

Chairwoman Eddie Bernice Johnson (D-TX)

Full Committee Markup of:

H.R. 2986, the "Better Energy Storage Technology (BEST) Act" H.R. 4230, the "Clean Industrial Technology (CIT) Act of 2019" H.R. 5374, the "Advanced Geothermal Research and Development Act of 2019" H.R. 5428, the "Grid Modernization Research and Development Act of 2019" H.R. 5760, the "Grid Security Research and Development Act" Wednesday, February 12, 2020

Good morning, and welcome to today's Science Committee markup of five good, bipartisan bills.

First, we will consider H.R. 2986, the Better Energy Storage Technology Act. The BEST Act authorizes the Department of Energy to conduct a cross-cutting research, development, and demonstration program on energy storage technologies, including batteries and pumped hydro systems. The Act requires DOE create a 5-year strategic plan to coordinate research activities among DOE's technology offices.

Renewable energy technology can be intermittent. Strong winds die down, and sunny days turn cloudy. According to the Congressional Research Service, energy storage systems may be a key technology to enabling a reliable, low greenhouse gas emitting electric grid comprised of energy generation sources like wind and solar.

Next we have H.R. 4230, the Clean Industrial Technology Act of 2019. This act authorizes a intra-agency, DOE-led research, development, and demonstration program to advance technologies that will help reduce emissions from the manufacturing sector, including steel and cement production, chemical production, and industrial heat. The research program will be carried out in collaboration with stakeholders from industry and labor groups.

Allowing American manufacturers to access technologies that make them increasingly sustainable will ensure that the domestic manufacturing industry will remain competitive through the 21st Century.

We will then move on to H.R. 5374, the Advanced Geothermal Research and Development Act of 2019. I will speak about this bill a little later.

Next is H.R. 5428, the Grid Modernization Research and Development Act of 2019, which authorizes a broad research, development, and demonstration program on a wide variety of

topics pertaining to grid modernization, including smart grid modeling, planning, and controls; hybrid energy systems; and enhanced electric grid integration of technologies like vehicles and building components.

Our nation's electricity grid is undergoing a series of transformations, which include adapting to a changing electricity generation mix, an increase in "smart grid" technologies, and a growing need to improve the resilience of the electric power grid. This bill will help lead our nation in developing the technologies we need by setting forth a comprehensive research agenda led by the DOE.

Finally, we'll be considering H.R. 5760, the Grid Security Research and Development Act. This bill is an updated version of a bill that Mr. Bera and I introduced, along with many of our Science Committee colleagues, in the previous two Congresses.

H.R. 5760 will provide legislative guidance to the activities carried out by the recently established DOE Office of Cybersecurity, Energy Security, and Emergency Response. The bill authorizes an interagency research and development program to advance electric grid cybersecurity, physical security, grid resilience, and emergency response efforts. In particular, the bill authorizes activities on cybersecurity test beds, education and workforce training and standards, and guidance documents for energy sector cybersecurity practices.

I am proud that today's bills are supported by a cross-section of interested groups. One or more of today's bills has been endorsed by organizations that include: the National Audubon Society, the U.S. Chamber of Commerce, the Information Technology & Innovation Foundation (ITIF), the Environmental Defense Fund (EDF), the National Rural Electric Cooperative Association, Duke Energy, the Union of Concerned Scientists, the Natural Resources Defense Council, and the National Association of Manufacturers.