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

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Thank you for the opportunity to discuss U.S. nuclear weapons policies and programs. My remarks focus on our efforts to transform the nuclear weapons complex into a 21st century national security enterprise. I will highlight our efforts to assure the safety, security and reliability of the U.S. nuclear weapons stockpile while at the same time transforming the stockpile and the current “Complex” that supports it.

Before I begin, I want to remind you of the tremendous progress made over the past few years in reducing the size of our nuclear weapons stockpile. As you recall, in 2002, President Bush and President Putin signed the Moscow Treaty, which will reduce the number of our operationally deployed strategic nuclear warheads to 1,700 to 2,200 by 2012. In 2004, the President issued a directive to cut the entire U.S. nuclear stockpile—both deployed and reserve warheads—in half by 2012. But this goal was later accelerated and achieved 5 years ahead of schedule in 2007. As of the end of 2007, the total stockpile was almost 50 percent below what it was in 2001, when the President took office.

On December 18, 2007, the White House announced the President’s decision to reduce the nuclear weapons stockpile by another fifteen percent by 2012. This means the U.S. nuclear stockpile will be less than one-quarter its size at the end of the Cold War—the smallest stockpile in more than 50 years.

In the eighth year of this Administration, with the support of Congress, NNSA has achieved a level of stability that is required for accomplishing our long-term missions. Our fundamental national security missions for the United States--in addition to assuring the safety, security and reliability of the U.S. nuclear weapons stockpile while at the same time transforming the stockpile and the nuclear weapons complex that supports it--also includes reducing the threats posed by nuclear proliferation, and providing safe and reliable nuclear reactor propulsion systems for the U.S. Navy.

Some individuals have questioned whether this Administration has articulated an underlying strategy for our strategic posture. In July 2007, the Secretary of Energy joined the Secretaries of Defense and State in sending to Congress the Bush Administration's nuclear weapons strategy entitled "National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century." This document not only describes the history of nuclear deterrence during the Cold War, but also reinforces how deterrence applies to present and future security threats, and what a nuclear stockpile of the 21st Century will need to look like in order to meet those threats.

As a follow-up, Secretaries Bodman and Gates provided Congress a far more detailed classified white paper in March 2008 entitled "National Security and Nuclear Weapons in the 21st Century." This document describes what type of deterrent strategy is needed in the 21st century; articulates the size and nature of a stockpile to correspond to that strategy given certain scenarios and potential technological improvements; and articulates the type of infrastructure needed to support this type of stockpile into the future. It is interesting to note, that while some claim we should not pursue an effort to modernize our nuclear enterprise, we are the only declared nuclear state that is in fact not currently modernizing its essential infrastructure or stockpile. We look forward to providing an unclassified redacted version in the very near future that will allow broader public discussion of these important issues.

In addition, over the past three years we have been on a very public course of analyzing, describing, and performing environmental studies associated with the type of infrastructure we believe we will need for the future, an effort integral to the future ability to sustain our deterrent called Complex Transformation. Just this year alone, we have conducted 20 public meetings on the Complex Transformation Supplemental Programmatic Environmental Impact Statement, and more than doubled the amount of time required by law to allow for public input into our plans. My intention is to make a decision this year on this three year effort, in order to move forward and ensure we are to continue on a viable path to support the nation's strategic deterrent.

Where we are Today

Before I describe our Complex Transformation vision, I want to review where we are today. Nuclear weapons remain the backbone of United States national security policy, providing the ultimate guarantor of our national defense. I am very proud of the accomplishments by people in the Complex who over the preceding decades enabled us to fulfill our vital stockpile mission. With the end of the Cold War and the dawn of the 21st Century, our national security investments in support of strategic deterrence must now advance to address an unpredictable international environment, persistent proliferation dangers, and emerging nuclear capabilities that could threaten vital American interests and international peace and security. In addition, our employees must have access to a responsive nuclear weapons complex that, in partnership with the Department of Defense (DoD), will ensure we have capabilities to address these future challenges.

