

**Statement of Ambassador Linton F. Brooks  
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National Nuclear Security Administration  
U.S. Department of Energy  
Before the  
House Appropriations Subcommittee on  
Energy and Water Development and Related Agencies**

**March 30, 2006**

Thank you for the opportunity to discuss the President's FY 2007 Budget Request for the National Nuclear Security Administration (NNSA). This is my fourth appearance before this Committee as the Under Secretary for Nuclear Security, and I want to thank all of the Members for their strong support for our important national security responsibilities.

## **OVERVIEW**

In the sixth 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 responsibilities for the United States include three national security missions:

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

The budget request for \$9.3 billion, an increase of \$211 million, supports these NNSA missions.

### **Weapons Activities**

The NNSA is committed to ensuring the long-term reliability, safety and security of the nation's nuclear deterrent. Stockpile Stewardship is working; the stockpile remains safe and reliable. This assessment is based not on nuclear tests, but on cutting-edge scientific and engineering experiments and analysis, including extensive laboratory and flight tests of warhead components and subsystems. Each year, we are gaining a more complete understanding of the complex physical processes underlying the performance of our aging nuclear stockpile. However, as we continue to draw down the stockpile to the levels established in the Treaty of Moscow—between 1,700 and 2,200 deployed strategic nuclear weapons—we must consider the long-term implications of successive warhead refurbishments for the weapons remaining in the stockpile. Successive refurbishments will take us further from the tested configurations and it is becoming more difficult and costly to certify warhead remanufacture despite the extraordinary success of the Stockpile Stewardship Program.

If we were starting to build the stockpile from scratch today we would take a much different approach than we took during the Cold War. Most of today's warheads were designed to maximize explosive yield with minimum size and weight so that many warheads could be carried on a single delivery vehicle. As a result, weapons designers designed closer to the so-called "cliffs" in performance. If we were designing the stockpile today, we would manage risk differently, trading size and weight for increased performance margins and ease of manufacture and maintenance.

Second, the legacy stockpile was not designed for longevity. During the Cold War we introduced new weapons routinely, turning over most of the stockpile every 15-20 years. Today, our weapons are aging and now are being rebuilt in life extension programs that are both difficult and costly. Rebuilding nuclear weapons will never be cheap, but Cold War decisions to use certain hazardous materials mean that, in today's health and safety culture, warheads are much more costly to remanufacture.

Furthermore, we continue to evolve our deterrent posture from its Cold War origins to one that requires far fewer weapons. Decisions the President announced in 2004 will result, by 2012, in the smallest total stockpile since the Eisenhower Administration. Even with these unprecedented reductions, however, the stockpile—especially the components we keep in reserve—is probably too large.

Finally, with regard to physical security, we must consider new technology to ensure these weapons can never be used by those who wish to harm us. During the Cold War the main security threat to our nuclear forces was from espionage. Today, that threat remains, but to it has been added a post-9/11 threat of well-armed and competent terrorist suicide teams seeking to gain access to a warhead or to special nuclear materials in order to cause a nuclear detonation in place. This change has dramatically increased security costs. If we were designing the stockpile today, we would apply new technologies and approaches to warhead design as a means to reduce physical security costs.

Fortunately, we know how to address all of these problems.

The Administration's Nuclear Posture Review (NPR), completed in December 2001, called for a transition from a threat-based nuclear deterrent with large numbers of deployed and reserve weapons to a deterrent 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 respond to threats. Success in realizing this vision for transformation will enable us to achieve over the long term a 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 one that enables a much more responsive nuclear weapons infrastructure. Most importantly, this effort can go far to ensure a credible deterrent for the 21<sup>st</sup> century that will reduce the likelihood we will ever have to employ our nuclear capabilities in defense of the nation—through demonstration of responsiveness in design and production, demonstration of confidence in our abilities, cleanup of portions of the Cold War legacy and demonstration of America's will to maintain nuclear preeminence. We have worked closely with the DoD to identify initial steps on the path to a responsive nuclear infrastructure.

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, and the facilities and equipment to support a right-sized nuclear weapons enterprise. But more than that, it involves a transformation in engineering and production practices that will enable us to respond rapidly and flexibly to emerging needs. Specifically, a responsive infrastructure must provide capabilities, on appropriate timescales and in support of DoD requirements, to:

- Dismantle warheads;
- Ensure warheads are available to augment the operationally deployed force;
- Identify, understand, and fix stockpile problems;
- Design, develop, certify, and begin production of refurbished or replacement warheads;
- Maintain capability to design, develop, and begin production of new or adapted warheads, if required;
- Produce required quantities of warheads; and
- Sustain underground nuclear test readiness.

As we and the DoD take the first steps down this path, we clearly recognize that the “enabler” for transformation is our concept for the Reliable Replacement Warhead (RRW). The RRW would relax Cold War design constraints that maximized yield to weight ratios and thereby allow 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 and a correspondingly reduced chance we will ever need to resort to nuclear testing.

The combination of the RRW and a responsive infrastructure—each enabled by the other—may be genuinely transformational. The reduced stockpile the President approved in 2004 still retains a significant non-deployed nuclear stockpile as a hedge against technical problems or geopolitical changes. Once we demonstrate that we can produce warheads on a timescale in which geopolitical threats could emerge, we would no longer need to retain extra warheads to hedge against unexpected geopolitical changes.

In addition to the mission of continuously maintaining the safety, security, reliability and operational readiness of the nation’s nuclear deterrent, establishing the capabilities to achieve and sustain this transformation is a central focus of our activities. Transformation will, of course, take time. We are starting now with improving business and operating practices, both in the federal workforce and across the nuclear weapons complex, and through restoring and modernizing key production capabilities. Full infrastructure changes, however, will take a couple of decades. But I believe by 2030 we can achieve a responsive infrastructure that will provide capabilities, if required, to produce weapons with different or modified military capabilities. As important, through the RRW program we will revitalize our weapons design community to meet the challenge of being able to adapt an existing weapon within 18 months and design, develop, and begin production of a new design within 3-4 years of a decision to

enter engineering development—goals that were established in 2004.

