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BILL ANALYSIS

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Senate Bill 385 (as discharged)
Sponsor: Senator Jim Barcia
Committee: Energy Policy and Public Utilities

Date Completed: 12-21-07

RATIONALE

Concerns about pollution, energy prices, and the limits of the fossil fuel supply, along with technological advances, have led some people to consider a greater reliance on renewable energy sources to meet electricity demands. At least 24 states have enacted some type of "renewable portfolio standard", either voluntary or mandatory. It has been suggested that electric service providers in Michigan also should be required to produce a certain percentage of their electricity using renewable resources such as wind, sunlight, and biomass.

CONTENT

The bill would create a new act to do the following:

- **Require the Public Service Commission (PSC) to establish a renewable energy portfolio standard for each electric service provider.**
- **Require renewable energy, by 2021, to constitute at least 20% of the electricity a provider sold to Michigan retail customers, under the portfolio standard.**
- **Require at least 5% of the electricity a provider generated from renewable energy sources to come from a solar renewable energy system, under the portfolio standard.**
- **Authorize the PSC to establish a system of renewable energy credits that a provider could use to comply with its portfolio standard.**
- **Require a provider to meet its portfolio standard under a renewable energy contract, if the provider were unable to comply with the standard by generating electricity with its own renewable energy system or the use of renewable energy credits.**
- **Require the PSC to exempt a provider from the portfolio standard, under certain circumstances.**
- **Require each provider to submit to the PSC an annual report on the actions taken to comply with its portfolio standard.**
- **Require the PSC to impose a fine on a provider that did not comply with its portfolio standard.**
- **Create a public benefits fund to fund the promotion and growth of renewable energy generation, and require fine money to be deposited in the fund.**

The bill is described below in further detail.

Renewable Portfolio Standard

For each provider (any person or entity in the business of selling electricity to retail customers in this State), the PSC would have to establish a portfolio standard for renewable energy. ("Renewable energy" would mean biomass; geothermal energy; solar thermal energy; or wind energy.) The portfolio standard would have to require the provider to generate or acquire electricity from renewable energy systems in the minimum amounts and by the dates shown in Table 1 (expressed as a percentage of the total amount of electricity the provider sold to its Michigan retail customers during the calendar year).

Table 1

Date	Amount
December 31, 2009	7%
December 31, 2012	9%
December 31, 2015	13%
December 31, 2018	16%
December 31, 2020	20%

In addition, the portfolio standard for each provider would have to require the following:

-- That of the total amount of electricity the provider was required to generate or acquire from renewable energy systems during each calendar year, at least 5% would be generated or acquired from solar renewable energy systems.
-- That any biomass combustion the provider used to meet the portfolio standard met the best available control technologies for emissions, with preference being given for gasified biomass technologies.

If a provider acquired electricity from a renewable energy system under a renewable energy contract with another party, the portfolio standard would have to require that contract to provide for both of the following:

-- That the term of the renewable energy contract was at least 10 years, unless the other party agreed to a contract with a shorter term.
-- That the terms and conditions of the contract were just and reasonable, as determined by the PSC.

If, for the benefit of one or more of its retail customers in Michigan, a provider had subsidized, in whole or in part, the acquisition or installation of a solar thermal energy system that qualified as a renewable energy system and reduced the consumption of electricity, the total reduction in the consumption during each calendar year that resulted from the solar thermal energy system would be considered electricity that the provider generated or acquired from a renewable energy system for the purposes of complying with its portfolio standard.

"Renewable energy system" would mean a facility or energy system that uses renewable energy to generate electricity and transmits or distributes the electricity that it generates from renewable energy, or a solar thermal energy system that reduces the consumption of electricity.

"Renewable energy contract" would mean a contract to acquire electricity from one or more renewable energy systems owned, operated, or controlled by third parties. "Terms and conditions" would include the price that an electric service provider was to pay to acquire electricity under a renewable energy contract.

"Biomass" would mean cellulosic organic material from a plant that is planted to produce energy or nonhazardous plant matter waste material that is segregated from other waste materials and is derived from any of the following: an agricultural crop, crop byproduct, or residue resource; gasified animal wastes; landfill methane; or waste such as landscape or right-of-way tree trimmings, excluding the following:

-- Municipal solid waste.
-- Recyclable postconsumer waste paper.
-- Painted, treated, or pressurized wood.
-- Construction debris.
-- Wood contaminated with plastic or metals.
-- Tires.

Renewable Energy Credits, Contracts

The PSC could establish a system of renewable energy credits that a provider could use to comply with its portfolio standard.

If a provider were unable to comply with its portfolio standard through the generation of electricity from its own renewable energy systems or the use of renewable energy credits, the provider would have acquire electricity under one or more renewable energy contracts.

The Commission would have to determine whether the terms and conditions of a renewable energy contract were just and reasonable.

Portfolio Standard Exemption

If the PSC determined that there was not or would not be a sufficient supply of electricity made available to a provider under renewable energy contracts with just and reasonable terms and conditions, it would have to exempt the provider, for that calendar year, from the remaining requirements of its portfolio standard or from any appropriate portion of the standard.

Annual Report

Each electric service provider would have to submit to the PSC an annual report that provided information relating to the actions the provider took to comply with the portfolio standard.

