



October 21, 2010

Submitted by electronic mail

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**Re: Draft Proposed Regulation: Renewable Portfolio Standard - Biomass
Policy Regulatory Process**

To Whom It May Concern:

The National Alliance of Forest Owners (NAFO) submits the following comments on the Massachusetts Department of Energy Resources' (DOER's) draft proposed regulation to establish criteria that woody biomass facilities must meet under the Massachusetts Renewable Energy Portfolio Standard (RPS), *available at* <http://www.mass.gov/Eoeea/docs/doer/renewables/biomass/225%20CMR%2014.00%20091710%20to%20SoS.PDF>. If finalized, the proposed regulation would have an immediate, adverse impact on the participation of biomass in the RPS and would likely severely limit new biomass power development. These impacts would negatively impact NAFO members.

NAFO's mission is to protect and enhance the economic and environmental values of private forests through targeted policy advocacy at the national level. At the time of this submission, NAFO's members represent 75 million acres of private forests in 47 states. NAFO was incorporated in March 2008 and has been working aggressively since to sustain the ecological, economic, and social values of forests and to assure an abundance of healthy and productive forest resources for present and future generations.

Forest biomass is a critical component of policies promoting the use of renewable energy to address global warming. The U.S. Energy Information Agency estimates that wood-based energy will provide well over 50% of all renewable energy under a Federal renewable portfolio standard.¹ Currently wood-based energy provides over half of the nation's renewable energy and more than solar, wind, and geothermal

¹ See <http://www.eia.doe.gov/oiaf/servicerpt/prps/rps.html>.

combined.² Additionally, biomass energy is a base load source of energy – providing energy on demand, rather than intermittently based on the availability of wind and sunlight. Before finalizing the proposed regulation, NAFO believes the following five aspects of the proposed rule must be addressed so that wood-generated energy is not effectively excluded from the RPS.

First, the proposed regulation improperly excludes certain types of forest-derived biomass from the fuel sources eligible for the RPS. The definition of Eligible Biomass Woody Fuel is limited to forest derived residues and forest salvage. NAFO urges DOER to expand this definition to include all types of forest-derived biomass, including all parts of the entire tree. A restrictive definition like the one in the proposed regulation would leave forest landowners with increasing stocks, diminished supply, and no alternative market for their product, while at the same time undercutting the renewable energy goals of Massachusetts and the United States. Indeed, earlier today, the United States Department of Agriculture (USDA) Secretary Tom Vilsack emphasized that “[d]omestic production of renewable energy, including biofuels, is a national imperative and that’s why USDA is working to assist in developing a biofuels industry in every corner of the nation.”³

Second, the proposed regulation would implement a strict limit so that no more than 15% of all forest products harvested by weight could be considered eligible biomass fuel. Landowners and DOER’s RPS program would be severely harmed by this unnecessary restriction, which would effectively place a total cap on biomass consumption at 15% of merchantable wood. DOER provides no support or justification for such a restriction, would improperly exclude large quantities of wood-based renewable energy from the RPS and should be eliminated in the final rule.

Third, the proposed regulation would establish an expensive process for biomass fuel certification verification that will likely become overly burdensome.

Fourth, the regulation would require combustion units to demonstrate, based on a life cycle analysis (LCA), at least a 50% reduction of greenhouse gas (GHG) emissions over a 20 year “life cycle,” compared to natural gas combined cycle electric

² See <http://afandpa.org/RenewableEnergy.aspx>.

