Committee: Economic Matters

Testimony on: HB1036 – Public Utilities - Generating Stations - Generation and

Siting (Renewable Energy Certainty Act)

Submitting: Deborah A. Cohn

Position: Favorable with Amendments

Hearing Date: February 26, 2025

Dear Chair Wilson and members of the Committee:

Thank you for your consideration of my testimony in support of HB1036 with amendments.

The Renewable Portfolio Standard (RPS) calls for 14.5% of Maryland's clean electricity to be contributed by solar energy by 2030. The State has consistently fallen short of adding the annual amount of new solar energy generation needed to attain this goal even after the annual targets for earlier years were reduced, requiring significantly larger increases in solar capacity in the outer years. As a result, in FY2023 Maryland utilities paid \$262m in Tier 1 alternative compliance payments (ACP) to the Strategic Energy Investment Fund (SEIF) in FY 2023. Paying ACPs is not the desired goal; we need installation of new solar energy generation systems. According to the 2023 Maryland Climate Pathways Report, solar generation must increase fivefold by 2031, with solar accounting for 33% of in-state energy generation.

According to the International Energy Agency (IEA) the rapid expansion of ever cheaper solar PV is expected to account for roughly half of global electricity demand growth in 2027, up from five percent in 2023. This growth rate results from the decreasing costs and ease of installing solar energy generating systems. Utility scale solar generating plants are the least expensive and fastest to deploy energy source in the world today. Costs for smaller scale distributed solar projects, such as community solar, have fallen as well. When combined with utility scale storage, their levelized cost of energy is lower than combined-cycle natural gas. The combination also provides dispatchable generation that is needed to stabilize the grid. As longer term thermal storage technologies, particularly molten salt storage which is the thermal storage most frequently paired with solar generating systems, become increasingly competitive, utility scale solar and storage can address the energy and reliability needs of Maryland without the long term economic and environmental risks posed by fossil fuel technologies.

4 https://www.utilitydive.com/news/solar-storage-projects-to-drive-utility-scale-deployment-of-batteries-na/551724/#:~:text=Storage%2Dplus%20PPAs%20are%20already%20less%20expensive%20than,in%2 0the%20United%20States%2C%20the%20report%20found.&text=This%20significant%20reduction%20in%20cost%20means%20that,even%20in%20markets%20without%20subsidies%2C%20BNEF%20said

¹ https://www.iea.org/reports/electricity-2025/executive-summary

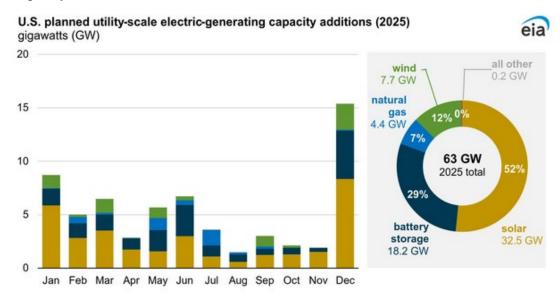
² https://pv-magazine-usa.com/2024/06/11/cheapest-source-of-fossil-fuel-generation-is-double-the-cost-of-utility-scale-solar/

³ Ibid.

⁵ https://www.sciencedirect.com/science/article/abs/pii/S2352152X21011257

⁶ https://www.energy.gov/eere/solar/solar-integration-solar-energy-and-storage-basics

According to the U.S. Energy Information Administration, solar and battery storage account for 81 percent of expected total capacity additions, with solar making up over 50 percent of the increase. In 2024, generators added 30GW of utility-scale solar on the grid, accounting for 61 percent of capacity additions.⁷



(2025). Retrieved from Energy Information Administration.

Maryland, however, has been slow to participate in this global trend, due to dysfunctional policies in the RPS, excessive interconnection delays at PJM, and some local prohibitions of solar energy plants. HB1036 addresses some of these issues with rules related to the siting of critical large-scale solar infrastructure throughout the state.

HB1036 would provide reasonable setbacks on the property, landscaping and visual barriers, prohibition of night lighting, fencing restrictions, and soil conservation at the site. These I support.

While I strongly support rapid increases in solar and storage projects in Maryland, I am deeply troubled, however, by the bad precedent set by a complete preemption of local review and regulation of solar projects. One day preemption of local review accelerates a goal one supports; the next day it comes back to bite one when it is used to accelerate a deeply troubling goal. One needs to be prepared to accept the compromises the political process produces, even when that stymies one's policy preferences.

The bill also does not address certain issues which a few amendments could address:

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⁷ https://www.eia.gov/todayinenergy/detail.php?id=64586

- Currently, four hour LI batteries are the industry standard for battery energy storage systems (BESS). The recently-adopted NFPA855 makes these systems vastly safer. The bill should require that any new LI BESS systems incorporate that or a safer standard.
- Inadequate incentives in the RPS are often cited as key roadblocks to widespread adoption of utility scale solar. Adding SREC II incentives as currently proposed in HB398 ("Affordable Abundant Clean Energy Act") are preferable to precluding further decline in the ACP cost. As previously noted, the current ACP is already too low to incentivize installation of adequate amounts of new solar generating systems.
- The blanket prohibition on county zoning and regulations pertaining to solar siting is a legitimate concern for local governments and residents and sets a dangerous precedent. The bill should provide an exemption to the prohibitions on county regulation or a specific PSC review process in instances where a county holds an agricultural preservation or conservation easement on a property proposed for solar development. Easements represent county ownership of one or more property rights that should not be rendered meaningless by state law.

While some are concerned that utility scale solar would irreparably harm the agricultural industry and the rural way of life in the state, the number of acres needed for solar generation are small as a percent of the total state acreage. The likely acreage needed is in the range of 12,000 acres statewide or less than 6/10 of 1 percent of all Maryland farmland. Moreover, smaller projects, such as community solar, may be just what is needed to help a farming family continue using their smaller acreage for farming, relying on the set aside of a small portion of the property for more lucrative solar generating stations to reduce overall risk. Providing the landowner that option recognizes a landowner's general right to determine the highest and best use of his or her land. Having a rational and effective process to incentivize and site solar is a way to address these competing, legitimate concerns.

For these reasons, I support HB1036 as amended and urge a FAVORABLE WITH AMENDMENTS report in Committee.