HB 878

Department of Legislative Services

Maryland General Assembly
2018 Session

FISCAL AND POLICY NOTE
First Reader

House Bill 878 (Delegate Robinson, *et al.*)
Economic Matters

Public Utilities - Renewable Energy - Electric and Gas Bills (100% Clean Renewable Energy Equity Act of 2018)

This bill repeals the existing State Renewable Energy Portfolio Standard (RPS) in 2020 and replaces it with a new RPS that increases over time to 100% by 2035 and requires electricity suppliers to directly procure renewable energy. The bill also makes several other significant and related changes, including (1) establishing the Maryland Megawatt Block Program administered by the Public Service Commission (PSC) to provide solar rebates and (2) establishing the Office of Offshore Wind Procurement in the Department of Natural Resources (DNR). **The bill has multiple effective dates through January 1, 2020.**

Fiscal Summary

State Effect: General fund expenditures increase by $29.8 million in FY 2019 and by about $61.0 to $62.0 million annually from FY 2020 through 2023 for solar rebates. Special fund expenditures increase by $1.4 million in FY 2019 and by about $1.1 to $1.2 million annually from FY 2020 through 2023; special fund revenues increase correspondingly from assessments imposed on public service companies. Special fund revenues and expenditures may further increase, as discussed below. State expenditures (all funds) increase beginning as early as FY 2020 due to higher electricity prices.

($ in millions)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
SF Revenue	$1.4	$1.2	$1.2	$1.1	$1.1
GF Expenditure	$29.8	$60.6	$61.4	$61.7	$61.7
SF Expenditure	$1.4	$1.2	$1.2	$1.1	$1.1
GF/SF/FF Exp.	$0	-	-	-	-
Net Effect	($29.8)	($60.6)	($61.4)	($61.7)	($61.7)

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

Local Effect: Local expenditures increase beginning as early as FY 2020 due to higher electricity prices. Revenues are not materially affected.

Small Business Effect: Meaningful.

Analysis

Bill Summary: Effective October 1, 2018, the bill (1) alters eligibility for a clean energy incentive tax credit to remove specified combustible sources and (2) makes the Community Solar Energy Generating System Pilot Program within PSC permanent, but otherwise unchanged.

Effective January 1, 2019, the bill establishes the Maryland Megawatt Block Program, administered by PSC, to provide rebates for solar energy.

Effective January 1, 2020, the bill (1) repeals the existing RPS and replaces it with a new RPS that increases over time to 100% by 2035 and requires electricity suppliers to directly procure renewable energy; (2) establishes the Office of Offshore Wind Procurement in DNR and requires the office to approve projects to meet specified capacity amounts; (3) limits electric and gas bills for low-income customers; and (4) requires PSC to conduct a related study.

Megawatt Block Program

Effective January 1, 2019, the Maryland Megawatt Block Program is established in PSC to provide rebates for solar photovoltaic (PV) systems. Three separate blocks, with separate rebate amounts, are established for residential, utility scale, and community solar energy generating systems. Rebates are provided for 1,200, 1,400, and 1,050 megawatts of capacity for the three separate blocks. Rebates decrease as installed capacity increases and range from 5 cents per watt to 50 cents per watt. For each watt of community solar energy that is eligible for a rebate, PSC must allocate 5 cents from the program to low- and moderate-income community solar subscribers. PSC must adopt regulations to implement the program.

The bill does not specify a funding source for the program.

RPS Repeal and Replacement

Effective January 1, 2020, the existing RPS is repealed and replaced by a new RPS with different percentage requirements and eligibility criteria. Percentage requirements start at 7% in 2020 and increase over time to 100% by 2035. Only solar PV, solar water heating, wind, ocean, small hydroelectric, or stored energy from one of these sources is eligible for the new RPS.

The renewable energy must be procured through long-term power purchase contracts and generally must be procured from the PJM Interconnection grid, unless the energy is from offshore wind, which has a broader geographic range. PSC must determine the optimal mix of solar and wind energy for each procurement.

