



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON **SCIENCE, SPACE, & TECHNOLOGY**

Opening Statement

**Ranking Member Deborah Ross (D-NC)
of the Subcommittee on Energy**

Subcommittee on Energy Hearing:
Powering Demand: Nuclear Solutions for AI Infrastructure

June 12, 2025

Good morning and thank you, Chairman Weber, for convening this hearing today to discuss the potential for nuclear energy solutions to power our nation's growing artificial intelligence infrastructure. I also want to thank our distinguished witnesses for being here to share your testimony and insights on this topic.

We have heard repeatedly from a wide range of sources about how the advancement of AI could fuel economic growth, geopolitical advantages, and the acceleration of science and technology. I am proud to represent North Carolina's 2nd District, where AI is driving a rapidly growing job market, education and workforce development, and research and innovation that could play a significant role in ensuring our nation's competitive edge.

Just over a month ago, an organization in Research Triangle Park added a cutting-edge AI tool for clinical trial optimization, leading to fewer required patients per trial, reduced timelines and costs, and ultimately increased success rates. However, these advancements depend on our ability to power them.

A recent assessment from SemiAnalysis found that the energy needed to meet this infrastructure demand is projected to require 80 gigawatts of additional energy by 2030. This need is not foreign to me: data center construction rose 15x in North Carolina last year. AI data centers are particularly unique in their energy requirements, with some calling for 24/7 supply at massive scale – and that scale is only projected to grow as hyperscalers invest billions of dollars towards these centers.

Much like the promise of AI, these data center investments can accelerate our economy and provide workforce benefits for years to come – but not without a cost. There are many impacts to consider in trying to meet this energy demand.

First, the environmental costs of rapid data center expansion are far from negligible. In a report from DOE's Lawrence Berkeley National Laboratory released last year, the total greenhouse gas emissions for U.S. data centers in 2023 was estimated to be 61 billion kilograms of CO2 equivalent.

As a former clean energy lawyer, I know firsthand that meeting this energy demand while working to build a sustainable future for North Carolina, and the nation, is not an easy task. We must intentionally build a more reliable and sustainable energy supply, and we should be using any environmentally benign resources available to do so at the lowest cost possible for the American people. We must also consider using existing, underutilized sources of power and must be intentional with our siting for the data centers required for this type of development.

Siting data centers near existing power generation—including in areas where manufacturing has moved away—should remain top of mind. While not directly connected to a specific data center by a dedicated power line, the Yadkin River Hydroelectric Project in western North Carolina plays a role in the overall power grid that served the data center corridor around Hickory.

This area has seen significant investment in data centers, and the region's hydroelectric power generation contributes to the overall energy supply. We can and should use renewable and existing energy sources to help power our data centers across the United States.

That brings us to another point we must keep top of mind today: the cost passed on to the American people – the ratepayers – who should not be the first in line in absorbing the high risk and financial burden typically associated with deploying a first of a kind energy source. Today we are here to discuss nuclear power – an energy source with immense promise to be sure, but with a very high risk of cost and schedule overruns thus far.

So, we must keep top of mind: who will absorb that risk?

I don't have to look far to see the negative impacts of that risk being absorbed by taxpayers. The abandoned VC Summer project in South Carolina experienced years of delays and cost overrun, eventually resulting in \$9 billion of sunk cost. To this day, \$5.7 billion is still being paid for by customers who do not reap the benefits of a successful nuclear project. This contrasts with Georgia's Vogtle project, which was enabled by strategic support from DOE's Loan Programs Office, or LPO.

This is Exhibit A for the reason we absolutely must maintain the expanded resources and capabilities provided to LPO through the Inflation Reduction Act. Nuclear projects are inherently challenging, but I believe we can learn from our mistakes and proceed responsibly – considering the use of brownfields, federal land and strategic capital, and above all the protection of taxpayers while building a more reliable and sustainable energy supply.

We have an opportunity to build long-lasting infrastructure that unlocks a more reliable and sustainable future, which I intend to continue working towards.

I look forward to hearing from our witnesses today on how nuclear energy can help us get there, in tandem with the far broader portfolio of clean energy resources that should also be considered.

Thank you, and I yield back.