SENATE BILL NO. 596

October 23, 2019, Introduced by Senators BARRETT, HOLLIER, BAYER, ALEXANDER and IRWIN and referred to the Committee on Energy and Technology.

A bill to amend 2008 PA 295, entitled

"Clean and renewable energy and energy waste reduction act,"

by amending sections 5, 7, 9, 13, 173, 175, 177, and 179 (MCL 460.1005, 460.1007, 460.1009, 460.1013, 460.1173, 460.1175, 460.1177, and 460.1179), as amended by 2016 PA 342; and to repeal acts and parts of acts.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 5. As used in this act:

(a) "Electric provider" means any of the following:

(*i*) Any person or entity that is regulated by the commission for the purpose of selling electricity to retail customers in this state.

(*ii*) A municipally owned electric utility in this state.

(*iii*) A cooperative electric utility in this state.

(*iv*) Except as used in subpart C of part 2, an alternative electric supplier licensed under section 10a of 1939 PA 3, MCL 460.10a.

(b) "Eligible electric generator" means a ~~methane digester or~~ **customer's** renewable energy system, ~~with~~ **cogeneration facility or waste heat recovery system that meets both of the following requirements:**

(*i*) Is located in this state.

(*ii*) Has a generation capacity ~~limited to the customer's electric need and that does not exceed the following:~~

~~(*i*) For a renewable energy system, 150 kilowatts of aggregate generation at a single site.~~

~~(*ii*) For a methane digester, 550 kilowatts of aggregate generation at a single site.~~**that is consistent with the safety and reliability requirements of the customer's interconnection.**

(c) "Energy conservation" means the reduction of customer energy use through the installation of measures or changes in energy usage behavior.

(d) "Energy efficiency" means a decrease in customer consumption of electricity or natural gas achieved through measures or programs that target customer behavior, equipment, devices, or materials without reducing the quality of energy services.

(e) "Energy star" means the voluntary ~~partnership among the~~

~~United States Department of Energy, the United States Environmental Protection Agency, product manufacturers, local utilities, and retailers to help promote energy efficient products by labeling with the energy star logo, educate consumers about the benefits of energy efficiency, and help promote energy efficiency in buildings by benchmarking and rating energy performance.~~**program established under 42 USC 6924a.**

(f) "Energy waste reduction", subject to subdivision (g), means all of the following:

(*i*) Energy efficiency.

(*ii*) Load management, to the extent that the load management reduces provider costs.

(*iii*) Energy conservation, but only to the extent that the decreases in the consumption of electricity produced by energy conservation are objectively measurable and attributable to an energy waste reduction plan.

(g) Energy waste reduction does not include electric provider infrastructure projects that are approved for cost recovery by the commission other than as provided in this act.

(h) "Energy waste reduction credit" means a credit certified pursuant to section 87 that represents achieved energy waste reduction.

(i) "Energy waste reduction plan" means a plan under section 71.

(j) "Energy waste reduction standard" means the minimum energy savings required to be achieved under section 77 or 78(1), as applicable.

(k) "Federal approval" means approval by the applicable regional transmission organization or other Federal Energy

Regulatory Commission-approved transmission planning process of a transmission project that includes the transmission line. Federal approval may be evidenced in any of the following manners:

(*i*) The proposed transmission line is part of a transmission project included in the applicable regional transmission organization's board-approved transmission expansion plan.

(*ii*) The applicable regional transmission organization has informed the electric utility, affiliated transmission company, or independent transmission company that a transmission project submitted for an out-of-cycle project review has been approved by the applicable regional transmission organization, and the approved transmission project includes the proposed transmission line.

(*iii*) If, after October 6, 2008, the applicable regional transmission organization utilizes another approval process for transmission projects proposed by an electric utility, affiliated transmission company, or independent transmission company, the proposed transmission line is included in a transmission project approved by the applicable regional transmission organization through the approval process developed after October 6, 2008.

(*iv*) Any other Federal Energy Regulatory Commission-approved transmission planning process for a transmission project.

