SUBSTITUTE FOR

HOUSE BILL NO. 5205

A bill to amend 2008 PA 295, entitled "Clean, renewable, and efficient energy act," by amending sections 1, 3, 7, 9, 11, and 39 (MCL 460.1001, 460.1003, 460.1007, 460.1009, 460.1011, and 460.1039).

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Sec. 1. (1) This act shall be known and may be cited as the
- 2 "clean, renewable, and efficient energy act".
- 3 (2) The purpose of this act is to promote the development of
- 4 clean energy, renewable energy, and energy optimization through the
- 5 implementation of a clean, renewable, and energy efficient standard
- 6 that will cost-effectively do all of the following:
- 7 (a) Diversify the resources used to reliably meet the energy
- 8 needs of consumers in this state.

- 1 (b) Provide greater energy security through the use of
- 2 indigenous energy resources available within the THIS state.
- 3 (c) Encourage private investment in renewable energy and
- 4 energy efficiency.
- 5 (d) Provide improved air quality and other benefits to energy
- 6 consumers and citizens of this state.
- 7 (E) REMOVE UNNECESSARY BURDENS ON THE APPROPRIATE USE OF SOLID
- 8 WASTE AS A CLEAN ENERGY SOURCE.
- 9 Sec. 3. As used in this act:
- 10 (a) "Advanced cleaner energy" means electricity generated
- 11 using an advanced cleaner energy system.
- 12 (b) "Advanced cleaner energy credit" means a credit certified
- 13 under section 43 that represents generated advanced cleaner energy.
- 14 (c) "Advanced cleaner energy system" means any of the
- **15** following:
- 16 (i) A gasification facility.
- 17 (ii) An industrial cogeneration facility.
- 18 (iii) A coal-fired electric generating facility if 85% or more
- 19 of the carbon dioxide emissions are captured and permanently
- 20 geologically sequestered.
- 21 (iv) An electric generating facility or system that uses
- 22 technologies not in commercial operation on the effective date of
- 23 this act.OCTOBER 6, 2008.
- 24 (d) "Affiliated transmission company" means that term as
- 25 defined in SECTION 2 OF the electric transmission line
- 26 certification act, 1995 PA 30, MCL 460.562.
- 27 (e) "Applicable regional transmission organization" means a

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- 1 nonprofit, member-based organization governed by an independent
- 2 board of directors that serves as the federal energy regulatory
- 3 commission-approved COMMISSION APPROVED regional transmission
- 4 organization with oversight responsibility for the region that
- 5 includes the provider's service territory.
- 6 (f) "Biomass" means any organic matter that is not derived
- 7 from fossil fuels, that can be converted to usable fuel for the
- 8 production of energy, and that replenishes over a human, not a
- 9 geological, time frame, including, but not limited to, all of the
- 10 following:
- 11 (i) Agricultural crops and crop wastes.
- 12 (ii) Short-rotation energy crops.
- 13 (iii) Herbaceous plants.
- (iv) Trees and wood, but only if derived from sustainably
- 15 managed forests or procurement systems, as defined in section 261c
- 16 of the management and budget act, 1984 PA 431, MCL 18.1261c.
- (v) Paper and pulp products.
- 18 (vi) Precommercial wood thinning waste, brush, or yard waste.
- 19 (vii) Wood wastes and residues from the processing of wood
- 20 products or paper.
- 21 (viii) Animal wastes.
- 22 (ix) Wastewater sludge or sewage.
- (x) Aquatic plants.
- 24 (xi) Food production and processing waste.
- 25 (xii) Organic by-products from the production of biofuels.
- 26 (g) "Board" means the wind energy resource zone board created
- 27 under section 143.

