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FISCAL AND POLICY NOTE
Revised

Senate Bill 521 (Senator Pinsky, *et al.*)

Finance and Education, Health, and Environmental Affairs — Economic Matters

Poultry Litter Energy-Generating Cooperative Program

This bill establishes a program to facilitate the establishment of energy-generating cooperatives that generate electricity from anaerobic decomposition of poultry litter and allow for the monetary value of the electricity to be used to offset cooperative members' electricity costs.

The bill takes effect June 1, 2014.

Fiscal Summary

State Effect: The bill can largely be implemented with existing resources; however, special fund expenditures and revenues may increase correspondingly in FY 2016 and/or 2017 to the extent contractual services are needed by the Public Service Commission (PSC) to handle a proceeding required under the bill.

Local Effect: Minimal.

Small Business Effect: Meaningful.

Analysis

Bill Summary: The bill establishes a Poultry Litter Energy-Generating Cooperative Program administered by PSC, in consultation with the Maryland Energy Administration (MEA).

An "energy-generating cooperative" is a renewable energy facility that:

- uses primarily poultry litter to generate electricity;

- generates metered electricity from the anaerobic decomposition of poultry litter;
- credits its cooperative members the monetary value for electricity generated from anaerobic decomposition of poultry litter;
- is located in the same electric company service territory as its cooperative members;
- has at least two cooperative members;
- credits the monetary value for electricity to no more than 40 electric accounts;
- has a rated capacity of no more than one megawatt (MW);
- does not utilize more than 20,000 tons of poultry litter in a single year; and
- may be owned by any person, including a public service company or a cooperative organization whose sole purpose is to own or operative a cooperative.

A cooperative organization may contract with a third party for the third party to finance, build, construct, lease, or operate an energy-generating cooperative.

The combined rated generating capacity of all cooperatives may not exceed 15 MW in any electric company service territory or 30 MW in the State. PSC must determine whether a cooperative applicant meets the requirements of the program and must adopt regulations to implement the program. A cooperative must meet all applicable statutes and regulations and follow specified interconnection procedures.

The monetary value of subscribed energy generated by an energy-generating cooperative is allocated by the electric company, each billing month, among the cooperative members. The extent to which a cooperative member's electricity costs are offset by the member's allocation of the generated electricity is calculated on a dollar value basis by multiplying the kilowatt-hours of electricity generated by the cooperative that are attributed to the member by an "energy-generating cooperative offset rate" (a per kilowatt-hour dollar value). A member generally receives, over a 12-month period, credit or payment for the kilowatt-hours attributed to the member, at the energy-generating cooperative offset rate, up to an amount of kilowatt-hours equal to the member's "baseline annual usage." "Baseline annual usage" is the member's usage, or an estimate of the member's usage, over the 12 months prior to the member's most recent subscription to the cooperative.

The bill defines "energy-generating cooperative offset rate" as the rate a cooperative member would have been charged by an electric company under the standard offer service rate for (1) energy; (2) capacity; and (3) transmission. However, PSC is required to open a proceeding by January 1, 2016, to establish, at a minimum, an appropriate energy-generating cooperative offset rate, and to issue a decision by September 30, 2016. Up to eight cooperatives that have all required permits and have begun construction prior to the PSC decision being issued may use the offset rate defined in the bill for up to 10 years. Any other cooperative must use the offset rate established by PSC.

An electric company receives any unsubscribed energy generated by a cooperative at no cost and must be compensated by a cooperative organization for billing services provided under the program. PSC must authorize full and timely cost recovery of an electric company's prudently incurred costs arising from its obligations under the program, in a rate-setting proceeding. An electric company may use a cooperative's generation to reduce wholesale purchases from its standard offer service suppliers and may require that all cooperative members be billed in the same billing group.

MEA must report to PSC by December 1, 2015, on recommendations for specified tariff structures for energy-generating cooperatives and "community renewable energy generating systems" that allow electric companies to recover reasonable distribution costs and administrative expenses while encouraging in-state distributed generation by taking into account electric company benefits, ratepayer benefits, public health benefits, and economic benefits. A "community renewable energy generating system" is defined as a renewable energy system that credits its generated electricity, in whole or in part, to an electric company billing accounts of two or more subscribers to the system.

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 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 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.

Exhibit 1
Net Energy Metered Installed Capacity in Maryland
June 30, 2013 (Kilowatts)

	2008	2009	2010	2011	2012	2013
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

State Fiscal Effect: Depending on the volume of other active proceedings at the time, PSC may require contractual services to conduct the work associated with the proceeding to establish an energy-generating cooperative offset rate. To the extent that contractual services are required, special fund expenditures from the Public Utility Regulation Fund increase in fiscal 2016 and/or 2017. Special fund revenues increase correspondingly from assessments imposed on public service companies. Administration of the program

is otherwise expected to be handled by PSC with existing resources, and MEA can handle the reporting requirements with existing resources.

Any impact that the establishment of a cooperative or cooperatives under the bill may have on electricity rates in affected electric company service territories is not expected to materially impact State finances.

Small Business Effect: To the extent energy-generating cooperatives are established as a result of the bill, poultry growers may benefit from the revenue and/or avoided electricity cost associated with the use of the growers' poultry litter in the cooperative. Any costs that would otherwise be incurred to manage the poultry litter may also be avoided. There are over 700 poultry growers on the Eastern Shore. MDA indicates that other small businesses also benefit from the economic activity associated with the development and operation of anaerobic digester systems.

Any impact that the establishment of a cooperative or cooperatives under the bill may have on electricity rates in affected electric company service territories is not expected to materially impact small businesses.

Additional Information

Prior Introductions: None.

Cross File: HB 1076 (Delegate Conway, *et al.*) - Economic Matters.

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

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