

**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF PUBLIC UTILITIES**

<u>The Berkshire Gas Company;</u>	)	
Eversource Gas Company of Massachusetts,	)	
d/b/a Eversource Energy;	)	
Fitchburg Gas and Electric Light Company,	)	D.P.U. 21-120 through 21-129
d/b/a Until (gas);	)	
Liberty Utilities (New England Natural Gas	)	
Company) Corp., d/b/a Liberty Utilities;	)	
Boston Gas, d/b/a National Grid;	)	
NSTAR Gas Company d/b/a Eversource Energy;	)	
Cape Light Compact JPE;	)	
Fitchburg Gas and Electric Light Company,	)	
d/b/a Until (electric);	)	
Massachusetts Electric Company and	)	
Nantucket Electric Company,	)	
each d/b/a National Grid; and	)	
NSTAR Electric Company	)	
d/b/a Eversource Energy	)	
<u>(2022-2024 Three-Year Energy Efficiency Plans)</u>	)	

**INITIAL BRIEF OF THE MASSACHUSETTS ENERGY MARKETERS ASSOCIATION**

**I. INTRODUCTION**

The Massachusetts Energy Marketers Association ("MEMA") respectfully submits this Initial Brief in the above-referenced proceedings regarding the 2022-2024 three-year energy efficiency plans ("the Plans") filed by the energy efficiency Program Administrators (the "PA's").

The purpose of this initial brief from MEMA is not to thwart the implementation of the Plans. Rather, MEMA respectfully asks The Department of Public Utilities ("The Department") to modify the Plans by preserving existing Mass Save equipment rebates for new, high efficiency heating oil equipment (boilers and furnaces) that utilize clean, renewable liquid biofuels.

**II. ARGUMENTS**

## **1. Heat Pumps Will Not Fully Replace Fossil-Fueled Heating Systems in the Next Three Years**

The 2022-2024 Term Sheet sets partial replacement “Heat Pump Goals” for residential electric customers using fossil fuel equipment at 31,953, and for low-income eligible electric customers, a goal of 3,598 partial replacements<sup>1</sup>. This indicates that 35,191 residential electric customers will still use a fossil-fueled heating system in their homes, at a minimum, by the end of the Plans’ three-year term.

As discussed at length in MEMA’s written testimony, multiple studies on heat pump utilization in the winter weather indicate that residents in the Commonwealth will primarily rely on their fossil-fueled heating systems, not heat pumps, during the winter.<sup>2</sup> Specifically, MEMA filed testimony from Ray Albrecht explaining in detail how “three of the studies (Cadmus VT/Cadmus MA and RI/ISO New England) looked at power consumption among large populations of heat pumps. They showed that homeowners were, on average, using their heat pumps for less than half of the potential winter hours of operation.”<sup>3</sup> The Mass Save website echoes this sentiment, saying that Mass Save does not “recommend fully replacing existing central heating systems with heat pump equipment.”<sup>4</sup>

Plainly, fossil-fueled heating systems will continue to play a role in the Commonwealth, providing residential heating for thousands, including those who have installed heat pumps. When evaluating the Plans, The Department should focus on how residents of the Commonwealth will actually heat their homes in practice, rather than in theory, and consider that

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<sup>1</sup> Exhibit Eversource Energy-1, Appendix M

<sup>2</sup> MEMA-RJA pg. 6.

<sup>3</sup> Id.

<sup>4</sup> Id.

home heating oil will remain an integral component of home heating in Massachusetts for the foreseeable future.

## **2. The Plans Should Emphasize Immediate Greenhouse Gas Reduction and Demand Reduction as Much as Possible**

As provided in MEMA testimony submitted by Matthew Herman:

*“Simply put, reducing carbon emissions now, is more valuable than reducing the same amount of emissions later. This is because earlier reductions limit the long-term climate impact caused by the accumulation of greenhouse gases. This significant and often overlooked principal is frequently absent from policy discussions, which, for example treat a reduction of CO2 in 2021 with the same weight as a reduction in 2050. This is simply not accurate and skews the market to seek low-technology readiness options which may not be deployed for years or decades, if ever at all.”<sup>5</sup>*

On July 15, 2021, Secretary Kathleen Theoharides with the Commonwealths’ Executive Office of Energy & Environmental Affairs issued a letter to the Energy Efficiency Advisory Council and the Program Administrators (PAs), titled “Greenhouse Gas Emissions Reductions Goal for Mass Save.” Her letter caused the EEAC and the PAs to redesign the 2022-2024 Mass Save program in order to meet aggressive Greenhouse Gas (“GHG”) goals set by the Climate Act of 2021. The purpose of the 2022-2024 plan is to reduce GHG along with “energy and demand reductions.”

