## BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

*En Banc* Hearing Concerning Interconnection and Tariffs for Large Load Customers

Docket No. M-2025-3054271

# OPENING STATEMENT OF MICHAEL FRADETTE ON BEHALF OF AMAZON DATA SERVICES, INC.

Dated: April 23, 2025

#### I. INTRODUCTION

Amazon Data Services, Inc. ("ADS") is submitting this Opening Statement as testimony pursuant to the Motion of Chairman Stephen M. DeFrank, dated March 27, 2025 in advance of the Pennsylvania Public Utility Commission's ("Commission") April 25, 2025 En Banc Hearing Concerning Interconnection and Tariffs for Large Load Customers. ADS thanks the Commission for taking the lead and proactively hosting this hearing to ensure Pennsylvania remains a leader in energy development and economic growth.

My name is Mike Fradette, and I represent ADS as a Large Load Customer operating within the data center industry. I am a Principal of Energy Strategy for Amazon Web Services, Inc., an affiliate of ADS (collectively "AWS"). My role is focused on ensuring AWS has reliable, cost effective, carbon-free, scalable power capacity to meet the needs of our customers in existing regions and new regions. Since launching in 2006, AWS has been providing world-leading cloud technologies that help any organization and any individual build solutions to transform industries, communities, and lives for the better. Amazon.com, Inc. ("Amazon"), the parent company of AWS, strives to be Earth's most customer-centric company. This means that we work backwards from our customers' problems to provide them with cloud infrastructure to meet their needs, so they can then innovate and redefine what is possible.

As part of this testimony, I will provide the Commission with a high-level overview of what data centers are and how they are integral in our daily lives. I will then touch on the challenges and opportunities we are facing today, followed by feedback regarding the prudent design of large load customer tariffs.

### II. BACKGROUND

Despite its name, cloud computing doesn't live in the clouds – it lives in data centers, which are the foundation of our digital world. Every time you check your bank statement, stream a movie, connect with family online, or stream a live Commission hearing, you are using cloud computing, which is effectively enabled by data centers. Think of cloud computing like electricity – just as you flip a switch and the power company delivers electricity, organizations can access computing power, storage, and other IT resources on-demand as needed through the cloud. In addition to housing this critical computing infrastructure to power our everyday digital lives, data centers also generate significant economic benefits for the communities in which they reside through job creation, tax revenue for schools and social services, and substantial local investment.

More broadly, AWS data centers are the engine of the digital economy and the digital backbone of modern life. Millions of customers – including startups, enterprises, and government agencies – trust AWS with their most sensitive data and depend upon our services. From hospitals and banks, to first responders and government agencies, critical sectors also rely on this digital infrastructure every second of every day to power essential services and keep modern life running.

At AWS, we continue to see record demand from our customers across cloud computing, artificial intelligence ("AI"), and machine learning capabilities. Personally, when I look at my everyday life and that of my family, I find myself only increasing my daily interactions with the cloud... more video conferencing, more interactive learning experiences, more virtual banking, and even dabbling with AI to increase my efficiency. Simply put, the cloud and the technologies it enables are driving innovation across industries, from healthcare and scientific research to entertainment and commerce. To meet this growing demand, AWS is continuing to make

significant investments throughout the U.S., ensuring that our nation remains the global leader in AI and machine learning technology.

However, as U.S. electricity demands grow across several economic sectors, whether it is electric vehicle adoption, reshoring of American manufacturing, data centers, or the electrification of industry, we recognize the need for a balanced approach that supports technological advancement, sustainable energy practices, and fair cost allocations.

# III. CURRENT LARGE LOAD CUSTOMER CHALLENGES AND OPPORTUNITIES

The rapid growth of electricity demand presents both challenges and opportunities for the US energy infrastructure. We understand the Commission's mandate to establish just and reasonable tariffs that provide open and non-discriminatory access to public utility systems while protecting existing customers from undue burdens and costs. At AWS, we share these concerns and are committed to being responsible partners in grid development and energy consumption. We've demonstrated this commitment through our Climate Pledge goal of reaching net-zero carbon emissions by 2040. Additionally, all of the electricity consumed across our operations – including our data centers, corporate buildings, grocery stores, and fulfillment centers – is matched with 100% renewable energy, seven years ahead of schedule.

