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House Armed Services Subcommittee on Strategic Forces Hearing
"Fiscal Year 2017 Budget Request for Atomic Energy Defense Activities"

(2:00 PM)

[Visit website.](#)

February 2016

President's 2017 Budget Proposal for DOE Supports Energy Innovation, National Security, Nuclear Management Responsibilities

DOE Press Release

February 9, 2016

[LINK](#)

For full FY17 budget request materials, [click here](#).

For the Department's FY17 budget request fact sheet, [click here](#).

For the White House's Mission Innovation fact sheet, [click here](#).

WASHINGTON – President Barack Obama's final budget proposal for the Department of Energy includes a significant increase in clean energy R&D needed to drive economic growth, ensure energy security and reduce greenhouse-gas emissions. The President's budget proposal includes continued investments in DOE's core missions of scientific research, national and energy security, and cleaning up the environmental legacy of the Cold War.

Energy Secretary Ernest Moniz today said the President's fiscal year (FY) 2017 budget reaffirms President Obama's commitment to Mission Innovation, an agreement made by the United States and 19 other countries to double clean energy R&D over five years. The request puts forward \$5.85 billion in discretionary funding for clean energy R&D at DOE, a 21 percent increase from FY 2016, including increases for DOE's innovation incubator ARPA-E (Advanced Research Projects Agency-Energy) and the creation of new regional partnerships that will drive breakthroughs at research universities, labs, and companies across America.

The budget proposal demonstrates the administration's commitment to all sources of clean energy and includes increased investments across renewable sources, advanced transportation, nuclear energy, carbon capture and storage, and advanced manufacturing.

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Senate Armed Services
Subcommittee on
Strategic Forces
Hearing
**"Department of
Energy Atomic Energy
Defense Activities and
Program"**
(2:30 PM)
[Visit website.](#)

August 2016

9-10

Third Annual
Intermountain
Energy Summit
Idaho Falls, ID
[Visit website.](#)

September 2016

14-15

DOE National Cleanup
Workshop
Hilton Alexandria Mark
Center
Alexandria, VA
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“The President’s budget request would accelerate American energy innovation, increase our energy and national security, and expand our commitment to science and research,” said Secretary Moniz. “It also reflects DOE’s continuing commitment to maintain our nuclear deterrent, secure vulnerable nuclear material, and clean up our Cold War legacy.”

Overall, the FY 2017 budget request for DOE represents a 10 percent increase above the FY 2016 enacted level, reflecting the importance of DOE’s work enabling the transition to a low-carbon secure energy future, and leading America’s research for discovery and innovation. It also continues important work to protect public health and safety through the Department’s commitment to cleaning up past nuclear weapons production while also maintaining a safe, secure, and effective nuclear weapons stockpile and advancing the President’s commitment to controlling and eliminating nuclear materials worldwide.

As part of the United States’ commitment to Mission Innovation, the U.S. government will seek to double the \$6.4 billion that Congress provided in FY 2016 for clean energy R&D to \$12.8 billion in FY 2021. The FY 2017 budget makes good on this commitment by proposing \$7.7 billion in discretionary funding for clean energy R&D across 12 agencies, an increase of about 20 percent. DOE’s proposed FY 2017 clean energy R&D budget of \$5.85 billion represents 76 percent of Mission Innovation investments.

The budget also proposes the creation of the ARPA-E Trust, which creates the needed funding stream to allow ARPA-E to expand its scope to address larger scale, more complex energy challenges than can be currently supported under its already successful program. The proposed trust would provide \$150 million in FY 2017 and a total of \$1.85 billion over five years to ARPA-E, increasing ARPA-E’s total budget by 70 percent from \$291 million to \$500 million.

To complement a national R&D effort, the budget also proposes new “Regional Clean Energy Innovation Partnerships,” creating up to 10 centers that will engage universities, industries, investors, labs and others to work toward technology-neutral clean energy breakthroughs that support regional needs.

