

44TH DISTRICT
STATE SENATOR
KATIE MUTH

SENATE BOX 203044
THE STATE CAPITOL
185 MAIN CAPITOL
HARRISBURG, PA 17120-3044
717-787-1398
FAX: 717-783-4587

338 MAIN STREET
ROYERSFORD, PA 19468
610-792-2137
FAX: 610-948-3037



Senate of Pennsylvania

COMMITTEES

VETERANS AFFAIRS & EMERGENCY
PREPAREDNESS, DEMOCRATIC CHAIR
COMMUNITY, ECONOMIC &
RECREATIONAL DEVELOPMENT
ENVIRONMENTAL RESOURCES
& ENERGY
FINANCE
STATE GOVERNMENT

EMAIL: senatormuth@pasenate.com
FACEBOOK: @SenatorMuth
X: @SenatorMuth
INSTAGRAM: @SenatorMuth
WEBSITE: www.SenatorMuth.com

June 6, 2025

Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120
Submitted electronically via PUC E-File and via USPS

RE: Docket Number M-2025-3054271

Dear Commissioners,

I am submitting this formal comment to the Pennsylvania Public Utility Commission (PUC) to express strong opposition to the current trajectory of data center development in Pennsylvania due to the absence of clear, enforceable regulatory safeguards. The April 24, 2025, en banc hearing held by the Commission exposed the urgent and far-reaching implications of unchecked data center growth for the Commonwealth's energy infrastructure, ratepayers, environment, and long-term public interest.

Grid Reliability and Energy Demand

The hearing testimony made it abundantly clear: the scale of power demanded by data centers, especially AI-driven and hyperscale campuses, poses unprecedented stress on our state's electric grid. One proposed Amazon Web Services (AWS) campus near Berwick alone is projected to consume up to 960 megawatts of electricity, equivalent to the usage of nearly 900,000 homes. This is not a marginal increase in load, it is an industrial-scale transformation of Pennsylvania's energy demand profile.

The Commission heard warnings that this could create "congestion and reliability issues" within existing transmission networks, particularly in areas not built for such concentrated load growth. Yet, in many cases, the data centers are located in rural or semi-rural communities where grid capacity is weakest and local oversight is minimal. The potential for cascading reliability challenges is serious and deserves a more coordinated response from regulators.

Cost Allocation and Ratepayer Risk

Equally concerning is the threat that existing residential and small business customers may be forced to subsidize infrastructure upgrades for corporate data centers, facilities that generate immense profits while imposing enormous strain on public systems.

Several speakers at the hearing, including representatives from consumer protection organizations and regional transmission authorities, raised valid concerns regarding the potential for utility companies seeking pre-approval of high-cost capital projects tied to speculative data center commitments. If those commitments fall through, or if the facilities fail to perform as projected, the costs still fall on the ratepayers. In effect, this model socializes risk and privatizes reward.

Moreover, there was broad concern that tariff structures and demand charges are currently inadequate to ensure that large load customers like data centers pay their fair share. This must be corrected before any further interconnections are approved.

Environmental and Water Resource Impacts

Beyond energy, the April 24 hearing also highlighted how data centers threaten local water resources. Many hyperscale facilities rely on large-scale evaporative cooling, withdrawing millions of gallons of water per day, often from vulnerable aquifers or municipal systems already under strain.

In the case of the proposed Berwick-area facility, the Susquehanna River and surrounding communities could face serious resource competition. We must recognize that in Pennsylvania, especially amid the increasing volatility of climate change, water is not an infinite resource. Pennsylvania's waterways are polluted by for-profit entities via pollution discharge permits which further impacts our state's water quality and supply of potable water. I urge the Commission to work with the Pennsylvania Department of Environmental Protection (PA DEP) to establish, implement, and enforce evidence-based regulations that meet international health standards for all data centers and new power supply infrastructure development as a condition for approval.