Secretary Theoharides letter states that “Section 106 of the Climate Act requires me to establish the first goal for the Mass Save Energy Efficiency Plans no later than July 15, 2021.” She further states, “By this letter, I set the following GHG emissions reduction goals for the 2022-2024 Energy Efficiency Plans, which are currently being reviewed by the Energy Efficiency Advisory Council.”

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<sup>5</sup> MEMA-MH, pg. 2

If GHG reduction and demand reduction are part of the Plans' mandate, the Department should use every tool at its disposal to accomplish these goals. Fossil-fueled heating systems will remain in use in thousands of homes in the Commonwealth, particularly during the winter. Accordingly, it stands to reason that the Plans should incorporate measures that would achieve GHG reduction and demand reduction in these homes. The Department can help accomplish these important goals by preserving rebates that would allow thousands of residents to upgrade their existing systems with newer, high-efficiency boilers and furnaces utilizing renewable biofuels.

### **3. Biofuel and Other Low Carbon Fuels Could Reduce GHG and Grid Demand**

As discussed above, Secretary Theoharides' letter makes clear that GHG reduction is a goal for these three-year plans. In their response to AG-Common 1-13, the PA's acknowledge that they "are committed to meeting their obligation to implement all cost effective energy efficiency that collectively will meet or exceed the Commonwealth's greenhouse gas ("GHG") emissions reduction goals, as reflected in the 2022-2024 Plan" and that "the path to decarbonization includes energy efficiency, electrification and low-carbon fuels."<sup>6</sup>

During the evidentiary hearings, the PAs also acknowledged that biofuel is considered a "low carbon fuel,"<sup>7</sup> a tool that the PAs themselves termed a part of the "path to decarbonization."<sup>8</sup> Despite that, however, the PAs stated that biofuel is "not something we would

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<sup>6</sup> AG-Common 1-13

<sup>7</sup> DPU 21-120 through 21-129, pg. 458.

<sup>8</sup> AG- Common 1-13

support through the energy efficiency programs.”<sup>9</sup> This position appears to be at odds with the purpose of the Plans.

As a low carbon fuel, the Commonwealth is already using biofuel to reduce GHG.

MEMA testimony filed by Michael Ferrante provides that:

*“In Massachusetts, the MA DOER’s Alternative Energy Portfolio Standard program (APS) has been successful in helping to incentivize biofuel blends in heating oil. Over a two-year period, following the implementation of the APS program in January 2018, the program has seen retail distributor participation grow from a handful of companies to seventy-eight companies today across the Commonwealth. To date, forty-six million gallons of heating oil have been displaced through the APS program. Each gallon of biodiesel that displaces heating oil reduces greenhouse gas emissions by roughly 19.598 lbs. of CO<sub>2</sub>e.”*<sup>10</sup>

Further, as raised in MEMA’s written testimony, Governor Baker’s Administration recognized the GHG reduction value of biofuel in an Executive Order issued just months ago.<sup>11</sup> Executive Order Number 594, issued in April of 2021, demonstrates that the mandated use of biofuels in state buildings using heating oil and government fleets using diesel fuel helps reduce greenhouse gas emissions in Massachusetts.<sup>12</sup>

Governor Baker’s recent Executive Order, DOER’s APS Program, and even the PAs themselves acknowledge the benefits of biofuels in reducing GHG. Accordingly, MEMA respectfully urges the Department to keep Mass Save programs in place that will prioritize the use of this important tool during the next three years.

#### **4. Eliminating Boiler and Furnace Rebates Ignores the Heightened Costs of Heat Pumps**

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<sup>9</sup> DPU 21-120 through 21-129, pg. 458.

<sup>10</sup> MEMA – MF, pg. 3.

<sup>11</sup> Id.

<sup>12</sup> Id.

As discussed in evidentiary hearings, basic service electric rates have risen amidst deliberations at the DPU regarding the 3-year plan.<sup>13</sup> Eversource anticipates a 23%-25% base rate increase for residential users next month.<sup>14</sup> Additionally, earlier this month ISO New England warned that there is a heightened risk of power outages this winter due to electric supply constraints.<sup>15</sup> When asked about these issues during evidentiary hearings, the PAs stated that neither issue provides sufficient reason to alter the proposed Plans.<sup>16</sup> Despite this, MEMA believes that these cost concerns should be a consideration for the Department when evaluating the PAs proposals.

