**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

November 21, 2025

U.S. Department of Energy
Grid Deployment Office
Attn: David Parsons
1000 Independence Ave. SW
Washington, D.C. 20585

**Via email:** *SpeedtoPowerRFI@hq.doe.gov*

**RE:** Response to DOE RFI – Speed to Power Initiative

## A. Introduction

NRG Energy, Inc. ("NRG") is a publicly traded, integrated power company that serves more than 8 million customers through its power, gas and energy-and-home-services retail brands, and owns and operates more than 10 GW of power generation. NRG also operates a large demand-response company.

Specifically relevant to this RFI, NRG is actively pursuing the redevelopment of its legacy power-generation sites for data-center deployment. Commercial operations at these locations are expected to begin in 2028 with ramping through 2032. In furtherance of these efforts, NRG has entered into a joint venture to develop more than 5 GW of new natural-gas fired generation with GE Vernova and the EPC contractor Kiewit to rapidly bring new generation capacity online in response to growing demand from AI. Additionally, the company has three projects, representing 1.6 GW of natural-gas fired generation, now under construction or in due diligence through the Texas Energy Fund.

NRG has publicly announced 445 MW of power purchase agreements to support new large load customers. As described in these comments, NRG is well positioned to meet rising customer demand using the headroom in its existing fleet. In the next phase of NRG's growth, we will construct new power generation when and where the AI industry undertakes long-term commitments for offtake that support the capital investments that

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

NRG, as a project sponsor of equity, together with our debt investors make in power generation. Like the Department, NRG is committed to securing for the United States the dominant role in AI.

Before addressing the questions presented in the RFI, we address perceptions that we have heard from the Administration that the development of power generation lags behind the projections of electricity demand arising from AI applications. We then address conceptually the Department's role in helping to solve the gap and propose approaches the Department may take through its policy and funding activities to align development of new generation with rising data center demand. We propose three concrete roles for the Department and the federal government at large in this space:

- To act as a buyer of compute services, requiring as a precondition of large new procurements that power-generation additionality is part of the government's supply contract;

- To act as a regulator of access to the grid, making sure any existing headroom and incremental expansions of the grid for large load interconnections are efficiently allocated through the kind of open season or auction that have promoted capital formation and innovation in the gas-pipeline and electromagnetic-spectrum sectors; and

- To ensure that the vast supply of backup power generation is configured into the power markets as a capacity resource, and is available to response in case of grid emergencies.

To be clear, NRG is not itself seeking any federal grants or loans through its submission in this matter. Instead, NRG believes the Department is best suited to a purpose where it assists in creating a market for supply and flexible-demand rather than providing direct subsidies to particular power projects. Especially in the competitive power markets, the Department's direct subsidization could perversely create expectations that such support was an effectual precondition of the success of a project's development, setting off a negative feedback loop that would dampen prospects for wider investment in the sector.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

**B. Three Reasons for Lagging Capital Formation in the Power Generation Sector Versus Projected AI Demand**

***i. Uncertainty of Demand***

Significant uncertainty exists within the marketplace of AI hyperscalers and the computer superfactories that process vast quantities of energy through chips and transform the data into beneficial applications for Americans. Uncertainty negatively affects the willingness of market participants to make investments up and down AI's chain of production. There is uncertainty about:

- the rate of energy consumption of the chips used for computing;
- the productivity of the large language models employed for inference;
- the overall end-use demand for AI-based products;
- the resulting need for fiber or other networks linking data centers to midstream and end-use applications; and,
- the scale of incremental power generation needed on the grid to supply these downstream purposes.

With these uncertainties in mind, those who have worked in the power, telecom, and computing industries previously have experienced waves of enthusiastic investment that, in retrospect, proved imprudent. Although some of these investments resulted in valuable additions to the nation's energy infrastructure, it is small comfort to the initial investors who lost principal through restructurings and write-downs. This legacy affects the sentiment of investors in the power sector still today.

