5 March 2024

Delegate Marc Korman, Chair
Environment and Transportation Committee
Room 251
House Office Building
Annapolis, Maryland 21401

Testimony
HB1265: Local Government – Building Permits for Residential Solar Energy and Residential Energy Storage Systems – Required Platform and Inspections

Position: Favorable

Chair Korman, Vice Chair Boyce, Members of the Committee, thank you for the opportunity to testify on House Bill 1265, Local Government – Building Permits for Residential Solar Energy and Residential Energy Storage Systems – Required Platform and Inspections. 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 favorable testimony on HB1265, Local Government – Building Permits for Residential Solar Energy and Residential Energy Storage Systems – Required Platform and Inspections. As residential solar and battery storage systems become more popular in Maryland, local governments will need improved resources to handle permitting and inspections. This bill would open new resources for counties to serve that exact purpose, such as the SolarAPP+ digital permitting tool.

Growing Need for Residential Solar and Storage

Residential solar has the potential to be a valuable grid asset. As Marylanders fully electrify their buildings and purchase electric vehicles, 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 the 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. Residential solar and storage can mitigate that peak demand at the source.

Access to solar unlocks many more options for families. Installing solar is often done in conjunction with installing home battery storage, and when coupled solar plus storage systems can provide back-up power when the grid goes down. Electric vehicle owners are also often solar owners. Solar only, and solar plus storage systems can help lower the cost of powering electric vehicles. A 2018 study from the non-profit Solar United Neighbors showed that surveyed participants were 66 percent more likely to own an electric vehicle if they owned solar. And researchers at the National Renewable Energy Laboratory published an scholarly journal article where they found that electric vehicle adoption could increase a household's likelihood of adopting solar for themselves.

This link is significant, and ties to the stability of Maryland's grid of the future. Residential solar, especially when paired with battery storage, can decrease the grid impacts of electric vehicles. It can save homeowners money on both EV charging and home energy usage. However, this link needs to be influencing energy policy, and HB366 can help fill this gap. In a 2023 report, the U.S. Department of Energy estimates that nationwide peak demand will increase by over 40 percent by 2050, largely from electric vehicle adoption. 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 unreasonable restrictions from community associations could hurt statewide clean energy goals in addition to preventing homeowners from choosing where they receive their energy.

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. When there are more distributed clean energy systems in communities, there are greater assets to increase reliability and resiliency. These solar systems can also be key grid assets that can support local energy demand and help prevent that runaway peak demand.

Easing the County Administrative Burden

The electrification transition has begun, and legislation like HB1265 can prepare local governments to better handle this new reality. Depending on the jurisdiction, obtaining a residential solar permit can take days, weeks, or even months. Delays can be due to inefficiencies in process as well as insufficient staffing. SolarAPP+, developed at the U.S. Department of Energy's National Renewable Energy Laboratory, is a software tool designed to speed up residential solar and storage permitting and review processes without sacrificing any of the necessary due diligence of the permitting process. It can fully digitize the permitting process and bring local governments into the 21st century. The results can be extraordinary.

SolarAPP+ is a free resource that has seen local government adoption across the country. There are already 235 communities that have signed up for SolarAPP+ voluntarily, including Montgomery County, Maryland. On average, the processing time for a solar permit is, on average, 12 days faster

in jurisdictions after they adopt and deploy SolarAPP+. On top of that, there are federal grants available to help counties adopt SolarAPP+. This bill would mandate digital solar permitting software tools by counties and local governments, but the federal resources offset any cost or training burden on the counties. The end result will be more solar, a more efficient solar permitting process, and less administrative burden for county officials.

For these reasons, CHESSA strongly supports HB1265. Achieving an equitable clean energy transition will take everyone's efforts. With SolarAPP+ digital permitting, local governments can play a big role in streamlining solar adoption and lowering costs for everyone.

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

Sincerely,

Robin K. Dutta
Executive Director (acting)
Chesapeake Solar and Storage Association
robin@chessa.org