

**Department of Legislative Services**  
 Maryland General Assembly  
 2017 Session

**FISCAL AND POLICY NOTE**  
**Enrolled - Revised**

House Bill 1414  
 Economic Matters

(Delegate Jameson)

Finance

**Renewable Energy Portfolio Standard - Study**

This bill requires the Power Plant Research Program (PPRP) in the Department of Natural Resources (DNR) to conduct a study of the Renewable Energy Portfolio Standard (RPS) and related issues. PPRP must consult with representatives of various segments of the clean energy industry and other stakeholders. State and local units of government must cooperate with PPRP in the conduct of the study, including sharing of information, data, and resources, subject to appropriate legal protections of commercially sensitive and other information. PPRP must submit an interim report by December 1, 2018, and a final report by December 1, 2019, to the Governor and specified committees of the General Assembly. A preliminary report with preliminary findings may also be submitted prior to December 1, 2018.

The bill takes effect June 1, 2017, and terminates June 30, 2020.

**Fiscal Summary**

**State Effect:** General fund expenditures for PPRP increase by \$288,300 annually from FY 2018 through 2020 for contractual services necessary to complete the study, which reflects the midpoint of PPRP’s range of estimated costs. Absent general funds to conduct the study, PPRP special funds are redirected from existing projects. State agencies are likely able to cooperate with PPRP with existing resources; to the extent this is not the case, general and/or special fund expenditures increase. No effect in FY 2017.

(in dollars)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	288,300	288,300	288,300	0	0
Net Effect	(\$288,300)	(\$288,300)	(\$288,300)	\$0	\$0

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** The bill does not materially affect local government finances or operations.

**Small Business Effect:** None.

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## **Analysis**

**Bill Summary:** The study conducted by PPRP must be a comprehensive review of the history, implementation, overall costs and benefits, and effectiveness of RPS in relation to the energy policies of the State, including:

- the availability of all clean energy sources at reasonable and affordable rates;
- the economic and environmental impacts of the deployment of renewable energy sources in the State and in surrounding areas;
- the effectiveness of RPS in encouraging development and deployment of renewable energy sources;
- the impact of alterations that have been made in the components of each tier of RPS, the implementation of different specific goals for particular sources, and the effect of different percentages and alternative compliance payment (ACP) scales for energy in the tiers;
- an assessment of alternative models of regulation and market-based tools that may be available or advisable to promote the goals of RPS and the energy policies of the State; and
- the potential to alter or otherwise evolve RPS in order to increase and maintain its effectiveness in promoting the State's energy policies.

Particular subjects to be addressed in the study, among others, are (1) the net environmental and fiscal impacts that may be associated with long-term contracts tied to clean energy projects, including ratepayer impacts that resulted in other states and ratepayer impacts that may result in the State from the use of such contracts; (2) whether RPS is able to meet current and potential future targets without the inclusion of certain technologies; (3) whether the State is likely to meet its existing RPS goals and, if the State were to increase those goals, whether electricity suppliers should expect to find an adequate supply to meet the additional demand for renewable energy credits (RECs); and (4) how energy storage technology and other flexibility resources should continue to be addressed in support of renewable energy and State energy policy.

## **Current Law/Background:**

### *Renewable Energy Portfolio Standard*

Maryland's RPS was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. It operates on a two-tiered system with carve-outs for solar energy and offshore wind energy and corresponding RECs for each tier. Electric companies (utilities) and other electricity suppliers must submit RECs equal to a percentage specified in statute each year or else pay an ACP equivalent to their shortfall. Over the past few years, the requirements have been met almost entirely through RECs, with negligible reliance on ACPs. The Maryland Energy Administration must use ACPs to support new renewable energy sources.

Chapters 1 and 2 of 2017 increased the Tier 1 percentage requirements from 20% by 2022 to 25% by 2020. The solar carve-out, which is included in Tier 1, was likewise increased from 2.0% by 2022 to 2.5% by 2020. The Tier 2 requirement remains constant at 2.5% each year until ending after 2018. In 2017, the requirements are 13.1% for Tier 1 renewable sources, including at least 1.15% from solar energy, and 2.5% from Tier 2 renewable sources.

Tier 1 sources include wind (onshore and offshore); qualifying biomass; methane from anaerobic decomposition of organic materials in a landfill or wastewater treatment plant; geothermal; ocean, including energy from waves, tides, currents, and thermal differences; a fuel cell that produces electricity from specified Tier 1 renewable sources; a small hydroelectric plant of less than 30 megawatts; poultry litter-to-energy; waste-to-energy; refuse-derived fuel; and thermal energy from a thermal biomass system. Tier 1 solar sources include photovoltaic cells and residential solar water-heating systems commissioned in fiscal 2012 or later. Following the transfer of several sources to Tier 1, Tier 2 includes only large hydroelectric power plants.

### *Power Plant Research Program*

PPRP was created in 1971 to conduct research on the impacts of existing and proposed power plants in each county. PPRP is required to undertake a continuing research program for electric power plant site evaluation and related environmental and land use considerations. PPRP is funded through an assessment on electricity used in the State, which accrues to the Environmental Trust Fund (ETF).

**State Expenditures:** The bill requires PPRP to conduct an extensive study, some aspects of which have been addressed in other, recent studies (such as the [2016 Long-term Electricity Report for Maryland](#)). DNR estimates the likely cost to complete the study ranges from \$780,000 to \$950,000 but advises that actual costs may vary from this amount.

The estimated range assumes that PPRP and its consultants develop the report, and that there are no independent reassessments of recent State or electric grid operator studies needed to complete the study.

For purposes of this estimate, the midpoint of DNR's estimated range of costs is allocated equally over three fiscal years, beginning in fiscal 2018. The actual timing of expenditures may vary. Accordingly, general fund expenditures increase by approximately \$288,300 annually from fiscal 2018 through 2020. Absent general funds to conduct the study, funds in ETF are redirected from existing projects.

State agencies are likely able to cooperate with PPRP with existing resources; to the extent this is not the case, general and/or special fund expenditures increase.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** SB 1146 (Senator Middleton) - Finance.

**Information Source(s):** Department of Natural Resources; Maryland Clean Energy Center; University System of Maryland; Public Service Commission; Maryland Municipal League; Department of Legislative Services

**Fiscal Note History:** First Reader - February 20, 2017  
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