



## Funding for the Department of Energy's National Nuclear Security Administration

Weapons Activities	(All numbers in thousands of US dollars)				
	<i>FY 2008</i>	<i>FY 2009</i>	<i>FY 2010</i>	<i>FY 2010</i>	<i>FY 2011</i>
	<i>Appropriation<sup>1</sup></i>	<i>Appropriation</i>	<i>Request</i>	<i>Appropriation</i>	<i>Request</i>
<b>Directed Stockpile Work</b>	<b>1,405,602</b>	<b>1,590,152</b>	<b>1,514,651</b>	<b>1,505,859</b>	<b>1,898,379</b>
Life Extension Programs	246,835	205,043	209,196	223,196	249,463
W76 Life Extension Program (LEP) <sup>2</sup>	189,822	202,920	209,196	223,196	249,463
Stockpile Systems	327,089	328,521	390,300	357,800	649,366
B61 Stockpile Systems	64,125	90,204	124,456	91,956	317,136
B61 System Sustainment	-	90,204	-	59,456	65,495
B61 Phase 6.2/6.2A Study <sup>3</sup>	-	-	65,000	32,500	251,641
Weapons Dismantlement and Disposition	55,408	57,238	84,100	96,100	58,025
Stockpile Services	691,319	866,383	831,055	828,763	941,525
Plutonium Sustainment <sup>4</sup>	-	-	149,201	141,909	190,318
Formerly Plutonium Capability (FY09)	-	155,269	-	-	-
Formerly Pit Manufacturing and Cert. Campaign (FY08)	213,831	-	-	-	-
<b>Campaigns</b>	<b>1,871,484</b>	<b>1,620,350</b>	<b>1,559,730</b>	<b>1,571,186</b>	<b>1,716,566</b>
Science Campaign	286,274	316,690	316,690	295,646	365,222
Advanced Certification <sup>5</sup>	14,866	19,400	19,400	19,400	76,972
Primary Assessment Technologies	61,844	80,181	80,181	83,181	85,723
Dynamic Materials Properties	95,978	83,231	86,617	86,617	96,984
Advanced Radiography	30,282	28,535	22,328	28,535	23,594
Secondary Assessment Technologies	78,399	76,913	77,913	77,913	81,949
Test Readiness (Transferred to NTS RTBF Program Readiness)	4,905	5,408	-	-	-
Engineering Campaign	168,548	150,000	150,000	150,000	141,920
Enhanced Surety	34,137	46,112	42,000	42,000	42,429
Inertial Confinement Fusion Ignition and High Yield Campaign	470,206	436,915	436,915	457,915	481,548
National Ignition Facility (NIF) diagnostics	68,107	66,201	72,252	72,252	102,649
Facility Ops and Target Production (NIF, OMEGA, & Z) <sup>6</sup>	112,012	203,282	248,929	269,929	260,393
Advanced Simulation and Computing Campaign	574,537	556,125	556,125	567,625	615,748
Readiness Campaign	158,088	160,620	100,000	100,000	112,092
Tritium Readiness	71,831	71,831	68,246	68,246	50,187
<b>Readiness in Technical Base and Facilities (RTBF)</b>	<b>1,635,381</b>	<b>1,674,406</b>	<b>1,736,348</b>	<b>1,842,870</b>	<b>1,848,970</b>
Operations of Facilities	1,152,455	1,163,331	1,359,938	1,538,966	1,449,954
Kansas City Plant (KCP) <sup>7</sup>	84,702	89,871	169,056	156,056	186,102
Lawrence Livermore National Laboratory (LLNL)	89,303	82,605	86,670	86,670	80,106
Los Alamos National Laboratory (LANL) <sup>8</sup>	283,025	289,169	311,776	311,776	318,464
Advanced Recovery and Integrated Extraction System (ARIES) <sup>9</sup>	-	-	23,988	23,988	-
Nevada Test Site	64,863	92,203	79,583	79,583	80,077
Pantex	112,813	101,230	131,602	131,602	121,254
Sandia National Laboratory (SNL)	153,873	123,992	104,133	104,133	117,369
Savannah River Site (SRS) <sup>10</sup>	85,738	92,762	128,580	128,580	92,722
Y-12 Production Plant (see below for decrease)	224,190	235,397	210,774	229,744	220,927
Institutional Site Support	53,948	56,102	102,129	120,129	40,970
Program Readiness	70,099	71,626	73,021	73,021	69,309
Test Readiness at Nevada Test Site (estimated same as 2009)	-	-	5,408	5,408	5,408
Facility Design/Construction	285,038	314,468	203,382	303,904	399,016
Los Alamos Neutron Science Center (LANSCE) Reinvestment	-	-	-	20,000	0
Various Locations Project Eng. and Design	41,552	101,521	70,678	12,000	0
Y-12 Uranium Processing Facility (separate line item in FY10)	38,538	90,622	54,478	-	-
Y-12 Uranium Processing Facility <sup>11</sup>	-	-	-	94,000	115,016
LANL Chemistry & Metallurgy Research Replacement (CMRR) <sup>12</sup>	74,141	97,194	55,000	97,000	225,000

