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U.S. Department of Energy
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Committee on House Armed Services
Subcommittee on Strategic Forces

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Thank you for the opportunity to discuss the President's FY 2008 Budget Request for the National Nuclear Security Administration (NNSA). This is my first appearance before this Committee as the Acting Under Secretary for Nuclear Security and NNSA Administrator, and I want to thank all of the Members for their strong support for our vital national security missions.

In the seventh year of this Administration, with the strong support of Congress, NNSA has achieved a level of stability that is required for accomplishing our long-term missions. Our fundamental national security responsibilities for the United States include:

- assuring the safety, security and reliability of the U.S. nuclear weapons stockpile while at the same time transforming the stockpile and the infrastructure that supports it;
- reducing the threat posed by nuclear proliferation; and,
- providing reliable and safe nuclear reactor propulsion systems for the U.S. Navy.

The FY 2008 Budget Request for \$9.4 billion, an increase of \$306 million from the FY 2007 operating plan, supports the crucial missions to ensure the Nation's nuclear security.

Weapons Activities

Stockpile Stewardship is working – the nuclear weapons stockpile remains safe, secure and reliable. Throughout the past decade, the Stockpile Stewardship Program (SSP) has proven its ability to successfully sustain the safety, security and reliability of the nuclear arsenal without resorting to underground nuclear testing. The SSP also enables the U.S. to provide a credible strategic deterrent capability with a stockpile that is significantly smaller. To assure our ability to maintain essential military capabilities over the long-term, however, and to enable significant reductions in reserve warheads, we must make progress towards a truly responsive nuclear weapons infrastructure as called for in the Nuclear Posture Review (NPR). The NPR called for a transition from a threat-based nuclear deterrent, with large numbers of deployed and reserve weapons, to a deterrent that is based on capabilities, with a smaller nuclear weapons stockpile and greater reliance on the capability and responsiveness of the Department of Defense (DoD) and NNSA infrastructure to adapt to emerging threats.

To meet these objectives, we developed a transformation vision and strategy, the cornerstones of which are Complex 2030 and the Reliable Replacement Warhead (RRW). We are boldly moving

forward to implement this strategy now, bringing us closer to achieving an even smaller stockpile, one that is safer and more secure, one that offers a reduced likelihood that we will ever again need to conduct an underground nuclear test, and ultimately, one that enables a much more responsive nuclear weapons infrastructure.

Over the next several years, our performance will not only be measured by the success of our continuing efforts to maintain the nuclear stockpile, but also, by the success of our efforts to plan and achieve a truly responsive nuclear weapons infrastructure for the long-term strategic needs of the Nation. What do we mean by “responsive nuclear weapons infrastructure?” By “responsive” we refer to the resilience of the nuclear enterprise to unanticipated events or emerging threats, and the ability to anticipate innovations by an adversary and to counter them before our deterrent is degraded. Unanticipated events could include complete failure of a deployed warhead type or the need to respond to new and emerging geopolitical threats.

The elements of a responsive infrastructure include the people, the science and technology base, the facilities and equipment to support a right-sized nuclear weapons enterprise as well as practical and streamlined business practices that will enable us to respond rapidly and flexibly to emerging needs. More specifically, a responsive infrastructure must provide proven and demonstrable capabilities, on appropriate timescales, and in support of national security requirements.

We are focused on four implementing strategies to achieve our transformational objectives: (1) transform to a modernized, more cost-effective safe and secure complex; (2) transform the nuclear stockpile in partnership with the DoD; (3) create a fully integrated and interdependent complex; and, (4) drive the science and technology base essential for long-term national security.

We are taking many concrete steps today to make this transformation vision a reality. The completion of a Supplemental Programmatic Environmental Impact Statement (PEIS) for Complex 2030 in accordance with the National Environmental Policy Act (NEPA) will mark the most significant of these steps. Although the original notice of intent for the PEIS did not include a Consolidated Nuclear Production Center (CNPC), we have determined that it is important to include this concept as an alternative to be evaluated in the draft PEIS. The scoping period concluded in January 2007, and a Record of Decision for the future configuration of the Complex is anticipated in 2008. While we await the results of the NEPA process, many actions to transform the stockpile, transform the operation of the Complex, and drive the science and technology base are already well underway. Specifically, we are:

- Reducing the number of sites with Category I/II special nuclear material (SNM) and consolidating such material within the remaining sites. This process has begun with the initial shipment in 2006 of plutonium from Lawrence Livermore National Laboratory (LLNL) and the removal of Category I/II material from Los Alamos National Laboratory (LANL) Technical Area 18. Within the next five years, we expect to eliminate the need for Category I/II SNM security at Sandia National Laboratory (SNL).
- Dramatically accelerating the dismantlement of retired weapons. The Pantex Throughput Improvement Program has resulted in a significant improvement in throughput and we expect our dismantlement rate for FY 2007 to exceed that of FY 2006 by nearly 50%. Additional

activities are also underway to increase the rate at which weapons can be dismantled and dispositioned at Y-12.

- Reconstituting the Nation's nuclear weapon production capability by implementing our plans to ramp up to 30-50 pits per year at LANL by 2012.
- Reviving our ability to extract tritium for use in the stockpile at the new Tritium Extraction Facility at the Savannah River Site (SRS).
- Developing a weapons program Science and Technology roadmap to define the full set of capabilities needed to sustain the future stockpile.
- Streamlining and improving business practices by adding multi-site incentives to current contracts, enhancing line management structures to strengthen accountability, consolidating facility organizations and establishing a systems integration structure.

To foster confidence in the transformation process and to ensure that the Complex remains focused on meeting our current commitments, we established a "Getting the Job Done" list for the nuclear weapons complex in April 2006. By January 2007, the following commitments were complete: (1) delivering B61-7 and B61-11 Alt 357 Life Extension Program (LEP) first production units; (2) delivering the full capability of the Advanced Simulation and Computing Purple Machine; (3) updating pit lifetime estimates; (4) supporting the Nuclear Weapons Council (NWC) decision in November 2006 to proceed with the RRW strategy; and, (5) extracting tritium for use in the stockpile at the new Tritium Extraction Facility.

The weapons complex is also on track to fulfill the remaining FY 2007 commitments of: (1) continuing to deliver our products (e.g., limited life components) to DoD; (2) eliminating the backlog of surveillance units consistent with an enhanced evaluation strategy (except the W84 and W88); (3) accelerating the dismantlement of retired weapons in FY07 by 50%; (4) delivering the W76-1 LEP first production unit; and, (5) certifying the W88 with a new pit and manufacturing 10 W88 pits in fiscal year 2007. Delivery on these and future near-term commitments during transformation of the weapons complex is essential to the continued safety, security and reliability of the stockpile.

