



Prepared Comments of

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Before the

Senate Consumer Protection & Professional Licensure Committee

Public hearing on solar energy's impact on Pennsylvania ratepayers

June 20, 2023

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Senator Patrick Stefano, Chair
Senator Lisa Boscola, Minority Chair
Senate Consumer Protection & Professional Licensure Committee
Hearing Room 1, North Office Building
Harrisburg, PA 17120

Re: Public hearing on solar energy's impact on Pennsylvania ratepayers

Dear Senator Stefano, Senator Boscola, and members of the Committee:

Please accept the enclosed comments assembled for the Senate Consumer Protection & Professional Licensure Committee (Committee) when considering solar energy's impact on Pennsylvania ratepayers during the Committee's public hearing scheduled for Tuesday, June 20, 2023. These comments are being submitted on behalf of the Pennsylvania Solar Center, a nonprofit, nonpartisan organization with the vision of our state becoming a national renewable energy leader through rapid and broad expansion of in-state solar generation in order to build more resilient communities and with a goal that all Pennsylvanians can benefit from solar energy

Pennsylvania's primary electricity generation sources have rapidly and drastically changed over the past decade, requiring new dependencies on resources susceptible to market and geopolitical volatility. Pennsylvania's lack of diversity in its electricity generation options has put Pennsylvanians at risk of higher and more unstable electricity prices as experienced during the Summer of 2022.¹ As Pennsylvania's electricity mix continues to change, the Committee must consider the benefits of diversifying the Commonwealth's electricity generation portfolio by adding more renewable energy resources to insulate electricity ratepayers from volatility in other energy markets, stabilize electricity rates and lower consumer energy bills. In order to diversify energy sources in Pennsylvania in the short term, Pennsylvania must expand the Alternative Energy Portfolio Standards (AEPS) goals for Tier I, enable community solar and protect the core net metering benefits for distributed generation.

BACKGROUND

The composition of Pennsylvania's existing electricity generation sources is important when analyzing any energy resources impacts on ratepayers. Over the past decade, Pennsylvania's electricity sector has experienced a tremendous shift in its primary electric generation resources. According to the most recent Pennsylvania Public Utility Commission (PA PUC) Alternative Energy Portfolio Standards Act of 2004 (AEPS) Compliance Report issued in 2022², coal accounted for 48% of Pennsylvania's electricity generation and natural gas accounted for 15% in 2010. In 2022, over 50% of electricity was generated using natural gas and 11.5% was generated by coal. This relatively rapid shift in primary electricity generation resources infuses new risks and uncertainties for Electric Distribution Companies (EDCs), Electric Generation Suppliers (EGSs) and ultimately ratepayers.

¹ Pennsylvania Public Utility Commission. (2022, May 9). *PUC alerts consumers of June 1 price changes for electric generation*. PA PUC. <https://www.puc.pa.gov/press-release/2022/puc-alerts-consumers-of-june-1-price-changes-for-electric-generation>

² Pennsylvania Public Utility Commission in cooperation with the Pennsylvania Department of Environmental Protection. (2022). *Alternative Energy Portfolio Standards Act of 2004 Compliance for Reporting Year 2021-2022*. Pennsylvania Alternative Energy Portfolio Standard Program. <https://pennaeps.com/wp-content/uploads/2023/03/aeps-2022-report-final-032223- dm.pdf>

Consistent among all energy resources, the impacts of solar energy on Pennsylvania ratepayers is proportional to its contributions to total electricity generation. Of the total electricity generated in Pennsylvania in 2022, renewables provided 4.5%.³ Included in the renewable's category, solar provided less than 1% (0.4%) of Pennsylvania's net electricity in-state generation.⁴

Pennsylvania's Public Utility Code requires electric utilities and electricity suppliers to purchase power on the competitive wholesale electricity markets which is then sold to end-use customers.⁵ Under today's restructured electric industry,⁶ electricity consumers are mostly insulated from severe price fluctuations because electricity prices are mostly determined by the lowest cost resource bid on the wholesale electricity market. However, when a majority of electricity is generated by a single energy resource, the cost of electricity becomes more closely coupled with the cost of that energy resource and the associated market dynamics of the resource that electricity generation is relied on. This scenario was demonstrated in 2022 when, as the PA PUC noted, "higher wholesale market prices for electricity, fueled in large part by shifts in supply and demand for natural gas, have increased purchasing costs for electric distribution companies (EDCs)..."⁷. As noted, natural gas accounted for over 50% of Pennsylvania's electricity generation in 2022. Natural gas also accounts for a majority of electricity generation in the PJM's service territory.⁸ Unpredictable domestic and geopolitical conditions have caused natural gas prices to become uncharacteristically unstable, consequently causing electricity prices in Pennsylvania to become uncharacteristically unstable and negatively impacting electricity ratepayers.