Beyond the cost of operating a heat pump as electricity costs rise, heat pump installation cost is prohibitively expensive for many, if not most residents, in the Commonwealth. Recent case studies conducted by Diversified Energy Specialists (DES) on residential heat pump rebate programs in Massachusetts and New York indicate that the cost to install residential heat pumps in existing homes with median square footage (1,764 to 1,912 square feet) ranges from \$17,260 to \$22,843.<sup>17</sup>

The overall cost of a heat pump, from installation through operation, must be a factor in the Department's appraisal of the PAs proposed Plans. To accomplish the Commonwealth's energy efficiency goals, it is imperative that the Department keeps in mind how consumers in the Commonwealth will react to these high costs and recognize that residential heat pumps are not an economically feasible solution in many cases.

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<sup>13</sup> DPU 21-120 through 21-129, pg. 424-426.

<sup>14</sup> Id.

<sup>15</sup> Id.

<sup>16</sup> Id.

<sup>17</sup> MEMA – MF, pg. 6.

## 5. Overreliance on Heat Pumps as a Panacea is Particularly Harmful to Low-Income and Environmental Justice Community Residents

Low-income households and those living in Environmental Justice (“EJ”) communities will be especially hard-hit by the costs associated with installing heat pumps and the inevitable increase in electricity rates.

EJ policy requires that “energy benefits” are defined as “access to funding, training, renewable or alternative energy, energy efficiency, or other beneficial resources disbursed by EEA, its agencies and its offices.”<sup>18</sup> Removing access to Mass Save rebates for heating oil equipment for EJ communities violates this policy.

As acknowledged by the PAs, there cannot be a “one size fits all” approach to energy efficiency in the Commonwealth. In their pre-filed testimony on DPU 21-129, NSTAR Electric Company d/b/a Eversource Energy (“Eversource”) stated, “customers throughout the Commonwealth are remarkably diverse – they have different economic considerations, priorities, and levels of income; they have different views on public policies and approaches; they face different barriers; they live in cities, suburbs, and rural communities; they may own a primary residence, a second home, or rent.”<sup>19</sup> Eversource stated further:

*“energy decisions are complex, and customers weigh factors differently. Some customers favor tried and true systems and technologies, while others are early adopters of cutting-edge technologies. Some customers favor online or technology-based experiences, and others prefer personal relationships. Some customers prioritize environmental benefits, some prioritize economic considerations, and some prioritize convenience and comfort. Some customers may prefer all-electric energy options, especially as renewable energy generation sources increase, while others may only be concerned with costs.”<sup>20</sup>*

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<sup>18</sup> Id.

<sup>19</sup> Exhibit Eversource Energy – 2, pg. 19.

<sup>20</sup> Id.

MEMA agrees with these statements from Eversource. These statements support MEMA's position that the Plans should be modified to include existing financial support from the Mass Save program to heating oil customers seeking to upgrade their current heating equipment with newer oil-fired systems that utilize renewable, low carbon liquid biofuel. Doing otherwise would ignore the acute impact that the current iteration of the Plans would have on low-income residents and residents of EJ communities.

### **III. CONCLUSION**

MEMA requests that The Department preserve existing Mass Save rebates for new, high efficiency heating oil equipment (boilers and furnaces) that utilize clean, renewable liquid biofuels in the Plans for the following reasons:

- Heating oil equipment will remain in use in thousands of Massachusetts homes, even in most homes using heating oil that have installed a heat pump;
- The Plans should focus on reducing GHG and demand reduction as much as possible in the immediate term, which should include a realistic appraisal of how many residents will continue to use heating oil systems over heat pumps in the winter months;
- As recognized by Governor Baker's Administration and the PAs, biofuel is a low carbon fuel that can assist in reducing GHG and demand in the next three years and, therefore, the use of biofuels should be incentivized in the Plans;
- Prioritizing heat pumps while eliminating existing Mass Save rebates for high efficiency heating oil equipment will drive up costs for residents in the Commonwealth; and

- The overreliance on heat pumps in the Plans will be particularly harmful to low-income residents and residents of EJ communities.

Respectfully submitted,

The Massachusetts Energy Marketers Association,

By its attorney,



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