



Analysis of Senate and House FY2009 Appropriations for DOE Nuclear Weapons-Related Activities

Key Highlights
January 2009

Congress will soon need to complete several Fiscal Year 2009 appropriations bills or extend those from 2008 via Continuing Resolution. The FY2009 Energy and Water Development Appropriations Act is among those that has yet to pass either floor; it may be considered before the current Continuing Resolution expires in March. This document summarizes key differences in the House and Senate appropriations committee bills for the Department of Energy's (DOE) nuclear weapons programs. This synopsis includes the Reliable Replacement Warhead (RRW), Advanced Certification, Enhanced Surety, the Chemistry and Metallurgy Research Facility Replacement (CMRR) project, Pit Manufacturing, Pit Manufacturing Capability, Dismantlement, and the Pit Disassembly and Conversion Facility (PDCF).

DOE NNSA Nuclear Weapons Activities-Related Budget (FY 2009)			
	Bush Administration Request	Energy & Water Appropriations Subcommittee Levels	
		Senate	House
Weapons Activities Total	6,618	6,525	6,202
RRW - DOE	10	0	0
Advanced Certification	20	20	20
Enhanced Surety	36	46	70
CMRR	100	125	0
Pit Manufacturing	145	145	0
Pit Manufacturing Capability	54	10	54
Dismantlement	65	65	71
Pit Disassembly and Conversion Facility (PDCF)-O&M	52	74	52
Pit Disassembly and Conversion Facility (PDCF)-Const.	67	67	67

*Amounts in millions of dollars, rounded to the nearest million

National Nuclear Security Administration (NNSA)—Weapons Activities

The Senate and House Energy and Water Development Appropriations Subcommittees funding levels for the FY2009 nuclear weapons-related programs of the National Nuclear Security Administration (NNSA) diverge in important ways. The Senate provides a total appropriation of \$6,525 million for weapons activities—\$93 million below the FY2009 request but \$227 million above the FY2008 level. The House level is significantly lower at \$6,202 million, or \$416 million below the budget request and \$96 million below the current year.

Reliable Replacement Warhead (RRW)

The proposed Reliable Replacement Warhead program would design and manufacture a new generation of nuclear warheads. The Senate and House Committees both zero out DOE funds for RRW, but the House side goes further in its report, taking the administration to task over the RRW program. While strongly supporting improved surety and a slimmed-down weapons complex, the Committee “remains to be convinced that a new warhead design will lead to these benefits.” The Committee “insists” that the administration develop an appropriate 21st century nuclear deterrent strategy—and determine the size and nature of the nuclear weapons stockpile and complex needed to support this strategy—“before...[it] will consider funding for most new programs.” Other campaigns and programs associated with RRW—including Advanced Certification, Enhanced Surety and Pit Manufacturing—are funded only as “non-RRW” work.

Advanced Certification

The Senate and House Committees each appropriate the requested \$20 million for Advanced Certification, an effort to add rigor to the warhead certification process so nuclear testing will not be required in the future. The Senate Committee states that it supports the program’s goals of increasing “the confidence in changes to warhead design to increase the safety and reliability margins of the stockpile without underground testing.” The House Committee appropriates the funds for “Advanced Certification Non-RRW,” limiting the program to work unrelated to the RRW and reiterating the Committee’s opposition to that initiative.

Enhanced Surety

The Enhanced Surety program seeks to improve “use control” for warheads, ensuring that the weapon will function only when properly authorized, and that fissile nuclear material cannot be accessed if, for example, it falls into the wrong hands. Amounts appropriated for Enhanced Surety differ substantially, although both sides increase funding. The Senate Committee allocates \$46 million—an increase of \$10 million over the request—“to support research and development of enhanced surety applications consistent with the 2007 JASON Reliable Replacement Warhead study Recommendation 2(a) to develop a ‘physical understanding of enhanced surety features’.” The House Committee provides even more, \$70 million, for “Enhanced Surety Non-RRW,” which it says “replaces” the current Enhanced Surety program, and stresses that priority should be given to “those weapon types at greatest long-term risk.”

