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U.S. Department of Energy

On

Fiscal Year 2010 President's Budget Request

#### Before the

# House Appropriations Subcommittee Energy and Water Development

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Thank you for the opportunity to discuss our vision for the National Nuclear Security Administration. My remarks today focus on the Fiscal Year 2010 President's Budget Request. The budget requested today will allow the National Nuclear Security Administration to continue to achieve the mission expected of it by the President, the Congress, and the American people.

In a recent trip to Prague, President Obama outlined his vision of a world without nuclear weapons. To this end, the United States will take concrete steps towards achieving such a world by reducing the role of nuclear weapons in our national security strategy and urging others to do the same. Until that ultimate goal is achieved, however, the United States will maintain nuclear forces sufficient to deter any adversary, and guarantee that defense to our allies. To support this vision, the National Nuclear Security Administration (NNSA) will continue to:

- Ensure a safe, secure, reliable and effective nuclear weapons stockpile, even if that stockpile is reduced under a START Follow-On Treaty.
- Reduce the threat to the United States (U.S.) posed by the proliferation of nuclear weapons, and related nuclear materials and expertise.
- Provide safe, reliable, militarily-effective propulsion systems to the U.S. Navy.

By pursuing its mission to achieve these ends, and by providing our unique knowledge and support to our partners in national security, the NNSA will continue to meet its current statutory responsibilities while supporting the long-term goal of a world free from the threat of nuclear weapons.

While the President's long-term objectives are clear, the role of the nuclear weapons stockpile and America's deterrence policy are being reviewed as part of the ongoing Nuclear Posture Review. Efforts are underway in the NPR to establish the size and composition of the future stockpile and the means for managing geopolitical or technical risk – NNSA is fully engaged in

these activities. Its role is to provide the technical and scientific input to inform policy decisions, and then to enable the implementation of the decisions.

NNSA is advancing our knowledge of the physical; chemical, and materials processes that govern nuclear weapons operation and is applying that knowledge in extending the life of existing weapons systems. We have recently completed construction of the National Ignition Facility at the Lawrence Livermore National Laboratory (LLNL) to explore weapons-critical regimes of high temperature and pressure and will begin our first ignition campaign to improve our scientific understanding of phenomena that could previously only be explored theoretically or in full-scale nuclear testing. The NNSA is also conducting warhead Life Extension Programs to ensure that our country remains secure without the production of new fissile materials, and without conducting underground nuclear tests. On the basis of the most recent assessment by the Directors of our national nuclear weapon laboratories, today's nuclear stockpile remains safe, reliable, and secure. At the same time, we are concerned about increasing challenges in maintaining, for the long term, the safety and reliability of the aging, finely-tuned warheads that were produced in the 1970's and 80's and are well past their original planned service life.

I am committed to continuing to transform our national laboratories and production plants into a smaller and more cost-effective Nuclear Security Enterprise. However, I am mindful that our design laboratories and production facilities are national assets that support a large number of defense, security, and intelligence activities. As the role of nuclear weapons in our Nation's defense evolves and the threats to national security continue to grow, the focus of this enterprise must also change and place its tremendous intellectual capacity and unique facilities in the service of addressing other challenges related to national defense. We are taking steps to move in this direction, including functioning as a national science, technology, and systems engineering resource to other agencies with national security responsibilities.

The NNSA FY 2010 Congressional Budget Request will allow continued progress in obtaining the essential goals I have outlined. It will allow us to:

- Continue transforming into a Nuclear Security Enterprise by:
  - o Involving the next generation of our nation's scientific, engineering, and technical professionals in the broad sweep of technical challenges;
  - Operating the National Ignition Facility, allowing the use of innovative technology to provide answers to important scientific questions;
  - Shrinking the Cold War complex by preparing buildings for decommissioning and decontamination, and replacing these antiquated facilities with modern and efficient facilities; as well as disposing of excess real property through demolition, transfer and the preparation of process-contaminated facilities for transfer to the Department of Energy (DOE) Office of Environmental Management (EM) for final disposition;
  - o Initiating a Site Stewardship program to ensure that NNSA increases the use of renewable and efficient energy, and reduces the number of locations with security Category I/II Special Nuclear Materials, including the removal of these materials from the Lawrence Livermore National Laboratory by the end of 2012, and
  - o Reducing security, safety and environmental risks by consolidating and disposing of excess nuclear materials wherever possible.

- Support the development and implementation of arms control, nonproliferation, and civil nuclear energy agreements by:
  - o Providing technical and policy support to U.S. delegations negotiating arms control, nonproliferation, and peaceful nuclear energy cooperation agreements;
  - O Developing the technologies and approaches needed to verify compliance with negotiated treaties and agreements, and
  - o Providing training and technical support to the International Atomic Energy Agency.
- Support U.S. commitments through construction of the Mixed Oxide Fuel Fabrication Facility and Waste Solidification Building to provide a disposition pathway for excess U.S. fissile materials, and to help Russia implement its reciprocal commitments.
- Continue our successful programs to secure and/or eliminate vulnerable nuclear and radioactive material in other countries, enhance nuclear/radiological material detection capabilities at borders, airports, and seaports, and strengthen nonproliferation practices and standards worldwide.
- Embark on the design and development of an advanced reactor core and propulsion plant supporting the timely replacement of the OHIO Class Submarine.
- Overhaul of the land-based prototype reactor plant used to test advanced materials and techniques in a realistic operating environment prior to their inclusion in propulsion plants.
- Honor the commitments made to those who won the Cold War by ensuring their pensions are secure in times of financial uncertainty.

Today, I'd like to testify on our efforts in Weapons Activities, Defense Nuclear Nonproliferation, and Naval Reactors.

#### WEAPONS ACTIVITIES OVERVIEW

The NNSA will ensure that our nuclear stockpile remains safe, secure and effective to deter any adversary, and provide a defense umbrella to our allies. At the same time, NNSA will continue to pursue a modern more flexible Nuclear Security Enterprise that is significantly smaller than the Cold War complex, but is able to address a variety of stockpile scenarios.

As I have committed to you previously, NNSA continues to retire and dismantle nuclear weapons. By 2012 our stockpile will be one-quarter of the size it was at the end of the Cold War. As the United States prepares for the 2010 Review Conference of the Nuclear Non-Proliferation Treaty, this fact alone should emphasize the commitment we make to both our Nation and to the world.

As a full partner in the Nuclear Posture Review, the NNSA is working with the Departments of Defense and State to establish the plans, policies, and programs that will govern the future posture of our nuclear forces and supporting infrastructure. The recently issued report of the Bipartisan Congressional Commission on the Strategic Posture of the United States will help guide these efforts. These reviews will assist the U.S. Congress and the Administration in clearly defining our future direction.

As the NPR proceeds, NNSA continues to carry out a number of activities in support of the stockpile including warhead surveillance, assessment, replacement of limited life components in

existing weapon systems, and dismantlements. We are also continuing the W76 Life Extension Program and a feasibility study with the Air Force for a Life Extension Program for some models of the B61 gravity bomb. There are also activities planned in the six campaigns and the studies needed for Annual Assessment of the stockpile.

The NNSA will also continue transforming the Nuclear Security Enterprise into a modern, smaller, and more flexible complex. The NNSA inherited a system of laboratories and production plants designed to produce large volumes of weapons and designs needed to counter Soviet aggression. We have initiated a major effort to right-size the enterprise to meet the new, anticipated requirements. The NNSA is consolidating Category I and II Special Nuclear Materials; removing these items from selected sites and providing safe, secure storage for this material.

In FY 2010, we will be reducing our infrastructure footprint through the deactivation and decommissioning of buildings such as Buildings 9206 and 9201 at Y-12. We will also plan for the future infrastructure through continuing design of the Uranium Processing Facility at Y-12, the Pit Disassembly and Conversion Facility at the Savannah River Site, and the Chemistry and Metallurgy Research Replacement Facility at the Los Alamos National Laboratory, and begin the process of planning for an orderly migration of missions to a smaller and more flexible facility at the Kansas City Plant.

The NNSA has received assistance in our ability to alter our infrastructure in the form of an increase in the General Plant Projects limit. We are pleased with the decision to increase the ceiling on General Plant Projects from \$5 million to \$10 million. We believe that this aids in the maintenance and repair of the enduring enterprise. Following on this increase, the NNSA is submitting a legislative proposal to similarly increase the design cost limit for these construction projects from \$600,000 to \$1,500,000. We seek your support for the proposal.

But while NNSA is reducing its footprint, and while the total number of warheads in the stockpile continues to decline, there are capabilities that must be preserved. Not only are these capabilities needed to support the maintenance of any stockpile, but they are also needed to support the Nuclear Security Enterprise's initiatives in nonproliferation, nuclear counterterrorism, nuclear forensics, and nuclear incident response. It's important to note that the enterprise does not scale linearly with the size of the stockpile; and the need for baseline functional capabilities is not eliminated with cessation of research into new designs and the cessation of any production of new weapons systems. These capabilities are needed whether we have a few warheads, or a few thousand.

Although NNSA did not receive any funds directly from the American Recovery and Reinvestment Act, we are assisting other parts of the Department in implementing their plans for stimulus work at the NNSA sites and stand ready to do more.

As NNSA prepares for the future, we must focus on the retention of our scientific, technical, and engineering personnel throughout the complex. Without experienced scientific, technical, and engineering personnel, NNSA cannot succeed at its mission. Throughout the cold war we were able to attract the nation's brightest scientists, engineers, and technical professionals by

providing challenges, facilities, and opportunities that were unique, were on the forefront of science, and that allowed them to put their talents to work to serve their country. Today we are transitioning our emphasis to a broader nuclear security mission, but our need to attract the best scientists, engineers and technical professionals remains. By developing new scientific tools such as the National Ignition Facility, new challenges such as the detection of smuggled uranium and plutonium, and the modernization of facilities such as the Chemistry and Metallurgy Research Replacement Facility, we can continue to attract bright technical minds who wish to serve their country. We believe that our response to the spectrum of threats to national security is not only the right steps for us to take to make the Nation more secure, but also will provide a significant set of technical areas that will motivate young scientists to join us in our mission.

The challenges are huge and meeting them calls upon both basic science and applied technology. Approximately 70 years ago, Hans Bethe advanced the state of science with his critical work explaining the physical processes governing the life cycles of stars. Today the National Ignition Facility (NIF) stands on the threshold of producing stellar conditions in the laboratory. By moving the enterprise forward in advancing the boundaries of science, we will continue to attract our Nation's brightest minds to our scientific endeavors. In FY 2009, two significant technological milestones were achieved; crossing the one mega joule threshold with NIF and the one petaflop threshold in the Advanced Simulation and Computing Campaign.

