May 7, 2025

Organization: Grid Action Contact: Christina Hayes Address: 10 G Street, NE, Suite 440, Washington, D.C. 20002 Phone: 503-507-5143 Email: christina.hayes@gridaction.org

Re: Data Center RFI Response

Thank you for the opportunity to submit our comments in response to the Department of Energy's "Request for Information on Artificial Intelligence Infrastructure on DOE Lands."

Grid Action is a coalition of diverse stakeholders that advocate for policies to build out the interstate high-capacity electric power network. Our members include investor-owned utilities, merchant transmission developers, energy generators, corporate customers, equipment manufacturers, labor advocates and non-governmental organizations from across the political spectrum. Collectively, we represent an industry working towards modernizing the U.S. electric grid that could unlock up to \$7.8 trillion in investment, create more than 6 million new jobs, and save American consumers over \$100 billion, reducing household electricity bills by more than \$300 a year.¹

Our comments will focus on Category 4 of the RFI related to Offsite Energy and Transmission Capacity.²

Category 4: Offsite Energy and Transmission Capacity

Grid Action applauds the Department's interest in exploring whether it can leverage DOE land assets to support the growing demand for artificial intelligence (AI) infrastructure, which is both a national security and economic imperative. As part of that process, we encourage the Department to approach potential co-location on DOE land in a way that avoids the risk of costshifting between customers on the grid. Additionally, while co-located arrangements may offer expedited in-service dates for a limited number of projects in the near term, they do so at a cost. Co-locating customers and generation does not allow for the reliability and resiliency of access to the broader grid with abundant sources of generation. To scale the AI industry, these new customers should be part of the grid that serves all customers and also be included in needed transmission buildout guided by comprehensive regional and interregional planning processes and accelerated by streamlined permitting reform.

¹ *Clack et al*, "Consumer, Employment, and Environmental Benefits of Electricity Transmission Expansion in the Eastern U.S.", ACEG, October 2020.

² While Grid Action's positions are developed through broad stakeholder engagement, these comments do not necessarily represent the views of every individual Grid Action supporter.

I. Avoid Cost-Shifting Between Customers on the Grid

To maximize reliability and affordability, Grid Action wholeheartedly supports tying co-located AI data centers to the grid. At the same time, any co-located load arrangements must be thoroughly evaluated to ensure that cost-shifting, particularly of transmission system and ancillary services costs, does not occur. Proposed co-located load arrangements do not always function as completely islanded micro grids and may still rely on services such as frequency regulation, voltage support, and black start capability. These services should be paid for by all who benefit from them.

If co-located loads avoid their share of system costs while relying on that system in emergencies, or even just for stability, such reliance would undermine cost causation principles and unfairly shift costs of the grid onto other customers. DOE should work to ensure that grid-connected configurations of co-located AI facilities on federal lands properly account for these services.

II. Transmission Buildout Is the Durable, Cost-Effective, Long-Term Solution

It's important to recognize that the perceived attractiveness of co-location in today's marketplace is in large measure a function of our nation's transmission policy having historically failed to plan ahead and build out a grid capable of meeting the nation's evolving electricity needs. In order to avoid repeating the same mistake, that must change. Specific policy improvements in siting and permitting and cost recovery for large transmission lines would expedite development and be sure that the grid was nimble and able to meet rapidly emerging loads. While co-located arrangements can offer flexibility and speed for a limited number of near-term facilities, they are not a substitute for the robust, regionally coordinated transmission system that will ultimately be necessary to reliably and cost-effectively serve growing AI data center loads at scale.

In the long run, reliance on co-located configurations alone risks creating a case-by-case patchwork of co-located projects that is more expensive than would otherwise be required and may undermine the effectiveness and efficiency of the broader grid. For context, it is worth noting that only 7% of existing data centers have on-site generation beyond backup diesel, underscoring that co-located generation has historically not been the preferred practice and cannot replace the need for integrated grid planning.³

By contrast, transmission expansion to serve AI data center growth through comprehensive regional and interregional processes offers a more durable and cost-effective path forward. Well-planned transmission investments enable the pooling of diverse generation and load resources, reduce congestion and market inefficiencies, and minimize the need for localized infrastructure duplication. They also lower overall system costs by spreading fixed investment over a broader customer base, and they support competitive wholesale markets by allowing generation to reach load centers efficiently. Transmission buildout should be the principal long-term strategy for serving rising load from AI data centers.

³ Wood Mackenzie, *Uncertainty Dominates the 2025 US Power Outlook* (Apr. 4, 2024), https://www.woodmac.com/news/uncertainty-dominates-the-2025-us-power-outlook/.

III. CONCLUSION

Although co-location on DOE property can play an important role in addressing AI-driven load growth in the near term, transmission buildout through regional and interregional transmission planning is critical to ensuring a reliable and affordable grid capable of meeting increasing demand from the AI industry over the long term. Accordingly, DOE should ensure that co-located load arrangements contribute fairly to the transmission system on which they rely and fully utilize the Coordinated Interagency Transmission Authorizations and Permits (CITAP) program and other authorities to streamline permitting and accelerate buildout of the transmission needed to power the AI industry at scale and ensure America's energy dominance in the 21st century.

Thank you for the opportunity to comment on the Department's "Request for Information on Artificial Intelligence Infrastructure on DOE Lands." Please don't hesitate to reach out to Christina Hayes at <u>christina.hayes@gridaction.org</u> or Bill Parsons at <u>bill.parsons@gridaction.org</u> with any further questions you may have. We appreciate your consideration of our views.