

Comment from Michigan Biomass on the Renewable Energy Draft Report

Readying Michigan to Make Good Energy Decisions

Michigan Biomass is a coalition of wood-fired independent power producers, which provide the state with more than half of its biomass power and a third of all non-hydro renewable power.¹ It submits these comments seeking clarity on biomass assumptions and scenarios included in the Renewable Energy Draft Report, and offers assistance to the Michigan Public Service Commission and the Michigan Energy Office in gathering additional data and information for the final report that is more reflective of, and specific to, the state's biomass power industry.

Michigan Biomass seeks clarity in two areas of the report:

1. **Baseline and “maximized” solar and biomass:** These sections lack adequate data, detail and clarity. The percentages of new solar and biomass capacity development under any of the scenarios presented are arbitrary. Arbitrary data does not lead to “good energy decisions.” It's as though the report authors “backfilled” the RPS after allocating a percentage of the incremental RPS increase to wind. For example in Table 8 Model 2 the percentages of the incremental increase for solar and biomass shrink over time as the percentage of wind increases. Solar and biomass percentages change dramatically from the 7.5% used as the Table 8 Model 1 base scenario to a wide range under the others: a low of 2.0% in a 30% by 2035 standard with a 50% surcharge and 1.2% annual load growth (Table 10), to a high of 33% in a 15% by 2020 standard with maximized solar and biomass and no load growth (Table 8). There is little or no explanatory data, information or comment on how these percentages were derived.

Unlike wind and solar, biomass power generation relies largely on the availability of fuel – agriculture byproducts, forest residues and other natural resources. Assumptions about the state's biomass capabilities cannot be adequately assessed or modeled without data and information on resource cost and availability. A lack of fuel available for the biomass power production targeted in the report constitutes a “technical” deficiency that is counter to the report conclusion that each of the scenarios presented are achievable.

Developing a viable biomass project is more than raising capital and obtaining a power purchase agreement, which is typical of wind development. These operational costs and complexities need to be considered in any analysis of potential biomass capacity.

¹ EIA, 2012, MI: wind, 41%; woody biomass, 33%; other biomass, 26%. Compared nationally: wind, 88%; woody biomass, 7%; other biomass, 5%

2. **Biomass performance data:** The report uses biomass data from the U.S. Energy Information Administration, including a 65% percent capacity factor. Michigan's wood-fired power plants routinely run in excess of 90% capacity. We believe other types of biomass power – anaerobic digestion, biogenic MSW and landfill gas – are likely included in this EIA number and may dilute the high capacity factor associated with wood-fired generation. A higher capacity factor in these models would reduce the amount of added capacity to meet the modeled numbers by 28%, lowering the cost of capital and, ultimately, the cost per MWh (assuming capital costs are included in the EIA cost model being used).

EIA has two definitions for biomass:

- a. **Wood and Wood Derived Fuels** includes paper pellets, railroad ties, utility poles, wood chips, bark, red liquor, sludge wood, spent sulfite liquor, and black liquor, with other wood waste solids and wood-based liquids.
- b. **Other Biomass** includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases and methane).

Power generated with wood-based biomass is distinctly different from other forms of biomass (i.e. landfill gas) in that it supports the forest products industry, aids forest health, provides hundreds of jobs and economically supports rural communities. In 2012, wood and wood derived fuels such as those used by Michigan's biomass power plants accounted for 56% of all IPP and utility biomass power generation. These are significant differences and a distinction from other forms of biomass energy that should be noted in any assessment of potential biomass capacity.

While the reports use EIA cost data (\$111 per MWh), actual cost data regarding Michigan's wood-fired power can be found in Consumers Energy Co.'s PSC-R annual filings with the MPSC.

Michigan Biomass appreciates this opportunity to comment and is willing to discuss these details with MPSC and Energy Office staff.

Sincerely,

Gary Melow, Director
Michigan Biomass