***ii. High Fixed Costs Throughout the Supply Chain***

Compounding the uncertainty related to demand for AI products, the infrastructure necessary to support data centers (i.e., the large language models, the chips within them, the power generation and transmission needed to supply them, and the fiber networks required to connect data centers to end users) are all high-fixed-cost, capital-intensive, large-scale propositions. Informed by history, and in the presence of uncertainty of demand and the high cost of entry to serve that demand, counterparties will reasonably require contractual terms that guarantee the purchase of some minimum amount of supply (e.g., a take-or-pay contract) to recover the costs of the high-fixed-cost asset that produces

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

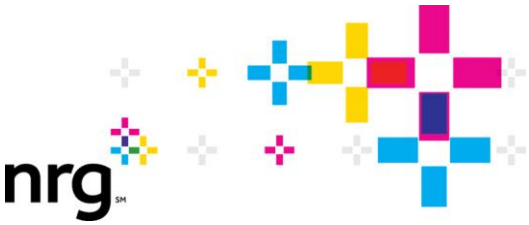
that supply. In the present situation, numerous links in the chain of production must fall into place for power plants to be constructed to supply energy, for the equipment to convert this energy into a voltage that is interconnected to the grid and then to an end-use data center, for chips to compute within that data center, and for the data center to produce and distribute its intelligence to end-use applications. Any one transaction out of sync with another can lead to delays throughout the chain—inimical to the "speed to power" that is the core of the Department's proposition.

### *iii. Energy Markets Not Signaling Significant Future Demand*

Curiously, the forward energy markets—the place where traders are buying and selling commodity futures based on predictions of future demand and supply—are not indicating a price that would justify the level of investment necessary to meet the current AI demand projections. For example, in Texas, the ERCOT forward market remains backwardated, with on-peak power for 2030 delivery selling at a price cheaper than on-peak power for delivery in 2026. In PJM's largest hub, forwards are only slightly escalated for the same period.[1] These prices are inconsistent with expectations of significantly increasing demand for energy.

This is a vexing phenomenon, and there are a few hypotheses that explain it. First is that the demand forecast is badly inflated. However, even a small amount of additional demand should cause forward prices to escalate given current tight conditions. An alternative hypothesis is that there may not be adequate confidence among buyers in this market to justify long positions on the purchase of supply when other links in the chain are yet unresolved. Consider the quandary of a data center developer: Why buy huge quantities of power for 2030 delivery if you have not secured the chips or the grid connection or the fiber for the data center to put them in? One might expect that purely financial traders would stockpile energy futures on prospective demand growth, but warehousing these positions requires substantial costs in collateral to secure these positions before profit has materialized. Historically, there have been plenty of asset owners willing to hedge output by selling long-term contracts, but structurally fewer long-term buyers of power supply. The structural asymmetry between sellers eager to go long versus not enough buyers willing to do the same can lead to suppressed prices in forward markets.

[1] Forward prices in ERCOT and PJM attached as Appendix A.



**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

One may also consider a third explanation founded in political economy: It could be that investors and traders do not regard the forward energy markets as the locus of activity that will convey the price signal to supply the AI industry. Perhaps data centers will for some reason disregard the market signal and, because of the private value and certainty they may obtain from the large-scale bilateral purchase of energy and capacity, will enter into such agreements at a premium.[2] Perhaps they will be expected or be required to bring their own generation to the grid. Perhaps traders in these markets expect some other *deus ex machina*, for example for regulators to cap the prices necessary to produce sufficient prices to justify new and large-scale entry. This last element is of course especially profound in markets like PJM, where politicians and regulators have already proved willing to intervene outside the normal course of the market's operation.[3] In this regard, an important question emerges: Why would anyone trade a product at a premium above the invisible strike price of a political actor's willingness to (have other people) pay?

The current situation of seeming underinvestment likely results from some combination of all three of these things: overstated demand, few long-term buyers for supply relative to those seeking to sell long-term supply, and a tacit understanding that the market one would hope to do the lifting on capital formation is not the venue where this action necessarily takes place. So, what is to be done?

