

**STATEMENT OF SAMUEL W. BODMAN
SECRETARY OF ENERGY**

Before the

**COMMITTEE ON ARMED SERVICES
U.S. SENATE**

Concerning the

DEPARTMENT OF ENERGY'S FY 2007 BUDGET REQUEST

February 16, 2006

Chairman Warner, Senator Levin, and members of the Committee, thank you for the opportunity to appear before you today to discuss the Administration's priorities for nuclear weapons, threat reduction programs, and DOE's environmental cleanup program.

ADVANCING AMERICA'S NATIONAL SECURITY

Let me first address national security programs under the National Nuclear Security Administration (NNSA). NNSA's FY 2007 budget request supports three fundamental national security missions:

- assure that the U.S. has a safe, secure, reliable and effective 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.

NUCLEAR WEAPONS PROGRAMS

The Department 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.

To assure our ability to maintain essential military capabilities over the long term, however, and to enable deeper cuts in the stockpile through reduction of reserve warheads, we must make progress towards a truly responsive nuclear weapons infrastructure, as called for in the Nuclear Posture Review (NPR). The Department is moving down the path towards realizing its vision

for a transformed nuclear weapon stockpile and infrastructure which are enabled by its Reliable Replacement Warhead Program and its initiative for a responsive infrastructure.

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, one that reduces NNSA and DoD ownership costs for nuclear forces, and one that enables a much more responsive nuclear infrastructure. Most importantly, this effort can go far to ensure a credible deterrent for the 21st century that will reduce the likelihood we will ever have to employ our nuclear capabilities in defense of the nation.

The NPR, and follow-on assessments, have resulted in a number of conceptual breakthroughs in our thinking about nuclear forces, breakthroughs that have enabled concrete first steps in the transformation of those forces and associated capabilities. Very importantly, the NPR articulated the critical role of the defense R&D and manufacturing base, of which a responsive nuclear weapons infrastructure is a key element, in the New Triad of strategic capabilities. We have worked closely with the Department of Defense to identify initial steps on the path to a responsive nuclear weapon infrastructure.

What do we mean by “responsive nuclear weapons infrastructure” and what is it that we want it to do? 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 needed 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.

The combination of the Reliable Replacement Warhead (RRW) and a responsive infrastructure—each enabled by the other—may genuinely be transformational. The reduced stockpile the President approved in 2004 still retains a significant number of non-deployed weapons as a hedge against technical problems or geopolitical changes. As we began to implement the concepts of the NPR, however, we and DoD recognized that if we could devise a truly responsive infrastructure, we could eliminate many of these hedge weapons. 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. Once we can respond in a timely way to technical problems in the stockpile, we may no longer need to retain extra warheads as a hedge against such problems.

As we and the DoD take the first steps down this path, we clearly recognize that the “enabler” for transformation is our concept for 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. This provides enormous leverage for a more efficient and responsive infrastructure.

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, may take a couple of decades.

But let me take you forward 20 or 25 years when the Administration’s emerging vision for the nuclear weapons enterprise of the future has come to fruition. The deployed stockpile—almost certainly considerably smaller than today’s plans call for—has largely been transformed. RRWs have relaxed warhead design constraints imposed on Cold War systems. As a result, they are more easily manufactured at fewer facilities with safer and more environmentally benign materials. These replacement warheads have the same military characteristics, are carried on the same types of delivery systems, and hold at risk the same targets as the warheads they replaced, but they have been re-designed for reliability, security, and ease of maintenance. Confidence in the stockpile remains high, without nuclear testing, because the RRW design offers substantially increased performance margins and because of our deeper understanding of nuclear phenomena enabled by the stockpile stewardship program and the R&D tools that come with it.

By 2030, according to our vision, the deployed stockpile will be backed up by a much smaller non-deployed stockpile than today. The United States has met the responsive infrastructure objective that for a relatively minor problem, we are able to repair warheads and begin to redeploy them within one year. The elimination of dangerous and toxic materials like conventional high explosives and beryllium has made this possible and obviated the need for large numbers of spare warheads to hedge against reliability problems.

The world in 2030 will not have gotten more predictable than it is today. We still will worry about a hedge against geopolitical changes and attempts by others to instigate an arms race. But that hedge is no longer in aging and obsolete spare warheads but in the responsive infrastructure.

