Department of Legislative Services

Maryland General Assembly
2024 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

Senate Bill 959 (Senator Feldman)
Education, Energy, and the Environment Economic Matters

Electricity - Tariffs, Distributed Energy Resources, and Electric Distribution System Support Services (Distributed Renewable Integration and Vehicle Electrification (DRIVE) Act)

This bill requires each investor-owned electric company to file with the Public Service Commission (PSC) one or more time-of-use (TOU) tariffs to be available for appropriate customer classes on an opt-in basis and an enrollment target to achieve by January 1, 2028. PSC must also (1) adopt regulations to establish an expedited process for interconnecting bidirectional electric vehicle systems to the grid and (2) develop a program for each investor-owned electric company to establish a pilot program or temporary tariff to compensate owners and aggregators of "distributed energy resources" for "electric distribution system support services." PSC may also approve or require an investor-owned electric company to offer upfront incentives or rebates to customers to acquire and install "renewable on-site generating systems." The bill also addresses cost recovery, municipal and cooperative participation, and low- or moderate-income customers.

Fiscal Summary

State Effect: Special fund expenditures for PSC increase by $410,600 in FY 2025 and by the amounts shown below in future years; expenditures in FY 2025 through 2028 reflect additional consultant costs. Special fund revenues for PSC increase correspondingly from assessments imposed on public service companies. Special fund expenditures and revenues for the Office of People's Counsel (OPC) may also increase beginning in FY 2025. The Maryland Energy Administration (MEA) advises that it can handle the bill's requirements with existing budgeted resources. The effect on electricity prices is discussed in the Additional Comments section below.

(in dollars)	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
SF Revenue	$410,600	$441,700	$450,000	$458,500	$217,400
SF Expenditure	$410,600	$441,700	$450,000	$458,500	$217,400
Net Effect	$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. The effect on electricity prices is discussed in the Additional Comments section below.

Small Business Effect: Minimal. The effect on electricity prices is discussed in the Additional Comments section below.

Analysis

Bill Summary:

Definitions

"Distributed energy resource" means an energy resource located on a customer's premises that (1) produces or stores electricity or (2) modifies the timing or amount of the customer's electricity consumption.

"Electric distribution system support services" means the dispatch and control of a distributed energy resource to provide services that contribute to the efficient and reliable operation of the electric distribution system by an electric company or an aggregator acting at the direction of an electric company. It includes (1) local or system peak demand reduction; (2) demand response; (3) the avoidance or deferral of a transmission or distribution upgrade or capacity expansion; and (4) facilitating hosting capacity to accommodate additional distributed energy resources.

"Renewable on-site generating system" means an energy system located on a customer's premises that:

- generates or stores electricity from a Tier 1 renewable source or a Tier 2 renewable source, as those terms are defined in current law, that does not release greenhouse gasses (GHGs);
- is capable of providing electricity to (1) a home, business, or other structure serviced by an electric company and (2) the electric distribution system;
- is paired with an energy storage device that is configured to charge from the renewable source and the electric distribution system, unless, for the purpose of eligibility for net metering, the device is required to be charged only from the renewable source; and
- is interconnected and operates in parallel with an electric company's transmission and distribution facilities.

It may include bidirectional electric vehicle service equipment located on a customer's premises.

Findings of the General Assembly

The General Assembly finds and declares that:

- well-designed TOU pricing of electricity can help mitigate the impacts of electrification on the electric distribution system, reduce GHG emissions during peak hours, and encourage customer adoption of beneficial electrification measures through off-peak cost savings;
- widespread beneficial electrification will increase demand on the electric distribution system and potentially require significant system upgrades if consumers adopting beneficial electrification measures do not engage in a form of load management to mitigate the need for system upgrades and reduce the GHG intensities associated with generation emissions during peak hours;
- pairing the adoption of renewable on-site generating systems with beneficial electrification measures may (1) further reduce the State's GHG emissions; (2) provide on-site resilience to consumers; and (3) facilitate load flexibility to mitigate impacts on the electric distribution system from load growth due to beneficial electrification; and
- it is reasonable to provide additional incentives and protections to low- and moderate-income households to (1) ensure access to the benefits of electrification and on-site energy systems and (2) protect those households from negative bill impacts during a transition to TOU rates.

Time-of-use Tarriff

By July 1, 2025, each investor-owned electric company must file with PSC one or more TOU tariffs for appropriate customer classes, to be made available to customers on an opt-in basis. Each TOU tariff must establish a sufficient price discount for off-peak hours compared to peak hours, as determined by the market or an investor-owned electric company's cost of service, to encourage customers to adjust electricity use to off-peak hours. The tariffs must be accompanied by a reasonable enrollment target to try to achieve by January 1, 2028, through a combination of marketing, customer education, and other means to communicate the benefits and risks of TOU rates.

