

Department of Legislative Services
 Maryland General Assembly
 2025 Session

FISCAL AND POLICY NOTE
 Third Reader - Revised

Senate Bill 909

(Senator Hester)

Education, Energy, and the Environment

Economic Matters

Energy Resource Adequacy and Planning Act

This bill establishes the Strategic Energy Planning Office (SEPO), subject to specified requirements. SEPO is funded through assessments imposed on public service companies through an existing process administered by the Public Service Commission (PSC). By September 1, 2028, and every three years thereafter, SEPO must develop and submit a Comprehensive Wholesale Energy Markets and Bulk Power System Risk Report to the Governor and the General Assembly. The bill also establishes reporting requirements for PSC, the Maryland Department of Transportation (MDOT), and the Maryland Energy Administration (MEA). **The bill takes effect July 1, 2025.**

Fiscal Summary

State Effect: Special fund expenditures for SEPO increase by \$4.4 million to \$5.3 million annually beginning in FY 2026. Special fund expenditures for PSC increase by \$0.7 million annually beginning in FY 2027. Special fund expenditures for the Office of People’s Counsel (OPC) may increase beginning in FY 2026. Special fund revenues for SEPO, PSC, and OPC increase correspondingly from assessments imposed on public service companies. Special fund expenditures for MEA increase by \$150,000 annually in FY 2026 and 2027. Transportation Trust Fund (TTF) expenditures for MDOT increase by \$100,000 in FY 2026 and by \$50,000 in FY 2027. The net effect on special fund finances is shown in the table below.

(\$ in millions)	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
SF Revenue	\$4.4	\$6.0	\$5.7	\$5.9	\$6.0
SF Expenditure	\$4.7	\$6.2	\$5.7	\$5.9	\$6.0
Net Effect	(\$0.3)	(\$0.2)	\$0.0	\$0.0	\$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: Minimal.

Analysis

Bill Summary:

Strategic Energy Planning Office

SEPO is established, headed by a director, who is appointed by the Governor with the advice and consent of the Senate. The director serves for a five-year term beginning July 1, as specified. The director is entitled to a salary as provided in the State budget. SEPO must have the staff provided for in the State budget.

In order to carry out its statutory requirements, SEPO must collaborate with MEA, PSC, the Power Plant Research Program (PPRP), the Maryland Clean Energy Center, and the Maryland Department of the Environment, and may, if necessary, hire private consultants. SEPO must also coordinate with PSC to establish procedures and rules to obtain information from electric and gas companies necessary to accomplish its duties.

Funding

The costs and expenses of SEPO are funded through the existing PSC-administered assessment mechanism that funds PSC and OPC. Annual funding is limited to 0.074% of public service company gross operating revenues derived from intrastate operations (the same amount as for OPC). The bill makes various conforming changes to integrate SEPO into the annual assessment process undertaken by PSC.

Comprehensive Wholesale Energy Markets and Bulk Power System Risk Report

Generally

Every three years, SEPO must develop a Comprehensive Wholesale Energy Markets and Bulk Power System Risk Report to (1) assess wholesale energy market financial, resource adequacy, and reliability risks associated with serving the State's long-term energy needs and (2) identify any necessary cost-effective solutions that ensure electric system reliability while meeting the State's energy policy goals. The solutions identified in the risk report must seek to minimize the growth of the cost of electricity (or lower the cost of electricity) and minimize energy resource reliability risks.

By September 1, 2028, and every three years thereafter, SEPO must submit the risk report to the Governor and the General Assembly. SEPO may submit any additional updates to the risk report at any time, provided that the updates must include specified information on relevant changes. SEPO must submit a status update on the development of the first risk report by September 1, 2027.

Content Requirements

The risk report must include energy and demand forecasts that contain:

- reasonable, 20-year projections for electricity load and energy demands for transmission zones and electric service territories; and
- projections for meeting State energy needs and clean energy goals and load forecasts in the PJM region, including (1) low, average, and high projections of energy demand based on State policies and other reasonable assumptions that impact the provision of electricity in the State and (2) other projections as necessary.