The security of Pennsylvania's energy costs is reliant on many factors, but diversification, particularly with renewables, minimizes the risk of any energy resource's potential to unpredictably disrupt other energy markets and negatively impact ratepayers. The Committee is strongly encouraged to consider the risks and resulting costs to ratepayers by allowing any energy resource to comprise a majority share of Pennsylvania's electricity generation. The following graph titled "Annual End of Year PTC for Pennsylvania EDCs (\$/kWh) 2018-2022" and table titled "Annual End of Year YOY % PTC Change" highlight the recent price increases experienced by Pennsylvania ratepayers as a result of majority reliance on one energy resource for electricity generation.⁹ We encourage the Committee to consider analyzing the ratepayer cost of limited electric generation diversity as well as cost trends that could result from not requiring a more diverse electric generation portfolio. It is the opinion of the PA Solar Center that the largest current risk to ratepayers comes from the state's lack of action to diversify its energy mix, and ratepayers will continue to be subjected to price shocks from energy resources susceptible to volatility, such as of natural gas, unless Pennsylvania's limited energy diversification issue is remedied.

³ Pennsylvania Public Utility Commission in cooperation with the Pennsylvania Department of Environmental Protection. (2022). *Alternative Energy Portfolio Standards Act of 2004 Compliance for Reporting Year 2021-2022*. Pennsylvania Alternative Energy Portfolio Standard Program. <https://pennaeps.com/wp-content/uploads/2023/03/aeps-2022-report-final-032223-dm.pdf>

⁴ Pennsylvania Department of Environmental Protection. (accessed on June 16, 2023). *Finding Pennsylvania's Solar Future*. <https://www.dep.pa.gov/Business/Energy/OfficeofPollutionPrevention/SolarFuture/Pages/Finding-Pennsylvania%E2%80%99s-Solar-Future.aspx>

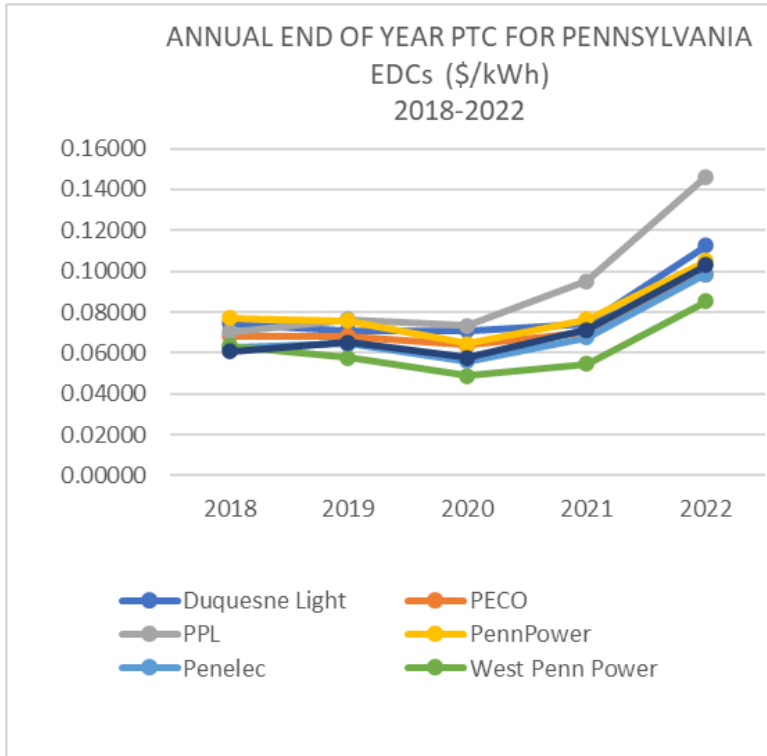
⁵ 52 Pa. Code Ch. 54. Electricity Generation Customer Choice

