HB 505

Department of Legislative Services

Maryland General Assembly
2025 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 505 (The Speaker, *et al.*) (By Request - Administration)
Economic Matters

Empowering New Energy Resources and Green Initiatives Toward a Zero-Emission (ENERGIZE) Maryland Act

This Administration bill establishes a 100% clean energy goal for the State, incorporates nuclear energy into the renamed Clean Energy Portfolio Standard (CEPS), establishes a ratepayer-funded incentive for new nuclear energy, and increases incentives for solar energy and offshore wind energy. The bill must be construed to apply retroactively and must be applied to and interpreted to affect all CEPS compliance years that begin on or after January 1, 2025. **The bill takes effect July 1, 2025.**

Fiscal Summary

State Effect: Special fund expenditures for the Public Service Commission (PSC) and the Office of People's Counsel (OPC) increase by at least $593,800 annually from FY 2026 through 2030; special fund revenues increase correspondingly from assessments imposed on public service companies. Special fund revenues for the Maryland Energy Administration (MEA) increase significantly beginning as early as FY 2026. General/special fund expenditures for the Department of Natural Resources (DNR) increase by at least $609,600 annually from FY 2028 through 2030. Transportation Trust Fund (TTF) expenditures likely increase by $150,000 in FY 2026. The effect on State expenditures for electricity is discussed in the Additional Comments section.

(in dollars)	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
SF Revenue	$593,800	$611,400	$616,200	$621,200	$626,300
SF Expenditure	$743,800	$611,400	$616,200	$621,200	$626,300
GF/SF Exp.	$0	$0	$609,600	$603,000	$615,900
Net Effect	($150,000)	$0	($609,600)	($603,000)	($615,900)

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

Local Effect: Local government finances and operations, including municipal electric utilities, are significantly affected, as discussed below.

Small Business Effect: The Administration has determined that this bill has minimal or no impact on small business (attached). The Department of Legislative Services (DLS) generally concurs with this assessment but notes potential positive effects for small businesses in the solar industry and the potential for significant electricity rate impacts on small businesses in the out-years.

Analysis

Bill Summary: Broadly, the bill:

- establishes a 100% clean energy goal for the State;
- incorporates nuclear energy into the State Renewable Energy Portfolio Standard (RPS) and renames it as CEPS;
- modifies existing processes and related requirements for qualified offshore wind projects, including removing statutory cost caps;
- increases solar alternative compliance payments (ACPs) beginning in fiscal 2025 by maintaining them at their 2024 amount instead of a gradual decline under current law; and
- establishes an application process for nuclear energy procurement overseen by PSC and funded through a nonbypassable surcharge on customer bills.

100% Clean Energy Goal

The General Assembly finds and declares that:

- the State has a goal of achieving 100% clean electricity;
- as of January 1, 2025, the State RPS and offshore wind energy leases will not satisfy that goal; and
- to achieve its clean electricity goal, the State must facilitate the construction of at least 3,000 megawatts of electricity from clean energy generation projects to (1) reduce the adverse climate and health impacts of traditional fossil fuel energy sources; (2) promote the development of clean energy sources that increase the nation's independence from foreign sources of fossil fuels; (3) position the State to take advantage of the economic development benefits of the emerging small modular reactor industry; and (4) provide a long-term hedge against volatile prices of fossil fuels.

The General Assembly also declares other existing related findings.

Clean Energy Portfolio Standard

The bill renames the State RPS as CEPS and makes various conforming changes to affected statutes to incorporate "clean" as opposed to "renewable" energy. "Clean energy source" means a Tier 1 renewable source or Tier 2 renewable source, as those terms are currently defined, or a nuclear energy generating station, including a small modular reactor, connected with the electric distribution grid serving the State. The bill does not otherwise alter eligible energy sources or the applicability of the standard.

Overall CEPS requirements are increased by 22.5 percentage points each year beginning in 2025, while leaving existing percentage requirements unchanged. However, PSC must reduce that overall requirement by the output of nuclear facilities connected to the electric distribution system in the State, as specified. The overall reduction may not reduce Tier 1 or Tier 2 percentages. Annual amounts are shown in **Exhibit 1**.

Exhibit 1
Annual Clean Energy Requirements
Current Law vs. The Bill

Year	Overall Total Current Law	Overall Total The Bill*	Difference
2025	38.00%	60.5%	22.50%
2026	40.50%	63.0%	22.50%
2027	44.00%	66.5%	22.50%
2028	45.50%	68.0%	22.50%
2029	52.00%	74.5%	22.50%
2030+	52.50%	75.0%	22.50%

* Under the bill, the Public Service Commission must reduce the overall total each year by the output of nuclear facilities connected to the electric distribution system in the State, as specified. In-state nuclear generation accounted for approximately 23% of electricity used in the State in 2022.

Source: U.S. Energy Information Administration; Department of Legislative Services

Offshore Wind

The definition of "qualified offshore wind project" is modified to allow the project to interconnect to the PJM Interconnection transmission system more generally, as opposed to at a point located on the Delmarva Peninsula.

The existing offshore wind procurement process administered by PSC is modified to remove existing ratepayer limits and maximum offshore wind renewable energy credit (OREC) prices. PSC is instead allowed to determine the maximum amount of ratepayer impacts and OREC prices. PSC must keep any determined amounts confidential.