Once again we have met the goal established in 2004 of being able to produce sufficient additional warheads well within the time of plausible geopolitical change.

The 2030 responsive infrastructure will provide capabilities, if required, to produce weapons with different or modified military capabilities if required. The weapons design community that was revitalized by the RRW program will be 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. Thus, if Congress and the President direct, we will be able to respond quickly to changing military requirements.

Security remains important in our future world. But the transformed infrastructure has been designed with security in mind. More importantly, new, intrinsic features built into the growing number of Reliable Replacement Warheads have improved both safety and security. In short, the vision I am setting forth is of a world where a smaller, safer, more secure and more reliable stockpile is backed up by a robust industrial and design capability to respond to changing technical, geopolitical or military requirements.

This 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. It provides a hedge against an inherently uncertain future. That's why we are embracing this vision of transformation. We should not underestimate the challenge of transforming the enterprise, but it is clearly the right path for us to take.

Progress on Stockpile and Infrastructure Transformation

Let me return to today and describe recent progress on transformation:

- Last year, the DoD and DOE jointly initiated an RRW competition in which two independent design teams from our nuclear weapons laboratories—LLNL and LANL both in partnership with Sandia—are exploring RRW options. A competition of this sort has not taken place in over 20 years, and the process is providing a unique opportunity to train the next generation of nuclear weapons designers and engineers. Both teams are confident that their designs will meet established requirements and be certifiable and producible without nuclear testing. The program is on schedule—preliminary designs will be provided this March. After that, an intensive, in-depth peer process will lead to selection of a preferred option that will be considered for engineering development.
- An intensive effort is also underway to establish our detailed vision for the future nuclear weapons complex, and to identify pathways leading to that vision. As part of this effort, we have reviewed the recommendations from the Secretary of Energy Advisory Board (SEAB) Nuclear Weapons Complex Infrastructure Task Force (NWCITF) report, and the recommendations of other advisory bodies including the Defense Science Board. The major challenge is to find a transition path to the future that is both affordable and feasible while continuing to meet the near-term needs of the current stockpile. We will report in more detail on this effort later this spring.

- Transformation does not apply only to people, scientific tools and facilities. Today's business practices—for example, the paper work and procedures by which we authorize potentially hazardous activities at our labs and plants—are unwieldy and have had a major impact on our ability to carry out certain programmatic work at our sites. We must improve the way we manage risk including rigorous analysis of the costs and benefits associated with the methods and means of ensuring safe and secure nuclear operations.

Other accomplishments that will facilitate near term support to the nuclear stockpile include:

- We have restored tritium production with the irradiation of special fuel rods in a Tennessee Valley Authority reactor, and anticipate that we will have a tritium extraction facility on-line in FY 2007 in time to meet the tritium needs of our stockpile.
- We have restored uranium purification capabilities at our Y-12 plant, and modernizing other capabilities, so that we can meet demanding schedules of warhead refurbishment programs, including, significantly, the B61 and W76 life extension programs which are scheduled to begin production in 2006 and 2007 respectively.
- We are on track to deliver a certified W88 pit to the stockpile in 2007. We were disappointed, however, 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 pit manufacturing capacity to 30-40 pits per year by the end of FY 2012. This production rate, however, will be insufficient to meet our assessed long-term pit production needs.
- We have taken steps to recruit and retain a strong workforce with the right skills for the focused mission.
- We are devoting substantial resources to restoring facilities that have suffered from years of deferred maintenance.

Nuclear Weapons Program Budget Breakdown

The FY 2007 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 capability and capacity to support ongoing missions.

Over \$1.4 billion in FY 2007 is requested for the Directed Stockpile Work that will ensure that the Nation's nuclear weapons stockpile is safe, secure and reliable.

The NNSA is accelerating efforts for warhead dismantlement 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.

In our FY 2007 budget, \$1.9 billion is requested for Campaigns, which 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.

Specifically, \$424.7 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 maintain the ability to conduct underground nuclear tests at the Nevada Test Site.

The Readiness Campaign, with a request of \$206.0 million, develops and delivers design-to-manufacture capabilities to meet the evolving and urgent needs of the stockpile and support the transformation of the nuclear weapons complex into an agile and more responsive enterprise.