Each provider would have to submit the report after the end of each calendar year in a format approved by, and within the time prescribed by, the PSC. Each report would have to include all of the following information:

-- The amount of electricity that the provider generated or acquired from renewable energy systems during the reporting period and the amount of renewable energy credits that the provider acquired, sold, or traded during the reporting period to comply with its portfolio standard.
-- The capacity of each renewable energy system owned, operated, or controlled by the provider, the total amount of electricity generated by each system during the reporting period, and the percentage of that total amount that was generated directly from renewable energy.
-- Whether, during the reporting period, the provider began construction on, acquired, or placed into operation any renewable energy system.
-- Any other information that the PSC required.

Penalties

If a utility did not meet its portfolio standard as required, the PSC would have to impose on the provider a fine of $55 per megawatt hour for each renewable energy credit that the provider did not generate or acquire from a renewable energy system during a calendar year in violation of its portfolio standard.

The PSC annually would have to adjust the fines that would be imposed for each calendar year using the prevailing consumer price index for the Detroit region.

If the PSC imposed a fine against a provider, all of the following would apply:

-- The fine would not be a cost of service to the provider.
-- The provider could not include any portion of the fine in any application for a rate adjustment or rate increase.
-- The PSC could not allow the provider to recover any portion of the fine from its retail customers.

Money resulting from any fines imposed on a provider would have to go into a public benefits fund, which the bill would create within the State Treasury. Money in the fund at the close of the fiscal year would remain in the fund and would not lapse to the General Fund. The PSC would have to spend money from the fund, upon appropriation, to promote and "grow" renewable energy generation in Michigan.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

According to the PSC's *21st Century Electric Energy Plan* (January 2007), only 3.0% of the electricity produced in the State currently comes from renewable resources while the rest comes from coal, natural gas, and nuclear energy. A more diverse mix of fuels would provide some insulation against price spikes caused by shortages in certain energy sources. In addition, certain renewable energy sources such as wind and solar power are free, while coal, natural gas, and uranium necessarily carry a cost. The traditional fossil fuels also must be imported from other states and nations, which further adds to the cost. Using renewable resources already available in the State would help lower costs to consumers, many of whom are businesses searching for the most economical place to locate.

Response: The increased demand for certain renewable energy sources such as biomass could lead to higher costs. For example, the increased demand for corn to make ethanol has resulted in higher prices for corn and has had a ripple effect on the price of other crops and food products. In determining whether a renewable portfolio standard (RPS) mandate would be appropriate, how high the standard should be set, and what mix of fuels should be encouraged, it is important to consider all of the potential consequences.

Supporting Argument

A greater reliance on renewable resources would reduce emissions of pollutants and greenhouse gases, resulting in fewer environmental consequences and health problems. It also could mitigate increases in the cost of energy due to measures to reduce pollution from fossil fuels, such as a carbon tax, pollution permits, or a requirement for carbon capture equipment, that could be enacted in the future.

Supporting Argument

Michigan is known for its strong agriculture and manufacturing traditions, which could be capitalized upon to create thousands of jobs to provide raw materials, manufacture components of renewable energy generation facilities, and construct and operate those facilities. In addition to providing jobs, such facilities would generate increased tax revenue to local governments.

Opposing Argument

It is questionable whether a government mandate on utilities to produce a certain percentage of electricity by using renewable sources is necessary or appropriate. Despite the absence of an RPS, some alternative energy companies already have made investments in Michigan. For example, John Deere Wind Energy has begun construction of the Harvest Wind Farm, which reportedly will produce enough electricity for more than 15,000 homes. Wolverine Power has signed a 20-year purchase agreement with the wind farm, which is located in Huron County. The project is anticipated to save Michiganders $4.0 billion over the length of the agreement.

Response: A mandatory RPS would guarantee a market in the State for prospective investors in the alternative energy industry and related fields. Other states have been successful in attracting businesses via an RPS. Furthermore, the standard would apply to all electric providers, but would allow each one to determine how best to meet it. This would stimulate competition and, therefore, lower prices.

Opposing Argument

While some other states appear to have experienced some economic development in connection with the enactment of an RPS, it is important that Michigan's specific resources be considered in a determination of whether an RPS would be appropriate in this State, and what the RPS should be. There are several renewable energy sources that could be used to meet a required standard; they are not, however, without challenges. Although Michigan reportedly is the 14th windiest state in the country, wind is less abundant during the summer months, when demand and electricity prices are high. Additionally, some people are concerned about the environmental impact of wind turbines and potential negative effects on property values.

Solar energy, like wind, is available intermittently, but is most available during peak demand times. The necessary equipment, however, can be expensive.

Another option is biomass resulting from agricultural and food processing waste and landfill gas. The generation of electricity from biomass creates an additional value-added market for crops, creates a market for various byproducts that otherwise would be considered waste, and reduces the amount of greenhouse gases released into the atmosphere. While the sources of biomass are plentiful in Michigan, development of their applications thus far has been focused more on transportation than on electric generation.

Given the State's available resources, it is uncertain whether a 20% RPS by 2021 would be a feasible standard. If an RPS is to be enacted, perhaps the percentage should be lower or the time frame longer.

Legislative Analyst: Julie Cassidy

FISCAL IMPACT

The bill would increase the administrative responsibility of the PSC, although any additional costs would be covered through existing revenue. The amount of revenue generated from fines for noncompliance would depend on their frequency and level. This revenue would have to be deposited into a new public benefits fund. Revenue in this fund would not lapse to the General Fund and would be used to promote renewable energy generation.

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