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BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Interconnection of Large Loads to the)	Docket No. RM26-4-000
Interstate Transmission System)	

REPLY COMMENTS OF OPENAI GROUP PBC

OpenAI Group PBC ("OpenAI") respectfully submits these reply comments in response to the Commission's October 27, 2025 Notice in the above-captioned proceeding inviting comments on the U.S. Department of Energy's ("DOE's") Advanced Notice of Proposed Rulemaking addressing the timely and orderly interconnection of large loads ("ANOPR"). We appreciate this opportunity to provide these comments addressing issues affecting the operation of our national grid.

The Commission has initiated this proceeding at a defining moment for America's electric grid and industrial future. The rapid rise of artificial intelligence, advanced computing, and digital infrastructure have all transformed electricity from a commodity input into a *strategic national asset*. Infrastructure is destiny, and as the scale of large-load demand accelerates, *interconnection policy has become inseparable from the United States' prospects to lead the next great industrial era.*

With the right reindustrialization strategy, we can not just bring back jobs and manufacturing, maintain our global innovation lead against China but also, by building the kind of Grid Flexibility Initiative that OpenAI is seeking to deploy where possible going forward, bring more electricity onto the grid and make electric bills cheaper.

The global stakes couldn't be higher. In 2024, China added 429 gigawatts ("GW") of new electricity capacity—more than eight GW per week on average—an amount equal to roughly one-third of the entire existing U.S. grid. Nowhere is the resulting "electron gap" more visible than in advanced technologies: China currently has 34 nuclear reactors under construction, while the United States has none. This divergence is not merely about energy statistics; it reflects a growing gap in the physical infrastructure that will determine economic growth, technological leadership, and strategic power in the Intelligence Age.

OpenAI expects the cost of AI to converge to the cost of energy. Large-load interconnections are now key to that convergence. The speed, certainty, cost, and scalability with which major new loads can connect to the grid will significantly shape where data centers, semiconductor fabs, advanced manufacturing, and entire new industrial ecosystems are built.

The United States faces a once-in-a-generation opportunity to reindustrialize on democratic terms. According to an OpenAI internal analysis, the first \$1 trillion invested in AI infrastructure could result in more than 5% in additional GDP growth over a 3-year period. The growth of AI infrastructure—data centers, semiconductor manufacturing, power generation, and transmission—can anchor a new era of domestic manufacturing, job creation, and resilient supply chains. The DOE estimates that U.S. transmission capacity must roughly double by 2050, requiring the nation to build in 25 years what previously took nearly a century. If successfully executed, this build-out can underpin a historic revival of U.S. manufacturing, support hundreds of thousands of high-wage jobs, stabilize power prices, reduce grid congestion, modernize the grid, making more electricity available to potentially reduce costs for everyday consumers, and secure domestic semiconductor and energy supply chains essential to American technological leadership and national security. And OpenAI's Grid Flexibility Initiative will lead the way where possible.

AI data centers, in particular, could function as assets capable of supporting the grid when it is under emergency conditions, such as during times of extreme heat or cold (which typically would put stress on the grid)—when they are paired with generation, load-flexibility, and demand response. If these AI data centers can reduce consumption during peak periods, such facilities could trim the need for incremental infrastructure, and improve overall reliability. As recent financial analysis has shown, Grid Flexibility can unlock substantial capacity currently constrained by outdated peak-demand planning.² And it's not just potential future flexibility that can lower power prices: a recent Lawrence Berkeley National Laboratory analysis found "that state-level load growth in recent years (through 2024) has tended to reduce average retail electricity prices." Data centers already result in lower prices in many areas where they operate.³

These won't be yesterday's data centers. Many of the supercomputing hubs OpenAI is designing in its Grid Flexibility Initiative are forward-looking and aim to be a positive force in the communities in which they operate. One of our planned hubs with a hybrid design will contribute \$2.7 billion to the regional domestic product, and we will invest a minimum of \$175 million to make critical regional infrastructure upgrades (which benefit not just the hub but the surrounding community). These facts unfortunately get overshadowed by the increasingly popular but inaccurate narratives that these AI data centers always cause power price increases and hog water. The aforementioned Lawrence Berkeley National Laboratory analysis found the biggest

¹ U.S. Department of Energy, Grid Deployment Office. 2024. <u>The National Transmission Planning Study</u>. Washington, D.C.: U.S. Department of Energy.