#### DEFENSE NUCLEAR NONPROLIFERATION OVERVIEW

As part of the President's comprehensive strategy to address the international nuclear threat, the President also called for strengthening the Nuclear Nonproliferation Treaty, accelerating our efforts to secure vulnerable nuclear materials around the world, and increasing our work to detect, deter, and eliminate illicit trafficking of nuclear materials. The NNSA Nuclear Security Enterprise is actively engaged in these and other nonproliferation missions and will provide the technical expertise to ensure they are successful.

The movement of funding for the Mixed Oxide Fuel Fabrication Facility and the Waste Solidification Building into the Fissile Materials Disposition budget is the largest change in the FY 2010 Congressional Budget for Defense Nuclear Nonproliferation program. These critical facilities provide the nonproliferation programs a disposition pathway for at least 34 metric tons of surplus U.S. weapons grade plutonium. I'm pleased to report that the U.S. and Russia have agreed on a revised Russian program to dispose of Russia's 34 metric tons of their surplus weapons plutonium. These changes will be codified in a Protocol that will amend the 2000 U.S.-Russian Plutonium Management and Disposition Agreement, and we expect to sign the Protocol this summer. In light of President Obama's recent statements in Prague and London, I am particularly pleased that the U.S. and Russian plutonium disposition programs are coming together at this time. As a result of these efforts, the U.S. and Russia will ultimately dispose of enough weapons plutonium for at least 17,000 nuclear weapons.

I should note also that with this budget request, we are submitting our last request for funding to eliminate the production of weapons-grade plutonium production in Russia by December 2010, through the shutdown of Russia's last weapons-grade plutonium production reactor in Zheleznogorsk.

The NNSA directly supports President Obama's goal to accelerate efforts to secure all vulnerable nuclear material from around the world within four years, including the expansion and acceleration of our existing efforts. The NNSA is the key agency supporting the Administration's goal of minimizing the use of highly-enriched uranium (HEU) in the civil nuclear sector through our program to shutdown entirely or convert HEU fueled research reactors to the use of low-enriched uranium (LEU) fuel. In FY 2010, we will direct significant funding to the Global Threat Reduction Initiative (GTRI) mission to eliminate and protect vulnerable nuclear and radiological materials located at civilian sites worldwide.

In FY 2010, we will also improve the physical security of nuclear material, as well as facilitate the development and implementation of material control and accountability procedures, and train personnel, to protect a total of 73 nuclear sites throughout Russia and the former Soviet republics. The NNSA will fulfill the Administration's goal of securing nuclear weapons-usable material by ensuring that the material possessed by the Russian Navy, the Russian Ministry of Defense, Rosatom and Russian civilian sites is secured.

But improving the security of weapons-usable material at its source is only the start. We must also develop a Second Line of Defense in order to anticipate the possibility that nuclear weapons-usable material could be smuggled out and transported across international borders. And in fact, we know that illicit trafficking in nuclear and other radioactive materials continues, especially in Eastern Europe, the Caucasus, and Central Asia. In response to the President's charge to do more to combat nuclear trafficking, we will install additional radiation detection equipment at 42 foreign sites across Europe, Asia, and North America, and provide detection equipment in 15 additional ports where cargo is loaded for shipment to the U.S.

This work started several years ago. Technology advances and foreign personnel turnover have occurred since NNSA first began securing sites and borders in foreign countries. Funds will be used not only to perform new installations and train personnel at new sites, but will also be used to upgrade older equipment at existing sites, and to provide refresher training to foreign security professionals.

Additionally, in FY 2010, NNSA will expand and accelerate its Next Generation Safeguards Initiative (NGSI), adding \$15 million to revitalize the U.S. technical and human capital base necessary to strengthen the international safeguards system and the International Atomic Energy Agency, in line with President Obama's charge in Prague. The NGSI complements related NNSA priorities to reduce proliferation risks associated with growing international interest in the use of nuclear power; to expand export control training and outreach; to develop and implement reliable fuel services as an alternative to the further spread of enrichment and reprocessing capabilities; and--consistent with the President's call for progress towards a world without nuclear weapons--to provide technical support for negotiations of the START follow-on agreement, Comprehensive Nuclear Test-Ban Treaty, and a verifiable Fissile Material Cutoff Treaty.

#### NAVAL REACTORS OVERVIEW

The NNSA also contributes to national security through the Naval Reactors Program. This program ensures that the nuclear propulsion plants aboard our Navy's warships remain safe and reliable for their complete service lives. Over 40 percent of the Navy's major combatants are nuclear-powered. All of the Nation's aircraft carriers, attack submarines, guided missile submarines, and ballistic missile submarines enjoy the significant operational advantage afforded by nuclear power, including speed, endurance, and enhanced combat payload. Through NNSAs efforts, nuclear-powered warships are on station where American interests are threatened, and ready to conduct sustained combat operations.

For over 60 years, the Naval Reactors program has had complete responsibility for all aspects of Naval Nuclear Propulsion. The Naval Nuclear Propulsion Program currently supports 82 active nuclear-powered warships and 103 operating reactors. This represents 8 propulsion plant designs, in seven classes of ships, as well as a training platform.

Naval Reactors funding supports safe and reliable operation of the Nation's Nuclear Fleet. This includes providing rigorous oversight, analysis of plant performance and conditions, as well as addressing emergent operational issues and technology obsolescence for 71 submarines, 11 aircraft carriers and four research and development and training platforms. This funding also supports new plant design projects (i.e., reactor plant for the GERALD R. FORD-class aircraft carrier and alternative lower-cost core for VIRGINIA-class submarines), as well as ensuring proper storage of naval spent nuclear fuel, prudent recapitalization of aging facilities, and remediation of environmental liabilities.

The OHIO-class SSBNs, which are the most survivable leg of the U.S. Strategic Forces, are approaching the end of their service lives. The Navy recently completed studies for a follow-on replacement to the OHIO-class and is funding the commencement of design work in FY 2010. NNSA funding in FY 2010 supports reactor core and propulsion plant design and development efforts to support this replacement.

Since 1978, the land-based prototype reactor plant (S8G) has provided an essential capability to test required changes or improvements to components and systems prior to installation in operational ships. The prototype has also provided required, high-quality training for new sailors preparing to operate the Nation's nuclear-powered vessels. This land-based prototype will run out of fuel and require a refueling overhaul starting in 2018. This overhaul and the resultant opportunity to test advanced materials and manufacturing techniques in a caustic operating environment will significantly mitigate risk in the OHIO Replacement reactor plant design. To support the refueling overhaul schedule, concept studies and systems design and development efforts will begin in 2010.

The Expended Core Facility, located at the Naval Reactors Facility on the Idaho National Laboratory, is the central location for Naval spent nuclear fuel receipt, inspection, dissection, packaging for dry storage, and temporary storage, as well as detailed examination of spent cores and irradiation specimens. Continuous, efficient operation of this facility is vital to ensure the United States can support fuel handling operations in our shipyards conducting construction,

repair, and restoration of nuclear ships. The existing facility and related infrastructure is over 50 years old and requires recapitalization. The mission need for recapitalizing this capability has been approved and conceptual design efforts begin in 2010.

The Program continues to explore and develop potentially advanced technologies that could deliver a compellingly better energy source for nuclear ships. For example, using a supercritical carbon dioxide energy conversion as a replacement for the traditional steam cycle is envisioned to be significantly smaller for the same power output, simpler, more automated, and more affordable. Leveraging existing university, industry, and Nuclear Security Enterprise scientific and engineering work in this technology, conceptual development and small-scale testing is underway to support eventual megawatt-scale testing and prototyping.

Acquisition of a new surface combatant (i.e., cruiser) in support of new ballistic missile defense and anti-air warfare mission requirements are currently under evaluation by the Navy. Based on these mission requirements, this new ship will potentially require higher energy capacity and output than is currently available from traditional fossil fueled power plants. Further, the National Defense Authorization Act (NDAA) for 2008 authorizes the Navy to construct all future major combatant vessels with integrated nuclear power systems unless this requirement is waived by the Secretary of Defense. The Navy is currently analyzing alternative shipboard systems that will determine final power plant requirements. Should the Navy decide to pursue a nuclear-powered cruiser in its current long-range shipbuilding plan, DOE-cognizant reactor core and propulsion plant design and development will be required.

The value of nuclear power for naval propulsion is well recognized and the demand for its inherent capabilities remains strong. By taking every opportunity for economies in our work and business practices, we have made a concerted effort to meet the Navy's demand for new propulsion plant designs while assuring the safe and reliable operation and maintenance of the existing fleet. However, the need to deal with a formidable collection of new challenges coupled with the Program's aging infrastructure and environmental legacies requires a fortified level of resource commitment.

#### NNSA Budget Summary by Appropriation

	(dollars in thousands)					
	FY 2008 Current Appropriation	FY 2009 Original Appropriation	FY 2009 Supplemental Request	FY 2010 Request		
National Nuclear Security Administration						
Office of the Administrator	402,137	439,190	0	420,754		
Weapons Activities	6,302,366	6,380,000	0	6,384,431		
Defense Nuclear Nonproliferation	1,656,922	1,482,350	89,500	2,136,709		
[non-add MOX Project funded in other appropriations]	[278,879]	[487,008]	N/A	N/A		
Naval Reactors	774,686	828,054	0	1,003,133		
Total, NNSA	9,136,111	9,129,594	89,500	9,945,027		
Rescission of Prior Year Balances	-322,000					
Total NNSA (OMB Scoring)	8 814 111					

#### NNSA Future-Years Nuclear Security Program

	(dollars in thousands)					
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	
NNSA						
Office of the Administrator	420754	424,962	429,211	433,504	437,838	
Weapons Activities	6,384,431	6,356,635	6,350,472	6,339,946	6,335,066	
Defense Nuclear Nonproliferation	2,136,709	2,227,276	2,284,049	2,439,019	2,595,190	
Naval Reactors	1,003,133	950,786	950,334	948,978	948,717	
Total, NNSA	9,945,027	9,959,659	10,014,066	10,161,447	10,316,811	

The NNSA FY 2010 Congressional Budget Request is \$9.9 billion, a total of \$815.4 million above the FY 2009 appropriations. Of the 8.9 percent increase, about 7 percent is attributable to the re-location of funding for the Mixed Oxide Fuel Fabrication facility project back to NNSA in the Defense nuclear Nonproliferation appropriation.

