The Honorable Mike Simpson Chairman, Subcommittee on Energy and Water Development, and Related Agencies U.S. House of Representatives Committee on Appropriations 2362-B Rayburn House Office Building Washington, DC 20515 The Honorable Marcy Kaptur Ranking Member, Subcommittee on Energy and Water Development, and Related Agencies U.S. House of Representatives Committee on Appropriations 2362-B Rayburn House Office Building Washington, DC 20515

The Honorable Lamar Alexander Chairman, Subcommittee on Energy and Water Development U.S. Senate Committee on Appropriations 184 Dirksen Senate Office Building Washington, DC 20510 The Honorable Dianne Feinstein Ranking Member, Subcommittee on Energy and Water Development U.S. Senate Committee on Appropriations 188 Dirksen Senate Office Building Washington, DC 20510

Re: Fiscal Year 2018 Office of Energy Efficiency and Renewable Energy Budget

Dear Chairman Simpson, Ranking Member Kaptur, Chairman Alexander, and Ranking Member Feinstein:

The U.S. Department of Energy is the single largest funder of clean energy innovation in the United States, and our nation will be hindered in the global energy market without a strategic and well-funded DOE research portfolio, including basic science, energy efficiency, renewable energy, nuclear energy, fossil energy, and electricity reliability.

We are the entire group of Senate-confirmed Republican and Democratic Assistant Secretaries of Energy who led the DOE Office of Energy Efficiency and Renewable Energy (EERE) between 1989 and 2017. We are particularly concerned about the Administration's recent proposal to cut the EERE budget by 69% from FY2017 enacted levels. While we have not always agreed on the relative emphasis of various elements of the EERE budget we are unified that cuts of this magnitude in the proposed FY18 budget will do serious harm to this office's critical work and America's energy future.

EERE-supported research, development, and demonstration in energy efficiency, transportation, renewable energy, clean energy manufacturing and electric grid modernization are critical to encouraging U.S. innovation, creating good-paying jobs,

cutting pollution, and ensuring American global competitiveness. Other important EERE programs, with similar benefits, focus on setting efficiency standards for appliances and equipment, helping states deliver energy efficiency improvements, leading the federal government's efforts to reduce its own \$23 billion annual energy bill, and cutting energy use in low-income homes.

This is a particularly inauspicious time to cut the EERE budget. World-wide investment in clean energy now measures in the hundreds of billions of dollars annually. Governments across the globe—and companies large and small—want a piece of this massive economic pie representing tens of trillions of dollars over the next three decades and millions of jobs. China, in particular, has made it a high priority to lead the globe in the clean energy industry and is reorganizing its energy R&D and deployment efforts in a broad array of clean energy technologies, many of them first developed in the U.S. at taxpayer expense. It is telling that China intends to spend more than \$360 billion on renewables through 2020 and create 13 million jobs. We ignore China's resolve—and success to date—at our peril.

U.S. energy security, a key focus of Congress and the administration, requires a reliable and resilient electricity system. Fundamental performance characteristics of the grid are changing due to increasing use of variable supplies, electronic converters for motor drives, lights, and other equipment, and grid communications and control with the shift from analog to digital systems. These changes have the potential to improve grid economics and performance, but also require greater agility to optimize operations, reduce response time to system failures, and confront new vulnerabilities such as cybersecurity. R&D to develop the capabilities needed in a modernized grid is critical, yet the electric utility sector invests just 0.2 percent of sales in R&D. R&D by EERE and DOE's Office of Electricity Delivery and Energy Reliability (with a proposed 48% cut) is pivotal in meeting these grid modernization challenges.

Finally, federal appliance and equipment efficiency standards, set by EERE since 1987, are the little engine that could when it comes to stimulating massive low-cost energy savings. DOE estimates that existing efficiency standards will, on a cumulative basis, save consumers nearly \$2 trillion on their utility bills between 1987 and 2030. While not without occasional controversy, the standards have long enjoyed bipartisan support. Standards for many types of residential, commercial, and industrial equipment are required to be regularly updated in order to capture the impact of technology advances and push these advances into the market. Thus, a refrigerator in 1973 used about 1900 kWh of electricity per year but federal R&D and standards have helped drop that electricity use to about 400 kWh per year, saving a typical household roughly \$150 per year.

As six Republican Senators wrote earlier this month, referencing EERE and other DOE offices, "We cannot lose the technological advantages we have gained through research

<sup>&</sup>lt;sup>1</sup> Reuters, January 5, 2017 http://www.reuters.com/article/us-china-energy-renewables-idUSKBN14P06P

and development. Governing is about setting priorities and the federal debt is not about Congress overspending on science and energy research each year." We share this view and we urge you to set the FY18 EERE budget at a level that will ensure the continued effectiveness of this critical federal program.

We would be honored to meet with you and share our views on the EERE budget and, more broadly, how to improve the productivity of the entire DOE energy RD&D portfolio in a bipartisan effort to secure America's energy future.

## Sincerely,

Dan W. Reicher, EERE, 1997-2001 DOE Chief of Staff, 1996-1997 DOE Assistant Secretary for Policy (Acting) 1995-1996 (President Bill Clinton)

Cathy Zoi, EERE, 2009-2011 DOE Under Secretary (Acting), 2010-2011 (President Barack Obama)

David Garman, EERE, 2001-2005 DOE Under Secretary, 2006-2007 (President George W. Bush)

Mike Davis, EERE, 1989-1992 (President George H.W. Bush) David Danielson, EERE, 2012-2016 Program Director, ARPA-e, 2009-2012 (President Barack Obama)

Alexander "Andy" Karsner, EERE, 2006-2008 (President George W. Bush)

Christine A. Ervin, EERE, 1993-1997 (President Bill Clinton)

cc:

Chairman and Ranking Member, U.S. House of Representatives Committee on Appropriations Chairman and Ranking Member, U.S. Senate Committee on Appropriations U.S. Senate Majority Leader and Democratic Leader Speaker of the U.S. House of Representatives and Democratic Leader