The United States will continue to require nuclear forces for the foreseeable future, and the NNSA fundamental mission responsibility to *provide safe, secure, and reliable nuclear warheads in support of the nation's deterrent* remains and guides our future actions. To accomplish our mission, we must retain and exercise fundamental capabilities to design and certify nuclear warheads at world-class facilities that apply leading-edge computing, simulation, and other science-based competencies to unique challenges; to manufacture one-of-a-kind weapon parts, such as plutonium and uranium components, in responsive and less-costly production plants; and to safely and securely assemble, disassemble, and transport warheads as needed to support our surveillance, life-extension, and dismantlement objectives. We need to accelerate the fundamental transformation of our Complex over the next 10 years to sustain these capabilities and to assure a safe, secure and reliable nuclear deterrent -- one that does not require underground nuclear testing; that resolves current stockpile and production challenges; and preserves our deterrent with fewer weapons.

Regarding the timing of current actions, we are not embarking upon a new strategy in the final days of an Administration. Even though many talk about Complex Transformation as a new initiative, transformation of the Complex has been underway for some time. Past transformational activities include closing the Pinellas, Florida plant and consolidating non-nuclear operations at our Kansas City Plant; closing our pit production facility at Rocky Flats, Colorado; closing operations at Mound, Ohio; and ending special nuclear material production at Hanford, WA, Oak Ridge, TN, and Savannah River, SC. Also in the 1990s, we initiated development of major new research and development (R&D) facilities, such as the National Ignition Facility, required to support our Stockpile Stewardship Program without the historical tool of underground testing. These earlier actions significantly changed the face of our nuclear weapons complex. Today's nuclear weapons enterprise consists of eight geographically separated sites that comprise the R&D and production capabilities of the complex. Our production plants were reduced in number during the 1990s but many of the remaining facilities are old, too large, and very expensive to maintain. We propose to continue this transformation to better serve the American people in the post-Cold War and post-September 11th world. By all accounts transformation is an evolution. We are continuing to consolidate non-nuclear component manufacturing through our Kansas City Responsive Infrastructure Manufacturing and Sourcing initiative that, over the next 5 years, will reduce the costs, square footage, and number of personnel required for this essential function. Our new Tritium Extraction Facility at the Savannah River Site is operational and providing us with replacement tritium supplies for the first time in nearly twenty years. Soon, the Highly-Enriched Uranium Materials Facility under construction at our Y-12 Site in Oak Ridge will consolidate uranium storage while simultaneously improving security and lowering storage costs. These are just a few examples of the continuing transformation of the physical face of the Complex.

While addressing physical infrastructure needs, Complex Transformation also addresses our most important resources--our people. We are able to accomplish great tasks, solve complex problems, and improve on our national security capabilities because we have scientific and technical talent beyond comparison. The people at our national

laboratories and production plants are truly world leaders in the science and technology that sustain our nuclear deterrent that helps keep America safe from hostile threats. Enabled by our core weapons-related programs, these same individuals throughout the Complex are able to also harness their skills in other areas of national security importance, such as nonproliferation research and development, nuclear forensics, threat reduction technology, and analytical nuclear counterterrorism support to the intelligence community.

The recent dislocations and involuntary separations that have impacted the weapons complex have affected employee morale and the retention of younger staff members. This past December when I announced the release of the Complex Transformation Supplemental Programmatic Environmental Impact Statement, I took careful note to highlight that scientific and engineering expertise are essential for the 21st Century mission of our deterrent and nonproliferation missions. As resources and attention focus on production capability issues, we must be vigilant to ensure the robustness of our scientific, technical and engineering expertise and facilities. To further demonstrate our commitment, last month, the Secretary of Energy signed a “Lab Vision” paper¹ setting forth the strategic mission of NNSA’s three laboratories and the test site to enable NNSA to respond to the evolving 21st Century global security threats, and bring our science, technology and engineering enterprise to bear on solving significant national security challenges. This document will allow me to further engage my interagency counterparts on national security diversification at our sites which will capitalize on the skills of our workforce into the future.

