

Testimony of Assistant Secretary Daniel Simmons
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Subcommittee on Energy
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INTRODUCTION

Chairman Cassidy, Ranking Member Heinrich, and Members of the Energy Subcommittee of the Committee on Energy and Natural Resources, thank you for the opportunity to testify today on legislation pertinent to the Department of Energy now pending in the Senate. My name is Daniel Simmons, and I am the Assistant Secretary for the Office of Energy Efficiency and Renewable Energy (EERE).

As the Assistant Secretary, I am responsible for overseeing a broad portfolio of energy efficiency and renewable energy programs. The technologies in my portfolio advance America's economic growth and energy security while enhancing the reliability and resilience of the U.S. energy system. The Department of Energy supports improving the energy efficiency and reducing energy costs, while at the same time ensuring important performance standards are met or exceeded. For instance, we want to ensure schools and other buildings are sufficiently bright to ensure safety, and that water flow from faucets is strong enough to clean dirty hands. Today, I would like to share what relevant work my office has done and is doing in the areas that these bills address.

I have been asked to testify on eleven (11) bills today, addressing a range of important energy issues. 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.

BILLS

S. 1890 – Renew America's Schools Act of 2019

S. 1890, the Renew America's Schools Act, authorizes and directs the Secretary of Energy to award competitive grants for energy efficiency and renewable energy improvements at public school facilities. The Department currently provides technical assistance to a number of K-12 schools across the country to help them achieve voluntary commitments of 20 percent or better energy savings in their facilities through the Better Buildings Challenge.

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

S. 2425 – CHP Support Act of 2019

S. 2425 amends the Energy Policy and Conservation Act to establish the Combined Heat and Power (CHP) Technical Assistance Partnership Program. The program would provide education and outreach to building, industrial, and electric and natural gas utility professionals, State and

local policy makers, and other stakeholders with an interest in CHP, waste heat to power, and efficient district energy technologies. The bill would update the number of regional CHP Technical Assistance Partnerships from 8 to 10, as well as authorize annual appropriations of \$12 million for each of fiscal years 2020 through 2024.

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

S. 2508 – Promoting American Energy Security Jobs

S. 2508 requires the Secretary of Energy to establish a council to conduct a survey and analysis of the employment figures and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States. In addition to key stakeholders, the Council shall include representatives from Commerce, Transportation, Census Bureau, Bureau of Labor Statistics, EPA, State Energy Advisory Board and energy trade associations. It also directs the Department to publish a report, to be entitled the “U.S. Energy and Employment Report”, describing the employment figures and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States based on the survey and analysis conducted.

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

S. 2556 – Protecting Resources On The Electric grid with Cybersecurity Technology (PROTECT) Act

S. 2556, or the PROTECT Act, amends the Federal Power Act to provide energy cybersecurity investment incentives, to establish a grant and technical assistance program for cybersecurity investments. The bill directs FERC to issue a rulemaking on rate incentives for advanced cybersecurity technology, which will enable and incentivize utilities to invest in new technologies that improve their cybersecurity defenses. It also establishes a DOE grant program for utilities that are not regulated by FERC to deploy advanced cybersecurity technology, such as electric cooperatives and municipal utilities.

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

S.2657 – Advanced Geothermal Innovation Leadership (AGILE) Act of 2019

S.2657, the AGILE Act of 2019 aims to accelerate geothermal energy development in the United States by addressing technical and non-technical barriers to geothermal development in both electric and direct use sectors. The bill achieves this through promoting research and development, encouraging technology transfer between the geothermal and oil and gas industries, and exploring ways to improve federal permit coordination.

Work currently underway in the Geothermal Technologies Office to address challenges to geothermal deployment includes: collaboration with the Vehicle Technology Office and Advanced Manufacturing Office to evaluate ways to improve the critical materials supply chain; technology testing opportunities with Wells of Opportunity that will allow stakeholders from geothermal, oil and gas, mining and other relevant subsurface industries to more rapidly adapt technologies to the Enhanced Geothermal Systems and conventional geothermal environments; innovative portfolios focusing on drilling, machine learning, and zonal isolation technologies; and continued investment at the Utah Frontier Observatory for Research in Geothermal Energy site.

In addition, the *GeoVision* analysis, published in May 2019, which found that optimizing permitting timelines could reduce costs and facilitate geothermal project development, potentially doubling installed geothermal capacity by 2050.

