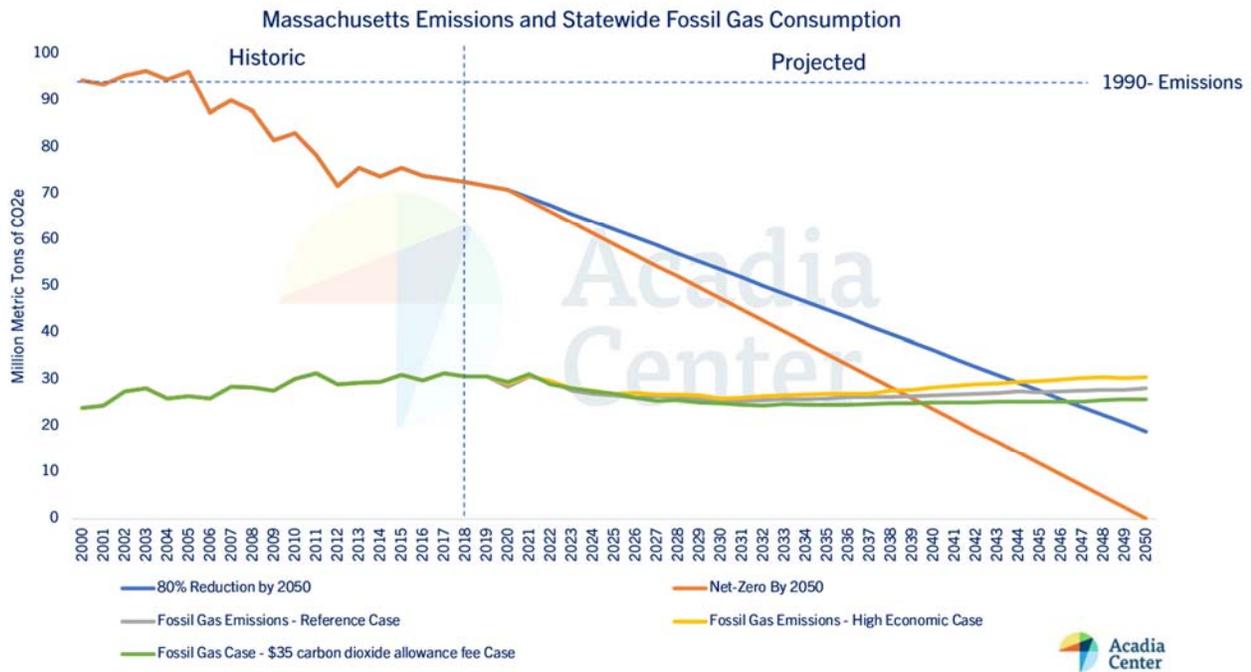
- Use of gas must sharply decline in the coming decade to achieve the Commonwealth’s climate goals. Investment in gas infrastructure must be made with this sharp decline in mind, with limited addition of gas customers, strategic use of non-pipe alternatives, and additional investment in natural gas distribution infrastructure only as necessary to ensure safety.
- According to the All Options scenario of the Roadmap, electricity will overtake gas in residential heating in 2038 and by 2029 for residential water heating. For commercial heating, high-efficiency electric and ground source heat pumps will overtake gas units in 2036 for total number of units. The LDCs must consider how the declining role of natural gas in the residential and commercial heating sectors will impact remaining gas customers, especially those least able to bear increased costs.
- It is essential for the Department and the LDCs to anticipate ratepayers’ coming shift from gas to electric end uses like heat pumps and shape cost recovery to avoid placing significant costs and stranded asset depreciation onto the dwindling numbers of customers.
- Any analysis by the LDCs or LDC-hired consultants regarding the DPU docket should be open and transparent to outside review and stakeholder comments.

Future of Gas Analysis Must Align with Current Energy Policy and Mandates

According to Massachusetts’ long-term modeling, there is very little room to continue the use of natural gas in the electric power and heating sectors in Massachusetts. Any analysis by the LDCs must take seriously existing state modeling and be compatible with state-level planning documents such as the Roadmaps. Both the Roadmaps and Acadia Center analysis demonstrate that continued use of gas, and thus continued investment in gas infrastructure, is incompatible with achieving Massachusetts’ climate reduction targets.

In 2018, emissions from natural gas in Massachusetts accounted for 43% of state-wide emissions (30.6 million metric tons of carbon dioxide equivalent (MTCO_{2e}), even without including methane leakage or upstream emissions from production and transmission. Without policy changes, Massachusetts’ cumulative gas use is not projected to change significantly – even displacement by renewable energy in the electric generation sector. By 2038-2040, Acadia Center’s analysis shows that total emissions from gas alone would use up the entire state’s climate budget – leaving no emissions available for vehicles, industry, or land use, as demonstrated in Figure 1 below.

Figure 1: Declining Massachusetts GHG Reduction Goals and Barriers Presented by Gas Use



Data from EIA State Emissions Database and Massachusetts GHG Inventory

Plainly, use of natural gas must decline sharply if the Commonwealth is to meet either its interim or mid-century target. Any analysis by the LDCs regarding the future role of natural gas must align with the newly strengthened climate targets, as well as other climate and energy policy in the Commonwealth already established to reduce use of fossil fuels.

According to Massachusetts’ Own Modeling, Gas Use Needs to Decrease Rapidly

In all modeled scenarios in the 2050 Roadmap – including the one with additional pipeline capacity – gas demand in the electric power sector decreases drastically over the next ten to 15 years to keep the Commonwealth on track to meet its 2050 target of 85% emissions reductions below 1990 levels. Natural gas use from in-state gas power plants must fall from roughly 70% of state generation to 37% by 2025 and 15% by 2030, and finally to less than 10% between 2040 and 2050 to stay on track.



