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MAREC ACTION Testimony to the Senate Consumer Protection and Professional Licensure and Senate Environmental Resources and Energy Committee on the Alternative Energy Portfolio Standards (AEPS) Act

Chairs Yaw, Yudichak, Tomlinson and Boscola and Members of the Joint Committees, I am Bruce Burcat the Executive Director of the MAREC Action. I appreciate the opportunity to provide testimony on the Alternative Energy Portfolio Standard (AEPS) Act, an Act that has been an economic driver for Pennsylvania. I commend the committees for taking a closer look at the AEPS, which needs to be updated to bring the Commonwealth the greater benefits of truly renewable resources, like wind and solar energy.

MAREC Action is an organization representing many of the leading utility-scale wind and solar developers, wind turbine manufacturers and public interest organizations that support the development of renewable energy in the region. MAREC action members have developed many of the renewable energy projects that supply carbon free energy to Pennsylvania.

The AEPS was enacted in 2004 to help bring emissions free energy generation and economic development benefits from renewable energy to the State. The target in the AEPS ultimately calls for only 8% of Pennsylvania's generation supply to come from renewable energy resources by May 31, 2021 and only 0.5% of these requirements must come from solar energy. On May 31, 2021, the requirement levels out at 8% and there no longer are requirements on default supplier and electric generation suppliers to procure *additional* amounts of renewable energy. The goals of the AEPS are being met. However, MAREC Action believes that it is time for Pennsylvania to take another look at the AEPS to update the Act to current standards and to build on the success of the program and increase the standards.

As far as wind power is concerned, the Commonwealth has over 1000 direct industry jobs as a result of the AEPS. There has been \$2.9 billion dollars of investment through 2018 and more to come. Tax payments as a result of these projects are approximately \$2.5 million dollars annually and lease payments to farmers and other landowners are estimated to be between \$1 - \$5 million dollars per year. There are 29 active wind-related manufacturing facilities in the state. There is

nearly 1400 MW of wind energy installed capacity making Pennsylvania the 18th ranked state for wind capacity in the nation¹ and first in the Mid-Atlantic region.

Solar energy, both utility-scale and distributed generation, provides a similar record of benefits from the resource being sited in Pennsylvania. While wind and solar generation have been a major benefit to the state, given the state's size and the regional and national landscape for renewable energy, Pennsylvania is lagging and is no longer positioned to gain significant benefits from renewable energy, especially after the 2021 final targets are met under the current AEPS.

MAREC Action would recommend your strong consideration of Senate Bill 600 which was just introduced that, if enacted, would extend the AEPS to 2030 with a 30% target for Tier I renewables, with a minimum of 10% having to come from solar energy located within PA. For comparison, New York and New Jersey have 50% renewable energy standards. The General Assembly in Maryland just passed legislation to increase its standard to 50% and Washington, D.C. has a new target for 100% renewables. We believe that Pennsylvania is well-positioned to move to a much higher standard than the current one.

What does this mean? The economic benefits of moving to a 30% goal means that the job creation in Pennsylvania will increase exponentially. *The top two fastest growing jobs in the United States are solar installer and wind technician.*² According to the U.S. Energy Information Administration, increasing Pennsylvania's target to 10 percent solar by 2030 would create about 30,000 direct jobs and upwards of 100,000 jobs throughout the supply chain, while providing economic benefits of up to \$1.6 billion annually through 2030.³ Currently there are about 8,700 renewable energy jobs in the state⁴

For both wind and solar that gets sited in Pennsylvania, farmers and other landowners will benefit from increased development and use of their land for projects. State and local tax payments will also increase substantially as a result of such development. Farmers in Pennsylvania, and in a number of places around the U.S., rely on renewable energy development as a reliable cash crop and are able to continue to farm the vast majority of their land.

