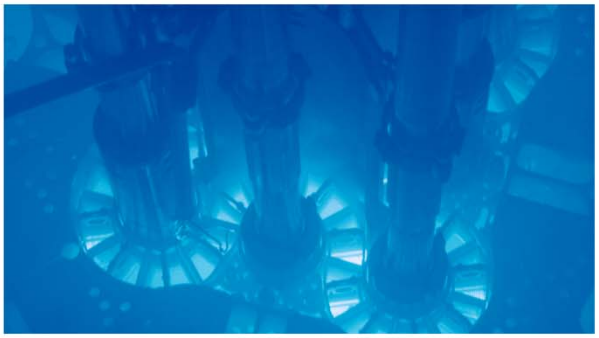
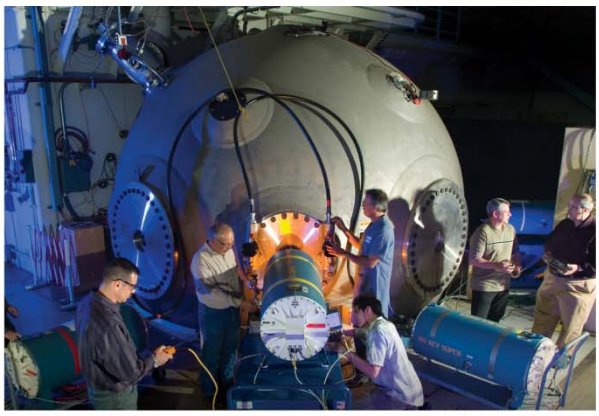
DEFENSE NUCLEAR FACILITIES SAFETY BOARD

# FY 2013 PERFORMANCE AND ACCOUNTABILITY REPORT





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## Chairman's Message

On behalf of the Members and staff of the Defense Nuclear Facilities Safety Board (Board), I am pleased to submit the Board's Performance and Accountability Report (PAR) for FY 2013.

The primary purpose of the Board is to ensure adequate protection of public health and safety by ensuring implementation of safety standards at Department of Energy (DOE) defense nuclear facilities and operations. In addition to conducting safety oversight on hundreds of existing hazardous nuclear operations, the Board is obligated by law to conduct in-depth reviews of new DOE defense nuclear facilities during both design and construction. Currently, DOE and the National Nuclear Security Administration (NNSA) are pursuing approximately a dozen new defense nuclear projects with an estimated value of more than $20 billion, including $12.3 billion for the Hanford Waste Treatment and Immobilization Plant (WTP). The design, construction, and initial startup of these new facilities typically require more than 12 years. The design and construction reviews conducted by the Board of DOE facilities are resource intensive and time consuming, but necessary as these time-sensitive safety reviews are key to preventing safety flaws in design and construction that could render a newly constructed facility unusable. The Board is committed to early integration of safety into design.

The Board also provides a key component of the oversight that prevents an accidental detonation of a nuclear weapon during the evaluation, maintenance, or dismantlement process. Such an accident could result in catastrophic impacts on lives and property, as well as cripple our Nation's nuclear deterrent capability. The Board's oversight is critical in preventing serious safety vulnerabilities and tragic accidents from occurring in very complex and dangerous DOE defense nuclear facilities.

During Fiscal Year (FY) 2013, the Board continued to make significant progress in ensuring the safety of the public and the workers at or near DOE defense nuclear facilities. For example, in October 2012, members of the Board staff conducted a review of the Pantex Plant emergency preparedness program, observed an emergency exercise, and provided immediate feedback regarding a lack of personnel training and the adequacy of exercises and drills. On March 14, 2013, the Board conducted a public meeting and hearing in Amarillo, Texas, that included discussions of the weaknesses in the program. As a result, NNSA recognized the weaknesses and initiated corrective actions for the emergency preparedness program. On October 2, 2012, the Board conducted a public hearing in Knoxville, Tennessee, to discuss safety issues associated with the Uranium Processing Facility (UPF) at the Y-12 National Security Complex with NNSA. The hearing also addressed NNSA's plans to mitigate safety concerns that could arise from planned changes to the project's execution strategy and major redesign activities.

The Board is committed to ensuring that public resources in our trust are used wisely. Office of Management and Budget (OMB) Circular A-136 requires an assessment of the completeness and reliability of the program performance and financial data contained in this report. I conclude that the financial data is complete and reliable. I also conclude that the program performance data is complete and provides accurate information. In addition, the Circular requires an assessment of internal controls which can be found on page 15 of this report. I am also very pleased to report that FY 2013 marked the seventh consecutive year that the Board's unqualified opinion on its financial statements was coupled with no instances of non-compliance with laws and regulations and no material internal control weaknesses.

The future holds many managerial challenges for the Board, both in terms of technically complex health and safety issues involving the disassembly, refurbishing, reassembly, and re-certifying of nuclear weapons and components; the stabilization and clean-up work at many defense nuclear sites; and high-visibility decommissioning activities, as well the review of new DOE defense nuclear facilities in the critical design and construction phases.

The Board remains committed to improving DOE's management of safety at our country's most sensitive defense nuclear facilities where our nuclear arsenal is maintained and where hazardous nuclear materials and components must be stored in secure and stable configurations. Our standard of excellence in carrying out this important mission will mirror the best of American excellence, values, and ideals. Our nation deserves nothing less.

Peter S. Winokur, Ph.D.
Chairman
December 19, 2013

# Chapter 1
# Management's Discussion and Analysis

## INTRODUCTION

This PAR summarizes the Board's oversight activities and associated resource expenditures for the period from October 1, 2012 through September 30, 2013 (FY 2013). This report was prepared pursuant to the requirements of the Accountability of Tax Dollars Act of 2002 and OMB Circular A-136, which provides instructions on the preparation of a PAR. FY 2013 is the tenth year that the Board has prepared and published a PAR.

The Government Performance and Results Act of 1993 (GPRA) and the GPRA Modernization Act of 2010 require each agency to prepare and submit a strategic plan establishing long-term programmatic, policy, and management goals. The Board's *Strategic Plan for FY 2011-2016* is available on the Internet at www.dnfsb.gov. Agencies are also required to develop a performance budget with annual performance objectives that indicate the progress toward achievement of the strategic plan's goals and objectives. The Board's performance objectives for FY 2014 and FY 2015, as well as representative accomplishments for FY 2010 through 2013, will be included in its *FY 2015 Budget Request to the Congress* in accordance with the requirements of OMB Circular A-11. For FY 2013, the GPRA requirement to submit an annual performance report is satisfied by this PAR. The Board also published its *"Twenty-Third Annual Report to Congress"* on February 28, 2013 which highlighted achievements of the Board from Calendar Year 2012; and periodic reports to Congress on December 24, 2012 and July 15, 2013 regarding the *"Status of Significant Unresolved Issues with the Department of Energy's Design and Construction Projects."*

Chapter 1, *Management Discussion and Analysis*, provides an overview of Board operations and is divided into five sections: *About the Board* describes the agency's mission, organizational structure, and five major performance goals; *Future Challenges* includes a review of upcoming issues; *Program Performance Overview* discusses the Board's success in accomplishing its performance goals; *Financial Performance Overview* provides highlights of the Board's financial position and audit results; and *Systems, Controls, and Legal Compliance* describes the agency's compliance with key legal requirements such as the Federal Information Security Management Act (FISMA), internal controls, and the Inspector General Act of 1978.

## ABOUT THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD

The Board, an independent executive branch agency, is charged with providing technical safety oversight of the Department of Energy's (DOE) defense nuclear facilities and activities in order to provide adequate protection for the health and safety of the public and workers. Congress established the Board in September 1988 in response to growing concerns about the level of health and safety protection that DOE was providing the public and workers at defense nuclear facilities. Congress sought to provide the public with added assurance that the defense nuclear facilities required to maintain the nation's nuclear weapons stockpile are being safely designed, constructed, operated, and decommissioned. The Board commenced operations in October 1989 with the Senate confirmation of the first five Board Members.

### Organization

The Board is composed of five full-time Board Members who, by statute, must be respected experts in the field of nuclear safety with a demonstrated competence and knowledge relative to independent investigations and oversight. Two members of the Board are designated by the President to serve as Chairman and Vice Chairman. Each Board Member is appointed by the President, with the advice and

consent of the Senate, and serves a term of five years. The Chairman serves as the Chief Executive Officer of the Board.

The Board's headquarters facility is located in downtown Washington, D.C., in proximity to the DOE headquarters facility. The Board's headquarters location was selected to facilitate the interface between Board and DOE management officials and staff and has proven to be beneficial for the timely exchange of information as the Board conducts its independent oversight mission.

The Board maintains on-site safety oversight of defense nuclear facilities by assigning experienced technical staff members to full-time duty at priority DOE defense nuclear sites. As of September 30, 2013, ten full-time site representatives were stationed at the following DOE sites:

- Hanford Site (2)
- Lawrence Livermore National Laboratory (LLNL) (1)
- Los Alamos National Laboratory (LANL) (2)
- Pantex Plant (1)
- Savannah River Site (SRS) (2)
- Y-12 National Security Complex (2)

The Site Representative Program provides a cost-effective means for the Board to closely monitor DOE activities, and to identify health and safety concerns promptly by having on-site staff conducting firsthand assessments of nuclear safety management at the priority sites to which they have been assigned. Site representatives regularly interact with the public, union members, congressional staff members, and public officials from federal, state, local, and tribal governments.

The Board's new (net) budget authority for FY 2013 was $26.786 million ($29.130 million appropriated less $2.344 million in reductions due to rescission/sequestration), and its total budgetary resources were $28.410 million (as shown on the Statement of Budgetary Resources, page 50), supporting 113 full-time equivalent staff. Total obligations were $26.252 million, leaving an unobligated balance of $2.158 million. The technical staff comprises approximately 80 percent of the Board's total workforce and funding, with the remainder comprised of administrative and legal staff. The Board's health and safety oversight activities are funded exclusively from a direct appropriation included in the annual Energy and Water Development Appropriations Act.

**Safety Oversight Responsibilities**

The Board's specific duties and responsibilities to protect the health and safety of the public and the workers at DOE's defense nuclear facilities are delineated in its enabling statute, 42 U.S.C. § 2286, *et seq.*, which states:

- The Board shall review and evaluate the content and implementation of the standards relating to the design, construction, operation, and decommissioning of defense nuclear facilities of the Department of Energy (including all applicable Department of Energy orders, regulations, and requirements) at each Department of Energy defense nuclear facility. The Board shall recommend to the Secretary of Energy those specific measures that should be adopted to ensure that public health and safety are adequately protected. The Board shall include in its recommendations necessary changes in the content and implementation of such standards, as well as matters on which additional data or additional research is needed.

- The Board shall investigate any event or practice at a Department of Energy defense nuclear facility which the Board determines has adversely affected, or may adversely affect, public health and safety.

- The Board shall have access to and may systematically analyze design and operational data, including safety analysis reports, from any Department of Energy defense nuclear facility.

- The Board shall review the design of a new Department of Energy defense nuclear facility before construction of such facility begins and shall recommend to the Secretary, within a reasonable time, such modifications of the design as the Board considers necessary to ensure adequate protection of public health and safety. During the construction of any such facility, the Board shall periodically review and monitor the construction and shall submit to the Secretary, within a reasonable time, such recommendations relating to the construction of that facility as the Board considers necessary to ensure adequate protection of public health and safety. An action of the Board, or a failure to act, under this paragraph may not delay or prevent the Secretary of Energy from carrying out the construction of such a facility.

- The Board shall make such recommendations to the Secretary of Energy with respect to Department of Energy defense nuclear facilities, including operations of such facilities, standards, and research needs, as the Board determines are necessary to ensure adequate protection of public health and safety. In making its recommendations, the Board shall consider, and specifically assess risk (whenever sufficient data exists), the technical and economic feasibility of implementing the recommended measures.

In support of this mission, the Board has identified the following four interrelated strategic areas of concentration and has organized its technical staff according to these strategic areas:

**AREA 1. SAFE NUCLEAR WEAPONS OPERATIONS:** DOE operations that directly support the nuclear stockpile and defense nuclear research.

**AREA 2. SAFE PROCESSING AND STABILIZATION OF NUCLEAR MATERIALS:** The processing, stabilization, and disposition of DOE defense nuclear materials and facilities.

**AREA 3. SAFETY IN NUCLEAR FACILITIES DESIGN AND INFRASTRUCTURE:** The design and construction of new DOE defense nuclear facilities, and major modifications to existing facilities.

**AREA 4. EFFECTIVE NUCLEAR SAFETY PROGRAMS AND ANALYSIS:** The development, implementation, and maintenance of DOE regulations, requirements, and guidance affecting public or worker health and safety; and the establishment and implementation of safety programs at DOE defense nuclear facilities.

A fifth area of concentration necessary to properly support and manage the technical nuclear safety oversight mission is Management Excellence. The Board added this Strategic Area of concentration in the strategic plan published in March 2011.

**AREA 5. MANAGEMENT EXCELLENCE:** The Board will strive for management excellence throughout its technical, legal and administrative staffs.

The FY 2013 performance goals and accomplishments associated with each of these areas of concentration will be discussed further in Chapter 2 of this report.

## FUTURE CHALLENGES

The Board is facing a number of significant challenges that impact the accomplishment of its independent health and safety oversight mission. In addition to conducting nuclear safety oversight of hundreds of

existing defense nuclear operations, the Board is obligated by law to conduct in-depth reviews of new defense nuclear facilities during design and construction to ensure the safety of the public and workers is addressed early in the design process. DOE has approximately one dozen major design and construction projects currently underway or planned for the near future with an estimated value of more than $20 billion. The Board will continue to expend considerable resources to review the ongoing design effort as well as the construction activities at new DOE defense nuclear facilities, concentrating its oversight attention on the projects with high risk, significance, and complexity. One prominent example of a high-risk, new facility undergoing both design and construction is the multi-billion dollar Waste Treatment and Immobilization Plant (WTP) in Richland, Washington. The WTP project consists of three major nuclear facilities to pretreat and vitrify high-level waste stored in underground tanks at Hanford. The WTP is a complex, high-risk program that (1) has changing design and construction parameters, (2) will take until 2019 to complete, and (3) will operate for decades. The design and construction reviews conducted by the Board on WTP and other new DOE facilities are resource intensive and time consuming, but are key to preventing safety flaws in design and construction that could render a newly constructed facility unusable.

Second, many aging DOE facilities are unsound, and the transition to new facilities will take decades. For example, the Chemical and Metallurgy Research Facility at Los Alamos National Laboratory (LANL) and the 9212 Complex at the Y-12 National Security Complex (Y-12) are of particular concern because of their deficient structures and advanced age. The Board will need to evaluate the rigor and maintenance of a robust safety posture in such facilities and inform the Secretary of potential threats to public health and safety.

Third, a recent DOE/Inspector General (IG) Audit Report (DOE-IG-0881, February 2013) entitled *National Nuclear Security Administration Contractor Governance*, reviewed the effectiveness of a 2007 NNSA requirement for contractors to implement self-assessment systems to measure performance and ensure effective and efficient mission accomplishment. The audit report notes that despite five years of effort, NNSA and its support offices and site contractors have not yet implemented fully functional and effective contractor assurance systems. Specifically troubling was the recognition that contractor self-assessments were not effective in identifying safety weaknesses subsequently identified by independent reviews and that Federal site level officials felt the contractor governance approach prohibited them from intervening in contractor activities. The Board will continue to provide oversight support to NNSA as they continue to reform, enhance, and mature their oversight of contractor assurance and governance systems.

Fourth, On July 9, 2012, the Secretary of Energy issued a memorandum entitled *Enterprise Risk Management (ERM) Framework for Directives*, announcing a new framework for development, revision, and review of all DOE directives. Under this initiative, each new or revised DOE directive will be reviewed to determine the likelihood, magnitude, and potential costs of the risks it seeks to mitigate; whether any external requirements or standards are available to address the risks; whether other DOE directives address the risks; and lastly, whether to accept the remaining risks or to include controls in the directive to mitigate them. The Board will be reviewing the process and evaluating proposed changes to nuclear safety requirements.

Fifth, changes in federal oversight and governance models have been coupled with significant organizational changes within DOE. However, DOE has no formal process to ensure safety-related roles and responsibilities of key federal staff are preserved and safety-related functions remain viable. The Board will need to closely monitor DOE to ensure DOE's safety program remains viable and adequately protective of public health and safety.

Sixth, DOE has developed actions responding to the Board's letter of August 28, 2012 that forwarded technical report DNFSB/TECH-37, *Integrated Safety Management at the Activity Level: Work Planning*

*and Control*. Proper work planning and control is essential to ensure adequate safety controls are identified and implemented to protect workers during execution of hazardous nuclear activities. The DOE improvement actions responding to DNFSB/TECH-37 include development of new DOE guidance for implementation of work planning and control and emphasis on rigorous oversight by contractors and DOE. These actions are to be fully implemented by FY 2015. The Board will continue reviews at DOE defense nuclear facilities to assess the implementation of these DOE improvement actions and the overall conduct of work planning and control.