As part of the transformation process we are also actively reviewing the recommendations of the Secretary of Energy Advisory Board Nuclear Weapons Complex Infrastructure Task Force to prepare a comprehensive plan for transforming the nuclear weapons complex. Many of the recommendations are consistent with initiatives that NNSA was already considering or is implementing (design of a Reliable Replacement Warhead, consolidation of Special Nuclear Materials, accelerating dismantlement of retired weapons, managing the evolving complex to enhance responsiveness and sustainability, and establishing an Office of Transformation). The analysis of this report and its recommendations is underway and should be completed and presented to the Congress by this spring.

Transformation presents some significant near term challenges, one of which is pit production. The NNSA considers an appropriate pit production capacity to be essential to its long-term evolution to a more responsive nuclear weapons infrastructure. We are disappointed, therefore, that Congress declined to fund planning for a modern pit production facility in FY 2006. As a result, we did not seek funding for this facility in FY 2007; although we remain convinced that increased pit production capacity is essential to our long-term evolution to a more responsive nuclear weapons infrastructure. In coming months, we will work with Congress to identify an agreed approach to fund long-term pit production capacity. In the meantime, we plan to increase the Los Alamos National Laboratory pit manufacturing capacity to 30-40 pits per year by the end of FY 2012 in order to support the Reliable Replacement Warhead. This production rate, however, will be insufficient to meet our assessed long-term pit production needs.

Another challenge of transformation is maintaining the balance between Life Extension Programs (LEP) for the current stockpile and development of the RRW and new infrastructure. The warhead LEP is key to our meeting the Department of Defense's (DoD) mission needs today and during transformation. These programs deserve special attention and I am concerned that FY 2006 Congressional reductions for two warhead LEPs have challenged our ability to meet our deterrence needs. A reduction in the W76 LEP request significantly increased the risk to achieving a first production unit by the end of FY 2007. Reductions to the W80 LEP request have delayed deployment of first production units and delayed the introduction of important use control features to strengthen security. We hope that this Committee renews its support for these critical LEPs

Another significant near term challenge is ensuring the security of our people, our nuclear weapons, our weapons-usable materials, our information, and our infrastructure from harm, theft or compromise. The job has become more difficult and costly as a result of two factors: the increased post-9/11 threat to nuclear warheads and associated fissile materials coupled with the primacy of "denying access" to these key assets—a much more rigorous security standard than "containment" of the asset. We will meet the requirements of the 2003 Design Basis Threat (DBT) by the end of this fiscal year. We expect to be compliant with the 2005 DBT revisions at the two most sensitive locations, the Secure Transportation Asset and the Pantex Weapons Plant by the end of FY 2008 as required by Departmental policy.

The world in 2030 will not be more predictable than it is today, but this vision of our future nuclear

weapons posture is enabled by what we have learned from ten years of experience with science-based Stockpile Stewardship, from planning for and carrying out life extension programs for our legacy stockpile, and from coming to grips with national security needs of the 21st century as laid out in the NPR. A world of a successful responsive infrastructure isn't the only plausible future of course. But it is one we should strive for. It offers the best hope of achieving the President's vision of the smallest stockpile consistent with our nation's security. That's why we are embracing this vision of stockpile and infrastructure transformation. We should not underestimate the challenge of transforming the enterprise, but it is clearly the right path for us to take.

### **Defense Nuclear Nonproliferation**

Let me now turn to our nuclear nonproliferation and threat reduction programs. Acquisition of nuclear weapons, WMD capabilities, technologies, and expertise by rogue states or terrorists poses a grave threat to the United States and international security. The pursuit of nuclear weapons by terrorists and states of concern makes it clear that our threat detection programs are urgently required must be successful and must proceed on an accelerated basis. The NNSA budget request addresses this urgency and demonstrates the President's commitment to prevent, contain, and roll back the proliferation of nuclear weapons-usable materials, technology, and expertise.

Our programs are structured around a comprehensive and multi-layered approach to threat reduction and nuclear nonproliferation. We work with more than 70 countries to secure dangerous nuclear and radioactive materials, halt the production of fissile material, detect the illegal trafficking or diversion of nuclear material, and ultimately dispose of surplus weapons-usable materials. We also work with multilateral institutions including the International Atomic Energy Agency and the Nuclear Suppliers Group to strengthen nuclear safeguards and improve the nuclear export control regulatory infrastructure in other countries. This multi-layered approach is intended to identify and address potential vulnerabilities within the international nonproliferation regime, reduce the incentive for terrorists and rogue states to obtain WMD, and limit terrorists' access to deadly weapons and materials.

A significant amount of our work falls at the intersection of nonproliferation and peaceful use of nuclear materials. The United States is setting an example by making a firm commitment to reducing its nuclear arsenal and recycling substantial quantities of weapons-usable highly enriched uranium for peaceful, civilian, energy-generating purposes. In 1994, the United States declared 174 tons of highly enriched uranium (HEU) to be in excess of our national security needs. The great bulk of that material is now in the process of being downblended for use in civilian nuclear power reactors. Last year, we announced that 17.4 MT of this material will be downblended and set aside to establish a fuel bank in support of our efforts to develop an international reliable fuel supply mechanism, an issue I will return to later in my statement.

In addition, in May of 2004, President Bush announced plans to reduce our nation's nuclear weapons stockpile by nearly half, to its smallest size since the Eisenhower Administration. This decision enables us to begin to dispose of a significant amount of weapons-grade nuclear material. Last year, the Administration committed to remove an additional 200 metric tons of HEU--enough material for

approximately 8,000 nuclear warheads--from any further use as fissile material in U.S. nuclear weapons. This represents the largest amount of special nuclear material ever removed from the stockpile in the history of the U.S. nuclear weapons program. The bulk of this material will be retained for use in propulsion systems for our nation's nuclear navy -- a step that will allow us to postpone the need to construct a new uranium high-enrichment facility for at least fifty years. Twenty metric tons of this HEU will be down-blended to LEU for use in civilian nuclear power reactors or research reactors.

