Department of Legislative Services

Maryland General Assembly
2010 Session

FISCAL AND POLICY NOTE
Revised

House Bill 801 (Delegate McHale, *et al.*)
Economic Matters Finance

Electricity - Net Energy Metering - Credits

This bill alters the net energy metering program by changing the way an eligible customer-generator may accrue credits from excess generation from a kilowatt-hour (kWh) basis to a dollar basis. The bill repeals the requirement that an accrued generation credit expires at the end of a 12-month period. The bill defines a "generation credit" and requires that the value of generation credits be based on the prevailing market price of electricity in the PJM Interconnection energy market. The bill also specifies the conditions under which an electric company must provide payment to an eligible customer-generator for excess generation credits. The Public Service Commission (PSC) must adopt regulations to implement the bill; convene a technical working group; and submit a related report to the Governor and specified legislative committees by January 1, 2011.

The bill's provisions relating to the adoption of regulations, the working group, and the required report take effect July 1, 2010.

Fiscal Summary

State Effect: None. The PSC can implement the bill with existing budgeted resources.

Local Effect: Potential meaningful impact on local governments that participate in net energy metering.

Small Business Effect: Potential meaningful impact on small businesses that participate in the net energy metering program.

Analysis

Bill Summary: A "generation credit" is a credit associated with the generation of electricity produced in excess of the electricity consumed by an eligible customer-generator in one billing period. Generation credits must be calculated at the prevailing market price of energy applicable to the electric company in the PJM Interconnection energy market and must be stated on an eligible customer-generator's bill in a dollar amount.

The electric company must carry forward accrued generation credits until the eligible customer-generator's consumption eliminates the credit or until the eligible customer-generator has been paid for the remaining credit. An eligible customer-generator may make a written request to receive payments from excess generation at the end of a 12-month period. Pursuant to such a request, an electric company must pay an eligible customer-generator for excess generation credits within 15 days after the end of the 12-month period. Also, if a customer-generator closes an account with an electric company, the electric company must, within 15 days, pay the customer-generator for any accrued generation credits remaining at the time the account is closed.

By January 1, 2011, PSC must adopt regulations to implement the bill; such regulations must take into consideration the technology available at each electric company and the appropriate value of generation credits. In developing the regulations, PSC must convene a technical working group to address specified equipment and pricing issues. Among other things, the technical working group must consider meter aggregation and the transfer of generation credits or aggregation of generation among separate accounts for specified eligible customer-generators.

Also by January 1, 2011, PSC must report to the Governor, the Senate Finance Committee, and the House Economic Matters Committee on the recommendations of the technical advisory group and the regulations adopted pursuant to the bill.

Current Law: Net energy metering is measurement of the difference between the electricity that is supplied by an electric company and the electricity that is generated by an eligible customer-generator and fed back to the electric company over the eligible customer-generator's billing period. An "eligible customer-generator" is a customer that owns and operates, or leases and operates, a biomass, solar, wind, or micro combined heat and power electric generating facility located on the customer's premises or contiguous property; interconnected and operated in parallel with an electric company's transmission and distribution facilities; and intended primarily to offset all or part of the customer's own electricity requirements. The generating capacity of an eligible customer-generator for net metering may not exceed two megawatts.

An eligible customer-generator may carry forward credits from excess generation, in the form of a negative kilowatt-hour reading, for up to 12 months or until the customer-generator's consumption of electricity from the grid eliminates that credit. At the expiration of the 12-month accrual period any credits from excess generation revert to the electric company and may not be recovered by the eligible customer-generator. State law does not permit eligible customer-generators to transfer credits from excess generation.

For an eligible customer-generator whose facility is sized to produce energy in excess of the customer-generator's annual energy consumption, PSC may require the customer-generator to install a dual meter capable of measuring the flow of electricity in two directions and must develop a credit formula that excludes recovery of transmission and distribution costs and provides a dollar-for-dollar offset of electricity supplied by the grid compared to electricity generated by the company.

PSC is required to submit an annual report on the status of net energy metering to the General Assembly by February 1 of each year. This report must contain the amount of generating capacity owned by eligible customer-generators in the State, the type of energy resource used in generation, a recommendation on if the generating capacity limit of the net metering program should be altered, and other pertinent information.

Background: As noted above, customer-generators with generating capacity in excess of their own consumption may be required to install a dual meter, which measures electricity generated and electricity consumed separately. Customer-generators with dual meters may currently receive dollar-for-dollar credits for excess generation but are not required to receive payment. These credits must exclude transmission and distribution costs. The number of customer-generators with dual meters currently installed is minimal overall.

