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

April 10, 2018

TO: Members, Subcommittee on Energy

FROM: Committee Majority Staff

RE: Hearing entitled "The Fiscal Year 2019 Department of Energy Budget"

On Thursday, April 12, 2018, at 10:00 a.m. in 2123 of the Rayburn House Office Building, the Subcommittee on Energy will hold a hearing on the U.S. Department of Energy's budget request for Fiscal Year (FY) 2019.

I. WITNESS

- **The Honorable Rick Perry**, Secretary, U.S. Department of Energy,
  accompanied by The Honorable John Vonglis, Chief Financial Officer.

II. BACKGROUND

The U.S. Department of Energy is one of the more diverse Cabinet agencies: it performs critical nuclear weapons, national security, and energy security missions; maintains world-class scientific, technological, and engineering capabilities; operates as the largest non-Defense Department contracting agency in the federal government; and manages some of the most challenging environmental remediation projects in the world.

The Department traces its origins and core nuclear weapons, scientific, and technological missions to the Manhattan Project and subsequently, to the Atomic Energy Commission, which was established by the Atomic Energy Act of 1946, as amended in 1954.[1] By the early 1970s, concerns about domestic energy supplies and shortages led to more focused attention on energy research and development, as well as regulatory interventions to ensure reliable and affordable energy supplies.[2] By 1977, in response to the continued energy concerns of the time, Congress and the Administration sought to develop a structure for implementing a coherent national energy policy. As a result, Congress enacted the Department of Energy Organization Act to establish DOE in its current form.[3] The new agency consolidated the core nuclear weapons and R&D

[1] *See* Atomic Energy Act of 1954 (42 U.S.C. § 2011 et seq.). The Act established the nation's policy of civilian control of nuclear energy, which maintained 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." It served as a guiding policy for civilian nuclear power development in the United States and export of U.S. nuclear technology internationally.

[2] In light of the changing energy policy demands, Congress disbanded the Atomic Energy Commission in 1975 and transferred its nuclear regulatory functions to a newly established Nuclear Regulatory Commission and its defense and R&D programs moved with other federal energy research programs to a new agency, the Energy Research and Development Organization.

[3] See Department of Energy Organization Act (August 4, 1977); see also 42 U.S.C Chapter 84.

programs of its predecessor agencies with other energy-related programs from throughout the federal government into a single department under the authority of a single Cabinet Secretary.[4]

Today, the Secretary of Energy is responsible for a broad range of national security, scientific, and environmental activities, including maintenance of the nation's nuclear weapons deterrent, supporting the United States' international nonproliferation programs, and nuclear propulsion work for the U.S. Navy. The Secretary oversees environmental cleanup of the nuclear weapons complex, and management and disposal of commercial and DOE-owned spent nuclear fuel and high-level radioactive waste.

The Department supports and conducts basic science research and advanced computing research, promotes scientific and technical innovation, energy conservation, and energy-related research. It maintains the Strategic Petroleum Reserve (SPR) and conducts programs to ensure domestic energy security, reliability, and resilience. It conducts regulatory programs and provides a central energy data collection and analysis program through the Energy Information Administration.[5]

The Secretary oversees the Department's performance of these various missions through a nationwide enterprise that is comprised of 64 sites across 29 states and the District of Columbia, including 17 National Laboratories. (See Attached.) Roughly 13,500 federal employees and 96,000 contractors execute these missions.[6]

On February 12, 2018, President Trump proposed a budget of $30.6 billion for DOE for FY 2019 (October 1, 2018 to September 30, 2019).[7] The budget requests a 1.7 percent increase, or $499.7 million, above the FY 2017 enacted level. The Omnibus appropriations bill, signed by President Trump on March 23, provides a total of $34.5 billion for the Department in FY 18—$3.9 billion or 12.8 percent more than the FY 2019 request.[8] The FY 2019 request provides $2.5B for energy and related programs. The budget proposes to split the Electricity Delivery and Reliability account into two separate accounts to increase focus on grid reliability. The new second account for Cybersecurity, Energy Security, and Emergency Response (CESER) would consolidate funding to execute the expanded emergency and cybersecurity responsibilities assigned to DOE. FY 2019 funding requests for select offices and programs are summarized below. (References to the general percentage increase or decrease from the FY 2018 enacted levels are provided for general program areas.)

