SECTION J

APPENDIX B

PEFORMANCE EVALUATION PLANS

B-1 PERFORMANCE EVALUATION PLAN FOR THE MANAGEMENT AND OPERATION (M&O) OF Y12/PX

(Replaced by 0015;-Added: 0045-FY15 PEP, 0052-FY16 PEP, 0084-FY17 PEP; 0118-FY18 PEP)

B-2 PERFORMANCE EVALUATION PLAN FOR UPF PROJECT MANAGEMENT

(Replaced by 0075)

B-1

PEFORMANCE EVALUATION PLAN FOR THE MANAGEMENT AND OPERATION (M&O) OF Y12/PX

CLIN 0001

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

Consolidated Nuclear Security, LLC

Management and Operation of the

Pantex Plant and the Y-12 National Security Complex

Contract Number: DE-NA0001942

Performance Evaluation Period: October 01, 2017 through September 30, 2018

[redacted] 9/27/2017

Morgan N. Smith Date
President and Chief Executive Officer
Consolidated Nuclear Security, LLC

[redacted] 28SEP2017

Geoffrey L. Beausoleil Date
Field Office Manager
NNSA Production Office
National Nuclear Security Administration

[redacted] 9/27/2017

Michael R. Vermeulen Date
Director, Contracts
Consolidated Nuclear Security, LLC

[redacted] 9.28.17

Belynda J. Thompson Date
Contracting Officer
NNSA Production Office
National Nuclear Security Administration

FY 2018 Performance Evaluation and Measurement Plan

Document Revision History

Revision	Date	Change Description

INTRODUCTION

The Pantex Plant (Pantex) and Y-12 National Security Complex (Y-12) are plant sites owned by the U.S. Government, under the custody of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA), herein referenced as "Pantex/Y-12 Plants," and are managed and operated 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 by which NNSA will evaluate CNS performance and the basis for determining the amount of performance incentive fee (PIF) earned. The available PIF amounts for FY18 are specified in Section B, *Supplies or Services and Prices/Costs*, of the contract. This PEMP promotes a strategic Governance and Oversight framework based on prudent management of risk, accountability, transparency, and renewed trust. It implements the collective governance and oversight reform principles as expressed by NNSA.

PERFORMANCE BASED APPROACH

The performance-based approach evaluates the CNS performance through a set of Goals. Each Goal, and its associated Objectives and, in some cases, 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

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 alterations (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 test, 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 NNSA infrastructure.

MISSION PERFORMANCE

CNS 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, CNS 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 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. 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 balanced 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. This evaluation will be documented in a Performance Evaluation Report (PER), and will include the performance ratings and PIF earned for the subject performance evaluation period. Objectives and, in some cases, KOs will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider the CNS 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 PIF earned for the contract. Notwithstanding the overall strategic framework, any significant failure may impact the overall rating and the PIF earned. The Fee Determining Official's (FDO) PIF determination is a unilateral decision made solely at the discretion of NNSA.

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.

PEMP CHANGE CONTROL

It is essential that a baseline of performance expectations be established at the beginning of the performance period to equitably measure performance, and that changes to that baseline are carefully managed. Any change to the PEMP requires concurrence by the appropriate program office and the NNSA Senior Procurement Executive prior to the Field Office Manager and Contracting Officer signatures. While recognizing the unilateral rights of DOE/NNSA as expressed in the contract terms and conditions, bilateral changes are the preferred method of change whenever possible.

TOTAL AVAILABLE PERFORMANCE INCENTIVE FEE ALLOCATION

Goal	% At-Risk Fee Allocation
Goal-1: Manage the Nuclear Weapons Mission	35%
Goal-2: Reduce Nuclear Security Threats	10%
Goal-3: DOE and Strategic Partnership Project Mission Objectives	5%
Goal-4: Science, Technology, and Engineering (ST&E)	5%
Goal-5: Operations and Infrastructure	30%
Goal-6: 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 Measurement 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 Government Fiscal Year (GFY) 2018 of the Contract, the Contract's period of performance may be extended for two additional years (July 1, 2019 through June 30, 2021) based on the standard of performance (score) and cost savings noted above.

Option Term 2: Commencing in Government Fiscal Year 2020 of the Contract, the Contract's period of performance may be extended for two additional years (July 1, 2021 through June 30, 2023) based on the standard of performance (score) and cost savings noted above.

Option Term 3: Commencing in Government Fiscal Year 2022 of the Contract, the Contract's period of performance may be extended for one additional year (July 1, 2023 through June 30, 2024) based on the standard of performance (score) and cost savings noted above.

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

	Gateway Decision Point	Performance Years Evaluated	Option Years Available
Option Term 1	2nd Quarter of GFY 2018	1 Jul 2014 – 30 Sep 2017	6-7
Option Term 2	2nd Quarter of GFY 2020	1 Oct 2017 – 30 Sep 2019	8-9
Option Term 3	2nd Quarter of GFY 2022	1 Oct 2019 – 30 Sep 2021	10

NOTE: *Evaluation of Performance is aligned with the CPEP and the GFY. There is no change in contract period of performance dates as a result of this alignment.*

NNSA will evaluate contract performance years 1-3 (July 1, 2014-Sep 30, 2017) to award Option Term 1 - contract years 6-7 (July1, 2019-June 30, 2021)

NNSA will evaluate contract performance for years 4-5 (Oct 1, 2017-Sep 30, 2019) to award Option Term 2 - contract years 8-9 (July 1, 2021-June 30, 2023)

NNSA will evaluate contract performance years 6-7 (Oct 1, 2019-Sep 30, 2021) to award Option Term 3 - contract year 10 (July 1, 2023-June 30, 2024)

(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, technology/science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. 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, DOE expects CNS 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 Pantex/Y-12 Plants, while maintaining a DOE/NNSA enterprise-wide focus, in order to achieve greater impact on a focused set of strategic national security priorities.

Objectives:

- Objective-1.1 Accomplish work as negotiated with program sponsors and partners integrating quality requirements into an effective Quality and Nuclear Enterprise Assurance program at their sites and through their suppliers that results in the design, production, and delivery of safe, secure, and reliable weapon products meeting performance, transportation, and cost effective operations.
- Objective-1.2 Maintain knowledge of the state of the stockpile, resulting from successful execution of the stockpile surveillance program and a robust scientific and engineering understanding for the delivery of the annual stockpile assessment.
- Objective-1.3 Execute stockpile work to deliver stockpile system maintenance, production, limited-life component exchanges, weapon containers and dismantlements.
- Objective-1.4 Apply innovative strategies and technologies, and sustain science and engineering capabilities, facilities and skills to support existing and future nuclear security enterprise requirements.
- Objective 1.5 Execute Phase 6.X, product realization processes and activities in support of nuclear weapon life extension programs, modification and alterations in accordance with NNSA requirements, Nuclear Weapons Council guidance, and NNSA project control processes to 1) integrate schedules; 2) lower risks; 3) control costs; and 4) control change.

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: Produce the approved amount of low enriched uranium castings for the U.S. High Performance Research Reactor (USHPRR) program.
- KO-2.2 Facilitate the timely removal of excess, unirradiated HEU from foreign civilian nuclear facilities, including removals from Europe in support of the U.S./Euratom HEU Exchange Memorandum of Understanding.
- KO-2.3: Support Mobile Uranium Facility (MUF) management transition by completing required actions in MUF Management Transition Plan.

Goal-3: DOE and Strategic Partnership Projects Mission Objectives

Successfully execute high-impact work for DOE and Strategic Partnership Project Mission Objectives safely and securely. Demonstrate the value of the work in addressing the strategic national security needs of the U.S. Government.

Objectives:

Objective-3.1 Pursue and perform high-impact work for DOE that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills.

Objective-3.2 Pursue and perform high-impact Strategic Partnership Projects that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills in support of national security mission requirements.

Goal-4: Science, Technology, and Engineering (ST&E)

Successfully advance national security missions and advance the frontiers of ST&E. 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 Plants strategies and supports DOE/NNSA priorities.
- Objective-4.2 Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.
- Objective-4.3 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.
- Objective-4.4 Research and develop high-impact technologies through effective partnerships and technology transfer mechanisms that support the Pantex/Y-12 Plants strategies, 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: 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; demonstrating accountability for mission performance and management controls; and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure.

Objectives:

- Objective-5.1 Deliver effective, efficient, and responsive environment, safety, health and quality (ESH&Q) management and processes.
- Objective-5.2 Accomplish capital projects in accordance with scope, cost, and schedule baselines.
- Objective-5.3 Deliver effective, efficient, and responsive safeguards and security. Deliver effective site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.
- Objective-5.4 Manage NNSA infrastructure to maintain, operate and modernize DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner that minimizes operational, security, and safety risks.
- Objective-5.5 Deliver efficient, effective, and responsible business operations, systems and financial management, including financial transparency; budget formulation and execution; and, internal controls.
- Objective-5.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.
- Objective-5.7 Deliver effective, efficient, and responsive information technology systems and cyber security.

Goal-6: Leadership

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of the 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, timely corrective action, transparency, and accountability through the entire organization, while also leveraging parent company resources and expertise.
- Objective-6.3 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.
- Objective-6.4 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

FAR 16.401 (e) (3) AWARD FEE ADJECTIVAL RATINGS AND SUPPLEMENTAL DEFINITIONS

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.

Department of Energy
National Nuclear Security Administration
Production Office
P.O. Box 2050
Oak Ridge, Tennessee 37831
P.O. Box 30030
Amarillo, Texas 79120

National Nuclear Security Administration

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,

[redacted]

Connie D. Bayless
Contracting Officer

Enclosure

cc w/enclosure:
M. Smith, CNS
M. Reichert, CNS
T. Sherry, CNS
M. Underwood, CNS
G. Beausoleil, NPO-01
T. Robbins, NPO-01
L. DeSerisy, NPO-50
J. Brashears, NPO-50

Fiscal Year 2017
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Consolidated Nuclear Security, LLC

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Pantex Plant and the Y-12 National Security Complex

Contract Number: DE-NA0001942

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[redacted] 9/12/2016

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President and Chief Executive Officer
Consolidated Nuclear Security, LLC

[redacted] 12SEP2016

Geoffrey L. Beausoleil Date
Field Office Manager
NNSA Production Office
National Nuclear Security Administration

[redacted] 9/12/2016

Michael R. Vermeulen Date
Senior Director, Contracts
Consolidated Nuclear Security, LLC

[redacted]

Connie D. Bayless Date
Contracting Officer
NNSA Production Office
National Nuclear Security Administration

FY [insert year] Performance Evaluation and Measurement Plan

Document Revision History

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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.

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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.

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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.

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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

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

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(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.

	Gateway Decision Point	**Performance Years* Evaluated**	**Option Years* Available**
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.

Fiscal Year 2016

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

Consolidated Nuclear Security, LLC

Management and Operation

of the

Pantex Plant and the Y-12 National Security Complex

Contract Number: DE-NA0001942

Performance Evaluation Period: October 01, 2015 through September 30, 2016

[redacted]

James R. Haynes Date
President and Chief Executive Officer
Consolidated Nuclear Security, LLC

[redacted]

Geoffrey L. Beausoleil Date
Field Office Manager
NNSA Production Office
National Nuclear Security Administration

[redacted]

Michael R. Vermeulen Date
Director, Contracts
Consolidated Nuclear Security, LLC

[redacted]

Date
Contracting Officer
NNSA Production Office
National Nuclear Security Administration

DOCUMENT REVISION HISTORY

Revision	Date	Change Description

INTRODUCTION

The Pantex Plant (Plant) 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" and is 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 2016 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

The performance-based approach evaluates the CNS 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

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 test, 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 NNSA infrastructure.

MISSION PERFORMANCE

CNS 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, CNS 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 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.** 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 balanced 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. This evaluation will be documented in a Performance Evaluation Report (PER), and will include the performance ratings and award fee earned for the subject performance evaluation period. Objectives and KOs will be assessed in the aggregate to determine an adjectival performance rating for each Goal. DOE/NNSA will consider CNS end of year self-assessment report in the performance evaluation. The performance ratings will be determined in accordance with FAR 16.401(e)(3) yielding ratings of Excellent, Very Good, Good, Satisfactory or Unsatisfactory. The Goals will then be considered in the aggregate to provide an overall rating and percentage of award fee earned for the contract. Notwithstanding the overall strategic framework, any significant failure may impact the overall rating and award fee earned. The Fee Determining Official's (FDO) award fee determination is a unilateral decision made solely at the discretion of NNSA.

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.

TOTAL AVAILABLE AWARD FEE ALLOCATION

Performance Category	Goal	% At-Risk Fee Allocation
Programs (NA-10)	**Goal-1:** Manage the Nuclear Weapons Mission	35%
Programs (NA-20, NA-40, NA-80)	**Goal-2**: Reduce Nuclear Security Threats	10%
Programs (FOM)	**Goal-3:** DOE and Strategic Partnership Projects Mission Objectives	5%
Programs (FOM)	**Goal-4:** Science, Technology, and Engineering (ST&E)	5%
Operations & Mission Execution (FOM)	**Goal-5:** Operations and Infrastructure	35%
Leadership (FOM)	**Goal-6:** Leadership	10%

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.

	Gateway Decision Point	Performance Years* Evaluated	Option Years* Available
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 problems that face the nation and the globe. 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, and 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 a focused set of strategic national security priorities.

Objectives:

- Objective-1.1 Accomplish work as negotiated with program sponsors and partners integrating quality requirements into an effective quality 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 and product realization processes and activities in support of nuclear weapon life extension programs, modification and alterations in accordance with NNSA requirements and Nuclear Weapons Council guidance.

Key Outcome(s):

- KO 1.1 Complete the development of an effective and robust container/Packaging & Transportation program initiated in FY2015 and ensure that mission needs are met at least cost in FY2016. Finalize the demonstration to NNSA that CNS has corrected the DPP-2 packaging structural modeling and analyses deficiencies in FY2016 to support packaging development as a design agency for the DPP-2.
- KO 1.2 Effectively execute B61-12 LEP, W88 Alt 370 and W80-4 LEP Phase 6.X programs in accordance with program-specific and NNSA Project Controls System directives, including Earned Value Management System implementation, in order to: 1) meet schedule, 2) comply with Phase 6.x Process and Product Realization Processes; 3) lower risks; 4) control change; and 5) control costs.
- KO 1.3 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 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.

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 Support the timely and complete removal of all HEU fuel from Japan's Fast Critical Assembly.

Goal-3: DOE and Strategic Partnership Projects Mission Objectives

Successfully execute high-impact work for DOE and Strategic Partnership Project Mission Objectives safely and securely. Demonstrate the value of the work in addressing the strategic national security needs of the U.S. Government.

Objectives:

- Objective-3.1 Pursue and perform high-impact work for DOE that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills.
- Objective-3.2 Pursue and perform high-impact Strategic Partnership Projects that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills in support of national security mission requirements.

Key Outcome(s):
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 plants 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 Maintain, operate and modernize DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner; including disposition of unneeded infrastructure and excess hazardous materials. 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.
- Objective-5.5 Deliver efficient, effective, and responsible business operations, systems and financial management, including financial transparency; budget formulation and execution; and, internal controls.
- Objective-5.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.
- Objective-5.7 Deliver effective, efficient, and responsive information technology systems and cyber security.

Key Outcome(s):

- KO 5.1 Aggressively and responsibly manage NNSA infrastructure to: 1) deliver cost efficient improvements; 2) meet energy conservation goals; 3) minimize operational, security, and safety risks; 4) increase the viable use of facilities; and, equipment; and, 5) shrink the infrastructure footprint in the best interest of the NNSA while working collaboratively with NNSA to implement management improvements (e.g., G2, MDI, BUILDER, and AMPs).
- KO 5.2 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 5.3 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. (NA-40)

KO 5.4 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 5.5 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 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.
- Objective-6.4 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

Key Outcome(s):

- KO 6.1 Demonstrate exceptional leadership in integrating NSE production activities; enhancing cooperation and problem solving with Design Agencies; and incorporating best practices and lessons learned from other NSE elements.
- KO 6.2 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.

Fiscal Year 2015
DOE/NNSA Strategic Performance Evaluation Plan (PEP)

FOR

Consolidated Nuclear Security, LLC

MANAGEMENT AND OPERATION OF THE
Pantex Plant and the Y-12 National Security Complex

Contract Number: DE-NA0001942

Performance Period: October 01, 2014 through September 30, 2015

[redacted] 30 Sep 2014
Ja Date
President and Chief Executive Officer
Consolidated Nuclear Security, LLC

[redacted] 9/30/2014
Steven C. Erhart Date
Manager, NNSA Production Office
National Nuclear Security Administration

[redacted] 9.30.2014
Richard A. Dunn Date
Director, Contracts
Consolidated Nuclear Security, LLC

[redacted] 9/30/2014
Seb Klein Date
Contracting Officer
NNSA Production Office
National Nuclear Security Administration

FY 2015 PERFORMANCE EVALUATION PLAN

DOCUMENT REVISION HISTORY

Revision	Date	Change Description

INTRODUCTION

The Pantex Plant and Y-12 National Security Complex (NSC) are facilities owned by the United States Department of Energy (DOE), and are managed by Consolidated Nuclear Security, LLC (CNS). Pursuant to the terms and conditions of the Contract, this Performance Evaluation Plan (PEP) 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 2015 are specified in Section B of Contract No. DE-NA0001942. This PEP 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

The performance-based approach evaluates CNS performance at Pantex and Y-12 through a set of Performance Objectives (PO). Each PO, and its associated Contributing Factors (CF) and Site Specific Outcomes (SSO), will be measured against authorized work and the respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission. CFs and SSOs will be assessed in the aggregate to establish an adjectival performance rating for each PO. Notwithstanding the overall strategic framework, failure to achieve an individual SSO, the most important DOE/NNSA fiscal year objectives may limit the award-fee.

MISSION

The Pantex Plant mission supports managing the nation's nuclear stockpile by performing disassembly, inspection and rebuild of weapon evaluation 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 alterations (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 tests, and surveillance and evaluation testing in support of Quality Evaluation Reports.

The Y-12 NSC 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 missions identified, including nuclear non-proliferation, the Naval Reactors Program, emergency response, continuing management reform, and recapitalizing NNSA infrastructure.

MISSION PERFORMANCE

CNS 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, the model for this PEP 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.** 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 balanced by the response to the incident, and by other initiatives to improve overall safety or security performance. The contractor is encouraged to note significant safety and security continuous improvements.

PERFORMANCE RATING PROCESS

At the end of each of the first three quarters, DOE/NNSA will evaluate performance and provide feedback to CNS highlighting successes and/or needed improvement. At the end of the year, an overall performance rating will be assigned for each PO using the table in Federal Acquisition Regulation Subpart 16.401(e)(3) yielding scores of Excellent, Very Good, Good, Satisfactory or Unsatisfactory. In general, performance objectives and contributing factors are written to reflect an overall adjectival performance level of **Good**. DOE/NNSA will consider the CNS end of year self-assessment report in preparing the Performance Evaluation Report (PER) for the Fee Determining Official (FDO). The PER transmits the final recommendations on performance ratings and award fee earned for the award fee period of performance. The unilateral decision of the total award fee earned will be made by the FDO.

PEP 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 PEP requires concurrence by the appropriate program office, the NNSA Senior Procurement Executive, and the NNSA corporate PEP manager prior to the Field Office Manager and Contracting Officer signatures. While recognizing the unilateral rights of DOE/NNSA as expressed in contract *Section B-7, Performance Evaluation Plan (PEP),* bilateral changes are the preferred method of change whenever possible.

FINAL DECISION

CNS can request a face-to-face meeting with the FDO to highlight their strategic performance. This meeting should occur in early October.

TOTAL AVAILABLE AWARD FEE ALLOCATION

Performance Category	Performance Objective	% At-Risk Fee Allocation
Programs (NA-10)	**PO-1:** Manage the Nuclear Weapons Mission	35%
Programs (NA-20, NA-40, NA-80)	**PO-2:** Reduce Global Nuclear Security Threats Mission	10%
Programs (FOM)	**PO-3:** DOE and Strategic Partnership Project Mission Objectives	5%
Operations & Mission Execution (FOM)	**PO-4:** Science, Technology, and Engineering (ST&E)	5%
Operations & Mission Execution (FOM)	**PO-5:** Operations and Infrastructure	35%
Operations & Mission Execution (FOM)	**PO-6:** Leadership	10%

UNEARNED FEE

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

INNOVATIVE SOLUTIONS

CNS will recommend innovative, science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. 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.

PO-1: Manage the Nuclear Weapons Mission – NA-10 (At-Risk Fee: 35%)

Successfully execute Nuclear Weapons mission work in a safe and secure manner accordance with DOE/NNSA Priorities, Program Control Document and Deliverables, and Program Implementation Plans. Integrate Pantex and Y-12 operations, while maintaining a DOE/NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

Contributing Factors:

CF-1.1 Accomplish work as negotiated with program sponsors and partners, achieving the expected level of quality to ensure safe, secure, reliable weapon performance, transportation, and cost effective operations.

CF-1.2 Increase 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.