### C. Governmental Approaches to Promote Capital Formation in the Sector

Both the Department and NRG agree that there is an AI imperative. As such, AI will either need or (as a prudential matter) should have access to substantial incremental energy supply. There are policy approaches the United States government can employ to clarify uncertainty around these issues. NRG proposes three: First, the federal government in its limited role of procuring computing services stimulates the power-generation industry by predicating its contractual purchases on power-generation additionally. Second, the government uses existing regulatory tools to promote a clear bell-ringing of a market opportunity in which capital more readily assembles around projects through the conduct

[2] Indeed, the longer-term deals with AI companies that power-generation companies, including NRG, have publicly announced imply a premium to market forwards.
[3] For example, Pennsylvania Governor Josh Shapiro struck a deal with PJM to establish a price collar for the 2026/2027 and 2027/2028 delivery years after filing a complaint at FERC alleging that PJM's demand curve cap is unjust and unreasonable. *See* Complaint of *Commonwealth of Pennsylvania v. PJM Interconnection, L.L.C.,* Docket No. EL25-46 (December 30, 2024).

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

of open seasons for rights to access the power grid. Each approach, which are not mutually exclusive, can encourage capital formation around AI throughout the supply chain. Third and finally, the government can and should encourage power markets to incorporate demand-side flexibility. A combination of backup generation, energy storage, and/or other technologies at the sites of both AI energy users and others will allow these large loads to be more nimbly added to the grid.

### i. *The Government as Consumer of Compute to Promote Upstream Capital Formation in Power Generation*

The government is a source of demand for AI compute. It should leverage its role as a buyer of these valuable services to act as an effectual financial guarantor of demand at one or more points in the supply chain. In the supply chain described above, and under the uncertain conditions now present, it is difficult and perhaps impossible to assess what is the true binding constraint on this system. Government could directly subsidize one link in the supply chain to find another blockage in its place, thus reshuffling the subsidies all the way down. The government should not take this approach.

NRG believes the better approach is for the government to encourage or require, through its contracts to purchase AI compute services, the most well-capitalized firms currently present in the supply chain to be the backstop to the upstream products that AI requires. For example, the United States Government could agree to contract for compute and AI services for its own applications exclusively from AI companies who, in turn, contract for long-term and additional power supply on the nation's grids. The government acting as a buyer would have consequential effects, in this case, up and down the value stream without directly intervening to subsidize particular links of the supply chain.

### ii. *The Government as Grid Regulator, Establishing Open Seasons for Grid Access to Promote Capital Formation in Data Centers*

The second way for the Department to facilitate a resolution to "speed to power" is by using the authority it has over a highly regulated industry—the power grid and access to it—to call the question and put those in the position of wishing to use grid access and power supply to place a strong, financial bet through regulation.

Present-day approaches to load interconnection are, worryingly, replicating the well-documented dysfunction of the generator interconnection queues. As contemplated

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

by NRG's comments to the Secretary's Advance Notice of Proposed Rulemaking ("ANOPR") on large load interconnection[4], the Federal Energy Regulatory Commission ("FERC" or "Commission") could incorporate the use of open seasons to expedite large load interconnections and efficiently allocate interconnection capacity. This would ensure a more efficient and market-based approach while providing much needed certainty around forecasted data center demand. The Department should encourage FERC, through the proceeding that the Secretary commenced through his issuance of the ANOPR, to incorporate this concept into its eventual proposed rule.

Borrowing from the process used by FERC-jurisdictional natural gas pipelines to allocate pipeline capacity, the Commission could mandate the use of open seasons to allocate interconnection capacity. Pipeline open seasons have successfully promoted capital formation in the natural gas sector, and the same can be true for interconnecting large loads to the nation's electric transmission grids. Similar to the pipeline industry, grid planners could develop a plan to meet projected demand in their respective regions, tender it to market to subscribe demand to the plan, and award financially binding commitments to receive an allocation of capacity. In the same way, the telecom industry has transformed into a high-value, multiple-use ecosystem through the electromagnetic spectrum auctions that occur under the aegis of the Federal Communications Commission. For the power sector, the creation of a property right to interconnect and draw a certain quantity of power from the system would bring clarity to capital formation in this sector. This approach emphasizes speed to power by bringing the most megawatts online at the lowest overall cost, while ensuring a direct allocation of incremental costs to new large users of the grid, thus preventing cost shifting to other customers.

