May 7, 2025

Via aiinfrastructure@hq.doe.gov

Attn: Neelesh Nerurkar
Director of Infrastructure Policy
Department of Energy
1000 Independence Ave. SW
Washington DC 20585

Subject: DCC Comments on the Request for Information on Artificial Intelligence Infrastructure on DOE Lands

The Data Center Coalition (DCC) appreciates the opportunity to provide comments in response to the Request for Information (RFI) on Artificial Intelligence Infrastructure on DOE Lands by the Department of Energy (DOE) on March 7, 2025. DCC appreciates the leadership of DOE and the Trump Administration in fostering a strong data center ecosystem in the U.S. Data centers are essential for supporting critical and emerging technologies like artificial intelligence (AI), which are vital to U.S. national security, global competitiveness, and economic growth. Our comments outline additional information that would enable data center developers to respond to a future solicitation and answers to questions posed in the RFI.

1) About DCC

DCC is the membership association for the U.S. data center industry, representing leading data center owners and operators, as well as companies that lease large amounts of data center capacity.[1] DCC's member companies provide the digital infrastructure that supports the applications, capabilities, and essential services that enable our modern economy, including cloud computing and AI. DCC member companies are making significant, multi-billion dollar investments in America's infrastructure. These investments support hundreds of thousands of quality jobs across the nation and contribute billions of dollars in local, state, and federal tax revenue, providing consistent funding for important community priorities like public safety, education, and transportation. Between 2017 and 2023, the data center industry's total contribution to U.S. GDP was $3.5 trillion. In 2023, the U.S. data center industry directly

[1] The Data Center Coalition is a membership organization of leading data center owners and operators as well as companies that lease large amounts of data center capacity. Public testimony and written comments submitted by DCC do not necessarily reflect the views of each individual DCC member. A list of current DCC members is accessible at https://www.datacentercoalition.org/members.

employed more than 600,000 workers and supported 4.7 million jobs in total. The sector generated $404 billion in total labor income and contributed $162.7 billion in federal, state, and local taxes in 2023.[2]

2) Role of Data Centers in the Modern Economy

There is unprecedented demand for the digital services that have become central to our daily lives and modern economy—everything from the way we work and learn to how we buy groceries, bank, and even access medical care now occurs online. These digital, cloud-based services on which we all rely take place in physical locations—America's data centers. With an average of 21 connected devices per household in the U.S. and 5.5 billion people currently online globally, the role of data centers is expected to grow as consumers and businesses generate twice as much data in the next five years as they did in the past decade.[3] This growth is driven by the widespread adoption of cloud services, the proliferation of connected devices, and the rapid scaling of advanced technologies like generative AI, which alone could create up to $4.4 trillion in economic value globally by 2030.[4]

Digital infrastructure is a critical component of the United States' global economic competitiveness and keeping Americans' data safe and secure domestically. Data centers enable the essential services and cutting-edge technologies that drive the 21st century economy and enhance our quality of life, ensuring that our homes, businesses, schools, hospitals, manufacturing facilities, and governments operate effectively and efficiently.

By providing cost effective digital services on a massive scale, data centers drive innovation and growth across various sectors and are the backbone of AI. Leadership in developing and operating AI in the United States is vital for protecting national security and ensuring that AI systems are safe, secure, and trustworthy.

DCC's member companies are at the forefront of this transformation, though it is important to recognize that the U.S. data center industry is not a monolithic one. There are a variety of data center companies, business models, facilities, missions, and operations supporting the digital services critical to the modern U.S. economy and Americans' daily lives. U.S. leadership in AI requires a vibrant and dynamic data center industry that supports each of these models.

3) Response to the RFI

General Response:

The federal government is rightfully considering the use of federal lands, both brownfield and greenfield, for data center development. However, as stated in the RFI, DOE aims to begin the

---

[2] PwC, "Economic Contributions of Data Centers in the United States," February 2025.
[3] Deloitte, "Connected Consumer Study 2023," September 2023; International Telecommunication Union, "Internet use continues to grow, but universality remains elusive, especially in low-income regions," November 27, 2024; JLL, "Data Centers 2024 Global Outlook," January 31, 2024.
[4] McKinsey, "The economic potential of generative AI: The next productivity frontier," June 2023.

construction of AI infrastructure at select DOE sites by the end of 2025 with the target for commencing operations of these data centers by the end of 2027. Given the timeline to complete siting, construction, and operations, DCC believes that the following information would be required from DOE for a respondent to comprehensively respond to a potential future solicitation.