CF-1.3 Execute stockpile work to deliver stockpile system maintenance, production, limited-life component exchanges, weapon containers and dismantlements.

CF-1.4 Demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs.

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

CF 1.6 Execute product realization processes and activities in support of nuclear weapon life extension programs, modification and alterations in accordance with NNSA requirements and Nuclear Weapons Council guidance.

Site Specific Outcomes:

1.1 – Develop an effective and robust container/Packaging &Transportation program that meets mission needs at least cost. Demonstrate to NNSA that CNS has corrected the DPP-2 packaging structural modeling and analyses deficiencies to support packaging development as a design agency for the DPP-2

1.2 – Effectively implement the Federal Program Manager (FPM) defined Earned Value Management System and project controls tools on the W88 Alt 370 and B61-12 LEPs to execute the program and lower risks while providing detailed program status to FPM, including deployment of Management Reserve; and to implement an effective cost control process and develop opportunities for cost reduction

1.3 – Execute production readiness and production activities IAW the NNSA Integrated Master Schedule on the W88 Alt 370 and B61-12 LEPs while effectively utilizing project controls tools to meet scheduled deliverables

1.4 – Create and integrate the Uranium mission strategy and mission requirements document and optimize scope and performance of the contract to ensure long-term stewardship of the site and effective implementation of the UPF

PO-2: Reduce Global Nuclear Security Threats Mission – NA-20, NA-40, and NA-80 (At-Risk Fee: 10%)

Successfully execute authorized global nuclear security mission work in a safe and secure manner to include the Non-Proliferation, Emergency Operations and Counterterrorism missions. Integrate Pantex and Y-12 Operations, while maintaining an NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

Contributing Factors:

CF-2.1 Support efforts to remove, eliminate and minimize the use of proliferation-sensitive materials.

CF-2.2 Support efforts to safeguard and secure materials, technologies, and facilities.

CF-2.3 Support efforts to detect and prevent the illicit trafficking of nuclear/radiological materials, technology, information and expertise.

CF-2.4 Provide R&D technology solutions for treaty monitoring, minimizing the use of proliferation-sensitive materials, and the application of safeguards and security.

CF-2.5 Provide unique technical/policy solutions and develop programs/strategies to reduce nuclear/radiological dangers.

CF-2.6 Demonstrate effective operations and implementation of policy for mission success in support of emergency management, incident response and nuclear forensics mission support capability.

CF-2.7 Sustain and improve nuclear counterterrorism and counterproliferation science, technology, and expertise.

Site Specific Outcomes:

2.1 – Successfully execute Pilot Line demonstration products for the UMo project supporting reactor conversions

2.2 – Fully support emergency incident response operations to include managing and maintaining readiness for deployable response teams, training and developing new and existing staff to become qualified responders, supporting implementation of new technologies and capabilities to support mission, supporting Headquarters in the development of new and existing emergency management policies and practices, and integrating the Headquarters Emergency Management Team and Emergency Operations Center in responses, including exercises

PO-3: DOE and Strategic Partnership Project Mission Objectives – FOM (At-Risk Fee: 5%)

Successfully execute high-impact work for DOE and Strategic Partnership Project Mission Objectives safely and securely. Provide objective evidence that demonstrates the value of the work in addressing the strategic national security needs of the U.S. Government.

Contributing Factors:

CF-3.1 Pursue and perform high impact work that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities and essential skills.

CF-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 future national security mission requirements.

CF-3.3 Accomplish work within the budget profile, scope, cost, schedule, quality and risk negotiated with the program.

PO-4: Science, Technology, and Engineering (ST&E) – FOM (At-Risk Fee: 5%)

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. CNS will effectively manage the Plant Directed Research and Development (PDRD) and Technology Transfer programs to advance the frontiers of ST&E. Provide defensible objective evidence.

Contributing Factors:

CF-4.1 Implement a research strategy that is clear and aligns discretionary investments (e.g., PDRD) with the research strategy and support DOE/NNSA priorities.

CF-4.2 Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.

CF-4.3 Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.

CF-4.4 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.

CF-4.5 Perform research to accomplish the high priority, multi-year research objectives, advance ST&E, and develop technologies for the public good through technology transfer.

Site Specific Objective:

4.1 – Develop technology and transition plans to support Lithium and Uranium Strategies in support of customer expectations

PO-5: Operations and Infrastructure – FOM (At-Risk Fee: 35%)

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

Contributing Factors:

CF-5.1 Deliver effective, efficient, and responsive environment, safety and health (ES&H) management and processes.

CF-5.2 Accomplish capital projects in accordance with scope, cost, and schedule baselines.

CF-5.3 Deliver effective, efficient, and responsive safeguards and security.

CF-5.4 Maintain, operate and modernize the DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner; including disposition of unneeded infrastructure and excess hazardous materials.

CF-5.5 Deliver efficient, effective and responsible business operations, systems and information technology.

CF-5.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.

CF-5.7 Deliver effective, efficient, and responsive cyber security.

Site Specific Outcomes:

5.1 – Aggressively and responsibly manage Y-12 and Pantex infrastructure to deliver on cost efficiency savings while minimizing operational, security and safety risks and increasing the viable use of facilities and equipment in the best interest of the NNSA

5.2 – CNS will set viable goals, develop criteria and demonstrate tangible improvements in the discipline of operations across the key functional areas of Operations, Security, Maintenance, and Engineering at the Pantex and Y-12 plants

5.3 – Implement programs that promote the safe execution of nuclear and nuclear explosive safety (NES) operations. Documented Safety Analyses (DSA) reports will be developed and reviewed against the criteria derived from the DSA Improvement Plan. Technical Safety Requirements will be clear and concise. At Pantex, the NES program will be executed to support mission deliverables and the NNSA NES Program. At Y-12, CNS will execute Nuclear Criticality Safety Improvement plan commitments; develop a plan and show demonstrable, measurable progress in downgrading nuclear facilities; and Area 5 de-inventory/Material at Risk reductions

5.4 – Implement Safety Culture Sustainment Plan that includes Quality of Life workplace improvements that takes advantage of reinvestment opportunities. Complete a baseline safety culture assessment of employees and revise the Sustainment Plan to address any new issues.

PO-6: Leadership - (At-Risk Fee: 10%)

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

Contributing Factors:

CF-6.1 Define and implement a realistic strategic vision for CNS, in alignment with the NNSA Strategic Plan, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.

CF-6.2 Promote a culture of critical self-assessment and transparency across all areas; instill a culture of accountability, responsibility, safety and performance through the entire organization; and coordinate/communicate these key issues and concerns to DOE/NNSA leadership.

CF-6.3 Demonstrate performance results through the institutional utilization of the Management Assurance System and the leveraging of parent company resources and expertise.

CF-6.4 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.

CF-6.5 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

Site Specific Outcomes:

6.1 – Support a seamless, effective contract transition for the SRTO option, if exercised.

6.2 - Develop and implement a Nuclear Security Enterprise (NSE) integration strategy consistent with NNSA objectives

Fiscal Year 2014
DOE/NNSA Strategic Performance Evaluation Plan

FOR

MANAGEMENT AND OPERATION OF THE
PANTEX PLANT AND THE Y-12 NATIONAL SECURITY COMPLEX
Consolidated Nuclear Security, LLC

Contract Number: DE-NA0001942

Performance period: July 1, 2014 – September 30, 2014

[redacted] 6/30/2014
James R. Haynes Date
President and Chief Executive Officer
Consolidated Nuclear Security, LLC

[redacted] 6/29/14
Steven C. Erhart Date
Manager, NNSA Production Office
National Nuclear Security Administration

[redacted] 6.30.14
Richard A. Dunn Date
Director, Contracts
Consolidated Nuclear Security, LLC

[redacted] 6/26/2014
Seb Klein Date
Contracting Officer
NNSA Production Office
National Nuclear Security Administration

INTRODUCTION

The Pantex Plant and Y-12 National Security Complex (NSC) are facilities owned by the United States Department of Energy (DOE), herein referenced as "Plants." They are managed by Consolidated Nuclear Security, LLC (CNS). Pursuant to the terms and conditions of the Contract, this Performance Evaluation Plan (PEP) sets forth the criteria in which the Plants' 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 2014 are specified in Section B of Contract No. DE-NA0001942. This PEP 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

The performance-based approach evaluates the Plants' performance through a set of performance objectives (PO). Each PO, and its associated Contributing Factors (CF) and Site Specific Outcomes (SSO) will be measured against authorized work and the respective outcomes, demonstrated performance, and impact to the DOE/NNSA mission. CFs and SSOs will be assessed in the aggregate to establish an adjectival performance rating for each Performance Objective. Notwithstanding the overall strategic framework, failure to achieve an individual SSO, the most important DOE/NNSA fiscal year objectives at the Plants, may limit the award-fee.

MISSION

The Pantex Plant mission supports managing the nation's nuclear stockpile by performing disassembly, inspection and rebuild of weapon evaluation 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 alterations (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 tests, and surveillance and evaluation testing in support of Quality Evaluation Reports. Additionally, Pantex supports several of the other NNSA missions identified, including nuclear non-proliferation, emergency response, continuing management reform, and recapitalizing NNSA infrastructure.

The Y-12 NSC 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.

MISSION PERFORMANCE

The Plants are 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, the model for this PEP is to rely on the Plants' leadership to use appropriate DOE contractual requirements and recognized industrial standards based on consideration of assurance systems, and the related measures, metrics, and evidence. **The Plants are 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 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 Plants' control), degree of difficulty, significant accomplishments, and other events that may occur during the performance period. Effective efforts by the Plants to quickly identify, self-report, and overcome or mitigate the impact of issues, barriers or other circumstances will also be a factor in evaluating performance. A significant safety or security event may result in an overall limitation to adjectival ratings.

PERFORMANCE RATING PROCESS

At the end of the evaluation period, an overall performance rating will be assigned for each PO using the table in Federal Acquisition Regulation Subpart 16.401(e)(3) yielding scores of Excellent, Very Good, Good, Satisfactory or Unsatisfactory. In general, performance objectives and contributing factors are written to reflect an overall adjectival performance level of **Good**. DOE/NNSA will consider the Plants' end of year self-assessment report in preparing the Performance Evaluation Report (PER) for the Fee Determining Official (FDO). The PER transmits the final recommendations on performance ratings and award fee earned for the award fee period of performance. The unilateral decision of the total award fee earned will be made by the FDO.

PEP 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 PEP requires concurrence by the appropriate program office, NA-00 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 Section B-7, Performance Evaluation Plan (PEP), bilateral changes are the preferred method of change whenever possible.

FINAL DECISION

Prior to a final decision by the FDO, the Plants' President and Chief Executive Officer will have a face-to-face opportunity to provide a final presentation in support of strategic performance determination and direction of the enterprise.

TOTAL AVAILABLE AWARD FEE ALLOCATION

Performance Category	Performance Objective	% At-Risk Fee Allocation
Programs (NA-10 & FOM)	**PO-1:** Manage the Nuclear Weapons Mission	25%
Programs (NA-2 & FOM)	**PO-2:** Broader National Security Mission	12.5%
Programs (NA1.1 & FOM)	**PO-3:** Science, Technology, and Engineering and Other DOE Mission Objectives	12.5%
Operations & Mission Execution (NA-3 & FOM)	**PO-4:** Operations & Infrastructure	25%
Operations & Mission Execution (NA-1 & FOM)	**PO-5:** Leadership	25%

UNEARNED FEE

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

INNOVATIVE SOLUTIONS

The Plants will recommend innovative, science-based, systems-engineering solutions to the most challenging problems that face the nation and the globe. The Plants will also provide evidence to support programmatic needs and operational goals tempered by risk. DOE/NNSA will take into consideration all major functions contributing to mission success. In addition, the Plants are expected to recommend and implement innovative business and management improvement solutions that enhance efficiencies.

PO-1: Manage the Nuclear Weapons Mission – NA-10 & FOM - (At-Risk Fee: 25%)
Successfully execute Nuclear Weapons mission work in accordance with DOE/NNSA Priorities, Program Control Document and Deliverables, and Program Implementation Plans. Integrate across the Plants, while maintaining a DOE/NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

Contributing Factors:

- CF-1.1 Accomplish work as negotiated with program sponsors and partners, achieving the expected level of quality to ensure safe, secure, reliable weapon performance, transportation, and cost effective operations.
- CF-1.2 Increase 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.
- CF-1.3 Execute deliveries for the stockpile work to meet limited-life component exchanges, and dismantlements.
- CF-1.4 Demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs.
- CF-1.5 Sustain and strengthen unique science and engineering capabilities, facilities and essential skills to ensure current and future Nuclear Weapons mission requirements will be met.
- CF-1.6 Execute W78/88-1 phase 6.2 activities, B61-12 phase 6.3 activities, and W88 ALT 370 phase 6.3 activities in accordance with the NNSA approved schedules.

Site Specific Outcomes:

- 1.1 Manage Material Recycle and Recovery, and Storage within Nuclear Programs in accordance with the Site Execution Plan (to include Level 2 milestones).
- 1.2 Implement site resource loaded schedules and an earned value measurement system. Establish a site performance management baseline and submit monthly project and earned value reporting consistent with NA-191 program management requirements.
- 1.3 Execute B61-12 development activities in accordance with baseline schedule to meet joint Air Force and NNSA B61-12 deliverables.
- 1.4 Demonstrate Earned Value Management System (EVMS) is implemented consistent with the W88 ALT 370 Project Control Systems Description and Implementation Schedule.
- 1.5 Support W76-1 production objectives, including delivery of funded Production Control Document requirements.
- 1.6 Conduct a follow-on Pantex Throughput Improvement Plan focused on improving War Reserve weapon throughput while expeditiously handling anomalous units and integrating infrastructure projects.

PO-2: Broader National Security Mission – NA-2 & FOM - (At-Risk Fee: 12.5%)
Successfully execute authorized broader national security mission work to include the Non-Proliferation, Emergency Operations and Counterterrorism missions as well as high-impact interagency work. Integrate across the Plants, while maintaining an NNSA enterprise-wide focus, to achieve greater impact on a focused set of strategic national security priorities. Provide defensible objective evidence.

Contributing Factors:

- CF-2.1 Support efforts to remove, eliminate and minimize the use of proliferation-sensitive materials.
- CF-2.2 Support efforts to safeguard and secure materials, technologies, and facilities.
- CF-2.3 Support efforts to detect and prevent the illicit trafficking of nuclear/radiological materials, technology, information and expertise.
- CF-2.4 Provide R&D technology solutions for treaty monitoring, minimizing the use of proliferation-sensitive materials, and the application of safeguards and security.
- CF-2.5 Provide unique technical/policy solutions and develop programs/strategies to reduce nuclear/radiological dangers.
- CF-2.6 Demonstrate effective operations and implementation of policy for mission success in support of emergency management, incident response and nuclear forensics mission support capability.
- CF-2.7 Sustain and improve nuclear counterterrorism and counterproliferation science, technology, and expertise.
- CF-2.8 Pursue and perform high-impact interagency work 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 future national security mission requirements.
- CF-2.9 Accomplish work within the budget profile, scope, cost, schedule, quality and risk negotiated with the program sponsors or partners.

Site Specific Outcome:

- 2.1 Successfully execute pilot line demonstration products for the LEUMo project supporting reactor conversions.

PO-3: Science, Technology, and Engineering (ST&E) and Other DOE Mission Objectives – NA-1.1 & FOM - (At-Risk Fee: 12.5%)

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. Execute other DOE Mission Objectives for programs such as Environmental Management in accordance with the budget profile, scope, cost, and schedule. Effectively manage Plant Directed Research and Development Programs (PDRD) to advance the frontiers of ST&E. Provide defensible ojective evidence.

Contributing Factors:

- CF-3.1 Implement a research strategy that is clear and aligns discretionary investments (e.g., PDRD) with the research strategy and support DOE/NNSA priorities.
- CF-3.2 Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.
- CF-3.3 Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.
- CF-3.4 Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.
- CF-3.5 Perform research to accomplish the high priority, multi-year research objectives, advance ST&E, and develop technologies for the public good through technology transfer.
- CF-3.6 Pursue and perform high impact work 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 future national security mission requirements.
- CF-3.7 Accomplish work within the budget profile, scope, cost, schedule, risk, and quality negotiated with the program sponsors or partners.

PO-4: Operations & Infrastructure – NA-3 & FOM - (At-Risk Fee: 25%)

Effectively and efficiently manage the safe & secure operations of the 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.

Contributing Factors:

- CF-4.1 Deliver effective, efficient, and responsive environment, safety and health (ES&H) management and processes.
- CF-4.2 Accomplish capital projects in accordance with scope, cost, and schedule baselines.
- CF-4.3 Deliver effective, efficient, and responsive physical, information and cyber security management and processes.
- CF-4.4 Maintain, operate and modernize the DOE/NNSA facilities, infrastructure, and equipment in an effective, energy efficient manner; including disposition of unneeded infrastructure and excess hazardous materials.
- CF-4.5 Deliver efficient, effective and responsible business operations and systems.
- CF-4.6 Deliver efficient and effective management of legal risk and incorporation of best legal practices.

Site Specific Outcomes:

- 4.1 Execute FY14 General Workplace Improvements (Quality of Life).
- 4.2 Successfully execute the nuclear safety, criticality safety, safety system engineering, and other related engineering programs while demonstrating continuous improvement in quality, efficiency, and effectiveness.
- 4.3 Successfully execute the Nuclear Explosive Safety (NES) program and support the NNSA NES program in the fulfillment of its responsibilities.
- 4.4 Demonstrate and maintain an effective Emergency Management Program that fully integrates all emergency management elements with an increased emphasis on the conduct and formality of both planning and program execution.

PO-5: Leadership - NA-1 & FOM - (At-Risk Fee: 25%)

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, the responsiveness of the Plants' 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 Plants and the Enterprise.

Contributing Factors:

CF-5.1 Define and implement a realistic strategic vision for the Plants, in alignment with the NNSA Strategic Plan, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.

CF-5.2 Promote a culture of critical self-assessment and transparency across all areas; instill a culture of accountability, responsibility, and performance through the entire organization; and coordinate/communicate these key issues and concerns to DOE/NNSA leadership.

CF-5.3 Demonstrate performance results through the institutional utilization of the Management Assurance System and the leveraging of parent company resources and expertise.

CF-5.4 Work selflessly within the DOE/NNSA complex to develop, integrate, and implement enterprise solutions that maximize program outputs at best value to the government; identify innovative business and management solutions that greatly improve enterprise-wide efficiencies.

CF-5.5 Exhibit professional excellence in performing roles/responsibilities while pursuing opportunities for continuous learning.

B-2

PERFORMANCE EVALUATION PLAN FOR UPF PROJECT MANAGEMENT

CLIN 0002

Includes approved UPF Fee Plan and Supplementary Annexes.

Uranium Processing Facility (UPF)

UPF FEE PLAN

Contract No. DE-NA0001942

With

Consolidated Nuclear Security, LLC (CNS)

National Nuclear Security Administration

[redacted] 02 Sept 2016
Date

Brian P. Reilly
UPF Project Director
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Date

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Revision Log

Revision	Date	Description	Total Pages	Affected Pages
0	November 3, 2015	Initial issue.	Front matter, i–ii Body, 1–6; Appendix A; Appendix B.	All
1	September 1, 2016	Added language for CO timeframe on Contractor earned fee requests.	Front matter, i–ii Body, 1–6; Appendix A, 1-3; Appendix B, 1.	6

Table of Contents

1. Introduction

The Uranium Processing Facility (UPF) project, herein referenced as "Project," is a major capital asset line item project for the United States Department of Energy (DOE), at the Y-12 National Security Complex in Oak Ridge, Tennessee, and is overseen by the National Nuclear Security Administration (NNSA) under the Office of Acquisition and Project Management (NA-APM).

The Project is being managed under the Cost Reimbursement Management and Operations (M&O) Contract No. DE-NA0001942, Contract Line Item Number (CLIN) 0002 - UPF Project Management, with Consolidated Nuclear Security, LLC (CNS), herein referenced as "Contractor," pursuant to the terms and conditions of the subject prime contract, including any special contract requirements, herein referenced as "Contract."

Under the terms and conditions of the Contract, the incentive fee associated to CLIN 0002 is separate and severable from all other fee provisions set forth in the Contract, so a separate and severable fee plan shall be maintained for the entire performance of the Project. Any Project scope allocated between the Contractor and NNSA Direct scope will be managed through the Baseline Change Proposal (BCP) process and authorized via Work Authorization and Contract modification when moving scope and/or funding.

2. Purpose

The UPF Fee Plan, herein referenced as "Plan," documents the base fee structure and implementation of fee provisions in which Project performance will be evaluated and upon which NNSA will determine the amount of Contractor provisional and earned fee.

The purpose of the Plan is to document the performance objectives and incentive provisions of the Contract, as well as the approach, procedures, and metrics the Government will use to administer the Plan. The desired behavior of the Contractor is to deliver high quality products and services (technical requirements), within the approved Performance Measurement Baseline (PMB), cost and schedule, which will ultimately deliver a UPF fully capable of meeting all DOE/NNSA mission performance, quality, safeguards and security, and environmental, safety, and health contractual requirements.