We are also working with the Russian Federation to eliminate 34 metric tons of weapons-usable plutonium in each country that will be converted into MOX fuel and burned in nuclear power reactors. We believe we have now resolved the impasse over liability that has long delayed the plutonium disposition program and the construction of the MOX plant at our Savannah River site.

Much of our work focuses on emerging issues such as detecting clandestine nuclear supply networks, monitoring efforts by more countries to acquire nuclear weapons, and preventing the spread of nuclear fuel cycle technology. We have taken a number of steps to shut down illicit supply networks and keep nuclear materials out of the hands of terrorists as reflected in U.S. leadership in support of the Proliferation Security Initiative, Security Council Resolution 1540, criminalizing proliferation, and in strengthening international export control regimes.

We have worked to expand our programs designed to stop nuclear smuggling and nuclear terrorism by cooperatively developing and employing radiological and nuclear detection equipment at key border crossings, airports, and major seaports, or "megaports," worldwide. NNSA also assists and trains customs officials at home and abroad to detect the illicit trafficking of nuclear and radiological materials, as well as dual-use commodities that might be useful in weapons of mass destruction programs. We are also expanding our efforts to secure and transform global inventories of weapons-usable materials. Our programs include the Global Threat Reduction Initiative to reduce and secure fissile and radioactive material worldwide; our International Material Protection and Cooperation program, also known as "MPC&A", which has accelerated efforts to improve the security of weapons usable material in Russia and elsewhere; and our efforts to complete the conversion of research reactors throughout the world to the use of low enriched uranium within the next decade. There are also two complementary programs that address the repatriation of fresh and spent HEU material from Russian-supplied research reactors and U.S.-origin material from research reactors around the world.

Cooperation with Russia on nonproliferation is nothing new for the United States, but this cooperation has been heightened following the rise of global terrorism and the events of September 11, 2001. The Joint Statement on Nuclear Security Cooperation issued by Presidents Bush and Putin at their Bratislava meeting last year is but one example of the significant progress we have made over the last five years. This joint statement has helped expedite our cooperative work with Russia. For example, as a result of the Bush-Putin Bratislava joint statement, we were able to make the return of fresh and spent HEU fuel from U.S. and Russian-design research reactors in third countries a top priority, as well as a plan for joint work to develop low-enriched uranium fuel for use in these reactors. As a result, we were able complete the conversion of a Russian-supplied research reactor located in the Czech Republic to low-enriched fuel and to airlift a significant amount of HEU from the Czech

Technical University reactor located near Prague for safe and secure storage in Russia. We have also made significant progress on the other Bratislava joint statement items, and we expect this cooperation and success will continue.

Beyond the threat of nuclear terrorism, illicit networks engaging in nuclear trade, and additional states seeking nuclear weapons capability, the nonproliferation community also faces another significant challenge -- revitalizing nuclear energy throughout the globe in a manner that also advances our nonproliferation interests. We have the opportunity to reshape our collective approach to ensure that nonproliferation is the cornerstone of the next evolution of civilian nuclear power and fuel cycle technology. The challenge before us is to make sure we design -- from the very beginning -- technologies and political arrangements that limit the spread of sensitive fuel cycle capabilities and ensure that rogue states do not use a civilian nuclear power as cover for a covert nuclear weapons program.

Last month, the Administration announced the Global Nuclear Energy Partnership, or GNEP, as part of President Bush's Advanced Energy Initiative. GNEP is a comprehensive strategy to enable an expansion of nuclear power in the U.S. and around the world, to promote nuclear nonproliferation goals; and to help resolve nuclear waste disposal issues. Fundamental to GNEP is a new approach to fuel cycle technology. Under this proposed new approach, countries with secure, advanced nuclear fuel cycle capabilities would offer commercially competitive and reliable access to nuclear fuel services — fresh fuel and recovery of used fuel — to other countries in exchange for their commitment to forgo the development of enrichment and recycling technology.

Over the next year, we will work with other elements of the Department to establish GNEP, paying special attention to developing advanced safeguards and developing the parameters for international cooperation. Since the signing of the Nuclear Non-Proliferation Treaty, the world has sought to prevent the proliferation of nuclear weapons while expanding the benefits of nuclear technology. I believe that GNEP takes us closer to that goal. By allowing us to move beyond abstract discussions to tangible actions that will benefit directly those who join us in this partnership. GNEP will offer us the opportunity to take the international lead in making nonproliferation an integral part of our global nuclear safety and security culture.

## **Naval Reactors**

Also contributing to the Department's national security mission is the Department's 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 forty 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 2007 BUDGET REQUEST BY PROGRAM**

The President's FY 2007 budget request totals \$9.3 billion, an increase of \$211 million or 2.3 percent. We are managing our program activities within a disciplined five-year budget and planning envelope. We are doing it successfully enough to be able to address the Administration's high priority initiatives to reduce global nuclear danger in Defense Nuclear Nonproliferation, and provide for needed funding increases in some of our programs within an overall modest growth rate.

### **Weapons Activities**

The FY 2007 budget request for the programs funded within the Weapons Activities appropriation is \$6.41 billion, less than a one percent increase over FY 2006. This request supports the requirements of the Stockpile Stewardship Program consistent with the Administration's Nuclear Posture Review (NPR) 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 responsive to new or emerging threats.

Directed Stockpile Work (DSW) is an area of special emphasis this year with an FY 2007 request of \$1.41 billion, a 3 percent increase over FY 2006. In FY 2007, we will be accelerating efforts for dismantlement of retired warheads and consolidation of special nuclear materials across the nuclear weapons complex. Both of these efforts will contribute to increasing the overall security at NNSA sites. DSW also supports routine maintenance and repair of the stockpile; refurbishes warheads through the Life Extension Programs; and, maintains the capability to design, manufacture, and certify new warheads, for the foreseeable future. DSW also 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 parts of the Stockpile Stewardship Program continues. The FY 2007 request for the six Campaigns is \$1.94 billion, a 9 percent decrease from FY 2006. 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 move to "science-based" stewardship. These campaigns are evidence of NNSA excellence and innovation in science, engineering and computing that, though focused on the nuclear weapons mission, have much broader application.