Sec. 7. As used in this act:

(a) "Gasification facility" means a facility located in this state that, using a thermochemical process that does not involve direct combustion, produces synthesis gas, composed of carbon monoxide and hydrogen, from carbon-based feedstocks, ~~(such~~ **such** as coal, petroleum coke, wood, biomass, hazardous waste, medical waste, industrial waste, and solid waste, including, but not limited to, municipal solid waste, electronic waste, and waste

described in section 11514 of the natural resources and environmental protection act, 1994 PA 451, MCL ~~324.11514)~~ **324.11514,** and that uses the synthesis gas or a mixture of the synthesis gas and methane to generate electricity for commercial use. Gasification facility includes the transmission lines, gas transportation lines and facilities, and associated property and equipment specifically attributable to such a facility. Gasification facility includes, but is not limited to, an integrated gasification combined cycle facility and a plasma arc gasification facility.

(b) "Incremental costs of compliance" means the net revenue required by an electric provider to comply with the renewable energy standard, calculated as provided under section 47.

(c) "Independent transmission company" means that term as defined in section 2 of the electric transmission line certification act, 1995 PA 30, MCL 460.562.

(d) "Integrated gasification combined cycle facility" means a gasification facility that uses a thermochemical process, including high temperatures and controlled amounts of air and oxygen, to break substances down into their molecular structures and that uses exhaust heat to generate electricity.

(e) "Integrated pyrolysis combined cycle facility" means a pyrolysis facility that uses exhaust heat to generate electricity.

(f) "Island mode" means a generation system status in which loads and energy resources are able to operate on-site or within a local microgrid but power is not exchanged with the utility-owned transmission or distribution network.

(g) ~~(f)~~ "LEED" means the leadership in energy and environmental design green building rating system developed by the

United States Green Building Council.

(h) ~~(g)~~ "Load management" means measures or programs that target equipment or behavior to result in decreased peak electricity demand such as by shifting demand from a peak to an off-peak period.

(i) ~~(h)~~ "Megawatt", "megawatt hour", or "megawatt hour of electricity", unless the context implies otherwise, includes the steam equivalent of a megawatt or megawatt hour of electricity.

~~(i) "Modified net metering" means a utility billing method that applies the power supply component of the full retail rate to the net of the bidirectional flow of kilowatt hours across the customer interconnection with the utility distribution system, during a billing period or time-of-use pricing period. A negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit under section 177(4). Under modified net metering, standby charges for distributed generation customers on an energy rate schedule shall be equal to the retail distribution charge applied to the imputed customer usage during the billing period. The imputed customer usage is calculated as the sum of the metered on-site generation and the net of the bidirectional flow of power across the customer interconnection during the billing period. The commission shall establish standby charges under modified net metering for distributed generation customers on demand-based rate schedules that provide an equivalent contribution to utility system costs. A charge for net metering and distributed generation customers established pursuant to section 6a of 1939 PA 3, MCL 460.6a, shall not be recovered more than once. This subdivision is~~

~~subject to section 177(5).~~

(j) "Microgrid" means a group of interconnected loads and distributed energy resources with clearly defined electrical boundaries that acts as a single controllable entity with respect to the macrogrid and that connects and disconnects from the macrogrid to enable it to operate in grid-connected or island mode.

Sec. 9. As used in this act:

(a) "Natural gas provider" means an investor-owned business engaged in the sale and distribution at retail of natural gas within this state whose rates are regulated by the commission.

(b) "Net metering" means a utility billing method that applies the full retail rate to the net of the bidirectional flow of kilowatt hours across the customer interconnection with the utility distribution system during a billing period or time-of-use pricing period. A negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit under section 177(4).

(c) ~~(b)~~ "Pet coke" means a solid carbonaceous residue produced from a coker after cracking and distillation from petroleum refining operations.

(d) ~~(c)~~ "Plasma arc gasification facility" means a gasification facility that uses a plasma torch to break substances down into their molecular structures.

(e) ~~(d)~~ "Provider" means an electric provider or a natural gas provider.

(f) ~~(e)~~ "PURPA" means the public utility regulatory policies act of 1978, Public Law 95-617.