Seventh, in addition to the focus on specific DOE activities noted above, the Board needs to continue its oversight of operations throughout the DOE defense nuclear complex to ensure continued safe operations. These operations include assembly and disassembly of nuclear weapons, fabrication of plutonium pits and weapon secondaries, production and recycling of tritium, criticality experiments, subcritical experiments, and a host of activities to address the radioactive legacy of nearly 70 years of these operations. Continued effective oversight of the conduct of operations is the only way the Board may ascertain whether operations are being conducted with the appropriate formality, identify potential safety problems promptly, and advise the Secretary of Energy in order to ensure adequate protection of public and worker safety at DOE's defense nuclear facilities.

Eight, mindful of the lessons learned from the Fukushima Dai-ichi nuclear disaster, the Board will continue to encourage DOE and its contractors to plan and prepare to respond to severe events, as well as to recover from these events. As part of its engagement with DOE on this topic, the Board has reviewed the emergency preparedness and response capabilities of various sites, and identified weaknesses and vulnerabilities, such as problems with assessments, drills and exercises, as well as corrective actions. The Board has shared its concerns with DOE and its contractors through Board public hearings and meetings and Board site visits.

A ninth challenge is maintaining a focused and well-executed human capital program within the Board. Because the Board's health and safety recommendations and other advisories to the Secretary of Energy are based on in-depth technical information and detailed safety analyses, the recruitment and retention of scientific and technical staff members with outstanding qualifications continue to be critical to the successful accomplishment of the Board's mission. The loss of technical competence due to retirements and other reasons must be countered with an aggressive recruiting campaign for new engineering talent at all levels including entry level engineers. The Board relies on a focused and well-executed human capital program that uses all available tools to attract and retain the technical talent necessary to accomplish the Board's mission. The combination of an aging workforce and high demand for experienced scientists and engineers by other organizations will remain a challenge for the Board. Approximately 16 percent of the Board's technical staff is eligible for regular retirement today. Competition for scientists and engineers with the Board's required expertise continues to be very stiff due to the need for increased technical expertise by the Nuclear Regulatory Commission, the Department of Defense's emphasis on combating weapons of mass destruction, and DOE's nuclear weapons complex activities. Consequently, the Board expects the need to spend more resources on recruiting highly qualified technical personnel in a highly competitive job market.

## PROGRAM PERFORMANCE OVERVIEW

In establishing the Board, Congress chose to establish an independent external oversight organization composed of technical experts in the field of nuclear health and safety. Therefore, the Board was given specific oversight and advisory powers, as opposed to being an independent regulator of the DOE defense nuclear complex. In view of the Board's enabling legislation and specific mission, the Board must focus its expertise and resources on one goal:

Ensuring adequate protection of public health and safety at the Department of Energy's defense nuclear facilities.

To achieve this general goal, the Board has identified the following strategic areas of concentration and has developed performance goals and outcome objectives for each:

## AREA 1. SAFE NUCLEAR WEAPONS OPERATIONS

Stockpile management is the term used to describe the industrial aspects of maintaining the U.S. nuclear weapon stockpile and complex. The Board's oversight activities for this strategic area focus on assuring that current and planned operations at the Pantex Plant in Texas, the Y-12 National Security Complex in Tennessee, and tritium operations at the Savannah River Site (SRS) in South Carolina, are accomplished safely according to approved standards.

Also included in this strategic area is DOE's stockpile stewardship program, which refers to activities carried out by DOE to ensure confidence in the safety, security, and reliability of nuclear weapons in the stockpile, in the absence of underground nuclear weapons testing. The Board's oversight of the stockpile stewardship program is centered on assuring the safety of the research, development, manufacturing, and testing activities conducted at LANL in New Mexico, the Lawrence Livermore National Laboratory (LLNL) in California, the Nevada National Security Site (NNSS), and Sandia National Laboratories (SNL) in New Mexico and California.

**Objective:** DOE operations that directly support the nuclear stockpile and defense nuclear research are conducted in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.

**Performance Goal:** The Board will promote DOE actions to effectively implement Integrated Safety Management (ISM) at NNSA defense nuclear facilities. The Board will ensure that DOE adopts credible health and safety standards at NNSA's defense nuclear facilities, and properly implements them, with particular emphasis on formal conduct of operations, safety start-up/restart of facilities or activities, and nuclear explosive safety. The Board will assist DOE to improve the quality and implementation of Documented Safety Analyses at NNSA's defense nuclear facilities, including addressing such complex issues as specific administrative controls, electrostatic discharge hazards, and nuclear material packaging.

**Outcome:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board, and will operate its defense nuclear facilities to approved safety standards, rules, orders, and directives. Follow-up technical evaluations of DOE's nuclear stockpile activities will verify necessary improvements in safety.

## AREA 2. SAFE PROCESSING AND STABILIZATION OF NUCLEAR MATERIALS

With the shutdown of major weapon production activities at DOE defense nuclear facilities in the early 1990s, substantial quantities of plutonium, uranium, transuranic isotopes, irradiated fuel, and radioactive and hazardous fission products have remained in storage for extended periods under potentially unsafe and deteriorating conditions.

The Board's focus in this strategic area is to aid DOE in identifying these excess materials and in reviewing DOE's plans/programs to stabilize the materials and place them in a safe configuration for storage pending future programmatic use or disposition.

Board oversight in this area will include the stabilization of spent nuclear fuel at the Savannah River Site in South Carolina; the cleanup of the sludge from corroded spent nuclear fuel at the Hanford Site in Washington; and the conduct of the nuclear waste storage and remediation programs at both of these sites plus the Idaho National Laboratory (INL), and the Waste Isolation Pilot Plant (WIPP) in New Mexico. The Board will also provide health and safety oversight of DOE programs to safely deactivate and decommission facilities at the Hanford and SRS Sites, the Y-12 National Security Complex, and at LANL and LLNL.

**Objective:** The processing, stabilization, and disposition of DOE defense nuclear materials and facilities are performed in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.

**Performance Goal:** The Board will encourage DOE to develop technically robust plans for the safe retrieval, handling, and stabilization of remnant nuclear material; the consolidation and disposition of plutonium; the management of high-level waste; and treatment of sludge from spent nuclear fuel. The Board will promote DOE actions to effectively implement ISM at DOE's defense nuclear facilities. The Board will ensure that DOE adopts credible health and safety standards at DOE's defense nuclear facilities, and properly implements them, with particular emphasis on formal conduct of operations, and safety start-up/restart of facilities of activities. The Board will assist DOE to improve the quality and implementation of Documented Safety Analyses at DOE's defense nuclear facilities, including addressing such complex issues as specific administrative controls, Justifications for Continued Operation, and nuclear material packaging.

**Outcome:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. Follow-up technical evaluations of DOE's nuclear materials management and facility disposition activities will verify necessary improvements in safety, as DOE meets its commitments to the Board to stabilize and dispose of hazardous nuclear materials.

## AREA 3. SAFETY IN NUCLEAR FACILITIES DESIGN AND INFRASTRUCTURE

To ensure that safety is addressed early in the process, the Board reviews the design and construction of DOE's new defense nuclear facilities. These facilities must be designed and constructed in a manner that will support safe and efficient operations for 20 to 50 years. This requires a robust design process that will ensure appropriate safety controls are identified and properly implemented early in the process. The Board's expectation is that the design and construction phases of defense nuclear facilities will be accomplished using approved nuclear codes and standards, and demonstrate clear and deliberate implementation of ISM principles and core functions.

The Board's reviews of the design and construction of major facilities and projects in this strategic area are resource intensive and time consuming, but they result in significant safety improvements. In recent years, there has been an increase in the number of new DOE projects, with more than 20 projects in the design and construction phase.

The Board has initiated a process for the early identification of safety issues during design and their early resolution. The Board is further strengthening this initiative based on its experience to date. This initiative also reduces the likelihood of cost and schedule difficulties in new projects due to safety driven retrofits.

**Objective:** DOE's new defense nuclear facilities and major modifications to existing facilities are designed and constructed in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.

**Performance Goal:** The Board will assist DOE to address safety reviews early in the design process for its defense nuclear facilities and monitor to ensure implementation during the construction phase of each facility. The Board will ensure that DOE develops facility designs that are robust, with appropriate safety controls that comply with approved nuclear codes and standards.

**Outcome:** DOE will have acknowledged, acted upon, and/or resolved the safety-in-design issues raised by the Board. Follow-up technical evaluations will verify necessary improvements in the design and construction of DOE's new nuclear facilities and major modifications to existing facilities. New nuclear facilities will meet acceptable safety standards.

## AREA 4. EFFECTIVE NUCLEAR SAFETY PROGRAMS AND ANALYSIS

The Board's oversight effort in this area focuses on issues where a complex-wide perspective on health and safety issues across the DOE complex is required to identify and correct generic health and safety problems. Under the aegis of ISM, significant resources are applied to areas such as the technical competence of DOE's Federal workforce, the efficiency of DOE's line management and safety oversight, and the development and implementation of ISM systems with particular focus on safety analyses and controls. Key supporting functional areas are also reviewed, such as quality assurance, nuclear criticality safety, and training and qualifications.

The Board's reviews in this strategic area often build on data collected at the field level in the other strategic areas of concentration, integrating and analyzing the results to feed back key information that can be used to direct safety program improvement across multiple management lines. For example, at the Board's urging, DOE issued a quality assurance improvement plan to strengthen the implementation of existing quality requirements for safety-related components and systems. Similarly, the Board continues its efforts to ensure that DOE maintains a vigorous nuclear criticality safety infrastructure to support nuclear operations. The Board has been instrumental in driving recent DOE efforts to verify that vital safety systems have been identified throughout the defense nuclear complex and that their condition is understood and controlled.

**Objective:** DOE regulations, requirements, and guidance are developed, implemented, and maintained; and safety programs at defense nuclear facilities are established and implemented as necessary to adequately protect the health and safety of the public, the workers, and the environment.

**Performance Goal:** The Board will ensure that DOE maintains a credible suite of nuclear safety requirements in its directive system. The Board will encourage DOE line management to improve oversight of safety operations. The Board will assist DOE in improving the technical competence of its Federal workforce. The Board will require that DOE reinvigorate the development and implementation of ISM systems with particular focus on quality assurance, nuclear criticality safety, and training and qualification. The Board will encourage DOE's nuclear safety programs be founded on solid research by ensuring the continued integration and support of research, analysis, and testing to understand the effect(s) of off-normal conditions on nuclear safety technologies.

**Outcome:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. In addition, follow-up technical evaluation of DOE's safety programs at defense nuclear facilities will verify necessary improvements in safety.

## AREA 5. MANAGEMENT EXCELLENCE

The Board's effort in this area focuses on providing effective and transparent administrative services that support the accomplishment of the four previous goals. Management techniques are employed that keep the support staff small while maximizing the Board's technical staff. The Board relies on management guidance from OMB, the Office of Personnel Management (OPM), and other executive branch agencies, especially guidance that applies to small agencies, in developing and evaluating its internal policies and procedures. The Board uses cost-effective external service providers rather than maintaining a large government or on-site contractor staff. A small government staff, augmented by contractors, performs the functions of human resources management, financial management, acquisition management, information technology management, logistics management, security management, travel management, and other administrative matters. The Board utilizes organizations, such as the Small Agency Council, as forums to address common management issues and seek best business practices from other small agencies. The Board keeps the DOE Office of the Departmental Representative to the Defense Nuclear Facilities Safety Board informed of its activities and coordinates activities between the two agencies with that office to ensure DOE senior management is fully informed of the Board's safety concerns. The Board ensures the public has access to its work to the maximum extent possible in order to provide visibility into DOE activities to help maintain and restore, as needed, public confidence that defense nuclear facilities are being operated safely and that the Board's oversight is a positive influence on the safe execution of these activities. The Board documents its activities and makes correspondence available to the Congress and the public in order to ensure there is no ambiguity concerning the Board's position on a particular matter. The Board maintains a public website and conducts public hearings, as appropriate. Reports to Congress include annual reports detailing new health and safety issues. The Board provides informal briefings to Congressional committees and testifies before Congress, as required. The Board and DOE provide joint reports on appropriate topics. The Board's official reports are posted on its public website at www.dnfsb.gov.

**Objective:** The Board will strive for management excellence throughout its technical, legal, and administrative staffs.

**Performance Goal:** The Board has seven subordinate goals in this performance area.

- The Board will keep Congress informed on current health and safety issues at DOE's defense nuclear facilities and the status of progress toward issue resolution as required by the Board's statue and other legislation.
- The Board will inform the public of issues related to health and safety at DOE defense nuclear facilities.
- The Board will adopt and execute processes and procedures with DOE that are compatible with the Board's enabling legislation and further the Board's mission.
- The Board will implement internal processes and procedures that effectively support the Board's oversight operations and responsibilities as a Federal agency using OMB and OPM management guidance applicable to small agencies to gauge Board performance.
- The Board will recruit and further develop appropriate technical and professional expertise to accomplish the Board's mission.

- The Board will effectively manage the appropriated financial resources, exercise responsible stewardship over its resource to accomplish the mission, and achieve a "clean" annual audit opinion on its financial statements.
- The Board will assign staff to be in residence at selected sites.

**Outcome:** There will be public confidence that DOE's defense nuclear facilities are being operated safely and that the Board's oversight is a positive influence on the safe execution of these activities.

**Interrelationship of the Four Technical Performance Goals**

The interrelationship of these four strategic areas of concentration must be understood to appreciate the efficiency of the Board's operating plan and corresponding organizational alignment. The "lessons learned" from the Board's health and safety oversight activities cut across each of these four areas. Health and safety hazards identified in Safe Processing and Stabilization of Nuclear Material (Area 2) must be transferred to Safe Nuclear Weapon Operations (Area 1) to avoid or mitigate new or existing remediation issues. Likewise, the lessons learned from Safety in Nuclear Facilities Design and Infrastructure (Area 3) must be shared with managers responsible for preparing and enforcing health and safety-related guidance, requirements, and regulations in Effective Nuclear Safety Programs and Analysis (Area 4).

For example, in order to oversee safety at the Y-12 National Security Complex, the Board must assess the safety of hazardous activities that support the nuclear weapons stockpile (Area 1). To accomplish its general goal, the Board must also assess processing and stabilization of nuclear materials to support facility deactivation, such as Building 9206 (Area 2), construction of new defense nuclear facilities such as the Uranium Processing Facility (Area 3), and implementation of important safety programs such as nuclear criticality safety (Area 4).

Another example of the interrelationship of the four strategic areas of concentration is the safety oversight of the Savannah River Site. At this site, the Board must evaluate not only the safety of nuclear material processing and stabilization activities such as disposing of high-level waste (Area 2), but also the safety of nuclear weapon support activities involving tritium operations (Area 1), the construction of new defense nuclear facilities such as the Salt Waste Processing Facility (Area 3), and nuclear safety programs such as high-level waste tank integrity inspections (Area 4).

As discussed in Strategic Area 3 above, DOE is designing and constructing many new defense nuclear facilities that will be used to support nuclear weapon operations and/or nuclear material processing and stabilization. To ensure that DOE protects the health and safety of the public and the workers, the Board must pay close attention to the design, construction, start-up, and operation of these facilities, as well as major modifications to existing facilities, including the selection of governing safety standards and requirements. Equally important is the Board evaluation of the directives, standards, and programs governing DOE's safe performance of its hazardous defense nuclear activities. The Board's first three strategic areas of concentration heavily rely upon the implementation of specific DOE rules and directives. The Board's integrated, comprehensive oversight of the safety of DOE's defense nuclear facilities requires that the Board carefully evaluate these safety programs.

The synergy gained from constant information sharing among the Board's matrixed technical staff, which supports all four technical strategic areas of concentration, is key to achieving the Board's general goal. The Board's technical staff has been organized specifically to achieve the agency's performance goals and to execute its Strategic Plan and Annual Performance Plans. Using a matrix form of organization, the Board gains management flexibility and avoids the need to establish layers of middle management that

divert staff resources from performing health and safety reviews. Four interrelated technical groups staffed with technical specialists having both the education and work experience commensurate with the designated oversight assignments have been created. Each group has direct responsibility for achieving one of the four strategic performance goals described in this plan. Depending on the urgency of the issue, the Board may reassign resources among these groups as necessary.

## FINANCIAL PERFORMANCE OVERVIEW

As of September 30, 2013, the Board had adequate internal controls to conduct its health and safety oversight mission and to ensure that obligations did not exceed its total budget authority. As with many small agencies, the Board has adopted the "economies of scale" philosophy for obtaining needed administrative support services. For financial support, the Board has negotiated interagency agreements with the Department of Treasury's Bureau of the Fiscal Services and the United States Department of Agriculture's National Finance Center for personnel/payroll services, and the General Services Administration (GSA) for accounting services on a fee-for-service basis. The Board's financial statements were prepared in accordance with the accounting standards codified in the Statements of Federal Financial Accounting Standards (SFFAS) and OMB Circular A-136, *Financial Reporting Requirements*.

