

**U.S. House Energy and Commerce Committee
Subcommittee on Energy, Climate, & Grid Security Hearing
Powering AI: Examining America’s Energy and Technology Future**

Testimony of Phil Dion
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Chairman Duncan, Ranking Member DeGette, and members of the subcommittee, thank you for the opportunity to testify today. I am Phil Dion, Senior Vice President for Customer Solutions at the Edison Electric Institute (EEI).

EEI is the association that represents all U.S. investor-owned electric companies. EEI’s member companies provide electricity for nearly 250 million Americans and operate in all 50 states and the District of Columbia. The electric power industry supports more than 7 million jobs in communities across the United States.

We are here today to talk about the exciting advancements in artificial intelligence (AI) and the steps we need to be taking as a country to ensure that we continue to be the top choice for technology startups and established companies that are looking to grow and expand. The growth of data centers and generative AI technologies, along with the reshoring of manufacturing that is being driven in part by the CHIPS and Science Act, offers tremendous opportunities for the United States. Projections show that these activities are driving—and will continue to drive—significant growth in demand for electricity.

While much of the focus of recent discussions about AI has been on electricity demand growth, what is less discussed is the critical infrastructure needed to ensure that new sources of supply can meet that demand. My remarks today focus on the need to ensure that critical energy infrastructure, including enhanced and expanded transmission infrastructure, can be built.

While the breakneck pace of innovation we are witnessing is exciting, it also forces us to confront a reality: innovation moves far faster than regulations, particularly those related to the planning, siting, and permitting of our energy grid. Today, the gap between innovation and regulation is widening. We need to take meaningful steps now to close this gap. Otherwise, we risk today’s leading companies, and future technology leaders, turning to other countries that actively are working to find ways to compete for these cutting-edge sectors and workers.

A survey of 2023 Federal Energy Regulatory Commission (FERC) filings showed that energy grid planners nearly doubled the five-year load growth forecast, from 2.6 to 4.7 percent, with 10 planning areas reporting most of the increase.¹ Similarly, in its 2023 Long-Term Reliability Assessment, the North American Electric Reliability (NERC) Corporation noted that electricity

¹ See John D. Wilson and Zach Zimmerman, Grid Strategies, The Era of Flat Power Demand is Over (Dec. 2023), [National-Load-Growth-Report-2023.pdf \(gridstrategiesllc.com\)](#).

peak demand and energy growth forecasts over the 10-year assessments period were higher than at any point in the last decade, which NERC attributed to concentrated new loads and heating system and transportation electrification.² Since the end of 2023, some regional grid planners have further increased their demand growth forecasts. For example, a recent announcement from PJM predicts 2.4 percent *annual* growth from 2024 to 2033.³ Some experts have indicated that these forecasts may underestimate demand, particularly from data centers and the related need to support AI.⁴

The accuracy of these forecasts is uncertain, but the trend line is clear. Electricity demand in this country is poised for growth in a manner we have not seen for decades. Thus, EEI member companies are focused on the tools that they will need to meet evolving customers' demands.

America's investor-owned electric companies have the expertise necessary to meet the increasing energy and reliability needs of technology companies and data centers, and their regulated business model allows them to raise and deploy the capital needed to enhance and expand the grid to enable this growth.

Electric companies are committed to ensuring that their customers are able to grow and expand and want to drive and power new economic activity. However, it is still too difficult and too time-consuming to develop and build critical and necessary energy infrastructure projects of all kinds.

The deployment of domestic energy infrastructure projects to meet growing energy needs frequently requires federal permits and, therefore, is subject to environmental reviews under a variety of federal and state statutes, including the National Environmental Policy Act (NEPA), Clean Water Act (CWA), and Endangered Species Act (ESA), among others. Increasingly, these statutes have become the focus of protracted litigation that disrupt the deployment of clean energy resources, delay the creation of clean energy jobs, and add time and cost to these critical infrastructure projects.

