

MEMORANDUM May 9, 2023

TO: Members of the Subcommittee on Energy, Climate, and Grid Security

FROM: Committee Majority Staff

RE: Hearing entitled "The Fiscal Year 2024 Department of Energy Budget"

I. INTRODUCTION

On Thursday, May 11, 2023, at 2:00 p.m. in 2123 Rayburn House Office Building, the Subcommittee on Energy, Climate, and Grid Security will hold a hearing on the U.S. Department of Energy's budget request for Fiscal Year (FY) 2024.

II. WITNESSES

• The Honorable Jennifer Granholm, Secretary, U.S. Department of Energy.

III. BACKGROUND

The U.S. Department of Energy (DOE) 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. 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

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.

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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 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, a member of the National Security Council (NSC), 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) to assure fuel supply security. It conducts programs to ensure domestic energy security, reliability, and resilience, including work to secure U.S. energy infrastructure against all hazards, reduce the risks and impacts of cyber threats, and lead energy response and restoration activities. It conducts regulatory programs, including oversight and permitting for certain natural gas exports, and provides a central energy data collection and analysis program through the Energy Information Administration (EIA).⁵

The Secretary oversees the Department's performance of these various missions through a nationwide enterprise that is comprised of 84 sites across 29 states and the District of Columbia, including 17 National Laboratories. Roughly 15,200 federal employees and 121,000 contractors execute these missions.⁶

The Biden Administration's proposed a budget of \$51.99 billion for DOE for FY 2024. The budget requests a \$6.2 billion increase, or 13.6 percent, above the FY 2023 enacted level. Since FY 2021, DOE's budget has increased some \$12.4 billion, or 31 percent.

In addition to the current request, DOE is implementing the Infrastructure Investment and Jobs Act (P.L. 117-58), which provided advanced, five-year appropriations of \$62 billion and authorized 56 new programs, and the Inflation Reduction Act (P.L. 117-169), which provided advanced, multi-year appropriations of \$35 billion and authorized 15 new programs.

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.

⁴ See <u>A Brief History of the Department of Energy</u>" and "The Institutional Origins of the Department of Energy" available at energy.gov

⁵ For links to the offices and descriptions of activities, see <u>DOE Offices</u>.

⁶ See <u>Fiscal Year 2022 Agency Financial Report</u>.

⁷ For DOE budget materials, see DOE FY 2024 Budget (Justification and Supporting Documents)

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FY 2024 funding requests for select offices and programs are summarized below. (References to the general percentage increase or decrease from the FY 2023 enacted levels are provided for general program areas.)

Nuclear Security

National Nuclear Security Administration (NNSA): \$23.8 billion (+\$1.7 billion or +7.6 percent)

Weapons Activities: \$18.8 billion

Defense Nuclear Nonproliferation: \$2.5 billion

Naval Reactors: \$1.9 billion

Federal Salaries and Expenses: \$538 million

Science

Office of Science: \$8.8 billion (+\$700 million or +8.65 percent)

Energy

Energy Programs total: \$9.4 billion

Energy Efficiency and Renewable Energy: \$3.8 billion (+\$366 million or +10.6 percent)

Vehicle Technologies: \$527 million Bioenergy Technologies: \$323 million

Hydrogen and Fuel Cell Technologies: \$163 million Renewable Energy Grid Integration: \$59 million

Solar Energy: \$379 million Wind Energy: \$385 million Water Power: \$230 million

Geothermal Technology: \$216 million

Advanced Materials & Manufacturing Technologies: \$242 million

Industrial Efficiency & Decarbonization: \$394 million

Building Technologies: \$348 million Corporate Support: \$215 million

Electricity: \$297 million (+\$12 million or +4.3 percent)
Transmission Reliability and Resilience: \$43 million
Energy Delivery Grid Operations Technology: \$30 million

Resilient Distribution Systems: \$47 million

Cyber Resilient and Secure Utility Communications Networks: \$15 million

Energy Storage Research: \$78.6 million

Transformer Resilience and Advanced Components: \$21.7 million

Applied Grid Solutions: \$\$29.7 million

Electricity Innovation and Transition: \$14 million

Program Direction: \$18.6 million

Office of Clean Energy Demonstrations: \$215 million (+\$126 million or +141 percent)

Clean Energy Demonstrations: \$170 million

Program Direction: \$45 million

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Cybersecurity, Energy Security, and

Emergency Response (CESER): \$245 million (+\$45 million or +23 percent)

