

Chairwoman Eddie Bernice Johnson (D-TX)

Subcommittee on Energy Hearing:
Water and Geothermal Power: Unearthing the Next Wave of Energy Innovation

Wednesday, November 14, 2019

Good afternoon and thank you, Chairman Lamb, for holding this timely hearing on two very important renewable energy resources, water and geothermal power.

Water and geothermal power are some of this country's and the world's oldest forms of energy. The United States has harnessed hydropower for decades and Americans have used various forms of geothermal energy since the 1800s.

Despite this long history, many water and geothermal energy technologies have struggled to become or remain competitive in modern energy markets, yet both still possess huge potential for further advancement and commercialization.

The Department of Energy's recent GeoVision report found that with technology improvements, geothermal electricity generation could increase 26-fold by 2050. The same study found that my home state of Texas, as well as most other states, have significant opportunities to expand their use of one or more geothermal energy technologies. New approaches could also apply geothermal energy to industrial activities, such as through heat production for manufacturing processes or critical mineral extraction, including the production of lithium, which is often needed for advanced batteries.

As for water power, pumped hydropower systems are considered a leading candidate to provide the large-scale, long-term energy storage that our electric grid will need as more renewables enter the electricity mix. Further, marine energy, which includes energy generated from waves, tides, and currents, has significant potential to power remote operations, and the U.S. Navy and others are already testing specific projects.

With these opportunities for energy innovation comes a need for strong, well-guided federal investments in research, development, and demonstration activities. Federal R&D can continue to lower water and geothermal power costs and validate their emerging applications. We have only begun to touch the surface of what these technologies can do, and the DOE and our National Labs, universities, and industry partners possess the expertise to explore them to their

fullest potential. I look forward to using today's hearing to inform forward-looking legislation that will enable DOE to propel these technologies into the future.

With that, I yield back.