With a request of \$618.0 million for the Advanced Simulation and Computing Campaign, we will be able to remain on schedule to develop computational tools and technologies necessary to support continued assessment and certification of the refurbished weapons, aging weapons components, and a Reliable Replacement Warhead program without underground nuclear tests. As we enhance our computational 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 while reducing the need for underground nuclear testing.

The \$451.2 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, \$254.9 million will support construction of NIF (includes the NIF Demonstration Program) and \$168.7 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 is 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 \$237.6 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.

In FY 2007 we are requesting \$2 billion to provide for the maintenance and operation of existing facilities, remediation and disposition of excess facilities, and construction of new facilities to enable NNSA to move toward a more supportable and responsive infrastructure. Of this amount, \$291 million is for Facilities and Infrastructure Recapitalization, \$1.4 billion is for Readiness in Technical Base and Facilities (RTBF) Operations and Maintenance, and \$281 million is for RTBF Construction.

The Secure Transportation Asset, with a request of \$209.3 million, safely and securely transports nuclear weapons, weapons components, and special nuclear materials.

Security and the Design Basis Threat

Securing our people, our nuclear weapons and weapons-usable materials, our information, and our infrastructure from harm, theft or compromise is my highest priority. 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 establishing “containment” of the asset. The Department will meet the requirements of the 2003 Design Basis Threat (DBT) by the end of this fiscal year. NNSA’s budget request of \$665.7 million for security will ensure continued implementation of these DBT requirements and position the Department to respond to emerging 2005 DBT requirements. The current DBT, approved in November 2005, revised the high-level security requirements from which site-specific implementation plans are being finalized. Funds in FY 2007 will be used, among other things, to upgrade protective forces weapons, training and equipment; harden storage structures; improve earlier detection and assessment of intrusion; consolidate nuclear material; and install additional delay mechanisms and barriers around critical facilities in order to protect them from evolving threats. Funding for NNSA security programs has increased by almost 400 percent during this Administration, which is a strong indicator of the priority the Congress and the Administration place on our security mission.

NON-PROLIFERATION AND THREAT REDUCTION PROGRAMS

Let me now turn to our nuclear non-proliferation and threat reduction programs. Acquisition of nuclear weapons, Weapons of Mass Destruction (WMD) capabilities, technologies, and expertise by rogue states or terrorists pose a grave threat to the United States and international security. Our nonproliferation and threat reduction programs designed to combat this threat, implemented by the NNSA, are structured around a comprehensive and multi-layered approach. The Administration’s request of \$1.726 billion to support NNSA activities to reduce the global weapons of mass destruction proliferation threat represents a 6.9% increase over the budget for comparable FY 2006 activities.

This increase demonstrates the President’s commitment to prevent, contain, and roll back the proliferation of nuclear weapons-usable materials, technology, and know-how. The Department works with more than 70 countries to secure dangerous nuclear and radioactive materials, halt the production of new fissile material, detect the illegal trafficking or diversion of nuclear material, and ultimately dispose of surplus weapons-usable materials. We are also working with multilateral organizations such as the International Atomic Energy Agency and the Nuclear Suppliers Group (NSG) to further 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 nonproliferation regime, reduce the incentive for terrorists and rogue states to obtain WMD, and limit terrorists’ access to deadly weapons and materials. The following is a status update on a number of the Department’s key nonproliferation programs.

Plutonium Disposition: The Administration's FY 2007 Fissile Material Disposition budget request is \$638 million. \$551 million of this total 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. DOE has made significant progress in implementing the plutonium disposition program in the past year. The U.S. 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 been 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 supports continuing this work in FY 2007, which will be a peak construction year. Russia has also made progress by beginning site preparation activities for its MOX facility. 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 program.

Global Threat Reduction Initiative (GTRI): The GTRI represents the Department's latest effort to identify, secure, recover, and/or facilitate the disposition of vulnerable nuclear and radioactive materials worldwide that pose a threat to the United States and the international community. Since the creation of GTRI in May 2004, there have been 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 agreement reached in Bratislava between Presidents Bush and Putin 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, we conducted four successful shipments in 2005 to repatriate Russian-origin highly enriched uranium (HEU) from the Czech Republic (two shipments), Latvia, and Uzbekistan, in addition to several successful shipments to repatriate U.S.-origin spent nuclear fuel from Japan, the Netherlands, Sweden, Greece, and Austria. In fiscal year 2006, GTRI converted research reactors in the Netherlands, Libya, and the Czech Republic from the use of HEU to the use of low-enriched uranium (LEU) fuel, and also in fiscal year 2006 completed physical security upgrades at priority sites housing dangerous materials in Ukraine and Kazakhstan. The Administration's FY 2007 budget request of \$107 million for GTRI supports major objectives, examples including; the acceleration of the recovery and/or disposal of eligible Russian origin materials in the Russian Research Reactor Fuel Return Program and the conversion of domestic research reactors under the Reduced Enrichment for Research and Rest Reactors Program, with a total of seven conversions in fiscal year 2007.