The Good News

Today, our national security laboratories and production plants ensure that American nuclear weapons are safe, secure and reliable. The Stockpile Stewardship Program that allows us to maintain a nuclear weapons stockpile continues to evolve and improve with experience we have gained over the past decade. To date, problems identified in the stockpile are being resolved by Stockpile Stewardship Program scientific tools without underground testing, and existing fixes have been incorporated into planned warhead Life Extension Programs (LEPs).

A tactical risk we took in the 1990s was transferring our plutonium production capability from the Rocky Flats Plant to the Los Alamos National Laboratory. After ten years of effort, we reconstituted a limited W88 pit manufacturing capability at Los Alamos and have successfully delivered newly-manufactured plutonium pits to the stockpile. This recent success has shown us the major challenges of rebuilding a capability after it has been lost.

We are also having great success in our nonproliferation commitments to reduce the size of the stockpile, as we exceeded our dismantlement goal for 2007 by nearly 150 percent. Combined with the reduction of the overall stockpile, this sends the right message to the rest of the world that the United States continues to lead in its commitment to Article VI of the Nuclear Non-Proliferation Treaty.

¹ The “Lab Vision” paper is provided.

Complex at a Crossroads

Today the Complex is at a crossroads. Although there may be debate on the size and role of our nuclear deterrent, one fact is clear—as long as other countries possess nuclear weapons the United States must maintain a reliable nuclear deterrent. Maintaining a viable deterrent means retaining an essential set of capabilities in the nuclear weapons complex to support the stockpile. While we are meeting safety, security, and basic DoD requirements today, the present Complex is too inefficient, too old, and too costly to sustain. Special nuclear materials (SNM) are present at more sites than we believe necessary. After September 11th, security has been enhanced and SNM is becoming more and more expensive to secure. Some facilities sized to support a large Cold War-era stockpile are no longer necessary or affordable. Without transformation, ever-increasing funds will be required to secure a greater perimeter than needed, maintain more square footage than is efficient, and sustain out-dated facilities well beyond their economic lifetime.

Our challenge is to *move from a nuclear complex designed for the Cold War to a 21st century national security enterprise that is at the forefront of science and technology and responsive to future national security requirements.* Several of the specific challenges we face are:

- Our uranium facilities date back to the Manhattan Project of the 1940s. Securing these facilities against terrorist threats is increasingly difficult and costly. Future warheads, whether refurbished through life-extension programs or through warhead replacement, will require a uranium component production or recycling capability. Our Y-12 uranium facilities in Oak Ridge, TN, are where our increased dismantlement work is also completed on warhead secondaries. Given the long lead times necessary to design and construct new facilities, decisions concerning uranium facilities must be made soon. In addition, the sooner that these existing, antiquated facilities are replaced, the sooner we will be able to reap the full security and cost benefits of consolidating of uranium activities into a smaller security and facility footprint.
- Restoring a limited production capability for W88 pits took ten years. Our pit manufacturing capability relies on Los Alamos nuclear facilities that were originally built to support R&D activities. The newest plutonium facility is thirty years old and one Los Alamos research building (Chemistry and Metallurgy Research) dates from the early 1950s and has served well beyond its economic lifetime. During the height of the Cold War the now-closed Rocky Flats pit manufacturing facility produced thousands of pits a year. Last year, an interim capability at Los Alamos produced 11 certifiable pits for the W88 warhead; this year 6 pits are slated to be produced. Sustaining this capability is both complex and technologically challenging. Furthermore, this cannot be done anywhere outside of the NNSA nuclear weapons complex. America needs a sustained level of pit production and plutonium capability for several reasons, listed below.

