

Item of Special Interest

Conventional Trident modification

The budget request contained \$957.6 million for Trident II missile modifications, including \$38.0 million for the conventional Trident modification (CTM) program. The budget request also contained \$111.1 million for strategic missile systems equipment, including \$12.0 million for CTM.

The committee understands that the Department of Defense is working to develop the prompt, precision, global conventional strike capability called for in the 2001 Nuclear Posture Review, and in the 2006 Quadrennial Defense Review. The committee also understands that the existing Trident II weapons system provides an opportunity to develop a long range conventional strike capability by leveraging existing technology at relatively low risk.

However, the committee is concerned that the development of this conventional ballistic missile capability for a submarine that has historically carried nuclear armed ballistic missiles could cause a missile launch misinterpretation regarding which type of warhead a ballistic missile may be carrying. The committee is encouraged that the Department has begun to engage military and civilian leaders of the international community to discuss the United States' intent behind this conventional strike capability, and is also developing measures to preclude misinterpretation of a conventional launch.

However, until this vital policy matter can be resolved, the committee recommends \$919.6 million for Trident II missile modifications, a decrease of \$38.0 million, and \$99.1 million for strategic missile systems equipment, a decrease of \$12.0 million.

AMMUNITION PROCUREMENT, NAVY & MARINE CORPS

Overview

The budget request for fiscal year 2007 contained \$789.9 million for Ammunition Procurement, Navy & Marine Corps. The committee recommends authorization of \$758.8 million, a decrease of \$31.2 million, for fiscal year 2007.

The committee recommendations for the fiscal year 2007 Ammunition Procurement, Navy & Marine Corps program are identified in the table below. Major changes to the Navy & Marine Corps request are discussed following the table.

ITEMS OF SPECIAL INTEREST

National Nuclear Security Administration

Overview

The budget request contained \$9.3 billion for the National Nuclear Security Administration for fiscal year 2007. The committee recommends \$9.3 billion, a decrease of \$50.0 million.

Weapons Activities

The budget request contained \$6,407.9 million for Weapons Activities of the National Nuclear Security Administration. The committee recommends \$6,467.9 million, an increase of \$60.0 million.

Directed Stockpile Work

The budget request contained \$1,410.3 million for Directed Stockpile Work. The committee recommends \$1,410.3 million, the amount of the budget request.

Reliable Replacement Warhead

The budget request contained \$27.7 million within Directed Stockpile Work for the Reliable Replacement Warhead (RRW) program. The committee notes that section 3111 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163) established the objectives of the RRW program and established requirements for both an interim report, which the committee has received, and a final report, which is due by March 1, 2007.

The committee notes that elsewhere in this title, the committee directs the Secretary of Energy and the Secretary of Defense to submit a plan for the transformation of the nuclear weapons complex. The vision for this plan will necessarily be influenced by the specific design and production capability requirements deemed essential for supporting the RRW program. The committee therefore urges the Secretary of Energy and the Secretary of Defense to ensure complete transparency between the RRW Project Officer's Group and those National Nuclear Security Administration and Department of Defense personnel working on the nuclear weapons complex transformation plan.

The committee recommends \$27.7 million for the Reliable Replacement Warhead program, the amount of the budget request.

Responsive Infrastructure

The budget request contained \$15.4 million for the National Nuclear Security Administration (NNSA) responsive infrastructure.

The committee fully supports the development of the responsive infrastructure and in section 3111 of this title requires the Secretary of Energy and the Secretary of Defense to submit a plan for the transformation of the nuclear weapons complex to Congress. The committee encourages NNSA to establish an Office of Transformation within Defense Programs to plan and execute actions to achieve the responsive infrastructure goal.

The committee recommends \$15.4 million, the amount of the budget request, for responsive infrastructure, and authorizes the Administrator of the NNSA to use up to \$15.4 million of the funds

authorized to establish an Office of Transformation. Should the Administrator elect to establish an Office of Transformation, the Administrator shall submit to the congressional defense committees a report stating the specific charter for this new office within 60 days after the establishment of such office.

Study of Quantification of Margins and Uncertainty Methodology

Section 3111 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163) established the objectives for the Reliable Replacement Warhead (RRW) program. The RRW program is intended to increase the reliability, safety and security of the nuclear weapons stockpile. One of the key objectives of the program is to further reduce the likelihood of the resumption of underground nuclear weapons testing. This objective is carried out by using designs that are consistent with basic design parameters employed in those nuclear weapons which have undergone testing or by otherwise using components that are well understood or certifiable without the need to resume underground testing.

According to documents accompanying the fiscal year 2007 Department of Energy budget request, the RRW program will rely upon the National Nuclear Security Administration's (NNSA) campaigns to assess whether the RRW can be certified without underground nuclear testing. A critical analytic tool employed by the national laboratories in making this determination is the Quantification of Margins and Uncertainties (QMU) methodology. A recent report by the Government Accountability Office found that the QMU methodology, while conceptually well-accepted, is still in its early stages and requires maturation and further refinement.