Nuclear Security

National Nuclear Security Administration (NNSA): $15.1 billion (+$373 million or +2.53 percent)

Weapons Activities: $11 billion

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[4] See A Brief History of the Department of Energy" and "The Institutional Origins of the Department of Energy" available at energy.gov

[5] For links to the offices and descriptions of activities, see DOE Offices.

[6] See Fiscal Year 2016 Agency Financial Report.

[7] For DOE budget materials, see DOE FY 2019 Budget (Justification and Supporting Documents)

[8] H.R. 1625, Consolidated Appropriations Act, 2018 (P.L. 115-141).

Defense Nuclear Nonproliferation: $1.9 billion
Naval Reactors: $1.8 billion
Federal Salaries and Expenses: $423 million

Science
Office of Science: $5.4 billion (-$869 million or -13.9 percent)

Energy
Energy Programs total: $2.5 billion (-$2.9 billion or -57.1 percent)

Energy Efficiency and Renewable Energy: $696 million (-$1.6 billion or -70 percent)
Vehicle Technologies: $68.5 million
Bioenergy Technologies: $37 million
Hydrogen and Fuel Cell Technologies: $58 million
Solar Energy: $67 million
Wind Energy: $33 million
Water Power: $45 million
Geothermal Technology: $30 million
Advanced Manufacturing: $75 million
Federal Energy Management Program: $10 million
Building Technologies: $57 million
Weatherization and Intergovernmental Programs: $0
Corporate Support: $215 million

Electricity Delivery[9]: $61.3 million(see footnote)
Transmission Reliability and Resilience[10]: $13 million
Resilient Distribution Systems[11]: $10 million
Energy Storage: $8 million
Transformer Resilience and Advanced Components: $5 million
Transmission Permitting and Technical Assistance[12]: $6 million
Program Direction: $19.3 billion

Cybersecurity, Energy Security, and Emergency Response: $95 million
Infrastructure Security and Energy Restoration: $18 million
Cybersecurity for Energy Delivery Systems: $70 million
Program Direction: $7.8 million

Fossil Energy Research and Development: $502 million (-$224.8 million or -30.9 percent)
Advanced Energy Systems: $175 million

[9] Formerly Electricity Delivery and Energy Reliability (now split into Electricity Delivery and Cybersecurity, Energy Security, and Emergency Response). The combined budget request for these two programs is -$91 million or 36.7% less than the FY2018 enacted budget.
[10] Formerly Clean Energy Transmission and Reliability
[11] Formerly Smart Grid R&D
[12] Formerly National Electricity Delivery

Cross Cutting Research: $53.3 million
Carbon Capture, Utilization, and Storage[13]: $40 million
STEP (Supercritical CO2): $25 million
Transformational Coal Pilots: $0
NETL Coal Research and Development: $50 million
Natural Gas Technologies: $5.5 million
Unconventional Fossil Energy Technologies: $14 million
Program Direction: $61 million
Special Recruitment Program: $200 million
NETL Infrastructure: $38 million
NETL Research and Operations: $40 million

Fossil Energy Petroleum Accounts: $482.2 million (-$139.6 million or -22.5 percent)
Strategic Petroleum Reserve: $175.1 million
Northeast Home Heating Oil Reserve: $10 million
Naval Petroleum and Oil Shale Reserves: $10 million
Energy Security and Infrastructure Modernization Fund: $300 million

Office of Nuclear Energy: $757.1 million (-$448 million or -37 percent)
Nuclear Energy Enabling Technologies: $116 million
Reactor Concepts R&D: $163 million
Fuel Cycle R&D: $60 million
SMR Licensing Technical Support: $0
Integrated University Program: $0
STEP R&D: $0
Radiological Facilities Management: $9 million
Idaho Facilities Management: $204 million
Idaho Sitewide Safeguards and Security: $136.1 million
International Nuclear Energy Cooperation: $2.5 million
Program Direction: $66.5 million

