



TESTIMONY
TO THE
SENATE CONSUMER PROTECTION AND PROFESSIONAL LICENSURE COMMITTEE
SUBMITTED BY
DUQUESNE LIGHT COMPANY
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9 am

SOLAR ENERGY'S IMPACT ON PENNSYLVANIA RATEPAYERS

Chairman Stefano, Chairwoman Boscola, members of the Consumer Protection and Professional Licensure Committee. On behalf of Duquesne Light Company, I would like to thank you for the opportunity to provide our perspective on energy policy as it pertains to solar energy in Pennsylvania and its impact on ALL electric customers. We very much appreciate the Committee's willingness to examine this issue.

My name is David Fisfis. I am the Vice President (VP) of Energy Policy and General Counsel for Duquesne Light Company (DLC), an electric distribution company (EDC) serving the greater Pittsburgh area in Allegheny and Beaver Counties. For more than a century, we have been working around the clock to deliver a safe and reliable electric service to communities in Southwestern Pennsylvania.

Duquesne Light Company

Duquesne Light Company has been an integral part of the fabric of Pittsburgh and the surrounding area. Our employees take pride in supporting the delivery of safe, dependable energy for greater comfort and leisure, faster communications, more efficient transportation, enhanced economic development, and improved health care for virtually every facet of life. We live and breathe the duty of maintaining a secure, resilient energy infrastructure for our communities.

Today, our core values of safety, integrity, dependability, equity, and community enable us to serve more than 600,000 customers. We are committed to safely powering our customers' lives while playing a leading role in Southwestern Pennsylvania's clean energy transition. Our vision is to create a larger-than-light, clean energy future for all by delivering exceptional results today and boldly harnessing opportunities for tomorrow. In doing so, we can ensure a cleaner, healthier, and more equitable community for generations to come.



Energy and Energy Policy in Pennsylvania

While the purpose of today's hearing is primarily to discuss the financial impact of solar energy on all Pennsylvanians, I would be remiss if I did not also take this opportunity to speak about the importance of having a policy plan in place as Pennsylvania seeks to increase clean energy resources.

As many of you know, Pennsylvania is one of the nation's leading energy producers in traditional energy sources (coal, oil, nuclear, natural gas) and is poised to be a future leader in renewable, zero-carbon, and distributed energy resources. As our energy profile becomes cleaner and increasingly diverse, DLC recognizes the need for and supports the development of a comprehensive state energy plan to advance the distribution, generation, transmission, conservation, and consumption of energy in the Commonwealth of Pennsylvania.

Currently, natural gas-fired power plants are the largest providers of in-state electricity generation, more than tripling from 15% in 2010, to 53% of our total net generation in 2021; 31% of Pennsylvania's electric generation comes from our four nuclear power plants; and 12% from coal-fired power plants. The remaining four percent is comprised of renewables, with wind being the largest renewable source and providing two-fifths of our state's renewable electricity, and solar, including both utility and small-scale photovoltaic installations, produced 11% of Pennsylvania's total renewable electricity in 2021.¹

With such diversity in energy resources, DLC is supportive of an "all of the above" approach to energy policy in Pennsylvania. This approach **must balance affordability, reliability, and resiliency**, recognizing the importance of 24-7 energy sources in the transition to a cleaner energy future for all.

While Pennsylvania's energy source portfolio has drastically changed over the past 10 years, our energy policy has not been touched in 15 to 20 years—not since the Rendell Administration, with passage of Act 129 of 2008- Energy Efficiency and Conservation; Act 35 of 2007 (amending the Alternative Energy Portfolio Standards Act, aka AEPS); and Act 213 of 2004- AEPS original passage, and similarly, Pennsylvania has not had a comprehensive energy plan in decades.

Pennsylvania's Energy Plan needs to recognize the continued value of the grid, and the complexity of planning and operating a changing distribution system that integrates diverse, distributed, interconnected and variable resources. Therefore, I encourage you not to consider solar energy in a vacuum, but as part of a broader suite of policies, as we look to address energy policy more comprehensively.

¹ U.S. Energy Information Administration: <https://www.eia.gov/state/analysis.php?sid=PA>;
https://kleinmanenergy.upenn.edu/wp-content/uploads/2020/08/A-Case-Study-of-Electric-Competition-Results-in-Pennsylvania_0_0-1.pdf



We look forward to working with the legislature to develop a state energy plan and support policy that enables Pennsylvania to maintain our status as a top energy producer and exporter, while seeking to decarbonize the energy sector in a way that is equitable, reduces energy burden for Pennsylvanians, enables the growth of clean energy technology, and supports economic growth and job creation throughout the Commonwealth.