The committee understands the importance of the QMU methodology in establishing a scientific basis for assessing whether the RRW will be able to be certified without underground nuclear testing. Given the importance of the RRW program and the need to reduce the likelihood of having to conduct an underground nuclear test in order to certify this warhead, the committee believes that an independent review of the NNSA laboratory utilization of QMU methodology is required to gain confidence that the RRW program objectives can be achieved.

Accordingly, the committee directs the National Academy of Sciences to conduct an independent assessment of the QMU methodology employed by the national laboratories and whether this methodology can be used to certify an RRW without underground nuclear testing. The Academy shall ensure that the panel chartered to conduct this review has among its members the following:

- (1) Former weapons designers;
- (2) Individuals well-versed in the underlying science associated with nuclear weapons, including the physics associated with weapon primaries and secondaries; and
- (3) Individuals familiar with the application of QMU principles, including probabilistic risk assessment methods, in industries such as the nuclear power industry.

Of the amounts made available to the Department of Energy for weapons activities, \$2.0 million shall be available for carrying out this study. The Academy report shall be submitted to the congressional defense committees by September 30, 2007.

Transformation Plan for the Nuclear Weapons Complex

The committee notes that the 2001 Nuclear Posture Review set forth the requirements for a responsive infrastructure within the National Nuclear Security Administration (NNSA) weapons complex. Through multiple hearings and briefings before the subcommittee on Strategic Forces, the committee has been informed of initiatives that would modernize the Nuclear Weapons Complex to achieve the desired responsive infrastructure capability while consolidating and disposing of special nuclear material. The committee also notes that section 3111 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163) established objectives for the Reliable Replacement Warhead program, an initiative that has the potential to enhance the safety, security and reliability of the nuclear stockpile, while setting the requirements for the capabilities of the responsive infrastructure.

The committee includes a provision (section 3111) that would require the Secretary of Energy and the Secretary of Defense to develop a plan to transform the nuclear weapons complex so as to achieve a responsive infrastructure. This plan shall be submitted to Congress by February 1, 2007, and shall meet certain objectives.

With respect to eliminating duplication of production capability except as necessary to ensure the safety, reliability and security of the stockpile, the committee intends the transformation plan to look at all production functions including but not limited to primary, secondary and non-nuclear production elements. The committee intends that the national security mission continue as the primary mission for the national security laboratories. Other laboratory work (such as work conducted for the Offices of Science or Energy Research within the Department of Energy, the Department of Homeland Security or for the Intelligence Community) should be conducted so as to maintain the primary mission of supporting the nuclear weapons stockpile. The committee encourages the Secretary of Energy in the formulation of this transformation plan to take a long-term strategic view of the desired optimal mix of NNSA primary mission work and other laboratory work to ensure a responsive capability into the future. With respect to both the production plants and the national security laboratories, the committee expects the transformation plan to consider how best to maintain the requisite human capital expertise while transforming to a more efficient complex.

The committee establishes as an objective the elimination of category I and II special nuclear materials from the national security laboratories by 2010. This objective does not preclude the retention of category I and II special nuclear materials at a national security laboratory, if the transformation plan for the nuclear weapons complex envisions a pit production capability at a national security laboratory.

Based on testimony before the subcommittee on Strategic Forces, the committee is aware of NNSA plans to purchase more non-nuclear weapons components from commercial suppliers in the future. While the committee supports those business practices that will lead to a more efficient enterprise, the committee also has some concerns for the security and cost implications of further outsourcing and expects the transformation plan to specifically address these concerns.

The committee understands that the Department of Defense is reviewing the military requirements for the W-80 warhead and is considering deferring the planned life extension program (LEP). The committee directs the Administrator of the National Nuclear Security Administration, working with the Nuclear Weapons Council, to prepare a plan for redirecting the human resources and facilities currently required for the W-80 LEP to the Reliable Replacement Warhead program and complex transformation. This plan shall be submitted to the congressional defense committees by February 1, 2007.

Inertial Confinement Fusion Ignition and High Yield Campaign

The budget request contained \$451.2 million for the Inertial Confinement Fusion Ignition and High Yield Campaign, including \$111.4 million for the National Ignition Facility (NIF) construction and \$143.4 million for the NIF demonstration campaign.

The committee fully supports the NIF program's goal of beginning the initial ignition campaign in 2010 with a series of integrated experiments that would culminate in full energy experiments in 2011. The committee believes that full funding of NIF construction and demonstration programs is essential in order to achieve ignition in 2010. Furthermore, the committee believes that additional investments in ignition target design and testing will enhance project success.

The committee recommends \$461.2 million for the Inertial Confinement Fusion Ignition and High Yield Campaign, an increase of \$10.0 million to support enhanced target production and characterization capabilities and for tests on the Omega and Z facilities.

Readiness in Technical Base and Facilities

The budget request contained \$1,685.8 million for Readiness in Technical Base and Facilities.

The committee is encouraged by the progress made in the reduction of deferred maintenance backlogs in the defense nuclear complex. In section 3111, the committee requires the Department of Energy and Department of Defense to submit a transformation plan for the nuclear weapons complex to achieve the responsive infrastructure envisioned by the Nuclear Posture Review. Recognizing that this plan may provide for modernization of the Pantex and the Y-12 production plants in Texas and Tennessee, respectively, the committee also recognizes that both facilities need additional infrastructure support as soon as possible.

