

**Fiscal Year 2018  
DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)**

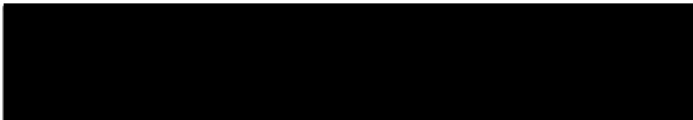
**Mission Support & Test Services, LLC**

**MANAGEMENT AND OPERATION OF THE**

**Nevada National Security Site**

**Contract Number: DE-NA0003624**

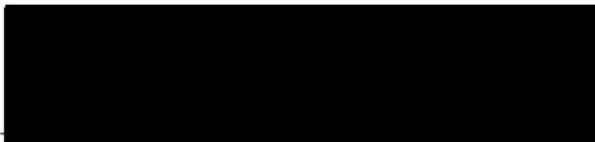
**Performance Evaluation Period: December 01, 2017 through September 30, 2018**



Mark W. Martinez Date  
President  
Mission Support and Test Services LLC



Steven J. Lawrence Date  
Field Office Manager  
Nevada Field Office  
National Nuclear Security Administration



David V. Ruckstuhl Date  
Director, Supply Chain  
Mission Support and Test Services LLC



Darby A. Dieterich Date  
Contracting Officer  
Nevada Field Office  
National Nuclear Security Administration

# FY 2018 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

## DOCUMENT REVISION HISTORY

Revision	Date	Change Description
----------	------	--------------------

## INTRODUCTION

The Nevada National Security Site (NNSS) is a site owned by the U.S. Government, under the custody of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA), herein referenced as the "NNSS", and is managed and operated by Mission Support & Test Service, LLC (MSTS). 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 MSTS performance and the basis for determining the amount of award fee earned. The available award fee amounts for FY 2018 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 NNSA.

## PERFORMANCE BASED APPROACH

The performance-based approach evaluates the MSTS 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

MSTS shall provide support and infrastructure for experiments and activities at the NNSS and satellite facilities. MSTS shall be responsible for a wide range of activities in support of DOE/NNSA missions that include the following: nuclear explosives operations; remote field experiments and operations; physical and environmental science; nuclear waste management systems and technology; design and fabrication of electronic, mechanical, and structural systems; remote and robotic sensing; management of multi-laboratory facilities, mining, engineering, and construction operations; chemical, explosives, and hazardous materials systems and technologies; intelligence-related work; and waste management for various categories of waste. MSTS shall be responsible for a wide-range of facilities, laboratories, and equipment that support the custom design, construction, and fielding of experimental systems ranging from small electronic and remote sensing packages to fielding complex systems in hostile environments for use anywhere in the world.

## MISSION PERFORMANCE

MSTS 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, MSTS 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 MSTS' leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. **MSTS 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 MSTs’ 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. MSTs 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 MSTs highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of MSTs’ 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 MSTs’ 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.

MSTs 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.

## TOTAL AVAILABLE AWARD FEE ALLOCATION

Goal	% At-Risk Fee Allocation
<b>Goal-1:</b> Manage the Nuclear Weapons Mission	30%
<b>Goal-2:</b> Reduce Nuclear Security Threats	15%
<b>Goal-3:</b> DOE and Strategic Partnership Projects Mission Objectives	6%
<b>Goal-4:</b> Science, Technology, and Engineering (ST&E)	4%
<b>Goal-5:</b> Operations and Infrastructure	30%
<b>Goal-6:</b> Leadership	15%