⁶ Act No. 138 of 1996

⁷ Pennsylvania Public Utility Commission. (2022, May 9). *PUC alerts consumers of June 1 price changes for electric generation*. PA PUC. <https://www.puc.pa.gov/press-release/2022/puc-alerts-consumers-of-june-1-price-changes-for-electric-generation>

⁸ PJM Interconnection. (2023, June 16). *PJM - Markets & Operations*. PJM. <https://www.pjm.com/markets-and-operations.aspx>

⁹ PA Power Switch the Official Electric Shopping Website of the Pennsylvania Public Utility Commission. (2023, June 16). *Shop for your home | PA power switch*. PA Power Switch. <https://www.papowerswitch.com/shop-for-electricity/shop-for-your-home/>



ANNUAL END OF YEAR YOY % PRICE TO COMPARE CHANGE

	2019	2020	2021	2022
Duquesne Light	-4.70%	+0.14%	+4.22%	+51.82%
PECO	+0.15%	-6.75%	+10.24%	+40.36%
PPL	+8.41%	-4.13%	+29.86%	+53.78%
PennPower	-1.82%	-14.83%	+18.77%	+37.27%
Penelec	+2.54%	-13.21%	+20.78%	+45.76%
West Penn Power	-9.29%	-15.09%	+11.37%	+56.36%
Met-Ed	+7.25%	-11.57%	+23.57%	+44.83%

Data included in graph and table above retrieved from PA Power Switch, The Official Electric Shopping Website of the Pennsylvania Public Utility Commission. <https://www.papowerswitch.com/shop-for-electricity/shop-for-your-home/>

To protect ratepayers from future price fluctuations, Pennsylvania must diversify its electricity mix by increasing its renewable energy generation goals from the current 8% goal defined in the Alternative Energy Portfolio Standards Act of 2004 (AEPS) to 30% by 2030. The U.S. average for a state’s utility-scale net electricity generation that comes from renewables is 24.5%, but in Pennsylvania, the Commonwealth currently gets less than 4.0% from renewables, which is a direct result of Pennsylvania’s outdated AEPS.¹⁰

¹⁰ U.S. Energy Information Administration. (2023, June 16). *State energy profile data*. U.S. Energy Information Administration (EIA). <https://www.eia.gov/state/data.php?sid=PA>

THE ALTERNATIVE ENERGY PORTFOLIO STANDARDS ACT OF 2004 (AEPS)

The most effective and proven mechanism for diversifying Pennsylvania’s electricity mix has been and continues to be the AEPS. The AEPS framework mandates that EDCs and EGSs purchase and sell the least cost resource through a competitive procurement process to meet incremental purchasing of alternative electricity generation resources. It requires electricity to be purchased from a diverse portfolio of electricity generation sources which protects consumers from having one resource with too much influence on electricity prices. The AEPS also encourages “the sale of electric energy generated from renewable and environmentally beneficial sources,”¹¹ recognizing the opportunity for innovation in clean energy and environmental protection in Pennsylvania’s electricity generation sector.

The AEPS Tier I renewable resources provides multiple benefits to ratepayers, and offers some of the lowest cost electricity available. For one, the fuel sources for wind turbines and solar panels are free, providing for near zero variable operating costs. The primary cost of solar and wind energy is focused on the initial capital needed for labor, equipment, and the cost of construction. These initial costs are incurred at the beginning of a solar and wind electricity generation asset’s life and remain largely unchanged for the lifetime of the system which can be 30 years or more. This combination of very low operating costs and fixed capital costs provides a stable, reliable, and very low price offering for electricity generated by wind and solar on the wholesale market.

Currently, the AEPS requires 18% of Pennsylvania’s electricity bought by consumers to come from alternative sources, with only 8% coming from renewable resources, and only 0.5% required from in-state solar. These goals, established in 2004, were easily achieved by 2021, a timeframe mandated in the AEPS. Since its adoption, the AEPS has successfully delivered numerous economic benefits to farmers, commercial building owners, homeowners, local governments, and businesses across Pennsylvania. Large institutions such as universities, large businesses, municipalities and others are entering into long-term contracts to purchase power from utility-scale solar projects that are delivering stable and reduced energy costs for 20 years or more. When the AEPS was adopted, Pennsylvania’s solar industry was non-existent. Today, over 1,125 MW of solar capacity is installed across Pennsylvania with over 40,000 solar installations, enough to power 139,182 homes, activating 4,188 jobs and attracting over \$3.1 billion in investment.¹²