The Plan replaces the standard NNSA-corporate strategic governance and oversight model for typical standalone M&O contracts, with a framework that utilizes the NA-APM construct (DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*) for managing major capital asset projects under an M&O contract.

The Plan will cover all CNS authorized Project scope, including Work Authorizations and Authorized Unpriced Work. The Project scope is broken out by Design Management Plan (DMP), and Construction Management (CM) subprojects, which will be measured in accordance with the oversight methods of the Contract, or as defined in the Plan.

3. Approach

The approach for the Plan is to have a fee structure that will appropriately motivate Contractor performance while reducing Government risk through the use of Performance Objectives and Cost Plus Incentive Fee (CPIF) arrangements.

The goal of the Plan and fee structure is to incentivize the Contractor to deliver the Project on time and on budget, with a facility that meets all of the contractual requirements. Therefore, an element of the fee structure is the Contractor's demonstrated performance in completing Contract deliverables that comply with DOE O 413.3B, including, but not limited to: Statement of Work, Program Requirements Document (PRD), Systems Requirements Document (SRD), Contract Data Requirements List (CDRL)/Data Item Descriptions (DID), and all other applicable DOE Orders, Standards, and Contractor Requirements Documents, as set forth in the Contract.

In order to provide a balanced fee structure, the Plan may include a mix of incentive provisions for meeting discrete Project scope.

4. Establishing Plan

The Contracting Officer (CO) must ensure that the cost and fee structure is commensurate with the Critical Decision (CD) phase and performance risks, as it pertains to DOE guidelines, limitations, and factors for determining fees.

Pursuant to DOE O 413.3B (Appendix C, Page C-3)(3), the Performance Baseline (PB) is established at CD-2, which marks the completion of preliminary design. The PB represents NNSA's commitment to Congress for delivering the Project's defined scope by a particular date at a specific cost, with the exception of any separately approved subprojects and long lead procurements, as applicable. Cost estimates for the DMP in advance of CD-2 do not represent finite commitments, and therefore need to be managed differently.

The Plan includes a separate exhibit, herein referenced as "Annex," for establishing the negotiated fee structure and performance objectives for each discrete scope of work. In order for the CO to determine the proposed costs are fair and reasonable, the Contractor shall provide a cost/schedule baseline proposal in sufficient detail for the Government to perform the appropriate price/cost analysis. Pursuant to FAR 15.404-1(b), the Government may use various price analysis techniques to definitize the negotiated target cost and target fee structure in the Contract.

Prior to CD-2 approval, the Government will manage authorized scope, whether definitized or undefinitized through the use of Work Authorizations or Limitations of Costs constraints via letters of direction. Additionally, the Government may opt to use the DMP baselines and/or estimated cost/schedule baseline(s) for subprojects for performance purposes until annexes are established.

5. Plan Oversight

The Contractor is responsible for Project management, and the quality level required to meet the Project's technical requirements, deliverables, and terms and conditions of the Contract.

The Plan will be monitored by the Government through an "open book" assessment of the Contractor's technical, cost, and schedule data, which includes the Government's own evaluation of costs, fee, and Earned Value Management Systems (EVMS) metrics, as well as oversight across all functional areas, including, but not limited to: Safeguards and Security; Quality Assurance; Project Management; Integrated Project Schedule and EVMS; Engineering, Procurement & Subcontract Management, and Construction (Processes, Procedures, and Systems); Environmental, Safety, and Health; Technology Development; and Business and Contract Management.

Each Annex will have an oversight section that describes the approach the Government will use for conducting performance objective oversight to ensure the Contractor delivers high quality products and services that meet the Project requirements. The Contracting Officer's Representatives (CORs), with input from functional area managers, will use the Annexes to measure how the key performance objectives of the Contract are met. The role of the Government oversight model is to ensure Contract objectives are achieved. The CO may notify the Contractor anytime during performance of the Contract to address cost, schedule, and/or performance concerns needing attention.

6. Change Procedures

The Plan and Annexes shall be approved and incorporated into the Contract by modification at Section J, Appendix B-2, UPF Fee Plan by the CO. The Plan and Annexes will be updated as necessary during Contract performance. These updates may include, but are not limited to, required changes caused by new authorized scope, CO/COR direction, project phasing, change control, and/or establishing/adjusting cost incentives and performance objectives. Any changes to the Plan and Annexes shall be codified by a Contract modification.

7. Programmatic and Contractual Terminology Clarifications

a. Project Changes vs. Contract Changes

Project Changes: Pursuant to DOE O 413.3B (A-21)(6e) the Contractor, Federal Project Director (FPD), and Project Management Executive (PME) use approved BCPs to change the estimated or approved PB and PMB of the Project, based on change control approval thresholds. However, these baseline changes do not change the Contract.

Contract Changes: The CO is the only individual who has the authority to issue Contract changes and modifications; and only when they comply with regulatory and statutory requirements in accordance with the changes clause of the Contract. Part II - Section I, Sub-Section I-2, DEAR 970.5243-1, *Changes* (Dec 2000). Thus, the Contractor shall coordinate with the CO to identify any specific Contract changes that may be required as the result of a BCP, prior to submitting for approval.

b. Contingency

Pursuant to DOE Acquisition Letter AL 2009-01, when establishing the negotiated pricing and fee structure for each Annex, only the Contractor's controlled and proposed contingency costs, i.e., Management Reserve (MR), consistent with FAR 31.205-7(c)(1) shall be allowed and included in the overall cost against which fee is calculated – "those that may arise from presently known and existing conditions, the effects of which are foreseeable within reasonable limits of accuracy; e.g., anticipated costs of rejects or defective work."

However, the Contractor has the burden of proof in demonstrating its proposed costs, including any Contractor controlled contingency costs, are reasonable, allocable, and allowable.

c. Contract Price

Pursuant to DOE O 413.3B and DOE G 413.3-10, *Earned Value Management System (EVMS)(Appendix B),* the following information is provided to ensure clarity of terms used in the Plan.

a. Contract Price (CP), a performance measurement term, represents Contract Budget Base (CBB) plus fee/profit, or *CP = CBB + profit/fee*.

b. CBB, a performance measurement term, includes all the authorized work, i.e., Negotiated Contract Cost (NCC) plus any Authorized Unpriced Work (AUW), from which the PMB is derived. However, CBB excludes Government contingency, other DOE direct costs, and any fee/profit. *CBB = PMB + MR*.

c. PMB, a project management and performance measurement term, represents an element of CBB, but by itself excludes MR (Contractor held contingency) and any fee/profit.

d. The Contract Estimated Price on Contract, a contractual term, represents the Governments estimated costs or negotiated costs of authorized priced scope, including any earned fee or allowable contingency costs, shown as a limitation of costs constraint under Cost Reimbursement contracts. Any changes that affect the Contract price on Contract shall be definitized by a modification to Contract, Section B, CLIN 0002 by the Contracting Officer.

8. Provisional Fee

Pursuant to DOE Acquisition Letter AL 2014-02, provisional payment of fee is paid to the Contractor for progress towards meeting performance objectives *before* the Contractor has earned the available fee. Therefore, provisional payment of fee is 100% at risk until earned.

The Contractor may request provisional fee payments on established Annexes, or as otherwise authorized by the CO, however, these requests shall be made no more frequently than "quarterly" and in writing to the CO. The amount of each provisional fee payment will be directly and expressly linked to the Contractor's demonstrated and continued performance towards earning fee. The Contractor's request shall summarize the basis for the amount of provisional fee requested. Each successive provisional fee payment, if any, shall reflect the Contractor's cumulative performance to date.

The CO's evaluation of provisional fee requests shall rely on the Contractor's ability to clearly demonstrate satisfactory progress and/or completion of discrete scopes of work against the budgeted value of work actually accomplished for each Annex. Other inputs may include, but are not limited to, routine and un-scheduled site visits, inspections, assessments, and peer reviews. The CO will notify the Contractor in writing within 30 calendar days from receipt of request outlining the amount of approved provisonal fee that can be drawn down from the letter of credit.

The CO, with coordination from NNSA HQs, will monitor performance to determine if the Contractor has met the requirements under which the Government will pay provisional fee to the Contractor, as well as any adjustments to the cumulative amount of provisional fee already paid.

In the event the CO determines the Contractor has over drawn provisionally paid fee, the Contractor shall return that provisionally paid fee to the Government within 60 calendar days of notification:

- The Contactor's obligation to return the provisionally paid fee is independent of its intent to dispute, and/or its disputing the CO determination in accordance with the disputes clause of the Contract. Part II - Section I, Sub-Section I-1, FAR 52.233-1, *Disputes, Alternate I* (Dec 1991)(Jul 2002); and

- If the Contractor fails to return the provisionally paid fee within 60 calendar days of the CO notification, the Government, in addition to all other rights that accrue to the Government, may withhold/deduct the amount of the provisionally paid fee from amounts the Government would otherwise authorize the Contractor to draw down under a Letter of Credit, or any other Contractor owed obligation.

9. Earned Fee

Earned fee is due the Contractor by virtue of its meeting the stated performance objectives of the Plan, Annexes, and Contract requirements entitling it to fee.

For the purposes of this Plan:

- All fee is 100% at risk until earned;
- Contractor performance objectives will be primarily measured against Cost 50% and Schedule 50%, with the flexibility for adjusting percentage split or adding other performance objectives to negotiated annexes based on scope and risk.
- All negotiated fee associated with cost performance objectives shall be provisional through the end of the project and/or contract, as spelled out in each Annex;
- Maximum fee will be > 5%, based on negotiated target cost and target fee share lines;
- How and when fee is earned will be negotiated and captured in each Annex; and,
- All fee is subject to the terms and conditions of the Contract, including any special contract requirements.
- The CO will notify the Contractor in writing within 45 calendar days or as mutually agreed between the parties, from receipt of an acceptable request outlining the amount of approved earned fee that can be drawn down from the letter of credit.

10. Incentive Fee Structure

The Government will bilaterally establish the incentive fee structure under the Plan by negotiating each discrete element of scope and incorporating the agreement, i.e., Annex, into the Contract via modification. However, the Government is under no obligation to pay provisional or earned fee without an approved Plan with agreed to Annexes.

The creation of each Annex and establishment of performance objectives, target cost, target fee, share lines, and maximum/minimum fee will be the result of several variable factors, including:

- The Government's price objective; and
- The Contractor's price objective.

It is anticipated that each Annex may contain a cost incentive, schedule incentive, and other applicable performance objectives. It is anticipated that some scope may require a deeper analysis of the reasonableness of and necessity for all costs incurred, risks, and the relative effectiveness of the Contractor's management and overall performance. Regardless, the Government’s objective is the same, to negotiate and definitize a reasonable price and fee structure with the Contractor. The final fee determination shall be made by the Government using the criteria and/or conditions contained in the annexes.

APPENDIX A

FEE PLAN TERMINOLOGY

Refer to DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets* and DOE G 413.3-10, *Earned Value Management System (EVMS)* for additional terms related to EVMS managed Projects. Additional terms may be added as Annexes are developed.

Actual Cost – the reasonable costs that the Contractor can claim, i.e., reasonable, allowable, and allocable.

Annex – the method for capturing the negotiated fee structure, performance objectives, and oversight for each discrete scope of work.

Authorized Unpriced Work (AUW) – is contractually approved scope, i.e., approved baseline changes, but not yet negotiated or definitzed on Contract.

Baseline – A quantitative definition of cost, schedule and technical performance that serves as a base or standard for measurement and control during the performance of an effort; the established plan against which the status of resources and the effort of the overall projects are measured, assessed and controlled.

Baseline Change Proposal – A document that provides a complete description of a proposed change to an approved performance baseline, including the resulting impacts on the project scope, schedule, design, methods, and cost baselines.

Earned Value – The budgeted value of work actually accomplished in a given time. Simply defined, Earned Value represents the value of work accomplished during the period.

Earned Value Management – A project performance method that utilizes an integrated set of performance measurements (e.g., scope, cost and schedule) to assess and measure project performance and progress, and estimate cost and schedule impacts at completion.

Earned Value Management System – An integrated set of policies, procedures and practices to objectively track true performance on a project. EVMS represents an integration methodology that is able to provide an early warning of performance problems while enhancing leadership decisions for successful corrective action.

Fee Plan – Captures the fee strategy. The base plan details the processes and procedures for implementing the fee structure and methodology of developing annexes for evaluating the contractor's performance.

Final Fee – The amount of fee owed to the Contractor, which includes adjustements for Contractor underruns, overruns or other performance objective fee adjustments.

Maximum Fee – The highest fee that may be earned, usually expressed as a percentage, but translated into a fixed dollar amount.

Minimum Fee – The lowest fee that may be earned, usually expressed as a percentage, but translated into a fixed dollar amount.

Other NNSA Direct Costs – Refers to scope being performed by someone other than the M&O Contractor, e.g. the United States Army Corps of Engineers (USACE), but included in the Projects PB and TPC.

Other Project Costs (OPC) – All other costs related to a project that are not included in the Total Estimated Cost (TEC).

Performance Baseline (PB) – The collective key performance, scope, cost, and schedule parameters, which are defined for all projects or subprojects at CD-2. The PB includes the entire project budget (TPC including fee and contingency) and represents DOE's commitment to Congress.

Performance Measurement Baseline (PMB) – The baseline cost that encompasses all contractor project work packages and planning packages, derived from summing all the costs from the Work Breakdown Structure. Undistributed management reserve, contingency, profit, fee and DOE direct costs are not part of the PMB. The PMB is the benchmark used within EVM systems to monitor project (and contract) execution performance.

Performance Objectives – The objective of incentive contracts is to motivate contractors to earn more compensation by achieving better performance objectives (cost, schedule, and/or technical); to better control costs and performance.

Range of Incentive Efectiveness (RIE) – RIE is a judgment of the range of probable costs and not an estimate of the range of possible costs above or below that range. Thus, RIE is the byproduct of cost analysis, and the conclusion reached after fact-finding, negotiations, and analysis of cost projections. The RIE is that conclusion translated into target cost/fee, share lines, and maximum/minimum fee dollars.

Share Line (Ratio) – The agreed upon cost sharing proportion, normally expressed in percentage, which is often different for cost overruns and cost underruns.

Target Cost – The estimated total contract cost for a subject Annex. The Target Cost will represent the point in the range of possible costs which both parties to the Contract agree is the “most probable.” The RIE sets the range of what Contract costs are likely to be, expressed in terms of most pessimistic to most optimistic.

Target Fee – The estimated fee for a subject Annex. The Target Fee is the amount of fee to be paid if the Target Cost matches the Actual Cost. The Target Fee will

represent the point in the range of possible fees which both parties to the Contract agree is the "most probable." The RIE sets the range of what Contract fees are likely to be, expressed in terms of most pessimistic to most optimistic.

Total Estimated Cost – All engineering design costs, facility construction costs and other costs specifically related to those construction efforts.

Total Project Cost – All costs between CD-0 and CD-4 specific to a project incurred through the startup of a facility, but prior to the operation of the facility. Thus, TPC includes TEC plus OPC.

Variances – A measurable change from a known standard or baseline. It is the difference between what is expected and what is actually accomplished. A variance is a deviation or departure from the approved scope, cost or schedule performance. Variances are expected, but the Contractor's potential of earned fee is directly related to the final variances.

Work Breakdown Structure – Used by the project management team to organize and define a project into manageable objectives and create a blueprint by which the steps leading to the completion of a project are obtained.

APPENDIX B

CPIF STRUCTURE COMPONENTS

CPIF Structure Components

The following CPIF structure component definitions will be used for developing the share line formulas in each Annex for calculating final fee. This structure forms the basis for the Plans incentive arrangement and sharing of risks between the Government and the Contractor regardless of the use of a single or multi-level share line model.

C_T = Target Cost // Negotiated Target Cost ($).

C_{TAC} = Total Allowable Cost // Actual Cost ($) the Contractor can claim.

F_T = Target Fee // Negotiated Target Fee ($).

F_{MAX} = Maximum Fee // *Maximum Fee ($) > Target Fee, but within statutory range.*

F_{MIN} = Minimum Fee // *Minimum Fee ($) < Target Fee, but not < Zero.*

F_{ATF} = Adjusted Target Fee // Calculated Fee amount ($) after share line(s) applied.

F_{AFF} = Adjusted Final Fee // Calculated Fee amount ($) after adjustments applied.

C_{TAP} = Total Adjusted Price // Calculated Contract Price ($) after Fee applied.

Share Ratios: Government Under/Over Target Shares, expressed as the Government percentage share of cost risk over the Contractor percentage share of cost risk.

Under Target Share = S_{GU}/S_{CU} // Government Share (%)/Contractor Share (%).

Over Target Share = S_{GO}/S_{CO} // Government Share (%)/Contractor Share (%).

Uranium Processing Facility (UPF)

Design Management Plan (DMP)
Fee Structure

Annex 1

National Nuclear Security Administration

[redacted] 02 Sept 2016
Date

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[redacted] 9/2/16
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Revision Log

Revision	Date	Description	Total Pages	Affected Pages
0	April 21, 2016	Initial issue.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	All
1	August 10, 2016	Change to target cost/target fee related to BCP 16P159 for increase in UPF testing scope required to achieve TRL 7 for microwave casting technology.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	A-1-10 B-2
2	September 1, 2016	Added Target Price Change Log.	Front matter, i–ii Body, 1–2; Appendix A, 1-18; Appendix B, 1-2 , and Appendix C, 1-3.	A-2

Table of Contents

1. Introduction

The Uranium Processing Facility (UPF) Design Management Plan, herein referenced as "DMP," was authorized by the National Nuclear Security Administration (NNSA) to advance design activities for the multiple building, campus approach for the Uranium Processing Facility (UPF). The DMP scope is being performed by Consolidated Nuclear Security, LLC (CNS), herein referenced as "Contractor," as defined in the UPF Project Execution Plan, UPF Project Execution Plan, PL-PJ-801768-A006, which establishes the formal plan for executing the project.

The DMP scope supports the UPF Project by completing Conceptual, Preliminary, and Final design, which includes all the associated safety basis documents as logical predecessors to establishing Critical Decisions. The DMP scope is best characterized as nuclear and non-nuclear design work, and includes new technologies. The DMP scope shall be managed through the use of the Project's design management baseline in order to ensure the scope, mission requirements, and schedules are met within the approved Contract Budget Base (CBB), Statement of Work, and Key Performance Parameters (KPPs) required for achieving design completion requirements and critical decisions before construction authorization.

The DMP scope shall support the Enriched Uranium Mission (EUM), with timely, cost effective, high quality deliverables.

2. Purpose

The DMP Fee Structure, herein referenced as "DMP Annex" (Annex 1), is a subset of the overarching Contract, Section J, Appendix B-2, "UPF Fee Plan," that documents the Performance Objectives and Cost Plus Incentive Fee (CPIF) arrangement, in which DMP performance will be evaluated. The purpose of the DMP Annex is to document the target cost and incentive fee/fixed fee structure, and define how NNSA will determine the final amount of Contractor earned fee, thereby establishing a "contract price" for the DMP scope.

3. Approach

The desired performance of the Contractor is to deliver high quality DMP deliverables (technical requirements) and/or integration support, which will ultimately deliver a UPF fully capable of meeting all DOE/NNSA mission performance, quality, safeguards and security, and environmental, safety, and health contractual requirements.

The desired goal is to properly incentivize the Contractor to deliver DMP scope on/or under budget and on/or ahead of schedule, by establishing a reasonable Target Price, including Cost and Schedule Performance Objectives for meeting the DMP scope.

4. Establishing Annex

The DMP Annex shall be approved and incorporated into the Contract by modification at Section J, Appendix B-2, UPF Fee Plan by the Contracting Officer (CO).

The Government will primarily incentivize the Contractor using the following critical performance objectives, unless otherwise documented in the Annex:

- Cost
- Schedule

By employing these incentives, the Government expects to motivate the Contractor to aggressively manage resources as required in order to provide high-quality and timely completion of authorized scope and integration/support of all DMP deliverables. Eligibility and the amount of the incentive fee earned shall be dependent on the Contractor meeting or exceeding the established performance objectives. Failure to meet any of the established DMP Performance Objectives, Appendix A, may result in the Contractor's forfeiture of incentive fee for that assigned objective or element.

5. Annex Oversight

The Government Oversight Model, Appendix C, describes the approach NNSA will use for conducting surveillance and oversight of DMP Performance Objectives and Contract deliverables, in order to ensure the Contractor delivers high quality products and services that meet the UPF Project requirements. The CO and Contracting Officer's Representatives (CORs), with input from functional area managers, will measure how the key performance objectives of the Contract are met. The purpose of the oversight model is to communicate Government expectations to the Contractor in order to ensure Contract objectives, i.e., final outcomes, are achieved. The CO/COR may notify the Contractor anytime during performance of the Contract to address cost, schedule, and/or performance concerns needing attention.

