

**Testimony of Under Secretary of Energy Mark W. Menezes
U.S. Department of Energy**

**Before the
Committee on Energy and Natural Resources
Subcommittee on Energy
United States Senate**

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INTRODUCTION

Chairman Cassidy, Ranking Member Heinrich, and Members of the Subcommittee, it is a privilege and an honor to serve at the Department of Energy (DOE or the Department), which is tasked with, among other important responsibilities: overseeing the Nation's nuclear energy research and development programs; creating and sustaining American leadership in the transition to a global clean energy economy; working effectively with the States on our Nation's energy challenges; and supporting our current, and developing our Nation's future, energy workforce. Thank you for the opportunity to testify today on behalf of the Department regarding legislation pertinent to DOE that is now pending in the Senate.

I have been asked to testify on nine (9) bills today. The Administration continues to review all of these bills. I appreciate the ongoing bipartisan efforts to address our Nation's energy challenges and I look forward to working with the Committee.

NUCLEAR ENERGY

As the major source of clean, reliable, and resilient baseload electricity, nuclear energy is a strategic national asset for the United States. It is an essential element of the Nation's diverse energy portfolio helping to sustain the U.S. economy and support our national goals. A strong domestic nuclear industry enabled by the existing nuclear fleet and enhanced by innovative technology developers is critical to our national security interests as well.

S. 2368 - Nuclear Energy Renewal Act

S. 2368, the Nuclear Energy Renewal Act, reauthorizes many nuclear energy research and development programs and authorizes several new activities to support the existing fleet of nuclear power plants while simultaneously accelerating the development of innovative advanced nuclear technologies. It supports licensing and relicensing of certain nuclear facilities and nuclear energy research, demonstration, and development.

The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

ENERGY EFFICIENCY AND RENEWABLE ENERGY

The mission of DOE's Office of Energy Efficiency and Renewable Energy (EERE) is to create and sustain American leadership in the transition to a global clean energy economy. EERE has, among other strategic goals, the aim of: improving the energy efficiency of our nation's homes,

buildings, and industries; stimulating the growth of a thriving domestic clean energy manufacturing industry; and increasing the generation of electric power from renewable sources.

S. 2137 - Energy Savings and Industrial Competitiveness Act

S. 2137, Energy Savings and Industrial Competitiveness Act of 2019, would require DOE to “encourage and support the adoption of building energy codes by States” and Indian tribes. The bill requires that each State and Indian tribe demonstrate whether the energy savings for the code provisions meet or exceed the energy savings of the updated model building energy code. The states and tribes are not required to adopt energy codes under the law because it is voluntary for them.

The bill endeavors to further establish authority for industrial efficiency programs of the Department of Energy; accelerate the deployment of technologies and practices that would increase industrial energy efficiency and improve productivity; accelerate the development and demonstration of technologies that would assist the deployment goals of the industrial efficiency programs of the Department and increase manufacturing efficiency; to improve industrial productivity and competitiveness; meet the future workforce needs of industry; and strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

Additionally, not later than one (1) year after the date of enactment, the bill requires each Federal agency to coordinate with the Director of the Office of Management and Budget, the Secretary, and the Administrator of the Environmental Protection Agency to develop an implementation strategy for the maintenance, purchase, and use by the Federal agency of energy-efficient and energy-saving information technologies.

Given the numerous subjects included within this bill, the Department continues to review the various provisions of this bill.

S. 2300 - Clean Industrial Technology Act

S. 2300, Clean Industrial Technology Act, would amend the Energy Independence and Security Act of 2007, to establish a program to incent innovation and to enhance the industrial competitiveness of the United States but only if the technologies also reduce greenhouse gas emissions of non-power industrial sectors.

The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

S. 1821 - Marine Energy Research and Development Act

As the bill indicates, the Water Power Technologies Office (WPTO) involves the Department’s program to accelerate the introduction of marine renewable energy production into the U.S. energy supply. The program’s work in marine renewable energy focuses on addressing scientific and engineering challenges that facilitate breakthroughs that have broad, industry-wide benefits. WPTO has developed strategic partnerships across the industry and into other scientific,

engineering, and industrial disciplines to leverage and focus resources on long-term marine renewable energy goals.

The makes provision for National Marine (Renewable) Energy Centers. The program works closely with the three existing National Marine Renewable Energy Centers (Pacific Marine Energy Center, Hawaii National Marine Renewable Energy Center, and Southeast National Marine Renewable Energy Center) and will continue to expand research, development, and testing activities for marine renewable energy.

The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward. At this time, the Department would like to offer one technical adjustment: The marine renewable energy industry uses the term “marine renewable energy” (MRE) as opposed to “marine energy.” The Department recommends using the term “marine renewable energy” for consistency purposes.