We recognize that bringing on new sources of baseload, carbon-free energy is critical to meeting society's growing electricity needs and meeting our customers' demands. It is one of the reasons we are investing in a diverse portfolio of energy sources, including solar, wind, and advanced nuclear technologies. For instance, we've recently invested over \$1 billion dollars in carbon free nuclear initiatives, including projects like the Susquehanna Nuclear Facility, and our equity investment in X-Energy to bring about 5 GW of new nuclear capacity by 2039.

Amazon also supports expanding and modernizing the U.S. power grid, including upgrading the physical infrastructure with advanced technologies (e.g., smart meters, grid enhancing technologies, battery storage), and implementing policies that enable rapid modernization, so that we can realize the benefits of a modernized power grid built on low or carbon-free power sources more quickly. We are taking tangible steps to support these efforts. We are innovating across the energy sector to bring new carbon-free power sources forward, encouraging investment in grid modernization technologies, and urging policymakers across the country to implement policies to accelerate grid modernization efforts.

That said, speed to market, coupled with ensuring we pay for our fair allocation of the costs to serve the electricity we consume, continues to be a priority as we work to meet growing demand from our customers, which directly influences how and where we make investments in both data center growth and energy development.

#### **IV. RECOMMENDATIONS**

With these challenges and opportunities in mind, AWS offers the following recommendations for the Commission's consideration.

First, AWS urges the Commission to continue operating in a non-discriminatory manner that focuses regulations based on load profiles and a cost-of-service model, rather than targeting individual customer or industry types. Such an approach ensures fairness and flexibility across industries and use cases, while keeping the focus on cost-causation principals.

Second, utilities and regulators should continue to consider, as a balanced overall commercial package, the adoption of mutual commitments like reasonable contract term lengths, fair collateral requirements, minimum demand charges, and appropriate exit provisions, balanced by corresponding commitments of service from the utility to the customer. These provisions ensure

that costs to support data center growth are not passed along to other customers, promote the efficient use of the transmission system, and need to be considered as an overall balanced package often developed based on the individual utility and regional needs, constraints, and opportunities.

Third, the above commercial provision should be structured so utilities are able to proactively attract and swiftly integrate large load customers like AWS onto the grid in a manner that fully recovers the costs to serve without shifting the financial burden on existing or remaining customers. Large load customers work alongside utility partners to cover their fair share of infrastructure costs, increasing reliability and investing in resources that reduce grid disruptions for all customers. Transparent cost structures for interconnection with expedited development opportunities for users willing to self-construct infrastructure like substation or system upgrades, and source generation capacity at their own expense, should enable speed to market. This speed enablement can come in different forms, most likely defined interconnection study timelines or service level agreements (SLA) for physical interconnection for load's that meet specified requirements.

Lastly, the development of such provisions should continue to account for the benefits that Large Load Customers bring to the system, again back to a cost-causation approach. Large Load Customer like Data Center's provide a stable, predictable load growth and profile, that are critical to economic growth and US leadership on cloud, gen AI, and machine learning. This growth is also supporting the re-investment in and modernization of the US electric grid for the benefit of all rate payers.

AWS believes these recommendations strike a balance between enabling rapid data center expansion and ensuring ratepayer protections. They also align with the Commission Chair's considerations for expanding energy investments, expediting interconnections, and exploring innovative approaches to grid enhancement.

## V. CONCLUSION

Large load customers like AWS can often provide significant benefit to the electricity grid, spreading fixed costs across a larger MW denominator. Integrating our load in a just, reasonable, and predictable fashion is critical to economic growth and will continue enabling U.S. leadership in cloud computing, AI, and machine learning.

We remain committed to working collaboratively with the Commission, utilities, regional transmission organization, and other stakeholders to develop solutions that benefit all Pennsylvanians.