In order to provide high confidence in the performance baseline and construction start authorizations, major design completion requirements have been extracted from the UPF Plan for Design Reviews Supporting Design Completion PL-EG-801768-A006 for use within the DMP Annex. Design completion requirements used in the DMP Annex shall be consistent with DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets and recent DOE and NNSA guidance. Specifically, the design for the nuclear facilities subprojects will be at least 90 percent complete prior to CD-2/3 approval, and the design of the non-nuclear subprojects is required to be sufficiently complete to establish a Performance Baseline (PB).

6. Change Procedures

The DMP Annex may be updated as necessary during Contract performance. These updates may include, but are not limited to, required changes caused by new authorized scope, project phasing, approved target cost change control, and/or establishing/adjusting fee incentives and performance objectives. Any changes shall be codified by a Contract modification within Section J, Appendix B-2, UPF Fee Plan.

All changes, including DMP Baseline Changes, are subject to the thresholds outlined in the UPF Project Execution Plan, PL-PJ-801768-A006, Appendix C.

Appendix A

DMP PERFORMANCE OBJECTIVES

Fee – Summary	
Target Price (P_T), includes available fee	$961,340,214
Available Fee (F_A), only includes unrealized cost and schedule fee	$45,778,106
NOTE: The Target Price for DMP includes the Target Cost for work completed and work planned through July 01, 2014 to February 16, 2018, and includes the amount of available fee for this period. NNSA will make a Final Fee Determination after NNSA approval of UPF CD-4 and acceptance of UPF closeout report. Cost and Schedule performance objectives apply to the project requirements being delivered and/or performed under this scope. For the purposes of this negotiated annex, all fee associated to the cost objective is provisional to the end of the project (UPF CD-4) or contract, subject to the final fee determination and Contract modification.	
Cost Objective Elements – 50%	
Target Cost (C_T)	$915,562,108
Target Fee (F_T)	$22,889,053
Level 1 Under Target Cost (C_{UT1})	$895,562,108
Level 1 Under Target Share Ratio (S_{GU1}/S_{CU1})	90/10
Level 2 Under Target Cost (C_{UT2})	$854,689,043
Level 2 Under Target Share Ratio (S_{GU2}/S_{CU2})	60/40
Maximum Fee (F_{MAX})	$41,238,279
Level 1 Over Target Cost (C_{OT1})	$935,562,108
Level 1 Over Target Share Ratio (S_{GO1}/S_{CO1})	90/10
Level 2 Over Target Cost (C_{OT2})	$956,451,161
Level 2 Over Target Share Ratio (S_{GO2}/S_{CO2})	0/100
Minimum Fee (F_{MIN})	$0

Schedule Objective Elements - 50%	
Schedule Fee (F_{SM}) Milestones	$22,889,053
Schedule Fee (F_{SSG}) Stretch Goals *	$8,600,000
* Stretch goal incentives are only available when DMP Actual Costs are ≤ Level 1 Over Target Cost (COT1).	

Target Price - Change Log

Modification	Target Cost	Avalable Fee	Target Price
Rev 0	$909,426,000.00	$45,471,300.00	$954,897,300.00
Rev 1	+ $6,136,108.00	+ $306,806.00	+ $6,442,914.00
Rev 2	+ 0.00	+ $0.00	+ $0.00
	$915,562,108.00	$45,778,106.00	$961,340,214.00

Scope – Summary

UPF is being designed to house the necessary capabilities and capacities to comply with the requirements of DOE/ORO-2171, Uranium Processing Facility Project: Replacement of Select Building 9212 Capabilities Subproject at Y-12 National Security Complex Program Requirements Document. Detailed systems requirements are delineated in the Systems Requirements Document for the Uranium Processing Facility Project (SRD) (SR-PE-801768-A001). Design criteria, which govern the overall design of the project, are detailed in the multi-volume Uranium Processing Facility Design Criteria (U) (DE-PE-801768-A001 through A053). See UPF Project Execution Plan, PL-PJ-801768-A006, Section 4.1, Scope Baseline for additional details.

NOTE: Major scope elements are identified in the Work Break Down (WBS) section.

Critical Decision (CD) - Summary	
CD-4 Forecasted Approval	4th QTR FY 2025
Key Performance Parameters, as it relates to design.	
1	Provide the necessary facilities with the appropriate safety and security functions to support the enriched uranium operations.
2	Provide the capability and capacity to conduct enriched uranium casting operations to produce cast uranium metal and alloyed items.
3	Provide the capability and capacity to convert bulk enriched uranium metal and casting residue to enriched uranium oxide.
4	Provide the capability and capacity to manufacture special uranium oxides from enriched uranium feedstock materials including alloys.
5	Provide the capability and capacity to process enriched uranium salvage streams from UPF and existing Y-12 facilities to provide material accountability, convert material to a stable form for storage, and prepare materials for waste distribution.
6	Provide the support operations required to run the processing capabilities (to include process support, maintenance shop, and packaging/shipping).

Schedule Milestones – Deliverable Summary [1]

Deliverable	Submission Date	Approval Date [5]	Impact Date
PSDR Submittal/PSVR Approval	June 15, 2016	November 10, 2016	November 11, 2016

Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$1,000,000	$0	N/A

Definition of Complete: The PSDR submittal shall be suitable for review by having the format and content prescribed by DOE-STD-3009-94. The PSDR approval shall meet the DOE-STD-1189-2008 and shall be approved by the NNSA Safety Basis Approval Authority by issuance of a PSVR such that the Conditions of Approval within the PSVR do not impact the on-time submission and approval of the PDSA.

The fee associated with this Earned Value at Milestone is only available until November 10, 2016.

NNSA Review Duration: 148 Calendar Days.

Deliverable	Submission Date	Approval Date [5]	Impact Date
MEB CD-2/3 Package Submittal and Approval	August 23, 2016	February 13, 2017	March 30, 2017

Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$1,000,000	$0	N/A

Definition of Complete: Critical Decision 2 and Critical Decision 3 requirements in Department of Energy Order 413.3B *Program and Project Management for the Acquisition of Capital Assets* and the Secretarial Policy Memoranda *Project Management Policies and Principles*, dated June 8, 2015. Verification of completeness shall be performed by a series of reviews including a UPO Sufficiency Review, an Independent Cost Estimate team and an External Independent Review. Critical Decision 2 and Critical Decision 3 approval by the Project Management Executive shall be obtained.

The fee associated with this Earned Value at Milestone is only available until March 29, 2017.

NNSA Review Duration: 174 Calendar Days.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable	Submission Date	Approval Date [5]	Impact Date
CD-3B and CD-3C Long Lead Procurement Packages for Gloveboxes and Skids Submittal and Approval	October 31, 2016	March 30, 2017	June 30, 2017

Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal	Approval Delay Reductions (Calendar Days) [4]
$1,000,000	$0	N/A	$10,870/day; $1,000,000 max

Definition of Complete: Applicable Critical Decision (CD)-2 and CD-3 requirements in Department of Energy Order 413.3B *Program and Project Management for the Acquisition of Capital Assets* and the Secretarial Policy Memoranda *Project Management Policies and Principles*, dated June 8, 2015. Applicability shall be determined in advance by an UPO FPD approved CD-3B and CD-3C Tailoring Strategy. Verification of completeness shall be performed by a series of reviews including a UPO Verification Review, an Independent Cost Estimate team and a NNSA independent review. Critical Decision 3B/3C approval by the Project Management Executive or the Chief Executive of Project Management shall be obtained.

Additional requirements include:

- Complete the design review for all long-lead procurement items, including resolution of all relevant pre-CD submittal comments, in accordance with the UPF Design Review Plan.
- Provide well documented schedule basis by procurement packages, modules and/or commodities for the selection of “long lead” scope that is supported by the project schedule and demonstrates the needed on-site delivery times to support the UPF construction schedule.
- Pursuant to the approved CD-3B/3C Tailoring Strategy, complete Acquisition Plans (APs) or Acquisition Strategy (AS) documents for each major long-lead equipment/material category that describes the basis for the recommended acquisition approach (e.g., design/bid/build, design/build, or other) and subcontracting strategy (e.g., single or multiple awards, Basic Ordering Agreements, firm fixed price, cost plus, or other). The appropriate acquisition documents shall also adequately describe the proposed approach for conducting Factory Acceptance Tests, pre-installation integrated testing, vendor or on-site storage, and preventive maintenance.
- Risk analysis shall thoroughly define risks associated with procurement of each of the major equipment/material categories in advance of completing the final design and establishing a performance baseline. The risk items shall consider the Quality Level, complexity of the item being procured, vendor capabilities, and impact to the overall UPF project cost/schedule if the selected vendor fails to deliver a quality product on time.

The fee associated with this Earned Value at Milestone is reduced daily after March 30, 2017.

NNSA Review Duration: 150 Calendar Days.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable			Submission Date	Approval Date [5]	Impact Date
PDSA Submittal and SER Approval			August 24, 2017	December 27, 2017	December 28, 2017
Earned Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**	**Approval Acceleration Incentive (Calendar Days) [3]**		
$2,000,000	$0	+ $1,433,620	1-120 days SER Issued by DOE/NNSA: $11,947/day; $1,433,620 max		

Definition of Complete: The PDSA submittal shall be suitable for review by having the format and content prescribed by DOE-STD-3009-94. The PDSA approval shall meet the DOE-STD-1189-2008 and shall be approved by the NNSA Safety Basis Approval Authority by issuance of an SER such that the Conditions of Approval within the SER do not impact the start of nuclear construction.

The fee associated with this Earned Value at Milestone is only available until December 27, 2017.

NNSA Review Duration: 152 Calendar Days.

Deliverable			Submission Date	Approval Date [5]	Impact Date
Microwave Casting Furnace TRL-7 Submittal and Approval			August 5, 2017	October 5, 2017	November 30, 2017
Earned Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**	**Approval Delay Reductions (Calendar Days) [4]**		
$1,153,053	$0	N/A	$20,590/day; $1,153,053 max		

Definition of Complete: The Technology Readiness Assessment (TRA) Report submittal, with supporting technical evidence that the TRL-7 Requirements identified in the Microwave Casting Furnace Technology Maturation Plan for achieving TRL-7 have been satisfactorily achieved, shall meet the criteria for content and format as defined in DOE Technology Readiness Assessment Guide 413.3-4A. The TRA Report approval shall meet the DOE Technology Readiness Assessment Guide 413.3-4A and shall be approved by the NNSA Program Secretarial Office by issuance of an approval letter. Pursuant to DMP Annex 1 - Rev 1, conduct the Depleted Uranium testing described in the UPF Microwave Casting Technology Maturation Plan, PL-EX-801768-A006, Rev. 0; UPF Microwave Casting Depleted-Uranium Test Plan PL-EX-801768-A008, Rev. 0; and Baseline Change Proposal 16P159, Depleted Uranium (DU) Testing of Microwave Casting to Demonstrate Technology Readiness 7 Revised.

The fee associated with this Earned Value at Milestone is reduced daily after October 5, 2017.

NNSA Review Duration: 31 Calendar Days.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable	Submission Date	Approval Date [5]	Impact Date
SAB and PSF CD-2/3 Packages Submittal and Approval	September 5, 2017	January 31, 2018	March 30, 2018

Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal	Approval Delay Reductions (Calendar Days) [4]
$3,437,000	$0	N/A	$59,258/day; $3,437,000 max

Definition of Complete: Critical Decision 2 and Critical Decision 3 requirements in Department of Energy Order 413.3B *Program and Project Management for the Acquisition of Capital Assets* and the Secretarial Policy Memoranda *Project Management Policies and Principles*, dated June 8, 2015. Verification of completeness shall be performed by a series of reviews including a UPO Sufficiency Review, an Independent Cost Estimate team and an External Independent Review. Critical Decision 2 and Critical Decision 3 approval by the Project Management Executive or Chief Executive for Project Management as appropriate.

Additional requirements include:

- Processes, procedures and tools are in place and ready to support and oversee nuclear construction.
  - Procedures necessary to manage nuclear construction are issued and on-board staff have been trained.
  - Appropriate staffing levels and disciplines are identified, and plans are in place to hire, accommodate badging, office space and equipment, and computer hardware/software that would not hinder successful project execution.
- This completion criteria regarding staffing will be verified by the External Independent Review Team in accordance with Department of Energy Guide 413.3-9 U.S. Department of Energy Project Review Guide for Capital Asset Projects (see section 5.4 Approve Start of Construction Review (CD-3), paragraph A(3) Construction/Execution Planning).

The fee associated with this Earned Value at Milestone is reduced daily after January 31, 2018. The SAB/PSF CD-2/3 approval is a prerequisite for MPB stretch goal.

NNSA Review Duration: 148 Calendar Days.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable			Submission Date	Approval Date [5]	Impact Date
MPB CD-2/3 Package Submittal and Approval			September 5, 2017	January 31, 2018	March 30, 2018
Earned Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**	**Approval Acceleration Incentive (Calendar Days) [3]**		
$13,299,000	$0	+ $7,166,380 (includes SAB, PSF, and MPB CD-2/3 approval)	$69,720/day; $7,166,380 max (all schedule milestones must be completed to achieve stretch goal)		
			Approval Delay Reductions (Calendar Days) [4]		
			$229,293/day; $13,299,000 max		

Definition of Complete: Critical Decision 2 and Critical Decision 3 requirements in Department of Energy Order 413.3B *Program and Project Management for the Acquisition of Capital Assets* have been completed and verified complete by an Independent Cost Estimate team and an Critical Decision 2 and Critical Decision 3 requirements in Department of Energy Order 413.3B *Program and Project Management for the Acquisition of Capital Assets* and the Secretarial Policy Memoranda *Project Management Policies and Principles*, dated June 8, 2015. Verification of completeness shall be performed by a series of reviews including a UPO Sufficiency Review, an Independent Cost Estimate team and an External Independent Review. Critical Decision 2 and Critical Decision 3 approval by the Project Management Executive or Chief Executive for Project Management as appropriate.

Additional requirements include:

- A non-project expense (NPE) estimate shall be prepared for all UPF scope and included with the UPF CD-2 documentation. This estimate shall be signed by the impacted CNS program owners (funding source; requires CNS coordination with NPO) indicating responsibility for obtaining and providing the funding.
- Processes, procedures and tools are in place and ready to support and oversee nuclear construction.
  - Procedures necessary to manage nuclear construction are issued and on-board staff have been trained.
  - Appropriate staffing levels and disciplines are identified, and plans are in place to hire, accommodate badging, office space and equipment, and computer hardware/software that would not hinder successful project execution.
- This completion criteria regarding staffing will be verified by the External Independent Review Team in accordance with Department of Energy Guide 413.3-9 U.S. Department of Energy Project Review Guide for Capital Asset Projects (see section 5.4 Approve Start of Construction Review (CD-3), paragraph A(3) Construction/Execution Planning).

The fee associated with this Earned Value at Milestone is reduced daily after January 31, 2018.

NNSA Review Duration: 148 Calendar Days.

Schedule Milestones – Deliverable Summary [1] (continued)

NOTES:

1 – Schedule Milestones and Schedule Stretch Goals are tied to deliverable dates and definitions of complete.

2 – Earned Value at Impact ($0) is achieved on the Impact Date for each milestone for circumstances related and attributable to CNS performance.

3 – Approval Acceleration Incentives are accelerations in achieving Government approval where the acceleration results from early submission of deliverables and/or efficiencies in Government review and approval enabled by the Contractor.

4 – Approval Delay Reductions are delays in achieving Government approval where the delays result from circumstances attributable to CNS performance.

5 – Approval Dates assume high quality deliverables, with no deficiencies (major findings or findings: attributable to significant scope, cost, schedule or safety impacts) that would prevent the project team from executing baseline.

Schedule of Values – Fee Liquidation Schedule [1]

When Paid	Scope	Cost Objective			Schedule Objective	
		Provisional	Earned	Unliquidated	Provisional	Earned
Annex Signed	DMP Work Completed.	$5,110,000	-	$2,191,000	$7,299,000	-
On Completion	63.0% Design Complete as measured by EPPR (in hours). As per March 2016 plan.[3, 4]	$1,544,000	-	$661,000	-	-
On Completion	69.6% Design Complete as measured by EPPR (in hours). As per June 2016 plan.[3, 4]	$1,544,000	-	$661,000	-	-
On Completion	NNSA Acceptance of *Preliminary Design Review*. As per September 2016 plan.[5, 6]	$1,544,000	-	$661,000	-	-
On Completion	81.0% Design Complete as measured by EPPR (in hours). As per December 2016 plan.[3, 4]	$1,544,000	-	$661,000	-	-
On Completion	86.7% Design Complete as measured by EPPR (in hours). As per March 2017 plan.[3, 4]	$1,544,000	-	$661,000	-	-
On Completion	91.2% Design Complete as measured by EPPR (in hours). As per June 2017 plan.[3, 4]	$1,544,000	-	$661,000	-	-
On Completion	NNSA Acceptance of *Final Design Review*. As per September 2017 plan.[5, 7]	$1,544,000	-	$661,000	-	-
On Submission	PSDR Submitted for DOE Approval	-	-	-	$1,000,000	-
On Approval [2]	**PSVR Issued by DOE**	**-**	**-**	**-**	**-**	**$1,000,000**
On Submission	MEB CD-2/3 Package Submitted to DOE for Approval	-	-	-	$1,000,000	-
On Approval [2]	**MEB CD-2/3 Package Approved**	**-**	**-**	**-**	**-**	**$1,000,000**
On Submission	CD-3B and CD-3C Glovebox and Skid Long Lead Procurements Submitted for DOE Approval	-	-	-	$1,000,000	-
On Approval [2]	**CD-3B and CD-3C Glovebox and Skid Long Lead Procurements Approved by DOE**	**-**	**-**	**-**	**-**	**$1,000,000**
On Submission	Microwave Casting Furnace TRL-7 Submitted to DOE for Approval	$153,053	-	-	$1,153,053	-
On Approval [2]	**Microwave Casting Furnace TRL-7 Approved by DOE**	**-**	**-**	**-**	**-**	**$1,153,053**

Schedule of Values – Fee Liquidation Schedule [1] (continued)

When Paid	Scope	Cost Objective			Schedule Objective	
		Provisional	Earned	Unliquidated	Provisional	Earned
On Submission	PDSA Submitted to DOE for Approval				$2,000,000	-
On Approval [2]	**SER Issued by DOE**				**-**	**$2,000,000**
On Submission	SAB and PSF CD-2/3 Packages Submitted to DOE for Approval	-	-	-	$3,437,000	-
On Approval [2]	**SAB and PSF CD-2/3 Packages Approved**	**-**	**-**	**-**	**-**	**$3,437,000**
On Submission	MPB CD-2/3 Package Submitted to DOE for Approval	-	-	-	$6,000,000	-
On Approval [2]	**MPB CD-2/3 Package Approved**	**-**	**-**	**-**	**-**	**$13,299,000**
TBD	Final Fee Determination [9]	$16,071,053	UPF CD-4 [8]	$6,818,000	$22,889,053	$22,889,053

NOTES:

1 – Schedule Milestones and Schedule Stretch Goals are tied to deliverable dates and definitions of complete.

2 – All DOE/NNSA approvals are pursuant to DOE O 413.3B and assume high quality deliverables, with no deficiencies (major findings or findings: attributable to significant scope, cost, schedule or safety impacts) that would prevent the project team from executing baseline.

3 – Percent Design Complete will continue to be calculated in accordance with the method used for reporting percent design complete in the Monthly Project Review. For the provisional cost fee payments scheduled for the quarters ending March 2016, June 2016, December 2016, March 2017 and June 2017, UPO will assess the percent design complete reported. The assessment will consist of a sampling of EPPR gates reported as complete since the last assessment and comparing completed gates with project and design documentation posted in InfoWorks. The assessment will also consist of a sampling of EPPR gates reported as partially complete, and comparing reported gate progress with the remaining duration shown in the forecast schedule.

4 – Percent Design Complete shall be calculated based on engineering hours planned and engineering hours earned as follows:

- CNS determined the usable design completed before the July 1, 2014 contract transition is 2,240,626 hours. This value was reviewed and accepted by UPO. This value represents both the engineering hours planned and earned prior to July 1, 2014.
- The source for CNS engineering hours planned and earned is EPPR.
- CNS engineering hours planned and earned will include Engineering Management.
- Vendor design to be completed post March 2018 is not included in the calculation.

- As a point of reference, for this calculation, the engineering hours planned as of August 2015 month end close is 6,524,834, and the hours earned is 3,295,915, or 50.5% design complete.
- The Percent Design Complete values on the Fee Liquidation Schedule were taken from January 2016 month end reporting data.

5 – For the quarters ending September 2016 and September 2017, the Preliminary Design Review and the Final Design Review conducted by UPO will be used as the assessment for the provisional cost fee payment.

6 – **Preliminary Design Completion Milestone - Definition of Complete:** Engineering Deliverables have advance to preliminary design status as specified in UPF Design Review Plan PL-EG-801768-A006. The Preliminary Design Review Assessment has verified and documented the design to meet the Review Plan CRAD's in a Report. Type A Findings shall be resolved or corrected prior to approval of the Preliminary Design Completion Project Milestone per the UPF Design Review Plan PL-EG-801768-A006.

