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Company/Institution’s Primary Area of Expertise or Focus Relevant to RFI: Corporate energy procurement; large-scale industrial, commercial, and data center loads; regional and interregional transmission; and electricity markets.

**U.S. Department of Energy’s Grid Deployment Office
Request for Information on “Accelerating Speed to Power/Winning the Artificial
Intelligence Race: Federal Action to Rapidly Expand Grid Capacity and Enable Electricity
Demand Growth” — Comments of the Clean Energy Buyers Association (CEBA)**

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CEBA respectfully submits these comments in response to the U.S. Department of Energy’s (DOE) Request for Information (RFI) on “Accelerating Speed to Power/Winning the Artificial Intelligence Race: Federal Action to Rapidly Expand Grid Capacity and Enable Electricity Demand Growth,” 90 Fed. Reg. 45032 (Sept. 18, 2025). CEBA is a business trade association that activates a community of energy customers and partners to deploy market and policy solutions for a carbon emissions-free energy system. CEBA’s more than 400 members

comprise one-fifth of the Fortune 500, represent \$38 trillion in market capitalization, and include institutional energy customers of every type and size — corporate and industrial companies, universities, and cities. CEBA is submitting these comments to assist DOE’s Speed to Power initiative, to accelerate the speed of large-scale grid infrastructure project development for both transmission and generation, and to ensure the United States has the power needed to win the global artificial intelligence (AI) race while continuing to meet growing demand for affordable, reliable, and secure energy.

SUMMARY

Corporate buyers of electricity, including the nation’s largest data center operators, manufacturers, technology firms, and commercial energy customers, face urgent and unprecedented challenges as electricity demand accelerates. The United States is entering a period of structural load growth not seen in decades driven by AI, semiconductor fabrication, reshored manufacturing, and widespread electrification. Corporate buyers are prepared to invest billions in U.S. expansion, but today’s grid is not prepared to deliver the reliable, affordable, firm power that modern digital and industrial operations require.

The ability of the United States to win the global AI race — especially against China — depends directly on the speed and scale at which the U.S. can expand grid capacity. Delayed interconnection timelines, congestion, aging and inefficient grid infrastructure, and inadequate transmission will push investment overseas, increase costs for all consumers, and deepen reliability risks during extreme weather.

Corporate buyers urge DOE to use its full set of authorities — funding, financing, permitting, coordination, and technical assistance — to rapidly accelerate grid expansion, modernize planning, and unlock near-term and long-term capacity. This is not just an energy issue; it is an economic competitiveness, national security, and price-stability imperative. A strengthened grid puts downward pressure on electricity prices, mitigates volatility, and allows new load to reduce fixed system costs for everyone.

We offer the following input to ensure the effort is structured to drive shared value, technology innovation, and market equity.

I. Response to RFI No. 2: High-Priority Geographic Areas for Targeted DOE Investment

a) Hyperscale Infrastructure Growth Concentrated in Northern Virginia, the South, and the Midwest

DOE has the opportunity to get ahead of coming trends on large load growth and ensure the infrastructure and technical support are available in the regions where load is expected to grow in the coming decade. According to a recent Synergy Research Group report,¹ 20 states or metro areas account for 62% of the current global hyperscale capacity, with fourteen of those

¹ Synergy Research Group, “Synergy Updates Its Ranking of the World’s Top 20 Hyperscale Data Center Locations” (July 2025). See, <https://www.srgresearch.com/articles/synergy-updates-its-ranking-of-the-worlds-top-20-hyperscale-data-center-locations>

top-20 markets located in the U.S., specifically Northern Virginia, Oregon, Iowa, Ohio, Texas/Dallas, Arizona, Nebraska, Illinois, South Carolina, Southern Virginia, Texas/San Antonio, Georgia, California/Silicon Valley, and North Carolina.

The selection of locations for hyperscale infrastructure is shaped by a variety of strategic factors. These include proximity to customers, the cost and availability of real estate and power, the quality of networking infrastructure, ease of doing business, local financial incentives, political stability, and the risk of natural hazards. Interestingly, these considerations often work against major cities, such as New York and Los Angeles, and instead favor less densely populated states like Oregon, Iowa, and Nebraska. Although Northern Virginia is projected to remain the dominant U.S. hub for hyperscale infrastructure in the near term, future growth is expected to shift toward the South and Midwest, indicating a geographic rebalancing of data center development.