The NNSA budget justification contains information for five years as required by Section 3253 of P.L. 106-065, entitled *Future-Years Nuclear Security Program (FYNSP)*. The FY 2010-2014 FYNSP projects \$50.4 billion for NNSA programs through 2014. The principal increases from the FY 2009-2013 FYNSP are: the transfer of funding for the Mixed Oxide (MOX) Fuel Fabrication Facility project back from the Office of Nuclear Energy to NNSA; the multi-year initiative to further enhance global nuclear nonproliferation efforts; and some of the increase required to support the development of the new generation submarine reactor replacement. For Weapons Activities, the outyear projections reflect only a continuation of current capabilities, pending upcoming strategic nuclear policy decisions. The FY 2011-2015 budget process is expected to present a fully integrated Future Years Nuclear Security Program budget aligned with the new strategic direction and program requirements for all of the NNSA programs.

#### NNSA Budget Summary by Appropriation and Program

#### **Weapons Activities Appropriation**

The Weapons Activities appropriation funds five NNSA program organizations. [There are six subheadings below. Combining "Site Stewardship" and "Infrastructure and Environment" would reduce the count to five and mirror the NNSA structure.] The FY 2010 Congressional Budget Request is \$6.4 billion for Weapons Activities, essentially level with FY 2009 appropriation.

#### **Defense Programs**

The FY 2010 Congressional Budget Request for Defense Programs is \$5.0 billion, a decrease of 1.1 percent from the FY 2009 appropriation that is primarily attributable to transitioning the Pit Disassembly and Conversion Facility and the Waste Solidification Building to other programs. The outyear projections for Defense Programs reflect a continuation of current programs and services pending further national nuclear policy direction expected during 2009.

Within the President's Budget request level, the NNSA will continue all programs to meet the immediate needs of the stockpile, stockpile surveillance, annual assessment, and Life Extension Programs (LEP). As directed by the Nuclear Weapons Council, a feasibility and cost study was initiated in September, 2008, to investigate the replacement of aging non-nuclear components in the family of B61 bombs, and to study the potential incorporation of modern safety and security features in these systems. Included in the program are efforts to complete the B61 Phase 6.2/6.2A refurbishment study evaluating end-of-life components, aging, reliability, and surety improvement options. The decrease within the Directed Stockpile Work (DSW) request is attributable mainly to the relocation of the funding for the Pit Disassembly and Conversion Facility (PDCF) to Readiness in Technical Base and Facilities (RTBF) and the Waste Solidification Building (WSB) to Defense Nuclear Nonproliferation.

The Campaign activities for Science, Engineering, Inertial Confinement Fusion and Advanced Simulation and Computing maintain the FY 2009 funding level throughout the FYNSP. The Science Campaign consolidates a new subprogram called "Academic Alliances" that encompasses the funding for university grants, alliances, and the joint program with Science. The Engineering campaign increases emphasis on Enhanced Surveillance and Systems Engineering Technology in the FY 2010 Congressional Budget Request. The Inertial Confinement Fusion Ignition and High Yield Campaign is requested at \$437 million, and in FY 2010, the emphasis shifts away from NIF assembly and toward Facility Operations as the program continues to refine requirements and prepare for the first ignition experiments in 2010. The FY 2010 Congressional Budget Request for the Advanced Simulation and Computing Campaign provides growth in physics and engineering models as support shifts away from hardware procurements and system software.

The Readiness Campaign funds the development and deployment of modern manufacturing capabilities to produce materials and components in compliance with weapon design and performance requirements and in accordance with Life Extension Program and refurbishment schedules. In FY 2010, the Readiness Campaign will focus on supporting the Tritium Readiness activities and high priority projects to deliver new or enhanced processes, technologies, and

capabilities to meet the current needs of the stockpile. The reduction in Tritium Readiness was planned, and is due to the cyclical nature of production.

The Readiness in Technical Base and Facilities request is \$62 million above the FY 2009 appropriations. The increase is attributable to additional funding provided to mitigate increased pension costs at the M&O contractor sites. Within the request for operating expenses, an increase is included for the Kansas City Plant supporting the work for the move to a new, smaller facility. Funding for construction projects is requested at \$203 million to sustain ongoing construction and design efforts. The location of funding for the PDCF project has been changed from DSW to RTBF. One new construction project is requested: the Nuclear Facilities Risk Reduction Project at Y-12 will provide maintenance to sustain uranium related capabilities at Building 9212.

The Secure Transportation Asset program is requested at \$234.9 million, an increase of 9.6 percent over the FY 2009 appropriation. The STA program plans to acquire a total of three transport category aircraft. One 737-type aircraft will be purchased each year--starting in FY 2010, FY 2011, and FY 2012 to replace the aging aircraft. In addition to the aircraft purchases, the remaining increase will be used for training and equipment.

### Nuclear Counterterrorism Incident Response (NCTIR)/Emergency Operations

The NCTIR program responds to and mitigates nuclear and radiological incidents worldwide as the U.S. government's primary capability for radiological and nuclear emergency response. The FY 2010 Congressional Budget Request for these activities is \$221.9 million, an increase of 3 percent over FY 2009 appropriations. The increase reflects funding growth in three specific areas of the program – International Emergency Management and Cooperation, Emergency Response, and Render Safe Stabilization Operations. These initiatives support increased efforts to address serious emergency management programs in priority countries, while continuing and completing ongoing programs with the International Atomic Energy Agency (IAEA) and other international partners and countries; scientific breakthroughs for Render Safe Stabilization Operations and the Technical Integration programs and continued implementation of National Technical Nuclear Forensics for pre- and post-detonation phases and the Stabilization aspect of nuclear emergencies through development of first generation stabilization equipment including training and maintenance programs to selected teams nationwide in support of better emergency response capability.

#### **Infrastructure and Environment**

This organization is responsible for the <u>Facilities and Infrastructure Recapitalization Program</u>, (<u>FIRP</u>) and the new <u>Site Stewardship Program</u> which encompasses Environmental Projects and Operations (EPO) that provides for Long-Term Stewardship (LTS) at NNSA sites after remediation is completed by the DOE Office of Environmental Management, Nuclear Materials Integration, Stewardship Planning which contains a renewable energy efficiency project; and may ultimately include deactivation and demolition activities.

The FY 2010 Congressional Budget Request for FIRP is \$154.9 million, an increase of 5 percent above FY 2009. This provides funding for recapitalization, infrastructure planning and construction. The increase supports continued progress in restoring the condition of mission

critical facilities and infrastructure across the Nuclear Security Enterprise to an acceptable condition. The program's original goals established in FY 2003 include: elimination of \$1.2 billion of deferred maintenance, achieving a Facility Condition Index (FCI) of 5 percent, and elimination of 3 million gsf of excess facilities. The original \$1.2 billion deferred maintenance buydown goal is based on the requirement to meet the FIRP commitment of 5 percent FCI for all facilities. The program's deferred maintenance goal was adjusted in FY 2007 to eliminate \$900 million of deferred maintenance by FY 2013 as a result of transformation decisions that reduced facility deferred maintenance requirements. The principle assumption governing FIRP is that the program will be funded only through FY 2013.

The FY 2010 Congressional Budget Request for Facilities and Infrastructure Recapitalization is \$154.9 million, an increase of 5 percent above FY 2009. This provides funding for recapitalization, infrastructure planning and construction. The increase supports continued progress in restoring the condition of mission essential facilities and infrastructure across the Nuclear Security Enterprise to an acceptable condition.

The FY 2010 Congressional Budget Request for the new GPRA Unit, Site Stewardship, is \$90.4 million. The goal of the Site Stewardship Program 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 transformation. The Site Stewardship program will institute and maintain a robust operational framework at the NNSA government-owned, contractor-operated sites that encompass responsibility for achieving the NNSA mission. This new GPRA Unit will encompass activities currently under Environmental Projects and Operations (EPO) and will include new subprogram elements Nuclear Materials Integration (NMI) and Stewardship Planning. In the I&E organization only EPO was funded (as a separate GPRA unit) in FY 2008 and FY 2009 and is reflected as such for those two years since this is a non-comparable budget submission. The Environmental Programs and Operations increases 7 percent over the FY 2009 appropriation to address ongoing and new regulatory-driven Long Term Stewardship activities at NNSA sites where Environmental Management activities have been completed. Nuclear Materials Integration provides focused attention on the consolidation and disposition of specific NNSA special nuclear materials. Current activities include the deinventory of security Category I and II Special Nuclear Material (SNM) from LLNL and also the consolidation and disposal of inactive actinides at other sites. Funds for these material consolidation and disposal activities are being transferred from Defense Programs to Infrastructure and Environment in FY 2010.

The majority of the requested FY 2010 funding increase of \$28 million is in Stewardship Planning for an operating expense-funded project, the Pantex Renewable Energy Project (PREP) at the Pantex Plant, that will create a more flexible, more reliable, and environmentally friendly source of renewable energy that supports DOE/NNSA operating goals and missions. The PREP will generate surplus electrical energy, reduce greenhouse gas emissions at local power plants, enhance energy security, and create jobs. This modular, operating expense-funded project will play a key role in satisfying NNSA's renewable energy objectives consistent with DOE Order 430.2B, Departmental Energy, Renewable Energy and Transportation Management.

#### **Defense Nuclear Security**

The FY 2010 Congressional Budget Request for Defense Nuclear Security is \$749.0 million to support the base program and on sustaining the NNSA sites 2003 Design Basis Threat baseline operations, and begin initial steps to implement the Department's new Graded Security Protection (GSP) policy. During FY 2010, the program will focus on eliminating or mitigating identified vulnerabilities across the Nuclear Security Enterprise. Funding for one new construction start is requested for the Security Improvements Project (SIP). The SIP will install a new security system to manage and integrate personnel security and access control systems at the Y-12 National Security Complex.

Starting in FY 2009, there is no longer an "offset" in this account or the Departmental Administration Appropriation for the security charges associated with reimbursable work. In the FY 2010 Congressional Budget Request, mission -driven activities will continue to be fully funded with direct appropriations, but security required for Work for Others will be covered as part of full cost recovery for these projects. Institutional security activities will continue to be funded by indirect or general and administrative costs at each site.

#### **Cyber Security**

The Cyber Security program will sustain the NNSA infrastructure and upgrade elements that will counter cyber threats from external and internal attacks using the latest available technologies.

