

Permit 3/19/10



**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT**

IN THE MATTER OF:

**APPLICATION OF THE UNITED STATES)
DEPARTMENT OF ENERGY AND)
LOS ALAMOS NATIONAL SECURITY, LLC)
FOR A HAZARDOUS WASTE FACILITY)
PERMIT FOR LOS ALAMOS NATIONAL)
LABORATORY)**

**No. HWB 09-37(P)
HWB 10-04(P)**

TESTIMONY OF JOHN TEGTMEIER

My name is John Tegtmeier. I am a Mission Manager at the Department of Energy, National Nuclear Security Administration, Los Alamos Site Office. I have twenty-eight years of experience with the DOE and its contractors, including specific responsibilities related to explosives facilities, explosives-driven experiments, treatment of explosives waste, and other explosives operations. My official duties include the technical oversight of programmatic work performed at the Los Alamos National Laboratory for the NNSA, the Department of Defense, and other national security customers.

For many decades, the United States has relied upon the scientific and technical contributions made by the Laboratory in addressing critical national security issues. In recent years, as the nature of threats to our national security have expanded and evolved, an increasing number of customers have looked to the Laboratory for help in identifying, analyzing, and providing innovative solutions to counter and defeat these emerging threats. This trend is expected to continue well into the foreseeable future. The importance of the Laboratory's broadening national security role is captured in the President's FY 2011 Congressional Budget request, which states "NNSA and its laboratories have a unique national role in taking on complex projects requiring both breadth and depth of science as well as an ability to respond to rapidly changing priorities. The integration of the multi-disciplinary national security and science and technology skills within the NNSA provides the versatility to address urgent national needs on appropriate time scales." This expanded role is complementary to the Laboratory's historical responsibilities for stockpile stewardship.

In many cases, these emerging threats involve the development and use by domestic and foreign terrorists of novel homemade explosives, improvised explosive devices, and explosives-driven weapons of mass effect. In order to address these challenges, it is imperative that the Laboratory maintain the capability to synthesize and formulate high explosives and other energetic materials, fabricate a variety of unique shapes from these materials, and perform tests and experiments using these materials. A safe and effective treatment method for the explosives waste streams generated by these activities is open burning, as proven through approximately fifty years of operational experience at the Laboratory.



The two principal Laboratory program areas that generate high explosives waste streams are global security missions and conventional and nuclear weapons research and development. In addition, facilities disposition and demolition of excess explosives processing buildings generate explosives waste. Based upon a review of data collected over the past several years, the bulk of the explosives waste treated by open burning at the Laboratory is attributable to global security missions. Smaller percentages are attributable to weapons research and development and to demolition. None of the waste treated by open burning is from the manufacturing of nuclear weapons components used in the stockpile.

The Laboratory has made significant progress in the segregation and minimization of explosives wastes. The Site Office has been working with the Laboratory to identify additional opportunities for waste minimization, to investigate alternative treatment technologies, and to pursue options for offsite treatment at commercial facilities.

FURTHER AFFIANT SAYETH NAUGHT

John Tegtmeier
John Tegtmeier

STATE OF NEW MEXICO)
) ss.
COUNTY OF LOS ALAMOS)

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me this 19th day of March, 2010

Lola E. Sandoval
NOTARY PUBLIC

My Commission Expires:

December 24, 2013

National Nuclear Security Administration

Overview

Appropriation Summary

	(dollars in thousands)		
	FY 2009 Actual Appropriation	FY 2010 Current Appropriation	FY 2011 Request
National Nuclear Security Administration			
Office of the Administrator	439,190	420,754	448,267
Weapons Activities	6,410,000	6,384,431	7,008,835
Defense Nuclear Nonproliferation	1,545,071	2,136,709	2,687,167
[non-add MOX Project funded in other appropriations]	[278,879]	N/A	N/A
Naval Reactors	828,054	945,133	1,070,486
Subtotal, NNSA	9,222,315	9,887,027	11,214,755
Transfer of prior year balances	-----	-10,000	-----
Total, NNSA - OMB Scoring	9,222,315	9,877,027	11,214,755

The National Nuclear Security Administration (NNSA) is critical to ensuring the security of our nation. The NNSA implements programs for three major national security endeavors: leveraging science to maintain a safe, secure and effective arsenal of nuclear weapons and capabilities to deter any adversary and guarantee that defense to our allies; accelerating and expanding our efforts here in the homeland and around the world to reduce the global threat posed by nuclear weapons, nuclear proliferation and unsecured or excess nuclear materials; and, providing safe and effective nuclear propulsion for the United States (U.S.) Navy.

