



**Department of Energy  
National Nuclear Security Administration  
Production Office**

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September 12, 2016

Mr. Michael R. Vermeulen  
Contracts Manager  
Consolidated Nuclear Security, LLC  
P. O. Box 2009  
Oak Ridge, Tennessee 37831-8004

Dear Mr. Vermeulen:

**CONTRACT NO DE-NA0001942, FISCAL YEAR 2017 DEPARTMENT OF ENERGY  
NATIONAL NUCLEAR SECURITY ADMINISTRATION STRATEGIC  
PERFORMANCE EVALUATION AND MEASUREMENT PLAN**

Please find enclosed the Fiscal Year 2017 Performance Evaluation and Measurement Plan (PEMP). This letter serves as direction that the enclosed is officially added to Consolidated Nuclear Security, LLC, Contract and a modification to the Contract will be forthcoming.

If you have any questions, please feel free to contact me at (865) 241-3917.

Sincerely,

Connie D. Bayless  
Contracting Officer

Enclosure

cc w/enclosure:  
M. Smith, CNS  
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**FY [insert year] Performance Evaluation and Measurement Plan**

**Document Revision History**

<b>Revision</b>	<b>Date</b>	<b>Change Description</b>
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## INTRODUCTION

The Pantex Plant (Pantex) and Y-12 National Security Complex (Y-12) are plant sites owned by the United States Department of Energy (DOE), herein referenced as "Pantex/Y-12 plants" which are managed by Consolidated Nuclear Security, LLC (CNS). Pursuant to the terms and conditions of the Contract, this NNSA Performance Evaluation and Measurement Plan (PEMP) sets forth the criteria in which CNS 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 FY 2017 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 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 CNS's performance. The performance-based approach is comprised of Goals, Objectives, and Key Outcomes (KOs) 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

The Pantex Plant mission supports managing the nation's nuclear stockpile by performing disassembly, inspection and rebuild of weapon evaluations cycle units, assembly of Joint Test Assemblies (JTAs) and JTA post mortem analysis, assembly and disassembly of test bed units, Limited Life Component Exchange, programmatic alternations (usually defined as Alts or Mods), weapon repairs, weapon and component radiography and non-destructive evaluation, High Explosive (HE) testing and explosive component evaluation, pit and non-nuclear evaluations, electrical and mechanical testing, and surveillance and evaluation testing in support of Quality Evaluation Reports.

The Y-12 National Security Complex supports national security programs through production of weapons components and parts; stockpile evaluation and maintenance; stockpile surveillance; dismantlement; and nuclear materials management, storage, and disposition. Its primary mission is the manufacturing of modern secondaries and processing and storage of highly enriched uranium.

Additionally, Pantex and Y-12 support several of the other NNSA identified missions, including nuclear non-proliferation, the Naval Reactors Program, emergency response, continuing management reform, and recapitalizing the NNSA infrastructure.

## MISSION PERFORMANCE

CNS is accountable for and will be evaluated on successfully executing mission program 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 PEMP is to rely on CNS leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. **CNS 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 CNS 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. CNS 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 CNS highlighting successes and/or needed improvement. At the end of the performance evaluation period, an evaluation of CNS performance will be completed and documented in a Performance Evaluation Report (PER). The PER will include the performance ratings and award fee earned for the subject performance evaluation period. Objectives and Key Outcomes (KOs) will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider CNS 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) 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 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.

### **FINAL DECISION**

CNS 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 (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**

<b>Performance Category</b>	<b>Goal</b>	<b>% At-Risk Fee Allocation</b>
Programs	<b>Goal-1:</b> Manage the Nuclear Weapons Mission	35%
Programs	<b>Goal-2:</b> Reduce Nuclear Security Threats	10%
Programs	<b>Goal-3:</b> DOE and Strategic Partnership Project Mission Objectives	5%
Programs	<b>Goal-4:</b> Science, Technology, and Engineering (ST&E)	5%
Operations & Mission Execution	<b>Goal-5:</b> Operations and Infrastructure	30%
Leadership	<b>Goal-6:</b> Leadership	15%

**UNEARNED FEE**

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

**AWARD TERM INCENTIVE**

This Contract includes several options: three options (Option Terms 1-3) extend the term of this Contract and an option to include SRTO within the scope of this Contract.

(a) Option Exercise for Additional Term: Gateway Decision: The Gateway Decision is a unilateral decision of the FDO based on the Contractor's performance rating under this Contract in accordance with the Performance Evaluation Plan, and the Contractor's delivery of cost savings reflected in the cost savings profile in Section J, Appendix D, Merger Transformation Plan. The standard of performance is such that the score in the annual PER must be "very good" or above (or achieve 80% or better) under the Performance Evaluation Plan for the performance years evaluated under the Base Term and Option Terms, if exercised, evaluated below. The Contractor must also meet a minimum of 80% of the total projected cost savings within the cost savings profile in Section J, Appendix D, Merger Transformation Plan for the combined performance years evaluated for each gateway decision point, as reflected in the table below. If the FDO's decision is to award additional term, the Contract will be modified unilaterally by the Contracting Officer to extend the term of the Contract, after considering NNSA requirements, in accordance with the Contract's Section I Clause entitled "FAR 52.217-9, Option to Extend the Term of the Contract".

Option Term 1: Commencing in the fourth year of the Contract, the Contract's period of performance may be extended for two additional years based on the standard of performance (score) and cost savings noted above.



Option Term 2: Commencing in the sixth year of the Contract, the Contract's period of performance may be extended for two additional years based on the standard of performance (score) and cost savings noted above.

Option Term 3: Commencing in the eighth year of the Contract, the Contract's period of performance may be extended for one additional year based on the standard of performance (score) and cost savings noted above.

