



Department of Energy

Washington, DC 20585

June 22, 2022

The Honorable Bobby Rush
Chairman
House Energy Committee Subcommittee on Energy
U.S. House of Representatives
Washington, DC 20515

The Honorable Frank Upton
Ranking Member
House Energy Committee Subcommittee on Energy
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Rush and Ranking Member Upton:

The Department of Energy thanks you for the opportunity to provide written testimony today on bills related to a variety of important energy topics.

DOE's work to strengthen America's prosperity and security by addressing its energy, environmental, and nuclear challenges spans the research, development, demonstration, and deployment (RDD&D) continuum. This work includes developing and implementing energy efficiency standards to deploy energy- and cost-saving technologies, and providing loans and loan guarantees for innovative and high-impact energy technologies when private lenders cannot or are unwilling to intervene. DOE also works to secure the nation's energy infrastructure, including the electric grid and supply chains, work that has received added emphasis since the passage in 2021 of the historic Bipartisan Infrastructure Law, also known as the Infrastructure Investment and Jobs Act.

The Department appreciates the opportunity to provide testimony on these bills on important topics including efficiency standards for water heaters, critical electric infrastructure, the Tribal Energy Loan Guarantee Program, critical minerals supply, and DOE's loan guarantees.

H.R. 2975 – To amend the Energy Policy and Conservation Act to modify the definition of water heater under energy conservation standards, and for other purposes. *[Note: Bill reintroduced on 6/7 as H.R. 7962. Updated bill text not yet available].*

This proposed legislation would provide an exclusion for certain categories of water heaters that the draft legislation is defining as intended exclusively for commercial use, but that are currently regulated as consumer products under Energy Policy and Conservation Act (EPCA). The proposed legislation would establish criteria that define those water heaters that should be "excluded" from the consumer part of EPCA and regulated as commercial equipment. The

proposed legislation would set forth a backstop provision if the shipments increase by 25% and requires compliance with the consumer regulations within one year.

The proposed legislation also would add a new category of water heater referred to as “multi-input electric storage water heater,” which is defined as a non-heat pump electric storage which can have multiple configurations above or below 12kw. The legislation specifies multi-input electric storage water heaters would be subject to the test procedures and standards for both consumer and commercial water heaters.

In addition, the proposed legislation would require DOE to consider demand response requirements for water heaters. More specifically, the proposed legislation would require DOE to set standards for demand response based on the statutory criteria for promulgation of a rulemaking. In setting such standards, DOE would be required to consider industry consensus standards, such as the Air Conditioning, Heating, and Refrigeration Institute (AHRI) 1430, as part of its test procedure. The proposed legislation would address preemption from state standards, including an allowance for those state standards already in effect such as California, Washington, and Oregon.

H.R. 5135 – To provide the Secretary of Energy with the authority to enter into contracts and cooperative agreements to improve the resilience of defense critical electric infrastructure and reduce the vulnerability of critical defense facilities to the disruption of the supply of electric energy to those facilities. [Note: Bill reintroduced as H.R. 8053]

Critical Electric Infrastructure

The energy sector provides the power all 16 U.S. critical infrastructure sectors depend on to operate. A disruption in the energy system can have a devastating impact to national security, the U.S. economy, and the livelihoods of millions of Americans.

The U.S. electric grid continues to grow in complexity and become ever more interdependent due to technology innovation and greater connectivity. These rapid changes are increasing the threat surface area for the energy sector, creating a multi-threat environment. Cyber threats remain one of the most significant strategic risks for the United States. We continue to see an increase in the frequency and sophistication of attacks by a range of actors, including foreign near-peer adversaries, domestic extremists, and cyber criminals.

Critical Defense Facilities/Electric Infrastructure

The Federal Power Act defines a Critical Defense Facility (CDF) as “critical to the defense of the United States,” and “vulnerable to a disruption of the supply of electric energy provided to such a facility by an external provider” and Defense Critical Electric Infrastructure (DCEI) as “any electric infrastructure that serves” a Critical Defense Facility, “but is not owned or operated by the owner or operator of such facility.”

The current statutory definitions for these terms limits CDFs and DCEI to facilities and infrastructure located in the 48 contiguous states or the District of Columbia.

DOE, in coordination with the Department of Defense, identified facilities located outside the 48 contiguous states and the District of Columbia to be critical to U.S. defense and vulnerable to

electric energy supply disruptions. However, under the Federal Power Act, DOE is not currently authorized to designate these installations as CDFs, and the infrastructure serving them therefore cannot qualify as DCEI. This limitation means these facilities are not eligible for the same protective measures as those designated under the current statutory provisions. Ineligible facilities are put at a significant security disadvantage, and it can be significantly more difficult for DOE to work with the infrastructure owners on key security initiatives, including participation in threat information sharing and technical assistance programs through the Infrastructure Investment and Jobs Act.