The budget request also includes \$12.9 billion for the nuclear security program managed by the National Nuclear Security Administration, \$357 million over the 2016 enacted level, that will support implementation and monitoring of the Joint Comprehensive Plan of Action with Iran to prevent that country from building a nuclear weapon, along with DOE’s core activities of maintaining a safe and secure nuclear deterrent and preventing the proliferation of nuclear material.

Other highlights of the FY 2017 budget include:

- \$6.1 billion for Environmental Management to address the obligation to clean up the nuclear legacy of the Cold War, including \$271 million to maintain critical progress toward returning the Waste Isolation Pilot Plant to normal operations, with the goal of restarting limited operations in 2016.
- \$5.67 billion for Science to continue to lead basic research in the physical sciences and develop and operate cutting-edge scientific user facilities while strengthening the connection between advances in fundamental science and technology innovation.
- \$2.89 billion, an increase of 40 percent, for Energy Efficiency and Renewable Energy to continue a diverse suite of sustained investment in development of renewable generation technologies, sustainable transportation technologies, and manufacturing technologies; and in efforts to enhance energy efficiency in our homes, buildings and industries.
- \$1.3 billion for 21st Century Clean Transportation to expand investment in transportation technologies of the future, establish regional fueling infrastructure to support the deployment of low-carbon fuels, and accelerate the transition to a cleaner vehicle fleet.

- \$994 million for Nuclear Energy to support vital ongoing R&D in advanced reactor technology as part of a low-carbon future.
- \$600 million for DOE's Fossil Energy program to advance carbon capture and storage and natural gas technologies, and \$257 million for the Strategic Petroleum Reserve to increase the system's durability and reliability and begin addressing the backlog of deferred maintenance.
- \$262 million for Electricity Delivery and Energy Reliability grid modernization activities to support a smart, resilient electric grid for the 21st century and fund critical emergency response and grid security capabilities.
- \$8.4 million for the Office of Technology Transitions to help get technologies out of National Laboratories and to the market.

National Nuclear Security Administration Highlights FY'17 Budget Request

NNSA Press Release

February 9, 2016

[LINK](#)

The U.S. Department of Energy's (DOE) National Nuclear Security Administration (NNSA) today released details of its portion of the President's FY 2017 Budget Request. The President's \$12.9 billion FY 2017 Budget Request for NNSA represents an increase of \$357 million—or 2.9 percent—above the FY 2016 appropriation, affirming the Administration's continued commitment to NNSA's enduring missions: maintaining a safe, secure, and effective nuclear deterrent; reducing the threat posed by nuclear proliferation and terrorism; and providing safe and effective nuclear propulsion for the U.S. Navy.

"The FY 2017 Budget Request is a strong endorsement of NNSA's vital and enduring missions, and is indicative of the Administration's unwavering commitment to a strong national defense," said Lt. Gen. Frank G. Klotz (Ret.), Administrator of NNSA and Under Secretary for Nuclear Security.

“Investments in modernization of our nuclear enterprise; implementation of our long-term stockpile stewardship strategy; and the continued strength of our nonproliferation, prevention, and response capabilities are critical to carrying out our missions.”

Budget Highlights:

The Defense Programs FY 2017 Budget Request (\$9.2 billion) is 4.5 percent above the FY 2016 appropriation to meet the Administration’s requirements for the programs and capabilities necessary to sustain the nation’s nuclear weapons stockpile. The Budget Request will allow NNSA to:

- Complete production of the W76-1 by 2019; deliver the B61-12 gravity bomb’s First Production Unit (FPU) by 2020; deliver the W88 Alt 370 (with conventional high explosives refresh) FPU by 2019; and maintain the 2025 date for the W80-4 warhead FPU.
- Collaborate with DOE’s Office of Science to develop exascale-class high performance computing.
- Make strides in recapitalizing the aging research and production infrastructure and capabilities, including the Chemistry and Metallurgical Research Replacement (CMRR) Facility project, at the Los Alamos National Laboratory in N.M., to support our plutonium strategy, and the Uranium Processing Facility at the Y-12 Facility at Oak Ridge, Tenn.
- Address the highest infrastructure risks and halt growth of deferred maintenance.
- Accelerate the dismantlement rate for weapons retired before 2009 by 20 percent.