Additionally, a qualified offshore wind project applicant must commit to deposit into an escrow account an amount determined by PSC to dissuade withdrawal from the OREC process, which may not be less than $5,000 per megawatt, and abide by a withdrawal process established by PSC, including forfeiture of any such deposit.

The Maryland Offshore Wind Business Development Advisory Committee is renamed the Maryland Clean Energy Business Development Advisory Committee and members from other energy industries are added. A similar change is made to rename the Maryland Offshore Wind Business Development Fund. By December 31, 2026, the advisory committee must provide written recommendations to MEA regarding the most effective use of money in the fund in order to maximize opportunities for emerging businesses in the State, including minority-owned emerging businesses, to participate in clean energy industries.

Solar Alternative Compliance Payments

Instead of continuing a gradual decline to $22.50 per megawatt-hour in 2030 and later under current law, solar ACPs are permanently maintained at the 2024 amount of $60 per megawatt-hour.

Nuclear Energy Procurement

The bill establishes a minimum of three rounds of applications and related requirements for PSC approval of one or more proposed nuclear energy generation projects funded through electric distribution rates. If PSC approves proposals that demonstrate, based on the criteria specified in the bill, positive net economic, environmental, and health benefits to the State, PSC must approve orders to facilitate the financing of nuclear energy generation projects. Rate impacts cannot exceed PSC-determined amounts. PSC is authorized to contract for the services of independent consultants and experts, as specified.

Applications

After the effective date of PSC regulations implementing the provisions described below, a person may submit an application to PSC for approval of a proposed nuclear energy generation project, subject to specified requirements. PSC must adopt regulations, as specified, by July 1, 2027.

On receipt of an application, PSC must (1) open an application period of at least 90 days where other interested persons may submit applications for approval of a proposed nuclear energy generation project and (2) provide notice that PSC is accepting applications. PSC must provide at least two additional application periods before January 1, 2031, and may provide additional application periods. Unless extended by mutual consent of the parties, PSC must approve, conditionally approve, or deny an application within one year of the close of the application period.

The bill specifies what an application must include, such as a (1) detailed description and financial analysis; (2) cost-benefit analysis; (3) proposed long-term pricing schedule; (4) decommissioning and waste storage plan; (5) commitment to abide by a community benefit agreement, as further specified; (6) a description of the applicant's plan for engaging small businesses; (7) if applicable, a statement that includes information on minority investors interviewed and whether they have invested in the project; and (8) commitment to deposit at least $6.0 million into the (renamed) Maryland Clean Energy Business Development Fund.

An applicant seeking investors must make serious, good-faith efforts to solicit and interview a reasonable number of minority investors and take other related actions. The Governor's Office of Small, Minority, and Women Business Affairs (GOSBA), in consultation with the Office of the Attorney General (OAG), must provide assistance to potential applications to satisfy the requirements.

Evaluation and Approval

The bill specifies the criteria that PSC must use to evaluate and compare proposed projects, such as (1) the lowest cost impact on ratepayers and potential changes in related electricity market prices; (2) the extent to which the cost-benefit analysis demonstrates positive net economic, environmental, and health benefits to the State; (3) the extent to which the plan for engaging small businesses meets the State's goal for small business contracting; (4) the extent to which the applicant's plan provides for various specified labor considerations; (5) the extent to which the project would require transmission or distribution infrastructure improvements in the State; and (6) the estimated ability of the project to assist in meeting the 100% clean electricity goal established by the bill.

Subject to specified processes and requirements, including that PSC must keep any determined amounts confidential, PSC may not approve an applicant's proposed project unless:

- the project is connected to the electric distribution system serving the State;
- over the duration of the proposed long-term pricing schedule, projected net rate impacts for residential and nonresidential customers do not exceed amounts determined by PSC; and

- the price specified in the proposed long-term pricing schedule does not exceed an amount determined by PSC.

Additionally, PSC may not approve an order to facilitate the financing of a nuclear energy generation project unless the project is subject to a community benefit agreement, which has various specified requirements.

A PSC order approving a proposed project must (1) specify the long-term pricing schedule and its duration, up to 30 years; (2) provide that a payment may not be made under a long-term pricing schedule until electricity supply is generated from the project; (3) provide that ratepayers and the State must be held harmless for any cost overruns associated with the system; and (4) require that any debt issued in connection with the project include language specifying that the debt instrument does not establish a debt, an obligation, or a liability of the State. An order approving a proposed project vests the owner with the right to receive payments according to the terms in the order.

The findings and evidence relied on by the General Assembly for the continuation of the State's Minority Business Enterprise (MBE) Program are incorporated into the bill. To the extent practicable and authorized by the U.S. Constitution, approved applicants for a proposed nuclear energy generation project must comply with the State's MBE Program. Within six months after the issuance of a PSC order approving a project, GOSBA, in consultation with OAG and the applicant, must establish a clear plan for setting reasonable and appropriate MBE goals, as specified.

Cost Recovery

PSC must adopt regulations to establish the nuclear energy long-term pricing purchase obligation sufficiently in advance to allow an electric company to reflect nuclear energy long-term pricing costs as a nonbypassable surcharge paid by all distribution customers of the company. The surcharge must allow an electric company to recover all costs associated with the purchase of nuclear energy. PSC must also establish a related escrow account to facilitate the transfer of funds.