(g) ~~(f)~~ "Pyrolysis facility" means a facility that effects

thermochemical decomposition at elevated temperatures without the participation of oxygen, from carbon-based feedstocks including, but not limited to, coal, wood, biomass, industrial waste, or solid waste, but not including pet coke, hazardous waste, coal waste, or scrap tires. Pyrolysis facility includes the transmission lines, gas transportation lines and facilities, and associated property and equipment specifically attributable to the facility. Pyrolysis facility includes, but is not limited to, an integrated pyrolysis combined cycle facility.

Sec. 13. As used in this act:

(a) "Site" means a contiguous site, regardless of the number of meters at that site. A site that would be contiguous but for the presence of a street, road, or highway is considered to be contiguous for the purposes of this subdivision.

(b) "Transmission line" means all structures, equipment, and real property necessary to transfer electricity at system bulk supply voltage of 100 kilovolts or more.

~~(c) "True net metering" means a utility billing method that applies the full retail rate to the net of the bidirectional flow of kilowatt hours across the customer interconnection with the utility distribution system, during a billing period or time-of-use pricing period. A negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit under section 177(4). This subdivision is subject to section 177(5).~~

(c) ~~(d)~~ "Utility system resource cost test" means a standard that is met for an investment in energy waste reduction if, on a life cycle basis, the total avoided supply-side costs to the

provider, including representative values for electricity or natural gas supply, transmission, distribution, and other associated costs, are greater than the total costs to the provider of administering and delivering the energy waste reduction program, including net costs for any provider incentives paid by customers and capitalized costs recovered under section 89.

(d) ~~(c)~~ "Wind energy conversion system" means a system that uses 1 or more wind turbines to generate electricity and has a nameplate capacity of 100 kilowatts or more.

(e) ~~(f)~~ "Wind energy resource zone" or "wind zone" means an area designated by the commission under section 147.

Sec. 173. (1) The commission shall establish a distributed generation program by order issued not later than 90 days after the effective date of the ~~2016~~ **2019** act that amended this section. **Under the distributed generation program, any customer of an electric utility or alternative electric supplier may generate electricity using an eligible electric generator interconnected with the local electric utility and operated parallel to the distribution system. The value of net excess generation in each billing period or time-of-use pricing period shall be credited to the customer pursuant to a fair value tariff, a standard-offer contract, or net metering. However, an electric utility or alternative electric supplier is required to participate only in the net metering component of the distributed generation program.** The commission may promulgate rules the commission considers necessary to implement this program. Any rules adopted regarding time limits for approval of parallel operation shall recognize reliability and safety complications including those arising from equipment saturation, use of multiple technologies, and proximity

to synchronous motor loads. ~~The program shall apply to all electric utilities whose rates are regulated by the commission and alternative electric suppliers in this state.~~

(2) ~~Except as otherwise provided under this part, an electric customer of any class is eligible to interconnect an eligible electric generator with the customer's local electric utility and operate the eligible electric generator in parallel with the distribution system.~~ The **distributed generation** program shall be designed for a period of not less than ~~10~~ **20** years and limit each customer to generation capacity designed to meet up to 100% of the customer's electricity consumption for the previous 12 months. ~~The commission may waive the application, interconnection, and installation requirements of this part for customers participating in the net metering program under the commission's March 29, 2005 order in case no. U-14346.~~

~~(3) An electric utility or alternative electric supplier is not required to allow for a distributed generation program that is greater than 1% of its average in-state peak load for the preceding 5 calendar years. The electric utility or alternative electric supplier shall notify the commission if its distributed generation program reaches the 1% limit under this subsection. The 1% limit under this subsection shall be allocated as follows:~~

~~(a) No more than 0.5% for customers with an eligible electric generator capable of generating 20 kilowatts or less.~~

~~(b) No more than 0.25% for customers with an eligible electric generator capable of generating more than 20 kilowatts but not more than 150 kilowatts.~~

~~(c) No more than 0.25% for customers with a methane digester capable of generating more than 150 kilowatts.~~