- 1 (h) "Carbon dioxide emissions benefits" means that the carbon
- 2 dioxide emissions per megawatt hour of electricity generated by the
- 3 advanced cleaner energy system are at least 85% less or, for an
- 4 integrated gasification combined cycle facility OR AN INTEGRATED
- 5 PYROLYSIS COMBINED CYCLE FACILITY, 70% less than the average carbon
- 6 dioxide emissions per megawatt hour of electricity generated from
- 7 all coal-fired electric generating facilities operating in this
- 8 state on January 1, 2008.
- 9 (i) "Commission" means the Michigan public service commission.
- 10 (j) "Customer meter" means an electric meter of a provider's
- 11 retail customer. Customer meter does not include a municipal water
- 12 pumping meter or additional meters at a single site that were
- 13 installed specifically to support interruptible air conditioning,
- 14 interruptible water heating, net metering, or time-of-day tariffs.
- Sec. 7. As used in this act:
- 16 (a) "Gasification facility" means a facility located in this
- 17 state that uses a thermochemical process that does not involve
- 18 direct combustion to produce synthesis gas, composed of carbon
- 19 monoxide and hydrogen, from carbon-based feedstocks (such as coal,
- 20 petroleum coke, wood, biomass, hazardous waste, medical waste,
- 21 industrial waste, and solid waste, including, but not limited to,
- 22 municipal solid waste, electronic waste, and waste described in
- 23 section 11514 of the natural resources and environmental protection
- 24 act, 1994 PA 451, MCL 324.11514) and that uses the synthesis gas or
- 25 a mixture of the synthesis gas and methane to generate electricity
- 26 for commercial use. Gasification facility includes the transmission
- 27 lines, gas transportation lines and facilities, and associated

- 1 property and equipment specifically attributable to such a
- 2 facility. Gasification facility includes, but is not limited to, an
- 3 integrated gasification combined cycle facility and a plasma arc
- 4 qasification facility.
- 5 (b) "Incremental costs of compliance" means the net revenue
- 6 required by an electric provider to comply with the renewable
- 7 energy standard, calculated as provided under section 47.
- 8 (c) "Independent transmission company" means that term as
- 9 defined in section 2 of the electric transmission line
- 10 certification act, 1995 PA 30, MCL 460.562.
- 11 (d) "Industrial cogeneration facility" means a facility that
- 12 generates electricity using industrial thermal energy or industrial
- waste energy.
- 14 (e) "Industrial thermal energy" means thermal energy that is a
- 15 by-product of an industrial or manufacturing process and that would
- 16 otherwise be wasted. For the purposes of this subdivision,
- 17 industrial or manufacturing process does not include the generation
- 18 of electricity.
- 19 (f) "Industrial waste energy" means exhaust gas or flue gas
- 20 that is a by-product of an industrial or manufacturing process and
- 21 that would otherwise be wasted. For the purposes of this
- 22 subdivision, industrial or manufacturing process does not include
- 23 the generation of electricity.
- 24 (g) "Integrated gasification combined cycle facility" means a
- 25 gasification facility that uses a thermochemical process, including
- 26 high temperatures and controlled amounts of air and oxygen, to
- 27 break substances down into their molecular structures and that uses

- 1 exhaust heat to generate electricity.
- 2 (H) "INTEGRATED PYROLYSIS COMBINED CYCLE FACILITY" MEANS A
- 3 PYROLYSIS FACILITY THAT USES EXHAUST HEAT TO GENERATE ELECTRICITY.
- 4 (I) (h) "LEED" means the leadership in energy and
- 5 environmental design green building rating system developed by the
- 6 United States green building council.
- 7 (J) (i)—"Load management" means measures or programs that
- 8 target equipment or devices to result in decreased peak electricity
- 9 demand such as by shifting demand from a peak to an off-peak
- 10 period.
- 11 (K) "MEGAWATT", "MEGAWATT HOUR", OR "MEGAWATT HOUR OF
- 12 ELECTRICITY", UNLESS THE CONTEXT IMPLIES OTHERWISE, INCLUDES THE
- 13 STEAM EQUIVALENT OF A MEGAWATT OR MEGAWATT HOUR OF ELECTRICITY.
- 14 (*l*) (i) "Modified net metering" means a utility billing method
- 15 that applies the power supply component of the full retail rate to
- 16 the net of the bidirectional flow of kilowatt hours across the
- 17 customer interconnection with the utility distribution system,
- 18 during a billing period or time-of-use pricing period. A negative
- 19 net metered quantity during the billing period or during each time-
- 20 of-use pricing period within the billing period reflects net excess
- 21 generation for which the customer is entitled to receive credit
- 22 under section 177(4). Standby charges for modified net metering
- 23 customers on an energy rate schedule shall be equal to the retail
- 24 distribution charge applied to the imputed customer usage during
- 25 the billing period. The imputed customer usage is calculated as the
- 26 sum of the metered on-site generation and the net of the
- 27 bidirectional flow of power across the customer interconnection