Specifically, \$425 million for the Science and Engineering Campaigns provides the basic scientific understanding and the technologies required to support the workload and the completion of new scientific and experimental facilities. We will continue to maintain the ability to conduct underground nuclear tests at the Nevada Test Site if required, but let me be clear, nothing at this time indicates the need for resumption for underground testing for the foreseeable future.

The Readiness Campaign, with a request of \$206 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.

The request of \$618 million for the Advanced Simulation and Computing Campaign supports the schedule to enhance the computational tools and technologies necessary to support the continued assessment and certification of the refurbished weapons, aging weapons components, and a Reliable Replacement Warhead program without underground nuclear tests. As we enhance these tools to link the historical test base of more than 1,000 nuclear tests to computer simulations, we can continue to assess whether the stockpile is safe, secure, reliable, and performs as required.

The \$451 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 Stockpile Stewardship Program. To achieve the ignition milestone, \$255 million will support construction of NIF and the NIF Demonstration Program and \$168 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.

The Pit Manufacturing and Certification Campaign request of \$238 million continues work to manufacture and certify the W88 pit in 2007 and to address issues associated with manufacturing future pit types including the Reliable Replacement Warhead and increasing pit production capacity at Los Alamos National Laboratory.

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

In FY 2007 we are requesting \$1.98 billion for the maintenance and operation of existing facilities, remediation and disposition of excess facilities, and construction of new facilities. This is of critical importance to enable NNSA to move toward a more supportable and responsive infrastructure.

Of this amount, \$1.69 billion is requested for Readiness in Technical Base and Facilities (RTBF), an increase of 3 percent from FY 2006, with \$1.4 billion in Operations and Maintenance and \$281 million for RTBF Construction. RTBF operates and maintains current facilities, and ensure the long-term vitality of the NNSA complex through a multi-year program of infrastructure construction.

This request also includes \$291 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. FIRP works in partnership with RTBF to assure that facilities and infrastructure are restored to an appropriate condition to support the mission, and to institutionalize responsible and accountable facility management practices. FIRP activities include reducing deferred maintenance, recapitalizing the infrastructure, and reducing the maintenance base by eliminating excess real property. The FIRP

Recapitalization projects are key to restoring the facilities that house the people, equipment, and material necessary to the Stockpile Stewardship Program, the primary NNSA mission. FIRP Facility Disposition activities reduce Environment, Safety and Health (ES&H) and safeguards and security liabilities, address footprint reduction of the complex, and reduce long-term costs and risks. The primary objective of FIRP Infrastructure Planning is to ensure that projects are adequately planned in advance of project start.

Last year the Congress significantly reduced funds for the FIRP program. This reduction, coming on reductions in planned levels dictated by fiscal constraints, means that the original (and Congressionally mandated) goal of eliminating the maintenance backlog and terminating the FIRP program by 2011 is no longer attainable. This matter may require legislation extending the FIRP program to 2013. We remain committed to the concept of FIRP as a temporary, “get well” program and to the long term, sustained funding of maintenance within the RTBF program.

### **Secure Transportation Asset**

In FY 2007, the budget requests \$209 million for Secure Transportation Asset (STA), a minor decrease from FY 2006 levels, 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 cumulative number of Safeguard Transporters in operation by three per year, with a target total of 51 in FY 2011.

### **Environmental Projects and Operations**

We are requesting \$17.2 million for Environmental Projects and Operations. The \$17.2 million request is for a new function, Long Term Response Actions/Long-Term Stewardship, which covers continuing environmental stewardship at NNSA sites after the completion of Environmental Management activities. This new program at each site begins when EM cleanup activities are completed, and will continue for several years. Activities comprise routine inspections of landfill covers/caps, and maintenance of pump and treatment systems, and starting in FY 2007, will be performed at three NNSA sites: Lawrence Livermore National Laboratory, Kansas City Plant, and Sandia national laboratories.

The FY 2007-2011 Budget Request does not include the transfer of legacy environmental management activities at NNSA sites that was proposed in the FY 2006 Budget Request. However, the responsibility for newly generated waste at the Lawrence Livermore National Laboratory and the Y-12 National Security Complex was transferred to the NNSA in FY 2006, and is managed in the Readiness in Technical Base and Facilities GPRA unit.

## **Nuclear Weapons Incident Response**

The FY 2007 request for Nuclear Weapons Incident Response is \$135 million, an increase of 15 percent over FY 2006. The NNSA Emergency Operations remains the U.S. government's primary capability for radiological and nuclear emergency response in support of Homeland Security. The program is continuing efforts to enhance Emergency Response capabilities, and the budget request supports all assets as planned, with emphasis on recruitment and training of personnel called into action during emergency situations. The FY 2007 increase is primarily associated with the research and development efforts of the Render Safe Research and Development program. This budget realigns this research and development funding to Emergency Response where the program is managed.

## **Safeguards and Security**

The FY 2007 request for Safeguards and Security is \$754 million. This budget supports two security-related activities. The budget request proposes that the physical security portion of NNSA's Safeguards and Security GPR Unit be renamed "Defense Nuclear Security", consistent with the responsible NNSA organization. This program is responding to a revision in threat guidance affecting physical security at all NNSA sites. Meeting the Design Basis Threat will require further upgrades to equipment, personnel and facilities, and NNSA is committed to completing these activities. The Cyber Security program activities, managed by the NNSA Chief Information Officer, comprise the rest of this account, and the FY 2007 request is essentially level with the FY 2006 funding level. The Request includes funding for the DOE Diskless Conversion initiative. Meeting the post-9/11 security requirements has required a significant long-term investment, reflecting DOE's continuing commitment to meet these requirements.

