Testimony

Submitted on behalf of the
Pennsylvania Chamber of Business and Industry

Public Hearing on Energy Reliability & Affordability

Before the:
Pennsylvania House Republican Policy Committee

Presented by:

Amy Brinton
Director, Government Affairs

Harrisburg, PA
October 28, 2025

417 Walnut Street
Harrisburg, PA 17101
717.720.5471
abrinton@pachamber.org

Good morning, Chairman Rowe and honorable members of the House Republican Policy Committee, my name is Amy Brinton, and I am Director of Government Affairs for the Pennsylvania Chamber of Business and Industry. The PA Chamber is the largest, broad-based business advocacy association in Pennsylvania. We represent employers of all sizes, crossing all industry sectors throughout the Commonwealth and include companies involved in all aspects of the energy industry and beyond.

Thank you for the opportunity to submit testimony regarding the challenges and opportunities before us with respect to energy reliability and affordability in Pennsylvania.

Pennsylvania's Energy Portfolio

Pennsylvania has long been a cornerstone of the nation's energy and manufacturing landscape, playing a critical role in powering the U.S. and supporting economic and industrial growth. Pennsylvania's energy sector supports thousands of jobs, contributes billions to our economy, and provides affordable energy to residents and businesses throughout the Commonwealth. From natural gas and electricity exports to essential construction materials, we are a key player in both the national and global economy.

In fact, Pennsylvania is currently the top electricity exporter and top supplier of natural gas, coal, and refined petroleum products. We are the second-largest natural gas-producing state, reaching almost 7.6 trillion cubic feet in 2023; the second largest, after Texas, net supplier of energy to other states; and third largest producer of electricity in the nation, with only Texas and Florida producing more.[1]

For much of our energy history, coal-fired power served as the backbone of our energy portfolio, providing a significant portion of reliable electricity that powered homes, businesses, and industries across the state and beyond. As one of the nation's leading coal producers, we relied heavily on this resource to fuel our economy and energy needs. However, in recent years, this landscape has shifted dramatically. Many of our coal-fired plants have come offline due to a combination of market forces, environmental regulations, and increasing economic viability of alternative energy sources. This, combined with increased

natural gas development in Marcellus Shale, has seen natural gas emerge as the dominant source of electricity generation in the state.

The shift away from coal and the rise of natural gas have significantly reshaped Pennsylvania's energy landscape, as illustrated in the chart below. In 2001, coal was the dominant energy source, accounting for 57 percent of Pennsylvania's electricity net generation, while natural gas made up only 1.5 percent. By 2023, however, this trend drastically changed with coal's share dropping to 5.4 percent, and natural gas surging to become the dominant source, comprising 59 percent of the state's net generation, with nuclear power accounting for 31.9 percent, and renewables at 3.3 percent.[1]

Fuel Source	2001	2005	2010	2015	2020	2023
Coal	57.0	55.5	48.0	30.1	10.2	5.4
Nuclear	37.5	35.0	33.9	37.5	33.2	31.9
Natural Gas	1.5	5.0	14.7	27.7	52.5	59.0
Renewables	1.5	1.8	2.6	3.7	4.0	3.3
Other	2.5	2.7	0.8	1.0	0.4	0.4

Source: US EIA Electricity Data Browser

It is also important to note that this shift to natural gas has also helped to reduce Pennsylvania's Power sector CO2 emissions by 46 percent between 2005 and 2020, far out pacing the transportation and industrial sectors.[2]

[1] https://www.eia.gov/state/analysis.php?sid=PA
[2] PA Greenhouse Gas Inventory Report, DEP, 2023

PJM in Pennsylvania[3]

In addition to being a leader in generating and exporting energy, Pennsylvania is also home to PJM Interconnection, the organization responsible for managing the grid and ensuring the reliability of power supply across a region that includes 13 states and the District of Columbia, serving over 65 million people.

As the regional transmission organization (RTO), PJM is responsible for coordinating the generation and transmission of electricity, ensuring that supply consistently meets demand across its vast footprint. It operates the world's largest competitive wholesale electricity market, where energy producers and consumers buy and sell electricity at market-based rates. PJM also oversees grid reliability by forecasting energy needs, managing the dispatch of power plants, and coordinating the flow of electricity across thousands of miles of transmission lines. They are tasked with maintaining a reliable, affordable, and sustainable energy supply for millions of people and businesses and must ensure that the grid remains stable by balancing electricity generation with consumption in real-time, while also planning for future growth and addressing emerging energy challenges.