Another area where we are making tremendous progress to transform the Complex is in our efforts to secure nuclear weapons, weapons-usable materials, information, and infrastructure from theft, compromise or harm. We established and staffed within the Office of Defense Nuclear Security, a Program Evaluation Office to ensure the effectiveness of both our implemented security programs and security line management oversight. Additionally, we have met the requirements of the 2003 Design Basis Threat and are firmly on track to meet the requirements of the 2005 DBT at all sites by FY 2011. We are also rapidly improving our cyber security standards and practices. As the Committee is aware, we recently experienced a major cyber security incident at LANL. While this incident has highlighted some additional areas for improvement, NNSA has been vigorously implementing measures over the last two years to strengthen the cyber security posture across the Complex. We are strongly committed to and are actively addressing the issues identified by the LANL incident and applying the lessons learned complex-wide. Sustaining and improving the security of the

nuclear weapons complex is an integral component of NNSA's core mission, and thus represents one of our highest priorities.

As we continue to draw down the stockpile, we have become concerned that our current path — successive refurbishments of existing warheads developed during the Cold War and to stringent Cold War specifications — may pose an unacceptable risk to maintaining high confidence in system performance over the *long-term*. Specifically, the Directors of our nuclear weapons laboratories have raised concerns about their ability to assure the reliability of the legacy stockpile over the very long-term absent nuclear testing. Our DoD partners share these concerns. The evolution away from tested designs through a LEP approach, resulting from inevitable accumulations of small changes over the extended lifetimes of these highly optimized systems, is what gives rise to these concerns.

Our decision to embark on the path to an RRW does not result from a failure of the stockpile stewardship program, as some have suggested, but is a reflection of its success. The SSP has revealed the need to pursue this new RRW path. Moreover, aggressive pursuit of the new scientific tools currently in use and being developed under the SSP is essential, not only to sustain existing warheads as long as they are needed, but to our efforts to design, develop and produce replacement warheads that are safer, more reliable, and cost-effective over the long term without nuclear testing.

We are pursuing the RRW strategy to ensure the long-term sustainment of the military capabilities provided by warheads in the existing stockpile, *not* to develop warheads for new or different military missions. Another major driver for the RRW approach was the realization after 9/11 that the security threat to our nuclear stockpile had fundamentally changed. The security features in today's stockpile are commensurate with technologies that were available during the Cold War and with the threats facing the U.S. at that time. Major enhancements in security are not readily available through system retrofits via the LEP approach.

We believe that features of the RRW concept will serve as the key “enabler” for achieving a smaller, more efficient and responsive infrastructure and opportunities for a smaller stockpile. The RRW will relax Cold War design constraints that maximized yield to weight ratios and thereby allows us to design replacement components that are easier to manufacture, are safer and more secure, eliminate environmentally dangerous materials, and increase design margins, thus ensuring long-term confidence in reliability. Moving forward with the RRW program will further allow us to take advantage of the scientists and engineers who are retiring soon and who possess the unique skills and experience of designing, developing, and producing nuclear weapons.

Moreover, the benefits of the RRW approach reinforce our nonproliferation commitments and objectives. Because these warheads would be designed with more favorable performance margins, and be less sensitive to incremental aging effects, they would reduce the possibility that the United States would ever be faced with a need to conduct a nuclear test to diagnose or remedy a stockpile reliability problem. This will bolster efforts to dissuade other countries from testing. Moreover, once a transformed production complex demonstrates that it can produce replacement warheads on a timescale in which geopolitical threats could emerge, or respond in a timely way to technical problems in the stockpile, then we can eliminate many spare warheads, reducing further the nuclear stockpile. The RRW strategy will allow us to increase our warhead dismantlement rate, sending a strong message to the world that we are taking meaningful steps towards further stockpile reductions. Additionally,

increased confidence in the U.S. nuclear deterrent will assure allies and obviate any need for them to develop and field their own nuclear forces. Finally, the improved security features of RRW will prevent unauthorized use should a warhead ever fall into the hands of terrorists.

On November 30, 2006, the NWC established the feasibility of the RRW program as a long-term strategy for maintaining a safe, secure and credible nuclear deterrent. We expect to commence the RRW design definition and cost study soon, the results of which will inform the decision making process within the Administration and Congress as to whether to proceed to the next phase, engineering development.

Nuclear Nonproliferation

Acquisition of nuclear weapons, weapons of mass destruction (WMD) capabilities, technologies, and expertise by rogue states or terrorists stands as one of the most potent threats to the United States and international security. The continued pursuit of nuclear weapons by terrorists and states of concern underscores the urgency of NNSA's efforts to secure vulnerable nuclear weapons and weapons-usable nuclear materials, to improve capabilities to detect and interdict nuclear weapons or materials, to halt the production of fissile material, and ultimately, to dispose of surplus weapons-usable materials. The FY 2008 Budget Request will enable NNSA to continue the activities that support these crucial threat reduction initiatives.

Preventing access to nuclear weapons and material has many dimensions. Our number highest priority is to keep these dangerous materials out of the hands of the world's most dangerous actors. Absent access to sufficient quantities of key fissile materials, there can be no nuclear weapon. Much of our emphasis has focused on Russia because that is where most of the poorly secured material was located. We have made remarkable progress cooperating with Russia to strengthen protection, control, and accounting of its nuclear weapons and materials. Meeting our commitment under the Bratislava Joint Statement to conclude security upgrade activities at Russian nuclear sites by the end of 2008 will be our chief priority in FY 2008. As a result of our efforts to accelerate this work in the wake of 9/11 and the momentum created by the Bratislava process, we are well-positioned to reach this significant milestone on schedule. Although our direct upgrade efforts are drawing to a close after over a decade of work, we will continue to work cooperatively with Russia to ensure the long-term sustainability of the systems and procedures we have implemented.

Not all nuclear material of concern is located in Russia. We are working with other partners to secure weapons-usable nuclear materials worldwide and to strengthen security at civil nuclear facilities. One area of concern is research reactors, which often use a highly enriched uranium (HEU) fuel suitable for bombs. Our Global Threat Reduction Initiative (GTRI) seeks to convert research reactors worldwide from HEU to low enriched uranium (LEU) fuel and further to repatriate U.S. and Russian-supplied HEU from these facilities to its country of origin. A major accomplishment was the return of 268 kilograms of Soviet-origin HEU from Germany to Russia, where it will be down blended to LEU fuel. This repatriation operation represents the largest shipment of Soviet-origin HEU conducted to date under the GTRI.

We are taking aggressive steps to interdict weapons-usable nuclear materials and to prevent dissemination of nuclear related technology via strengthened export controls and improved

international cooperation. As a complement to improving physical security, the Second Line of Defense Program works to enhance our foreign partners' ability to interdict illicit trafficking in nuclear materials. Under this program, we deploy radiation detection systems at high-risk land-border crossings, airports and seaports, increasing the likelihood of interdiction of diverted nuclear materials entering or leaving the country.

The Megaports Initiative, established in 2003, responds to concerns that terrorists could use the global maritime shipping network to smuggle fissile materials or warheads. By installing radiation detection systems at major ports throughout the world, this initiative strengthens the detection and interdiction capabilities of our partner countries.

To prevent the diffusion of critical technologies, we are training front line customs officers around the world. We are working to implement UN Security Council Resolution 1540, which establishes a requirement to criminalize proliferation involving non-state actors and encourages states to strengthen export control laws and improve enforcement. Because keeping terrorists from acquiring materials will be easier if we limit enrichment of uranium or reprocessing of spent fuel, the President proposed in 2004 a new initiative, the Global Nuclear Energy Partnership (GNEP), which would provide nations which refrain from developing or deploying enrichment and reprocessing technology assured access to the benefits of nuclear power.