- First, maintaining the deterrent requires a capability to conduct advanced plutonium research and manufacture plutonium pits. This is a core competency that must be retained. Independent of the number of pits needed in the future, we need the Chemistry and Metallurgy Research Replacement – Nuclear Facility to maintain our plutonium capabilities at Los Alamos as we remove Category I/II quantities of plutonium from Lawrence Livermore National Laboratory’s “Superblock,” close the existing Chemistry and Metallurgy Research (CMR) facility, and consolidate weapons-related operations into one plutonium site. Moreover, if a major problem develops in the stockpile related to pits, we currently have an insufficient capacity to make replacement pits. During the Cold War, five major sites, now closed and dismantled, conducted plutonium research and manufacturing. Today, our plutonium research and pit manufacturing is consolidated at one site –Los Alamos—and we must ensure the safety and viability of that site.
 - Second, maintaining a responsive infrastructure means maintaining the skills of the people who understand plutonium and plutonium manufacturing and analysis. In the end, we are best served by exercising the capability to conduct advanced plutonium research and to manufacture plutonium pits in facilities designed to meet 21st Century security, safety and health requirements.
- Our stockpile is aging, with some warheads designed and constructed over 40 years ago. We have increasing concerns about our ability in the long-term to certify the safety and reliability of these warheads without nuclear testing. That is the impetus for our consideration of a Reliable Replacement Warhead (RRW) approach which could introduce significant safety and security enhancements and allow the best opportunity for a smaller stockpile. Alternatively, and absent congressional support for RRW, we will rely on a life-extension approach of the legacy stockpile for an extended period. Neither approach would introduce new military capabilities to the stockpile, although an LEP approach because of the already beyond design life of our current stockpile, could prove too costly and may ultimately not be viable should we require our deterrent throughout this century. Some of the technologies and capabilities in our Complex, required for either the LEPs or RRWs, have atrophied or will atrophy and may have to be completely reconstituted if we do not take action now. We must ensure that we sustain essential nuclear capabilities.
- Security, both physical and cyber, will continue to require substantial resources. The current Complex, including some Manhattan Project facilities, is not optimized to provide both a robust and cost-effective security posture.
- Similarly, assuring nuclear safety of our Complex will become increasingly challenging and more costly until we improve our risk management practices and replace aging facilities with new ones built to modern standards with more

engineered safety features included. Thus, construction of new uranium and plutonium facilities is a key element of our long-term strategy to enhance nuclear safety and security at a sustainable cost.

In addition to the fundamental technical challenges of maintaining a nuclear deterrent, the costs simply to maintain the *current* infrastructure continue to rise; we cannot afford the status quo. We must transform the Complex to a smaller, more integrated and interdependent enterprise that accomplishes our existing and future national security missions at an affordable cost.

Transformation Vision

Our Complex Transformation vision for the future is a *smaller, safer, more secure and less expensive enterprise that leverages the scientific and technical capabilities of our workforce to meet all our national security requirements.*

Our future deterrent won't be based on the Cold War model of a large number of weapons. The Cold War model is not appropriate to address the 21st Century international security environment. We are reducing the size of our nuclear weapons stockpile. Instead, it will be based upon the *capability* and *flexibility* to respond to varying national security situations and produce those weapons if and when required. Complex Transformation is critical not only to accomplish our nuclear weapons mission in partnership with DoD, but also to better leverage our scientific and technical know-how needed to support other national security partners in the areas of non-proliferation, nuclear incident response, nuclear forensics, and support to the intelligence community.

Our approach to achieve Complex Transformation rests on four pillars:

- Transform the nuclear stockpile through the Stockpile Stewardship Program in partnership with the Department of Defense.
- Transform to a modernized, cost-effective nuclear weapons complex to support needed capabilities in our physical infrastructure.
- Create an integrated, interdependent enterprise that employs best business practices to maximize efficiency and minimize costs.
- Advance the science and technology base that is the cornerstone of our nuclear deterrence and remains essential for long-term national security.