Urgent Need for Regulatory Guardrails

The testimonies presented at the PUC hearing make one point unmistakably clear: the Commonwealth is not prepared—from a policy, infrastructure, or oversight standpoint—to absorb the proposed wave of data center expansion currently underway. Without deliberate, enforceable rules, Pennsylvania risks:

- Overloading our electric grid and compromising reliability
- Allowing ratepayers to foot the bill for billions of dollars in data center infrastructure costs
- Worsening environmental degradation and incremental or phased development without full environmental review
- Forcing residents to live next to data centers that cause health harms from constant low frequency sound pollution, possible air pollution, and compromised public safety due to storage of diesel fuel and batteries onsite
- Eliminating equity and fairness in our energy system

- Increasing cumulative infrastructure strain

Recommendations for Commission Action

In light of the testimony provided at the April hearing and the clear public interest at stake, I strongly urge the Commission to adopt the following actions:

1. *Define Large Load Customers Precisely*
Establish a clear megawatt threshold (e.g., 1 MW or above) for defining “large load customers” and apply targeted interconnection reviews and large load user fees.
2. *Mandate Comprehensive and Cumulative Impact Assessments and Public Health Protections*
Before approving any new interconnection request, require applicants to submit environmental impact assessments, local infrastructure analyses, and contingency planning documentation. A cumulative impact assessment should also be required to show how any new data center would contribute to existing air pollution, water pollution and supply, health-impacting sound pollution, and public safety risk. Night time noise limits should not exceed 35 dB(A) and require installation of berms and/ or sound walls for all data center sites. Require all data centers to be built with materials that will eliminate all continuous low humming noise pollution. Require 5-year third-party hydrological assessments and cumulative impact studies for each site and nearby data centers. Residents should have access to sound and air pollution data in real time to ensure public safety and compliance.
3. *Require Infrastructure Cost-Sharing and Pricing Transparency*
Utilities and data center developers must split the cost of upgrades, with data centers assuming a proportionate financial burden reflecting their demand profile. Ratepayer dollars should not subsidize or underwrite speculative private ventures. The costs of these projects should be available to the public to ensure accountability of utility companies and data center entities.
4. *Ensure Renewable Integration*
Make renewable energy sourcing a condition of interconnection approvals for data centers. If these facilities are to consume massive amounts of energy, they should be required to invest in the clean generation capacity to match it. Mandate onsite renewable energy for at least 30% of demand.
5. *Enforce Transparency and Accountability*
The PUC must create a transparent, public-facing database of large load applications, interconnection agreements, and project performance metrics.
6. *Require Peak Load and Emergency Planning Protocols*
Require the following: (a) Peak Load Impact and Emergency Power Plans, (b) coordination with local utilities for demand response and energy storage to manage peak strain, (c) installation of load management systems, (d) restrict backup generator testing to off-peak hours, (e) drought emergency protocol

7. *Require Water Use Restrictions and Air Quality Controls*

Cap water withdrawal at 0.5 gal/kWh and prohibit use during drought emergencies. Require closed-loop cooling, quarterly emissions and stack testing, and caps on NOx/PM2.5 emissions.

8. *Require Local First Responder and Emergency Management Approval for ALL Site Design and Emergency Preparedness and Response Protocols*

Any and all emergency protocol and disaster planning must be approved by fire and police departments, EMS, and HAZMAT personnel. Emergency responders and data center staff should also conduct emergency response practice drills that are scenario based to ensure readiness. Emergency Response providers must also sign off on all traffic related components for both site development and site operations. Require site-specific traffic studies that include a comprehensive assessment of all traffic corridors with first responder feedback and approval and mandate mitigation funding.

The energy landscape of Pennsylvania is being reshaped, largely behind closed doors, by the demands of large, often unaccountable, digital infrastructure players. If we fail to act now, we risk allowing corporate actors to dictate the future of our grid, inflate consumer bills, and deplete our natural resources. The role of the PUC is to protect the public interest, and in this moment, that means: establishing and enforcing regulations and requirements that ensure the public is protected from financial and health harms and demand accountability from data center developers and operators.

I urge the Commission to adopt a proactive regulatory stance before we are left managing the consequences of decisions made without proper oversight.

In service,

A handwritten signature in black ink, appearing to read 'Katie Muth', with a long, sweeping underline.

Senator Katie J. Muth
Senate District 44