Transitioning Pennsylvania to a Clean Energy Future for ALL

As Pennsylvania seeks to transition to clean energy, energy affordability as well as the reliability of the electric grid are paramount. It is imperative that we employ a strategy that seeks to improve and expand the portfolio of available low-carbon resources, rather than restrict them; to offer a greater likelihood of affordably achieving deep decarbonization; utilize all energy resources in the Commonwealth; and modernize energy transmission and distribution systems to deliver clean resources to customers.

Decarbonizing Pennsylvania’s energy sector must be done in a way that is equitable, reduces energy burden² for Pennsylvanians, and enables the growth of clean energy technology while maintaining existing zero-emissions sources as new sources are brought online. Whether through AEPS or another mechanism, thought should be given to preserving existing zero-carbon generation sources as we grow new sources.

Legislators should look for ways to grow renewable energy that are **cost effective and do not result in unreasonable cost-shifting**, implement legislation and programs that align with Pennsylvania’s utility and regulatory operating structure, and ensure that policies do not allow “gaming” of the system.

Net Metering Reform

Perhaps there was a time when we needed to subsidize solar energy through net-metering to encourage its development. With recent advances in technology and an increase in demand, the cost for solar energy has decreased significantly, making it cost-competitive with other forms of energy and our price for default service, we believe that it is time to re-evaluate net metering in Pennsylvania.

Pennsylvania’s net metering laws were adopted in 2004 when the economics of solar were vastly different than they are today. We believe it is time to explore net metering reforms (not repeal) that ensure customer-generators are fairly compensated without resulting in cost-shifting. Any change to current net metering practices would include the grandfathering of current net metering customers.

² Defined by US DOE: <https://www.energy.gov/scep/slsc/low-income-community-energy-solutions#:~:text=Energy%20burden%20is%20defined%20as,which%20is%20estimated%20at%203%25>.



As such, we recommend the following be considered:

1. Transition to a model that assigns a monetary value to kWh exported to the grid and provide customer generators with a bill credit that offsets charges on the customer's bill, instead of having a kWh exported replace a kWh imported, as is done today. The monetary value would be a modified wholesale rate applied to each kWh produced.
2. Treat net metering customers as a separate class with approval to reflect cost recovery mechanisms designed to recover from net-metering customer generators their allocated cost of service to operate and maintain the electric utility grid.
3. Exclude EDC surcharges from net-metered billing treatment Customer-generators avoid paying the surcharges that support customer benefit programs, including low-income support, energy efficiency, etc. (energy efficiency, low-income, etc.).

Nationwide, the median income of a net metered household was about \$110,000 in 2021, compared with a U.S. median income of \$63,000 for all households. As such, the costs of these programs fall on those non-net metered customers. Based on the above household income statistic, these are typically middle-to-lower income households.³

4. Absent the option of net metering reform, the legislature could direct the addition of a "community benefit charge" on net-metered customers' bills. This charge would approximate what those customers would have paid toward the surcharge-funded programs if they weren't net-metered.

Further, we feel that the legislature should address issues presented by the Hommrich v. Pennsylvania Public Utilities Commission decision⁴. The "Hommrich Decision" struck down PUC regulations that required a customer generator to have independent load to qualify for net metering. As we have noted previously, net metering bill credits exceeds the wholesale price of energy, thus a solar generator who takes advantage of this situation will benefit financially, but further increase costs on all customers, including non-solar customers.

To address this situation, we suggest that legislation is drafted to formally reinstate the "110% rule" – i.e., provide that a customer can receive net metering for generators sized to produce no more than 110% of the customer's estimated annual electrical consumption.

³ <https://www.utilitydive.com/news/low-income-residential-solar-rising-income-gap-remains-California-Texas-Florida/635527/>

⁴ 231 A.3d 1027 (Pa. Cmmw. Ct. 2020)



We are also concerned that generation developers may attempt to abuse virtual meter aggregation to “load shop.” Load shopping is when a generator searches for customers within two miles and seeks to aggregate those customers’ meters against their own, for the purpose of obtaining distribution credit for their generation output. As such, we recommend that to be eligible to virtually aggregate meters, the account holder must directly control each metered property. This is most likely the intent of current regulations governing virtual meter aggregation, but we recommend a change be made so for the statute to provide clarity.