Yucca Mountain and Interim Storage Programs: $120 million

Loan Programs
Innovative Technology Loan Guarantee Program: $7 million
Advanced Technology Vehicles Manufacturing Loan Program: $1 million

Advanced Research Projects Agency - Energy: $0

Power Marketing Administrations: $77 million

Environmental Cleanup
Environmental Management: $6.6 billion (+$315 million or +5 percent)

[13] Formerly two separate programs: Carbon Capture and Carbon Storage

Office of Legacy Management: $158.9 million

Misc Management, Offices, Programs
Departmental Administration: $139.5 million (net)
Office of the Inspector General: $51.3 million (+$2.3 million or +4.7 percent)
Energy Information Administration (EIA): $115 million (-$10 million or -8 percent)

III. ISSUES

The following issues may be examined at the hearing:

- Funding priorities;
- Major budget changes;
- Cybersecurity and emergency response;
- National energy policy and energy reliability priorities;
- Management and security reforms.

IV. STAFF CONTACT

If you have any questions regarding the hearing, please contact Mary Martin, Brandon Mooney, or Peter Spencer of the Committee staff at (202) 225-2927.

Attachment 1

DOE Laboratories, Plants, and other Field Sites

*** Federal Field/ Site Offices are co-located with many of the DOE locations listed**
Indicates DOE National Laboratory

Alaska
1. Arctic Energy Office

California
2. Energy Technology Engineering Center
3. Lawrence Berkeley National Laboratory
4. Lawrence Livermore National Laboratory
5. Sandia National Laboratories
6. SLAC National Accelerator Laboratory

Colorado
7. Grand Junction Office
8. National Renewable Energy Laboratory
9. Western Area Power Administration

Connecticut
10. Northeast Home Heating Oil Reserves

District of Columbia
11. DOE Headquarters – Forrestal Building

Georgia
12. Southeastern Power Administration

Idaho
13. Idaho National Laboratory
14. Radiological Environmental Sciences Laboratory

Illinois
15. Argonne National Laboratory
16. Chicago Office
17. Fermi National Accelerator Laboratory

Iowa
18. Ames Laboratory

Kentucky
19. Paducah Gaseous Diffusion Plant

Louisiana
20. Strategic Petroleum Reserve - West Hackberry Site
21. Strategic Petroleum Reserve - Bayou Choctaw Site
22. Strategic Petroleum Reserve Project Management Office
23. St. James Terminal

Maine
24. Northeast Gasoline Supply Reserve

Maryland
25. DOE Headquarters – Germantown Campus

Massachusetts
26. Northeast Gasoline Supply Reserve
27. Northeast Home Heating Oil Reserve

Missouri
28. Kansas City National Security Campus

Nevada
29. Nevada National Security Site

New Jersey
30. Northeast Home Heating Oil Reserve
31. Princeton Plasma Physics Laboratory

New Mexico
32. Inhalation Toxicology Research Institute
33. Los Alamos National Laboratory
34. National Training Center
35. NNSA Albuquerque Complex
36 Sandia National Laboratory
37. Waste Isolation Pilot Plant

New York
38. Separations Process Research Unit
39. Northeast Gasoline Supply Reserve
40. Brookhaven National Laboratory
41. Knolls Atomic Power Laboratory
42. West Valley Demonstration Project

Ohio
43. EM Consolidated Business Center
44. Portsmouth Gaseous Diffusion Plant

Oklahoma
45. Southwestern Power Administration

Oregon
46. Bonneville Power Administration
47. National Energy Technology Laboratory – Albany

Pennsylvania
48. Bettis Atomic Power Laboratory
49. National Energy Technology Laboratory – Pittsburgh

South Carolina
50. Savannah River National Laboratory
51. Savannah River Operations Office

Tennessee
52. East Tennessee Technology Park
53. Oak Ridge National Laboratory
54. Office Scientific and Technical Information
55. Y-12 Plant

Texas
56. Strategic Petroleum Reserve - Big Hill Site
57. Strategic Petroleum Reserve - Bryan Mound Site
58. Pantex Plant
59. National Energy Technology Laboratory - Sugar Land