1. **Speed to Market:** As highlighted above, DOE's timeline for supporting data center operations on federal lands is rightfully quick. Given the timeline, DOE should clarify how it will enable speedy data center construction, specifically in regards to power procurement, which is currently the pacing challenge to data center development in markets across the country. This information should include specific steps to fast-track permitting for data center construction and energy infrastructure projects, procurement of long lead time materials, and general support the federal government is willing and legally able to provide.

2. **Lease Terms:** The RFI states that DOE anticipates authorizing land use rights and privileges through either a long-term ground lease or an easement. The DOE should strongly consider 99-year lease terms to provide long-term stability and security for developers. If there are statutory limitations on lease lengths, DOE should implement easy and no-competition renewals as an option. Additionally, DOE should examine successful and commercially viable land use agreements to identify best practices and structure lease terms accordingly.

3. **Environmental Considerations:** DOE should proactively make available to potential developers information on the environmental conditions of the sites, including any known or suspected contamination and remediation plans.

4. **Permitting Pathways Under NEPA:** DOE should outline current National Environmental Policy Act (NEPA) pathways for each site, including any previously completed environmental assessments, and indicate sites that are "shovel-ready." Additionally, DOE should describe any ongoing or planned assessments under NEPA or similar programs. In parallel with individual site reviews, we recommend initiating a programmatic NEPA review for data center developments.

5. **Definition of an AI Data Center:** Defining the concept of an AI Data Center is crucial to establish clear standards and guidelines for the types of facilities eligible to participate in the solicitation. However, with the rapid evolution of technology and industry practices, this definition needs to remain flexible to accommodate future advancements and innovations.

6. **All of Government Approach:** DOE should consult with other agencies, Congress, and industry on appropriate policy to enable the rapid deployment of data centers in the U.S. By proactively removing barriers to deployment, the federal government can play a

pivotal role in supporting this critical sector, fostering economic growth, and maintaining our competitive edge against foreign adversaries. Issues for collaboration should include, but not be limited to, timely access to reliable energy, critical equipment and supply chain constraints, workforce challenges, state level cooperation, and providing the right resources to agencies.

Responses to Specific Questions:

Category 1: Interest in Solicitation

What characteristics of a site make it more or less favorable for development?

The siting of data centers is a complex process driven by multiple factors essential for their performance and reliability. Critical considerations include access to reliable and affordable energy resources, as well as proximity to fiber networks for global connectivity. These factors are pivotal as data centers are large, relatively consistent loads that require high levels of power quality and reliability. Proximity to customers is also a critical consideration, particularly for cloud service providers.

Other critical considerations include tax and regulatory environment, access to a strong local construction and technical workforce, availability of land and associated costs, the speed of permitting and bringing facilities online, and low risks of natural disasters to ensure long-term operational stability.

Category 4: Off-Site Energy and Transmission Capacity

Assuming additional capacity could be procured or built in stages, what are desired timelines for electricity capacity availability?

A tension exists between the timelines of data center builds, which have traditionally been 18 to 24 months, and those of power infrastructure development and transmission development, which typically can take three to five years and seven to ten years, respectively.[5] Ideally, data center developers could procure electricity capacity in approximately two years to match the general timeline to build a data center.

Would flexible data center operations be possible if it would enable faster capacity interconnection?

DCC supports exploring the development of well-structured, voluntary demand response programs for large end users that properly allocate risk and incentivize and reward participation. However, there are several considerations that depend on the exact nature of the demand response, load resource, or emergency response programs. Data centers are largely 24/7 facilities that require 99.999 percent uptime to meet contractual obligations and support essential services. Latency—or the delay in time it takes for data to travel from one point on a network to

[5] McKinsey, "How data centers and the energy sector can sate AI's hunger for power," September 17, 2024.

another—is also an important consideration, particularly for data centers providing cloud infrastructure. Beyond those business considerations, there are additional factors related to backup generation, air permitting rules, and energy procurement commitments. As such, the ways in which data centers can participate in demand response programs vary greatly by data center operator, facility, and the nature of their operations, and depend upon the exact nature of the program.