Similarly, a recent S&P Global Commodity Insights study² projects that up to 2030, new large loads, driven by data centers and manufacturing, will be significantly concentrated in the Eastern Interconnection regions (PJM, MISO, Southeast) and Texas (ERCOT).

While data center expansion is driving much of the nation's demand growth, the U.S. is also experiencing significant growth across the industrial, transportation, and commercial sectors due to the reshoring of manufacturing and electrification. U.S. economic dominance hinges on a robust transmission grid that accelerates speed to power for these sectors, in addition to data center growth.

Targeted federal investment in existing areas already in urgent need of new transmission infrastructure, coupled with planning for forecasted data center growth in Northern Virginia, the South, and the Midwest, would create opportunities to improve overall grid reliability, reduce congestion, and put downward pressure on energy costs to benefit all electricity customers.

b) The U.S. Could Readily Increase Reliability and Access to Power by Increasing 35 GW of Additional Interregional Transfer Capability

The Fiscal Responsibility Act of 2023 required the North American Electric Reliability Corporation (NERC) to study the reliability value of increased interregional transfer capability. NERC's Interregional Transfer Capability Study (ITCS)³ recommends increasing transfer capability by 35 gigawatts (GW) across several regions due to rising demand, extreme weather, and evolving generation mixes.

The ITCS highlights the growing need for a strategic, interregional approach to ensure grid reliability amid rising electrification and more frequent extreme weather events. As transportation, industrial loads, and data centers increase demand, the ability to move power

² S&P Global Commodity Insights, "U.S. National Power Demand Study" (March 2025); page 15. See, <https://cleanpower.org/resources/us-national-power-demand-study/>

³ NERC, "Interregional Transfer Capability Study (ITCS) — Strengthening Reliability Through the Energy Transformation Final Report" (December 2024). See, https://www.nerc.com/globalassets/initiatives/itcs/itcs_final_report.pdf

across regions becomes critical. The study emphasizes that a reliable energy supply is most vital during extreme conditions, requiring coordinated planning across transmission planning regions.

Key findings revealed that energy deficiencies occurred in all twelve weather years analyzed, and import capability needs vary significantly across the country — there is no universal solution. The study identifies approximately 35 GW of additional transfer capability as beneficial for reliability. However, siting, permitting, and development delays hinder timely implementation. While some needs may be partially met by projects already in planning or construction, higher-than-expected retirements without replacement capacity could exacerbate deficiencies. Importantly, transmission upgrades alone cannot fully address these risks; complementary measures such as local generation resources, energy efficiency, demand-side management, and energy storage are essential.

Investment priorities include significant transmission enhancements in the following key regions:

- ERCOT: +14,100 MW
 - SERC-East: +4,100 MW
 - New York: +3,700 MW
 - SPP-South: +3,700 MW
 - MISO-East: +3,000 MW
 - PJM-South: +2,800 MW
 - SERC-Florida: +1,200 MW
 - California North: +1,100 MW
 - New England: +700 MW
 - MISO-South: +600 MW
- Total:** ~35,000 MW additional transfer capability

The ITCS recommends accelerating wide-area planning that integrates transmission and resource adequacy, addressing regulatory and permitting barriers as well as establishing a regular study cadence to adapt to evolving resource mixes and weather risks. A diverse and region-specific approach will be key to strengthening reliability and supporting the energy transition.

c) Data Centers Drive Unprecedented 166 GW Growth, Requiring Urgent Grid Expansion

Grid Strategies recently published a report⁴ finding that the U.S. has entered a new era of rapid electricity demand growth, driven primarily by data centers and supported by rising industrial, oil and gas, and electrification loads. Utility forecasts now project 166 GW of peak-load growth from 2025–2030, a more than six-fold increase compared to forecasts just three years ago. Data centers alone account for roughly 55% of projected growth, though analysts suggest utilities may be overstating this load by as much as 25 GW. Electricity use — not just