Electricity suppliers must annually demonstrate to PSC that they purchased or generated sufficient renewable energy to meet the requirement in that year or else pay an alternative compliance payment (ACP) equivalent to what the renewable energy would have cost. ACP revenue must be used only to provide clean energy workforce training and low-income bill assistance.

Office of Offshore Wind Procurement

Effective January 1, 2020, the Office of Offshore Wind Procurement is established in DNR. Subject to specified requirements, the director of the office must solicit requests for and select proposed offshore wind projects totaling 4,100 megawatts of new capacity from 2025 through 2035, according to a specified schedule. The bill specifies requirements related to the financial viability of applicants, the location of proposed projects, and other related requirements. A proposed project must be for a minimum of 200 megawatts.

In evaluating and comparing an applicant's proposed offshore wind project, the director, in consultation with PSC, must contract for the services of independent consultants and experts as necessary for the fair evaluation of an applicant's proposed project. The following criteria must be used to evaluate and compare proposed projects, among others:

- lowest cost impact on ratepayers;
- the extent to which a required cost-benefit analysis demonstrates positive net economic, environmental, and health benefits to the State; and
- estimated ability to assist in meeting RPS requirements.

Unless extended by mutual consent, PSC must approve, conditionally approve, or deny an application for a proposed project that the director has accepted within 90 days of receipt of the application, subject to specified requirements. PSC must contract for the services of independent consultants and experts when evaluating applications.

Within 60 days after PSC approval, the applicant must deposit funds specified in the request for proposal into the Maryland Offshore Wind Business Development Fund (MOWBDF) and subsequently deposit additional amounts within one and two years.

PSC must approve a long-term power purchase contract between an electric company and an offshore wind project if PSC determines that the project has the capacity to produce the amount of energy stated in the contract, and the contract meets the requirements of the bill.

DNR and PSC must adopt regulations to implement these provisions by July 1, 2019; the regulations cannot take effect until January 1, 2020.

Electric and Gas Bill Limits for Low-income Customers

Effective January 1, 2020, the total annual electricity bill and gas bill for a low-income residential customer whose annual gross household income is at or below 175% of the poverty level may not, when the bills are combined, exceed 6% of the customer's annual gross household income. PSC must adopt regulations to implement this requirement.

PSC Study

Effective January 1, 2020, PSC must study current utility regulations and business models to determine changes that are necessary to achieve a 100% renewable energy electricity system by 2035 that is reliable and resilient. The study must include, among other requirements:

- an examination of the transformation of utility distribution companies from serving as a single provider of all energy services to serving as a platform provider for distributed energy resource development and deployment, including all technical, economic, institutional, and business-model aspects that would be necessary for a transformation;

- a review of the fundamental principles that a platform provider would use to provide nondiscriminatory access to an enhanced range of products and services to customers connected to the grid; and

- an examination of the principles on which a new platform would be designed, as specified.

To assist with the transition to 100% renewable energy, PSC must implement changes identified in the study that are within its authority. By December 31 each year, PSC must report to the General Assembly on the status of the study and changes implemented. The report must include related recommendations for legislative action.

Current Law/Background:

Clean Energy Incentive Tax Credit

A qualified facility that is located in the State and primarily uses qualified energy resources, including specified combustible sources, may qualify for the clean energy incentive tax credit. The credit is subject to an annual aggregate limit equal to the amount appropriated in the State budget to a reserve fund; there is no funding for the credit in the Governor's proposed fiscal 2019 budget. No new projects are eligible for the credit after December 31, 2018.

Community Solar Energy Generating Systems Pilot Program

In addition to the State's general net energy metering law, Chapters 346 and 347 of 2015 established the three-year Community Solar Energy Generating Systems Pilot Program within PSC. Under the program, a single community solar energy generating system can have multiple "subscribers." Then, rather than the generated electricity offsetting just a single electric bill, the generated electricity is credited to the subscribers through "virtual net energy metering." There are specified eligibility criteria.

