

**Fiscal Year 2017**  
**DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)**

**for**

**Sandia Corporation**

**MANAGEMENT AND OPERATION OF THE**

**Sandia National Laboratories**

**Contract Number: DE-AC04-94AL85000**

**Performance Evaluation Period: October 01, 2016 through April 30, 2017**

[Redacted Signature]

9.23.16

Date

President  
Sandia Corporation

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9/27/16

Date

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**FY 2017 PERFORMANCE EVALUATION AND MEASUREMENT PLAN**

**DOCUMENT REVISION HISTORY**

<b>Revision</b>	<b>Date</b>	<b>Change Description</b>
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## INTRODUCTION

Sandia National Laboratories is a Federally Funded Research and Development Center (FFRDC) owned by the United States Department of Energy (DOE), herein referenced as “Laboratories,” and is managed by Sandia Corporation (Sandia). Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria in which Sandia’s performance will be evaluated and upon which the determination of the amount of award fee earned shall be based. The available award fee amounts for FY 2017, October 1, 2016 through April 30, 2017 are specified in Section B, Supplies or Services and Prices/Costs, of the contract. This PEMP promotes a strategic governance and oversight framework based on prudent management of risk, accountability, transparency, and renewed trust. It has been written to implement the collective governance and oversight reform principles as expressed by the DOE/National Nuclear Security Administration (NNSA).

## PERFORMANCE BASED APPROACH

DOE/NNSA will use a performance-based approach to evaluate Sandia’s performance. The performance-based approach is comprised of Goals, Objectives, and Key Outcomes (KOs) that will be measured against authorized work in terms of cost, schedule, and technical performance, as well as respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission.

## MISSION

Sandia shall manage, operate, protect, sustain, and enhance the Laboratories’ multi-mission capabilities, while assuring accomplishment of the Laboratories’ primary mission work in nuclear weapons research, development, and engineering. Sandia shall facilitate the Laboratories’ capability to project its efforts to participate with the scientific, engineering, and technical communities on both the national and international levels with the highest degree of vision, quality, integrity, and technical excellence. Sandia shall engage in the strategic and institutional planning necessary to assure that the Laboratories maintain a posture aimed at anticipating the national technical and scientific needs and dedicated to providing practical solutions. Sandia shall study and explore innovative concepts to minimize or mitigate possible current and future national security threats.

## MISSION PERFORMANCE

Sandia is accountable for and will be evaluated on successfully executing mission work in accordance with applicable DOE/NNSA safety and security requirements consistent with the terms and conditions of the Contract. Protection of worker and public safety, the environment, and security are essential and implicit elements of successful mission performance. Accordingly, safety and security improvements and accomplishments are integral to mission performance and will be evaluated in meeting all Goals. The model for this PEMP is to rely on Sandia’s leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. **Sandia is expected to manage in a safe, secure, efficient, effective, results-driven manner, with appropriate risk management and transparency to the government, while taking appropriate measures to minimize costs that do not compromise core objectives and mission performance.** Products and services are expected to be delivered on-schedule and within budget.

## **CONSIDERATION OF CONTEXT IN PERFORMANCE EVALUATION**

The evaluation of performance will consider “context” such as unanticipated barriers (e.g., budget restrictions, rule changes, circumstances outside Sandia’s control), shortened performance period, degree of difficulty, significant accomplishments, and other events that may occur during the performance period. A significant safety or security event may result in an overall limitation to adjectival ratings. Such impacts may be mitigated by the response to the incident, and by other initiatives to improve overall safety or security performance. Sandia is encouraged to note significant safety and security continuous improvements.

