



SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

HEARING CHARTER

“Powering America's AI Future: Federal Permitting Challenges for Energy and Data Center Infrastructure”

Tuesday, February 24, 2026

10:00 a.m.

2318 Rayburn House Office Building

Purpose

This hearing will examine the structure, implementation, and oversight of federal permitting frameworks governing the development of energy and data center infrastructure that support artificial intelligence (AI). The hearing will evaluate how lengthy permitting timelines, growing compliance requirements, and uncertainty in approvals constrain energy production and grid expansion needed to power AI data centers. Additionally, the Subcommittee will consider the implications of these constraints for U.S. competitiveness in the global AI race, particularly as China rapidly increases power generation and data center capacity through more centralized and streamlined approval processes.

Witnesses

- **Paige Lambermont**, Research Fellow, Center for Energy and Environment, Competitive Enterprise Institute
- **Marsden Hanna**, Head of Energy and Sustainability Policy, Google
- **Dr. Eric Masanet**, Professor and Mellichamp Chair in Sustainability Science for Emerging Technologies, Bren School of Environmental Science & Management, UC Santa Barbara

Overarching Questions

- How do existing federal permitting processes for energy generation, transmission, and data center infrastructure affect the pace and location of AI development in the United States?
- To what extent do environmental review requirements, judicial review risk, and interagency coordination delays create uncertainty that discourages or delays infrastructure investment?

- Have recent executive actions and agency initiatives meaningfully reduced timelines, or do they leave core statutory and procedural barriers intact?
- How do U.S. permitting timelines and energy infrastructure constraints compare to China's centralized approach to power generation and data center deployment, and what does this mean for global AI competitiveness?

Background

Artificial intelligence (AI) development is increasingly dependent on large-scale, energy-intensive data centers that require reliable, dispatchable power and rapid infrastructure development.¹ Advanced AI models rely on high-density computing that draws significant electricity loads, placing unprecedented demands on energy generation capacity, transmission infrastructure, and grid reliability.² According to the International Energy Agency (IEA), U.S. data centers consumed 183 terawatt-hours (TWh) of electricity in 2024, accounting for more than 4% of the country's total electricity consumption.³ By 2030, this figure is projected to grow by 133%.⁴ Energy availability—not computing hardware alone—is emerging as a binding constraint on AI development in the United States.⁵

Despite growing demand, energy infrastructure projects in the United States face permitting timelines that routinely stretch for years.⁶ Federal environmental reviews, including those required under the National Environmental Policy Act (NEPA), Clean Water Act permitting, Endangered Species Act consultations, and overlapping state and local approvals, contribute to delays and uncertainty.⁷ The average time for NEPA reviews with a final decision issued in 2024 was 26 months.⁸ The percentage of Environmental Impact Statement (EIS) reviews taking more than two years remains substantial.⁹ Reporting indicates that transmission projects, pipelines, and generation facilities often take longer to permit than to construct, even when they align with

¹ *Energy Can Be America's Secret Weapon in the AI Race*, Williams (Jan. 28, 2025),

<https://www.williams.com/2025/01/28/energy-can-be-americas-secret-weapon-in-the-ai-race/>

² Emily Orler et al., *Data Centers and Permitting Reform: Is Artificial Intelligence Up to the Challenge?*, ARNOLD & PORTER (July 25, 2025), <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2025/07/data-centers-and-permitting-reform>; John Pierce, *AI Data Centers and the Looming Energy Crisis in the United States*, JDSUPRA (Jan. 16, 2026), <https://www.jdsupra.com/legalnews/ai-data-centers-and-the-looming-energy-3662206/>.

³ Rebecca Leppert, *What we know about energy use at U.S. data centers amid the AI boom*, PEW RESEARCH CENTER (Oct. 24, 2025), <https://www.pewresearch.org/short-reads/2025/10/24/what-we-know-about-energy-use-at-us-data-centers-amid-the-ai-boom/>.

⁴ *Id.*

⁵ Zachary Liscow, *Reforming Permitting to Build Infrastructure*, AMERICAN ENTERPRISE INSTITUTE (Sept. 11, 2025), <https://www.aei.org/research-products/report/reforming-permitting-to-build-infrastructure/>; Rayan Sud & Sanjay Patnaik, *How does permitting for clean energy infrastructure work?*, THE BROOKINGS INSTITUTION (Sept. 28, 2022), <https://www.brookings.edu/articles/how-does-permitting-for-clean-energy-infrastructure-work/>.

⁶ International Energy Agency, *Energy and AI*, at 49 IEA (2025), <https://www.iea.org/reports/energy-and-ai/energy-demand-from-ai>.

⁷ Garrett Jansma et al., *White House Aims To Accelerate Environmental Permitting For Data Centers*, THE NAT. LAW REV. (Aug. 6, 2025), <https://natlawreview.com/article/white-house-aims-accelerate-environmental-permitting-data-centers>.