Why Transform Now – Why Not Wait?

Complex Transformation must take place regardless of the size or composition of our future stockpile. Even with a smaller stockpile, maintaining required capabilities has a greater impact on the minimum size of our facilities than throughput capacity. Neither our workforce numbers nor facility square footage scale linearly with the size of the stockpile. In today's era of small stockpiles, the required square footage in a modern, well-designed facility to provide an essential capability frequently provides sufficient minimum capacity for our work. For example, the Uranium Processing Facility (UPF) is

being designed to function within various through-put ranges which are directly tied to any future stockpile projections. The UPF is being designed to fulfill the modest requirements of today. However, with minimal cost impact, it can be modified within the existing design floor space to accommodate additional national security requirements which may arise. This basic facility is instrumental in consolidating the current uranium missions for Naval Reactors fuel production, Defense Nuclear Nonproliferation's highly-enriched uranium blend-down, and work for others including medical isotope production. Thus, we are confident that many aspects of Complex Transformation can proceed while a more precise size and composition of our stockpile is defined in the coming years.

Complex Transformation must take place with or without RRW and the facilities we have proposed are required for either outcome. We will be hard pressed to meet our LEP commitments without successfully implementing Complex Transformation. If an RRW were authorized by the next Administration and Congress, its concepts could enhance the efficiency and responsiveness of the Complex compared to an LEP-only approach. The RRW concept increases intrinsic security in the weapons themselves, employs fewer exotic and hazardous (and more environmentally benign) materials, and could mean eventual lower lifecycle costs by eliminating some processes needed to support today's weapons, such as the need to machine and handle conventional high explosives. Additionally, if RRW meets the promise of allowing a smaller nuclear stockpile, additional savings could be achieved.

Physical Infrastructure and the Complex Transformation Supplemental Programmatic Environmental Impact Statement (SPEIS)

This period of change for the nuclear weapons complex began with the end of the Cold War and the initiation of the Stockpile Stewardship Program. The decisions related to the Stockpile Stewardship Program were announced in a 1996 record of decision that was based on analyses in the *Stockpile Stewardship and Management Programmatic Environmental Impact Statement (SSM-PEIS)* and other information. Since early 2002 when the Administration's Nuclear Posture Review was sent to Congress, NNSA has focused on establishing a responsive infrastructure to enable opportunities for stockpile reductions. A number of other reviews including Department of Defense assessments and Task Force reports in 2005 from both the Defense Science Board and Secretary of Energy Advisory Board subsequently identified shortcomings with the current Complex and emphasized a more urgent need to transform.

In 2006, NNSA proposed a planning scenario for the future Complex. Release of that planning scenario is part of NNSA's process of evaluating alternatives for transforming the Complex and identifying the environmental impacts, costs, risks and benefits of these alternatives. One of our primary objectives was to restructure facilities containing large quantities of Special Nuclear Material (SNM) that are costly to secure. Restructuring of major R&D facilities is also being evaluated in order to eliminate unnecessary redundancy across the Complex. To inform our decisions, we are preparing an environmental impact statement. Given that the current proposals would continue the transformation announced in the 1996 record of decision and analyzed in the SSM-PEIS, the current NEPA analysis is structured as a supplement to the SSM PEIS and is referred

to as the *Complex Transformation Supplemental Programmatic Environmental Impact Statement* or “SPEIS.”²

I announced NNSA’s intent to move forward on the SPEIS on December 18, 2007. The draft SPEIS evaluated alternatives for continuing transformation of the Complex. The document analyzed many different scenarios regarding how the Complex might be structured to best achieve our mission. It describes NNSA’s “preferred alternative” for transforming the Complex that would rely on distributed centers of excellence focusing on core competencies, eliminating redundancies, and maximizing consolidation of SNM that requires high levels of security.

