



Funding for Department of Energy's National Nuclear Security Administration

Weapons Activities	(All numbers in thousands of US dollars)			<i>FY 2010</i>
	<i>FY 2008</i>	<i>FY 2009</i>	<i>FY 2010</i>	<i>E & W</i>
	<i>Approp.</i>	<i>Approp.</i>	<i>Request</i>	<i>Conf.</i> ¹
Directed Stockpile Work	1,405,602	1,590,152	1,514,651	1,505,859
Life Extension Programs	246,835	205,043	209,196	223,196
W76 Life Extension Program (LEP) ²	189,822	202,920	209,196	223,196
Stockpile systems	327,089	328,521	390,300	357,800
B61 Stockpile Systems	64,125	78,021	124,456	91,956
B61 Refurbishment Study ³	-	-	65,000	32,500
Weapons Dismantlement and Disposition	55,408	57,238	84,100	96,100
Stockpile Services	691,319	866,383	831,055	828,763
Plutonium Infrastructure Sustainment ⁴	-	-	-	141,909
Formerly Plutonium Sustainment (FY10 Budget Request)	-	-	149,201	-
Formerly Plutonium Capability (FY09)	-	155,269	-	-
Formerly Pit Manufacturing and Cert. Campaign (FY08)	213,831	-	-	-
Campaigns	1,871,484	1,620,350	1,559,730	1,571,186
Science Campaign	286,274	316,690	316,690	295,646
Advanced Certification	14,866	19,400	19,400	19,400
Primary Assessment Technologies	61,844	80,181	80,181	83,181
Dynamic Materials Properties	95,978	83,231	86,617	86,617
Advanced Radiography	30,282	28,535	22,328	28,535
Secondary Assessment Technologies	78,399	76,913	77,913	77,913
Test Readiness (transferred to NTS RTBF Program Readiness)	4,905	5,408	-	-
Engineering Campaign	168,548	150,000	150,000	150,000
Enhanced Surety	34,137	46,112	42,000	42,000
Inertial Confinement Fusion Ignition and High Yield Campaign	470,206	436,915	436,915	457,915
National Ignition Facility (NIF) diagnostics	68,107	66,201	72,252	72,252
Facility Ops and Target Production (NIF, OMEGA, & Z) ⁵	112,012	203,282	248,929	269,929
Advanced Simulation and Computing Campaign	574,537	556,125	556,125	567,625
Readiness Campaign	158,088	160,620	100,000	100,000
Tritium Readiness	71,831	71,831	68,246	68,246
Readiness in Technical Base and Facilities (RTBF)	1,635,381	1,674,406	1,736,348	1,842,870
Operations of Facilities	1,152,455	1,163,331	1,342,303	1,348,303
Kansas City Plant (KCP) ⁶	84,702	89,871	169,056	156,056
Lawrence Livermore National Laboratory (LLNL)	89,303	82,605	86,670	86,670
Los Alamos National Laboratory (LANL) ⁷	283,025	289,169	311,776	311,776
Advanced Recovery and Integrated Extraction System (ARIES) ⁸	-	22,000	23,988	23,988
Nevada Test Site (NTS)	64,863	92,203	79,583	79,583
Pantex	112,813	101,230	131,602	131,602
Sandia National Laboratory (SNL)	153,873	123,992	104,133	104,133
Savannah River Site (SRS)	85,738	92,762	128,580	128,580
Y-12 Production Plant	224,190	235,397	210,774	229,744
Institutional Site Support	53,948	56,102	102,129	120,129
Program Readiness	70,099	71,626	73,021	73,021
Test Readiness at Nevada Test Site (estimated same as 2009)	-	-	5,408	5,408
Facility Design/Construction	285,038	314,468	203,382	303,904
Los Alamos Neutron Science Center (LANSCE) Reinvestment	-	-	-	20,000
Various Locations Project Eng. and Design	41,552	101,521	70,678	12,000
LANL TA-55 Reinvestment Phase II ⁹	1,097	8,245	5,200	see fn. 10
LANL Radioactive Liquid Waste Treatment Facility Upgrade	990	2,654	11,000	see fn. 10
Y-12 Uranium Processing Facility	38,538	90,622	54,478	-

