OPENING STATEMENT

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of the Subcommittee on Energy

House Committee on Science, Space, and Technology
Subcommittee on Research and Technology
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"*American Leadership in Quantum Technology"*
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Thank you Chairwoman Comstock and Chairman Weber for holding this hearing, and thank you to the witnesses for being here today. Quantum technologies have the potential to solve problems that were previously out of reach and push scientific discovery to new levels. A major breakthrough in this area could result in a significant transformation in our communications systems, computational methods, and even how we understand our world. In addition to the distinguished group of researchers on our second panel, I am also delighted that we will hear from many of the most important federal agencies that lead our nation's research in this field. I hope this becomes a practice that we can expect for every relevant hearing this committee holds.

The activities within the federal government that support the development of quantum technologies cut across many agencies, as we will see by those testifying on our first panel. I should note that in addition to NIST, NSF, and DOE, there are also a number of quantum-related activities taking place within the Department of Defense in DARPA and the military branches, as well as within the intelligence community. In 2016, the Obama Administration published an interagency working group report that highlighted the need for continued investment across these federal agencies. It also called for stronger coordination and focused activities to address the impediments to progress in this field.

Our work here in Congress has provided consistent funding for these activities, though I would note that in order to compete with countries like China, Japan, Canada, and Italy, we will need to grow the investments that we are already making. Sadly, as we have come to expect with every hearing this Committee holds highlighting an important area of research, you can trust that the Trump Administration has proposed to cut it. Vital research in quantum materials is happening within the Department of Energy's Basic Energy Sciences program, and yet this year the Trump Administration has proposed to cut this critical program by $295 million or 16%. While the Advanced Scientific Computing Research Program saw a slight increase in funding, most of that increase was to the exascale computing project. The research portfolio within this program that would actually support advancements in quantum computing saw a 15% cut in the budget proposal released earlier this year. This is not the path towards a technological breakthrough or quantum leaps.

I would be remiss not to mention the Energy Frontier Research Centers. The centers have generally enjoyed bipartisan support since the Obama Administration launched these innovative research collaborations across our national labs, universities, and industry. A few of these

centers do important work that has the potential to advance our understanding of quantum technologies. They may just provide us the breakthroughs we need to launch this field to new heights. While the Trump Administration also proposed cuts to these centers, I hope and expect my colleagues in Congress will continue our strong support for the researchers and their vital work. Strong, sustained investment across our research and innovation ecosystem is the only way we can expect to see results from our world-class researchers at our national labs, universities, and private companies. Quantum technologies are certainly no different in that regard.

I am looking forward to hearing from both panels today on where this field can take us and what exciting new possibilities are on the horizon. Thank you again, Madame Chair, and I yield back the balance of my time.