7 – **Final Design Completion Milestone - Definition of Complete:** Engineering Deliverables have advanced final design status as specified in UPF Design Review Plan PL-EG-801768-A006. The Final Design Review Assessment has verified and documented the design to meet the Review Plan CRAD's in a Report. Type A Findings shall be resolved or corrected prior to approval of the Final Design Completion Project Milestone per the UPF Design Review Plan PL-EG-801768-A006.

8 – NNSA will liquidate the remaining cost objective fee on the last CD-2/3 approval; however, all fee associated with cost objective is provisional to CD-4.

9 – NNSA will make a Final Fee Determination after NNSA approval of UPF CD-4 and acceptance of UPF closeout report.

Reporting Requirements	
The Federal Project Director and Contracting Officer, with inputs from other Government personnel, will verify the on time submission of project reports that meet DOE/NNSA requirements contained in the Data Item Descriptions (DIDs). The Government will perform this verification by comparing the DOE/NNSA requirements contained in the following DIDs to the deliverables provided by the Contractor:	
Data Item Description	Title
DID-ENG-0001/T	As-Built Configuration List
DID-ENG-0002/T	As-Built Drawings
DID-ENG-0003/T	Code of Record Document
DID-ENG-0004/T	Conceptual Design Report
DID-ENG-0009	Design Master Record Index
DID-ENG-0010	Facility Design Description
DID-ENG-0012/T	Final Design Review
DID-ENG-0014/T	Interface Control Document
DID-ENG-0015/T	Preliminary Design Report
DID-ENG-0017/T	System Design Description
DIE-ENG-0018/T	Technology Readiness Assessment
DID-ENG-0019/T	Reliability, Availability, Maintainability, and Inspectability
DID-ENG-0020/T	Design Review Plan
DID-ENG-0021/T	Engineering Drawings
DID-ENG-0023/T	Equipment List
DID-ENG-0025/T	Design Change Control Plan
DID-ENG-0026	Request for Deviation (Request for Variance)

OT-ENG-1027	Design Criteria
OT-ENG-1028	Engineering Execution Plan
OT-ENG-1029	Material & Energy Balance Design Analysis Calculations
OT-ENG-1030	Process Narratives
OT-ENG-1031	Scope of Facilities
OT-ENG-1032	System Requirement Document
OT-ENG-1003	Other Basis Records
DID-PM-0001/T	Document of Trend Board/Change Control Board Meetings
DID-PM-0002/T	Configuration Management Document Pick List
DID-PM-0003	Configuration Management Plan
DID-PM-0004/T	Project Completion Verification
DID-PM-0005	Document Control Plan
DID-PM-0006/T	Earned Value Management (EVM) Plan
DID-PM-0008	Long Lead Items List
DID-PM-0009	Systems Engineering Management Plan
DID-PM-0010	Procurement Plan
DID-PM-0011/T	Project Acquisition Plan
DID-PM-0012	Project Execution Plan
DID-PM-0013/T	Project Management Plan
DID-PM-0014/T	Project Performance Baseline Control Plan
DID-PM-0015/T	Records Management Plan
DID-PM-0016/T	Requirements Management Plan

DID-PM-0017/T	Risk Analysis Report
DID-PM-0018/T	Risk Management Plan
DID-PM-0019/T	Risk Register
DID-PM-0022/T	Work Breakdown Structure and WBS Dictionary
DID-PM-0023/T	Critical Path Schedule
DID-PM-0024	Fixed Price Contract Milestone & Schedule Status Report
DID-PM-0026/T	Monthly Project Report
DID-PM-0027/T	Resource Loaded Schedule
DID-PM-0028	Statement of Work
DID-PM-0029/T	Total Project Cost
DID-PM-0030/T	Emergency Management Plan
DID-PM-0031/T	Quality Assurance Plan
OT-PM-1031	Contractor Assurance System
DID-PM-0032	Technology Maturation Plan
DID-PM-0033/T	Value Engineering Plan
OT-PM-1033	Value Engineering Program Status Report
DID-PM-0034	Communications Management Plan
DID-PM-0035/T	Project Funding Requirements Profile
DID-PM-0036/T	Federal Project Director Monthly Project Review
DID-PM-0037/T	Data Management Plan
DID-PM-0039/T	Master Document List
DID-PM-0040/T	Life Cycle Cost

DID-PM-0041/T	Project Closeout Report
DID-PRG-0001	Checkout, Testing, and Operations Acceptance
DID-PRG-0003/T	Key Performance Parameters
DID-PRG-0004/T	Key Project Assumptions
DID-PRG-0005	Operations and Maintenance Configuration Management
DID-PRG-0006/T	Performance Baseline Development Plan
DID-PRG-0009/T	Transition to Operations Plan
DID-PRG-0011	Program Requirements Document
DID-PRG-0014/T	Analysis of Acquisition Alternatives
DID-PRG-0015/T	Project Master Schedule
DID-PRG-0016	Performance Work Statement
DID-PRG-0017	Contract Data Requirements List
DID-PRG-0019/T	Project Data Sheet
DID-PRG-0020/T	Contracting Strategy Analysis
DID-PRG-0021	Monthly Status PARS II Report
DID-PRG-0022/T	Integrated Program Management Report (IPMR)
DID-SAF-0001	Conceptual Safety Design Report
DID-SAF-0003	Operational Readiness Review Implementation Plan
DID-SAF-0004	Final Hazards Analysis Report
DID-SAF-0005	Hazardous Analysis Report
DID-SAF-0006	Preliminary Documented Safety Analysis
DID-SAF-0007	Preliminary Hazards Analysis

DID-SAF-0008	Preliminary Safety Design Report
DID-SAF-0009	Safety Design Strategy
DID-SAF-0010	Technical Safety Requirements
DID-SAF-0011	Documented Safety Analysis
DID-SAF-0012/T	Readiness to Proceed (RTP) Memorandum
DID-SAF-0013/T	Contractor Operational Readiness Review Plan of Action
DID-SAF-0014/T	Integrated Safety Management Plan
DID-SAF-0015	Safety Design Control Plan
DID-SAF-0016	Fire Hazards Analysis
DID-SAF-0017/T	Occurrence Report
DID-SAF-0018/T	Lessons Learned Report
DID-SAF-0019/T	Occupational Safety Plan and Reporting
OT-ADM-1001	Conference Minutes
DID-SEC-0001/T	Final Security Vulnerability Assessment
DID-SEC-0002/T	Preliminary Security Vulnerability Assessment
DID-SEC-0003/T	Security Plan
DID-SEC-0004/T	Safeguards and Security Requirements
OT-SEC-1006/T	Comprehensive Emergency Management System
DID-ITS-0001	Information Technology Management Plan
DID-EPC-0001	Environmental Compliance Strategy
DID-EPC-0002	Environmental Management System Documentation
DID-EPC-0003	Final NEPA Documentation

DID-EPC-0004	NEPA Compliance Strategy
DID-CST-0001/T	Pre-Construction (Site Preparation) Plan
DID-CST-0002/T	Construction Management Plan
DID-CST-0003/T	Construction Work Authorization Plan
DID-CST-0004/T	Construction Safety Plan
OT-CST-1005	Daily Construction Progress Report
OT-CST-1006	Weekly Construction Working Schedules
	Monthly Project Briefing Package to NA-APM
	Monthly Labor Charges Report
	Weekly Status Report

APPENDIX B

COST PLUS INCENTIVE FEE (CPIF) MODEL/GRAPH

DMP Incentive Fee - Terms

The Government will use the following CPIF Model terms for DMP fee calculation.

P_T = Target Price // Estimated Target Price ($) if all available fee earned.

F_A = Available Fee // Combined unrealized Target Fee and Schedule Fee ($).

C_T = Target Cost // Negotiated Target Cost ($).

F_T = Target Fee // Negotiated Target Fee ($).

F_{SM} = Schedule Fee Milestones // Schedule Fee Milestones ($).

F_{SSG} = Schedule Fee Stretch Goals // Schedule Fee Stretch Goals ($).

F_{MAX} = Maximum Fee // *Maximum Fee ($) realized for Level 2 Under Target Cost.*

F_{MIN} = Minimum Fee // *Minimum Fee ($) realized for Level 2 Over Target Cost.*

Level 1 Under Target Cost (C_{UT1}) // Actual Costs ($) before L1- Fee realized.

Level 2 Under Target Cost (C_{UT2}) // Actual Costs ($) when Maximum Fee realized.

Level 1 Over Target Cost (C_{OT1}) // Actual Costs ($) before L1+ Fee realized.

Level 2 Over Target Cost (C_{OT2}) // Actual Costs ($) when Minimum Fee realized.

C_{TAC} = Total Allowable Cost // Actual Cost ($) the Contractor can claim.

F_{TA1} = Target Fee Adjustment // Calculated Level 1 Adjustment ($) for Under/Over.

F_{TA2} = Target Fee Adjustment // Calculated Level 2 Adjustment ($) for Under/Over.

F_{ATF} = Adjusted Target Fee // Calculated Fee Adjustment ($) applied to Target Fee.

F_{AFF} = Adjusted Final Fee * // Calculated Fee Adjustment ($) for Schedule.

P_C = Contract Price ** // Calculated Contract Price ($) after Final Fee applied.

* Final fee calculations, minus any adjustments, will be made using Government CPIF model.

** Earned fee rules and adjustments apply in determining final Contract Price.

Share Ratios: Government Under/Over Target Shares, expressed as the Government percentage share of cost risk over the Contractor percentage share of cost risk.

Under Target Share = S_{GU}/S_{CU} // Government Share (%)/Contractor Share (%).

Over Target Share = S_{GO}/S_{CO} // Government Share (%)/Contractor Share (%).

Level 1 Under Target Share Ratio (S_{GU1}/S_{CU1}) // Level 1 Under Target Share Ratio

Level 1 Over Target Share Ratio (S_{GO1}/S_{CO1}) // Level 1 Over Target Share Ratio

Level 2 Under Target Share Ratio (S_{GU2}/S_{CU2}) // Level 2 Under Target Share Ratio

Level 2 Over Target Share Ratio (S_{GO2}/S_{CO2}) // Level 2 Over Target Share Ratio

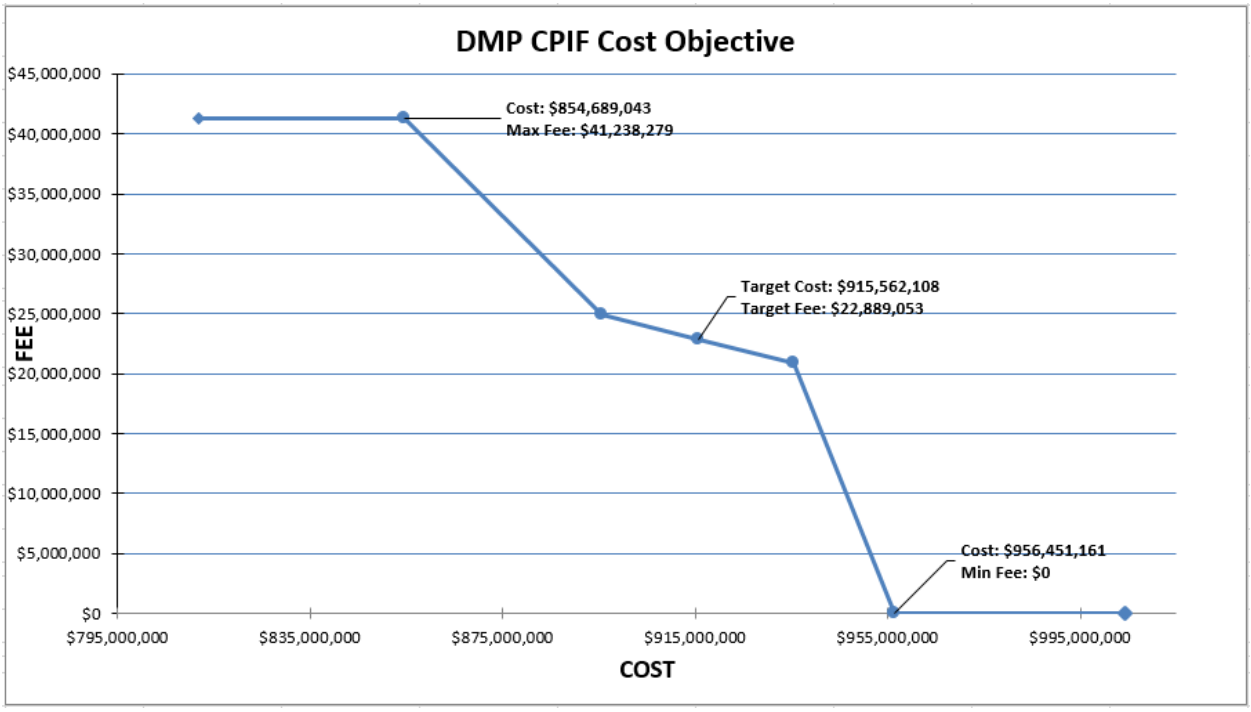

Figure 1: DMP CPIF Cost Objective Graph

APPENDIX C
GOVERNMENT OVERSIGHT MODEL

Cost Objective: The Government will oversee Cost Performance by verifying the Contractor's approved baseline data to ensure mission commitments are met with timely, high quality deliverables, in accordance with DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Cost Objective includes, but not limited to:

- Complete authorized scope in accordance with the approved Performance Measurement Baseline; provide timely project reporting.
- Manage a deliverable-based Work Breakdown Structure (WBS); cost control accounts, work packages and planning packages consistent with WBS/scope.
- Use established DOE earned value methods, measure work accomplishment, and assess project performance; perform variance analysis to identify, correct, and report problems; and regularly evaluate Estimates at Completion (EAC).
- Expend funds and resources that optimally provide the maximum benefit to the Government; perform proactive and effective subcontract management oversight of subcontractors to ensure effective cost performance controls.
- Maintain the total cost under configuration control to ensure impacts of design evolution on procurement, construction, and commissioning are managed effectively; ensure retroactive adjustments to the baseline are not allowed.
- Produce cost estimates compliant to the GAO Best Practices for Developing and Managing Capital Costs Guide and DOE G 413.3-21, Cost Estimating Guide; consider life cycle cost when evaluating proposed project changes.
- Demonstrate effective procurement and subcontract management oversight by driving costs down through competition, making best use of tier two subcontracting opportunities, including maximizing use of fixed price subcontracts and small business participation.
- Establish and maintain a project organization that implements a disciplined conduct of business, EPC commercial best practices, contract management, systems, processes, and procedures in accordance with applicable DOE directives and project requirements.
- Execute quality work products with minimal rework, e.g., designs, specifications, plans, procurement, construction, testing, and commissioning; demonstration of implementation of an approved DOE O 414.1D Quality Program.
- Identify, quantify and mitigate technical, programmatic, schedule, and cost risks.

APPENDIX C - Continued

Schedule Objective: The Government will oversee Schedule Performance by verifying the Contractor's Integrated Master Schedule (IMS) data to ensure mission commitments are met with timely, high quality deliverables, in accordance with Part III-Section J, Appendix, Appendix N, DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Schedule Objective includes, but not limited to:

- Execute scope in accordance with NNSA approved Project Execution Plans.
- Manage an IMS to support project management, implementation and control; include the total scope of baselined work and identify Work Breakdown Structure (WBS) elements for all activities and milestones; identify interdependencies between project activities/milestones to reflect a credible, logical project sequence; activity durations which are reasonable, measureable, and appropriately detailed for effective management; appropriate activity and resource calendars are employed.
- Baseline the IMS and control the content using the project change control board processes; maintain current project status and credible start/finish forecasts for all to-go tasks and milestones; include project and management controls milestones (e.g., critical decisions, major design reviews, and technology, procurement, construction, testing, and commissioning); incorporate labor, material and equipment resources and ensure reasonable/available.
- Manage a credible critical path as determined by the calculated IMS logic network; ensure adequate schedule margin has been included and clearly defined; ensure the number of lags/leads and activity constraints is reasonable. Incorporate subcontracted activity into schedule/critical path to ensure visibility to the Government.
- Compliance with all applicable environmental, safety, and security requirements. No formal notices of violation or similar citations from a Federal, State, or local regulatory agency; excellent safety DART/TRC rates; no safeguards and security incidents.
- Minimize construction down times; delays to construction activities are minimal, and all delays are proactively identified, tracked, analyzed for patterns, evaluated for quick resolution, and reported expeditiously to CO/FPD.
- Support USACE construction in accordance with NNSA approved Execution Plans and Procedure UPO-95-A026, Interfaces Between UPO, M&O and USACE for UPF Construction.
- Design and engineering products, including material and equipment, shall have the necessary technical and constructability (fabrication) quality to accomplish procurement, fabrication and construction expeditiously without major problems or delays (Title II).
- Provide Resident Engineering representation as directed to support Construction

and oversee the design's intent and requirements; exceptions are rare to non-existent without problems or delays (Title III).

- Perform pre-award/award/post-award, surveillance/oversight functions to support and/or accomplish requirements. Proper source/destination inspection and acceptance provisions are Government special interest items to ensure receipt of quality subcontracted products/materials.
- Identify, quantify and mitigate project schedule risks; perform schedule risk assessments to predict the probability of completing on time.

Uranium Processing Facility (UPF)

Site Readiness (SR)
Subproject Fee Structure

Annex 2

National Nuclear Security Administration

[redacted] 24Dec2015
Date

Brian P. Reilly
UPF Project Director
Consolidated Nuclear Security, LLC

[redacted] 12/30/15
Date

Dale E. Christenson
Federal Project Director
NNSA, UPF Project Office

[redacted] 12/24/15
Date

Scott S. Crawford
UPF Prime Contracts Manager
Consolidated Nuclear Security, LLC

[redacted] 12/24/2015
Date

Michael C. Bocskovits
Contracting Officer
NNSA, UPF Project Office

Revision Log

Revision	Date	Description	Total Pages	Affected Pages
0	December 24, 2015	Initial issue.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	All

Table of Contents

1. Introduction

The Uranium Processing Facility (UPF) Site Readiness (SR) Subproject, herein referenced as "SR," was authorized by the National Nuclear Security Administration (NNSA) to advance the Site Preparatory activities. The SR CD-2/3 scope was divided between Consolidated Nuclear Security, LLC (CNS), herein referenced as "Contractor," and the United States Army Corps of Engineers (USACE), as defined in the SR Execution Plan, PL-PM-801768-A015, which establishes the formal plan for executing the subproject.

The SR scope supports the UPF Project by completing early key critical-path site preparation construction work so that the Project site will be ready for subsequent nuclear facility construction. The SR scope is best characterized as standard commercial work, and does not implement new technologies. The SR scope shall be managed through the use of the Project's construction management baseline in order to ensure the scope, mission requirements, and schedules are met within the approved Contract Budget Base (CBB), Statement of Work, and Key Performance Parameters (KPPs) that must be achieved by the Critical Decision (CD) 4 date.

The SR scope shall include subproject optimization of Y-12 activities in support of the Enriched Uranium Mission (EUM), are met with timely, cost effective, high quality deliverables as defined in the Contract and in accordance with DOE O 413.3B and ANSI/EIA-748B.

2. Purpose

The SR Fee Structure, herein referenced as "SR Annex" (Annex 2), is a subset of the overarching Contract, Section J, Appendix B-2, "UPF Fee Plan," that documents the fee structure arrangement, in which SR performance was evaluated. The purpose of the SR Annex is to document the fixed fee structure, and define how NNSA will determine the final amount of Contractor earned fee, thereby establishing a "contract price" for the SR scope.

3. Approach

The desired performance of the Contractor is to deliver high quality SR deliverables (technical requirements) and/or integration support, which will ultimately deliver a UPF fully capable of meeting all DOE/NNSA mission performance, quality, safeguards and security, and environmental, safety, and health contractual requirements.

The desired goal is to properly incentivize the Contractor for scope already completed, by establishing a fair and reasonable Contract Price for meeting the SR scope.

4. Establishing Annex

The SR Annex shall be approved and incorporated into the Contract by modification at Section J, Appendix B-2, UPF Fee Plan by the Contracting Officer (CO).

The Government will primarily incentivize the Contractor using the following fee arrangement, unless otherwise documented in the Annex:

- Fixed Fee

5. Annex Oversight

The Government Oversight Model, Appendix C, describes the approach NNSA used for conducting surveillance and oversight of SR Contract deliverables, in order to ensure the Contractor deliverables meet the UPF Project requirements. The CO and Contracting Officer's Representatives (CORs), with input from functional area managers, reviewed and considered actual performance. The purpose of the oversight model is to communicate Government expectations to the Contractor in order to ensure Contract objectives, i.e., final outcomes, are achieved. The CO/COR may notify the Contractor anytime during performance of the Contract to address cost, schedule, and/or performance concerns needing attention.

6. Change Procedures

The SR Annex may be updated as necessary during Contract performance. These updates may include, but not limited to, required changes caused by new authorized scope, project phasing, approved change control, and/or establishing/adjusting fee incentives and performance objectives. Any changes shall be codified by a Contract modification within Section J, Appendix B-2, UPF Fee Plan.