### *iii. A Government Requirement to Remove Barriers to Asset-Backed Demand Flexibility in Power Markets, and to Inventory It for Emergency Purposes*

NRG has significant experience offering Demand Response into the FERC-regulated power markets for resource adequacy purposes. Historically, much of this service, despite the terminology "Demand Response," was predicated upon the availability of backup generation. However, federal, state, and local environmental regulations have discouraged

[4] *Interconnection of Large Loads to the Interstate Transmission Sys.*, Initial Comments of NRG Energy, Inc., Docket No. RM26-4-000 (Nov. 19, 2025) ("NRG Comments") comments-of-nrg-energy-interconnection-of-large-loads-signed-travis-kavulla.pdf.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

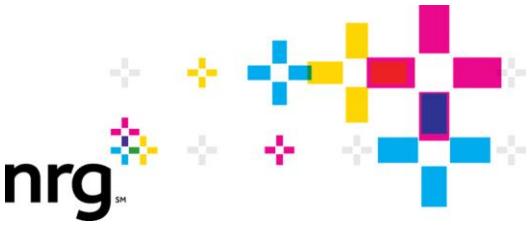
the use of backup generation in these markets. Certain states have overtly prohibited Demand Response using fossil-fuel-based backup generation.[5] Fortunately, U.S. EPA helpfully clarified in recent months that backup generation may be dispatched under instructions from a balancing area authority, an approach that makes clear it may be included in wholesale and retail tariff designs geared toward maintaining resource adequacy during critical times.[6] Typically, these run-hour limitations are 50 hours, but state and local regulations may establish stricter standards. As the Department knows, even the EPA limitations on runtime for backup generation are not absolute, and under Sec. 202(c) of the Federal Power Act, the Secretary of Energy possesses authority to require its operation in exceedance of those limits during emergencies that the Secretary may declare.[7]

While no exact figures exist, NRG conservatively estimates that at least 3,000 MWs of capacity that once existed in the power markets, predicated on backup generation, have fallen out of the markets due to environmental regulation and state prohibitions. Meanwhile, considerable new investments in backup generation are occurring on the premises of AI data centers, but these too are not being configured within the RTO markets for resource adequacy purposes. Energy storage resources also are being invested in, which have similar duration-limited properties. These resources exist both on site of larger commercial and industrial customers, but also on smaller commercial and even residential premises. Even though these storage resources collectively represent a substantial amount of generating capacity, no nationwide inventory of them exists, even on a confidential basis, and it is unclear whether the Department could plausibly direct them into service in an emergency, even when the public interest required it.

To prevent additional capacity resources from dropping out of the wholesale markets and to encourage other such resources to participate in solving the resource adequacy challenges of our nation's power markets, the Department should consider two

---

[5] *See*, e.g., D.16-09-056, Decision Adopting Guidance for Future Demand Response Portfolios and Modifying Decision 14-12-024, California Public Utilities Commission, Sept. 29, 2016, https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M167/K725/167725665.PDF.
[6] *See*, e.g., U.S. Environmental Protection Agency, Memorandum on Duke Energy Regulatory Interpretation, Apr. 17, 2025, https://www.epa.gov/system/files/documents/2025-05/rice-memo-on-duke-energy-regulatory-interpretation-04_17_25.pdf.
[7] 16 U.S.C. § 824a(c).

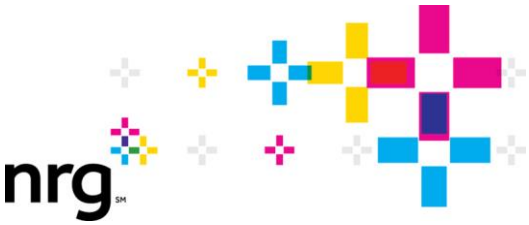


**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

approaches. First, the Department should encourage participation of these resources in the wholesale energy markets for resource adequacy purposes. Second, the Department should create a backstop by assembling an inventory of these resources for deployment in emergency conditions.

