

CENTER FOR RURAL PENNSYLVANIA’S PUBLIC HEARING ON DATA CENTER DEVELOPMENT
July 29, 2026
Bloomensburg, PA

Written Testimony of Michael D. Helbing, JD

Good morning and thank you to the Board for inviting me to speak today about some of the legal issues affecting data center development in Pennsylvania. My testimony will touch briefly on two distinct but related topics: local government ordinances addressing data center development and eminent domain authority for construction of electric transmission lines.

Experience

I am Executive Director of Penn State’s Center for Energy Law and Policy (CELP). In that role, I am involved in many of CELP’s research and educational activities related to energy policy in Pennsylvania and beyond. Among other things, my work includes analyzing the responses of Pennsylvania municipalities and the Commonwealth’s legislature to both data center proposals and utility-scale solar proposals. I have published articles on several topics, including local ordinances governing data centers; the governance of regional transmission organizations; the regulatory landscape for anaerobic digestion; and state policy governing sustainable aviation fuel. I also serve as an adjunct professor of law at Penn State Dickinson Law, having recently taught courses in energy law and policy, water law and policy, and natural resources law. Prior to beginning work at CELP in July 2022, I worked for approximately ten years as an attorney in the Office of the Chief Counsel for the U.S. Food and Drug Administration, where I was Associate Chief Counsel for Litigation and Senior Enforcement Advisor, and for approximately three and half years as a Staff Attorney for Citizens for Pennsylvania’s Future (PennFuture). I received a bachelor’s degree in chemical engineering, with a minor in environmental engineering, from Penn State and a juris doctorate from Yale Law School.

Local Ordinance Provisions Addressing Data Centers

As interest in data center development has intensified across the Commonwealth, many citizens and municipal officials have expressed concerns about the local impacts of data center construction and operation in their communities. Community concerns often include fears of adverse impacts to energy and water rates, air quality, noise, heat, and aesthetics.¹

¹ Rachel Mural, *How Local Communities Are Challenging Big Tech Data Centers’ Noise, Pollution, and Rising Electricity Bills*, THE CONVERSATION, June 18, 2026, <https://theconversation.com/how-local-communities-are-challenging-big-tech-data-centers-noise-pollution-and-rising-electricity-bills-284642>.

In an attempt to address those concerns, Pennsylvania municipalities have responded by adopting new ordinances or amending existing zoning ordinances. Although under the Pennsylvania Municipalities Planning Code (MPC), a municipality generally cannot completely exclude a legal land use,² it can place constraints on where and how land uses can be built and operated consistent with the MPC.

Ordinances naturally vary among different municipalities, but some common themes can be identified.³ Municipalities often use their zoning ordinances to establish data centers as conditional uses that require a hearing before the municipality's governing body to ensure that they satisfy the municipality's requirements. Many municipalities restrict data center development to industrial or commercial zones. Municipal data center ordinances often contain setback requirements that establish the distance land development must be from a property line. Some provide increased setback distances for residential properties and/or sensitive receptors such as hospitals or schools. Many require project developers to submit plans or studies related to topics such as noise, energy and/or water consumption, emergency response, or transportation impacts. These plans and studies are intended to help the municipality better understand the project impacts and to help ensure that negative externalities to the community are mitigated. All of these zoning approaches are similar to local regulation of other types of commercial or industrial land uses, such as solar energy farms or warehouses.

Although many municipalities have adopted zoning ordinance provisions specifically addressing data center development, there remain challenges that municipalities must overcome as they craft ordinances that suit their communities. The Department of Community and Economic Development recently developed a Pennsylvania Data Center Planning Tool Kit,⁴ which can serve as a resource for municipal officials, but there may be more options for Commonwealth officials to consider.

The speed asked for decision making is overwhelming municipal officials, who are tasked with overseeing all aspects of municipal governance that include everything from managing police services to maintaining roads and collecting taxes. Municipal officials are often short on resources and time, and few have personal expertise related to data center

² See Pennsylvania Legislator's Municipal Deskbook (7th ed.), *Exclusionary Zoning and the Fair Share Doctrine*, at 107-08 (2025),

<https://www.lgc.state.pa.us/download.cfm?file=/Reports/deskbook2025/Land%20Use%20-%20003%20-%20Exclusionary%20Zoning%20and%20Fair%20Share%20Doctrine.pdf>.

³ Michael Helbing, *How Pennsylvania Towns Are Protecting Themselves from the Noise, Heat and Utility Costs of Massive Data Centers*, THE CONVERSATION, June 11, 2026, <https://theconversation.com/how-pennsylvania-towns-are-protecting-themselves-from-the-noise-heat-and-utility-costs-of-massive-data-centers-282126>.