The FY 2010 Congressional Budget Request for Cyber Security is \$122.5 million, an increase of 1 percent over the FY 2009 appropriations. The Cyber Security program is in the process of a major five-year effort focused on revitalization, certification, accreditation and training across the NNSA enterprise. Revitalization enables NNSA to respond to its highest priorities and to address current and future risks; certification and accreditation assure proper documentation of risks and justification of associated operations for systems at all sites; and, education and awareness provides training for federal and contractor personnel to meet expanding skill requirements of NNSA cyber security and information environments.

#### **Defense Nuclear Nonproliferation (DNN) Appropriation**

The DNN program goal is to detect, prevent, and reverse the proliferation of Weapons of Mass Destruction (WMD). Our programs address the threat that hostile nations or terrorist groups may acquire weapons of mass destruction or weapons-usable material, dual-use production or technology, or WMD capabilities, by securing or eliminating vulnerable stockpiles of weapon-usable materials, technology, and expertise in Russia and other countries of concern.

The FY 2010 Congressional Budget Request for the DNN appropriation totals \$2.1 billion. The most significant FY 2010 and outyear increases relate to the request to move the funding for the MOX Fuel Fabrication Facility project and the WSB back to NNSA's DNN Programs. The NNSA has funded the MOX Fuel Fabrication Facility project and the WSB baseline increases within the requested funding for FY 2010 and the outyears. Other increases include International Materials Protection and Cooperation (INMP&C) and Nonproliferation and International Security (NIS), both of which increase 38 percent over the FY 2009 levels.

Funding in the INMP&C FY 2010 Congressional Budget Request of \$552.3 million is an increase of 38 percent over the FY 2009 appropriated level. This increase is the first step in

fulfilling President Obama's promise during his Prague address that the United States will expand its partnership with Russia and pursue new partnerships to eliminate or secure vulnerable nuclear materials. This budget provides for sustainability support to Russian warhead and material sites with completed INMP&C upgrades, INMP&C upgrades to areas/buildings agreed to after the Bratislava Summit and the projects to assist the Russian Federation and other partner countries in establishing the necessary infrastructure to sustain effective MPC&A operations. In addition, the budget provides for the Second Line of Defense program and the installation of radiation detection equipment at 43 foreign sites and 15 Megaports.

The FY 2010 Congressional Budget Request for the NIS program is \$207.2 million, an increase of 38 percent over the FY 2009 appropriations. This supports the Next Generation Safeguards Initiative (NGSI), which aims to strengthen the international safeguards system and revitalize the U.S. technical base and the human capital that supports it; as well as nuclear disablement, dismantlement, and verification activities in North Korea; policy and technical support for U.S. efforts to address proliferation by Iran, North Korea and proliferation networks; and the implementation of nuclear arms reduction and associated agreements.

The FY 2010 Congressional Budget Request for the Global Threat Reduction Initiative (GTRI) is \$353.5 million, a 10.5 percent reduction from the FY 2009 appropriations. Most of this decrease results from the completion of the Kazakhstan Spent Fuel work in CY 2010. The FY 2010 Congressional Budget Request of \$24.5 million for the Elimination of Weapons Grade Plutonium Production (EWGPP) is the final increment of U.S. funding needed for this program. The significant reduction in the budget reflects close-out and completion of the construction activities for the Zheleznogorsk Project.

The Nonproliferation and Verification R&D program is requested at \$297.3 million, a decrease from the FY 2009 level. This decrease reflects both an unrequested congressional addition in 2009 and NNSA's funding in 2009 of the total required in 2009 and 2010 for the Physical Sciences building in Washington State. The \$297.3 million is sufficient to support long-term R&D leading to detection systems for strengthening U.S. capabilities to respond to current and projected threats to national and homeland security posed by the proliferation of nuclear weapons and diversion of special nuclear material. Almost a third of this funding is for production of operational nuclear detonation detection sensors to support the nation's operational nuclear detonation detection and reporting infrastructure through joint programs with DoD.

The President's Request for Fissile Materials Disposition is \$701.9 million, reflecting the transfer of funding for the MOX Fuel Fabrication Facility project and WSB projects back to this program. In addition to these U.S. plutonium disposition activities, the program supports three other principal elements: efforts to dispose of U.S. HEU declared surplus to defense needs primarily by down-blending it into low enriched uranium; technical analyses and support to negotiations among the United States, Russia, and the International Atomic Energy Agency on monitoring and inspection regimes required by a 2000 U.S.-Russia plutonium disposition agreement; and limited support for the early disposition of Russia's plutonium in that country's BN-600 reactor including U.S. technical support to oversee work in Russia for early disposition of Russian weapon-grade plutonium in fast reactors. The U.S. and Russia began negotiations on

amendments to the 2000 Agreement in 2008, and expect to complete the negotiations this summer.

### **Naval Reactors Appropriation**

The NNSA's Naval Reactors program continues to provide the U.S. Navy with safe, military effective nuclear propulsion plants and ensure their continued safe and reliable operation. The FY 2010 Congressional Budget Request for Naval Reactors is \$1,003.1 million, an increase of 21 percent over the FY 2009 appropriations.

This increase provides additional funding to initiate the new mission work for the design and delivery of a new reactor core and propulsion plant to support the next-generation submarine design, and refueling of the S8G Prototype, one of two land-based reactor plant prototypes that serve as a testing platform for nuclear technology. Significant outyear funding is required for both of these activities. A portion of the FY 2010 increase will also support Naval Reactors pension responsibilities.

### Office of the Administrator Appropriation

This appropriation provides corporate direction, federal personnel, and resources necessary to plan, manage, and oversee the operation of the NNSA. It provides funding for all Federal NNSA staff in Headquarters and field locations except those supporting Naval Reactors and the Secure Transportation Asset agents and transportation staff.

The FY 2010 Congressional Budget Request of \$420.8 million reflects a decrease of \$18.4 million that is attributable to Congressionally-directed projects funded in FY 2009. Staffing increases in FY 2010 by 28 full time equivalents (FTEs) from 1,942 to 1,970 reflecting functional transfers and growth to accommodate mission program increases. The projected staffing level for FY 2010 is 1,970 and is maintained throughout the outyear period. The Historically Black Colleges/Hispanic Serving Institutions programs will continue through FY 2010 on grants made by appropriations provided in FY 2009 and through program funding. The FY 2010 Congressional Budget Request includes \$4.1 million for the Massie Chairs and related activities only.

**Budget Tables for the National Nuclear Security Administration** 

### National Nuclear Security Administration

### Overview Appropriation Summary

(dollars in thousands)

	(contais in abdisards)				
			FY 2009		
	FY 2008 Current	FY 2009 Original	Supplemental	FY 2010	
	Appropriation	Appropriation	Request	Request	
National Nuclear Security Administration					
Office of the Administrator	402,137	439,190	0	420,754	
Weapons Activities	6,302,366	6,380,000	0	6,384,431	
Defense Nuclear Nonproliferation	1,656,922	1,482,350	89,500	2,136,709	
[non-add MOX Project funded in other appropriations]	[278,879]	[487,008]	N/A	N/A	
Naval Reactors	774,686	828,054	0	1,003,133	
Total, NNSA	9,136,111	9,129,594	89,500	9,945,027	
Rescission of Prior Year Balances	-322,000				
Total, NNSA (OMB Scoring)	8,814,111				

## Outyear Appropriation Summary NNSA Future-Years Nuclear Security Program (FYNSP)

(dollars in thousands)

Total, NNSA	9,945,027	9,959,659	10,014,066	10,161,447	948,717 <b>10,316,811</b>
Naval Reactors	1,003,133	950,786	950,334	948,978	049 717
Defense Nuclear Nonproliferation	2,136,709	2,227,276	2,284,049	2,439,019	2,595,190
Weapons Activities	6,384,431	6,356,635	6,350,472	6,339,946	6,335,066
Office of the Administrator	420754	424,962	429,211	433,504	437,838
NNSA					
	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014

### Office of the Administrator National Nuclear Security Administration

#### Overview

**Appropriation Summary by Program** 

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	FY 2008 Current Appropriation	FY 2009 Original Appropriation <sup>a</sup>	FY 2010 Request <sup>b</sup>
Office of the Administrator			
Office of the Administrator	379,997	415,878	431,074
<b>Congressional Directed Projects</b>	22,140	23,312	0
Use of prior year balances	0	0	(10,320)
Total, Office of the Administrator	402,137	439,190	420,754

#### **Public Law Authorization:**

FY 2009 Omnibus Appropriations Act (P.L. 111-8)

National Nuclear Security Administration Act (P.L. 106-65), as amended

#### **Outyear Appropriation Summary**

(dollars in thousands)

	(dollars in thousands)					
	FY 2011	FY 2012	FY 2013	FY 2014		
Office of the Administrator	424,962	429,211	433,504	437,838	_	

<sup>&</sup>lt;sup>a</sup> The FY 2009 Omnibus Appropriations Act report language states, "The Department is directed to transfer \$10,000,000 from the Office of the Administrator to the Non-Defense Environmental Cleanup account for cleanup efforts at Argonne National Laboratory."

<sup>&</sup>lt;sup>b</sup> The FY 2010 program level for the Office of the Administrator will be achieved through the planned use of prior year unobligated balances in the amount of \$10,320,000.

### Office of the Administrator

### **Congressional Directed Projects**

### Funding Profile by Subprogram

(dollars in thousands)

FY 2008 Current	FY 2009 Original	FY 2010
Appropriation <sup>a</sup>	Appropriation	Request
22 140	23 312	0

**Congressionally Directed Projects** 

<sup>&</sup>lt;sup>a</sup> Reflects a rescission of \$360,000 as cited in the FY 2008 Consolidated Appropriations Act (P.L. 110-161).