Each electric company must procure the required volume of nuclear energy from the escrow account to meet its obligations. In turn, for each long-term pricing schedule for which a project receives payment, the project must sell all energy, capacity, and ancillary services associated with the creation of the long-term pricing into the PJM markets and distribute the proceeds to electric companies to be refunded or credited to each distribution customer based on the customer's electricity consumption subject to CEPS. The bill also establishes a process to refund or credit customers in the event of overpayments due to insufficient nuclear energy being available.

A debt, obligation, or liability of a nuclear energy generation project or of an owner or operator of a nuclear energy generation project may not be considered a debt, obligation, or liability of the State.

Authorized Dedicated Purpose Account Transfer

For fiscal 2026, funds from the Dedicated Purpose Account (DPA) may be transferred by budget amendment to implement specified requirements related to the nuclear energy applications described above.

Existing Obligations and Contract Rights Not Impaired or Affected

A presently existing obligation or contract right may not be impaired in any way by the bill.

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 greenhouse gas (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.

Long-term Electricity Supply

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.

Power Plant Siting

PSC is the lead agency for licensing the siting, construction, and operation of power plants and related facilities in the State through Certificates of Public Convenience and Necessity (CPCN). For additional information on the CPCN process, see the **Appendix – Certificate of Public Convenience and Necessity**.

Renewable Energy Portfolio Standard

PSC administers the State RPS, which requires that renewable sources generate specified percentages of Maryland's electricity supply each year. For general information, including a list of eligible Tier 1 sources and trends in renewable energy credit prices and ACP revenues, see the **Appendix – Renewable Energy Portfolio Standard**.

Offshore Wind

Definitions

"Qualified offshore wind project" means a wind turbine electricity generation facility, including the associated transmission-related interconnection facilities and equipment, that:

- is located on the outer continental shelf of the Atlantic Ocean in an area that the U.S. Department of the Interior designates for leasing and, generally, is more than 10 miles off the coast of the State; and
- interconnects to the PJM Interconnection grid at a point located on the Delmarva Peninsula, or through an offshore wind transmission project.

"Offshore wind transmission project" means an electric transmission project selected by PSC to interconnect directly or indirectly with one or more qualified offshore wind projects.

Offshore Wind – Generally

Chapter 3 of 2013 established a carve-out in the State 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 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.

As described in the order, the US Wind project complies with existing ratepayer limits specified in statute for Round 1 and Round 2 projects. Residential limits are $1.50 per month (average customer, 2012 dollars) and $0.88 per month (average customer, 2018 dollars) for Round 1 and Round 2, respectively. Nonresidential limits are 1.5% for Round 1 and 0.9% for Round 2.

Solar Incentives

State law establishes multiple incentives for solar energy generating systems of different types, sizes, and locations. For an overview of notable incentives, see the **Appendix – Incentives for Solar Energy Generating Systems**.

Other Related Climate and Renewable Energy Initiatives

The Maryland Department of the Environment's (MDE) Climate Change Program leads the State's efforts to reduce GHG emissions and participation and oversight in other initiatives, including the Regional Greenhouse Gas Initiative (RGGI) and the U.S. Climate Alliance. The program also ensures State compliance with climate-related State and federal laws, such as the Climate Solutions Now Act (CSNA) of 2022.

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. In December 2023, MDE published *Maryland's Climate Pollution Reduction Plan*, which was developed to implement CSNA.

Maryland participates in the multi-state RGGI in order to reduce carbon dioxide (CO_2) emissions from the power sector. Each participating state limits CO_2 emissions from electric power plants, issues CO_2 allowances, and establishes participation in CO_2 allowance auctions. A single CO_2 allowance represents a limited authorization to emit one ton of CO_2.

Maryland is also part of the U.S. Climate Alliance, which is a group of states committed to reducing GHG emissions consistent with the goals of the Paris Agreement. These goals include reducing collective net GHG emissions by at least 26% to 28% by 2025, by 50% to 52% by 2030, and by 61% to 66% by 2035 (all below 2005 levels) and collectively achieving overall net-zero GHG emissions as soon as practicable, but no later than 2050.

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. The bill implements many of the recommendations for potential reforms described in the report, beginning on page 57.

Strategic Energy Investment Fund

The Strategic Energy Investment Fund (SEIF), which is administered by MEA, is generally funded through the proceeds from the auction of carbon allowances under RGGI; SEIF also receives ACP revenues generated under Maryland's RPS and will receive a portion of

corporate income tax revenues from qualified data centers that are operational on or after January 1, 2026.

RGGI proceeds are allocated according to a statutory formula for energy assistance, low-income energy efficiency and conservation programs, renewable and clean energy programs, and administrative expenses. Generally, ACP revenues may be used only to make loans and grants to support the creation of new renewable energy sources in the State that are owned by or directly benefit specified communities, households, or businesses. The loans and grants made from solar and post-2022 geothermal ACP revenues must be for specified purposes related to solar and geothermal energy, including for the Customer-Sited Solar Program from fiscal 2025 through 2027. Additionally, through June 30, 2027, MEA may use 10% of solar ACP revenues for administrative expenses.