⁴ Pa. Dept. of Community and Econ. Devel., *Pennsylvania Data Center Planning Toolkit* (May 2026), <https://dced.pa.gov/business-assistance/data-center-resources/planning-toolkit/>

development. Data center proposals have proliferated significantly across the Commonwealth recently, and local officials are often forced to scramble to quickly respond to a proposal or anticipated proposal from data center developers. This can put local officials in a difficult situation while they try to rapidly educate themselves to make quick decisions that may have long-term consequences for their communities.

A separate issue arises in municipalities that currently lack any type of zoning ordinance. The MPC authorizes the types of land-use rules that municipalities can adopt. It gives municipalities substantial authority to control land uses through zoning ordinances. Municipalities' authority to adopt land-use regulations outside of a zoning ordinance, however, is much more limited. Thus, for the approximately 32% of local governments that have not adopted zoning ordinances⁵ (many of which are small municipalities that are likely to be rural⁶), local officials must choose between developing a comprehensive zoning ordinance for the entire municipality, often on an abbreviated timeline, or limiting themselves to trying to address concerns about data center development through other methods, such as under Subdivision and Land Development Ordinances (SALDO), which provide significantly less authority over land use.

Policy Options for Local Ordinance Provisions Related to Data Centers

The state legislature has several policy levers that it may choose to use to address some of the challenges faced by local officials. They include:

- **Allowing for temporary pause on review of data center proposals to give municipalities time to develop adequate ordinances.**⁷ Because of the pace at which data center proposals are being made, local officials are being rushed to understand the impacts of data centers and to develop policies in abbreviated timeframes. This problem is especially acute in municipalities that lack an existing zoning ordinance because officials may need to consider developing a zoning ordinance for the entire municipality for the first time. Having a window of time to perform this work while no data center proposals may move forward could benefit local officials. The State of New York recently adopted a one-year moratorium on data centers, in part to establish “standards for data center development and

⁵ Pa. Dept. of Community and Econ. Devel., *2020 State Land Use and Growth Management Report*, at 9, https://library.weconservepa.org/library_items/1512/files/2678.

⁶ Penn State Extension, *Land Use Planning in Pennsylvania: Zoning*, at 2-3 (2001), https://library.weconservepa.org/library_items/1512/files/2678.

⁷ Although I do not advocate for or against any policy or legislative proposal as part of this testimony, I note that two bills (H.B. 2496 and S.B. 1359) pending before the Pennsylvania General Assembly contain provisions that incorporate a pause on data center siting and/or permitting.

creat[e] a blueprint to support localities.”⁸ Other states are also considering a moratorium.⁹

- **Developing a model ordinance to assist municipal officials as they address these concerns.**¹⁰ As municipal officials consider policies appropriate for their community, it may be helpful for them to have a model ordinance of provisions related to data center regulation to guide their deliberations. A model ordinance developed at the state level can be drafted in a manner that helps to ensure compliance with Commonwealth law.¹¹ Pennsylvania has developed model municipal ordinances in other contexts, including stormwater¹² and floodplain management.¹³
- **Considering concerns of municipalities without zoning ordinances.** As noted above, the challenges facing officials in municipalities without zoning ordinances are especially acute. The Commonwealth may consider policies that would assist them in their efforts. Such policies could include an extended pause on data center siting and permitting for municipalities that do not currently have zoning and/or amendments to the Municipalities Planning Code that would allow for certain types of land-use regulations to be implemented outside of a zoning ordinance.¹⁴

⁸ Press Office of Gov. Kathy Hochul, *First Statewide Moratorium on New Hyperscale Data Centers Launched by Governor Kathy Hochul* (July 14, 2026), <https://www.governor.ny.gov/news/first-statewide-moratorium-new-hyperscale-data-centers-launched-governor-kathy-hochul>.

⁹ National Conference of State Legislatures, *Which States Are Banning Data Centers?* (July 1, 2026) <https://www.ncsl.org/fiscal/which-states-are-banning-data-centers>.

¹⁰ Although I do not advocate for or against any policy or legislative proposal as part of this testimony, I note that H.B. 2151, which is currently pending before the Pennsylvania General Assembly contains a requirement that the Commonwealth develop a model ordinance for data centers.

¹¹ Outside groups have developed model ordinances for data centers, including one by PennFuture available at <https://pennfuture.org/Report/Data-Center-Model-Ordinance>, but a model ordinance developed by the Commonwealth can provide an additional alternative that may be more influential among municipal officials.

¹² Pa. Dept. of Env'tl Prot. Bureau of Watershed Mgmt., Pennsylvania Model Stormwater Management Ordinance (Nov. 17, 2008), https://spcwater.org/wp-content/uploads/2020/01/14.11_DEP_ModelOrdinance.pdf.

¹³ Pa. Emergency Mgmt. Agency, Suggested Provisions Meeting the Minimum Requirements of the National Flood Insurance Program and the Pennsylvania Floodplain Management Act (1978-166) Section 60.3(d), July 2023, <https://www.pa.gov/content/dam/copapwp-pagov/en/pema/documents/mitigation/floodplain%20model%20ordinance.pdf>.