These are critical steps but they alone cannot address the problem. Indeed, there is enough fissile material in the world today for tens of thousands of weapons. An integral part of our strategy, therefore, has been to induce other states to stop producing materials for nuclear weapons, as the United States did many years ago. We recently tabled a draft treaty at the Conference on Disarmament in Geneva to do just that. We also supplement international diplomatic efforts with bilateral programs. For example, Russia still produces weapons-grade plutonium, not because it needs it for weapons, but because the reactors that produce it also supply heat and light to local communities. We are replacing these reactors with fossil fuel plants. By 2008, two of the existing three plutonium-producing reactors in Russia will shut down permanently, with the third shut down by 2010.

As previously indicated, there are a number of effective synergies between NNSA's weapons activities and our nuclear nonproliferation objectives. For example, we are disposing of the substantial quantities of surplus weapons grade material that resulted from the thousands of warheads that we have dismantled by down-blending it to lower enrichment levels suitable for use in commercial reactors. We are also working with Russia to eliminate Russian HEU. Under the HEU Purchase Agreement, nearly 300 metric tons of uranium from Russia's dismantled nuclear weapons—enough material for more than 11,000 nuclear weapons—has been down-blended for use in commercial reactors in the United States. Nuclear power generates twenty percent of American electricity and half of that is generated by fuel derived from Russian HEU. As a result, one-tenth of the U.S. electrical energy need is powered by material removed from former Soviet nuclear weapons. In addition to the efforts on HEU, the United States and Russia have each committed to dispose of 34 metric tons of surplus weapon-grade plutonium.

If we are to encourage responsible international actions, the United States must set the example. We have dramatically improved physical security of U.S. nuclear weapons and weapons usable materials in the years since the attacks of 9/11. We recently withdrew over 200 metric tons of HEU from any further use as fissile material in nuclear weapons, a portion of which will be devoted to powering our

nuclear navy for the next fifty years, obviating the need over that period for high-enrichment of uranium for any military purpose. Seventeen tons will be blended down and set aside as an assured fuel supply as part of global efforts to limit the spread of enrichment and reprocessing technology.

The risk of nuclear terrorism is not limited to the United States and the success of our efforts to deny access to nuclear weapons and material is very much dependent on whether our foreign partners share a common recognition of the threat and a willingness to combat it. Last July, just before the G-8 summit, Presidents Bush and Putin announced the Global Initiative to Combat Nuclear Terrorism to strengthen cooperation worldwide on nuclear materials security and to prevent terrorist acts involving nuclear or radioactive substances. Paired with UN Security Council Resolution 1540, we now have both the legal mandate and the practical means necessary for concrete actions to secure nuclear material against the threat of diversion.

Naval Reactors

Also contributing to the Department's national security mission is the Naval Reactors Program, whose mission is to provide the U.S. Navy with safe, militarily effective nuclear propulsion plants and ensure their continued safe, reliable and long-lived operation. Nuclear propulsion enhances our warship capabilities by providing the ability to sprint where needed and arrive on station, ready to conduct sustained combat operations when America's interests are threatened. Nuclear propulsion plays a vital role in ensuring the Navy's forward presence and its ability to project power anywhere in the world.

The Naval Reactors Program has a broad mandate, maintaining responsibility for nuclear propulsion from cradle to grave. Over 40 percent of the Navy's major combatants are nuclear-powered, including aircraft carriers, attack submarines, and strategic submarines, which provide the Nation's most survivable deterrent.

FY 2008 BUDGET REQUEST BY PROGRAM

The President's FY 2008 Budget Request for NNSA totals \$9.4 billion, an increase of \$306 million or 3.4 percent over the FY 2007 operating plan. We are managing our program activities within a disciplined five-year budget and planning envelope, and are successfully balancing the Administration's high priority initiatives to reduce global nuclear danger as well as future planning for the Nation's nuclear weapons complex within an overall modest growth rate.

The NNSA budget justification contains information for five years as required by Sec. 3253 of P.L. 106-065. This section, entitled *Future-Years Nuclear Security Program*, requires the Administrator to submit to Congress each year the estimated expenditures necessary to support the programs, projects and activities of the NNSA for a five-year fiscal period, in a level of detail comparable to that contained in the budget.

The FY 2008-2012 Future Years Nuclear Security Program -- FYNSP -- projects \$50.0 billion for NNSA programs through 2012. This is an increase of about \$1.5 billion over last year's projections in line with the Administration's strong commitment to the Nation's defense and homeland security. The FY 2008 request is slightly smaller than last year's projection in order to adequately fund the GNEP

initiative, which is a major element of the Administration's nonproliferation approach. The outyears, however, are increased starting in 2009. Within these amounts, there is significant growth projected for the Defense Nuclear Nonproliferation programs to support homeland security, including new initiatives and acceleration of threat reduction programs and increased inspection of seagoing cargoes destined for ports in the United States.

Weapons Program Activities

The FY 2008 Budget Request for the programs funded within the Weapons Activities Appropriation is \$6.51 billion, an approximately 3.8 percent increase over the FY 2007 operating plan. It is allocated to adequately provide for the safety, security, and reliability of the nuclear weapons stockpile and supporting facilities and capabilities.

This request supports the requirements of the SSP consistent with the Administration's NPR and subsequent amendments, and the revised stockpile plan submitted to the Congress in June 2004. Our request places a high priority on accomplishing the near-term workload and supporting technologies for the stockpile along with the long-term science and technology investments to ensure the design and production capability and capacity to support ongoing missions. This request also supports the facilities and infrastructure that must be modernized to be responsive to new or emerging threats.

The Department has made significant strides over the past year to transform the nuclear weapons complex. The "Complex 2030" planning scenario was introduced in 2006 and has already resulted in a number of accomplishments. We have not created a separate budget line for our transformational activities in the FY 2008 President's Request. Implementation actions to bring about transformation are incorporated into existing program elements: Directed Stockpile Work (DSW), Campaigns, Readiness in Technical Base and Facilities (RTBF), and Secure Transportation Asset. The approach to transformation relies extensively on existing line program organizations taking responsibility for individual actions required to change both the stockpile and its supporting infrastructure. While the Administration continues to assess the plans and funding projections for certain elements of NNSA's complex transformation strategy, this budget contains resources to support a number of transformational initiatives underway within our base program activities.

In FY 2008, we are requesting \$1.45 billion for DSW, an increase of \$21.5 million over the FY 2007 operating plan. We will continue an aggressive dismantlement plan for retired warheads and consolidation of special nuclear material across the nuclear weapons complex. Both of these efforts will contribute to increasing the overall security at NNSA sites. In FY 2007, funding was increased to cover upfront costs associated with tooling procurement, procedure development, Safety Authorization Basis work, hiring of production technicians, and equipment purchases, which will support future-year dismantlement rates. The FY 2008 request reflects the required funding to support the planned dismantlement rates reported to Congress. Funding at higher levels was unnecessary once the dismantlement process was improved with FY 2005 and FY 2006 funding. In May 2006, the NWC directed that the W80 LEP be deferred to support NNSA efforts to transform the nuclear weapons complex and continue work on a RRW. At the same time, the B61 and W76 LEP workloads are increasing, since they both will have entered the production phase by FY 2008. DSW also supports routine maintenance and repair of the stockpile and supports managing the strategy, driving the change, and performing the crosscutting initiatives required to achieve responsiveness objectives

envisioned in the NPR. Our focus remains on the stockpile, to ensure that the nuclear warheads and bombs in the U.S. nuclear weapons stockpile are safe, secure, and reliable.