## **Defense Nuclear Nonproliferation**

The Defense Nuclear Nonproliferation program goal is to detect, prevent, and reverse the proliferation of Weapons of Mass Destruction (WMD) while mitigating nuclear risk worldwide. Our programs address the danger that hostile nations or terrorist groups may acquire weapons of mass destruction or weapons-usable material, dual-use production or technology, or WMD capabilities. Our primary focus in this regard is securing or disposing of vulnerable stockpiles of weapon-usable materials, technology, and expertise in Russia and other countries of concern. The Administration's request of \$1.73 billion to support NNSA activities to reduce the global weapons of mass destruction proliferation threat represents almost a 7 percent increase over the budget for comparable FY 2006 activities.

The Administration's FY 2007 Fissile Material Disposition budget request is \$638 million, an increase of \$169 million over FY 2006. This increase reflects the progress in implementing the plutonium disposition program in the past year. Of this amount, \$551 million will be allocated toward disposing of surplus U.S. and Russian plutonium and \$87 million will be allocated toward the disposition of surplus U.S. highly enriched uranium. The plutonium disposition program, the Department's largest nonproliferation program, plans to dispose of 68 metric tons (MT) of surplus Russian and U.S. weapons-grade plutonium by fabricating it into mixed oxide (MOX) fuel for use in civilian nuclear power-generating reactors. The United States and Russia successfully completed negotiations of a

liability protocol for the program, and senior Russian government officials have assured the United States that this protocol will be signed in the near future. DOE has also been working to validate the U.S. MOX project cost and schedule baseline as part of our project management process, and we will have a validated baseline in place before construction begins. DOE received authorization to begin construction of the MOX facility from the Nuclear Regulatory Commission, began site preparation work for the MOX facility at the Savannah River Site, and implemented a number of improvements to strengthen the management of the MOX project. Current plans call for construction of the U.S. MOX facility to start in 2006, with operations to start in 2015. The Administration's budget request is essential for continuing this work in FY2007, which will be a peak construction year. Now that the liability issue is nearing resolution, high-level U.S.-Russian discussions are taking place to confirm the technical and financial details for the Russian construction program.

The Administration's FY 2007 budget request of \$107 million for the Global Threat Reduction Initiative (GTRI) is a 10 percent increase over FY 2006 and supports the urgency carried in ambitious completion dates and objectives set by the program. GTRI represents the Department's latest effort to identify, secure, recover, and/or facilitate the disposition of the vulnerable nuclear and radioactive materials worldwide that pose a threat to the United States and the international community. Since the creation of GTRI, we have enjoyed a number of successes. Under our radiological threat reduction program, we have completed security upgrades at more than 340 facilities around the world. As a result of the Bush-Putin Bratislava joint statement on enhanced nuclear security cooperation, we have established a prioritized schedule for the repatriation of U.S.-origin and Russian-origin research reactor nuclear fuel located in third countries. As part of our nuclear materials threat reduction efforts under GTRI, three successful shipments in FY 2005 to repatriate Russian-origin fresh highly enriched uranium (HEU) from the Czech Republic (two shipments) and Latvia.

In accordance with the President's Bratislava commitment, we have also begun working with the Russian Federation to repatriate Russian-origin spent fuel. We have also conducted several successful shipments to repatriate U.S.-origin spent nuclear fuel from Japan, the Netherlands, Sweden, Greece, and Austria. We have converted three research reactors in the Netherlands, Libya, and the Czech Republic from the use of HEU to the use of low-enriched uranium (LEU) fuel so far in 2006, and we have completed physical security upgrades at three priority sites housing dangerous materials in Ukraine, Kazakhstan, and Uzbekistan.

The International Material Protection and Cooperation FY 2007 budget request of \$413 million is a 2 percent decrease from FY 2006. For more than a decade, the United States has worked cooperatively with the Russian Federation and other former Soviet republics to secure nuclear weapons and weapons material that may be at risk of theft or diversion. As part of the Bush-Putin Bratislava joint statement, we agreed to accelerate security upgrades at Russian sites holding weapons-usable materials and warheads. The Bratislava joint statement also provided for a comprehensive joint action plan for cooperation on security upgrades of Russian nuclear facilities at Rosatom and Ministry of Defense sites. In addition, this statement called for enhanced cooperation in the areas of nuclear regulatory development, sustainability, secure transportation, MPC&A expertise training, and protective force equipment. A number of major milestones for this cooperative program are on the horizon, and the FY 2007 budget ensures that sufficient funding will be available to meet these milestones. Security

upgrades for Russian Rosatom facilities will be completed by the end of 2008—two years ahead of schedule. By the end of 2008 we will also complete cooperative upgrades at the nuclear warhead storage sites of the Russian Strategic Rocket Forces and the Russian Ministry of Defense sites. By the end of FY 2007, we will have provided security upgrades at more than 80 percent of all the nuclear sites in Russia at which we now plan cooperative work.

The Administration's budget request will enable us to expand and accelerate the deployment of radiation detection systems at key transit points within Russia and accelerate installation of such equipment in five other priority countries to prevent attempts to smuggle nuclear or radiological materials across land borders. Through our Megaports initiative, we plan to deploy radiation detection capabilities at three additional major seaports in FY 2007 to pre-screen cargo containers destined for the United States for nuclear and radiological materials, thereby increasing the number of completed ports to thirteen.

The FY 2007 budget request of \$207 million for the Elimination of Weapons Grade Plutonium Production (EWGPP) is an increase of 18 percent from FY 2006. The EWGPP program is working toward complete the permanent shut down of the three remaining weapons grade plutonium production reactors in Russia at Seversk and Zheleznogorsk. Every week, these reactors currently produce enough fissile material for several nuclear weapons. The overall EWGPP plan is to shutdown these reactors permanently and replace the heat and electricity these reactors supply to local communities with energy generated by fossil fuel plants by December 2008 in Seversk and December 2010 in Zheleznogorsk. The reactors will shut down immediately when the fossil plants are completed. The first validated estimate of total program cost—\$1.2 billion—was determined in January 2004. After extensive negotiations with Russia, we achieved \$200 million in cost savings. Also, under the authority to accept international funding as provided in the Ronald W. Reagan Defense Authorization Act for FY 2005, we have received pledges of \$30 million from six Global Partnership participants. Construction of the fossil fuel plant at Seversk started in late 2004, and the start of construction of the fossil fuel plant at Zheleznogorsk was recently approved. The increased funding as part of the FY 2007 budget request allows for both construction projects to remain on schedule and thereby hold the line on cost.