- 1 during the billing period. The commission shall establish standby
- 2 charges for modified net metering customers on demand-based rate
- 3 schedules that provide an equivalent contribution to utility system
- 4 costs.
- **5** Sec. 9. As used in this act:
- 6 (a) "Natural gas provider" means an investor-owned business
- 7 engaged in the sale and distribution of natural gas within this
- 8 state whose rates are regulated by the commission. However, as used
- 9 in subpart B of part 2, natural gas provider does not include an
- 10 alternative gas supplier licensed under section 9b of 1939 PA 3,
- 11 MCL 460.9b.
- 12 (B) "PET COKE" MEANS A SOLID CARBONACEOUS RESIDUE PRODUCED
- 13 FROM A COKER AFTER CRACKING AND DISTILLATION FROM PETROLEUM
- 14 REFINING OPERATIONS.
- 15 (C) (b)—"Plasma arc gasification facility" means a
- 16 gasification facility that uses a plasma torch to break substances
- 17 down into their molecular structures.
- 18 (D) (c) "Provider" means an electric provider or a natural gas
- 19 provider.
- 20 (E) (d) "PURPA" means the public utility regulatory policies
- 21 act of 1978, Public Law 95-617.
- 22 (F) "PYROLYSIS FACILITY" MEANS A FACILITY THAT EFFECTS
- 23 THERMOCHEMICAL DECOMPOSITION AT ELEVATED TEMPERATURES WITHOUT THE
- 24 PARTICIPATION OF OXYGEN, FROM CARBON-BASED FEEDSTOCKS SUCH AS COAL,
- 25 WOOD, BIOMASS, INDUSTRIAL WASTE, OR SOLID WASTE, INCLUDING, BUT NOT
- 26 LIMITED TO, WASTE DESCRIBED IN SECTION 11514 OF THE NATURAL
- 27 RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, MCL

- 1 324.11514. PYROLYSIS FACILITY INCLUDES THE TRANSMISSION LINES, GAS
- 2 TRANSPORTATION LINES AND FACILITIES, AND ASSOCIATED PROPERTY AND
- 3 EQUIPMENT SPECIFICALLY ATTRIBUTABLE TO THE FACILITY. PYROLYSIS
- 4 FACILITY INCLUDES, BUT IS NOT LIMITED TO, AN INTEGRATED PYROLYSIS
- 5 COMBINED CYCLE FACILITY.
- 6 (G) (e)—"Qualifying small power production facility" means
- 7 that term as defined in 16 USC 824a-3.
- 8 Sec. 11. As used in this act:
- 9 (a) "Renewable energy" means electricity OR STEAM generated
- 10 using a renewable energy system.
- 11 (b) "Renewable energy capacity portfolio" means the number of
- 12 megawatts calculated under section 27(2) for a particular year.
- 13 (c) "Renewable energy contract" means a contract to acquire
- 14 renewable energy and the associated renewable energy credits from 1
- 15 or more renewable energy systems.
- 16 (d) "Renewable energy credit" means a credit granted pursuant
- 17 to section 41 that represents generated renewable energy.
- 18 (e) "Renewable energy credit portfolio" means the sum of the
- 19 renewable energy credits achieved by a provider for a particular
- **20** year.
- 21 (f) "Renewable energy credit standard" means a minimum
- 22 renewable energy portfolio required under section 27.27(3).
- 23 (g) "Renewable energy generator" means a person that, together
- 24 with its affiliates, has constructed or has owned and operated 1 or
- 25 more renewable energy systems with combined gross generating
- 26 capacity of at least 10 megawatts.
- (h) "Renewable energy plan" or "plan", means a plan approved