Progress in other elements of the SSP continues. The FY 2008 request for the six Campaigns is \$1.87 billion, a \$113 million decrease from the FY 2007 operating plan. The decrease in program funding is required to balance overall weapon activity priorities, specifically the transition of the W76 LEP from R&D to production, the consolidation of computing facilities, and a large decrease in Readiness Campaign activities associated in part to the transition of Tritium Extraction Facility to full operations. The Campaigns focus on scientific and technical efforts and capabilities essential for assessment, certification, maintenance, and life extension of the stockpile and have allowed NNSA to continue “science-based” stockpile stewardship. These Campaigns are evidence of NNSA’s excellence and innovation in science, engineering and computing that, though focused on the nuclear weapons mission, have broader application and value. The use of DOE Office of Science facilities in supporting Stockpile Stewardship science and engineering will increase modestly at the same time that access to NNSA’s science facilities is extended to a broader community of users.

Specifically, \$425.8 million for the Science and Engineering Campaigns provides the basic scientific understanding and the technologies required to support DSW and the completion of new scientific and experimental facilities in the absence of nuclear testing.

The Readiness Campaign, with a request of \$161.2 million, develops and delivers design-to-manufacture capabilities to meet the evolving and urgent needs of the stockpile and supports the transformation of the nuclear weapons complex into an agile and more responsive enterprise. In February 2007, startup of the Tritium Extraction Facility at the Savannah River Site was completed, making possible the use of new tritium in the U.S. stockpile for the first time in 18 years.

The Advanced Simulation and Computing (ASC) Campaign is a key example of NNSA excellence and innovation in science and engineering, establishing world leadership in computational simulation sciences with broad application to national security. The request of \$585.7 million for the ASC Campaign supports the development of computational tools and technologies necessary to support the continued assessment and certification of the refurbished weapons, aging weapons components, and the RRW program without underground nuclear testing. As we enhance and validate the predictive science capabilities embodied in these tools, using the historical test base of more than 1,000 Cold War era nuclear tests to computer simulations, we can continue to assess the stockpile to ensure that it is safe, secure, and reliable.

The \$412.3 million request for the Inertial Confinement Fusion Ignition and High Yield Campaign is focused on the execution of the first ignition experiment at the National Ignition Facility (NIF) in 2010, and provides facilities and capabilities for high-energy-density physics experiments in support of the SSP. To achieve the ignition milestone, \$147 million will support construction of NIF and the NIF Demonstration Program and \$232.2 million will support the National Ignition Campaign. The ability of NIF to assess the thermonuclear burn regime in nuclear weapons via ignition experiments is of particular importance. NIF will be the only facility capable of probing in the laboratory the extreme conditions of density and temperature found in exploding nuclear weapons.

NIF will join the Z pulsed-power machine at Sandia National Laboratories and the Omega Laser at

University of the Rochester's Laboratory for Laser Energetics as world leading facilities in providing quantitative measurements that close important gaps in understanding nuclear weapons performance. NIF, Omega, and Z are complementary in their capabilities, allowing scientists from both inside and outside the nuclear weapons complex to contribute to a better understanding of the high energy density physics of nuclear warheads. NIF will provide the only access in the world to thermonuclear ignition conditions and the Omega laser with its symmetric illumination and very high repetition rate provides a large amount of quantitative information. The Z facility is especially suited for accurate measurement of materials properties that are crucial to weapons performance. These facilities will be operated as national user facilities in order to obtain the best return on investment and maximum contribution to the Stockpile Stewardship mission.

The Pit Manufacturing and Certification Campaign request of \$281 million builds on the success of manufacturing and certifying a new W88 pit in 2007 and addresses issues associated with manufacturing future pit types including the RRW and increasing pit production capacity at LANL. There are plans to increase pit production capacity at LANL to meet national security needs. LANL is not only an interim capability for pit manufacturing at the present time, but it serves as the United States' sole capability. We continue to be the only nuclear weapon state without a true manufacturing capability.

Readiness in Technical Base and Facilities (RTBF) and Facilities and Infrastructure Recapitalization Program (FIRP)

In FY 2008, we are requesting \$1.96 billion for the maintenance and operation of existing facilities, remediation and disposition of excess facilities, and construction of new facilities. Of this amount, \$1.66 billion is requested for RTBF, an increase of \$49 million from the FY 2007 operating plan, with \$1.36 billion reserved for Operations and Maintenance and \$307 million for RTBF Construction. Some new facility construction (e.g., NIF, MESA, TEF, and DARHT) is budgeted in applicable Campaigns.

This request also includes \$293.7 million for the Facilities and Infrastructure Recapitalization Program (FIRP), a separate and distinct program that is complementary to the ongoing RTBF efforts. The FIRP mission is to restore, rebuild and revitalize the physical infrastructure of the nuclear weapons complex, in partnership with RTBF. This program assures that facilities and infrastructure are restored to an appropriate condition to support the mission, and to institutionalize responsible and accountable facility management practices. In response to NNSA's request, Congress extended the FIRP end date from 2011 to 2013 to enable successful completion of the FIRP mission. The Integrated Prioritized Project List (IPPL) is the vehicle that the FIRP program will rely on to prioritize and fund outyear projects to reduce legacy deferred maintenance. These projects significantly reduce the deferred maintenance backlog to acceptable levels and support the SSP mission and transformation of the complex.

These activities are critical for the development of a more responsive infrastructure and will be guided by decisions resulting from the Complex 2030 Supplemental Programmatic Environmental Impact Statement and the National Environmental Policy Act (NEPA) process. Since a significant fraction of our production capability resides in World War II era facilities, infrastructure modernization, consolidation, and sizing consistent with future needs is essential for an economically sustainable

Complex. Facilities designed according to modern manufacturing, safety, and security principles will be more cost-effective and responsive to a changing future. For example, a facility could be designed to support a low baseline capacity and preserve the option, with a limited amount of contingent space, to augment capacity if authorized and needed to respond to future risks.

Having a reliable plutonium capability is a major objective of NNSA planning. Options for plutonium research, surveillance, and pit production are being evaluated as part of the Complex 2030 NEPA process with a Record of Decision anticipated in 2008. The baseline Complex 2030 planning scenario relies on Los Alamos National Laboratory facilities at Technical Area 55 to provide interim plutonium capabilities until a consolidated, long-term capability can be established. This interim strategy relies on the proposed Chemistry and Metallurgy Research Replacement – Nuclear Facility (CMRR-NF) to achieve all the objectives of (1) closing the existing Chemistry and Metallurgy Research (CMR) facility, (2) replacing essential plutonium capabilities currently at Lawrence Livermore National Laboratory, and (3) achieving a net manufacturing capacity of 50 pits per year. However, the increasing cost of the CMRR-NF and the need to ensure that near- and long-term planning for plutonium facilities are integrated requires that we complete our Complex 2030 decision process before committing to construction of the CMRR-NF. Since the CMRR Radiological Laboratory, Utility, and Office Building (CMRR-RLUOB) is required under all scenarios, this project will proceed as planned.