### Sources of Funds

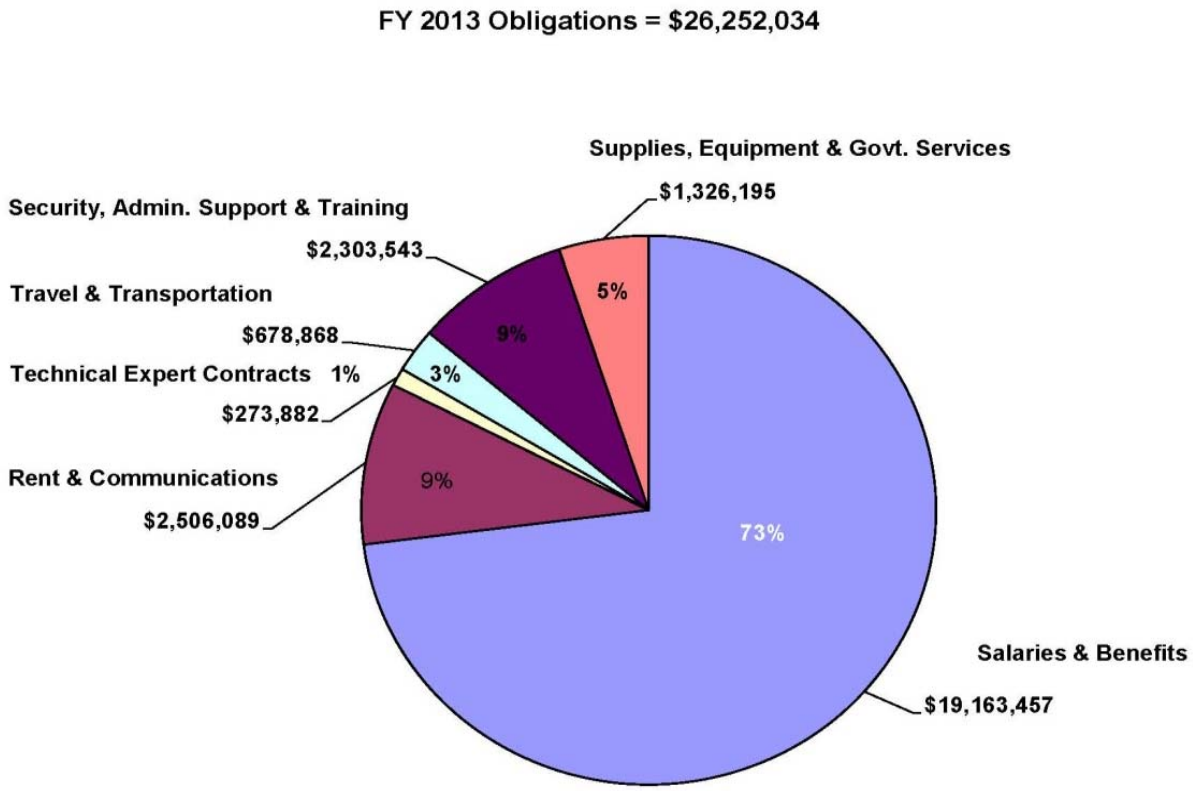
The Board receives an annual appropriation for Salaries and Expenses, with the funds made available for two years. The sources of funds available for obligation in FY 2013 and FY 2012 are listed as follows:

| | **FY 2013** | **FY 2012** |
|---|---|---|
| New Budget Authority | $26,713,571 | $29,130,000 |
| Prior Year Unobligated Balance | 924,672 | 366,386 |
| Recovery of Prior Year Obligations & Offsetting Collections | 771,523 | 118,765 |
| **Total Budgetary Resources** | **$28,409,766** | **$29,615,151** |

The significant reduction in total budgetary resources of $1,205,385 (4.1%) from FY 2012 was due to a $2,416,429 (8.3%) decrease in new (net) budget authority resulting from sequestration, offset by a $1,211,044 increase in prior year unobligated balance and recoveries.

**Uses of Funds by Function**

The Board incurred obligations of $26,252,034 in FY 2013. As shown below, the FY 2013 budget was used primarily to pay the salaries and benefits of the Board's employees, with most of the remaining resources dedicated to rent and the logistical support of the Board Members and employees as they conducted oversight operations.




## AUDIT RESULTS

The Board received an unqualified audit opinion on its FY 2013 financial statements. The auditors disclosed no instances of noncompliance with laws and regulations and identified no material internal control weaknesses.

A copy of the full audit report as provided to the Board can be found in Chapter 3 of this PAR.

## FINANCIAL STATEMENT HIGHLIGHTS

The Board's financial statements summarize the financial activity and financial position of the agency. The financial statements, footnotes, and required supplemental information appear in Chapter 3, *Auditors' Reports and Financial Statements*. Analysis of the principal statements follows:

**Analysis of the Balance Sheet**

| | FY 2013 | FY 2012 |
|---|---|---|
| Total Assets | $8,438,531 | $9,413,076 |
| Total Liabilities | $2,231,808 | $3,301,717 |
| Net Position | $6,206,723 | $6,111,359 |

The Board's assets were $8,438,531 as of September 30, 2013, a decrease of $974,545 from the end of FY 2012. Its total liabilities and net position (which together equal total assets) were $2,231,808 and $6,206,723, respectively, as of the end of FY 2013, a decrease/increase of $1,069,909 and $95,364, respectively, from the end of FY 2012. The Fund Balance with Treasury (FBWT) represents the Board's largest asset. A reduced FBWT (due to decreased budgetary resources as explained on page 11) was the primary reason for the decrease in Total Assets. The higher offsetting decrease in Total Liabilities (due to a reduction in end of year accounts payable and accrued payroll) resulted in the slight increase in Net Position.

**Analysis of the Statement of Net Cost**

| | FY 2013 | FY 2012 |
|---|---|---|
| Net Cost of Operations | $27,483,544 | $27,814,344 |

The Board's net cost of operations for the year ended September 30, 2013, was $27,483,544, a decrease of $330,800 or 1.2% from FY 2012 costs. Although the Board operated at a higher FTE level in FY 2013 (113) than in FY 2012 (109), increased personnel compensation costs were more than offset by larger cumulative reductions in other areas such as awards, travel, contracts, and acquisition of assets. The Board was able to reduce FY 2013 costs in these areas in response to decreased budget authority from sequestration.

**Analysis of the Statement of Changes in Net Position**

The Statement of Changes in Net Position reports the changes in net position during the reporting period. Net Position is affected by changes in its two components: Cumulative Results of Operations and Unexpended Appropriations. The Board's Net Position increased slightly by $95,364 or 1.6% from FY 2012 to FY 2013.

**Analysis of the Statement of Budgetary Resources**

The Statement of Budgetary Resources shows the sources of budgetary resources available and the status at the end of the period. It presents the relationship between budget authority and budget outlays, and reconciles obligations to total outlays. For FY 2013, the Board had Total Budgetary Resources available of $28,409,766, the majority of which was derived from new appropriations. Total Budgetary Resources decreased by $1,205,395 or 4.1% from the FY 2012 amount of $29,615,161 due to the decreased level of appropriations received in FY 2013.

For FY 2013, the Statement of Budgetary Resources showed the Board incurred obligations of $26,252,034, a decrease of $2,438,445 or 8.5% from FY 2012 obligations of $28,690,479. Net Outlays for FY 2013 were $27,951,417, a $1,431,949 or 5.4% increase over FY 2012 outlays of $26,519,468.

## LIMITATION OF THE FINANCIAL STATEMENTS

The principal financial statements have been prepared to report the financial position and results of operations of the Board, pursuant to the requirements of the Accountability of Tax Dollars Act of 2002. While the statements have been prepared from the books and records of the Board in accordance with generally accepted accounting principles (GAAP) for Federal entities and the formats prescribed by OMB, the statements are in addition to the financial reports used to monitor and control budgetary resources which are prepared from the same books and records.

The statements should be read with the realization that they are used for a component of the U.S. Government, a sovereign entity.

The Board's financial statements were audited by Lani Eko & Company, LLC.

## COMPLIANCE WITH THE INSPECTOR GENERAL ACT OF 1978

The Board is required to file a report annually under the Inspector General Act of 1978, Pub. L. 95-452, Oct. 12, 1978, 92 Stat. 1101, codified at 5 U.S.C. Appendix 3. The statute mandates a report which:

> (A) States whether there has been established in the Federal entity an office that meets the requirements of this section;
>
> (B) Specifies the actions taken by the Federal entity otherwise to ensure that audits are conducted of its programs and operations in accordance with the standards for audit of governmental organizations, programs, activities, and functions issued by the Comptroller General of the United States, and includes a list of each audit report completed by a Federal or non-Federal auditor during the reporting period and a summary of any particularly significant findings; and
>
> (C) Summarizes any matters relating to the personnel, programs, and operations of the Federal entity referred to prosecutorial authorities, including a summary description of any preliminary investigation conducted by or at the request of the Federal entity concerning these matters, and the prosecutions and convictions which have resulted.

The Board reports as follows for Fiscal Year 2013:

> (A) The Board did not establish an IG office.
>
> (B) The Board took the following actions to ensure audit of its programs and operations:
>
> - Annual Financial Statements Audit in accordance with the Accountability of Tax Dollars Act of 2002.
>
> (C) The Board referred no matters to prosecutorial authorities.

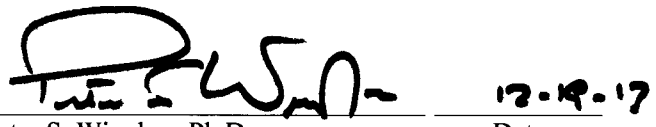
## SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

This section provides information on the Board's compliance with the Federal Managers' Financial Integrity Act (FMFIA) and the Improper Payments Information Act, as well as other management information, initiatives, and issues. FMFIA requires that agencies establish controls that provide reasonable assurance that: (1) obligations and costs comply with applicable law; (2) assets are safeguarded from waste, loss, unauthorized use, or misappropriation; and (3) revenues and expenditures

are properly recorded and accounted for. It also requires the Board's Chairman to provide an assurance statement on the adequacy of management controls.

**Assurance Statement (FMFIA)**

The Defense Nuclear Facilities Safety Board's (Board) management is responsible for establishing and maintaining effective internal controls that meet the obligations of FMFIA within their areas of responsibility. Based on my personal observation, line managers' knowledge of daily operations, and the independent audit conducted of our financial statements, the Board can provide reasonable assurance that its internal control over the effectiveness and efficiency of operations and compliance with applicable laws and regulations as of September 30, 2013 was operating effectively, and no material weaknesses were found in the design or operation of the internal controls. In FY 2013, the Board made significant progress in strengthening formal internal controls over the technical program areas of the DNFSB. In FY 2014, these efforts will continue under the guidance and direction of DNFSB's Executive Committee on Internal Controls (ECIC).



Peter S. Winokur, Ph.D.
Chairman

12-19-13
Date

**Improper Payments Information Act**

The Board is considered to be at low risk for improper payments since the functional payment areas are limited to traveler reimbursement, commercial vendors for supplies and services, and the payroll electronic funds transfer payments. The Board does not administer any entitlement, grant, or loan programs. During FY 2013, GSA and the National Finance Center made net total payments of $27,951,417 on behalf of the Board. Neither the GSA accounting staff, nor the Board's finance staff, has identified any improper payments during this period.

**Federal Travel Card Program**

The Board is a full participant in the Federal Travel Card Program, and has issued travel credit cards to employees whose official duties may require them to travel. The Board's financial staff routinely monitors each employee's travel card usage to ensure that charge activities are restricted to official government travel-related expenses and that the employee is paying credit card bills ontime.

During FY 2013, employees were reimbursed for authorized travel-related expenses no more than five working days after their completed travel vouchers were submitted for processing. During this same period, no Board employee's travel card account was more than 60 days delinquent, and no inappropriate usage of the travel card was identified during monthly reviews of credit card activity.

**Federal Purchase Card Program**

The Board has made extensive use of the U.S. Government's purchase card program to expedite the purchase of authorized supplies and services both in its headquarters and field operations. During FY 2013, transactions using individual purchase cards totaled $311,378. The Board established a system of

internal controls to ensure that only authorized purchases are made by each card holder. The Board's purchase card procedures were distributed to all new purchase cardholders during FY 2013. These procedures stressed the requirement for completion of the electronic training program necessary to exercise the delegations of procurement authority.

The Board's internal control procedures for the purchase card program are much more stringent than the requirements of the program itself, without sacrificing the overall efficiency and timeliness of this purchasing method. All card purchases are reviewed and approved by the cardholder's supervisor, the purchase card coordinator, and finally, a Board contracting officer who gives final approval of invoices. The number of purchase cardholders is kept at the minimum necessary to effectively conduct Board operations. At the close of FY 2013, the total number of purchase cards issued was eight at headquarters, and three at our field locations.

**Federal Information Security Management Act (FISMA)**

The Federal Information Security Management Act (FISMA) requires each agency to report annually to OMB on the status of its information technology (IT) security program. In FY2013, the Board continued to leverage emerging technologies to both improve the effectiveness of its workforce and increase its security posture. In conjunction with deploying a new mobile device program, the Board is taking advantage of a cloud-based mobile device management service to ensure that the increased work flexibilities offered by new mobile devices does not put Board information at an increased risk of compromise.

The Board submitted its annual FISMA report to OMB, and no areas of concern were identified in the independent auditor's evaluation of the Board's submission. In addition, no IT material weaknesses were identified in the independent auditor's internal control report for the sixth year in a row.

**Government Accountability Office (GAO) Investigations and Reports**

Audit follow-up is an integral part of good management. In accordance with OMB Circular A-50, *Audit Followup*, each agency must establish systems to assure the prompt and proper resolution and implementation of audit recommendations. During FY 2013, GAO did not conduct any reviews or investigations of Board oversight programs, and there are no open audit recommendations from previous GAO reviews.

**Internal Control Program**

The Board has a formal internal control policy which delineates the requirements for the program. In FY 2013, internal controls for the following areas which have been routinely evaluated over the years were evaluated once again with no significant or reportable issues: Time and Attendance, Transportation Fringe Benefits Subsidies, Purchase Cards, Employee Travel Cards, Property Accountability, Classified Documents, Security Clearances, Retention and Relocation Bonuses Program, Telework Program, Advisory and Assistance Contracts, Government in the Sunshine Act, and Information Systems Security.

Although the Board did not identify any material weaknesses in its internal control program, the Board did identify a lack of formal controls in its technical operations as a reportable condition. The Board is committed to the continual pursuit of excellence in its operations, and devoted significant resources in FY 2013 to the development of formal internal controls in major technical operation work processes. A number of controls were documented in FY 2013, and implementation of those controls (including staff training) began in early FY 2014.

Chapter 2
# Program Performance

**Overall Outcome: Using its expert knowledge, the Board has complied with its statutory mission to ensure that public and worker health and safety are adequately protected at DOE defense nuclear facilities and met its performance goals for FY 2013. The report notes cases where additional safety improvements sought by the Board have not yet been fully achieved by DOE. The Board is actively pursuing these safety improvements in FY 2014.**

## INTRODUCTION

The Board's contribution to the safety of DOE's defense nuclear activities derives from four basic types of activities that are embodied in the Board's enabling legislation. First, the Board evaluates DOE's policies and processes to ensure that fundamental safety requirements necessary to undertake highly hazardous operations exist at DOE. These reviews evaluate topics such as technical competence of DOE and contractor personnel, adequacy of safety requirements and guidance, and the presence of a strong safety culture. The deficiencies in Federal oversight and corporate safety programs revealed by the Deepwater Horizon oil rig accident clearly illustrate the safety risks inherent in deficiencies in these areas and the need for safety organizations, such as the Board, to emphasize reviews of this type. The Board plans this type of oversight in advance, and those plans are generally not affected by unanticipated changes in DOE's plans or activities.

The second major type of safety oversight activity performed by the Board is the evaluation of actual hazardous activities and facilities in the field. These reviews focus on identifying the hazards attendant with DOE's mission activities and evaluating the controls put in place to mitigate those hazards. The Board plans for these types of reviews based on the risk, complexity, maturity, and significance of the activities underway or planned by DOE. However, unanticipated changes in DOE's plans or new, emergent information often change the priority of the Board's oversight in this area. The Board continuously seeks to be proactive and to focus DOE's attention on the most significant safety issues present in the defense nuclear complex at any given time. Therefore, because the priority of safety issues can change rapidly, the Board cannot always predict in advance what activities it will review or what safety outcomes it will ultimately achieve.

Third, the Board provides expert-level reviews of the safety implications of DOE's actions, decisions, and analyses. It is extremely important that the Board provide DOE with independent evaluations of the technical quality and safety impacts of DOE's decisions and actions. For example, well-intended actions by DOE managers can have significant unintended negative consequences if they are based on faulty, inadequate, or misunderstood information.

The Board attempts to be proactive in conducting this type of review, but it is necessary that DOE first develop at least preliminary plans with sufficient detail to allow for a meaningful technical review. Therefore, it is not possible for the Board to plan all of its efforts in this important area explicitly in advance.

The Board does allocate resources to this form of oversight, and does report the significant outcomes that result from such oversight in its performance reports.

The last major type of oversight performed by the Board is the identification of new safety issues that were otherwise unknown in the DOE complex. Since, by definition, these safety issues would not have

been addressed without the Board's efforts, this may be the area in which the Board has the largest impact on the safety of DOE's highly hazardous operations. However, by their very nature, it is impossible to plan for these emergent safety issues in advance. The effectiveness of this type of safety oversight activity relies exclusively on the expertise of the Board and its staff.

