Fiscal Year 2023
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, 2022 through September 30, 2023

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September 29, 2022
# FY 2023 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

## DOCUMENT REVISION HISTORY

<table>
<thead>
<tr>
<th>Revision</th>
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<th>Change Description</th>
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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 2023 are specified in Section B, Supplies or Services and Prices/Costs, of the Contract. This PEMP promotes a strategic Governance and Management Framework in support of the NNSA’s Strategic Vision. This Strategic Vision requires MSTS to fully execute mission milestones in support of key mission objectives and effectively meet significant management challenges identified 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) as applicable, will be measured against authorized cost, schedule, and technical performance, based on respective outcomes, demonstrated performance, and impact to DOE/NNSA missions.

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 mission work with safety and security as integral to mission execution and 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 its assurance systems, and supporting measures, metrics, and evidence. MSTS is expected to manage in a safe, secure, efficient, effective, and 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.
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 effectiveness and efficiency.

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 or improvements, 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 accomplishments and/or issues. At the end of the performance evaluation period, an evaluation of MSTS’ performance will be completed based on contractor oversight against the criteria in the PEMP. Sources of oversight data include, but are not limited to, DOE/NNSA formal assessments, contractor self-assessments, internal and external audits, inspections, program and project reviews, operational awareness activities, contractor assurance system, etc.

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 (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 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.

MSTS 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. All goals will receive an adjectival assessment as a part of the Corporate Performance Evaluation Process (CPEP).

<table>
<thead>
<tr>
<th>Goal</th>
<th>At Risk Award Fee</th>
<th>At Risk Award Fee Percent</th>
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<tbody>
<tr>
<td><strong>Goal-1:</strong> Mission Delivery: Nuclear Weapons</td>
<td>TBD</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Goal-2:</strong> Mission Delivery: Global Nuclear Security</td>
<td>TBD</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Goal-3:</strong> Mission Innovation: Advancing Science and Technology</td>
<td>TBD</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Goal-4:</strong> Mission Enablement</td>
<td>TBD</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Goal-5:</strong> Mission Leadership</td>
<td>TBD</td>
<td>15%</td>
</tr>
</tbody>
</table>

The above template is applied to each field office using At-Risk Award Fee (AF) amounts established in each individual contract. The amounts are based on estimated values for FY 2023 and will change slightly as actual values for various categories of work are established with FY 2023 budgets.

**UNEARNED FEE**

DOE/NNSA reserves the right to withdraw and redistribute DOE/NNSA unearned fees.
**Goal-1: Mission Delivery: Nuclear Weapons**

Successfully execute the cost, scope, and schedule of the 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: Work as a team across the nuclear security enterprise on stockpile modernization program scope to 1) achieve and maintain program delivery schedules; 2) lower risk to achieving First Production Unit (FPU), Initial Operational Capability (IOC), and Final Operational Capability (FOC); 3) improve manufacturability and supply chain execution; and 4) control costs.

Objective-1.2: Execute stockpile surveillance, assessment, and development studies/capability improvements, weapon program planning/support, and meet transportation and weapon containers activities to meet DoD commitments and deliver the annual stockpile assessment.

Objective-1.3: Work as a team to support and execute production modernization processes and activities to sustain and improve production capabilities, equipment, and infrastructure for 1) War Reserve production; 2) components (particularly pit production); 3) strategic materials capabilities; and 4) improve safety margins, technology maturation strategies, and qualification, logistics, and security plans collaboratively across the NSE.

Objective-1.4: Provide the knowledge and expertise to maintain confidence in the nuclear stockpile without additional nuclear explosive testing by developing, maturing, and applying innovative strategies and technologies to sustain a robust stockpile and improve science and engineering capabilities, facilities, and essential skills to support existing and future nuclear security enterprise requirements.

Key Outcome(s):

KO1.1: MSTS will maintain operational capabilities required to execute subcritical experiments and aging/production science experiments to provide data relevant to improving our predictive capability, assessing the current stockpile and certifying the future stockpile in accordance with milestone schedules.
Goal-2: Mission Delivery: Global Nuclear Security

Successfully execute the cost, scope, and schedule of the 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 to strengthen the nonproliferation and arms control regimes.
- Objective-2.5: Sustain and improve nuclear counterterrorism, counterproliferation, and forensic science, technology, expertise and associated Nuclear Emergency Support Team (NEST) capabilities; execute unique radiological and nuclear (RN) emergency response missions, implement policies and procedures in support of RN incident response and nuclear forensics missions, and assist international partners/organizations.

