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Committee: Education, Energy, and the Environment Testimony on: SB357 "Renewable Energy Portfolio Standard – Solar Energy – Compliance Fees" Position: Support Hearing Date: February 14, 2023

The Maryland Chapter of the Sierra Club strongly supports SB357. The bill will adjust the solar Alternative Compliance Payments (ACPs) paid for shortfalls of solar energy development to maintain them at their current value. As explained below, solar ACPs effectively set an upper limit for the value of one of the most important incentives for solar development. If this bill is not enacted, the solar ACPs and, most importantly, this incentive, will decrease in value by more than half by 2030, during a time when Maryland needs to be accelerating solar development.

Why This Bill is Needed

Increasing Maryland's solar energy capacity is an essential part of the State's efforts to achieve net-zero greenhouse gas emissions by 2045, the target set last year by the Climate Solutions Now Act (CSNA). The State's solar-specific target (also established in statute) is for solar energy to comprise 14.5% of the State's total electricity consumption by 2030. To accomplish this, state law includes interim targets to increase solar capacity each year up to the 14.5% amount. The Public Service Commission estimates that the 14.5% amount represents about 6,200 megawatts (MW) of solar. This is the minimum needed to meet Maryland's greenhouse gas reduction goal of a 60% reduction (compared to 2006 levels) by 2031, a goal that also was set by the CSNA.

For a variety of reasons, however, solar development continues to be below the pace needed to meet the interim targets.¹ The Solar Energy Industries Association (SEIA) estimates that Maryland had about 1,600 MW of solar

at the end of 2022. This means that Maryland will need to develop 4,600 MW of solar from 2023 to 2030 to achieve the 14.5% target. This would require Maryland to more than double its current rate of solar development.²

This graph shows how Maryland's solar growth rate will leave us far short of the 14.5% target. The blue solid and dotted lines represent the year-by-year solar targets, as amended by the General Assembly in 2019 and again in 2021. The orange line represents the actual 2015-2021 rate and a SEIA estimate of the 2022-2026 rate.³



Maryland solar progress

¹ These reasons include delays associated with receiving approval from the regional transmission system for utility-scale solar projects, current limitations to the community solar program, the impact of the pandemic, and other factors.

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 70,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

² Reaching the 2030 target will require building an average of 575 MW each year between 2023 and 2030; the greatest annual amount of solar built in the state was about 275 MW in 2016, when the value of the solar incentive was much higher.

³ The graph is labeled "RPS solar requirements vs. 2015-2021 actual" since the solar requirements in state law are a part of the State's Renewable Portfolio Standard (RPS).

Clearly, Maryland needs to accelerate its solar development. Yet, current law is set to <u>reduce</u> the current solar incentive by more than half in the next few years.⁴

This legislation will <u>maintain</u> the solar incentive at its current value at least until 2030. This will provide important dependability in the financing of solar projects, large and small. Along with the federal Investment Tax Credit (ITC) for solar development (extended under the Inflation Reduction Act), maintaining the state incentive at its current value will establish a basic floor for financial planning of solar projects, encouraging continued growth.

Maryland (as well as the federal government) will need additional actions to accelerate solar development. The Maryland solar incentive and the ITC provide an important foundation. However, by themselves, they have not provided enough incentive to actually increase the growth rate, especially for more costly forms of solar on rooftops, parking lots, and disturbed lands. solar projects combined with agriculture, and solar projects serving vulnerable or underserved communities or large numbers of low-income households.⁵

The Connection of Compliance Fees with the Value of the Solar Incentive

The incentive for solar generation growth created by the state's Renewable Portfolio Standard is the Solar Renewable Energy Credit (SREC). Each megawatt-hour of energy generated by a solar array earns one SREC. Solar array owners sell SRECs through a market process to utilities.

State law indirectly sets the dollar value of an SREC by setting the value of the solar ACP. Utilities must annually purchase a minimum amount of solar energy, represented by purchase of SRECs; but, if that minimum is not achieved, they instead must submit a solar ACP to the State.⁶ As a matter of economics, utilities generally will not buy SRECs if the SREC cost exceeds the solar ACP cost; thus, the state-determined cost of the solar ACP effectively sets an upper limit for the SREC value.

In 2022, the solar ACP rate dropped from 8 cents per kwh (\$80 per megawatt-hour) to 6 cents per kwh (\$60 per MWh). As a result, the value of SRECs immediately fell to just below \$60. The solar ACP value is set to drop again in two more years (in 2025) and will decline every year after that, landing at 2.25 cents per kwh (\$22.50 per MWh) by 2030, taking SREC values down as well.

This legislation will maintain the solar ACP rate at 6 cents per kwh, and thus the SREC value at about \$60.

Conclusion

The Maryland Chapter of the Sierra Club strongly supports SB357 as an essential component of a set of actions needed to accelerate solar development and achieve Maryland's clean energy and greenhouse gas reduction goals.

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⁴ The General Assembly established a declining value for the incentive based on the view that the rate of solar growth would substantially increase in the early 2020s such that there would be a declining need for the incentive.

⁵ For this reason, the Chapter is supporting additional legislation that will provide such incentives.

⁶ The solar ACP is equal to the amount by which a utility fell short of the solar target – measured in kilowatt hours (kwh) – multiplied by a rate per kwh specified in state law.