Looming Generation Shortfall

In 2023, PJM published, "Energy Transition in PJM: Resource Retirements, Replacements and Risks", which predicts a resource adequacy shortfall due to a potential "timing mismatch" between resource retirements, load growth, and new generation. PJM's report indicated that accelerated retirements of thermal generation resources, which have long served as the backbone of our grid, is outpacing integration of new generation capacity.

In 2024, PJM forecasted an average net energy load growth of 2.3 percent per year over the next 10-years, and 2.2 percent over the next 15-years, largely

[3] https://www.pjm.com/about-pjm/who-we-are

due to the recent rise in AI and data centers, electric vehicles, and the overall electrification of society.[4]

These trends are expected to persist, further widening the gap between available energy supply and growing energy demand. The mismatch in timing between the retirement of resources and the integration of new energy sources poses a significant risk to the reliability and affordability of energy in Pennsylvania. As these plants retire, they are not being replaced quickly enough, nor are new generation sources able to produce the capacity needed to fill the "energy gaps" left by the retirement of these plants. As such, it is critical that we act now to address this shortfall and ensure a stable energy future for Pennsylvania.

The Role of Data Centers in Pennsylvania's Energy and Economic Future

As Pennsylvania navigates the challenges of energy affordability and reliability, data center development presents a unique opportunity to grow our economy while modernizing our energy infrastructure. With abundant water resources and a diverse energy portfolio, Pennsylvania is perfectly positioned to support the high cooling and power demands of data centers, making us an ideal location for this industry.

The overall economic impacts of data center development are substantial. Each data center typically creates hundreds, and some even thousands, of construction jobs during buildout, followed by dozens to hundreds of permanent operational roles in IT, maintenance, and security. These projects also drive indirect job creation in supply chains, such as steel, HVAC, electrical equipment, and logistics, many of which offer family-sustaining wages. Data centers also serve as anchor institutions that attract startups, R&D initiatives, and innovation hubs, accelerating growth in sectors like biotech and advanced manufacturing.

Data centers have the potential to be transformative economic engines for Pennsylvania, attracting billions in capital investment. These facilities generate long-term tax revenue, revitalize underutilized industrial sites, and stimulate

[4] PJM Load Forecast Report, 2024

demand across sectors such as construction, energy, manufacturing, and technology. While Pennsylvania is uniquely positioned to become a national and even global leader in this technology evolution, realizing this potential requires thoughtful policy.

Integrating data centers into Pennsylvania's energy strategy also underscores the need for reliable, affordable power. These facilities are energy-intensive and require consistent access to electricity. As the PJM region faces a projected generation shortfall and increasing demand from electrification and digital infrastructure, investments in grid modernization, energy storage, and diversified generation sources become even more critical. By embracing innovation and fostering a balanced energy policy and regulatory environment, Pennsylvania can support the growth of data centers while ensuring long-term affordability and reliability for all consumers.

Resource Adequacy: Implications for Pennsylvania's Businesses and Economy

An energy capacity shortfall in Pennsylvania will have significant ramifications for the state's businesses and economy. As the demand for electricity continues to grow, failure to ensure an adequate and reliable energy supply could lead to supply shortages, power outages, and price volatility. For businesses, this instability is a major concern, particularly for industries that rely on a consistent and affordable energy supply to operate. Manufacturing plants, data centers, healthcare facilities, and other critical infrastructure are at risk if the grid cannot meet demand, leading to potential disruptions in production, delays, and financial losses.

The impact of a generation shortfall goes beyond the immediate disruption of business operations and threatens Pennsylvania's overall economic competitiveness. The uncertainty surrounding energy availability makes the state less attractive for new investment, particularly for energy-intensive industries that rely on reliable and affordable energy. If Pennsylvania experiences frequent power outages or rising energy prices due to insufficient generation capacity, businesses will be deterred from expanding or relocating here, ultimately slowing economic growth and reducing job creation.

Additionally, higher electricity prices driven by supply shortages would raise operating costs for businesses across various sectors, forcing them to either pass these costs on to consumers or attempt to absorb them, possibly by reducing investments in their workplaces and workforce. Small and medium-sized businesses would be especially vulnerable to energy price spikes, and as energy costs rise, businesses may be less inclined to invest in expansion or innovation—two key drivers of long-term economic growth.