As set out in the preferred alternative, *modern production “centers of excellence”* for plutonium, uranium, tritium, and assembly/disassembly of weapons would be created to support the enduring stockpile. To preserve intellectual competition and robust, rigorous peer review, *two independent design/certification “centers of excellence”* would be maintained for nuclear weapons development and assessment. We would reduce the amount of space protected by high-security perimeters, the acreage of testing sites, and square footage of buildings in today’s Complex. The facilities that provide our future warhead stewardship and production capabilities would be modern, agile, safe, and secure. The Complex of the future would have an integrated set of laboratories and manufacturing plants that apply leading-edge science and technology to maintain nuclear forces sufficient to deter future adversaries or to respond to foreign technological breakthroughs.

Over the next ten years, we would:

- Consolidate the SNM now at seven sites to five sites by 2012, with a significantly smaller high-security security perimeter footprint at those sites by 2018;
- Close or transfer from weapons activities funding about 600 buildings or structures, many by 2010;
- Reduce NNSA operational responsibilities and areas at two major testing sites supporting our laboratories by 2015;
- Reduce the square footage of facilities supporting weapons missions by more than 9 million square feet; and
- Reduce the workforce supported by weapons activities funding by 20-30% over the course of a decade or so. Our preference, with the support of Congress, is to achieve this workforce reduction through attrition, or by moving people from weapons work to other important and related national security work.

The Draft Complex Transformation SPEIS was published and posted online; and NNSA notified the public that it was available for review on January 11, 2008. A 90-day comment period was to close on April 10, 2008. However, in response to requests from

² A copy of the executive summary for the SPEIS is provided.

the Congress and the public, NNSA extended the comment period until April 30, 2008. More than 2000 people attended 20 public hearings across the United States. We received more than 600 oral comments during more than 80 hours of hearings, and more than 100,000 e-mail and written comments.

We are in the process of considering the comments we received and revising the SPEIS. We plan to release the final SPEIS this fall. NNSA would issue the first record of decision based on the final SPEIS no sooner than 30 days after the final SPEIS's Notice of Availability appears in the *Federal Register*.

Science and Technology Base

Maintaining the science and technology base provided by our national security laboratories and plants is essential. For more than a decade, a comprehensive science-based approach – the Stockpile Stewardship Program – has been the foundation for the continued viability of the stockpile. While focusing on this core weapons mission, our labs and plants have also provided many technological solutions to broader national security challenges. These solutions were derived from the capabilities developed as part of our weapons mission. The scientific capabilities resident in our highly-skilled workforce and infrastructure are a unique and very valuable resource for the nation.

Some have expressed concern that Complex Transformation may damage this essential science and technology base. There is a need for vigilance to prevent the unintended weakening of our scientific foundation. However, we believe that the greatest potential for long-term damage to our scientific capabilities arises from taking no action. Simply stated, the overhead costs of maintaining our existing infrastructure are just too large, and growing. Over time, this reduces the funds available for direct mission work including our science base. We must fund some near-term capital investments to solve this problem for the long-term. This requires a re-distribution of some funds within the Complex. Since the national security laboratories receive a majority share of NNSA weapons funding, this re-distribution must be done with great care to minimize impacts to science and technology activities.

Over the past two years, we have increased our science and engineering planning to ensure that we protect essential scientific capabilities during consolidation and change. As noted earlier, the Secretary of Energy, myself and the Directors of our National Laboratories recently announced a “Laboratory Vision for the Future” to address some of these concerns. I recently appointed a senior science advisor who reports directly to me. He is to focus on sustaining our science base. We are actively seeking strategic partnerships with other Department of Energy entities and federal agencies to better leverage and sustain critical competencies at our laboratories. While we share the concerns about adverse impacts to our science and technology base during Complex Transformation, we are aggressively taking action to avoid them.

