Fiscal Year 2020
DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)

Triad National Security, LLC

MANAGEMENT AND OPERATION OF THE

Los Alamos National Laboratory

Contract Number: 89233218CNA000001

Performance Evaluation Period: October 01, 2019 through September 30, 2020

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FY 2020 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

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 Government, under the custody of the Department of Energy (DOE), herein referenced as "Laboratory," and is managed and operated by Triad National Security, LLC (Triad). Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria by which NNSA will evaluate Triad performance and upon which NNSA shall determine of the amount of award fee earned. The available award fee amounts for FY 2020 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 implements 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 Triad's 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

Los Alamos National Laboratory works to solve the nation's toughest national security challenges through scientific and engineering excellence. We do that by ensuring the safety, security, and effectiveness of our nation's nuclear stockpile; developing tools for nuclear nonproliferation; providing expertise in counterterrorism; and tackling emerging threats.

MISSION PERFORMANCE

Triad 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, Triad 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 Triad'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. **Triad 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 Triad'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 adjectival ratings. Such impacts may be balanced by the response to the incident, and by other initiatives to improve overall safety or security performance. Triad 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 Triad highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of Triad's performance will be completed. This evaluation will be documented in a Performance Evaluation Report (PER) and include the ratings and award fee earned for the evaluation period. Objectives and KOs (if any) will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider Triad'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 in any goal may affect the overall rating and award fee earned. **Dollar values contained in the PEMP are provided as guidelines for developing a recommendation of fee allocation to the Fee Determining Official (FDO). The final determination as to the amount of fee earned is a unilateral determination made by the FDO.**

Triad 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.

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.

FEE ALIGNMENT AND "AT-RISK" AWARD FEE ALLOCATION

This table is provided for information only and does not change the terms and conditions of the contract. "At-Risk" Award Fee (AF) is applied to goals 1, 2, 5, and 6 and Fixed Fee (FF) is applied to goals 3 and 4. Goal 3 displays total estimated fee attributable to DOE work. The sum of dollars available for goals 1, 2, 5, and 6 equals total AF for both DOE and NNSA work. The dollars available for goal 4 is the total FF for both DOE and NNSA work. All goals, including those with FF, will receive an adjectival assessment as a part of the Corporate Performance Evaluation Process (CPEP).

Fixed Fee (FF), Award Fee (AF), SPP Fixed Fee (SPP FF)

Goal	Fee Amount	Fee Type
Goal-1: Mission Execution: Nuclear Weapons	$8.9M	Award Fee (At-Risk)
Goal-2: Mission Execution: Global Nuclear Security	$3.8M	Award Fee (At-Risk)
Goal-3: DOE and Strategic Partnership Projects (SPP)	*DOE – $M SPP - $TBD	*DOE – (FF + AF) SPP – Fixed Fee
Goal-4: Mission Execution: Science, Technology, and Engineering (ST&E)	$20.0M	Fixed Fee
Goal-5: Mission Enablement	$7.7M	Award Fee (At-Risk)
Goal-6: Mission Leadership	$5.1M	Award Fee (At-Risk)

**Display of total estimated fee attributable to DOE work.*

The above template is applied to each field office using Fixed Fee (FF) and At-Risk Award Fee (AF) amounts established in each individual contract. The charts also do not include Fee associated with Capital Asset Projects such as CMRR.

UNEARNED FEE

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

INNOVATIVE SOLUTIONS

Triad will recommend innovative, technology/science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. Triad 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, DOE/NNSA expects Triad to recommend and implement innovative business and management improvement solutions that enhance efficiencies.

Goal-1: Mission Execution: Nuclear Weapons

Successfully execute Nuclear Stockpile mission work for Defense Programs work in a safe and secure manner in accordance with DOE/NNSA priorities, work authorizations, and execution/implementation plans.

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: Execute stockpile system maintenance, production, limited-life component exchanges, weapon containers, surveillance, and dismantlement programs and maintain knowledge of the state of the stockpile through 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: Apply innovative strategies and technologies to sustain strategic materials and improve science and engineering capabilities, facilities and essential skills to support existing and future nuclear security enterprise requirements.