The Defense Nuclear Nonproliferation (DNN) FY 2017 Budget Request (\$1.8 billion) is 6.8 percent below the FY 2016 appropriation. The DNN Budget Request includes all NNSA funding to prevent, counter, and respond to global nuclear dangers. The decrease for this fiscal year is possible due to prior year carryover balances available to execute some programs, and because less funding is required for MOX. The Budget Request will allow NNSA to:

- Continue technical support to the International Atomic Energy Agency to meet its safeguard and monitoring missions, including those associated with implementation of the Joint Comprehensive Plan of Action (the Iran Deal).
- Terminate the MOX fuel fabrication project and pursue a dilute and dispose approach as a faster, less expensive path to meeting the U.S. commitment to dispose of excess weapons grade plutonium.
- Advance technical capabilities to monitor foreign nuclear weapons program activities, diversion of special nuclear material, and nuclear detonations.
- Build international capacity to secure and prevent smuggling of nuclear and radiological material through equipment installations and upgrades, and capacity-building workshops and training.
- Strengthen DOE's emergency management system.

The Naval Reactors FY 2017 Budget Request (\$1.4 billion) is 3.2 percent above the FY 2016 appropriation to support the Navy's fleet of nuclear-powered aircraft carriers and submarines. The Budget Request will allow NNSA to:

- Continue development of the reactor for the Ohio-class submarine replacement.
- Continue refueling of the Land-Based Prototype reactor at the Kesselring site in New York.
- Complete design and initiate construction of a new Spent Fuel Handling Recapitalization Project at Naval Reactors Facility in Idaho.

Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, and effectiveness of the U.S. nuclear weapons stockpile without nuclear explosive testing; works to reduce the global danger from weapons of mass destruction; provides the U.S. Navy with safe

and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the U.S. and abroad.

Obama administration proposes Hanford budget cut next year

Tri-City Herald

February 9, 2016

[LINK](#)

The Obama administration is proposing spending less money on Hanford cleanup next year.

The White House sent Congress its federal budget request for fiscal 2017 on Tuesday, calling for an overall decrease in money spent nationwide for cleanup of defense sites like Hanford.

Sen. Patty Murray, D-Wash., called the proposed Hanford budget “inadequate” and “shortsighted.”

Sen. Maria Cantwell, D-Wash., wants funding to remain at least at current levels, according to her staff.

“The administration’s proposed FY 2017 budget cut for Hanford funding, and specifically the Richland Operations Office, would result in cleanup delays, increased total project costs and missed legal milestones within the River Corridor,” Newhouse said.

There was some disagreement about how deep the cuts at Hanford would be under the budget proposal. Murray’s office used documents from the White House to come up with a figure of \$287 million, almost all of it for the Department of Energy’s Richland Operations Office projects.

The Office of River Protection is responsible for underground tanks holding waste from the past production of weapons plutonium and the vitrification plant being built to treat the waste.

The Richland Operations Office is responsible for all other work, including cleanup of groundwater, digging up waste sites, decommissioning and demolishing contaminated buildings, and site-wide services.

Monica Regalbuto, the DOE assistant secretary for environmental management, said during a conference call that the proposed budget for the Richland Operations Office would drop by \$190 million from spending this year, but the budget for the Office of River Protection would increase by \$86 million.

Under that scenario, the Richland Operations Office would receive \$800 million.

That would be enough to finish demolishing the Plutonium Finishing Plant and place a cap over the slab that would be left on the ground. Planning would begin to look at options to move nearly 2,000 radioactive cesium and strontium capsules stored underwater in central Hanford into dry storage.

Work would continue at the high-hazard 618-10 Burial Ground just north of Richland, and preparations would be made toward cleaning up the highly radioactive spill beneath the 324 Building just north of Richland near the Columbia River.