## **PERFORMANCE RATING PROCESS**

DOE/NNSA will review performance throughout the performance evaluation period, and provide a minimum of one feedback report to Sandia highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of Sandia’s performance will be completed and documented in a Performance Evaluation Report (PER). The PER will include the performance ratings for the subject performance evaluation period. Objectives and Key Outcomes will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider Sandia’s end of performance evaluation period self-assessment status report in the performance evaluation. The performance ratings will be determined in accordance with FAR 16.401(e) (3) yielding ratings of Excellent, Very Good, Good, Satisfactory or Unsatisfactory. The Goals will then be considered in the aggregate to provide an overall rating and percentage of award fee earned for the contract. Notwithstanding the overall strategic framework, any significant failure may impact the overall rating and award fee earned.

## **PEMP CHANGE CONTROL**

It is essential that a baseline of performance expectations be established at the beginning of the performance period to equitably measure performance, and that changes to that baseline are carefully managed. Any change to the PEMP requires concurrence by the appropriate program office and the NNSA Senior Procurement Executive prior to the Field Office Manager and Contracting Officer signatures. While recognizing the unilateral rights of DOE/NNSA as expressed in the contract terms and conditions, bilateral changes are the preferred method of change whenever possible.

## **FINAL DECISION**

The Fee Determining Official (FDO) makes the final decision regarding the performance ratings and percentage of award fee earned. This is a unilateral decision made solely at the discretion of the FDO.

## TOTAL AVAILABLE AWARD FEE ALLOCATION

<b>Performance Category</b>	<b>Goal</b>	<b>% At-Risk Fee Allocation</b>
Programs	<b>Goal-1:</b> Manage the Nuclear Weapons Mission	25%
Programs	<b>Goal-2:</b> Reduce Nuclear Security Threats	15%
Programs	<b>Goal-3:</b> DOE and Strategic Partnership Projects Mission Objectives	20%
Programs	<b>Goal-4:</b> Science, Technology, and Engineering (ST&E)	10%
Operations & Mission Execution	<b>Goal-5:</b> Operations and Infrastructure	20%
Leadership	<b>Goal-6:</b> Leadership	10%

### **UNEARNED FEE**

DOE/NNSA reserves the right to withdraw and redistribute unearned fees.

### **INNOVATIVE SOLUTIONS**

Sandia will recommend innovative, science-based, systems-engineering solutions to the most challenging national and global problems. Sandia will also provide evidence to support programmatic needs and operational goals tempered by risk. DOE/NNSA will take into consideration all major functions including safety and security contributing to mission success. In addition, Sandia is expected to recommend and implement innovative business and management improvement solutions that enhance efficiencies.

## Goal-1: Manage the Nuclear Weapons Mission

Successfully execute Nuclear Weapons mission work in a safe and secure manner in accordance with DOE/NNSA Priorities, Program Control Document and Deliverables, Program Implementation Plans, and Weapon Quality Assurance Requirements. Integrate across the Sandia National Laboratories, while maintaining a DOE/NNSA enterprise-wide focus, to achieve greater impact on strategic national security priorities.

### Objectives:

- Objective-1.1 Accomplish work as negotiated with program sponsors and partners integrating quality requirements into an effective Quality and Nuclear Enterprise Assurance program at their sites and through their suppliers that results in the design, production, and delivery of safe, secure, and reliable weapon products meeting performance, transportation, and cost effective operations.
- Objective-1.2 Maintain knowledge of the state of the stockpile, resulting from successful execution of the stockpile surveillance program and a robust scientific and engineering understanding for the delivery of the annual stockpile assessment.
- Objective-1.3 Execute stockpile work to deliver stockpile system maintenance, production, limited-life component exchanges, weapon containers and dismantlements.
- Objective-1.4 Demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs.
- Objective-1.5 Sustain unique science and engineering capabilities, facilities and essential skills to ensure current and future Nuclear Weapons mission requirements will be met.
- Objective 1.6 Execute Phase 6.X product realization processes and activities in support of nuclear weapon life extension programs, modifications, and alterations in accordance with NNSA requirements, Nuclear Weapons Council guidance, and NNSA project control processes to 1) integrate schedules; 2) lower risks; 3) control costs; and, 4) control change.