The table below reflects Option Terms 1, 2, & 3.

	<b>Gateway Decision Point</b>	<b>Performance Years* Evaluated</b>	<b>Option Years* Available</b>
Option Term 1	Beginning of Year 4*	1-3	6-7
Option Term 2	Beginning of Year 6*	4-5	8-9
Option Term 3	Beginning of Year 8*	6-7	10

\*Years are counted from the beginning of the Base Term.

- (b) Option Exercise to add SRTO: This option allows for adding the SRTO scope of work to the Contract. If the NNSA determines it is in the best interest of the Government to exercise this option, the Contract will be modified unilaterally by the Contracting Officer to add the SRTO effort. Immediately upon option exercise, the Contractor will be required to provide a Transition Plan including the same elements as noted in Section F, F-7(a) and (b). The Contractor shall also update applicable Contract requirements, as directed by the Contracting Officer, including, but not limited to, the Performance Guarantee(s) and Subcontracting Plan, at the time of option exercise. NNSA may exercise the SRTO option at the end of the first year; however the determination will be based on NNSA mission requirements and other factors.

### **INNOVATIVE SOLUTIONS**

CNS will recommend innovative, science-based, systems-engineering solutions to the most challenging national and global problems. CNS 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, CNS 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, Program Implementation Plans, and Weapon Quality Assurance Requirements. Integrate across the Pantex/Y-12 plants, 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 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 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 Meet the nuclear weapon mission Type B container requirements in support of the Packaging & Transportation program for NNSA. Specifically, continue to provide Design Agency support for the DT and DPP packaging developed and maintained by CNS. FY17 deliverables include continued performance of design analysis for varying content in the DPP-2 package to meet complex-wide needs. Complete and successfully gain approval by NNSA of the DPP-2 packaging structural modeling analysis deficiencies.
- KO-1.2 Continue to implement the Enriched Uranium Mission Strategy and Requirements, as outlined in the Implementation Plan for the Highly Enriched Uranium Mission Strategy and funded through the appropriate work authorizations to optimize scope and performance, further needed technologies, implement the Extended Life Program for EU facilities, and integrate with the UPF project, all to ensure long-term stewardship of the Y-12 site. Execute the required actions to achieve the purified metal production objectives, while continuing to successfully implement the Material Recycle and Recovery scope as defined in the work authorization documents.



KO-1.3

Continue to develop and implement NNSA's Lithium Strategy including executing the CNS Y-12 Lithium Implementation plan activities to provide material, sustain facility infrastructure, sustain unit operations, mature and deploy technologies while supporting the planning to provide an alternative Lithium Production Capability to ensure the long-term mission requirements are met.

## **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: Successfully produce experimental products for the U. S. High Performance Research Reactor program (USHPRR) supporting reactor conversions.
- KO-2.2 Facilitate the timely removal of excess, unirradiated HEU from Europe in support of the U.S./Euratom HEU Exchange Memorandum of Understanding.
- KO-2.3: Support the U.S. Highly Enriched Uranium (HEU) Disposition Program with strategic and tactical planning, oversight, technical analyses, regulatory coordination, business development and marketing, and coordination of interfaces among key participants and stakeholders.

### **Goal-3: DOE and Strategic Partnership Project 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):

None



#### **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 Pantex/Y-12 plants Directed Research and Development (PDRD) 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., PDRD) with Pantex/Y-12 plant 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 Pantex/Y-12 plants 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):**

None

## Goal-5: Operations and Infrastructure

Effectively and efficiently manage the safe and secure operations of the Pantex/Y-12 plants 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.

### Key Outcome(s):

- KO-5.1 Implement Nuclear Safety and Engineering programs that promote the safe execution of nuclear safety and nuclear explosive safety work, and that build and maintain a sound engineering and technical base. This includes effectively supporting installation of equipment that eliminates critical single point failure of safety Structures, Systems, and Components; new facility construction, including major modifications; effectively executing the Uranium Processing Facility Design Authority responsibilities; and, the ongoing NS&E improvement plans and initiatives, e.g., DSAIP, NCSIP, PISAIP, etc.
- KO-5.2 Deliver effective, efficient, and responsive emergency preparedness and services with specific emphasis on strengthening the Pantex Emergency Management Program. Support milestones for the improvement of emergency preparedness and response core capabilities and demonstrate site-specific actions to increase overall readiness and

performance.

- KO-5.3 Implement a Quality Assurance Program that effectively implements contractual quality- related requirements, including the graded approach to quality, into Facility, Weapons, Construction and Software activities, ensuring procurement quality activities demonstrate measurable improvements in nuclear safety item/weapons product acceptance. Weapons Quality Assurance activities will be effectively executed to include processes to identify and correct weapon product and process defects to ensure continued weapon product acceptance delegation capability.
- KO-5.4 Implement a cradle to grave Material Management Program, in concert with the Supply Chain Management System. The program shall ensure the inventory of material is sufficient to meet operational needs, minimizes purchasing surplus material, stores material in a manner that prevents degradation, and has a defined disposition path, and is dispositioned in a timely manner.



## **Goal-6: Leadership**

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, improving safety culture, the responsiveness of CNS 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 Pantex/Y-12 plants and the Enterprise.

### **Objectives:**

- Objective-6.1 Define and implement a realistic strategic vision for the Pantex/Y-12 plants, 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 and 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.

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

- KO-6.1 Continue to establish a Performance Excellence Culture that enhances all aspects of CNS operations. Performance Excellence must include both immediate and long term actions that result in tangible improvements in the conduct of disciplined operations. An effective Performance Excellence Culture includes a mature Contractor Assurance System that links Performance Excellence and Performance Assurance to provide a more effective evaluation of performance and assurance of sustained performance improvement.