



April 17, 2026

Senator Gene Yaw, Chair
Representative Eddie Day Pashinski, Vice Chair
Center for Rural Pennsylvania
625 Forster St, Room 902
Harrisburg, PA 17120-2184

Dear Senator Yaw and Representative Pashinski:

On behalf of the Data Center Coalition (DCC), thank you for the opportunity to testify on the Center for Rural Pennsylvania's "Public Hearing Series on Data Centers: Part I — Mapping the Landscape Across State, Local, Industry, and Environmental Perspectives." DCC is the national membership association for the data center industry. DCC's membership includes leading data center owners and operators, as well as companies that lease large amounts of data center capacity.¹

Today, there is unprecedented demand for the digital services that have become central to our daily lives and modern economy—everything from the way we work and learn to how we buy groceries, bank, and even access medical care now occurs online. With an average of 21 connected devices per household in the U.S., the role of data centers is expected to grow as consumers and businesses generate twice as much data in the next five years as they did over the previous ten.² This growth is driven by the widespread adoption of cloud services, the proliferation of connected devices, and the rapid scaling of advanced technologies like generative AI, which alone could create between \$2.6 trillion and \$4.4 trillion in economic value globally by 2030.³

Data centers are the essential digital infrastructure behind every online purchase, every telehealth appointment, every online news article, and every digital classroom. Data centers enable the essential services and cutting-edge technologies that drive the 21st century economy and enhance our quality of life, ensuring that our homes, businesses, schools, hospitals, manufacturing facilities, and government units operate smoothly and efficiently. Digital infrastructure is a critical component of the United States' global economic competitiveness and keeping Pennsylvanians' data safe and secure domestically.

Data Centers Make Significant Economic Contributions to Pennsylvania

By prioritizing investments in local communities, data centers catalyze supply chain and service ecosystems, creating jobs for thousands of construction professionals as facilities are built, and providing quality, high-wage jobs to support ongoing operations. Every data center comes with years of reliable support for local economies by promoting job creation at restaurants, hotels, car rental agencies, fiber and HVAC installers, steel fabricators, advanced manufacturing facilities, and many other businesses. Each job in a data center supports six jobs elsewhere in the economy.

¹ Public testimony and written comments submitted by DCC do not necessarily reflect the views of each individual DCC member. A list of current DCC members is accessible at <https://www.datacentercoalition.org/members>.

² Deloitte, *Consumers embrace connected devices and virtual experiences for the long term* (September 5, 2023), available at <https://www2.deloitte.com/us/en/insights/industry/telecommunications/connectivity-mobile-trendssurvey/2023/connectivity-mobile-trends-survey-full-report.html>.

³ JLL, *Data Centers 2024 Global Outlook*, available at <https://www.us.jll.com/content/dam/jll-com/documents/pdf/research/global/jll-data-center-outlook-global-2024.pdf>.

According to a recent PwC report, Pennsylvania’s data center industry supported 99,150 total jobs in 2023—including direct, indirect, and induced employment—and contributed \$8.35 billion in annual labor income. Over the 2022–2023 period, the industry cumulatively added \$27.69 billion to Pennsylvania’s Gross Domestic Product (GDP) and generated \$2.62 billion in state and local tax revenues.⁴

Data centers rely on local skilled trades workers—including electricians, plumbers, pipefitters, steamfitters, and HVAC technicians—to build facilities and to maintain and upgrade them when operational. This requires a strong workforce pipeline to meet current needs while also planning for future investment.

The industry is investing in workforce development programs to ensure a robust pipeline of skilled workers to support facilities. Under the lead of the Pennsylvania Commission for Community Colleges, four institutions have created a Technology and Trades Workforce Consortium to address workforce needs during the construction of hyperscale data centers, and the jobs needed once they are built.⁵ Amazon Web Services has partnered with Buck County Community College to offer a four-week, paid Information Infrastructure Pre-Apprenticeship, giving applicants hand-on experience in the skills needed for data centers and digital infrastructure.⁶ Another DCC member recently partnered with Texas State Technical College to prepare Texans for good paying careers in data center operations and maintenance.⁷ These are pathways to careers in a 21st century economic field that typically doesn’t require a four-year degree.