Minority Business Enterprise Program

The State's MBE Program requires that a statewide goal for MBE contract participation be established biennially through the regulatory process under the Administrative Procedure Act. The goal is 29% for fiscal 2025. The Maryland Department of Transportation (MDOT) is designated in State regulations as the State's MBE certification agency. An MBE is a legal entity, other than a joint venture, that is:

- organized to engage in commercial transactions;
- at least 51% owned and controlled by one or more individuals who are socially and economically disadvantaged; and
- managed by, and the daily business operations of which are controlled by, one or more of the socially and economically disadvantaged individuals who own it.

State Fiscal Effect: Significant individual effects of the bill are discussed separately below. Effects on any agencies not discussed below are assumed to be generally minimal and/or absorbable within existing budgeted resources. The effect on State expenditures for electricity is discussed in the Additional Comments section below.

Public Service Commission

PSC advises that the bill creates new and incremental requirements that cannot be absorbed within existing resources. PSC advises that it requires one additional staff to implement the various requirements, plus ongoing consultant technical assistance of $0.5 million annually through at least fiscal 2030. This estimate does not assume any funds are transferred from DPA in fiscal 2026 for these expenses, despite the bill's authorization to do so.

Accordingly, special fund expenditures for PSC increase by $593,756 in fiscal 2026, which accounts for a 90-day startup delay. This estimate reflects the cost of hiring one program

manager to handle the anticipated increase in regulatory workload. It includes a salary, fringe benefits, one-time start-up costs, ongoing operating expenses, and $0.5 million annually in consultant costs.

Position	1.0
Salary and Fringe Benefits	$83,387
Contractual Services	500,000
Other Operating Expenses	10,369
Total FY 2026 PSC Expenditures	**$593,756**

Future year expenditures reflect a full salary with annual increases and employee turnover as well as annual increases in ongoing operating expenses and $0.5 million in annual 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.

To the extent that PSC requires additional staff or consultants beyond that which has been estimated above, special fund revenues and expenditures further increase.

Office of People's Counsel

Special fund expenditures for OPC for additional staff and/or consultants to participate in the nuclear energy and, potentially, offshore wind procurement proceedings at PSC also increase beginning as early as fiscal 2026, although 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

The bill increases solar ACPs, and assumed ACP revenues, beginning with compliance year 2025. Generally, RPS compliance reports and associated ACPs are due by April 1 following the compliance year. However, Chapter 595 of 2024 requires PSC to allow a one-time delay for compliance year 2025, with a due date between July 1, 2026, and December 31, 2026. Whether and to what extent electricity suppliers will choose to delay compliance filings and ACPs under the extension is unknown.

Additionally, the bill, by removing statutory ratepayer limits from the offshore wind procurement process, may allow for additional applications. Those applicants must commit

to deposit at least $6.0 million into the (renamed) Clean Energy Business Development Fund. Applicants for the nuclear energy incentive in the bill must likewise commit to deposit $6.0 million into the fund.

Any administrative requirements related to MEA administering extra revenues received under the above processes and costs associated with staffing the Clean Energy Business Development Advisory Committee are assumed to be absorbable within available funding.

Accordingly, special fund revenues for SEIF increase significantly, beginning as early as fiscal 2026, but likely more substantially beginning in fiscal 2027, from additional solar ACP revenues. Amounts cannot be reliably predicted, but escalate annually in the near-term and could exceed $50.0 million in fiscal 2029, according to MEA. With additional funding available, special fund expenditures for SEIF likely increase correspondingly as available funds are used for MEA programs, but any such spending is not required by the bill. Special fund revenues (and likely, expenditures) likewise increase for the Clean Energy Business Development Fund based on approved offshore wind and/or nuclear project applications; timing and amounts are unknown at this time.

Department of Natural Resources

DNR advises that its Power Plant Research Program (PPRP) requires additional technical and legal staff as well as funding for consultants to meet anticipated workloads associated with additional CPCNs for complex nuclear energy projects. Staff and consultants are needed through at least fiscal 2030. This estimate assumes PPRP costs begin in fiscal 2028, although costs could start earlier if PSC regulations on nuclear energy procurement are adopted earlier than July 1, 2027.

In general, special funds from the Environmental Trust Fund are used to fund PPRP's operations. However, general funds may be required to cover part or all of the expenses that PPRP incurs under the bill because the department anticipates a special fund revenue shortfall.

Accordingly, general/special fund expenditures for DNR increase by $609,646 in fiscal 2028, which accounts for the anticipated timing of nuclear energy CPCN applications. This estimate reflects the cost of hiring two power plant siting assessors and one half-time attorney to assist with additional CPCN analyses. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, and $300,000 in consultant costs.

Positions	2.5
Salaries and Fringe Benefits	$287,208
Contractual Services	300,000
Other Operating Expenses	22,438
Total FY 2028 DNR Expenditures	**$609,646**

Future year expenditures reflect salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. Future year expenditures also assume continued consultant costs of $300,000 annually.