³ See USDA, Press Release: *Agriculture Secretary Vilsack Announces Renewable Energy Initiatives to Spur Rural Revitalization Throughout the Country* (Oct. 21, 2010).

generation and any fossil fuel emissions displaced from serving thermal loads. NAFO objects to this approach. LCAs are not necessary to demonstrate the GHG reduction benefit of biomass. It is well established that net fluxes of biomass carbon to the atmosphere from the combustion of biomass in the United States are, at a minimum, “carbon neutral” in that any GHG emissions associated with the combustion of biomass are diminished by the significant role domestic forests play as the nation’s leading carbon sink.⁴ Given that domestic forest carbon stocks are increasing, there is simply no need for an LCA requirement in the RPS program. Moreover, LCAs are an improper tool for assessing the site-specific impacts of a particular generation unit’s fuel supply, as contemplated by the proposed rule. Lastly, DOER has failed to provide sufficient guidance on how such LCAs would be conducted.

Finally, NAFO recommends that DOER reconsider the proposed regulation’s requirement that biomass units must meet a high efficiency criterion. This requirement would effectively prevent most biomass generation units from receiving Renewable Energy Certificates and would encourage the use of less environmentally-favorable energy sources.

I. The proposed rule contains an overly narrow definition of eligible biomass fuel.

DOER should expand its proposed definition of Eligible Biomass Woody Fuel to include all types of forest-derived biomass. The definition should include the entire tree, not just parts of it.

The only forest-derived materials included in the proposed rule’s definition of Eligible Biomass Woody Fuel are forest-derived residues and forest salvage. See proposed 225 C.M.R. § 14.02. NAFO urges that instead, all types of forest-derived biomass be qualified as eligible material under the RPS. The definition should consist of the entire tree, including any part of the tree, e.g. logs, slash, chips, bark, hog fuel,

⁴ The benefits of using forest-derived biomass as a fuel source have been well documented and are summarized in NAFO’s September 13, 2010 comments, submitted in response to the Environmental Protection Agency’s (EPA’s) call for information on greenhouse gas emissions associated with bioenergy and other biogenic sources. See Attachment 1. We incorporate these comments by reference and request that DOER consider them in their entirety before finalizing its proposed RPS regulation.

understory, purpose grown material, and disaster debris. Although the proposed definition suggests otherwise, the whole tree is a renewable resource.

The RPS regulation should not—through its definition of eligible biomass—restrict forest landowners from supplying any aspect of their important, renewable feedstock as it is of utmost importance to the United States' ongoing transition to cleaner fuels and energy. The results of well-established LCAs demonstrate that biomass energy provides a more favorable GHG profile when compared to energy produced from the combustion of fossil fuels. See *generally* Attachment 1. "While biomass is like fossil fuels in that burning releases carbon into the biosphere . . . these carbon releases are different from those of fossil fuels in that the process does not release net additional amounts of carbon into the biosphere. By contrast, carbon found in fossil fuels-coal, oil and natural gas-which holds carbon captive, does release net permanent additional amounts of carbon to the biosphere upon energy generation." See Roger A. Sedjo, *Biomass: Short-Term Drawbacks, But Long-Term Climate Benefits*, The Energy Daily (Sept. 20, 2010) (Attachment 2). Using biomass as a fuel source can thus have long-term climate benefits.

For these reasons, the definition of eligible biomass woody fuel should be expanded so that the entire tree is qualified. This change is necessary so that forest-derived biomass of all types can compete with other renewable feedstocks on an even playing field.

II. The 15% limit on forest-derived fuel is unwarranted and should be eliminated in the final rule.

The proposed rule contains a requirement that no more than 15% of the total weight of all forest products harvested from a given forest harvest area was removed for utilization as an Eligible Biomass Woody Fuel. DOER provides no technical basis for such a limitation, nor do we believe one exists. The proposed 15% cap is also so restrictive that it would improperly limit the ability of forest landowners to participate in the RPS. In addition, as explained in Section III below, the cost and feasibility of certifying and verifying compliance with this requirement could be extremely burdensome and further act to exclude certain landowners from participating in the program. NAFO urges DOER to eliminate the 15% limit requirement and instead allow all sources to compete on an even basis.