Data centers provide significant tax revenue for communities, which is reinvested into schools, services, and infrastructure, and helps keep communities affordable. For example, in Mecklenburg County, a rural community in south central Virginia that is home to a large data center campus, the county’s most recent budget featured a “data center dividend” that included \$1.5 million in tax cuts—including a reduction in personal property tax, elimination of vehicle registration fee, and elimination of the consumer utility tax. In Quincy, Washington, Microsoft’s long time investments have helped to cut the share of residents living below the poverty level in half, paying 1.7 times higher than the regional average pay, investing in local schools, and creating a Datacenter Academy providing hands-on training for students and job seekers pursuing careers in data center operations and related technical fields.⁸

Data Centers Are Highly Efficient Facilities, Enabling Efficiency Gains Economy-wide and Leading the Clean Energy Transition

Data centers aggregate our society’s collective computing demands efficiently and securely. Previously, these types of computing resources were dispersed across businesses, which were far less efficient and secure. By centralizing computing resources, data centers have been able to leverage innovations in design, equipment, and technology to maximize energy efficiency. While electricity consumption at data centers rose just six percent from 2010 to 2018, computing output jumped 550 percent, marking significant gains in efficiency and productivity.⁹

Moreover, data centers are highly incentivized to continue operating as efficiently as possible. According to the U.S. Chamber of Commerce, energy is among the largest operating costs for data centers. Apart from meeting

⁴ PwC, Economic contributions of U.S. data centers, 2017–2023 (February 2025), available at <https://www.centerofyourdigitalworld.org/2025-impact-study>.

⁵ Four Pennsylvania Community Colleges are joining forces to ADVANCEPA with a Technology and Trades Workforce Consortium, available at <https://www.lccc.edu/news/four-pennsylvania-community-colleges-are-joining-forces-to-advancepa-with-a-technology-and-trades-workforce-consortium/>.

⁶ https://www.bucks.edu/workforce/future-focus/?fbclid=IwZXh0bgNhZW0CMTAAAYnJpZBExMXZzVkJ6SUUVm9sYnNydGMGYXBwX2IkEDlyMjAzOTE3ODgyMDA4OTIAAR6bHI4dfFDSIxOTKGbWj3doJTdvaWw7LFlNMFHniPuhnV2yZg7L33blbrOtmg_aem_e7D3lhBPejJHc-ku4vZN4A.

⁷ Compass Data Centers, “Building the Future of New-Collar Work: Compass data centers and TSTC’s METI Data Center Pathway,” available at <https://www.compassdatacenters.com/in-the-news/mei-pathway-program/>.

⁸ Source One, “Microsoft Points to Quincy in New Community-First AI Push,” available at https://www.yoursourceone.com/columbia_basin/microsoft-points-to-quincy-in-new-community-first-ai-push/article_4df57cc8-c871-4ff6-82f9-59beb6cd5d9b.html.

⁹ Lawrence Berkeley National Laboratory, “Recalibrating global data center energy-use estimates,” Science Magazine, available at https://datacenters.lbl.gov/sites/default/files/Masanet_et_al_Science_2020.full_.pdf.

sustainability commitments, data center companies strive to maximize energy efficiency to keep costs low for customers and for supporting their own operations.

It is important to recognize that data centers are not simply large consumers of electricity; they also facilitate efficiency gains and energy savings for homes, businesses, industrial consumers, and utilities across the economy. Many technologies and strategies deployed across Pennsylvania—including smart thermostats, smart meters, managed electric vehicle (“EV”) charging, smart lighting, and grid enhancing technologies—require the digital infrastructure provided by data centers.

Moreover, leading data center owners and operators have not stopped at energy efficiency: the data center industry also represents half of all contracted corporate renewable energy in the U.S.¹⁰ This aggressive investment in clean energy technologies is in line with the industry’s broader sustainability goals: many data center companies have committed to achieving carbon neutrality and supporting their operations with 100 percent clean energy within the next 10 years. Data center companies are also actively supporting next-generation clean electricity technologies from utility-scale hydrothermal power and long-duration storage to the development of small modular reactors (“SMRs”) and nuclear fusion efforts.

These massive investments in energy technologies underscore industry’s unparalleled interest and commitment to advancing affordable, abundant, reliable, and sustainable power for all grid customers.

Data Centers Are One Part of Increasing Electricity Demand Tied to Economic Growth

After nearly two decades of relatively flat electricity consumption, the U.S. is experiencing a significant increase in power demand driven by several economic growth trends. As noted by Lawrence Berkeley National Laboratory in the 2024 U.S. Data Center Energy Usage Report, “This surge in data center electricity demand...should be understood in the context of the much larger electricity demand that is expected to occur over the next few decades from a combination of electric vehicle adoption, onshoring of manufacturing, hydrogen utilization, and the electrification of industry and buildings.”¹¹ Supporting growing electricity demand through timely and prudent investments in new generation, transmission, and distribution infrastructure—along with investments in energy efficiency, grid enhancing technologies, and other innovative strategies—is essential to the nation’s economic growth, global competitiveness, and national security.

