Fiscal Year 2016
DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)

Los Alamos National Security, LLC

MANAGEMENT AND OPERATION OF THE

Los Alamos National Laboratory

Contract Number: DE-AC52-06NA25396

Performance Evaluation Period: October 01, 2015 through September 30, 2016

[redacted] 9/23/15
Charlie F. McMillan Date
Director
Los Alamos National Laboratory

[redacted] 9/23/15
Kimberly Davis Lebak Date
Field Office Manager
Los Alamos Field Office
National Nuclear Security Administration

[redacted] 9/23/15
[redacted] Steven K. Shook Date
Chief, Prime Contracts Office
Los Alamos National Laboratory

[redacted] 9/23/2015
Robert M. Poole Date
Contracting Officer
Los Alamos Field Office
National Nuclear Security Administration

DOCUMENT REVISION HISTORY

Revision	Date	Change Description

INTRODUCTION

The Los Alamos National Laboratory 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 Los Alamos National Security, LLC (LANS). Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria in which LANS' 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 LANS' 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

LANS shall manage, operate, protect, sustain, and enhance the Laboratory's 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. LANS shall facilitate the Laboratory's ability to project its efforts and 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. LANS 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. LANS shall study and explore innovative concepts to minimize or mitigate possible national security threats, current and future.

MISSION PERFORMANCE

LANS 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, LANS 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 LANS' leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. **LANS 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 LANS' 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 adjectival ratings. Such impacts may be balanced by the response to the incident, and by

other initiatives to improve overall safety or security performance. LANS 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 LANS highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of LANS 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 LANS' 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

LANS 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

Performance Category	Goal	% At-Risk Fee Allocation
Programs (NA-10)	**Goal-1:** Manage the Nuclear Weapons Mission	30%
Programs (NA-20, NA-40, NA-80)	**Goal-2**: Reduce Nuclear Security Threats	10%
Programs (FOM)	**Goal-3:** DOE and Strategic Partnership Projects Mission Objectives	5%
Programs (FOM)	**Goal-4:** Science, Technology, and Engineering (ST&E)	10%
Operations & Mission Execution (FOM)	**Goal-5:** Operations and Infrastructure	35%
Leadership (FOM)	**Goal-6:** Leadership	10%

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 LANS 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 LANS contract.

INNOVATIVE SOLUTIONS

LANS will recommend innovative, science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. LANS 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, LANS 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 Laboratory, 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 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: hydrodynamic experiments, certifications and assessment methodologies. Complete acceptance of the Trinity Phase I computer system and begin secure scientific calculations, and complete installation of the Trinity Phase II computer system. The Phase II milestone is contigent on timely deliverables by the commercial vendors.

KO 1.2 Effectively execute B61-12 LEP and W88 Alt 370 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 Advance the Plutonium Strategy.

KO 1.4 Strengthen the technical foundation for a broad-range of LEP options including primary and secondary LEP options; beginning the neutron-diagnosed subcritical experiment (NDSE) capability development by conducting measurements to demonstrate sources and detector options; executing DARHT hydrodynamic experiments; and complete the Secondary LEP Capability and Advanced Safety Capability Peg Posts in FY16.

KO 1.5 Take appropriate actions, within LANS purview, to ensure that TRU waste is processed, packaged and transferred out of TA-55 and CMR, in order not to interrupt Defense Programs planned work at TA-55 and CMR.

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 2.1 Successfully meet the NNSA-Air Force negotiated schedule and performance requirements in delivering Space Nuclear Detonation Detection Mission-related capabilities.
- KO 2.2 Perform activities necessary at LANL to achieve plutonium oxide production requirements in support of Material Disposition Program objectives.
- KO 2.3 Implement fuel fabrication capability process optimization activities for the U.S. High Performance Research Reactor program (USHPRR) supporting reactor conversions.
- KO 2.4 Execute nuclear threat device "task list" and materials work; provide leadership for the Block 8 training course; execute stand-off disablement experimental and modeling efforts, support the assessment of open source information; manage and maintain readiness for deployable response and home teams, train and develop new and existing staff to become qualified responders, and support operations, exercises, and drills.

Goal-3: DOE and Strategic Partnership Projects Mission Objectives

Successfully execute high-impact work for DOE and Strategic Partnership Project 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.

KeyOutcome(s):

KO 3.1 Support Department of Energy crosscuts in planning, and provide relevant science and technology leadership in collaboration with other laboratories in exascale and subsurface science initiatives in support of the nation's energy security goals.

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 *Laboratory* 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.

KeyOutcome(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.

KeyOutcome(s):

- KO 5.1 Los Alamos National Laboratory will prepare for and successfully execute readiness assessments for PF-4 and WETF operations and will resume operations in PF-4 and WETF in accordance with an approved schedule.
- KO 5.2 Improve Nuclear and High Hazard Operations in areas including, but not limited to Conduct of Operations, Safety Basis development and implementation, Fire Protection, and Work Planning and Control, including the implementation of the Laboratory's Corrective Action Plan for the TA-53 arc-flash accident.
- KO 5.3 Achieve recertification of the Earned Value Management System (EVMS) for Capital Projects and demonstrate EVMS effectiveness in accordance with an approved schedule.
- KO 5.4 Execute Radiological Laboratory Equipment Installation Phase 2 (REl-2) and PF-4 Equipment Installation (PEI) subprojects in accordance with the approved plan with emphasis on cost and schedule milestones. Emphasis will also be on the support and progress in development of baseline (CD-2/3) activities for each subproject.
- KO 5.5 Implement the approved corrective action plan that addresses all the findings of both internal and external reviews (i.e. AIB, OIG, Longenecker, OE, etc.) of the LANL TRU waste program, including strengthening of the Contractor Assurance System.
- KO 5.6 Support the implementation of the New Mexico Environment Department (NMED) Settlement. Key factors include effective management of designated supplemental environmental projects.

KO 5.7 Develop and implement an effective Enduring Waste Management Master Plan that addresses all laboratory generated waste and with specific emphasis on Transuranic waste, which reflects altered work scope associated with the new EM Bridge Contract for legacy waste.

KO 5.8 Implement infrastructure management improvements such as G2, MDI, and BUILDER.

KO 5.9 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. (NA-40)

KO 5.10 Maintain effective Institutional and Weapons Quality Assurance Programs.

Goal-6: Leadership

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, improving safety culture, the responsiveness of LANS 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.

KeyOutcome(s):

- KO 6.1 Support for the establishment of the Manhattan Project National Historical Park.
- KO 6.2 Support the transition of legacy environmental cleanup workscope from NA-LA to EM-LA.
- KO 6.3 Support regional economic development requirement, Technology Commercialization, and NM Small Business Assistance (NMSBA) programs to benefit both regional small businesses and LANL Principal Investigators, identifying opportunities for creating NM-based startup companies based on LANL technology.