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Senate Bill 596 (as introduced 10-23-19)
Sponsor: Senator Tom Barrett
Committee: Energy and Technology

Date Completed: 2-11-20

CONTENT

The bill would amend the Clean and Renewable Energy and Energy Waste Reduction Act to do the following:

- **Modify the date by which the Michigan Public Service Commission (MPSC) would have to establish a distributed generation program in the State.**
- **Require the program to be designed for a period of at least 20 years.**
- **Require the program to include uniform provisions pursuant to which an electric utility or alternative electric supplier could enter a standard-offer contract for electricity generated by customers with eligible electric generators with a capacity of 500 kilowatts or more.**
- **Require the program to include net metering and require an electric utility or alternative electric supplier to make net metering available to any customer that submitted an application.**
- **Provide that the selection of customers for participation in the program would have to be based solely on meeting the interconnection and equipment requirements.**
- **Prohibit an electric utility or supplier from restricting the number of participants in the distributed generation program except under certain circumstances.**
- **Modify safety and equipment standards related to the distributed generation program.**
- **Require the Commission to establish a Statewide uniform methodology by which an electric utility or alternative electric supplier could establish a fair value tariff.**
- **Prescribe requirements that the fair value tariff would have to meet.**
- **Modify certain other requirements of the distributed generation program in the State.**

The bill also would repeal Section 183 of the Clean and Renewable Energy and Energy Waste Reduction Act, which allows a customer participating in a net metering program before the Commission establishes a tariff to elect to continue to receive service under the terms and conditions of the program for up to 10 years from the date of enrollment.

The bill would take effect 90 days after its enactment.

Modification of Distributed Generation Program Requirements

Under Part 5 (Distributed Generation) of the Act, the MPSC must establish a distributed generation program by order issued not later than July 19, 2017. The bill would require the Commission to establish the program not later than 90 days after the bill's effective date. The

bill also specifies that, under the program, a customer of an electric utility or alternative electric supplier could generate electricity using an eligible electric generator interconnected with the local electrical utility and operated parallel to the distribution system. The value of net excess generation in each billing period or time-of-use pricing period would have to 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 would be required to participate only in the net metering component of the program.

(The Act defines "true net metering" as 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. The bill would modify the term and references to it throughout to refer instead to "net metering".)

The Act defines "eligible electric generator" as a methane digester or renewable energy system with a generation capacity limited to the customer's electrical needs and that does not exceed the following:

- For a renewable energy system, 150 kilowatts of aggregate generation at a single site.
- For a methane digester, 550 kilowatts of aggregate generation at a single site.

Under the bill, the term would mean a customer's renewable energy system, cogeneration facility or waste heat recovery system that meets the following requirements:

- Is located in the State.
- Has a generation capacity that is consistent with the safety and reliability requirements of the customer's interconnection.

Currently, the distributed generation program must apply to all electric utilities whose rates are regulated by the Commission and alternative electric suppliers in the State. Except as otherwise provided, 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 Commission may waive the application, interconnection, and installation requirements of the Act for customers participating in the net metering program under the Commission's March 29, 2005, order in case no. U-14346. The bill would delete these provisions.

(The Commission's case no. U-14346 of March 29, 2005 ordered the consensus agreement for a voluntary, statewide net metering program with which utilities could participate by meeting certain requirements provided in the order.)

The Act requires the program to be designed for a period of not less than 10 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. Instead, under the bill, the program would have to be designed for a period of at least 20 years.

Under the Act, 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 five calendar years. The electric utility or alternative electric supplier must notify the Commission if its distributed generation program reaches the 1% limit. The 1% limit must be allocated as follows:

- No more than 0.5% for customers with an eligible electric generator capable of generating 20 kilowatts or less.
- 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.
- No more than 0.25% for customers with a methane digester capable of generating more than 150 kilowatts.

The bill would delete this provision.

