HB 1149

Department of Legislative Services

Maryland General Assembly
2025 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 1149 (Delegate Adams)
Economic Matters

Public Service Commission - Full Costs and Benefits Analysis of Sources of Electricity Generation

This bill requires the Public Service Commission (PSC) to conduct a full costs and benefits analysis of sources of electricity generation in the State as it pertains to natural gas, nuclear, offshore wind, and energy storage, as specified. By December 1, 2026, PSC must report its findings and recommendations to the Senate Committee on Education, Energy, and the Environment and the House Economic Matters Committee.

Fiscal Summary

State Effect: Special fund expenditures for PSC increase by approximately $250,000 in FY 2026 and 2027 for consultants, under the assumptions discussed below. Special fund revenues increase correspondingly from assessments imposed on public service companies.

(in dollars)	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
SF Revenue	$250,000	$250,000	$0	$0	$0
SF Expenditure	$250,000	$250,000	$0	$0	$0
Net Effect	$0	$0	$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: The analysis must:

- identify the costs of electricity to ratepayers assuming that the State electricity market is served by the following generation mixes: (1) natural gas energy at its current capacity; (2) nuclear energy at its current capacity; and (3) 8,500 megawatts of offshore wind energy capacity;
- include the additional costs of electricity generation necessary to offset reliability issues and the intermittency of offshore wind energy;
- use the Levelized Full System Cost of Electricity model to analyze the costs of meeting the State's electricity needs from (1) only natural gas energy and energy storage; (2) only nuclear energy and energy storage; and (3) only offshore wind energy and energy storage;
- identify the costs for natural gas, nuclear, and offshore wind if energy storage is available to offset reliability and intermittency issues; and
- include recommended policy changes to support the development of the energy sources with the lowest costs and greatest benefits to the ratepayers of the State.

Current Law:

Generation Resources

The Electric Customer Choice and Competition Act of 1999 facilitated the restructuring of the electric utility industry in Maryland, which deregulated the generation, supply, and pricing of electricity. As part of restructuring, the State's vertically integrated electric companies divested themselves of their generation assets. With restructuring, generation resources are considered competitive, and the competitive market is relied upon to provide new generation resources and to meet load requirements.

In order to meet long-term, anticipated demand in the State for standard offer service and other electricity supply, PSC may require or allow an investor-owned electric company to construct, acquire, or lease, and operate, its own generating facilities, and transmission facilities necessary to interconnect the generating facilities with the electric grid, subject to appropriate cost recovery.

Offshore Wind – Generally

Chapter 3 of 2013 established a carve-out in the State Renewable Energy Portfolio Standard (RPS) for offshore wind energy, requiring State electricity sales to include an amount derived from offshore wind energy beginning in 2017. The amount is set by PSC

each year, based on the projected annual creation of offshore wind renewable energy credits (ORECs) by qualified offshore wind projects, and may not exceed 2.5% of total retail sales. Chapter 757 of 2019 bifurcated the application and approval process for offshore wind into "Round 1" (the process established by Chapter 3) and a "Round 2" process to allow for new applications with different specifications. PSC may also provide for additional application periods.

Chapter 95 of 2023 established a State goal of reaching 8,500 megawatts of offshore wind energy by 2031. The Act also required (1) PSC to take specified actions related to regional transmission system upgrades for offshore wind and (2) the Department of General Services (DGS) to issue a competitive sealed procurement solicitation and authorized the department to enter into at least one contract for a power purchasing agreement to procure up to 5.0 million megawatt-hours annually of offshore wind energy and associated renewable energy credits from one or more qualified offshore wind projects.

Chapter 431 of 2024 altered processes for Round 1, Round 2, and DGS-procured offshore wind projects. Any Round 1 offshore wind project may seek PSC approval to amend its previously approved project order to increase the maximum amount of ORECs and modify its project schedule. PSC was required to open a revised Round 2 offshore wind project proceeding limited to evaluating revised project schedules, sizes, or pricing for a previously approved Round 2 project. The DGS procurement established by Chapter 95 was modified to, among other changes, (1) remove the 5.0 million megawatt-hour annual limit and (2) require a second procurement. PSC was also required to develop a plan for achieving a total of 8,500 megawatts of offshore wind energy capacity by 2031 and submit a report on the plan to the General Assembly by January 1, 2025.

PSC Order No. 91496 contains the commission's decision on revised offshore wind project proceedings under Chapter 431. The order states that US Wind will construct a 1,710-megawatt project consisting of 114 turbines over four phases, with operation dates in 2029 and 2030. PSC approved a 20-year OREC price schedule for each phase, coincident with the projected operation date for each phase. When all four phases are complete, US Wind is approved for nearly 7.0 million ORECs annually. At this time, US Wind is the sole developer under the State RPS.

Energy Storage

Chapter 570 of 2023 required PSC to establish the Maryland Energy Storage Program and establish 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 by the end of the 2027 PJM Interconnection, LLC (PJM) delivery year, 1,500 megawatts by the end of the 2030 PJM delivery year, and 3,000 megawatts 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.

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 megawatts and 10 megawatts.

State Fiscal Effect: PSC advises that it does not have the requisite software tools, databases, and staff expertise to conduct the study required by the bill and, therefore, requires consultants to assist with those tasks. PSC estimates the cost for such consultants is approximately $500,000. Based on the bill's effective date and the report due date, this analysis allocates half of the cost in fiscal 2026 and half in fiscal 2027.

Accordingly, special fund expenditures for PSC increase by approximately $250,000 in both fiscal 2026 and 2027 for PSC to procure consultants to conduct the study required by the bill. Generally, PSC is funded through an assessment on the public service companies that it regulates. As a result, special fund revenues for PSC increase correspondingly from assessments imposed on public service companies.

Additional Comments: In 2022, natural gas accounted for 37.6% of Maryland-generated electricity, nuclear accounted for 39.9% – by far the two largest sources of Maryland-generated electricity. Coal was third, at 12.5%; remaining amounts were mostly hydroelectric and other renewables, at about 5% each.

The University of Maryland's Center for Global Sustainability released a report in November 2024 that discusses the State's energy generation facilities in the context of a transition to renewable energy.

Additional Information

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

Designated Cross File: SB 675 (Senator Carozza, *et al.*) - Education, Energy, and the Environment.

Information Source(s): Public Service Commission; University System of Maryland; Department of Legislative Services

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