



March 13, 2018

The Honorable Thad Cochran
Chairman
Senate Appropriations Committee
113 Dirksen Senate Office Building
Washington, D.C. 21502

The Honorable Rodney P. Frelinghuysen
Chairman
House Appropriations Committee
2306 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Patrick Leahy
Ranking Member
Senate Appropriations Committee
437 Russell Senate Office Building
Washington, D.C. 20510

The Honorable Nita M. Lowey
Ranking Member
House Appropriations Committee
2365 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen Cochran and Frelinghuysen and Ranking Members Leahy and Lowey,

We write to express the serious concern of the U.S. renewable energy industry regarding proposed cuts to the Department of Energy (DOE)'s budget for Fiscal Year (FY) 2019, and to encourage you to continue current funding levels for vital DOE programs in FY 2018 appropriations. At a time when global competitors are drastically increasing research and development funding for renewable energy technologies, the Administration has proposed cutting more than \$1.9 billion from programs supporting energy innovation and deployment, a 43 percent decrease from current annualized funding levels. The proposed budget includes a \$1.3 billion (66 percent) cut to the Office of Energy Efficiency and Renewable Energy (EERE) and an elimination of the Advanced Research Programs Agency – Energy (ARPA-E) program. We believe that such cuts in FY 2018 or FY 2019 would seriously jeopardize America's leadership in cutting-edge research on clean energy technologies and harm our country's overall competitiveness in a rapidly growing global industry that presents a multi-trillion-dollar business opportunity.

The DOE, through the EERE, ARPA-E, National Renewable Energy Laboratory (NREL) and other national labs, have been instrumental in the research, development and deployment of many important electric power innovations. Investments made through the Office of EERE and the individual technology programs within it have contributed to increased clean energy output, improved grid reliability and resiliency, decreased deployment barriers, and reduced costs, among other benefits. In addition, NREL has conducted assessments and analyses¹, secured more than 100 patents, and been the source of technological breakthroughs that have improved productivity and reduced the costs of wind turbines, solar panels, geothermal systems, hydropower and pumped storage, marine energy and hydrokinetics, biofuels, electric vehicles and energy storage systems. NREL's work has helped the renewable energy industry achieve impressive cost reductions and NREL has also been a critical partner for the private sector through hundreds of technology partnerships.

The ARPA-E program, which advances high-potential, high-impact research and development across an array of potentially transformative technologies, has provided critical financial support to the energy sector. ARPA-E invests in early-stage projects that typically are not yet mature enough to attract private sector capital. This model has proven successful. In fact, 74 ARPA-E projects funded since 2009 have already advanced far enough into development to attract private capital, securing

¹ For example, the 2016 Hydropower Vision Report. A first-of-its-kind comprehensive analysis to evaluate future pathways for hydropower (conventional and pumped storage) growth in the United States, focused on continued technical evolution, increased energy market value, and sustainability.

more than \$1.8 billion in private sector investment² These projects span an array of technologies, including energy storage, wind, solar, hydropower and marine energy, and carbon capture and sequestration.

The work done by EERE, NREL, and ARPA-E fills a critical gap in research and development programs. In the energy space, the U.S. is at risk of falling behind other countries that are investing heavily in this important area, including for example China, which is racing to develop the next generation of energy technologies.

NREL is not the only national lab impacted by the proposed cuts. Important research efforts on renewable energy, smart grids, grid reliability, cybersecurity, energy storage and grid resiliency are being conducted at over 14 national labs spread across the nation in states such as California, Idaho, Illinois, Iowa, New Mexico, New York, South Carolina, Tennessee, and Washington. The work performed at these labs is vital to modernizing our electricity system. Unfortunately, the administration's proposed budgets for FY 2018 and 2019 would seriously jeopardize important research by these laboratories. This reduction would significantly slow the research and deployment of new and innovative technologies that enable greater energy production at lower costs, and would jeopardize the United States' dominant technological position in electric power and renewable energy research and development.

This is a particularly poor time to reduce research and development investment in energy, because the nation's aging electricity system requires significant new investment in modern infrastructure. NREL and the other national labs are at the forefront of the development of many of the new technologies and software important to a high-performing, reliable and resilient grid system. Further, the need for investment in a modern grid system is a global phenomenon and presents a massive market opportunity for American businesses and entrepreneurs. The global renewable energy market attracted \$333.5 billion worth of investment in 2017 alone.³

Advanced energy technologies represent a multi-trillion-dollar opportunity for American businesses and workers. We respectfully urge you to continue current funding levels for these important programs supporting research and development of clean energy and innovative energy technologies in your FY 2018 appropriations and to oppose the proposed cuts in the FY 2019 budget.

Please feel free to contact us for additional information or if we can be of help in any way.

Sincerely,

American Council on Renewable Energy
American Wind Energy Association
Geothermal Resources Council
National Hydropower Association
Solar Energy Industries Association

² ARPA-E Press Release, available at: <https://arpa-e.energy.gov/?q=news-item/arpa-e-projects-receive-more-18-billion-private-follow-funding-transformational-energy>.

³ Bloomberg New Energy Finance, "State of Clean Energy Investment", January 2017. Available at: <https://about.bnef.com/clean-energy-investment/>.