H.R. 5135 would expand the number of jurisdictions in which DOE may designate CDFs and in turn the number of jurisdictions that may contain DCEIs, to include all 50 states, the District of Columbia, and United States territories. The expansion would address the significant security disadvantage for facilities located in Alaska, Hawaii, and U.S. territories resulting from current statutory restrictions.

A bill to provide for direct loans to Indian Tribes and Tribal energy development organizations for energy development, and for other purposes. [*Note: Bill introduced as H.R. 8068*]

This bill continues, in FY 2023 and beyond, the legislative change made in the FY 2022 Consolidated Appropriations Act to broaden Tribal Energy Loan Guarantee Program (TELGP) authority to allow applicants to apply to Loan Programs Office (LPO) for direct loans via the U.S. Treasury Federal Financing Bank guaranteed by the Department in FY 2022, in addition to partial loan guarantees to third party lenders. Due to the timing of FY 2022 appropriations and FY 2023 Budget formulation, the Budget appendix and credit supplement report were unable to reflect the direct loan authority. The Department plans to issue a solicitation supplement in the coming months to implement the change from the FY 2022 Omnibus. Combined with recently announced changes in FY 2022 to the TELGP solicitation to clarify project ownership requirements and eliminate certain fees, this expanded authority is expected to increase interest in and accessibility to loan guarantees and loans under TELGP. The Department looks forward to continuing to work with the Committee to evaluate the best legislative pathway for making this legislative change in FY 2023 and beyond.

H.R. 1599 – Securing America’s Critical Minerals Supply Act.

H.R. 1599 would instruct DOE to conduct assessments of critical energy resources and their supply chains and to strengthen these through diversification of supply, increasing domestic production, developing substitutes and alternatives, improving reuse and recycling technologies, and evaluating the energy security risks of reliance on imports.

The Department has already undertaken many of the activities this legislation would require. In response to President Biden’s Executive Order 14017 on America’s Supply Chains, DOE published “America’s Strategy to Secure the Supply Chain for a Robust Clean Energy Transition” in February of this year. This report includes deep-dive assessments of supply chains for 11 key energy technologies, including where they use critical minerals and materials. These assessments covered the national security risks of reliance on imports. As part of its recent organizational realignment, DOE also created the Office of Manufacturing and Energy Supply

Chains to ensure the energy industrial base is supported by a clean and resilient domestic supply chain. DOE also participates in the Federal Consortium for Advanced Batteries (FCAB), an interagency group partnering to accelerate the development of a robust, secure, domestic industrial base for advanced batteries. Last year, FCAB published a National Blueprint for Lithium Batteries, which included securing access to the critical minerals needed for commercial and defense applications.

R&D on critical energy materials is largely conducted through the Office of Energy Efficiency and Renewable Energy's Advanced Manufacturing Office (AMO), the Office of Energy and Carbon Management, and the Office of Science. AMO supports a portfolio of work including the Critical Minerals Institute (CMI) led by Ames National Laboratory. CMI pursues research in diversifying the supply of critical minerals, developing substitutes, and improving reuse and recycling. DOE aims to increase domestic manufacturing by improving extraction techniques and increasing domestic manufacturing of some critical energy materials. Funding from DOE's Loan Programs Office is also available to support the domestic critical minerals and materials supply chain, as well as recycling and reuse projects. In April, LPO announced a conditional commitment to lend up to \$107 million to Syrah Technologies to expand its capacity to produce critical materials for lithium-ion batteries at its facility in Vidalia, Louisiana.

H.R. 5292 – Energy Accountability Act. *Prohibits the Secretary of Energy from making a loan guarantee if the borrower has previously defaulted on an obligation guaranteed under such title*

The Department does not have a position on this pending legislation, which would prohibit DOE from making a loan guarantee if the borrower has previously defaulted on an obligation guaranteed under such title. However, LPO continuously works to improve program oversight, manage project risk, and achieve its mission of investing in the deployment of innovative technologies where commercial debt markets cannot or are unwilling to intervene. Despite the amount of risk that is actively managed by LPO, the portfolio is robust and healthy, as indicated in LPO's FY 2021 Annual Portfolio Status Report.

Conclusion

Thank you for the opportunity provide written testimony on these bills. The Department looks forward to working with you as we protect America's energy security while transitioning to a clean energy economy. *[Note: H.R. 7947 "Weatherization Enhancement and Readiness Act of 2022 is not reflected in this written statement as it was added to the hearing agenda after testimony was complete]*

Sincerely,

A handwritten signature in black ink, appearing to read "Ali Nouri", with a large, stylized flourish extending to the right.

Dr. Ali Nouri
Assistant Secretary for Congressional and
Intergovernmental Affairs