The FY 2011-2015 President's Request for the NNSA is a funding increase over the current appropriations because NNSA is a key player in the implementation of the President's vision for our nation's nuclear security and non-proliferation goals. This vision is based on the reality that nuclear security is not just about warheads and the size of the stockpile. The vision emphasizes that we must increase our focus on global nuclear security, and transform the Cold War nuclear weapons complex into a 21st century national security enterprise. We must ensure our evolving strategic posture places the stewardship of our nuclear stockpile, nonproliferation programs, counterterrorism, missile defenses, and the international arms control objectives into one comprehensive strategy that protects the American people and our allies.

Outyear Appropriation Summary NNSA Future-Years Nuclear Security Program

	(dollars in thousands)				
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
NNSA					
Office of the Administrator	448,267	426,424	430,726	435,069	448,498
Weapons Activities	7,008,835	7,032,672	7,082,146	7,400,966	7,648,200
Defense Nuclear Nonproliferation	2,687,167	2,507,191	2,715,191	2,833,243	2,956,328
Naval Reactors	1,070,486	1,099,734	1,171,178	1,226,017	1,310,530
Total, NNSA	11,214,755	11,066,021	11,399,241	11,895,295	12,363,556

The NNSA budget justification contains information for five years as required by Section 3253 of P.L. 106-065, entitled Future-Years Nuclear Security Program (FYNSP). The FY 2011-2015 FYNSP projects \$57.9 billion for NNSA programs through 2015. While the funding necessary to support the President's commitment to secure vulnerable nuclear materials throughout the world is focused in the near term, major longer term funding commitments are needed in other NNSA programs. The Secretaries of the Department of Defense (DoD) and the Department of Energy (DOE) agree that it is necessary to modernize the nuclear weapons infrastructure of the United States, and this will require the investments over the long term reflected in the FYNSP. Modernization of the infrastructure, including major capital projects, is needed to ensure safe, secure, sustainable and cost-effective operations in support of scientific and manufacturing activities. It is also necessary to bolster key scientific, technical and manufacturing capabilities needed to ensure that the U.S. nuclear weapons stockpile remains safe, secure and effective while avoiding the requirement for new nuclear tests. Increased outyear resources are also included for major new deliverables in support of the nuclear navy, including reactor plant development for the OHIO Class replacement submarine, core manufacturing for and refueling of the technology demonstration land-based prototype, and recapitalization of spent nuclear fuel infrastructure.

FY 2009 Budget Execution

(dollars in thousands)

	FY 2009 Appropriation	PY Balance/ General Reduction	Supplemental Appropriation	Reprogramming and Other Transfers	Total Adjustments	Final FY 2009
Office of the Administrator	439,190	0	0	0	0	439,190
Weapons Activities	6,380,000	0	30,000	0	30,000	6,410,000
Defense Nuclear Nonproliferation	1,493,768	-11,418	55,000	7,721	51,303	1,545,071
Naval Reactors	828,054		0	0	0	828,054
Total, NNSA	9,141,012	-11,418	85,000	7,721	81,303	9,222,315

FY 2010 Budget Execution

(dollars in thousands)

	FY 2010 Appropriation	PY Balance/ General Reduction	Supplemental Appropriation	Reprogramming and Other Transfers	Total Adjustments	Current FY 2010
Office of the Administrator	420,754	0	0	0	0	420,754
Weapons Activities	6,426,531	-42,100	0	0	-42,100	6,384,431
Defense Nuclear Nonproliferation	2,136,709	0	0	0	0	2,136,709
Naval Reactors	945,133	0	0	0	0	945,133
Total, NNSA	9,929,127	-42,100	0	0	-42,100	9,887,027

Preface

The NNSA was created by the Congress in 2000 to focus the management of the nation's nuclear defense through a single, separately organized and managed agency within the DOE. The NNSA brought together three existing major program components related to nuclear weapons and the nuclear deterrent: the U.S. stockpile and associated infrastructure; the Administration's efforts to reduce and prevent the proliferation of nuclear weapons, materials, and expertise; and the responsibility to provide cradle-to-grave support for the U.S. Navy fleet's nuclear propulsion.

The NNSA is funded through four appropriations. The Weapons Activities appropriation funds mission programs in five organizations, (Defense Programs, Nuclear Counterterrorism Incident Response (NCTIR), Infrastructure and Environment, Defense Nuclear Security (DNS), and Cyber Security, and has 14 Government Performance and Results Act (GPRA) Unit Programs. The Defense Nuclear Nonproliferation (DNN) appropriation funds one program with 5 GPRA Unit Programs. The Naval Reactors appropriation supports all activities, including Program Direction, for that program, and is a single GPRA Unit Program. The Office of the Administrator appropriation provides support for all Federal NNSA employees in Headquarters and its field elements (except the Secure Transportation Asset (STA) and Naval Reactors), and also provides for Information Technology for Federal employees in Headquarters and field locations and is a single GPRA Unit Program.