The 15% limit on use of harvested wood for biomass energy will create a significant economic barrier to the use of eligible forest biomass for the generation of

renewable energy. For example, it would likely preclude thinning operations in which the primary objectives are to produce energy wood and improve forest health. The limit would also likely choke an emerging market for landowners faced with excess supply and decreased demand, potentially pushing landowners away from forestry to other land uses.

Furthermore, there is no need for such a policy, because pulp and paper companies are demanding less and less wood from landowners⁵ while forest stock continues to increase nationwide. In the nation's commercial forests, growth exceeds harvest by over 50%. Accumulated biomass can be a forest health issue and represents a biomass availability opportunity. Markets for forest thinnings are essential in order to manage healthy and productive forests.

Finally, use of biomass for energy will not displace higher value wood products. The economics of forestry favors the production of the highest value saw logs and peeler logs first, higher value pulp logs second and biomass, third. Because biomass is the lowest value product in the forest "value chain," forest owners will not displace higher value products in the long term to supply low value biomass in the short term. Instead, market history shows that biomass supply will increase as market demand for biomass increases. Forest owners will respond to growing and more stable markets with increased investments in forest management practices that maintain sustainable production. See Attachment 1.

III. The proposed rule contains unnecessary and burdensome requirements for certifying and verifying eligible biomass fuel.

The final rule should not include the proposed "special provisions" requiring additional certification and verification for generation units using eligible biomass woody fuels or manufactured biomass fuels. See proposed 225 C.M.R. § 14.05(8). The requirements would likely discourage generation units from using forest-derived materials, a fuel source that has a highly favorable environmental profile. See Attachment 1 (discussing benefits of using forest-derived biomass as a fuel source).

⁵ See Forisk, *Three Realities of Wood Bioenergy and Forest owners* (2010), available at <http://www.nafoalliance.org/wp-content/uploads/Three-Realities-of-Wood-Bioenergy-and-Forest-Owners.pdf>.

The certification and verification process would add costs that would likely hinder the participation of forest-derived biomass in the RPS program. As the DOER knows full well, the practical effect of placing a strict 15% limit on the use of harvested wood for biomass energy is that only the lowest-value forest-derived biomass will be eligible for participation in the program. By adding the proposed certification and verification requirements on top of this overly stringent limit, the cost burden of participating in the program will likely be prohibitive to many forest owners.

As noted above, energy production is one of the lowest value uses of forest biomass. Forest owners, most of whom are private individuals,⁶ rely on healthy forest products markets—including energy markets—to support the investments necessary to maintain and improve their forests over the long term. Otherwise their forests will not compete favorably with more economically valuable non-forest uses. Despite a great potential for growth,⁷ forest owners will only be able to increase their biomass production for energy and other uses if barriers to their participation in the marketplace are removed. The proposed verification requirements could be so burdensome and costly as to “tip the scale” in favor of other land uses. Such a shift would be contrary to Massachusetts’ and the United States’ renewable energy goals as forests play a paramount role in supplying renewable feedstock and in the ongoing transition to cleaner fuels and energy.

⁶ In Massachusetts, 71% of the forests are privately-owned.

⁷ Market history and recent studies show that forest owners can sustainably increase biomass from their forests by as much as 150% on planted forests and 75% on naturally growing forests as the market demand for biomass increases. Clutter, M., Abt, R., Greene, D., Siry, J. and Mei, R., *A Developing Bioenergy Market and Its Implications on Forests and Forest Products Markets in the United States*, (April 2010), available at <http://nafoalliance.org/clutter/>. Moreover, biomass facilities in the U.S. will only be built as economic and other conditions, such as securing necessary permits and enough wood to operate sustainably, will allow. Credible market analysis shows that approximately 52% of all the new biomass energy projects announced in 2010 are expected to be online by 2020. This gradual build-up in biomass energy production will enable biomass supply to grow with demand over time rather than creating sudden demand spikes that overextend supply. Mendell B. and Hamsley, A., *A Practical Guide for Tracking Wood Using Bioenergy Markets*, (April 2010), available at <http://nafoalliance.org/bioenergy-tracking-guide/>.