In-State Gas-Generated Electricity

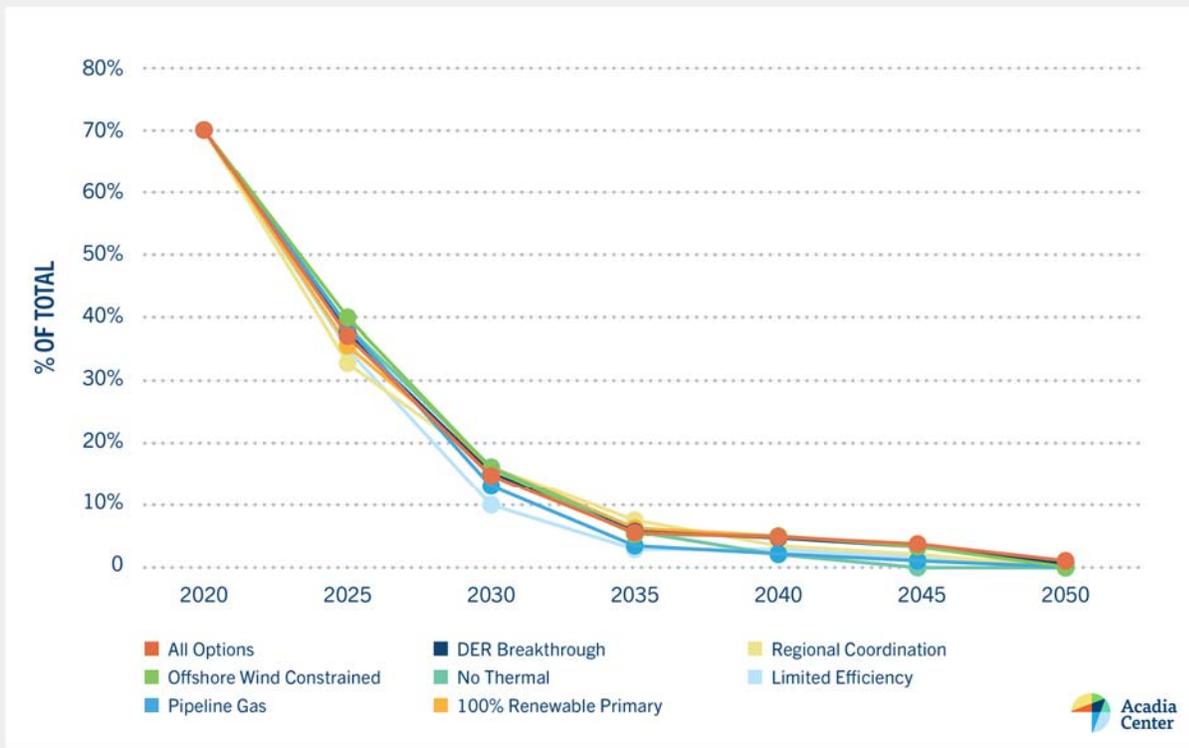


Figure 2: Data from 2050 Massachusetts Energy Pathways Technical Report

Beyond the electric power sector, the 2050 Roadmap models the increasing role of electrification in end-use residential and commercial space and water heating. According to the Roadmaps, under the All Options scenario, electricity will overtake gas in residential heating in 2038 and by 2029 for residential water heating. For commercial heating, high-efficiency electric and ground source heat pumps will overtake gas units in 2036 for total number of units. The Commonwealth’s own analysis, therefore, indicates that the reduction in use of natural gas in the electric power and heating sectors **must decline more steeply in the next decade-and-a-half** than some further out date. The time is now for the LDCs and Commonwealth to grapple with how to make this happen.

Gas Expansion Investments are Imprudent

It is essential for the Department and LDCs to plan for the future of gas with the sharp decline in usage and ratepayers’ coming shift from gas to electric end uses in mind. Planning decisions should incorporate strategic use of non-pipe alternatives, and future investments in the natural gas distribution network should focus not on service expansion, but on repairing and removing from service the most dangerous, leaking sections of the existing system. Per the Commonwealth’s own modeling, use of the gas distribution system must be cut in half or used even less within 20 years. Due to the long depreciation tail of pipelines, customers remaining on the system at that point will bear not

only costs of investments made today, but also those made years ago. The Department must begin shaping cost recovery now to avoid their bearing the brunt of stranded assets.

An Open and Accessible Stakeholder Process is Key

Acadia Center urges LDCs and their consultant(s) to comprehensively identify pathways for a responsible, guided transition away from fossil natural gas distribution. Such an analysis should be open to the public and seek input from a diverse array of voices in the Commonwealth on multiple occasions. Per the LDCs March 1st update, stakeholder involvement in this docket has, to date, been extremely limited and by special invitation. Acadia Center urges the LDCs and their consultants to change that fact.

Any inquiry of this importance to the well-being of Massachusetts' citizens requires a deliberate, inclusive, and transparent process. The natural gas distribution system has both energy and non-energy impacts, touching all corners of the Commonwealth. Engaging in a thorough dialogue with a broad and inclusive set of stakeholders is critical to understanding all perspectives and moving forward with policy decisions supported by the communities which you serve.

Conclusion

Acadia Center urges the LDCs, their consultant(s) and the DPU to utilize this docket as an opportunity to face the fact that continued use of natural gas in Massachusetts must end, and the transition must begin now. The Roadmaps' analysis has only put this fact in more stark relief. Acadia Center looks forward to working with the LDCs and their consultant(s) as an interested stakeholder to reach a safe, sustainable, and economic clean energy transition.

Sincerely,



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Cc: DPU 20-80 Service List
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Danielle Winter – Keegan Werlin
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Gary Epler – Unitil