Maryland Department of Transportation

To comply with the bill's requirement that GOSBA establish a clear plan for setting MBE participation goals, MDOT (as the State's MBE certification agency) must conduct a disparity study to determine whether and how much a disparity exists in the use of MBEs by nuclear power facilities. Although a new statewide disparity study is due to be completed in September 2025, it likely does not include the analysis necessary for this bill. To the extent that a separate disparity analysis must be completed, and based on costs for similar studies in the past, TTF expenditures likely increase by approximately $150,000 for MDOT to conduct a disparity study on the use of MBEs by nuclear facilities. This estimate assumes those costs are incurred in fiscal 2026, although costs may be incurred in subsequent years.

Local Fiscal Effect: The bill has several potential significant effects on local government operations and finances. Among the potential effects:

- The State's five municipal electric utilities are not exempt from the ratepayer-funded procurement mechanism for new nuclear energy generation and will be required to pay their proportional share of the cost. Municipal utilities are also affected by the bill's changes to CEPS, although overall effects are limited, as they have lower fixed CEPS percentage requirements, including for solar and offshore wind. The five municipal electric utilities are located in Berlin (Worcester County), Easton (Talbot County), Hagerstown (Washington County), Thurmont (Frederick County), and Williamsport (Washington County).
- Local governments that own solar energy facilities or are otherwise entitled to solar renewable energy credits (SRECs) may be affected by the increase in solar ACPs.
- Local governments may receive more funding from ACP-funded programs.
- Local governments, as electric customers, are affected by any change in electricity rates, as discussed in the Additional Comments section below.

Additional Comments: In the short term, the bill appears likely to increase electricity rates due to the increase in solar ACPs from what they otherwise would be under current law. As noted in the MEA report discussed above, there continues to be a projected shortfall in solar generation in the State. In that scenario, maintaining ACPs at higher levels raises SREC prices and ACP revenues from what they otherwise would have been. Those price signals are intended to incentivize additional solar capacity to be built; sufficient capacity would then be expected to reduce SREC prices and reduce or eliminate ACPs in the out-years.

The bill also removes statutory ratepayer limits for qualified offshore wind projects and allows limits to be determined by PSC; under current law, existing OREC awards account for all, or nearly all, of the existing ratepayer limits. Therefore, the bill facilitates additional potential rounds of OREC awards and their eventual ratepayer impacts. The rate impacts would not become effective until additional projects are constructed and producing electricity.

Finally, the bill establishes a long-term ratepayer-funded procurement mechanism for new nuclear energy generation, again subject to a limit determined by PSC. Costs associated with electric companies purchasing the nuclear energy will be recovered through a nonbypassable surcharge paid by all distribution customers. Again, the rate impacts do not become effective until any projects are constructed and producing power.

All three of the above direct incentives have the potential to provide other benefits to the broader energy market and eventually reduce associated electricity rates paid by customers in the State by increasing in-state or regional energy generation capacity and providing a hedge against future fossil fuel prices. However, DLS cannot further advise on the long-term net effect.

In any case, the State, local governments, and all businesses, including small businesses, are affected by the potential significant change in electricity rates due to the bill, particularly in the out-years.

Additional Information

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

Designated Cross File: SB 434 (The President, *et al.*) (By Request - Administration) - Education, Energy, and the Environment.

Information Source(s): Public Service Commission; Office of People's Counsel; Maryland Energy Administration; Maryland Department of Transportation; Department of Natural Resources; Maryland Department of the Environment; Maryland Department of Health; Maryland Department of Labor; Department of Commerce; Department of Budget and Management; Board of Public Works; Governor's Office of Small, Minority, and Women Business Affairs; Office of the Attorney General; Comptroller's Office; Maryland State Treasurer's Office; Maryland Environmental Service; Northeast Maryland Waste Disposal Authority; Harford County; Maryland Association of Counties; Maryland Municipal League; U.S. Energy Information Administration; Department of Legislative Services

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Appendix – Certificate of Public Convenience and Necessity

General Overview

The Public Service Commission (PSC) is the lead agency for licensing the siting, construction, and operation of power plants and related facilities in the State through Certificates of Public Convenience and Necessity (CPCN). The CPCN process is comprehensive and involves several other State agencies, including the Department of Natural Resources (and its Power Plant Research Program), and the Maryland Department of the Environment. Subject to limited exemptions described below, a person may not begin construction in the State of a generating station, overhead transmission line, or qualified generator lead line unless a CPCN is first obtained from PSC.

State law provides that a "generating station" excludes:

- a facility used for electricity production with a capacity of up to 2 megawatts that is installed with equipment that prevents the flow of electricity to the electric grid during time periods when the grid is out of service;
- a combination of two or more co-located or adjacent facilities used for electricity production from solar photovoltaic systems or specified eligible customer-generators that have a maximum cumulative capacity of 14 megawatts, including maximum individual capacities of 2 megawatts (subject to satisfying other requirements); and
- a facility, or a combination of two or more facilities, used for electricity production for the purpose of onsite emergency backup for critical infrastructure when service from the electric company is interrupted and conducting necessary test and maintenance operations (subject to satisfying other requirements).

The CPCN process, detailed further below, involves the notification of specified stakeholders, the holding of public hearings, the consideration of recommendations by State and local government entities, and the consideration of the project's effects on various aspects of the State infrastructure, economy, and environment.

In December 2020, PSC initiated a rulemaking (RM 72) to revise regulations governing CPCNs for generating stations. Updated regulations became effective in September 2021. Among other changes, the regulations contain additional information requirements – to assist in project evaluation – and allow for electronic submission and distribution of application materials.

