SB 380

Department of Legislative Services

Maryland General Assembly
2011 Session

FISCAL AND POLICY NOTE
Revised

Senate Bill 380 (Senator Pinsky and the President, *et al.*) (By Request - Administration)

Finance Economic Matters

Electricity - Net Energy Metering

This bill alters the net energy metering program by changing the way an eligible customer-generator may accrue credits from excess generation from a dollar basis to a kilowatt-hour (kWh) basis. Eligible customer-generators may accrue net excess generation for a 12-month accrual period and electric companies must carry forward net excess generation until the customer's electricity consumption eliminates the net excess generation or the 12-month accrual period expires. The bill repeals existing provisions that govern payment for excess generation and establishes new rates and payment conditions for a customer's net excess generation at the end of the 12-month accrual period. The bill also repeals the authority of the Public Service Commission (PSC) to require the use of a dual meter for certain customer-generators and related provisions, alters a reporting deadline for PSC, and establishes a monthly payment option for customers of certain electric cooperatives.

The bill takes effect June 1, 2011.

Fiscal Summary

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

Local Effect: Potential benefit for local governments that become eligible customer-generators.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: An eligible customer-generator that generates more electricity than consumed from the grid may accrue net excess generation for an accrual period of up to 12 months that ends with the billing cycle that is complete immediately prior to the end of April of each year. The electric company must carry forward net excess generation in the form of a negative kWh reading until the eligible customer-generator's electricity consumption eliminates the net excess generation or the 12-month accrual period expires.

On or before 30 days after the billing cycle that is complete immediately prior to the end of April of each year, the electric company must pay each eligible customer-generator the dollar value of any accrued net excess generation remaining at the end of the previous 12-month period. Also, if a customer-generator closes an account with an electric company, the electric company must, within 15 days, pay the eligible customer-generator for the dollar value of any accrued net excess generation remaining at the time the customer closes the account. The dollar value of net excess generation must be equal to the average generation or commodity rate that the eligible customer-generator would have been charged over the 12-month accrual period, multiplied by the number of kWh of net excess generation. For customers served by an electricity supplier, the dollar value is equal to the generation or commodity rate that the customer would have been charged, multiplied by the number of kWh of net excess generation.

The bill removes PSC authorization to require an eligible customer-generator whose facility is sized to produce energy in excess of the eligible customer-generator's annual energy consumption to install a dual-meter capable of measuring the flow of electricity in two directions. The bill also repeals related provisions.

An eligible customer-generator served by an electric cooperative that serves a population of less than 250,000 in its distribution territory may choose to be paid for the dollar value of net excess generation at the end of each month instead of at the end of the 12-month accrual period. If an eligible customer-generator chooses to receive payment for net excess generation monthly, the dollar value of net excess generation is equal to the generation or commodity portion of the rate the eligible customer-generator would have been charged by the electric cooperative for the previous month. An electric cooperative must pay the eligible customer-generator for net excess generation within 30 days after the end of each month.

The bill allows an eligible customer-generator's assignee to own and have title to renewable energy credits.

Finally, the date which PSC must submit its annual report on the status of net metering is changed from February 1 to September 1 of each year.

Current Law: Net energy metering is the 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, fuel cell, wind, or micro combined heat and power (micro-CHP) 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.

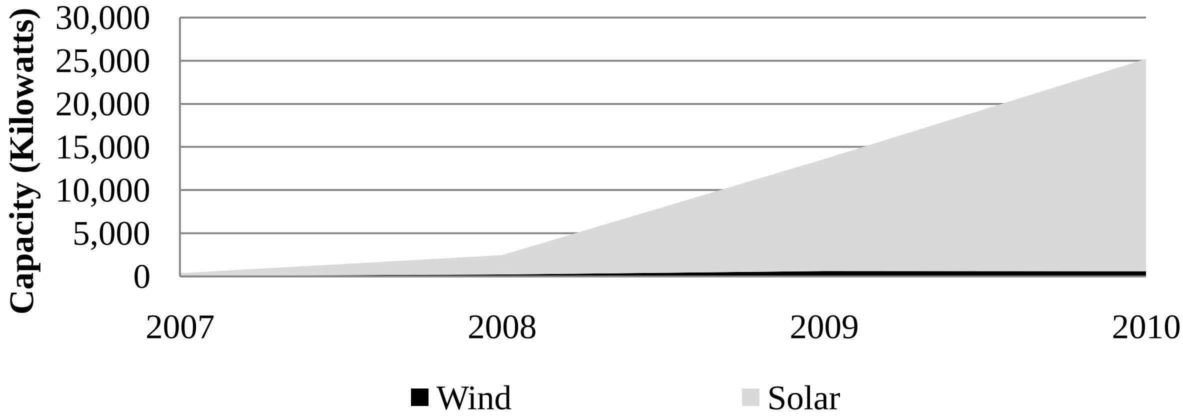
Chapters 437 and 438 of 2010 altered the net energy metering program by changing the way an eligible customer-generator may accrue credits from excess generation from a kWh basis to a dollar basis and established the conditions under which an electric company must provide payment to an eligible customer-generator for excess generation. The Acts also required PSC to (1) establish a technical working group to address issues relating to the pricing mechanisms for different hours and seasons, meter aggregation, and the transfer of generation credits or aggregation of generation among separate accounts; and (2) adopt implementing regulations.