The Highly Enriched Uranium Materials Facility (HEUMF) and the proposed Uranium Processing Facility (UPF) will allow a reduction of the high security area at the Y-12 National Security Complex from 150 acres to 15 acres. This reduction will combine with the engineered security features of the two structures to meet the DBT at significantly reduced costs, to lower non-security costs, and to provide a responsive highly enriched uranium manufacturing capability. UPF planning is consistent with the timing of decisions from the Complex 2030 PEIS process.

Secure Transportation Asset

In FY 2008, the Budget Request includes \$215.6 million for Secure Transportation Asset (STA) Program, an increase of \$6 million from the FY 2007 operating plan, for meeting the Department's transportation requirements for nuclear weapons, components, and special nuclear materials shipments. The workload requirements for this program will escalate significantly in the future to support the dismantlement and maintenance schedule for the nuclear weapons stockpile and the Secretarial Initiative to consolidate the storage of nuclear material. The challenge to increase secure transport capacity is coupled with and impacted by increasingly complex national security concerns. To support the escalating workload while maintaining the safety and security of shipments, STA is increasing the number of SafeGuards Transporters (SGT) in operation by two per year, with a target total of 51 in FY 2014. Due to resource constraints, SGT production has been slowed from three to two per year, extending the original 2011 endpoint target date.

Environmental Projects and Operations

The Environmental Projects and Operations/Long-Term Stewardship Program is requested at \$17.5 million in FY 2008. This program serves to reduce the risks to human health and the

environment at NNSA sites and adjacent areas by: operating and maintaining environmental clean-up systems; performing long-term environmental monitoring activities; and, integrating a responsible environmental stewardship program with the NNSA mission activities.

Nuclear Weapons Incident Response

The Nuclear Weapons Incident Response (NWIR) Program responds to and mitigates nuclear and radiological incidents worldwide as the United States Government's primary capability for radiological and nuclear emergency response. The FY 2008 Request for these activities is \$161.7 million, of which \$28 million is reserved for the implementation of two new initiatives that will strengthen the Nation's emergency response capabilities - the National Technical Nuclear Forensics (NTNF) and the Stabilization Implementation programs.

The National Technical Nuclear Forensics Program will establish a DOE capability to support post-detonation activities and enhance DOE Technical Nuclear Forensics capabilities. The development of this capability will facilitate the thorough analysis and characterization of pre- and post-detonation radiological and nuclear materials and devices as well as prompt signals from a nuclear detonation. Developing forensic capabilities of this nature is crucial to the overall objective of nuclear material or device attribution.

Stabilization is a new concept and a new capability aimed at using advanced technologies to enhance the U.S. Government's ability to interdict, delay and/or prevent operation of a terrorist's radiological or nuclear device until national assets arrive on the scene to conduct traditional "render safe" procedures. NNSA has actively sponsored new research in this area and, additionally, is leveraging emerging technologies that have been demonstrated successfully by the DoD in support of the global war on terrorism. In the implementation phase, NNSA will transfer these matured projects into operational testing, potentially followed by their transition into the collection of tools available to Federal response teams.

Safeguards and Security

The FY 2008 Request for Defense Nuclear Security is \$744.8 million, an increase of \$121 million above the FY 2007 operating plan. This increase will accommodate the increased cost of sustaining the implementation of the 2003 DBT and the phased implementation of the 2005 DBT in 2008 and the outyears. Full implementation of the 2005 DBT will occur at: the Pantex Plant in FY 2008; Lawrence Livermore National Laboratory in FY 2008; the Nevada Test Site in FY 2009; the Y-12 National Security Complex in FY 2011; and, LANL in FY 2011. During FY 2008, the program's efforts will largely be focused on eliminating or mitigating identified vulnerabilities across the nuclear weapons complex by bolstering protective force training, acquiring updated weapons and support equipment, improving physical barrier systems and standoff distances, and reducing the number of locations with "targets of interest." Physical security systems will be upgraded and deployed to enhance detection and assessment, add delay and denial capabilities, and to improve perimeter defenses at several key sites.

The FY 2008 Request for Cyber Security is \$102.2 million is focused on sustaining the NNSA

infrastructure and upgrading elements designed to counter cyber threats and vulnerabilities from external and internal attacks. This funding level will support cyber security revitalization, identify emerging issues, including research needs related to computer security, privacy, and cryptography. Additionally, the funding will provide for enhancement, certification, and accreditation of unclassified and classified systems to ensure proper documentation of risks and justification of associated operations for systems at all sites. The funding within this Request will also be applied to foster greater cyber security awareness among Federal and contractor personnel. NNSA will sponsor a wide range of educational initiatives to ensure that our workforce possess the ever-expanding cyber security skills critical to safeguarding our national security information. Funding provided to NNSA sites will be conditioned upon their implementation of a risk-based approach to cyber security.

Defense Nuclear Nonproliferation

The Defense Nuclear Nonproliferation Program mission is to detect, prevent, and reverse the proliferation of weapons of mass destruction (WMD). Our nonproliferation programs address the danger that hostile nations or terrorist groups may acquire weapons-usable material, dual-use production or technology, or WMD capabilities. The FY 2008 request for these programs totals \$1.673 billion, a slight decrease from the FY 2007 operating level. This reduction is the result of NNSA achieving and approaching important milestones in our nuclear security work in Russia, including the completion of major security upgrades at several sites under the Material Protection, Control, and Accounting (MPC&A) Program and the anticipated end of construction of a fossil fuel plant in Seversk by the end of calendar year 2008 under the Elimination of Weapons Grade Plutonium Production (EWGPP) Program.

Global Threat Reduction Initiative

The Administration's FY 2008 Request of \$119 million for the Global Threat Reduction Initiative (GTRI) is an increase of \$4 million over the FY 2007 operating plan. The GTRI reduces the risk of terrorists acquiring nuclear and radiological materials for an improvised nuclear or radiological dispersal device by working at civilian sites worldwide to: 1) convert reactors from the use of WMD-usable HEU to LEU; 2) remove or dispose of excess WMD-usable nuclear and radiological materials; and 3) protect at-risk WMD-usable nuclear and radiological materials from theft and sabotage until a more permanent threat reduction solution can be implemented. Specific increases in the GTRI budget reflect, for example, the serial production and delivery of twenty-seven (27) 100-ton casks for transportation and long-term storage of 10,000 kg of HEU and 3,000 kg of plutonium removed from the BN-350 reactor site in Kazakhstan.

International Material Protection and Cooperation

NNSA's International Material Protection and Cooperation FY 2008 Budget Request of \$372 million is a decrease of \$101 million from the FY 2007 operating plan. This decrease reflects the successful completion of nuclear security upgrade work at Russian Strategic Rocket Forces and Russian Navy sites. International material protection work continues in other areas, including the continuation of security upgrades at a significant number of sites within the Russian nuclear complex, including those

operated by the Federal Atomic Energy Agency (Rosatom), and the 12th Main Directorate of the Ministry of Defense. Security upgrades for Russian Rosatom facilities will be completed by the end of 2008 -- two years ahead of the original schedule, consistent with the Bratislava Initiative.

