



Maine Forest Products Council

The voice of Maine's forest economy

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DATE: July 26, 2019

TO: John Wassam, Massachusetts Department of Energy Resources (DOER),
100 Cambridge Street, Suite 1020, Boston MA 02114.

DOER.RPS@mass.gov.

FROM: Patrick Strauch, executive director, Maine Forest Products Council

RE: Rulemaking 225 CMR 14.00: Renewable Energy Portfolio Standard

Members of the Maine Forest Products Council (MFPC) appreciate the opportunity to comment on the review of the Renewable Portfolio Standards (RPS) by the Massachusetts Department of Energy Resources. The Council represents more than 300 member companies including pulp and paper mills, sawmills, biomass energy producers, wood pellet manufacturers and more than 8.5 million acres of commercial forest landowners. MFPC has compiled these comments with input from our landowner and manufacturing members.

Maine's forest resources have a long history of connection to the more populated regions of southern New England through the supply of wood products, such as spruce and pine dimension lumber, paper packaging and wood panel products used to build your communities.

We also produce renewable energy from wood that replaces fossil fuels. This enables Maine wood manufacturers to productively use bark and sawdust byproducts that would otherwise be landfilled and decompose into more harmful greenhouse gases. Land managers also produce biomass from silvicultural thinnings and harvests, which maintains healthy forests and reduces carbon emissions from decomposition. We have a business ecosystem in Maine that together with our sequestration of carbon and manufacturing emissions that results in a net sequestration of carbon.¹

In the spirit of collaboration, we provide the attached comments to the draft rules focused on the wood biomass energy production. The Council provided rulemaking comments to the Department of Energy Resources (DOER) during the 2010 process.

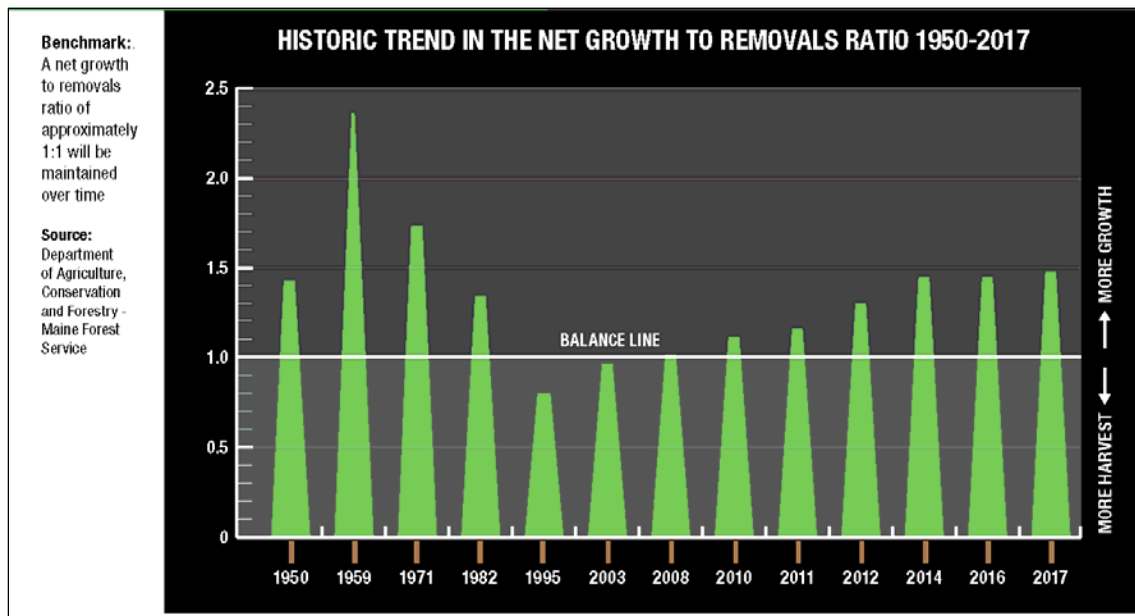
In Maine, we have government controls that achieve the outcomes desired in the draft rules, and our biomass harvesting and related carbon cycling has been continuous for over 35 years.

Maine regulations provide a method to measure forest harvest sustainability by major regions in the State. Recent inventory analyses conducted by the Maine

¹ Cameron, Ryan & Hennigar, Chris & MacLean, David & Adams, Greg & A. Erdle, Thom. (2013). A Comprehensive Greenhouse Gas Balance for a Forest Company Operating in Northeast North America. Journal of Forestry. 111. 194-205. 10.5849/jof.12-043.

Forest Service and reported in Maine's Annual Economic Indicators of Growth² shows our forests are sustainably managed with a positive growth to harvest ratio. We suggest that the Massachusetts regulatory process allow participating states to offer compliance plans for approval by the DOER that meet sustainability goals in these regions while maintaining appropriate responsibilities for individual Generating Units.