The Board uses its Strategic Plan and Annual Performance Plan to ensure that its resources remain focused on the most significant safety challenges and the DOE activities that warrant the most external review. All of the Board's safety activities are closely tied to goals and objectives embodied in these plans. This approach gives the Board confidence that its staff (113 FTEs in FY 2013, including Board Members) and budget (approximately $26.3 million in FY 2013 obligations) are dedicated to the highest risk activities under the Board's jurisdiction. The Board's strategic plan may be viewed in its entirety on the Board's internet website at www,dnfsb.gov.

The information in this PAR is also provided directly to the Congress in the Board's statutorily required annual report, also available on the Board's website. There are slight differences between the two reports because the annual report covers calendar years rather than fiscal years. The Board's *Twenty-Fourth Annual Report to Congress* will be issued during the first quarter of CY 2014. The Board also provides periodic reports to Congress and DOE on the status of significant unresolved technical differences between the Board and DOE on issues concerning (1) the design and construction of DOE's defense nuclear facilities, and (2) the infrastructure of aging DOE defense nuclear facilities.

## SAFETY GOALS

The Board revised its strategic plan in March 2011 to refocus its efforts and better align its resources to meet the challenges of ensuring safety in the defense nuclear complex as the DOE mission evolved during the latter half of the previous decade. The performance goals that result from the current strategic plan are summarized below.

## SAFETY OVERSIGHT GOAL

> **Ensure adequate protection of public health and safety at the Department of Energy's defense nuclear facilities.**

To achieve this general goal, the Board has identified the five strategic areas of concentration discussed in the Program Performance Overview section of Chapter 1.

## ANNUAL PERFORMANCE OBJECTIVES

The Board's *Annual Performance Plan for FY 2013* identified annual performance objectives that consist of reviews that were to be conducted in support of the Board's strategic plan, plus the identification of candidate areas for these reviews. An outcome measure for each objective is described as part of the discussion of each annual performance goal. Qualitative assessments of the outcome associated with each annual performance goal are provided in this chapter of the Board's PAR.

The Board measures progress toward achieving the positive outcomes embedded in each annual performance goal in three stages, by evaluating:

- DOE's acknowledgment that a safety enhancement is needed after the Board communicates the results of its technical reviews;
- DOE's subsequent development of appropriate corrective actions to resolve the Board-identified safety issue; and

- DOE's implementation of the necessary corrective actions, leading to the successful resolution of the safety issue and resulting in improved protection of the public, the workers, and the environment.

The basis of measurement for the qualitative assessment includes formal, publicly-available correspondence from DOE and its defense nuclear contractors, Board correspondence, staff reports, DOE and contractor public testimony, and other sources. Past reporting (see the Board's Annual Reports) of Board-identified issues and associated DOE responses demonstrates that the Board has had a clear and positive impact on the safety of DOE defense nuclear activities.

**Assessment of the Reliability and Completeness of Performance Data**

The sources used by the Board to measure its outcome are robust, varied, and independent. Documentation of accomplishments includes the Board's Annual Reports to the Congress, correspondence to and from DOE, Board technical reports, and public meeting records. These documents are available for public review on the Board's internet web site, www,dnfsb.gov. As such, the Board believes that the performance data used in this report are reliable and complete.

**Comparison of Fiscal Year 2013 Actual Performance with Planned Performance**

The following pages provide detailed information comparing the Board's actual performance driving safety improvements at DOE to its plans for FY 2013. Information concerning the Board's performance accomplishments in FY 2009 through FY 2012 is contained in the Board's FY 2014 Budget Request to Congress, which is published on the Board's website at www,dnfsb.gov.

## PERFORMANCE GOAL 1: SAFE NUCLEAR WEAPONS OPERATIONS

**DOE operations that directly support the nuclear stockpile and defense nuclear research are conducted in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.**

**OUTCOME:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board, and the facilities are operated to approved safety standards, rules, orders, and directives. Follow-up technical evaluation of DOE's nuclear stockpile activities will verify necessary improvements in safety.

**FY 2013 Performance Objectives:**

The Board and its staff will verify the safety of DOE's defense nuclear facilities and activities relating to the maintenance, storage, and dismantlement of the nuclear weapon stockpile, quality assurance of the stockpile, as well as its associated research and development, and the capability to test nuclear weapons and disposition damaged or improvised nuclear devices (such as a terrorist device). The Board and its staff will conduct assessments of DOE's efforts to develop and implement safety management systems for stockpile management activities. The Board's evaluations will be split between DOE efforts to develop safety systems (e.g., system and process designs, safety bases, control schemes, and administrative programs) and DOE efforts to implement safety management systems. These reviews will focus on activities at the Pantex Plant, Y-12, SRS tritium facilities, LANL, LLNL, SNL, and NNSS. Representative areas for review include:

- Development, implementation, and refinement of site-wide and facility-specific safety analyses and controls for nuclear facilities and activities (e.g., safety analysis reports and annual updates developed per 10 CFR 830).
- Cross-cutting functional areas such as legacy material disposition, nuclear criticality safety, fire protection, nuclear explosive safety, seismic design, conduct of operations, work planning, training and qualification, maintenance, and configuration management.
- Special studies of unique or significant hazards at DOE nuclear facilities (e.g., classified projects, process technology alternatives, and disposition of special items and by-product materials).
- Weapon-specific safety analyses and controls identification and implementation for nuclear weapon activities (e.g., W76, W84, and W88).
- Nuclear explosive operations at Pantex (e.g., conduct of operations, procedures, lightning protection, electrostatic discharge controls), and adequacy of the Nuclear Explosive Safety Study process.
- Laboratory support of nuclear explosive operations at Pantex (e.g., sensitivity testing of high explosives, electrostatic discharge and lightning protection studies, and weapon response evaluation and documentation).
- Uranium chemical processing and component assembly/disassembly operations at Y-12 (e.g., conduct of operations, work planning and control, criticality safety, fire protection, and operation and maintenance of vital safety systems).
- Safety basis for the waste storage facilities at LLNL.
- Corrective actions to strengthen institutional safety programs and infrastructure at LANL, LLNL, and SNL including reviews of the adequacy of vital safety system assessments and the implementation of conduct of operations and engineering at various LANL facilities.
- Readiness to dispose of damaged nuclear weapons or improvised nuclear devices at NNSS.
- Subcritical experiments at NNSS.
- Potential nuclear explosive operations at the Device Assembly Facility at NNSS.
- Operation of the National Criticality Experiments Research Center at NNSS.

- Confinement ventilation and fire suppression system improvements at NNSS Device Assembly Facility.
- Development and implementation of upgrades to address seismic vulnerabilities identified by the Seismic Analysis of Facilities and Evaluation of Risk (SAFER) analyses for the LANL Plutonium Facility, and implementation of Recommendation 2009-2, *Los Alamos National Laboratory Plutonium Facility Seismic Safety*.
- NNSA's transition from Technical Business Practices, the Development and Production Manual, and Engineering Procedures to the new Requirements Modernization and Integration system for the weapon lifecycle.
- Safety basis for the Annular Core Research Reactor at SNL.
- Implementation of controls related to the Auxiliary Hot Cell Facility at SNL.

While performing its reviews, the staff will assess the effectiveness of integrated safety management implementation and the safety controls identified for ongoing operations as well as any new weapon system surveillance, life extension, or dismantlement projects at Pantex, Y-12, or NNSS that start in FY 2013.

**FY 2013 Measured Performance:**

**LANL Plutonium Facility Seismic Vulnerabilities.** DOE, in its September 2012 response to the Board's July 18, 2012 letter committed to conduct an alternate nonlinear seismic analysis of the plutonium facility. The Board's staff has closely observed this substantial effort since its start in October 2012. Completion of this analysis is a critical step in determining the risk associated with a post-seismic collapse and fire accident scenario. The Board's July 17, 2013 letter emphasized the importance of the analysis and requested a schedule that supports timely completion.

**Safety Basis at the LANL Plutonium Facility.** Following identification of new collapse mechanisms at the Plutonium Facility, DOE directed the LANL contractor to develop a Safety Basis Addendum to justify continued operations. The Board issued its January 3, 2013 letter urging DOE to consider additional compensatory measures including reduction of nuclear material inventory, robust containerization and increased emphasis on emergency preparedness. DOE issued the Addendum and responded to the Board on March 27, 2013, reporting that the Secretary of Energy's review of consequence and frequency indicated it was safe to continue operations. The Board reported that it could not reach this conclusion until the above mentioned alternate seismic analysis was complete.

**Nuclear Criticality Safety at LANL.** In a July 15, 2013 letter to NNSA, the Board expressed concern with long-standing issues associated with LANL's implementation of its Criticality Safety Program. Concerns include: a significant shortage of contractor criticality safety staff that has hindered their ability to address criticality deficiencies; most criticality safety controls are not incorporated into operating procedures; operators typically do not utilize written procedures when performing work; fissile material labels do not list parameters relevant to criticality safety (e.g., mass); some fissile material operations lack criticality safety evaluations (CSE); and some CSEs do not analyze all credible abnormal conditions. Most fissile material operations in the Plutonium Facility have been paused since June 27, 2013. In response to the Board letter, NNSA briefed the Board on September 24, 2013, and intends to release an approved resumption plan prior to restarting full operations with fissile materials.

**Continued Operations of Y-12 Aging Infrastructure.** In a letter to NNSA dated March 13, 2007, the Board identified concerns regarding NNSA's ability to safely operate the 9212 Complex for an extended period of time and established an annual reporting requirement to evaluate the physical condition of the building's systems, structures, and components. In February 2012, NNSA deferred transition of the operations in Buildings 9215 and 9204-2E from the scope of the planned Uranium Capabilities Replacement Project. Given this change, the Board emphasized the need for NNSA and the Y-12

contractor to more vigilantly monitor the condition of these facilities during the October 2, 2012, Public Hearing in Knoxville. On August 26, 2013, NNSA briefed the Board on the Continued Safe Operations Oversight Team's review, which was expanded this year to incorporate Buildings 9215 and 9204-2E.

**Y-12 Training and Qualification Program.** In a letter to NNSA dated June 5, 2012, the Board identified numerous areas for improvement related to the Y-12 Training and Qualification Program. During FY 2013, the Y-12 contractor took action to address the Board's concerns by formalizing a continuing training strategy within its production organization and making improvements to its systematic approach to training. The staff provided feedback to the Y-12 contractor regarding this strategy and continues to actively track progress towards implementing the new training program.

**Y-12 Work Planning and Control.** In a letter to NNSA dated December 29, 2011, the Board identified concerns with the planning, control, execution, and oversight of work at Y-12. The Y-12 contractor briefed the Board on April 24, 2013, regarding an independent contractor assessment of the effectiveness of corrective actions taken through the comprehensive Work Planning and Control Performance Improvement Plan. A number of weaknesses continue to persist and the Y-12 contractor committed to actions to sustain key initiatives and further improve in this area.

**Pantex Emergency Preparedness.** In October 2012, members of the Board's staff conducted a review of the Pantex emergency preparedness program, observed an emergency exercise, and provided immediate feedback regarding a lack of personnel training and the adequacy of exercises and drills. On March 14, 2013, the Board conducted a public meeting and hearing in Amarillo, Texas, that included discussions of the weaknesses in the program. As a result, NNSA recognized the weaknesses and initiated corrective actions for the emergency preparedness program at the Pantex Plant.

**Pantex Fire Protection.** On February 25, 2013, the Board issued a letter to NNSA documenting its concern regarding maintenance and operation issues with the fire protection systems at Pantex. NNSA responded by taking immediate actions to address issues with the fire suppression systems and maintenance procedures and committed to prioritizing long-term improvements to the fire protection system.

**Pantex Probabilistic Seismic Hazard Analysis (PSHA) Update.** Beginning in August 2012, and throughout FY 2013, members of the Board's staff reviewed the seismic qualifications of the Pantex site and noted a lack of compliance with DOE Order 420.1B, *Facility Safety*; specifically the requirement to evaluate the need to update the site seismic hazard analysis every ten years. NNSA and its contractor responded by publishing plans to address the seismic hazard at Pantex and updating the seismic source characterization model.

**Pantex Documented Safety Analysis.** On January 28, 2013, the Board received a briefing by NNSA regarding its continuing efforts to bring the Pantex documented safety analysis (DSA) into compliance with NNSA directives. Particular shortcomings were originally documented in a Board letter issued July 2, 2010. The Board reviewed the new plan and implementation efforts presented by NNSA and provided immediate feedback. NNSA utilized the Board's input and published an updated DSA Improvement Plan, which was published in July 2013.

**Pantex Safety Culture.** On March 2, 2012, the Board issued a letter describing major shortcomings in the Pantex safety culture that led to operations being performed that exceeded the approved nuclear explosive safety boundaries. NNSA initiated multiple efforts to address this significant concern including a B&W Pantex investigation of the nuclear explosive safety change evaluation process, an NNSA assessment of the same process, and an HSS investigation of Pantex safety culture. The Board further investigated how its concerns were being addressed at a public meeting and hearing held on March 14,

2013. NNSA is continuing to take corrective actions to increase safety of nuclear explosive operations and, in particular, to improve communication between management and workers.

**Nuclear Explosive Safety (NES) at Pantex.** The Board's staff observed several NES evaluations and raised a number of key issues:

- NNSA has allowed ongoing nuclear explosive operations to continue without correcting or mitigating critical safety concerns raised by these evaluations.
- NNSA does not provide adequate staffing levels of qualified federal personnel needed to conduct these evaluations.
- NNSA does not ensure that these evaluations are revalidated as required by the directives.

These and other issues were the subject of a Board public hearing in March 2013 in Amarillo, Texas. During the preparation phase for this public hearing, NNSA restructured the nuclear explosive safety program to address many of the concerns that had been raised informally via technical interchanges between the Board's staff and the NNSA staff. The Board received assurances from NNSA that these changes would improve the visibility and the independence of the current process and should lead to improvements in all of these areas.

**LLNL Safety Basis Processes**. On August 30, 2012, the Board issued a letter expressing concern that there were systemic deficiencies in the development, review, and approval of safety control strategies at LLNL. In response to the Board's letter, NNSA and the contractor each conducted an independent, external review of their respective nuclear safety basis processes during FY 2013. The Board evaluated the results of these reviews and will assess the effectiveness of the associated corrective actions as part of the Board's oversight process.

**LLNL Waste Storage Facilities Safety Basis.** A review team from the Board's staff assessed the LLNL Waste Storage Facilities Documented Safety Analysis for compliance with DOE Standards and noted a number of deficiencies and errors within the analysis. The staff review team communicated these deficiencies to the Livermore Field Office, which then directed the contractor to formally resolve the staff comments. One of the identified deficiencies led the LLNL contractor to declare that a potential inadequacy in the safety analysis existed. The contractor is working to address the staff review team comments. The staff is planning a follow up review of the Waste Storage Facilities Safety Basis once the contractor has completed updating the analysis.

**NNSS National Criticality Experiments Research Center (NCERC)—Safety Basis and Instrumentation and Control.** The Board's staff continued to evaluate NNSA's efforts to improve operations at NCERC—efforts that NNSA began in response to a Board letter dated August 5, 2010. Areas of concern included the adequacy of the safety analysis, classification of controls, and the reliability of instrumentation and control systems. In response, NNSA identified corrective actions for each of the Board's concerns and in FY 2013, NNSA implemented several improvements to the safety analysis and controls at NCERC.

**NNSS Device Assembly Facility (DAF) Fire Suppression System.** The Board and its staff have long noted deficiencies in the DAF fire suppression system that should be corrected before beginning more hazardous operations. In response, NNSA initiated a project to assess the condition of the system, analyze and prioritize needed improvements, develop improvement options, and begin improvements to the system. In FY 2013, NNSA approved a new comprehensive project plan that should address the full scope of the deficiencies.

**Fire Protection and Life Safety for Subcritical Experiments at NNSS.** The Board's staff reviewed plans and improvements to fire protection and life safety in the underground tunnel complex for

subcritical experiments at NNSS. As a result of staff-to-staff interactions, NNSA identified more appropriate requirements for safety and health in underground facilities at NNSS.

## PERFORMANCE GOAL 2: SAFE NUCLEAR MATERIAL PROCESSING AND STABILIZATION

**The processing, stabilization, and disposition of DOE defense nuclear materials and facilities are performed in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.**

**OUTCOME:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. Follow-up technical evaluation of DOE's nuclear materials management and facility disposition activities will verify necessary improvements in safety, as DOE meets its commitments to the Board to stabilize and dispose of hazardous nuclear materials.

**FY 2013 Performance Objectives:**

The Board and its staff will conduct assessments of DOE's efforts to characterize, stabilize, process, and safely store plutonium, uranium, and other actinides, residues, spent nuclear fuel, and wastes from the nuclear weapons program to ensure that these efforts are performed safely and that the risks posed by these materials are addressed in a timely manner. These reviews will be conducted using the principles of Integrated Safety Management and will include assessments of the design of new facilities, facility readiness to safely begin new operations, the safety of ongoing operations, and the suitability of long-term storage and disposal facilities. Representative areas for review include:

**Implementation of Recommendation 2000-1:**
- Stabilization and disposal of plutonium-bearing residues at LANL.
- Installation of systems to remove spent nuclear fuel sludge in the K-West Basin at the Hanford Site.
- Analysis of methods to treat K-West Basin sludge at the Hanford Site.

