Fiscal Year 2017
DOE/NNSA Strategic Performance Evaluation and Measurement Plan (PEMP)

National Security Technologies, LLC (NSTec)

MANAGEMENT AND OPERATION OF THE

Nevada National Security Site

Contract Number: DE-AC52-06NA25946

Performance Evaluation Period: October 01, 2016 through May 31, 2017

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

1/31/2017
## FY 2017 PERFORMANCE EVALUATION AND MEASUREMENT PLAN

### DOCUMENT REVISION HISTORY

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/31/2017</td>
<td>Change ending period of performance date based on contract extension</td>
</tr>
</tbody>
</table>
INTRODUCTION
The Nevada National Security Site (NNSS) is a site owned by the United States Department of Energy (DOE), herein referenced as “NNSS” and is managed by NSTec. Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria in which NSTec’s performance will be evaluated and upon which the determination of the amount of award fee earned shall be based. The available award fee amounts for FY2017 are specified in Section B, Supplies or Services and Prices/Costs, of the contract. This PEMMP promotes a strategic Governance and Oversight framework based on prudent management of risk, accountability, transparency, and renewed trust. It has been written to implement the collective governance and oversight reform principles as expressed by the DOE/National Nuclear Security Administration (NNSA).

PERFORMANCE BASED APPROACH
DOE/NNSA will use a performance-based approach to evaluate NSTec’s performance. The performance-based approach is comprised of Goals, Objectives and Key Outcomes (KOIs), that will be measured against authorized work in terms of cost, schedule, and technical performance, as well as respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission.

MISSION
NSTec shall provide support and infrastructure for experiments and activities at the NNSS and satellite facilities. National Security Technologies, LLC 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; and waste management for various categories of waste. National Security Technologies LLC 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
NSTec is accountable for and will be evaluated on successfully executing mission work in accordance with applicable DOE/NNSA safety, quality, 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, safety and security improvements and accomplishments are integral to mission performance and will be evaluated in meeting all Goals. The model for this PEMMP is to rely on NSTec’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. NSTec 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. Quality 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 NSTec’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 mitigated by the response to the incident, and by other initiatives to improve overall safety or security performance. NSTec 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 triennial feedback to NSTec highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of NSTec’s performance will be completed and documented in a Performance Evaluation Report (PER). The Performance Evaluation Report (PER), and will include the performance ratings 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 NSTec’s end of performance evaluation period self-assessment status 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.

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 PEM 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.

FINAL DECISION
NSTec 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. The Fee Determining Official’s (FDO) makes the final decision regarding the performance ratings and percentage of award fee earned. This is a unilateral decision made solely at the discretion of the FDO.
### TOTAL AVAILABLE AWARD FEE ALLOCATION

<table>
<thead>
<tr>
<th>Performance Category</th>
<th>Goal</th>
<th>% At-Risk Fee Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td><strong>Goal-1:</strong> Manage the Nuclear Weapons Mission</td>
<td>30%</td>
</tr>
<tr>
<td>Programs</td>
<td><strong>Goal-2:</strong> Reduce Nuclear Security Threats</td>
<td>15%</td>
</tr>
<tr>
<td>Programs</td>
<td><strong>Goal-3:</strong> DOE and Strategic Partnership Projects Mission Objectives</td>
<td>6%</td>
</tr>
<tr>
<td>Programs</td>
<td><strong>Goal-4:</strong> Science, Technology, and Engineering (ST&amp;E)</td>
<td>4%</td>
</tr>
<tr>
<td>Operations &amp; Mission Execution</td>
<td><strong>Goal-5:</strong> Operations and Infrastructure</td>
<td>30%</td>
</tr>
<tr>
<td>Leadership</td>
<td><strong>Goal-6:</strong> Leadership</td>
<td>15%</td>
</tr>
</tbody>
</table>

### UNEARNED FEE

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

### INNOVATIVE SOLUTIONS

NSTec will recommend innovative, science-based, systems-engineering solutions to the most challenging national and global problems. NSTec 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, NSTec is expected 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, to achieve greater impact on strategic national security priorities.

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 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 Demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs.

Objective-1.5 Sustain unique science and engineering capabilities, facilities and essential skills to ensure current and future Nuclear Weapons mission requirements will be met.

Objective 1.6 Execute Phase 6.X product realization processes and activities in support of nuclear weapon life extension programs, modifications, 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 Counter Proliferation 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 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 Projects 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.

KeyOutcome(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 in accordance with budget profile, scope, cost, schedule and risk while achieving the expected level of quality, safety and security. 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 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.

KeyOutcome(s):

KO 4.1 Implement an experimental platform/testbed to hone NSTec’s 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 NNSS while maintaining an NNSA enterprise-wide focus; demonstrate accountability for mission performance and management controls; assure mission commitments are met with high-quality products and services; and maintain excellence as a 21st century government-owned, contractor-operated facility.

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. 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, and effective business operations and systems, 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 and cyber security.

KeyOutcome(s):

KO 5.1 Objectively demonstrate integrated operational performance across all components of NSTec with a strong safety and security culture that effectively enables successful mission outcomes with special emphasis on:

- U1a Hazard Categorization Upgrade 3 - 2
- 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, improving safety culture, the responsiveness of NSTec’s 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 Demonstrate leadership engagement in integrating Nuclear Security Enterprise (NSE) activities; enhancing cooperation, problem solving among NSE elements, and incorporating best practices and lessons learned from other NSE elements.

Objective-6.4 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

KeyOutcome(s):

KO 6.1 Demonstrate that NSTec 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
- Issues Management and Continuous Improvement
- Effective internal and external cross organizational integration

KO 6.2 Demonstrate commitment to and execution of contract transition priorities.