What additional information could DOE collect from grid operators to inform potential AI infrastructure development at DOE sites?

- **Load Forecasting Practices:** DOE should collect information on how grid operators and utilities report anticipated load additions, including data quality, documentation, information about associated transmission needs such as supplemental projects, and regular revalidation. Requested information should include whether utilities and grid operators conducted multiple scenarios for growth (including low, medium, and high scenarios) and whether they supplemented forecasts with any third party or independent market data sources. A common framework and data collection would reduce uncertainties and improve the comparability of load inputs relied on by grid operators.

- **Enhanced Transparency in Transmission Planning:** Enhanced transparency in transmission planning involves making the process more open and accessible to stakeholders, including the public. This typically means providing detailed information about the criteria, models, and assumptions used in planning, as well as the identified local needs and potential facilities being considered. Additionally, it includes public posting of information and conducting stakeholder meetings.

- **Interconnection Queue Timelines and Reforms:** DOE should collect information on generation interconnection queues in various Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs) including, but not limited to, study and powering timelines, resource mix, regional differences, implementation of regulatory reforms, and completion rates similar to Lawrence Berkeley National Laboratory's *Queued Up* report.[6]

- **Transmission Congestion Reporting:** Consistent with Section 1221(a) of the Energy Policy Act of 2005, DOE should continue to conduct an electric transmission congestion study to provide information about transmission congestion to interested participants. Currently, DOE is required to conduct a study every three years. However, making this information more readily available would aid in reducing grid connection backlogs.

[6] Lawrence Berkeley National Laboratory, "Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection."

- **Power Flow Studies:** DOE should facilitate the collection of power flow studies from relevant utility and transmission providers to help stakeholders better address the capacity ceiling and interconnection capabilities of existing infrastructure serving the relevant DOE sites.

Category 5: Financial and Contractual Considerations

What types of large load utility tariffs or tariff design elements would make developing a data center in a certain service territory more or less preferable?

Any large load utility tariff or tariff design elements should be transparent, evidence-based, and include provisions that reflect the actual risk to the utility. Generally, the following utility tariff design elements would make developing a data center in a certain service territory more favorable:

- **Non-Discriminatory Applicability**: Apply any "enhanced" terms to *all* very-large loads above a clear MW threshold, rather than singling out specific industry or type of end use, such as data centers.
- **Minimum-Demand Charges**: Floors in the 70-80% range (with higher percentages only if the customer chooses a longer term) recover costs while preserving efficiency.
- **Load-ramp Schedules**: Tariffs should include a reasonable, time-limited ramp (often up to four years) that both parties can tailor during negotiations. A staged ramp lets the utility finish transmission and generation build-outs while the data center scales operations, easing early cash-flow pressure and aligning infrastructure spending with real load growth.
- **Contract Length**: Eight-to-twelve-year base terms with optional exit after a certain amount of years give utilities revenue certainty and customers flexibility.
- **Exit Fees**: Tie fees to the utility's incremental investment and let customers re-assign unused capacity, freeing space for others in the queue; flat, high fees with no reassignment option waste capacity.
- **Collateral Exemption:** Exemption from collateral should be allowed for customers with investment grade credit ratings (e.g., BBB- from S&P and Baa3 from Moody's) or other demonstrations of commercial viability.
- **Flexible Collateral Forms**: Accept parental guarantees, letters of credit, surety bonds, or cash deposits. Large load customers should be given a realistic window to arrange the security. There should also be a schedule that reflects the actual risk to the utility and decreases the collateral as the utility's risk exposure falls over time.

- **Cost-based Metrics**: Set minimum demand, exit-fee, and collateral levels using quantitative analysis that shows revenues comfortably exceed incremental transmission costs; arbitrary numbers erode confidence.

- **Aligned Incentives for Accurate Forecasting**: The combination of long-term commitments, moderate demand floors, and sensible collateral creates strong motivation for customers to forecast load accurately, reducing stranded-asset risk for all classes and keeping rates stable.