Megawatt Block Program

There is no grant program on the scale contemplated for the Megawatt Block Grant Program under the bill. The Maryland Energy Administration (MEA) administers a Clean Energy Grant Program, which provides rebates for certain clean energy technologies for residential and commercial customers. Funding has ranged from about $4.0 to $9.0 million annually in recent years.

Renewable Energy Portfolio Standard

Maryland's RPS was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. It operates on a two-tiered system with carve-outs for solar energy and offshore wind energy and corresponding renewable energy credits (RECs) for each tier. Tier 1 sources include wind, geothermal, solar, and several others. Following the transfer of several sources to Tier 1, Tier 2 includes only large hydroelectric power plants. Legislation enacted in 2017 increased the Tier 1 percentage requirements from 20% by 2022 to 25% by 2020. The 2018 requirement is 15.8%, including 1.5% from solar.

In 2017, PSC approved two offshore wind projects through the process established in current law, which combined, are estimated to produce almost the statutory maximum of 2.5% when they are both operational. The amounts count toward the overall Tier 1 requirements in a given year.

Electric companies (utilities) and other electricity suppliers must submit RECs equal to a percentage specified in statute each year or else pay an ACP equivalent to their shortfall. Revenue from ACPs, which historically has been zero or minimal in any given year, accrues to the Strategic Energy Investment Fund (SEIF) and is used by MEA to support new Tier 1 renewable energy sources in the State.

Power Plant Research Program

The Power Plant Research Program (PPRP) in DNR was created in 1971 to conduct research on the impacts of existing and proposed power plants in each county. PPRP is required to undertake a continuing research program for electric power plant site evaluation and related environmental and land use considerations. PPRP is funded through an assessment on electricity used in the State, which accrues to the Environmental Trust Fund (ETF).

State Fiscal Effect: Individual fiscal effects associated with various provisions of the bill are discussed separately below. The most significant quantifiable expenditures are for the Megawatt Block Program and PSC and DNR's administrative costs.

Clean Energy Incentive Tax Credit

Since there is no funding in the Governor's proposed fiscal 2019 budget for the program, and no new projects are eligible after December 31, 2018, altering eligible energy sources has no effect on State finances.

Community Solar Energy Generating Systems Pilot Program

Extending the program does not materially affect State finances or operations.

Megawatt Block Program

Effective January 1, 2019, PSC must administer the Maryland Megawatt Block Program, which provides rebates for solar PV systems. At the incentives specified in the bill, the rebates total $595.5 million. As no funding source or potential timeline for the rebates is specified, this estimate assumes that general funds are used, that it takes 10 years to provide all of the rebates, that funding is provided in equal increments, and that rebates are issued concurrent with the effective date of the program. Under these assumptions, general fund expenditures increase by $29.8 million in fiscal 2019, by $59.6 million annually from fiscal 2020 through 2023, and significantly thereafter through fiscal 2029, to provide rebates. This estimate does not include any administrative costs for PSC, which are discussed separately.

Offshore Wind Approvals

Part of the application process for new offshore wind projects requires applicants to deposit funds in MOWBDF. Therefore, special fund revenues and corresponding expenditures for MOWBDF increase for each offshore wind project approved under the bill. The exact amount and potential timing of such revenues is unknown, although funding is not likely before fiscal 2022.

Effect on Electricity Rates

While the effect on electric rates cannot be estimated by DLS at this time, State expenditures likely increase, potentially significantly, beginning as early as fiscal 2020 due to higher electricity prices.

Increasing the RPS requirement from 25% to 100% is likely to increase electric rates from what they otherwise would have been. The effect is further complicated by the unknown future disposition of existing energy generation assets (such as Calvert Cliffs) due to the bill, the unknown but significant costs of the required offshore wind procurements, and the electric and gas utility bill limit for low-income customers.