Notification Process

Upon receipt of a CPCN application, PSC – or the CPCN applicant, if required by PSC – must immediately provide notice to specified recipients, including the executive and governing body of affected local governments, affected members of the General Assembly, and other interested persons. When providing the notice, PSC must also forward the CPCN application to each appropriate unit of State and local government for review, evaluation, and comment and to each member of the General Assembly who requests a copy.

Public Hearing and Comment

PSC must provide an opportunity for public comment and hold a public hearing on a CPCN application in each county and municipality in which any portion of the construction of a generating station, overhead transmission line, or qualified generator lead line is proposed to be located. PSC must hold the hearing jointly with the governing body of the county or municipality and must provide weekly notice during the four weeks prior to the hearing, both in a newspaper and online, and must further coordinate with each local government to identify additional hearing notification options. PSC must ensure presentation and recommendations from each interested State unit and must allow representatives of each State unit to sit during the hearing of all parties. PSC must then allow each State unit 15 days after the conclusion of the hearing to modify the unit's initial recommendations.

Public Service Commission Considerations

PSC must take final action on a CPCN application only after due consideration of (1) recommendations of the governing body of each county or municipality in which any portion of the project is proposed to be located; (2) various aspects of the State infrastructure, economy, and environment; and (3) the effect of climate change on the project. For example, PSC must consider the effect of the project on the stability and reliability of the electric system and, when applicable, air and water pollution. There are additional considerations specifically for a generating station or an overhead transmission line. For example, PSC must consider the impact of a generating station on the quantity of annual and long-term statewide greenhouse gas emissions and must consider alternative routes and related costs for the construction of a new overhead transmission line.

Generating Station Exemptions

There are three general conditions under which a person constructing a generating station may apply to PSC for an exemption from the CPCN requirement:

- the facility is designed to provide onsite generated electricity, the capacity is up to 70 megawatts, and the excess electricity can be sold only on the wholesale market pursuant to a specified agreement with the local electric company;
- at least 10% of the electricity generated is consumed onsite, the capacity is up to 25 megawatts, and the excess electricity is sold on the wholesale market pursuant to a specified agreement with the local electric company; or
- the facility is wind-powered and land-based, the capacity is up to 70 megawatts, and the facility is no closer than a PSC-determined distance from the Patuxent River Naval Air Station, among other requirements.

However, PSC must require a person who is exempted from the CPCN requirement to obtain approval from the commission before the person may construct a generating station as described above. The application must contain specified information that PSC requires, including proof of compliance with all applicable requirements of the independent system operator.

Appendix – Renewable Energy Portfolio Standard

General Overview

Maryland's Renewable Energy Portfolio Standard (RPS) was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. There are specified eligible ("Tier 1" or "Tier 2") sources as well as carve-outs for solar, offshore wind, and geothermal. Electric companies (utilities) and other electricity suppliers must submit renewable energy credits (RECs) equal to a percentage of their retail electricity sales specified in statute each year or else pay an alternative compliance payment (ACP) equivalent to their shortfall. Historically, RPS requirements have been met almost entirely through RECs, with negligible reliance on ACPs; however, as discussed further below, that has not been the case more recently. Generally, the Maryland Energy Administration must use ACPs for purposes related to renewable energy, as specified.

In 2025, the requirements are 35.5% from Tier 1 sources, including at least 7.0% from solar and 0.25% from post-2022 geothermal systems, plus 2.5% from Tier 2 sources.

Recent Significant Changes to Overall Percentage Requirements

- Chapter 757 of 2019 significantly increased the percentage requirements, which now escalate over time to a minimum of 50% from Tier 1 sources, including 14.5% from solar, by 2030.

- Chapter 673 of 2021 reduced the amount of solar energy required under the RPS each year from 2022 through 2029, while leaving the nonsolar requirement generally unchanged, before realigning with the previous requirements beginning in 2030. The Act also extended Tier 2 in perpetuity at 2.5%.

- Chapter 164 of 2021 created a carve-out for post-2022 geothermal systems in Tier 1 beginning in 2023.

Limited Applicability to Municipal Electric Utilities and Electric Cooperatives

As RPS percentage requirements have grown over time, legislation has been enacted to limit the effect on municipal electric utilities and electric cooperatives. Tier 1 percentage requirements for municipal electric utilities are limited to 20.4% in total beginning in 2021, including at least 1.95% from solar energy and up to 2.5% from offshore wind. Municipal electric utilities are also exempt from Tier 2 after 2021. Electric cooperatives are exempt from future increases to the solar carve-out beyond 2.5%, and the RPS does not apply to Choptank Electric Cooperative.

Renewable Energy Credits

Generally, a REC is a tradable commodity equal to one megawatt-hour of electricity generated or obtained from a renewable energy generation resource. In other words, a REC represents the "generation attributes" of renewable energy – the lack of carbon emissions, its renewable nature, etc. A REC has a five-year life during which it may be transferred, sold, or redeemed. REC generators and electricity suppliers are allowed to trade RECs using a Public Service Commission (PSC) approved system known as the Generation Attributes Tracking System, a trading platform designed and operated by PJM Environmental Information Services, Inc., that tracks the ownership and trading of RECs.

