



December 4, 2020

Ms. Samantha Meserve
Mass. Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: APS Review Comment

Dear Ms. Meserve:

The Northeast Gas Association (NGA) appreciates the opportunity to provide comments on the current stakeholder review process being undertaken by the Department of Energy Resources (DOER) in regards to 2020 APS Minimum Standard Review.

NGA is a non-profit trade association of natural gas companies based in Needham. Our members are the local gas distribution companies (LDCs) that serve the states of Massachusetts, Connecticut, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont. Our members also include interstate pipeline companies that transport natural gas into the region; liquefied natural gas (LNG) suppliers; compressed natural gas (CNG) suppliers; and other industry participants.

We are responding to several of the questions posed by DOER in regards to the analysis and recommendations by DOER's consultant, Daymark Energy Advisors. We express our support for the continued role of CHP in the APS, and consideration of the economic, energy and environmental benefits by such alternative natural gas inputs as renewable natural gas (RNG) and potentially hydrogen. The deployment of advanced natural gas technologies, such as gas heat pumps, should also be further explored and incorporated. We concur with Daymark's recommendation that DOER undertake further stakeholder engagement in this process.

1. What are the benefits of the APS program to ratepayers, including but not limited to economic, environmental, and societal benefits?

The APS program offers the opportunity for the more efficient use of energy, the reduction of emissions and reduced energy costs for ratepayers.

Combined heat and power – or CHP – in particular offers great benefits for the Commonwealth and in our view should be remain within the APS portfolio.

As defined on the MA Department of Energy Resources web site, "Combined Heat and Power (CHP) system (or cogeneration) can effectively and reliably generate useful heat and electric power using less fuel than a typical system that generates power only. CHP systems offer tremendous opportunities for customers with predictable and consistent heat and power needs (particularly large commercial, industrial, and institutional facilities), providing potential for significant economic savings and reductions in fuel consumption and greenhouse gas emissions."

Natural gas fuels about 70% of existing CHP capacity in the U.S. and is likely to be the key fuel input for CHP going forward. As NRRRI observes: "The abundance of natural gas will make gas-fired CHP systems the preferred technology of the future. The scale of CHP systems ranges from the micro, residential scale of around 1 kW to large-scale industrial systems with a capacity greater than 100 MW."

The U.S. EPA notes that "gas turbines produce a high quality (high temperature) thermal output suitable for most combined heat and power applications...There is a significant amount of gas turbine based CHP capacity operating in the United States located at industrial and institutional facilities. Much of this capacity is concentrated in large combined-cycle CHP systems that maximize power production for sale to the grid. However, a significant number of simple-cycle gas turbine based CHP systems are in operation at a variety of applications including oil recovery, chemicals, paper production, food processing, and universities." (Indeed, both Tufts in Medford in 2018 and Harvard in Allston in 2020 have added major CHP facilities to power their campuses in environmentally sustainable ways.)

CHP related to natural gas is environmentally beneficial - and here we disagree with Daymark. EPA reports that, "because of their relatively high efficiency and reliance on natural gas as the primary fuel, gas turbines emit substantially less carbon dioxide (CO₂) per kilowatt-hour (kWh) generated than any other fossil technology in general commercial use."

We encourage DOER to continue support in this program for CHP. The Daymark analysis states that CHP has been successful – indeed, the most successful technology in the program – and as such, is no longer appropriate for this program. We respectfully disagree. A successful technology should be supported.

In addition, the panoply of renewable thermal options should be encouraged, including natural gas heat pumps. A wide portfolio of alternative energy options offers the greatest range of opportunities.

3. Do you believe the APS program should prioritize technologies which provide the most benefits, such as greatest greenhouse gas emissions reductions?

The Commonwealth should seek a return on the best technology opportunities. At the same time, as Governor Baker has stated, a wide-ranging portfolio or "all of the above" platter is the best pathway to good solutions.

In our view, renewable thermal policies should be widely applied to include all sources, including natural gas. RNG offers great opportunities for lower carbon content and is currently being incorporated by multiple utilities in the New England region. NGA and GTI released a 2019 study on RNG that notes the opportunities available from its incorporation into the natural gas delivery network. Natural gas heat pumps also offer the opportunity for GHG reductions. The Commonwealth should not preclude new technology opportunities.

Fuel cells, included in the APS as of 2017, can also be expected to grow and are a potential economic engine for manufacturers in the New England region.

12. Is there any additional information you believe DOER should consider in its 2020 APS Minimum Standard Review?

We agree with Daymark's recommendation that further stakeholder engagement should be held to assess the applicability and impact of the supply and demand changes described in the report.

We don't think that any revision to the current structure is warranted at this time. For example, creating a requirement for sellers of natural gas under the APS would result in an inappropriate cross-subsidy from natural gas customers to electric thermal users.

However, DOER might want to consider developing a separate policy mechanism, such as a gas company procurement standard for RNG or low-carbon hydrogen. This would more effectively catalyze the market for decarbonized heating fuels than would including these fuels in the APS program. A program similar to the APS, but focused on low-carbon or zero-carbon fuels, would help ensure that the APS can best continue to deliver benefits to the Commonwealth.

Also, it should be noted that the Department of Public Utilities (DPU) recently opened an investigation into the role of local natural gas distribution companies in the future of the Commonwealth's energy portfolio. As part of the investigation, the DPU will assess the role of gas companies in ensuring a low-carbon future and explore strategies that enable the Commonwealth to achieve net zero greenhouse gas emissions while safeguarding ratepayer interests and securing safe, reliable, and affordable natural gas service. In light of this pending, comprehensive investigation, any changes to the APS to preclude natural gas seems premature at this time and could lead to unintended consequences.

In our view, a broad portfolio of technology options, including CHP, can continue to provide benefits to the Commonwealth's energy system and its ratepayers.

We appreciate your consideration of our comments.

Thank you.

Sincerely,

A handwritten signature in black ink that reads "Thomas M. Kiley". The signature is fluid and cursive, with a large initial 'T' and 'K'.

Thomas M. Kiley
President & CEO