Thank you for your consideration.



² 2019 Measures of Growth Report, <https://www.mdf.org/economic-policy-research/maine-economic-growth-council/2019-measures-of-growth-report/>

Maine Forest Products Council Comments (MFPC) on 225 CMR: DEPARTMENT OF ENERGY RESOURCES 225 CMR 14.00: RENEWABLE ENERGY PORTFOLIO STANDARD - CLASS I

Section 14.02: Definitions

Eligible Biomass Woody Fuel. Woody fuels that are derived from the following sources, consistent with the requirements of 225 CMR 14.05(8):

(a) Forest Derived Residues.

1. Tops, crooks and other portions of trees produced as a byproduct, and trees collaterally damaged, during the normal course of harvesting material, such as timber, pulpwood or cordwood, in the implementation of a silvicultural prescription as administered by a licensed or certified forester as prescribed in the Department's *Guideline on Eligible Biomass Fuel for Renewable Generation Units*.
2. Trees and portions of trees harvested for the purposed of the restoration and management of habitat for rare & endangered species as listed by the Massachusetts Division of Fisheries and Wildlife. Qualifying harvest areas must be approved by the Massachusetts Division of Fisheries and Wildlife Natural Heritage Program.

MFPC COMMENT: Realistically market availability and location will determine tree utilization. If no pulpwood markets are available, then it may need to be marketed as biomass. We suggest that DOER consider deleting this definition or acknowledge market dynamics that determine wood use.

By reference, in Maine only about 32% of the non-industrial harvests involve a licensed forester (MFS Silviculture Activities Report³). Harvesting standards are guided by the Forest Practices Act. Outcomes are evaluated in the U.S. Forest Service and MFS monitoring of the forest inventory data and use of best management practices. We suggest adding language: or standards established by participating states. (See comments in *Guideline on Eligible Biomass Fuel for Renewable Generation Units*.) Also, while Massachusetts requires a forester, Maine does not. Massachusetts should replace certification and forester requirements with a management plan signed either by the landowner or a forester.

(d) Non-forest Derived Residues.

1. Primary Forest Products Industry. Lumber mill residues or lumber processing residues consisting of the slabs, shavings, trimmings, sawdust, bark, end pieces of wood, and log cores that result from the various processing operations occurring in sawmills, pulp mills, and veneer and plywood plants. Forest products industry: Residues derived from wood products manufacturing consisting of Clean Wood.

MFPC COMMENT: This is very important to Maine's sawmill industry, which supplies southern New England with dimension lumber and panel building products. Supporting biomass energy in Maine is a critical linkage between the states.

³ https://www.maine.gov/dacf/mfs/publications/annual_reports.html

Eligible Liquid Biofuel. A liquid fuel that is derived from Eligible Biomass Fuel, but is not Eligible Biomass Woody Fuel or Co-mingled Biomass Woody Fuel, and that yields at least a 50% reduction in Lifecycle Greenhouse Gas Emissions relative to average lifecycle greenhouse gas emissions for petroleum distillate fuel sold in 2005, as determined by the Department in consultation with the MassDEP and the Executive Office; or that is derived from waste feedstocks consisting of previously used or discarded solid, liquid or contained gaseous material resulting from industrial, commercial or household food service activities that would otherwise be stored, treated, transferred or disposed. Waste organic waste feedstock and meets the standards for advanced biofuels under the Environmental Protection Agency's Renewable Fuel Standard (RFS2) program. Organic waste feedstocks shall include, but not be limited to, waste vegetable oils, waste animal fats, substances derived from wastewater and the treatment of wastewater, or grease trap waste. Waste feedstock Eligible Liquid Biofuel shall not include petroleum-based waste or waste that otherwise meets the definition of hazardous waste Hazardous Waste as defined in 310 CMR 40.0006: *Terminology, Definitions, and Acronyms*, unless otherwise determined by the Department in consultation with MassDEP.

MFPC COMMENT: There is great interest in refining fuels from wood residuals in Maine, however current EPA Renewable Fuel Standard (RFS) only recognizes wood from plantations and not from naturally regenerated stands (95% of Maine's forest is regeneration). We are working with EPA on this issue, but until this issue is resolved, we recommend that this rule allow wood fuel from sustainably managed Maine forests.

There is growing use in Maine of liquid fuels made from wood, and we anticipate new developments in wood-derived liquid fuel, which could be used in other states as well. So this rule should encourage these developments.

Sustainable Forestry Management. Practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat, and aesthetics and the stewardship and use of forests and forest lands in a way, and a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality, and potential to fulfill, now and in the future, relevant ecological, economic, and social functions at local, national, and global levels, and that does not cause damage to other ecosystems. Criteria for sustainable forestry include the landowner balancing values of:

- (a) conservation of biological diversity;
- (b) maintenance of productive capacity of forest ecosystems; (c) maintenance of forest ecosystem health and vitality;
- (d) conservation and maintenance of soil and water resources;
- (e) maintenance of forest contributions to global carbon cycles;
- (f) maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies; and
- (g) a legal, institutional, and economic framework for forest conservation and sustainable management.