Many of the certification and verification requirements are also not sufficiently flexible and, in some instances, do not appear to relate to the substantive requirements of the proposed rulemaking. For example, Section 14.05(8)(a)1.b states that foresters will certify compliance with the eligibility requirements for Eligible Biomass Woody Fuels, which “may include evidence that the fuel has been received from land certified by” certain specific entities. Such certification, however, should be unnecessary as it is not a requirement of eligibility under the proposed rule. Moreover, to the extent that DOER intends to list certification options, the American Tree Farm System, the largest certification program in Massachusetts, should be included on the list.

Under Section 14.05 (8)(a)2.a, an “Advisory Panel” will be established with eight members. NAFO believes such a panel is unnecessary and will add to the administrative burden and cost of the program. However, to the extent that DOER is inclined to include an Advisory Panel in the final rulemaking, its makeup should be reconsidered. While the members include parties such as “an environmental advocacy group,” “a licensed Massachusetts forester,” and “a conservation biologist,” they do not include other interested parties, such as large and small forest landowners and loggers. The Panel, if retained, should represent all affected stakeholders.

IV. The LCA requirement should be eliminated.

The proposed rule would place additional requirements on generation units that use an eligible biomass woody fuel or manufactured biomass fuel provide, including the requirement that they provide an analysis of lifecycle GHG emissions. See proposed 225 C.M.R. § 14.05(1)(a)(7)(f)(iii). There is no basis for such a requirement.

A. An LCA requirement is unnecessary because it is well established that GHG emissions from the combustion of biomass do not increase atmospheric carbon and that domestic carbon stocks are increasing.

As documented in NAFO’s call for information comments, see Attachment 1, science backs the carbon-benefits and sustainability of renewable forest biomass energy. In July 2010, 113 scientists wrote a letter to the U.S. Congress emphasizing that the carbon in wood used for energy is part of a natural carbon cycle that is not adding to overall carbon dioxide in the atmosphere. See Letters from 113 Scientists (Lippke, B. et al.) to Sen. Boxer, et al. and Rep. Waxman, et al. (July 20, 2010), available at www.nafoalliance.org/scientists. This is particularly true in the United States where overall forest carbon stocks continue to increase annually. Indeed, the

113 scientists noted the sustainability of U.S. forests, stating that forest acreage in the United States has remained stable over the past 100 years, and that forest growth nationally has exceeded harvest, resulting in the standing volume of wood increasing 52% since 1952. *Id.* In the eastern United States (including in Massachusetts, as the Manomet study recognizes, see *supra* at Section IV.D), average volume per acre has almost doubled. Given the “carbon neutrality” of the energy from forest-derived biomass and that domestic forest carbon stocks are increasing, there is simply no need for the burdensome, costly site-specific LCAs called for in the proposed regulation. It would be unnecessary to require each participant in the RPS to conduct LCAs, repeatedly, to prove that the types of eligible biomass being used have significant GHG emission reductions when these types of fuel sources have already consistently demonstrated highly favorable LCA results. See Attachment 1.

B. The LCAs called for in the proposed regulation are unadvisable as a means of assessing site-specific impacts.

The proposed regulation would improperly necessitate expensive, site-specific LCAs.

Conducting an LCA at the site-specific or plot level is not advisable. While it is possible, via a site-specific LCA, to estimate the net impact on the atmosphere of GHG emissions from specific biogenic sources, this is not something that can be done on a routine basis. Comparative LCAs are useful in measuring the relative GHG emissions of energy technology options, but LCA is not an appropriate tool for routine use in a site-specific analysis, such as the analysis that appears to be required by the proposed regulation. An LCA considers not only factors that are under the control of the facilities that combust biomass, but also other aspects of the carbon lifecycle that are entirely outside the control of such facilities. It is also critical that any LCA measuring energy from the combustion of forest-derived biomass begin at the point where carbon is removed from the atmosphere and not the point of harvest. Because the biogenic carbon cycle begins with the uptake of CO₂ from the atmosphere,⁸ it is the appropriate starting point for an LCA analysis. See *generally* Attachment 1.

