Fiscal Year 2016
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


25 Sept 15
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<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10/6/2015</td>
<td>Add to Objective 4.5 “ensure that reporting and publishing (via DOE’s Public Access Plan) requirements for broad availability of federally funded scientific research are implemented.”</td>
</tr>
</tbody>
</table>

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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 "laboratory," and is managed by Sandia Corporation. Pursuant to the terms and conditions of the Contract, this Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria in which Sandia Corporation 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 2016 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
The performance-based approach evaluates the Sandia Corporation performance through a set of Goals. Each Goal, and its associated Objectives and Key Outcomes (KOs), will be measured against authorized work in terms of cost, schedule, and technical performance, and the respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission.

MISSION
Sandia Corporation shall manage, operate, protect, sustain, and enhance the Laboratories' ability to function as a NNSA Multi-Program Laboratory, while assuring accomplishment of its primary assignment as a nuclear weapons research, development, and engineering laboratory. Sandia Corporation shall facilitate the Laboratory’s ability 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 Corporation shall engage in the strategic and institutional planning necessary to assure that the Laboratory maintains a posture aimed at anticipating the national technical and scientific needs and dedicated to providing practical solutions. Sandia Corporation shall study and explore innovative concepts to minimize or mitigate possible national security threats, current and future.

MISSION PERFORMANCE
Sandia Corporation is accountable for and will be evaluated on successfully executing program 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, Sandia Corporation shall plan safety and security improvements and accomplishments as an integral component of mission performance contributing to meeting the affected programmatic Goals. The model for this PEMP is to rely on Sandia Corporation’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 Corporation 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 Corporation’s control), 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 adjetival ratings. Such impacts may be balanced by the response to the incident, and by other initiatives to improve overall safety or security performance. Sandia Corporation 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 tri-annual feedback to Sandia Corporation highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of Sandia Corporation’s performance will be completed. This evaluation will be documented in a Performance Evaluation Report (PER), and will include the performance ratings and award fee earned for the subject performance evaluation period. Objectives and KOs will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider Sandia Corporation’s end of year self-assessment 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. The Fee Determining Official’s (FDO) award fee determination is a unilateral decision made solely at the discretion of NNSA.

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 Laboratory Director at the Sandia Corporation may request a face-to-face meeting with the FDO to highlight their site’s strategic performance at the end of the performance evaluation period. This meeting should occur within the first two weeks after the end of the period.

TOTAL AVAILABLE AWARD FEE ALLOCATION

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Goal</th>
<th>% At-Risk Fee Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs (NA-10)</td>
<td>Goal-1: Manage the Nuclear Weapons Mission</td>
<td>25%</td>
</tr>
<tr>
<td>Programs (NA-20, NA-40, NA-80)</td>
<td>Goal-2: Reduce Nuclear Security Threats</td>
<td>15%</td>
</tr>
<tr>
<td>Programs (FOM)</td>
<td>Goal-3: DOE and Strategic Partnership Project Mission Objectives</td>
<td>20%</td>
</tr>
<tr>
<td>Programs (FOM)</td>
<td>Goal-4: Science, Technology, and Engineering (ST&amp;E)</td>
<td>10%</td>
</tr>
<tr>
<td>Operations &amp; Mission Execution</td>
<td>Goal-5: Operations and Infrastructure</td>
<td>20%</td>
</tr>
<tr>
<td>(FOM)</td>
<td>Goal-6: Leadership</td>
<td>10%</td>
</tr>
</tbody>
</table>
UNEARNED FEE
DOE/NNSA reserves the right to withdraw and redistribute DOE/NNSA unearned fees.

AWARD TERM INCENTIVE
To be eligible to earn available award term the Sandia Corporation must earn an adjectival score of Very Good or better in four of the six Goals and receive no adjectival score of Satisfactory or lower in any Goal, and further, meet any additional requirements as specified in the contract.

INNOVATIVE SOLUTIONS
Sandia Corporation will recommend innovative, science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. Sandia Corporation 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 Corporation 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, and 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 a focused set of strategic national security priorities.

Objectives:

Objective-1.1 Accomplish work as negotiated with program sponsors and partners integrating quality requirements into an effective quality 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 and product realization processes and activities in support of nuclear weapon life extension programs, modification and alterations in accordance with NNSA requirements and Nuclear Weapons Council guidance.

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 for delivery of CD-0 for the Center for Heterogeneous Integration, Packaging and Processing (CHIP3) and CD-1 for Enhanced Capabilities for Subcritical Experiments (ECSE).

KO 1.2 Effectively execute B61-12 LEP, W88 Alt 370 and W80-4 LEP Phase 6.X programs in accordance with program-specific and NNSA Project Controls System directives, including Earned Value Management System implementation, in order to: 1) meet schedule, 2) comply with Phase 6.x Process and Product Realization Processes; 3) lower risks; 4) control change; and 5) control cost.

KO 1.3 Demonstrate the effective application of existing capabilities and the development of new capabilities, including codes and models for predictive simulations, on next-generation computing platforms.

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 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 at 50 domestic buildings. Work closely to revise bilateral nuclear security training material to integrate United States Government priorities and international standards (e.g., incorporation of nuclear material accounting and control into nuclear security program).

KO 2.3 Fully support counterterrorism, counterproliferation, and incident response by advancing nuclear threat device assessment science and improvements to render safe activities by providing technical leadership for dynamic disablement approaches, executing standoff disablement experimental and modeling efforts, obtaining dynamic response data on relevant materials, managing and maintaining readiness for deployable response and home-teams, training and developing new and existing staff to become qualified responders, supporting other new technologies and capabilities, and supporting international activities.
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 Sustain Sandia communication and transparency with the Sandia Field Office regarding Strategic Partnership Projects and improve access to contractor assurance processes and tools.

KO 3.2 Demonstrate effective leadership, collaboration and progress to advance cross-cutting initiatives, including the security and resilience of the United States power grid in alignment with DOE grid modernization goals and objectives.
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 the research 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 laboratory’s 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 laboratory 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 21st 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 Maintain, operate and modernize DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner; including disposition of unneeded infrastructure and excess hazardous materials. 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.

Objective-5.5 Deliver efficient, effective, and responsible business operations, systems and 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 systems 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 Implement infrastructure management improvements such as MDI, BUILDER, and G2.

KO 5.3 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 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 Corporation’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 laboratory and the Enterprise.

Objectives:

Objective-6.1 Define and implement a realistic strategic vision for the laboratory, 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 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.

Objective-6.4 Exhibit professional excellence in performing roles/ responsibilities while pursuing opportunities for continuous learning.

Key Outcome(s) (KO):

KO 6.1 Demonstrate sustainable site-wide safety enhancements through implementation of the “Site-Wide Strategy for Safety Improvement.”

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.