

**Before the
Grid Deployment Office, Department of Energy
Washington, D.C. 20585**

In the Matter of	)	
	)	
Accelerating Speed to Power/Winning the	)	FR Doc. 2025–18058
Artificial Intelligence Race: Federal Action to	)	
Rapidly Expand Grid Capacity and Enable	)	
Electricity Demand Growth	)	

COMMENTS OF INCOMPAS

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November 21, 2025

I. Introduction and Summary

INCOMPAS, the internet and competitive networks association, respectfully submits these comments in response to the Department of Energy’s (“DOE”) Request for Information titled *Accelerating Speed to Power / Winning the Artificial Intelligence Race: Federal Action to Rapidly Expand Grid Capacity and Enable Electricity Demand Growth*.¹ INCOMPAS represents a diverse membership of competitive communications and technology companies that invest in energy, broadband, cloud, data, and AI infrastructure across the United States. Our members are catalysts for creating economic growth and improving connectivity for all Americans through technological innovation, new services, and greater choice for consumers and businesses. They are at the forefront of deploying networks and digital systems that will power the artificial intelligence (AI) economy.

Now is the time to build out AI infrastructure, modernize our energy grid, and deploy reliable broadband networks to ensure America’s continued leadership. Achieving these goals will require federal, state, and local governments to coordinate to systematically remove barriers to building AI networks and infrastructure, including data centers, transmission capacity, fiber networks, pipelines, and submarine cables. The inefficiencies of building this critical infrastructure under current regulatory and bureaucratic regimes has resulted in unnecessary and costly delays, uncertainty, and unpredictability, which disincentivize the capital investment needed to keep pace with China’s intensive and unbridled AI infrastructure deployments.

The continued success of innovation depends on a robust, reliable, and affordable electricity grid capable of meeting rapidly expanding digital demand. INCOMPAS strongly

¹ *Accelerating Speed to Power/Winning the Artificial Intelligence Race: Federal Action to Rapidly Expand Grid Capacity and Enable Electricity Demand Growth*, Doc. No. 2025-18058, Request for Information, 90 FR 45032 (rel. Sept. 18, 2025) (“RFI”).

supports DOE’s leadership in recognizing the intersection between AI, data infrastructure, and the nation’s energy future. Speed to power remains one of the most critical challenges for American competitiveness. The Department’s attention to this issue—and its intent to identify federal actions that can expand grid capacity and enable faster, smarter, and more secure deployment—is both timely and essential.

II. Streamlining Permitting and Siting Processes

The expansion of AI and advanced cloud services has created a sustained increase in electricity consumption across the country. U.S. electricity demand is expected to rise at a 2.4% compound annual growth rate between 2022 and 2030, with data centers accounting for about 90% of that growth.² Private industry is responding: companies are investing billions of dollars in new data centers and related digital infrastructure in the United States. Yet these investments depend on access to power—and specifically, on the ability to obtain that power quickly, predictably, and affordably. While physical construction of power lines can often be completed within two to three years, the permitting, siting, and study processes that precede construction can extend well beyond a decade. Over the past 25 years, the United States has not experienced structural electricity growth of this magnitude. As a result, the systems and supply chains required to deliver this expansion are being tested. Addressing these challenges requires both targeted investment and meaningful reform of permitting and interconnection processes.

Speed to power will ultimately depend on how efficiently the U.S. can permit, site, and build major energy infrastructure. In the postwar period, the nation built approximately 80,000

² *Gen AI: Too Much Spend, Too Little Benefit*, GOLDMAN SACHS (rel. June 25, 2024), available at https://www.goldmansachs.com/images/migrated/insights/pages/gs-research/gen-ai--too-much-spend,-too-little-benefit-/TOM_AI%202.0_ForRedaction.pdf.

miles of transmission within two to five years per project—an extraordinary record of coordination and execution. On average, today the federal permitting process takes on average four to five years, stalling an estimated \$1.1 to \$1.5 trillion of infrastructure capital expenditures,³ contrary to the goals of Executive Order (“EO”) 14318 and the AI Data Center Infrastructure Task Force. Powerlines can be built in two to three years. However, studies, permitting, and siting of these projects can take ten years or more. INCOMPAS recommends the Administration prioritize a comprehensive strategy to accelerate the buildout of high-capacity transmission infrastructure. Expedited permitting is the solution to achieving this goal.

At the federal permitting level, the need for an all-of-government approach is vital, as many agencies play a role in inadvertently deterring timely and efficient deployments. It is extremely important that not only DOE, but that all federal agencies, including the Federal Energy Regulatory Commission (“FERC”), the Environmental Protection Agency (“EPA”), the Federal Communications Commission (“FCC”), and state and local regulatory authorities understand and create policies and rules to remove bureaucratic hurdles, promote fast-track permitting, and secure financing from both private and public sources. To improve agency coordination and accelerate the deployment of AI-enabling infrastructure, INCOMPAS recommends the Administration designate a lead federal agency, such as DOE, for siting and permitting interstate transmission lines and NTIA for all broadband-related projects, including federally funded projects like the Broadband Equity Access and Deployment program (“BEAD”), as well as privately funded projects, for the purposes of NEPA reviews. This

³ Bob Sternfels, Adi Kumar, and Brodie Boland, *Unlocking US Federal Permitting: A Sustainable Growth Imperative*, McKinsey & Company (July 25, 2025).

designation would streamline the permitting process by consolidating environmental reviews, establishing clear timelines, and reducing duplicative agency oversight.

