

Funding for the National Nuclear Security Administration's Nuclear Weapons Complex

(All numbers in thousands of US dollars)

Nuclear Weapons Activities	FY 2010	FY 2011	FY 2011	FY 2012	FY11-FY12
11000001100110000	Appropriation	Request	CR^{1}	Request	Requests +% 2
Total Weapons Activities	6,384,431	7,008,835	6,696,400	7,600,000	8.43%
Directed Stockpile Work	1,564,290	1,898,379	0,0>0,100	1,963,583	3.43%
Life Extension Programs ³	231,888	249,463		480,597	92.65%
W76 Life Extension Program (LEP) ⁴	231,888	249,463		257,035	3.04%
B61 Life Extension Program ⁵	-	-		223,562	
Stockpile systems	385,202	649,366		497,627	-23.37%
B61 Stockpile Systems	114,195	317,136		72,396	-77.17%
B61 LEP feasibility study	32,500	251,641		0	-100.00%
W78 Stockpile Systems	52,167	85,898		109,518	27.50%
W78 LEP feasibility study ⁶		26,000		51,087	96.49%
Weapons Dismantlement and Disposition	95,786	58,025		56,770	-2.16%
Stockpile Services	851,414	941,525		928,589	-1.37%
Plutonium Sustainment ⁷	141,909	190,318		154,231	-18.96%
Campaigns	1,571,186	1,716,566		1,796,727	4.67%
Science Campaign	294,548	365,222		405,939	11.15%
Advanced Certification	19,269	76,972		94,929	23.33%
Primary Assessment Technologies	82,838	85,723		86,055	0.39%
Dynamic Materials Properties	86,371	96,984		111,836	15.31%
Advanced Radiography	28,489	23,594		27,058	14.68%
Secondary Assessment Technologies	77,581	81,949		86,061	5.02%
Engineering Campaign	149,679	141,920		143,078	0.82%
Enhanced Surety	41,928	42,429		41,696	-1.73%
Inertial Confinement Fusion Ignition and High Yield Campaign	457,486	481,548		476,274	-1.10%
National Ignition Facility (NIF) diagnostics	72,144	102,649		86,259	-15.97%
Facility Ops and Target Production (NIF, OMEGA, & Z) ⁸	269,775	260,393		266,030	2.16%
Advanced Simulation and Computing Campaign	566,069	615,748		628,945	2.14%
Readiness Campaign	106,744	112,092		142,491	27.12%
Tritium Readiness	68,245	50,187		77,491	54.40%
Readiness in Technical Base and Facilities (RTBF)	1,810,279	1,848,970		2,326,134	25.81%
Operations of Facilities	1,526,375	1,449,954		1,705,624	17.63%
Kansas City Plant (KCP) 9	117,895	186,102		156,217	-16.06%
Lawrence Livermore National Laboratory (LLNL)	86,083	80,106		83,990	4.85%
Los Alamos National Laboratory (LANL) 10	338,479	318,464		318,526	0.02%
Advanced Recovery and Integrated Extraction System (ARIES) 11	23,988	not avail.		not. avail.	
Nevada National Security Site (different from test readiness below)	79,326	80,077		97,559	21.83%
Pantex	131,227	121,254		164,848	35.95%
Sandia National Laboratory (SNL)	103,618	117,369		120,708	
Savannah River Site (SRS) 12	131,129	92,722		97,767	5.44%
Y-12 National Security Complex	228,601	220,927		246,001	11.35%
Institutional Site Support	120,129	40,970		199,638	387.28%
Program Readiness	72,873	69,309		74,180	7.03%
Test Readiness at former Nevada Test Site	5,408	not avail.		not. avail.	
Facility Design/Construction	283,904	399,016		620,510	55.51%
Los Alamos Neutron Science Center (LANSCE) Reinvestment	19,300	0		0	2.000/
LANL TA-55 Reinvestment Phase II ¹³	-	20,000		19,402	-2.99%
LANL Radioactive Liquid Waste Treatment Facility Upgrade	0	0		0	

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(All numbers in thousands of US dollars)