The FY 2007 budget requests \$269 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. The Proliferation Detection program 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. The Proliferation Detection program conducts fundamental research in fields such as radiation detection, providing support to the Department of Homeland Security (DHS) and the Intelligence Community. The Nuclear Explosion Monitoring program builds 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.

The FY 2007 budget request for Nonproliferation and International Security is \$127 million. This figure cannot be directly compared to FY 2006 because of a budget structure change that has realigned the Global Initiatives for Proliferation Prevention and HEU Transparency programs to this GPRA unit. Through this program the Department provides technical and policy expertise in support of U.S. efforts to strengthen international nonproliferation institutions and arrangements, fosters implementation of nonproliferation requirements through engagement with foreign partners, and helps develop the mechanisms necessary for transparent and verifiable nuclear reductions worldwide. This budget request addresses our need to tackle key policy challenges including efforts to strengthen the IAEA safeguards system, attempts to block and reverse proliferation in Iran and North Korea, attention to augmenting U.S. cooperation with China, India, and Russia, and our plan to build-up the nonproliferation component of the Global Nuclear Energy Partnership.

### **Naval Reactors**

The Naval Reactors FY 2007 budget request of \$795 million is an increase of \$13.5 million from FY 2006. The Program'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 the Program's number-one priority of ensuring the safety and reliability of the 104 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 conventional 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 \$212 million requested for Reactor Technology and Analysis will support continued work on the design for the new reactor plant for the next generation of aircraft carriers, CVN-21. These efforts also support the design of the Transformational Technology Core (TTC), a new high-energy core that is a

direct outgrowth of the Program's advanced reactor technology and materials development and verification work.

Reactor Technology and Analysis also develops and improves the analysis tools, which can be used to safely extend service life beyond our previous experience base. 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 \$131 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. Reactor plant performance, reliability, and safety are maintained through a full understanding of component performance and system condition over the life of each ship. 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. 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 \$118 million requested for Materials Development and Verification funds 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. More explicitly, materials in the reactor core and reactor plant must perform safely and reliably for the extended life of the ship.

The \$179 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 a dry spent fuel storage production line that will put naval spent fuel currently stored in water pits at the Idaho Nuclear Technology and Engineering Center 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 \$64.6 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, program direction



and facilities funding is required for continued support of the Program's operations and infrastructure. The \$57 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 \$2.8 million requested for construction funds will be used to complete construction of a materials development facility and to support the design of a materials research technology complex. Finally, the \$31.2 million requested for program direction will support Naval Reactors' DOE personnel at Headquarters and the Program's field offices, including salaries, benefits, travel, and other expenses.

### **Office of the Administrator**

The FY 2007 budget request of \$387 million, and increase of 14.2 percent over the FY 2006 appropriation. NNSA completed the reengineering of its Federal workforce last year and has begun to recruit to fill critical skill gaps in safety, security, facilities, and business positions, in addition to the Future Leaders Intern program initiated in FY 2005. The FY 2007 request increases to provide additional personnel and support for mission growth in the Defense Nuclear Nonproliferation area, as well as in safety and security functions. The remainder of the increase reflects functional transfers to NNSA of 18 people from other Departmental elements, and fact of life changes including pay adjustments, increased space and occupancy charges, and cost of living increases in pay and benefits. We plan to support a slightly higher workforce level than in previous years, reflecting support for mission growth areas and skill gap closures.

### **Historically Black Colleges and Universities Support**

A research and education partnership program with the Historically Black Colleges and Universities (HBCU) and the Massie Chairs of Excellence was initiated by the Congress in the Office of the Administrator appropriation in FY 2005 and FY 2006. NNSA has established 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 NNSA. The NNSA's goal is a stable \$10 million effort annually. The majority of the efforts directly support program activities, and it is expected that programs funded by the Weapons Activities, Defense Nuclear Nonproliferation and Naval Reactors appropriations will fund research with the HBCUs in areas including engineering, radiochemistry, material and computational sciences and sensor development. A targeted effort in education and curriculum development, and support for the Massie Chairs, will also be continued.

## **MANAGEMENT ISSUES**

NNSA has fully embraced the President's Management Agenda through the completion of the NNSA re-engineering initiative by creating a more robust and effective NNSA organization. Additionally, NNSA's success has been recognized with consistently "Green" ratings from the DOE, including Budget and Performance Integration. NNSA's Planning, Programming, Budgeting and Evaluation (PPBE) process was implemented simultaneously with the standup of the new NNSA organization, and is now the established management construct that integrates management, financial data and

performance information in a multi-year context.

The PPBE process is in its fifth year of implementation, and provides a fully integrated, multi-year perspective. The linkages within NNSA mirror the Headquarters and field organization structures, and are supported by management processes, contracting, funds control and accounting documentation. The cascade and linkages are quite evident in our updated NNSA Strategic Plan, issued last November.

We take very seriously the responsibility to manage the resources of the American people effectively and I am glad that our management efforts are achieving such results.

Finally, to provide more effective supervision of high-hazard nuclear operations, I have established a Chief, Defense Nuclear Safety position and appointed an experienced safety professional to the position. I believe this will help us balance the need for consistent standards with my stress on the authority and responsibility of the local Site Managers.

## **CONCLUSION**

In conclusion, I am confident that we are headed in the right direction. Our budget request will support continuing our progress in protecting and certifying our nuclear deterrent, transforming our 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. Above all, it will meet the national security needs of the United States of in the 21st century.

