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BILL ANALYSIS

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Senate Bill 1246 (Substitute S-2)
Sponsor: Senator Bruce Patterson
Committee: Energy Policy and Public Utilities

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CONTENT

The bill would amend Public Act 3 of 1939, the Public Service Commission (PSC) law, to require the PSC to establish a statewide net metering program applicable to all electric utilities and alternative electric suppliers (AESs) in Michigan for electric generators powered by renewable fuel (solar or wind power or solar hot water).

Within 180 days after the bill took effect, the PSC would have to establish the program and establish rules regarding any time limits on the submission of applications or inspections of net metering equipment and any other rules the Commission considered necessary for enforcement of the bill's provisions. Any rules adopted regarding time limits for approval of parallel operation would have to recognize complications arising from equipment saturation, use of multiple technologies, and proximity to synchronous motor loads. Except as otherwise provided, customers of any class would be eligible to interconnect eligible electric generators with the customers' local electric utility and operate the generators in parallel with the distribution system. The program would have to be designed for a period of at least 10 years and limit each customer to generation capacity designed to meet only the customer's electric needs. The PSC could waive the application interconnection and installation requirements of the bill for customers participating in the net metering program under the Commission's March 29, 2005, order in Case No. U-14346.

("Eligible electric generator" would mean a system for the generation of electricity that is fueled by a renewable fuel, with a generation capacity limited to the customer's electric need. An eligible generation system could not exceed 550 kilowatts of aggregate generation at a single site. "Renewable fuel" would mean a resource that replenishes naturally over a human, not a geological, time frame ultimately derived from solar power, solar hot water, or wind power. A renewable fuel would have to come from the sun or from thermal inertia of the ground and would have to minimize the output of toxic material in the conversion of the energy.)

A utility or an AES would not have to allow for net metering that was greater than 1% of its in-State peak load for the preceding calendar year. The utility or AES would have to notify the PSC if its net metering program exceeded the 1% requirement. The 1% limit would have to be allocated as follows:

-- Up to 0.5% for customers with a system capable of generating 30 kilowatts or less.
-- Up to 0.25% for customers with a system capable of generating between 30 and 150 kilowatts.
-- Up to 0.25% for customers with a system capable of generating more than 150 kilowatts.

Selection of customers for participation in the program would have to be based on the order in which the utility or AES received applications.

An electric utility or AES could not refuse to provide or discontinue electric service to a customer solely for the reason that the customer participated in the net metering program.

The program would have to include statewide uniform interconnection requirements for all eligible electric generators. The requirements would have to be designed to protect electric utility workers, equipment, and the general public. Additionally, net metering installation would have to meet all current local and State electric and construction code requirements. Any equipment would be considered eligible equipment if it were certified by a nationally recognized testing laboratory to IEEE (Institute of Electrical and Electronics Engineers) 1547.1 testing standards and in compliance with UL (Underwriters Laboratories) 1741 Scope 1.1A, effective May 7, 2007, and installed in compliance with these provisions. Within the time provided by the PSC rules and consistent with good utility practice, protection of electric utility workers and equipment, and protection of the general public, a utility could study, confirm, and ensure that an eligible electric generator installation at the customer's site met the IEEE 1547 anti-islanding requirements. Utility testing and approval of the interconnection and execution of a parallel operating agreement would have to be completed before the equipment operated in parallel with the utility's distribution system.

Additionally, the program would have to include a uniform application form and process to be used by all electric utilities and AESs in Michigan. A customer who was served by an AES would have to submit a copy of the application to the electric utility for the customer's service area.

Each utility and AES would have to maintain records of all applications and up-to-date records of all eligible electric generators located within their service area.

A utility or an AES could charge an application fee of up to $100. A customer with a system capable of generating more than 150 kilowatts would have to pay all interconnection and standby costs. The utility or AES would have to charge a participating customer with a system capable of generating 150 kilowatts or less rates and charges identical to those charged other similarly situated retail customers, and could not charge an additional standby, capacity, interconnection, or other charge. The PSC would have to establish a cost for each utility and AES to operate a net metering program. For a utility with at least 1.0 million retail customers in Michigan, the PSC would have to include in the utility's base distribution rates all costs of meeting all program requirements. For a utility with fewer than 1.0 million Michigan base distribution customers, the PSC would have to allow the utility to recover all energy costs of the program through the power supply cost recovery mechanism prescribed in the Act, and would have to develop a cost recovery mechanism for the utility to recover contemporaneously all other costs of meeting the program requirements.

