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Center**

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

Dear Ms. Meserve:

Acadia Center appreciates the opportunity to comment on the regulation (225 CMR 16.00) promulgated in response to *An act relative to credit for thermal energy generated with renewable fuels*, as well as the companion *Guidelines On Biomass, Biogas, And Biofuels For Eligible Renewable Thermal Generation Units* (Guidelines).

Acadia Center is a non-profit, research and advocacy organization committed to advancing the clean energy future in the Northeast. Acadia Center is at the forefront of efforts to build clean, low carbon and consumer friendly economies. Acadia Center's approach is characterized by reliable information, comprehensive advocacy and problem solving through innovation and collaborations. We have a long history of examining the carbon impacts of forest management and the use of biomass fuel.

Acadia Center has supported amending the Alternative Energy Portfolio Standard to add wood heat, as long as appropriate emissions and sustainability standards accompany incentives. Using biomass fuel for generation of heat is one of the most efficient applications of a limited resource – far more efficient electricity generation – and with appropriate air quality and fuel harvesting standards can play a role in helping Massachusetts to achieve GHG reduction requirements and reduce fossil fuel expenditures.

Acadia Center believes that with a number of revisions, the regulations will establish a fair approach to balancing sustainability and health protections with providing a practical and reasonable implementation structure. We also appreciate that DOER has removed biomass from land conversion to non-agricultural uses as an eligible fuel. While this waste fuel is otherwise appropriate to use, it cannot be considered sustainable under any definition of the word.

We do however, find several areas where the regulations should be strengthened:

- 1) Reinserting the language in 225 CMR 16 05(4)(g) that ties the definition of sustainable forest management to the Guidelines. The Guidelines are referred to elsewhere in the statute, and given the importance of this provision, it is important to clarify here. The section 225 CMR 16 02 definition for Eligible Woody Biomass Fuel should also be edited to clarify that the sustainability guidelines in the Guidelines apply to forest-derived residue *and* thinnings, not just residue. There is a discrepancy between the statute and the Guidelines, and it is essential that sustainability standards cover thinning operations as well.
- 2) In section 3B of the Guidelines, DOER specifies that biomass from forest land certified by Forest Stewardship Council (FSC) and Program for the Endorsement of Forest Certification (PEFC), which includes the

Sustainable Forestry Initiative (SFI) and American Tree Farm System (ATFS), are considered to be sustainable. While these programs demonstrate some commitment to long-term management and best management practices, they vary significantly in their requirements. FSC certification has the strongest standards for soil fertility and downed wood, but none of the programs focus on standards for biomass fuel harvesting specifically. Acadia Center recommends initially allowing only FSC eligibility under this option, until the first 5 year assessment of the impacts of biomass heating has been conducted.

- 3) In section 3A of the Guidelines, DOER allows that “Suppliers utilizing forest outside of the Commonwealth of Massachusetts should have a cutting plan authorized under the host state forest agency or signature of a professional forester”. It is unclear whether DOER intends that neighboring state agencies develop a specific permit to ensure that a cutting plan meets these standards in the Guideline, or if they intend to rely on existing permits in other states. Not all neighboring states require sign-off on cutting plans under normal timber operations, and if so, these plans do not usually require adherence to Forest Guild biomass retention guidelines. DOER should specify which neighboring state permits and programs are eligible.
- 4) We would also request that DOER clarify within 225 CMR 16.05 (4)(g)(1)(iii) that large (>3,000,000 Btu per hour) facilities are also required to use only Eligible Woody Biomass Fuel.
- 5) Acadia Center is also concerned that the calculation of the k-factor may be incorrect in the *Guideline on Reduction of Greenhouse Gases* spreadsheet. As highlighted in the comments submitted by the Project for Policy Integrity, the APS workbook has adopted the k-constant of 0.126 for forestry residues, which derived from the Manomet study assumption for “low-diameter” residues –meaning leaves, twigs, needles, up to branches that are a couple inches thick. However, this value is, as PFPI details, not appropriate for the cleaner materials burned in thermal wood chip boilers for heat.
- 6) Acadia Center supports the provision that DOER will assess the impact of biomass heating on the region’s forests every five years, beginning in 2020 and in coordination with the Forest Impact Assessment under the Renewable Portfolio Standard Class I. We also strongly support the provision that DOER will report annually on the aggregate woody biomass fuel composition used in qualified APS Renewable Thermal Generation Units. It is essential that these reviews happen in a timely fashion.

Sincerely,

Ellen Hawes

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