### **UNEARNED FEE**

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

### **AWARD TERM INCENTIVE (N/A)**

### **INNOVATIVE SOLUTIONS**

MSTS will recommend innovative, technology/science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. MSTS 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 MSTS 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 NNSS, while maintaining a DOE/NNSA enterprise-wide focus, in order 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 and Nuclear Enterprise Assurance program at their sites and through their suppliers that results in the design, production, and delivery of safe, secure, and reliable weapon products meeting performance, transportation, and cost effective operations.
- Objective-1.2 Maintain knowledge of the state of the stockpile, resulting from successful execution of the stockpile surveillance program and a robust scientific and engineering understanding for the delivery of the annual stockpile assessment.
- Objective-1.3 Execute stockpile work to deliver stockpile system maintenance, production, limited-life component exchanges, weapon containers and dismantlements.
- Objective-1.4 Apply innovative strategies and technologies, and sustain science and engineering capabilities, facilities and skills to support existing and future nuclear security enterprise requirements.
- Objective 1.5 Execute Phase 6.X, product realization processes and activities in support of nuclear weapon life extension programs, modification and alterations in accordance with NNSA requirements, Nuclear Weapons Council guidance, and NNSA project control processes to 1) integrate schedules; 2) lower risks; 3) control costs; and 4) control change.

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

- KO 1.1 Execute the Subcritical Experimental (SCE) series according to the National SCE Program and implement the SCE framework, including facility and safety basis modifications, while continuing to improve operations and advanced diagnostics.
- KO 1.2 Advance the Critical Decision Process and Risk Mitigation of the Enhanced Capabilities for Subcritical Experiments (ECSE) work and implement elements including enhanced radiography, enhanced experimental infrastructure, enhanced authorization basis and begin conducting Neutron-Diagnosed Subcritical Experiments (NDSE) proof-of-principle experiments.
- KO 1.3 Enhance the Dynamic Materials Properties and Primary Assessment Technologies within the Research, Development, Test and Evaluation national program through JASPER data generation and by supporting key diagnostics developments at other stewardship facilities.

## 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 Counterproliferation 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 Demonstrate effective technical experimental and facility capability in support of non-proliferation, counter-proliferation, counter-terror and treaty verification objectives.
- KO 2.2 Manage and operate National Emergency Response facilities and assets, including aircraft, to respond to situations involving radioactive materials to detect, measure, and track material involved, determine contamination levels, and map release patterns; manage and maintain readiness for deployable response and home teams; train and develop new and existing staff to become qualified responders; maintain and recapitalize equipment in accordance with implementation plan; and support international emergency management and cooperation activities associated with emergency preparedness and response program development to include first responder training, detection and response equipment, GIS, emergency center, and infrastructure.

### **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.

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

- KO 3.1 Operate and maintain the radioactive waste management complex and its supporting infrastructure, and continue to perform the legacy environmental cleanup of groundwater and soil in accordance with the federal facility agreement and consent order and other applicable requirements. Enable and enhance the consolidation of components that supports the de-inventory and disposition initiatives of legacy items throughout the national security complex.



## **Goal-4: 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 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., SDRD) with site 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 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.
- Objective-4.4 Research and develop high-impact technologies through effective partnerships and technology transfer mechanisms that support the site'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):**

- KO 4.1 Implement an experimental platform/testbed to hone MSTs' diagnostic and experimental competencies, train the next-gen STEM workers for increased sophistication of SCE and other experiments, and execute R&D not feasible on other venues.

## Goal-5: Operations and Infrastructure

Effectively and efficiently manage the safe and secure operations of the site while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure.

### 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
- 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 5.1 Objectively demonstrate integrated operational performance across all components of MSTs with a strong safety and security culture that effectively enables successful mission outcomes with special emphasis on:
  - Mission Critical Enhancements
  - Argus Installation
  - Workforce Planning and Staffing
- KO 5.2 Demonstrate management focus, integrated planning and required resources are applied to sustain the multi-year NNSS Infrastructure Consolidation and Modernization effort to reduce risk, cost and energy usage, and improve workplace conditions and mission support.

## Goal-6: 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 MSTs' 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 site and the Enterprise.

### Objectives:

- Objective-6.1 Define and implement a realistic strategic vision for the site, 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, timely corrective action, 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 6.1 Demonstrate that MSTs is a self-critical, learning organization with a strong safety and security culture that effectively enables successful mission outcomes. Demonstrate Operational Excellence through improved:

- Transparency/Management Engagement and Communication
- Leadership Development
- Effective operations driven by risk management and mitigation
- Issues Management and Continuous Improvement
- Effective internal and external cross organizational integration