The committee recommends an additional \$17.0 million for plant infrastructure repair and equipment replacement at Pantex, to be executed in a manner consistent with the priorities of both the 10 year site comprehensive plan and the transformation plan required by this title.

The committee recommends an additional \$17.0 million for the Y-12 complex, to include: \$2.0 million for material recycle and recovery to process materials generated in the Directed Stockpile Work accelerated dismantlement program, and \$15.0 million for plant infrastructure repair and equipment replacement consistent with the priorities of both the 10 year site comprehensive plan and the transformation plan required by this title.

The committee fully supports the efforts of the Administrator of the National Nuclear Security Administration (NNSA) to reduce safeguards and security costs throughout the complex by consolidating nuclear material storage and by accelerating certain construction projects that will permit even further consolidation of nuclear materials. The transformation plan for the nuclear weapons complex, required by section 3111, should assist NNSA senior managers in ensuring that any maintenance or upgrades to existing facilities or construction of new facilities will be consistent with both the 10 year site comprehensive plans and the transformation plan's vision for the complex of the future.

The committee is also aware of design changes to the Highly Enriched Uranium Material Facility (HEUMF) at Y-12 required by revisions to the design basis threat policy and resulting from construction problems with this new facility. The committee recognizes the importance of the HEUMF project in achieving material consolidation objectives at the Y-12 complex. However, the committee is disappointed with the extent of the problems that have surfaced with a relatively simple project. Should additional funds be required to move forward with the HEUMF facility in fiscal year 2007, the Secretary of Energy shall submit a reprogramming request to the congressional defense committees.

The committee recommends \$1,719.8 million, an increase of \$34.0 million for Readiness in Technical Base and Facilities.

Safeguards and Security

The budget request contained \$721.4 million for safeguards and security.

The committee continues to be deeply concerned with safeguards and security practices and the costs associated with complying with design basis threat (DBT) requirements throughout the complex. As evidenced by section 3113 of the National Defense Authorization Act for Fiscal Year 2006 (Public Law 109-163), the committee believes that the Department of Energy (DOE) must employ a risk based approach in decision-making associated with DBT compliance. The committee notes with approval the decision by the Department to waive compliance with certain aspects of the DBT at the Y-12 plant in Tennessee pending completion of the Highly Enriched Uranium Material Facility.

The committee is aware that the Department has discussed shifting accounting for security costs from direct to indirect costs. The committee believes that only the use of direct cost accounting for security costs provides the necessary transparency into what it takes to comply with DOE's DBT policy. Accordingly, the committee directs that until directed otherwise by Congress, the Department shall continue to employ direct cost accounting for all security costs.

The committee supports the efforts of the Administrator of the National Nuclear Security Administration to enhance security practices through consolidation of nuclear material at individual sites and throughout the complex. The committee notes that the nuclear weapons complex transformation plan required in section 3111 should help the Department focus its attention on innovative ways to reduce safeguards and security costs through the consolidation of nuclear material.

The committee recommends \$737.4 million, an increase of \$16.0 million, to include an additional \$8.0 million for Pantex, and an additional \$8.0 million for Y-12 to be used at both sites for unfunded safeguards and security requirements consistent with site safeguards and security priority plans.

Test Readiness

The budget request contained \$14.8 million within the Science Campaign for test readiness.

Section 3113 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) mandated an 18 month readiness posture for the resumption of underground nuclear weapons testing by the United States. While the committee has no indication of the need to resume underground nuclear testing in the near future, it does believe that maintaining the 18 month readiness posture as directed by Congress is important to national security. The committee notes that funding shortfalls have precluded the Department of Energy from achieving the 18 month readiness posture as required by law.

Accordingly, the committee supports full funding of the test readiness capability.

Defense Nuclear Nonproliferation

The budget request contained \$1,726.2 million for defense nuclear nonproliferation programs.

The committee fully supports the goals of the Department of Energy's nuclear nonproliferation programs but remains concerned with uncosted, uncommitted balances in several of the nonproliferation accounts due to the delays and problems in resolving government to government agreements for critical projects. The committee shifts funds within the nonproliferation account into programs that have experienced greater success or that are viewed as more executable based on the above concerns noted with government to government agreements.

The committee authorizes \$1,616.2 million, a decrease of \$110.0 million.

Global Threat Reduction Initiative

The budget request contained \$106.8 million for the Global Threat Reduction Initiative (GTRI).

The committee supports the goals of this program, especially those activities conducted outside the United States.

The committee recommends \$126.8 million, an increase of \$20.0 million as follows: \$5.0 million for international radiological threat reduction and \$15.0 million to be used exclusively for other GTRI activities outside the United States.

International Materials Protection and Cooperation

The budget request contained \$413.2 million for International Nuclear Materials Protection and Cooperation (MPC&A), including \$40.1 million for the Second Line of Defense Megaports program.

The committee fully supports the program's emphasis on national programs and sustainability as the way ahead in ensuring that the progress which has been made in the area of upgrades to nuclear warhead and nuclear material security are sustained by