U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

February 9, 2015

TO: Members, Subcommittee on Energy and Power

FROM: Committee Majority Staff

RE: Hearing entitled "The Fiscal Year 2016 Department of Energy Budget"

I. INTRODUCTION

On Wednesday, February 11, 2015, at 2:00 p.m. in 2123 Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing entitled "The Fiscal Year 2016 Department of Energy Budget."

II. WITNESSES

- The Honorable Ernest J. Moniz, Secretary, U.S. Department of Energy.

III. BACKGROUND

The U.S. Department of Energy (DOE) traces its origins to the World War II Manhattan Project and to the Atomic Energy Act of 1946, amended in 1954. The Atomic Energy Act established the fundamental law for the civilian development and control of nuclear energy. DOE was guided by the policy that, subject to the needs of common defense and security, the research, development, and control of nuclear energy and related technology would be directed toward "improving the public welfare, increasing the standard of living, strengthening free competition in private enterprise, and promoting world peace."[1]

DOE, in its current form, was established in 1977 pursuant to the Department of Energy Organization Act, which consolidated its core atomic energy and research and development programs and the responsibilities of various energy-related agencies into a single department.[2] DOE is comprised of 10 program offices, 19 staff offices, 10 field offices, 21 lab and technology centers, 4 power marketing administrations, as well as the Energy Information Administration and the National Nuclear Security Administration.[3] DOE has 14,858 Federal employees and 94,302 contractors (as of the end of FY 2014).[4]

DOE currently engages in a broad range of national security, scientific, and environmental activities, including the maintenance of the nation's nuclear weapons program,

[1] *See* Atomic Energy Act of 1954 (42 U.S.C. § 2011 et seq.).
[2] *See* Department of Energy Organization Act (August 4, 1977).
[3] *See* Organization Chart; DOE Offices. The Federal Energy Regulatory Commission (FERC) is an independent agency within DOE. FERC is self-funding, recovering costs directly from the industries it regulates through annual charges and fees. *See* About FERC.
[4] *See* Fiscal Year 2014 Agency Financial Report.

nuclear propulsion work for the U.S. Navy, environmental cleanup of the nuclear weapons complex, nuclear waste management and disposal, as well as the promotion of scientific and technical innovation, energy conservation, energy-related research, and other activities.[5]

A. Department of Energy FY 2016 Budget Proposal

On February 2, 2015, President Obama proposed a budget of $29.9 billion for DOE for FY 2016 (October 1, 2015 to September 30, 2016).[6] The budget requests a 9.2% percent increase, or $2.52 billion, above the FY 2015 enacted level. FY 2016 funding requests for select offices and programs, and the percentage increase or decrease from the FY 2015 enacted levels, are summarized below:

Crosscutting Activities to Advance National Energy Goals ($1.2 billion (+46%))

- *Energy-Water Nexus*: $38.35 million (+146%)
- *Exascale Computing*: $272.6 million (+83%)
- *Grid Modernization*: $356 million (+81.5%)
- *Subsurface Technology and Engineering*: $244 million (+45%)
- *Supercritical CO2*: $43.6 million (+44%)
- *Cybersecurity*: $306.3 million (-1.6%)

Science and Energy

- *Office of Science*: $5.34 billion (+5.4%)

- *Energy Efficiency and Renewable Energy*: $2.7 billion (+42.3%)
  - Vehicle Technologies: $444 million (+58.6%)
  - Bioenergy Technologies: $246 million (+9.3%)
  - Hydrogen and Fuel Cell Technologies: $103 million (+6.2%)
  - Solar Energy: $336.7 million (+44.5%)
  - Wind Energy: $145.5 million (+36%)
  - Water Power: $67 million (+9.8%)
  - Geothermal Technology: $96 million (+74.5%)
  - Advanced Manufacturing: $404 million (+102%)
  - Federal Energy Management Program: $43 million (+59.6%)
  - Building Technologies: $264 million (+53.5%)
  - Weatherization and Intergovernmental Programs: $318.5 million (+31.1%)
  - Corporate Support: $255.2 million (+7.7%)

- *Electricity Delivery and Energy Reliability*: $270.1 million (+83.4%)
  - Clean Energy Transmission and Reliability: $40 million (+16.7%)
  - Smart Grid R&D: $30 million (+94.3%)
  - Cybersecurity for Energy Delivery Systems: $52 million (+13%)

[5] For links to the offices and descriptions of activities, see DOE Offices.
[6] For DOE budget materials, see DOE FY 2016 Budget (Justification and Supporting Documents); President's FY 2016 Budget Department of Energy.