EEI supports environmental processes that are clear, transparent, and as efficient as possible while meeting all environmental requirements. Further reform is needed to ensure that these requirements can be met without delaying the development and deployment of critical infrastructure.

Today, it can take 10 years, on average, to site, permit, and build a new transmission line. Constructing and building the line is not the issue. The delays are caused by the current siting and permitting process and by groups that have learned to weaponize the litigation process so that a much-needed project could be stuck facing endless rounds of lawsuits.

² See NERC, 2023 Long-Term Reliability Assessment at 10 (Dec. 2023), [Report \(nerc.com\)](#).

³ See PJM, Inside Lines, PJM Publishes 2024 Long-Term Load Forecast at 10, 33-34 (Jan. 8, 2024), <https://insidelines.pjm.com/pjm-publishes-2024-long-term-load-forecast/>.

⁴ See Vivian Lee, Boston Consulting Group, [The Impact of GenAI on Electricity: How GenAI is Fueling the Data Center Boom in the U.S. \(linkedin.com\)](#) (Sept. 13, 2023).

Protracted litigation increases costs for customers and erodes project viability. This, in turn, slows down efforts to interconnect new electric generation sources to the grid. We can no longer accept these outcomes if we hope to help the United States remain at the leading edge of innovation.

The ability of the electricity system to supply enough energy to meet the requirements of customers at all times is foundational for reliability, and it depends upon the ability to design, plan, build, and operate the grid. This will require better system planning and coordination across a wide range of stakeholders and jurisdictions. FERC's recently issued rule on electric transmission planning, which requires longer range planning, is a critical first step, but continued work will be needed to address a range of other issues, including cost allocation and interregional planning.

To supplement efforts to expand the transmission system, focus should remain on efforts to maximize the use of existing rights-of-way, including adopting innovative grid-enhancing technologies where and when cost-effective. In addition, electric company investments at the state level must be supported, recognizing the value of local transmission owners' expertise, facilities, and history in communities to build necessary infrastructure quickly for reliability. Grid enhancing technologies will play a key role, but are not a substitute for building new infrastructure.

The need for additional grid capacity will increase the demand for critical grid components. Prolonged shortages of critical grid components can lead to delays for projects aimed at increasing grid capacity and interconnecting new major customers like data centers. Equipment shortages also can impair efforts to respond to and recover from natural disasters and extreme weather events, which have become increasingly frequent and severe, and they could impact efforts to respond and to recover from cyber and physical attacks on the grid.

Ensuring that critical grid components are available, affordable, and secure requires the United States to take a holistic, risk-based approach to critical supply chains that addresses our long-standing reliance on foreign manufacturers. We also need to prioritize the most urgent and most potentially impactful needs. An effective strategy to increase domestic, continental, and friend-shored manufacturing and sourcing will require a whole-of-government commitment to improve U.S. trade policy, labor policy, mining and mineral rights policy, and other policy areas that affect critical supply chains.

The grid is changing and expanding as it always has because technology is evolving and because customers' expectations are changing. Meeting customers' needs now and in the future—affordably and reliably—is at the core of our business. America's investor-owned electric companies are confident in our ability to meet these challenges.

The regulated business model has proven it can drive significant investments effectively and in a way that manages cost impacts to customers while ensuring that all customers are seeing the benefits. In 2023 alone, EEI estimates that its member companies invested \$167.8 billion to serve customers and to make the energy grid smarter, stronger, cleaner, more dynamic, and more

secure. More than \$30 billion of these investments were focused on adaptation, hardening, and resilience initiatives that strengthen the nation's transmission and distribution infrastructure.

We are excited by the opportunities that data centers, AI, and new technologies may bring, and we look forward to working with this Subcommittee and with Congress to help make meaningful reforms to our siting and permitting processes to ensure that America can maintain its lead for the sectors that have the potential to transform our economy.

Thank you again for the opportunity to testify. I look forward to answering any questions you may have.