The Tri-Cities area community wants actual cleanup of the spilled waste to proceed, not just preparations, said Gary Petersen, vice president of Hanford programs for the Tri-City Development Council.

Federal documents said cuts are proposed for the Richland Operations Office because of work that would be completed by then, including equipment

purchases for removing and repackaging radioactive sludge from the K West Basin and completion of other cleanup along the Columbia River.

However, the long-term plan for Hanford cleanup has been to shift cleanup focus to contaminated areas in central Hanford as cleanup along the Columbia River is completed.

At the Office of River Protection, the proposed budget would be almost \$1.5 billion, Regalbuto said.

Money for the vitrification plant would remain close to current spending at \$693 million under the proposal. Money for the tank farms would jump from \$724 million to \$807 million. Within the tank farm budget, \$73 million would be spent on a pretreatment facility with limited capabilities for low-activity radioactive waste.

The spending will advance plans for the vitrification plant to treat low-activity waste as early as 2022, long before full operation of the plant begins, including its much larger and more complex Pretreatment Facility.

The Hanford budget also includes money for infrastructure repairs, as environmental cleanup is expected to continue for decades to come.

Money is proposed to repair water lines, electrical utilities, fire alarm systems and roads, as well as put in infrastructure to prepare for feeding low-activity waste directly to the vitrification plant's Low Activity Waste Facility, Regalbuto said.

Now work begins in Congress to develop House and Senate versions of the Hanford budget.

"As every member of the Hanford community already knows, it is absolutely critical that work continues on schedule and in a safe, efficient manner, so I will continue to make it clear to both the administration and my colleagues in

the House and the Senate that the federal government cannot shirk its obligation on Hanford cleanup,” Murray said.

As a senior member of the Senate Appropriations Committee, Murray plans to question DOE officials at a scheduled hearing next month on how the administration’s proposed budget will allow the federal government to meet cleanup milestones at Hanford and other cleanup sites in the U.S.

Cantwell’s staff said she also will question Energy Secretary Ernest Moniz in appropriation hearings.

Newhouse said he will work with colleagues to secure funding.

“The proposed reduction in funding violates the federal government’s legal and moral obligation to clean up Hanford and prepare the Mid-Columbia for a post-cleanup future,” he said.

Federal budget proposal calls for shutdown of Mixed Oxide Fuel Fabrication Facility at Savannah River Site

The Augusta Chronicle

February 9, 2016

[LINK](#)

However, it won’t shut down without a fight as South Carolina Attorney General Alan Wilson filed suit Tuesday in federal district court regarding the U.S. Department of Energy’s failure to make good on agreements on the facility’s completion and the removal of plutonium from the site.

In his fiscal year 2017 budget proposal posted to the White House Web site, Obama proposed cutting MOX funding by \$55 million, dropping its annual budget to \$285 million. The Energy Department puts the actual nonproliferation construction budget – MOX being the only project – at \$270 million.

The proposal calls for terminating the project next year, asking the U.S. Department of Energy to instead compete the pre-conceptual design for the dilute and dispose option previously provided as an alternative to MOX, which has been plagued with construction delays and cost overruns.

That option, according to previous reports, involves down-blending weapons grade plutonium to then be stored at the Waste Isolated Pilot Plant in New Mexico, which is currently shut down. Material processed at MOX, on the other hand, would be converted into mixed oxide fuel to be used in commercial nuclear reactors.

Contractors say that roughly \$5 billion has already been spent on the main MOX facility, which they estimate is 70 percent complete, and should take another \$3 billion to finish the project. However, those figures have been disputed by others.

According to a detailed budget released by the Energy Department on Tuesday, two reports completed by federally funded research and development center Aerospace Corporation and an analysis by industry experts gathered by Energy Secretary Ernest Moniz – dubbed the Red Team – concluded that downblending would be nearly \$400 million cheaper than MOX.

But lost in the noise surrounding the budget proposal is it's just that – a proposal.