⁴ Grid Strategies, “Power Demand Forecasts Revised Up for Third Year Running, Led by Data Centers” (November 2025). See, <https://gridstrategiesllc.com/wp-content/uploads/Grid-Strategies-National-Load-Growth-Report-2025.pdf>

peak demand — is expected to increase 32% by 2030, with new loads exhibiting very high load factors due to 24/7 data center operations and off-peak electrification. Six regions — ERCOT, PJM, SPP, MISO, CAISO, and Georgia Power — make up more than 80% of this growth.

d) Corporate Demand for Carbon Emissions-Free Electricity Is Increasing

Our member companies are set to drive unprecedented demand for at least 275 GW of energy by 2035 from both new and existing electricity load, according to a report CEBA released in collaboration with Wood Mackenzie.⁵ That's equivalent to about one-fifth of total installed electricity generating capacity in today's electric grid across the U.S.

The Electric Reliability Council of Texas (ERCOT), PJM (covering the Mid-Atlantic), and the Midcontinent Independent System Operator (MISO) are forecasted to dominate nearly 70% of current and future energy procurement activity, in line with historical activity. However, the Southeast and West are poised for emerging demand growth.

II. Response to RFI No. 3: Use of DOE Funding, Financing, and Technical Assistance — DOE Needs to Pursue Two Parallel Pathways to Increase Transmission Capacity

We believe that a strong grid benefits all consumers. Transmission allows us to access the most affordable generation and meet demand cost-effectively while reducing congestion, improving system resilience, and ensuring reliability.

Today, corporate buyers cannot meaningfully expand data center capacity, manufacturing or heavy industry facilities, or electrified operations without near-term access to large quantities of power. Regions with headroom and actionable transmission plans will attract investment; regions without will fall behind.

Expanding grid capacity is the best way to put downward pressure on wholesale prices nationwide, improve resilience during severe weather, and reduce the cost of new generation by unlocking diverse resources across regions. Numerous DOE, NERC, and academic studies show that well-planned transmission pays for itself many times over, with a payback period measured in years, not decades.

Transmission needs are intensifying due to aging infrastructure, rising load demand, and a rapidly evolving generation mix. Addressing these challenges requires a strategic approach that pairs immediate relief with long-term structural reforms — ensuring a stable, affordable, and reliable grid for decades to come.

As major corporate electricity buyers, we urge DOE to prioritize grid investments, but along two distinct pathways at the same time. Outdated infrastructure and lengthy deployment timelines are increasingly limiting our ability to meet corporate energy goals, manage rising costs, and maintain reliability.

⁵ Wood Mackenzie, "US Corporate Carbon Emissions-Free Demand Outlook" (January 2025). See, https://cebabuyers.org/wp-content/uploads/2025/01/CEBA_US-Corporate-Carbon-Emissions-Free-Demand-Outlook.pdf

a) Short-Term Strategy: Speed by Focusing on Existing Rights-of-Way and Grid Optimization via Advanced Transmission Technologies

Existing rights-of-way hold the fastest, most scalable near-term solution to address rising load. These investments can provide immediate, cost-effective capacity gains and represent one of DOE's most impactful near-term levers. Permitting is simpler and faster because deployment occurs within existing brownfield rights-of-way, typically involving only new equipment installation or replacement of old transmission lines and conductors. A suite of advanced transmission technologies — already commercially available — can help utilities respond to rapid load growth, reliability and resilience challenges, and new generation interconnections. These include high-performance conductors (HPCs), grid-enhancing technologies (GETs) — such as dynamic line ratings (DLRs) and advanced power flow controls — and energy storage, as well as system automation and situational awareness tools (e.g., ADMS, DERMS). These tools can double the capacity of existing infrastructure in the near term, helping meet the early phases of AI and manufacturing growth expected in the next 18 to 36 months.

Finalizing FERC's pending DLR rule, which builds on Order No. 881, is a critical next step. Implementation delays in Order No. 881 adopting ambient adjusted line rating requirements, in part, stem from RTO software upgrades. DOE should support or fund these upgrades through existing programs to accelerate adoption and create the foundation for widespread DLR deployment.

