

## **VIA ELECTRONIC MAIL**

SpeedtoPowerRFI@hq.doe.gov

November 20, 2025

Mr. David Parsons
Deputy Director
Grid Deployment Office
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

RE: RFI Response – Accelerating Speed to Power

Dear Mr. Parsons:

In response to the Request for Information (RFI) "Accelerating Speed to Power/Winning the Artificial Intelligence Race: Federal Action To Rapidly Expand Grid Capacity and Enable Electricity Demand Growth" published in the Federal Register on September 18, 2025, the following information is provided:

Company/institution name: Americans for Prosperity

Company/institution point of contact: James Morrone

Contact's address: 4201 Wilson Blvd., Suite 1000

Contact's phone number: 571-705-3513

Contact's e-mail address: JMorrone@afphq.org

Company/institution's primary area State and Federal Energy Policy

of expertise or focus relevant

To this RFI

#### **INTRODUCTION**

Recent analyses from industry experts highlight the unprecedented scale at which artificial intelligence is transforming global economic activity and energy demand. Goldman Sachs estimates that broad adoption of AI across business and society could increase global GDP by 7%, or nearly \$7 trillion, and raise productivity growth by 1.5 percentage points over the next decade. As AI capabilities accelerate, the compute required to run generative AI applications alone is projected by McKinsey to grow 125-fold between 2024 and 2030.

Meeting this level of compute expansion presents significant data center, infrastructure, and energy challenges. Access Partnership projects global data center capacity would need to increase by an additional 130% to meet AI inference demand by 2030, leaving a potential shortfall of approximately 18.7 QFLOPs of compute. Addressing this gap solely through new data center construction would require at least \$2.8 trillion in additional infrastructure investment. At the same time, energy availability is emerging as a critical bottleneck. Data centers already account for up to 10% of electricity consumption in some cities, and nationwide U.S. data center electricity use could rise from 4% of total demand in 2023 to 12% by 2028, placing substantial strain on existing power networks.<sup>3</sup>

Recent U.S.-focused projections underscore the scale of the challenge. Deloitte estimates power demand from AI data centers could grow from 4 gigawatts in 2024 to as much as 123 gigawatts, a more than thirtyfold increase. Early-stage planning for 50,000-acre data center campuses suggests potential power needs of 5 gigawatts per site, equivalent to the electricity consumption of five million residential homes and exceeding the output of the nation's largest nuclear or gas facilities. The growth in AI-driven data centers creates operational stress in several regions due to large continuous, and highly concentrated 24/7 power loads.<sup>4</sup>

Industry investment projections reflect the magnitude of anticipated demand. BCG estimates that hyperscalers—Amazon, Meta, Microsoft, and Google—will account for roughly 60% of global data center industry growth through 2028, increasing their share of global power demand from 35% to 45%. Colocation providers are expected to supply the remaining 50% of data center

https://www.mckinsey.com/~/media/mckinsey/industries/semiconductors/our%20insights/mckinsey%20on%20semi conductors%202024/mck semiconductors 2024 webpdf.pdf.

<sup>&</sup>lt;sup>1</sup> Goldman Sachs. 2023. "Generative AI Could Raise Global GDP by 7%." Goldman Sachs. April 5, 2023. https://www.goldmansachs.com/insights/articles/generative-ai-could-raise-global-gdp-by-7-percent.

<sup>&</sup>lt;sup>2</sup> Mckinsey. 2023. "Creating Value, Pursuing Innovation, and Optimizing Operations McKinsey on Semiconductors."

<sup>&</sup>lt;sup>3</sup> Lander, Stella. 2025. "Building the Hybrid Future of AI - Access Partnership." Access Partnership. October 13, 2025. https://accesspartnership.com/reports/building-the-hybrid-future-of-ai/.

<sup>&</sup>lt;sup>4</sup> Stansbury, Martin, Kelly Marchese, Kate Hardin, and Carolyn Amon. 2025. "Can US Infrastructure Keep up with the AI Economy?" Deloitte Insights. Deloitte. June 23, 2025.

https://www.deloitte.com/us/en/insights/industry/power-and-utilities/data-center-infrastructure-artificial-intelligence.html.

power demand by 2028 as they support hyperscaler expansion.<sup>5</sup> In parallel, Citigroup projects that AI-related infrastructure spending by major technology companies will exceed \$2.8 trillion through 2029, driven by aggressive early investment and rising enterprise adoption. Citi further estimates that meeting global AI compute requirements will necessitate 55 gigawatts of new power capacity by 2030, representing \$2.8 trillion in incremental spending, including \$1.4 trillion in the United States alone.<sup>6</sup>

In light of these trends, we believe it is vital for the U.S. Department of Energy to develop and refine strategies, planning frameworks, and policy approaches that support the nation's ability to meet the accelerating power and infrastructure needs driven by AI and advanced data center growth, while ensuring continued reliability, affordability, and sustainability across the national grid.

#### **RECOMMENDATIONS FOR RFI**

Americans for Prosperity ("AFP") appreciates the opportunity to provide responses to this RFI.