The primary policy in Pennsylvania that supports homeowners, businesses, farmers, schools, and municipalities that install solar energy systems on their properties is the AEPS. The AEPS allows these stakeholders that install solar on their property to obtain a credit on their electricity bill for the energy produced from the solar system, a process called net metering. On a monthly basis throughout the year, onsite solar owners receive credit for excess generation that provides compensation for energy generated and provided to the grid. Net metering is an important policy to build renewable energy markets, and the PA Solar Center strongly urges that the state keep net metering rules intact for the foreseeable future. There may be some opportunity for reform once the state reaches a much higher penetration of solar as other states have seen, but altering the basic net metering rules at this time would cause irreparable damage to the distributed solar market at a time when the state should be focusing on building a strong renewables base. Further, there may be some opportunity to review excess generation and so-called “merchant generators.”

In addition, every 1,000 kWh of generation from a renewable energy system earns one Alternative Energy Credit (AEC). This AEC is earned by the owner of the solar array which can be sold to EDCs and EGSs that are required to purchase AECs to meet their obligated amount of credits to satisfy the EDCs AEPS requirements. Oftentimes, solar owners will sell AECs to companies that aggregate AECs from across the United States to

¹¹ Act No. 213 of 2004

¹² Solar Energy Industries Association. (2023, June 16). *Pennsylvania Solar*. SEIA. <https://www.seia.org/state-solar-policy/pennsylvania-solar>

purchase from generators and sell to EDCs that need to meet AEPS obligations.

The cost of these benefits from the AEPS is borne by electricity customers in Pennsylvania, and the 2020 AEPS Compliance Report calculated that “approximately \$0.012 (1.2 cents) of every electric service-related dollar is spent on AEPS compliance.”¹³ Further, when compared to other states with restructured electricity markets that have adopted policies similar to the AEPS, Pennsylvania ranks as one of the lowest costs of compliance for electric utilities purchasing Alternative Energy Credits (AECs) and Alternative Compliance Payments (ACPs).¹⁴ Comparing the relative benefits enabled by the AEPS to its costs is difficult, but it is unquestionable that the AEPS has contributed to the growth of new electricity generation sectors in Pennsylvania that are in strong positions to support the stabilization of Pennsylvania’s electricity prices, strengthen energy security and ensure freedom from external threats to electricity prices.

SOLAR ENERGY’S BENEFITS TO PENNSYLVANIA’S RATEPAYERS

Completed in 2018, Pennsylvania’s Department of Environmental Protection Energy Programs Office assembled a statewide partnership of experts to collaborate over a year to identify strategies to achieve 10% increase in solar powered electricity.¹⁵ “Pennsylvania’s Solar Future Plan” identified fifteen strategies for Pennsylvania to increase electricity generation from in-state solar energy. It found that moving to 10% in-state solar on Pennsylvania’s grid decreases wholesale electricity price while creating tens of thousands of jobs and billions in economic benefit to local communities and to the state without compromising grid reliability. Solar energy is growing in Pennsylvania, however, solar currently provides less than 1% of Pennsylvania’s electricity while over a quarter of the United States is currently achieving over 5% of energy from solar.¹⁶

Several researchers have found that Pennsylvanians will benefit from increasing the state’s solar goals:

1. The Pennsylvania Department of Environmental Protection Energy Program’s Office “Finding Pennsylvania Solar Future” report shows results of modeling that demonstrate “the combination of fuel savings (free sunlight) and anticipated cost savings (avoided public health and environmental damages) *could result in a net benefit of over \$1.6 billion annually from 2018 to 2030” by moving to 10% solar.*¹⁷
2. A Power Grid Engineering and Markets (POWERGEM) study commissioned by Community Energy found that transitioning to *10% solar in PA would lower Pennsylvania’s wholesale energy cost by \$619 million annually.* These savings start with 5% solar penetration. Moving to 10% solar would also result in \$9.2 Billion in Private Capital Investment, \$5.3 Billion in Local Economic Benefit, 66,507 Jobs and \$4.1 Billion in Wages, \$2.3 Billion in Farmer Lease Payments, and \$228 Million in Local Tax Revenue from Grid Scale Projects.¹⁸
3. PJM’s Renewable Integration Study found that the *PJM system would not have any significant reliability issues operating with up to 30 percent of its energy (as distinct from capacity) provided by*