### Weapons Activities

### **Funding Profile by Subprogram**

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	(00	ollars in thousands)	
	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Weapons Activities			
Directed Stockpile Work	1,405,602	1,590,152	1,514,651
Science Campaign	286,274	316,690	316,690
Engineering Campaign	168,548	150,000	150,000
Inertial Confinement Fusion Ignition and High Yield Campaign	470,206	436,915	436,915
Advanced Simulation and Computing Campaign	574,537	556,125	556,125
Pit Manufacturing and Certification Campaign	213,831	0	0
Readiness Campaign	158,088	160,620	100,000
Readiness in Technical Base and Facilities	1,635,381	1,674,406	1,736,348
Secure Transportation Asset	211,523	214,439	234,915
Nuclear Counterrorism Incident Response	158,655	215,278	221,936
Facilities and Infrastructure Recapitalization Program	177,861	147,449	154,922
Site Stewardship	0	0	90,374
Environmental Projects and Operations	17,272	38,596	0
Defense Nuclear Security	799,133	735,208	749,044
Cyber Security	105,287	121,286	122,511
Congressionally Directed Projects	47,232	22,836	0
Subtotal, Weapons Activities	6,429,430	6,380,000	6,384,431
Security Charge for Reimbursable Work	-34,000	0	0
Use of Prior Year Balances	-93,064	0	0
Total, Weapons Activities	6,302,366	6,380,000	6,384,431

#### **Public Law Authorization:**

FY 2008 Consolidated Appropriations Act (P.L. 110-161)

Omnibus Appropriations Act, 2009 (P.L. 111-8)

National Nuclear Security Administration Act, (P.L. 106-65), as amended

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(dollare	ın	thousands)
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	FY 2011	FY 2012	FY 2013	FY 2014
Weapons Activities	L. C.			/
Directed Stockpile Work	1,522,230	1,485,842	1,531,408	1,553,468
Science Campaign	313,075	311,860	308,223	304,899
Engineering Campaign Inertial Confinement Fusion Ignition and High Yield	118,630	118,170	116,792	144,415
Campaign	431,927	430,251	425,234	420,648
Advanced Simulation and Computing Campaign	549,776	547,643	541,257	535,420
Pit Manufacturing and Certification Campaign	0	. 0	0	0
Readiness Campaign	84,029	83,704	82,728	81,835
Readiness in Technical Base and Facilities	1,736,779	1,770,867	1,736,475	1,694,224
Secure Transportation Asset	253,902	257,444	255,575	259,146
Nuclear Counterrorism Incident Response	223,178	222,914	222,508	222,300
Facilities and Infrastructure Recapitalization Program	156,764	154,750	154,687	. 0
Site Stewardship	89,915	91,636	91,261	245,729
Defense Nuclear Security	753,233	752,341	750,972	750,271
Cyber Security	123,197	123,050	122,826	122,711
Congressional Directed Projects	0	0	0	0
Total, Weapons Activities	6,356,635	6,350,472	6,339,946	6,335,066

### Directed Stockpile Work

### **Funding Profile by Subprogram**

	(do	llars in thousands)	
	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Directed Stockpile Work			
Life Extension Programs			
B61 Life Extension Program	57,013	2,123	0
W76 Life Extension Program	189,822	202,920	209,196
Subtotal, Life Extension Programs	246,835	205,043	209,196
Stockpile Systems			
B61 Stockpile Systems	64,125	78,021	124,456
W62 Stockpile Systems	2,122	1,596	0
W76 Stockpile Systems	65,212	66,365	65,497
W78 Stockpile Systems	36,880	42,049	50,741
W80 Stockpile Systems	27,342	31,073	19,064
B83 Stockpile Systems	23,959	24,986	35,682
W87 Stockpile Systems	53,199	36,073	51,817
W88 Stockpile Systems	54,250	48,358	43,043
Subtotal, Stockpile Systems	327,089	328,521	390,300
Reliable Replacement Warhead	1,527	0	0
Weapons Dismantlement and Disposition			
99-D-141-01 Pit Disassembly and Conversion Facility-SRS	22,447	24,883	0
99-D-141-02 Waste Solidification Building-SRS	33,600	40,000	0
Weapons Dismantlement and Disposition	55,408	57,238	84,100
Device Assembly Facility	14,713	0	. 0
Pit Disassembly and Conversion Facility-O&M	12,664	68,084	0
Subtotal, Weapons Dismantlement and Disposition	138,832	190,205	84,100
Stockpile Services			
Production Support	283,529	293,062	301,484
Research & Development Support	31,386	35,144	37,071
Research & Development Certification and Safety	173,609	187,574	143,076
Management, Technology, and Production	202,795	195,334	200,223
Plutonium Capability	0	155,269	0
Plutonium Sustainment	0	0	149,201
Subtotal, Stockpile Services	691,319	866,383	831,055
Total, Directed Stockpile Work	1,405,602	1,590,152	1,514,651

		(dollars in	thousands)	
	FY 2011	FY 2012	FY 2013	FY 2014
Directed Stockpile Work				
Life Extension Programs				
W76 Life Extension Program	206,808	206,005	203,603	236,403
Subtotal, Life Extension Programs	206,808	206,005	203,603	236,403
Stockpile Systems				
B61 Stockpile Systems	110,689	138,084	195,768	198,355
W62 Stockpile Systems	. 0	0	0	0
W76 Stockpile Systems	56,884	51,348	52,883	49,177
W78 Stockpile Systems	47,596	39,077	38,158	41,518
W80 Stockpile Systems	17,599	15,909	18,482	19,444
B83 Stockpile Systems	34,649	34,616	35,447	38,596
W87 Stockpile Systems	55,196	61,555	59,247	46,002
W88 Stockpile Systems	40,120	56,354	60,137	62,069
Subtotal, Stockpile Systems	362,733	396,943	460,122	455,161
Weapons Dismantlement and Disposition	62,464	60,783	61,928	59,544
Stockpile Services				
Production Support	317,074	295,307	277,715	272,016
Research & Development Support	39,494	35,904	35,517	36,378
Research & Development Certification and Safety	193,516	176,360	183,311	184,090
Management, Technology, and Production	198,387	206,980	201,499	203,590
Pit Manufacturing	0	0	0	0
Pit Manufacturing Capability	0	0	0	0
Plutonium Capability	0	0	0	0
Plutonium Sustainment	141,754	107,560	107,713	106,286
Subtotal, Stockpile Services	890,225	822,111	805,755	802,360
Total, Directed Stockpile Work	1,522,230	1,485,842	1,531,408	1,553,468

## Science Campaign

### Funding Profile by Subprogram

(dollars in thousands)

	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Science Campaign			
Advanced Certification	14,866	19,400	19,400
Primary Assessment Technologies	61,844	80,181	80,181
Dynamic Plutonium Experiments	0	23,022	0
Dynamic Materials Properties	95,978	83,231	86,617
Academic Alliances	0	0	30,251
Advanced Radiography	30,282	28,535	22,328
Secondary Assessment Technologies	78,399	76,913	77,913
Test Readiness	4,905	5,408	0
Total, Science Campaign	286,274	316,690	316,690

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	FY 2011	FY 2012	FY 2013	FY 2014
Science Campaign				
Advanced Certification	19,316	19,104	18,881	18,678
Primary Assessment Technologies	79,835	78,958	78,038	77,195
Dynamic Plutonium Experiments	0	0	0	0
Dynamic Materials Properties	86,243	85,296	84,301	83,392
Academic Alliances	30,120	29,790	29,442	29,125
Advanced Radiography	19,984	21,987	21,731	21,497
Secondary Assessment Technologies	77,577	76,725	75,830	75,012
Test Readiness	0	0	0	0
Total, Science Campaign	313,075	311,860	308,223	304,899

#### **Engineering Campaign**

#### **Funding Profile by Subprogram**

(dollars in thousands) FY 2008 Current FY 2009 Original FY 2010 Appropriation Appropriation Request **Engineering Campaign Enhanced Surety** 34,137 46,112 42,000 Weapon Systems Engineering Assessment Technology 18,814 16,592 18,000 Nuclear Survivability 8,644 21,100 21,000 **Enhanced Surveillance** 78,573 66,196 69,000 Microsystems and Engineering Sciences Applications (MESA) Other Projects Cosrs (OPC) 7,485 0 0 08-D-806, Ion Beam Laboratory Refurbishment Construction 9,911 0 0 01-D-108, Microsystems and Engineering Sciences Applications (MESA) Construction 10,984 0 Total, Engineering Campaign 168,548 150,000 150,000

#### Outyear Funding Profile by Subprogram

(dollars in thousands) FY 2011 FY 2012 FY 2013 FY 2014 **Engineering Campaign Enhanced Surety** 43,431 45,101 44,770 50,064 Weapon Systems Engineering Assessment Technology 13,850 16,938 15,572 20,218 Nuclear Survivability 17,922 9,454 8,760 10,590 Enhanced Surveillance 43,427 46,677 47,690 63,543 MESA OPCs 0 0 0 0 **MESA Construction** 0 0 0 Total, Engineering Campaign 118,630 118,170 116,792 144,415

### Inertial Confinement Fusion Ignition and High Yield Campaign

### **Funding Profile by Subprogram**

	(dollars in thousands)			
	FY 2008 Current	FY 2009 Original	FY 2010	
	Appropriation	Request		
Inertial Confinement Fusion Ignition and High Yield Campaign				
Ignition	103,029	100,535	106,734	
Support of Other Stockpile Programs	0	0	0	
NIF Diagnostics, Cryogenics, and Experimental Support	68,107	66,201	72,252	
Pulsed Power Inertial Confinement Fusion	10,241	8,652	5,000	
Joint Program in High Energy Density Laboratory Plasmas	3,152	3,053	4,000	
Facility Operations and Target Production	112,012	203,282	248,929	
Inertial Fusion Technology	29,426	0	0	
NIF Assembly and Installation Program	134,294	55,192	0	
High-Energy Petawatt Laser Development	0	0	0	
96-D-111, National Ignition Facility	9,945	0	0	
Total, Inertial Confinement Fusion Ignition and High Yield				
Campaign	470,206	436,915	436,915	

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Inertial Confinement Fusion Ignition and High Yield				
Campaign				
Ignition	111,173	94,773	74,410	71,479
Support of Other Stockpile Programs	0	13,102	29,495	29,177
NIF Diagnostics, Cryogenics, and Experimental Support	74,370	75,395	74,921	71,348
Pulsed Power Inertial Confinement Fusion	4,978	4,924	4,866	4,814
Joint Program in High Energy Density Laboratory Plasmas	3,983	3,939	3,893	3,851
Facility Operations and Target Production	237,423	238,118	237,649	239,979
Inertial Fusion Technology	0	0	. 0	0
NIF Assembly and Installation Program	0	0	0	0
High-Energy Petawatt Laser Development	0	0	0	0
96-D-111, National Ignition Facility	0	0	0	0
Total, Inertial Confinement Fusion Ignition and High Yield				
Campaign 431,927 430,251 425,234				420,648

