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

# National Technology & Engineering Solutions of Sandia, LLC (NTESS)

# MANAGEMENT AND OPERATION OF THE

# Sandia National Laboratories

Contract Number: DE-NA0003525

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

Dr. Stephen Vounger Laboratories Director NTESS

Date

Field Office Manager

Jeffrey P. Harrell

Sandia Field Office

National Nuclear Security Administration

Date

Date

Kelly E. Westlake Date
Acting Senior Manager
Prime Contract & Export Control
NTESS

Geraldine Duran Contracting Officer

Sandia Field Office

National Nuclear Security Administration

#### INTRODUCTION

Sandia National Laboratories is a Federally Funded Research and Development Center owned by the United States Government, under the custody of the Department of Energy (DOE), National Nuclear Security Administration (NNSA) herein referenced as "Laboratories" and is managed and operated by National Technology and Engineering Solutions of Sandia, LLC (NTESS). 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 NTESS performance and upon which NNSA shall determine 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/NNSA.

#### PERFORMANCE BASED APPROACH

The performance-based approach evaluates the NTESS 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

NTESS shall manage, operate, protect, sustain, and enhance the Laboratories' multi-mission capabilities, while assuring accomplishment of the Laboratories' primary mission work in nuclear weapons and nuclear non-proliferation research, development, and engineering. NTESS 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 a high degree of vision, quality, integrity, and technical excellence. NTESS 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. NTESS shall study and explore innovative concepts to minimize or mitigate possible current and future national security threats.

#### MISSION PERFORMANCE

NTESS 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, NTESS 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 NTESS leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. NTESS 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 NTESS 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. NTESS 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 biannual feedback to NTESS highlighting accomplishments and/or issues. At the end of the performance evaluation period, an evaluation of NTESS 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 NTESS 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 impact 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.

NTESS may request a face-to-face meeting with the FDO to highlight its 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
<b>Goal-1:</b> Mission Execution: Nuclear Weapons	\$3.24M	Award Fee (At-Risk)
<b>Goal-2</b> : Mission Execution: Global Nuclear Security	\$0.81M	Award Fee (At-Risk)
Goal-3: DOE and Strategic Partnership Projects (SPP)	DOE - *\$1.40M SPP - \$11.223M	*DOE – (FF + AF) SPP – Fixed Fee
<b>Goal-4:</b> Mission Execution: Science, Technology, and Engineering (ST&E)	\$20.28M	Fixed Fee
Goal-5: Mission Enablement	\$2.43M	Award Fee (At-Risk)
Goal-6: Mission Leadership	\$1.62M	Award Fee (At-Risk)

<sup>\*</sup>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 amounts are based on estimated values for FY20 and will change slightly as actual values for various categories of work are established with FY20 budgets. The charts also do not include Fee associated with Capital Asset Projects.

#### **UNEARNED FEE**

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

#### INNOVATIVE SOLUTIONS

NTESS will recommend innovative, technology/science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. NTESS 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 NTESS 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. Integrate 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 standards, transportation requirements, and cost effective management.
- 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 risk, 3) control cost, and 4) improve manufacturability and supply chain execution.

#### **Key Outcomes:**

- KO 1.1 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 1.2 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 Counter Proliferation, 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 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 Outcomes:

- KO 2.1 Meet space nuclear detonation detection mission-related performance requirements, milestones and delivery dates.
- KO 2.2 Develop and implement plans that address the Capability Forward Initiative, and support nuclear forensics in the development of National Nuclear Material Archive.

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

Successfully execute high-impact work for DOE and Strategic Partnerships 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 leverage, sustain and strengthen unique science and engineering capabilities, facilities, and essential skills in support of national security mission requirements.

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

Successfully advance national security missions and advance the frontiers of ST&E. Effectively manage Laboratory Directed Research and Development (LDRD) 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., LDRD with NTESS 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.

#### Goal-5: Mission Enablement

Effectively and efficiently manage the safe and secure operations of the Laboratories while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber, technical, informational, 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/preventive maintenance work being performed to reduce corrective maintenance and risks of disruption to mission operations. 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 Energy Savings Performance Contracts and Utility Energy Savings Contracts.
- 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 provide for a comprehensive mission and functional area delivery.

#### 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 NTESS 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 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:

KO 6.1

Triad, LLNS, NTESS, and MSTS collaborate to execute U1a Complex Enhancement 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 awardfee 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 <u>Accomplishment</u> 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 <u>Issue</u> 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.