MFPC COMMENT: We acknowledge the SAF definition, but find its practical use to be limited. We recommend aligning this definition with a more succinct definition of sustainable forest management used in Maine: "Sustainable forest management enhances and maintains the biological productivity and diversity of Maine's forests, thereby assuring economic and social opportunities for this and future generations. It takes place in a

large ecological and social context and achieves a balance between landowners' objectives and society's needs."⁴

DOER's definition needs to balance private landowner objectives as well. For example, it is a landowner's prerogative to practice either short rotation or long rotation silviculture, either can be exemplary, sustainable forestry. An owner whose life savings have been invested in timberland needs to be able to realize this value.

14.05: Eligibility Criteria for RPS Class I, Solar Carve-out Renewable Generation Units, and Solar Carve-out II Renewable Generation Units

Eligible Biomass Woody Fuel. Woody fuels that are derived from the following sources, consistent with the requirements of 225 CMR 14.05:

(8) Special Provisions for Generation Units Using Eligible Biomass Woody Fuels, Co-mingled Biomass Woody Fuels, or Fuels or Manufactured Biomass Fuels. (a) Eligible Biomass Woody Fuel or Manufactured Biomass Fuel Certification, Verification, and Enforcement. An Owner, Operator, or Authorized Agent of a Generation Unit that uses an Eligible Biomass Woody Fuel or a Manufactured Biomass Fuel must meet the following provisions.

(a) Sustainable Forest Management. Forest Derived Residues and Forest Derived Thinnings shall only be sourced from forests meeting Sustainable Forestry Management practices, as independently verified through the attestation of a licensed forester, certified forester or independent certification.

MFPC COMMENT: Throughout Maine, there has been an active forest industry for centuries. Based on this experience we believe the standards established in this provision are not realistic. For example:

Maine has the highest acreage of certified land of any U.S. state, yet our supplying mills can only achieve an overall certified content percentage of approximately 40%;

The MFS tracks harvest supervised by a professional forester to be in the 45% range.

While these are important measures, they do not adequately measure overall outcomes monitored by the MFS through inventory tracking and best management practices. We suggest creating a provision where neighboring states can present a monitoring plan to DOER for review and approval if it meets the goals of the agency.

(d) Verification of Eligible Biomass Woody Fuel. In order to verify the use of Eligible Biomass Woody Fuel, an RPS Class I Renewable Generation Unit utilizing Eligible Biomass Woody Fuel shall report the following to the Department on a quarterly basis in a manner outlined in the Department's *Guideline on Eligible Biomass Fuel for Renewable Generation Units*:

1. Supplier of the fuel;
2. Amount of fuel delivered; and
3. Date of delivery.

⁴ Maine Council on Sustainable Forest Management, 1996, https://digitalmaine.com/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1027&context=for_docs.

MFPC COMMENT: Maine has a harvest notification system used by landowners and loggers that links to a mill delivered ticket system. This system links harvest sites to mill deliveries. Is this volume of data necessary or should a random audit system be established to confirm compliance?

225 CMR 14.05(1)(a)7.

- f. A Generation Unit, that uses an Eligible Biomass Woody Fuel, Co-mingled Biomass Woody Fuel, or a Manufactured Biomass Fuel, must provide to the Department as part of their Statement of Qualification Application the following items.
- ii. A design and operational plan that demonstrates that the Unit will achieve an Overall Efficiency, as calculated in 225 CMR 14.05(8)(c)2. through 4. of at least 50% on a quarterly basis, or 40% on a quarterly basis for Advancement of Biomass Conversion Generation Units.

MFPC COMMENT: An overall efficiency “of at least 50% on a quarterly basis, or 40% on a quarterly basis for Advancement of Biomass Conversion Generation Units” will be extremely difficult for many to achieve. Wood manufacturing facilities should be given the opportunity to generate electricity with wood waste and woods biomass and then use the thermal energy in wood dry kilns to produce an overall higher measurable efficiency.