**Safe management of spent nuclear fuel:**
- Long-term storage of spent nuclear fuel at SRS that no longer has a disposition path.
- Monitoring and characterization of degrading metal fuels at SRS.
- Processing of spent nuclear fuel in H-Canyon at SRS.
- Efforts to consolidate, store, and dispose of spent nuclear fuel at Idaho National Laboratory (INL).

**Safe management of surplus nuclear materials:**
- H-Canyon and HB-Line processing campaigns and life extension activities.
- Operation of plutonium blending and packaging systems at HB-Line.
- Startup and operation of plutonium oxide production at H-Canyon and HB-Line.
- Long-term storage of neptunium oxides at INL.
- Disposal of U-233 inventory in Building 3019 at ORNL.
- Complex-wide consolidation and disposition of nuclear materials.

**Safe management of high-level wastes:**
- Removal and processing of salt waste from HLW tanks at SRS and preliminary startup preparations for the Salt Waste Processing Facility.
- Operation of HLW facilities at SRS including Saltstone and the Defense Waste Processing Facility.
- Bulk waste removal and cleaning of HLW tanks at Hanford and SRS.
- HLW tank structural integrity at the Hanford Site and implementation of corrosion controls.
- Conduct of operations and work planning in the tank farms at the Hanford Site and SRS.

- Design and testing of waste feed mixing and delivery systems at Hanford tank farms.
- Design of supplemental processing and treatment of waste from Hanford tanks.
- Ventilation system upgrades to Hanford double-shell tanks.
- Operations at the Integrated Waste Treatment Unit at INL.
- Maintenance program at the Waste Encapsulation and Storage Facility.

**Safe management of transuranic wastes:**
- Retrieval, characterization, and packaging of TRU wastes at Hanford, LANL, ORNL, SRS, and INL.
- TRU waste disposal operations at WIPP.

**Deactivation and decommissioning activities:**
- Deactivation and decommissioning work at defense nuclear facilities.
- Preparations for material at risk reduction and deactivation of 235-F (Recommendation 2012-1).

**FY 2013 Measured Performance:**

**Maintenance Program at the Waste Encapsulation and Storage Facility (WESF).** DOE provided a corrective action plan to address the Board's letter dated October 6, 2011, relating to the Waste Encapsulation and Storage Facility (WESF) maintenance program. Members of the Board's staff reviewed the closure packages associated with the plan and observed a contractor review of the effectiveness of the plan. As a result of the original letter and associated follow-up reviews, DOE made improvements in the areas of formal periodic monitoring and surveillance of design features, the quality/use of technical procedures, facility-specific system training, and the effectiveness of contractor oversight.

**Installation of Systems to Remove Spent Nuclear Fuel Sludge in the K-West Basin at the Hanford Site.** Members of the Board's staff reached an agreement with DOE on the path forward associated with design issues identified in a project letter dated July 31, 2012. DOE agreed to remove non-conservative assumptions implicit in the accident analysis and is specifying industry consensus standards for the design of safety-related instrumented control systems.

**Recommendation 2012-2*, Hanford Tank Farms Flammable Gas Safety Strategy*.** On September 28, 2012, the Board issued Recommendation 2012-2 to address the need to take action to reduce the risk posed by flammable gas events at the Hanford Tank Farms. The Secretary of Energy accepted the recommendation on January 7, 2013, and submitted an Implementation Plan on June 6, 2013, which the Board accepted. Members of the Board's staff began reviewing DOE's near-term actions to improve the flammable gas controls.

**Safety Basis of Hanford Tanks with Deep Sludge.** Members of the Board's staff questioned DOE regarding the potential for large spontaneous flammable gas release events in the tanks receiving sludge waste and accumulating deep sludge layers. DOE declared a potential inadequacy in the safety analysis and, in March 2013, approved a Justification for Continued Operation. The staff members reviewed this justification and identified deficiencies. The staff passed on observations to DOE that the deep sludge issue was inadequately characterized, and the compensatory measures described are not sufficiently defined.

**Integrity of High-Level Waste Tanks and Transfer System at Hanford.** DOE addressed a number of the performance and maintenance issues related to the waste transfer system identified in a Board letter dated April 26, 2011**.** The Board encouraged DOE to continue laboratory and in-situ testing of corrosion mechanisms for the high-level waste tanks. These efforts are important in determining whether DOE's tanks and transfer pipelines can continue to perform for an anticipated 30 or more years. Members of the

Board's staff continue to monitor progress in this area. The staff also reviewed DOE's analyses of potential leaks of high-level wastes from a single-shell tank and a double-shell tank at Hanford.

**Activity Level Work Planning and Control at the Plutonium Finishing Plant (PFP).** Members of the Board's staff conducted an on-site review of activity-level work planning and control at the Plutonium Finishing Plant and noted that the quality of work packages was enhanced by the consistent reinforcement of high expectations from PFP senior management and persistent, focused work planning and control oversight from DOE. The staff members continued to monitor work planning and execution at PFP.

**Long Term Storage of Spent Nuclear Fuel at SRS**. The Board issued Technical Report 38, regarding the storage conditions of reactive metal fuels in L-Basin at SRS. In this report, members of the Board's staff identified that the reactive metal fuels are vulnerable to degradation, and that degradation is already occurring. As the fuel degrades, it becomes more difficult to handle, repackage, and/or process in the future. The Board encouraged DOE to give more attention to the disposition of these materials.

**Plutonium Processing at H-Canyon and HB-Line.** Members of the Board's staff reviewed the safety basis developed by the contractor to support the resumption of plutonium processing in HB-Line. The staff identified weaknesses in the safety strategy, which may have put the facility workers at risk in case of a fire, or led to vessel explosions in the case of a loss of power. DOE responded to these concerns by deciding to maintain a fire detection, alarm and notification system, and diesel generator as safety significant equipment.

**Operations at SRS High Level Waste Facilities.** Members of the Board's staff monitored operations in the Tank Farms and the Defense Waste Processing Facility (DWPF). In December 2012, a fire affected a transformer in DWPF. The staff reviewed the actions being taken by DOE to prevent a recurrence. These actions are reasonable, but the staff continues to monitor the situation. In January 2013, a fire in a Tank Farms trailer occurred near nuclear facilities and near a storage area for hazardous chemicals. The staff encouraged DOE to analyze the potential for fires in such structures to impact nuclear facilities or the workers operating those facilities.

**Recommendation 2012-1, *Savannah River Site Building 235-F Safety***. In FY 2012, the Board issued Recommendation 2012-1, identifying the need for DOE to remove or immobilize the residual plutonium-238 contamination located within Building 235-F because of the material's physical form, its significant quantity, and the more than 1000 site workers located nearby. As a result, during FY 2013 DOE took action to improve the safety posture of this facility by reducing transient combustibles and conducting emergency response drills. In addition, DOE developed a deactivation plan and began development of a safety basis to support initiation of deactivation activities and the removal of the residual contamination.

**Neptunium Oxide Storage at INL.** Members of the Board's staff reviewed the storage of neptunium oxide at the Fuel Manufacturing Facility vault. DOE's Office of Nuclear Energy plans to conduct surveillance of six storage containers during 2014. A specially designed glovebox is being procured by INL to facilitate the surveillance and repackaging. The staff reviewed the design of the glovebox and raised questions to DOE regarding the adequacy of the planning for handling the containers for insertion into the glovebox. DOE is working to respond to the staff's concerns.

**Integrated Waste Treatment Unit at INL.** DOE developed a corrective action plan in response to the June 2012 over-pressurization event at IWTU. Members of the Board's staff reviewed DOE's development and initial implementation of this plan. The staff members noted several vulnerabilities in the corrective action plan, which they communicated to DOE. DOE acted to address the staff's concerns. The staff continues to monitor the project's progress.

**Transuranic Waste Operations at INL.** Members of the Board's staff continued to review TRU waste operations at the Advanced Mixed Waste Treatment Project (AMWTP). In July 2013, the staff observed the much-delayed verification of Phase II implementation of Integrated Safety Management (ISM) Systems by the new contractor at AMWTP. The staff raised questions as to the absence of procedural compliance during a maintenance operation requiring step-by-step compliance. DOE incorporated the staff's observations in the closeout report.

**Uranium-233 Disposition at ORNL Building 3019.** Members of the Board's staff raised several safety and design-related concerns to DOE associated with the U-233 Disposition Project's "Phase II," in which U-233 materials will be processed for disposal. DOE intends to work toward addressing the staff members' concerns as it develops its Phase II plans.

**WIPP Maintenance Program.** On June 27, 2012, the Board issued a letter identifying safety issues associated with the formality and rigor of work planning and control for the maintenance program at WIPP. DOE and the contractor began to address the identified deficiencies. Members of the Board's staff followed these efforts to fully address the deficiencies.

## PERFORMANCE GOAL 3: SAFETY IN NUCLEAR FACILITIES DESIGN AND INFRASTRUCTURE

**New DOE defense nuclear facilities, and major modifications to existing facilities, are designed and constructed in a manner that ensures adequate protection of the health and safety of the public, the workers, and the environment.**

**OUTCOME:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. Follow-up technical evaluation will verify necessary improvements in the design and construction of DOE's new nuclear facilities and major modifications to existing facilities. New nuclear facility designs will meet acceptable safety standards.

**FY 2013 Performance Objectives:**

The Board and its staff will continue reviews of DOE's implementation of integrated safety management in design and construction activities. At least five reviews will be completed. In general, the reviews will evaluate the adequacy of geotechnical specifications and hazards analyses; the design of safety-related structures, systems, and components (SSCs); and the adequacy of SSC installation, startup, and operational readiness. Candidates for review include:

- Support and analyze the development and execution of implementation plans to the Board's recommendations, continue safety basis and design reviews, and initiate review of testing and turnover of safety systems for the Waste Treatment and Immobilization Plant at the Hanford Site.

- Review the design of the Chemistry and Metallurgy Research Replacement facility at Los Alamos National Laboratory to determine if there are any significant changes to the project's safety strategy since the Board's certification review in 2009. If Congress directs the 5-year project delay identified in the President's Budget Request for Fiscal Year 2013, the Board will obtain the project's archived design package for future use and review when DOE resumes the project.

- Work with DOE to resolve design issues identified by the Board during its review of the preliminary design and safety basis for the Transuranic Waste Facility project at Los Alamos National Laboratory. Review final design and safety basis development activities for the project.

- Review the Safety Design Strategy for the Radioactive Liquid Waste Treatment Facility Upgrade Project at Los Alamos National Laboratory. Monitor the development of the preliminary design for the low level waste treatment systems and development of the safety basis for the project.

- Review construction and development of the Technical Safety Requirements for the Salt Waste Processing Facility at the Savannah River Site.

- Review start-up activities for the Waste Solidification Building at Savannah River Site.

- Review the revised Project Execution Plan for the Uranium Capabilities Replacement Project. Review the revised Preliminary Safety Design Report and facility design to evaluate whether safety is adequately integrated at the Critical Decision-2 milestone. Conduct a public hearing at Y-12 in part to discuss outstanding and potential safety issues with the project.

- Continue systematic review of the adequacy of electrical safety programs at DOE nuclear sites.

- Review the adequacy of the DOE site probabilistic seismic hazard analysis for the Savannah River Site and Hanford.

As a result of these reviews, DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. Follow-up technical evaluation will verify necessary safety improvement in the design and construction of DOE's new nuclear facilities and major modification to existing facilities. New nuclear facilities will meet acceptable safety standards.

**FY 2013 Measured Performance:**

**Waste Treatment and Immobilization Plant (WTP) at the Hanford Site.** The Board continued its review of the design and construction of structures, systems, and components designated as important-to-safety in the WTP facilities. During this fiscal year, the Board did not identify any new safety issues with WTP. The Board's activities primarily consisted of evaluating potential safety issues and the adequacy of DOE's actions to resolve outstanding safety issues. Specific examples are cited below.

- On November 8, 2012, the Secretary of Energy informed the Board that DOE needed to revise its strategy for verifying key parts of the WTP design. This required DOE to revise the Implementation Plan for Recommendation 2010-2, *Pulse Jet Mixing at the Waste Treatment and Immobilization Plant.* In a letter dated July 15, 2013, the Board expressed concern with DOE's delay in revising the design verification philosophy and development of the revised Implementation Plan. Members of the Board's staff have engaged with DOE on drafting a revision of the Implementation Plan.

- Because of DOE's new design verification strategy, the Board closed an outstanding safety issue with DOE's effort to verify and validate the FLUENT computational fluid dynamics model as it would no longer be used for mixing system design confirmation. The Board identified this issue in a letter to DOE dated April 3, 2012.

- Members of the Board's staff reviewed testing at Pacific Northwest National Laboratory that comprises DOE's efforts to resolve an issue with the methodology for assessing dose consequences from pressurized spray leaks involving radioactive liquids at WTP. The testing concluded that DOE's spray leak model is non-conservative. The Board first identified this safety issue in a letter dated April 5, 2011.

- The Board reviewed DOE's response to the Board's April 13, 2012, letter identifying safety issues with the design and construction of the electrical distribution system for WTP. The Board concluded that the response identified a reasonable plan for resolving these issues during the next several years.

- Members of the Board's staff reviewed the project's efforts to update the safety basis for the Low-Activity Waste (LAW) and HLW facilities and upgrade the hazard characterization for the LAW facility. The staff identified and communicated to DOE several deficiencies with the hazard analyses. DOE subsequently paused project hazard analysis efforts to correct the deficiencies.

- Members of the Board's staff reviewed the project's efforts to re-qualify black cell components as safety significant. As a result of interactions between DOE and the staff, the project revised a supporting calculation to demonstrate adequate structural performance of the black cell components.

**Waste Feed Mixing and Delivery Systems at Hanford.** Members of the Board's staff continued to observe DOE's efforts on a small-scale mixing demonstration for the Hanford double-shell tank waste feed delivery system. The staff's activities included reviewing DOE's plans for and subsequent results from mixing and sampling tests associated with the Hanford double-shell tank waste feed delivery system, and DOE's plans and analyses for the Hanford tank farm waste feed certification process. Based on these reviews, DOE decided to pursue a different capability for characterizing and sampling Hanford tank farm waste.

**Salt Waste Processing Facility (SWPF) as SRS.** The Board reviewed and closed the two remaining safety issues with the SWPF project related to shortcomings with process vessel air pulse agitator (APA) mixing system testing and modeling, and deficiencies in how the project analyzes accidents resulting from detonation and deflagration of flammable gas in process vessels and piping systems. The Board identified these safety issues in letters to DOE dated February 10, 2009, and October 15, 2009, respectively. As a result of these reviews, DOE demonstrated its APA mixing system safety functions using a credible testing program and created new flammable gas safety and administrative controls that meet applicable DOE requirements. Members of the Board's staff also reviewed the design and implementation of the Instrumentation and Control (I&C) System for the SWPF project. The review did not identify any significant safety issues but did identify several concerns that the project team subsequently addressed to demonstrate that the I&C system will be designed to perform its safety function.

**Uranium Processing Facility (UPF) at the Y-12 National Security Complex.** During this fiscal year, the Board reviewed NNSA's actions to resolve issues identified in its April 2, 2012, letter to NNSA concerning the integration of safety into the UPF design. Notably, the Board and its staff reviewed major revisions of the project's Preliminary Safety Design Report and supporting design documentation. The Board's review determined that while NNSA has made progress in addressing prior issues, additional action is needed by NNSA to ensure that the project complies with DOE's nuclear safety requirements and to continue improving the integration of safety into the UPF design. The Board documented its concerns in a letter to NNSA dated August 26, 2013. The Board has worked with NNSA to establish approaches for resolving these new concerns. Members of the Board's staff also reviewed and found reasonable NNSA's plan for validating structural modeling assumptions and design techniques. NNSA developed the plan in response to the Board's September 6, 2012, letter that identified issues with the impact of modeling assumptions not yet validated by the project on localized building behavior during seismic loading.

On October 2, 2012, the Board conducted a public hearing at Y-12 to discuss UPF safety issues with NNSA. The hearing also addressed NNSA's plans to mitigate safety concerns that could arise from planned changes to the project's execution strategy and major redesign activities. Due to changes in the project's execution strategy, the UPF project did not issue a formal revision of the Project Execution Plan during this fiscal year. The Board will review the revised plan when available.

**Transuranic Waste Processing Center (TWPC) Sludge Processing Facility Buildouts (SL-PFB) Project at Oak Ridge National Laboratory (ORNL).** Members of the Board's staff reviewed the conceptual design and safety design strategy for the SL-PFB project. The review identified no safety issues that would preclude the project from advancing to the next design stage (preliminary design). However, the review identified concerns with accident modeling parameters, seismic design requirements for safety systems, and the project team's evaluation of accidents involving potential detonations in process piping. During the staff's review, the project team committed to addressing these concerns. The staff's review will support the Board's development of a project letter for Critical Decision-1 in the next fiscal year.