Key Outcome(s):
- KO 2.1: MSTS will maintain operational capabilities and conduct strategic planning efforts required to execute nuclear forensics programs; enhance NEST readiness capabilities through increased dedicated Radiological Assistance Program Training for Emergency Responders (RAPTER); evolve RN incident response capabilities through the development of just-in-time training and field technical assistance for law enforcement partners; and provide resources required to respond to a nuclear incident domestically and internationally.
Goal-3: Mission Innovation: Advancing Science and Technology

Successfully advance national security missions through innovation by expanding the frontiers of Science, Technology, and Engineering (ST&E). Execute transformative and leading-edge Research and Development (R&D) by creating a vibrant, creative, environment that leverages effective partnerships (including SPP) and technology transfer endeavors. Effectively manage high-impact DOE Work and [Laboratory or Plant] Directed Research and Development (LDRD or PDRD) and Technology Transfer, etc. in a safe and secure manner consistent with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objectives:

Objective-3.1: Execute a research strategy that is clear and aligns discretionary investments (e.g., SDRD with NNSS’ strategy and supports DOE/NNSA priorities.)

Objective-3.2: Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.

Objective-3.3: Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.

Objective-3.4: Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.

Objective-3.5: Research and develop high-impact technologies through effective partnerships and technology transfer mechanisms that support the NNSS’s strategy, DOE/NNSA priorities and impact the public good; and ensure that reporting, publishing, and information management requirements of federally funded scientific research and development are implemented (via DOE’s Public Access Plan) and per DOE’s Scientific and Technical Information Management directive (DOE O 241.1B).

Objective-3.6: 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.

Key Outcome(s): None
Goal 4: Mission Enablement

Effectively and efficiently manage the safe and secure operations of the NNSS in accordance with cost, scope and schedule 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-4.1: Deliver effective, efficient, and responsive Environment, Safety, and Health (ES&H), Quality (including weapon quality) and radioactive waste management. Advance DOE/NNSA’s climate resiliency and sustainability goals with a focus on maximizing energy efficiency and supporting Carbon Pollution-Free energy objectives.

Objective-4.2: Deliver mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of facilities and infrastructure. Execute design and construction projects to achieve the scope on schedule and on budget.

Objective-4.3: Deliver effective, efficient, and responsive safeguards and security, including assigned enterprise initiatives.

Objective-4.4: Deliver efficient, effective, responsible, and transparent financial management operations and systems including financial integration reporting; budget formulation and execution; programmatic cost estimates; and internal controls.

Objective-4.5: Deliver efficient and effective management of legal risk and incorporation of best legal practices.

Objective-4.6: Deliver effective, efficient, and responsive information technology systems and cybersecurity that provides for a comprehensive mission and functional area delivery through the completion of the implementation factors established in the NA-IM IT and Cybersecurity Program Execution Guidance, and adaptive day-to-day IT and cybersecurity operations to support, protect, and defend mission /business systems and networks.

Objective-4.7: Deliver effective, efficient, and responsive site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.

Objective-4.8: Deliver efficient, effective, and compliant business operations including, but not limited to, procurement, human resources, and property systems, in support of NNSA missions. Focus areas include achievement of small business and socioeconomic goals; support provided to the NSE Workforce Recruitment Strategy; and strategic management of integrated recruiting, retention, and diversity programs.
Key Outcome(s):

KO 4.1: Plan and execute the Enhanced Capabilities for Subcritical Experiments portfolio projects in accordance with approved scope and baselined cost and schedule milestones; leading the U1a Complex Enhancements Project; completion of borehole drilling and ITS infrastructure ready for installation; risk management; cost estimating and cost control; and notification to NNSA of variances to Level 3 WBS elements exceeding 10%.
Goal-5: 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 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-5.1: 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-5.2: 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-5.3: Develop and implement a National Security Enterprise-wide partnership model that enhances collaboration, reinforces shared fate and enables mission success including transformation of the stockpile and the enterprise.

Objective-5.4: Exhibit professional excellence in performing roles/responsibilities while pursuing collaborative opportunities for continuous organizational and enterprise learning and demonstrated improvements that will improve productivity, grow the capacity to execute mission, and manage, rather than avoid, risk. Pursue innovations to increase agility and resilience while controlling costs.

Objective 5.5: Demonstrate leadership in driving enhanced and sustainable formality and rigor of operations through proactive implementation of effective and efficient measures to minimize operational upsets that have potential to impact mission.

Objective 5.6: LLC Leadership takes decisive action, as a cooperative partner of NNSA, to attract and retain the workforce needed to achieve the nuclear security enterprise missions, with particular emphasis on critical and under-resourced skill sets, reaching back to parent company resources as necessary.

Key Outcome(s): None
### FAR 16.401 (e) (3) AWARD FEE ADJECTIVAL RATINGS AND SUPPLEMENTAL DEFINITIONS

<table>
<thead>
<tr>
<th>Award Fee Adjectival Rating</th>
<th>Percentage Range</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.