In collecting the data for the forecasts, SEPO should, but is not required to, use (1) historical and projected information from electric companies; (2) load forecasts for the PJM region; (3) appropriate econometric data for the State; and (4) any other information the office considers appropriate.

SEPO must examine different wholesale energy market and bulk power system scenarios to serve the forecasts. Each scenario examined must identify (1) the resulting wholesale energy market and bulk power system financial and resource adequacy impacts of serving the forecasts with the existing electric system, known additions to the electric system, and electric system resource retirements and (2) resource and demand-side management solutions that may resolve potential resource adequacy issues at the least cost. SEPO must identify related reliability impacts and least-cost solutions to reliability constraints for a subset of the scenarios, as specified. Each scenario must also examine:

- different energy resource mixes to meet the State's energy needs, including the use of demand-side management;
- different approaches for meeting the State's clean energy goals;
- improvements to existing energy resources as opposed to the deployment of new energy resources;
- balancing the use of electricity imported from outside the State with the development of new energy resources in the State;
- financial and other risks associated with retiring energy generation resources;
- directional assessing of cost risks to ratepayers; and
- impacts to the wholesale energy market and bulk power system in meeting the State's policy goals related to electricity.

The scenarios must include (1) at least one scenario that examines the achievement of the State's clean energy goals; (2) at least one scenario that examines a least-cost approach to meeting the State's projected energy needs; and (3) at least one scenario that assumes no changes in State energy and climate policies.

The risk report must be informed by the forecasts and scenarios described above and:

- provide information on the risks associated with serving the identified energy forecasts and achievement of the State's clean energy goals;
- discuss the potential financial impacts of the different scenarios examined on the State and ratepayers;
- identify the financial, resource adequacy, and reliability risks of the wholesale energy markets and bulk power system on ratepayers; and
- specify the inputs and assumptions used in developing the risk report.

The risk report must also include any recommendations of SEPO regarding short- and long-term solutions to minimize wholesale energy market and bulk power system financial, resource adequacy, and reliability risks, including strategies to implement any recommendations, as specified. If SEPO determines that the identified risks are acceptable or that existing market designs, processes, or policies will adequately address the risks identified in the risk report, SEPO may recommend that no actions be taken. In either case, SEPO must support its recommendations by analyses that balance affordability, reliability, and greenhouse gas (GHG) emissions reductions.

Each report must include documentation of stakeholder engagement and any feedback received related to the development of that report.

Process Requirements

SEPO must (1) develop and maintain the tools and resources necessary to complete the analyses required under the bill; (2) coordinate with PJM Interconnection, LLC to develop and maintain the tools necessary to complete the analyses required under the bill; (3) have the ability to conduct cost-benefit analyses of energy generation resources in wholesale energy markets and different forms of levelized costs of electricity and levelized full system costs of electricity; and (4) provide an opportunity for stakeholder feedback on any reports developed by the office.

For the risk report, SEPO must conduct a stakeholder process to solicit feedback regarding the development of data inputs that will inform the forecasts and scenarios for developing the report. SEPO is not required to utilize the feedback received from the stakeholder process, but must provide documentation of the stakeholder process in the risk report.

SEPO, in consultation with PSC and MEA, must complete energy modeling for the risk report.

Stakeholder Process and (Separate) Report to Assess Mitigation Strategies

After the publication of the risk report or any update to the report, SEPO must conduct a stakeholder process to develop a report that assesses strategies to address the identified risks and recommendations in the risk report. When assessing strategies, there must be consideration of new or existing programs, leveraging technology enhancements, revised regulatory structures, State coordination of federal solutions, utilizing market mechanisms, and any other factors considered appropriate. By September 1, 2028, and every three years thereafter, SEPO must submit the resulting report to the Governor and the General Assembly.

Annual Evaluation of Policy Scenarios at the Request of General Assembly Committees

By November 1 each year, the Senate Committee on Education, Energy, and the Environment and the House Economic Matters Committee may jointly request SEPO to assess up to five policy scenarios. No later than one year after the date SEPO receives such a request, the office must submit a report of the results of the requested policy scenarios to those committees.