Mission

To strengthen United States' security through the military application of nuclear energy and by reducing the global threat from terrorism and weapons of mass destruction.

Strategic Themes and Goals

- Broaden the NNSA's science, technology and engineering mission to meet both energy and national security needs;
- Work with global partners to secure all vulnerable nuclear materials around the world within four years;
- Work towards a world with no nuclear weapons while ensuring that the U.S. stockpile remains safe, secure and effective in the interim;
- Complete the transformation of the nation's Cold-War era weapons complex to a 21st century national security enterprise, and
- Provide safe and effective nuclear propulsion for U.S. navy warships.

American Recovery and Reinvestment Act (Recovery Act)

NNSA did not receive any Recovery Act funding.

Presidential Initiatives

The President has initiated bold steps to put an end to Cold War thinking to lead a new international effort to enhance global security. In his April 5, 2009 speech given in Prague, Czech Republic, President Obama charted a new course for the United States. The President's goals of securing nuclear material in four years and advancing the Comprehensive Test Ban Treaty (CTBT) provided clear direction for the NNSA. Program work to address this direction is found in the requests for the Defense Nuclear Nonproliferation appropriation: International Materials Protection and Cooperation, and Global Threat Reduction Initiative.

In addition, the Administration's Nuclear Posture Review is nearing completion. The United States will take steps toward achieving a world without nuclear weapons. Until that goal is achieved, we will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies. Programs funded within the Weapons Activities appropriation support the nation's current and future defense posture, and its attendant nationwide infrastructure of science, technology and engineering capabilities. The President's Request reflects an investment strategy consistent with these challenges by providing a strong basis for transitioning to a smaller but continued safe, secure and effective nuclear stockpile without additional nuclear testing, strengthening the science, technology and engineering base, modernizing the physical infrastructure, and streamlining the enterprise's physical and

operational footprint. These investments will enable execution of a comprehensive nuclear defense strategy based on current and projected global threats that relies less on nuclear weapons, yet enhances national security by strengthening NNSA's nuclear security programs. This improved NNSA capability base will mitigate the concerns regarding ratification of the follow-on Strategic Arms Reduction Treaty and the Comprehensive Test Ban Treaty.

Science Technology and Engineering

In his address to the National Academy of Sciences on April 27, 2009, President Obama stated, "Science is more essential for our prosperity, our security, our health, our environment, and our quality of life than it has ever been before..." It is an acknowledgement of this statement and the reality of today's security environment that the United States requires an agile and responsive national security science, technology and engineering (ST&E) enterprise to address the threats of today and the future. Sustaining the national security ST&E capabilities within the NNSA is not in the sole interest of those responsible for assessing and monitoring the nuclear weapons stockpile. While national ST&E investments are instrumental in transitioning to a 21st century nuclear deterrent strategy, they are also key to a range of national security issues, tools, and solutions. NNSA and its laboratories have a unique national role in taking on complex projects requiring both breadth and depth of science as well as an ability to respond to rapidly changing priorities. The integration of the multi-disciplinary national security science and technology skills within the NNSA provides the versatility to address urgent national needs on appropriate time scales. It is essential that planning of NNSA ST&E takes on a strategic perspective to ensure agile and responsive capabilities. Transparency into these capabilities and the investments made in them is critical. The President has challenged agencies to identify science and technology innovation that drive the economy, impact climate change and energy security, improve health care and life quality and enhance U.S. national security. NNSA programs contribute to addressing many of these challenges.

Despite the classified nature of NNSA's mission, many of the science and engineering activities are unclassified and can, and in some cases already do, involve universities, industry and civilian agencies. Specific actions are being initiated to improve the open communication and facilitate such cooperation. One example is the Livermore Valley Open Campus with both Lawrence Livermore National Laboratory and Sandia National Laboratories-California making some modifications of physical space on the government-owned property to provide for easier access by visiting scientists, particularly researchers associated with transportation science (Combustion Research Facility operated by the Office of Science) and high energy density physics (National Ignition Facility). Science, Technology and Engineering funding is contained in the Weapons Activities appropriation in the Campaigns, and in a new subprogram element, Science, Technology and Engineering Capabilities. The Nuclear Counterterrorism Incident Response has an important R&D component. In the Defense Nuclear Nonproliferation appropriation, the research efforts are funded by the Nonproliferation and Verification R&D program.

FY 2011 Program Changes

Weapons Activities Appropriation

NNSA is sensitive to the need to more fully reflect in the budget the wide range of activities funded by this appropriation. In recent years, NNSA's nuclear security enterprise has broadened the application of NNSA's science, technology and engineering capabilities to the wider set of energy and national security missions while still carrying on the historical responsibilities for stockpile stewardship, infrastructure, emergency response and security.