(3) ~~(4)~~ Selection of customers for participation in the distributed generation program shall be based ~~on the order in which the applications for participation in the program are received by the electric utility or alternative electric supplier.~~**solely on meeting the interconnection and equipment requirements for participation. An electric utility or alternative electric supplier shall not restrict the number of participants in the distributed generation program unless it demonstrates to the satisfaction of the commission that the restriction is necessary to protect the public health and safety or the integrity of the distribution system in a contested case hearing pursuant to chapter 4 of the administrative procedures act of 1969, 1969 PA 306, MCL 24.271 to 24.288.**

(4) ~~(5)~~ An electric utility or alternative electric supplier shall not discontinue or refuse to provide electric service to a customer solely because the customer participates in the distributed generation program.

(5) ~~(6)~~ The distributed generation program ~~created under subsection (1)~~ shall include all of the following:

(a) Statewide uniform interconnection requirements for all eligible electric generators. The interconnection requirements shall be designed to protect electric utility workers and equipment and the general public.

(b) ~~Distributed~~ **Requirements that distributed** generation equipment and its installation ~~shall~~ meet all current local and state electric and construction code requirements. Any equipment that is certified by a nationally recognized testing laboratory to IEEE 1547.1 testing standards and in compliance with UL 1741 scope 1.1A, effective May 7, 2007, **or updates to those testing standards**

and scope approved by the commission, and **that is** installed in compliance with this part is considered to be compliant. Within the time provided by the commission ~~in rules promulgated under~~ **pursuant to** subsection (1) and consistent with good utility practice ~~,~~ and the protection of electric utility workers, electric utility equipment, and the general public, an electric utility may study, confirm, and ensure that an eligible electric generator installation at the customer's site meets the ~~IEEE 1547 anti-islanding requirements or any applicable successor anti-islanding requirements determined by the commission to be reasonable and consistent with the purposes of this subdivision.~~ **"IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems", a commission-approved update to IEEE 1547, or standards approved by the commission that enable operation in island mode.** If necessary to promote reliability or safety, the commission may promulgate rules that require the use of inverters that perform specific automated grid-balancing functions to integrate distributed generation onto the electric grid. Inverters that interconnect distributed generation resources may be owned and operated by electric utilities. Both of the following must be completed before the equipment is operated in parallel with the distribution system of the utility:

(*i*) Utility testing and approval of the interconnection, including all metering.

(*ii*) Execution of a parallel operating agreement.

(c) A uniform **distributed generation** application form and process to be used by all electric utilities and alternative electric suppliers in this state. Customers ~~who~~ **that** are served by an alternative electric supplier shall submit a copy of the

application to the electric utility for the customer's service area.

~~(d) Distributed generation customers with a system capable of generating 20 kilowatts or less qualify for true net metering.~~

~~(e) Distributed generation customers with a system capable of generating more than 20 kilowatts qualify for modified net metering.~~

(d) ~~(7) Each~~ **A requirement that each** electric utility and alternative electric supplier ~~shall~~ maintain records of all applications and up-to-date records of all active eligible electric generators located within ~~their~~ **its** service area.

(6) Not later than 1 year after the effective date of the 2019 act that amended this section, the commission shall establish a statewide uniform methodology by which an electric utility or alternative electric supplier may establish a fair value tariff if approved by the commission after a contested case hearing pursuant to chapter 4 of the administrative procedures act of 1969, 1969 PA 306, MCL 24.271 to 24.288. Both of the following apply to a fair value tariff:

(a) A fair value tariff shall meet all of the following requirements:

(*i*) Allow distributed generation for self-service in each billing period or time-of-use pricing period without any charge to the customer.

(*ii*) Apply the same system access, delivery, and power supply charges for net electricity delivered in each billing period or time-of-use pricing period to a customer that participates in the distributed generation program as to a customer that is similarly situated but does not participate.

(*iii*) Credit the customer for net excess generation by the customer in each billing period or time-of-use pricing period that is delivered to the local utility's distribution system. The customer shall be credited at a rate that meets both of the following requirements:

(A) Is not less than the full retail rate for a customer that is similarly situated but does not participate in the distributed generation program at the time of excess generation, minus the delivery charge.