- 1 under section 21 or 23 or found to comply with this act under
- 2 section 25, with any amendments adopted under this act.
- 3 (i) "Renewable energy resource", SUBJECT TO SUBDIVISION (J),
- 4 means a resource that naturally replenishes over a human, not a
- 5 geological, time frame and that is ultimately derived from solar
- 6 power, water power, or wind power. Renewable energy resource does
- 7 not include petroleum, nuclear, natural gas, or coal. A renewable
- 8 energy resource comes from the sun or from thermal inertia of the
- 9 earth and minimizes the output of toxic material in the conversion
- 10 of the energy and includes, but is not limited to, all ANY of the
- 11 following:
- 12 (i) Biomass.
- 13 (ii) Solar and solar thermal energy.
- 14 (iii) Wind energy.
- (iv) Kinetic energy of moving water, including all of the
- 16 following:
- 17 (A) Waves, tides, or currents.
- 18 (B) Water released through a dam.
- 19 (v) Geothermal energy.
- 20 (vi) Municipal solid waste, INCLUDING BOTH THE BIOGENIC AND
- 21 ANTHROPOGENIC FRACTIONS.
- 22 (vii) Landfill gas produced by municipal solid waste.
- 23 (viii) FUEL THAT HAS BEEN MANUFACTURED IN WHOLE OR SIGNIFICANT
- 24 PART FROM WASTE, INCLUDING, BUT NOT LIMITED TO, MUNICIPAL SOLID
- 25 WASTE OR WASTE DESCRIBED IN SECTION 11514 OF THE NATURAL RESOURCES
- 26 AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, MCL 324.11514. FUEL
- 27 THAT MEETS THE REQUIREMENTS OF THIS SUBPARAGRAPH INCLUDES, BUT IS

- 1 NOT LIMITED TO, MATERIAL THAT IS LISTED UNDER 40 CFR 241.3(B) OR
- 2 241.4(A) OR FOR WHICH A NON-WASTE DETERMINATION IS MADE BY THE
- 3 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO 40 CFR
- 4 241.3(C).
- 5 (J) "RENEWABLE ENERGY RESOURCE" DOES NOT INCLUDE PET COKE.
- 6 (K) (j)—"Renewable energy standard" means the minimum
- 7 renewable energy capacity portfolio, if applicable, and the
- 8 renewable energy credit portfolio required to be achieved under
- 9 section 27.
- 10 (l) (k) "Renewable energy system" means a facility, electricity
- 11 generation system, or set of electricity generation systems that
- 12 use 1 or more renewable energy resources to generate electricity OR
- 13 STEAM. Renewable energy system does not include any of the
- 14 following:
- (i) A hydroelectric pumped storage facility.
- 16 (ii) A hydroelectric facility that uses a dam constructed after
- 17 the effective date of this act OCTOBER 6, 2008 unless the dam is a
- 18 repair or replacement of a dam in existence on the effective date
- 19 of this act OCTOBER 6, 2008 or an upgrade of a dam in existence on
- 20 the effective date of this act OCTOBER 6, 2008 that increases its
- 21 energy efficiency.
- 22 (iii) An incinerator unless the incinerator is a municipal solid
- 23 waste incinerator as defined in section 11504 of the natural
- 24 resources and environmental protection act, 1994 PA 451, MCL
- 25 324.11504. , that was brought into service before the effective
- 26 date of this act, including any of the following:
- 27 (A) Any upgrade of such an incinerator that increases energy

- 1 efficiency.
- 2 (B) Any expansion of such an incinerator before the effective