Y-12 Uranium Processing Facility ¹¹	-	-	-	94,000
LANL Chemistry & Metallurgy Research Replacement (CMRR) ¹²	74,141	97,194	55,000	97,000
SRS Pit Disassembly and Conversion Facility (PDCF) ¹³	12,664	68,084	30,321	30,321
Secure Transportation Asset	211,523	214,439	234,915	234,915
Nuclear Counterterrorism Incident Response	158,655	215,278	221,936	221,936
Facilities and Infrastructure Recapitalization Program	177,861	147,449	154,922	83,959
Site Stewardship	-	-	90,374	61,288
Environmental Projects and Operations (FY08 & 09) ¹⁴	17,272	38,596	-	-
Safeguards and Security	870,420	856,494	871,555	871,555
Total, Weapons Activities	6,302,366	6,380,000	6,384,431	6,348,431
Total, Defense Nuclear Nonproliferation	1,334,922	1,482,350	2,136,709	2,136,709
Fissile Materials Disposition	66,235	41,774	701,900	701,900
MOX Fuel Fabrication Facility at the Savannah River Site ¹⁵	278,800	467,800	504,238	504,238
Total, Naval Reactors	774,686	828,054	1,003,133	945,133
Total, Office of the Administrator	402,137	439,190	420,754	420,754
Total, NNSA	8,814,111	9,129,594	9,945,027	9,887,027

Sources: House/Senate Energy and Water Development Appropriations Conference Report (Report 111-278) and the FY10 NNSA Congressional Budget Request. Columns do not precisely add up because some lesser budget items are omitted.

Footnotes

1. Nearly all funding for DOE is appropriated by House and Senate Energy & Water Subcommittees. Any differences between them are reconciled in a joint conference committee.

2. During refurbishment the W76 warhead is fitted with a new fuse capable of selectable height of burst. Outside of the LEP its MK4 reentry vehicle is being upgraded with more accurate telemetry. This combination imbues the W76 with new military characteristics, transforming a 150 kiloton nuclear weapon into a “counterforce” weapon capable of destroying hardened, deeply buried targets. (See http://www.fas.org/blog/ssp/2007/08/us_tripplis_submarine_warhead.php)

3. The House/Senate E&W funding restricts the study to only nonnuclear components for the proposed B61-12 warhead.

4. Plutonium Infrastructure Sustainment includes plutonium processing and recycling; plutonium pit surveillance, refurbishment, and manufacturing; and maintaining technical plutonium capability.

5. NIF is the new \$3.5 billion problem-plagued 192-laser facility at LLNL; 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 most powerful laboratory X-ray source (used to simulate nuclear weapons effects).

6. The \$66M increase includes “support” for transition to a new \$660M KCP financed by private investors and Kansas City municipal bonds. Construction of this new nuclear weapons component plant is outside the NNSA budget.

7. Includes operation of plutonium pit production facilities.

8. ARIES is a pit disassembly program that is being tasked to provide plutonium oxide feedstock for the Mixed Oxide (MOX) Fuel Fabrication Facility at SRS while its proposed neighboring facility, the PDCF, is being designed and possibly built. ARIES was transferred to RTBF in the FY10 budget from Weapons Dismantlement.

9. The Lab’s Technical Area 55 is the site of the plutonium pit production facility.

10. The FY10 Conference Report does not provide the budget breakout between the TA-55 and Radioactive Liquid Waste Treatment Facility Upgrades; \$12M is split between the two.

11. The FY10 House/Senate E&W conference created a new separate line item for design of the Y-12 Uranium Processing Facility (total UPF costs are now estimated at up to \$3.5B).

12. CMRR is proposed to consist of two separate buildings: a “Rad Lab”(construction recently finished at \$165M, with an additional \$199M estimated for equipment) and a future “Nuclear Facility” (estimated to cost well over \$2B). The latter will directly support plutonium pit “trigger” production.

13. The PDCF was transferred to RTBF in the FY10 budget from Weapons Dismantlement.

14. Now Site Stewardship.

15. The MOX Fuel Fabrication Facility (MFFF) will manufacture plutonium oxide-based fuel for domestic commercial reactors. The MFFF was transferred in the FY10 budget to NNSA from the DOE Office of Nuclear Energy.