The Alternative Energy Portfolio Standards Act (AEPS), PA Local Solar, and Community Solar

Many stakeholders prefer to increase solar in Pennsylvania by expanding the Alternative Energy Portfolio Standards (AEPS)—utility scale solar is the most cost-effective solar. Expanding the existing AEPS program is more efficient than building a new program from scratch and applies to all load-serving entities (both EDCs and EGSs) equally. This is our preferred mechanism for expanding renewable energy.

DLC supports expanding solar and other renewable energy in Pennsylvania, consistent with our mission to enable a clean energy future for all. Apart from increasing solar via an increase in AEPS requirements, there have been several legislative options introduced that seek to expand access to solar energy in Pennsylvania.

PA Local Solar

Absent a change to AEPS, DLC feels that legislation creating the PA Local Solar Program is the best approach to successfully increase our customers’ access to solar power. PA Local Solar legislation allows us to bring solar power to those customers who otherwise would not have access to it and increases the amount of solar energy that is generated right here in Pennsylvania, in a way that is **equitable and does not result in unreasonable cost-shifting**.

PA Local Solar allows EDCs to use a competitive bid process to develop a 100% local solar project. Under this legislation, EDC customers have the option to purchase solar energy from these projects, with all costs being shared by those customers who subscribe to the program; **no PA Local Solar program costs are borne by non-subscribing customers**.

Under this legislation, after recognizing their customers’ demand for 100% local solar power, an EDC can create a project and is responsible for enrolling customers into a PA Local Solar program. Once the project has enough “subscribers”, it is then placed out for open bid, which is available to any solar developer who may be interested in the opportunity to compete to address the market demand for locally generated solar electricity.



Through a PPA, EDCs are then able to lock in a long-term competitive fixed price, for anywhere between 15 and 25 years, which eliminates rate volatility many years into the future. This also allows solar developers to keep prices lower for those customers who choose to participate in the PA Local Solar program, as they are also able to lock in that competitive fixed price for 100% locally sourced solar power. The EDC does not own these projects and serves only as a facilitator to bring 100% local solar power to customers.

Protecting our customers is one of our top priorities, including PUC oversight of solar projects. The consumer protection and PUC oversight that are built into PA Local Solar, provides assurance that our customers are purchasing 100% local solar power at an affordable rate, without the fear of being exploited. Under PA Local Solar legislation, the RFP process, the price of energy, and the overall evaluation of a program, all require PUC oversight.

Lastly, the PA Local Solar program is not a mandate and is supported only by its subscribers, with customers paying a separate “solar rate”, which is determined by the long-term competitive fixed price established by the PPA. Therefore, **the costs of PA Local Solar projects are only borne by its customers and not the entire rate base.**

Overall, PA Local Solar legislation accomplishes several fundamentally important objectives: Creating The PA Local Solar program, which pays for itself, with costs being supported by subscribers and not shared by the entire rate base; it allows customers to use their voice in the energy marketplace; allows developers to address market demand by building solar facilities to offer renewable power to customers at an affordable price; allows electric utilities to support the deployment of stable, reliable power sources to further diversify the power grid mix; and ensures a fair, equitable regulatory framework developed by the Public Utility Commission (PUC) to ensure adequate consumer protections.

Duquesne Light is proud to support legislation that creates the PA Local Solar Program, and we are excited at the prospect of being able to provide our customers with the option to choose 100% locally produced solar energy.

Community Solar

Senate Bill 550, which enables community solar projects to be constructed in Pennsylvania has also been offered as another legislative option to increase solar in Pennsylvania. Unfortunately, community solar proposals, such as Senate Bill 550, shift solar project costs to an EDC’s entire customer base. In doing so, non-solar customers are forced to subsidize the costs of these projects, as well as the distribution service.

Again, our customers are our top priority, and as such, we believe that **the cost associated with increasing and encouraging solar development in Pennsylvania should not be borne entirely by our customers.**



Under Senate Bill 550, the PUC is required to implement regulations that subsequently require community solar projects to be created. Using an “If they build it, they will come” model, after the project is completed, customers then subscribe to purchase energy from these facilities, and their bills are credited accordingly.

This brings us to our first cost concern with Senate Bill 550: The bill credit.

As currently written, Senate Bill 550 requires a bill credit to be set at the EDC’s “price to compare (PTC)”. As you know, the PTC is the per kWh price paid by customers who do not shop with a supplier. The PTC includes not only the costs of generation but also transmission and wholesale capacity charges. Therefore, we find it troubling that, by establishing the bill credit amount at the PTC, community solar projects allow their subscribing customers to avoid paying for these costs, essentially making all other customers subsidize these costs.

