Prepared Testimony of

Stephen M. DeFrank

Chairman, Pennsylvania Public Utility Commission

before the

Senate Democratic Policy Committee

September 2, 2025

Pennsylvania Public Utility Commission

400 North Street Harrisburg, Pennsylvania 17120

Telephone (717) 787-4301

http://www.puc.pa.gov

Good afternoon, Chairman Miller and members of the Senate Democratic Policy Committee. My name is Stephen DeFrank, Chairman of the Public Utility Commission (Commission or PUC). I appreciate the opportunity to testify in front of the Committee today on the topic of data centers.

In your invitation to the Commission for this hearing, you elaborated on your intent to examine the opportunities and the impacts on Pennsylvania's communities arising from the construction of data centers here in the Commonwealth. I applaud you for leading this discussion. As the members of this Committee are well aware, data center proliferation is a central topic of interest among policymakers here in the Commonwealth and nationwide. The Commission has placed a targeted focus on this newly evolving commercial revolution, and we are glad to share our perspective on these issues along with summarizing actions taken at the PUC.

Data center buildout, along with the policy conversations gravitating around it, have expanded significantly and quickly. The challenges and opportunities now being discussed in a myriad of venues, such as this hearing today, were barely a topic of conversation two years ago. Now we find ourselves weighing the variables, and striving to tackle these challenges in a way that maximizes the huge opportunities presented.

Pennsylvania has a long and proud history of energy, industrial, and technological innovation – from the first commercial oil well in Titusville, to the steel mills of Bethlehem, to the Westinghouse Labs in Pittsburgh, to natural gas extraction in shale formations in the southwest and northeast regions of the state. Once again Pennsylvania is uniquely situated to cultivate the potential benefits from a breakthrough in data center development. The Commonwealth is a major energy exporter with an abundance of excess electric generation capacity, including carbon free energy from one of the nation's largest nuclear fleets. We have top-flight research universities and a highly educated workforce. Pennsylvania is centrally located, close to the major population centers of the northeast and to existing data hubs in Northern Virginia, New York, and Columbus, Ohio. Pennsylvania is also aggressively building out its communications systems, recently announcing a $800 million investment in broadband deployment using funds from the Infrastructure Investment and Jobs Act.[1] And finally, the Commonwealth has an attractive tax climate for data centers.

I highlighted the Commonwealth's unique position in my official testimony submitted at a Federal Energy Regulatory Commission (FERC) Technical Conference, held last November, related to data centers and their interconnection to the electricity grid.[2] At that conference, I also noted the consequences of poorly planned economic development. Many Pennsylvanians know all too well the costs of

[1] See Pennsylvania Broadband Deployment Authority press release at the following link – https://broadband.pa.gov/pennsylvania-broadband-development-authority-announces-provisional-approval-of-nearly-800-million-in-bead-grants-that-will-connect-all-pennsylvanians-with-high-speed-internet/

[2] FERC Technical Conference on Co-Located Load at Docket AD24-11.

poorly planned development. While our industrial heritage has contributed to our economic prosperity, we have left future generations to deal with the impacts of poor – or no planning. This is why we must make certain that the mistakes of our past are not repeated in the present to leave problems for the future. Now, at the beginning of this new wave of technological growth, is the time to make sure things are well-planned and done right.

To that end, on April 14th, 2025, the Commission hosted an *en banc* hearing concerning interconnection and tariffs for large load customers.[3] At the hearing the Commission heard testimony from ten participants representing electric utilities, data centers, and advocates. We focused the conversation on the impact of data center interconnection onto the electric grid as well as on what rules and procedures should be put in place to effectively interconnect these facilities while protecting existing customers from undue risks and stranded costs. The Commission also received filed comments from over forty interested parties. We have carefully considered this input and are currently working on a proposed model tariff aimed at addressing characteristics such as appropriate MW size for tariff designations, financial security requirements, minimum contract terms, early termination fees, maximum interconnection study times, load ramping, and best practices from other jurisdictions. It is my goal to have this proposal out for comment in the near future.

As we all now know, the electric demand from these data centers is unprecedented. Historically, growth in electricity demand was linear, growing in the range of one to three percent per year. Interconnection of data center customers is similar to creating a brand-new city but placing its demand on a relatively small geographic footprint. Herein lies the potential benefit of these accounts. For instance, the City of Pittsburgh has approximately 5,000 miles of circuits, 180,000 meters, 100,000 poles, 150 substations, and 20,000 transformers. Conversely, a typical data center would have less than a few miles of circuits, one meter, a handful of poles, a substation, and a few transformers. This is significantly less infrastructure than a city, but the account is consuming a similar amount of electricity. The disparity in volume versus fixed costs offers the potential to reduce rates, particularly for transmission, among all ratepayers. In essence, data centers provide an opportunity to significantly increase the number of watts while minimally increasing the fixed costs, thereby spreading the fixed costs among a much larger volume of load and reducing the per unit cost of service for the utility. However, this will only be realized if prudent interconnection rules and policies are established and followed. The Commission is firmly committed to seeing this through.

Finally, the impact of data centers on resource adequacy of the electricity grid is top of mind. While the Commission does not regulate generation nor administer electric resource planning, we still have a direct responsibility to foster reliable electric distribution service at affordable rates. To that end the Commission hosted a Resource Adequacy Technical Conference on November 25th, 2024, to hear the

[3] Docket M-2025-3054271.

perspectives of electric utilities, generators, PJM, Advocates, and Legislators on this important issue.[4] Following the conference, the Commission initiated the *en banc* I discussed earlier and also has worked with electric distribution companies to reform and refine their load projections.

The Commission also maintains a strong advocacy voice for the Commonwealth in other venues. I serve as the Commission's board member of the Organization of PJM States Incorporated (OPSI). Whether through OPSI, or individually as the Commission, the PUC monitors and participates in matters at PJM Interconnection, LLC (PJM), the operator of Pennsylvania's electric grid, and in proceedings at FERC. Recently PJM issued a Critical Issue Fast Path proposal to address the onrush of demand created by data centers and its impact on reliability and resource adequacy.[5] The Commission and OPSI are currently reviewing the proposal and plan to actively engage in the deliberation process to ensure the viewpoints of the states are considered. Our goal is to ensure that grid reliability is maintained, and we will continue to advocate for effective market rules to ensure such.

These are extraordinary times in the energy sector. The decisions we make in the next five to seven years will impact us for the next 70 years. I am confident that with prudent planning, new data centers can be integrated into the electric grid in a manner that benefits all utility customers, local municipalities, and the Commonwealth.

Thank you for the invitation to testify today and I look forward to answering any questions you may have.

[4] https://www.puc.pa.gov/filing-resources/issues-laws-regulations/technical-conference-on-resource-adequacy/
[5] https://insidelines.pjm.com/pjm-board-fast-tracks-effort-to-reliably-serve-large-loads/