PSC *may* require an investor-owned electric company to automatically enroll customers that receive an incentive from the company as part of a beneficial electrification program in a TOU tariff, but PSC *must* require that any automatically enrolled customers be provided an opportunity to opt-out.

By July 1, 2026, each investor-owned electric company must submit a report to PSC evaluating (1) the potential to avoid or defer electric distribution system capital projects through the use of TOU rates, demand-response and demand-side programs, and renewable on-site generating systems and (2) the merits and feasibility of transitioning all customers to a TOU tariff on an opt-out basis. By December 31, 2027, PSC must submit a report to the General Assembly on (1) the impacts of opt-in TOU tariffs on the electric distribution system; (2) the timeline, feasibility, and merits of transitioning all customers to a TOU tariff on an opt-out basis; and (3) whether a full transition to TOU rates is justified.

An investor-owned electric company may recover all reasonable and prudent costs, including marketing costs, to achieve its proposed enrollment targets and execute its responsibilities under these provisions. For good cause, PSC may delay the deadline for an investor-owned electric company to comply with these provisions. A municipal electric utility or electric cooperative may file with PSC one or more TOU tariffs in the same manner as an investor-owned electric company under the bill, and if it does so, is then governed by the same provisions as an investor-owned electric company described above.

Bidirectional Electric Vehicle Systems

By May 1, 2025, PSC must adopt regulations to (1) establish expedited processes for interconnecting specified bidirectional electric vehicle systems to the electric distribution system and (2) provide investor-owned electric companies with adequate time to ensure electric distribution system reliability in advance of the electric vehicle system interconnections.

An investor-owned electric company *may* require a customer to provide notice to the company if the customer installs a bidirectional electric vehicle system and *must* require a customer to apply for interconnection if the customer configures the system to provide electricity to the electric distribution system. A municipal electric utility or an electric cooperative may comply with these requirements in the same manner as an investor-owned electric company.

Electric Distribution System Support Services Program

PSC must develop a program for each investor-owned electric company to establish a pilot program or temporary tariff to compensate owners and aggregators of distributed energy resources for electric distribution system support services through an incentive mechanism determined by PSC. By July 1, 2025, each investor-owned electric company must submit a pilot program or temporary tariff to PSC for approval, subject to specified requirements for performance and compensation. PSC must approve, deny, or approve with amendments the pilot program or temporary tariff in an expedited manner. A municipal electric utility or electric cooperative may also establish a pilot program, temporary tariff, or performance mechanism under the program, subject to the same requirements as investor owned-electric companies (and other incentives for on-site generating systems described below).

If PSC finds the transition to be in the public interest, PSC may establish a process for an investor-owned electric company to transition a pilot program or temporary tariff to a permanent program or tariff for electric distribution system support services; pilot customers may be transitioned to the permanent program or tariff.

PSC may allow the energy generated by a renewable on-site generating system that provides electric distribution system support service under a pilot program or temporary tariff to count toward the investor-owned electric company's GHG emissions reduction goals under EmPOWER Maryland.

Except for electric vehicles that are part of a renewable on-site generating system and mobile energy storage devices, the cumulative energy storage capacity of any energy storage devices installed on a customer's property in accordance with the bill must count toward capacity requirements under the Maryland Energy Storage Program.

The cumulative nameplate capacity of renewable on-site generating systems participating in a pilot program or temporary tariff under the bill may not exceed 2% of the investor-owned electric company's highest recorded coincident peak demand.

Incentives for On-site Generating Systems

Subject to specified requirements and considerations, PSC may approve or require an investor-owned electric company to offer upfront incentives or rebates to customers to acquire and install renewable on-site generating systems if the customer (1) enrolls in a pilot program or temporary tariff under the bill and (2) allows the system to be used for electric distribution system support services for at least five years.

PSC may (1) authorize or require an investor-owned electric company to provide an additional incentive or rebate for low- or moderate-income customers who apply for an incentive or rebate and (2) require an investor-owned electric company to prioritize the offer of incentives or rebates to low- or moderate-income customers.

PSC must consider establishing a limit on the amount of incentives or rebates issued in a manner that achieves deployment goals while mitigating potential customer impacts.

When approving or requiring an incentive or rebate under the bill, PSC must consult with MEA to ensure that the incentive or rebated is designed to supplement, to the greatest extent possible, other available State and federal incentives for customer adoption of renewable on-site generating systems.