Pit Manufacturing and Pit Manufacturing Capability

Under the Directed Stockpile Work (DSW) Stockpile Services subprogram, the administration requests \$145 million for “Pit Manufacturing” to make new plutonium pits, the explosive core of nuclear weapons. At present, the Los Alamos National Laboratory (LANL) in New Mexico can produce about a dozen pits a year for W88 warheads, but the NNSA has been seeking to expand that to 50 to 80 pits per year. The administration also asked for \$54 million for “Pit Manufacturing Capability” to develop the ability to produce pits for other warhead types, including pits for possible new-design warheads such as RRW.

The Senate Committee provides full funding for Pit Manufacturing, but recommends only \$10 million for the Capability initiative “to be used to fund mission transfers from Lawrence Livermore National Laboratory to Los Alamos National Laboratory as proposed in the request.”

In contrast, the House Committee eliminates all funding for Pit Manufacturing, arguing that additional W88 pits are unwarranted, since “the W88 warhead, with its very high yield and yield/weight ratio, serves obsolete Cold War concepts rather than current or future needs.” They fully fund Pit Manufacturing Capability at \$54 million, “in order to maintain future operations.”

The Chemistry and Metallurgy Research Facility Replacement (CMRR) Project

On construction of the Chemistry and Metallurgy Research Facility Replacement (CMRR) project at LANL, the two committees assume starkly different positions. CMRR would replace an existing building at LANL with a new facility to house plutonium testing, characterization and research, as well as storage and accounting of “special nuclear materials” (those that can be used to build nuclear weapons). Construction of the CMRR, at an estimated cost of \$2 billion, would allow LANL to increase the number of plutonium pits it can produce by freeing up space in other facilities. The Senate Committee provides \$125 million for the project, a \$25 million increase over the administration’s request. Conversely, as it did last year, the House Committee zeroes out funds for the CMRR. The House report argues that “in the absence of critical decisions on the nature and size of the stockpile, which in turn generate requirements for the nature and capacity of the nuclear weapons complex, it is impossible to determine the capacity required of [the facility]. It would be imprudent to design and construct on the basis of a guess at [its] required capacity.”

Dismantlement

The Senate appropriates the requested \$65 million for Weapons Dismantlement. Dismantlement refers to taking apart the weapons (numbering in the thousands) that the United States has declared in excess of its strategic needs. The House adds an additional \$6 million (for a total of \$71 million), of which \$5 million is for the Device Assembly Facility at the Nevada Test Site “to examine a capability to dismantle small numbers of troublesome individual warheads without interfering with the large-scale entire-type dismantlements at Pantex.”

Pit Disassembly and Conversion Facility (PDCF)

Both the Senate and House Committees fully fund construction of the proposed Pit Disassembly and Conversion Facility (PDCF) at \$67 million. The PDCF is intended to take apart thousands of surplus nuclear weapons pits and convert the extracted plutonium metal to plutonium oxide. DOE plans to use this material to fabricate mixed oxide (MOX) fuel at the planned Mixed Oxide Fuel Fabrication Facility for use in four nuclear reactors in North Carolina and South Carolina. Current estimates indicate the PDCF will cost \$2.4-3.2 billion, but it is already four to six years behind schedule. As a result, it will not be finished in time to provide plutonium oxide for the fabrication facility when the latter starts to operate. To fill the gap, the Senate proposes an additional \$22 million for a facility at LANL “to ensure there is adequate feedstock available when the MOX facility begins operation.” This money is added to an Operations and Maintenance line under the PDCF budget. The Senate Committee also recommends that NNSA “analyze and report on whether more timely and more cost-effective alternatives to the PDCF exist within the existing NNSA complex.”

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