Before the General Assembly of the State of Maryland

Senate Finance Committee
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Testimony of Leslie Ann Elder
Mid-Atlantic Regional Director
Coalition for Community Solar Access

SB 407: Electric – Net Energy Metering – Limit
FAVORABLE

Thank you for the opportunity to provide testimony on SB 407. I am the Mid-Atlantic Director for the Coalition for Community Solar Access (CCSA) where I am charged with implementing and maintaining community solar markets in Maryland, New Jersey, Pennsylvania, and Virginia.

CCSA is a national coalition of businesses and nonprofits working together to implement best practices for all community solar markets. Our mission is to empower all Maryland households and businesses that seek home grown energy sources through community solar. We work with customers, utilities, local stakeholders, allies and policymakers to develop and implement best practices that ensure community solar programs provide a win-win-win solution. The solution begins with the customer and the land owners. Our members are solar industry leaders and are engaged at every step of development, ensuring these best practices are not theoretical but are applied and practiced. We have members headquartered in Maryland and others who are investing here.

CSSA is strongly supportive of this legislation and is proud to partner with Chesapeake Solar and Storage Association (CHESSA) on this issue. As an industry, our members are grateful to Senator Kramer for his strong leadership and commitment to solar development.

In Maryland, systems eligible for net metering must be less than two megawatts (MW) in capacity or 200 percent of the owner's annual baseline electricity usage. Maryland electric utilities and cooperatives are required to allow all eligible customers to net meter until the total capacity of net metered systems in Maryland reaches 1,500 MW.

The Public Service Commission's (PSC) report on the Status of Net Metering in the State of Maryland, recommended the General Assembly should look for ways to expand the net metering cap before the current cap is reached. Senator Kramer's SB407 does just that, it raises the net metering cap from 1,500 MW to 3,000 MW. Enacting this legislation now will provide certainty into the market and will provide the PSC ample opportunity to review, regulate, and implement the expansion before the current net metering cap is reached.

Increasing the net metering cap will provide critical economic investments into Maryland and local municipalities through job creation, increased tax revenue, and critical cost savings to Maryland customers. Additionally, this simple legislative fix is critical in helping Maryland achieve its robust clean

energy goals by investing in local and distributed energy sources. This investment decreases the demand for importing dirty energy sources from neighboring states like Pennsylvania and ultimately will lead to Maryland becoming an energy independent state.

Net-metered solar significantly reduces demand-related costs because it displaces the need for generating capacity to meet periods of high demand, and the transmission and distribution system upgrades needed to deliver it to customers. Electricity demand is strongly correlated with solar insolation for the intuitive reason that when the sun is shining on solar panels, it is also shining on buildings and increasing air conditioning demand. Solar's output therefore reduces the need for building or retaining generating capacity to meet peak demand, and for upgrading the transmission and distribution system to deliver it to customers, ultimately leading to significant cost savings for all Marylanders.

Solar capacity value is typically around three times higher than its capacity factor (e.g., 100 MW of solar provides around 60 MW of capacity value and around 20 MW of average energy output), indicating the value of solar for meeting peak demand is significant relative to solar energy production. This is much higher than the capacity value to capacity factor ratio for the fossil-fired generation that provides the majority of customers' power.

A PJM's renewable integration study found solar capacity value in excess of 50% with wind and solar providing 20-30% of annual energy. More recent modeling by PJM confirms that solar marginal capacity value will remain high, with solar marginal capacity value contribution not dropping below 25% until very high penetrations (serving over 20% of peak load with solar alone) are achieved.

As stated earlier, adding solar to the power system has always caused the need for other forms of capacity to decrease, and never increased it. Even if a solar resource has zero output, peak demand is still what it was prior to the addition of the solar resource, as adding the solar resource has not increased peak demand. This is a critical element to meeting the ambitious clean energy goals for the state and bringing energy generation closer to home.

According to a new report released by Vibrant Clean Energy and Local Solar For All, the United States can transition to a clean electric grid and save $473 billion if we significantly scale local solar and along with utility-scale renewables. The most cost effective way to get to 95% emissions reductions is by building 247 GW of community and rooftop solar, 798 GW of utility-scale solar, and 802 GW of utility-scale wind.

More local solar means more direct and indirect benefits to communities such as jobs, increased economic development, increased resilience, and more equitable access to the benefits of renewables. By scaling and optimizing local solar at the distribution level and closer to customer load, we don't have to over-rely on the most expensive parts of the transmission system. These assets cost-effectively reshape the load, reducing bulk power system costs and smoothing volatility and variation in load across the system. This allows for a more efficient overall allocation of investments and better utilization of grid assets. Leveraging local solar will help Maryland achieve its unique energy demands and avoid costly

distribution system investments. Senator Kramer's SB407 will help put Maryland on track to achieve these goals.

Thank you for your time and consideration for SB407 and CCSA hopes we can count on your support.

Sincerely,

Leslie Ann Elder, Mid-Atlantic Director
Coalition for Community Solar Access