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Nuclear Weapons Activities	FY 2010	FY 2011	FY 2011	FY 2012	FY11-FY12		
	Appropriation	Request	CR 1	Request	Requests +% 2		
Y-12 Uranium Processing Facility	94,000	115,016		160,194			
LANL Chemistry & Metallurgy Research Replacement (CMRR) 14	97,000	225,000		300,000	33.33%		
CMRR-"Nuclear Facility"		"TBD"		"TBD"			
Pit Disassembly and Conversion Facility-SRS 12	30,321	0		0			
Secure Transportation Asset	240,683	248,045		251,272	1.30%		
Nuclear Counterterrorism Incident Response	223,379	233,134		222,147	-4.71%		
Facilities and Infrastructure Recapitalization Program	95,575	94,000		96,380	2.53%		
Site Stewardship 15	63,308	105,478		104,002	-1.40%		
Safeguards and Security	893,161	844,299		849,471	0.61%		
Total, Defense Nuclear Nonproliferation 16	2,136,709	2,687,167	2,085,200	2,548,000	-5.18%		
Verification R&D	311,274	351,568	, , ,	417,598	18.78%		
Nonproliferation and International Security	187,202	155,930		161,833	3.79%		
Int. Nuclear Materials Protection and Cooperation	572,749	590,118		571,639	-3.13%		
Elimination of Weapons-Grade Plutonium Production	24,507	0		0			
Fissile Materials Disposition	701,900	1,030,713		890,153	-13.64%		
MOX Irradiation, Feedstock, and Transportation	27,217	107,787		83,527	-22.51%		
MOX Fuel Fabrication Facility at the Savannah River Site	504,238	475,788		385,172	-19.05%		
Waste Solidification Building	70,000	57,000		17,582	-69.15%		
Pit Disassembly and Conversion Facility Construction	-	80,000		176,000	120.00%		
Uranium Disposition	34,691	25,985		26,435	1.73%		
Global Threat Reduction Initiative	333,500	558,838		508,269	-9.05%		
Total, Naval Reactors	945,133	1,070,486	967,100	1,153,662	7.77%		
Total, Office of the Administrator	410,754	448,267	407,800	450,060	0.40%		
Total, NNSA	9.873.640	11,214,755	10,156,500	11.782.930	5.07%		
Total, NNSA 9,873,640 11,214,755 10,156,500 11,782,930 5.07% Note: Columns do not add up to totals because not all budget subcategories are included here, including Use of Prior Year Balances							
DOE Defense Environmental Cleanup 17	5.642,331	5,588,039	5,016,041	5,400,000	-3.37%		
DOE Energy Efficiency and Renewable Energy	2,242,500	2,335,473	1,467,400	3,200,053	37.02%		
DOE Nuclear Energy	786,637	842,052	661,100	825,000	-2.03%		

NNSA Site Tables

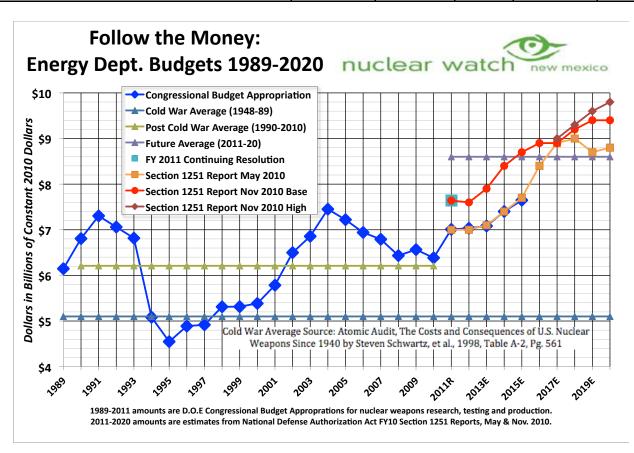
(All numbers in thousands of US dollars)