Materials Protection, Control and Accounting (MPC&A): 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 a result of the agreement reached at Bratislava, we agreed to accelerate security upgrades at Russian sites holding weapons-usable materials and warheads. The Bratislava agreement provided for a comprehensive joint action plan for cooperation on security upgrades of Russian nuclear facilities at Rosatom and Ministry of Defense sites and cooperation in the areas of nuclear regulatory development, sustainability, secure transportation, MPC&A expertise training, and protective force equipment. A number of milestones for this cooperative program are on the horizon, and the FY07 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. Cooperation with the nuclear warhead storage sites of the Russian Strategic Rocket Forces and the Russian Ministry of Defense sites will also be completed by the end of 2008. 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 installations of such equipment in five other priority countries to prevent attempts to smuggle nuclear or radiological materials across state borders. Through our Megaports initiative, we are deploying 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 13. The International Material Protection and Cooperation FY 2007 budget request of \$413.2 million supports meeting all of the accelerated completion dates and objectives.

Elimination of Weapons Grade Plutonium Production (EWGPP): The EWGPP program is working toward complete shut down of the three remaining plutonium production reactors in Russia at Seversk and Zheleznogorsk. These reactors currently produce enough material for several nuclear weapons per week. The overall EWGPP plan is to permanently shutdown 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 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, pursuant to the authority provided in the Ronald W. Reagan Defense Authorization Act for FY 2005 to accept international funding, 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 FY 2007 budget request of \$207 million keeps both construction projects on schedule.

Nonproliferation and Verification Research and Development: This effort includes a number of programs totaling a budget request of \$269 million in FY 2007 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 the entire planet from space 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.

Nonproliferation and International Security: Through this program the Department provides technical and policy expertise in support of U.S. efforts to strengthen international nonproliferation institutions and arrangements, foster implementation of nonproliferation requirements through engagement with foreign partners, and provide for transparent and verifiable nuclear reductions. Key policy challenges that will be addressed in FY 2007 include efforts to strengthen the IAEA safeguards system, block and reverse proliferation in Iran and North Korea, and augment cooperation with China, India, and Russia. The FY 2007 budget request for Nonproliferation and International Security is \$127.4 million.

We need to remain cognizant of the linkage between a future that encourages broader use of nuclear energy in meeting rising energy demands around the world, and one that places a premium on nonproliferation and counter-terrorism performance. No one nation can address these future challenges alone. No one nation has a monopoly on nuclear technology or on the ideas or proposals that will mitigate the threats posed by proliferation and terrorism. We will therefore continue to welcome the contributions and proactive cooperation of others who share our vision of a better future, one that enjoys the benefits of nuclear energy and one that is better protected from the dangers of theft or diversion of sensitive nuclear materials and technologies.

NAVAL REACTORS PROGRAM

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 plays an essential role in ensuring the "forward presence" of the Navy around world to respond anywhere America's interests are threatened. The 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. The Administration is requesting \$795 million to support the program's ongoing work on power plant technology, reactor safety, materials development and servicing and evaluation.

ENVIRONMENTAL MANAGEMENT

The Department's mission of remedying the environmental legacy of the Cold War is inherently challenging and innately beneficial to our country. The Office of Environmental Management is striving to regain momentum in the cleanup program, after encountering significant project management, regulatory, and legal challenges.

The program has made significant progress in the last four years in shifting focus from risk management to risk reduction and cleanup completion, an achievement not possible without the strong leadership and support of this committee. In fact, this last year we physically completed the cleanup of the Rocky Flats site in Colorado, produced 250 canisters of vitrified high level waste in South Carolina, and began the decontamination and decommissioning of the last remaining centrifuge facilities in Tennessee. This year alone, we expect to complete cleanup at up to nine sites. But over the last year, despite our commitment, EM performance has met with long-term mixed results for longer term cleanup.