EERE has provided technical comments on this bill. The Department will continue to review the legislation and looks forward to working with Congress as the legislative process moves forward.

S. 2668 – Solar Energy Research, Development, and Demonstration Program Act of 2019

S.2668, the Solar Energy Research, Development, and Demonstration Program Act of 2019 reauthorizes the activities of EERE’s Solar Energy Technology Office (SETO). The bill outlines several research priority areas, such as improving the energy efficiency, reliability, and security of solar energy technologies, while also focusing on reducing the overall costs of solar energy systems. The bill authorizes additional work to be carried out by SETO, such as providing technical assistance, supporting workforce development and training activities, and the awarding of grants to carry out both research and development and demonstration projects to advance the development of solar technologies.

Work currently underway in SETO to address near-term, mid-term, and long-term challenges to the advancement of solar energy technologies includes: the American-Made Solar Prize, a prize competition designed to revitalize U.S. solar manufacturing; photovoltaics and concentrating solar power research; and systems integration research, which works to improve situational awareness of solar energy systems on the grid.

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

S. 2660 – Wind Energy Research and Development Act of 2019

S.2660, the Wind Energy Research and Development Act of 2019 reauthorizes the activities of EERE’s Wind Energy Technology Office (WETO). The bill outlines several research priority areas, such as improving the energy efficiency, reliability, and capacity of wind energy generation, and supports the development of innovative designs for both land-based and offshore

wind energy technologies. The bill also outlines several grant subject areas, including research on the recycling and reuse of wind-energy technology components and grants to help mitigate regulatory and market barriers.

WETO is currently addressing challenges to reduce technology costs as well as regulatory and market barriers through investments in related science and modeling and analytical tools, complemented by selective, cost-shared projects, and carried out as collaborations with industry, academia, national laboratories and facilities, and other research enterprises.

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

S.2688 – Technology Transitions Act

S. 2688, the Technology Transitions Act would establish an Office of Technology Transitions (OTT) to expand the commercial impact research investments of the Department and focus on commercializing technologies that reduce greenhouse gas emissions.

S. 2688 reiterates work that the Department, under the leadership and direction of the Secretary, is already undertaking. Under authority provided in the Energy Policy Act of 2005, the Department established the Office of Technology Transitions in 2015. Under authority provided in the Department of Energy Organization Act, the Secretary can adjust offices of the Department to address circumstances that may arise in the future. The existing OTT will help in continuing to expand the commercial impact of DOE investment and highlight the vast research capabilities so important to ensuring our domestic energy and national security, as well as U.S. economic competitiveness.

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

S. 2702 - Integrated Energy Systems Act

S. 2702, the Integrated Energy Systems Act, requires the Secretary of Energy to establish an integrated energy systems research, development, and demonstration program between multiple Department offices, to be known as the Integrated Energy Systems Program. The intent of the program is to maximize energy production and efficiency; provide reliable, competitive, and environmentally sustainable electricity to the grid; expand the use of emissions-reducing technologies into nonelectric sectors to achieve dramatic reductions in environmental emissions; and enable the energy infrastructure of the United States to support the quantity, variability in type, and variability in size of generation devices and smart load devices.

The Department has provided technical assistance on this bill and looks forward to working with Congress as the legislative process moves forward.

S. 876 – Energy Jobs for Our Heroes Act of 2019

S. 876, the Energy Jobs for Our Heroes Act of 2019 would establish the ‘Energy-Ready Vets Program’ that would prepare veterans for careers in the energy industry. The program will allow eligible participants to earn an applicable industry-recognized entry-level certificate or other credential. The program will be carried out through the SkillBridge program of the Department of Defense.

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

S. 2714 – ARPA-E Reauthorization Act of 2019

S. 2714, the ARPA-E Reauthorization Act of 2019, would authorize a significant increase in the Department of Energy’s Advanced Research Project Agency-Energy’s funding, from \$428 million in Fiscal Year 2020 to \$750 million in Fiscal Year 2024. The bill also adds an annual reporting requirement for ARPA-E’s scale-up and demonstration activities and would broaden the authorized scope of ARPA-E to support not only projects that improve the resilience, reliability, and security of America’s energy infrastructure but also those that improve the management, clean-up, and disposal of radioactive waste and spent nuclear fuel.

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

CONCLUSION

Thank you again for the opportunity to testify before the Subcommittee 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.