Public Service Commission Of Maryland

Report on the Status of Net Energy Metering In the State of Maryland

In Compliance with Section 7-306(i) of the Public Utility Companies Article, Annotated Code of Maryland

Prepared for the General Assembly of Maryland

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6 St. Paul Street, 16th Floor Baltimore, Maryland 21202 Tel: (410) 767-8000 <u>www.psc.state.md.us</u>

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Executive Summary

This report is prepared by the Public Service Commission ("Commission") in compliance with § 7-306(i) of the Public Utility Companies Article, *Annotated Code of Maryland* ("*PUC Article*"). This section requires the Commission to report to the General Assembly, in accordance with § 2-1246 of the State Government Article, on the status of the net metering program implemented pursuant to § 7-306 of the PUC Article. The report is required to include: (1) the amount of capacity of electric generating facilities owned and operated by eligible customer-generators in the State by type of energy resource; (2) based on the need to encourage a diversification of the State's energy resource mix to ensure reliability, whether the rated generating capacity limit codified in § 7-306(d) of the PUC Article, *i.e.*, 1500 megawatts ("MW"), should be altered; and (3) other pertinent information.

The current installed capacity of eligible customer-generators in the State is approximately 364 kilowatts ("kW"), or .364 MW. The current eligible limit of 1,500 MW far exceeds the level of installed capacity. There has been an increase in the number of recent installations; however, it is unlikely that the current cap would be approached within the foreseeable future. Accordingly, at this time, the Commission does not recommend changes to the eligibility cap for net metering.

Net Metering in Maryland

Net metering is a method of simplifying the measurement of energy produced by a renewable energy generator when it is connected to an electric utility distribution system. Net metering is permitted by law for solar, wind, and biomass generators that are intended to supply no more than the customer's annual energy usage. The term "net metering" refers to the measurement of the difference between the electricity supplied by an electric company and the electricity that is generated by an eligible customer-generator and fed back to the electric company during a customer-generator's billing period. In other words, during a single reading period, *e.g.*, one month, it is the net of the energy supplied by the electric company and used by the customer and the energy produced by a customer and sent back to the electric company through the company's distribution system. The terms of utility tariffs typically require a customer to pay the monthly customer charge, regardless of the net energy used. However, for energy billed, the customer only pays for energy that is used, netted against any generation produced by the customer. The practical effect of this policy is to allow customers to use the utility grid as "battery storage," so that excess energy produced at any given instant can be captured for later use.

Customer-generators also benefit by less expensive interconnection with the utility (e.g., only a single standard meter without additional switches). In this manner, electricity needs in excess of the renewable output can be obtained from the grid without having to disconnect or shutdown the renewable generator. The ease of interconnection allows the customer to use the renewable generator in a grid-connected manner without significant installation or operating expense, thus improving the benefit of the renewable generator.

While the net metering law in § 7-306 of the PUC Article permits renewable net metering, utilities implement it through tariffs that are filed with the Commission. These tariffs place terms and conditions on the net metering operations and specify monthly customer charges. These tariffs also include requirements for eligibility which cap the maximum installed size¹ as well as the State-wide limit. Any changes to State law will result in each utility being required to revise its tariff and file the revision with the Commission.

Eligibility Cap

The current limit on eligible renewable generation capacity is 1,500 MW. This limit represents about 8% of the peak demand in the State, which is approximately 20,000 MW.

Current Level of Renewable Deployment

Commission Staff surveyed Maryland electric companies for the number of net-metered facilities currently operating in each of the electric companies' distribution territories. The total amount of generation is approximately 364 kW, or .364 MW. The table below shows the results of the survey of net-metered installations.

Electric Utility	Solar	Wind	Biomass	Utility Total
	Kilowatt			
A & N Electric Cooperative	No Response			0
Baltimore Gas and Electric Company	103.3	0	0	103.3
Choptank Electric Cooperative	16.2	0	0	16.2
Delmarva Power and Light Company	55.7	24.4	0	80.1
Easton Utilities	0	0	0	0
Hagerstown Municipal Light Company	1.0	0	0	1.0
Town of Thurmont	No Response			0
Town of Berlin	0	0	0	0
Potomac Electric Power Company	98.56	0	0	98.56
Potomac Edison Company	16.97	18		34.97
Williamsport Light	No Response			0
Southern Maryland Electric Cooperative	29.6	0	0	29.6
Somerset Electric Cooperative	No Response			0
State Total	321.33	42.4	0	363.73

¹ By law, the generating capacity of an electric generating system used by an eligible customer-generator for net metering may not exceed 2 MW. *See* § 7-306(h)(1) of the PUC Article.

Recommendation on Eligibility Cap

As of January 2008, the level of installed capacity is less than 0.3% of the current limit. Commission Staff, as part of the net-metering survey, requested the electric companies to provide the date(s) on which the installed capacity was completed in their distribution territories. The data received indicates that there has been an increase in the number of new renewable capacity installed in 2006 and 2007. The rate of installation, however, does not indicate that the cap would be approached in the near future. Consequently, the Commission does not view the 1,500 MW limit as a barrier to installation of new renewable sources.

Other Issues

During 2007, the Commission initiated a rule making in which it proposed regulations for small generator interconnection standards in response to the direction by the General Assembly to revise Maryland's interconnection standards and procedures to be consistent with nationally adopted interconnection standards and procedures and facilitate and encourage a simplified connection of small distributed generators to the grid. The adoption of these proposed regulations should encourage and increase the number of customergenerators installing capacity and increasing net metering usage. The proposed regulations were published in the *Maryland Register* on January 18, 2008.

At this time, the Commission has not identified any other matters relating to the net metering eligibility limit or other issues relating to net metering that require the action of the General Assembly.

Conclusion

The current eligible net metering limit of 1,500 MW far exceeds the level of installed capacity. Although there has been an increase in the number of recent installations, it is unlikely that the current cap would be approached within the foreseeable future. Accordingly, the Commission currently does not recommend the eligibility cap for net metering be altered.