In recent years, Pennsylvania has experienced a surge in interest from prospective data center customers. That surge is part of a national trend. As every segment of the economy becomes increasingly dependent on digital services, the development of data centers, which make those services possible, has accelerated across the country to meet those needs. Data centers require a significant amount of electricity, which creates both challenges and opportunities.

On one hand, data center-driven load growth challenges utilities to build the infrastructure required to serve those customers’ demands in a timely manner while mitigating the risk of those investments to all customers. On the other hand, data center-driven load growth will generate significant new revenues for electric utilities, and those revenues can create downward pressure on the rates that all customers pay as noted by PPL in its April testimony in the Pennsylvania Public Utility Commission (PUC) *En Banc* hearing.¹²

There are several factors contributing to shifts and increases in electricity cost rates across the U.S. The interaction between load growth, grid improvements, and electricity rates was recently analyzed in a U.S. Department of Energy-commissioned report, conducted by LBNL in partnership with The Brattle Group. The study concluded that national average electricity prices during 2019-2024 primarily tracked with inflation, but state-level retail electricity price trends varied widely with increases mainly attributable to: 1) grid modernization due to aging

¹⁰ S&P Global, “Data centers account for half of US clean energy procurement but only 20% in Europe: report,” October 31, 2024 available at <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/electric-power/103124-data-centers-account-for-half-of-us-clean-energy-procurement-but-only-20-in-europe-report>.

¹¹ Lawrence Berkeley National Laboratory, “2024 United States Data Center Energy Usage Report,” available at <https://eta.lbl.gov/publications/2024-lbnl-data-center-energy-usage-report>.

¹² PPL Electric Utilities Corporation, “Testimony of Joseph B. Lookup, Vice President-Transmission & Distribution Planning and Asset Management,” En Banc Hearing on Interconnection and Tariffs for Large Load Customers Docket No. M-2025-3054271, available at <https://www.puc.pa.gov/pdocs/1875751.pdf>.

infrastructure; 2) extreme weather and wildfire recovery costs; 3) volatile natural gas prices, and 4) inflation and supply chain pressures. Importantly, the LBNL study found that states with the greatest price increases typically exhibited shrinking customer loads whereas states with the greatest price decreases exhibited increasing customer loads.¹³

Data Centers Are Committed to Paying their Full Cost of Service and Can Stabilize Utility Prices

The data center industry is committed to paying its full cost of service for the energy and infrastructure it uses. Several recent publications from key data center markets indicate that the data center industry has been paying its full cost of service for energy to date. Utilities across the country are also increasingly articulating how data centers and other large energy users can help apply downward pressure on electricity rates in their jurisdiction. Several examples are included here:

- **Virginia:** As the largest data center market in the world, Virginia faces unique challenges and opportunities related to this rapidly expanding sector. In late 2024, the Virginia General Assembly's Joint Legislative Audit and Review Commission (JLARC) published a report that included an in-depth analysis of how data center growth affects Virginia's electric grid, energy policy, and ratepayers. In this report, JLARC indicated that data centers are currently paying their full cost of service for energy.¹⁴
- **California:** Earlier this year during a quarterly earnings call, PG&E CEO Patti Poppe said that for each gigawatt of new load on the system, the utility can reduce customers' electric bills by about 1 percent, citing rate cuts of 11 percent since 2024, which has been facilitated by data center growth.¹⁵
- **Arizona:** In an April 2025 letter, the Chair of the Arizona Corporation Commission stated that, to date in Arizona, the data center industry is paying its fair share of costs related to the expansion of power generation and infrastructure under existing utility rate structures and Commission practices.¹⁶
- **Georgia:** In a recent video, Georgia Power confirmed that newly adopted rules ensure that data centers pay for the infrastructure they need, preventing residential and small businesses customers from being impacted. In fact, Georgia Power confirmed that large energy users, like data centers, are helping the utility to keep rates frozen for the next three years, directly benefiting other customers.¹⁷ Georgia Power also plans to provide annual savings of approximately \$102 for the typical residential customer following the company's next base rate case in 2028.¹⁸
- **Indiana:** In a February announcement, Indiana Michigan Power (I&M) unveiled a comprehensive Customer Benefits Plan centered on a reduction in base rates—the most significant component of the typical utility bill. This rate relief is driven by surging revenues from large-scale industrial growth, specifically the expansion of data centers within the region. The plan also introduces a stabilization mechanism designed to buffer customers against future price volatility. It further commits to significant investments in modern infrastructure and grid technology to bolster performance. These enhancements aim to deliver more

¹³ Lawrence Berkeley National Laboratory and The Brattle Group, "Factors Influencing Recent Trends in Retail Electricity Prices in the United States," October 2025, <https://www.sciencedirect.com/science/article/pii/S1040619025000612>.