**Transuranic Waste Facility Project at LANL**. On October 9, 2012, NNSA responded to the Board's June 11, 2012, letter that identified issues associated with the design and safety basis of the new Transuranic Waste Facility (TWF) at LANL. These issues included: (1) the use of non-conservative values for accident analysis parameters; (2) inadequate bases for screening external man-made accidents such as large truck and aircraft crashes in the accident analysis; and (3) an inadequate definition of the boundary for a system supporting the operability of the safety-related fire suppression system. Members of the Board's staff reviewed NNSA's response and supporting material and discussed subsequent concerns with NNSA officials. In addition, the Board received and members of the Board's staff began reviewing the Preliminary Documented Safety Analysis (PDSA).

**Electrical Safety at DOE Facilities.** During this fiscal year, members of the Board's staff reviewed the adequacy of the electrical safety programs (ESPs) and electrical distribution systems (EDSs) at LANL's Plutonium Facility and at the Pantex Plant. These reviews indicated that the ESPs are well organized, supported, and integrated with site operations. The reviews also identified several safety concerns with the seismic qualification of certain EDS components and emergency lighting at LANL and with the design of the battery room ventilation system for diluting explosive hydrogen gas at Pantex. DOE has committed to addressing the staff's concerns, and the staff is monitoring DOE's actions.

During this fiscal year, DOE also issued a revision of the DOE Electrical Safety Handbook (DOE-HDBK-1092-2013). The revision adequately addresses concerns previously raised by members of the Board's staff with the handbook.

**Probabilistic Seismic Hazard Analysis (PSHA) for SRS and Hanford.** Members of the Board's staff observed activities associated with updating the PSHAs at SRS and Hanford. The staff reviewed the SRS seismic hazard calculations and draft report dated May 2013, and has engaged DOE to address concerns in the final report. The staff participated in the second workshop to update the Hanford PSHA and followed DOE's progress toward developing the final report which is anticipated in late FY 2014.

**Deficiencies with the System for the Analysis of Soil-Structure Interaction (SASSI) Computer Software.** The DOE complex uses the computer program SASSI to evaluate interaction effects between nuclear facility structures and supporting soils. In an April 8, 2011, letter to DOE, the Board highlighted its concern that issues with the program could lead to erroneous conclusions that affect the safety-related structural design at DOE defense nuclear facilities. DOE responded to the Board in letters dated July 29, 2011, October 5, 2011, and December 27, 2011. DOE agreed with the Board's concerns and is taking actions to address both technical and quality assurance issues. DOE developed a SASSI Project Plan and Technical Work Plan that will result in an improved set of SASSI validation and verification problems. During this fiscal year, members of the Board's staff continued to monitor DOE's execution of these plans.

**Periodic Reports to Congress.** The Board issued two periodic reports to Congress on the status of significant unresolved technical differences between the Board and DOE on issues concerning the design and construction of DOE's defense nuclear facilities. These reports have been highly effective in communicating Board concerns to Congress, as well as to DOE senior management. The reports were issued December 24, 2012, and July 15, 2013, respectively.

## PERFORMANCE GOAL 4: EFFECTIVE NUCLEAR SAFETY PROGRAMS AND ANALYSIS

**DOE regulations, requirements, and guidance are developed, implemented, and maintained; and safety programs at defense nuclear facilities are established and implemented; as necessary to protect adequately the health and safety of the public, the workers, and the environment.**

**OUTCOME:** DOE will have acknowledged, acted upon, and/or resolved the health and safety issues raised by the Board. In addition, follow-up technical evaluation of DOE's safety programs at defense nuclear facilities will verify necessary improvements in safety, and effective implementation of Integrated Safety Management principles.

**FY 2013 Performance Objectives:**

**DOE Directives.** The Board will assess DOE's implementation of newly revised directives at DOE's defense nuclear sites. With the completion of the DOE 2010 Safety and Security Reform Plan, the Board expects to review slightly fewer directives than the Board reviewed in 2011 and 2012. The Board will continue to review the adequacy of proposed revisions to DOE and NNSA directives to ensure that any revisions are technically supported, appropriate, and provide for adequate protection of the public, worker, and environment. The results of the Board's directives reviews will be provided to DOE for action. The Board anticipates that approximately 25 DOE and NNSA directives will require review because of their potential impact on public and worker health and safety. Of particular interest to the Board is DOE's proposed revision of DOE Standard 3009-94 Change Notice 3, *Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analyses*. This directive and 5 others are likely to require significant Board interaction to ensure satisfactory resolution of issues. The Board will continue its involvement in the efforts of NNSA to establish its supplementary directives system. As a result of the Board's review of DOE and NNSA directives, improved health and safety directives will be issued, resulting in enhanced safety requirements and guidance that provide for adequate protection of the workers and the public as well as the protection of the environment.

**Conduct of Operations.** The Board plans to review conduct of operations at several DOE sites in FY 2013 where there are indications that the program may be experiencing significant challenges. The Board will also assess the maintenance programs at select DOE sites in FY 2013 to ensure those programs are being managed and implemented as effectively and safely as possible.

**Federal Technical Capability Program (FTCP).** The Board expects that the acquisition, training, and qualification of DOE's workforce at defense nuclear facilities are at a level that ensures it is technically competent to manage and oversee the safe operation of its facilities and processes. The Board will continue to assist DOE in improving the technical competence of its workforce by participating in monthly meetings and reviewing FTCP documents. The Board will review the FTCP's FY 2013 Operational Plan and provide input on potential enhancements to all newly issued and revised Functional Area Qualification Standards.

**Facility Representative Program.** The Board encourages DOE line management to continually improve oversight of operations, in particular with regard to safety. This includes key federal oversight positions such as facility representatives. The Board will ensure that the DOE facility representative program remains vibrant through participation in monthly meetings, periodic assessments, and working interactions with facility representatives during site visits.

**Integrated Safety Management.** The Board will continue its reviews of DOE's implementation of integrated safety management (ISM) and associated nuclear safety programs. In addition, while the Board has noted considerable progress in the implementation of ISM, continued DOE efforts are necessary to maintain ISM systems and ensure continuous improvement across the complex. Specific functional areas will be sampled to a greater depth, with emphasis on implementation of ISM at the activity level of execution.

**Safety Management Programs.** The Board will continue to address the ability of DOE sites to respond to beyond design basis and severe events in its future site specific public meetings, including its public meeting at Y-12. The Board will conduct reviews of emergency preparedness, response, and recovery at Pantex, LLNL, SRS, and SNL.

**FY 2013 Measured Performance:**

**DOE Directives**. As part of its continuing review of new and revised DOE directives, members of the Board's staff evaluated more than 30 DOE directives including technical standards and NNSA supplemental directives. Members of the Board's staff provided constructive comments on directives being developed or revised, and evaluated the safety impact for directives that DOE proposed to cancel. Examples of reviews of DOE directives completed in FY 2013 include:

- DOE Standard 3014-2006, *Accident Analysis for Aircraft Crash into Hazardous Facilities* (Re-affirmation)
- DOE Handbook 3010-94, *Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities* (Reaffirmation)
- DOE Standard 1150-YR, *Quality Assurance Functional Area Qualification Standard*
- DOE Standard 1174-YR, *Radiation Protection Functional Area Qualification Standard*

At year's end, members of the Board's staff were actively reviewing five revisions or reaffirmations of directives, including DOE Handbook 1132-99, *Design Considerations*. Members of the Board's staff were also working to reach resolution of issues regarding revisions or drafts of eight pending directives to improve the content, clarity, and consistency of safety requirements and guidance. These directives include draft DOE Standard 3009-YR, *Criteria and Guidance for Preparation of U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analysis*, and draft DOE Standard, SAFT-0132, *Probabilistic Risk Assessment for Nuclear Safety Applications*.

**Integrated Safety Management.** In August 2012, the Board issued technical report DNFSB/TECH-37, *Integrated Safety Management at the Activity Level: Work Planning and Control*. DNFSB/TECH-37 concluded that there was a lack of comprehensive requirements and guidance within DOE's directives system governing ISM at the activity level, and a lack of DOE and contractor oversight in this functional area. In October 2012, the Board's staff provided feedback to DOE during development of its response that DOE's planned actions did not include development of comprehensive guidance on contractor implementation of ISM at the activity level. Following this interaction, DOE submitted its response to DNFSB/TECH-37 that included actions to develop new and revised DOE directives providing comprehensive guidance on contractor implementation of ISM at the activity level, as well as on contractor and DOE oversight in this area. Per this response, DOE conducted a complex-wide workshop on ISM at the activity level to gain insights for the new guidance and has initiated an internal review of the new and revised DOE directives.

**Conduct of Operations.** The Board's staff performed follow-up reviews in FY 2013 of the maintenance programs at the Waste Isolation Pilot Plant (WIPP) and the Waste Encapsulation and Storage Facility (WESF) at Hanford to validate that safety concerns noted in prior Board letters had been resolved. The Board's staff noted improvements at WIPP in the post maintenance testing documentation, pre-job briefings, safety system walkdowns, and execution of maintenance activities. However, some weaknesses remain with respect to the quality of the work documents. Although the Board's staff noted some opportunities for improvement, significant progress was evident at WESF in the areas of maintenance training, periodic inspections of design features, contractor oversight of maintenance, and execution of work. The Board's staff communicated its observations related to operational activities at WIPP and WESF to key site personnel and will continue to evaluate DOE's efforts to improve conduct of operations and maintenance throughout the complex.

**Emergency Management**. The Board's staff continued to review emergency management programs at DOE sites with defense nuclear facilities. Key areas of concern included the ability of these programs to address severe events, multi-facility impacts, cascading or "connected" events, loss of utilities and supporting infrastructure, and the coordination of DOE and local response resources. The Board's staff conducted reviews of emergency management programs and the ability of DOE sites to respond to emergency events including severe events at Pantex, LANL, LLNL, Hanford, SNL, Y-12, and SRS. Emergency preparedness, response, and recovery at the Pantex site were key topics at the Board's public meeting/hearing held in Amarillo, TX, on March 14, 2013.

**Federal Technical Capability Program (FTCP).** The Board's staff participated in FTCP meetings and activities during FY 2013 to ensure DOE maintained a competent and highly capable federal workforce at its defense nuclear facilities. The Board's staff reviewed all newly issued and revised Functional Area Qualification Standards and provided extensive feedback to DOE on proposed safety improvements. DOE accepted many of the Board staff's comments that will ensure duties and responsibilities of site oversight personnel and the competencies documented in the Functional Area Qualification Standards are focused on technical and safety-related matters. In addition, an issue previously raised by the Board related to a lack of federal training on the human factors safety management program was resolved during FY 2013 with the development and implementation of a course at the National Training Center.

**Facility Representative Program.** The Board's staff ensured that the DOE facility representative program remained vibrant through participation in monthly meetings, periodic assessments, and working interactions with facility representatives during site visits. The Board's staff participated in facility representative program assessments at the Nevada Site Office and the Pantex NNSA Production Office and provided input to improve the assessment process.

**Recommendation 2002-3, *Requirements for the Design, Implementation, and Maintenance of Administrative Controls*.** The Board's staff continued to follow DOE's efforts to verify the implementation of Recommendation 2002-3. DOE recently completed all of the commitments in its Implementation Plan for the Recommendation. The Board is reviewing closure of Recommendation 2002-3.

**Recommendation 2009-1, *Risk Assessment Methodologies at Defense Nuclear Facilities.*** The Board continued to monitor DOE's efforts in implementing Recommendation 2009-1 which identified the need for policies and guidance on the use of quantitative risk assessment methodologies at DOE defense nuclear facilities. DOE has shown a recent and renewed interest in applying risk assessment technology in nuclear safety applications. In this regard, members of the Board's staff reviewed DOE's proposed Standard on the use of risk assessment. The Board will continue to work toward improving DOE's safety posture with respect to the use of risk assessment methodologies.

**Recommendation 2010-1,** ***Safety Analysis Requirements for Defining Adequate Protection for the Public and the Workers*****.** DOE has been working diligently on executing the Implementation Plan for Board Recommendation 2010-1. However, completion of this Implementation Plan proved to be more time consuming than DOE originally planned, and the schedule has been extended. DOE continues to work to make significant revisions to five essential DOE Standards that support implementation of DOE's Nuclear Safety Management Rule, 10 CFR Part 830. The Board's staff reviewed a draft of the first such Standard (DOE-STD-3009) and provided DOE with a significant number of comments to ensure consistency with the DOE Implementation Plan, as well as ensure that the workers and the public are adequately protected through a comprehensive set of clear and unambiguous requirements.

## PERFORMANCE GOAL 5: MANAGEMENT EXCELLENCE

**The Board will strive for management excellence throughout its technical, legal and administrative staffs.**

**OUTCOME:** There will be public confidence that the defense nuclear facilities are being operated safely and that the Board's oversight is a positive influence on the safe execution of these activities.

**FY 2013 Performance Objectives:**

| | FY 2013 Target |
|---|---|
| **Performance Goal 5.1:** The Board will keep Congress informed on current health and safety issues at DOE nuclear facilities and the status of progress toward issue resolution. | The Board will publish its annual report to Congress by March 1. This report is to include all recommendations made by the Board during the preceding year, and an assessment of: (1) the improvements in the safety of DOE's defense nuclear facilities during the period covered by the report, (2) the improvements in the safety of DOE's defense nuclear facilities resulting from actions taken by the Board or taken on the basis of the activities of the Board, and (3) the outstanding safety problems, if any, of DOE's defense nuclear facilities.<br><br>The Board will publish Periodic Reports on the *Status Of Significant Unresolved Issues with the Department of Energy's Design and Construction Projects* and the *Summary of Significant Safety-Related Infrastructure Issues at Operating Defense Nuclear Facilities.* These reports will serve to provide Congress and the public timely information on significant issues prior to publication of the Board's Annual Report. |
| **Performance Goal 5.2:** The Board will inform the public of issues related to health and safety at defense nuclear facilities. | The Board will post public documents, including all recommendations, the Board's Annual Report, Periodic Reports, and other correspondence with DOE on its public website within 2 work days of publication date. |

| | |
|---|---|
| | The Board will plan a Public Meeting and Hearing at Oak Ridge National Laboratory/Y-12 National Security Complex in the first quarter in order to review public health and safety at the site, provide transparency into DOE activities, and allow interested persons or groups to present comments, technical information, or data to the Board on the announced topics. |
| **Performance Goal 5.3:** The Board will adopt and execute processes and procedures with DOE that are compatible with the Board's enabling legislation and further the Board's mission. | The Board will be briefed on issues by senior DOE officials from EM and NNSA on a periodic basis in order continue a dialogue to further public health and safety at DOE defense nuclear facilities.<br><br>The Chairman will consult with the DOE Secretary and Deputy Secretary on matters of interest and will meet with the DOE Deputy Secretary periodically in order to ensure there are no misunderstandings concerning the Board's recommendations and other concerns at defense nuclear facilities to review documents for classified and security related sensitive information. |
| **Performance Goal 5.4**: The Board will implement internal processes and procedures that effectively support the Board's oversight operations and responsibilities as a Federal agency using OMB and OPM management guidance applicable to small agencies to gauge performance. | The Board will improve employee performance by developing a revised GS performance management system to make it more performance oriented in accordance with OPM guidance. The Board will strive toward full certification of its SES performance management system. |
| **Performance Goal 5.5:** Appropriate technical and professional expertise will be recruited and/or trained by the Board to accomplish the mission. | The Board will continue to hire technically competent engineers and scientists who can support the Board's nuclear safety oversight mission. The Board will emphasize improving the diversity of its technical staff workforce. The Board will utilize at least 95% of its authorized FTEs. |
| **Performance Goal 5.6:** The Board will effectively manage the appropriated financial resources, and exercise responsible stewardship over its resources to meet its needs and accomplish the mission. | The independent auditor's Report on Internal Control & Compliance with Laws and Regulations does not identify any material weaknesses or non-compliance with laws or regulations. This is to demonstrate the Board is properly managing its resources. |
| **Performance Goal 5.7:** The Board will assign staff to be in residence at selected sites. | The Board will assign site representatives at appropriate defense nuclear facilities based on changes in DOE priorities and activities. The |

| | |
|---|---|
| | Board will review the assignment of site representatives semi-annually in order to ensure each manned site has at least one staff member assigned and assess the need for additional site representatives to meet operational needs. |

**FY 2013 Measured Performance:**

**Performance Goal 5.1: The Board will keep Congress informed on current health and safety issues at DOE defense nuclear facilities and the status of progress toward issue resolution.**

- The Board submitted to Congress its 23rd Annual Report for Calendar Year 2012 on February 28, 2013. As required by 42 U.S.C. § 2286e(a), this report describes the Board's current safety initiatives and assesses improvements in the safety of DOE defense nuclear facilities as well as safety problems yet to be resolved.

- On December 24, 2012, and July 15, 2013, the Board provided two periodic reports to Congress and DOE on the status of significant unresolved technical issues concerning the design and construction of DOE's defense nuclear facilities. These periodic reports built on earlier reports to summarize the status of issues previously raised and identified new issues associated with the relevant projects.

- On February 14, 2013, the Board issued its Report to Congress on the Board Interpretation of "Technical and Economic Feasibility".