⁸ The prevailing view in the science community is that carbon emissions from forest biomass are offset by the prior absorption of carbon through photosynthesis that created the biomass and, as such, the return of the carbon to the atmosphere will have a neutral effect on atmospheric carbon. In other words, the carbon that enters the atmosphere when forest biomass is

C. The proposed regulation does not provide proper or sufficient parameters to implement the LCA requirement.

Because the proposed rule provides inadequate guidance on how the LCA assessments should be accomplished, they will likely have substantial variation and provide limited helpful information to DOER.

The specific guidance that is provided—for example, that the LCA should be based on a 20 year life cycle—is unsupported. There is simply no basis for confining an LCA to 20 years. The proposed rule also defines lifecycle GHG emissions as including, among other things, “temporal changes in forest carbon sequestration and emissions resulting from biomass harvests, regrowth, and avoided decomposition.” See proposed 225 C.M.R. § 14.02. The term “temporal changes” is unnecessary and confusing because it implies dynamic modeling should be used, even though there is no guidance on how to perform a dynamic assessment or on how to utilize the resulting information.

In addition, without specific guidance on parameters, any attempt to use LCA as the method to evaluate the impacts of biogenic emissions from particular facilities would likely yield inconsistent results. The proposed regulations fail to provide specific guidelines on the spatial and temporal boundaries for the required LCAs. The methods for including land use change impacts in LCA analyses have not yet been standardized.⁹ The results of LCA analyses can also be heavily influenced by the particular methods, assumptions, and procedures for establishing boundary conditions that are applied by the analyst. It would therefore be extremely difficult to consistently

combusted was previously absorbed from the atmosphere by the forest biomass. As the cycle is repeated, additional CO₂ will be absorbed when new biomass is grown. As such, where forest biomass is being supplied while maintaining forest carbon stocks over the supply area, the net transfers of biogenic carbon to the atmosphere are “zero” at worst, and may be negative if some of the harvested carbon is being stored in long-lived products. The scientific basis for these conclusions is the biogenic carbon cycle.

⁹ Standards are now being developed under the auspices of the International Organization for Standardization and the WRI/WBCSD GHG Protocol. The GHG Protocol standard is currently expected to be finalized by the end of 2010. See WRI, Companies complete road testing of new global greenhouse gas accounting standards (2010), *available at* <http://www.ghgprotocol.org/companies-complete-road-testing-of-new-global-greenhouse-gas-accounting-standards>.

conduct LCAs as would be required under the proposed rule. The results of such LCAs would vary greatly based on the analyst's subjective and arbitrary judgments about what was considered within the scope of the LCA. For example, there is no direct way to measure how an individual generation unit's activities affect carbon stocks. In addition, even if it were possible to trace biomass combustion back to specific impacts on carbon stocks, on a site-by-site basis, which it is not, a rational landowner would not likely incur the cost of doing so. Using forest biomass for energy is currently the lowest-value product from the forest. Such onerous requirements would likely cause forest landowners to look for more profitable uses of their land than producing biomass for energy. It would also likely be prohibitively expensive to routinely conduct LCAs on a facility-by-facility basis.

D. The Manomet Study does not provide adequate support for the proposed LCA requirements.

DOER has explained that its proposed regulation is the result of careful consideration of the *Biomass Sustainability and Carbon Policy Study*, which is often referred to as the "Manomet study,"¹⁰ and related comments. However, the Manomet Study should not be used as a basis for the LCA requirements included in the proposed regulation.