Public Service Commission – Future Proceeding to Assess Risk Reports

By September 1, 2030, and at least once every three years thereafter, after receiving a request by SEPO, PSC, in consultation with the office, must conduct a public proceeding to assess the results and recommendations contained in the risk report and any updates to the report, subject to specified requirements. PSC must consider any feedback received through the public proceeding and determine whether any action under its jurisdiction is warranted.

Additional Studies and Reports

Public Service Commission – Study on Independent Distribution Operator

PSC must study the effectiveness of an independent distribution operator and, by December 31, 2026, must submit a report on the study to the General Assembly.

Maryland Department of Transportation – Study on Transmission Congestion

MDOT must study methods for reducing transmission-constrained areas through the use of existing rights-of-way and, by December 31, 2026, must submit a report on the study to the General Assembly.

Maryland Energy Administration – Power Flow and Resource Adequacy Analyses

MEA must obtain existing power flow analyses for electric system reliability in the State that are related to currently known electric generation facility retirements. If MEA is unable to do so, then MEA, with the support of PSC, must develop a power flow analysis for electric system reliability in the State that is related to currently known electric generation facility retirements. By January 1, 2026, MEA must submit a report of the power flow analyses to the Governor and the General Assembly.

By December 31, 2025, and again by December 31, 2026, MEA must provide an update to the General Assembly on the status of the National Renewable Energy Laboratory's analysis on resource adequacy conducted at the request of MEA. MEA must also submit a final report on the analysis to the General Assembly when it is received.

Current Law/Background:

Public Service Commission

Generally

PSC must supervise and regulate public service companies, which includes electric companies, subject to its jurisdiction to (1) ensure their operation in the interest of the public and (2) promote adequate, economical, and efficient delivery of utility services in the State without unjust discrimination. In doing so, PSC must consider the public safety, the economy of the State, the maintenance of fair and stable labor standards for affected workers, the conservation of natural resources, the preservation of environmental quality, the achievement of the State's climate commitments for reducing GHG emissions, and the protection of a public service company's infrastructure against cybersecurity threats. PSC must also enforce compliance with legal requirements by public service companies.

Energy Analysis and Planning Division

PSC's Energy Analysis and Planning Division provides analysis of the short-term and long-term energy resources available to the State. Among other duties, the division manages and monitors (1) the State's Renewable Energy Portfolio Standard Program; (2) the licensing of electric and natural gas suppliers and brokers; (3) various purchased power contracts, such as those resulting from standard offer service electricity procurements; and (4) emissions disclosure activities. The division also works with electric companies to develop cost-effective energy efficiency, conservation, demand reduction, and other related programs (*i.e.*, EmPOWER Maryland programs). The division also (1) monitors electricity issues in national and regional forums, such as the Federal Energy Regulatory Commission and PJM Interconnection, along with environmental matters

affecting generating facilities promulgated by the U.S. Environmental Protection Agency and (2) provides PSC with related summary reports.

Electricity Division

PSC's Electricity Division participates in PSC rate and merger cases. Among other duties, the division conducts economic analyses of market structure and competition; energy choice implementation and ratemaking; and statistical, economic, and financial studies. The division also makes evidentiary presentations regarding electric and gas customer choice and utility merger policy, rate design, class and jurisdictional cost of service allocations, cost of capital, and other issues related to regulatory economics.

Annual Creation of 10-year Electric System Plan

Each year, the PSC chair must forward to the Secretary of Natural Resources a 10-year plan listing possible and proposed sites, including the associated transmission routes, for the construction of electric plants within the State, subject to specified requirements.

Each annual [10-year-plan](#) provides a forward-looking analysis of the composition of Maryland's electricity and generation profile and covers topics relevant to Maryland, including load growth forecasts, and the status of the State's generation resources and electric transmission system.