### Key Outcome(s) (KO):

- KO 1.1 Demonstrate the effective application of existing experimental capabilities and progress toward developing and implementing new capabilities to support stockpile sustainment and stewardship of the existing stockpile, including, but not limited to: plutonium experiments on the Z Machine, materials science, radiation/hostile environment sciences, engineering sciences, diagnostics, microelectronics, and support of the Critical Decision processes for Trusted Microsystems Capability (TMC) and Enhanced Capabilities for Subcritical Experiments (ECSE).
- KO 1.2 Effectively execute the Mobile Guardian Transporter Project in accordance with the requirements articulated within task agreements with the Office of Secure Transportation.
- KO 1.3 Develop and deliver computational simulation capabilities in support of the Nuclear Weapon mission that run effectively on both current high-performance computing (HPC) platforms and next-generation HPC platforms as they become available.
- KO 1.4 Demonstrate the effective application of existing capabilities to meet the build plan specified within the approved Neutron Generator Implementation Program Plan (NIPP) by reducing risk, managing program costs, and improving efficiency while sustaining or improving the Neutron Generator Enterprise (NGE) infrastructure.

## Goal 2: Reduce Nuclear Security Threats

Successfully execute authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism, and Counter Proliferation and Incident Response missions. Integrate across the NNSA enterprise to achieve greater impact on a focused set of strategic national security priorities.

### Objectives:

- Objective-2.1 Support efforts to secure, account for, and interdict the illicit movement of nuclear weapons, weapons-useable nuclear materials and radiological materials.
- Objective-2.2 Support U.S. national and nuclear security objectives in reducing global nuclear security threats through the innovation of unilateral and multi-lateral technical capabilities to detect, identify, and characterize: 1) foreign nuclear weapons programs, 2) illicit diversion of special nuclear materials, and 3) global nuclear detonations.
- Objective-2.3 Support efforts to achieve permanent threat reduction by managing and minimizing excess weapons-useable nuclear materials and providing nuclear materials for peaceful uses.
- Objective-2.4 Support efforts to prevent proliferation, ensure peaceful nuclear uses, and enable verifiable nuclear reductions in order to strengthen the nonproliferation and arms control regimes.
- Objective-2.5 Sustain and improve nuclear counterterrorism and counterproliferation science, technology, and expertise; execute unique emergency response missions, implement policy in support of incident response and nuclear forensics missions, and assist international partners/ organizations.

### Key Outcome(s) (KO):

- KO 2.1 Meet the expected NNSA and Air Force negotiated schedule and performance requirements in delivering Space Nuclear Detonation Detection mission-related capabilities.
- KO 2.2 Complete radiological security upgrades as assigned by NNSA. Revise bilateral nuclear security training material to integrate U.S. government priorities and international standards (e.g., incorporation of nuclear material accounting and control into nuclear security program).
- KO 2.3 Advance nuclear threat device assessment science and improvements to render safe activities by providing technical leadership for dynamic disablement approaches, ensuring continued enhancements to standoff disablement experimental and modeling capabilities, and obtaining dynamic response data on relevant materials. Manage and maintain readiness for deployable response and home-teams, training and developing new and existing staff to become qualified responders, and maintain equipment in accordance with implementation plans.

### **Goal-3: DOE and Strategic Partnership Projects Mission Objectives**

Successfully execute high-impact work for DOE and Strategic Partnership Projects Mission Objectives safely and securely. Demonstrate the value of the work in addressing the strategic national security needs of the U.S. Government.

#### **Objectives:**

- Objective-3.1 Pursue and perform high-impact work for DOE that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills.
- Objective-3.2 Pursue and perform high-impact Strategic Partnership Projects that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills in support of national security mission requirements.

#### **Key Outcome(s) (KO):**

- KO 3.1 Demonstrate effective leadership, collaboration and progress to advance DOE cross-cutting initiatives.



#### **Goal-4: Science, Technology, and Engineering (ST&E)**

Successfully advance national security missions and advance the frontiers of ST&E in accordance with budget profile, scope, cost, schedule and risk while achieving the expected level of quality, safety and security. Effectively manage Laboratory Directed Research and Development (LDRD) and Technology Transfer programs to advance the frontiers of ST&E.