The Manomet study produced modeling results that confirm biomass energy systems can help reduce GHG emissions when supported by sustainable forest management. However, the authors framed their analyses and conclusions in a way that casts doubt on the GHG mitigation benefits of biomass energy. The authors suggest that emissions are always greater in the near-term for biomass than for fossil fuels and that net reductions in GHG emissions attributable to bioenergy usually do not become apparent for many years. This "carbon debt" analysis is flawed because it focuses only on emissions associated with stands of trees that are harvested in any given year and ignores sequestration associated with the vast majority of forested acres where the stands are not disturbed by harvesting and continue to grow in a given

¹⁰ Walker, T., P. Cardellicchio, A. Colnes, J. Gunn, B. Kittler, B. Perschel, C. Recchia, and D. Saah., *Biomass Sustainability and Carbon Policy Study*, Manomet Center for Conservation Sciences, Brunswick, ME (2010).

year.¹¹ Notably, it is the existence of the entire system (e.g., the long-term fuel supply), that is the basis for investing in the harvest in the first place.

Forest management produces tomorrow's fuel today, removing CO₂ from the atmosphere that offsets the biogenic CO₂ emissions associated with the combustion of biomass removals on one part of the supply area. Indeed, the Manomet study itself showed that carbon stocks within the Massachusetts study area are increasing. By doing the accounting on one plot at a time, the system is improperly being defined as the plot rather than the complete energy supply system. Plot-level analyses are simply insufficient to estimate effects of forest management options on carbon stocks. In fact, active forest management can have a positive affect on carbon stocks.¹² The Manomet study's model thus creates a false impression that forest carbon stocks are always depleted by harvesting and that carbon stock depletion is reversed only gradually as the harvested stands are re-grown.¹³

¹¹ See Lucier, A., *NCASI Review of Manomet Biomass Study*, National Council for Air and Stream Improvement, Inc. (2010), available at <http://www.mass.gov/Eoeea/docs/doer/renewables/biomass/study-comments/lucier.pdf>.

¹² See, e.g., Nechodom, M. PhD, USDA Forest Service, Pacific Southwest Research Station, CEC-500-2009-080, *Biomass To Energy: Forest Management For Wildfire Reduction, Energy Production, And Other Benefits* at 77-83, Prepared for Public Interest Energy Research, California Energy Commission (January 2010) (showing transition from passive to active forest management can occur without creating a "carbon debt" as active management of forests in the study landscape would reduce carbon losses to wildfire), available at <http://www.energy.ca.gov/2009publications/CEC-500-2009-080/>; see also Zhang, J., Powers, R. and Skinner, C., *To Manage or Not to Manage: The Role of Silviculture in Sequestering Carbon in the Specter of Climate Change*, USDA Forest Service, Pacific Southwest Research Station (pending publication) (showing active forest management increased carbon sequestration and decreased fires-caused tree mortality).

¹³ The understanding of the importance of time in carbon stock assessments goes back at least to the early 1990s. See, e.g., Marland, G. and Marland, S., "Should we store carbon in trees?" *Water, Air and Soil Pollution* (64), 1992: 181-195. As explained above, the analytical framework used in the Manomet study yields results that overstate the length of time needed to experience net benefits from using forest biomass fuels compared to fossil fuels because it improperly assumes that modeling harvested stands in isolation is equivalent to modeling forests comprising a diverse population of stands.

The study also set an arbitrary cut off for the repayment of the “carbon debt” at the year 2050. Finally, in considering the value of the Manomet study, it is important to recognize that its findings have frequently been misconstrued by certain groups and in the press. In fact, to address press coverage that oversimplified the study’s results, the Manomet study authors issued a statement of clarification: “One commonly used press headline has been ‘wood worse than coal’ for GHG emissions or for ‘the environment.’ *This is an inaccurate interpretation of our findings, which paint a much more complex picture.*”¹⁴

In other words, as explained in comments to EPA on its call for information, Jay O’Laughlin, Ph.D., of the University of Idaho’s College of Natural Resources’ Policy Analysis Group, the carbon debt model is flawed by “time and space restrictions:”

The carbon cycle does not begin at the time a tree dies, rather it is continuous; wood utilization requires many, many stands sustained over a long period of time, not one stand over four decades as in the Manomet Center study report. The study report also purposely ignores wood products carbon pools and the benefit of avoided GHG emissions from substituting wood products for concrete and steel, which consume large amounts of fossil fuel energy in their production.