Category 7: Economic Opportunities and Considerations

What workforce requirements would inform the feasibility of development at a particular site?

Worker shortages in the data center industry are commonplace already. As data centers expand from traditional mature markets to emerging markets across the country, workforce shortages are amplified by a mismatch between the existing skills in those communities and the skills necessary for data center-related operations and trades positions. With rapid expansion of AI and the associated data center infrastructure buildout, the need for trades and highly skilled labor will continue to increase.

Are there specific local tax structures that impact site selection?

Data centers involve significant financial investments in buildings and equipment, with some individual projects representing billions in capital investment. Given the magnitude of initial capital investment and the need for data centers to replace and refresh expensive computer equipment on a regular cycle (typically every 3-5 years), the availability of sales and use tax exemptions on data center equipment is a critical factor for the data center industry in considering markets to locate and expand.

More than 35 states have created economic development programs that recognize the capital-intensive nature of data centers and treat their equipment with the same standard as manufacturing equipment. Manufacturers have long received a sales and use tax exemption on equipment in 41 states, and economic development programs for data center equipment bring the data center industry in line with existing programs for other capital-intensive industries like manufacturing.

Which components of data center infrastructure (e.g., advanced chips and other components of AI servers, advanced busbar, substation equipment, on-site energy generation/storage equipment, etc.) for these sites can be manufactured domestically now or for regular future server upgrades?

Data centers operate at the end of a long and complex supply chain. However, to secure American AI leadership, U.S. data center, cloud, and AI companies have diversified their supply chains globally. We would welcome the opportunity to discuss this topic in greater detail and

look forward to working with DOE on a plan to onshore more of our data center and AI supply chain in the U.S.

Importantly, the data center industry is a catalyst for U.S. economic growth in several industries throughout its supply chain. For example, SteelFab, one of the nation's premier fabricators of steel for data center projects, has successfully sourced steel for more than 330 data centers in 24 states and counting.[7] Munters Corporation in Virginia recently announced an investment of $29.95 million to build a 200,000-square-foot expansion to support its ongoing HVAC manufacturing activities for the data center industry.[8]

In Ohio, Vertiv makes cooling and distribution systems for data centers, and, as a result, has seen its business grow into one of central Ohio's most valuable companies.[9] Across America, Clayco, a construction company, has 57 active data center projects with the largest hyperscale and tech companies. In 2024 alone, data center projects generated $3.6 billion in revenue—half of Clayco's total revenue in 2024 and more than double the revenue they generated from data center construction in 2023.[10]

In 2024, Schneider Electric built an integration facility in Red Oak, Texas campus to support increasing demand for prefabricated modular data centers, creating over 200 jobs and allowing the company to expedite delivery of standardized infrastructure to customers nationwide and reduce production costs.[11] Schneider recently announced an additional investment of $700 million in U.S. manufacturing to meet rising demand across several business segments, including data centers.[12]

Category 8: Relevant and Available Environmental Documentation

What environmental baseline data should inform the site selection process?

DCC members have a vested interest in minimizing environmental impacts of their data center developments. This includes siting and designing data centers to avoid significant environmental impacts.

Environmental baseline data is critical to support environmentally responsible site selection and design. This should include information on the presence of wetlands, special status species, known or potential contamination, historic use of the land, air quality, Tribal trust resources, water resources, and architecturally, culturally, or archaeologically significant resources.

---

[7] SteelFab, "Data Center Projects."
[8] Governor of Virginia, "Munters to Expand Manufacturing Facility in Botetourt County," March 25, 2025.
[9] The Columbus Dispatch, "How Vertiv grew from a small refrigeration shop to one of central Ohio's largest companies," February 16, 2025.
[10] Crain's Chicago Business, "Clayco sees revenue soar from data center projects as AI drives demand," January 15, 2025.
[11] Schneider Electric, "Schneider Electric Opens Data Center Integration Facility in Red Oak, TX," June 20, 2025.
[12] Manufacturing Dive, "Schneider Electric to invest $700M in US manufacturing," March 27, 2025.

