Before the United States House of Representatives, AI and Energy Working Group

In the Matter of: Request for Information on Artificial Intelligence's Growing Energy Demands

COMMENTS OF INCOMPAS

Chip Pickering Christopher L. Shipley Taylor Abshire INCOMPAS 1100 G Street, N.W. Suite 800 Washington, DC 20005 (202) 872-5746 cshipley@incompas.org

May 15, 2025

I. <u>INTRODUCTION</u>

INCOMPAS respectfully submits these comments in response to the AI and Energy Working Group's ("Working Group") *Request for Information to Address AI's Growing Energy Demands* ("*RFI*").¹ INCOMPAS appreciates Congresswoman Fedorchak and the Working Group's commitment to crafting a legislative framework that secures the U.S.'s energy dominance, strengthens the energy grid, and positions America as the global leader of artificial intelligence ("AI").² The RFI is well-timed as it coincides with a number of other federal efforts to understand the challenges associated with meeting the energy demands associated with AI infrastructure, including the Office of Science and Technology Policy's ("OSTP") *Development of an AI Action Plan*,³ and the Department of Energy's ("DOE") request for comment on *AI Infrastructure on DOE Lands*.⁴.

Now is the time to build out AI infrastructure, modernize our energy grid, and deploy reliable broadband networks to ensure America's continued leadership in these areas. Achieving these goals will require federal, state, and local governments to coordinate so as to systematically remove barriers to building AI networks and infrastructure, including data centers, transmission

¹ Request for Information to Address AI's Growing Energy Demands, Rep. Julie Fedorchak, AI and Energy Working Group (rel. March 10, 2025) ("*RFI*").

² See Press Release, Representative Julie Fedorchak, Fedorchak issues Request for Information to address AI's growing energy demands (March 10, 2025), <u>https://fedorchak.house.gov/media/press-releases/fedorchak-issues-request-information-address-ais-growing-energy-demands</u>.

³ See Comments of INCOMPAS, FR Doc. 2025-02305 (filed March 15, 2025).

⁴ See Comments of INCOMPAS, FR Doc. 2025-05936 (filed May 7, 2025). INCOMPAS supports government-wide coordination with respect to establishing a regulatory environment around AI and urges the Working Group to collaborate with OSTP and DOE on any issues in the RFI that may overlap with areas under consideration by these executive-level agencies.

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.

INCOMPAS believes that sensible policies with appropriate safeguards can ensure AI is integrated securely into the economy while maintaining a climate that encourages continuous innovation and investment. This is how the U.S. can maintain its technological and economic edge, bolster the country's competitiveness, promote entrepreneurial market entry, and help to prepare the next generation for upcoming opportunities and global challenges. This moment presents opportunities not only to reshore American manufacturing of goods needed to deploy AI infrastructure, but the country can establish an all-of-the-above energy policy for traditional energy, natural gas, and renewables, as well as permitting and licensing policies for new SMR and nuclear technologies that will ensure energy generation that will power the growing data center market. Once again, INCOMPAS commends the Working Group for seeking industry feedback for the purposes of establishing a legislative framework that facilitates and streamlines the deployment of this critical infrastructure in order to ensure America's AI and energy dominance.

II. FEDERAL PERMITTING REFORM IS VITAL TO MEETING THE ENERGY NEEDS OF AI INFRASTRUCTURE AND OUTPACING CHINA

The need for increased connectivity has led to significant investment by INCOMPAS member companies in infrastructure such as fiber optics, middle mile, transmission capacity, and cloud services. These investments enhance overall network quality and reliability. Along with these enhancements, energy consumption continues to grow. The International Energy Agency

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estimates that globally, electricity consumption from data centers, AI development, and the cryptocurrency sector could double by 2026.⁵ Existing electrical infrastructure in some areas can handle this amount of demand, but will need to be modernized. Permitting jurisdictions have a significant impact on how quickly this vital infrastructure can be deployed. INCOMPAS' members consistently face delays in permitting and gaining access to public rights-of-way when deploying broadband and AI infrastructure, which can run as long as 40-70 months.⁶ Unless Congress takes immediate and government-wide action, the present timeline to build out energy infrastructure will not align with the pace of growing demand.

To eliminate regulatory barriers to deployment, INCOMPAS encourages Congress to establish an "all-of-government" approach in order to fast-track permitting. It is extremely important that not only Congress, but that all federal agencies, including the DOE, Federal Energy Regulatory Commission, 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.

At the federal permitting level many agencies play a role in inadvertently deterring timely and efficient deployments. For example, the Team Telecom Review Process (at the Departments of Justice, Homeland Security, Defense, and State, and the FCC) for submarine cable landings in

⁵ Electricity 2024: Analysis and Forecast to 2026, International Energy Agency (Jan. 2024), available at <u>https://www.iea.org/reports/electricity-2024</u>.