Based on data submitted by electric companies, there are currently over 1,000 customer-generators in the State participating in net metering and approximately 90% of these customer-generators have solar installations. Over 55% of customer generators have 4 kilowatts or less of generating capacity and over 90% of customer-generators have 10 kilowatts or less of generating capacity.

The 2010 annual report on net energy metering has not been submitted to the General Assembly by PSC. The most recent data reported by PSC available on net energy metering is provided in **Exhibit 1**. During calendar 2008, the amount of generation increased from 364 kilowatts to 2,453 kilowatts. This represents only 0.16% of the current statewide limit of 1,500 megawatts for total net energy metering capacity. As of January 2009, the majority of net metering in the State was from solar generation. The generation sources are likely to have changed in the past 12 months, as additional generation sources have become eligible for net energy metering (micro combined heat and power) and additional grants have been provided for solar and small wind installations.

Exhibit 1
January 2009 Net Metering Capacity
(Kilowatts)

Electric Utility	Solar	Wind	Biomass	Utility Total
A & N Electric Cooperative	-	-	-	-
Baltimore Gas and Electric Company	302.8	0.8	-	303.6
Choptank Electric Cooperative	21.2	37.2	-	58.4
Delmarva Power and Light Company	85.4	27.7	-	113.1
Easton Utilities	-	-	-	-
Hagerstown Municipal Light Company	1.0	-	-	1.0
Town of Thurmont	-	-	-	-
Town of Berlin	-	-	-	-
Potomac Electric Power Company	713.3	-	-	713.3
Potomac Edison Company	1,035.5	144.9	-	1,180.4
Williamsport Light	-	-	-	-
Southern Maryland Electric Cooperative	83.2	-	-	83.2
Somerset Electric Cooperative	-	-	-	-
Total	**2,242.4**	**210.6**	**-**	**2,453.0**

Source: Public Service Commission

Local Fiscal Effect: Although net energy metering participation by local governments is currently minimal, many counties and municipalities are considering installing renewable energy generation that will likely be eligible for net energy metering. As discussed below in the small business effect, the bill may provide a benefit to some eligible customer-generators and may negatively affect others, depending on pricing mechanisms adopted by PSC.

Small Business Effect: Providing payment for credits from excess generation provides a meaningful benefit to customer-generators who regularly produce more electricity than they consume; however, equaling this payment to the prevailing PJM market rate may have a negative impact on eligible customer-generators with generating capacity that does not exceed their annual energy needs, depending on if pricing mechanisms adopted by PSC include recovery of transmission and distribution costs.

Under current law, eligible customer-generators without a dual meter (electric meters capable of measuring electricity produced and electricity consumed separately) accrue credits from excess generation each month on a kWh basis. The majority of customer-generators do not have dual meters so credits for these customer-generators are carried forward in the form of a "negative" kWh reading on the customer's bill for up to 12 months. For customer-generators whose electric generation does not exceed consumption on an annual basis, 100% of electricity generated is either used each month or "reclaimed" in following months, when consumption exceeds generation. This is especially beneficial for many customer-generators because periods of peak electricity consumption may not coincide with periods of peak generation.

The full cost of electricity purchased by any electric customer includes the cost of the electric commodity (approximate to the PJM market rate), delivery service, taxes, and other charges. The components of a customer's bill vary based on the service territory, rate class, local and State taxes, and the price of the electric commodity. Instead of allowing a customer-generator to "reclaim" 100% of excess generation in future periods, as allowed under current law, the bill requires a customer-generator to receive monthly credits based on the PJM market rate as determined by PSC. In periods where consumption exceeds generation, instead of "reclaiming" a kWh credit from prior generation, the customer-generator will pay the full retail price, including transmission and distribution charges.

Whether this positively or negatively affects participants in the net energy metering program depends on regulations adopted by PSC and if the value of generation credits granted to customer-generators includes transmission and distribution costs. If the value does not include transmission and distribution costs, eligible customer-generators are negatively affected. *For illustrative purposes*, assuming that the PJM market rate represents 80% of the total cost of electricity purchased by an eligible customer-generator, awarding credits for excess generation in a dollar value will diminish the value of excess electricity generated by a customer-generator by 20%.

Effect on Retail Electric Customers: The bill will not have a significant effect on electric rates as a whole. To the extent that changes to the net energy metering program increase electric company costs to administer the program, residential electric rates may increase, as electric company costs to administer the net energy metering program are charged to all customers through base distribution rates. However, to the extent that changes to the net energy metering program result in an increase in small distributed generation, retail electric customers may benefit from reduced rates. Distributed generation provides a meaningful benefit by alleviating congestion in electric transmission lines and lessening overall demand for electricity during periods of peak demand.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Office of People's Counsel, Public Service Commission, Department of Legislative Services

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