¹⁴ Joint Legislative Audit and Review Commission, "Report to the Governor and the General Assembly of Virginia Data Centers in Virginia," December 9, 2024, <https://jlarc.virginia.gov/pdfs/reports/Rpt598-2.pdf>.

¹⁵ "Data Center Growth Has Helped PG&E Cut Rates 11% since 2024, CEO Says." *Utility Dive*, 17 Feb. 2026, www.utilitydive.com/news/data-center-growth-has-helped-pge-cut-rates-11-since-2024-ceo-says/812230/.

¹⁶ Correspondence from Chair Thompson, Arizona Corporation Commission, Docket No. E-00000A-25-0069, Bar Code E000042869, April 3, 2025, <https://www.azcc.gov/news/home/2025/04/10/acc-addresses-data-center-development--ensure-customers-are-financially-protected>.

¹⁷ Georgia Power, "Will Data Centers Affect My Power Bill?" September 2025, https://www.linkedin.com/posts/georgiapower_were-here-to-communicate-the-facts-about-activity-7365154306762645506-Y8S6/.

¹⁸ Georgia Power. (2026, February 17). *Georgia Power delivers lower costs with latest filings* [Press release]. <https://www.georgiapower.com/news-hub/press-releases/georgia-power-delivers-lower-costs-with-latest-filings.html>

resilient service with fewer and shorter interruptions, building upon the company's 32% improvement in reliability achieved over the past five years.¹⁹

- **Kansas:** A 2020 study prepared for Kansas officials found that large energy users can actually dilute the average consumer's share of energy demand, reducing costs. Large load users also pay a greater share of a utility's fixed costs, such as surplus energy during low-demand hours, which helps lower the burden on households.²⁰
- **Mississippi:** In a recent news release, Entergy announced approximately \$5 billion in total savings for 2.3 million customers in Arkansas, Louisiana, and Mississippi. The release detailed more than \$2 billion in savings for Mississippi customers – rates that are significantly less than they otherwise would have been during the replacement construction of power plants if not for the added contribution of a new large data center project, among others. This comes at the same time as the company is providing increased investments in grid improvements to reduce power outages with no additional cost to existing customers.²¹
- **Pennsylvania:** In recent testimony, the chair of the Pennsylvania Public Utility Commission (PAPUC) illustrated how concentrated electricity use by large customers, like data centers, can create systemwide efficiencies. While a city such as Pittsburgh requires thousands of miles of circuits, poles, and transformers to serve many dispersed users, a data center consumes a comparable amount of power through only a few pieces of infrastructure. Because it draws so much electricity with minimal grid buildout, this imbalance between usage and physical assets can help lower per-unit transmission costs and reduce rates for all customers.²² Additionally, in a recent filing with the PAPUC, the President of PPL Electric noted the Company estimates that the first gigawatt of interconnected load will reduce other customers' transmission costs by 10%.²³

How Data Centers Use Water

The servers, IT equipment, and other hardware housed in a data center generate a significant amount of heat. If that heat is not dissipated, that equipment can overheat and fail, leading to vast and costly disruptions to critical services. There is no one-size-fits-all solution for cooling, and the best approach often depends on local factors such as water stress analysis, humidity, climate, temperature, and the availability of water, including recycled, nonpotable, or reclaimed sources. Cooling data centers involves inherent trade-offs: air cooling tends toward higher energy use, while liquid and evaporative methods typically require less energy but more water. Selecting cooling technology, therefore, includes the need to balance energy consumption and water usage.

Data Centers are Among the Most Efficient Water Users in the Economy

Data centers are just one of several industrial water users throughout the economy, yet they are one of the most efficient. Data centers used an estimated 39 billion gallons of water per year (BGY) in 2025, while semi-conducting manufacturing used 59 BGY and food and beverage used 533 BGY. An estimated 2,500 BGY was lost to utility water leakage in 2025.²⁴

¹⁹ Indiana Michigan Power. (2026, February 24). *I&M announces base rate reduction for Hoosiers through Customer Benefits Plan* [Press release]. <https://www.indianamichiganpower.com/company/news/view?releaseID=10776>.