All changes, including SR Baseline Changes, are subject to the thresholds outlined in the UPF Project Execution Plan, PL-PJ-801768-A006, Appendix C, and the SR Execution Plan, PL-PM-801768-A015.

Appendix A

SR PERFORMANCE OBJECTIVES

Fee – Summary	
Contract Price (P_C), includes fixed fee	$12,908,530.00
Fixed Fee (F_F)	$436,520.00
NOTE: NNSA will make a Final Fee Determination after NNSA approval of SR CD-4 and acceptance of SR closeout report. For the purposes of this negotiated annex, all fee is considered earned upon full execution of SR annex and Contract modification.	

Scope – Summary
NOTE: The major SR scope tasks and responsibility for performing each task are defined in SR Subproject Project Execution Plan (PL-PM-801768-A015). A summary of the major scope elements are identified in the Work Break Down (WBS) summary section, with USACE having the majority of scope and CNS providing support services.

Critical Decision (CD)- Summary	
CD-4 Approval	February 28, 2015

Key Performance Parameters	
1	Bear Creek Road relocated and open to traffic, including a security vehicle turnoff.
2	New Potable water lines relocated, tied in, and delivering water to the City of Oak Ridge and Y-12 site.

3	Construction site cleared of electrical lines, and designated electrical and communication lines relocated and active.
4	Wet spoils area prepared and ready to receive wet spoils from construction excavation.
5	Wet spoils area ready to receive wet spoils from excavation.
6	Haul road constructed from UPF site to batch plant area and ready for trucks hauling concrete and other materials to the construction site.
7	Portal 10 excavated and retaining wall installed as designed.
8	Jack-and-bore installation of utility casing completed and ready for utility installation.
9	Wetland expansion/creation completed to mitigate wetland impacts.

Schedule Milestones - Summary	
Site Readiness CD-4 Completion/Ready for Use.	February 28, 2015

Work Break Down Structure (WBS)
1.07.02.09.25.05.10.10.95.40 – Electrical Utilities
1.07.02.09.25.05.10.10.95.50 – Civil Work
1.07.02.09.25.90.10.10 – Project Functional Support
1.07.02.09.25.40.91.10.10 – Title III Engineering
1.07.02.09.25.50.92.10.51.10 – Wet Spoils
1.07.02.09.25.50.92.10.51.20 – West Borrow Area
1.07.02.09.25.50.92.10.53 – Construction Equipment, Tools and Supplies
1.07.02.09.25.50.92.10.54 – Field Non-Manual

Reporting Requirements	
The Federal Project Director and Contracting Officer, with inputs from other Government personnel, will verify the on time submission of project reports that meet DOE/NNSA requirements contained in the Data Item Descriptions (DIDs). The Government will perform this verification by comparing the DOE/NNSA requirements contained in the following DIDs to the deliverables provided by the Contractor:	
Data Item Description	Title
DID-PM-0026/T	Monthly Project Report
DID-PRG-0022/T	Integrated Program Management Report (IPMR)
DID-PRG-0021	Monthly Status PARS II Report
DID-PM-0001/T	Document of Trend Board/Change Control Board Meetings
DID-PM-0004/T	Project Completion Verification
DID-PM-0027/T	Resource Loaded Schedule
DID-PM-0029/T	Total Project Cost
DID-PM-0036/T	Federal Project Director Monthly Project Review
DID-PM-0041/T	Project Closeout Report
	Monthly Project Briefing Package to NA-APM
	Monthly Labor Charges Report

APPENDIX B
FEE STRUCTURE

SR Fee Structure - Terms
The Government will use the following fee structure for SR fee calculation. P_C = Contract Price // Negotiated Contract Price ($), including fee. F_F = Fixed Fee // Negotiated Fixed Fee ($), based on negotiated actuals.

APPENDIX C
GOVERNMENT OVERSIGHT MODEL

Cost Objective: The Government will oversee Cost Performance by verifying the Contractor's approved baseline data to ensure mission commitments are met with timely, high quality deliverables, in accordance with DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Cost Objective includes, but not limited to:

- Complete authorized scope in accordance with the approved Performance Measurement Baseline; provide timely project reporting.
- Manage a deliverable-based Work Breakdown Structure (WBS); cost control accounts, work packages and planning packages consistent with WBS/scope.
- Use established DOE earned value methods, measure work accomplishment, and assess project performance; perform variance analysis to identify, correct, and report problems; and regularly evaluate Estimates at Completion (EAC).
- Expend funds and resources that optimally provide the maximum benefit to the Government; perform proactive and effective subcontract management oversight of subcontractors to ensure effective cost performance controls.
- Maintain the total cost under configuration control to ensure impacts of design evolution on procurement, construction, and commissioning are managed effectively; ensure retroactive adjustments to the baseline are not allowed.
- Produce cost estimates compliant to the GAO Best Practices for Developing and Managing Capital Costs Guide and DOE G 413.3-21, Cost Estimating Guide; consider life cycle cost when evaluating proposed project changes.
- Demonstrate effective procurement and subcontract management oversight by driving costs down through competition, making best use of tier two subcontracting opportunities, including maximizing use of fixed price subcontracts and small business participation.
- Establish and maintain a project organization that implements a disciplined conduct of business, EPC commercial best practices, contract management, systems, processes, and procedures in accordance with applicable DOE directives and project requirements.
- Execute quality work products with minimal rework, e.g., designs, specifications, plans, procurement, construction, testing, and commissioning; demonstration of implementation of an approved DOE O 414.1D Quality Program.
- Identify, quantify and mitigate technical, programmatic, schedule, and cost risks.

APPENDIX C - Continued

Schedule Objective: The Government will oversee Schedule Performance by verifying the Contractor's Integrated Master Schedule (IMS) data to ensure mission commitments are met with timely, high quality deliverables, in accordance with Part III-Section J, Appendix, Appendix N, DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Schedule Objective includes, but not limited to:

- Execute scope in accordance with NNSA approved Execution Plans.
- Manage an IMS to support project management, implementation and control; include the total scope of baselined work and identify Work Breakdown Structure (WBS) elements for all activities and milestones; identify interdependencies between project activities/milestones to reflect a credible, logical project sequence; activity durations which are reasonable, measureable, and appropriately detailed for effective management; appropriate activity and resource calendars are employed.
- Baseline the IMS and control the content using the project change control board processes; maintain current project status and credible start/finish forecasts for all to-go tasks and milestones; include project and management controls milestones (e.g., critical decisions, major design reviews, and technology, procurement, construction, testing, and commissioning); incorporate labor, material and equipment resources and ensure reasonable/available.
- Manage a credible critical path as determined by the calculated IMS logic network; ensure adequate schedule margin has been included and clearly defined; ensure the number of lags/leads and activity constraints is reasonable. Incorporate subcontracted activity into schedule/critical path to ensure visibility to the Government.
- Compliance with all applicable environmental, safety, and security requirements. No formal notices of violation or similar citations from a Federal, State, or local regulatory agency; excellent safety DART/TRC rates; no safeguards and security incidents.
- Minimize construction down times; delays to construction activities are minimal, and all delays are proactively identified, tracked, analyzed for patterns, evaluated for quick resolution, and reported expeditiously to CO/FPD.
- Support USACE construction in accordance with NNSA approved Execution Plans and Procedure UPO-95-A026, Interfaces Between UPO, M&O and USACE for UPF Construction.
- Design and engineering products, including material and equipment, shall have the necessary technical and constructability (fabrication) quality to accomplish procurement, fabrication and construction expeditiously without major problems or delays (Title II).
- Provide Resident Engineering representation as directed to support Construction

and oversee the design's intent and requirements; exceptions are rare to non-existent without problems or delays (Title III).

- Perform pre-award/award/post-award, surveillance/oversight functions to support and/or accomplish requirements. Proper source/destination inspection and acceptance provisions are Government special interest items to ensure receipt of quality subcontracted products/materials.
- Identify, quantify and mitigate project schedule risks; perform schedule risk assessments to predict the probability of completing on time.

Uranium Processing Facility (UPF)

Site Infrastructure and Services (SIS) Subproject Fee Structure

Annex 3

National Nuclear Security Administration

[redacted] 18 JUL 2016
Date

Brian P. Reilly
UPF Project Director
Consolidated Nuclear Security, LLC

[redacted] 7/18/16
Date

Dale E. Christenson
Federal Project Director
NNSA, UPF Project Office

[redacted] 7/18/16
Date

Scott S. Crawford
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[redacted] 7/18/2016
Date

Michael C. Bocskovits
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NNSA, UPF Project Office

Revision Log

Revision	Date	Description	Total Pages	Affected Pages
0	January 25, 2016	Initial issue.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	All
1	July 11, 2016	Target Cost/Fee adjustment for USACE Support beyond planned completion date.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	Header/Footer Appendix A and B

Table of Contents

1. Introduction

The Uranium Processing Facility (UPF) Site Infrastructure and Services (SIS) Subproject, herein referenced as "SIS," was authorized by the National Nuclear Security Administration (NNSA) to advance the Site Preparatory activities initiated during the Site Readiness Subproject. The SIS CD-2/3 scope was divided between Consolidated Nuclear Security, LLC (CNS), herein referenced as "Contractor," and the United States Army Corps of Engineers (USACE), as defined in the SIS Execution Plan, PL-PM-801768-A030, which establishes the formal plan for executing the subproject.

The SIS scope supports the UPF Project by completing key critical-path site preparation construction work so that the Project site will be ready for subsequent nuclear facility construction. The SIS scope is best characterized as standard commercial work, and does not implement new technologies. The SIS scope shall be managed through the use of the Project's construction management baseline in order to ensure the scope, mission requirements, and schedules are met within the approved Contract Budget Base (CBB), Statement of Work, and Key Performance Parameters (KPPs) that must be achieved by the Critical Decision (CD) 4 date.

The SIS scope shall support the Enriched Uranium Mission (EUM), with timely, cost effective, high quality deliverables.

2. Purpose

The SIS Fee Structure, herein referenced as "SIS Annex" (Annex 3), is a subset of the overarching Contract, Section J, Appendix B-2, "UPF Fee Plan," that documents the Performance Objectives and Cost Plus Incentive Fee (CPIF) arrangement, in which SIS performance will be evaluated. The purpose of the SIS Annex is to document the target cost and incentive fee structure, and define how NNSA will determine the final amount of Contractor earned fee, thereby establishing a "contract price" for the SIS scope.

3. Approach

The desired performance of the Contractor is to deliver high quality SIS deliverables (technical requirements) and/or integration support, which will ultimately deliver a UPF fully capable of meeting all DOE/NNSA mission performance, quality, safeguards and security, and environmental, safety, and health contractual requirements.

The desired goal is to properly incentivize the Contractor to deliver SIS scope on/or under budget and on/or ahead of schedule, by establishing a reasonable Target Price, including Cost and Schedule Performance Objectives for meeting the SIS scope.

4. Establishing Annex

The SIS Annex shall be approved and incorporated into the Contract by modification at Section J, Appendix B-2, UPF Fee Plan by the Contracting Officer (CO).

The Government will primarily incentivize the Contractor using the following critical performance objectives, unless otherwise documented in the Annex:

- Cost
- Schedule

By employing these incentives, the Government expects to motivate the Contractor to aggressively manage resources as required in order to provide high-quality and timely completion of authorized scope and/or integration/support of all SIS deliverables. Eligibility and the amount of the incentive fee earned shall be dependent on the Contractor meeting or exceeding the established performance objectives. Failure to meet any of the established SIS Performance Objectives, Appendix A, may result in the Contractor's forfeiture of incentive fee for that assigned objective or element.

5. Annex Oversight

The Government Oversight Model, Appendix C, describes the approach NNSA will use for conducting surveillance and oversight of SIS Performance Objectives and Contract deliverables, in order to ensure the Contractor delivers high quality products and services that meet the UPF Project requirements. The CO and Contracting Officer's Representatives (CORs), with input from functional area managers, will measure how the key performance objectives of the Contract are met. The purpose of the oversight model is to communicate Government expectations to the Contractor in order to ensure Contract objectives, i.e., final outcomes, are achieved. The CO/COR may notify the Contractor anytime during performance of the Contract to address cost, schedule, and/or performance concerns needing attention.

6. Change Procedures

The SIS Annex may be updated as necessary during Contract performance. These updates may include, but not limited to, required changes caused by new authorized scope, project phasing, approved change control, and/or establishing/adjusting fee incentives and performance objectives. Any changes shall be codified by a Contract modification within Section J, Appendix B-2, UPF Fee Plan.

All changes, including SIS Baseline Changes, are subject to the thresholds outlined in the UPF Project Execution Plan, PL-PJ-801768-A006, Appendix C, and the SIS Execution Plan, PL-PM-801768-A030, Table 4.5.

Appendix A

SIS PERFORMANCE OBJECTIVES

Fee – Summary	
Target Price (P_T), includes available fee	$26,205,018.00
Available Fee (F_A), only includes unrealized cost and schedule fee	$1,048,202.00
Note: NNSA will make a Final Fee Determination after NNSA approval of SIS CD-4 and acceptance of SIS closeout report. Cost and Schedule performance objectives apply to the project requirements being delivered and/or performed under this scope. For the purposes of this negotiated annex, all fee associated to the cost objective is provisional to the end of the subproject (SIS CD-4), subject to the final fee determination and Contract modification.	
Cost Objective Elements – 50%	
Target Cost (C_T)	$25,156,816.00
Target Fee (F_T)	$524,101.00
Under Target Cost (C_{UT})	$24,405,018.00
Under Target Share Ratio (S_{GU}/S_{CU})	50/50
Maximum Fee (F_{MAX})	$900,000.00
Over Target Cost (C_{OT})	$25,680,917.00
Over Target Share Ratio (S_{GO}/S_{CO})	0/100
Minimum Fee (F_{MIN})	$0
Schedule Objective Elements - 50%	
Schedule Fee (F_S)	$524,101.00

Target Price - Change Log			
Modification	**Target Cost**	**Avalable Fee**	**Target Price**
Rev 0	$24,000,000.00	$1,000,000.00	$25,000,000.00
Rev 1	+ $1,156,816.00	+ $48,202.00	+ $1,205,018.00
	$25,156,816.00	$1,048,202.00	$26,205,018.00

Scope - Summary

The major SIS scope tasks and responsibility for performing each task are defined in CD-2/3 Request for UPF Project Site Demolition and Security Upgrades - Scope, Cost, and Schedule (PL-PM-80 I768-A025), CD-2/3 Request for UPF Project Concrete Batch Plant - Scope, Cost, and Schedule (PL-PM-80 I768-A041), CD-2/3 Request for UPF Construction Support Building - Scope, Cost, and Schedule (PL-PM-80 I768-A040), Letter of Direction (COR-ESH-4. 40. 2015-624559) Contracting Officer's Direction for the UPF Construction Support Building, and Technical Direction (COR-ESH-5.4.20 15-627981) UPF SIS, Construction Support Building.

NOTE: Major scope elements are identified in the Work Break Down (WBS) section.

Critical Decision (CD)- Summary	
CD-4 Approval	April 30, 2018
Key Performance Parameters	
1	Required grading and water management features have been constructed in accordance with the approved plans and specifications.
2	Security features for the Haul Road extension have been constructed and tested in accordance with the approved plans and specifications.
3	The Concrete Batch Plant has been installed and commissioned and is ready to support UPF construction.
4	The Construction Support Building has been constructed in accordance with the approved plans and specifications. (USACE scope, not part of this annex.)

Schedule Milestones - Summary	
Site Demolition and Security Upgrades	
VAS Gate and Portal 19 Complete and Ready for Use.	April 15, 2016
Monitoring Wells Plug and Abandonment Complete.	June 23, 2015
Building 9107 Demolition Complete.	June 17, 2015
Concrete Batch Plant	
Concrete Batch Plant Design Complete	March 31, 2016
Concrete Batch Plant Commissioning is Complete.	October 30, 2016
Construction Support Building	
Construction Support Building Performance Specification Complete.	March 2, 2015
Civil and Utility Design for Construction Support Building Complete.	October 22, 2015
Construction Support Building Beneficial Occupancy	November 20, 2017

Schedule Incentives *

	Earned Value at Milestone	Delay Reductions (Calendar Days)	Earned Value at CD-4 Impact **
Building 9107 Demolition & Monitoring Wells Plug and Abandonment	$15,000.00	N/A	$0
VAS Gate	$34,803.00	1-30 days late: $150/day; $4.5k Max 31-60 days late: $300/day; $18k Max ≥61 days late: $600/day; $30k Max	$0
Portal 19	$50,197.00	1-30 days late: $180/day; $5.4k Max 31-60 days late: $360/day; $21k Max ≥61 days late: $720/day; $45k Max	$0
Concrete Batch Plant	$270,000.00	1-30 days late: $1k/day; $30k Max 31-60 days late: $2K/day; $120k Max ≥61 days late: $3k/day; $200k Max	$0
Construction Support Building Support	$154,101.00	N/A	$0

NOTE: * Schedule incentives are tied to schedule milestones dates and WBS definitions of complete.
** CD-4 impacts directly related and attributable to CNS performance.

Schedule of Values – Fee Liquidation Schedule *

When Paid	Scope	Cost Objective			Schedule Objective	
		Provisional	Earned	Unliquidated	Provisional	Earned
Annex Signed	Building 9107 Demolition	$22,750.00	-	$9,750.00	-	$14,810.00
Annex Signed	Monitoring Wells Plug and Abandonment	$292.00	-	$125.00	-	$190.00
Annex Signed	Initial Construction Support Building (CSB) Support	$11,520.00	-	$4,938.00	-	$10,000.00
Annex Signed	Concrete Batch Plant Awarded	$28,438.00	-	$12,187.00	-	$16,000.00
On Completion	Concrete Batch Plant Design	$28,438.00	-	$12,187.00	-	$16,000.00
On Completion	VAS Gate	$75,833.00	-	$32,500.00	-	$34,803.00
On Completion	Portal 19	$109,375.00	-	$46,875.00	-	$50,197.00
On Completion	Concrete Batch Plant Commissioned and Accepted	$56,875.00	-	$24,375.00	-	$238,000.00
Rev 1 Signed	USACE Support through May 2016	$19,139.00		$8,203.00		$16,612.00
On Completion	USACE Support to Achieve CSB Beneficial Occupancy **	$14,211.00	-	$6,090.00	-	$127,489.00
TBD	Final Fee Determination ***	$366,871.00	SIS CD-4	$157,230.00	-	$524,101.00

NOTE: * Schedule of values for provisional and earned fee are tied to Schedule Milestones dates and WBS definitions of complete.

** CNS shall provide written notice to the Contracting Officer whenever it has reason to believe that the costs it expects to incur under the USACE support control account will exceed 75% of budget. The USACE support to go estimate is based on services and durations recommended by SIS FPD. CNS shall have the burden of proof for demonstrating and providing the basis for any adjustments or unforseen conditions outside the June 2016 basis for USACE support to go, including detailed labor charges for all subdivided tasks. The parties may agree to adjust the USACE support budget prior to the final fee determination, including reportioning USACE Support services and/or revising the Annex as necessary. CNS shall true up the Contract Budget Base (Performance Measurement Baseline and Management Reserve) to reflect any unused USACE support budget, and return any unused portion to Federal Project Director contingency.

*** NNSA will make a Final Fee Determination, including any potential Target Cost/Target Fee adjustments, after NNSA approval of SIS CD-4 and acceptance of SIS closeout report.

Work Break Down Structure (WBS)									
WBS Level									Title
1	2	3	4	5	6	7	8	9	
1	07	02	09	45	25				**SITE INFRASTRUCTURE & SERVICES (SIS)**
Description of Scope									
This includes Site Demolition & Security Upgrades, Concrete Batch Plant, and Construction Support Building.									

1	07	02	09	45	25	30			**SIS SITE DEMOLITION & SECURITY UPGRADES (SDS)**
Description of Scope									
This work breakdown structure (WBS) element consists of defined scope for site demolition and security upgrades in advance of start of UPF construction.									

1	07	02	09	45	25	30	05		**SIS CNS/BNI PERFORM SIS CIVIL & SECURITY MODIFICATIONS**
Description of Scope									
This Control Account is for CNS/BNI scope per the As-Approved CD package for the Site Demolition & Security Upgrades including building demolition/debris removal, LOTOs, Asphalt Removal/Recovery, Well P&A, new Security Portal 19, VAS Gate #5, Site Maintenance, and Project Integration support including subcontracts and materials as needed. (see WP/PP for additional details).									

1	07	02	09	45	25	30	05	10	SIS CNS/BNI Perform Building 9107 Isolations/LOTO for Demolition
Description of Scope									
This WP is for the CNS Maintenance group to perform remaining utility isolations prior to demolition of buildings listed in WP 1.07.02.09.45.25.30.05.15 and supply water for dust control during demo and debris removal.									

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS Maintenance	Completed	Completion for this WP is the final isolations for buildings listed in WP 1.07.02.09.45.25.30.05.15 and dust control. All work scope is complete.

1	07	02	09	45	25	30	05	15	SIS CNS/BNI S/C Perform Building 9107 Demolition
Description of Scope									
This WP encompasses a subcontractor to perform building demolition and removal of debris for the following areas: 1) 9107 office building and surface slab. 2) 9124 storage building.									