- Energy Storage: $21 million (+75%)
- Infrastructure Security and Energy Restoration: $14 million (+133.3%)
- National Electricity Delivery: $7.5 million (+25%)
- Program Direction: $32.6 million (+18.1%)
- Transformer Resilience and Advanced Components: $10 million (n/a)
- State Energy Reliability and Assurance Grants: $63 million (n/a)

- *Fossil Energy Programs*: $842.1 million (+6.4%)
  - Fossil Energy Research and Development: $560 million (-0.1%)
    - Carbon Capture : $116.6 million (+32.5%)
    - Carbon Storage : $108.8 million (+8.8%)
    - Advanced Energy Systems (coal): $39.4 million (-61.8%)
    - Cross Cutting Research (coal): $51.2 million (+4.6%)
    - NETL Coal R&D: $34 million (-31.9%)
    - Natural Gas Technologies: $44 million (+75.2%)
    - Fossil Energy Environmental Restoration: $8.2 million (+39%)
    - Plant and Capital Equipment: $18 million (+14.3%)
    - Super Computer: $5.5 million (n/a)
    - Program Direction: $114.2 million (-4%)
  - Strategic Petroleum Reserve: $257 million (+28.5%)
  - Northeast Home Heating Oil Reserve: $7.6 million (+375%)
  - Naval Petroleum and Oil Shale Reserves: $17.5 million (-12.3%)

- *Office of Nuclear Energy*: $907.6 million (+8.9%)
  - Nuclear Energy Enabling Technologies: $86.4 million (-14.5%)
  - Reactor Concepts R&D: $108.1 million (-18.7%)
  - Fuel Cycle R&D: $217.8 million (+10.5%)
  - SMR Licensing Technical Support: $62.5 million (+14.7%)
  - Supercritical Transformational Electric Power Generation (STEP) R&D: $5 million (+0%)

Management and Performance

- *Environmental Management*: $5.8 billion (-0.7%)
- *Office of Legacy Management*: $167.2 million (-2.7%)
- *Management:* $76.2 million (+21.1%)
- *Hearing and Appeals*: $5.5 million (+0.1%)
- *Economic Impact and Diversity*: $10 million (+11.1%)

Corporate Management

- *Congressional and Intergovernmental Affairs*: $6.3 million (+34%)
- *International Affairs*: $23.6 million (+81.5%)
- *Energy Policy and Systems Analysis*: $35 million (+12.2%)

Nuclear Security

- *National Nuclear Security Administration (NNSA)*: $12.6 billion (+10.2%)

- Weapons Activities: $8.8 billion (+8.1%)
- Defense Nuclear Nonproliferation: $1.9 billion (+20.1%)
- Naval Reactors: $1.37 billion (+11.5%)
- Federal Salaries and Expenses[7]: $402.6 million (+8.9%)

Credit Programs

- *Innovative Technology Loan Guarantee Program*: $0 (-100% or $17 million)
- *Advanced Technology Vehicles Manufacturing Loan Program*: $6 million (+50%)

Other Offices and Programs

- *Advanced Research Projects Agency-Energy (ARPA-E)*: $325 million (+16.1%)
- *Energy Information Administration (EIA)*: $131 million (+12%)
- *Power Marketing Administrations*: $82 million (+2%)
- *Federal Energy Regulatory Commission*: $-23.6 million (+17.2%)
- *Defense Environmental Cleanup*: $5.5 billion (+1.4%)
- *Non-Defense Environmental Cleanup*: $220.2 million (-10.5%)
- *Uranium Enrichment Decontamination & Decommissioning Fund*: $542.3 million (-13.2%)
- *Departmental Administration*: $153.5 million (+22.7%)
- *Office of the Inspector General*: $42.4 million (+14.6%)
- *Environment, Health, Safety and Security*: $183.8 million (+1.6%)

B. Quadrennial Energy Review

On January 9, 2014, President Obama issued a Presidential Memorandum establishing a Quadrennial Energy Review (QER) Task Force to review existing energy policies in the context of current economic, environmental, and security conditions and provide recommendations for additional executive and legislative actions, as well as establishing priorities for research and development. The QER Task Force is co-chaired by the Director of the Office of Science and Technology Policy and the Special Assistant to the President for Energy and Climate Change, and includes the heads of many other executive agencies and departments, with DOE providing support for inter-agency coordination.

The first QER report, to be delivered in the first quarter of 2015, will focus on the variety of challenges facing the nation's energy transmission, storage and distribution system. Over the past year, DOE has hosted 13 meetings to allow for expert, stakeholder and public input in the preparation of the QER and will make all comments publicly available. DOE's Office of Energy Policy and Systems Analysis (EPSA) serves as the coordinating office for the QER and DOE's FY 2015 budget requested a 100%, or a $19.3 million, increase for EPSA over FY 2014 enacted levels.

[7] Formerly Office of the Administrator.