¹³ Pennsylvania Public Utility Commission in cooperation with the Pennsylvania Department of Environmental Protection. (2020). *Alternative Energy Portfolio Standards Act Compliance for Reporting Year 2020*. Pennsylvania Public Utility Commission | Regulating Utility Services | PA PUC. <https://www.puc.pa.gov/media/1410/aeps-annreport2020.pdf>

¹⁴ Pennsylvania Department of Environmental Protection. (June 16, 2023). *Finding Pennsylvania's Solar Future*. <https://www.dep.pa.gov/Business/Energy/OfficeofPollutionPrevention/SolarFuture/Pages/Finding-Pennsylvania%E2%80%99s-Solar-Future.aspx>

¹⁵ Pennsylvania Department of Environmental Protection. (June 16, 2023). *Pennsylvania's Solar Future Plan*. <https://www.dep.pa.gov/Business/Energy/OfficeofPollutionPrevention/SolarFuture/Pages/Pennsylvania's-Solar-Future-Plan.aspx>

¹⁶ Glover, E. (2023, March 14). *The best and worst states for solar energy 2023*. Forbes Home. <https://www.forbes.com/home-improvement/solar/best-worst-states-solar/>

¹⁷ Pennsylvania Department of Environmental Protection. (June 16, 2023). *Pennsylvania's Solar Future Plan*. <https://www.dep.pa.gov/Business/Energy/OfficeofPollutionPrevention/SolarFuture/Pages/Pennsylvania's-Solar-Future-Plan.aspx>

¹⁸ Power Grid Engineering and Markets. (2019, June 18). *PA Solar Study*. Community Energy. <https://www.communityenergyinc.com/pasolarstudy>

wind and solar generation. Every scenario examined resulted in lower PJM fuel and VOM costs as well as lower average Locational Marginal Prices. The lower LMPs, when combined with the reduced capacity factors, resulted in lower gross and net revenues for the conventional generation resources. The renewable generation increased the amount of cycling (start up, shut down and ramping) on the existing fleet of generators, which will result in increased VOM costs on these units. However, these increased costs were small relative to the value of the fuel displacement.¹⁹

Solar's benefits to ratepayers uniquely span across customer classes and electricity markets. Solar works most efficiently during the middle of the day when electricity use is typically at its highest. When electricity demand is at its highest, electricity prices are also at their highest because the grid's current peaker plants are expensive and inefficient. Peak solar energy generation coincides closely with peak demand, and reducing peak demand is one of the most important means of lowering electric ratepayer costs. Solar's low cost pulls down the peak price curves and results in reduced wholesale electricity prices. Further innovations in solar plus storage systems provide a new opportunity for grid operators to address peak demand throughout the year.²⁰

Distributed solar generators provide for lower transmission and distribution infrastructure because the energy generation is closer to the location of energy demand and doesn't need to travel as far. And as electrification increases, a distributed grid becomes vital for the reliability of the grid as utilities build infrastructure to meet the new electricity demands of customers. Utility scale solar has the benefit of being the lowest cost resource in the wholesale electricity market, so when its available consumer prices are reduced (as mentioned above, the penetration of solar must reach at least five percent to begin to see wholesale price reductions.) These are some of the reasons why solar is an attractive energy source to include in any grid's diverse set of electricity generation needs.

OVERVIEW OF LEGISLATIVE PROPOSALS THAT WOULD IMPACT SOLAR

Several legislative proposals have been introduced in Pennsylvania's 2023-2024 session of the General Assembly that would impact the Commonwealth's solar industry, and thus impact Pennsylvania ratepayers. It is important to note that state government intervention in Pennsylvania energy markets has consistently resulted in benefits to ratepayers over the past few decades. Pennsylvania's Electricity Generation Customer Choice and Competition Act of 1996 allowed customers to shop for their electric generation provider for the first time and shifted the capital risk for constructing and operating new electricity generators from ratepayers to the private sector. In 2004, the Alternative Energy Portfolio Standards Act was adopted which enabled innovation in Pennsylvania's electricity generation sector, growing jobs and investments in the solar industry.