DOE's leadership is essential in launching a National Transmission Modernization Strategy that coordinates across DOE offices and Power Marketing Administrations (PMAs). Aligning funding streams for HPCs and GETs will ensure modernization efforts are consistent, scalable, and measurable.

DOE should also work with federal partners to streamline permitting by applying categorical exclusions for GETs-enabled upgrades on federally managed lands, tracking deployments through a centralized clearinghouse, and collaborating with the Bureau of Land Management (BLM) and Department of Defense (DoD) on demonstration projects — using PMAs as innovation testbeds.

DOE should move from analysis to deployment by supporting pilot and demonstration projects through the Loan Programs Office (LPO) and other mechanisms. These projects, whether led by third-party suppliers or corporate buyers, can validate technologies, reduce risk, and accelerate market adoption. RTO-specific assessments of GETs and reconductoring opportunities should be prioritized because they can immediately unlock underutilized transmission capacity and strengthen regional reliability.

Finally, DOE must complete Round 3 of the Grid Resilience and Innovation Partnerships (GRIP) Program and secure reauthorization for both GRIP and the Grid Resilience State and Tribal Formula Grants program. With \$10.5 billion in funding and cost-match requirements, GRIP is a vital public-private tool for enhancing grid flexibility and protecting communities from extreme weather.

To date, the GRIP Program has awarded over \$1.5 billion to advanced transmission technology projects designed to quickly boost grid capacity and accelerate advanced transmission technology adoption. DOE should ensure these awards are fully funded and that these critical projects move forward.

GETs

- Dynamic Line Ratings
 - Virginia Electric and Power Co. (Dominion Energy Virginia): Analytics and Control for Driving Capital Efficiency Project
 - Duquesne Light Company: Grid Visibility Program (GVP): Unlocking System-Wide Data to Build a More Resilient and Equitable Grid
 - Arizona Public Service Company: Enhancing Arizona's Smart, Resilience Grid Infrastructure
 - Central Maine Power: Creating a Modern, Dynamic Grid to Increase Distributed Energy Resources in Rural Maine
 - Montana Dakota Utilities Co. and Innovative Energy Alliance Cooperative: Grid Modernization and Capacity Expansion in North Dakota
- Advanced Power Flow Control
 - EPRI and VELCO: Optimizing Interregional Transfer Capacity Using Advanced Power Flow Control
 - Avista Utilities and Idaho Power Company: Upgrading Interregional Transmission for Resilience and Smart Operations in the Northwest

HPCs

- Wildfire Mitigation and Renewable Energy Access in Western Kansas
- Reconductoring with Advanced Conductor Technology in Rural North Dakota
- Utah Office of Energy
- VEIR, Inc. ACES Project
- Tennessee Valley Authority (TVA)
- Georgia Transmission Corp

GETS and HPCs

- Georgia Power Company: Deploying Grid-Enhancing Technologies for Increased Capacity and Flexibility in Georgia
- CHARGE 2T: California Harnessing Advanced Reliable Grid Enhancing Technologies for Transmission

The CHARGE 2T project is a prime example of large-scale regional optimization. It combines multiple advanced transmission technologies, such as DLR and HPCs, with multi-utility coordination and collaboration among state regulators and policymakers. This approach moves us closer to an ideal grid modernization strategy that aligns advanced transmission technology deployments. By generating valuable lessons learned, CHARGE 2T will likely serve as a multiplier for future projects, enabling shared insights across all stakeholders.

These tools deliver the near-term reliability and affordability benefits required to keep U.S. industry competitive. Corporate buyers strongly support DOE's leadership in accelerating deployment.

Short-Term Recommendations

- Prioritize GRIP and other DOE funding for projects that deploy advanced transmission technologies, including DLRs, topology optimization, advanced power flow control, ADMS/DERMS, and HPC reconductoring within 1–24 months.
- Provide RTO-specific modeling assistance to accelerate GETs adoption and fund RTO software upgrades necessary for real-time ratings.
- Establish a national clearinghouse of GETs, HPC, and energy storage case studies, cost-benefit results, procurement templates, and utility best practices.
- Coordinate DOE offices and PMAs to align modernization funding streams.
- Use LPO and other programs to fund pilot and demonstration projects.
- Complete GRIP Round 3 and secure reauthorization for GRIP and State and Tribal grants.

b) Long-Term Strategy (2031+): Interregional Transmission and Large-Scale Buildout

Interregional transmission is the highest-value investment DOE can make, as it is essential for moderating energy prices nationwide, ensuring reliability during extreme weather, and enabling large-scale AI and manufacturing deployment. DOE should lead efforts to remove regulatory barriers to interregional transmission development, including those that block entrepreneurial, merchant transmission developers from advancing beneficial projects. Market-driven merchant transmission can help deliver an interregional, high-voltage backbone capable of supporting gigawatts of new load and powering economic growth for decades.