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NNSA Site Tables	FY 2010	FY 2011	FY 2011	FY 2012	FY11-FY12
	Appropriation	Request	CR	Request	Request + %
Kansas City Plant (Total DOE)	433,197	535,433		548,094	2.36%
Weapons Activities	430,586	532,949		545,475	2.35%
Nonproliferation	2,608	2,439		2,584	5.95%
Site Stewardship	3,121	1,847		1,889	2.27%
Lawrence Livermore National Laboratory (Total DOE)	1,156,457	1,213,180		1,229,933	1.38%
Weapons Activities	998,859	1,051,070		1,091,008	
Nonproliferation	82,327	108,755		85,272	-21.59%
Site Stewardship	38,132	38,475		44,140	14.72%
Los Alamos National Laboratory (Total DOE)	1,878,348	2,216,629		2,326,181	4.94%
Weapons Activities	1,333,935	1,636,838		1,593,863	-2.63%
Nonproliferation	190,678	233,537		233,331	-0.09%
Cleanup	197,500	196,953		357,939	81.74%

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(All numbers in thousands of US dollars)

NNSA Site Tables	FY 2010	FY 2011	FY 2011	FY 2012	FY11-FY12
	Appropriation	Request	CR	Request	Request + %
Nevada National Security Site (Total DOE)	321,831	389,079		345,933	-11.09%
Weapons Activities	245,096	228,669		228,309	-0.16%
Nonproliferation	18,941	106,570		58,752	-44.87%
Cleanup	57,794	53,840		58,872	9.35%
Pantex Plant (Total DOE)	555,732	533,140		649,380	21.80%
Weapons Activities	555,479	532,317		645,051	21.18%
Nonproliferation	228	218		4,304	1874.31%
Site Stewardship	8,028	12,345		14,630	18.51%
Sandia National Laboratories (Total DOE)	1,381,463	1,491,998		1,598,222	7.12%
Weapons Activities	988,783	1,141,953		1,238,825	8.48%
Nonproliferation	183,525	187,275		188,230	0.51%
Site Stewardship	4,027	9,255		8,764	-5.31%
Savannah River Site (Total DOE)	1,633,498	1,632,317		1,699,067	4.09%
Weapons Activities	245,226	191,685		202,546	5.67%
Nonproliferation	104,469	147,529		119,807	-18.799
Cleanup	1,262,233	1,270,533		1,354,144	6.58%
Y-12 National Security Complex (Total DOE)	761,918	792,565		927,601	17.049
Weapons Activities	673,849	676,756		831,392	22.85%
Nonproliferation	51,369	51,219		66,209	29.279
Cleanup	36,700	63,775		30,000	-52.96%



Following the New Money

Republican Senate Whip Jon Kyl engineered Section 1251 of the FY 2010 National Defense Authorization Act. It required President Obama to submit a plan to the Senate to "modernize" the nuclear stockpile, its delivery systems and the nuclear weapons complex at the same time he submitted the New Strategic Arms Reduction Treaty (START) for ratification. When he submitted both last May Obama committed to increase the nuclear weapons programs of the National Nuclear Security Administration (NNSA). As the fight over START ratification heated up the Administration released a second version of the plan in November, which further increased projected funding for NNSA nuclear weapons programs to an average of \$8.6 billion per year for the next 10 years. This is in contrast to the previous 20-year average of \$6.2 billion and the historic Cold War average of \$5.1 billion. Obama's FY 2012 budget matches the figures he gave in the November 1251 report with \$7.6 billion requested in FY 2012 for NNSA nuclear weapons programs, rising to nearly \$8.6 billion by FY 2016. Even as discretionary domestic spending for education, environmental protection, law enforcement, etc. is being cut, NNSA nuclear weapons programs will enjoy a 19% increase in FY 2012 above the FY 2010 funding level of \$6.4 billion, or a 34% increase in four years. [This graph can be downloaded from http://www.nukewatch.org/facts/nwd/Weapons_Chart_All_Dec_2010.pdf]

Notes:

1. The Continuing Resolution (CR) was a stopgap measure by the 111th Congress to fund the federal government given that it failed to pass appropriations bills. The current CR runs to March 4, 2011 and generally funded the federal government at FY 2010 levels. The notable exception was a 14% increase to NNSA nuclear weapons programs that matched higher FY 2011 request levels as a quid pro quo for Senate ratification of the New Strategic Arms Reduction Treaty with Russia.

In the new 112th Congress the Republican-controlled House Appropriations Committee announced on February 11 that it is seeking a new CR with \$100 billion in cuts for the remainder of FY 2011. The proposed CR cuts Total Weapons Activities from the FY 2011 request by 12.8%, Nonproliferation Programs by 22%, energy efficiency and renewable energy by 37% and cleanup by 10%. [Budget figures in the proposed CR do not get down to the subprogram level.] Any future CR will, of course, be a charged partisan issue while cutting domestic spending, and will have to be hammered out in compromise with the Senate.