On the first point, the Department should consider ways by which this valuable capacity is voluntarily made available to power markets. As it has done in other recent proceedings, the Department should rely on its authority under Sec. 403 of the DOE Organization Act to direct FERC to consider the adoption of a rule requiring that all RTOs have a Demand Response product that contemplates the use of limited-duration backup generation and storage. Additionally, FERC should also be directed to expedite the implementation of its Order 2222 among the impacted RTOs and ISOs to ensure that aggregations of backup generation and energy storage are able to expeditiously participate in markets, putting to the side the various roadblocks that have blocked the path to timely implementation.

On the second point, the Department should posture itself to ensure it has the information necessary to command valuable capacity that may sit idle during emergencies to be put into service. Through the U.S. Energy Information Administration or another entity, the Department could require the collection of information about backup generation that exists in case an energy emergency would require its operation, subject to the Department's existing authority. However, NRG recommends the Department take care to first encourage these back up resources to be configured within the existing power markets.



**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

**D. Response to RFI Questions**

DOE requests the interested parties provide the requested information and answers to the questions below. DOE also encourages respondents to submit data, case studies, or other available materials that provide actionable insight to support this RFI.

**1. Large-Scale Generation and Transmission Projects To Enable Load Growth**

**Question**: Please identify any specific large-scale generation, transmission, and grid infrastructure proposed projects (under development, in planning, or construction-ready) that should be considered and prioritized by DOE for siting and permitting support, technical assistance, and/or Federal funding (see Section V of this document, "Confidential Business Information," regarding protection of information and how to submit confidential or proprietary information). Please include detailed project information for each project, including but not limited to:

i. Project region, name, geographical location, and description, including detailed maps or geospatial data of the project, if available.

ii. Project type and size ( *e.g.,* 100-mile 500 kV transmission line, 1.1 GW nuclear plant, 20 GW data center/grid corridor, etc.).

iii. Current development stage ( *e.g.,* conceptual, environmental planning and permitting, financing, construction-ready).

iv. A description of how the project is critical to meeting confirmed or anticipated large electric loads.

v. A description of how DOE financial assistance, loan guarantees, or technical assistance could support the project.

vi. Estimated cost and project timeline.

vii. Any prior tribal engagements (if applicable).

viii. Size and characteristics of the load(s) the project is intended to serve.

ix. Likely clients/project partners.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

x. Amount of funding/capital raised.

xi. Siting and permitting status.

xii. Interconnection status.

xiii. A description of any Federal, state, or local barriers or dependences to project completion.

xiv. A description of whether the project has engaged with any DOE programs ( *e.g.,* LPO financing, GRIP, TFP, etc.).

**Answer:**

As described above, NRG has a substantial development pipeline for dispatchable natural-gas-fired power generation that is deployable across multiple markets, an optionality which is a beneficial feature of the merchant power producer's business model. However, we are not seeking direct financial support from the Department.

If the Department does choose to incentivize the development of conventional power generation, it should consider as a model the Texas Energy Fund ("TEF"), a program that has been appropriated $10 billion in loan authority for up to 10 gigawatts of generation in the state (which has a peak demand of 85 gigawatts). The TEF offers loans at a statutory rate (3%) up to 60% project leverage, in exchange for performance requirements, a mandate that the energy produced by those plants be offered into the wholesale market (and not hoarded by data centers specifically), and an assortment of financial covenants that protects the government as a lender. TEF also includes completion bonuses for projects able to come online quickly. NRG has three projects either under contract or under consideration in TEF.