Perhaps an even more concerning cost that Senate Bill 550 passes along to customers is the “grid services payment.”

Subsection (a) of 30A09 of the bill provides for a “grid services payment” as follows: “... an electric distribution company shall file a petition with the commission requesting approval of the electric distribution company's tariff to provide the grid services payment to a community solar facility owner.”

The bill subsequently provides for the actual cost recovery from customers in subsection (f) as follows:

“(f) Cost recovery.-- An electric distribution company shall recover from the electric distribution company's customers the costs of the grid services payment made under a tariff or tariffs placed into effect under this section, the value of the services payments and costs incurred by the utility to comply with and implement this section...”

The bill goes on to further provide for the actual cost of the “grid services payment” as “...an annual payment of 18 cents per **watt** of nameplate generating capacity...”.

I would like to point out that this charge is in **watts**. Under SB 550, community solar projects cannot exceed 5,000 kW for non-brownfield or rooftop and 20,000 kW for brownfield or rooftop community solar facilities. So, for simplicity’s sake, to calculate the overall cost to customers for an average project, we will focus on a 5,000-kW and 20,000-kW community solar project.

First, to calculate in kW, we multiply 18 cents by 1,000, which equals a charge of \$180 per kW; \$180 multiplied by 5,000 (kWs) equates to \$900,000 per year, and over five years, as is required by Senate Bill 550, we arrive at a five-year grand total cost of \$4,500,000 per 5,000 kW project. Using that same math, the total cost of a 20,000-kW project is \$3.6 million per year and \$18 million over 5 years. Again, as currently written in Senate Bill 550, these costs are required to be recovered by all EDC customers through a tariff.



It is evident that Senate Bill 550 is a win-win for community solar developers- shifting numerous costs and risks of these projects to **all** customers, including non-solar customers. Because the grid services fee is spread across all customers, effectively that means all utility customers are paying towards the creation, financing, and operation of a community solar facility reducing the amount paid by subscribers.

We cannot stress enough how strongly we feel that **the cost and risks associated with increasing and encouraging solar development in Pennsylvania should not be borne entirely by our customers.**

We have previously seen community solar advocates highlight the amount of revenue that could be generated by community solar. But we must ask ourselves at what cost. This Commonwealth should not pursue revenue via poorly structured programs that benefit a select group while improperly burdening others.

Delivering Value to Customers – Equitable Access, Consumer Choice, and Affordability

In crafting energy policy in Pennsylvania, we must be careful and thoughtful to implement legislation and programs that align with Pennsylvania’s utility and regulatory operating structure.

As we work for a clean energy future for all, it is imperative that we look for ways to grow renewable energy that are cost effective and do not result in unreasonable cost-shifting. This includes reevaluating net metering and possible net metering reform. The time is ripe to explore reforms that ensure customer-generators are fairly compensated without resulting in unreasonable cost-shifting.

Duquesne Light is supportive of efforts to increase clean energy generation, including solar. However, Pennsylvania’s energy policy – including its position on solar – should advance affordability, reliability, and economic growth. ***Electric service is an essential service and must remain affordable.*** We believe there are ways to increase solar generation, potentially including community solar, that have less impact on electricity rates paid by Pennsylvania customers.

PA Local Solar can play a key role in helping the Commonwealth transition to a clean energy future for all. It encourages affordable and equitable solar development, all while minimizing financial impacts on **ALL** customers and creating well-paying jobs. Pennsylvania is poised to be at the forefront in expanding the availability of solar energy, but we need to make sure that we are doing this in a way that benefits everyone.



We recognize that subsidization exists throughout the energy utility service, however, we feel that subsidies must be transparent and based on solid methodology, must benefit ALL customers, and should never be unreasonable. For example, all customers pay for energy efficiency and conservation programs under Act 129 of 2008. The costs and benefits of Act 129 are regularly assessed by the PUC and made public. In contrast, under proposed community solar legislation, we see significant cost-shifting between community solar participants and other non-subscribing customers, and the risk shifting from solar developers to all customers. These costs and risk shifting are mostly based on fees that are required by the legislation and lack data to substantiate their value.

We are hopeful that we can continue this collaboration and participate in multi-sector conversations to strike the right balance, allowing solar policy to move forward in a way that is equitable, does not result in unreasonable cost-shifting, and compensates customers fairly.

On behalf of my entire team at Duquesne Light, I would like to extend my sincere thanks to the Committee Chairs, members, and staff for providing this opportunity to offer our perspective on this quickly emerging energy policy issue. At this time, I would be glad to respond to questions from members of the Committee.