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- 3 date of this act.
- 4 (C) Any expansion of such an incinerator on or after the
- 5 effective date of this act to an approximate design rated capacity
- 6 of not more than 950 tons per day pursuant to the terms of a final
- 7 request for proposals issued on or before October 1, 1986.
- 8 (M) (l) "Revenue recovery mechanism" means the mechanism for
- 9 recovery of incremental costs of compliance established under
- **10** section 21.
- Sec. 39. (1) Except as otherwise provided in section 35(1), 1
- 12 renewable energy credit shall be granted to the owner of a
- 13 renewable energy system for each megawatt hour of electricity
- 14 generated from the renewable energy system, subject to all of the
- 15 following:
- 16 (a) If a renewable energy system uses both a renewable energy
- 17 resource and a nonrenewable energy resource to generate electricity
- 18 OR STEAM, the number of renewable energy credits granted shall be
- 19 based on the percentage of the electricity OR STEAM, OR BOTH,
- 20 generated from the renewable energy resource.
- 21 (b) A renewable energy credit shall not be granted for
- 22 renewable energy generated from a municipal solid waste incinerator
- 23 to the extent that the renewable energy was generated by operating
- 24 the incinerator in excess of the greater of the following, as
- 25 applicable:
- 26 (i) The incinerator's nameplate capacity rating on January 1,
- **27** 2008.

- 1 (ii) If the incinerator is expanded after the effective date of
- 2 this act to an approximate continuous design rated capacity of not
- 3 more than 950 tons per day pursuant to the terms of a final request
- 4 for proposals issued not later than October 1986, the nameplate
- 5 capacity rating required to accommodate that expansion.
- 6 (B) (c) A renewable energy credit shall not be granted for
- 7 renewable energy the renewable attributes of which are used by an
- 8 electric provider in a commission-approved voluntary renewable
- 9 energy program.
- 10 (2) Subject to subsection (3), the THE following additional
- 11 renewable energy credits, to be known as Michigan incentive
- 12 renewable energy credits, shall be granted under the following
- 13 circumstances:
- 14 (a) 2 renewable energy credits for each megawatt hour of
- 15 electricity from solar power.
- 16 (b) 1/5 renewable energy credit for each megawatt hour of
- 17 electricity generated from a renewable energy system, other than
- 18 wind, at peak demand time as determined by the commission.
- 19 (c) 1/5 renewable energy credit for each megawatt hour of
- 20 electricity generated from a renewable energy system during off-
- 21 peak hours, stored using advanced electric storage technology or a
- 22 hydroelectric pumped storage facility, and used during peak hours.
- 23 However, the number of renewable energy credits shall be calculated
- 24 based on the number of megawatt hours of renewable energy used to
- 25 charge the advanced electric storage technology or fill the pumped
- 26 storage facility, not the number of megawatt hours actually
- 27 discharged or generated by discharge from the advanced energy

- 1 storage facility or pumped storage facility.
- 2 (d) 1/10 renewable energy credit for each megawatt hour of
- 3 electricity generated from a renewable energy system constructed
- 4 using equipment made in this state as determined by the commission.
- 5 The additional credit under this subdivision is available for the
- 6 first 3 years after the renewable energy system first produces
- 7 electricity OR STEAM on a commercial basis.
- 8 (e) 1/10 renewable energy credit for each megawatt hour of
- 9 electricity from a renewable energy system constructed using a
- 10 workforce composed of residents of this state as determined by the
- 11 commission. The additional credit under this subdivision is
- 12 available for the first 3 years after the renewable energy system
- 13 first produces electricity OR STEAM on a commercial basis.
- 14 (3) A renewable energy credit expires at the earliest of the
- 15 following times:
- 16 (a) When used by an electric provider to comply with its
- 17 renewable energy credit standard.
- 18 (b) When substituted for an energy optimization credit under
- **19** section 77.
- (c) Three years after the end of the month in which the
- 21 renewable energy credit was generated.
- 22 (4) A renewable energy credit associated with renewable energy
- 23 generated within 120 days after the start of a calendar year may be
- 24 used to satisfy the prior year's renewable energy standard and
- 25 expires when so used.