¹⁴ Currently, the MPC expressly allows a municipality that has not enacted a zoning ordinance to adopt in its SALDO provisions that “apply uniformly throughout the municipality regulating minimum setback lines and minimum lot sizes which are based upon the availability of water and sewage.” 53 P.S. § 10503(4.1). Expanding on that authority to give municipalities more power to enact land-use regulations in a SALDO may help alleviate some municipal officials’ concerns with respect to data centers, but it should be done with caution to ensure that property rights are adequately protected by safeguards such as those required to be included in zoning ordinances.

Eminent Domain Authority to Construct Electric Transmission Lines

Because of data centers' significant energy needs, new electric generation, distribution, and transmission resources are being constructed or proposed to satisfy the anticipated demand from data centers. These projects raise related, but distinct, concerns about land use beyond those created by data center construction and operation.

One type of project that is raising concerns among rural Pennsylvanians is transmission lines. As an example of long, linear infrastructure projects, transmission lines affect numerous properties along their path, which can sometimes be hundreds of miles long. Some farmers have raised concerns about the impacts that these transmission lines would have on their agricultural fields. I expect that we will hear more about those concerns from people directly impacted during the next session of this hearing. To set the stage for that later testimony, I will very briefly outline some of the legal provisions that bear on the taking of agricultural land for electricity transmission projects.

Under Pennsylvania law, a public utility has the right to take and condemn private property (with just compensation) for, among other things, the transmission of electricity.¹⁵ Utilities may only exercise this right of condemnation after the Pennsylvania Public Utility Commission (PUC) makes a determination, after a right to a hearing, that the proposed project is necessary or proper for the service, accommodation, convenience, or safety of the public.¹⁶ To approve a new transmission line, the PUC must find after an opportunity for a hearing that: (1) there is a need for the line; (2) it will not create an unreasonable risk to public health or safety; (3) it complies with applicable natural resource statutes; and (4) it will have minimal environmental impact considering the public's electric needs.¹⁷

In other contexts, condemnation for infrastructure on certain agricultural lands located in an agricultural security area requires approval by the Agricultural Lands Condemnation Approval Board.¹⁸ But such protection does not apply to a "public utility facility" approved by the Pennsylvania PUC or by the Federal Energy Regulatory Commission (FERC).¹⁹

Further complicating the issue is recent federal case law that limits the PUC's authority to deny siting approval for a transmission line that is included in an RTO regional

¹⁵ 15 Pa. Stat. and Cons. Stat. Ann. § 1511.

¹⁶ *Id.*

¹⁷ 52 Pa. Code §§ 57.71–76; see also Pa. Const. art. I, § 27.

¹⁸ 3 Pa. Cons. Stat. § 913; see also <https://www.pa.gov/agencies/pda/plants-land-water/farmland-preservation/agricultural-security-areas>.

¹⁹ *Id.*

planning process approved by the FERC.²⁰ Although this holding does not completely preclude the PUC from denying siting authority for a transmission line that has been included in an approved RTO regional planning process, it does severely limit the grounds on which such denial could occur by preventing the PUC from rejecting a transmission line that was included in an approved RTO transmission plan for lack of need.²¹ The RTO in which Pennsylvania is located, PJM, has completed a Regional Transmission Expansion Plan that includes new transmission lines in Pennsylvania, in part to support data centers.²²

Policy Options for Eminent Domain Concerns related to Electric Transmission Lines

To address landowners' concerns about the taking of private land for construction of transmission infrastructure, the Commonwealth could amend PUC authority to give it greater power to deny approval to an electric transmission line on grounds that would not run afoul of the *Transource* precedent. Alternatively, the Commonwealth could revise the Agricultural Area Security Law to provide for Agricultural Lands Condemnation Approval Board review of eminent domain proceedings of agricultural land subject to condemnation for transmission line projects. In any case, although even large interstate transmission lines remain subject to state siting authority, state policy options for addressing eminent domain for electric transmission must be evaluated in the context of the complicated interplay between state and federal authority over electricity production and transmission, including the role of the regional transmission organization, PJM.

I thank the Board for the opportunity to testify today, and I look forward to discussing these matters further during the rest of this session.

²⁰ *Transource Pa., LLC v. Defrank*, 156 F.4th 351, 379 (3d Cir. 2025) (holding that “when an RTO has selected a project for inclusion in a regional transmission plan as part of its federal mandate, a state regulator cannot, consistent with the Supremacy Clause, reject the project based on a lack of ‘need.’”)

²¹ *Id.*

²² PJM Interconnection LLC, *Regional Transmission Expansion Plan (RTEP) 2025* (Apr. 17, 2026), <https://www.pjm.com/-/media/DotCom/library/reports-notice/2025-rtep/2025-rtep-report.pdf>.