Union of Concerned Scientists

FACT SHEET

Key Elements of the FY 2011 Budget Request for Nuclear Weapons and Nonproliferation

The Fiscal Year 2011 budget request for nuclear weapons and nonproliferation includes major increases in funding for new facilities, for warhead maintenance, and for nonproliferation programs. In proposing this funding, the Obama administration is seeking to build Congressional support for its far-reaching nuclear security agenda. The agenda includes a clear commitment to maintaining the existing nuclear arsenal, a push to ratify two major arms control treaties, a pledge to reduce the roles and numbers of nuclear weapons, and support for the goal of a world free of nuclear weapons. Balancing those sometimes competing priorities will be an on-going challenge for the administration.

Item	FY 2010 Appropriation (in $millions)	FY 2011 Request (in $millions)	Senate E&W Committee Mark-up (in $millions)	Percent Change FY11 Senate Recommendation vs. FY10 Approp.
Total NNSA Budget*	**9,877**	**11,215**	**11,110**	**12%**
Weapons Activities	6,384	7,008	7,018	10%
Directed Stockpile Work	1,505	1,898	1,874	24%
B61 Stockpile Systems	92	317	317	244%
B61 Phase 6.2/6.2A Study	32	251	251	784%
Stockpile Services	829	942	911	10%
Plutonium Sustainment	142	190	160	13%
Science Campaign	296	365	354	20%
Advanced Certification	19	77	56	189%
Dismantlement & Disposition	96	58	64	-33%
Readiness in Technical Base & Facilities	1,842	1,849	1,920	4%
Construction	304	399	440	45%
Uranium Processing Facility	94	115	115	22%
Chem. & Metallurgy Res. Facility	97	225	225	132%
Defense Nuclear Nonproliferation	2,137	2,687	2,612	22%
Fissile Materials Disposition	702	1,031	935	33%
Global Threat Reduction Initiative	334	559	569	71%

* The numbers do not add to the total since the NNSA budget includes funding for naval reactors and administration in addition to weapons activities and defense nuclear nonproliferation.

B61 Warhead

For FY2011, the Senate Energy and Water Appropriations Committee recommended the full amount of the $251 Million requested for a study of the B61 Life Extension Program (LEP).

The B61 bomb comes in both strategic and tactical versions, with the B61-3 and B61-4 tactical versions deployed in five European countries under NATO's "nuclear sharing" arrangement. The B61-7 strategic bomb is deployed in the United States and the B61-10 tactical bomb was placed in the inactive stockpile in 2005. Under the LEP, the National Nuclear Security Agency (NNSA) plans to combine these four versions of the B61 into a single B61-12. The remaining version of the B61, the B61-11 strategic earth-penetrator, would not be included in this LEP.

Most of the spending for the LEP—between 80-90 percent—will focus on the non-nuclear components. The remainder will involve changes to the nuclear explosive package, in particular the "primary," which creates the initial nuclear explosion. The study will consider options to supplement the warhead's safety and use-control features, seeking to reduce the likelihood that an accident would lead to a nuclear explosion or the release of plutonium and to prevent the weapon from being used without authorization or if stolen or lost.

According to NNSA, these modifications are being made "independent of any threat scenario." However, the Senate Energy and Water appropriations bill requires a cost/benefit analysis of the B61 LEP to determine whether the planned modifications are needed and cost effective. As part of this analysis, NNSA will likely assess the actual security conditions under which the bombs are stored and transported, and whether they meet the safety and security requirements for the weapon. The tactical B61 weapons deployed in Europe have the most challenging security environment, and their future is still unclear. As part of an on-going review, several NATO countries have proposed withdrawing these bombs from Europe. Before NNSA assesses the bomb's safety and security needs, the United States should determine the future of these weapons in Europe, since it could affect the cost/benefit analysis.

Weapons Dismantlement

The President's budget request for Weapons Dismantlement saw a substantial drop of 40 percent, to $58 million from $96 million. The NNSA cited complicated, time-consuming work dismantling large, old B53 warheads as one reason for the cut. However, it is unclear why a slow-down in dismantlement rates would result in a significant decrease in budgets if each warhead takes longer to dismantle.

What is true is that life extension programs are interfering with dismantlement activities. The same facilities are used for life extension and weapon dismantlement, and the NNSA gives priority to the life extension programs. In particular, the current W76 LEP is consuming most of the available space and resources that could otherwise be used for dismantlement work.

The Senate Energy and Water Appropriations Committee recommended an additional $6.4 million above the administration's request for dismantlement, for a total of $64.4 million. It also specified that $27.5 million of the total would be used "to help restore activities at Pantex for weapons dismantlement activities." This is a step in the right direction. Given the ongoing arsenal reductions planned by the United States and the security risks posed by the backlog of thousands of retired warheads waiting for dismantlement, efforts are needed to increase dismantlement rates.

Chemical and Metallurgy Research Replacement facility-Nuclear Facility

The Bush administration promoted plans for "Complex Transformation" to replace aging facilities at the weapons laboratories with more modern ones, but did little to overcome the lukewarm reception Congress gave the proposals. The Obama administration, seeking to build support for its broad nuclear security agenda, increased funding to implement what is essentially the Bush administration's plan. The two largest projects are the Chemical and Metallurgy Research Replacement facility-Nuclear Facility (CMRR-NF) and the Uranium Processing Facility (UPF). Both will replace facilities that officials have said are deteriorating, thus improving safety and efficiency in the long run.

The CMRR facility at Los Alamos national lab in New Mexico consists of two separate buildings: the Radiological Laboratory/Utility/Office Building, which is nearly complete, and the much larger Nuclear Facility, which is still being designed. The CMRR budget request is $225 million for next year, and the projections rise to over $300 million in the following years.

The Nuclear Facility is not directly involved in the production of warhead components, but is critical to the NNSA's efforts to increase the capacity to produce pits. The plutonium pits at the core of each primary are produced in nearby Plutonium Facility 4 (PF-4), at a rate of about 10 pits per year. If the CMRR-NF is built as planned, it will include lab and extra storage space for nuclear materials currently housed in PF-4. This would allow Los Alamos to increase PF-4's capacity to produce up to 50-80 pits per year. Although independent scientific experts have confirmed that new pits are not needed to maintain the reliability, safety and security of nuclear warheads, the Obama administration's Nuclear Posture Review argues that this added production capacity is needed to hedge against geopolitical and technical uncertainties.

Uranium Processing Facility

The administration's FY10 budget requests $115 million for UPF at the Y-12 National Security Complex in Tennessee and predicts that costs will grow to $320 million in 2015. NNSA estimates the total cost will be $1.4 to 3.5 billion, but Tennessee's Senator Corker has suggested that the cost of the UPF would likely be $4 to 5 billion.

The UPF will assemble and disassemble secondaries, the uranium-based components that generate most of the explosive force in modern nuclear weapons. As proposed, the UPF will be able to produce 50-80 secondaries per year, which would equal the number of pits that could be produced by PF-4 if Los Alamos increases its capacity.

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