Mr. Chairman, this concludes my statement. A statistical appendix follows that contains the budget figures supporting our request. My colleagues and I would be pleased to answer any questions on the justification for the requested budget.

# **National Nuclear Security Administration**

## **Appropriation and Program Summary Tables Outyear Appropriation Summary Tables**

### **FY 2007 BUDGET TABLES**

## National Nuclear Security Administration Appropriation and Program Summary

(dollars in millions)

	FY 2005 Current Appropriations	FY 2006 Original Appropriation	FY 2006 Adjustments	FY 2006 Current Appropriation	FY 2007 Request
<b>National Nuclear Security Administration (NNSA)</b>					
Office of the Administrator.....	363.4	341.9	-3.4	338.5	386.6
Weapons Activities (after S&S WFO offset).....	6,625.5	6,433.9	-64.3	6,369.6	6,407.9
Defense Nuclear Nonproliferation	1,508.0	1,631.2	-16.3	1,614.8	1,726.2
Naval Reactors.....	801.4	789.5	-7.9	781.6	795.1
<b>Total, NNSA.....</b>	<b>9,298.3</b>	<b>9,196.5</b>	<b>-92.0</b>	<b>9,104.5</b>	<b>9,315.8</b>

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)

(\$ in millions)

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
<b>NNSA</b>					
Office of the Administrator.....	387	394	402	410	418
Weapons Activities (after S&S offset).....	6,408	6,536	6,667	6,800	6,936
Defense Nuclear Nonproliferation.....	1,726	1,761	1,796	1,832	1,869
Naval Reactors.....	795	811	827	844	861
<b>Total, NNSA.....</b>	<b>9,316</b>	<b>9,502</b>	<b>9,692</b>	<b>9,886</b>	<b>10,084</b>

**Weapons Activities**  
**Funding Profile by Subprogram**

(dollars in thousands)

	FY 2005 Current Appropriation	FY 2006 Original Appropriation	FY 2006 Adjustments	FY 2006 Current Appropriation	FY 2007 Request
<b>Weapons Activities</b>					
Directed Stockpile Work .....	1,351,206	1,386,189	-13,862	1,372,327	1,410,268
Science Campaign .....	277,253	279,464	-2,794	276,670	263,762
Engineering Campaign .....	258,767	250,411	-2,504	247,907	160,919
Inertial Confinement Fusion Ignition and High Yield Campaign ..	536,756	549,073	-5,491	543,582	451,191
Advanced Simulation and Computing Campaign.....	698,196	605,830	-6,058	599,772	617,955
Pit Manufacturing and Certification Campaign .....	263,570	241,074	-2,411	238,663	237,598
Readiness Campaign .....	265,472	218,755	-2,188	216,567	205,965
Readiness in Technical Base and Facilities .....	1,657,712	1,647,885	-3,130	1,644,755	1,685,772
Secure Transportation Asset.....	199,709	212,100	-2,121	209,979	209,264
Nuclear Weapons Incident Response .....	98,427	118,796	-1,188	117,608	135,354
Facilities and Infrastructure Recapitalization Program .....	313,722	150,873	-1,508	149,365	291,218
Environmental Projects and Operations .....	0	0	0	0	17,211
Safeguards and Security .....	751,929	805,486	-7,735	797,751	754,412
<b>Subtotal, Weapons Activities .....</b>	<b>6,672,719</b>	<b>6,465,936</b>	<b>-50,990</b>	<b>6,414,946</b>	<b>6,440,889</b>
Use of Prior Year Balances .....	-16,372	0	-13,349	-13,349	0
Security Charge for Reimbursable Work .....	-30,000	-32,000	0	-32,000	-33,000
Transfer to the Office of the Administrator for Pajarito.....	-3,205	0	0	0	0
Undistributed Budget Authority <sup>a</sup> .....	2,400	0	0	0	0
<b>Total, Weapons Activities .....</b>	<b>6,625,542</b>	<b>6,433,936</b>	<b>-64,339</b>	<b>6,369,597</b>	<b>6,407,889</b>

<sup>a</sup> Results from application of the 0.8 percent across-the-board rescission against the gross Weapons Activities appropriation prior to receipt of the \$300,000,000 which was derived by transfer from the Department of Defense in accordance with Public Law 108-447.

NOTE: The FY 2006 adjustments column includes an across-the-board rescission of 1 percent in accordance with the Department of Defense Appropriations Act, 2006, P.L. 109-148. It also reflects the approval of the following reprogrammings for Readiness in Technical Base and Facilities using prior year funding—Savannah River General Plant Projects and Project 03-D-102, National Security Sciences Building.

**Public Law Authorization:**

P.L. 109-163, National Defense Authorization Act, FY 2006

P.L. 109-103, Energy and Water Development Appropriations Act, 2006

**Outyear Funding Profile by Subprogram**

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Weapons Activities</b>				
Directed Stockpile Work .....	1,381,893	1,431,364	1,462,287	1,494,962
Science Campaign .....	282,223	281,344	274,296	268,441
Engineering Campaign .....	169,012	152,114	149,639	147,584
Inertial Confinement Fusion Ignition and High Yield Campaign .....	426,035	415,222	414,823	400,013
Advanced Simulation and Computing Campaign.....	632,095	621,943	607,746	593,761
Pit Manufacturing and Certification Campaign.....	249,588	252,174	260,096	255,832
Readiness Campaign .....	202,636	198,090	192,401	187,659
Readiness in Technical Base and Facilities .....	1,767,586	1,833,813	1,907,510	2,008,941
Secure Transportation Asset.....	225,057	237,344	244,212	247,580
Nuclear Weapons Incident Response .....	137,766	140,019	142,332	144,701
Facilities and Infrastructure Recapitalization Program....	310,369	339,257	368,054	396,996
Environmental Projects and Operations .....	17,518	17,805	18,099	18,400
Safeguards and Security .....	768,269	781,279	794,608	808,235
<b>Subtotal, Weapons Activities .....</b>	<b>6,570,047</b>	<b>6,701,768</b>	<b>6,836,103</b>	<b>6,973,105</b>
Security Charge for Reimbursable Work .....	-34,000	-35,000	-36,000	-37,000
<b>Total, Weapons Activities .....</b>	<b>6,536,047</b>	<b>6,666,768</b>	<b>6,800,103</b>	<b>6,936,105</b>