To expedite permitting, DOE can also take the lead to increase access to public rights-of-way, accelerate the approval of permits, and ask state and local governments, utilities, and railroads to charge fees that are based only on their actual, objectively reasonable costs. Additionally, DOE should work with Congress to consider statutory or administrative mechanisms to establish unified siting authorities and provide early legal certainty to reduce prolonged litigation risk. These improvements would help streamline improvements of all necessary infrastructure. Finally, DOE should continue to explore policies that align energy generation, transmission, and digital infrastructure planning as a unified ecosystem—ensuring that investments in AI and data innovation are matched by equivalent investments in the power systems that sustain them.

III. Improving Load Forecasting and Queue Management

DOE’s leadership is needed to improve how utilities and grid operators forecast and plan for large load growth. Across multiple regions, load forecasting methodologies are inconsistent, opaque, and in many cases inaccurate. Forecasts often include speculative or duplicative interconnection requests from developers “shopping” for favorable terms across multiple utilities. Because these speculative requests are rarely vetted for commercial viability, they appear in multiple forecasts—leading to significant double-counting and inflated demand projections. Some utilities incorporate 100 percent of a project’s nameplate capacity as soon as a study agreement is signed, while others apply nonstandard ramp rates or utilization factors. The result is a “black box” forecasting process that undermines reliability and creates distorted market signals.

For example, PJM Interconnection has reported expectations of more than 60,000 MW of new data center demand by 2030 based on submitted utility data.⁴ However, much of this projection reflects overlapping or nonbinding load requests. These inflated forecasts are not a trivial matter—they are the primary input for regional capacity markets. If uncorrected, this approach could lead to artificially high-capacity costs—potentially exceeding \$40 billion annually—that will ultimately be borne by consumers. INCOMPAS urges DOE to encourage reforms to ensure that new large loads are included in forecasts only when backed by firm commitments from projects with proven viability. This one change would: 1) Protect consumers by preventing overinvestment in phantom loads; and 2) Provide market certainty for both load and generation developers, enabling real-world projects to proceed faster and with greater confidence.

IV. Addressing Grid Infrastructure Constraints

Expanding and modernizing grid capacity requires addressing multiple, interconnected bottlenecks. These include long interconnection queues, limited use of advanced transmission technologies (“ATTs”), and significant equipment shortages. DOE can play a leadership role by encouraging utilities to adopt advanced conductors such as aluminum conductor composite core (“ACCC”) technologies. These solutions can increase power flow along existing rights-of-way and accelerate delivery of new capacity. Many utilities, however, do not allow large-load customers to invest directly in such upgrades due to technical or procedural barriers. DOE should work with the FERC and state regulators to develop frameworks that allow customer-financed grid enhancements where appropriate.

⁴ Krystal Knapp, *Power grid operator PJM launches ‘fast-track plan’ to confront surge in data center electricity demand*, The Jersey Vindicator (Aug. 17, 2025).

Key equipment shortages also threaten grid timelines. Large-scale transformers and static compensators (“Statcoms”) face multi-year production backlogs. DOE should consider using its Defense Production Act (“DPA”) authorities to accelerate domestic manufacturing of these critical components, ensuring the U.S. supply chain can meet the demands of both clean energy and AI-era digital growth.

V. Enhancing Grid Security and Resilience

As we innovate to meet growing energy demand, the security of the grid must be a core priority. The next-generation grid will increasingly link operational technology (“OT”) and information technology (“IT”) systems—creating powerful efficiencies, but also new cybersecurity risks. The recent “Typhoon” campaigns against U.S. critical infrastructure illustrate the extent to which state actors are targeting digital vulnerabilities. DOE has an opportunity to ensure that the 21st-century grid is not only more efficient but also more resilient to cyber exploitation and manipulation. INCOMPAS urges DOE to develop new models of public-private partnership and incentives that promote secure-by-design innovation and integrate cybersecurity requirements into all federally supported grid modernization programs.

VI. Encouraging Domestic Energy Generation and Innovation

Finally, the AI era requires federal policies that expand reliable and domestically sourced power generation, consistent with the goals of this Administration.⁵ DOE should prioritize incentives for advanced nuclear energy, including small modular reactors (SMRs). Streamlined regulatory processes, targeted tax incentives, and federal loan guarantees can accelerate

⁵ Exec. Order No. 14154, 90 FR 8353 (2025) (EO on Unleashing American Energy).

deployment and provide stable, low-carbon power essential for data centers and digital infrastructure. These efforts should be paired with reforms to interconnection processes and regional transmission planning to ensure that new generation can be efficiently delivered to AI infrastructure hubs.

VII. Conclusion

DOE's leadership in addressing "speed to power" is both timely and essential. The nation's ability to lead in artificial intelligence, digital infrastructure, and advanced manufacturing depends on a modernized grid that is fast, secure, and resilient. INCOMPAS appreciates the opportunity to submit our comments and looks forward to working with the DOE to develop the policies and programs necessary to unlock America's next generation of energy and digital growth.

Respectfully submitted,

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