(B) Includes the value of the costs and benefits that will accrue over a period of not less than 20 years, considering the location and time of generation. The costs and benefits include, but are not limited to, the following:

(I) Energy generated.

(II) Generation capacity.

(III) Avoided line losses.

(IV) Avoided transmission capacity.

(V) Avoided or deferred distribution system investments.

(VI) Voltage support and regulation.

(VII) Reduced fuel price risk to utility customers.

(VIII) Reasonably quantifiable economic development benefits including job creation and local tax revenue benefits.

(IX) Any other quantifiable benefits.

(X) Any costs to the electric provider incurred to serve distributed generation customers reflecting actual penetration levels.

(*iv*) Not establish the rate or other terms based on consideration of whether or to whom the customer sells renewable energy credits owned by the customer under section 179. The

customer may, under a separate contract, sell the renewable energy credits to the electric utility, the alternative electric supplier, or a third party.

(*v*) Require a utility to recalculate a fair value tariff, subject to commission approval, in any proceeding that changes power supply tariffs.

(*vi*) Not impose any additional charges on a customer for participation in the distributed generation program.

(b) A fair value tariff may do any of the following:

(*i*) If the tariff credits the customer for capacity without deducting for forced outages, deduct standby charges for an eligible electric generator with capacity in excess of 500 kilowatts based on the product of the utility's market cost of capacity and the average peak-coincident forced outage rate of customer generators using similar generation technology.

(*ii*) Based on known and measurable evidence of the cost or benefit of the distributed generation program to the electric utility or alternative electric supplier, incorporate other values into the fair value tariff, including credit for an eligible electric generator that is installed at a high-value location on the distribution grid.

(7) The distributed generation program shall include uniform provisions pursuant to which an electric utility or alternative energy supplier may enter a standard-offer contract for electricity generated by customers with eligible electric generators with a capacity of 500 kilowatts or more. A standard-offer contract shall meet all of the following requirements:

(a) Be on a form approved by the commission.

(b) In net present value, be economically equivalent to or

larger than the customer compensation that would be expected under a fair value tariff and assign appropriate value to any reduced uncertainty about future power supply costs for the electric utility or alternative electric supplier and its other customers.

(c) Provide a fixed price schedule for power delivered from the eligible electric generator over the full term of the contract, subject to adjustment for changes in the Consumer Price Index. As used in this subdivision, "Consumer Price Index" means the most comprehensive index of consumer prices available for this state from the Bureau of Labor Statistics of the United States Department of Labor.

(d) Have a term of 20 years or more, unless a shorter term is requested by the customer and agreed to by the electric utility or alternative electric supplier.

(e) Provide a satisfactory basis for the customer to finance the eligible electric generator through a lending institution under normal commercial terms.

(f) Not establish the price or other terms based on consideration of whether or to whom the customer sells the renewable energy credits owned by the customer under section 179. The customer may, under a separate contract, sell the renewable energy credits to the electric utility, the alternative electric supplier, or a third party.

(8) The distributed generation program shall include net metering. An electric utility or alternative electric supplier shall make net metering available to any customer that submits an application. However, the commission may authorize an electric utility or alternative electric supplier to suspend receipt of applications to participate in net metering from customers with an

eligible electric generator with a capacity exceeding 500 kilowatts when the electric utility or alternative supplier is offering a fair value tariff or a standard-offer contract approved by the commission for electricity from that type of eligible electric generator. The commission may waive the application, interconnection, and installation requirements under this part for customers participating in the net metering program under the commission's March 29, 2005 order in case no. U-14346.

Sec. 175. (1) An electric utility or alternative electric supplier may charge a fee not to exceed $50.00 to process an application to participate in the distributed generation program. ~~The~~ **A** customer shall pay all interconnection costs. The commission shall recognize the reasonable cost for each electric utility and alternative electric supplier to operate a distributed generation program. For an electric utility with 1,000,000 or more retail customers in this state, the commission shall include in that electric utility's nonfuel base rates all costs of meeting all program requirements except that all energy costs of the program shall be recovered through the utility's power supply cost recovery mechanism under section 6j of 1939 PA 3, MCL 460.6j. For an electric utility with fewer than 1,000,000 base distribution customers in this state, the commission shall allow that electric utility to recover all energy costs of the program through the power supply cost recovery mechanism under section 6j of 1939 PA 3, MCL 460.6j, and shall develop a cost recovery mechanism for that utility to contemporaneously recover all other costs of meeting the program requirements.