Risk Management Technology and Tools: \$135 million

Response and Restoration: \$39 million

Preparedness, Policy, and Risk Analysis: \$39 million

Program Direction: \$32.5 million

Petroleum Accounts (under CESER): \$301 million (+\$74 million or +32.5 percent)

Strategic Petroleum Reserve⁸: \$281 million Northeast Home Heating Oil Reserve: \$7 million Naval Petroleum and Oil Shale Reserves: \$13 million

Energy Security and Infrastructure Modernization Fund: \$300 million

Fossil Energy and Carbon Management: \$905 million (+\$15.5 million or +1.7 percent)

Carbon Management Technologies:

Hydrogen with Carbon Management: \$85 million Carbon Transport and Storage: \$110 million Carbon Dioxide Removal: \$70 million Carbon Dioxide Conversion: \$50 million Point-Source Carbon Capture: \$144 million

Supercritical Transformational Electric Power (STEP): \$0 million

Resource Sustainability:

Advanced Remediation Technologies: \$13 million Methane Mitigation Technologies: \$100 million

Natural Gas Decarbonization and Hydrogen Technologies: \$20 million

Mineral Sustainability: \$45 million Analysis and Engagement: \$1 million Energy Asset Transformation: \$6 million University Training and Research: \$19 million

Special Recruitment: \$1 million Program Direction: \$92 million

National Energy Technology Laboratory (NETL) Infrastructure: \$55 million

NETL Research and Operations: \$89 million

Office of Nuclear Energy: \$1.6 billion (-\$210 million or -11.9 percent)

Nuclear Energy University Programs: \$147 million

Reactor Concepts RD&D: \$423 million

Nuclear Energy Enabling Technologies: \$96 million

Fuel Cycle R&D: \$60 million

Advanced Reactor Demonstration Program \$203 million

Infrastructure: \$319 million

Idaho Sitewide Safeguards and Security: \$178 million International Nuclear Energy Cooperation: \$13 million

⁸ Includes Facilities Development and Operations, at requested \$234 million; SPR operations, at \$30.7 million; and Northeast Gasoline Supply Reserve, at \$16 million.

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Program Direction: \$85.5 million

Nuclear Waste Fund Oversight: \$12 million (+\$1.8 million or +18 percent)

Indian Energy Policy and Programs: \$110 million (+\$35 million or +47 percent)

Loan Programs

Title XVII Loan Guarantee Program: \$70 million (offset by \$196 million in collections) Advanced Technology Vehicles Manufacturing Loan Program: \$13 million Tribal Energy Loan Guarantee Program: \$6 million

Advanced Research Projects Agency - Energy: \$650 million (+\$180 million or +38 percent)

Power Marketing Administrations: \$111.5 million (no significant change)

Federal Energy Management Program: \$82 million (+\$25 million or +31 percent)

Grid Deployment Office: \$106 million

Manufacturing and Energy Supply Chains: \$179.5 million (+\$160.5 million or +845 percent)

Office of State and Community Programs⁹: \$705 million (+\$212 million or +43 percent)

Environmental Cleanup

Environmental Management: \$8.3 billion (+\$17 million or + 0.2 percent) Office of Legacy Management: \$196.3 million (+\$5 million or +3 percent)

Miscellaneous Management, Offices, Programs

Departmental Administration: \$433 million, net: (+\$150 million or +53 percent)
Office of the Inspector General: \$165 million (+\$79 million or +92 percent)
Energy Information Administration (EIA): \$156.5 million (+\$21.5 million or +16 percent)
Environment, Health, Safety, and Security: \$231 million (+\$15.7 million or +7 percent)
Office of Enterprise Assessments¹⁰: \$94 million (+\$8.7 million or +10 percent)
Office of Hearings and Appeals: \$4.5 million (no significant change)
Office of Technology Transitions: \$56.5 million (+\$34 million or +156 percent)

IV. ISSUES

The following issues may be examined at the hearing:

- Funding priorities;
- DOE mission priorities;

⁹ Implements the Weatherization Assistance Program, State Energy Program, Community Energy Programs, Energy Future Grants.

¹⁰ This office conducts independent oversight of safety and security of DOE operations for the Secretary.

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- Major budget changes;
- National energy policy and energy reliability priorities; and
- Management generally.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Mary Martin, Brandon Mooney, Peter Spencer, and Jake McCurdy of the Committee staff at (202) 225-3641.