INTERACTIONS WITH THE STATES

DOE has a long and successful history of working with States on the Nation’s most significant energy challenges. DOE has provided support for State and local governments to develop and refine energy assurance plans, build in-house expertise on infrastructure interdependencies (i.e., other critical infrastructure systems’ reliance on electricity for operations) and vulnerabilities, integrate renewable energy, address challenges associated with premature nuclear power plant retirements and opportunities associated with advanced nuclear deployment, and utilize new applications such as cyber and smart grid technologies.

S. 2094 – Enhancing State Energy Security Planning and Emergency Preparedness Act

Planning for energy sector disruptions—often led by state energy offices—is essential to safeguarding energy system reliability and resilience. Energy assurance planning can help to achieve a robust, secure and reliable energy infrastructure that is also able to restore services rapidly in the event of any disaster. Nearly all state and territory governments and select local governments have an energy security or assurance plan, which serves as a foundation for action when an energy disruption threatens public welfare or when the energy industry requests help. These plans address energy supply risks and vulnerabilities and enable a quick recovery and restoration. Combined with training and exercises for personnel and stakeholders, energy assurance plans enhance response and recovery efforts and support resiliency.

The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

S. 2095 – Enhancing Grid Security through Public-Private Partnerships Act

One of the most critical missions at DOE is developing the science and technology to successfully counter the ever-evolving, increasing threat of cyber and other attacks on our networks, data, facilities, and infrastructure. DOE works closely with our Federal agency partners, as well as governments at the State, local, tribal and territorial government levels, industry, academic institutions, and National Laboratory partners to accomplish this mission.

This bill provides for certain activities in the Department concerning cybersecurity and vulnerabilities of, and physical threats to, the electric grid. It creates a program related to physical security and cybersecurity of electric utilities.

The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

HUMAN CAPITAL

In the United States we are producing a wider range of fuels, more abundantly and affordably, while using them more cleanly and efficiently than ever. As part of a balanced approach to energy policy, our Nation is vastly improving energy choice, embracing new and smarter ways to reach our energy, and our environmental goals. In the United States, our energy renaissance over the last decade has been nothing short of a game-changer. As energy evolves, so too does our demand on our current and future workforce.

S. 607 – Timely Review of Infrastructure Act

S. 607, Timely Review of Infrastructure Act, is primarily within the Federal Energy Regulatory Commission's (FERC) purview.

This bill gives the FERC Chairman additional discretion and employee compensation capabilities to hire the experts and personnel needed to meet its current demands. It amends the Department of Energy Organization Act to address insufficient compensation of employees or other personnel. The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

S. 2393 - Clean Energy Jobs Act

S. 2393, *Clean Energy Jobs Act*, orders the Secretary to establish and carry out a comprehensive and nationwide program to improve education and training for jobs in energy-related industries to increase the number of skilled workers trained to work in energy related industries, such as manufacturing, engineering, construction, and retrofitting jobs. This bill also includes providing internships, fellowships, traineeships, apprenticeships, and employment at DOE and the National Laboratories.

The Department continues to review the legislation and looks forward to working with Congress as the legislative process moves forward. We also defer to the Department of Labor who is the lead Federal agency on job training programs and provides oversight of workforce development boards authorized under the Workforce Innovation and Opportunity Act (WIOA).

S. 1739 - Department of Energy National Labs ACCESS Act

S. 1739, Department of Energy National Labs ACCESS Act, directs the Secretary to establish competitive five (5)-year grants to conduct Federal cost-sharing to aid in the development and delivery of related instruction associated with pre-apprenticeship and apprenticeship programs specifically designed to train critical skill sets needed to fill positions at the National Laboratories and at National Nuclear Security Administration (NNSA) sites.

Sec. 2. (a) of the bill proposes that, “Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program known as the ‘Department of Energy National Lab Jobs ACCESS program.’” NNSA’s Office of Acquisition and Program Management is concerned that six months may not be long enough to implement a technical skills-based pre-apprenticeship and apprenticeship program envisioned by the Act. Further, NNSA’s Office of Research, Development, Test & Evaluation notes that there is no funding path for the grant awards identified in the legislation and current funding cannot support the creation of a new program within six months. We defer to the Department of Labor on the technical aspects of the apprenticeship language as the Department of Labor is the lead Federal agency on pre-apprenticeship and apprenticeship programs, and as noted above, provides oversight of workforce development boards authorized under WIOA.

Conclusion

Thank you again for the opportunity to be here today. The Department appreciates the ongoing bipartisan efforts to address our Nation’s energy challenges, and looks forward to working with the Committee on the legislation on today’s agenda and any future legislation. I would be happy to answer your questions.