Overly optimistic assumptions and unrealized technology advancements have led us to the slower progress we are experiencing. One of the most visible projects on which our progress has slowed is the Waste Treatment Plant at Hanford. The Waste Treatment Plant project is the largest, most complex construction project in the nation and has encountered design and construction setbacks. We remain committed to fix the problems correctly, complete the project, and begin operations to treat the radioactive waste at the site. Other examples of slowing cleanup progress include delays in start of construction in South Carolina and delays in sludge cleanup from spent nuclear fuel basins in Washington.

We have not lost sight of the mission, nor the will to complete the EM mission in a manner that is protective of the environment and public while demonstrating fiscal responsibility. The FY 2007 budget request reflects a balance of risk reduction and cleanup completion with other Departmental and national priorities. Overall, our request puts a high priority on tank waste treatment and radioactive waste disposition.

The FY 2007 Environmental Management budget request is \$5,828 million, a decrease of \$762 million from the FY 2006 appropriation, an indicator of the success we have demonstrated with the completion and closure of Rocky Flats in Colorado and several other sites.

At the Savannah River Site, this request will support ongoing stabilization of the site's stored nuclear materials, including funding for a container surveillance capability and consolidating the site's own plutonium into a single location. The request also provides for management and disposition of tank waste, including funding for design and construction of the Salt Waste Processing Facility.

This budget request will make possible a ramp up in construction of key components of the Waste Treatment Plant, and continues safe management of the underground tanks and waste retrievals from single shell tanks at Hanford. This request increases funding for the Advanced Mixed Waste Treatment Project in Idaho to support shipments of transuranic waste to the Waste Isolation Pilot Plant and the construction of the Sodium Bearing Waste Facility to treat tank waste. This request reflects an increase to support the critical path to closure for the East Tennessee Technology Park in Oak Ridge.

In addition, the request supports ongoing cleanup at National Nuclear Security Administration sites like Nevada Test Site, Pantex Plant, and Lawrence Livermore-Site 300. It also supports transuranic waste disposal operations and complex-wide integration, including the first full year of remote-handled waste disposal at the Waste Isolation Pilot Plant in New Mexico.

This budget request also will continue to focus on our risk reduction and cleanup completion mission, with our goal to complete cleanup of eight more sites by 2009.

LEGACY MANAGEMENT

The Legacy Management (LM) program was established to provide a long term solution to the environmental legacy created by the Cold War. As the Office of Environmental Management (EM) completes its cleanup activities, certain aspects of the Department's responsibilities at those sites remain. These include remedy surveillance and maintenance, long-term groundwater pump and treat operations, records management, and the oversight of pensions and post-retirement benefits for contractor personnel. A long-term commitment to manage the resources and activities beyond the completion of active remediation is required. The activities of the LM program ensure that these Departmental responsibilities are addressed and EM is able to concentrate its efforts on cleanup and risk reduction.

Over the past year, LM and EM have been working in close cooperation to ensure the timely and effective transition of the three major EM closure sites: Rocky Flats, Colorado; Mound, Ohio; and Fernald, Ohio. EM and LM have established transition teams for each site consisting of subject-matter experts from different fields, such as environmental and regulatory compliance, community outreach, records management, and worker benefits. The goal of the teams is to have a seamless transition of sites from EM to LM.

Legacy Management's FY2007 budget request is just over \$200 million. In FY 2007, EM will transfer post closure management responsibility, work scope and budget target to LM for Rocky Flats, Fernald, and the Nevada Offsites. Due to additional cleanup of OU-1 at the Mound site, transfer of Mound from EM to LM will occur at a later date.

The significant increase in the LM budget in FY 2007 is for pension contributions and the payment of post-retirement benefits for contractor retirees at Rocky Flats and Fernald. This request, previously included in the EM budget, constitutes just over \$100 million of LM's total budget request. LM has also included \$10 million associated with the ongoing management and administration of those pension and post-retirement benefits.

Long-term surveillance and maintenance will ensure protection of human health and the environment at legacy management sites. The FY 2007 request for the long term surveillance and maintenance program is \$45 million. The funding requested for FY 2007 will allow LM to monitor and conduct long-term treatment of 94 sites in accordance with legal, contractual, and regulatory agreements. The \$18 million increase reflects the added responsibility of the sites transferred from EM to LM -- Rocky Flats, Fernald and the Nevada Offsites, as well as additional sites transferred to LM from private uranium mining and milling operations under the Uranium Mill Tailings Radiation Control Act and sites from the U.S. Army Corps of Engineers associated with the Formerly Utilized Sites Remedial Action Program.

