

Department of Legislative Services
Maryland General Assembly
2019 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 163

(Chair, Economic Matters Committee)(By Request -
Departmental - Maryland Energy Administration)

Economic Matters

Electricity - Combined Heat and Power Systems - Metering

This departmental bill requires the Public Service Commission (PSC) to establish a Combined Heat and Power (CHP) System Program by October 1, 2020, subject to specified requirements. PSC must adopt regulations to implement the program by that date.

Fiscal Summary

State Effect: PSC can handle the bill's requirements with existing budgeted resources. State agencies may benefit from participating in the program; however, overall State finances are likely not materially affected.

Local Effect: Local governments and/or municipal utilities may benefit from participating in the program. The overall effect on any particular local government is likely limited, but positive.

Small Business Effect: The Maryland Energy Administration has determined that this bill has minimal or no impact on small business (attached). The Department of Legislative Services disagrees with this assessment as discussed below.

Analysis

Bill Summary: "Combined heat and power system" means an energy system that:

- is connected to the electric distribution grid serving the State;
- is located on the same site as its owner-operator;

- has its own electric meter;
- credits its generated electricity, or the value of its generated electricity, to the owner-operator through CHP metering;
- may not be held or operated by an investor-owned utility (*e.g.*, Baltimore Gas and Electric Company or Pepco);
- concurrently produces useful thermal energy along with electricity or mechanical power; and
- has a generating capacity of at least 30 kilowatts, and up to 20 megawatts (*i.e.*, 20,000 kilowatts).

A CHP system, including an owner-operator or a municipal owner-operator of the system, is *not* an electric company, an electricity supplier, or a generating station.

CHP System Program Requirements

PSC must establish a CHP System Program, subject to specified conditions, including:

- all rate classes may participate in the program;
- PSC must require electric companies to develop a standard contract or tariff for CHP metering and make it available to owner-operators;
- an owner-operator may not receive credit for excess generation if the CHP system (1) fails to achieve a system efficiency of at least 60% on a higher heating value based on the higher heating value of the fuel; (2) produces thermal energy in excess of the annual thermal load of the owner-operator; or (3) fails to maintain a comprehensive warranty or service contract for the first five years after system commissioning;
- excess generation of a CHP system may be exported for sale only at a rate equal to the calculation of the *wholesale* portion of the electricity rate, determined as specified;
- an electric company must use energy generated from a CHP system to offset purchases from electricity suppliers; and
- a municipal utility or cooperative utility may participate in the program, and, unlike other electric companies, may own a CHP system.

Net excess generation is typically carried forward and applied in subsequent billing cycles, with an annual cash payment in the spring for the value of any remaining excess generation. Owner-operators in small electric cooperatives may elect to receive payments monthly.

Program Regulations

By October 1, 2020, PSC must adopt regulations to implement the CHP System Program, including regulations for:

- consumer protection;
- a tariff structure for an electric company to provide an owner-operator with the kilowatt-hours or value of the owner-operator's excess generation;
- a calculation for CHP metering;
- a protocol for electric companies, electricity suppliers, and owner-operators to communicate the information necessary to calculate and provide the monthly electric company bill credits and yearly net excess generation payments; and
- a protocol for an owner-operator organization to coordinate with an electric company for the interconnection and beginning of operations of a CHP system.

Contracts Remain in Effect if Program Terminates

Subject to PSC regulations or orders, a contract relating to a CHP system or an owner-operator organization that is entered into under the program remains in effect according to the terms of the contract, including after any termination of the program.

Current Law/Background: The bill establishes a net energy metering program for CHP systems with similar requirements to those in current law for eligible electric-only systems. Significant differences are (1) the size of an eligible system and (2) the method for calculating the dollar value of net excess generation. The CHP System Program allows larger systems, but provides a smaller monetary benefit per unit of excess energy.

Net Metering – Generally

Generally, 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. Effectively, under the existing net energy meeting law, customer-generators are credited with the *retail* value of excess energy. This is more than the *wholesale* value used in the bill.

The generating capacity of an eligible customer-generator for net metering may be up to two megawatts. Eligible energy sources are solar, wind, biomass, micro combined heat and power, fuel cell, and certain types of hydroelectric.

As of June 30, 2018, the amount of net metered capacity in the State was approximately 772 megawatts, or about one-half of the statewide 1,500-megawatt limit. This is more than seven times the capacity in June 2013. Most net metered capacity is solar.

PSC must submit an annual report on the status of net energy metering to the General Assembly. The report must contain the amount of generating capacity owned by eligible customer generators in the State, the type of energy source used in generation, a recommendation regarding whether the generating capacity limit of the net metering program should be altered, and other pertinent information. The most recent report can be found on PSC's [website](#).

State Fiscal Effect: PSC can handle the bill's requirements, including adopting the required regulations, with existing budgeted resources through the reprioritization of existing staff responsibilities. State agencies may participate in and benefit from the CHP program. However, overall State finances are likely not materially affected.

Local Fiscal Effect: Local governments and/or municipal utilities may participate in the program, including owning a CHP system. Local governments that choose to participate benefit from the net metering authorized under the program. The overall effect on any particular local government is likely limited, but positive.

Small Business Effect: Some companies involved in the CHP system installation supply chain are small businesses. These businesses may experience an increase in the demand for their services. Small businesses may also benefit from the additional ability to participate in net metering through the installation of CHP systems.

Additional Comments: The bill does not establish an overall capacity limit to the program, nor does it guarantee that new tariffs established under the program will remain distribution-revenue neutral for electric companies. If the bill results in significantly reduced distribution revenue from CHP participants, then distribution rates are likely to increase for all customer classes, which includes State and local governments and small businesses. The effect cannot be estimated, and is not included in the above analysis, but the potential exists.

Additional Information

Prior Introductions: None.

Cross File: None.

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

Fiscal Note History: First Reader - February 4, 2019
an/lgc

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ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Electricity - Combined Heat and Power Systems - Metering

BILL NUMBER: HB163

PREPARED BY: Landon Fahrig – Policy Manager

PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

PART B. ECONOMIC IMPACT ANALYSIS

Maryland Energy Administration does not anticipate that the proposed legislation will have an impact on Maryland small businesses.