## Advanced Simulation and Computing Campaign

### **Funding Profile by Subprogram**

	(do	(dollars in thousands)				
•	FY 2008 Current FY 2009 Original FY 201					
•	Appropriation	Appropriation	Request			
Advanced Simulation and Computing Campaign						
Integrated Codes	151,984	138,917	138,475			
Physics and Engineering Models	65,049	49,284	58,762			
Verification and Validation	49,606	50,184	49,781			
Computational Systems and Software Environment	185,637	156,733	150,833			
Facility Operations and User Support	122,261	161,007	158,274			
Total, Advanced Simulation and Computing Campaign	574,537 556,125 556,12					

	(dollars in thousands)				
	FY 2011	FY 2012	FY 2013	FY 2014	
Advanced Simulation and Computing Campaign					
Integrated Codes	137,975	137,975	137,975	137,975	
Physics and Engineering Models	54,798	58,762	58,762	58,762	
Verification and Validation	49,781	49,781	49,781	49,781	
Computational Systems and Software Environment	150,833	150,833	150,833	150,833	
Facility Operations and User Support	156,389	150,292	143,906	138,069	
Total, Advanced Simulation and Computing Campaign	549,776	547,643	541,257	535,420	

### Readiness Campaign

### Funding Profile by Subprogram

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	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Readiness Campaign			
Stockpile Readiness	18,562	27,869	5,746
High Explosives and Weapon Operations	9,647	8,659	4,608
Nonnuclear Readiness	25,103	30,000	12,701
Tritium Readiness	71,831	71,831	68,246
Advanced Design and Production Technologies	32,945	22,261	8,699
Total, Readiness Campaign	158,088	160,620	100,000

### Outyear Funding Profile by Subprogram

(dollars in thousands)

	FY 2011	FY 2012	FY 2013	FY 2014
Readiness Campaign		-		
Stockpile Readiness	11,199	0	0	0
High Explosives and Weapon Operations	0	0	0	0
Nonnuclear Readiness	7,026	0	0	0
Tritium Readiness	51,371	83,704	82,728	81,835
Advanced Design and Production Technologies	14,433	0	0	0
Total, Readiness Campaign	84,029	83,704	82,728	81,835

### Pit Manufacturing and Certification Campaign

### Funding Profile by Subprogram

	(do	(dollars in thousands)			
	FY 2008 Current	FY 2009 Original	FY 2010		
	Appropriation	Appropriation	Request		
Pit Manufacturing and Certification Campaign					
Pit Manufacturing	137,323	0	0		
Pit Certification	37,273	0	0		
Pit Manufacturing Capability	39,235	0	0		
Total, Pit Manufacturing and Certification Campaign	213,831	0	0		

#### **Budget Structure Changes**

Having successfully reconstituted the capability for producing a replacement plutonium pit for a nuclear weapon, the Pit Manufacturing and Certification Campaign is complete. In FY 2009, Pit Manufacturing and Pit Manufacturing Capability become Plutonium Capability under the DSW Stockpile Services subprogram with other production manufacturing activities. Also in FY 2009, Pit Certification was moved to the Science Campaign and renamed Dynamic Plutonium Experiments.

#### Readiness in Technical Base and Facilities

### **Funding Profile by Subprogram**

(dollars in thousands) FY 2008 Current FY 2009 Original FY 2010 Appropriation Appropriation Request Readiness in Technical Base and Facilities Operations of Facilities 1,152,455 1,163,331 1,342,303 Program Readiness 70,099 71,626 73,021 Material Recycle and Recovery 71,567 70,334 69,542 Containers 21,760 23,392 22,696 Storage 34,462 31,951 24,708 Subtotal, Operations and Maintenance 1,350,343 1,359,938 1,532,966 Construction 285,038 314,468 203,382 Total, Readiness in Technical Base and Facilities 1,635,381 1,674,406 1,736,348

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Readiness in Technical Base and Facilities	***************************************			
Operations of Facilities	1,290,006	1,212,085	1,169,649	1,114,853
Program Readiness	70,945	66,075	65,567	65,117
Material Recycle and Recovery	72,091	66,267	66,258	64,959
Containers	28,653	25,658	24,691	23,541
Storage	24,805	23,089	22,975	22,487
Subtotal, Operations and Maintenance	1,486,500	1,393,174	1,349,140	1,290,957
Construction	250,279	377,693	387,335	403,267
Readiness in Technical Base and Facilities	1,736,779	1,770,867	1,736,475	1,694,224

### **Secure Transportation Asset**

### Overview

### **Funding Profile by Subprogram**

	(d	(dollars in thousands)			
	FY 2008 Current	FY 2008 Current FY 2009 Original FY 2010			
	Appropriation	Appropriation	Request		
Secure Transportation Asset (STA)					
Operations and Equipment	128,34	3 127,701	138,772		
Program Direction	83,18	0 86,738	96,143		
Total, Secure Transportation Asset	211,52	3 214,439	234,915		

	(dollars in thousands)				
	FY 2011	FY 2012	FY 2013	FY 2014	
Operations and Equipment					
Operations and Equipment	158,322	160,165	156,897	159,224	
Program Direction	95,580	97,279	98,678	99,922	
Total, Operations and Equipment	253,902	257,444	255,575	259,146	

### **Secure Transportation Asset**

### **Operations and Equipment**

### **Funding Profile by Subprogram**

	thousands)

	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Operations and Equipment			
Mission Capacity	72,358	70,107	75,038
Security/Safety Capability	18,168	20,617	26,472
Infrastructure and C5 Systems	29,769	25,978	23,217
Program Management	8,048	10,999	14,045
Total, Operations and Equipment	128,343	127,701	138,772

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	FY 2011	FY 2012	FY 2013	FY 2014
Operations and Equipment	-			
Mission Capacity	82,721	82,893	80,286	80,695
Security/Safety Capability	27,516	28,124	27,883	28,582
Infrastructure and C5 Systems	33,486	34,226	33,933	34,783
Program Management	14,599	14,922	14,795	15,164
Total, Operations and Equipment	158,322	160,165	156,897	159,224

## Secure Transportation Asset

### **Program Direction**

### Funding Profile by Subprogram

1	'doll	ars	in	thousands)	
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Total, Full Time Equivalents	567	647	647
Total, Program Direction	83,180	86,738	96,143
Other Related Expenses	1,195	1,324	3,587
Travel	8,741	10,188	11,331
Salaries and Benefits	73,244	75,226	81,225
Program Direction			
	Appropriation	Appropriation	Request
	FY 2008 Current	FY 2009 Original	FY 2010

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	(dollars III wie asailas)			
	FY 2011	FY 2012	FY 2013	FY 2014
Program Direction				
Salaries and Benefits	82,157	83,844	84,846	85,658
Travel	11,482	11,827	12,182	12,521
Other Related Expenses	1,941_	1,608	1,650	1,743
Total, Program Direction	95,580	97,279	98,678	99,922
Total, Full Time Equivalents	647	667	667	667

#### **Nuclear Counterterrorism Incident Response**

#### Funding Profile by Subprogram<sup>c</sup>

(dollars in thousands) FY 2009 Original FY 2008 Current FY 2010 Appropriation Appropriation Request **Nuclear Counterterrorism Incident Response** (Homeland Security)<sup>b</sup> Emergency Response (Homeland Security)<sup>b</sup> 131,455 132,918 139,048 National Technical Nuclear Forensics (Homeland Security)<sup>b</sup> 12,000 12,557 10,217 Emergency Management (Homeland Security)<sup>b</sup> 6,479 7,428 7,726 Operations Support (Homeland Security)<sup>b</sup> 8,721 8,207 8,536 International Emergency Management and Cooperation 0 4,515 7,181 Nuclear Counterterrorism (Homeland Security)<sup>b</sup> 0 49,228 49,653 Total, Nuclear Counterterrorism Incident Response 158,655 215,278 221,936

#### Outyear Funding Profile by Subprogram

(dollars in thousands) FY 2011 FY 2012 FY 2013 FY 2014 **Nuclear Counterterrorism Incident Response** Emergency Response (Homeland Security)<sup>b</sup> 138,939 139,222 139,899 141.100 10,384 National Technical Nuclear Forensics (Homeland Security)<sup>b</sup> 10,500 10,400 10,400 Emergency Management (Homeland Security)<sup>b</sup> 7,852 7,500 7,000 6,850 Operations Support (Homeland Security)<sup>b</sup> 8,675 8,692 8,799 8,750 International Emergency Management and Cooperation 7,298 7,300 7,310 7,200 Nuclear Counterterrorism (Homeland Security)<sup>b</sup> 50,030 49,800 49,000 48,000

223,178

222,914

222,508

222,300

Total, Nuclear Counterterrorism Incident Response

c Effective June 1, 2007, the Office of International Emergency Management and Cooperation was functionally transferred from the Office of Defense Nuclear Non-proliferation (DNN) to Nuclear Counterterrorism Incident Response (NCTIR) in an effort to consolidate emergency mission, functions, authorities and activities within NNSA. Funding that was managed by the NCTIR program, but still resided in the DNN budget, was \$6,249,000 for FY 2008, reflecting planned program activities including increases for the Bratislava Agreement. Effective December 2007, the Office of Nuclear Counterterrorism Design Support was functionally transferred from the Office of Defense Programs (DP) to NCTIR in an effort to consolidate emergency mission, functions, authorities and activities within NNSA. FY 2008 funds totaling \$53,000,000 resided in DP; however, NCTIR managed the program.

<sup>&</sup>lt;sup>b</sup> Office of Management and Budget (OMB) Homeland Security designation.