Current regulatory structures often favor diseconomies of scale and discourage shared, multistate solutions. DOE should prioritize interregional transmission in areas where shared infrastructure improvements can relieve known congestion and interconnection constraints. These bottlenecks delay project deployment, increase curtailment, and drive up consumer costs. By focusing on regions with overlapping needs, DOE can ensure that federal transmission investments deliver broad, systemwide benefits.

The ability to move electricity between regions is a foundational tool for reliability, resilience, and national security. Experience from recent extreme weather events underscores this. When interconnected transmission lines are available, operators can access more generation during fuel shortages, equipment failures, or extreme weather. Winter Storm Uri (2021) is a clear example: with limited transmission ties to other regions,⁶ the Texas grid experienced devastating multiday outages affecting millions and resulting in more than 200 deaths.⁷ Meanwhile, regions like MISO and SPP, which have hundreds of transmission ties to each other and PJM, were able

⁶ ERCOT has only two DC transmission tie lines to the Eastern Interconnection and imported just 800 MW of power from SPP over the week.

⁷ FERC, NERC, "Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South Central United States" (Nov. 2021). See, <https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and>

to import and export energy throughout the event, avoiding widespread, extended, and costly outages.⁸ During Winter Storm Elliott (2022), interregional transfers again provided critical support, reducing the extent of rolling blackouts in the Southeast over the Christmas holiday.⁹

Beyond reliability, expanded interregional transmission lowers costs by allowing regions to access the cheapest generation available nationwide. Modeling shows that expanded transmission could save customers within the U.S. portion of the Eastern Interconnection approximately \$3 billion per year by 2035 and \$4 billion per year by 2040.¹⁰ PJM separately estimated that new interregional projects could reduce the need to build new generation by nearly \$3.8 billion per year, simply by enabling existing resources to be shared more efficiently.¹¹ In sum, multiple studies show that interregional expansion offers \$4–\$6 in benefits for every \$1 invested.

Meanwhile, NERC’s ITCS¹² recommends increasing transfer capability by 35 GW across several regions due to rising demand, extreme weather, and evolving generation mixes.

DOE’s Transmission Facilitation Program (TFP) is one of the most powerful tools available to advance major transmission buildout. With \$2.5 billion in revolving funds, TFP has already helped overcome financial barriers to major interstate lines, upgrades, and microgrid connections. Fully funding recent TFP selections and securing program reauthorization and arguably at much higher levels are essential to sustaining this momentum.

TFP’s flexible financing, including capacity contracts, direct loans, and public-private partnerships, has proven effective in de-risking early-stage projects. The capacity contract model, where DOE acts as an “anchor customer” by purchasing up to 50% of line capacity for up to 40 years, is particularly effective at unlocking private capital.

TFP is best suited for nearly “shovel-ready” projects that cannot advance without federal support. Projects that are already fully subscribed are appropriately ineligible, ensuring funds target the highest-need projects. Without renewed support, many transformative interregional projects could stall, jeopardizing national reliability and the affordability of electric service for communities and corporate consumers alike.