Objective-1.4: Execute all warhead processes and activities in accordance with NNSA direction and in close coordination and collaboration with other laboratories, sites, or plants to 1) integrate schedules for activities across the complex that meet overall commitments to DoD; 2) lower risks; 3) control costs; and 4) improve manufacturability and supply chain execution.

Key Outcome(s):

KO 1.1 Triad and SRNS collaborate on establishing NNSA's ability to produce 80 pits per year by working together on potential equipment design and layouts and developing strategies to effectively onboard and train personnel, including ensuring training facilities are available.

KO 1.2 Complete fabrication of subcritical test articles and conduct plutonium subcritical experiments.

KO 1.3 Execute the programs safely, securely, and compliantly with an emphasis on conduct of operations and waste management during program execution.

KO 1.4 Triad, LLNS, NTESS, and MSTS collaborate to execute subcritical experiments to provide data relevant to improving our predictive capability and for certification of the current and future stockpile.

KO 1.5 Triad, NTESS, and LLNS will develop weapons codes on the Sierra platform showing progress to support future qualification and certification analysis.

Goal-2: Mission Execution: Global Nuclear Security

Successfully execute authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism and Counterproliferation, and Incident Response missions in accordance with DOE/NNSA priorities, work authorizations, and execution/implementation plans,

Objectives:

- Objective-2.1 Support efforts to secure, account for, and interdict the illicit movement of nuclear weapons, weapons-useable nuclear materials, and radioactive 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 Continue operations to convert surplus plutonium to oxide in preparation for final disposition consistent with integrated schedule for TA-55 and the program plan, prioritizing materials to consolidate vault space storage.
- KO 2.2 Execute Space Nuclear detonation detection mission-related performance requirements, milestones and delivery dates.
- KO 2.3 Develop and implement plans that address the Capability Forward Initiative, and support nuclear forensics in the development of National Nuclear Material Archive.
- KO 2.4 Execute the programs safely, securely, and compliantly with an emphasis on conduct of operations and waste management during program execution.

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 ensure that high-impact Strategic Partnership Projects strategically integrate 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 3.1 Execute the programs safely, securely, and compliantly with an emphasis on conduct of operations and waste management during program execution.

Goal-4: Mission Execution: Science, Technology, and Engineering (ST&E)

Successfully advance national security missions and advance the frontiers of ST&E. Effectively manage Site Directed Research and Development (SDRD) and Technology Transfer, etc. in a safe and secure manner in accordance with DOE/NNSA priorities, work authorizations, and execution/implementation plans.

Objectives:

- Objective-4.1 Execute a research strategy that is clear and aligns discretionary investments (e.g., SDRD with the 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 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):

- KO 4.1 Execute the programs safely, securely, and compliantly with an emphasis on conduct of operations and waste management during program execution.

Goal 5: Mission Enablement

Effectively and efficiently manage the safe and secure operations of the Laboratory while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber and physical security requirements, and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure. Performance will be measured by the contractor's assurance system, NNSA metrics, cost control, business and financial operations, project baselines, implementation plans, assessment and audit results, etc., with a focus on mission enablement.

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, infrastructure, 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, and 4) focus on the amount of predictive/preventative maintenance work being performed, to reduce corrective maintenance and risks of disruption to mission operations. Demonstrate progress to advance the Department of Energy has 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, 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, that provides for a comprehensive mission and functional area delivery.