The MPC&A Program is also focused on reducing proliferation risks by converting Russian HEU to LEU and by consolidating weapons-usable nuclear material into fewer, more secure locations. In FY 2008, we will eliminate an additional 1.2 metric tons of HEU for a cumulative total of 10.7 metric tons.

Our Second Line of Defense (SLD) Program, a natural complement to our efforts to lock down vulnerable nuclear material and weapons, installs radiation detection equipment at key transit and border crossings, airports and major ports to deter, detect and interdict illicit trafficking in nuclear and radioactive materials. During FY 2008, the SLD Program plans to install detection equipment at an additional fifty-one strategic overseas transit and border sites. Under the Megaports Initiative, we have deployed radiation detection and cargo scanning equipment at six ports to date in Greece, the Netherlands, Bahamas, Sri Lanka, Singapore and Spain. During FY 2008, we plan to install detection equipment at three additional large ports: the port of Antwerp in Belgium, the port of Caucedo in the Dominican Republic, and the port of Salalah in Oman.

Additionally, we are joining elements of the Megaports Initiative and the Container Security Initiative (CSI) under a new maritime security initiative, the Secure Freight Initiative (SFI) Phase I. This new initiative is a partnership between host governments, commercial container shipping entities and the U.S. Government that serves to increase the number of containers physically scanned for nuclear and radiological materials and to create a detailed record of each U.S.-bound container. Data from radiation detection equipment provided by NNSA and from non-intrusive imaging equipment provided by the Department of Homeland Security (DHS) will enhance the identification of high-risk containers and facilitate the prompt resolution of potential nuclear or radiological threats.

Nonproliferation and International Security

While the thrust of GTRI and MPC&A is to secure nuclear sites, convert reactors, and repatriate fuel from reactors worldwide, NNSA's Office of Nonproliferation and International Security (ONIS) provides technical and policy expertise in support of U.S. efforts to strengthen international nonproliferation arrangements (e.g., the Nuclear Suppliers Group, United Nations Security Council Resolution 1540 and the Global Initiative to Combat Nuclear Terrorism). The ONIS staff also fosters implementation of global nonproliferation requirements through engagement with foreign partners and the redirection of WMD expertise, and helps develop and implement mechanisms for transparent and verifiable nuclear reductions. The FY 2008 Budget Request for the Office of Nonproliferation and International Security is \$124 million. This request includes funds for providing technical support to strengthen the International Atomic Energy Agency safeguards system and supports programs to improve foreign governments' export control systems. This request will augment U.S. nonproliferation cooperation with China and India, and enhance transparency and scientist redirection activities with Russia, Ukraine, Kazakhstan, Libya and Iraq.

The Budget Request also supports activities to build up the nonproliferation component of the Global Nuclear Energy Partnership (GNEP) initiative. While GNEP is a long-term vision for the future of

expanded use of nuclear power, NNSA plays an important role by providing leadership and technical expertise in the areas of safeguards technology, safeguards cooperation, and fuel supply arrangements to mitigate the proliferation risks that otherwise might accompany the expansion of nuclear power around the world envisioned by GNEP.

Elimination of Weapons Grade Plutonium Production

Turning to programs that focus on halting the production of nuclear materials, the Elimination of Weapons Grade Plutonium Production (EWGPP) Program staff are working toward completing the permanent shutdown of two of the three remaining weapons-grade plutonium production reactors in Seversk and Zheleznogorsk, Russia. The FY 2008 Budget Request of \$182 million is a decrease of \$44 million from the FY 2007 operating plan, reflecting the planned completion of the fossil fuel heat and electricity facility at Seversk. The budget request provides the funding required to shut down these reactors permanently and to replace the heat and electricity these reactors supply to local communities with energy generated by fossil fuel plants by December 2008 in Seversk and by December 2010 in Zheleznogorsk. The reactors will be shut down immediately once the fossil-fuel plants are completed, eliminating the annual production of more than one metric ton of weapons-grade plutonium.

Fissile Materials Disposition

In addition to curbing the production of dangerous nuclear materials, NNSA is working to reduce the existing stockpiles of nuclear materials in both Russia and the U.S. To that end, the FY 2008 Fissile Materials Disposition budget request of \$609 million will contribute to the elimination of surplus U.S. and Russian weapon-grade plutonium and surplus U.S. highly-enriched uranium. Of this amount, \$522.5 million will be allocated toward disposing of surplus U.S. plutonium, including \$333.8 million for the Mixed Oxide (MOX) Fuel Fabrication Facility and \$60 million for the Pit Disassembly and Conversion Facility (PDCF) and the Waste Solidification Building. Of the remaining amount, \$66.8 million will be devoted to the disposition of surplus U.S. HEU and \$20.2 million will be focused on supporting activities common to both programs.

This budget request also provides funding for ongoing efforts to dispose of surplus U.S. HEU, including down blending 17.4MT of HEU in support of establishing the Reliable Fuel Supply Program, available to countries with good nonproliferation credentials that face a disruption in supply that cannot be corrected through normal commercial means. This initiative marks the first step towards a key GNEP policy aim of creating a reliable nuclear fuel mechanism, providing countries a strong incentive to refrain from acquiring enrichment and reprocessing capabilities.

Nonproliferation and Verification Research and Development

The FY 2008 budget requests \$265 million for Nonproliferation and Verification Research and Development. This effort includes a number of programs that make unique contributions to national security by researching the technological advancements necessary to detect and prevent the illicit diversion of nuclear materials. Within the Proliferation Detection Program, fundamental research is conducted in fields such as radiation detection, which supports national and homeland security agencies. It also advances basic and applied technologies for the nonproliferation community with

dual-use benefit to national counter-proliferation and counter-terrorism missions. Specifically, this program develops the tools, technologies, techniques, and expertise for the identification, location, and analysis of the facilities, materials, and processes of undeclared and proliferant WMD programs. As the sole provider for the science base to the U.S. national nuclear test monitoring system, the Nuclear Explosion Monitoring Program produces the nation's operational sensors that monitor from space the entire planet to detect and report surface, atmospheric, or space nuclear detonations. This program also produces and updates the regional geophysical datasets enabling operation of the nation's ground-based seismic monitoring networks to detect and report underground detonations.

Naval Reactors

The Naval Reactors FY 2008 Budget Request of \$808 million is an increase of \$26 million from the FY 2007 operating plan. Naval Reactor's development work ensures that nuclear propulsion technology provides options for maintaining and upgrading current capabilities, as well as for meeting future threats to U.S. security.

The majority of funding supports Naval Reactor's number-one priority of ensuring the safety and reliability of the 103 operating naval nuclear propulsion plants. This work involves continual testing, analysis, and monitoring of plant and core performance, which becomes more critical as the reactor plants age. The nature of this business demands a careful, measured approach to developing and verifying nuclear technology, designing needed components, systems, and processes, and implementing them in existing and future plant designs. Most of this work is accomplished at Naval Reactors' DOE laboratories. These laboratories have made significant advancements in extending core lifetime, developing robust materials and components, and creating an array of predictive capabilities.

