

Senate Energy & Technology Testimony

Michigan Biomass

March 18, 2014

Michigan Biomass is a coalition of the state's wood-fired power producers operating under long-term contracts with utilities, in effect and on-line prior to adoption of Renewable Portfolio Standards in 2008.

Michigan's wood-based power plants total 189 MW of installed capacity, and historically (we've been producing baseload renewable energy for nearly 30 years) have accounted for about 1% of the state's power generation.

Biomass power is vitally important to Michigan's renewable energy portfolio. According to the PSC, 30% of the 26.7 million RECs in the system at the end of last year were generated from biomass power, and 28% of the more than 4 million RECs retired for RPS compliance in 2012 were from biomass. Our power is sold at avoided costs, which is based on production costs at the utilities' fleet of coal plants, so our power is affordable. And, as independent power producers, we assume all the capital risk, not ratepayers.

Biomass contributions are substantial. Prudent, "no regrets" energy policy for the State of Michigan preserves this baseload renewable capacity, which brings a host of non-electron benefits to the table.

1. Jobs: Biomass power supports more *direct* jobs than any other form of renewable energy; the majority of those in the field processing, handling and transporting upwards of 1.6 million tons of wood byproducts we use every year for fuel. That translates to about 700 jobs throughout the state; or 3.6 jobs per MW installed; six times the *permanent* employment rate of other renewables, such as wind.

These are jobs in mostly rural communities that rely on their natural resources as the basis of their economies; communities hit hardest by the recent recession, like...

- L'Anse in Baraga County with the highest unemployment rate in the state at nearly 17% last year
- Hillman in Montmorency County, third highest in unemployment at more than 15%
- Lincoln in Alcona County, fourth at almost 15%
- Cadillac in Wexford County, 13th highest in unemployment at more than 12%
- McBain in Missaukee County, number 17 at more than 11%
- Grayling in Crawford County, 39th at 10%
- And Genesee County, which came in at 43rd with an unemployment rate of 9.6%.

Biomass power is home grown, domestic energy that puts Michiganders to work and keeps Michigan's energy dollars in Michigan.

To put these benefits into perspective, the PSC's RPS report last year stated that the 100-MW Lakes Wind project generated \$10 million local in economic activity during construction. A hundred MWs of biomass would inject more than \$18 million into that area in fuel purchases alone; \$18 million the first year, \$18 million the second year, the third year, the fifth year and every year thereafter. These aren't temporary or trickle down jobs. These are permanent, good-paying, skilled, full-time jobs directly related to biomass power.

2. Biomass power is "baseload" capacity. It's the only renewable that can effectively store energy; either on the stump as part of a forest resource investment, or in the power plant's fuel yard as a pile of chips. It is firm, reliable, distributed, dispatchable power that supports and enhances the capability of the transmission system, especially in rural and remote areas.
3. Biomass power is a beneficial use of secondary materials. Our fuel is a byproduct, so we play a key role in waste management, and in forest health and stewardship practices. We do not cut trees specifically for making power. We are not the economic driver of the wood fiber market, and we don't compete with other wood users. Biomass power lives at the bottom of the wood-fiber food chain. The millions of tons of wood that go into power production are byproducts of higher value wood fiber markets, the forest products industry and forest management activities.
 - When a log is harvested for board, lumber and paper, we buy the tops and slash and turn it into electricity.
 - When that log is cut into saw timber at a primary mill, we buy the slabs and bark and turn it into electricity.
 - When the saw timber is manufactured into lumber, or a crate or pallet, we buy the sawdust and scraps and turn that into electricity.
 - When the crate, pallet or 2 x 4 is has out lived its useful life as a crate or pallet, we divert it from the landfill and turn it into electricity

Simply said, biomass power extracts the last bit of value – energy – from our valuable forest resources; cradle to grave utilization.

4. We play a supporting role in forest health, stewardship and habitat development. A few years ago when the US Dept. of Agriculture tried to eradicate the emerald ash borer by cutting down infested trees, that wood went to Genesee Power Station to ensure the pest was destroyed. When the U.S. Forest Service removes small diameter brush and undergrowth from federal forests to reduce the risk of catastrophic forest fires, we buy that material and reduce the cost of that treatment. When the DNR cuts jackpine stands to provide nesting habitat for the endangered Kirtland Warbler, we buy that material and reduce those costs.

Without biomass we'd have fewer jobs in rural Michigan, less baseload capacity, and higher cost forest products and forest management practices.

However, today, Michigan's biomass power industry finds itself navigating in uncertain waters. Most pressing is the pending expiration of power purchase agreements, beginning at the end of next year. By

2018 we could see more than 200 jobs lost and 54 MW of baseload renewable capacity mothballed, and the loss all the values that come with it.

1. Regulated utilities do not profit on these third-party contracts, and subsequently, these important facilities are being displaced by new, mostly intermittent, renewable energy systems. The RPS has encouraged the construction of utility-owned energy systems, which is rendering these existing renewable energy systems obsolete. Utility shareholders profit from new construction, not third-party contracts. Michigan's current energy policy is a disincentive to maintaining these contracts.
2. These facilities are also at a direct competitive disadvantage with new renewable energy systems that A) have the benefit of federal tax credits that biomass does not, and B) because under the RPS we're limited to owning just 20% of our RECs; 80% goes to the utility with no additional compensation to the generating facility.

Baseload, renewable, biomass power brings diversity to the state's portfolio, support for the grid, and a host of benefits that includes jobs, economics, forest health and stewardship, and waste management services. It simply doesn't make sense to lose this capacity. A reasonable, prudent, "no regrets" energy future includes biomass power and all that comes with it.