

Chairman Conor Lamb (D-PA) of the Subcommittee on Energy

Energy Subcommittee Hearing: The Future of Electricity Delivery: Modernizing and Securing our Nation's Electricity Grid Wednesday, July 17, 2019

Good afternoon and thank you to all our witnesses joining to discuss a critical topic to our nation: the electric grid. When we were first started building the grid over a century ago, we couldn't have imagined the technologies we'd use to power our homes and businesses – much less the technologies that would depend upon electricity. And despite the incredible advancements our scientists, researchers, companies and universities have pioneered since, many of the basic principles of our grid's design and operation remain unchanged.

One thing I've heard both sides of the aisle emphasize is the need for increased infrastructure investment. Any infrastructure plan must include the grid, and we need new technology solutions to upgrade the backbone of the energy system for the 21^{st} century.

It's clear the energy sector is changing as our grid faces challenges like cyber threats and climate change. We also know that the generation resources used to power our grid are changing. The costs of electricity have continued to drop as we found new ways to develop natural gas resources and made breakthrough advancements in renewable resources like wind and solar. These generation changes have saved constituents money and are lowering carbon emissions – critical as we continue to try and mitigate the effects of climate change.

Our economy and civilization increasingly rely on electricity. It only makes sense to invest in the delivery system for what powers our hospitals and schools, our factories and homes. And it makes sense to invest in the research that allows for advancements and adoption of new technology and protects this critical infrastructure from adversaries or natural disasters.

I was alarmed to hear, as I am sure many were, of the first incident of a cyber attack on our nation's electricity grid, reported to the Department of Energy by an anonymous Western utility on March 5th, 2019. While no customers lost power, this attack portends the potential damage to come and the importance of bolstering our grid's security.

This is why I'm looking forward to discussing two important legislative drafts at this hearing today that will guide the Department's research and development activities on grid modernization and cybersecurity. The draft Grid Modernization Research and Development Act of 2019 would set forth a comprehensive research agenda on several important topics in grid modernization, including grid resilience, emergency response, modeling and visualization, and the better integration of buildings, vehicles, and renewable energy sources onto the electric grid.

I understand that several members of this committee, led by Mr. Casten and Mr. Foster, have introduced legislation on energy storage, elements of which are also incorporated into these drafts.

The second draft bill we are here to discuss, the draft Grid Cybersecurity Research and Development Act of 2019, updates a bill that was previously introduced by my colleague on this Committee, Mr. Bera. This bill authorizes a cross-agency research and development program to harden and mitigate the electric grid from cyber attacks. This research program would be carried out in partnership with the Department of Homeland Security, the National Institute for Standards and Technology, and the National Science Foundation and includes technical assistance, education and workforce programs, and interagency coordination as tools to achieve these important security goals.

I hope we're able to work together in a bipartisan way to develop and advance these bills to ensure our grid remains reliable, resilient, and secure.