The interconnection requirements would have to provide that an electric utility or AES, subject to any time requirements imposed by the PSC and at its own expense and upon reasonable written notice to the net metering customer, could perform testing and inspection of an eligible generator as necessary to determine that the system complied with all applicable electric safety, power quality, and interconnection requirements.

The interconnection requirements would have to require all eligible electric generators, AESs, and utilities to comply with all applicable Federal and State laws, rules, or regulations and any national standards as determined by the PSC.

Electric meters would have to be used to determine the amount of a customer's use in each billing period, net of any excess energy the customer's generator delivered to the utility

distribution system during that billing period. A customer with a system capable of generating more than 30 kilowatts would have to 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 would have to pay the costs of installing any new meters.

An electric utility serving more than 1.0 million customers in Michigan could give its customers participating in the net metering program, at no additional charge, a meter or meters capable of measuring the flow of energy in both directions.

An electric utility serving fewer than 1.0 million customers in Michigan would have to give the meter or meters to its customers at cost. An eligible customer would have to pay only the incremental cost above that for meters provided by the utility to similarly situated nongenerating customers.

If the quantity of electricity generated by an eligible electric generator during a billing period exceeded the quantity of electricity supplied from the utility or AES, the eligible customer would have to be credited by the customer's supplier of generation service for the excess kilowatt-hours generated during the billing period. The credit would have to appear on the bill for the following billing period and would 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 would have to be carried forward to subsequent billing periods. Notwithstanding any law or regulation, net metering customers could not receive credits for electric utility transmission or distribution charges. The credit per kilowatt hour for the excess kilowatt hours would have to be either of the following:

-- The locational marginal price per hour at the commercial pricing node within the utility's distribution service territory during the period the excess kilowatt hours were delivered to the utility's distribution system, for eligible generators using time-of-day meters or automated metering.
-- The utility's or AES's average monthly per-kilowatt-hour electric generation fuel cost.

Proposed MCL 460.10dd

Legislative Analyst: Julie Cassidy

FISCAL IMPACT

This bill would have a very minimal negative impact, if any, on sales tax collections. Electricity is taxed at a rate of 4% when purchased by individuals and 6% when purchased by businesses. Under the bill, individuals and businesses that generate some of the electricity they consume and participate in a net metering program possibly could realize a reduction in the amount of sales tax they pay on the electricity they purchase from their utility company, but it would depend on how the purchase and sale of electricity by participants in the net metering program would be recorded and reported on their electric bills. The bill is not clear as to how the net metering activity would be measured or how it would be reported on utility bills. If meters that automatically run in reverse when excess electricity is sold to a utility were used, only the net amount of electricity purchased by the consumer (amount of electricity purchased from a utility less amount of excess electricity sold to a utility) would be recorded and reported on the consumer's bill. Under this scenario, the sales tax would have to be assessed on the net amount of electricity purchased and the person's sales tax liability would be reduced compared with what it would be without the net metering program. Given the limit on the maximum size of the net metering program proposed in the bill, under this implementation scenario it is estimated that sales tax collections would be reduced $0.3 million.

On the other hand, if the net metering program were implemented using separate meters or smart meters to measure separately the electricity being purchased by consumers and the electricity being generated by consumers and sold to a utility company, then there would be no net change in sales tax collections. Under this scenario, the Department of Treasury likely would assess the sales tax on the gross amount of the electricity purchased by the consumer. This would be consistent with the way the sales tax is currently assessed on motor vehicle purchases that also include trading in a vehicle. When a person purchases a motor vehicle and trades in another vehicle as part of the overall transaction, the sales tax is assessed on the price paid for the motor vehicle before the value of the vehicle being traded in is netted out.

This analysis assumes that most of the individuals and businesses that would participate in a net metering program would be those that are already using alternative methods to generate electricity. Any loss in sales tax collections under this bill would primarily reduce the School Aid Fund and essentially would have no impact on revenue sharing payments to local governments. The Public Service Commission within the Department of Labor and Economic Growth currently has staff working on the area of net metering. Thus, the bill would impose no additional costs on the Department.

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