In addition to substantial economic benefits, wind and solar provide substantial benefits to the environment. These resources use virtually no water in their generation process saving water consumption of nearly 1.8 billion gallons annually. There are no carbon dioxide emissions from these resources, so nearly 3.4 million metric tons of carbon dioxide

¹ Source: American Wind Energy State Fact Sheet for Pennsylvania:

<https://www.awea.org/Awea/media/Resources/StateFactSheets/Pennsylvania.pdf>

² Source: Fortune Magazine, March 2019 based on the Bureau of Labor Statistics: <http://fortune.com/2019/03/11/the-20-fastest-growing-jobs-in-america-and-how-much-they-pay/>

³ Source: U.S. Energy Information Administration, Bloomberg New Energy Finance, Business Council for Sustainable Energy: <https://www.bcse.org/wp-content/uploads/Sustainable-Energy-in-America-Factbook-2018-Updated-Overview.pdf>

⁴ Source: vi www.e2.org/cleanjobs

are avoided under the current standards.⁵ Again, an increase in the requirements for the AEPS would increase these savings almost four times if the 30% goal is adopted.

While we think that a very significant portion of the 30% target would come from in-state resources, including the entire solar carve-out, my organization stresses that any bill needs to strike a reasonable balance between in-state resources and out-of-state resources for compliance purposes. My members believe in a competitive landscape and allowing for wind and solar to compete in Tier I outside of the solar carve-out targets (10%) is an essential element of a well-designed program. Allowing some in-state resources to compete with out-of-state resources makes sense to help find the lower cost for compliance and keeping costs of the entire program to a minimum. The current state AEPS was designed this way and all of the state renewable energy programs regionally conform with this approach I believe Senate Bill 600 preserves this concept.

SB 600 also proposes a new approach that will save electric consumers money while meeting the goal of more renewables in the state of Pennsylvania. The bill calls for a portion of the AEPS to be met through long-term contracts for renewable energy. Getting a portion of our energy through long-term contracts is a smart approach from a diversified portfolio perspective as most energy and renewable energy credits (RECs) today in Pennsylvania are procured on a short-term basis. Long-term contracts for renewable energy save electric consumers money and provide greater assurance that projects will be able to move forward. These contracts minimize the overall cost of projects by reducing project risk, thereby reducing the cost of financing projects and ultimately the cost of renewable energy to electric consumers. Here are some examples of the benefits of renewable long-term contracts:

1. Fortune 500 companies (Wal-Mart, General Motors, Proctor & Gamble, Target, and many more) that are procuring renewable energy are using long-term contracts to save money.
2. DC Government is already saving money through long-term contracts – the city government signed a long-term contract for wind energy and projects \$45 million in taxpayer savings.
3. MA projects \$682 million in ratepayer savings through long-term contracts to meet RPS requirements.
4. CT projects reducing ratepayers' electricity costs by \$219 million to meet RPS requirements through long-term contracts.
5. GA and AL have pursued long-term contracts for renewables. Southern Company's Alabama Power stated that the "...price of energy from the wind facility is expected to be lower than the cost the company would incur to

⁵ Source: American Wind Energy State Fact Sheet for Pennsylvania:
<https://www.awea.org/Awea/media/Resources/StateFactSheets/Pennsylvania.pdf>

produce that energy from its own resources...with **the resulting energy savings flowing directly to the Company's customers.**"

We have heard some concern that there may be insufficient resources to accommodate additional wind energy resources in Pennsylvania. We disagree and the facts establish a much different level of capacity for wind resources. First, we know that a 90 MW project is under construction and 68 MW of capacity are currently in advanced development in the State. Moreover, land-based technical wind potential at 80 m hub heights show the potential for additional wind energy capacity of 108,986 MW.⁶ Recent developments in turbine technologies would indicate that this number would be significantly higher. Moreover, the use of long-term contracting will bring down the costs of development of wind and solar facilities, allowing for more development in Pennsylvania.

Finally, I would just emphasize that Tier I is already comprised with a number of other resources that under the Act are deemed renewable energy. We strongly believe that Tier I should not be opened up to any other resource for consideration as that would lead to watering down the benefits of Tier I resources. Currently the State has benefitted from economic benefits for new renewable energy. In contrast the other resources desiring to be in Tier I are not usually new resources that will provide economic development benefits of wind and solar energy; and generally, do not have the environmental qualities that are desirable for Tier I consideration.

I want to thank the joint committees for this opportunity to comment on the AEPS. I will say that the General Assembly's efforts with the AEPS to this point has already increased economic development in the State, helped create a better environment for its citizens and served to drive down the cost of renewable energy resources, like wind and solar energy. Nevertheless, we believe that this is the right moment in time to act to significantly improve the AEPS.

⁶ *Id.*