

Department of Legislative Services
 Maryland General Assembly
 2017 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

Senate Bill 715
 Finance

(Senator Rosapepe, *et al.*)

Rules and Executive Nominations

Clean Energy - Energy Storage Technology Study

This bill requires the Power Plant Research Program (PPRP) in the Department of Natural Resources (DNR) to conduct a study of regulatory reforms and market incentives that are necessary or beneficial to increase the use of energy storage devices in the State. PPRP is required to consult with various stakeholders in conducting the study, including the Public Service Commission, the Maryland Energy Administration (MEA), the University of Maryland Energy Research Center, the Maryland Clean Energy Center, the Office of People’s Counsel, and specified private entities. The bill specifies that the cost of the study may be no more than \$125,000 per fiscal year. PPRP must submit a report by December 1, 2018, to specified committees of the General Assembly.

The bill takes effect July 1, 2017.

Fiscal Summary

State Effect: General fund expenditures for PPRP increase by \$125,000 annually in FY 2018 and 2019 for contractual services necessary to complete the study. Absent sufficient general funds to conduct the study, PPRP special funds are redirected from existing projects. DNR advises that the \$125,000 annual limit on spending in the bill approximates the estimated cost of the study. State agencies are likely able to consult with PPRP with existing resources; to the extent this is not the case, general and/or special fund expenditures increase. Revenues are not affected.

(in dollars)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	125,000	125,000	0	0	0
Net Effect	(\$125,000)	(\$125,000)	\$0	\$0	\$0

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

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: In conducting the study and in collaboration with the consulted parties, PPRP must:

- consider the types and viability of different energy storage technologies and cases for their use;
- consider wholesale market factors, including available information from the regional electric grid transmission operator and the Federal Energy Regulatory Commission;
- review energy storage regulatory policies, ownership models, cost recovery mechanisms, procurement targets, and market incentives in other states and use any data or results that are available from those states, as appropriate;
- review existing State regulatory policies and definitions and determine appropriate revisions to facilitate the expansion of energy storage in the State;
- examine whether and how pumped hydropower should be included in any regulatory policies or market incentives;
- identify appropriate metrics and standards for energy storage systems such as energy capacity, charge and discharge rates, round trip efficiency, durability, and other appropriate metrics and standards;
- consider policies to incentivize deployment of energy storage systems that are connected to customers' facilities and of systems that are directly connected to transmission and distribution facilities; and
- consider any policies, procurement targets, or other market incentives that would allow for diverse ownership models.

Current Law/Background:

Energy Storage

No energy storage requirement exists in State law; however, several programs are designed to promote energy efficiency, such as EmPower Maryland.

MEA completed a [study](#) (available on MEA's website) in January 2016 that addressed various considerations for energy storage in Maryland, including background on the types of storage systems and a discussion of significant regulatory and market barriers and ways other states have addressed them. The report found that storage can provide a variety of functions in the electricity system, from supporting the efficient operation of the electric grid to providing backup power in emergency situations. The report also noted that, notwithstanding the benefits, "the historic high costs of energy storage systems have made it difficult for broad deployment."

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 on energy storage, as described above. DNR's estimate of the total cost to complete the study in its entirety is \$250,000. The bill specifies that the cost of the study may be no more than \$125,000 per fiscal year (\$250,000 total over two fiscal years). Accordingly, general fund expenditures increase by \$125,000 annually in fiscal 2018 and 2019 for contractual services necessary to complete the study.

Absent sufficient general funds to conduct the study, funds in ETF – up to \$125,000 annually in fiscal 2018 and 2019 – are redirected from existing projects. State agencies are likely able to consult with PPRP with existing resources; to the extent this is not the case, general and/or special fund expenditures increase.

Additional Information

Prior Introductions: None.

Cross File: HB 773 (Delegate Korman, *et al.*) - Economic Matters.

Information Source(s): Department of Natural Resources; Maryland Energy Administration; Maryland Clean Energy Center; University System of Maryland; Office of People’s Counsel; Public Service Commission; Department of Legislative Services

Fiscal Note History: First Reader - February 20, 2017
mm/lgc Third Reader - April 7, 2017
Revised - Amendment(s) - April 7, 2017
Revised - Other - May 1, 2017

Analysis by: Stephen M. Ross

Direct Inquiries to:
(410) 946-5510
(301) 970-5510