



ASSOCIATION OF
AMERICAN UNIVERSITIES

ASSOCIATION OF
PUBLIC AND
LAND-GRANT
UNIVERSITIES



July 8, 2014

The Honorable Lamar Smith
House Committee on Science, Space,
and Technology
2321 Rayburn Office Building
Washington, DC 20515

The Honorable Eddie Bernice Johnson
House Committee on Science, Space,
and Technology
2321 Rayburn Office Building
Washington, DC 20515

Dear Chairman Smith and Ranking Member Johnson:

On behalf of the Association of Public and Land-grant Universities and the Association of American Universities, we write to express our views concerning the Department of Energy Research and Development Act of 2014 (H.R. 4869). This legislation has positive aspects that we support. We also have specific concerns regarding the bill which, if not addressed, would prevent our organizations from fully endorsing the bill.

First, we appreciate and strongly support the overall FY 2015 authorization funding levels included in the bill for the Office of Science. The proposed 5.1 percent increase above current funding levels is a welcome step toward closing the nation's growing innovation deficit. The United States cannot afford to pull back support for science while other countries continue to strengthen their investments in research. The strong funding levels proposed in the bill for the DOE Office of Science would help keep the U.S. at the forefront of research in the physical sciences, energy, computing, and other important areas of basic science and engineering that are heavily dependent upon DOE support. It would also help maintain and maximize access to and utilization of critical DOE scientific facilities located at both national laboratories and universities.

We also support the provision included in Section 130 of the bill that would exempt institutions of higher education and other nonprofit institutions from the existing statutory 20 percent matching requirement for conducting DOE applied research and development. This provision effectively responds to a recommendation made by the President's Advisory Council on Science and Technology (PCAST) in its 2011 report entitled "Accelerating the Pace of Change in Energy Technologies through an Integrated Federal Energy Policy." As public or private nonprofit institutions, universities have limited sources of funding to meet existing DOE cost sharing requirements, e.g. restricted endowments, state funds, tuition. Current economic conditions have already forced many of our institutions to make cutbacks in other important parts of their budgets and it is usually difficult and often impossible to find the resources at our institutions or from industry to meet such matching requirements. Thus, the matching requirement has provided a significant disincentive for some institutions to allow their faculty to submit proposals to DOE for research in these areas of applied energy R&D. Therefore, we welcome the provision addressing this issue in the bill.

We are concerned, however, about the dramatic changes to funding allocations the bill proposes for some of the research programs in the Office of Science. In particular, the bill would authorize the Biological and Environmental Research (BER) program in FY2015 at 18 percent below current-year levels. This represents a significant reduction that would seriously harm the world-class biological and environmental research programs and scientific user facilities supported by BER. These programs are central to supporting DOE's energy, environment, and basic research missions. Among other things, science supported by BER helps us understand

how genomic information is translated to functional capabilities; enables more confident redesign of microbes and plants for sustainable biofuel production; improves carbon storage; addresses issues relating to bioremediation and containment of harmful and toxic chemicals; and provides a foundation of basic scientific knowledge in areas such as atmospheric chemistry, biogeochemistry, physics, ecology, and biology.

We are also concerned about significant reductions proposed for high-risk, high-reward, and applied energy research programs at DOE. The bill proposes a 14.3 percent cut to the Advanced Research Projects Agency for Energy (ARPA-E) and a 29 percent cut to the Energy Efficiency and Renewable Energy (EERE) research program. Both of these programs support research at U.S. universities that is considered far too risky for U.S. industry to support, but which has the potential to change dramatically how we will acquire and store energy in the future. We are hopeful that the cuts to these programs, as well as those to BER, will be restored as the bill moves forward in the legislative process.

Finally, we fear that some of the policy provisions in the bill would impede the ability of university-based researchers to conduct important science. Specifically, we do not support the provision that would require researchers to demonstrate that they have been unsuccessful in obtaining private funding for their proposals before seeking funding from ARPA-E. In our view, this would impede ARPA-E's ability to achieve its mission since the organization is specifically designed to invest in early stage pre-commercial projects that are not even worth an attempt to secure private financing - especially for researchers working at universities, national laboratories, and nonprofits. We are concerned that demonstrating a "sufficient attempt" would mean having to show a relationship or exchange with a bank or investor about potential industry funding. Due to the high-risk or pre-lab scale for many of these projects, university researchers would never even receive a response from such entities. Time spent trying to secure and demonstrate such relationships would detract from actually conducting the research by imposing an additional administrative burden on faculty members who are already overburdened with federally imposed requirements.

We also oppose the provision of H.R. 4869 that would eliminate the existing ARPA-E goal of developing energy technologies to reduce energy-related emissions. This is a legitimate scientific goal which we believe ARPA-E should continue to pursue. Another policy provision about which we have concerns would prohibit DOE research from serving as a basis for federal regulations. We believe strongly that the federal government should be able to benefit from research that it has directly funded to help shape federal regulations and other public policy decisions, especially those aimed at protecting public and environmental health.

We hope that our comments are useful as you work to advance this important legislation. We look forward to working with you on these matters and would be happy to discuss further with you and your staff any of the concerns we have regarding the bill.

Sincerely,



Hunter R. Rawlings III
President
Association of American Universities



Peter McPherson
President
Association of Public and Land-grant Universities

cc: Members of the House Committee on Science, Space, and Technology