



December 4, 2020

Ms. Samantha Meserve
Deputy Director of the Renewable and Alternative Energy Division
Massachusetts Department of Energy Resources

Sent via email to DOER.APS@mass.gov

Re: 2020 APS Minimum Standard Review Comment

Dear Ms. Meserve,

Thank you for the opportunity to submit comments for the 2020 APS Minimum Standard Review. The Partnership for Policy Integrity (PFPI) is a nonprofit organization based in Pelham, MA that works in Massachusetts, across the United States, and internationally to promote science-based policies that protect air, water, ecosystems, and the climate.

The most effective way to simplify the APS program and target resources to technologies that can best achieve the Commonwealth's decarbonization goals is to (1) remove incentives for biomass from the renewable thermal program and (2) prioritize non-combustion renewable thermal technologies.

1) Biomass energy is polluting, expensive, and bad for the climate

DOER must remove incentives for biomass from the APS renewable thermal program

The [Daymark report](#) notes that since the introduction of renewable thermal technologies three years ago, the APS program has not seen as much demand for wood heating as it has for some of the other APS-eligible technologies. The Daymark study shows that biomass units are both the least efficient of the APS eligible renewable thermal technologies and have the highest operation and maintenance costs.¹

In 2017, PFPI, the American Lung Association, and twelve other public health and environmental advocacy groups submitted [joint comments](#) on the draft APS regulations showing that they would incentivize wood boilers and furnaces that are significant sources of CO₂ emissions and air pollutants including PM 2.5. As we stated in our comments, "Programs incentivizing alternative energy should help reduce greenhouse gas and air pollution emissions. At a minimum, they should not incentivize technologies that are worse than the traditional energy technologies they replace... Burning biomass emits significantly more carbon pollution than burning fossil fuels per unit of energy, and harvesting trees for fuel reduces the ability of forests to take carbon out of the atmosphere."²

Since 2017, there have been further developments that support our position that incentivizing biomass heat and energy runs counter to the Commonwealth's – and the world's - climate goals:

¹ <https://www.mass.gov/doc/alternative-energy-portfolio-standard-review/download>

² http://www.pfpi.net/wp-content/uploads/2017/08/DOER_APS_JointBioenergyComments_8-7-2017.pdf

- In 2018, the UN Intergovernmental Panel on Climate Change (IPCC) warned that in order to prevent global warming from increasing more than 1.5 degrees C it will be necessary to both reduce CO₂ emissions dramatically and accelerate drawdown of excess CO₂ from the atmosphere.³ Importantly, the IPCC found that it is feasible to draw down and store excess atmospheric CO₂ without recourse to experimental carbon capture and sequestration technologies by relying entirely on nature-based solutions, primarily forests, in combination with steeper emissions reductions.⁴
- Also in 2018, the US Climate Alliance, of which Massachusetts is a founding member, pledged to maintain forests and natural ecosystems as a net carbon sink “in order to provide significant and cost-effective opportunities to reduce greenhouse gas (GHG) emissions consistent with the goals of the Paris Agreement.”⁵
- In 2019, Attorney General Maura Healey warned that regulatory changes proposed to the MA Renewable Portfolio Standard, which DOER argued would “streamline” MA’s RPS program by making it consistent with the far less stringent APS eligibility criteria for biomass, could jeopardize the Commonwealth’s ability to meet its emissions reduction goals under the Global Warming Solutions Act (GWSA).⁶
- On October 22, 2020 the GWSA Implementation Advisory Committee [recommended](#) that biomass and municipal solid waste combustion (“waste-to-energy”) be removed from eligibility under all clean energy incentive programs administered by EEA, including the RPS, APS, CES, and CPS, by 2022 in order to meet MA’s decarbonization goals.
- Also in 2020 we have been faced with a new public health threat – COVID-19. A recent Harvard study has shown that communities with high levels of PM 2.5 pollution also have higher mortality rates from Covid-19. Massachusetts already has extremely high levels of PM 2.5 emissions from residential wood burning.⁷ Wood-burning furnaces and boilers release large quantities of greenhouse gas emissions, fine particulates and other air pollutants. Low-income communities, communities of color, and sensitive populations such as children, the elderly, and people with respiratory ailments are particularly at risk. Due to the health impacts alone, the Commonwealth should absolutely not be subsidizing wood-heating.
- Environmental justice communities bear the brunt of Massachusetts’ power plant pollution. A recent article in the [Boston Globe](#) profiled how Massachusetts’ incentives for biomass energy could impact the residents of Springfield, MA who have been fighting a proposed biomass power plant for more than a decade.⁸ It is unclear whether this plant would benefit from the APS, but it would certainly benefit from the RPS under the rule changes proposed last year.

³ <https://www.ipcc.ch/sr15/chapter/spm/>

⁴ <http://www.pfpi.net/the-ipccs-recipe-for-a-livable-planet-grow-trees-dont-burn-them>.

⁵ <https://www.usclimatealliance.org/publications/2018/8/23/the-us-climate-alliance-commits-to-maintain-lands-as-a-net-carbon-sink-and-develop-pathways-to-act-by-2020>

⁶ http://www.pfpi.net/wp-content/uploads/2019/08/MA-AGO-RPS-Biomass-Comments_FINAL1.pdf

⁷ <https://www.pfpi.net/massachusetts-tops-northeast-in-air-pollution-from-wood-burning>

⁸ <https://www.bostonglobe.com/2020/10/20/science/nations-asthma-capital-plans-burn-wood-energy-spark-fury>

As Bill McKibben wrote in [CommonWealth Magazine](#) earlier this year, “It is absurd to use dedicated clean energy funding to subsidize technologies that actually *increase* CO₂ emissions and air pollution.”⁹

2) The Future is Electric

The APS must prioritize non-combustion renewable thermal technologies

Decarbonizing the building sector has the potential to dramatically advance the Commonwealth’s greenhouse gas (GHG) reduction goals. A quarter of GHG emissions in the Northeast come from heating and cooling buildings. As a leader on climate change, Massachusetts must put its money where its mouth is – on home weatherization, energy efficiency, and non-combustion heating and cooling technologies that can run on clean renewable electricity.

PFPI supports the phase-out of eligibility for CHP plants and expanded eligibility for air source heat pumps (ASHP). This technology has come a lot farther, a lot faster, than anyone anticipated when the APS statute was expanded in 2014 to include renewable thermal technologies. A report released earlier this year by the Acadia Center, [Clean Heating Pathways](#), describes the need for thermal decarbonization, details the positive environmental and consumer financial impacts of beneficial electrification, and shows which states have made progress on policies that will achieve these benefits.¹⁰

In conclusion, the APS program must be modified to prioritize non-combustion renewable heating technologies, particularly air source heat pumps, and eliminate incentives for burning wood pellets and chips. These changes are needed to reduce greenhouse gas emissions, protect public health, prevent unsustainable logging activities, and to guide ratepayer and other financial incentives toward the installation of clean, non-polluting renewable energy systems.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, reading "Laura Haight". The signature is fluid and cursive, with the first name "Laura" and last name "Haight" clearly distinguishable.

Laura Haight
U.S. Policy Director

⁹ <https://commonwealthmagazine.org/opinion/2-simple-steps-to-address-climate-change/>

¹⁰ <https://acadiacenter.org/document/clean-heating-pathways/>