⁶ See., e.g., Letter from Thomas Jones, Counsel for Zayo Group, LLC, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 17-79 & WC Docket No. 17-84 (fil. Oct. 31, 2019) ("[M]any local and state governments condition [its] access to public rights of way for the purpose of deploying wireline facilities on the payment of above-cost and discriminatory access fees as well as on compliance with ambiguous in-kind contribution requirements.").

the U.S. (which are critical to support domestic data center development) has become complex, subject to delays, and has a lack of transparency for applicants about why decisions are made and what risks the government is trying to avoid. The process, as it stands today, discourages submarine cable investments in the U.S. at a time where *more* investment is needed to ensure sufficient network resilience and capacity. Likewise, competing uses of maritime space is making it increasingly difficult to create diverse and resilient landings for submarine cables in the United States. Providing relief to the National Oceanic and Atmospheric Administration's permitting requirements for subsea cables entering marine sanctuaries could open new landing sites.

Another example of federal deterrence is the protracted permitting process for potential data center sites in air quality nonattainment areas. Industrial technological advancements and the rapid need for AI infrastructure require a review of the EPA's air regulatory interpretations, as many of these interpretations are overly conservative and outdated (*e.g.* source aggregation, atrisk allowable construction activities prior to the receipt of an air permit, fossil fuel-fired steam electric plant applicability with waste heat recovery system that does not generate steam, or cross-state air pollution applicability to power generation sites not capable of selling to the public utility grid). Ensuring the EPA and states only need to address comments directly related to the Clean Air Act and federal, state, or local air regulations would create a more streamlined application process and permit review.

In order to resolve some of these issues, any legislative framework created by the Working Group should prioritize efficiency and transparency. For example, Congress should establish shot clocks, or similar time-certain frameworks, for periods of study and permitting required for this construction. If multiple agency reviews are involved, the reviews should be

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placed on the same shot clock in order to create greater certainty for industry. Transparent permitting procedures should be utilized, meaning that all necessary information about the steps and costs required to secure the permit should be public when industry participants file an application. INCOMPAS also urges Congress to remove redundant environmental reviews. An all-of-government approach would ensure that studying the same project once is sufficient to satisfy environmental concerns for any federal agency.

III. CONGRESS SHOULD ENCOURAGE FAVORABLE LOCAL REGULATORY ENVIRONMENTS

INCOMPAS asks that Congress encourage state and local governments to encourage domestic building of AI infrastructure. The regulatory environment at the state level is a key consideration on whether it is economically and operationally efficient to build data centers in certain locations. Congress should encourage increased access to public rights-of-way, accelerating the approval of permits, and asking state and local governments, utilities, and railroads to charge fees that are based only on their actual, objectively reasonable costs. These improvements at the state and local level would help streamline improvements of all necessary infrastructure.

Local tax incentives also significantly impact site selection. Sales tax exemptions and property tax incentives offered by more than 25 states on data center equipment are critical to the U.S. competing globally on cost. INCOMPAS urges Congress to take steps to support those exemptions and incentives. When state legislatures opposed to building data centers discourage investment by either revoking development programs or not creating new tax incentives, it creates a chilling effect on new investment, which the U.S. cannot afford if it intends to compete on a global level in the AI marketplace.

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Congress can help improve the state and local regulatory environment by publicly countering negative rhetoric towards data centers and other AI infrastructure. AI infrastructure will have a significant positive impact on local communities by bringing jobs, investment, tax revenue, and philanthropy. The employment opportunities for local communities and their residents are significant and include diverse positions—from construction jobs, skilled trades, and operational jobs. Many of these jobs do not require a four-year degree and many data centers offer on-the-job training. Examples of employment positions include technicians, heating and cooling specialists, engineers, project managers, and site managers. Also, the investment in data centers and other infrastructure brings significant tax revenue to the community, funding important public services including local public schools and infrastructure projects. Lastly, data centers require robust local infrastructure, such as the expansion and modernization of local roads, power infrastructure, network speeds, and water systems. These upgrades benefit local residents and drive even more economic development for communities. Congress creating positive rhetoric could help improve state and local regulatory environments.

INCOMPAS asks Congress to keep in mind other key characteristics that make a domestic site more or less favorable to industry development, including: (1) proximity to major markets and customers, (2) amount of local and state economic development incentives, labor costs and availability, (3) environmental conditions, (4) availability and cost of real estate options, (5) availability of telecommunications infrastructure and cost of utilities,⁷ (6) ability to develop redundant fiber paths and right-of-way access for further development, if needed, (7)

⁷ See What is a Data Center? Tiers, Types, and More, NLTYE SOFTWARE, available at <u>https://www.nlyte.com/faqs/what-is-a-data-center/</u>.

access to natural gas pipelines for reliability⁸ (8) access to renewable and carbon-free energy to continue progress towards sustainability goals, (9) proximity to technical and engineering workforce talent as well as local universities, and (11) business friendly climates and strong partnerships.