##### Objectives:

- Objective-4.1 Execute a research strategy that is clear and aligns discretionary investments (e.g., LDRD) with Sandia's strategy and supports DOE/NNSA priorities.
- Objective-4.2 Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.
- Objective-4.3 Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.
- Objective-4.4 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.
- Objective-4.5 Research and develop high-impact technologies through effective partnerships and technology transfer mechanisms that support the Laboratories' strategy, DOE/NNSA priorities and impact the public good; ensure that reporting and publishing (via DOE's Public Access Plan) requirements for broad availability of federally funded scientific research are implemented.

##### Key Outcome(s):

None

## Goal-5: Operations and Infrastructure

Effectively and efficiently manage the safe and secure operations of the Laboratories while maintaining an NNSA enterprise-wide focus; demonstrate accountability for mission performance and management controls; assure mission commitments are met with high-quality products and services; and maintain excellence as a 21<sup>st</sup> century government-owned, contractor-operated facility.

### Objectives:

- Objective-5.1 Deliver effective, efficient, and responsive environment, safety, health and quality (ESH&Q) management and processes.
- Objective-5.2 Accomplish capital projects in accordance with scope, cost, and schedule baselines.
- Objective-5.3 Deliver effective, efficient, and responsive safeguards and security. Deliver effective site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.
- Objective-5.4 Manage NNSA infrastructure to maintain, operate and modernize DOE/NNSA facilities and equipment in an effective, energy efficient manner that minimizes operational, security, and safety risks. Improve site conditions via: 1) disposition of unneeded infrastructure and excess hazardous materials, 2) increasing the viable use of facilities and equipment, and 3) delivering cost efficient improvements. Demonstrate progress to advance the Department of Energy's crosscut initiative to halt the growth of deferred maintenance and support arresting the declining state of infrastructure while working collaboratively with NNSA to implement management improvements (e.g., G2, MDI, BUILDER, and AMPs). Support NNSA's corporate sustainability and energy conservation goals including use of ESPCs and UESCs.
- Objective-5.5 Deliver efficient and effective business operations and systems, financial management, including financial transparency, budget formulation and execution, and internal controls.
- Objective-5.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.
- Objective-5.7 Deliver effective, efficient, and responsive information technology and cyber security.

### Key Outcome(s) (KO):

- KO 5.1 Demonstrate sustainability of the hazardous materials life-cycle management program to reduce risk from legacy chemical/explosive/nuclear material.
- KO 5.2 Support milestones for the improvement of emergency preparedness and response core capabilities and demonstrate site-specific actions to increase overall readiness and performance. Integrate the Headquarters Emergency Management Team and the Headquarters Emergency Operations Center into site exercises and operations.

## Goal-6: Leadership

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, improving safety culture, the responsiveness of Sandia's leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of the Laboratories and the Enterprise.

### Objectives:

- Objective-6.1 Define and implement a realistic strategic vision for the Laboratories, in alignment with the NNSA Strategic Vision, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.
- Objective-6.2 Demonstrate performance results through the institutional utilization of a Contractor Assurance System and promoting a culture of critical self-assessment, transparency, and accountability through the entire organization, while also leveraging parent company resources and expertise.
- Objective-6.3 Demonstrate leadership engagement in integrating Nuclear Security Enterprise (NSE) activities; enhancing cooperation and problem solving among NSE elements, and incorporating best practices and lessons learned from other NSE elements.
- Objective-6.4 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

### Key Outcome(s) (KO):

- KO 6.1 Demonstrate improvements to Safety Culture through the enhanced and sustainable application of engineered safety principles.
- KO 6.2 Reduce the potential for security compromises by moving to a culture that promotes critical thinking in the protection of our national security assets. Demonstrate an effective integrated approach to addressing security incidents and increase continuous improvement activities in this area.