DOE should also provide technical assistance and funding so that state regulators can coordinate more effectively on interregional planning. Strategic investment in interregional

⁸ Goggin, Gramlich, Caspary, and Schneider, “Fleetwide Failures: How Interregional Transmission Tends to Keep the Lights on When There Is a Loss of Generation” (Nov. 2021). See, <https://gridstrategiesllc.com/wp-content/uploads/2024/05/fleetwide-failures-how-interregional-transmission-tends-to-keep-the-lights-on-when-there-is-a-loss-of-generation.pdf>

⁹ Massie, Toth Kotwis, “Wasted Wind and Tenable Transmission during Winter Storm Elliott” (Feb. 2023). See, <https://rmi.org/wasted-wind-and-tenable-transmission-during-winter-storm-elliott/>

¹⁰ Tandon Manz, “Economic, Reliability, and Resiliency Benefits of Interregional Transmission Capacity” (Oct. 2022). See, <https://www.nrdc.org/sites/default/files/ge-nrdc-interregional-transmission-study-report-20221017.pdf>

¹¹ PJM Interconnection, “The Benefit of the PJM Transmission System” (April 2019). See, <https://pjm.com/-/media/library/reports-notice/special-reports/2019/the-benefits-of-the-pjm-transmission-system.ashx?la=en>

¹² NERC, “Interregional Transfer Capability Study (ITCS) — Strengthening Reliability Through the Energy Transformation Final Report” (December 2024). See, https://www.nerc.com/globalassets/initiatives/itcs/itcs_final_report.pdf

facilities enhances reliability, reduces curtailment, improves interconnection timelines, and exerts downward pressure on wholesale electricity prices. Modernized transmission infrastructure allows regions to balance supply and demand more efficiently, avoid outages, and access lower-cost resources — savings that ultimately flow to consumers.

Long-Term Recommendations

- Fully fund all pending TFP selections and secure long-term authorization for the program at higher funding levels.
- Use TFP capacity contracts to de-risk major multistate lines and support merchant/entrepreneurial transmission developers.
- Secure TFP program reauthorization through legislative or administrative action.
- Provide technical assistance and financial support to state regulators to participate effectively in interregional cost-allocation decisions.
- Provide state regulators with technical assistance and funding for coordinated interregional planning.

III. Response to RFI No. 3: Use of DOE Funding, Financing, and Technical Assistance — DOE Should Take Steps to Strengthen Its Critical Role in Streamlining Transmission Permitting to Accelerate Project Timelines

Meeting the electricity needs of the accelerating AI economy and advanced manufacturing boom requires transmission and generation projects to move from concept to steel-in-the-ground far faster than the timelines allowed under current permitting frameworks. Today, even well-planned, broadly supported transmission lines can take 7–12 years to permit and build. These delays are incompatible with the speed at which the U.S. must add grid capacity to remain globally competitive — especially as China is deploying both high-voltage transmission and data center-scale generation at a far faster pace.

Corporate buyers — which are making multi-billion-dollar, decades-long commitments to building AI data centers, semiconductor fabs, logistics hubs, and new or expanded manufacturing facilities — cannot wait a decade for the grid to catch up. Permitting delays are now a direct constraint on U.S. economic competitiveness and a mounting reliability risk, as load growth increasingly outpaces the timeline for new projects to come online.

State-by-state siting rules slow the expansion of electric transmission needed to power the AI economy. DOE is uniquely positioned to accelerate permitting through direct action and federal coordination. DOE's Coordinated Interagency Transmission Authorizations and Permits (CITAP) Program streamlines federal permitting for transmission projects while maintaining rigorous environmental reviews to minimize litigation risk. CITAP designates DOE as the lead agency to coordinate and accelerate reviews for qualifying facilities.

Corporate buyers urge DOE to strengthen CITAP and adopt reforms that match the efficiency of natural gas pipeline permitting. Without major improvements to federal permitting processes, the U.S. will not be able to build the high-capacity interregional transmission lines, large-scale generation resources, or backbone infrastructure needed to win the AI race.

Recommendations

- Modernize and expand CITAP to deliver full federal authorization within **two years**, including all Notices to Proceed.
- Expand the use of applicant-prepared Environmental Impact Statements to accelerate review and free agency staff to focus on critical analyses.
- Require that CITAP’s Integrated Interagency Pre-Application process be completed within 12 months, with early issue identification and clear dispute-resolution steps.
- Embed CITAP more deeply across agencies, including the BLM, U.S. Forest Service, U.S. Fish and Wildlife Service, DoD, National Park Service, and National Oceanic Atmospheric Administration, to ensure consistent environmental review practices.
- Develop a transparent public dashboard showing review timelines, agency responsibility, milestone completion, and pending decisions.