- 2. Comparing the FY 2011 request to the FY 2012 request is not ideal. Normally we would be able to compare the next fiscal year's request to actual appropriations for the existing fiscal year. However this is not possible given that FY 2011 funding levels are in still in play in the pending CR.
- 3. We oppose Life Extension Programs (LEPs) as currently formulated. This is because of the number of existing nuclear weapons planned for service life extensions of three decades or more, which is inconsistent with our declared national security goal of a future nuclear weapons-free world. Moreover, LEPs can endow existing nuclear weapons with new military capabilities, despite the repeated denials at the highest levels of U.S. government. Finally, LEPs are or will increasingly introduce changes to existing weapons that have been extensively tested and are known to be far more reliable than previously thought. Those changes can erode confidence in stockpile reliability, in the extreme even leading to resumed full-scale testing.

Nuclear Watch New Mexico advocates that a progressively diminishing (in numbers) nuclear weapons stockpile should be rigorously maintained while we take active steps toward a nuclear weapons-free world. At the same time, we argue that the right approach to maintaining stockpile safety and reliability is through "curatorship" of the arsenal through already well-understood methods of surveillance and replacement

of limited life components as needed. These methods are the most sound from technical and economic perspectives, as well as consistent with a vitally needed overall policy of not encouraging other nuclear powers to "modernize" their weapons or non-weapons powers to acquire to acquire weapons. In a phrase, "If it ain't broke, don't fix it!", and in the interests of fiscal prudence do not condone expensive make work for the already privileged nuclear weapons labs and research and production complex.

- 4. The current W76 LEP is believed to include a new fuze with selectable heights of burst. In combination with the increased accuracy of its sub-launched D5 missile this can transform the 100-kiloton W76 from a weapon of deterrence holding soft targets hostage (such as cities) into a hard target killer of missile silos and buried military command and control centers. This can be strategically destabilizing.
- 5. NNSA is moving rapidly into a full-fledged Life Extension Program for the B61 gravity bomb even before the results are in for a feasibility study funded in FYs 2010 and 2011 (which the FY 2012 budget now defunds). In addition to extending service lives, the main purpose of the B61 LEP appears to be transformation of this "analogue" nuclear bomb into a "digital" bomb that can be mated with the future F-35 Joint Strike Fighter. In turn, that overall purpose appears to be keeping ~200 nuclear bombs forward deployed in Europe when their original mission was against a Soviet threat that vanished a long time ago. Moreover, a number of our NATO allies have publicly stated that they want them withdrawn. These forward deployed B61s are also a security threat, as European peace activists demonstrated by penetrating within yards of supposedly secure storage facilities. Finally, the future of the F-35 Joint Strike Fighter itself is subject to doubt over its fundamental need and typical mushrooming cost overruns.
- 6. The W78 LEP feasibility study will consider an "option" for a redesigned, refurbished warhead that could operate cross-platform as both a land-based ICBM and sub-launched ballistic missile warhead (the latter substituting for the W88 warhead). This amplifies our concerns over straying from the reliable tested pedigree of existing nuclear weapons. For the first time, feasibility studies for both the B61 and W78 are going to consider intrusive modifications to the all-important nuclear explosives package (the critical plutonium pit and its surrounding lenses of high explosives), which could seriously erode confidence in stockpile reliability.
- 7. Plutonium Sustainment is focused on processing and recycling plutonium; manufacturing pits; supporting surveillance of pits; performing refurbishments of pits; and maintaining technical plutonium capability. The initial campaign to manufacture W88 pits has been completed, and it is not clear what future plutonium pit production is needed (except, we add, for possible new-designs, which the recent record suggests the labs and NNSA want).
- 8. The National Ignition Facility (NIF) is the new \$5 billion+ problematic 192-laser facility at LLNL, which keeps moving the goal posts to proscribe "integration" tests instead of "ignition" tests; OMEGA located at the University of Rochester in NY, is a 60-laser facility used to support NNSA programs; the Z machine is located at SNL and is the world's largest and most powerful laboratory Z-pinch X-ray source (used to simulate nuclear weapons effects.
- 9. This funding includes support for "transition" to a new facility but not construction of new ~\$660M new plant, which is being financed by the private sector outside of the NNSA budget. This Congressional Budget Request line item first appeared in FY 2010, after a first round of bidding by private developers busted the congressionally-mandated cap for future lease costs. We conjecture that NNSA hollowed out contract criteria to lower costs for the private developer and then went hat-in-hand to Congress for more money, after repeatedly claiming that construction of this new nuclear weapons production plant would cost American taxpayers nothing upfront.