Funding

The costs and expenses of PSC and OPC must be borne by the public service companies that are subject to PSC's jurisdiction. The total amount that may be charged to a public service company for a State fiscal year, as a percentage of the company's gross operating revenues derived from intrastate utility and electricity supplier operations in the preceding calendar year, may not exceed 0.5% for PSC. PSC is also authorized to assess up to 0.074% for the expenses of OPC. Assessed amounts accrue to the Public Utility Regulation Fund.

Climate Solutions Now Act

The Climate Solutions Now Act (CSNA) made broad changes to the State's approach to reducing statewide GHG emissions and addressing climate change. Among other things, the Act accelerated previous statewide GHG emissions reductions targets originally established under the Greenhouse Gas Emissions Reduction Act by requiring the State to develop plans, adopt regulations, and implement programs to (1) reduce GHG emissions by 60% from 2006 levels by 2031 and (2) achieve net-zero statewide GHG emissions by 2045.

Chapter 540 of 2024 made changes to provisions in CSNA related to electric distribution system planning, generally to broaden the scope to beyond the distribution system, broaden references to federal funds, and to delay and modify a related requirement for PSC to adopt regulations.

Statement of Policy Goals for the State Electric System

It is the goal of the State that the electric system support, in a cost-effective manner, the State's policy goals with regard to (1) GHG reduction; (2) renewable energy; (3) decreasing dependence on electricity imported from other states; and (4) achieving energy distribution resiliency, efficiency, and reliability.

Electric Distribution System Planning and Improvements

By December 1, 2024, and each year thereafter, PSC must submit a report to the General Assembly with information regarding the current status of projects designed to promote the above policy goals, including information on planning processes and implementation that promote specified goals, including (1) measures to decrease GHG emissions incident to electric distribution, including high levels of distributed energy resources and electric vehicles, and (2) electric system resiliency and reliability.

By December 31, 2025, PSC must adopt regulations or issue orders to (1) implement specific policies for electric system planning; (2) require consideration of investment in, or procurement of, cost-effective demand-side methods and technology to improve reliability and efficiency, including virtual power plants; and (3) implement specific policies for improvements in order to promote the State's policy goals for the electric system. The regulations and orders must be developed with consideration given to the inherent differences, individual circumstances, and available resources among different types of electric companies and, if determined necessary by PSC, establish separate requirements for each type.

Other Recent Reports

CSNA required PSC to conduct a one-time study to assess the capacity of the distribution systems of the larger electric and gas companies to successfully serve customers under a managed transition to a highly electrified building sector. The [report](#) can be viewed on the PSC website.

The University of Maryland's Center for Global Sustainability also released a [report](#) pursuant to CSNA in November 2024 that discusses the State's energy generation facilities in the context of a transition to renewable energy.

Among other actions, Executive Order 01.01.2024.19 directed MEA to establish a framework for a clean energy standard to achieve 100% clean electricity in Maryland by 2035 and determine if all or part of the proposed clean energy standard can be implemented through existing authority. MEA published the resulting [report](#) in January 2025.

State Fiscal Effect: Significant individual effects of the bill are discussed separately below. Generally, the bill creates new costs to establish SEPO, new costs for PSC, technical assistance and one-time study costs for MEA, and one-time study costs for MDOT. Costs may also increase for OPC. Any effects on agencies not mentioned below are assumed to be generally minimal and absorbable within existing budgeted resources.

Strategic Energy Planning Office

The following estimate is based on information provided by PSC; however, costs may vary significantly from this estimate, based on actual experience under the bill in establishing and staffing SEPO.

PSC advises that SEPO requires (1) staff experienced in energy modeling, regulatory policy, economics, engineering, and environmental policy; (2) economic forecasting and modeling hardware, software, and data sources; and (3) the services of outside consultants and experts. More specifically, PSC estimates that SEPO requires 21 full-time staff and estimates annual consultant costs of \$1.5 million and annual energy modeling costs of \$1.0 million to \$2.0 million, along with other relatively minor administrative costs. The estimate is based in part on the [budget](#) for OPC and reflects the following staff structure:

- 1 director, 1 deputy director, and 1 lead counsel;
- 3 program managers; 2 staff attorneys, 1 environmental and climate analyst, 4 engineers, and 2 regulatory economists; and
- 4 administrative staff and 2 information technology staff.

