



29 February 2024

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

### **Testimony**

#### **HB1393: Electric System Planning – Scope and Funding**

#### **Position: Favorable**

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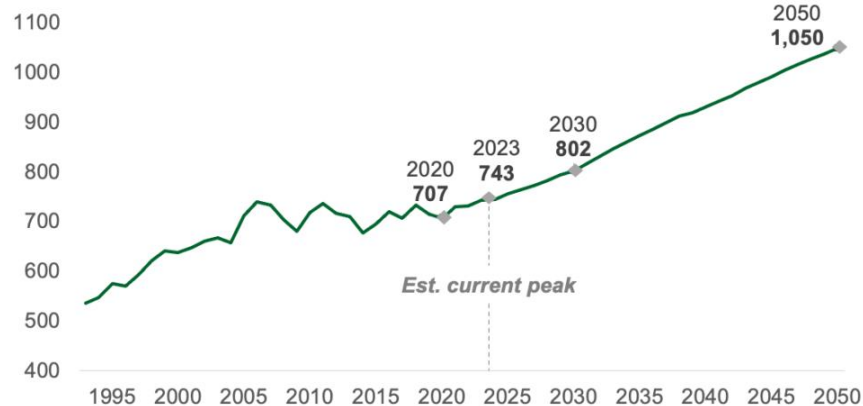
Chair Wilson, Vice Chair Crosby, Members of the Committee, thank you for the opportunity to testify on House Bill 1393, Electric System Planning – Scope and Funding. I am Robin Dutta, the Executive Director of the Chesapeake Solar and Storage Association (CHESSA). Our association has over 100 member 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 in order to realize a stable and affordable grid for all consumers.

I am here to provide testimony on HB 1393, Electric System Planning – Scope and Funding. It is imperative that the Public Service Commission utilize an all-of-the-above strategy to modernize the grid and include demand-side methods such as virtual power plants. Mainstream adoption of advanced energy technologies such as local solar and storage will unlock the lowest cost and more equitable path to a clean energy future.

#### **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. In order 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.

**US system peak demand, historical and projected, 1995-2050 (GW)**



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.

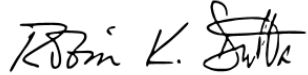
### **Re-Thinking the Electric Grid**

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. 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.

HB1393 will expand the scope of how the Public Service Commission considers grid modernization, and the methods by which to achieve distribution system resiliency, reliability, and affordability. The grid of the future cannot rely on 20<sup>th</sup> century electric grid principles. Otherwise, the runaway peak demand will cause runaway grid expansion and expense for all ratepayers. Virtual power plants and its grid benefits can be unlocked with the proper policies but before that can happen, its regulators need to start down the road of re-thinking the electric grid.

Thank you for the opportunity to testify. CHESSA requests a favorable report on HB 1393. Please reach out with any questions on solar and storage policy. CHESSA is here to be a resource to all committee members.

Sincerely,

A handwritten signature in black ink that reads "Robin K. Dutta". The signature is written in a cursive style with a large, stylized initial 'R'.

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