Long-term program goals have been to increase core energy, to achieve life-of-the-ship cores, and to eliminate the need to refuel nuclear-powered ships. Efforts associated with this objective have resulted in planned core lives that are sufficient for the 30-plus year submarine (based on past usage rates) and an extended core life planned for CVN 21 (the next generation aircraft carrier). The need for nuclear propulsion will only increase over time as the uncertainty of fossil fuel cost and availability grows.

Naval Reactors' Operations and Maintenance budget request is categorized into six areas: Reactor Technology and Analysis; Plant Technology; Materials Development and Verification; Evaluation and Servicing; Advanced Test Reactor (ATR) Operations and Test Support; and Facility Operations.

The \$218 million requested for Reactor Technology and Analysis will support work that ensures the operational safety and reliability of reactor plants in U.S. warships and extends the operational life of Navy nuclear propulsion plants. This work includes continued development of the Reactor System Protection Analysis for the next generation aircraft carrier, CVN 21. These efforts also support continued work on core design concepts for submarines.

The increasing average age of our Navy's existing reactor plants, along with future extended service lives, a higher pace of operation and reduced maintenance periods, place a greater emphasis on our work in thermal-hydraulics, structural mechanics, fluid mechanics, and vibration analysis. These factors, along with longer-life cores, mean that for years to come, these reactors will be operating beyond our previously-proven experience base.

The \$115 million requested for Plant Technology provides funding to develop, test, and analyze components and systems that transfer, convert, control, and measure reactor power in a ship's power plant. Naval Reactors is developing components to address known limitations and to improve reliability of instrumentation and power distribution equipment to replace aging, technologically obsolete equipment. Development and application of new analytical methods, predictive tests, and design tools are required to identify potential concerns before they become actual problems. This enables preemptive actions to ensure the continued safe operation of reactor plants and the minimization of maintenance costs over the life of the ship. Additional technology development in the areas of chemistry, energy conversion, instrumentation and control, plant arrangement, and component design will continue to support the Navy's operational requirements.

The \$110 million requested for Materials Development and Verification supports material analyses and testing to provide the high-performance materials necessary to ensure that naval nuclear propulsion plants meet Navy goals for extended warship operation and greater power capability. These funds support the test assemblies for use in ATR, post irradiation examination of the materials tested at ATR, and destructive and non-destructive examinations of spent navy nuclear fuel and reactor component materials.

The \$204 million requested for Evaluation and Servicing sustains the operation, maintenance, and servicing of Naval Reactors' operating prototype reactor plants. Reactor core and reactor plant materials, components, and systems in these plants provide important research and development data and experience under actual operating conditions. These data aid in predicting and subsequently preventing problems that could develop in fleet reactors. With proper maintenance, upgrades, and servicing, the two prototype plants will continue to meet testing needs for at least the next decade.

Evaluation and Servicing funds also support the implementation of the dry spent fuel storage production lines that will put naval spent fuel currently stored in water pools at the Idaho Nuclear Technology and Engineering Center (INTEC) on the Idaho National Laboratory (INL) and at the Expanded Core Facility (ECF) on the Naval Reactors facility in Idaho into dry storage. Additionally, these funds support ongoing decontamination and decommissioning of inactive nuclear facilities at all Naval Reactors sites to address their "cradle to grave" stewardship responsibility for these legacies and minimize the potential for any environmental releases.

The \$58.8 million requested for Advanced Test Reactor Operations and Test Support sustains the ongoing activities of the INL ATR facility, owned and operated by the Office of Nuclear Energy (NE), Science and Technology.

In addition to the budget request for the important technical work discussed above, facilities funding is required for continued support of Naval Reactor's operations and infrastructure. The \$60 million requested for facilities operations will maintain and modernize the program's facilities, including the Bettis and Knolls laboratories as well as ECF and Kesselring Site Operations (KSO), through capital equipment purchases and general plant projects.

The \$10 million requested for construction funds will be used to support the project engineering and design of a materials research technology complex and ECF M290 receiving and discharge station and

to support the design and construction of a shipping and receiving and warehouse complex.

Office of the Administrator

This account provides for all Federal NNSA staff in Headquarters and field locations except those supporting Naval Reactors and the Secure Transportation Asset couriers. The FY 2008 Budget Request is \$394.7 million, an increase of \$54 million over the FY 2007 operating level.

This Budget Request is consistent with the funding trajectory needed for personnel support in an account that is comprised of over 70 percent salaries and benefits. NNSA needs to attain a steady-state staffing level of about 1,950 FTEs in FY 2008 to support current mission needs and to implement workforce planning for succession. Information Technology (IT) for the Federal staff is also included in this account, and the FY 2008 IT Request reflects efficiencies planned for A-76 efforts initiated in FY 2006. The outyear budget addresses significant challenges due to the impacts of escalation on payroll and needed support to the NNSA Federal staff.

The Budget Request includes funding for activities that were previously funded by the former Offices of Environment, Safety, and Health and Security and Safety Performance Assurance that transferred to the NNSA. Pursuant to Section 3117 of the John Warner National Defense Authorization Act for FY 2007 (P.L. 109-364), beginning in FY 2008, the functions, personnel, funds, assets, and other resources of the Office of Defense Nuclear Counterintelligence of the NNSA are transferred to the Secretary of Energy, to be administered by the Director of the Office of Counterintelligence of the Department of Energy.

Historically Black Colleges and Universities (HBCU) Support

A research and education partnership program with the HBCUs and the Massie Chairs of Excellence was initiated by Congress through earmarks in the Office of the Administrator Appropriation in FY 2005, FY 2006 and FY 2007. The NNSA has implemented an effective program to target national security research opportunities for these institutions to increase their participation in national security-related research and to train and recruit HBCU graduates for employment within the NNSA. The NNSA goal is a stable \$10 million annual effort. In FY 2008, the Office of the Administrator appropriation will provide continued funding of \$1 million to support certain HBCU activities. The programs funded in the Weapons Activities Appropriation will provide approximately \$4 to \$6 million of support to HBCU programs. In addition, the Defense Nuclear Nonproliferation Appropriation will provide approximately \$2 to \$3 million to this program. Lastly, the Naval Reactors Program will fund approximately \$1 million of HBCU programs in FY 2008.

Conclusion

I am confident that NNSA is headed in the right direction in the coming Fiscal Year. The Budget Request will support continuing our progress in protecting and certifying our Nation's strategic deterrent, transforming our nuclear weapons stockpile and infrastructure, reducing the global danger from proliferation and weapons of mass destruction, and enhancing the force projection capabilities of

the U.S. nuclear Navy. It will enable us to continue to maintain the safety and security of our people, information, materials, and infrastructure. Taken together, each aspect of this Budget Request will allow us to meet our national security responsibilities during the upcoming Fiscal Year and well into the future.

A statistical appendix follows that contains the budget figures supporting our Request. I look forward to answering any questions on the justification for the requested budget.