The financial strain of reliability issues will also be felt by Pennsylvania's residents. Power outages and rising energy costs directly impact consumers, who will be faced with higher utility bills and power-related disruptions in their daily lives. This, in turn, could lead to a reduction in consumer spending, which is a major driver of the state's economy. As both businesses and residents feel the economic consequences of an energy shortfall, Pennsylvania would likely experience slower economic growth, see a reduction in job creation, and a decline in overall quality of life.

With all these factors in play, we must plan for an energy future that can meet growing demand while maintaining the reliability and affordability on which residents and businesses depend. This means not only addressing capacity shortfalls and aging infrastructure but investing in innovative solutions to maximize existing energy resources and diversify our energy mix to ensure that we have the flexibility to adapt to future challenges.

The combination of population growth, economic development, climate-related weather events, electrification trends, and digital transformation will continue to shape energy needs in our region. It is crucial that we proactively address these trends through comprehensive energy planning, modernization of the grid, and investment in reliable generation sources to ensure we can meet demand.

With this projected shortfall looming in the PJM region, we are uniquely positioned to play a key role in addressing this urgent issue and ensure affordable and reliable energy throughout the Commonwealth. As such, the PA Chamber supports an all-of-the-above energy policy/strategy that strengthens our status as a global energy leader, while allowing our energy sector leaders to innovate and thrive. This includes leveraging our existing baseload resources while supporting energy innovation and new technologies, such as hydrogen and small modular

reactors (SMRs), to power both our economy and communities throughout the Commonwealth.

Filling the Energy Gap

Pennsylvania, with our diverse industrial base, is home to key sectors such as manufacturing, technology, and healthcare, all of which rely on a stable, affordable energy supply to fuel their operations. As new businesses emerge and existing ones grow, the need to ensure reliable and affordable energy to power facilities, factories, and offices will only intensify.

To ensure that Pennsylvania's energy remains both reliable and affordable, the Commonwealth should adopt a comprehensive energy policy that balances environmental goals with economic considerations and grid reliability, without discriminating against reliable thermal generation (e.g., via carbon taxes). Pennsylvania's energy strategy should include a directive for administration officials and personnel to focus specifically on the development and sustained implementation of the energy policy, potentially, through the creation of an energy-centric department or agency, either as an independent agency, as part of the Governor's Administration (e.g., PA Department of Energy), or as a more prominent office/department with the PA Department of Environmental Protection (DEP). The creation of such an entity would serve as a dedicated, centralized body, comprised of subject matter experts, working to address the diverse and evolving energy needs of Pennsylvania, and ensure that the state's energy future is secure, sustainable, and economically viable.

Pennsylvania's energy plan must protect and expand job opportunities, promote economic growth and investment, and prioritize capital investment while also investing in reliable baseload generation to ensure adequate and affordable energy to power our economy. This should include initiatives that help facilitate investment in reliable thermal generation projects at the sites of recently or soon to-be-retired thermal plants; expanding the definition of eligible projects for EDGE Tax Credits to support new generation projects; and initiatives that encourage innovation and competition across all energy sources, fostering a free and balanced energy market without favoring any particular energy technology or source.

It is vital that, as part of a state energy plan, we leverage and utilize our existing thermal baseload resources (e.g., coal, natural gas, and nuclear) to their full and maximum potential, as most new "replacement energy" projects currently being proposed and constructed are generally inverter-based resources like wind and solar. While inverter-based projects provide some energy to fill these gaps and should certainly be part of Pennsylvania's all-of-the above energy plan/strategy, these resources do not yet provide the same operational features that are crucial for maintaining grid reliability. Without sufficient and reliable replacement generation from traditional baseload resources, available, dispatchable energy that can be quickly deployed to meet demand, can be diminished and will put reliability at risk, especially during peak demand periods.

With natural gas currently serving as Pennsylvania's primary baseload energy source, it offers a unique opportunity to ensure grid stability and meet demand. Our proximity to abundant Marcellus Shale gas supplies enables more cost effective and reliable baseload power generation. However, to fully harness the potential of Pennsylvania's natural gas resources, continued investment in infrastructure and policies that promote its responsible use are essential.