When analyzing the impacts of legislation on solar, it is important to consider the three distinct market segments of the solar industry. The customer-generator (Rooftop Solar/on-site solar) market consists of small installations, typically providing local electricity needs in the range of 3 kilowatts (kW) and up to 3,000 kW (and up to 5,000 kW in special cases) with any excess going directly into the distribution grid. These also include residential markets (up to 50kW) and commercial systems that are typically 50kW to 3,000 kW. The Utility Scale solar market includes large solar installations that provide electricity to the transmission grid for regional transmission operators to dispatch and are typically sized in the range of 5 megawatts (MW) to 100 MW or more. The Community Solar market represents an innovative business model that enables access to solar power for electricity users who cannot install solar energy generation on-site; however, this is not available in

¹⁹ PJM Interconnection. (2016, September). *PJM - Renewable integration study reports*. <https://www.pjm.com/committees-and-groups/closed-groups/irs/pris.aspx>

²⁰ U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. (2023, June 16). *Solar integration: Solar energy and storage basics*. Energy.gov. <https://www.energy.gov/eere/solar/solar-integration-solar-energy-and-storage-basics>

Pennsylvania. Community Solar installations could range from small shared systems up to 5,000 kW, depending on the program enabled by legislation in Pennsylvania. Each of these market segments experience different economies of scale, customer classes, and other market factors that result in different benefits and impacts to different ratepayers.

Currently, the following legislative proposals have been introduced in the current session and would have varying benefits and impacts to ratepayers:

1. **Senate Bill 230: Modernizing Pennsylvania’s Renewable Energy Standards**²¹

- Amends the Alternative Energy Portfolio Standards (AEPS) to increase the Tier I goal from 8% to 30% by 2030 and increase the solar carveout from 0.5% to 14%.
- This bill would enable community solar under the AEPS to ensure equivalent treatment of solar Alternative Energy Credits (AECs) administered through an existing and operational program. Community solar growth and performance would be predictable and the program would be administered under existing procedures currently implemented by electric utilities, developers and other solar stakeholders.
- The solar carveout would be segmented under three distinct categories with separate goals to appropriately recognize their varying market costs and benefits: customer-generator (rooftop/on-site solar) would be 4%, utility-scale would be 8%, and community solar would be 2%.
- For customer-generator and community solar, the lifetime of the AECs is 15 years at which time will transition to Tier I AECs.
- This bill also includes modifications to the Alternative Compliance Payments (ACPs) for solar projects respective of the differing market conditions each solar category experiences.
- Based on the cost of compliance and compared to existing proposals, SB 230 proposes the least cost and most benefit to ratepayers.

PA Solar Center Position on Senate Bill 230

The PA Solar Center supports this bill with modifications to the Alternative Compliance Payments (ACPs) and also with a guaranteed savings to consumers on the community solar portion of the bill. SB 230 provides a significant and necessary increase to the state’s renewable energy and in-state solar goals that will send important market signals to investors. The bill also enables community solar in an equitable process in line with other renewable resources. With the recent federal Inflation Reduction Act, Pennsylvania needs to act swiftly so the state can take full advantage of building its renewable energy market as well as the potential 50,000 jobs and billions in private investment that this bill is estimated to bring.

2. **Senate Bill 550: Community Solar Legislation**²²

- Proposes a standalone program that has not been tested in other markets and includes an incentive mechanism without a means for managing costs to ratepayers, opening the potential to harm existing and future renewable energy markets in Pennsylvania.
- This bill includes a “Grid Service Payment” subsidy that will be added to all customer bills. Based on current cost estimates, all Pennsylvania ratepayers would subsidize upwards of 100% of the cost to construct and operationalize a solar project enabled under this bill. To help illustrate this point, each 5MWac community solar project that receives the proposed Grid

²¹ Pennsylvania General Assembly. (2023, March 15). *Regular Session 2023-2024 Senate Bill 230*. <https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2023&slnd=0&body=s&type=b&bn=230>

²² Pennsylvania General Assembly. (2023, April 13). *Regular Session 2023-2024 Senate Bill 550*. <https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2023&slnd=0&body=s&type=b&bn=550>

Service Payment of \$0.18 per watt would receive \$5.85 million from ratepayers. A 5 MWac (which is 6.5 MWdc) project costs approximately \$1.25 per watt to build, or a total of \$8.125 million. This cost is first discounted with the updated federal tax credit of 30% (\$2.44 million) and depreciation (estimate 20% or \$1.625 million), making the total cost to a solar developer roughly \$4.06 million. Therefore, the proposed Grid Services Payment pays the developer \$5.85 million which could be more than the cost to build one project. And if a project claims the Inflation Reduction Act's bonus tax credits (energy community, low-income, etc.) the cost to build may be even lower. Based on this simple calculation and current electric generation capacity projections for community solar project development in Pennsylvania, 1% solar via SB 550's proposal would cost Pennsylvanians \$1.85 billion. Further, this bill does not include a growth management mechanism, so the ratepayer impacts of this bill could be much higher.

