

April 5, 2024

Commissioner Bonnie Heiple
Massachusetts Department of Environmental Protection 100
Cambridge Street, Suite 900
Boston, Massachusetts 02114

Re: The MassDEP Clean Heat Standard – Stakeholder Comments

Dear Commissioner Heiple:

The Northeast Chapter of the Combined Heat and Power Alliance (the “Northeast Chapter”) submits this letter as a supplement to its comments regarding the MassDEP Clean Heat Standard (“CHS”) Draft Framework dated February 16, 2024. As a reminder, the Northeast Chapter is the successor organization to the Northeast Clean Heat and Power Initiative, which submitted several prior comments during the MA Clean Heat Standard and Alternative Energy Portfolio Standard proceedings.

The Northeast Chapter is a group of manufacturers, system developers, engineers, and end-user representatives with the common goal of reducing energy costs and carbon emissions using the highly efficient and reliable technology of combined heat and power (“CHP”). Many of its members are located in Massachusetts and/or develop and operate projects therein. As previously stated, the Northeast Chapter strongly believes that CHP must play a crucial role in reducing marginal grid emissions in the near-term while assisting Massachusetts efforts for a fully electrified grid. The United States Department of Energy shares this sentiment, stating that “[i]ndustrial CHP can provide significant greenhouse gas emissions reductions in the near- to mid-term as marginal grid emissions continue to be based on a mix of fossil fuels.”¹ Ignoring CHP at this critical moment is fundamentally inconsistent with the express goals of the MassDEP’s CHS.

In furtherance of such goals, we are pleased to supplement our prior comments, emphasizing the need to include CHP technologies in MassDEP’s comprehensive decarbonization strategy, specifically regarding the CHS.

1. The CHS should provide full credit for renewable natural gas (“RNG”), biofuels, and hydrogen, immediately and in perpetuity. Additionally, credits should be awarded for the use of any alternate fuel, or process, that results in reductions in emissions from fossil fuel combustion.

While we are encouraged by the MassDEP’s consideration of “potential mechanisms for emission reduction credits generation in non-residential buildings” related to “non-pipeline clean fuels,” noted in its

¹ US Department of Energy, Industrial Decarbonization Roadmap, Sep. 2022 at 14, <https://www.energy.gov/sites/default/files/2022-09/Industrial%20Decarbonization%20Roadmap.pdf>

Stakeholder Discussion Document dated March 2024, the Northeast Chapter continues to strongly believe that hydrogen must be given full credit immediately and in perpetuity, regardless of whether the building is residential or not. Additionally, we support allowing crediting for reductions in emissions, compared to fossil fuel combustion, resulting from the substitution of renewable natural gas and hydrogen. Consistent with the MassDEP’s stated goal of reducing climate pollution, such credit for reductions should be awarded for the use of any alternative fuel, or process such as CHP, that results in reductions in emissions from fossil fuel combustion. The degree of credit, of course, could vary based on the degree of emissions reduction, but the MassDEP should reward all verifiable means of carbon reduction. The MassDEP must not let perfect be the enemy of good.

As noted in point “3” of our comments dated February 16, 2024, the Northeast Chapter strongly believes that all clean energy sources, including RNG, biofuels, and hydrogen should be eligible for credits immediately and that the proposed 2028 study to consider such other fuels be eliminated. In the alternative, the proposed study must be expedited so as to be considered during the 2024-2025 timeframe. As noted by other stakeholder comments, excluding other clean fuels until after further study discourages their use, impedes investment in and stifles development of clean energy resource options, narrowing the set of alternatives at this critical moment for the environment. As noted by Eversource, significant electrical infrastructure improvements are required to enable the clean energy objectives of the Commonwealth reliably and safely.² As those improvements are likely to take significant time to implement, decarbonized RNG and biofuels provide a viable solution while the Commonwealth constructs the infrastructure necessary to meet its climate goals. Disincentivizing the use of these energy sources during the energy transition puts the Commonwealth at risk of failing to meet its climate goals.

RNG and biofuels are already being utilized to reduce greenhouse gas emissions in Massachusetts. The MassDEP has highlighted the benefits of such use in wastewater treatment operations.³ Additionally, the Commonwealth has noted that RNG and biofuels are actively being utilized in agricultural and industrial settings.⁴ It would be counterintuitive, and contrary to the MassDEP’s express goals, to disincentivize the use of RNG and biofuels, particularly when the Commonwealth and MassDEP are promoting their use and benefits. Accordingly, RNG, biofuels, and hydrogen should be eligible for credits immediately as a proven method of greenhouse gas emissions and climate pollution reductions.

