



7 March 2024

Delegate C.T. Wilson, Chair
Economic Matters Committee
Room 231
House Office Building
Annapolis, Maryland 21401

Written Testimony

HB1256: Electricity - Tariffs, Distributed Energy Resources, and Electric Distribution System Support Services (Distributed Renewable Integration and Vehicle Electrification (DRIVE) Act)

Position: Favorable

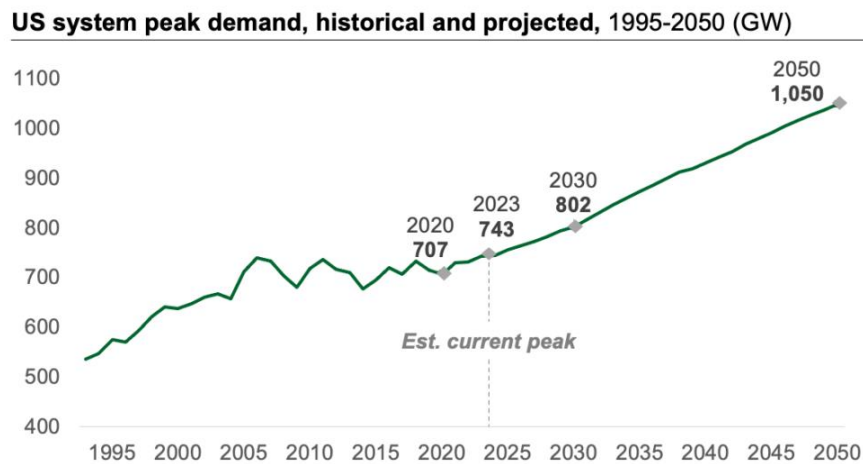
Chair Wilson, Vice Chair Crosby, Members of the Committee, thank you for the opportunity to testify on House Bill 1256, Electricity - Tariffs, Distributed Energy Resources, and Electric Distribution System Support Services (Distributed Renewable Integration and Vehicle Electrification (DRIVE) Act). I am Robin Dutta, the Executive Director of the Chesapeake Solar and Storage Association (CHESSA). Our association has over 100 member companies in the solar and energy storage industries. Many members are Maryland-based. Others are regional and national companies with an interest and/or business footprint in the state. Our purpose is to promote the mainstream adoption of local solar, large-scale solar, and battery storage throughout the electric grid to realize a stable and affordable grid for all consumers.

I am here to provide favorable testimony on HB1256, Electricity - Tariffs, Distributed Energy Resources, and Electric Distribution System Support Services (Distributed Renewable Integration and Vehicle Electrification (DRIVE) Act). I'm very glad to be able to testify in support of the DRIVE Act. It's a critical piece of legislation to move Maryland to the next generation of consumer energy policy, improve resiliency and reliability when consumers need it most, and ensure that all of Maryland can [unlock a low cost and equitable clean energy transition](#). This legislation is focused on people – how to empower and equip them with clean energy and back-up power, enable them to actively help utilities lower their costs, and lower their own energy costs.

The Changing Electric Grid

Maryland is not only undergoing a clean energy transition, but also changing how it is powered. As Marylanders make the move towards building and transportation electrification, they will become more reliant on the electric grid than at any previous point. The grid of the future will have the combined roles that today's grid, natural gas system, and gas stations have. For that grid to serve those roles, it will need to look and act differently. It will need to account for higher statewide electric loads, and greater electric demand in peak periods. And, the higher peak demand gets, the more expensive the electric grid becomes, due to expensive infrastructure expansion and higher peak energy pricing. If clean energy policy lowers peak demand, it lowers the cost of the grid. For the

everyday Maryland consumer, this would mean that critical grid events and spiking wholesale energy prices would occur less frequently, in less duration, and in lower extremes.



States across the country, including Maryland, are just beginning to incorporate assumptions for building and transportation electrification into their projections. [In a 2023 report](#), the U.S. Department of Energy estimates that nationwide peak demand will increase by over 40 percent by 2050. The above chart, from that report, illustrates that projection. However, there is a lag in Maryland data and modeling. The November 2023 report from the Public Service Commission to the Department of Natural Resources, “[Ten-Year Plan \(2023-2032\) of Electric Companies in Maryland](#)”, does not even reference electric vehicles and their anticipated grid impact. The Maryland energy grid problem is vastly understated as a result. If Maryland’s electric future follows anywhere near the projected national trend, it needs to step up the clean energy build-out throughout the state at the same time as handling fossil fuel retirements. That means scaling up statewide solar and energy storage adoption of all kinds, as soon as possible.

Re-Thinking the Electric Grid

It is essential that Maryland’s clean energy scale up comes at the lowest cost with the highest value. Put another way, Maryland needs to lower that runaway peak demand that could come from electric vehicle adoption. Not prioritizing such a path could burden already-burdened families with higher costs for electric grid projects that are unnecessary. That requires implementing a proactive strategy of deploying Distributed Energy Resources (DERs), such as distributed solar and storage, across all geographic areas and communities. As illustrated in a [2023 study from the firm The Brattle Group](#), DERs can provide capacity resources to utilities at 40-60% of the cost of traditional utility methods. They can act as a “[virtual power plant](#)” as described and promoted by the U.S. Department of Energy. When there are more distributed clean energy systems in communities, there is greater potential for not only increased reliability and resiliency assets, but there are also key grid assets that can support local energy demand and help off-set peak demand. Coupled with a build-out of large-scale renewables in and near Maryland, the state can advance its clean energy future while prioritizing a stable and affordable electric grid.

That is what makes the DRIVE Act so important – it would create foundational policies that modernize the electric grid and unlock the inherent benefits from a range of customer-facing advanced energy technologies.

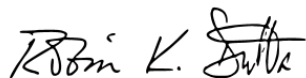
- Time-of-use retail electric rates can influence consumer behavior, accurately reflect the cost of utility service, and encourage consumers to adopt technologies that will both save them money and help reduce the cost of the electric grid.
- The grid services program can lower peak demand locally and become a lower cost source of energy for utilities versus traditional methods of procuring wholesale electricity from the transmission grid.
- Advanced energy technologies can work together to increase consumer and grid benefits. A home can have smart appliances, solar and energy storage, and an electric vehicle and shape its own energy usage in a way that relieves strain on the grid.

Here's what this can mean for a homeowner – for consumers who adopt advanced energy technologies such as solar, battery storage, electric vehicles (EVs) and home chargers, and smart thermostats, they can lower their monthly utility bills and contribute to a lower cost grid (ie. fewer surcharges). Adopting those systems could be easier because of multiple state and federal incentive programs. And then, during normal use, they could apply settings to let their home energy system reduce their demand of the grid in response to utility needs without necessarily needing to conserve. During a summer heat wave, home batteries could discharge extra energy to the grid while those homes are still using air conditioning, saving the utility from rationing energy and creating rolling blackouts. Their EV could be charged from their solar and battery system, preventing further grid strain. And the utility could be lowering their costs – even when compensating these virtual power plants – because their customers are grid assets that provide a lower cost service than the current, traditional methods.

For these reasons, CHESSA asks the committee to issue a favorable report on HB1256.

Please reach out with any questions on solar and storage policy. CHESSA is here to be a resource to the committee.

Sincerely,



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