**Performance Goal 5.2: The Board will inform the public of issues related to health and safety at defense nuclear facilities.**

- During FY 2013, the Board posted numerous documents to the public website to include the Board's Annual Report, Periodic Reports, weekly Site Representative Reports, letters to the DOE from the Chairman regarding safety issues, Board recommendations, Federal Register notices, and notices of Board hearings. The standard was met for posting documents to the public website within 2 working days of the publication date.

- On October 2, 2012, the Board held a public hearing in Knoxville, Tennessee, on factors that could affect the timely execution and safety of the UPF Project. The hearing was made publicly available via a live video stream on the Board's website.

- On March 14, 2013, the Board held a public hearing in Amarillo, Texas, on safety culture and the status of emergency preparedness at the Pantex Plant. The hearing was made publicly available via a live video stream on the Board's website.

**Performance Goal 5.3: The Board will adopt and execute processes and procedures with DOE that are compatible with the Board's enabling legislation and further the Board's mission.**

- The Board received numerous briefings on issues by senior DOE officials from the Office of Environmental Management and NNSA in order to continue the dialogue on public health and safety at DOE defense nuclear facilities.

- On August 15, 2013, the Board issued Policy Statement 5, *Policy Statement on Assessing Risk*, which establishes the approach it will take to assess risk when making recommendations to the Secretary of Energy.

**Performance Goal 5.4: The Board will implement internal processes and procedures that effectively support the Board's oversight operations and responsibilities as a Federal agency using OMB and OPM management guidance applicable to small agencies to gauge performance.**

- 

- The Board planned, organized, and held training for Board executives on the new Senior Executive Service (SES) performance system, with an emphasis on how to develop performance plans (including performance standards) that meet OPM requirements for system certification.

**Performance Goal 5.5: Appropriate technical and professional expertise will be recruited and/or trained by the Board to accomplish the mission.**

- The Board continued its recruitment of highly-qualified technical personnel and was able to achieve its goal of utilizing at least 95% of its budgeted FTEs, despite absorbing an 8% reduction to its enacted appropriation as a result of sequestration.

**Performance Goal 5.6: The Board will effectively manage the appropriated financial resources, and exercise responsible stewardship over its resources to meet its needs and accomplish the mission.**

- The Board achieved its seventh consecutive unqualified audit opinion on its (FY 2012) financial statements from an independent auditor, as required by the Accountability of Tax Dollars Act of 2002. The auditor found the Board complied with all applicable federal laws and regulations and had no material weaknesses in its internal controls.

**Performance Goal 5.7: The Board will assign staff to be in residence at selected sites**.

- The Board enhances its on-site safety oversight of DOE defense nuclear facilities by assigning experienced technical staff members to full-time duty at priority DOE sites. Currently, 10 full-time site representatives are stationed at five DOE sites: (1) Pantex Plant to oversee nuclear weapons activities, including the weapons stockpile stewardship and weapons disassembly programs; (2) Hanford Site to monitor waste characterization and stabilization and facility deactivation; (3) Savannah River Site to monitor DOE's efforts to deactivate facilities, stabilize waste materials, and store and process tritium; (4) Oak Ridge's Y-12 National Security Complex to monitor safety and health conditions at Y-12 and other defense nuclear facilities in the area; and (5) LANL to advise the Board on overall safety and health conditions at LANL, and to participate in Board reviews and evaluations related to the design, construction, operation, and decommissioning of LANL defense nuclear facilities.

Chapter 3
# CFO Letter, Auditor's Report, and Financial Statements

## CFO LETTER

I am pleased to report that the Board's FY 2013 financial statements received an unqualified opinion from its independent auditors, the Board's eighth consecutive unqualified opinion since its FY 2004 financial statements were initially audited pursuant to the Accountability of Tax Dollars Act (ATDA) of 2002. In addition, FY 2013 marked the sixth consecutive year that the Board's unqualified opinion was coupled with no instances of non-compliance with laws and regulations and no material internal control weaknesses identified in the accompanying report.

The financial statements that follow were prepared and audited as part of this performance and accountability report within 45 days after the end of the fiscal year. To ensure that resources are dedicated to fulfilling the demanding health and safety oversight mission, the Board has adopted the "economies of scale" philosophy for obtaining needed administrative support services and "contracts" (through Interagency Agreements) with GSA to act as its accounting services provider. The Board's financial staff worked diligently with its GSA accountants in preparing our FY 2013 financial statements and providing the necessary supporting documentation to its auditors, and credit should be given to both those organizations for achieving these accomplishments.

### Compliance with Laws and Regulations

The auditors tested the Board's compliance with certain provisions of laws and regulations, non-compliance which could have a direct and material effect on the determination of financial statement amounts, and certain other laws in regulations specified in OMB Bulletin 07-04, *Audit Requirements for Federal Financial Statements*. For the sixth consecutive year, the auditors found no instances of non-compliance with such laws or regulations.

### Internal Controls

In planning and performing the financial statements audit, the independent auditors considered the Board's internal controls over financial reporting by obtaining an understanding of the Board's internal controls, determining if internal controls had been placed in operation, assessing controls risk, and performing tests of controls. Testing of internal controls was limited to those controls necessary to achieve objectives described in OMB Bulletin 07-04. The auditors noted no internal control material weaknesses for the fifth consecutive year.

The auditor's report, together with the accompanying report on compliance with laws and regulations and internal control are included in their entirety in this Chapter.

Mark T. Welch, Acting Chief Financial Officer

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## INDEPENDENT AUDITOR'S REPORT

Chairman of the Board
Defense Nuclear Facilities Safety Board

We have audited the accompanying balance sheets of the Defense Nuclear Facilities Safety Board (DNFSB) as of September 30, 2013 and 2012, and the related statements of net cost, changes in net position, and budgetary resources for the years then ended. These financial statements are the responsibility of the DNFSB's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 14-02, *Audit Requirements for Federal Financial Statements*. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the DNFSB as of September 30, 2013 and 2012, and its net cost, changes in net position, and budgetary resources for the years then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated November 25, 2013, on our consideration of the DNFSB's internal control over financial reporting and on our tests of its compliance with certain provisions of laws and regulations. The purpose of those reports are to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Management's Discussion and Analysis (MD&A) and other accompanying information are not a required part of the DNFSB's basic financial statements but are supplementary information

required by OMB Circular A-136, *Financial Reporting Requirements*, as amended, and the Federal Accounting Standards Advisory Board's Statement of Federal Financial Accounting Standards No. 15, *Management's Discussion and Analysis*. We made certain inquiries of management and compared the MD&A information with the DNFSB's audited financial statements and against other knowledge obtained during our audit. We also compared the other accompanying information with the audited financial statements. However, we did not audit the MD&A or other accompanying information and, therefore, express no opinion on them.

Lani Eko & Company, CPAs, PLLC

November 25, 2013
Alexandria, Virginia

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# REPORT ON INTERNAL CONTROL AND ON COMPLIANCE AND OTHER MATTERS OVER FINANCIAL REPORTING BASED ON AN AUDIT OF THE FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Chairman of the Board
Defense Nuclear Facilities Safety Board

We have audited the financial statements of the Defense Nuclear Facilities Safety Board (DNFSB) as of and for the year ended September 30, 2013, and have issued our report thereon dated November 25, 2013. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 14-02, *Audit Requirements for Federal Financial Statements*.

## Internal Control Over Financial Reporting

In planning and performing our audit, we considered the DNFSB's internal control over financial reporting as a basis for designing our auditing procedures, obtained an understanding of the design effectiveness of internal controls, determined whether the internal controls have been placed in operation, assessed control risk, and performed tests of the DNFSB's internal controls for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the DNFSB's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of DNFSB's internal control over financial reporting.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the DNFSB's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in the internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses or significant deficiencies, as defined above.

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**Compliance and Other Matters**

The management of DNFSB is responsible for complying with laws and regulations applicable to the DNFSB. As part of obtaining reasonable assurance about whether the DNFSB's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of applicable laws and regulations and contracts, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* or Office of Management and Budget (OMB) Bulletin No. 14-02, *Audit Requirements for Federal Financial Statements*.

This report is intended solely for the information and use of the management of the DNFSB, the OMB, the Government Accountability Office, and Congress and is not intended to be and should not be used by anyone other than these specified parties.

*Lani Eko & Company, CPAs, PLLC*

November 25, 2013
Alexandria, VA

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

## APPROPRIATED FUND

## FINANCIAL STATEMENTS

## As Of And For The Years Ended September 30, 2013 and 2012

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

## BALANCE SHEET

### As Of September 30, 2013 and 2012

| | | 2013 | 2012 |
|---|---|---|---|
| **Assets:** | | | |
| Intragovernmental: | | | |
| Fund Balance With Treasury | (Note 2) | $ 7,859,949 | $ 9,097,796 |
| Other | (Note 5) | 13,750 | |
| Total Intragovernmental | | 7,873,699 | 9,097,796 |
| Assets With The Public: | | | |
| Accounts Receivable, net | (Note 3) | 17,892 | 13,882 |
| General Property, Plant and Equipment | (Note 4) | 546,940 | 301,398 |
| Total Assets With The Public | | 564,832 | 315,280 |
| **Total Assets** | | $ 8,438,531 | $ 9,413,076 |
| **Liabilities:** | (Note 6) | | |
| Intragovernmental: | | | |
| Accounts Payable | (Note 7) | $ 27,770 | $ 20,137 |
| Employee Benefits | (Note 8) | 78,759 | 184,607 |
| Total Intragovernmental | | 106,529 | 204,744 |
| Liabilities With the Public: | | | |
| Accounts Payable | | 535,952 | 894,818 |
| Accrued Funded Payroll and Leave | | 346,122 | 988,610 |
| Employer Contributions and Payroll Taxes Payable | | 15,990 | 35,704 |
| Unfunded Leave | | 1,205,202 | 1,155,828 |
| Worker's Compensation | (Note 10) | 22,013 | 22,013 |
| Total Liabilites With the Public | | 2,125,279 | 3,096,973 |
| **Total Liabilities** | | $ 2,231,808 | $ 3,301,717 |
| Unexpended Appropriations - Other Funds | | 6,869,106 | 6,973,920 |
| Cumulative Results of Operations - Other Funds | | (662,383) | (862,561) |
| Total Net Position | | 6,206,723 | 6,111,359 |
| **Total Liabilities and Net Position** | | $ 8,438,531 | $ 9,413,076 |

*Amounts may be off by a dollar due to rounding.

The accompanying notes are an integral part of these statements.

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD
### STATEMENT OF NET COST
### As Of And For The Years Ended September 30, 2013 and 2012

| | | 2013 | 2012 |
|---|---|---|---|
| **Program Costs:** | | | |
| **DNFSB:** | | | |
| **Gross Costs** | (Note 12) | 27,483,544 | 27,814,344 |
| **Net Program Costs** | | 27,483,544 | 27,814,344 |
| **Net Cost of Operations** | | $ 27,483,544 | $ 27,814,344 |

*Amounts may be off by a dollar due to rounding.

The accompanying notes are an integral part of these statements.

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

## STATEMENT OF CHANGES IN NET POSITION

**As Of And For The Years Ended September 30, 2013 and 2012**

| | 2013 | 2012 |
|---|---|---|
| **Cumulative Results of Operations:** | | |
| **Beginning Balances** | $ (862,561) | $ (916,253) |
| **Budgetary Financing Sources:** | | |
| **Appropriations Used** | 26,818,384 | 26,983,817 |
| **Other Financing Resources (Non-Exchange):** | | |
| **Imputed Financing** | 865,337 | 884,218 |
| **Total Financing Sources** | 27,683,721 | 27,868,035 |
| **Net Cost of Operations (+/-)** | 27,483,544 | 27,814,344 |
| **Net Change** | 200,177 | 53,692 |
| **Cumulative Results of Operations** | $ (662,383) | $ (862,561) |
| **Unexpended Appropriations:** | | |
| **Beginning Balances** | $ 6,973,920 | $ 4,827,737 |
| **Budgetary Financing Sources:** | | |
| **Appropriations Received** | 29,130,000 | 29,130,000 |
| **Other Adjustments** | (2,416,429) | |
| **Appropriations Used** | (26,818,384) | (26,983,817) |
| **Total Budgetary Financing Sources** | (104,813) | 2,146,183 |
| **Total Unexpended Appropriations** | 6,869,106 | 6,973,920 |
| **Net Position** | $ 6,206,723 | $ 6,111,359 |

*Amounts may be off by a dollar due to rounding.

The accompanying notes are an integral part of these statements.

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD
### STATEMENT OF BUDGETARY RESOURCES

As Of And For The Years Ended September 30, 2013 and 2012

| | | 2013 | 2012 |
|---|---|---|---|
| BUDGETARY RESOURCES | | | |
| Unobligated balance brought forward, October 1 | | $ 924,672 | $ 366,386 |
| Recoveries of prior year unpaid obligations (unobligated balances) | | 767,716 | 108,324 |
| Unobliged balance from prior year budget authority, net | | 1,692,388 | 474,709 |
| Appropriations (discretionary and mandatory) | | 26,713,571 | 29,130,000 |
| Spending authority from offsetting collections | | 3,807 | 10,442 |
| Total budgetary resources | | $ 28,409,766 | $ 29,615,151 |
| STATUS OF BUDGETARY RESOURCES | | | |
| Obligations incurred | (Note 13) | $ 26,252,034 | $ 28,690,479 |
| Apportioned | | 2,157,732 | 914,230 |
| Unapportioned | | - | 10,442 |
| Unobligated balance brought forward, end of year | | 2,157,732 | 924,672 |
| Total budgetary resources | | $ 28,409,766 | $ 29,615,151 |
| CHANGE IN OBLIGATED BALANCE | | | |
| Unpaid obligations, brought forward, October 1 (gross) | | $ 8,173,124 | $ 6,120,878 |
| Obligations incurred | | 26,252,034 | 28,690,479 |
| Outlays (gross) (-) | | (27,955,225) | (26,529,909) |
| Recoveries of prior year unpaid obligations (-) | | (767,716) | (108,324) |
| Unpaid obligations, end of year | (Note 14) | 5,702,218 | 8,173,124 |
| Obligated balance, start of year (net) | | 8,173,124 | 6,120,878 |
| Obligated balance, end of year (net) | | $ 5,702,218 | $ 8,173,124 |
| BUDGET AUTHORITY AND OUTLAYS, NET | | | |
| Budget authority, gross (discretionary and mandatory) | | $ 26,717,378 | $ 29,140,442 |
| Actual offsetting collections (discretionary and mandatory) (-) | | (3,807) | (10,442) |
| Budget authority, net (discretionary and mandatory) | | 26,713,571 | 29,130,000 |
| Outlays, gross (discretionary and mandatory) | | 27,955,225 | 26,529,909 |
| Actual offsetting collections (discretionary and mandatory) (-) | | (3,807) | (10,442) |
| Outlays, net (discretionary and mandatory) | | $ 27,951,417 | $ 26,519,468 |

***Amounts may be off by a dollar due to rounding.**

The accompanying notes are an integral part of these statements.

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

## APPROPRIATED FUND

### Note 1 – Significant Accounting Policies

### (a) Reporting Entity

The Board is an independent Federal government agency with responsibility for the oversight of DOE's defense nuclear facilities located throughout the United States. The Board is directed by a Chairman and four other members appointed by the President. The Board's mission as described by the Atomic Energy Act of 1954, as amended, is to "provide independent analysis, advice, and recommendations to the Secretary of Energy to inform the Secretary, in the role of the Secretary as operator and regulator of the defense nuclear facilities of the Department of Energy, in providing adequate protection of public health and safety at such defense nuclear facilities."

### (b) Basis of Presentation

These financial statements have been prepared from the accounting records of the Board in accordance with generally accepted accounting principles (GAAP) as promulgated by the Federal Accounting Standards Advisory Board (FASAB) and OMB Circular A-136, *Financial Reporting Requirements.* GAAP for Federal entities is the hierarchy of accounting principles prescribed in the American Institute of Certified Public Accountants' (AICPA) Statement on Auditing Standards No. 91, *Federal GAAP Hierarchy.*

Circular A-136 requires agencies to prepare principal statements, which include a Balance Sheet, a Statement of Net Cost, a Statement of Changes in Net Position, and a Statement of Budgetary Resources. The balance sheet presents, as of September 30, 2013, amounts of future economic benefits owned or managed by the Board (assets), amounts owed by the Board (liabilities), and amounts, which comprise the difference (net position). The Statement of Net Cost reports the full cost of the Board's operations and the Statement of Budgetary Resources reports Board's budgetary activity.

### (c) Basis of Accounting

Transactions are recorded on the accrual accounting basis in accordance with OMB Circular A-136. Under the accrual basis of accounting, revenues are recognized when earned, and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

### (d) Revenues and Other Financing Sources

The Board receives its funding needed to support its activities through annual congressional appropriations. FY 2013 and FY 2012 appropriated funds are available for obligation until September 30, 2014 and September 30, 2013, respectively (i.e., two year funds). None of the appropriations is an "earmarked" fund. An imputed financing source is recognized to offset costs incurred by the Board and funded by another Federal source (see Notes 1(i) and 8).