- 10. Includes operations of plutonium pit production facilities.
- 11. ARIES is a pilot pit disassembly and conversion at LANL program that is being tasked to provide plutonium oxide feedstock for the Mixed Oxide (MOX) Fuel Fabrication Facility at SRS while a new feedstock facility, the PDCF, is built. According to NNSA's FY 2012 budget request "Operations of ARIES is part of the 7 year campaign to produce 2 MT of feedstock to be used during start-up and initial operation of the MFFF." It is part of "MOX Irradiation, Feedstock, and Transportation" funded at \$83.53 million in FY 2012, but is not separately broken out.
- 12. The decrease from FY 2010 to FY 2011 was due to the transfer of the Pit Disassembly and Conversion Facility (PDCF) out of Total Weapons Activities to Defense Nuclear Nonproliferation.
- 13. Technical Area 55 (TA-55) is site of the CMRR project and the existing plutonium pit production facility at LANL
- 14. CMRR consists of two separate buildings: a "Rad Lab" (recently finished construction at \$165M, and with an additional \$199M estimated for equipment), and a future "Nuclear Facility" estimated to cost up to \$5.8 billion. The Nuclear Facility is now the subject of a "supplemental environmental impact statement" because it has increased 50% in size and costs have risen seven-fold since its first 2003 EIS. Design costs for the CMRR-NF are still "TBD" for this still current fiscal year 2011 and the coming FY 2012.
- 15. "Site Stewardship" is a small subset of NNSA Total Weapons Activities for KCP, LLNL, Pantex and Sandia after those sites were declared "cleaned up" according to regulations and remediation programs within DOE Environmental Management terminated. NNSA says, "The goal of Site Stewardship is to ensure environmental compliance and energy and operational efficiency throughout the nuclear security enterprise, while modernizing, streamlining, consolidating, and sustaining the stewardship and vitality of the sites as they transition within NNSA's plans for the nuclear security enterprise." Site Stewardship typically means ongoing environmental monitoring and "pump and treat" of contaminated groundwater into perpetuity. It certainly does not mean true clean up, and may even hinder it.
- 16. In general Nuclear Watch New Mexico strongly supports NNSA Defense Nonproliferation Programs. They include, for example, R&D of treaty verification technologies and efforts to secure nuclear weapons materials globally. However, we are adamantly against the Mix Oxide (MOX) Program under Fissile Material Disposition that seeks to use weapons-grade plutonium in fuel rods for commercial reactors. We believe that to be a proliferating program rather than a nonproliferation program. On the other hand, we believe that Uranium Disposition (downblending of weapons-grade highly enriched uranium) should be prioritized, and its requested \$26.44 million greatly augmented at the expense of the MOX Program.
- 17. LANL, SRS, Y-12 and NTS still have cleanup programs funded by the DOE Office of Environmental Management, arguably far better than mere "Site Stewardship." However, even these programs commonly seek something less than full cleanup. For example, LANL intends to "cap and cover" and leave in place its largest radioactive dump (see http://www.nukewatch.org/facts/nwd/MDA-G_CME_PR_final.pdf). In the big picture, the DOE still has an estimated \$260 billion in estimated cleanup liabilities nation-wide across the Cold War nuclear weapons complex, an amount that annually increases instead of diminishing, despite the up to \$6 billion spent each year.

Sources: the FY 2012 NNSA Congressional Budget Request- http://www.mbe.doe.gov/budget/12budget/Content/Volume1.pdf and Department of Energy "Laboratory Tables" for all of its sites http://www.mbe.doe.gov/budget/12budget/Content/FY2012Lab.pdf.