



Opening Statement of Energy Subcommittee Chairman Brandon Williams

Energy Subcommittee Hearing
Unleashing American Power: The Development of Next Generation Energy Infrastructure

March 23, 2023

Good afternoon. Today, the Energy Subcommittee will examine the Department of Energy (DOE)'s role in accelerating key next generation energy infrastructure research and development activities in areas like grid security, pipeline innovation, and hydrogen R&D. This hearing will also serve as a legislative hearing for three bills that would update DOE's R&D efforts in these areas.

Recent Science Committee legislation such as the Energy Act of 2020 and the CHIPS and Science Act have authorized programs at the DOE to meet the growing challenges of our time, but there are some serious gaps left specifically in energy infrastructure R&D.

Without comprehensive authorizations by Congress in these areas, the U.S. may risk falling behind our global competitors.

From powering our homes and businesses, to fueling our transportation system, the U.S power grid and pipeline systems are integral to our long-term economic success and national security. This infrastructure connects producers to consumers, powering our homes and businesses. But it was built decades ago, and this aging system wasn't constructed with modern challenges in mind, such as cybersecurity intrusions and the surging electrification of our economy.

Grid security is national security. DOE's Office of Cybersecurity, Energy Security, and Emergency Response, known as CESER, is tasked with modernizing and securing our grid.

CESER partners with the National Laboratories, universities, non-profits, and industry to identify potential vulnerabilities, create processes to detect cyber incidents, and develop technologies that strengthen the grid. DOE also supports test beds at National Laboratories that provide researchers and industry unique opportunities to test tools, methods, and technologies including distribution automation, smart grid devices, and communication tools--all without impacting existing customer service.

As our energy sector faces increased threats and hazards, it is imperative that Congress provides DOE with updated guidance to ensure the Department can meet the challenges of tomorrow, providing better service for customers and reducing blackouts.

Working in tandem with the electric grid, pipelines are the vital arteries of the U.S. energy system, providing cost-effective and reliable power to Americans across the country.

The Department of Energy's Office of Fossil Energy and Carbon Management and the Department of Transportation's Pipeline and Hazardous Materials Safety Administration are leaders in fundamental pipeline research and innovation. Their work includes, but is not limited to, developing advanced materials, coatings, sensors, testing blends, and improving leak detection and pipeline repair technologies.

Despite these efforts, Congress has yet to pass a comprehensive authorization of DOE's pipeline R&D activities. Future legislation should build on efforts that improve safety, increase efficiency, and extend the life span of the existing miles of pipelines across the United States.

For example, my home state of New York has over 500 miles of natural gas transmission pipelines and 1,100 miles of crude oil, products, and natural gas liquid lines, which allow my constituents to access reliable, resilient, and affordable energy.

In recent years, New York State Officials have stifled at least 3 pipeline development projects. As a result, New York consumers and households pay 51 percent more for electricity than the national average. Further direction from Congress would ensure pipeline resources do not fall by the wayside.

Also essential to the future of our energy infrastructure, hydrogen, a potential source of low-cost energy, is a light and abundant element that can be used to power our economy and store excess energy. Currently, it is primarily produced from fossil fuels, and used in industrial applications and to produce chemicals such as ammonia. But it has a wide range of potential uses and can be generated from other energy sources such as coal, renewables, and nuclear.

This month, Nine Mile Point Nuclear Station in Oswego, neighboring my district, became the first nuclear facility to produce clean hydrogen through a DOE demonstration program. Codifying these kinds of public-private partnerships in law is key to the development and cost effectiveness of hydrogen. Despite these efforts, DOE's hydrogen and fuel cell activities have not been fully reauthorized in over 15 years. There is an urgent need for updated congressional direction in this area.

With reauthorizations of grid security, pipelines, and hydrogen R&D, I am certain that the DOE, along with partners at the National Laboratories, universities, and industry, will lead us towards a path that unleashes American energy and delivers prosperity for all citizens.

I want to thank our witnesses for their testimony and look forward to our conversations.