² Nadel, Steven. 2025. <u>Opportunities to Use Energy Efficiency and Demand Flexibility to Reduce Data Center Energy Use and Peak Demand</u>. Washington, DC: ACEEE.

Also, Knittel, Christopher R., Senga, Juan Ramon L., and Wang, Shen (2025), "Flexible Data Centers and the Grid: Lower Costs, Higher Emissions?," MIT CEEPR Working Paper 2025-14, July 2025.

³ Shehabi, A.; Newkirk, A.; Smith, S.; Hubbard, A.; Lei, N.; Siddik, M., et al. (2024). 2024 United States Data Center Energy Usage Report. *Lawrence Berkeley National Laboratory*. Report #: LBNL-2001637. http://dx.doi.org/10.71468/P1WC7Q Retrieved from https://escholarship.org/uc/item/32d6m0d1

drivers of rising electricity costs were inflation and natural-disaster mitigation. And another study showed that data centers consumed just 0.2% of the nation's fresh water in 2023—significantly below what the agricultural, mining, and golf course industries used.⁴

In addition to recognizing the benefits of supercomputing hubs, the nation must integrate next-generation energy technologies—advanced nuclear, fusion, geothermal, battery storage, and other existing scalable energy innovations—into the AI-driven infrastructure build-out. AI both depends on abundant energy and accelerates breakthroughs in energy science, including these promising advancements. This natural synergy must become a deliberate national strategy. Every AI facility can serve not only as a compute hub, but also as a testbed for energy innovation that strengthens the grid and accelerates clean, reliable baseload development.

In this context, the Commission's ANOPR is not a routine administrative inquiry. It goes to the heart of whether the United States can execute on the physical build-out required to lead the next industrial era—on democratic terms. If interconnection timelines for large loads remain measured in many years, America risks surrendering a decisive advantage to systems that can mobilize infrastructure by centralized command. The United States should prove we can build at speed while preserving transparency, accountability, and reliability.

Accordingly, OpenAI urges the Commission to advance reforms that preserve system reliability while materially improving the *speed, predictability, and scalability of large-load interconnections*. A framework that enables Grid Flexibility, integrates co-located generation and storage, aligns cost responsibility with national infrastructure benefits, and enforces consistent timelines will not only protect the grid—it will help unlock the next era of American reindustrialization, technological leadership, and democratic economic growth.

History offers a clear lesson. The United States went big on transportation, on electricity, and on broadband—each time making generational investments that reshaped the economy, expanded opportunity, and secured long-term national strength. Those choices were not incremental; they were bets on the future that paid off for decades. The same is now true for AI, energy, and the grid. Infrastructure is destiny, and the Commission's actions in this docket will help determine whether that destiny is shaped by timely, reliability-grounded, large-scale investment—or constrained by interconnection bottlenecks that no longer reflect the demands of the modern economy.

CONCLUSION

OpenAI supports the DOE's and the Commission's large load interconnection initiatives and encourages stakeholders to promote simple and actionable steps to expedite the interconnection of ready, high-value large loads, including loads that will help maintain U.S. dominance in AI

⁴ https://andymasley.substack.com/p/the-ai-water-issue-is-fake

research. These initiatives will unlock American energy, sustain the American advantage in continued innovation with AI, and help ensure that the benefits of AI are accessible to all Americans. OpenAI appreciates the DOE's and the Commission's leadership on these critical issues and looks forward to continued engagement as the rulemaking develops.

Respectfully submitted,

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