(2) The interconnection requirements of the distributed generation program shall provide that an electric utility or

alternative electric supplier shall, subject to any time requirements imposed by the commission and upon reasonable written notice to the distributed generation customer, perform testing and inspection of an interconnected eligible electric generator as is necessary to determine that the ~~system~~ **eligible electric generator** complies with all applicable electric safety, power quality, and interconnection, including metering, requirements. The costs of testing and inspection are considered a cost of operating a distributed generation program and shall be recovered ~~under~~ **pursuant to** subsection (1).

(3) The interconnection requirements shall require ~~all~~ eligible electric generators, alternative electric suppliers, and electric utilities to comply with ~~all~~ applicable federal, state, and local laws, rules, ~~or~~ **and** regulations, and any national standards as determined by the commission.

Sec. 177. (1) ~~Electric~~ **In the distributed generation program, electric** meters shall be used to determine the amount of the customer's energy use in each billing period, net of any excess energy the customer's **eligible electric** generator delivers to the utility distribution system during that same billing period. For a customer with ~~a generation system~~ **an eligible electric generator** capable of generating more than 20 kilowatts, the utility shall install and utilize a generation meter and a meter or meters capable of measuring the flow of energy in both directions. A customer with ~~a system~~ **an eligible electric generator** capable of generating more than 150 kilowatts shall pay the costs of installing any new meters.

(2) An electric utility serving over 1,000,000 customers in this state may provide its customers participating in the

distributed generation program, at no additional charge, a meter or meters capable of measuring the flow of energy in both directions.

(3) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters described in subsection (2) to customers participating in the distributed generation program at cost. Only the incremental cost above that for meters provided by the electric utility to similarly situated nongenerating customers shall be paid by the ~~eligible~~ customer **participating in the distributed generation program.**

(4) If the ~~quantity~~ **value** of electricity generated and delivered to the **electric** utility distribution system by an eligible electric generator during a billing period exceeds the ~~quantity~~ **value** of electricity supplied from the electric utility or alternative electric supplier during the billing period, the eligible customer shall be credited by ~~their~~ **the** supplier of electric generation service for the excess ~~kilowatt hours~~ **value** generated during the billing period. The credit shall appear on the bill for the following billing period. ~~and shall be limited to the total power supply charges on that bill.~~ Any excess ~~kilowatt hours~~ **value** not used to offset electric generation charges in the next billing period will be carried forward to subsequent billing periods. ~~Notwithstanding any law or regulation, distributed generation customers shall not receive credits for electric utility transmission or distribution charges. The credit per kilowatt hour for kilowatt hours delivered into the utility's distribution system shall be either of the following:~~

~~(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory, or for distributed~~

~~generation customers on a time-based rate schedule, the monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory during the time-of-use pricing period.~~

~~(b) The electric utility's or alternative electric supplier's power supply component, excluding transmission charges, of the full retail rate during the billing period or time-of-use pricing period.~~

~~(5) A charge for net metering and distributed generation customers established pursuant to section 6a of 1939 PA 3, MCL 460.6a, shall not be reduced by any credit or other ratemaking mechanism for distributed generation under this section.~~

Sec. 179. ~~A customer shall own any renewable~~ **Renewable** energy credits granted for electricity generated on the customer's site under the distributed generation program created in this part ~~.~~**are owned as follows:**

(a) By the customer, to the extent the electricity is utilized by the customer.

(b) By the electric provider, to the extent the electricity is delivered to the local utility's distribution system.

Enacting section 1. Section 183 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1183, is repealed.

Enacting section 2. This amendatory act takes effect 90 days after the date it is enacted into law.