

August 20, 2021

Massachusetts Department of Energy Resources
Renewable and Alternative Energy Division
100 Cambridge St. Suite 1020
Boston MA. 02114

Subject: 2021 APS Review

Thank you for both the opportunity and platform to help shape the renewable energy future of our Commonwealth. I greatly appreciate the chance to provide feedback on the possible changes to the Alternative Portfolio Standard. I am very grateful that the DOER is considering these bold changes as the APS, I have confidence that the adjustments will reinvigorate the program.

Please find below some specific feedback:

GHG Reduction Timeline

I think it can go without saying that the impacts of climate change are upon us; the time for measured action is behind us as the climate is approaching a tipping point. Therefore I commend the DOER's efforts to reinvigorate the APS while synchronously accelerating the Commonwealth's decarbonization. In light of this effort I support the alignment of APS with the RPS to demonstrate a 50% reduction in GHG emissions within 20 years.

Metering Thresholds

Naturally, the DOER has the responsibility to ensure that RTGUs legitimately produce the eligible heat they are awarded AECs for. Accordingly, it stands to reason that as system size increases there should be a proportional increase in oversight. However, the current practice is onerous to both the DOER and system owners.

Therefore, I suggest:

1. Redefining residential (pellet) boilers & furnaces as unmetered and therefore eligible for pre-minted AECs. The DOER now has years of pellet feedstock data showing that pellet mills have far more eligible sawdust than is needed to assure APS sustainability. It is also worth recognizing that due to pellet storage design requirements system owners are mechanically obliged to receive their fuel via blower truck, vehicles that are filled directly at these sustainably fed mills. This fact is important as it makes APS system owners unable to fuel themselves with fuel of unknown origins. Therefore there is very little risk that APS systems could violate sustainable fuel expectations, even without quarterly reporting/monitoring. Notably, the DOER

may have greater confidence in this ongoing green legitimacy than it currently extends to ASHP owners. There is no requirement that owners of these systems adhere to grid-typical renewable power. An ASHP owner could choose to purchase their power from a competitive supplier who, for financial competitiveness reasons chooses to forego the inclusion of any green power in their generation portfolio.

2. Increasing the breakpoint between fuel-metered and heat-metered wood fired thermal (commercial) RTGUs be the same as the MassDEP emissions eligibility threshold of 3MMBtu's. Systems smaller than 3MMBtu would be fuel metered and as such account for parasitic load and grid efficiency via the existing formulas currently used for larger-intermediate systems.

ACP and Minimum Obligation Increase

I support adjusting the alternative compliance payment (to \$40) and adding a onetime 2% to the annual minimum standard. Understandably, the DOER has weighed the impacts of this change on ratepayer and found the environmental benefits of establishing a meaningful AEC price structure to be worth the added burden.

CHP Eligibility Glide Path

I recognize that gas-fired CHP technology is statutorily allowed, and feel that the benefits of combining heat and power should be recognized. However, the benefit to the Commonwealth now seems grossly out of balance with the technology's AEC production. Therefore I support the adoption of the proposed CHP eligibility changes and have confidence that the DOER will only apply these adjustments to fossil-fueled (non-renewable) CHP facilities.

Forest-derived Fuels

I support the elimination of the requirement that eligible woody biomass fuel be composed of +30% forest derived material. There is more than enough non-forest derived materials (1-3 Million Tons/yr. in the Commonwealth alone) to support the APS. Requiring that a portion of the fuel be directly sourced from the forest has invited unwelcome opposition to our technology sector.

Adding a Fuel Category

To more accurately characterize and better quantify the GHG benefits of eligible woody biomass fuel within the APS I propose that the DOER in 225 CMR 16.05k add a new category (IV) which must be (at a minimum) 95% Forest Derived Residues, Non-forest Derived Residues, and Forest Salvage. As such this fuel would be eligible to displace Natural gas, electric resistance, propane, fuel oil #6 & #2.

Biofuel Freeze

I support setting the required blend for biofuel eligibility at B20 and capping subsequent AEC production at 460,000/yr.

APS vs MassSave

I can appreciate the need for only the best technologies to be eligible to earn AECs. However, this expectation has limited consumer choice to the Eligible Furnace & Boiler list, a portfolio of technologies capable of remarkable GHG impacts. Unfortunately, these technologies being comparatively new to the market are significantly more costly than the traditional boilers & furnaces

that they are replacing. I was therefore very disappointing when the MassCEC ended its renewable thermal rebate program and MassSave (despite being required to) failed to extend their program to include wood heating technologies. Adding to this disappointment was DOER proposing that future RTGUs must choose between the APS and MassSave.

Thank you for the opportunity to provide feedback on this Straw Proposal. I hope my feedback has offered some perspective.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Caluwe', with a long horizontal line extending to the right.

Marc J. Caluwe
President

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