In the Federal Register Request for information, published September 18, 2025, 90 FR 45032, at II. RFI Questions, Item 6 Additional Comments, the text at p. 45035 states:

"Please share any further insights, recommendations, or examples of effective practices related to grid infrastructure expansion to support large electric loads."

AFP recommends that the Department of Energy ("DOE") evaluate the feasibility of having generation, transmission, and distribution of electricity occur outside of the traditional grid system. For example, a data center or other large load could co-locate generation at or near the large load site and have its energy needs met by that co-located generation. Transmission and distribution lines could be tied in only to that large load and bypass the traditional grid entirely. Such a scenario could operate in a manner so that the load of that particular large customer would be handled entirely by the co-located generation, transmission, and distribution.

<sup>6</sup> Singh, Rashika, and Joel Jose. 2025. "Citigroup Forecasts Big Tech's AI Spending to Cross \$2.8 Trillion by 2029." *Reuters*, September 30, 2025. https://www.reuters.com/world/china/citigroup-forecasts-big-techs-ai-spending-cross-28-trillion-by-2029-2025-09-30/.

<sup>&</sup>lt;sup>5</sup> Lee, Vivian, Pattabi Seshadri, Clark O'Niell, Archit Choudhary, Braden Holstege, and Stefan A Deutscher. 2025.

<sup>&</sup>quot;Breaking Barriers to Data Center Growth." BCG Global. January 20, 2025.

https://www.bcg.com/publications/2025/breaking-barriers-data-center-growth.

<sup>&</sup>lt;sup>7</sup> "Accelerating Speed to Power/Winning the Artificial Intelligence Race: Federal Action To Rapidly Expand Grid Capacity and Enable Electricity Demand Growth", Request for information, Grid Deployment Office, Department of Energy, 90 FR 45032, September 18, 2025 Federal Register, p. 45035.

#### **OFF GRID OPERATIONS**

## **Microgrids**

In its 2025 Regular Session, the West Virginia legislature passed House Bill 2014, which was subsequently signed by the Governor. That legislation establishes a Certified Microgrid Development Program to be administered as a program within the Division of Economic Development. The legislation also states that within a certified microgrid district, any person seeking to provide electric service through the generation or distribution of electricity within the microgrid district to businesses locating within the microgrid district may not be subject to the jurisdiction of the Public Service Commission with respect to rates, obtaining a certificate of convenience and necessity, conditions of service or complaints pursuant to the relevant code section; may not be subject to the net metering and interconnection standards set forth in the relevant code section; and may elect to qualify as an exempt wholesale generator under federal law for purposes of furnishing electric service through the generation of electricity to a utility or regional transmission organization without being subject to the Public Service Commission's siting certificate requirements as set forth in the relevant code sections.

The legislation further establishes the High Impact Data Center Program "to encourage the continued development, construction, operation, maintenance, and expansion in West Virginia of high impact data centers." <sup>12</sup>

### Consumer Regulated Electricity

A concept similar to the microgrid concept is something that is referred to as Consumer Regulated Electric ("CRE") Utilities. The CRE idea is for generation and transmission to occur, with limited exceptions, totally outside of the traditional grid with loads being able to connect to generation via transmission and distribution lines that are likewise not part of the traditional grid.

Much the same as with microgrids, CRE operations would not be subject to state utility commission jurisdiction for some matters while, for purposes of health and safety, may be subject to such jurisdiction and the jurisdiction of other appropriate state and federal agencies.

While the bulk power system will continue to play a vital role in the provision of electric power, innovative operations that can bypass that grid, either in whole or in part, can help additional loads to be serviced while not compromising the reliability of the grid.

4

<sup>&</sup>lt;sup>8</sup> West Virginia House Bill 2014, 2025 Regular Session, <a href="https://www.wvlegislature.gov/Bill\_Text\_HTML/2025\_SESSIONS/RS/bills/hb2014%20sub1%20enr.pdf">https://www.wvlegislature.gov/Bill\_Text\_HTML/2025\_SESSIONS/RS/bills/hb2014%20sub1%20enr.pdf</a>

<sup>&</sup>lt;sup>9</sup> Id., §5B-2-21(c)(1) referring to chapter 24 of the West Virginia Code.

<sup>&</sup>lt;sup>10</sup> Id., §5B-2-21(c)(2) referring to §24-2F-8 of the West Virginia Code.

<sup>&</sup>lt;sup>11</sup> Id., §5B-2-21(c)(3) referring to §24-2-1(d), §24-2-11c, or §24-2-10 of the West Virginia Code.

<sup>&</sup>lt;sup>12</sup> *Id.*, §5B-2-21a(b)

# PRACTICAL SOLUTIONS IN THE ENERGY SPACE

AFP believes that these and other practical solutions can be identified that can move our nation forward as we continue to build a resilient electric grid while meeting the increased demand from large loads and AI.

We look forward to assisting in the identification of those solutions.

Respectfully Submitted,

Mario Ottero Emerging Technology Policy Analyst

James Morrone Policy Analyst, Energy