⁸ Joseph R. Herbster et al., *Evolving NEPA Regulations May Facilitate Energy Projects*, JONES DAY (June 2025), <https://www.jonesday.com/en/insights/2025/06/evolving-nepa-regulations-may-facilitate-energy-projects>.

⁹ Bob Sternfels et al., *Unlocking US federal permitting: A sustainable growth imperative*, MCKINSEY & CO. (July 28, 2025), <https://www.mckinsey.com/industries/public-sector/our-insights/unlocking-us-federal-permitting-a-sustainable-growth-imperative>.

stated national priorities such as clean energy deployment, grid resilience, or technological leadership.¹⁰ On average, permitting for a new electric transmission line takes approximately four years and, in extreme cases, can take more than a decade.¹¹

Data centers themselves are increasingly subject to federal and state permitting scrutiny, particularly when facilities require Clean Water Act permits, wetlands approvals, or trigger environmental reviews due to their size, location, or energy interconnection needs.¹² Experts note that even when permitting agencies attempt to streamline reviews, litigation risk and procedural complexity can result in prolonged delays, deterring investment or shifting projects to jurisdictions with more predictable approval processes.¹³

Federal Permitting Framework and Recent Executive Actions

In July 2025, the White House issued Executive Order 14318, “Accelerating Federal Permitting of Data Center Infrastructure,” directing permitting agencies to prioritize reviews, improve interagency coordination, and modernize permitting processes.¹⁴ The EO applies to “Qualifying Projects,” defined as data centers requiring more than 100 megawatts of new load and related infrastructure.¹⁵ It directs the Department of Commerce to provide financial support, such as loans, grants, and tax incentives.¹⁶ The EO builds on prior efforts to expedite infrastructure approvals through digitalization and process reform, without altering the underlying statutory requirements governing environmental review or judicial oversight.¹⁷ While these actions aim to improve administrative efficiency, they leave intact the core legal frameworks that drive permitting delays.

Energy Infrastructure Constraints and AI Development

AI data centers require not only large volumes of electricity but also reliable power capable of supporting continuous operation. BloombergNEF forecasts that U.S. data center power demand will more than double by 2035, rising from nearly 35 gigawatts in 2024 to 78 gigawatts.¹⁸ Analysts warn that delays in approving energy generation facilities—particularly natural gas, nuclear, and transmission projects—limit the grid’s ability to meet AI-driven energy demand

¹⁰ *Biden-Harris Administration Announces Final Transmission Permitting Rule and Latest Investments To Accelerate the Build Out of a Resilient, Reliable, Modernized Electric Grid*, U.S. DEPT. OF ENERGY (Apr. 25, 2024), <https://www.energy.gov/articles/biden-harris-administration-announces-final-transmission-permitting-rule-and-latest>.

¹¹ U.S. Gov’t Accountability Office, *Electricity Grid: DOE Could Better Support Industry Efforts to Ensure Adequate Transformer Reserves*, GAO-23-106180 (Aug. 2, 2023), <https://www.gao.gov/products/gao-23-106180>.

¹² Molly Taft, *Big Tech Asked for Looser Clean Water Act Permitting. Trump Wants to Give It to Them*, WIRED (July 29, 2025), <https://www.wired.com/story/big-tech-asked-for-looser-clean-water-act-permitting-trump-wants-to-give-it-to-them/>.

¹³ Philip Rossetti, *Low-Energy Fridays: Why is Judicial Review Important for Permitting Reform?*, R STREET INSTITUTE (Sept. 13, 2024), <https://www.rstreet.org/commentary/low-energy-fridays-why-is-judicial-review-important-for-permitting-reform/>.

¹⁴ Exec. Order No. 14,318, 90 FR 35385 (July 23, 2025).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ Helen Kou & Nathalie Limandibhratha, *Power for AI: Easier Said Than Built*, BLOOMBERGNEF (Apr. 15, 2025), <https://about.bnef.com/insights/commodities/power-for-ai-easier-said-than-built/>.

growth.¹⁹ Without significant improvements in permitting timelines, the U.S. risks energy scarcity that could slow AI development, increase consumer costs, or push investment overseas.

