Department of Legislative Services

Maryland General Assembly 2014 Session

FISCAL AND POLICY NOTE Revised

House Bill 1076 Economic Matters (Delegate Conway, et al.)

Education, Health, and Environmental Affairs

Energy-Generating Cooperative Advisory Committee

This bill creates an Energy-Generating Cooperative Advisory Committee that must evaluate specified issues related to utilization of poultry litter and the establishment of poultry litter energy-generating cooperatives. The advisory committee must report to the General Assembly by December 31, 2015.

The bill takes effect June 1, 2014, and terminates May 31, 2016.

Fiscal Summary

State Effect: General and/or special fund expenditures may increase by more than \$100,000 over the course of FY 2015 and 2016 for contractual services. To the extent special funds from the Public Utility Regulation Fund are utilized, special fund revenues increase correspondingly. Any expense reimbursements are assumed to be minimal and absorbable within existing budgeted resources.

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: The Energy-Generating Cooperative Advisory Committee includes, among others, the Secretary of Agriculture, the Director of the Maryland Energy Administration (MEA), the Chair of the Public Service Commission, and the Executive Director of the Maryland Clean Energy Center (or any of those officials' designees). The State units represented on the committee must provide staff for the committee. Members of the advisory committee may not receive compensation, but are entitled to reimbursement for expenses.

The advisory committee must evaluate:

- the most efficient, cost-effective, and environmentally sound methods for utilizing poultry litter;
- whether anaerobic decomposition of poultry litter is an appropriate method to reduce the State's nutrient load to the Chesapeake Bay;
- the potential for reduced air emissions from anaerobic decomposition of poultry litter;
- funding sources for poultry litter energy-generating cooperatives, including the Strategic Energy Investment Fund (SEIF), manure transport programs, and other available funding;
- an appropriate tariff structure, taking into account various specified considerations, that will avoid costs to and subsidies from customers of an electric company and that will ensure that an electric company receives full and timely recovery of prudently incurred costs, while encouraging poultry litter energy-generating cooperatives;
- a tariff structure and related regulatory structure designed to operate the energy-generating cooperative at least cost;
- whether an energy-generating cooperative and its cooperative members should be compensated or assessed costs;
- the size and number of energy-generating cooperatives that the State can support; and
- any other issue the advisory committee determines is necessary.

By December 31, 2015, the advisory committee must report to the General Assembly on:

- a tariff structure that encourages poultry litter energy-generating cooperatives and allows an electric company to recover prudently incurred costs;
- an appropriate regulatory structure that provides necessary oversight while allowing the energy-generating cooperative to be operated at least cost;
- whether an energy-generating cooperative and its cooperative members should be compensated or assessed costs;
- the size and number of energy-generating cooperatives that the State can support;
- the most efficient, cost-effective, and environmentally sound methods for utilizing poultry litter; and
- other matters the committee considers necessary or advisable to bring to the attention of the General Assembly.

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

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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 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 accrue net excess generation for a period (1) of up to one year and (2) 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 until (1) the eligible customer-generator's consumption of electricity from the grid eliminates the net excess generation or (2) the accrual period expires.

Generally, the dollar value of net excess generation is equal to the generation or commodity portion of the rate that the eligible customer-generator would have been charged for the electricity multiplied by the number of kilowatt-hours of net excess generation. At the end of the accrual period ending in April each year, the electric company must pay to each eligible customer-generator the dollar value for any accrued net excess generation remaining.

Pursuant to PSC regulations, certain eligible customer-generators can request meter aggregation from an electric utility for the purposes of net metering, including an eligible customer-generator using electrical service for agriculture and an eligible customer-generator that is a not-for-profit organization or business. If the eligible customer-generator's electrical services are not located close enough to physically interconnect metered service, virtual meter aggregation is available, where the electric company accounts for the usage and excess generation of all applicable accounts to calculate the customer's excess generation for a billing period.

