

Publications

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Pennsylvania PUC Reviews Data Center Impacts Amid New Energy Plan

Key Takeaways:

- During a recent Pennsylvania Utility Commission (PUC) hearing to evaluate how the rise in data centers is impacting energy demand, grid reliability and utility regulation, stakeholders emphasized fair cost allocation for infrastructure, opposing special treatment for data centers and favoring standard tariff processes.
- Primary concerns include infrastructure investment and cost allocation, generation and reliability issues, and tariff design.
- Six proposed bills in connection with Governor Shapiro's "Lightning Plan" were unveiled on the same day of the PUC hearing, aimed at modernizing Pennsylvania's energy landscape through a carbon cap-and-invest program, expanded clean energy targets, streamlined project approvals, infrastructure tax incentives, support for rural and low-income communities, and enhanced energy efficiency rebates.

As data centers surge across Pennsylvania, the PUC is taking a closer look at their impact on energy systems and regulatory oversight. At the same time, Governor Shapiro's Lightning Plan proposes sweeping changes to modernize the Commonwealth's energy systems, setting the stage for potential shifts in utility law and oversight. This update explores the legal context, policy drivers and impacts that may emerge from the intersection of infrastructure growth and state energy policy.

On April 24, 2025, the PUC convened an en banc hearing to address the growing impact of data centers and other large electricity consumers on the state's power grid. In the Motion calling for the hearing, the Chair recognized what has been a running theme across the nation for large load consumers and developers looking to attract data centers — uncertainty regarding both the interconnection timeline and the costs these users will face to procure power in the Commonwealth.

The hearing brought together stakeholders from tech, public utility and consumer advocacy groups to discuss the opportunities presented by the rapid expansion of energy-intensive facilities and the challenges posed by the new demand on the grid. The testimony bore out three primary themes: (1) generation and reliability concerns, (2) infrastructure investment and cost allocation and (3) tariff design.

Related People

- Christine Soares

Related Capabilities

- Energy
- Public Utilities & Energy Consumers
- Data Center & Infrastructure

Infrastructure and Cost Allocation

Fair cost allocation was articulated as a priority by utility and data center panelists alike. The utilities explained in detail how their large load interconnection process works, including how infrastructure investment costs specific to large load customers are allocated. Panelists encouraged the PUC to avoid the creation of a data center customer class and instead rely on cost-of-service studies and rate case proceedings to ensure transparency and that proper allocation of costs to data center customers. This would mean that data centers would be customers under tariffs and not under special contracts, which are often filed for commission approval on a confidential basis.

Tariff Design

The panelists expressed differing views around a model tariff versus a policy statement. Some panelists advocated for a policy statement citing concerns around changes in the market and the potential of a model tariff that is too restrictive or cannot adapt to a changing environment. Others, particularly the statutory advocates, believe a model tariff will level the playing field for utilities serving data centers and not force the utilities to compete against each other in attracting them.

Commissioner Zerfuss noted at the end of the utility panel that she saw no difference between a model tariff and a policy statement, as both would be considered recommendations and not mandates.

Generation and Reliability

With the anticipated surge in electricity demand, the PUC acknowledged the strain on the existing grid infrastructure. The PUC emphasized that simply building more generation or transmission facilities may not suffice, advocating for a diversified approach that includes load management and demand response strategies. Panelists discussed the concept of a “bring your own generation” (BYOG) model, where data centers would provide their own power generation infrastructure, such as solar panels or wind turbines, to support their primary generation needs.

From a regulatory compliance perspective, BYOG could convert a data center to a utility, thus obligating compliance with a host of utility regulations. While some data centers are already navigating complex FERC guidelines resulting from recent FERC orders allowing them to monetize their on-site generation, a BYOG data center could also be subject to grid interconnection laws, energy trading restrictions and local zoning laws around where on-site generation can be located. It remains unclear whether BYOG would slow the development of data centers in the Commonwealth given the potential regulatory and legal obstacles that the data centers may face. There is a possibility, however, that the legal framework may change because of Governor Shapiro’s “Lightning Plan.”

The Lightning Plan

On the day of the PUC hearing, Governor Josh Shapiro’s Lightning Plan was introduced into the General Assembly through six pieces of legislation.

1. The Pennsylvania Climate Emissions Reduction Act (PACER) (HB 503) introduces a cap and invest program requiring power plants to pay for their carbon emissions with 70 percent of the revenues funneled back to consumers through utility bill rebates and the rest funding low-income assistance and clean energy initiatives.
2. The Pennsylvania Reliable Energy Sustainability Standard (PRESS) (HB 501) aims to increase the Commonwealth’s clean energy requirement from eight to 35 percent by 2035.

3. The Pennsylvania Reliable Energy Siting and Electric Transition (RESET) Board (HB 502) would expedite energy project approvals by streamlining the siting and permitting process in the Commonwealth, which is one of only 12 states without a state siting and permitting entity for such projects.
4. Improvements to the EDGE Tax Credit (HB 500) would add tax incentive credits for investment in energy infrastructure, including up to \$100 million annually for new power plants over three years.
5. The community energy bill (HB 504) would support rural communities, farmers and low-income residents by promoting shared energy resources — such as methane digesters on farms — to reduce energy costs.
6. Modernizing energy efficiency in the Commonwealth (HB 505) through an amendment to Act 129 would provide more money to consumers in the form of rebates and incentives for buying energy efficient appliances.

While the proposed legislation needs to work its way through the legislative process, those operating in Pennsylvania's energy sector should be prepared for potential changes in compliance requirements, tariff design, power procurement and infrastructure investment. We will closely monitor the PUC dockets and the movement of these bills through the legislative process.