Grid congestion and interconnection delays further exacerbate the problem. Reports indicate that transmission projects critical to delivering power to data centers face some of the longest permitting timelines of any infrastructure category, often exceeding a decade from proposal to implementation.²⁰ In 2024, only 888 miles of new high-voltage (345 kV and above) transmission lines were completed, marking one of the slowest years for such construction in the past 15 years.²¹ These delays undermine both energy reliability and the ability to determine where data centers can be built based on available energy resources. California's transmission planning timeline, for example, was extended from a 10-year to a 15-year horizon under 2022 state legislation to ensure sufficient lead time for permitting and construction of approved projects.²²

Judicial Review, Litigation Risk, and Regulatory Uncertainty

Judicial review plays a central role in federal permitting outcomes. While oversight and accountability are essential, expansive judicial review combined with vague statutory standards can create incentives for litigation that delay projects regardless of their merits. A July 2025 Breakthrough Institute study found that federal agencies prevail in approximately 74% of NEPA cases.²³ However, litigation results in project delays averaging more than four years from the publication of an environmental impact statement to the conclusion of the corresponding legal challenge at the appellate level.²⁴ Such delays increase uncertainty for investors and infrastructure developers, particularly for large-scale energy and data center projects with long planning horizons.

Legal uncertainty is especially acute for projects involving new technologies, where permitting agencies lack clear precedent and courts may impose additional procedural requirements.²⁵ These legal risks disproportionately affect infrastructure critical to AI development, which requires rapid scaling and predictable approval pathways. Currently, an aggrieved party may file a NEPA-related complaint up to six years after a project receives federal approval.²⁶

Global Competition and the China Comparison

¹⁹ James Broughel & Paige Lambermont, *Powering Intelligence: Meeting AI's Energy Needs in a Changing Electricity Landscape*, COMPETITIVE ENTERPRISE INSTITUTE (Mar. 26, 2025) at 12, <https://cei.org/studies/powering-intelligence/>.

²⁰ *Id.* at 4.

²¹ Nathan Shreve et al., *Report: Fewer New Miles: Strategic Industries Held Back by Slow Pace of Transmission*, AMERICANS FOR A CLEAN ENERGY GRID (July 2025), <https://www.cleanenergygrid.org/new-report-reveals-u-s-transmission-buildout-lagging-far-behind-national-needs/>.

²² *ISO Board of Governors approves 2024-2025 transmission plan*, CALIFORNIA ISO (May 22, 2025), <https://www.caiso.com/about/news/news-releases/iso-board-of-governors-approves-2024-2025-transmission-plan>.

²³ Alex Trembath et al., *The Procedural Hangover: How NEPA Litigation Obstructs Critical Projects*, THE BREAKTHROUGH INSTITUTE (July 24, 2025), https://thebreakthrough.imgix.net/pdfs/A-Comprehensive-Analysis-of-NEPA-Litigation_v5.pdf.

²⁴ Nikki Chiappa et al., *Understanding NEPA Litigation*, THE BREAKTHROUGH INSTITUTE (July 11, 2024), <https://thebreakthrough.org/issues/energy/understanding-nepa-litigation>.

²⁵ *Id.* at 8.

²⁶ 28 U.S.C. § 2401(a).

While the United States grapples with fragmented and time-consuming permitting processes, China has rapidly expanded power generation and data center capacity through centralized planning and streamlined approvals.²⁷ According to the IEA, more than half of global electricity demand growth in 2024 came from China, much of it driven by data centers.²⁸ China's data center electricity consumption is estimated at 100-200 TWh in 2025, with some projections reaching as high as 600 TWh by 2030.²⁹ China has implemented aggressive efficiency standards, with goals to reduce the average Power Usage Effectiveness (PUE) of data centers below 1.5 by 2025, and large-scale facilities in cooler regions are expected to achieve PUE levels of 1.25 or lower.³⁰ China has also launched the "Eastern Data and Western Computing" initiative to relocate data centers to western regions with abundant renewable energy resources and natural cooling.³¹

China's ability to rapidly deploy energy infrastructure at scale has provided advantages in supporting compute-intensive industries, including AI. Although China's authoritarian model carries long-term economic risks, its speed of deployment presents near-term competitive challenges for the United States. As AI becomes a foundational technology for economic growth and national security, delays in U.S. energy and infrastructure deployment could translate into lost leadership in AI development and commercialization.

²⁷ See generally Kristen Pirce, *China's GEC Update: What it means for Data Centers*, ACT (July 22, 2025), <https://www.actgroup.com/latest/blogs/china-s-gec-update-what-it-means-for-data-centers>.

²⁸ *Id.*

²⁹ Yuan Ye, *Explainer: How China is managing the rising energy demand from data centres*, CARBONBRIEF (Apr. 16, 2025), <https://www.carbonbrief.org/explainer-how-china-is-managing-the-rising-energy-demand-from-data-centres/>.

³⁰ *Wasted Power: Data Center Regulation in China*, ORBITAL INDUSTRIES (last accessed on Feb. 9, 2026) <https://www.orbitalindustries.com/posts/wasted-power-data-center-regulation-in-china>.

³¹ Ning Zhang et al., *The "Eastern Data and Western Computing" Initiative in China Contributes to Its Net-Zero Target*, 52 ELSEVIER ENGINEERING 256, 258 <https://www.sciencedirect.com/science/article/pii/S2095809924005058>.