

Lisa Shulock Philadelphia Energy Authority Testimony before the Pennsylvania House Consumer Protection, Technology, and Utilities Committee on HB 1032 May 2, 2023

Good morning, I'm Lisa Shulock, Director of Commercial Programs with the Philadelphia Energy Authority. Thank you to members of the House Consumer Protection, Technology, and Utilities Committee for having me today to discuss Representative Fiedler's Bill HB 1032, establishing the Pennsylvania Solar for Schools Grant Program.

The Philadelphia Energy Authority is an independent municipal authority focused on building a robust, equitable clean energy economy for Philadelphia. In 2016, PEA and City Council President Darrell Clarke launched the Philadelphia Energy Campaign, a \$1 billion, 10-year investment in energy efficiency and clean energy projects to create 10,000 jobs.

The Campaign has deployed more than \$380MM in projects and created 3,275 jobs in total from work in five sectors: municipal, affordable housing, small business, commercial and industrial, and *schools*. We provide technical assistance to the School District of Philadelphia and run a workforce development program called Bright Solar Futures, a 3-year Career and Technical Education Vocational Program, the first-of-its-kind in the nation for careers in solar and clean energy, at Frankford High School in Philadelphia.

Deploying Solar for Schools at scale across the Commonwealth has the potential to reduce and stabilize costs, advance environmental education, and create family-sustaining local jobs. Today, I'll focus on the impact the PA Solar for Schools Grant Program can have using our experience with the School District of Philadelphia as an example.

The School District of Philadelphia has over 300 schools and related facilities and spends about \$45 million a year on energy. The District has identified a backlog of over \$4.5 billion in deferred maintenance and much-needed capital improvements that have accumulated over decades due to persistent budget constraints. PEA partners with the District to use energy efficiency and solar as tools for subsidizing and addressing these capital needs and improving learning environments.

While we've <u>proven the case</u> for energy efficiency through the use of the <u>PA Guaranteed Energy</u> <u>Savings Act</u> or GESA to procure, manage, and guarantee results from \$250MM dollars worth of retrofits to its school buildings, the District has untapped potential when it comes to solar energy.

PEA has authored reports and provided the District technical analysis on the economic impact of on-site solar and its feasibility with existing rooftop conditions and site conditions for ground-mounted systems. Our analysis contemplated a power purchase agreement model where the developer pays the upfront cost of the installation and owns and operates the solar array over the term of the agreement to ensure that the District is not responsible for ongoing operations and maintenance of the system. In our four-school analysis, on-site solar offset 45% of the electricity consumption for the schools, has a positive net present value, and serves as a hedge against future electricity price uncertainty. The analysis we did for the District showed initial installed costs ranging from \$310,000 for the smallest system to \$650,000 for the largest system. Our recommendation to the District is to release a request for proposals for a five-school pilot to demonstrate the numerous financial and educational benefits of hosting solar on site.

Since producing this technical analysis, there is much stronger support for on-site solar from the federal government. Congress passed the Inflation Reduction Act or the IRA, a once-in-a-generation investment in clean energy. The IRA has a key provision - direct payment - that extends tax incentives for solar to tax-exempt entities, including schools, for solar. The 30% tax credit applies not only to solar system costs but also includes the costs to connect the system to the grid and battery storage to improve the resilience of a school, even when the grid goes down. Some school communities may also be eligible for additional tax incentives if they are located in designated energy communities or low-income communities or use a certain percentage of American-made products in their projects.

We believe that the grants and technical assistance proposed by HB 1032 will catalyze SDP and many other districts across the state to develop plans for solar projects. These projects are complex - even when the economics are strong, districts need financial and technical support to pursue them.

There has never been a better time for investment by the state government in solar schools. Targeted support by the legislature in the form of grants and technical assistance from the PA Department of Community and Economic Development will help catalyze statewide adoption of on-site solar, maximizing our window to bring much needed federal funding to Pennsylvania's schools. This critical investment in on-site solar will help improve school infrastructure and save money that could otherwise be spent on core needs. This is an upfront investment with long-term benefits.

An added bonus of on-site solar is local family-sustaining job creation, which you will hear about today from the PA Building Trades, but also the opportunity for students to gain exposure to and experience in solar installation.

Bright Solar Futures is designed to fill the careers created by our own Solarize Philly Program and for other positions in the fast-growing clean energy economy in Philadelphia and Pennsylvania with our well-trained, local, diverse workforce. Students will find careers with local

solar installers, designers and developers, with our local utilities, as apprentices with the local building trades, and others.

Bright Solar Futures students at Frankford HS have been learning about solar and battery storage installation, design, sales, weatherization, construction basics, and job site safety in a classroom specially equipped with a state-of-the-art solar training lab complete with a simulated roof. The BSF curriculum is approved by the PA Department of Education and is available for use by any district in Pennsylvania that's interested in starting their own solar CTE program.

Our students at Frankford recently hosted the U.S. Secretary of Energy Jennifer Granholm and U.S. Senator Bob Casey to show their skills and demonstrate what the future clean energy workforce looks like and to demonstrate how Inflation Reduction Act dollars can be deployed in Pennsylvania. We are excited to see the first class of BSF students that went through the 3 year curriculum is graduating this June.

We fully support the Pennsylvania Solar for Schools Grant Program and are hopeful that we will capitalize on this once-in-a-generation opportunity for our schools to reduce and stabilize costs, advance environmental education, and create local jobs.

I'm happy to follow-up with additional resources. Thank you very much for your time.