IV. Response to RFI No. 4: Load Growth Trends

A recent S&P Global Commodity Insights study¹³ projects that U.S. electricity demand could grow 35%–50% between 2024 and 2040, driven primarily by AI data centers, new manufacturing, and the electrification of vehicles and heating. This massive load growth coincides with aging infrastructure, persistent congestion, rising peak risks, and generation portfolios that require greater transmission connectivity to maintain reliability.

This anticipated surge necessitates an “all-of-the-above” resource strategy to ensure the grid can meet demand, which is growing faster than current supply can be brought online. The study highlights the urgency of policy action on permitting and interconnection to accelerate the buildout of new energy solutions.

Key Findings From the S&P Global Study

- **Growth drivers:** The main drivers for increased electricity demand are AI data centers, manufacturing growth, transportation electrification, and electric space heating.
- **Rate of growth:** Demand growth is expected to accelerate significantly, requiring more generation additions than any previous decade in U.S. history.
- **Urgent need for action:** The study identifies a critical gap between current energy supply capacity and future demand, stressing the need for faster policy action on permitting and grid interconnections.
- **Energy strategy:** Meeting this demand will require a diverse portfolio of energy resources.
- **Supply chain and interconnection challenges:** The study also points out real-world constraints, such as strained supply chains and interconnection bottlenecks, that could slow the pace of new energy deployment.

¹³ S&P Global Commodity Insights, “U.S. National Power Demand Study” (March 2025); page 16. See, <https://cleanpower.org/resources/us-national-power-demand-study/>

V. Response to RFI No. 6: Other — DOE Support Needed to Jumpstart More Efforts to Merge Transmission Planning and Generator Interconnection Processes

To maximize long-term system benefits, DOE should provide technical assistance and funding to facilitate the merging of transmission planning and interconnection processes. For example, the Southwest Power Pool’s decision to merge its transmission planning and generator interconnection processes under the new Consolidated Planning Process (CPP) represents exactly the kind of forward-looking policy innovation DOE should champion. By aligning transmission expansion with generation interconnection, SPP is addressing two of the most significant barriers to energy deployment: fragmented planning and cost uncertainty. This integrated model ensures transmission upgrades are identified and built strategically, when and where they are needed, to reliably serve new generation and existing load. The model also promotes cost transparency and fairness through the GRID-C framework, which shares costs proportionally between generators and consumers.

The CPP’s proactive, stakeholder-supported approach exemplifies how regional grid operators can modernize planning to accommodate rapid demand growth, large interconnection backlogs, and an evolving energy mix. DOE should support efforts to replicate policies that streamline permitting, accelerate grid modernization, and create predictable investment signals critical for achieving national energy and reliability goals.

Recommendation

- DOE should provide technical assistance and funding to states and utilities to encourage the integration of transmission planning and interconnection processes.

VI. Response to RFI No. 6: Other — DOE Must Support All-of-the-Above to Win the AI Race

CEBA asks DOE to support an all-of-the-above spectrum of energy generation technologies to meet evolving load demands and achieve President Donald Trump’s goal of connecting one terawatt of new generation resources to the grid. Promoting all-of-the-above resource portfolios would enhance grid reliability, resilience, and sustainability. Blended resource approaches are particularly effective in optimizing performance across varying geographies and load profiles.

AI speed-to-market considerations outweigh preferences for specific generation resources because the urgency to deploy high-performance data centers — driven by global competition, massive capital investment, and time-sensitive innovation cycles — requires immediate access to all forms of power. Since supply chain constraints, permitting, interconnection, and infrastructure delays may limit the availability of some resource types, the urgency of the situation requires us to access all available generation options to meet the national imperative to support load growth and win the AI race. Short-term pragmatism means reliance on whatever generation can be brought online fastest to avoid stalling economic and technological momentum.

Recommendation

- Advocate for DOE policies that prioritize rapid deployment of all available generation resources over technology preferences to meet urgent AI data center demand and overcome delays in permitting, interconnection, and infrastructure.

