

Congress of the United States

House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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MEMORANDUM

TO: Committee on Science, Space, and Technology Subcommittee on Energy
Members and Staff

FROM: Science, Space, and Technology Committee Staff

DATE: June 11, 12:00 p.m.

RE: Subcommittee on Energy Markup

The Subcommittee on Energy will meet on **Wednesday, June 11, at 12:00 p.m.** in Room 2318 of the Rayburn House Office Building to consider the following:

- Committee Print, H.R. ____, the “Department of Energy Research and Development Act of 2014”

Background and Need

The DOE funds a wide range of research, development, demonstration, and commercial application activities. DOE is currently organized under three main secretariats: Science and Energy, Nuclear Security, and Management and Performance. This legislation reauthorizes research and development activities under the Office of the Under Secretary for Science and Energy and ARPA-E.

The DOE Office of Science is the largest federal sponsor of basic research in physical sciences and supports 31 national scientific user facilities across the United States. NE supports research and development for nuclear power systems, including advanced reactor concepts, small modular reactors, and alternative fuel cycles. EERE supports research and development for efficiency and renewable energy technologies, including fuel cells, bioenergy, solar, wind, geothermal, and water power, as well as vehicles, buildings, and advanced manufacturing technologies. FE supports research and development for coal, natural gas, and unconventional fossil energy recovery and related technologies. OE supports research and development for smart grid, cybersecurity, and energy storage. ARPA-E supports funding for high-risk high-reward energy technology development.

This legislation reauthorizes programs within the jurisdiction of the Committee on Science, Space, and Technology at the Department of Energy (DOE), including the Office of Science, research and development programs within the Offices of Nuclear Energy (NE), Energy Efficiency and Renewable Energy (EERE), Fossil Energy (FE), and Electricity Delivery and

Energy Reliability (OE), and the Advanced Research Projects Agency-Energy (ARPA-E). This legislation also optimizes management, operations, and technology transfer at the national laboratories.

Major Provisions and Policy

This Committee Print:

- Reauthorizes the Office of Science, prioritizing fundamental research in physical sciences and state-of-the-art enabling facilities to maintain U.S. competitiveness and attract global talent and investment.
- Increases efficiency at the national laboratories by, among other things, providing signature authority to operators for certain agreements with third-party entities and authorizing a pilot program to increase flexibility for contracting terms.
- Reauthorizes NE, EERE, FE, OE and ARPA-E at funding levels recognizing national deficit spending concerns.
- Reduces the nation's deficit spending by authorizing overall appropriations levels below fiscal year 2014 by approximately \$232,000,000.

Legislative History

In 2007, Congress enacted the America COMPETES Act (P.L. 110-69) which authorized an appropriation level of \$5.814 billion for DOE basic research for fiscal year 2010 and established the Advanced Research Projects Agency-Energy (ARPA-E).

In 2010, Congress enacted the America COMPETES Reauthorization Act of 2010 (P.L. 111-358), which authorized appropriations levels for DOE basic research at \$5.247 billion for fiscal year 2011, \$5.614 billion for fiscal year 2012, and \$6.007 billion for fiscal year 2013. The America COMPETES Reauthorization Act of 2010 also authorized appropriations levels for APRA-E at \$300 million for fiscal year 2011; \$306 million for fiscal year 2012; and \$312 million for fiscal year 2013.

The Committee on Science, Space, and Technology held hearings on April 10, 2014 and June 18, 2013 with Secretary of Energy Ernest Moniz to examine the DOE's budget priorities. The Full Committee also held a hearing titled "American Competitiveness: The Role of Research and Development" on February 6, 2013. The Energy Subcommittee held a hearing on a draft version of the EINSTEIN America Act on October 30, 2013 as well as the following hearings:

- "American Energy Outlook: Technology, Market, and Policy Drivers" (February 13, 2013)
- "Federal Financial Support for Energy Technologies: Assessing Costs and Benefits" (March 13, 2013)
- "Assessing the Efficiency and Effectiveness of Wind Energy Incentives" (Joint hearing with the Oversight Subcommittee on April 16, 2013)

- “A Review of Federal Hydraulic Fracturing Research Activities” (Joint hearing with the Environment Subcommittee on April 26, 2013)
- “America’s Next Generation Supercomputer: The Exascale Challenge” (May 22, 2013)
- “Oversight and Management of Department of Energy National Laboratories and Science Activities” (July 11, 2013)
- “The Future of Coal: Utilizing America’s Abundant Energy Resources” (July 25, 2013)
- “EPA Power Plant Regulations: Is the Technology Ready?” (October 29, 2013)

Authorizations

This legislation authorizes for fiscal year 2015:

- The Office of Science at \$5,324,550,000.
- Crosscutting Research and Development at \$40,000,000.
- Office of Nuclear Energy research and development activities at \$488,630,000.
- Office of Energy Efficiency and Renewable Energy research and development activities at \$1,197,631,000.
- Office of Fossil Energy research and development activities at \$570,565,000.
- ARPA-E at \$240,000,000.