

Samantha Meserve
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114
And via email at thermal.doer@state.ma.us

August 1, 2017

Dear Ms. Meserve:

We appreciate the opportunity to comment on the regulations (225 CMR 16.00) promulgated in response to *An act relative to credit for thermal energy generated with renewable fuels* (Chapter 251 of the acts of 2014). We also include comments on the companion *Guideline on Biomass, Biogas, and BioFuels*.

The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. The Conservancy and its members have protected over 24,000 acres of habitat in Massachusetts. We provide input based on best-available science to help landowners, communities, agencies and non-profits, and legislators conserve and manage forests in a way that maximizes the clean water and air, forest products, wildlife habitat, recreation, and economic benefits of forests.

Expanding the eligible renewable thermal technologies in the Alternative Energy Portfolio Standard (APS) to include wood heat and other types of renewable thermal energy will help the Commonwealth meet its emissions reduction policy goals, and help leading states meet the emissions reductions goals under the Paris climate agreement. The Conservancy is supportive of many different types of renewable energy, but we have limited our comments here to wood heat, given the several ways wood heat impacts our mission of protecting the lands and waters on which all life depends. We support the expansion of the Massachusetts APS to include wood heat because the APS regulations include strong requirements for fuel sustainability, energy efficiency, air pollution, and carbon accounting. Rather than assuming that wood heat is by default carbon neutral, the policy takes measures to ensure emissions reductions.

We applaud the Department of Energy Resources (DOER) for revising the definition of eligible wood fuel in 225 CMR 16.00 to remove wood from land clearing as an eligible source of fuel. As the Conservancy and many other organizations and stakeholders have commented in the past, wood harvested during conversion of forest to developed land is, by definition, not sustainable. By making this change, DOER has avoided setting up a policy inconsistent with the rest of the Department's efforts to reduce emissions, and further ensured that wood heat systems that receive Alternative Energy Credits are reducing greenhouse gas emissions compared to fossil fuel systems. To ensure that AECs are awarded only to facilities using sustainably sourced wood fuel, we would ask that DOER clarify within the regulation (16.05 Section 4.g.1.iii) that large (>3,000,000 Btu per hour) facilities are also required to use only Eligible Woody Biomass Fuel.

With the changes made to the regulations and the *Guideline*, we have no major concerns with how wood heat is regulated and incentivized, but note here four minor concerns that we hope DOER will address:

1. DOER's auditing and compliance burden for forest-derived residues under the regulations and *Guideline* is significant. DOER could reduce this burden by requiring that the forest-derived residues and thinnings used in wood fuel come from third-party certified harvests. Of the certification options listed in the *Guideline*, Forest Stewardship Council (FSC) certification has the strongest safeguards for soil fertility, downed wood, and other aspects of forest health that are impacted by harvests of wood for biomass fuel. DOER could provide technical and/or financial assistance to interested Massachusetts landowners and fuel producers to achieve FSC certification. The combination of requirements and incentives would help reduce DOER's oversight burden while ensuring that forest harvests include sufficient safeguards for forest and soil health.
2. We also note the need to consider and incorporate ongoing research into particulate emissions from wood heat, especially in combination with other air quality impacts of climate change. Against this changing backdrop, DOER will need to continually evaluate whether the particulate emission limits set for wood heat facilities in the *Guideline* are sufficient to protect public health.
3. The intent of the 225 CMR 16.00 regulation is to incentivize various types of thermal energy. The AEC multipliers will help to achieve this, but we would encourage DOER to use its authority to balance the distribution of AECs among the different types of thermal energy. Wood heat, solar thermal energy, ground source heat pumps, and the other technologies in the regulations should all be able to compete and access AEC payments.

Since DOER started the promulgation process in 2014, we have supported amending the Alternative Energy Portfolio Standard to add wood heat. We appreciate the robust stakeholder process and comment periods, and feel that the regulations and companion *Guideline* incentivize the replacement of fossil fuel heating systems with wood heat systems while safeguarding forest and public health. Please feel free to ask any questions. Thank you for your time and consideration.

Sincerely,



Laura Marx

Forest Ecologist
The Nature Conservancy in Massachusetts
413-584-2596
lmarx@tnc.org