

Testimony to DOER about changes in 2 main programs that subsidize renewable energy: the Renewable Portfolio Standard (RPS) and the Alternative portfolio Standard (APS). Submitted by: Mike & Miriam Kurland 566 East St., Williamsburg, MA 01096 413-268-7529 mimbck@yahoo.com

Both RPS and APS subsidize wood burning and garbage burning. Climate science shows that to avoid catastrophic warming, we must reduce emissions and take CO₂ that's already in the atmosphere out, most likely by restoring and expanding forests, while also reducing fossil fuels and other hazardous energy sources. We need to cut our net emissions in half in the next ten years, and reach emissions neutrality with balanced emissions by 2050.

The big finding of the Manomet Report that was commissioned by Massachusetts to inform the state's biomass energy policy said that wood burning power plants emit more CO₂ per unit energy than even fossil-fired plants, pumping greenhouse gases into the atmosphere just when we need most to reduce emissions. It takes decades to grow forests back. The result is a net increase in CO₂ emissions to the atmosphere just when we need to reduce them. Net emissions from wood-burning power plants that burn a mixture of trees and forestry residues exceed emissions from a same-sized coal or gas plant for years to decades.

The proposed changes represent a total betrayal of a hard-won compromise and agreement from 2012, to say nothing of the 100,000+ people who signed a petition to take ALL biomass out of the RPS. DOER should be doing what's best for the health and wellness of the Commonwealth's public, environment and climate, instead of placating industries that are only interested in making more money.

It's a similar story with the Alternative Portfolio Standard (APS). After the RPS rules went into place in 2012, and it became clear that the large wood-burning plants would probably not be built, the forestry and biomass lobby went into high gear, and working with DOER, added biomass thermal energy to the APS, which had previously been a catch-all program that provided subsidies to a few technologies that the state wanted to incentivize, but that did not really qualify as "renewable" energy. Along with solar and geothermal heating, biomass heat-only units were made eligible for public subsidies (as were biomass combined heat and power plants, just like in the RPS – except the APS contained none of the protective rules the RPS contained. It took a few years to get the APS regulations finalized. Independent scientists and activists fought to keep the APS "clean" by advocating that it only include zero-emissions thermal sources (solar, wind and geothermal) but the wood industry was powerful and got biomass thermal added. The DOER continued to weaken the APS regulations whenever it had the chance.

We end up with lax regulations that promote the wood fuel that can be the most carbon-intensive – wood pellets from cutting down forests. Mill residues: wood shavings, sawdust, bark. "Clean" mill residues can be burned directly or made into wood pellets. Mill residues are considered to have relatively low net carbon impact if the alternative fate of this material is to decompose (emitting carbon) or be burned without energy recovery. However, if this material would have been used for some other purpose (e.g. particleboard), then burning it for energy can force the former user to go out and harvest more trees which increases emissions. Forestry residues: tree tops and limbs left over after sawtimber harvesting. Forestry residues have been considered to have relatively low net carbon impact if the alternative fate of this material is to decompose. However, the net carbon impact of burning residues is still significant – especially in a world where we want to limit emissions now. PFPI published a paper on this. The relatively low net emissions impact of residues in the Manomet Study and the subsequent regulations by MA means that DOER (and foresters) want to call everything residues. True residues are the by-product of sawtimber harvesting. Cutting trees and calling them "residues," as the forest industry tends to do, is not legitimate and significantly increases the net emissions impact.

Cutting trees is considered to have the highest carbon impact because if they were not cut and burned for energy, they'd either continue growing and taking carbon out of the atmosphere; OR, they'd be harvested for some other purpose, potentially a long-lived wood product that locks up some of the tree's carbon away from the atmosphere. And as with mill residues, if the trees would have been used for some other purpose (e.g. pulp and paper) and now they are harvested for bioenergy, that means the paper industry needs to go cut trees somewhere else – hence, more leakage, and more emissions. We must now stop allowing industry from cutting our state forests.

So I believe the DOER should withdraw these ^{proposed} changes, & proceed to improved considerations for reducing energy use & remove biomass from inclusion as a renewable energy. In addition, truly renewable energy →

should also be allowed in places that do not remove forests.