The Act requires the selection of customers for participation in the program to be based on the order in which applications for participation are received by the electric utility or alternative electric supplier. Instead, the bill would require the selection of customers for participation in the program to be based solely on meeting the interconnection and equipment requirements for participation. An electric utility or alternative electric supplier could not restrict the number of participants in the program unless it demonstrated to the satisfaction of the Commission that the restriction was necessary to protect the public health and safety or the integrity of the distribution system in a contested case hearing pursuant to the Administrative Procedures Act.

Among other things, the Clean and Renewable Energy and Energy Waste Reduction Act requires the distributed generation program to include requirements that distributed generation equipment and its installation 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, and that is installed in compliance with Part 5 is considered to be compliant. The bill also would consider equipment that was in compliance with updates to the above testing standards and scope approved by the Commission as compliant with the Act.

(The IEEE 1547.1 testing standards specify the type, production, and commissioning tests that must be performed to demonstrate that the interconnection functions and equipment of the distributed generation system are appropriate. The UL 1741 requirements cover inverters, converters, charge controllers and interconnection system equipment intended for use in stand-alone or utility-interactive power systems.)

In addition, the Act specifies that, within the time provided by the Commission and consistent with good utility practice, 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 purpose of the Act. Under the bill, within the time provided by the Commission and consistent with good utility practice, the protection of electric utility workers, electric utility equipment, and the general public, an electric utility could study, confirm, and ensure that an eligible electric generator installation at the customer's site met "IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems", a Commission-approved update on IEEE 1547, or standards approved by the Commission that enable operation in island mode.

"Island mode" would mean a generation system status in which loads and energy resource are able to operate on-site or within a local microgrid, but power is not exchanged with the utility-owned transmission or distribution network. "Microgrid" would mean a group of interconnected loads and distributed energy resources with clearly defined electrical boundaries that act 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.

Under the Act, distributed generation customers with a system capable of generating 20 kilowatts or less qualify for true net metering, and customers with a system capable of generating more than 20 kilowatts qualify for modified net metering. The bill would delete these provisions.

Under the bill, the distributed generation program would have to include uniform provisions pursuant to which an electric utility or alternative electric supplier could 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 would have to meet all of the following requirements:

- Be on a form approved by the Commission.
- 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.
- Have a term of 20 years or more, unless a shorter term was requested by the customer and agreed to by the utility or supplier.
- Provide a satisfactory basis for the customer to finance the eligible electric generator through a lending institution under normal commercial terms.
- 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, and allow the customer, under a separate contract, to sell the renewable energy credits to the utility, the supplier, or a third party.
- 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.

"Consumer price index" would mean the most comprehensive index of consumer prices available for the State from the Bureau of Labor Statistics of the United States Department of Labor.

The bill would require the distributed generation program to include net metering. An electric utility or alternative electric supplier would have to make net metering available to any customer that submitted an application. However, the Commission could authorize a utility or 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 was 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 could waive the application, interconnection, and installation requirements under the bill for customers participating in the net metering program under the Commission's March 29, 2005 order in case no. U-14346.

Uniform Methodology for Fair Value Tariff

Under the bill, within one year after the bill's effective date, the Commission would have to establish a statewide uniform methodology by which an electric utility or alternative electric supplier could establish a fair value tariff if approved by the Commission after a contested case hearing under the Administrative Procedures Act.

The bill specifies that a fair value tariff would have to meet the following requirements:

- Allow distributed generation for self-service in each billing period or time-of-use pricing period without any charge to the customer.
- 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 participated in the distributed generation program as to a customer that was similarly situated but did not participate.
- Not establish the rate or other terms based on consideration of whether or to whom the customer sold renewable energy credits owned by a customer, and allow the customer, under a separate contract, to sell the renewable energy credits to the electric utility, the alternative electric supplier, or a third party.
- Require a utility to recalculate a fair value tariff, subject to Commission approval, in any proceeding that changed power supply tariffs.
- Not impose any additional charges on a customer for participation in the distributed generation program.