Maine Forest Products Council (MFPC) comments: Renewable Energy Portfolio

Standard Guideline on Eligible Biomass Fuel for Renewable Generation Units

2. Biomass Sustainability

Per 225 CMR 14.05(8)(a), facilities using Eligible Biomass Woody Fuel or Manufactured Biomass Fuel will need to demonstrate that any Forest Derived Residues or Forest Derived Thinnings they use to generate electricity is sourced from forests managed according to Sustainable Forestry Management practices. The definition of Sustainable Forestry Management, which can be found in 225 CMR 14.02, is based off the definition of Sustainable Forestry from the *Dictionary of Forestry* provided by the Society of American Foresters. Non-Forest Derived Residues and Forest Salvage (as defined in 225 CMR 14.02) are considered to meet the sustainability requirements, so for these resources, no further sustainability demonstration is required. RGU owner or operators will need to demonstrate to the Department's satisfaction the sustainable management of the forest from which woody biomass was sourced to the extent that forest derived biomass is used to manufacture the biomass fuel. RGU owner or operators will need to document the chain of custody from the forest to the retail supplier and on to the end customer.

MFPC COMMENT: Maine Harvest Notification and Trip Ticket laws link the source of a harvest to the delivered mill.

The following options are sufficient to demonstrate Sustainable Forest Management:

A) Licensed Forester Attestation

The licensed forester attests that all the lands from where Eligible Biomass Woody Fuel was sourced were covered by a cutting plan that adhered to best management practices, and implemented the operational guidelines for biomass retention and harvesting within the publication titled Biomass Harvesting and Retention Guidelines for the Northeast (Forest Guild, 2010). For forests located in the Commonwealth of Massachusetts these requirements shall be met through a Commonwealth of Massachusetts Department of Conservation and Recreation (DCR) cutting plan pursuant to 304 CMR 11.00, under the long term management option, and include a signature from a state forester attesting to compliance of the requirements. For forests located outside of the Commonwealth of Massachusetts, these requirements can be met by a cutting plan with a signature of a licensed forester attesting that the cutting plan adhered to Sustainable Forest Management (225 CMR 14.02), adhered to the best management practices (either voluntary or regulatory) of the host state, and implemented operational guidelines for biomass retention and harvesting within the publication titled Biomass Harvesting and Retention Guidelines for the Northeast (Forest Guild, 2010).

MFPC COMMENT: The MFS annually determines the number of harvests supervised by a forester. In 2017 with a harvest of more than 13 million tons, only about 32% of the non-industrial harvests were supervised by a forester. The Maine Forest Practices Act ensures harvest practices meet standards and the MFS evaluates Best Management Practices. Maine does not recognize the Forest Guild Retention Guidelines, but has established its own woody biomass retention guidelines.⁵ In addition, the Forest Guild issued Revised Assessment of

⁵ <https://forestbioproducts.umaine.edu/wp-content/uploads/sites/202/2010/10/Woody-Biomass-Retention-Guidelines-2010.pdf>

Biomass Harvesting and Retention Guidelines in 2019,⁶ which assessed the guidelines of other states, including Maine. We suggest that provisions for an approved neighboring state policy should be included in the rules.

Chain of custody is documented through bills of lading. Eligible Biomass Woody Fuel and Manufactured Biomass Fuel must be reported on a consignment basis to ensure sufficient disaggregation of sustainability data. Each consignment should constitute the same characteristics in terms of feedstock types, biomass form, and geographical origin.

MFPC COMMENT: Maine trip ticket and harvest notification reporting regulations should qualify as the mechanism to track shipments.

B) Independent Certification

The Department recognizes independent third-party certification programs as meeting the sustainability requirements for Eligible Biomass Woody Fuel land. At time of writing, these are the 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). The Department will continue benchmarking other independent certification programs and may update this Guideline as necessary.

MFPC COMMENT: Maine has the highest acreage of certified land in the USA, but mills report an average certified content rating of 40%. Maintaining a certification standard for low grade energy wood is not cost effective. Recommend regional assessment of state inventory and growth data to determine realistic measurement of sustainability outcomes.

In general, we think the forest certification requirements are still too onerous for most generators to meet if they requires 100% of their deliveries to come from jobs with approved management plans signed by professional forester. As stated previously, DOER should consider review of neighboring State sustainability monitoring plans.

The Master Logger certification program⁷ is a point of harvest certification system that ensures the use of sustainable harvesting practices, harvest by harvest.

SFI Fiber Sourcing Standard promotes responsible forestry practices with measures that broaden the practice of biodiversity, use forestry best management practices to protect water quality, provide outreach to landowners, and utilize the services of forest management and harvesting professionals.

Massachusetts could consider allowing some sort of a credit system so that a percentage of the generators output could qualify for Class 1 RECs, proportional to the percentage of the inputs they can quantify as meeting the standards. This would open the door for some subset of supply to meet the standard instead of all. For example, if 40% of the supply came from sophisticated landowners with professional foresters and management plans, then up to 40% of the electrons could be sold as Class 1 RECS. This would be similar to what is commonly done with Forest Stewardship Council (FSC) credits under the Chain of Custody (CoC) system for certified paper.

⁶ https://foreststewardsguild.org/wp-content/uploads/2019/06/biomass_guidelines.pdf

⁷ <http://masterloggercertification.com/>