3) 9720-37 (ammunition bunker). 4) 9723-35, 9983-GX, 9983-88 (trailers) (utilities will be abandoned in place). 5) Perimeter fence and guard rails, except for guard rail parallel to PIDAS (per demo dwg). 6) Relocate/Demolish security features (per approved Security Feature changes).		
Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
Fixed-price Sub	1) Completed 2) Completed 3) Completed 4) Completed 5) Completed 6) Completed	Completion of demolition/relocation scope. All work scope is complete.

1	07	02	09	45	25	30	05	20	SIS CNS/BNI Perform Civil & Utility Site Work Modification

Description of Scope

This WP encompasses the CNS/BNI direct hire labor to perform civil/utility site work:

1) Removal of 6" depth of Asphalt in the following locations:
   - Bear Creek, Pine Ridge, and 9107 parking lots.
   - East/West detour.
   - BCR from Pine Ridge parking lot to West detour.
   - Asphalt will be ground/crushed for reuse at Y-12.
2) Installation of sanitary sewer line inside PA (Per Design).
3) Electrical demolition of Old BCR & Pine Ridge parking lot lights and feeder.
4) Install guardrail along East detour (~600 lf) and striping of road.
5) Install mineral aggregate or recovered asphalt base along Haul Rd. from BCR parking lot to VAS gate.

Method of Accomplishment	Status of Work Scope	Definition of Complete
1) Direct Hire/CNS 2) Direct Hire/CNS 3) Direct Hire/CNS 4) Fixed-price Sub 5) Direct Hire/CNS	1) Completed 2) Ongoing 3) Completed 4) Completed 5) Completed	Final acceptance of sanitary sewer line and utility work by CNS Y-12 as evidence by authorized signatures on the acceptance documents.

1	07	02	09	45	25	30	05	23	SIS CNS/BNI Procure Civil & Utility Site Work Material

Description of Scope

This WP is for material procurements based on MTOs associated with:

1) Installation of the Sanitary Sewer line inside PA.
2) Installation of Mineral Aggregate for Haul Rd from BCR parking lot to VAS gate.
3) Guardrail along East detour (~600 lf).
4) Any minor materials for the Asphalt Removal and Electrical Demo to support the labor listed in 1.07.02.09.45.25.30.05.20.

Method of Accomplishment	Status of Work Scope	Definition of Complete

Local Suppliers - Material Receiving Reports	1) Ongoing 2) Completed 3) Completed 4) Completed	Material Receipt / Inspection Reports signed by authorized CNS Y-12 representatives.

1	07	02	09	45	25	30	05	25	SIS CNS/BNI S/C Perform P&A Monitoring Wells

Description of Scope

This WP is for a subcontractor to Plug and Abandon (P&A) two existing groundwater monitoring wells located within the excavation and grading footprint along the bank east of 9107.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed-price Sub	Completed	Plug and Abandon for two wells.

1	07	02	09	45	25	30	05	30	SIS CNS/BNI S/C Procure & Install Portal 19

Description of Scope

This scope includes procurement and installation of a new security Portal 19 on the haul road to control access. Includes guard building, fences, gates, walkup, and security equipment.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed-price Sub	Ongoing	Final acceptance of the new Security Portal 19 by CNS Y-12 as evidenced by authorized signatures on the acceptance documents.

1	07	02	09	45	25	30	05	35	SIS CNS/BNI Procure VAS Gate Bulks

Description of Scope

This WP is for bulk material procurements based on MTOs associated with installation of Vehicle Arresting System (VAS) Gate # 5 including required electrical materials and grading, excavation, asphalt and concrete placement materials. This WP does not include the purchase of the VAS Gate.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Local Suppliers - Material Receiving Reports	Ongoing	Material Receipt / Inspection Reports signed by authorized CNS Y-12 representatives.

1	07	02	09	45	25	30	05	36	SIS CNS/BNI Install VAS Gate

Description of Scope

This WP is for CNS/BNI direct hire labor to install the Vehicle Arresting System (VAS) Gate # 5 and associated electrical service, associated grading, excavation, asphalt, and concrete, relocation of a revetment, installation of Response Road, construct a Security Vehicle parking position, and the barrier wall at VAS Gate #5. Also included in this WP is the labor associated with VAS Gate #5 Construction Testing.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Direct-hire labor	Ongoing	Final acceptance of the new 40' VAS Gate #5 by CNS Y-12, as evidenced by authorized signatures on the acceptance documents.

1	07	02	09	45	25	30	05	37	SIS CNS/BNI Procure VAS Gate & Wall Barrier

Description of Scope

This WP is for procurement of the VAS Gate and Barrier Wall for installation of Vehicle Arresting System (VAS) Gate # 5 based specifications. This WP does not include the material purchase associated with VAS Gate #5 electrical supply and grading/finish.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Purchase order - Material Receiving Reports	Ongoing	Material Receipt / Inspection Reports signed by authorized CNS Y-12 representatives.

1	07	02	09	45	25	30	05	40	SIS Field Distribs

Description of Scope

This WP is for CNS/BNI scope during the As-Approved CD period for CNS/BNI SIS effort:

1) UPF Site maintenance, including weed eating and mowing of subcontractor's yard during CNS/BNI effort on SIS.
2) Maintenance of UPF site roads and walkways (safety barriers, traffic devices, misc. support) during CNS/BNI effort on SIS.
3) Field communications maintenance.
4) Purchase of small tools, consumables, and misc. materials for CNS/BNI effort on SIS.
5) Purchase of safety supplies (e.g., PPE): hard hats, gloves, glasses, first aid supplies for CNS/BNI effort on SIS.
6) Field Communications purchase, including two-way radios, wireless utilities (radios and computers will be provided to USACE) covering the SIS CD approved performance period.
7) General Services Administration (GSA) vehicle agreements.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI direct labor, subcontracts, and BPS purchases, GSA agreements. Distribs.	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	05	50	SIS Field Non-Manual

Description of Scope

This WP is for CNS/BNI Field Construction Management during the As-Approved CD period for CNS/BNI SIS effort including:

1) Construction Superintendents, Field Engineers, Subcontract Technical Representatives, field

administrative support and field document management center. 2) Field support provided by functional organization staff including Field Procurement, Quality Control (QC), Project Controls, and ES&H. 3) Inspections in the field by the QC organization will ensure appropriate level of quality. 4) Maintenance (Y-12 Infrastructure) for tie-in of utilities, lock-out/tag-out of plant systems, and utility disconnects not specified in other WPs associated with SIS.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI Const. Direct Staff	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	05	60	SIS Field Non-Manual Other Costs

Description of Scope

This WP is for CNS/BNI site services such as Security, Fire Protection, Medical, Refuse/Recycling, Waste Management and RADCON during the As-Approved CD period for CNS/BNI SIS effort. Includes Site Usage Fee for BNI, S/C Non Manual and USACE FNM resources on-site.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI contractor will provide security and Fixed Unit Rate subcontracts for service subcontracts	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	15		**SIS CNS/BNI SIS PROJECT FUNCTIONAL SUPPORT**

Description of Scope

This Control Account is for CNS/BNI scope per the As-Approved CD package for project management and functional support for the defined site infrastructure and services scope.

1	07	02	09	45	25	30	15	10	SIS Project Integration

Description of Scope

This WP is for project functional organizations to provide support for the CNS/BNI authorized scope during the As-Approved CD period for CNS/BNI SIS effort. This includes project management support; Project Controls baseline management support, change control support, and SIS reporting; Project Services document control and records management system; Procurement award and management of designated site infrastructure and services subcontracts (subcontract administration is included with each subcontract); Environment, Safety & Health (ES&H) management and integration for health, safety, and environmental compliance; CNS Maintenance interface support; and Security derivative classifiers for review of project documents. This WP also includes CNS/BNI functional organization support.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI contractor staff -Passage of Time	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	15	30	SIS Title III Engineering

Description of Scope

This WP is for Title III Engineering support during the As-Approved CD period for CNS/BNI SDS effort consisting of Engineering activities required to assure that SDS activities are executed in accordance with plans and specifications for scope executed under CNS authority.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI direct staff and BOA subcontractors	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	15	40	SIS USACE Support

Description of Scope

This WP is for CNS/BNI Project Integration (Project Management, Project Controls, etc.), Title III, Field Staff and Coordination, RADCON, Security Force/Canine search support, and other CNS/BNI services required during and as authorized in the As-Approved CD period to directly support the following SIS project scopes being executed by the USACE:

1) Building 9107 hillside excavation to specified grade level after demolition of Building 9107.
2) Demolition of specified portion of existing underground 24-inch (approx. 650LF) and 16-inch (approx. 600LF) potable water lines after new potable water lines are tied-in (Site Readiness scope).
3) Demolition of NNSA authorized site structures, including fencing, concrete curbing, concrete walks, guardrail, and other site appurtenances.
4) Installation of new storm drain line C which includes 48-inch RCP, and JC-3 and JC-4.
5) Installation of new storm drain line which includes C-4, SB-3, 24-inch RCP, and 24-inch HDPE Piping.
6) Installation of B-13 and temporary 24-inch HDPE storm drain piping.
7) Installation of Sanitary Sewer line MHB-7 to MHB-4.
8) Installation of Storm Drain Line G, including SB-6.
9) Perform erosion and sediment control and water management for USACE scope of work.
10) Installation of Sediment Basin 4 and associated outlet control structure.
11) Demolition and removal (excluding asphalt removal) of unused stretch of Phase I BCR that extends west beyond the tie-in on the east of BCR relocated as part of Site Readiness.
12) Installation of new storm drain line K which includes 48-inch RCP, and JK-2, JK-3, and JK-4.
13) Maintenance of West Borrow area, Wet Spoils area, and Haul Road during use by USACE.
14) Rough / finish excavation and grading of the Construction Support Building site.
15) Design Authority (DA) representation will also be provided on an as-needed basis to support USACE construction activities, including maintenance of Title III-related documents and the review and approval of contract submittals per NNSA approval.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI contractor direct staff and BOA subcontractors.	Ongoing	CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	25	30	90		**SIS NNSA Direct ODC**
Description of Scope									
This WBS element includes all scope directly executed by the NNSA. NNSA will procure specific site infrastructure and services activities through an Interagency Agreement with the U.S. Army Corps of Engineers (USACE).									

1	07	02	09	45	25	30	90	10	SIS NNSA Direct USACE Civil Site Prep including CSB Excavation

Description of Scope

This USACE Task Order scope includes:

1) 9107 hillside excavation to grade after demolition of Building 9107 by the M&O/BNI contractor under WBS 1.07.02.09.45.25.30.05.10.
2) Demolition of portion of existing underground 24-inch and 16-inch potable water lines after new potable water lines are tied in as part of Site Readiness scope. This includes demo of approximately 600 LF of 16-inch waterline and 650 LF of 24-inch waterline.
3) Demolition of site structures, including fencing, concrete curbing, concrete walks, guardrail, and other site appurtenances.
4) Installation of new storm drain line C which includes 48-inch RCP, and JC-3 and JC-4.
5) Installation of new storm drain line which includes C-4, SB-3, 24-inch RCP, and 24-inch HDPE Piping.
6) Installation of B-13 and temporary 24-inch HDPE storm drain piping.
7) Installation of Sanitary Sewer line MHB-7 to MHB-4.
8) Installation of Storm Drain Line G, including SB-6.
9) Perform erosion and sediment control and water management for USACE scope of work.
10) Installation of Sediment Basin 4 and associated outlet control structure.
11) Demolition and removal (excluding asphalt removal) of unused stretch of Phase I BCR that extends west beyond the tie-in on the east of BCR relocated in Site Readiness.
12) Installation of new storm drain line K which includes 48-inch RCP, and JK-2, JK-3, and JK-4.
13) Maintenance of West Borrow area, Wet Spoils area, and Haul Road during use by USACE.
14) Rough / finish excavation and grading of the Construction Support Building site.

Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
USACE Task Order	Complete	Work scope not part of this annex.

1	07	02	09	45	25	30	90	20	SIS NNSA Direct USACE Supervision & Administration
Description of Scope									
USACE Construction Management in the field for execution of Civil Site Work; includes engineering and design support, supervision and administration, mobilization, and preparatory work.									

Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
USACE Task Order	Complete	Work scope not part of this annex.

1	07	02	09	45	25	30	90	30	SIS NNSA Direct Site Usage Fee

Description of Scope

This WBS element captures the cost included in the USACE Task Order for the Y-12 Site Usage Fee to cover fire protection, emergency services, security, etc. for USACE staff and subcontractors.

Method of Accomplishment	Status of Work Scope	Definition of Complete
USACE Task Order	Complete	Work scope not part of this annex.

1	07	02	09	45	25	50			**SIS CONCRETE BATCH PLANT**

Description of Scope

This Control Account is for the construction and commissioning of the As-Approved CD package On-Site Concrete Batch Plant (CBP) to provide concrete for UPF construction. This control account includes Subcontract to Furnish/Install/Commission the CBP, CNS/BNI labor and materials to supply utilities and services to/from the batch plant, and CNS/BNI Integrated Support for the Installation/Commissioning of the Batch Plant.

1	07	02	09	45	25	50	10		Batch Plant Furnish/Install

Description of Scope

Installation and commissioning of an on-site concrete batch plant to provide concrete for UPF construction. A furnish and install subcontract will be awarded to perform this scope.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Furnish/Install Subcontract	Ongoing (Phased work scope release by customer)	The UPF CBP is commissioned and ready to provide concrete for the UPF Construction scope.

1	07	02	09	45	25	50	30		Batch Plant Subcontract Support

Description of Scope

CNS/BNI support for the subcontractor Furnish, Installation, and Commissioning of the As-Approved CD package CBP including: field non-manual (construction management and oversight, STRs, field engineers, Quality, etc.), CNS RADCON services, and Title III Engineering. Subcontract costs to install temporary fencing are also included in this element.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI direct staff and subcontractors	Ongoing (Phased work scope release by customer)	The UPF CBP is commissioned and ready to provide concrete for the UPF Construction scope.

1	07	02	09	45	25	60	10		**SIS CNS/BNI CSB UTILITIES INSTALL AND NNSA /USACE SUPPORT**

Description of Scope

This Control Account is to provide Discrete CNS/BNI labor, subcontracts, and materials for the installation, testing, and tie-in of utilities (electrical, water, sewage, communications) to the 5' Limit of the Construction Support Building (CSB) and to provide LOE Project Integration support as authorized by NNSA during USACEs construction of the CSB.

1	07	02	09	45	25	60	10	10	SIS CNS/BNI Procure Matl for CSB Utilities

Description of Scope

This WP is for bulk material procurements based on MTOs needed to provide utilities (electric, water, sewer, communications) and tie-ins to the CSB. Distributable are also included in this element.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Local Suppliers - Material Receiving Reports	Work Not Authorized by NNSA	Material Receipt / Inspection Reports signed by authorized CNS Y-12 representatives.

1	07	02	09	45	25	60	10	20	SIS CNS/BNI CSB Utilities

Description of Scope

This Discrete WP is for CNS/BNI direct labor to install CSB utilities (electric, water, communications) and tie-ins to the CSB.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI direct staff	Work Not Authorized by NNSA	CSB utilities are installed, tested, tied-in, and accepted by CNS Y-12; as evidenced by authorized signatures on the acceptance / turnover documents.

1	07	02	09	45	25	60	10	30	SIS CNS/BNI Project Integration Support to USACE during CSB Design/Construction and Utility Installation

Description of Scope

Owner's Agent support as specified in COR-ESH-6.4.2015-628668 dated 8 Jun 2015, Contracting Officer's Clarification on Consolidated Nuclear Security, LLC Responsibilities for the UPF CSB, including:

1) Integrating the CSB schedule and risks into the overall UPF Site Infrastructure & Services (SIS) schedule and risk register.
2) Providing CNS/BNI Subject Matter Experts (SMEs) to participate in the USACE post award conference.
3) Reviewing and commenting on the USACE CSB Design submittals, with respect to compliance with the CNS performance specification. The current schedule shows:
   - 30% Design Charrette meeting (13-19 Apr 2016)
   - 60% Design Review (01-14 Jun)
   - Onsite Meeting and Comment Resolution (15-16 Jun)
   - 90% Design Review (29 Jul-11 Aug 2016)

- Onsite Meeting and Comment Resolution (12-15 Aug)
- Design Complete (26 Aug)

4) Posting the USACE Design and Submittals into the official UPF Project Record.
5) Interfacing with CNS Y-12 to provided site specific USACE support (badging, information technology, construction permits, lock out / tag outs, utility hookups and outages, waste disposition, RADCON services, HAZMAT monitoring services during the CSB Ground Source Heat Pump construction, security services, etc.).
6) Participating in weekly SIS IPT meetings, and preparing SIS progress reports / briefings.
7) Participating in walkdowns and inspections of USACE work, as SME advisors to UPO (plan for 8 hrs per week).
8) All support specified in Appendix B to PL-PM-801768-A030, UPF Site Infrastructure and Services Subproject Execution Plan.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI contractor direct staff and BOA subcontractors.	Work Not Authorized by NNSA.	CNS assumes responsibility and ownership for the CSB in the DOE FIMS database and on other required Real Property records. CD-4 approval from the DOE/NNSA Project Management Executive.

1	07	02	09	45	26				**SIS Other Project Costs**

Description of Scope

This Control Account is for Other Project Costs (OPC) related to CD-4 and closeout activities for the Site Demolition & Security Upgrades scope, Concrete Batch Plant, and Construction Support Building (CSB). Includes all closeout reports, inspection and acceptance testing, and security testing of Portal 19 and VAS Gate 5.

1	07	02	09	45	26	30			SIS CNS/BNI Site Demolition & Security Upgrades Closeout (OPC)

Description of Scope

Site Demolition & Security Upgrades OPC scope includes CD-4 and Project Closeout activities. As a basis for CD-4 approval, a report will be prepared that documents inspection and acceptance of completed scope and a plan for transition of appropriate scope to the Y-12 site; i.e., Portal 19 and VAS gate. Project Closeout will be documented in a Final Project Closeout Report. The request for CD-4 and Project Closeout activities for this scope will be based on verifying that Key Performance Parameters (KPPs) have been achieved. Includes Security Testing of Portal 19/VAS Gate and checkout.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS/BNI direct staff and subcontractors		CD-4 approval from the DOE/NNSA Project Management Executive

1	07	02	09	45	26	50			SIS CNS/BNI Concrete Batch Plant Closeout (OPC)

Description of Scope

Concrete Batch Plant OPC scope includes CD-4 and Project Closeout activities. As a basis for CD-4 approval, a report will be prepared that documents inspection and acceptance of completed scope. Project Closeout will be documented in a Final Project Closeout Report. The request for CD-4 and

Project Closeout activities for concrete batch plant scope will be based on verifying that Key Performance Parameters (KPPs) have been achieved.		
Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
CNS/BNI direct staff and subcontractors		CD-4 approval from the DOE/NNSA Project Management Executive

1	07	02	09	45	26	60			SIS Construction Support Building Closeout (OPC)
Description of Scope									
Construction Support Building OPC scope includes CD-4 and Project Closeout activities. As a basis for CD-4 approval, a report will be prepared that documents inspection and acceptance of completed scope and a plan for transition of appropriate scope to UPO to be provided to the UPF Project as a government-furnished building. Project Closeout will be documented in a Final Project Closeout Report. The request for CD-4 and Project Closeout activities for SIS CSB scope will be based on verifying that Key Performance Parameters (KPPs) have been achieved.									
Method of Accomplishment				**Status of Work Scope**					**Definition of Complete**
CNS/BNI direct staff and subcontractors									CD-4 approval from the DOE/NNSA Project Management Executive

Reporting Requirements	
The Federal Project Director and Contracting Officer, with inputs from other Government personnel, will verify the on time submission of project reports that meet DOE/NNSA requirements contained in the Data Item Descriptions (DIDs). The Government will perform this verification by comparing the DOE/NNSA requirements contained in the following DIDs to the deliverables provided by the Contractor:	
Data Item Description	Title
DID-PM-0026/T	Monthly Project Report
DID-PRG-0022/T	Integrated Program Management Report (IPMR)
DID-PRG-0021	Monthly Status PARS II Report
DID-PM-0001/T	Document of Trend Board/Change Control Board Meetings
DID-PM-0004/T	Project Completion Verification
DID-PM-0027/T	Resource Loaded Schedule
DID-PM-0029/T	Total Project Cost
DID-PM-0036/T	Federal Project Director Monthly Project Review
DID-PM-0041/T	Project Closeout Report
	Monthly Project Briefing Package to NA-APM
	Monthly Labor Charges Report
	Monthly Expenditure Report for USACE Support
	Weekly Status Report

APPENDIX B

COST PLUS INCENTIVE FEE (CPIF) MODEL/GRAPH

SIS Incentive Fee - Terms

The Government will use the following CPIF Model terms for SIS fee calculation.

P_T = Target Price // Estimated Target Price ($) if all available fee earned.

F_A = Available Fee // Combined unrealized Target Fee and Schedule Fee ($).

