



COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
REPUBLICANS Frank Lucas, Ranking Member

Ranking Member Randy Weber
Energy Subcommittee Hearing Opening Statement
“The Future of Electricity Delivery: Modernizing and Securing
our Nation’s Electricity Grid”
July 17, 2019

Thank you, Chairman Lamb, for hosting this hearing. This afternoon, we will hear from expert witnesses on the existing strengths and weaknesses of our nation’s electric grid, and the impact that potential attacks and incidents could have on our grid reliability and national security.

Our witnesses today will also discuss advances in the research and development of new grid tools and technologies and provide insight into how the federal government can work alongside American industry to strengthen our energy sector.

The reliability of America’s power grid is one of our greatest economic strengths. In my home state of Texas, reliable and affordable power serves a population that is increasing by more than 1,000 people per day and supports the energy intensive industries that drive U.S. consumption of energy. Texas is by far the nation’s largest producer and consumer of electricity and keeping its power grid reliable and secure is key to maintaining U.S. economic growth.

But even in Texas, it is common knowledge that our electric grid faces significant and diverse threats to the reliability and resilience of power delivery. Put simply, we cannot predict when a cyberattack would threaten our power supply and we don’t know when the next natural disaster will occur.

In 2017, we were reminded of this fact by the impact of Hurricane Harvey, a devastating Category 4 hurricane that hit the Gulf Coast and caused significant generator and transmission line outages for many on the Texas Interconnection.

Due to proper planning and management by the Electric Reliability Council of Texas (ERCOT), the Texas grid was able to quickly recover from this devastating storm. But since it is not a question of “if” but a question of

“when” the power grid will face significant physical and cyber threats, the modernization of the national electricity system must be our priority.

According to the Department of Energy (DOE), the U.S. electric grid must be updated within the next decade to address challenges including aging U.S. energy infrastructure, changes in demand, emerging threats and fundamental shifts in the U.S. energy supply portfolio as energy sources like renewables and nuclear increase.

Again we can see these changes taking place in my home state, where today, nuclear generation is our most reliable source of energy, running at more than 93% of the time over the past three years – and where we lead the nation in wind energy.

As next-generation energy technologies continue to come online, and as cybersecurity capabilities continue to evolve, we must take action to counter our grid vulnerabilities and provide necessary updates to this critical infrastructure.

Thankfully, DOE funds broad research and development programs to support grid modernization and security technologies through Department-wide collaborations like the Grid Modernization Initiative (GMI), and the Grid Modernization Lab Consortium (GMLC).

DOE also funds robust research in novel grid technologies and computational modeling efforts through its Office of Electricity (OE) and cybersecurity technology for energy delivery systems through its Office of Cybersecurity, Energy Security, and Emergency Response (CESER).

We are grateful to have two witnesses representing these important efforts here this afternoon: the Honorable Karen Evans, Assistant Secretary of CESER, and Mr. Juan J. Torres, an Associate Laboratory Director at the National Renewable Energy Laboratory and Co-Chair of Grid Modernization Lab Consortium.

Modernizing our grid will require these important programs, along with cooperation from many federal agencies, states, and industry. I hope our witnesses can share their expertise and provide valuable insight on how Congress can best support these collaborative efforts.

I want to again thank the Chairman for holding this hearing, and I look forward to a productive discussion today.

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