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Submitted by email to DOER.RPS@mass.gov

June 10, 2019

John Wassam
Department of Energy Resources
100 Cambridge Street
Suite 1020
Boston, MA 02114

Re: Comments on proposed changes to MA RPS Class I and RPS Class II regulations

To Whom It May Concern:

Please accept these comments on MA DOER's proposed changes to the RPS Class I and Class II regulations.

Innovative Natural Resource Solutions LLC (INRS) is a consulting firm active throughout the northeast with interests in sustainable forestry, forest economic development, renewable energy and the intersection of all three. Founded in 1994, the firm has three partners with over 100 years of combined experience. Two of the firm's partners are licensed professional foresters and all the firm's partners have degrees in forestry or natural resource economics.

Following are comments of INRS on proposed changes:

Minimum Standard percentage requirements for 2020 and beyond. INRS supports establishing more aggressive renewable energy targets for Class I from 1% per year growth rate to 2% per year growth rate from 2020 to 2029. In general, we favor state policies that accelerate the transition to displace fossil fuel-based electric and thermal energy with all renewable energy technologies that qualify under Class I. INRS supports the proposal by DOER to make changes to the lifecycle greenhouse gas emissions reduction calculation, overall efficiency requirements, and fuel sourcing requirements for biomass electric generation.

With respect to the proposal that the regulations no longer allow fuel sourced from land clearings related to development to qualify for the RPS, we take no position. We understand the perspective that this fuel source is ultimately not sustainable, inasmuch as land conversion for development generally forecloses on any future forest growth on the impacted acres. However, we point out that land clearing will happen with or without the existence of a biomass fuel market. Markets for biomass for energy do

not cause land clearing, which is motivated by economic factors that are completely unrelated to the harvest of trees before the development can begin, or the insignificant value of biomass as an energy fuel resource. If forest residues from land clearing are not utilized in biomass energy, the only other recourse developers or land clearers may have is landfilling or processing into mulch, with the same eventual release of carbon dioxide and other greenhouse gases from decomposition, but no capture of the energy content of the fuel for useful purposes. Most logging contractors do some land clearing to maintain steady operations, especially during times of the year when ground conditions are not suitable for logging in the woods. We urge MA DOER to reconsider the proposal to exclude wood derived from land clearing as REC eligible.

We also applaud the decision to make forest salvage wood exempt from the arbitrary efficiency limits for biomass power. Massachusetts forests face an onslaught of invasive insects and diseases that are having a major impact on forest health. The emerald ash borer is projected to kill off virtually all ash trees in Massachusetts within the next two decades. Gypsy moths are in a population upswing, causing extensive oak mortality through south-central MA in areas with consecutive years of defoliation. New threats are emerging, such as the spotted lanternfly.

One of our partners, Charlie Niebling, had an experience following Hurricane Sandy in 2012 that is relevant to this issue. At that time, he was the general manager and procurement forester for New England Wood Pellet's manufacturing plant in Jaffrey NH. He received dozens of calls from FEMA and other state and municipal emergency officials, desperate for a market for the tens of thousands of tons of trees damaged or killed by Hurricane Sandy in coastal areas of CT, NY and NJ. Much of this wood was contaminated with salt spray or was very rough with high bark content and could not be used for pellet manufacturing. He later learned that much of this wood was landfilled. He had a similar experience in 2009-2010 during the oak sanitation cutting in and around Worcester MA following the Asian Longhorned Beetle infestation. Again, New England Wood Pellet could not use any of this wood because of the potential for transport of the insect outside the quarantine area. NE Wood Pellet was able to utilize clean hardwood bole chips salvaged from the June 2011 tornado that traversed the state, but much less than salvage contractors wanted to sell the company.

MA needs the ability to cost effectively utilize wood salvaged from forests damaged by insects, disease or catastrophic weather events, and this change in the RPS law will enable existing biomass plants to qualify for RECs when using this material without having to comply with the arbitrary efficiency threshold.

We conclude by pointing out that the latest U.S. Forest Service Forest Inventory & Analysis data (2017) shows that Massachusetts has 5% more total wood fiber in our forests than just five years ago. This is due to the fact that we're growing nearly 4.3 times as much wood as we're harvesting each year. FIA data also show that tree mortality exceeds the harvest level by more than 2:1, meaning that more than twice as many trees are dying than are being harvested annually. Some of this mortality is from invasive insects and disease, and some from overcrowding and competition between trees. Worse yet, mortality rates are increasing.

Massachusetts needs new markets for low grade wood so that forest landowners who are so inclined have economically viable options to utilize this wood and practice high quality silviculture. Utilizing low grade wood for energy – both electricity and thermal energy – is the most viable market option, but only if state policies encourage and support this use. Biomass electric generation, combined heat and power,

and useful thermal energy with supportive policy in the RPS and APS are essential to provide these markets.

Accordingly, we urge DOER to consider waiving efficiency requirements for wood from forest-derived residues and forest-derived thinnings, as this will help increase forest resilience while continuing to help mitigate against climate change. These proposed changes align with the APS requirements for woody biomass wherever possible, and goal of the proposed changes.

We thank you for the opportunity to share these comments.

Sincerely,

A handwritten signature in blue ink, reading "Charles A. Levesque".

Charles A. Levesque
President

A handwritten signature in blue ink, reading "Eric Kingsley".

Eric Kingsley
Vice President

A handwritten signature in blue ink, reading "Charles Niebling".

Charles Niebling
Partner