- This bill would provide the Alternative Energy Credits (AECs) for these projects directly to the utility at a cost of the Grid Service Payment which is much higher than AEPS compliance. If this bill passes and the solar carveout in the AEPS is not increased, the utilities will no longer need to purchase AECs from customer generators (onsite residential and commercial solar) or utility-scale projects and therefore, SB 550 will severely cripple the existing solar AEC market and harm current and prospective customers that rely on solar AECs.

PA Solar Center Position on Senate Bill 550

Although the PA Solar Center strongly supports community solar, there are serious concerns with this bill's approach, the potential ratepayer impacts and harmful implications on the current AEC market.

3. HB 330: PA Local Solar Program²³

- Proposes a program that provides EDCs with the exclusive right to sanction the building of solar projects to provide customers with access to "shared" solar. This bill would create a non-competitive landscape that authorizes only EDCs with the decision-making authority to build projects instead of permitting non-EDC entities to leverage the competitive electricity markets to build community solar projects based on customer demand and market conditions.
- This bill permits projects of up to 30 MW in capacity, which is much larger than other community solar programs in other states and more closely resembles utility-scale solar. Some EDCs have issued requests for proposals to purchase energy from utility-scale solar projects through long term contracts for the energy to supply a portion of the EDC's default service supply. EDC's sourcing default service from solar demonstrates that this bill would have a very limited impact on solar development in Pennsylvania.

PA Solar Center Position on House Bill 330

The PA Solar Center does not support HB 330 because it does not create a true community solar program. This bill allows only utilities to control the building of projects, does not offer guaranteed energy savings to subscribers (and in fact, the utility may offer a premium priced product), and will likely not result in meaningful solar buildout.

ADDITIONAL BACKGROUND ON COMMUNITY SOLAR

Community solar is a business model that requires enabling legislation in Pennsylvania to allow solar projects to benefit multiple customers from an off-site solar array. In other states where community solar is permitted, electric customers can buy or lease a percentage of an off-site solar array and receive credit on their electric

²³ Pennsylvania General Assembly. (2023, April 13). *Regular Session 2023-2024 House Bill 330*. <https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2023&slnd=0&body=h&type=b&bn=330>

bills for the electricity generated commensurate with their share. The intent of a community solar program is to provide the option for renters, homeowners, businesses, nonprofits, and others the benefit of locally generated solar because they may be restricted in their ability to install solar panels on-site for some reason.²⁴

Over the past several years, there have been many community solar proposals considered by Pennsylvania's General Assembly. Some of the concerns in Pennsylvania include ownership opportunities of community solar installations, minimum subscription requirements, the incentive mechanism, and maximum capacity requirements. It is important to underscore the intent of community solar legislation in the context of Pennsylvania's energy landscape, which is that community solar programs should both attract investments from firms that specialize in developing and commissioning community solar installations as well as protect ratepayers from unforeseeable changes to Pennsylvania's energy landscape with the overall goal of ensuring more electricity customers can access the benefits of solar.

CONCLUSION

Renewable energy is an important and necessary component in controlling and reducing ratepayer impacts on rising energy prices and diversifying our energy mix. It is crucial that the state prepare for the new energy economy in order to take full advantage of new technologies of the 21st century grid. Pennsylvania can unlock the benefits of solar by modernizing the AEPS to increase the Tier I solar carveout, permit community solar, and increase the Commonwealth's overall renewable energy goals to 30% by 2030. This is all achievable by amending the AEPS and updating administrative processes that all stakeholders have utilized for over a decade. These updates will diversify the grid to enhance electricity price stability, attract tens of thousands of jobs and billions of dollars from investors, and provide all ratepayers with access to the benefits of solar and renewable energy. Thank you for the opportunity to submit written comments on this important topic. The Pennsylvania Solar Center is always available to discuss the costs and benefits of solar with any member of the Committee.

²⁴ U.S. Department of Energy Office of Energy Efficiency and Renewable Energy. (2023, June 16). *Community solar basics*. Energy.gov. <https://www.energy.gov/eere/solar/community-solar-basics>