“The Congress is under no stipulation or mandate to produce what the president asks of it,” said Craig Albert, assistant professor of political science at Augusta University. “The true budget process begins in the House and Senate where in each body, budget resolutions are written and voted upon.”

Albert continued that presidential budget proposals carry little weight outside of their affiliated party. Previous attempts to halt construction at the site were met with much backlash by a vocal bipartisan group.

“There is very little chance that the final budget resembles what the president proposes,” Albert said. “The speaker of the House has already declared several aspects of the budget ‘dead on arrival’ meaning, no chance of passing. Because both houses are Republican dominant, it is highly unlikely that most of the president’s contentious (according to Republicans) proposals will happen.”

U.S. Rep. Joe Wilson, R-S.C., said after Obama’s budget proposal he fears that South Carolina is becoming the de facto repository for nuclear waste. In a lawsuit filed in federal district court on Tuesday, the state’s attorney general asked that the Energy Department immediately remove one metric ton of weapons grade plutonium from SRS and pay \$1 million for each day the terms of its agreement with the state is not met.

The material mentioned in the suit was supposed to be removed by Jan. 1 if MOX wasn’t operational.

“The Department of Energy has continually shown disregard for its obligations under federal law to the nation, the state of South Carolina and frankly the rule of law,” Alan Wilson said in a written statement. “The federal government is not free to flout the law. This behavior will not be tolerated. We are committed to using every legal avenue possible to ensure compliance.”

His father, Joe Wilson, again voiced his support for the project being built by Chicago Bridge and Iron and Areva Group. Both are regular contributors to his campaign committee, according to the Federal Election Commission.

“This decision to eliminate funding to the MOX facility is counterproductive and short-sighted,” Wilson said.

Tom Clements, director of the nuclear watchdog group SRS Watch, on the other hand, welcomed the proposal.

“DOE is to be congratulated for admitting the reality that the MOX project is not financially or technically viable and must be terminated,” he said.

“Termination is the only option for MOX as there is no viable path forward for the project from a financial or technical perspective.”

The detailed budget said that it will ask contractors to “determine activities required to place the facility and project in a safe and secure state,” before winding down construction. The Energy Department would then ask MOX Services to stop construction for 90 days while a termination plan is developed.

About 500 craft personnel and 750 salaried personnel would be released with an average of two weeks pay. Under the proposal, MOX would be completely shut down by 2021 at a cost of \$600 to \$700 million, which is higher than the \$500 million estimate provided to U.S. Rep. Rick Allen, R-Ga., during a site tour last month. Aiken Chamber of Commerce President David Jameson said he’s heard figures as high as \$1 billion for the shutdown alone.

“As this battle ensues, I feel sorry for the uncertainty that the workforce must endure while politics is at play,” Jameson said. “In good conscience, how can the federal government walk away from this project after funding billions for construction to this point? Alternative directions will take decades to develop and implement.”

DOE Requests \$270M for Clean Up Efforts at Paducah Gaseous Diffusion Plant

WKMS NPR

February 9, 2016

[LINK](#)

More than \$270 million dollars in federal funds may be slated for ongoing cleanup efforts at the Paducah Gaseous Diffusion Plant.

The request made by the U.S. Department of Energy Office of Environmental Management is part of a more than six-billion dollar proposed budget issued to Congress for fiscal year 2017.

The largest portion of the funds allocated to PGDP is more than \$200 million for decontamination and decommissioning. Funding also goes towards depleted uranium conversion, security, facilities management and administration.

A breakdown of the proposed budget request for Paducah:

- Decontamination and decommissioning: \$205.530 million
- Depleted uranium hexafluoride (DUF6) conversion: \$48.976 million
- Safeguards and security: \$14.049 million
- Paducah Community and Regulatory Support: \$1.725 million
- Nuclear Materials Stabilization and Disposition-Paducah Uranium Facilities Management: \$1.369 million
- Paducah Contract/Post-Closure Liabilities/Administration: \$661,000