Regulations to implement Chapters 437 and 438 were proposed and submitted to the Joint Committee on Administrative, Executive, and Legislative Review but have not yet been adopted. The proposed regulations exclude transmission and distribution charges from the rate upon which customers are compensated for excess generation and require generation credits to be valued based on PJM Interconnection's locational marginal pricing mechanism, even though the acknowledged result would decrease the value of credits for most net-metered generation other than summer-peak solar generation. The proposed regulations also include physical and virtual aggregation of multiple meters for certain customer sectors in accordance with legislative suggestions of the working group established under Chapters 437 and 438.

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 regarding whether the generating capacity limit of the net metering program should be altered, and other pertinent information.

Background: The most recent data reported to PSC on net energy metering is provided in **Exhibit 1**. During calendar 2010, the amount of generation increased from 13,555 kilowatts to 25,207 kilowatts. This represents only 0.8% of the current statewide limit of 1,500 megawatts for total net energy metering capacity. As of December 2010, 97.7% of net metering capacity was from solar, 2.2% from wind, and approximately 0.1% from micro-CHP. **Exhibit 2** shows the amount of net metering for each electric company as of December 2010.

Exhibit 1
Maryland Net Metering Capacity



Source: Public Service Commission

Exhibit 2
December 2010 Net Metering Capacity
(Kilowatts)

Electric Utility	Solar	Wind	Micro-CHP	Utility Total
A & N Electric Cooperative	-	-	-	-
Baltimore Gas and Electric Company	11,617	101	30	11,747
Choptank Electric Cooperative	221	87	-	307
Delmarva Power and Light Company	2,827	108	-	2,935
Easton Utilities	15	-	-	15
Hagerstown Municipal Light Company	35	-	-	35
Town of Thurmont	-	-	-	-
Town of Berlin	-	-	-	-
Potomac Electric Power Company	4,948	-	-	4,948
Potomac Edison Company	4,387	236	-	4,624
Williamsport Light	-	-	-	-
Southern Maryland Electric Cooperative	567	27	-	594
Somerset Electric Cooperative	2	-	-	2
Total	**24,619**	**559**	**30**	**25,207**

Note: There were no eligible biomass facilities in 2010.
Source: Public Service Commission

This bill alters the pricing mechanism for generation credits in order to support the value of existing installed net metering generation systems and the deployment of additional similar distributed generation.

Local Fiscal Effect: Net energy metering provides a meaningful benefit to eligible customer-generators. During times of peak generation, excess electricity produced is fed into the electric grid and the customer-generator is only charged for the net difference of electricity used each month. The practical effect is that customer-generators are able to use the utility grid as battery storage, so excess energy produced at any given instant can be captured for later use. Additionally, customer-generators may receive payment for excess electricity produced at the end of a 12-month period.

Although net energy metering participation by local governments is currently minimal, municipalities that install renewable generation and become eligible customer-generators may receive a benefit from the payment terms offered under the bill, as discussed in the small business effect.

As advised by the Maryland Energy Administration, 13 units of local government (counties, municipalities, community colleges, and boards of education) are scheduled to install solar photovoltaic (PV) equipment in 2011. These projects will likely participate in net energy metering.

Small Business Effect: Calculating the net excess monthly generation on a kWh basis, instead of a dollar basis, will allow a customer to recover 100% of excess electricity generated in a given month at a later time, instead of less than 50% (calculated at PJM wholesale, excluding transmission and distribution charges) of the value, as provided under current law. Additionally, for customer-generators that regularly produce more electricity than they consume, establishing terms of payment for net excess generation at a rate equal to the generation or commodity rate (excluding transmission and distribution charges) increases the rate of compensation for net excess generation, providing additional revenue to homes and small businesses that participate in net energy metering; however, establishing the rate based on the average annual commodity or generation rate may reduce the value of generation for some solar PV systems, since they tend to produce the most electricity at times when hourly electricity prices are highest.

Increasing monetary incentives for individuals to install renewable generating facilities reduces the lifecycle cost of the project. As a result, small businesses involved with the manufacturing, distribution, and installation of solar, wind, and other renewable energy sources stand to benefit.

Additional Information

Prior Introductions: None.

Cross File: HB 860 (Delegate McHale, *et al.*) – Economic Matters.

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

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