With regards to the workforce restructuring which has occurred over the past year as a result of the FY08 appropriations, I feel it is important to emphasize to the Committee that I do not take these actions lightly and that we have applied great scrutiny and care to

ensure that we are taking these actions consistent with our future plans in terms of human capital and workforce expertise. It is important to remind ourselves that our Defense Programs activities are formulated based on national security requirements and meeting those deliverables to our partners in the Department of Defense.

Going Forward

The preferred alternative for Complex Transformation offers the lowest overall cost and risk. We propose to implement transformation within our FYNSP projections, assuming, of course, that savings from early transformation actions (e.g., supply chain management center, SNM consolidation, and non-nuclear production transformation) are available to be reinvested. Additionally, we would minimize the risk of production shortfalls for items that support the existing stockpile during the transition to a transformed complex.

We propose to pay for transformation through a combination of the following:

- Infrastructure savings through footprint reductions, replacement of buildings that are long past their economic lifetime, and updated cost-sharing models for work-for-others customers;
- Reduced overhead costs through contract reforms, improved risk management strategies, greater business practice uniformity, improvements in product assurance processes, and commodity purchase savings through a supply chain management center;
- Negotiations with DoD on alternative stockpile augmentation strategies;
- Reductions in staff supporting weapons activities through attrition and reassignment to other national security missions; and
- Optimization of federal staffing enabled by contract reform and improved line oversight of contractor assurance systems.

In short, Complex Transformation forces us to reform our current business practices and consolidate the nuclear weapons enterprise while we ensure that our most important resource – our people – are energized and challenged.

What if we don't transform?

What will happen if we do not transform and just maintain the status quo? The short answer is *we will reach the point where NNSA will be unable to maintain America's nuclear deterrent*. Every year the costs to maintain, operate and secure our physical infrastructure continue to rise. The JASONS, an independent group of scientists that advises the government, the Defense Nuclear Facilities Safety Board (DNSFB), the Defense Science Board and the Secretary of Energy Advisory Board have all issued reports or findings over the past several years highlighting the need for NNSA infrastructure improvements and modernization. Delay in beginning this phase of transformation will only increase the costs and risks of maintaining the nuclear deterrent.

We cannot continue to do 21st Century national security business with a 50-year-old Cold War infrastructure. The need for sustaining future plutonium and uranium capabilities are without question. One common thread among all these experts is the agreement that we will need these capabilities to maintain our nuclear deterrent. Take the 50-year-old Chemistry and Metallurgy Research (CMR) Facility at Los Alamos, for example. The DNSFB has clearly stated that the CMR has significant safety issues which cannot be addressed in the existing structure. Similar issues exist at Y-12 with regards to Building 9212 which currently houses many of our legacy uranium processing operations. The country can not afford to wait any longer.

Conclusion

As Administrator, I am responsible for sustaining our capabilities that support the Nation's commitment to maintain the lowest number of nuclear weapons consistent with U.S. national security requirements. In this role, I support adopting a flexible posture that allows "back up" to be provided by an infrastructure capable of confronting a threat rather than warheads held in reserve. A reduced stockpile and consolidated, efficient design and production capability, will be a more cost-effective means to maintain the U.S. nuclear deterrent. Since my first day as acting Deputy Administrator for Defense Programs, I have taken a long hard look at the nuclear weapons complex, and where we need to be. I am convinced that what I have outlined here is the best path. And I also feel that the need for change is urgent. We must act now to adapt for the future and stop pouring money into an old, Cold War weapons complex that is too big and too expensive.

This will not be easy, but the key to successfully meeting our mission and transforming the Complex is to ensure that we become a *smaller, safer, more secure, and less expensive enterprise that leverages the scientific and technical capabilities of our workforce to meet all our national security requirements*. We need buildings, methods and materials that are safer for our workers than those used during the Cold War.

Our dedicated workforce is the key to transformation and its success. They will be the agents of transformation and their insights, experience and proven dedication will be needed to carry it out. Their expertise constitutes a key element of our nation's national security.

Thank you, I'll be happy to take your questions.