Key policies should encourage investment in carbon capture and storage (CCS) technologies, promote the development of renewable natural gas, and support workforce development programs to ensure workers are equipped with the necessary skills for both natural gas and clean energy sectors. Additionally, upgrading and modernizing natural gas delivery infrastructure, including pipelines, storage facilities, and processing plants, is essential to ensuring grid resiliency. Encouraging new pipeline projects improves access to natural gas, strengthens the connectivity of Pennsylvania's pipeline network with neighboring states, and helps diversify the energy supply while reducing the risk of disruptions.

Maintaining thermal generation sources, such as coal, natural gas, and nuclear, alongside renewable energy, ensures reliable baseload power and further supports grid stability. At the same time, policies and initiatives that support investments in modernizing and expanding Pennsylvania's electric grid improve the integration of renewable energy projects, address the growing demand for energy, reduces the risk of outages and facilitates a more efficient transmission of energy. Together, these efforts will help ensure access to reliable and affordable energy that is vital to Pennsylvania's economy and residents.

Permitting Reform in Pennsylvania

Pennsylvania has the potential to be a national and global leader in economic growth. Too often we lose out to other states in attracting business, resulting in missed opportunities for job creation, tax revenue, and long-term prosperity. Employers across industries, from manufacturing and energy development to construction and logistics, consistently cite permitting delays, inconsistent agency communication, and a lack of transparency as major barriers to investment. These challenges undermine Pennsylvania's competitiveness, especially when compared to neighboring states with more streamlined regulatory environments.

In 2024, as part of the FY 2024–2025 Budget, the Legislature worked in a bi-partisan manner with the Administration to pass the Streamlining Permits for Economic Expansion and Development (SPEED) Act. This legislation established a program at DEP allowing qualified third-party professionals to expedite the review of air, land, and water permit applications, an important step toward modernizing Pennsylvania's permitting system and supporting energy innovation.

We are also encouraged to see other permitting reform initiatives recently advance, such as Senate Bill 6. Senate Bill 6, sponsored by Senator Kristin Phillips-Hill, recently passed out of the Senate and represents a proactive, comprehensive approach to addressing long-standing permitting challenges. The bill includes several key provisions designed to improve efficiency, transparency, and accountability across state agencies, such as requiring timely notifications when applications are incomplete or technically deficient, "deemed approval" authority when agencies miss decision deadlines and fail to refer applications for third-party review, and the formal establishment of the Office of Transformation and Opportunity to coordinate economic development projects and promote inter-agency collaboration.

By improving communication, ensuring accountability, and reducing permitting delays, we can build a regulatory environment that fosters business growth, innovation, and long-term competitiveness.

Working Together to Ensure a Reliable and Affordable Energy Future

Pennsylvania stands at a critical crossroads in shaping both our own energy future and the nation's energy future. As the demand for electricity continues to grow and the transition away from certain thermal energy sources accelerates, it is imperative that our grid remains reliable, affordable, and capable of supporting the diverse industries that drive our economy.

A comprehensive, all-of-the-above energy strategy that maximizes the use of Pennsylvania's reliable thermal baseload sources while balancing additional renewable energy sources is essential for maintaining grid stability and fostering long-term economic growth. In addition to slowing down the retirement of some coal-fired generation facilities, we must also recognize the significant role that natural gas, with its abundant and cost-effective supply, and nuclear energy play in Pennsylvania's baseload source portfolio. These reliable thermal sources help to ensure we are able to meet demand and provide reliable energy during peak periods.

Additionally, modernization of our energy infrastructure, additional permitting reforms, and providing certain incentives for capital investments are necessary to expedite the deployment of new energy projects, so Pennsylvania remains competitive in attracting new investment. Recent steps taken with permitting reform and the SPEED Act are positive, however, more needs to be done to streamline the permitting process and make Pennsylvania an even more attractive destination for businesses and energy investments and innovations.

The PA Chamber of Business and Industry is committed, and is looking forward to working with policymakers, industry leaders, and stakeholders to address these challenges and continue to position Pennsylvania as a current and future energy leader. By embracing a forward-thinking energy policy that combines innovation, reliability, and economic growth, we can ensure a prosperous energy and economic future for all Pennsylvanians.

Thank you for your time and attention today. I look forward to continuing to work with you on this important issue.