### Facilities and Infrastructure Recapitalization Program

## Funding Profile by Subprogram

	(dollars in thousands)				
	FY 2008 Current FY 2009 Original		FY 2010		
	Appropriation	Appropriation	Request		
Facilities and Infrastructure Recapitalization Program					
Operations and Maintenance (O&M)					
Recapitalization	87,414	69,226	130,507		
Facility Disposition	21,300	0	0		
Infrastructure Planning	7,627	10,324	14,452		
Subtotal, Operations and Maintenance (O&M)	116,341	79,550	144,959		
Construction	61,520	67,899	9,963		
Total, Facilities and Infrastructure Recapitalization Program	177,861	147,449	154,922		

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Facilities and Infrastructure Recapitalization Program				
Operations and Maintenance (O&M)				
Recapitalization	145,065	142,048	152,073	0 .
Facility Disposition	0	0	0	0
Infrastructure Planning	11,699	12,702	2,614	0
Subtotal, Operations and Maintenance (O&M)	156,764	154,750	154,687	0
Construction	0	0	0	0
Total, Facilities and Infrastructure Recapitalization Program	156,764	154,750	154,687	0

### Site Stewardship

### Funding Profile by Subprogram

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	FY 2008 Current FY 2009 Original		FY 2010
	Appropriation Appropriation		Request
Operations and Maintenance			
Environmental Projects and Operations	0	0	41,288
Nuclear Materials Integration	0	0	20,000
Stewardship Planning	0	0	29,086
Total, Operations and Maintenance	0	0	90,374
Construction	. 0	0	0
Total, Site Stewardship	0	0	90,374

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FY 2011	FY 2012	FY 2013	FY 2014	
39,026	37,468	36,040	36,900	
15,000	15,000	10,000	10,000	
13,889	39,168	21,221	158,829	
67,915	91,636	67,261	205,729	
22,000	0	24,000	40,000	
89,915	91,636	91,261	245,729	
	39,026 15,000 13,889 67,915 22,000	39,026 37,468 15,000 15,000 13,889 39,168 67,915 91,636 22,000 0	39,026     37,468     36,040       15,000     15,000     10,000       13,889     39,168     21,221       67,915     91,636     67,261       22,000     0     24,000	

# **Environmental Projects and Operations**

## Funding Profile by Subprogram

	(dollars in thousands)			
	FY 2008 Current   FY 2009 Original   FY 2			
	Appropriation	Appropriation	Request	
Environmental Projects and Operations				
Long-Term Stewardship	17,272	38,596	0	
Total, Environmental Projects and Operations	17,272	38,596	0	

# Safeguards and Security

## Funding Profile by Subprogram

	(dollars in thousands)				
	FY 2008 Current	FY 2010			
	Appropriation	Appropriation	Request		
Safeguards and Security (S&S)					
Defense Nuclear Security (Homeland Security)					
Operations and Maintenance	728,023	689,510	700,044		
Construction	71,110	45,698	49,000		
Subtotal, Defense Nuclear Security	799,133	735,208	749,044		
Offset for S&S Work for Others	(34,000)	0	0		
Total, Defense Nuclear Security	765,133	735,208	749,044		
Cyber Security (Homeland Security)	105,287	121,286	122,511		
Total, Safeguards and Security	870,420	856,494	871,555		

		(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014	
Safeguards and Security (S&S)					
Defense Nuclear Security (Homeland Security)					
Operations and Maintenance	701,233	707,911	750,972	750,271	
Construction	52,000	44,430	0	0	
Total, Defense Nuclear Security	753,233	752,341	750,972	750,271	
Cyber Security (Homeland Security)	123,197	123,050	122,826	122,711	
Total, Safeguards and Security	876,430	875,391	873,798	872,982	

## **Defense Nuclear Security**

## Funding Profile by Subprogram

	(dollars in thousands)				
	FY 2008 Current	FY 2009 Original	FY 2010		
	Appropriation	Appropriation	Request		
Defense Nuclear Security					
Operations and Maintenance (Homeland Security)					
Protective Forces	439,106	418,694	443,000		
Physical Security Systems	120,873	77,245	74,000		
Transportation	1,007	420	0		
Information Security	21,072	25,880	25,300		
Personnel Security	29,460	31,263	30,600		
Materials Control and Accountability	23,978	35,929	35,200		
Program Management	82,527	71,364	83,944		
Technology Deployment, Physical Security	10,000	9,431	8,000		
Graded Security Protection Policy (formerly DBT)	0	19,284	0		
Total, Operations and Maintenance (Homeland Security)	728,023	689,510	700,044		
Construction (Homeland Security)	71,110	45,698	49,000		
Subtotal, Defense Nuclear Security	799,133	735,208	749,044		
Offset for S&S Work for Others	-34,000	0	0		
Total, Defense Nuclear Security with Offset	765,133	735,208	749,044		

	(dollars in thousands)				
	FY 2011	FY 2012	FY 2013	FY 2014	
Defense Nuclear Security					
Operations and Maintenance (Homeland Security)					
Protective Forces	443,360	447,305	465,803	462,947	
Physical Security Systems	77,370	74,727	84,602	84,478	
Information Security	26,276	27,353	27,664	27,979	
Personnel Security	32,116	33,431	33,812	34,196	
Materials Control and Accountability	36,495	37,990	38,423	38,859	
Program Management	77,588	78,747	92,215	93,263	
Technology Deployment, Physical Security	8,028	8,358	8,453	8,549	
Total, Operations and Maintenance (Homeland Security)	701,233	707,911	750,972	750,271	
Construction (Homeland Security)	52,000	44,430	0	0	
Total, Defense Nuclear Security	753,233	752,341	750,972	750,271	

## **Cyber Security**

# Funding Profile by Subprogram

	(dollars in thousands)				
	FY 2008 Current	FY 2009 Original	FY 2010		
	Appropriation	Appropriation	Request		
Cyber Security (Homeland Security)					
Infrastructure Program	71,777	93,776	99,011		
Enterprise Secure Computing	19,500	25,500	21,500		
Technology Application Development	2,010	2,010	2,000		
Classified Diskless Workstation Operations	12,000	0	. 0		
Total, Cyber Security (Homeland Security)	105,287	121,286	122,511		

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Cyber Security (Homeland Security)				
Infrastructure Program	99,697	95,550	95,326	95,211
Enterprise Secure Computing	21,500	25,500	25,500	25,500
Technology Application Development	2,000	2,000	2,000	2,000
Classified Diskless Workstation Operations	0	0	0	0
Total, Cyber Security (Homeland Security)	123,197	123,050	122.826	122.711

## Weapons Activities

## **Congressional Directed Projects**

## Funding Profile by Subprogram

(dollars in thousands)

FY 2008 Current	FY 2009 Original	FY 2010
Appropriation	Appropriation	Request
47,232	22.836	0

**Congressionally Directed Projects** 

#### **Defense Nuclear Nonproliferation**

#### **Funding Profile by Subprogram**

	/ 1 11		•	. 1	1 \	
- (	doll	ars	ın	tho	usands)	

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			FY 2009	
	FY 2008 Current	FY 2009 Original	Supplemental	FY 2010
· <b>L</b>	Appropriation	Appropriation	Request	Request
Defense Nuclear Nonproliferation  Nonproliferation and Verification Research and				
Development	379,649	363,792	0	297,300
Nonproliferation and International Security International Nuclear Materials Protection and	149,993	150,000	9,500	207,202
Cooperation	624,482	400,000	55,000	552,300
Elimination of Weapons-Grade Plutonium Production	180,190	141,299		24,507
Fissile Materials Disposition	66,235	41,774		701,900
Global Threat Reduction Initiative	199,448	395,000	25,000	353,500
International Nuclear Fuel Bank	49,545	0		
Congressional Directed Projects	7,380	1,903		
Subtotal, Defense Nuclear Nonproliferation	1,656,922	1,493,768	89,500	2,136,709
Use of Prior Year Balances	0	-11,418		0
Total, Defense Nuclear Nonproliferation	1,656,922	1,482,350	89,500	2,136,709
Rescission of Prior Year Balances	-322,000	0		
Total, Defense Nuclear Nonproliferation (OMB Scoring)	1,334,922	1,482,350	89,500	2,136,709

NOTES: The FY 2008 Current Appropriation column includes international contributions of \$6,473,368 to Defense Nuclear Nonproliferation programs. FY 2008 subprogram amounts as shown reflect a rescission of \$15,279,000 as cited in the FY 2008 Consolidated Appropriations Act (P.L. 110-161). FY 2009 funds appropriated in Other Defense Activities for Fissile Materials Disposition, and in Weapons Activities for the Waste Solidification Building funds are not reflected in the above table.

#### **Public Law Authorization:**

Omnibus Appropriations Act, 2009 (P.L. 111-8) FY 2008 Consolidated Appropriations Act (P.L. 110-161) National Nuclear Security Administration Act, (P.L. 106-65), as amended

·	(dollars in thousands)			
	FY 2011 FY 2012 FY 2013			FY 2014
Defense Nuclear Nonproliferation				
Nonproliferation and Verification Research and Development	318,882	315,941	317,557	328,193
Nonproliferation and International Security	170,888	164,929	169,219	173,923
International Nuclear Materials Protection and Cooperation	583,400	570,799	561,790	558,492
Elimination of Weapons Grade Plutonium Production	0	0	0	0
Fissile Materials Disposition	672,991	580,212	673,143	461,605
Global Threat Reduction Initiative	481,115	652,168	717,310	1,072,977
Total, Defense Nuclear Nonproliferation	2,227,276	2,284,049	2,439,019	2,595,190

# Nonproliferation and Verification Research and Development

### **Funding Profile by Subprogram**

	(dollars in thousands)				
	FY 2008 Current FY 2009 Original		FY 2010		
	Appropriation	Appropriation	Request		
Nonproliferation and Verification R&D					
Operations and Maintenance (O&M)					
Proliferation Detection	216,857	199,699	171,839		
Homeland Security-Related Proliferation Detection [Non-Add]	[50,000]	[50,000]	[50,000]		
Nuclear Detonation Detection	130,352	145,633	125,461		
Supporting Activities	7,668	0	0		
Subtotal, O&M	354,877	345,332	297,300		
Construction	24,772	18,460	0		
Total, Nonproliferation and Verification R&D	379,649 363,792 297,3				

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Nonproliferation and Verification R&D				
Operations and Maintenance (O&M)				
Proliferation Detection (PD) Homeland Security-Related Proliferation Detection	184,952	183,246	184,183	190,352
[Non-Add]	[50,000]	[50,000]	[50,000]	[50,000]
Nuclear Detonation Detection	133,930	132,695	133,374	137,841
Supporting Activities	0	0	0	0
Subtotal, O&M	318,882	315,941	317,557	328,193
Construction	0	0	0	0
Total, Nonproliferation and Verification R&D	318,882	315,941	317,557	328,193

## Nonproliferation and International Security

## Funding Profile by Subprogram

(dollars in thousands)

	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
Nonproliferation and International Security			
Dismantlement and Transparency	45,709	47,529	92,763
Global Security Engagement and Cooperation	50,912	44,076	50,708
International Regimes and Agreements	44,444	40,793	42,703
Treaties and Agreements	3,879	17,602	21,028
International Emergency Management Cooperation	5,049	0	0
Total, Nonproliferation and International Security	149,993	150,000	207,202

### Outyear Funding Profile by Subprogram

(dollars in thousands)