See O’Laughlin, J., University of Idaho, *Accounting for Greenhouse Gas Emissions from Wood Bioenergy*, Report No. 31 at 1 (Sept. 13, 2010)¹⁵; see also Roger A. Sedjo, *Biomass: Short-Term Drawbacks, But Long-Term Climate Benefits*, The Energy Daily (Sept. 20, 2010) (Attachment 2).

In the United States, the concept of “carbon debt” is particularly irrelevant; because forest carbon stocks are increasing, there is no “carbon debt” to repay. See Attachment 1 at Sections I.A & III.A. As explained in NAFO’s call for information comments, any measurement of carbon stocks is most appropriately addressed through a national-scale accounting approach. See *id.* at Section III. Smaller-scale accounting

¹⁴ See Statement from Manomet on the Biomass Study (June 21, 2010) (emphasis added), available at <http://www.manomet.org/sites/manomet.org/files/Manomet%20Statement%20062110b.pdf>.

¹⁵ Available at [http://www.cnrhome.uidaho.edu/documents/JayO"L_to-EPA_9-13-2010_PAG_31.pdf?pid=119711&doc=1](http://www.cnrhome.uidaho.edu/documents/JayO).

approaches, such as facility-level analyses, are problematic as they cannot accurately assess whether the combustion of biomass by a particular facility or facilities was relevant to an observed change in carbon stocks.

As set forth in NAFO's comments on EPA's call for information, see Attachment 1, recent LCAs show that energy derived from biomass has a GHG mitigation benefit when compared to energy derived from fossil fuels. There is no need to require generation units to conduct site-specific LCAs under the proposed regulation. It is well established that the combustion of forest-derived biomass is at least carbon neutral so long as carbon stocks are stable or increasing, as they are in the United States. See *id.*; see also Lippke, B. & Oneil, E., Consortium for Research on Renewable Industrial Materials, *Unintended Consequences of the Proposed EPA Tailoring Rule Treatment of Biomass Emissions the Same as Fossil Fuel Emissions* (2010).¹⁶

V. The proposed rule's efficiency standards are unreasonable and would improperly prevent biomass from participating in the RPS.

NAFO also urges reconsideration of Section 14.05(8)(b)(3) of the proposed regulation, which provides that biomass units must meet a high efficiency criterion. This requirement will improperly bar the majority of biomass generation units from receiving Renewable Energy Certificates. While DOER suggests that this approach will encourage the development of applications that achieve higher levels of efficiency, the reality is that the types of thermal energy plants that may be able to meet the efficiency requirements in the future will be limited by thermal energy demand and, in any event, will not be in place for some time. In the meantime, clean biomass-derived power will likely be replaced by fossil fuel production that will fall far below the efficiency criterion. As explained further in comments that are being submitted by the Biomass Power Association, such a result is fundamentally unfair and would penalize recent investment in biomass facilities that was made with the reasonable expectation that the facilities would be qualified for the RPS. Such a reversal of policy is unjustified and can be expected to have a chilling effect on future renewable energy investment. NAFO therefore recommends DOER eliminate this requirement in the final rule.

¹⁶ To be available at <http://www.nafoalliance.org/>.

Conclusion

NAFO appreciates the opportunity to comment on this important rulemaking. Our members look forward to working with DOER to realize the contributions that our private forests can make to the RPS program.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "D. Tenny", with a long horizontal flourish extending to the right.

David P. Tenny
President and CEO
National Alliance of Forest Owners

Enclosures