National Grid agrees that alternate fuels like RNG and hydrogen are valuable decarbonization resources and therefore should be included in the CHS.⁵ In its submission dated September 1, 2023, the Northeast Chapter highlighted the benefits of the proposed Northeast Regional Hydrogen Hub, which was supported by seven regional states, including Massachusetts. Given the Commonwealth’s prior support for hydrogen, it should be included along with other clean fuels in the MassDEP’s CHS.⁶ Similarly, the United States Department of Energy believes that the use of “renewable and synthetic fuels, and clean sources of energy as the prime

² See *Id.* at p 26.

³ See Shutsu Chai Wong, Tapping the Energy Potential of Municipal Wastewater Treatment: Anaerobic Digestion and Combined Heat and Power in Massachusetts, Mass DEP, July 2011, <https://www.mass.gov/doc/tapping-the-energy-potential-of-municipal-wastewater-treatment-anaerobic-digestion-and-0/download>

⁴ See Anaerobic Digestion Case Studies, Commonwealth of Massachusetts, 2024, <https://www.mass.gov/info-details/anaerobic-digestion-case-studies>

⁵ See US Department of Energy, Industrial Decarbonization Roadmap, Sep. 2022 at p 64.

⁶ See *Id.* at p 72.

movers for CHP systems can avoid the use of fossil fuels, which will support the integration of CHP into a fully decarbonized energy economy.”⁷ Accordingly, RNG, biofuels, and hydrogen must be given full credit immediately, and in perpetuity under the CHS.

Several states, including California, Oregon, Washington, Vermont, and Colorado, allow for use of alternative fuels in their transportation sector Low Carbon Fuels Standard or CHS. The Commonwealth ought to look to the experiences of Colorado’s investor-owned gas utilities in meeting that state’s Clean Heat Standard. According to a recent article in S&P Global, gas utilities Atmos and Black Hills are relying heavily on energy efficiency and renewable natural gas (later, in 2030, hydrogen) to meet the CHS mandates and stay under the cost cap:

In assessing different clean heat portfolios, the companies {Atmos, Black Hills} ran into a dilemma similar to the one their larger peer, Xcel Energy Inc., encountered when it filed the state's first clean heat plan in August 2023. Achieving the full 22% reduction by 2030 would require far outspending the cost cap imposed on clean heat plans by legislators, or 2.5% of annual retail sales.⁸

We urge that all viable options for meeting our shared concerns, be kept open. Pre-selecting a subset of technologies and systems, while ruling out other alternative fuels as eligible measures in the CHS is not in line with a goal of maximizing emissions reductions and ensuring affordability for customers.

Conclusion

The MassDEP’s proposed CHS is not in alignment with its stated mission to reduce climate pollution.⁹ In order to remain truly committed to this mission, all credits given to energy sources and technologies should be linked to the life cycle reduction in greenhouse gas emissions that these solutions provide. Accordingly, the CHS must be technology agnostic and provide full credits to a broader spectrum of energy sources, such as CHP technology and low carbon/zero carbon fuels such as hydrogen and RNG, provided that they deliver greenhouse reductions relative to fossil fuels. Finally, credits should be awarded for the use of any alternate fuel, or process, that results in reductions in emissions from fossil fuel combustion.

Respectfully,

The Northeast Chapter of the Combined Heat and Power Alliance

⁷ US Department of Energy, *Industrial Decarbonization Roadmap*, Sep. 2022 at 14,

<https://www.energy.gov/sites/default/files/2022-09/Industrial%20Decarbonization%20Roadmap.pdf>.

⁸ Tom DiChristopher, Atmos, Black Hills Rely on Energy Efficiency, RNG in Colo. Clean Heat Plans, January 17, 2024. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/atmos-black-hills-rely-on-energy-efficiency-rng-in-colo-clean-heat-plans-80068913>

⁹ Regulatory Assistance Project. “A Clean Heat Standard for Massachusetts.” June 2022. www.mass.gov/doc/clean-heat-standard-2-page-summary/download