The TEF is among the least intrusive government subsidies one might design, while having significant impacts. The program buys down the cost of capital, while nevertheless requiring significant project-sponsor equity that ensures there is "skin in the game" and requires that equity sponsor to take a commercial view of the likelihood that market revenues actually will produce adequate returns to repay the government and produce adequate equity returns.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

**2. High-Priority Geographic Areas for Targeted DOE Investment**

DOE is interested in identifying geographic areas or zones where targeted Federal investment in transmission, generation, or grid infrastructure could unlock or accelerate large-scale economic activity tied to electric load growth. These may include regions experiencing substantial near-term demand from data centers, manufacturing, or other large load users, as well as areas with untapped development potential constrained by inadequate grid infrastructure.

**Question:** Are there specific geographic areas or high-priority zones (*e.g.*, data center corridors, semiconductor clusters, industrial parks, port complexes, etc.) where:

i. Major electric loads are expected or already committed?

ii. Grid constraints (transmission, generation, or other grid infrastructure) are limiting or delaying economic development?

iii. DOE investment (financial assistance, loan guarantees, siting and permitting support, technical assistance, etc.) could be targeted to unlock high-value or private investment?

**Answer:** See NRG comment immediately below.

**Question:** For each specific high-priority zone, please identify the characteristics of the geographic area that support prioritization by DOE, including:

i. Amount of confirmed or anticipated electric load.

ii. Availability of energy supply and electricity generation capacity.

iii. Generation, transmission, or grid infrastructure projects in development that could serve large electric loads.

iv. Grid constraints that may be alleviated with DOE investment and technical assistance.

v. Existence of other infrastructure to support build out ( *e.g.*, water resources, telecommunications, etc.).

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

vi. Any existing planning efforts by states, local jurisdictions, electric utilities, grid operators to identify and designate investment zones or corridors.

**Answer:**

NRG is focused on markets where competitive power generation opportunities exist or may exist and restricts its opinions to such regions. Within that geography, NRG believes the core markets for data center development are ERCOT, PJM (and specifically northern Illinois, Pennsylvania, and Ohio), and certain areas in the Western United States where traditionally vertically integrated utilities lack a sufficient balance sheet to support out-of-scale investments that would be necessary to support data center growth.

NRG observes that, despite very significant data-center interest in Illinois, it will be difficult or impossible to construct any incremental natural-gas-fired generation in the state due to state environmental laws. Indeed, we expect that significant fossil-fired generation will be retired in the state by 2030, unless the state or federal governments intercede to prevent an outcome that current Illinois law appears to require.

NRG notes that the forward markets for energy have been backwardated, and do not convey strong price signals to companies like ours to construct power plants. We explain this phenomenon extensively in our introductory comments. PJM shows some energy-price escalation, and it has a capacity market that is predicated on administrative guesses of future demand, which are binding on demand in terms of what must be paid for the ultimate capacity obliged through its auctions. ERCOT is backwardated such that 2030 on-peak power deliveries are trading lower than 2026 deliveries of the same, a market outcome that appears inconsistent with expectations of significant demand growth. Nevertheless, significant resources are being constructed in ERCOT, predicated on significant intra-day arbitrage value (storage), a cheap resource relative to demand (solar), and peaking resources.

**3. Use of DOE Funding, Financing, and Technical Assistance**

**Question:** In what specific ways can DOE support the development and deployment of large-scale generation and transmission projects? Please provide concrete examples and suggestions in areas such as:

i. Financial incentives ( *e.g.*, grants, loans, tax credits, etc.).

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

ii. Technical assistance and expertise.

iii. Research and development.

iv. Streamlining environmental review and permitting processes.

v. Facilitating stakeholder collaboration.

vi. Addressing supply chain and workforce vulnerabilities.

**Answer:** See NRG's comments in sections C(i-iii) above.

**Question:** What specific authorities, programs, or initiatives within DOE are best positioned to provide this support?

**Answer:** See NRG's comments in sections C(i-iii) above.

**Question:** How should DOE prioritize or structure its financial and technical support to advance high-impact generation, transmission, and grid infrastructure projects to serve large electric loads?

**Answer:** DOE should ensure that it holds competitive processes for any allocation of its funds, or otherwise sponsors processes run by third party entities that are not bidders into such processes to do the same.