	FY 2011	FY 2012	FY 2013	FY 2014
Nonproliferation and International Security				
Dismantlement and Transparency	58,869	56,816	58,294	59,915
Global Security Engagement and Cooperation	56,830	54,848	56,275	57,839
International Regimes and Agreements	48,648	46,952	48,173	49,512
Treaties and Agreements	6,541	6,313	6,477	6,657
International Emergency Management Cooperation	0	0	0	0
Total, Nonproliferation and International Security	170,888	164,929	169,219	173,923

## International Nuclear Materials Protection and Cooperation

### Funding Profile by Subprogram

(	do.	l	ars	in	tho	usands)	
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	FY 2008 Current	FY 2009 Original	FY 2010
	Appropriation	Appropriation	Request
International Nuclear Materials Protection and Cooperation			
Navy Complex	20,339	22,666	33,880
Strategic Rocket Forces/12 <sup>th</sup> Main Directorate	125,885	34,417	48,646
Rosatom Weapons Complex	66,343	56,070	71,517
Civilian Nuclear Sites	63,416	35,542	43,481
Material Consolidation and Conversion	19,608	21,560	13,611
National Programs and Sustainability	71,270	54,901	68,469
Second Line of Defense	257,621	174,844	272,696
Total, International Nuclear Materials Protection and			
Cooperation	624,482	400,000	552,300

### Outyear Funding Profile by Subprogram

(dollars in thousands)

-		(		
	FY 2011	FY 2012	FY 2013	FY 2014
International Nuclear Materials Protection and Cooperation	•			
Navy Complex	42,408	31,764	0	0
Strategic Rocket Forces/12 <sup>th</sup> Main Directorate	44,964	37,831	0	0
Rosatom Weapons Complex	103,497	52,000	0	0
Civilian Nuclear Sites	24,785	18,502	0	0
Material Consolidation and Conversion	14,165	14,306	14,627	14,627
National Programs and Sustainability	62,148	61,967	39,006	39,006
Second Line of Defense	291,433	354,429	508,157	504,859
Total, International Nuclear Materials Protection and				
Cooperation	583,400	570,799	561,790	558,492

## Elimination of Weapons-Grade Plutonium Production

### Funding Profile by Subprogram

	(dollars in thousands)			
	FY 2008 Current	FY 2009 Original	FY 2010	
	Appropriation	Appropriation	Request	
Elimination of Weapons-Grade Plutonium Production (EWGPP)			•	
Seversk Plutonium Production Elimination (SPPEP)	19,400	0	0	
Zheleznogorsk Plutonium Production Elimination (ZPPEP)	159,140	139,282	22,507	
Crosscutting and Technical Support Activities	1,400	2,017	2,000	
Funds from International Contributions	250	0	0	
Total, Elimination of Weapons-Grade Plutonium Production				
(EWGPP)	180,190	141,299	24,507	

	(dollars in thousands)				
	FY 2011	FY 2012	FY 2013	FY 2014	
Elimination of Weapons-Grade Plutonium Production					
Seversk Plutonium Production Elimination	0	0	0	0	
Zheleznogorsk Plutonium Production Elimination	0	0	0	0	
Crosscutting and Technical Support Activities	0	0	0	0	
Total, Elimination of Weapons-Grade Plutonium Production	0	0	0	0	

### Fissile Materials Disposition

#### **Funding Profile by Subprogram**

	(do	llars in thousands)		
	FY 2008 Current	FY 2009 Original	FY 2010	
	Appropriation	Appropriation	Request	
Fissile Materials Disposition (FMD)				
U.S. Surplus Fissile Materials Disposition				
Operations and Maintenance (O&M)				
U.S. Plutonium Disposition	0	0	90,896	
U.S. Uranium Disposition	66,235	39,274	34,691	
Supporting Activities	0	1,500	1,075	
Subtotal, O&M	66,235	40,774	126,662	
Construction	0	0	574,238	
Total, U.S. Surplus FMD	66,235	40,774	700,900	
Russian Surplus FMD				
Russian Materials Disposition	0	1,000	1,000	
Total, Fissile Materials Disposition	66,235	41,774	701,900	

	(dollars in thousands)			
	FY 2011	FY 2012	FY 2013	FY 2014
Fissile Materials Disposition				
U.S. Surplus Fissile Materials Disposition (O&M)	139,203	181,113	344,686	350,944
Construction	532,788	398,099	327,457	109,661
Russian Surplus Fissile Materials Disposition	1,000	1,000	1,000	1,000
Total, Fissile Materials Disposition	672,991	580,212	673,143	461,605

#### Global Threat Reduction Initiative (GTRI)

#### Funding Profile by Subprogram<sup>a</sup> b

(dollars in thousands) FY 2008 Current FY 2009 Original FY 2010 Appropriation Appropriation Request Global Threat Reduction Initiative Highly Enriched Uranium (HEU) Reactor Conversion 33,819 83,347 71,500 Nuclear and Radiological Material Removal Russian Research Reactor Fuel Return 38,896 0 0 U.S. Foreign Research Reactor Spent Nuclear Fuel 9,887 0 0 Emerging Threats and Gap Materials 5,466 0 0 U.S. Radiological Threat Reduction 13,510 0 0 Russian-Origin Nuclear Material Removal 0 130,045 97,000 U.S.-Origin Nuclear Material Removal 0 14,222 10,000 Gap Nuclear Material Removal 0 7,279 51,000 Emerging Threats Nuclear Material Removal 0 8,767 9,500 International Radiological Material Removal 0 18,312 18,500 Domestic Radiological Material Removal 0 15,527 16,000 Subtotal, Nuclear and Radiological Material Removal 67,759 194,152 202,000 **Nuclear and Radiological Material Protection** Kazakhstan Spent Fuel 43,098 0 0 Global Research Reactor Security 3,557 0 0 International Radiological Threat Reduction 44,992 0 BN-350 Nuclear Material Protection 52,761 9,000 International Material Protection 0 31,950 35,000 Domestic Material Protection 0 32,790 36,000 Subtotal, Nuclear and Radiological Material 91,647 117,501 80,000 Total, Global Threat Reduction Initiative (appropriation) 193,225 395,000 353,500 **Funds from International Contributions** 6,223 Total, Global Threat Reduction Initiative Funds Available 199,448 ° 395,000 353,500

<sup>&</sup>lt;sup>a</sup> Includes the funding from the FY 2007 Supplemental Act (P.L. 110-28) for International Radiological Threat Reduction (IRTR) in FY 2008 in the amount of \$20,000,000.

<sup>&</sup>lt;sup>b</sup> Includes for FY 2008 international contributions from the Government of Canada for \$1,975,400; from the Republic of Korea for \$250,000, and from the United Kingdom of Great Britain and Northern Ireland for \$3,997,968.

<sup>&</sup>lt;sup>c</sup> FY 2008 funds available of \$199,448,000 will be reduced by \$1,792,000 to reflect GTRI share of directed reduction in prior-year balances for a revised FY 2008 total of \$197,656,000.

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	FY 2011	FY 2012	FY 2013	FY 2014
Global Threat Reduction Initiative				
HEU Reactor Conversion	105,000	189,000	193,000	299,000
Nuclear and Radiological Material Removal				•
Russian-Origin Nuclear Material Removal	168,452	158,000	180,000	250,000
U.SOrigin Nuclear Material Removal	20,000	30,000	30,000	40,000
Gap Nuclear Material Removal	35,000	75,000	75,000	120,000
Emerging Threats Nuclear Material Removal	15,000	15,000	15,000	15,000
International Radiological Material Removal	20,000	25,000	28,000	33,000
Domestic Radiological Material Removal	20,000	25,000	28,000	33,000
Subtotal, Nuclear and Radiological				
Material Removal	278,452	328,000	356,000	491,000
Nuclear and Radiological Material Protection				
BN-350 Nuclear Material Protection	2,000	2,000	0	0
International Material Protection	44,663	53,168	64,310	119,977
Domestic Material Protection	51,000	80,000	104,000	163,000
Subtotal, Nuclear and Radiological				
Material Protection	97,663	135,168	168,310	282,977
Total, Global Threat Reduction Initiative	481,115	652,168	717,310	1,072,977
	•	•	,	, ,

#### **International Nuclear Fuel Bank**

#### Funding Profile by Subprogram

(dollars in thousands)

FY 2008 Current	FY 2009 Original	FY 2010
Appropriation	Appropriation	Request
49.545	0	0

Total, International Nuclear Fuel Bank Program

**Public Law Authorization:** 

FY 2008 Consolidated Appropriations Act (P.L. 110-161)

Outyear Funding Profile by Subprogram

(dollars in thousands)

FY 2011 FY 2012 FY 2013 FY 2014

Total, International Nuclear Fuel Bank Program

### **Congressional Directed Projects**

### Funding Profile by Subprogram

(	dol	lars	in	thousands)	
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FY 2008 Current	FY 2009 Original	FY 2010		
Appropriation	Appropriation	Request		
7,380	1,903	0		

#### **Naval Reactors**

#### Funding Profile by Subprogram

	(do	(dollars in thousands)		
	FY 2008 Current	FY 2009 Original	FY 2010	
	Appropriation	Appropriation	Request	
Naval Reactors Development				
Operations and Maintenance (O&M)	732,374	771,600	935,533	
Program Direction	32,403	34,454	36,800	
Construction	9,909	22,000	30,800	
Total, Naval Reactors Development	774,686	828,054	1,003,133	

#### **Public Law Authorizations:**

P.L. 83-703, "Atomic Energy Act of 1954"

"Executive Order 12344 (42 U.S.C. 7158), "Naval Nuclear Propulsion Program"

P.L. 107-107, "National Defense Authorizations Act of 2002", Title 32, "National Nuclear Security Administration"

John Warner National Defense Authorization Act for FY 2007, (P.L. 109-364)

FY 2008 Consolidated Appropriations Act (P.L. 110-161)

National Nuclear Security Administration Act, (P.L. 106-65), as amended

FY 2009 Consolidated Appropriations Act (P.L. 111-8)

#### Outyear Funding Profile by Subprogram

(dollars in thousands) FY 2011 FY 2012 FY 2013 FY 2014 **Naval Reactors Development** Operations and Maintenance 879,386 888,634 882,878 878,117 Program Direction 37,900 38,800 39,700 40,600 Construction 33,500 22,900 26,400 30.000 Total, Naval Reactors Development 950,786 950,334 948,978 948,717