IV. AI SHOULD BE USED TO STREAMLINE PERMITTING

To promote efficiency, Congress should utilize the latest AI technology to automate and optimize licensing processes, especially for environmental reviews and permitting. This practice would be consistent with the Administration's policies.⁹ Congress has an opportunity to utilize AI in a variety of other ways, including to mitigate increased cybersecurity threats to energy infrastructure, analyze applications, predict spectrum needs based on usage trends, and recommend optimized license terms that consider current and future demand. By reducing bureaucratic delays and administrative overhead, AI-driven licensing could speed up the deployment of wireless broadband infrastructure, particularly for smaller providers that may struggle with lengthy regulatory processes.

As a part of its legislative framework, Congress can promote the use of AI to simplify regulatory compliance and reduce the burden on smaller Internet service providers (ISPs) entering the broadband market. AI could automate reporting processes, predict potential

⁸ See The Economic Benefits of Natural Gas Pipeline Development on the Manufacturing Sector, National Association of Manufacturers, 4 (May 2016), available at <u>https://nam.org/natural-gasstudy/#:~:text=In%20a%20recent%20IHS%20manufacturing,natural%20gas%20liquids%20(NG Ls)</u>. See also Trade Group Urges Congress to Expedite Gas Pipeline Buildout, PERMIAN BASIN OIL AND GAS MAGAZINE (April 2025) available at <u>https://pboilandgasmagazine.com/tradegroup-urges-congress-to-expedite-pipeline-buildout/</u>.

⁹ Presidential Memoranda on Updating Permitting Technology for the 21st Century (rel. April 15, 2025), *available at* <u>https://www.whitehouse.gov/presidential-actions/2025/04/updating-permitting-technology-for-the-21st-century/</u>.

regulatory violations, and ensure that smaller providers meet compliance standards without excessive administrative costs. By lowering regulatory and compliance costs, AI can encourage more competition by enabling smaller ISPs to compete effectively with larger, established providers. This could accelerate broadband deployment in areas currently underserved by large providers. Automation tools in regulatory compliance can be explored to streamline processes for small businesses and startups in various industries.

V. PROMOTING PUBLIC-PRIVATE RESEARCH PARTNERSHIPS WILL BE CRITICAL TO ACHIEVING CONGRESS' AI GOALS

Industry and government collaboration to improve AI can help drive energy efficient grid management and offer ample benefits to modern infrastructure. Congress should continue to fund these research and development partnerships. For example, the Department of Energy ("DOE") has established the Energy Threat Analysis Center (ETAC), to build partnerships between the public and private sectors to mitigate cyber threats to energy infrastructure, like DOE's recent award of \$4.2 million to Georgia Tech to develop an AI security solution.¹⁰ The risk of cyberattacks remains high and these efforts should continue to be funded to ensure these solutions are scaled and distributed across the U.S., and that AI is utilized in the most efficient way possible.

DOE has also announced an AI testbed to bring together researchers, national labs, and the private sector to research energy-efficient and/or energy-flexible AI training and inference.¹¹

¹⁰ Zac Amos, *Protecting the Grid: Does AI Hold the Key to Cybersecurity?*, *EEPower* (April 02, 2024), *available at* <u>https://eepower.com/tech-insights/protecting-the-grid-does-ai-hold-the-key-to-cybersecurity/#</u>.

¹¹ Recommendations on Powering Artificial Intelligence and Data Center Infrastructure, U.S. Dep't of Energy, Sec. of Energy Board, Presented to the Sec. of Energy on July 30, 2024, https://www.energy.gov/sites/default/files/2024-

It is already developing AI tools to improve the way such projects are sited and permitted at the federal, state, and local levels as part of its recently launched voltAIc Initiative.¹² More broadly, the DOE's Frontiers in Artificial Intelligence for Science, Security and Technology ("FASST") program is a multi-purpose initiative leveraging the DOE's infrastructure to address issues including energy, national security, and workforce.¹³ INCOMPAS commends these initiatives and implores Congress to increase funding to help DOE continue investments in AI and collaborate with industry to conduct research vital to winning the AI race.

VI. CONCLUSION

For the reasons stated herein, INCOMPAS urges the AI and Energy Working Group to consider the above comments as it seeks to develop a legislative framework for powering the future of AI.

Respectfully submitted,

/s/ Chip Pickering

Chip Pickering CEO

Christopher L. Shipley Executive Director of Public Policy

Taylor Abshire Policy Advisor

<u>08/Powering%20AI%20and%20Data%20Center%20Infrastructure%20Recommendations%20Ju</u> <u>1y%202024.pdf</u>.

¹² How AI Can Help Clean Energy Meet Growing Electricity Demand, U.S. Dep't of Energy, Office of Policy (August 2024) available at <u>https://www.energy.gov/policy/articles/how-ai-can-help-clean-energy-meet-growing-electricity-demand</u>.

¹³ FASST Factsheet, U.S. Dep't of Energy (July 2024) available at <u>https://www.energy.gov/sites/default/files/2024-07/FASST%20Handout%20%281%29_0.pdf</u>.

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