Pit Disassembly and Conversion Facility-SRS <sup>10</sup>	-	-	30,321	30,321	-
<b>Secure Transportation Asset</b>	<b>211,523</b>	<b>214,439</b>	<b>234,915</b>	<b>234,915</b>	<b>248,045</b>
<b>Nuclear Counterterrorism Incident Response</b>	<b>158,655</b>	<b>215,278</b>	<b>221,936</b>	<b>221,936</b>	<b>233,134</b>
<b>Facilities and Infrastructure Recapitalization Program</b>	<b>177,861</b>	<b>147,449</b>	<b>154,922</b>	<b>83,959</b>	<b>94,000</b>
<b>Site Stewardship</b>	-	-	<b>90,374</b>	<b>61,288</b>	<b>105,478</b>
<b>Total, Weapons Activities</b>	<b>6,302,366</b>	<b>6,380,000</b>	<b>6,384,431</b>	<b>6,348,431</b>	<b>7,008,835</b>
<b>Total, Defense Nuclear Nonproliferation</b>	<b>1,656,922</b>	<b>1,482,350</b>	<b>2,136,709</b>	<b>2,136,709</b>	<b>2,687,167</b>
Fissile Materials Disposition	66,235	41,774	701,900	701,900	1,030,713
MOX Irradiation, Feedstock, and Transportation					107,787
MOX Fuel Fabrication Facility at the Savannah River Site <sup>13</sup>	278,800	467,800	504,238	504,238	475,788
Waste Solidification Building				70,000	57,000
Pit Disassembly and Conversion Facility Construction					80,000
<b>Total, Naval Reactors</b>	<b>774,686</b>	<b>828,054</b>	<b>1,003,133</b>	<b>945,133</b>	<b>1,070,486</b>
<b>Total, Office of the Administrator</b>	<b>402,137</b>	<b>439,190</b>	<b>420,754</b>	<b>420,754</b>	<b>448,267</b>
<b>Total, NNSA</b>	<b>9,136,111</b>	<b>9,129,594</b>	<b>9,945,027</b>	<b>9,887,027</b>	<b>11,214,755</b>

#### Footnotes

- Nearly all funding for DOE is appropriated by the House and Senate Energy & Water Appropriations Subcommittees and any differences between them are reconciled by House/Senate conference.
- Includes a new fuze with selectable height of burst, which in effect provides a new military capability. Related or not, the new FY11 budget indicates future new fuzes for the B61 and W78 warheads as well.
- "May include an extension of the B61 nuclear primary's life (reusing the existing B61 nuclear pit)." This is the first budget reference that we are aware of that spells out intrusive pit modifications.
- 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 FY11 budget "completes the W88 pit build," the original reason for resumed production, but "provides the necessary foundation... for new production requirements..."
- Includes "hydrodynamic experiments to examine options for modernized surety." Decoded, this probably means nonnuclear explosive tests of plutonium pits to develop built-in mechanisms to prevent the unauthorized use of US nuclear weapons. That sounds good in principle, but is not needed because of already existing extensive surety mechanisms. It will, however, provide the latest rationale for new-design weapons and continuing work for the nuclear weapons labs. If implemented it could seriously undermine confidence in the already extensively tested stockpile by introducing major changes to the nuclear explosives package.
- 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 largest and most powerful laboratory Z-pinch X-ray source (used to simulate the nuclear weapons effects).
- The \$30M increase includes "support for transition" to a new facility but not construction of the new \$660M plant, which is privately financed and therefore not included in the NNSA budget.
- Includes operations of plutonium pit production facilities.
- ARIES is a demonstration plutonium pit disassembly line at Los Alamos. It has been transferred to NNSA's Nonproliferation Program, but is slated to process 2 metric tons of plutonium in FY 2011 for feed stock for the SRS Mox Fuel Fabrication Facility while the PDCF is being built.
- Decrease is due to the transfer of the Pit Disassembly and Conversion Facility to Nonproliferation Programs.
- Congress created a separate line item for the UPF in FY 2010. Annual construction costs will climb to \$300 million by 2015.
- When first proposed in 2004 NNSA projected that the CMRR would cost \$660 million. It is now \$4 billion and climbing.
- The purpose of the MOX Fuel Fabrication Facility is to convert weapons-grade plutonium into commercial reactor fuel, thereby introducing plutonium into the international commodity market, perhaps not a good idea.