

ADVANCED WASTE ENERGY RECOVERY

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House Bill 5205

Sponsor: Rep. Aric Nesbitt

Committee: Energy and Technology

Complete to 5-19-14

A SUMMARY OF HOUSE BILL 5205 AS INTRODUCED 12-12-13

Briefly, the bill would amend the Clean, Renewable, and Efficient Energy Act to:

- Add a new purpose for the act: to remove unnecessary burdens on the appropriate use of solid waste as a clean energy source.
- Allow fuel manufactured from municipal solid waste, among other waste sources, to be a "renewable energy resource" and revise the definition of the term.
- Allow for the use of pyrolysis technologies in the generation of renewable energy. ("Pyrolysis" is not defined in the bill but generally refers to a high-temperature, oxygen-free process to make biofuels from a wide range of agricultural, industrial, and municipal solid waste.)
- Consider an advanced-waste-to-energy facility to be a renewable energy system.
- Remove the prohibition on granting a renewable energy credit for energy generated from municipal solid waste incinerators by exceeding the incinerator's nameplate capacity.
- Revise and add numerous definitions.

DETAILED SUMMARY:

House Bill 5205 would amend the Clean, Renewable, and Efficient Energy Act (MCL 460.1001 et al.). The bill would make numerous revisions and additions to allow for biofuels associated with the process known as *pyrolysis* to be part of the development of renewable energy. A description of the bill follows.

Purpose of act

The bill would add, as a purpose of the act, the removal of unnecessary burdens on the appropriate use of solid waste as a clean energy source.

Definitions

"*Advanced cleaner energy system*" currently means (1) a gasification facility; (2) an industrial cogeneration facility; or, (3) a coal-fired electric generating facility meeting specified CO₂ emissions requirements. Instead, the bill would replace "a gasification facility" with "any system using advanced thermal technology." The bill would also add an "advanced waste to energy facility" to the list and also any facility using fuel manufactured in whole or significant part from industrial waste or solid waste (this would include, but not be limited to, municipal solid waste and waste described in Section 11514 of the Natural Resources and Environmental Protection Act, NREPA).

Define "*advanced waste to energy facility*" as a municipal solid waste incinerator as defined in Sect 11504 of NREPA that is subject to federal regulation under 40 CFR Part 60 subpart CB, EA, or EB.

Define "*advanced thermal technology*" as technology to achieve thermochemical decomposition of waste at elevated temperatures with reduced or no participation of oxygen. The term would include gasification, pyrolysis, hydrothermal liquefaction, and plasma arc technologies. ("Pyrolysis", though not defined in the bill, refers to a high-temperature, oxygen-free process to make biofuels from a wide-range of agricultural, industrial, and municipal solid waste.)

Revise the definition of "*carbon dioxide emissions benefits*" to include the carbon dioxide emissions of electricity generated by an integrated pyrolysis cycle facility that are 70 percent less than the average carbon dioxide emissions per megawatt hour of electricity generated from all coal-fired electric generating facilities operating in Michigan on January 1, 2008.

"*Integrated pyrolysis combined cycle facility*" would mean a pyrolysis facility that uses exhaust heat to generate electricity.

"*Pyrolysis facility*" would mean a facility that effects thermochemical decomposition at elevated temperatures without the participation of oxygen, from carbon-based feedstocks such as coal, petroleum coke, wood, biomass, industrial waste, or solid waste (including waste described in Section 11514 of NREPA). The term would include the transmission lines, gas transportation lines and facilities, and associated property and equipment specifically attributable to the facility. It would also include, but not be limited to, an integrated pyrolysis combined cycle facility.

Revise the definition of "renewable energy resources." Currently, the term means *a resource that naturally replenishes over a human, not a geological, time frame and that is ultimately derived from solar power, water power, or wind power. Renewable energy resource does not include petroleum, nuclear, natural gas, or coal. A renewable energy resource comes from the sun or from thermal inertia of the earth and minimizes the output of toxic material in the conversion of the energy and includes, but is not limited to all, of the following:*

- Biomass.
- Solar and solar thermal energy.
- Wind energy.
- Kinetic energy of moving water, including waves, tides, or currents; water released through a dam; geothermal energy; municipal solid waste (the bill would include both the biogenic and anthropogenic fractions); and landfill gas produced by municipal solid waste.

The highlighted text above would be deleted. The bill would also add to this list fuel that has been manufactured in whole or significant part from waste, including, but not limited to, municipal solid waste or waste described in Section 11514 of NREPA.

Revise the definition of "*renewable energy system*." Currently, an incinerator is not included as a renewable energy system unless it is a municipal solid waste incinerator as defined in Section 11504 of NREPA that was brought into service before October 6, 2008, (the effective date of the Clean, Renewable, and Efficient Energy Act). Instead, the bill would specify that an incinerator is not included in the meaning of a renewable energy system unless it is an advanced waste to energy facility.

Renewable energy credit

Currently, except as provided in Section 35(1) of the act, one renewable energy credit is granted to the owner of a renewable energy system for each megawatt hour of electricity generated from the system, subject to certain conditions. The bill would eliminate a provision that does not allow a renewable energy credit for renewable energy generated by a municipal solid waste incinerator to the extent the renewable energy was generated by operating the incinerator in excess of the incinerator's nameplate capacity rating as of January 1, 2008, or, if the incinerator had been expanded, the nameplate capacity rating required to accommodate the expansion.

[Note: Section 11514 of the Natural Resources and Environmental Protection Act describes numerous substances that are prohibited from delivery to, or acceptance for disposal by, a landfill. Listed substances include certain types of medical waste, used oil, low-level radioactive waste, sewage, PCBs, asbestos waste, yard waste, and lead acid batteries.]

FISCAL IMPACT:

House Bill 5205, as introduced, would have an indeterminate, yet likely nominal, fiscal impact on the Michigan Public Service Commission (PSC) to the extent that the changes made to various definitions would result in additional administrative costs in the review and approval of renewable energy plans and contracts and the reconciliation of RECs by the PSC, including the definition of "renewable energy resources" which could result in energy generated via "advanced thermal technology" by "advanced waste to energy facilities" and "pyrolysis facilities" to qualify for the granting of renewable energy credits (RECs).

However Section 2 of the Costs of Regulating Public Utilities act of 1972 stipulates that the Department of Licensing and Regulatory Affairs (LARA) "shall ascertain the amount of the appropriation attributable to the regulation of public utilities... [which] shall be assessed against the public utilities...." Consequently, irrespective of the short-term and long-run fiscal impacts of HB 5205, LARA would assess public utilities the amounts sufficient to administer the PSC's regulatory responsibilities.

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.