Background:

Anaerobic Decomposition

The U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) indicates that anaerobic decomposition occurs naturally in various circumstances and anaerobic processes can also be managed in a "digester" (an airtight tank) or a covered lagoon for waste treatment. According to EERE, anaerobic digestion "uses bacteria to break down waste organic materials into methane and other gases, which can be used to produce electricity or heat." Other benefits of anaerobic digestion include nutrient recycling, waste treatment, and odor control. Based on indications from the

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Maryland Department of Agriculture (MDA), MEA, and the Maryland Environmental Service, it appears that there are few, if any, currently operational anaerobic digesters using poultry litter in the State, although certain projects are being pursued. One of those projects, at the Department of Public Safety and Correctional Services' Eastern Correctional Institution, has experienced financing challenges and, as of early March 2014, had been suspended.

Poultry Litter Management

The Chesapeake Bay Total Maximum Daily Load (TMDL) established by the U.S. Environmental Protection Agency sets the maximum amount of pollution the bay can receive and identifies specific pollution reduction requirements. All reduction measures must be in place by 2025, with at least 60% of the actions established by 2017. Reducing nutrient runoff from agricultural activities is a part of the overall State strategy to meet TMDL goals. MDA has indicated that, with respect to animal producers, increasing pressures to meet the TMDL goals have contributed to increased demand for a program it offers to help transport excess manure from producing farms to be used on land with soil that has capacity to hold additional phosphorus or to be used in environmentally acceptable ways other than land application. Most of the manure transported to date under the Manure Transport Program has been poultry litter.

Net Metering

Data from PSC's most recent *Report on the Status of Net Energy Metering in the State of Maryland* (September 2013) is provided in **Exhibit 1**. As of June 30, 2013, the amount of net energy metered capacity increased over the prior year from 58,514 kilowatts to 101,692 kilowatts. This represents only 6.6% of the current statewide limit of 1,500 megawatts for total net energy metering capacity.

Meter aggregation for the purposes of net metering was first implemented by PSC as a pilot program, but is now being made more widely available. PSC's September 2013 report indicated that as of June 30, 2013, there were 21 installed meter aggregation projects and 12 applications pending. It is not specified in the report how many of those are agricultural projects.

In response to an April 2012 request from the Senate Finance Committee, PSC ordered its stakeholder Net Metering Working Group to evaluate whether a net energy metering program for "community energy-generating facilities" as specified in SB 595 of 2012 (a concept similar to the energy-generating cooperatives in this bill) could be a workable net energy metering program in the State. A November 2012 letter from PSC to the committee indicated that, although the working group concluded that such a program could be workable in Maryland, significant policy issues remained, and PSC had not yet evaluated, resolved, or decided any of the disputed issues at that point. HB 1076/ Page 4

	Exhibit 1 Net Energy Metered Installed Capacity in Maryland June 30, 2013 (Kilowatts)						
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
Solar	321	2,242	24,628	30,905	55,856	100,062	
Wind	42	211	556	514	1,278	1,310	
Biomass	-	-	30	320	1,380	320	
Total	364	2,453	25,214	31,739	58,514	101,692	

Note: Numbers may not sum to total due to rounding.

Source: Public Service Commission

Strategic Energy Investment Fund

SEIF, referenced in the bill, holds proceeds from the sale of carbon dioxide allowances under the Regional Greenhouse Gas Initiative. The fund is administered by MEA and used for various purposes including renewable and clean energy programs and initiatives.

State Fiscal Effect: General and/or special fund (SEIF and/or Public Utility Regulation Fund) expenditures may increase by more than \$100,000 over the course of fiscal 2015 and 2016 for contractual services to assist in studying and reporting on issues that must be addressed by the Energy-Generating Cooperative Advisory Committee. Based on the likely complexity of the work that must be completed by the advisory committee and the fact that part of the work relates to environmental issues which the involved State agencies may not have the expertise to fully address, the Department of Legislative Services advises that contractual services for studies in other areas, costs could be more than \$100,000. To the extent expenditures are covered with special funds from the Public Utility Regulation Fund, special fund revenues increase correspondingly from assessments imposed on public service companies.

Additional Information

Prior Introductions: None.

Cross File: SB 521 (Senator Pinsky, *et al.*) - Finance and Education, Health, and Environmental Affairs.

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Information Source(s): Maryland Department of Agriculture; Maryland Energy Administration; Public Service Commission; Maryland Environmental Service; U.S. Department of Energy; Department of Legislative Services

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