Finally, in an effort to communicate the significant costs associated with managing records and information associated with these sites, LM has chosen to separate the roughly \$9 million for this purpose from the long-term surveillance and maintenance cost to make it more visible in this year's budget.

ENVIRONMENT, SAFETY AND HEALTH

The Office of Environment, Safety and Health (EH) is committed to protecting the safety and health of DOE workers, the public, and the environment by integrating safety and health awareness into all Departmental activities. The Office is also responsible for Price-Anderson enforcement and funding radiation health studies.

The budget request for FY 2007 is \$109.9 million, approximately 6 percent above the FY 2006 appropriation. The budget is broken into Other Defense Program Activities (\$80.8 million) and Energy Supply and Conservation Activities (\$29.1 million).

In FY 2007, EH will continue its commitment to protecting our environment by: continuing to ensure DOE compliance with the National Environmental Policy Act; guide and assist DOE programs and sites as they shift from development and documentation to implementation of the Environmental Management Systems; assist DOE sites in implementing the Department's Environmental Compliance Management Improvement Plan; and, continuing to guide and assist the implementation of DOE's requirements for public and environmental radiation protection.

The Department, and I personally, consider protecting worker safety to be of paramount importance.

On February 2, 2006, I announced a new safety rule which will require all non-nuclear DOE contractors to comply with applicable OSHA safety and health standards. Also, as applicable on a site-by-site basis, contractors will also be responsible for meeting additional health and safety consensus standards such as the American Conference of Governmental Industrial Hygienists; the National Fire Protection Association; the American National Standards Institute; and, the American Society for Mechanical Engineers. The new rule also establishes investigative procedures and fines for contractors who fail to meet safety and health requirements, with a potential fine of up to \$70,000 per violation, per day. DOE nuclear workers are already protected under the Atomic Energy Act, which allows the Department to take enforcement actions against contractors who violate nuclear safety rules.

Environment, Safety and Health Programs in FY 2007 will continue to promote the health and safety of DOE's workforce and the communities surrounding DOE sites. The Former Worker Medical Surveillance Program provides medical evaluations to former DOE workers who may be subject to health risks as a result of exposures during their work at DOE. EH will also continue its ongoing health activities such as: the Radiation Effects Research Foundation's program, which conducts epidemiologic studies and medical surveillance of the survivors of the atomic bombings in Hiroshima and Nagasaki; and, provide special medical care for a small cohort of radiation exposed individuals in the Marshall Islands.

ADVANCING AMERICA'S ECONOMIC AND ENERGY SECURITY

Finally, I would also like to mention some exciting new Presidential initiatives announced in the State of the Union that involve the rest of the Department of Energy. The Department's budget for Fiscal Year (FY) 2007 follows the blueprint laid out by the President's new initiatives, the **American Competitiveness Initiative** and the **Advanced Energy Initiative**. The \$23.5 billion budget request seeks to address America's short-term energy needs while positioning our country for the future. The budget request makes bold investments to improve America's energy security while protecting our environment, puts policies in place that foster continued economic growth, spurs scientific innovation and discovery, and addresses and reduces the threat of nuclear proliferation.

The Department's FY 2007 budget features \$250 million to begin investments in the **Global Nuclear Energy Partnership**. GNEP is a comprehensive strategy to enable an expansion of nuclear power in the U.S. and around the world, to promote non-proliferation goals; and to help resolve nuclear waste disposal issues.

The Energy Information Administration projects that over the next 25 years, demand for electricity in the United States alone will grow by over 40 percent. Nuclear power is an abundant, safe, reliable and emissions-free way to help meet this growing demand for energy throughout the world. As part of the GNEP strategy, the United States will work with key international partners to develop and demonstrate new proliferation resistant technologies to recycle spent nuclear fuel to reduce waste. To help bring safe, clean nuclear power to countries around the world, the international GNEP partners will also develop a fuel services program to supply developing nations with reliable access to nuclear fuel in exchange for their commitment to forgo developing enrichment and recycling technologies.

Thank you. This concludes my formal statement. I would be pleased to answer any questions you may have at this time.