²⁰ London Economics International LLC, "Study of Retail Rates of Kansas Electric Public Utilities," prepared for the Kansas Legislative Coordinating Council, January 8, 2020, https://kslegislature.gov/li_2020/b2019_20/committees/ctte_h_energy_utilities_and_telecommunications_1/documents/testimony/20200204_01.pdf.

²¹ Entergy. (2026, March 5). *Entergy announces \$5B in customer savings delivered by data center agreements; issues "Fair Share Plus" pledge* [Press release]. <https://www.entergy.com/news/5b-in-customer-savings-delivered-by-data-center-agreements-issues-fair-share-plus-pledge/>.

²² Stephen M. DeFrank, Chairman of the Pennsylvania Public Utility Commission, "Prepared Testimony before the Senate Democratic Policy Committee," September 2, 2025, https://www.puc.pa.gov/media/3594/defrank-senate_dem_policy_hearing-data_center_090225.pdf.

²³ PPL Services Corporation, "Comments of PPL Electric Utilities Corporation," in En banc Hearing Concerning Interconnection and Tariffs for Large Load Customers, June 6, 2025, <https://www.puc.pa.gov/pdocs/1882402.pdf>.

²⁴ Bluefield Research, U.S. Water for Data Centers: Market Trends, Opportunities, and Forecasts, 2025–2030, available at https://www.bluefieldresearch.com/research/u-s-water-for-data-centers-market-trends-opportunities-and-forecasts-2025-2030/?utm_content=349981779&utm_medium=social&utm_source=linkedin&hss_channel=lcp-3082084

A December 2024 report by Virginia’s Joint Legislative Audit & Review Commission (JLARC) confirmed that in Virginia, home to the world’s largest data center market, data center water usage is currently sustainable, and the state ensures future sustainability through regulation. The report also noted that in 2023, 83% of data centers in Virginia used the same amount of water (or less) than the average large office building.²⁵

A recently released report from the Kyl Center for Water Policy at Arizona State University showed that data centers in Arizona, a top data center market nationally, are estimated to use less acre-feet of water than:

- Power generation
- Semiconductor manufacturing (which has a significant presence in the state)
- Sand & gravel mining
- Golf courses
- Beverage facilities²⁶

Lastly, the Houston Advanced Research Center (HARC) report estimates that between direct (on-site cooling) and indirect (electricity generation) water consumption, existing data centers in Texas, the second largest data center market nationally, consumed approximately 25 billion gallons (or 77,000 acre-feet) of water, the equivalent of 0.4% of total water use in Texas in 2025.²⁷

Data center operators are actively prioritizing responsible water use through operational best practices and innovative development strategies, often collaborating with local authorities and conservation organizations on water restoration and reclamation projects.

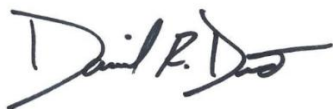
Considerations for Rural Communities

Data center developers, owners, and operators understand the regulatory environment and strive to be good neighbors in the communities where they operate. Regulatory certainty is a key factor that enables businesses to make significant investments in this essential infrastructure. For example, zoning laws that affect where and how data centers are built, designed, and operated are a critical element of siting considerations and economic success.

Additionally, data centers offer tremendous opportunities to grow a community’s tax base, support and grow local business ecosystems, and develop pathways for good-paying careers. DCC encourages robust engagement with the industry, local governments and other stakeholders on policies that balance local concerns with creating an environment that fosters economic development and opportunity for rural communities.

Thank you again for the opportunity to submit testimony. I am happy to continue being a resource for the Center as well as for rural communities throughout the Commonwealth.

Sincerely,



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²⁵ Joint Legislative Audit and Review Commission (JLARC), “Data Centers in Virginia,” page vii and 62, <https://jlarc.virginia.gov/pdfs/reports/Rpt598-2.pdf>.

²⁶ Kyl Center for Water Policy, Arizona State University, From Copper, Cattle and Cotton to Chips and Cloud Computing: Large Water Uses in Central Arizona, available at <https://morrisoninstitute.asu.edu/copper-cattle-and-cotton-chips-and-cloud-computing-large-water-uses-central-arizona>.

²⁷ Houston Advanced Research Center, Thirsty Data and the Lone Star State: The Impact of Data Center Growth on Texas’ Water Supply, available at <https://harcresearch.org/wp-content/uploads/2026/01/Thirsty-Data-Water-Use-and-The-Projected-Data-Center-Boom-in-Texas.pdf>.