Key Outcome(s):

- KO 5.1 Accomplish the effective and timely de-inventory of stored NNSA waste, as described in the Enduring Waste Management Plan approved and the NNSA NGEN TRU waste program plan. Improve current radioactive waste management operations to include implementation of the WIPP WAC to support timely characterization and certification of radioactive waste streams for continuous off-site shipments to WIPP and completion of Supplemental Environmental Projects.
- KO 5.2 Execute Projects within the Line Item construction portfolio in accordance with approved cost, scope or schedule baselines or execution plans to obtain the requisite

Critical Decision: Radiological Laboratory Equipment Installation Phase 2 (REI-2) and PF-4 Equipment Installation Phase 1 (PEI-1), TA-55 Reinvestment (Phase III) Project, Electrical Power Capacity Upgrade(s) (EPCU) Project, TA-3 Electrical Substation Replacement Project, TRU Liquid Waste Project, and Advanced Sources and Detectors (ASD). Advance scope development for the EPCU Project and the Line Item scope proposed to support the Los Alamos Plutonium Pit Production effort to include the formerly planned CMRR subprojects known as PEI2 and Recategorizing RLUOB to Hazard Category 3 (RC3). Complete construction and approve CD-4 for the Exascale Class Computing Cooling Equipment (EC3E) Project.

KO 5.3 Achieve agency (DOE) formal recertification of the Earned Value Management System (EVMS) for capital projects over $100M no later than March 31, 2020.

KO 5.4 Develop and demonstrate improved culture of subcontractors in the areas of safety, security, environmental compliance, and performance.

KO 5.5 Develop and implement key performance indicators in programmatic areas including Conduct of Operations, Criticality Safety, Safety Basis, Emergency Management, Cyber Security, Business Systems, and Work Planning and Control that demonstrate mission execution in a safe and secure manner with continuous improvement.

KO 5.6 As part of establishing a learning environment, establish a pilot training/education program for the weapons production mission addressing in part, disciplined operations.

Goal-6: Mission Leadership

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of Triad 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 collaboratively within the DOE/NNSA complex to develop, integrate, and implement enterprise-wide plans and solutions that improve Design Agency and Production Agency integration, optimize make/buy decisions and processes to qualify in-house and COTS components, and achieve life-cycle efficiencies for the complex that facilitate meeting the mission requirements.
- Objective-6.4 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

Key Outcome(s):

- KO 6.1 Demonstrate strong leadership in achieving FY 2020 goals and milestones critical to producing 30 pits-per-year at LANL and supporting efforts to achieve 50 pits-per-year at Savannah River Site, in accordance with the NNSA-authorized project plans.
- KO 6.2 Ensure consistent support for NNSA's effective, responsive, and resilient nuclear security enterprise with LANL senior leadership, subject matter expertise, and external communications.
- KO 6.3 Implement actions to drive cultural change, with measurable and sustainable outcomes and impacts demonstrated by continuous improvement.
- KO 6.4 Triad, LLNS, NTESS, and MSTS collaborate to execute U1a Complex Enhancements Projects including Enhanced Capabilities for Subcritical Experiments (ECSE)/Advanced Sources and Detectors (ASD) projects in accordance with negotiated outcomes.

FAR 16.401 (e) (3) AWARD FEE ADJECTIVAL RATINGS AND SUPPLEMENTAL DEFINITIONS

Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by at least one significant accomplishment, or a combination of accomplishments that significantly outweigh very minor issues, if any. No significant issues in performance exist.*
Very Good	76% - 90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by accomplishments that greatly outweigh issues. No significant issues in performance exist.*
Good	51% - 75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by accomplishments that slightly outweigh issues. No significant issues in performance exist.*
Satisfactory	No greater than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by issues that slightly outweigh accomplishments.*

Unsatisfactory	0%	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period. *This performance level is evidenced by issues that significantly outweigh accomplishments, if any.*

Definitions:

An **Accomplishment** is an achievement or success in the performance of contract requirements that exceeds standards or expectations. Examples might be performing full contract requirements under budget while meeting or beating schedule baselines or performing additional scope within the initial cost targets with no negative effect on requirements or other programs, indicating continued performance improvement.

An **Issue** is a point in question or a matter that raises concerns regarding successful performance of contract requirements within scope, cost (budget), and schedule baselines or concern of negative effect on requirements or other programs, indicating a decline in performance that needs attention and improvement.