To approximate a ramp-up period as SEPO is initially staffed, this estimate assumes that 9 staff, including the director, are hired October 1, 2025, and the remaining 12 staff are hired July 1, 2026.

Accordingly, special fund expenditures for SEPO increase by \$4.4 million in fiscal 2026, which reflects a 90-day startup delay. This estimate reflects the cost of hiring nine of the staff listed above: the director and lead counsel, two engineers, one regulatory economist, one program manager, one information technology staff, and two administrative staff. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, \$1.5 million in consultant costs, and \$2.0 million in energy modeling costs.

Positions	9.0
Salaries and Fringe Benefits	\$802,684
Consultants	1,500,000
Energy Modeling	2,000,000
Other Operating Expenses	<u>126,319</u>
FY 2026 SEPO Expenditures	\$4,429,003

Future year expenditures reflect full salaries with annual increases and employee turnover, costs associated with hiring the remaining 12 staff in fiscal 2027, annual increases in ongoing operating expenses, plus \$1.5 million annually in consultant costs and \$1.0 million to \$1.3 million annually in energy modeling costs.

Under the above assumptions, office expenditures total \$5.3 million in fiscal 2027, \$5.1 million in fiscal 2028, \$5.2 million in fiscal 2029, and \$5.3 million in fiscal 2030.

SEPO is funded through an assessment on the public service companies that PSC regulates. As a result, special fund revenues for SEPO increase correspondingly from assessments imposed on public service companies.

Public Service Commission

PSC advises that it requires additional staff and ongoing consultant services to handle responsibilities of analyzing and testifying on work submitted by SEPO. More specifically, PSC estimates that it requires five full-time staff and \$100,000 annually for ongoing consultant assistance beginning July 1, 2026, once SEPO has been more fully established.

Accordingly, special fund expenditures for PSC increase by \$698,031 in fiscal 2027. This estimate reflects the cost of hiring one program manager, two attorneys, one engineer, and one regulatory economist. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, and \$100,000 in consultant costs.

Positions	5.0
Salaries and Fringe Benefits	\$544,751
Consultants	100,000
Other Operating Expenses	<u>53,280</u>
FY 2027 PSC Expenditures	\$698,031

Future year expenditures of approximately \$0.7 million annually reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses and \$100,000 annually in ongoing consultant costs.

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.

Office of People's Counsel

Special fund expenditures for OPC may increase for additional staff and/or consultants to review the work of SEPO. OPC advises that the need depends on the number of other matters requiring OPC's resources when the proceedings take place. OPC is also funded through assessments on public service companies; thus, any additional special fund expenditures are funded through a corresponding increase in special fund revenues from assessments imposed on public service companies.

Maryland Energy Administration

MEA advises that it requires the assistance of consultants with its responsibilities under the bill. More specifically, MEA anticipates costs of \$150,000 in fiscal 2026 to prepare the report on power flow analysis and \$150,000 in fiscal 2027 to assist SEPO in its wholesale energy market modeling for the first risk report. Costs for MEA may further increase to the extent that MEA provides additional assistance to SEPO. MEA costs are generally paid for using the Strategic Energy Investment Fund (SEIF).

Accordingly, special fund expenditures for MEA (specifically, SEIF) increase by \$150,000 annually in both fiscal 2026 and 2027, and may increase further to the extent MEA provides further assistance to SEPO.

Maryland Department of Transportation

In the execution of its duties, MDOT often engages expert consultants to handle research, evaluations, studies, and staffing duties, and MDOT anticipates engaging a consultant to complete the rights-of-way analysis required by the bill. Accordingly, TTF expenditures increase by an estimated \$100,000 in fiscal 2026 and \$50,000 in fiscal 2027 for consultant services.

Department of Natural Resources

The Department of Natural Resources advises that PPRP intends to dedicate the time of existing staff to collaborate with SEPO – approximately half of the time of one power plant assessor.

Additional Information

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

Designated Cross File: HB 1037 (Delegate Crosby) - Economic Matters.

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

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