**Major Outyear Considerations**

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Weapons Activities .....</b>	<b>6,570,047</b>	<b>6,701,768</b>	<b>6,836,103</b>	<b>6,973,105</b>

## Defense Nuclear Nonproliferation

### Funding Profile by Subprogram

(dollars in thousands)

	FY 2005 Current Appropriation	FY 2006 Original Appropriation	FY 2006 a Adjustments	FY 2006 Current Appropriation	FY 2007 Request
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#### Defense Nuclear Nonproliferation and Verification

Nonproliferation Research and Development....	219,836	322,000	-3,220	318,780	268,887
Nonproliferation and International Security .....	143,764	75,000	-750	74,250	127,411
International Nuclear Materials Protection and Cooperation.....	403,451	427,000	-4,270	422,730	413,182
Global Initiatives for Proliferation Prevention	40,675	40,000	-400	39,600	0
HEU Transparency Implementation <sup>a</sup> .....	20,784	19,483	-195	19,288	0
Elimination of Weapons-Grade Plutonium Production.....	67,331	176,185	-1,762	174,423	206,654
Fissile Materials Disposition .....	619,060	473,508	-4,735	468,773	637,956
Offsite Recovery Project .....	7,540	0	0	0	0
Global Threat Reduction Initiative .....	0	97,975	-980	96,995	106,818
<b>Subtotal, Defense Nuclear Nonproliferation ....</b>	<b>1,522,441</b>	<b>1,631,151</b>	<b>-16,312</b>	<b>1,614,839</b>	<b>1,760,908</b>
Use of Prior Year Balances .....	-14,475	0	0	0	-34,695
<b>Total, Defense Nuclear Nonproliferation.....</b>	<b>1,507,966</b>	<b>1,631,151</b>	<b>-16,312</b>	<b>1,614,839</b>	<b>1,726,213</b>

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.

#### Public Law Authorization:

P.L. 108-148, The Consolidated Appropriations Act, 2006

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<sup>a</sup> This budget request includes an across-the-board rescission of 1 percent for FY 2006 in accordance with the Department of Defense Appropriations Act 2006, P.L. 109-148.

## Outyear Funding Profile by Subprogram

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Defense Nuclear Nonproliferation</b>				
Nonproliferation and Verification Research and Development.....	279,439	293,924	311,551	324,034
Nonproliferation and International Security.....	132,458	134,706	138,835	146,990
International Nuclear Materials Protection and Cooperation .....	403,351	444,405	530,723	542,859
Elimination of Weapons Grade Plutonium Production .....	182,017	139,363	24,949	0
Fissile Materials Disposition.....	642,853	654,469	710,178	737,976
Global Threat Reduction Initiative.....	120,619	129,085	115,635	116,649
<b>Total, Defense Nuclear Nonproliferation .....</b>	<b>1,760,737</b>	<b>1,795,952</b>	<b>1,831,871</b>	<b>1,868,508</b>

## Major Outyear Considerations

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Defense Nuclear Nonproliferation .....</b>	<b>1,760,737</b>	<b>1,795,952</b>	<b>1,831,871</b>	<b>1,868,508</b>

NNSA describes major outyear considerations at each GPRA-Unit level within this appropriation.



## Naval Reactors Funding Profile by Subprogram

(dollars in thousands)

FY 2005 Current Appropriation	FY 2006 Original Appropriation	FY 2006 Adjustments	FY 2006 Current Appropriation	FY 2007 Request
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**Naval Reactors Development (NRD)**

Operations and Maintenance.....	765,041	728,800	-7,288	721,512	761,176
Program Direction.....	29,264	30,300	-303	29,997	31,185
Construction..... <sup>a</sup>	7,132	30,400	-304	30,096	2,772
<b>Subtotal, Naval Reactors</b>					
<b>Development.....</b>	<b>801,437</b>	<b>789,500</b>	<b>-7,895</b>	<b>781,605</b>	<b>795,133</b>
Use of Prior Year Balances.....	0	0	0	0	0
<b>Total, Naval Reactors.....</b>	<b>801,437</b>	<b>789,500</b>	<b>-7,895</b>	<b>781,605</b>	<b>795,133</b>

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.

**Public Law Authorization:**

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 Authorization Act of 2002", Title 32, "National Nuclear Security Administration"

P.L. 108-375, National Defense Authorization Act, FY 2005

P.L. 108-447, The Consolidated Appropriations Act, 2005

P.L. 109-163, National Defense Authorization Act, 2006

## Outyear Funding Schedule

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Naval Reactors.....</b>	<b>811,036</b>	<b>827,257</b>	<b>843,802</b>	<b>860,678</b>

<sup>a</sup> In the Conference report to Public Law 109-103, Congress directed that NR transfer \$13.5 million to DOE-NE to support the Advanced Test Reactor (ATR) Life Extension Program (LEP). However, the report included the \$13.5 million specified for ATR under the Construction Heading vice Operations and Maintenance. The additional \$13.5 million has been transferred to NE to support the LEP (NR total transfer to NE for ATR in FY 2006 was \$70.8 million). Actual NR Construction requirements in FY 2006 are \$16.9 million.

## Major Outyear Considerations

(dollars in thousands)

	FY 2008	FY 2009	FY 2010	FY 2011
<b>Naval Reactors</b>				
Operations and Maintenance .....	765,186	777,407	780,702	804,078
Program Direction .....	32,700	33,900	35,100	35,900
Construction .....	13,150	15,950	28,000	20,700
<b>Total, Naval Reactors.....</b>	<b>811,036</b>	<b>827,257</b>	<b>843,802</b>	<b>860,678</b>

NNSA describes major outyear considerations at each GPRA-Unit level within this appropriation.