Cost Recovery

An investor-owned electric company may recover all reasonable costs incurred in (1) participating in and administering an electric distribution system support services program and (2) offering an upfront incentive or rebate under the bill. To the extent feasible, the costs must be recovered by the investor-owned electric company within the calendar year in which those costs were incurred.

Notwithstanding any provision of the bill, an investor-owned electric company may pursue and use a performance incentive mechanism to cover the cost of using distributed energy resources or an aggregator of distributed resources under the bill.

Current Law:

Public Service Commission and Rate Regulation

PSC must supervise and regulate public service 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.

A public service company must charge just and reasonable rates for the regulated services that it renders. Generally, PSC has the power to set a just and reasonable rate of a public service company, as a maximum rate, minimum rate, or both. A "just and reasonable rate" means a rate that:

- does not violate any provision of the Public Utilities Article;
- fully considers and is consistent with the public good; and
- except for rates of a common carrier, will result in an operating income to the public service company that yields, after reasonable deduction for depreciation and other necessary and proper expenses and reserves, a reasonable return on the fair value of the public service company's property used and useful in providing service to the public.

Electric companies may currently offer TOU rates to customers, including residential customers.

Climate Goals and the Electric Grid

The Climate Solutions Now Act (CSNA) of 2022 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.

CSNA established the goal of the State that the electric distribution 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.

By December 1, 2024, and each year thereafter, PSC must submit a report to the General Assembly with information regarding the current status of electric distribution system evolution, including information on electric distribution system planning processes and implementation that promote specified goals, such as:

- measures to decrease GHG emissions incident to electric distribution, including high levels of distributed energy resources and electric vehicles;
- giving priority to vulnerable communities in the development of distributed energy resources and electric vehicle infrastructure;
- meeting anticipated increases in load; and
- incorporation of energy storage technology to support the electric distribution system, as specified.

CSNA also 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, which can be viewed on the PSC website.

Net Metering

Net energy metering is the measurement of the difference between the electricity that is supplied by an electric company and the electricity that is generated by an eligible customer-generator and fed back to the electric company over the eligible customer-generator's billing period. PSC must require electric utilities to develop and make net metering tariffs available to eligible customer-generators. Generally, the generating capacity of an eligible customer-generator for net metering may be up to

2 megawatts, or up to 5 megawatts for a community solar energy generating system. Eligible energy sources are solar, wind, biomass, micro combined heat and power, fuel cell, and certain types of hydroelectric. There is a statewide net-metered capacity limit of 3,000 megawatts.

State Fiscal Effect: PSC advises that the bill creates significant new and incremental requirements that cannot be absorbed within existing resources. PSC requires two additional staff and must hire consultants with expertise in forecasting, modeling, incentives, and grid impacts associated with distributed energy resources. Consultant costs are assumed to be incurred in equal $250,000 increments in fiscal 2025 through 2028; actual timing and amounts may vary.

Accordingly, special fund expenditures for PSC increase by $410,628 in fiscal 2025, which accounts for the bill's October 1, 2024 effective date. This estimate reflects the cost of hiring one engineer and one regulatory economist to implement the bill, including researching TOU rates and related issues, reviewing tariff changes, attending workgroup meetings, preparing required reports and comments, and participating in the development of applicable rules and regulations. It includes salaries, fringe benefits, one-time start-up costs, ongoing operating expenses, and $250,000 in consultant costs.

Positions	2.0
Salaries and Fringe Benefits	$141,616
Contractual Services	250,000
Other Operating Expenses	19,012
Total FY 2025 PSC Expenditures	**$410,628**

Future year expenditures reflect full salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. Expenditures through fiscal 2028 also reflect $250,000 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.

OPC anticipates that participation in the complex PSC proceedings associated with the bill will require a significant portion of current agency resources, including both internal staff and external technical consultant expenses. Accordingly, special fund expenditures for OPC may increase beginning in fiscal 2025 for consultants and/or additional staff, depending on the amount of other PSC proceedings. 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.

Additional Comments: The State, local governments, and small businesses, as electric customers, are affected by the bill's processes to transition to opt-in TOU rates, various incentives provided by electric companies, and electric company cost recovery. The net effect on any particular unit of government or small business is unknown, but likely depends on individual circumstances (such as the amount of savings under TOU rates and incentives, and whether those savings outweigh an increase in electric company distribution rates for the affected customer class).

Additional Information

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

Designated Cross File: HB 1256 (Delegate Fraser-Hidalgo) - Economic Matters.

Information Source(s): Public Service Commission; Office of People's Counsel; Maryland Energy Administration; Department of Legislative Services

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