Alternative Compliance Payments

SEIF revenues may increase significantly from ACPs made by electricity suppliers beginning in fiscal 2020. Special fund expenditures increase correspondingly for workforce training and low-income bill assistance as authorized under the bill, although the recipients of such funding are unknown.

Department of Natural Resources Administrative Costs

Effective January 1, 2020, the Office of Offshore Wind Procurement is established in DNR and the existing RPS is eliminated and replaced with a new RPS. This creates two separate costs for DNR: (1) the new office; and (2) additional evaluations of solar facilities by PPRP as part of the existing Certificate of Public Convenience and Necessity (CPCN) process.

The establishment of a new office in DNR requires, at a minimum, hiring a director, several technical and administrative staff, and various contractual services to evaluate proposed offshore wind applications. It is assumed that general funds are used for these costs.

To meet the enhanced solar requirements under the bill, PPRP estimates that eventually an additional 20 to 40 CPCN applications must be filed each year at an estimated cost of $1.0 million to $2.0 million annually. PPRP also requires additional staff to handle the increased volume. Absent sufficient general funds to conduct additional CPCN analyses and hire staff, either funds in ETF are redirected from existing projects or PPRP is unable to meet some of the bill's requirements.

Therefore, general fund expenditures for DNR increase by $1,034,683 in fiscal 2020, which reflects the January 1, 2020 effective date of the related requirements. This estimate reflects the cost of hiring eight staff for the offshore wind office and one staff at PPRP to handle the additional volume of solar CPCNs. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, and contractual costs associated with evaluating offshore wind and solar projects.

Offshore Wind Procurement Office Positions	8
PPRP Position	1
Salaries and Fringe Benefits	$360,860
Offshore Wind Evaluation Costs	100,000
PPRP CPCN Evaluation Costs	500,000
Other Operating Expenses/Equipment	73,823
Total FY 2020 DNR Expenditures	**$1,034,683**

Future year expenditures of $1.9 million in fiscal 2021 and $2.2 million annually in fiscal 2022 and 2023 reflect full salaries with annual increases and employee turnover, ongoing operating expenses, and ongoing contractual costs associated with evaluating offshore wind and solar projects. Similar expenditures continue thereafter.

PSC Administrative Costs

PSC must administer the Maryland Megawatt Block Program, evaluate and approve offshore wind projects, verify compliance with the new RPS, implement a program to limit low-income customer utility bills, and conduct a related study.

Special fund expenditures for PSC increase by $1,344,870 in fiscal 2019, which accounts for the October 1, 2018 effective date of the relevant requirements. This estimate reflects the cost of hiring two regulatory economists, one assistant staff counsel, and one administrative specialist to oversee the Maryland Megawatt Block Program and manage PSC's other ongoing responsibilities under the bill. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, and consultant costs.

Positions	4
Salaries and Fringe Benefits	$215,935
Consultant Costs	1,100,000
Other Operating Expenses/Equipment	28,935
Total FY 2019 PSC Expenditures	**$1,344,870**

Future year expenditures of about $1.0 million annually reflect full salaries with annual increases and employee turnover, ongoing operating expenses, and additional costs associated with offshore wind project evaluations. Special fund revenues increase correspondingly from assessments imposed on public service companies.

Office of People's Counsel Administrative Costs

Special fund expenditures for the Office of People's Counsel increase by $100,000 in fiscal 2019, by $200,000 annually in fiscal 2020 and 2021, and by $100,000 annually thereafter for consultant and related costs associated with the bill's requirements. Special fund revenues increase correspondingly from assessments imposed on public service companies.

Small Business Effect: Small businesses likely incur higher electricity prices under the bill beginning as early as fiscal 2020. However, the bill also creates demand for solar and other renewable energy technology installations and creates a significant solar rebate program. Small businesses in this industry benefit from increased demand to design, build, install, and maintain renewable energy systems under the bill.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Public Service Commission; Department of Natural Resources; Office of People's Counsel; Department of Labor, Licensing, and Regulation; Department of Legislative Services

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