HB 910

Department of Legislative Services

Maryland General Assembly
2023 Session

FISCAL AND POLICY NOTE
Enrolled - Revised

House Bill 910 (Delegate Fraser-Hidalgo, *et al.*)

Economic Matters Education, Energy, and the Environment

Energy Storage - Targets and Maryland Energy Storage Program - Establishment

This bill requires the Public Service Commission (PSC) to establish the Maryland Energy Storage Program and set targets for the cost-effective deployment of new energy storage devices in the State with a goal of achieving at least a cumulative total of 750 megawatts (MW) by the end of the 2027 PJM Interconnection, LLC (PJM) delivery year, 1,500 MW by the end of the 2030 PJM delivery year, and 3,000 MW by the end of the 2033 PJM delivery year. If a target cannot be met cost effectively, the target must be reduced to the maximum cost-effective amount for the relevant delivery year. The program must be implemented by July 1, 2025, as specified. By December 31, 2023, PSC must report to the General Assembly on pending designs for the program and any additional statutory changes required to fully implement an effective program to meet the minimum energy storage targets established under the bill.

Fiscal Summary

State Effect: No fiscal effect assumed in FY 2024. Special fund expenditures for PSC increase by $649,600 in FY 2025. Future years reflect inflation and the elimination of one-time costs. Special fund revenues increase correspondingly from assessments imposed on public service companies. State expenditures for electricity likely increase beginning as early as FY 2025 as discussed in the Additional Comments below.

(in dollars)	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SF Revenue	$0	$649,600	$637,000	$665,200	$700,200
SF Expenditure	$0	$649,600	$637,000	$665,200	$700,200
Net Effect	$0	$0	$0	$0	$0

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

Local Effect: Local government expenditures likely increase beginning as early as FY 2025 as discussed in the Additional Comments below. Revenues are not directly affected.

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: The program *must* include competitive procurement mechanisms to reach a minimum of 3,000 MW of energy storage, or the maximum cost-effective amount of energy storage that can be deployed, by the end of the 2033 PJM delivery year.

The program *may* include:

- a system of energy storage credits and market-based incentives designed to develop a robust energy storage market in the State;
- a requirement that investor-owned electric companies install or contract for energy storage devices or contract for energy storage credits from an energy storage project under the Maryland Energy Storage Pilot Program;
- a requirement that program participants make reasonable efforts to apply for all applicable State and federal grants, rebates, tax credits, loan guarantees, and other similar benefits as the benefits become available; or
- any other mechanism or policy that PSC determines is appropriate to achieve the goal of a robust cost-effective energy storage system in the State.

PJM defines a "delivery year" as the 12 months beginning June 1 and extending through May 31 of the following year. Delivery year may also be referred to as planning year or planning period.

Current Law: Chapter 427 of 2019 required PSC to establish an Energy Storage Pilot Program by June 1, 2019. Under the program, each of the State's four investor-owned electric companies was required to request proposals for two energy storage projects and apply for PSC approval. The cumulative size of the pilot projects under the program must be between 5 MW and 10 MW, with a minimum of 15 megawatt-hours (MWh). The projects were required to fit within four commercial and regulatory models, featuring varying levels of utility, private sector, and customer involvement.

PSC has approved eight projects totaling approximately 9 MW and 31 MWh under the pilot program. For three consecutive years beginning July 1, 2023, each electric company must annually submit certain related information – such as project costs, size, financing methods, the cost recovery mechanism, and technology used – to PSC, the Maryland Energy Administration, and the Office of People's Counsel.

PSC must evaluate the program and submit to the General Assembly an interim report by July 1, 2024, and a final report by December 31, 2026.

The current Renewable Energy Portfolio Standard does not include energy storage.

State Fiscal Effect: PSC advises that additional staff are needed to evaluate energy storage benefits, avoided electric distribution costs, the value of avoided outages, peak demand reduction capacity, and energy savings and air emissions reductions, among other things, in addition to handling processing of energy storage renewable energy credit applications, plus a rulemaking to promulgate regulations for energy storage credits. The additional workload cannot be absorbed within existing resources.

The bill's 3,000-MW power output goal is approximately *325 times* the combined power output of the eight current pilot projects. Based on previous estimates for a smaller potential program, the Department of Legislative Services estimates that PSC requires six additional staff. This estimate assumes staff are hired July 1, 2024, one year prior to the July 1, 2025 deadline for program commencement and in time to assist with the significant preparatory work; actual expenditures will vary with the timing of program commencement.

Accordingly, special fund expenditures for PSC increase by $649,555 in fiscal 2025. This estimate reflects the cost of hiring three regulatory economists and three engineers to handle the requirements discussed above. Current staff will also be involved in PSC rulemaking. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Positions	6.0
Salaries and Fringe Benefits	$603,447
Operating Expenses	46,108
Total FY 2025 PSC Expenditures	**$649,555**

Future year expenditures reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses.

Special fund revenues increase correspondingly from assessments imposed on public service companies.

Additional Comments: The "planning year" term under the bill is ambiguous. More specifically, it is unclear whether the planning years *start* or *end* in the year specified in the bill. PSC expenditures for staff are generally unaffected by the distinction, but costs associated with the utilities complying with the program vary based on when the energy storage must be available.

The cost to the State, local governments, and small businesses (through electricity prices) for the incentives necessary to reach the energy storage goals in the bill are unknown but likely significant, even if the program may only build out to cost-effective levels. Cost-effective does not mean cost-neutral, and it will be up to PSC to determine what to measure in terms of cost-effectiveness.

Capital cost estimates from the National Renewable Energy Laboratory for residential and utility scale energy storage in 2025 under a moderate cost reduction scenario are $2,600 per kilowatt and $1,100 per kilowatt, respectively. Assuming 90% of new energy storage additions are utility scale, the total cost to construct sufficient storage to reach 3,000 MW of power output at those prices is $3.8 billion – although not all costs must be directly incurred by the electric companies, and some portion of the costs would presumably be offset by avoided costs and market revenues. This does not include costs for ongoing operations and maintenance. Costs experienced by the electric companies would be recoverable through electricity rates over time: the scale of the potential expenditures and associated cost recovery on ratepayers is worth consideration. Costs likely begin no earlier than fiscal 2025.

Additional Information

Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: SB 697 (Senators Augustine and Hester) - Education, Energy, and the Environment.

Information Source(s): Public Service Commission; PJM Interconnection, LLC; National Renewable Energy Laboratory; Department of Legislative Services

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