Eligible Sources

Tier 1 sources include wind (onshore and offshore); solar (photovoltaic and certain water-heating systems); 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 sources; a small hydroelectric plant of less than 30 megawatts; poultry litter-to-energy; waste-to-energy; refuse-derived fuel; thermal energy from a thermal biomass system; and raw or treated wastewater used as a heat source or sink for heating or cooling. Tier 2 includes only large hydroelectric power plants.

Chapter 673 excluded black liquor, or any product derived from black liquor, from Tier 1 beginning in 2022, although some black liquor RECs remain eligible through the duration of certain contracts.

Trends in Compliance Costs, Renewable Energy Credit Prices, and Resources Used

Compliance costs for electricity suppliers totaled $564.2 million in 2023: $243.8 million for 7.9 million RECs and $320.4 million in ACPs. This continues a multi-year trend of increasing overall compliance costs, reliance on ACPs, and REC prices. Of note, 2023 was the first time that ACPs have been used in a significant way for general Tier 1 compliance. In fact, electricity suppliers retired the lowest number of general Tier 1 RECs since 2013 – and made $262.4 million in ACPs for the remaining obligation. Compliance costs and REC prices for the most recent five-year period are shown in **Exhibit 1**.

In 2023, solar (27.5%), wind (19.9%), black liquor (16.1%), municipal solid waste (14.2%), and small hydroelectric (7.5%) were the primary energy sources used for Tier 1 RPS compliance. Maryland facilities generated 5.2 million RECs in 2023: 1.3 million Tier 1 RECs, 2.1 million Tier 1 RECs, and 1.8 million Tier 2 RECs. Many RECs can be used for compliance in both Maryland and other surrounding states, although there are geographic and energy source restrictions.

Exhibit 1
RPS Compliance Costs and REC Prices
2019-2023

	2019	2020	2021	2022	2023
Compliance Costs ($ Millions)					
RECs					
Tier 1	$79.3	$99.8	$187.3	$246.5	$124.9
Tier 1 Solar	55.2	122.9	144.4	101.4	109.6
Tier 1 Geothermal	n/a	n/a	n/a	n/a	0.1
Tier 2	0.1	0.4	1.0	4.4	9.3
RECs Subtotal	***$134.6***	***$223.1***	***$332.7***	***$352.3***	***$243.8***
ACPs					
Tier 1	$5.0	$0.0	$0.2	$0.7	$262.4
Tier 1 Solar	2.7	0.0	76.9	85.9	56.0
Tier 1 Geothermal	n/a	n/a	n/a	n/a	1.6
Tier 2	0.1	0.0	0.0	0.0	0.4
ACPs Subtotal	***$7.7***	***$0.1***	***$77.1***	***$86.6***	***$320.4***
Total	**$142.3**	**$223.2**	**$409.8**	**$438.9**	**$564.2**
Average REC Price ($)					
Tier 1	$7.77	$8.24	$14.36	$17.80	$24.61
Tier 1 Solar	$47.26	$66.10	$72.59	$57.80	$56.67
Tier 1 Geothermal	n/a	n/a	n/a	n/a	$94.47
Tier 2	$1.05	$1.06	$6.45	$7.42	$10.50

ACP: alternative compliance payment
REC: renewable energy credit
RPS: Renewable Energy Portfolio Standard

Note: Numbers may not sum to total due to rounding. The post-2022 geothermal system carve-out became effective in 2023.

Source: Public Service Commission

Related Studies and Reports

PSC must submit an RPS compliance report to the General Assembly each year. The most recent report, which contains historical data through 2023, can be found here.

The Power Plant Research Program (PPRP) in the Department of Natural Resources has frequently been required to conduct RPS studies. PPRP submitted a final report on a comprehensive RPS study in December 2019, which can be found here. PPRP also submitted a related required study on nuclear energy at that time, which can be found here. PPRP's supplemental study on the overall costs and benefits of increasing the RPS to a goal of 100% by 2040 was due by January 1, 2024.

The Department of Legislative Services also issued an RPS report in 2024, which can be found here. The report contains additional detail on the program, significant statutory changes, and visualizations of planned and actual RPS percentage requirements over time.

Appendix – Incentives for Solar Energy Generating Systems

State law establishes multiple incentives for solar energy generating systems of different types, sizes, and locations. The following is an overview of notable State incentives, which may be combined, depending on the specifics of a particular solar energy generating system.

Production Incentives

Net Metering

Under § 7-306 of the Public Utilities Article, the Public Service Commission (PSC) must require electric companies to develop and make net metering tariffs available to eligible customer-generators. Net metering is the measurement of the difference between the electricity that is supplied by an electric company and the electricity that is generated by the customer and fed back to the grid over the customer's billing period. Under net metering, the customer pays only for energy used, netted against energy generated, plus the fixed monthly customer charge. In the event that more energy is generated than used, the electric company must pay the customer the value of the difference, subject to specified requirements. Generally, net excess generation payments are made annually, although certain customers may instead choose to accrue net excess generation indefinitely.

Generally, the generating capacity of an eligible customer-generator for net metering may be up to 2 megawatts, although there are exceptions allowing for larger capacities, including for community solar. Community solar systems are those that meet specified requirements, have multiple subscribers, and engage in virtual net metering.