IV. ISSUES

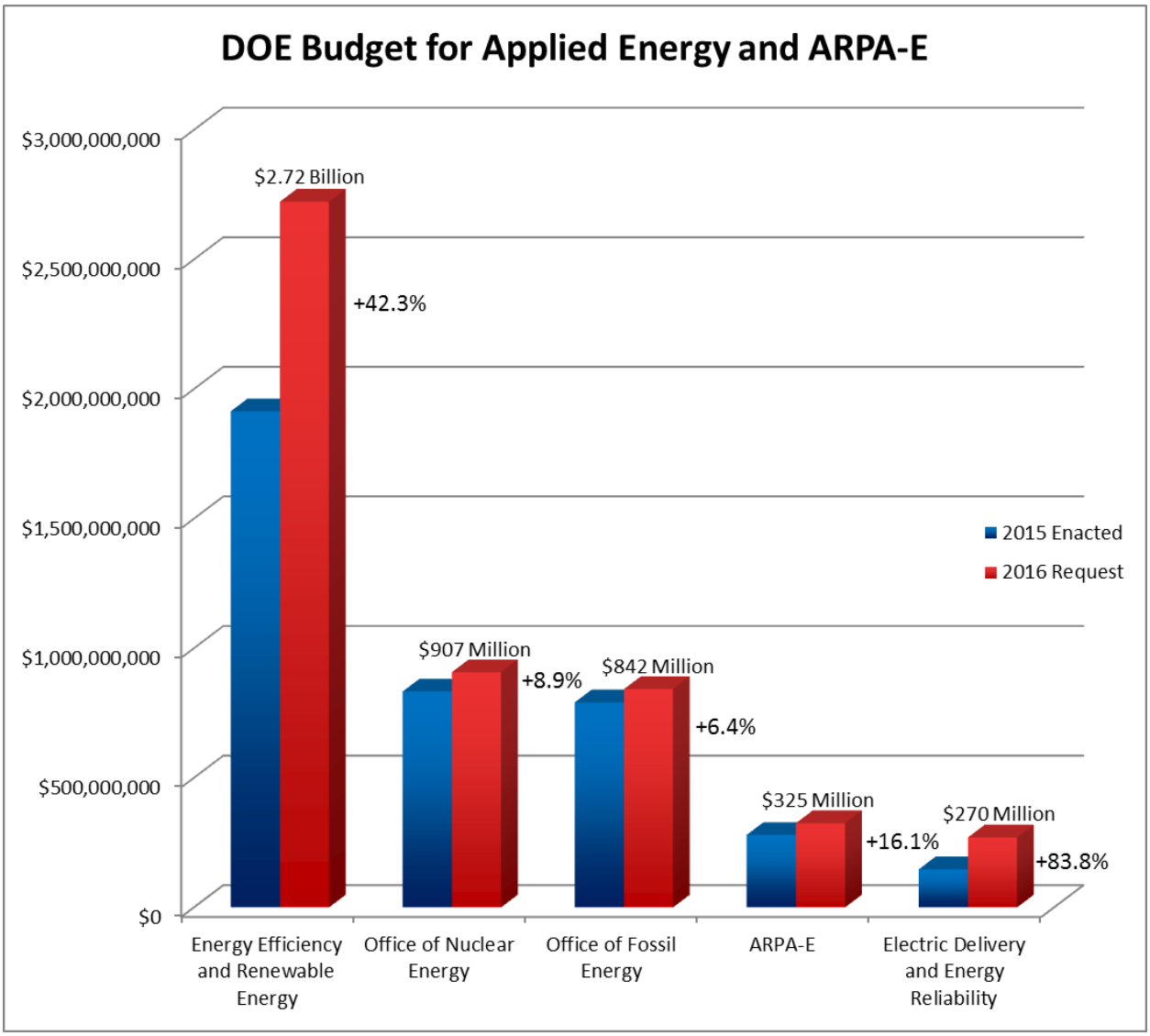
The following issues may be examined at the hearing:

- Funding priorities;
- Major budget changes;
- Energy-related rulemakings;
- Priority science and research;
- Loans and grants; and
- Management and security reforms.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Tom Hassenboehler, Patrick Currier, or Peter Spencer of the Committee staff at (202) 225-2927.

APPENDIX


DOE Budget for Applied Energy and ARPA-E
$3,000,000,000
$2,500,000,000
$2,000,000,000
$1,500,000,000
$1,000,000,000
$500,000,000
$0
$2.72 Billion
+42.3%
$907 Million
+8.9%
$842 Million
+6.4%
$325 Million
+16.1%
$270 Million
+83.8%
2015 Enacted
2016 Request
Energy Efficiency and Renewable Energy
Office of Nuclear Energy
Office of Fossil Energy
ARPA-E
Electric Delivery and Energy Reliability