Specifically, providing the following information will help in evaluating potential environmental concerns on the proposed sites:

- Previously completed NEPA documents for the sites, including categorical exclusion determinations, Environmental Assessments (EA), and Environmental Impact Statements (EIS).
- Any wetland delineations or approved jurisdictional determinations from the U.S. Army Corps of Engineers at or adjacent to the proposed sites.
- IPaC reports and previous Biological Opinions from the U.S. Fish and Wildlife Service
- Previous Section 106 consultations with the appropriate State Historic Preservation Office.
- Documentation of previous government-to-government Tribal consultation for similar work on the subject property.
- Any previous surveys of known or potential soil or groundwater contamination, including any assessments of historical use of the sites, and any active or pending remediation plans.

Further, DOE can support timely evaluation of environmental impacts by leveraging streamlining options already available under NEPA, such as fully adopting previous NEPA analyses of a site, using programmatic Biological Opinions, using previous agency environmental surveys with minimal supplementation, and setting strict deadlines for federal agencies to respond to requests for consultation. DOE could achieve maximum acceleration of data center construction and operation on federal lands via a Categorical Exclusion under NEPA.

A NEPA Categorical Exclusion would relieve the lead federal agency of the time and resource-intensive burden of a site-specific EA and EIS, and could accelerate development by as much as three years. Alternatively, DOE could significantly streamline data center development by creating and using a programmatic environmental impact analysis and statement. This has the potential to significantly shorten the EISt phase and accelerate the agency's drafting of the EIS without sacrificing quality of the analysis.

Regardless of the environmental impact analysis and permitting path, facilitating data center development means ensuring that the permitting agencies tasked with performing environmental impact reviews and permitting are fully funded, staffed, and prepared to expedite workload at a pace that matches the timeline our members are capable of delivering. This could mean restoring environmental agency budgets that were previously cut and redirecting those funds toward processing permit applications for data center development or updating project development-focused databases and tools.

Category 9: Challenges and Any Additional Information Required for Potential Solicitations

What potential challenges, including but not limited to timeline, physical security, and cybersecurity, could be associated with siting AI infrastructure on DOE sites?

- **Federal Risk Management Requirements:** Requirements to conform with the Federal Risk and Authorization Management Program (FedRamp) to participate in site opportunities would be an area of curiosity. DCC members that do not currently have FedRamp authorization would need to apply to participate. We would recommend outlining FedRamp authorization requirements and any other cybersecurity requirements clearly. In addition, we would suggest the acceleration of the certification process to apply for authorization, as it could take 12-18 months on average and preclude certain companies from participating.

- **Tenant Restrictions:** DOE should clarify whether data centers sited on DOE lands will have any restrictions on tenants, such as those based on criteria like a tenant's country of origin or intended use of the facility.

What concerns exist with supply chain limitations, such as long lead times on certain power and onsite energy equipment, and what alternatives should be considered?

Major sectors of the U.S. economy are experiencing shortages and delays with delivery of capital equipment, especially power generation and distribution equipment—and materials. DCC members report broad challenges in procuring critical data center equipment, along with lengthening lead-times for delivery. Shortages are dependent upon general industry demand, leading to demand spikes across all data center operators, including hyperscalers. Some of the critical equipment categories that have experienced delays and fluctuations in delivery timeframes are:

- Mid and high-voltage circuit breakers
- Mid and high-voltage transformers
- Low and mid-voltage switchgear
- Uninterruptible Power Supply (UPS) units
- Chillers and cooling equipment
- Backup generators

While the data center industry works hard to source domestic content, and suppliers are increasingly looking to build more U.S. capacity, it is not always possible to source domestically in the short-term.

4) Conclusion

DCC thanks the DOE and the Trump Administration for its leadership in promoting a strong data center ecosystem here in the U.S. Data centers are vital to enabling critical and emerging technologies like AI that are essential to U.S. national security, international competitiveness, and economic prosperity. With the right approach to deploying data center infrastructure, the U.S. can win the AI race safely, securely, and to the benefit of all Americans.

Please do not hesitate to reach out to me at Cy@datacentercoalition.org if you have questions on the information provided or would like to schedule additional conversations.

Respectfully,

Cy McNeill
Director, Federal Energy Policy
Data Center Coalition