



Telephone: (517) 373-5383 Fax: (517) 373-1986 TDD: (517) 373-0543

Senate Bill 583 (Substitute S-3) Sponsor: Senator Jason E. Allen Committee: Technology and Energy

Date Completed: 10-25-05

CONTENT

The bill would amend the Michigan Next Energy Authority Act to include items related to the research, development, and manufacturing of an alternative energy system and alternative energy vehicles in the definition of "alternative energy technology"; revise other definitions; and add several new definitions.

Public Act 593 of 2002 created the Michigan Next Energy Authority Act and the Michigan Next Energy Authority. Among other things, the Authority may oversee an alternative energy zone, as well as promote and increase the research, development, and manufacturing of alternative energy technology.

The Act defines "alternative energy technology" as equipment, component parts, materials, electronic devices, testing equipment, and related systems that are solely related to the following:

- -- The storage or generation of hydrogen for use in an alternative energy system.
- -- The process of generating and putting into a usable form the energy generated by an alternative energy system, excluding the component parts of an alternative energy system that are required regardless of the energy source.
- -- A microgrid.

Under the bill, "alternative energy technology" would mean equipment, component parts, materials, electronic devices, testing equipment, and related systems that are integrally related to the following:

- -- The storage, generation, reformation, or distribution of clean fuels integrated within an alternative energy system or alternative energy vehicle, excluding an anaerobic digester energy system, for use within the system or vehicle.
- -- The process of generating and putting into a usable form the energy generated by an alternative energy system.
- -- A microgrid.
- -- Research, development, and manufacturing of an alternative energy system.
- -- Research, development, and manufacturing of an alternative energy vehicle.
- -- Research, development, and manufacturing of an anaerobic digester energy system.

"Anaerobic digester energy system" would mean a device or system of devices for optimizing the anaerobic digestion of biomass for the purpose of recovering biofuel for energy production.

Page 1 of 3 sb583/0506

The bill would revise the definition of "microgrid", which currently means the lines, wires, and controls to connect to two or more alternative energy systems. The bill would include fuel lines and fuel reformers in the definition.

The Act defines "alternative energy system" as the small-scale generation or release of energy from one or any combination of the following types of energy systems: a fuel cell energy system, a solar-thermal energy system, a wind energy system, a battery cell energy system, and a clean fuel energy system. The bill would add biomass and thermoelectric energy systems. "Biomass energy system" would mean a system that creates energy from a process using residues from wood and paper products industries, food production and processing, trees and grasses grown specifically to be used as energy crops, and gaseous fuels produced from solid biomass, animal wastes, municipal wastes, or landfills. "Thermoelectric energy system" would mean a system that creates energy by converting thermal energy created as direct heat from a clean fuel energy system or waste heat from any source. The term would include an energy system that uses alkali metal thermal-to-electric conversion (AMTEC) technology.

The bill also would revise the definition of "small-scale". Currently, the term means a single energy system with a maximum generating capacity of two megawatts or an integrated energy system with a maximum generating capacity of 10 megawatts. Under the bill, the term also would include a fuel cell energy system, a photovoltaic energy system, or a wind energy system.

The Act defines "clean fuel energy system" as a device that is designed and used solely for the purpose of generating power from a clean fuel. The bill would include renewable fuels in the definition of "clean fuel", and define "renewable fuels" as biodiesel or biodiesel blends containing at least 20% biodiesel, or biomass. "Biodiesel" would mean a diesel fuel substitute consisting of methyl or ethyl esters produced from the transesterification of animal or vegetable fats with methanol or ethanol. "Biomass" would mean wood and paper products industries, food production and processing, trees and grasses grown specifically to be used as energy crops, and gaseous fuels produced from solid biomass, animal waste, municipal wastes, or landfills.

Under the Act, "alternative energy vehicle" means a motor vehicle manufactured by an original equipment manufacturer that fully warrants and certifies that the vehicle meets Federal motor vehicle safety standards for its class of vehicles, and certifies that the vehicle meets local emissions standards, that is propelled by an alternative energy system. The term includes an alternative fueled, fuel cell, electric, hybrid, solar, and hybrid electric vehicle. The bill would include a hydraulic hybrid vehicle in the definition, and define "hydraulic hybrid vehicle" as a motor vehicle powered by a regenerative hydraulic drive system or powered by an internal combustion engine assisted by a regenerative hydraulic drive system. "Regenerative hydraulic drive system" would mean a system that captures energy from nonparasitic vehicle sources or energy wasted by a vehicle's brakes or suspension to be released to directly assist vehicle propulsion or directly propel the vehicle.

Currently, "hybrid vehicle" means a motor vehicle that can be powered only by at least two alternative energy systems. Under the bill, "hybrid vehicle" would mean a motor vehicle that can be powered only by an internal combustion engine and one or more alternative energy systems.

The Act defines "alternative energy marine propulsion system" as an onboard propulsion system or detachable outboard propulsion system for a watercraft that is powered by a fuel cell energy system, photovoltaic energy system, or advanced battery cell energy system and that is the singular propulsion system for the watercraft. The bill would delete the reference to a fuel cell, photovoltaic, or advanced battery cell energy system and instead refer to an alternative energy system.

BACKGROUND

In addition to creating the Michigan Next Energy Authority, Public Act 593 of 2002 transferred to the Authority four parcels of State-owned land in York Township, Washtenaw County; authorized the Authority to convey or lease all or part of the property transferred to it; and required that the proceeds be deposited into a new Michigan Alternative Energy Technology Fund.

The Authority has the power to manage and oversee an alternative energy technology park and the alternative energy zone; finance, direct, or otherwise aid in the planning, construction, and design of alternative energy technology businesses and infrastructure located within the zone and park; and design, construct, operate, and convey sites within the zone and park. The Authority also may construct, acquire, and improve or equip an alternative energy technology project, and borrow money and issue bonds and notes to finance project costs.

The Authority is required to certify the following property for a personal property tax exemption: alternative energy systems, alternative energy marine propulsion systems, and alternative energy vehicles. The Act requires the State to reimburse intermediate school districts for all tax revenue lost as a result of the personal property tax exemption. In addition, the Authority must certify an alternative technology business, and an eligible taxpayer for the purpose of claiming a single business tax (SBT) credit for qualified business activity.

Public Act 549 of 2002 amended the General Property Tax Act to exempt from personal property taxes alternative energy personal property, if certified by the Authority and if the local school district and local tax collecting unit do not disapprove the exemption.

Public Act 531 of 2002 amended the Single Business Tax Act to allow a taxpayer to claim an SBT credit for qualified business activity certified by the Authority and/or claim a credit for qualified payroll if the taxpayer is located in an alternative energy zone.

Legislative Analyst: Julie Koval

FISCAL IMPACT

The definition changes proposed in this bill would increase the alternative energy activity that qualifies for two existing single business tax credits and a personal property tax exemption. It is estimated that under current law, these credits will reduce single business tax revenue by \$8.6 million and personal property taxes by \$0.8 million in FY 2004-05. Based on preliminary information, it is estimated that the proposed changes would at least double the cost of both the single business tax credits and the personal property tax exemption due primarily to the provision in the bill that would make research, development, and manufacturing activity for alternative energy systems and alternative energy vehicles eligible for these tax breaks.

Fiscal Analyst: Jay Wortley
David Zin

S0506\s583sh

This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.