**Question:** Are there gaps in capital availability (e.g., for utilities, project developers, or certain types of infrastructure) that DOE funding could help bridge?

**Answer:** See NRG's comments above.

**Question:** What forms of technical assistance or planning support (e.g., power flow modeling, capacity expansion planning, load forecasting, interconnection studies, technology operational assessments, technology implementation roadmaps, etc.) would help states, utilities, and project developers more effectively use Federal funding to meet demand?

**Answer:** As contemplated in section C(ii) above, DOE should offer funding to run an open season to any public utility requesting it. DOE should commission a technical design for a

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

model open season, drawing on lessons from the natural gas interstate pipeline industry and the FCC's spectrum auctions.[8]

**Question:** How should DOE coordinate funding across its offices to support large-scale electric load growth?

**Answer:** NRG respectfully offers no reply to this question at this time.

**Question:** What additional coordination is needed between DOE and other Federal agencies ( *e.g.,* U.S. Department of Agriculture, Department of Commerce, Department of Interior, Environmental Protection Agency, the Department of Defense, Department of the Treasury, Department of Transportation, the Federal Energy Regulatory Commission, etc.) to align funding, permitting, or policy with emerging electric load challenges?

i. Are there successful examples of interagency coordination that should be expanded to address grid capacity and load growth?

**Answer:** NRG respectfully offers no reply to this question at this time.

**Question**: How can DOE effectively leverage public-private partnerships to accelerate the development of these projects?

i. What are the most critical data gaps or information needs that DOE should address to better understand and support these projects?

**Answer:** NRG respectfully offers no reply to this question at this time.

**4. Load Growth Trends**

**Question:** What types of new electric load are driving demand increases in your service area or region?

**Answer:** Load growth in ERCOT has increased substantially around organic growth, even before AI/data centers. In the other restructured markets in which NRG operates, load growth has been relatively flat, with PJM for example last registering a peak demand in 2006. Unlike earlier growth cycles, AI/data center growth is essentially the *only* source of

[8] See NRG Comments at p. 15.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

demand growth projected in the sector, which increases the uncertainty and risk of investing around it.

**Question:** Please provide any available projections or forecasts of the scale, timing, and location of this expected growth.

**Answer:** NRG respectfully declines to answer this question. There is a wide variation in load growth estimates. Rather than estimating load growth based on bureaucratic approaches, the Department should support open seasons and approaches like them to "call the question" and register demand under contractual commitments to take service from the grid.

**5. Grid Infrastructure Constraints**

**Question:** What generation, transmission, or distribution constraints are limiting the ability to serve this demand?

**Answer:** See NRG's comments above.

**Question:** What are the primary challenges and barriers to expanding infrastructure and deploying large-scale generation and transmission projects? Please consider factors such as:

i. Siting and permitting;

ii. Financing and investment;

iii. Construction timelines;

iv. Supply chain constraints;

v. Workforce availability;

vi. Interconnection queues;

vii. State and Federal regulatory and policy uncertainty;

viii. Technology integration;

ix. Community engagement and acceptance.

**Answer:** See NRG's comments above.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

### 6. Additional Comments

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

**Answer:** As described in NRG's comments above related to the Department's ANOPR on the Interconnection of Large Loads to Interstate Transmission Facilities, there are clear, market-based approaches that would rapidly and efficiently allocate scarce headroom as well as incremental capacity to the grid to interconnect large loads. Other industries have devised methods by which to do this, but the power sector lags behind.

## E. Conclusion

NRG appreciates your public service and thanks you for considering our comments in this matter.

Sincerely,

/s/ Travis Kavulla

Travis Kavulla
Vice President, Regulatory Affairs
NRG Energy, Inc.

**NRG Energy, Inc.**
325 7th St. N.W., 5th Fl.
Washington, D.C. 20004
Travis Kavulla, VP Regulatory Affairs
P: 406-788-3419
E: travis.kavulla@nrg.com

## APPENDIX A

Appendix A DOE RFI – Forward Power Curves_NRG.xslx

