

ENERGY SCIENCES COALITION

December 20, 2013

Senator Dianne Feinstein
Chair, Subcommittee on
Energy and Water Development
Dirksen Senate Office Building, SD-184
Washington, DC 20510

Senator Lamar Alexander
Ranking Member, Subcommittee on
Energy and Water Development
Dirksen Senate Office Building, SD-188
Washington, DC 20510

Representative Mike Simpson
Chair, Subcommittee on
Energy and Water Development
Rayburn House Office Building, 2362-B
Washington, DC 20515

Representative Marcy Kaptur
Ranking Member, Subcommittee on
Energy and Water Development
Rayburn House Office Building, 2186
Washington, DC 20515

Dear Senators Feinstein and Alexander and Representatives Simpson and Kaptur:

As you negotiate final FY 2014 funding levels for the Department of Energy (DOE), the undersigned organizations representing universities, businesses, and the scientific community, urge you to assign a high priority to funding for the Department of Energy's Office of Science and the Advanced Research Projects Agency for Energy (ARPA-E). Federal investment in fundamental and high-risk research that would not otherwise be supported by industry is the proper role of government. This is exactly the type of research that is supported by DOE's Office of Science and ARPA-E. Continued strong support for the research sponsored by these two DOE agencies is vitally important to securing our future national energy security, ensuring continued U.S. leadership in key fields of science, and to solving the fiscal and economic challenges facing the nation.

The DOE Office of Science is the nation's primary supporter of basic physical sciences research, providing over 40% of total federal support in this area. Sustained and predictable funding for the DOE Office of Science is also critical to ensure U.S. leadership in other fields including the biological sciences, advanced materials, computing, and engineering. The DOE Office of Science also supports the operation of the largest collection of major scientific user facilities in the world. These user facilities are the backbone of experimental and computational research in the U.S. and are relied upon by over 25,000 scientists from universities, companies, and Federal agencies to conduct their scientific and engineering research. The DOE Office of Science thus plays a critical role in developing the nation's scientific and engineering workforce and in advancing the fundamental knowledge underpinning major energy and other technology-related breakthroughs.

Modeled after the highly successful Defense Advanced Research Projects Agency (DARPA), ARPA-E supports high-risk, high-reward research that private industry will not support, but which has the potential to drastically alter how we generate, store, and use energy. ARPA-E focuses on transformational energy technologies that can be meaningfully advanced with a small investment over a defined period of time. Since 2009, ARPA-E has funded more than 350 projects across 38 states. Of these projects, seventeen projects alone have attracted over \$450 million in private sector capital after ARPA-E's initial investment of approximately \$70 million.

The Energy Sciences Coalition (ESC) is a broad based coalition of organizations representing scientists, engineers and mathematicians in universities, industry and national laboratories who are committed to supporting and advancing the scientific research programs of the U.S. Department of Energy (DOE), and in particular, the DOE Office of Science.

While we understand that you are working within a constrained budget, we strongly believe that providing stable and sustained funding increases for both the DOE Office of Science and ARPA-E must be a priority for the Congress. At the very time that our economic competitors in China, India, South Korea, the European Union, and elsewhere are copying our approach to innovation and increasing their rate of investment in basic and energy-related research, now is not the time to reduce vital federal funding for Department of Energy research and scientific facilities so critical to our future economic growth. We therefore urge your strong support for these two agencies as you make final decisions about FY 2014 funding levels.

Sincerely,

American Association for the Advancement of Science
American Astronomical Society
American Chemical Society
American Geosciences Institute
American Institute of Physics
American Mathematical Society
American Physical Society
American Society for Engineering Education
American Society of Agronomy
American Society of Mechanical Engineers
American Society of Plant Biologists
Applied DNA Sciences
Arizona State University
Association of American Universities
Association of Public and Land-grant Universities
Battelle
Binghamton University
Case Western Reserve University
Clemson University
Coalition for Academic Scientific Computation (CASC)
Columbia University
Computing Research Association
Cornell University
Cray Inc.
Crop Science Society of America
Duke University
Florida State University
Fusion Power Associates
Geological Society of America
Georgia Institute of Technology
Harvard University
IBM
Iowa State University
Jefferson Science Associates, LLC
Krell Institute
Massachusetts Institute of Technology

Materials Research Society
Michigan State University
National User Facility Organization
Oak Ridge Associated Universities
(ORAU)
Pennsylvania State University
Princeton University
Purdue University
Rensselaer Polytechnic Institute
Rutgers, The State University of New
Jersey
Society for Industrial and Applied
Mathematics
Soil Science Society of America
South Dakota School of Mines
Southeastern Universities Research
Association
Stanford University
Tech-X
The Ohio State University
University of California System
University of California, Davis
University of California, San Diego
University of Chicago
University of Colorado Boulder
University of Delaware
University of Maryland, College Park
University of North Texas
University of Southern California
University of Texas at Austin
University of Wisconsin-Madison
Vanderbilt University
Washington State University
Washington University in St. Louis
West Virginia University

cc: Senator Barbara Mikulski, Chair, Senate Committee on Appropriations
Senator Richard Shelby, Ranking Member, Senate Committee on Appropriations
Representative Hal Rogers, Chair, House Committee on Appropriations
Representative Nita Lowey, Ranking Member, House Committee on Appropriations
Members, Senate Appropriations Subcommittee on Energy and Water Appropriations Development
Members, House Appropriations Subcommittee on Energy and Water Appropriations Development