Fiscal Year 2020
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: October 01, 2019 through September 30, 2020

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<table>
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<tr>
<th>Revision</th>
<th>Date</th>
<th>Change Description</th>
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FY 2020 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

DOCUMENT REVISION HISTORY
INTRODUCTION
The Nevada National Security Site (NNSS) is a site owned by the United States Government, under the custody of the Department of Energy (DOE), herein referenced as "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 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/National Nuclear Security Administration (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 triannual 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 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 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 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.

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.
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)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Fee Amount</th>
<th>Fee Type</th>
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<tbody>
<tr>
<td>Goal-1: Mission Execution: Nuclear Weapons</td>
<td>$5.576M</td>
<td>Award Fee (At-Risk)</td>
</tr>
<tr>
<td>Goal-2: Mission Execution: Global Nuclear Security</td>
<td>$3.717M</td>
<td>Award Fee (At-Risk)</td>
</tr>
<tr>
<td>Goal-3: DOE and Strategic Partnership Projects (SPP)</td>
<td>*DOE – TBD SPP - TBD</td>
<td>*DOE – (AF) SPP – Fixed Fee</td>
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<tr>
<td>Goal-4: Mission Execution: Science, Technology, and Engineering (ST&amp;E)</td>
<td>$-0-</td>
<td>Fixed Fee = N/A</td>
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<tr>
<td>Goal-5: Mission Enablement</td>
<td>$5.576M</td>
<td>Award Fee (At-Risk)</td>
</tr>
<tr>
<td>Goal-6: Mission Leadership</td>
<td>$3.717M</td>
<td>Award Fee (At-Risk)</td>
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*Display of total estimated fee attributable to DOE work.

The amounts are based on estimated values for FY20 and could change slightly as actual values for various categories of work are established with FY20 budgets.

**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: 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 to 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 Outcome:

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.
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/orrganizations.
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 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.
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 NNSS' 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 NNSS' 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 NNSS 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, 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’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 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 cybersecurity that provides 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 the 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 NNSS and the Enterprise.

Objectives:

Objective-6.1 Define and implement a realistic strategic vision for the NNSS, 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 Enhancements Projects including Enhanced Capabilities for Subcritical Experiments (ECSE)/Advanced Sources and Detectors (ASD) projects in accordance with negotiated outcomes.
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<th>Rating</th>
<th>Percentage</th>
<th>Definition</th>
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| 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.