National Nuclear Security Administration

Appropriation and Program Summary Tables Outyear Appropriation Summary Tables

FY 2008 BUDGET TABLES

National Nuclear Security Administration Appropriation and Program Summary

(dollars in millions)

	FY 2006 Current Appropriations	FY 2007 Operating Plan	FY 2008 Request
National Nuclear Security Administration (NNSA)			
Office of the Administrator	354.2	340.3	394.7
Weapons Activities (after S&S WFO offset)	6,355.3	6,275.6	6,511.3
Defense Nuclear Nonproliferation	1,619.2	1,683.3	1,672.6
Naval Reactors	781.6	781.8	808.2
Total, NNSA	9,110.3	9,081	9,386.8

NOTE: The FY 2006 column includes an across-the-board rescission of 1 percent in accordance with the Department of Defense Appropriations Act, 2006, P.L. 109-148.

The NNSA budget justification contains information for five years as required by Sec. 3253 of P.L. 106-065. This section, entitled *Future-Years Nuclear Security Program (FYNSP)*, requires the Administrator to submit to Congress each year the estimated expenditures necessary to support the programs, projects and activities of the NNSA for a five-year fiscal period, in a level of detail comparable to that contained in the budget.

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

(dollars in millions)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
NNSA					
Office of the Administrator	395	405	415	425	436
Weapons Activities (after S&S offset)	6,511	6,705	6,904	7,111	7,324
Defense Nuclear Nonproliferation	1,673	1,798	1,845	1,893	1,942
Naval Reactors	808	828	849	870	892
Total, NNSA	9,387	9,736	10,013	10,299	10,594

Weapons Activities Funding Profile by Subprogram

(dollars in thousands)

	FY 2006 Current Appropriation	FY 2007 Operating Plan	FY 2008 Request
Weapons Activities			
Directed Stockpile Work	1,372,327	1,425,722	1,447,236
Science Campaign	276,670	270,458	273,075
Engineering Campaign	247,907	162,786	152,749
Inertial Confinement Fusion Ignition and High Yield Campaign	543,582	489,706	412,259
Advanced Simulation and Computing Campaign	599,772	611,973	585,738
Pit Manufacturing and Certification Campaign	238,663	242,392	281,230
Readiness Campaign	216,567	201,713	161,169
Readiness in Technical Base and Facilities	1,654,840	1,613,241	1,662,144
Secure Transportation Asset	209,979	209,537	215,646
Nuclear Weapons Incident Response	117,608	133,514	161,748
Facilities and Infrastructure Recapitalization Program	149,365	169,383	293,743
Environmental Projects and Operations	0	0	17,518
Safeguards and Security	797,751	761,158	881,057
Other	0	17,000	0
Subtotal, Weapons Activities	6,425,031	6,308,583	6,545,312
Use of Prior Year Balances			
Security Charge for Reimbursable Work	-32,000	-33,000	-34,000
Use of Prior Year Balances	-37,734	0	0
Total, Weapons Activities	6,355,297	6,275,583	6,511,312

Public Law Authorization:

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

Outyear Funding Profile by Subprogram

	(dollars in thousands)			
	FY 2009	FY 2010	FY 2011	FY 2012
Weapons Activities				
Directed Stockpile Work	1,483,417	1,520,502	1,558,515	1,597,478
Science Campaign	282,741	275,622	270,390	275,626
Engineering Campaign	147,090	144,448	142,614	145,417
Inertial Confinement Fusion Ignition and High Yield Campaign	406,098	413,186	411,851	407,487
Advanced Simulation and Computing Campaign	598,241	583,643	570,873	582,243
Pit Manufacturing and Certification Campaign	291,945	339,462	357,622	347,269
Readiness Campaign	190,477	184,703	180,357	183,946
Readiness in Technical Base and Facilities	1,698,403	1,765,458	1,862,729	1,952,633
Secure Transportation Asset	228,300	237,749	253,037	262,118
Nuclear Weapons Incident Response	169,835	178,327	187,243	196,605
Facilities and Infrastructure Recapitalization Program	286,572	297,096	304,330	312,000
Environmental Projects and Operations	32,471	29,923	30,864	31,574
Safeguards and Security	924,410	969,881	1,017,575	1,067,604
Subtotal, Weapons Activities	6,740,000	6,940,000	7,148,000	7,362,000
Security Charge for Reimbursable Work	-35,000	-36,000	-37,000	-38,000
Total, Weapons Activities	6,705,000	6,904,000	7,111,000	7,324,000

Defense Nuclear Nonproliferation

Funding Profile by Subprogram

(dollars in thousands)

	FY 2006 Current Appropriation	FY 2007 Operating Plan	FY 2008 Request
Defense Nuclear Nonproliferation			
Nonproliferation and Verification Research and Development	312,658	270,387	265,252
Nonproliferation and International Security	74,250	128,911	124,870
International Nuclear Materials Protection and Cooperation	422,730	472,730	371,771
Global Initiatives for Proliferation Prevention	39,600	0	0
HEU Transparency Implementation	19,288	0	0
Elimination of Weapons-Grade Plutonium Production	187,100	225,754	181,593
Fissile Materials Disposition	468,773	470,062	609,534
Global Threat Reduction Initiative	96,995	115,495	119,626
Subtotal, Defense Nuclear Nonproliferation	1,621,394	1,683,339	1,672,646
Use of Prior Year Balances	-2,215	0	0
Total, Defense Nuclear Nonproliferation	1,619,179	1,683,339	1,672,646

NOTE: The FY 2006 Current Appropriation column includes additions for international contributions to the Elimination of Weapons-Grade Plutonium Production Program in the amount of \$12,677,000, and the use of prior year balances in the amount of \$2,215,000 for an approved appropriation transfer action to the Office of the Administrator.

Public Law Authorization:

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

Outyear Funding Profile by Subprogram

(dollars in thousands)

	FY 2009	FY 2010	FY 2011	FY 2012
Defense Nuclear Nonproliferation				
Nonproliferation and Verification Research and Development	305,105	335,564	353,047	364,528
Nonproliferation and International Security	133,041	158,693	166,479	174,276
International Nuclear Materials Protection and Cooperation	408,209	402,458	407,161	414,009
Elimination of Weapons Grade Plutonium Production	138,929	24,507	0	0
Fissile Materials Disposition	660,796	771,190	802,786	813,378
Global Threat Reduction Initiative	151,920	152,588	163,527	175,809
Total, Defense Nuclear Nonproliferation	1,798,000	1,845,000	1,893,000	1,942,000

Naval Reactors Funding Profile by Subprogram

(dollars in thousands)

	FY 2006 Current Appropriation	FY 2007 Operating Plan	FY 2008 Request
Naval Reactors Development			
Operations and Maintenance (O&M)	734,877	747,648	765,519
Program Direction	29,997	31,380	32,700
Construction	16,731	2,772	10,000
Total, Naval Reactors Development	781,605	781,800	808,219

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)

Outyear Funding Profile by Subprogram

(dollars in thousands)

	FY 2009	FY 2010	FY 2011	FY 2012
Naval Reactors Development				
Operations and Maintenance	771,700	795,700	822,500	836,800
Program Direction	33,900	35,100	36,400	37,700
Construction	22,400	18,200	11,100	17,500
Total, Naval Reactors Development	828,000	849,000	870,000	892,000