Utah
60. Moab UMTRA Project

Virginia
61. Thomas Jefferson National Accelerator Facility

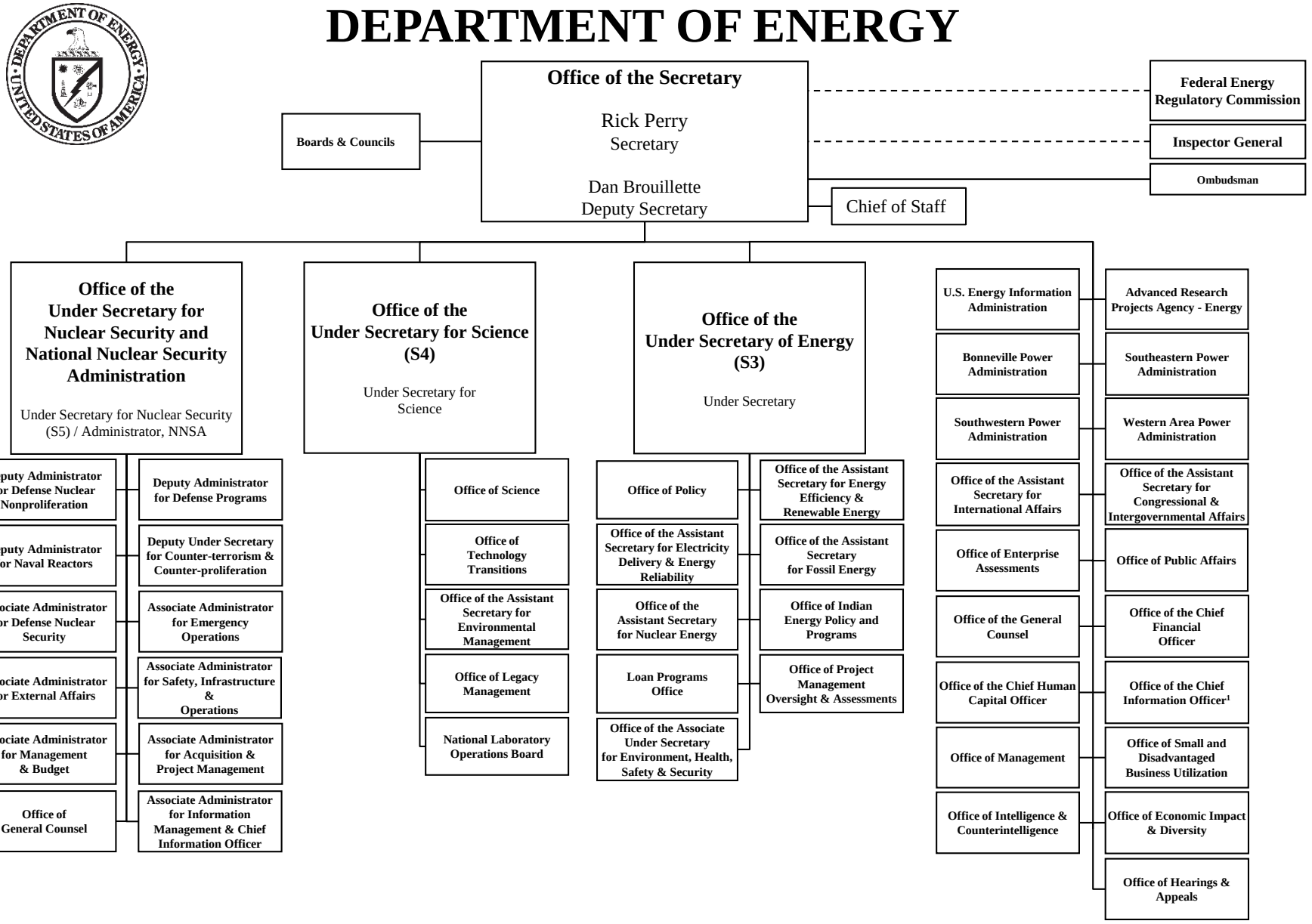
Washington
62. Hanford
63. Pacific Northwest National Laboratory

West Virginia
64. National Energy Technology Laboratory – Morgantown

* EFFECTIVE DATE: NOVEMBER 2016

Source: DOE Cabinet Exit Memo, 2017

DEPARTMENT OF ENERGY



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