A fair value tariff also would have to credit the customer for net excess generation by the customer in each billing period or time-of-use pricing period that was delivered to the local utility's distribution system. The customer would have to be credited at a rate that was at least the full retail rate for a customer that was similarly situated but did not participate in the distributed generation program at the time of excess generation, minus the delivery charge.

In addition, the rate would have to include the value of the costs and benefits that would accrue over a period of at least 20 years, considering the location and time of generation. The costs and benefits would include the following:

- Energy generated.
- Generation capacity.
- Avoided line losses.
- Avoided transmission capacity.
- Avoided or deferred distribution system investments.
- Voltage support and regulation.
- Reduced fuel price risk to utility customers.
- Reasonably quantifiable economic development benefits including job creation and local tax revenue benefits.
- Any other quantifiable benefits.
- Any costs to the electric provider incurred to serve distributed generation customers reflecting actual penetration levels.

The bill specifies that a fair value tariff could do any of the following:

- If the tariff credited 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 generator technology.
- 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 values into the fair value tariff, including credit for an eligible electric generator that was installed at a high-value location on the distribution grid.

Equipment

Under the Act, the interconnection requirements of the distributed generation program must

specify that an electric utility or an alternative electric supplier, subject to any requirements imposed by the Commission upon reasonable written notice to the distributed generation customer, must perform testing and inspection of an interconnected eligible electric generator as needed to determine that the system complies with all applicable electric safety, power quality, and interconnection, including metering, requirements.

The Act requires meters to 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 the same billing period. For a customer with a generation system capable of generating more than 20 kilowatts, the utility must install and use a generation meter and a meter or meters capable of measuring the flow of energy in both directions. A customer with a system capable of generating more than 150 kilowatts must pay the costs of installing any new meters.

The bill would refer to "eligible electric generator" instead of "system".

Credits

The Act specifies that if the quantity of electricity generated and delivered to the utility distribution system by an eligible electric generator during a billing period exceeds the quantity of electricity supplied from the electric utility or alternative electric supplier during the billing period, the eligible customer must be credited by their supplier of electric generation service for the excess kilowatt hours generated during the billing period. The credit must appear on the bill for the following billing period and must be limited to the total power supply charges on that bill. Any excess kilowatt hours not used to offset electric generation charges in the next billing period will be carried forward to subsequent billing periods. The bill would refer to "value" instead of "quantity" or "kilowatt hours".

The Act also generally prohibits a distributed generation customer from receiving credits for electric utility transmission or distribution charges. The credit per kilowatt hour for kilowatt hours delivered into the utility's distribution system must be either of the following:

- 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.
- 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.

The bill would delete this prohibition and accompanying provisions. The bill also would delete a provision specifying that a charge for net metering and distributed generation customers established pursuant to the Public Service Commission law must not be reduced by any credit or other ratemaking mechanism for distributed generation under this Act.

Currently, a customer must own any renewable energy credits granted for electricity generated on the customer's site under the distributed generation program. Under the bill, renewable energy credits granted for electricity generated on the customer's site under the program would be owned as follows:

- By the customer, to the extent the customer used the electricity.
- By the electric provider, to the extent the electricity was delivered to the local utility's distribution system.

Definitions

"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. Under the bill, the term would mean the voluntary program established under Federal law.

"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. The bill would delete this term and its definitions.

MCL 460.1005 et al.

Legislative Analyst: Tyler VanHuysse

FISCAL IMPACT

The bills would have no significant fiscal impact on the Public Service Commission or local government units. Current appropriations likely are sufficient to cover administrative and regulatory activities undertaken by the Commission due to the bill. The bills may affect rate payers if they resulted in significant changes to the costs of service, but estimates currently are not available.

Fiscal Analyst: Elizabeth Raczkowski

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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.