There are multiple eligible energy sources for net metering, although most of the installed capacity is solar. The statewide capacity limit is 3,000 megawatts.

Renewable Energy Portfolio Standard

Under Title 7, Subtitle 7 of the Public Utilities Article, which establishes the State Renewable Energy Portfolio Standard (RPS), utilities and other competitive energy suppliers must submit renewable energy credits (RECs) equal to a percentage of their retail electricity sales specified in statute each year or else pay an alternative compliance payment (ACP) equivalent to their shortfall. Generally, an REC is a tradable commodity equal to one megawatt-hour of electricity generated or obtained from a renewable energy generation source. In program compliance year 2025, RPS percentage requirements include 7.0% from solar, which must be connected to the electric distribution grid serving Maryland.

Under § 7-709.1 of the Public Utilities Article, PSC must establish a Small Solar Energy Generating System Incentive Program and begin determining eligibility by January 1, 2025. Under the program, a solar energy generating system that meets specified requirements and is certified by PSC generates certified solar RECs, which have an RPS compliance value of 150%, for 15 years. In addition to other requirements, an eligible system must be placed in service between July 1, 2024, and January 1, 2028, inclusive.

Grant and Loan Incentives

Under § 9-20B-05 of the State Government Article, the Maryland Energy Administration (MEA) must administer the Strategic Energy Investment Fund (SEIF). Among other revenue sources, SEIF receives funds from the sale of carbon dioxide emissions allowances under the Regional Greenhouse Gas Initiative (RGGI) and ACP revenues through the State RPS. RGGI-sourced funding is allocated through a statutory formula that provides significant annual funding for clean energy programs and initiatives, in addition to other purposes. In practice, MEA offers a variety of residential and commercial grants and rebates for different types of solar installations. Solar ACP revenues must be used make grants and loans to support the creation of new solar energy sources in the State that are owned by or directly benefit low- to-moderate income communities, overburdened or underserved communities, or households with low- to-moderate income.

Tax Incentives

Solar Energy Property Generally Not Subject to State or Local Real Property Tax

Under § 7-242 of the Tax-Property Article, solar energy property is generally not subject to State or local real property tax. "Solar energy property" means equipment that is installed to use solar energy or solar thermal electric energy to generate electricity to be used in a structure or supplied to the electric grid or provide hot water for use in a structure.

Specified Nonresidential Solar Systems Exempt from Valuation or State or Local Property Taxes

Under § 7-249 of the Tax-Property Article, specified nonresidential solar energy generating systems that are constructed on the rooftops of buildings or on parking facility canopies are not subject to valuation or to State or local property taxes. The exemption applies only to a system approved by PSC for a Certificate of Public Convenience and Necessity (CPCN) or CPCN exemption on or after July 1, 2024.

Community Solar Personal Property Tax Exemption

Under § 7-237 of the Tax-Property Article, a community solar energy generating system with up to 5 megawatts of capacity that meets specified requirements is exempt from the county and municipal personal property tax through the life cycle of the system. To be eligible, a system must (1) be placed in service after June 30, 2022, and be approved by PSC by December 31, 2030; (2) provide at least 50% of the energy produced to low- to moderate-income customers at reduced prices, as specified; and (3) be used for agrivoltaics or be installed on a rooftop, brownfield, parking facility canopy, landfill, or clean fill.

Community Solar Real Property Tax Credit

Under § 9-111 of the Tax-Property Article, the State and local governments must grant a 50% property tax credit for a brownfield, landfill, or clean fill on which a specified community solar energy generating system is installed.

Optional Local Property Tax Credit for Solar Energy Devices

Under § 9-203 of the Tax-Property Article, counties and municipalities are authorized to grant tax credits against county or municipal property taxes for the use of a solar energy, geothermal energy, or qualifying energy conservation device in a structure for the purposes of heating and cooling, electricity generation, or the provision of hot water. Local governments may establish related definitions in determining eligibility for the credit.

Optional Local Real Property Assessment Reduction for Certain Parking Canopies

Under § 7-250 of the Tax-Property Article, the governing body of a county or municipality may reduce or eliminate, by law, the percentage of the assessment of any real property that is subject to the county or municipal property tax if the real property includes a parking facility on which a solar energy generating system has been constructed on its canopy. These provisions apply only to real property that includes a parking facility on which a system has been approved by PSC for a CPCN or CPCN exemption on or after July 1, 2024.

Sales and Use Tax Exemptions

Under § 11-230 of the Tax-General Article, the sales and use tax does not apply to the sale of solar energy equipment, which is defined as equipment that uses solar energy to heat or cool a structure, generate electricity to be used in a structure or supplied to the electric grid, or provide hot water for use in a structure.

Under § 11-207 of the Tax-General Article, the sales and use tax does not apply to the sale of electricity generated by solar energy equipment for use in residential property owned by an eligible customer-generator under the State's net metering law.

ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Empowering New Energy Resources and Green Initiatives Toward a Zero-Emission (ENERGIZE) Maryland Act

BILL NUMBER: HB 505

PREPARED BY: Saif Ratul

PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

_X_ WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

___ WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

PART B. ECONOMIC IMPACT ANALYSIS

This legislation will have little to no impact on small businesses in the near term. Utility rates rise slightly in CY25 and beyond due to the constant price of SRECs and Solar ACP within the RPS for new projects.