### (e) Assets and Liabilities

Intra-governmental assets and liabilities arise from transactions between the Board and other Federal entities.

Funds with the U.S. Treasury compose the majority of assets on the Board's balance sheet. All other assets result from activity with non-federal sources.

Liabilities represent amounts that are likely to be paid by the Board as a result of transactions that have already occurred. The accounts payable portion of liabilities consist of amounts owed to federal agencies and commercial vendors for goods, services, and other expenses received but not yet paid.

Liabilities covered by budgetary or other resources are those liabilities of the Board for which Congress has appropriated funds, or funding is otherwise available to pay amounts due. Liabilities not covered by budgetary or other resources represent amounts owed in excess of available congressionally appropriated funds or other amounts. The liquidation of liabilities not covered by budgetary or other resources is dependent on future congressional appropriations or other funding.

### (f) Fund Balance with the U.S. Treasury

The U.S. Treasury processes the Board's receipts and disbursements. Funds with the U.S. Treasury are cash balances from appropriations as of the fiscal year-end from which the Board is authorized to make expenditures and pay liabilities resulting from operational activity.

### (g) Property, Plant, and Equipment (PPE)

PPE consists of capitalized equipment, furniture and fixtures, and software. There are no restrictions on the use or convertibility of property, plant, or equipment.

The Board capitalizes PPE with a useful life of at least two years and individually costing more than $10,000 ($25,000 for leasehold improvements). Bulk purchases of lesser value items are capitalized when the cost is $25,000 or greater.

Assets are depreciated on a straight-line basis over the estimated used life of the property. Information Technology (IT) equipment and software is depreciated over a useful life of three years. All other equipment is depreciated over a five year useful life. Furniture and fixtures are depreciated over a seven year useful life and leasehold improvements over a ten year useful life.

The Board owns no land and leases its office space from GSA. The lease costs approximate commercial lease rates for similar properties.

### (h) Annual, Sick, and Other Leave

Annual leave is recognized as an expense and a liability as it is earned; the liability is reduced as leave is taken. The accrued leave liability is principally long-term in nature. Sick leave and other types of leave are expensed as leave is taken.

### (i) Federal Employee Benefits

The Board recognizes its share of the cost of providing future pension benefits to eligible employees over the period of time that they render service to the Board. The pension expense recognized in the financial statement equals the current service cost for the Board's employees for the accounting period less the

amount contributed by the employees. The Office of Personnel Management (OPM), the administrator of the plan, supplies the Board with factors to apply in the calculation of the service cost. These factors are derived through actuarial cost methods and assumptions. The excess of the recognized pension expense represents the amount being financed directly by OPM. This amount is considered imputed financing to the Board (see Note 8).

The Board recognizes a current-period expense for the future cost of post-retirement health benefits and life insurance for its employees while they are still working. The Board accounts for and reports this expense in a manner similar to that used for pensions, with the exception that employees and the Board do not make current contributions to fund these future benefits.

Federal employee benefit costs paid by OPM and imputed to the Board are reported as a resource on the Statement of Changes in Net Position.

**(j) Contingencies**

The Board has no material pending claims or lawsuits against it. Management believes that losses from other claims or lawsuits, not yet known to management, are possible, but would not likely be material to the fair presentation of the Board's financial statements. Thus, there is no provision for such losses in its statements. The Board has not entered into any contractual arrangements which may require future financial obligations.

**Note 2 – Funds Balance with the U.S. Treasury**

The Board's funds with the U.S. Treasury consist only of appropriated funds. Worksheet adjustments were made for credits of $684,770 and $18,816 for FY 2013 and FY 2012, respectively, for payroll charges that were reflected in the U.S. Treasury cash balance at year end but were not yet recorded in the GSA accounting system. The status of these funds as of September 30, 2013 and 2012 are as follows:

| | FY 2013 | FY 2012 |
|---|---|---|
| A. Fund Balance with Treasury | | |
| Appropriated Fund | $7,859,949 | $9,097,796 |
| B. Status of Fund Balance with Treasury | | |
| 1) Unobligated Balance | | |
| (a) Available | 2,157,732 | 914,230 |
| (b) Unavailable | | 10,442 |
| 2) Obligated Balance not yet Disbursed | 5,702,218 | 8,173,124 |
| Total | $ 7,859,949* | $9,097,796 |

**Rounding*

**Note 3 – Accounts Receivable, Net**

The line item represents the gross amount of monies owed to the Board. The Board has historically collected receivables due and thus has not established an allowance for uncollectible accounts.

| **Accounts Receivable** | **FY 2013** | **FY 2012** |
|---|---|---|
| Claims | $17,892 | $13,882 |

**Note 4 - General Property, Plant and Equipment, Net**

The Board's total cost, accumulated depreciation, and net book value for PPE for the years ending September 30, 2013 and 2012 are as follows.

| 2013 | Equipment | Furniture & Fixtures | Software | Software in Development | Total |
|---|---|---|---|---|---|
| **Cost** | $1,096,055 | $40,174 | $673,273 | $0 | $1,809,502 |
| **Accum. Depr.** | (622,624) | (40,174) | (599,764) | ( 0) | (1,262,562) |
| **Net Book Value** | $473,431 | $ 0 | $73,509 | $0 | $ 546,940 |

| 2012 | Equipment | Furniture & Fixtures | Software | Software in Development | Total |
|---|---|---|---|---|---|
| **Cost** | $901,536 | $40,174 | $683,023 | $0 | $1,624,733 |
| **Accum. Depr.** | (733,204) | (40,174) | (549,957) | ( 0) | (1,323,335) |
| **Net Book Value** | $168,332 | $ 0 | $133,066 | $0 | $ 301,398 |

**Note 5 – Other Assets**

The FY 2013 Other Assets amount represents an unliquidated advance.

| | FY 2013 | FY 2012 |
|---|---|---|
| Intragovernmental | $13,750 | $0 |
| With the Public – Associates | $ 0 | $0 |
| Total Other Assets | $13,750 | $0 |

**Note 6 – Liabilities Not Covered by Budgetary Resources**

The liabilities on the Board's Balance Sheets as of September 30, 2013 and 2012 include liabilities not covered by budgetary resources, which are liabilities for which congressional action is needed before budgetary resources can be provided. Although future appropriations to fund these liabilities are likely and anticipated, it is not certain that appropriations will be enacted to fund these liabilities. The composition of liabilities not covered by budgetary resources as of September 30, 2013 and 2012 is as follows:

| | 2013 | 2012 |
|---|---|---|
| Unfunded Leave | $1,205,202 | $1,155,828 |
| Workers' Compensation | $ 22,013 | $ 22,013 |
| Total liabilities not covered by budgetary resources | $1,227,215 | $1,177,841 |
| Total liabilities covered by budgetary resources | $1,004,593 | $2,123,876 |
| Total Liabilities | $2,231,808 | $3,301,717 |

**Note 7 - Intragovernmental Liabilities**

Intragovernmental liabilities arise from transactions with other Federal entities. As of September 30, 2013, the Board had accounts payable intragovernmental liabilities of $27,770 with OPM ($13,000) and GSA ($14,770). The Board's FY 2012 accounts payable intragovernmental liabilities of $20,137 were with OPM. Employee benefits are the amounts owed to OPM and Treasury as of September 30, 2013 and 2012 for Federal Employees Health Benefits Program (FEHBP), Federal Employees' Group Life Insurance Program (FEGLIP), Federal Insurance Contributions Act (FICA), Federal Employees Retirement System (FERS), and Civil Service Retirement System (CSRS) contributions (reference Note 8).

**Note 8 – Federal Employee Benefits**

All permanent employees participate in the contributory CSRS or FERS. FERS employees are covered under FICA. To the extent that employees are covered by FICA, the taxes they pay to the program and the benefits they will eventually receive are not recognized by the Board's financial statements. The Board makes contributions to CSRS, FERS, and FICA and matches certain employee contributions to the thrift savings component of FERS. All of these payments are recognized as operating expenses.

In addition, all permanent employees are eligible to participate in the contributory FEHBP and FEGLIP and may continue to participate after retirement. The Board makes contributions through OPM to FEHBP and FEGLIP for active employees to pay for current benefits; these contributions are recognized as operating expenses. The Board does not report on its financial statements these programs' assets, accumulated plan benefits, or unfunded liabilities, if any, applicable to its employees. Reporting such amounts is the responsibility of OPM; however, the financing of these costs by OPM and imputed to the Board are reported on the Statement of Changes in Net Position.

Employee benefits liabilities are current (versus non-current liabilities).

**Note 9– Other Liabilities**

Other liabilities with the public for the years ending September 30, 2013 and 2012 consist of Accrued Funded Payroll and Leave, Withholdings Payable, Unfunded Leave and Workers' Compensation in the amounts shown below:

| | With the Public | Non-Current | Current | Total |
|---|---|---|---|---|
| 2013 | Other Liabilities | $1,205,202 | $384,125 | $1,589,327 |
| 2012 | Other Liabilities | $1,155,828 | $ 1,046,327 | $2,202,155 |

**Note 10 – Workers' Compensation**

The Federal Employees' Compensation Act (FECA) provides income and medical cost protection to covered federal civilian employees injured on the job, employees who have incurred a work-related disease, and beneficiaries of employees whose death is attributable to a job-related injury or occupational disease. Claims incurred for benefits for Board employees under FECA are administered by the Department of Labor and are paid, ultimately, by the Board.

The Board recorded an estimated liability for claims incurred, but not reported as of September 30, 2013 and 2012, as follows:

| | FY 2013 | FY 2012 |
|---|---|---|
| Worker's Compensation | $22,013 | $22,013 |

**Note 11 – Leases**

The Board has not entered into any existing capital leases and thus has incurred no liability resulting from such leases. The Board's one operating lease is for headquarters office space from GSA. Lease costs for office space for FY 2013 and FY 2012 under the terms of its leases amounted to $2,256,815 and $2,211,869, respectively. The Board entered into a new ten (10) year lease agreement effective March 8, 2006. Estimated future minimum lease payments under the terms of the lease are as follows:

| Fiscal Year Ending September 30 | Payment |
|---|---|
| 2014 | $2,228,682 |
| 2015 | $2,229,996 |
| 2016 (through March 7) | $1,009,162 |
| Total Estimated Future Lease Payments | $5,467,840 |

**Note 12 – Intragovernmental Costs**

The portion of the Board's program costs (note as the Board earns no revenue from its operations, gross and net costs are identical) related to Intragovernmental Costs and Costs with the Public are shown as follows. Intragovernmental Costs are costs incurred from exchange transactions with other federal entities (e.g., building lease payments to GSA). Costs with the Public are incurred from exchanged transactions with non-federal entities (i.e., all other program costs).

| | Intragovernmental Costs | Costs with the Public | Total Program Costs |
|---|---|---|---|
| FY 2013 | $6,730,804 | $20,752,740 | $27,483,544 |
| FY 2012 | $7,366,689 | $20,447,655 | $27,814,344 |

The Board's program costs/net cost of operations by OMB Object Class (OC) are as follows:

| OC | Description | FY 2013 | FY 2012 |
|---|---|---|---|
| 11 | Personnel Compensation | $14,809,298 | $14,502,781 |
| 12 | Personnel Benefits | $ 5,292,487 | $ 5,313,089 |
| 13 | Former Personnel Benefits | $ 2,513 | $ 0 |
| 21 | Travel & Transportation of Persons | $ 622,277 | $ 973,593 |
| 22 | Transportation of Things | $ 100,810 | $ 37,710 |
| 23 | Rent, Communications, & Utilities | $ 2,507,369 | $ 2,425,316 |
| 24 | Printing & Reproduction | $ 12,972 | $ 22,146 |
| 25 | Other Contractual Services | $ 3,437,100 | $ 3,841,019 |

| | | | |
|---|---|---|---|
| 26 | Supplies & Materials | $ 218,014 | $ 267,647 |
| 31 | Acquisition of Assets | $ 480,703 | $ 431,043 |
| | Total | $27,483,544 | $27,814,344 |

**Note 13 – Apportionment Categories of Obligations Incurred**

The Board is subject to apportionment. All obligations are incurred against Category A (budgetary resources are distributed by fiscal year quarter) amounts apportioned on the latest Standard Form (SF)-132, *Apportionment and Reapportionment Schedule*.

| | **FY 2013** | **FY 2012** |
|---|---|---|
| Direct | | |
| Category A | $26,252,034 | $28,690,479 |

**Note 14 – Undelivered Orders at the End of the Period**

The amount of Unpaid Obligated Balance, Net, End of Period shown on the Statement of Budgetary Resources includes obligations relating to Undelivered Orders (goods and services contracted for but not yet received at the end of the year) and Accounts Payable (amounts owed at the end of the year by the Board for goods and services received). The amount of each is as follows:

| | **Undelivered Orders** | **Accounts Payable** | **Unpaid Obl. Balance, Net** |
|---|---|---|---|
| FY 2013 | $4,697,625 | $1,004,593 | $5,702,218 |
| FY 2012 | $6,049,248 | $2,123,876 | $8,173,124 |

**Note 15 – Explanation of Differences Between the Statement of Budgetary Resources and the Budget of the United States Government**

Budgetary resources made available to the Board include current appropriations, unobligated appropriations and recoveries of prior year obligations. For FY 2012, no material differences exist between the amounts on the Statements of Budgetary Resource and the amounts in the FY 2014 President's Budget which are rounded to the nearest million. As the FY 2015 President's Budget is not yet available, comparison between the Statement of Budgetary Resources and the actual FY 2013 data in the FY 2015 Budget cannot be performed.

**Note 16 – Explanation of the Relationship Between Liabilities Not Covered by Budgetary Resources on the Balance Sheet and the Change in Components Requiring or Generating Resources in Future Periods**

The Change in Components Requiring or Generating Resources in Future Periods equals the difference between the opening and ending balances of Liabilities Not Covered by Budgetary Resources (as shown on the Balance Sheet, reference Note 6), shown as follows:

**FY 2013**

| | FY 2012 | FY 2013 | Change |
|---|---|---|---|
| Unfunded Annual Leave | $1,155,828 | $1,205,202 | $49,374 |
| Workers Compensation | $ 22,013 | $ 22,013 | $ 0 |
| Total | $1,177,841 | $1,177,841 | $49,374 |

**FY 2012**

| | FY 2011 | FY 2012 | Change |
|---|---|---|---|
| Unfunded Annual Leave | $1,080,545 | $1,155,828 | $75,283 |
| Workers Compensation | $ 19,445 | $ 22,013 | $ 2,568 |
| Total | $1,099,990 | $1,177,841 | $77,851 |

Note accrued funded payroll liability is covered by budgetary resources and is included in the net cost of operations, whereas unfunded annual leave liability includes the expense related to the increase in annual leave liability for which the budgetary resources will be provided in a subsequent period.

**Note 17 – Reconciliation of Net Cost of Operations (proprietary) to Budget**

Budgetary Resources Obligated are obligations for personnel, goods, services, benefits, etc. made by the Board in order to conduct operations or acquire assets. Other (i.e., non-budgetary) financing resources are also utilized by Board in its program (proprietary) operations. For example, Spending Authority from Recoveries and Offsetting Collections are financial resources from the recoveries of prior year obligations (e.g., the completion of a contract where not all the funds were used) and refunds or other collections (i.e., funds used to conduct operations that were previously budgeted). As explained in Notes 1(i) and 8, an Imputed Financing Source from Costs Absorbed by Others is recognized for future federal employee benefits costs incurred for Board employees that will be funded by OPM. Changes in Budgetary Resources Obligated for Goods, Services, and Benefits Ordered but Not Yet Provided represents the difference between the beginning and ending balances of undelivered orders (i.e., goods and services received during the year based on obligations incurred the prior year represent a cost of operations not funded from budgetary resources). Resources that Finance the Acquisition of Assets are budgetary resources used to finance assets and not cost of operations (e.g., increases in accounts receivables or capitalized assets). Financing Sources Yet to be Provided represents financing that will be provided in future periods for future costs that are recognized in determining the net cost of operations for the present period. Finally, Components not Requiring or Generating Resources are costs included in the net cost of operations that do not require resources (e.g., depreciation and amortized expenses of assets previously capitalized).

A reconciliation between Budgetary Resources Obligated and Net Cost of Operations (i.e., providing an explanation between budgetary and financial (proprietary) accounting) is as follows (note: in prior years this information was presented as a separate financial statement (the Statement of Financing)):

| | **FY 2013** | **FY 2012** |
|---|---|---|
| Budgetary Resources Obligated | $26,252,034 | $28,690,479 |
| | | |
| Spending Authority from Recoveries and Offsetting Collections | (771,523) | (118,765) |
| Imputed Financing from Costs Absorbed by Others | 865,337 | 884,218 |
| Changes in Budgetary Resources Obligated for Goods, Services, and Benefits Ordered but Not Yet Provided | 1,337,873 | (1,587,896) |
| Resources that Finance the Acquisition of Assets | (494,641) | (285,327) |
| Financing Sources Yet to be Provided (see Note 16) | 49,374 | 77,851 |
| Components Not Requiring or Generating Resources | 245,089 | 153,784 |
| | | |
| Net Cost of Operations | $27,483,544 | $27,814,344 |