VII. Response to RFI No. 6: Other — DOE Funding Must Continue to Support Protecting Affordability and Transparency for All Customers

As electricity demand accelerates, ensuring affordability is not merely a consumer-protection goal; it is a national competitiveness strategy. Corporate buyers of electricity, including data center operators, manufacturers, logistics companies, and commercial enterprises, depend on affordable, predictable electricity prices to invest and expand in the U.S. Rising electricity prices are already straining household budgets and eroding the cost advantages that underpin U.S. manufacturing and digital infrastructure leadership.

Transmission transparency is critical for companies making long-term energy investments, yet today's data landscape is fragmented and opaque. Outside organized wholesale markets, congestion data is virtually nonexistent, making it difficult to evaluate the economic case for GETs and HPCs, solutions that could unlock capacity and reduce costs. DOE can play a pivotal role by collecting and publishing congestion proxies for non-RTO regions or funding third parties to do so.

Similarly, transmission project data is inconsistent and unreliable within RTOs, and even worse in regions outside of them. Key details — such as cost drivers, project scope, and timelines — are rarely available, and there is no centralized or uniform recordkeeping. While the U.S. Energy Information Administration publishes aggregated expenditure data, it lacks project-level costs or regional breakdowns, and its Annual Energy Outlook provides only limited transmission modeling. For corporate buyers seeking predictable, cost-effective energy strategies, this lack of visibility creates risk and slows infrastructure development. DOE should lead efforts to standardize, collect, and publish detailed transmission and congestion data to enable informed investment decisions and accelerate progress toward a reliable, affordable grid.

Without greater transparency, accountability, and cost discipline in transmission and distribution spending, the U.S. risks higher power prices, slower AI deployment, weaker industrial competitiveness, and ultimately losing ground to China, which is expanding grid capacity far more quickly and at a significantly lower cost.

At the same time, corporate loads, when integrated effectively, can lower costs for all customers by spreading fixed infrastructure costs across more energy delivered. But this rate benefit disappears when utilities invest in expensive, piecemeal upgrades instead of comprehensive regional or interregional solutions with broad systemwide value. The combination of record-high transmission spending, growing utility capital budgets, and insufficient oversight has put upward pressure on customer bills, even where demand is growing and should, in theory, be reducing per-customer costs.

This affordability challenge is not simply a regulatory issue — it is an emerging strategic threat to U.S. competitiveness. High electricity prices deter data center and manufacturing investment, slow AI buildout, and increase pressure to offshore new facilities. DOE has the authority and resources to help states, regulators, RTOs, and utilities adopt best practices that foster affordability and deliver broad system value.

Just as important, corporate buyers need transparency to plan multi-billion-dollar investments with decade-long timelines. Predictable, disciplined infrastructure spending reduces risk, lowers financing costs, and accelerates the deployment of new industrial facilities, data centers, and advanced manufacturing capacity — all of which require large amounts of affordable power.

Recommendations

- Establish a standardized, centralized system to collect and publish detailed transmission and congestion data — including cost drivers, project scope, timelines, and congestion proxies for non-RTO regions — to enable informed investment decisions and accelerate grid modernization.
- Engage with states and utilities to identify best practices for large-load forecasting, and help states and utilities adopt verifiable and transparent methods for large-load forecasting.
- Require applicants for DOE funding to demonstrate how proposed projects reduce production costs, congestion, and long-term customer bills.
- Prioritize projects that address multiple grid needs simultaneously and avoid narrow, location-specific upgrades.
- Require utilities receiving DOE support to evaluate lower-cost alternatives, such as GETs and HPCs.

Conclusion

The U.S. is in a global race — one that will define leadership in AI, advanced manufacturing, and the next century of economic competitiveness. Grid capacity is the constraint that will determine whether the U.S. leads or follows.

DOE's RFI represents a generational opportunity. Corporate buyers urge DOE to move rapidly and decisively. By expanding interregional transmission, accelerating near-term GETs and reconductoring, modernizing planning frameworks, streamlining permitting, and strengthening affordability protections, DOE can ensure that the power needed for American innovation is available when and where it is required.

The stakes are clear: reliability, affordability, and America's leadership in the AI economy. On behalf of corporate electricity buyers, CEBA commends DOE for its forward-thinking vision and stands ready to help meet this moment.