C_T = Target Cost // Negotiated Target Cost ($).

F_T = Target Fee // Negotiated Target Fee ($).

F_S = Schedule Fee // Negotiated Schedule Fee ($).

C_{UT} = Under Target Cost // Actual Costs ($) when Maximum Fee realized.

F_{MAX} = Maximum Fee // *Maximum Fee ($) realized for Under Target Cost.*

C_{OT} = Over Target Cost // Actual Costs ($) when Minimum Fee realized.

F_{MIN} = Minimum Fee // *Minimum Fee ($) realized for Over Target Cost.*

C_{TAC} = Total Allowable Cost // Actual Cost ($) the Contractor can claim.

F_{TA} = Target Fee Adjustment // Calculated Fee Adjustment ($) for Under/Over.

F_{ATF} = Adjusted Target Fee // Calculated Fee Adjustment ($) applied to Target Fee.

F_{AFF} = Adjusted Final Fee // Calculated Fee Adjustment ($) for Schedule.

P_C = Contract Price * // Calculated Contract Price ($) after Final Fee applied.

* Final fee determination will be made using Government CPIF Excel model formulas.

** Earned fee rules apply in determining final Contract Price.

Share Ratios: Government Under/Over Target Shares, expressed as the Government percentage share of cost risk over the Contractor percentage share of cost risk.

Under Target Share = S_{GU}/S_{CU} // Government Share (%)/Contractor Share (%).

Over Target Share = S_{GO}/S_{CO} // Government Share (%)/Contractor Share (%).

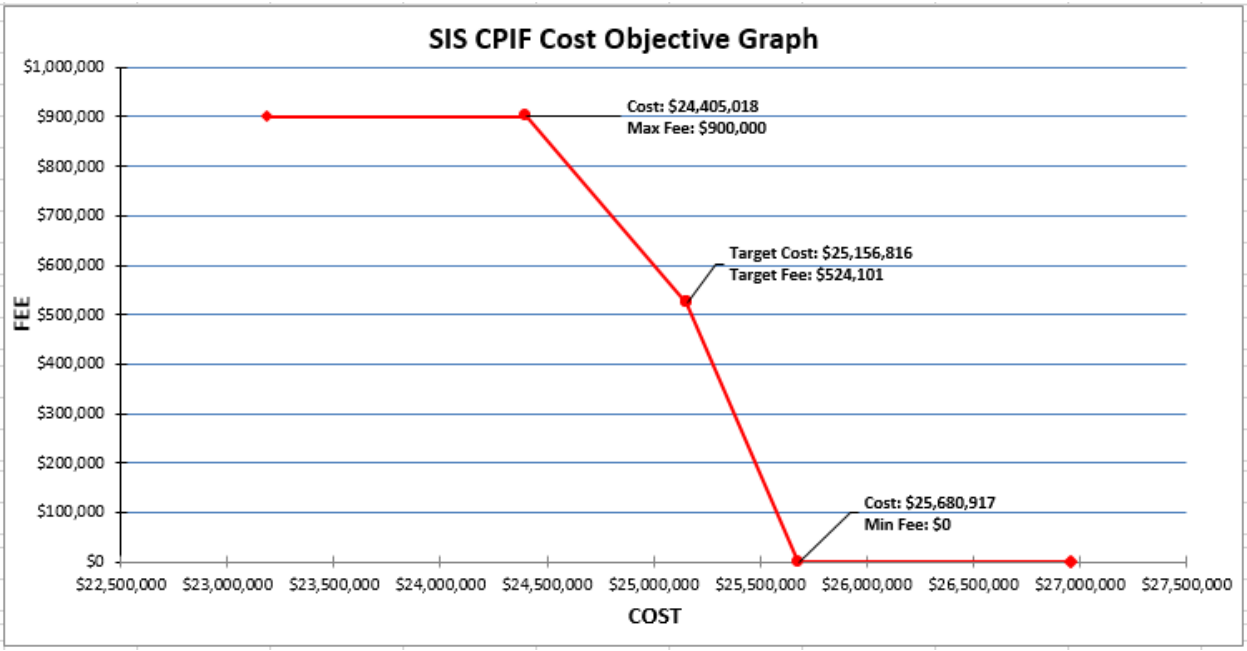

Figure 1: SIS CPIF Cost Objective Graph

APPENDIX C
GOVERNMENT OVERSIGHT MODEL

Cost Objective: The Government will oversee Cost Performance by verifying the Contractor's approved baseline data to ensure mission commitments are met with timely, high quality deliverables, in accordance with DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Cost Objective includes, but not limited to:

- Complete authorized scope in accordance with the approved Performance Measurement Baseline; provide timely project reporting.
- Manage a deliverable-based Work Breakdown Structure (WBS); cost control accounts, work packages and planning packages consistent with WBS/scope.
- Use established DOE earned value methods, measure work accomplishment, and assess project performance; perform variance analysis to identify, correct, and report problems; and regularly evaluate Estimates at Completion (EAC).
- Expend funds and resources that optimally provide the maximum benefit to the Government; perform proactive and effective subcontract management oversight of subcontractors to ensure effective cost performance controls.
- Maintain the total cost under configuration control to ensure impacts of design evolution on procurement, construction, and commissioning are managed effectively; ensure retroactive adjustments to the baseline are not allowed.
- Produce cost estimates compliant to the GAO Best Practices for Developing and Managing Capital Costs Guide and DOE G 413.3-21, Cost Estimating Guide; consider life cycle cost when evaluating proposed project changes.
- Demonstrate effective procurement and subcontract management oversight by driving costs down through competition, making best use of tier two subcontracting opportunities, including maximizing use of fixed price subcontracts and small business participation.
- Establish and maintain a project organization that implements a disciplined conduct of business, EPC commercial best practices, contract management, systems, processes, and procedures in accordance with applicable DOE directives and project requirements.
- Execute quality work products with minimal rework, e.g., designs, specifications, plans, procurement, construction, testing, and commissioning; demonstration of implementation of an approved DOE O 414.1D Quality Program.
- Identify, quantify and mitigate technical, programmatic, schedule, and cost risks.

APPENDIX C - Continued

Schedule Objective: The Government will oversee Schedule Performance by verifying the Contractor's Integrated Master Schedule (IMS) data to ensure mission commitments are met with timely, high quality deliverables, in accordance with Part III-Section J, Appendix, Appendix N, DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Schedule Objective includes, but not limited to:

- Execute scope in accordance with NNSA approved Execution Plans.
- Manage an IMS to support project management, implementation and control; include the total scope of baselined work and identify Work Breakdown Structure (WBS) elements for all activities and milestones; identify interdependencies between project activities/milestones to reflect a credible, logical project sequence; activity durations which are reasonable, measureable, and appropriately detailed for effective management; appropriate activity and resource calendars are employed.
- Baseline the IMS and control the content using the project change control board processes; maintain current project status and credible start/finish forecasts for all to-go tasks and milestones; include project and management controls milestones (e.g., critical decisions, major design reviews, and technology, procurement, construction, testing, and commissioning); incorporate labor, material and equipment resources and ensure reasonable/available.
- Manage a credible critical path as determined by the calculated IMS logic network; ensure adequate schedule margin has been included and clearly defined; ensure the number of lags/leads and activity constraints is reasonable. Incorporate subcontracted activity into schedule/critical path to ensure visibility to the Government.
- Compliance with all applicable environmental, safety, and security requirements. No formal notices of violation or similar citations from a Federal, State, or local regulatory agency; excellent safety DART/TRC rates; no safeguards and security incidents.
- Minimize construction down times; delays to construction activities are minimal, and all delays are proactively identified, tracked, analyzed for patterns, evaluated for quick resolution, and reported expeditiously to CO/FPD.
- Support USACE construction in accordance with NNSA approved Execution Plans and Procedure UPO-95-A026, Interfaces Between UPO, M&O and USACE for UPF Construction.
- Design and engineering products, including material and equipment, shall have the necessary technical and constructability (fabrication) quality to accomplish procurement, fabrication and construction expeditiously without major problems or delays (Title II).
- Provide Resident Engineering representation as directed to support Construction

and oversee the design's intent and requirements; exceptions are rare to non-existent without problems or delays (Title III).

- Perform pre-award/award/post-award, surveillance/oversight functions to support and/or accomplish requirements. Proper source/destination inspection and acceptance provisions are Government special interest items to ensure receipt of quality subcontracted products/materials.
- Identify, quantify and mitigate project schedule risks; perform schedule risk assessments to predict the probability of completing on time.

Uranium Processing Facility (UPF)

Site Preparation and Long Lead Procurement
CD-3A (SP/LL)
Fee Structure

Annex 4

National Nuclear Security Administration

[redacted] 28 Jun 2016
Date

Brian P. Reilly
UPF Project Director
Consolidated Nuclear Security, LLC

[redacted] 6/28/16
Date

Dale E. Christenson
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Revision Log

Revision	Date	Description	Total Pages	Affected Pages
0	June 28, 2016	Initial issue.	Front matter, i–ii Body, 1–2; Appendix A, B, and C.	All

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1. Introduction

The Uranium Processing Facility (UPF) Site Preparation and Long Lead Procurement CD-3A (SP/LL CD-3A) scope, herein referenced as "SP/LL CD-3A," was authorized by the National Nuclear Security Administration (NNSA) to advance the scope of the Mechanical Electrical Building (MEB), Salvage Accountability Building (SAB), and Main Processing Building (MPB) future subprojects. The SP/LL CD-3A scope is being performed by Consolidated Nuclear Security, LLC (CNS), herein referenced as "Contractor," as defined in the UPF Project Execution Plan, PL-PJ-801768-A006, which establishes the formal plan for executing the CD-3A scope.

The SP/LL CD-3A scope supports the UPF Project by completing key critical-path site preparation construction work so that the Project site will be ready for subsequent nuclear facility construction. The SP/LL CD-3A scope is best characterized as standard commercial with risk significant (RS) attributes to be verified by the Contractor, and does not implement new technologies. The SP/LL CD-3A scope shall be managed through the use of the Project's construction management baseline in order to ensure the scope, mission requirements, and schedules are met within the approved Contract Budget Base (CBB), Statement of Work, and Level II/III Milestones that must be achieved to not impact the nuclear construction forecast schedule UPF CD-4 date (4th QTR FY 2025).

The SP/LL CD-3A scope shall support the Enriched Uranium Mission (EUM), with timely, cost effective, high quality deliverables.

2. Purpose

The SP/LL CD-3A Fee Structure, herein referenced as "SP/LL CD-3A Annex" (Annex 4), is a subset of the overarching Contract, Section J, Appendix B-2, "UPF Fee Plan," that documents the Performance Objectives and Cost Plus Incentive Fee (CPIF) arrangement, in which SP/LL CD-3A performance will be evaluated. The purpose of the SP/LL CD-3A Annex is to document the target cost and incentive fee structure, and define how NNSA will determine the final amount of Contractor earned fee, thereby establishing a "contract price" for the SP/LL CD-3A scope.

3. Approach

The desired performance of the Contractor is to deliver high quality SP/LL CD-3A deliverables (technical requirements) and/or integration support, which will ultimately deliver a UPF fully capable of meeting all DOE/NNSA mission performance, quality, safeguards and security, and environmental, safety, and health contractual requirements. The desired goal is to properly incentivize the Contractor to deliver SP/LL CD-3A scope on/or under budget and on/or ahead of schedule, by establishing a reasonable Target Price, including Cost and Schedule Performance Objectives for meeting the SP/LL CD-3A scope.

4. Establishing Annex

The SP/LL CD-3A Annex shall be approved and incorporated into the Contract by modification at Section J, Appendix B-2, UPF Fee Plan by the Contracting Officer (CO).

The Government will primarily incentivize the Contractor using the following critical performance objectives, unless otherwise documented in the Annex:

- Cost
- Schedule

By employing these incentives, the Government expects to motivate the Contractor to aggressively manage resources as required in order to provide high-quality and timely completion of authorized scope and/or integration/support of all SP/LL CD-3A deliverables. Eligibility and the amount of the incentive fee earned shall be dependent on the Contractor meeting or exceeding the established performance objectives. Failure to meet any of the established SP/LL CD-3A Performance Objectives, Appendix A, may result in the Contractor's forfeiture of incentive fee for that assigned objective or element.

5. Annex Oversight

The Government Oversight Model, Appendix C, describes the approach NNSA will use for conducting surveillance and oversight of SP/LL CD-3A Performance Objectives and Contract deliverables, in order to ensure the Contractor delivers high quality products and services that meet the UPF Project requirements. The CO and Contracting Officer's Representatives (CORs), with input from functional area managers, will measure how the key performance objectives of the Contract are met. The purpose of the oversight model is to communicate Government expectations to the Contractor in order to ensure Contract objectives, i.e., final outcomes, are achieved. The CO/COR may notify the Contractor anytime during performance of the Contract to address cost, schedule, and/or performance concerns needing attention.

6. Change Procedures

The SP/LL CD-3A Annex may be updated as necessary during Contract performance. These updates may include, but are not limited to, required changes caused by new authorized scope, project phasing, approved change control, and/or establishing/adjusting fee incentives and performance objectives. Any changes shall be codified by a Contract modification within Section J, Appendix B-2, UPF Fee Plan.

All changes, including SP/LL CD-3A Baseline Changes, are subject to the thresholds outlined in the UPF Project Execution Plan, PL-PJ-801768-A006, Appendix C.

Appendix A

SP/LL CD-3A PERFORMANCE OBJECTIVES

Fee – Summary for SP/LL CD-3A	
Target Price (P_T), includes available fee	$112,304,616.00
Available Fee (F_A), only includes unrealized cost and schedule fee	$5,347,838.00
Note: NNSA will make a Final Fee Determination after NNSA approval of UPF CD-4 and acceptance of UPF closeout report. For the purposes of this negotiated annex, all fee related to the cost objective is provisional to the end of the project (UPF CD-4) or contract, subject to the final fee determination and Contract modification.	
Cost Objective Elements – 50%	
Target Cost (C_T)	$106,956,778.00
Target Fee (F_T)	$2,673,919.00
Level 1 Under Target Cost (C_{UT1})	$103,913,556.00
Level 1 Under Target Share Ratio (S_{GU1}/S_{CU1})	90/10
Level 2 Under Target Cost (C_{UT2})	$98,841,027.00
Level 2 Under Target Share Ratio (S_{GU2}/S_{CU2})	70/30
Maximum Fee (F_{MAX})	$4,500,000
Level 1 Over Target Cost (C_{OT1})	$110,000,000.00
Level 1 Over Target Share Ratio (S_{GO1}/S_{CO1})	90/10
Level 2 Over Target Cost (C_{OT2})	$112,369,597.00
Level 2 Over Target Share Ratio (S_{GO2}/S_{CO2})	0/100
Minimum Fee (F_{MIN})	$0

Schedule Objective Elements - 50%	
Schedule Fee (F_{SM}) Milestones	$2,673,919.00

Scope – Summary
The major SP/LL CD-3A scope tasks and responsibility for performing each task are defined in *UPF Project Scope for CD-3A Long-Lead/Bulk Procurements and Site Preparation* (PL-PM-801768-A011), and Letter of Direction, COL-NNSA-UPO-PM-801768-A068 (COR-PS-8.19.2015-639130) *Contracting Officer Direction for the Site Preparation Critical Decision Package.* **NOTE:** Major scope elements are defined in the Work Breakdown Structure (WBS) section and schedule milestone – deliverable summary, as extracted and further defined from PL-PM-801768-A011.

Critical Decision (CD) - Summary	
UPF CD-4 Forecasted Approval	4th QTR FY 2025

Schedule Milestones – Deliverable Summary [1]

Deliverable	Completion Date [3]	Impact Date
Start Excavation WBS: 1.07.02.09.45.60.80.10.10	September 8, 2016	N/A

Provisional Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$194,109.00	$0	N/A

Definition of Complete: All mobilization and excavation pre-construction submittals for mass excavation have been accepted by CNS. The excavation subcontractor is mobilized to start excavation scope. The subcontractor has achieved removal (Load/Haul/Dump) of 75 loads. Objective evidence that verifies completeness (e.g. Contractor Weekly Reports) is provided.

Deliverable	Completion Date [3]	Impact Date
Retaining Wall Complete WBS: 1.07.02.09.45.60.80.10.50	August 4, 2017	February 20, 2018

Provisional/Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$129,406.00/$105,165.00	$0	N/A

Definition of Complete: Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Installation of retaining wall including formwork, rebar, embeds, and placement per design and specification is complete. Standard closure evidence provided. The fee associated with this Earned Value at Milestone is only available until February 19, 2018.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable			Completion Date [3]	Impact Date
West End Feeder Upgrade Complete WBS: 1.07.02.09.45.60.80.40.82			November 14, 2016	N/A
Provisional Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**		
$230,343.00	$0	N/A		
Definition of Complete: Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Standard closure evidence provided.				

Deliverable			Completion Date [3]	Impact Date
Initiate Mud Mat Placement WBS: 1.07.02.09.45.60.80.20.10			April 10, 2017	N/A
Provisional Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**		
$304,104.00	$0	N/A		
Definition of Complete: Subgrade is approved by the geotechnical engineer for placement of the initial mud mat. CNS has verified that subgrade for the initial placement meets Risk Significant attributes. The first Mud Mat placement has been completed in accordance with design. Verification that the first mud mat has been placed in accordance with specifications and RS requirements.				

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable	Completion Date [3]	Impact Date
Excavation Complete WBS: 1.07.02.09.45.60.80.10.10	October 30, 2017	N/A

Provisional Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$404,137.00	$0	N/A

Definition of Complete: CNS has verified that excavation is completed per engineering design boundaries. Competent shale/bedrock is confirmed. All removed material is hauled to and placed at the appropriate location. Sediment Basin 5 is closed. Brush/tree removal is complete. Rip rap installation is complete. 18-in sump drain, select storm drains, parking lots are demolished/removed. Redlines and the corresponding survey data is complete and accepted by the UPF Project. Standard closure evidence provided.

Deliverable	Completion Date [3]	Impact Date
MEB Slab Rebar on Site and Staged in Laydown Area or in Rubb-Tents WBS: 1.07.02.09.45.60.80.30.50	January 30, 2018	July 18, 2018

Provisional/Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$12,941.00/$10,517.00	$0	N/A

Definition of Complete: Acceptance of rebar by procurement per Y17-95-64-804 and Y17-95-64-846. CNS verification of certificates of conformance, receipt inspections, and rebar acceptance. Objective evidence that the rebar is received, stored, and maintained per specification (Contractor Weekly Reports from the CNS PM). The fee associated with this Earned Value at Milestone is only available until July 17, 2018.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable	Completion Date [3]	Impact Date
Tower Cranes Pass Factory Acceptance Test WBS: 1.07.02.09.45.60.80.40.70	March 23, 2018	N/A

Provisional Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$64,703.00	$0	N/A

Definition of Complete: CNS Verification that both Tower Cranes have passed the Factory Acceptance Test. Documentation and verification of FAT acceptability is provided.

Deliverable	Completion Date [3]	Impact Date
Lift 6 Concrete Placement Complete WBS: 1.07.02.09.45.60.80.20.20	October 24, 2017	July 18, 2018

Provisional/Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$447,098.00/$93,597.00	$0	N/A

Definition of Complete: Lift 6 is complete in accordance with design. Objective evidence that competent material determination/verification by a geotechnical engineer and CNS certificates that the mud mat was placed in accordance with plans as specifications. Standard closure evidence provided. The fee associated with this Earned Value at Milestone is only available until July 17, 2018.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable	Completion Date [3]	Impact Date
Lift 9 Concrete Placement Complete WBS: 1.07.02.09.45.60.80.20.20	April 4, 2018	July 18, 2018

Provisional/Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$447,098.00/$93,597.00	$0	N/A

Definition of Complete: Lift 9 is complete in accordance with design. Standard closure evidence provided. The fee associated with this Earned Value at Milestone is only available until July 17, 2018.

Deliverable	Completion Date [3]	Impact Date
All Concrete Select Fill Lifts and Aggregate Backfill Placed Complete WBS: 1.07.02.09.45.60.80.20.20	April 17, 2018	July 18, 2018

Provisional/Earned Value at Milestone	Earned Value at Impact [2]	Earned Value at Max Stretch Goal
$258,812.00/$223,813.00	$0	N/A

Definition of Complete: Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Select Fill and Mud Mat: Objective evidence that competent material determination/verification by a geotechnical engineer and CNS certificates that the mud mat was placed in accordance with plans as specifications. Mineral Aggregate Backfill: QC documentation verifying the aggregate backfill was installed per design (RS attribute) is complete. Schedule incentive "All Concrete Select Fill Lifts and Aggregate Backfill Placed" is defined as: All lifts are complete and all mineral aggregate base backfill is placed and "A" punch list items are complete. The fee associated with this Earned Value at Milestone is only available until July 17, 2018.

Schedule Milestones – Deliverable Summary [1] (continued)

Deliverable			Completion Date [3]	Impact Date
All Tower Cranes Operational WBS: 1.07.02.09.45.60.80.40.70			July 18, 2018	October 15, 2018
Provisional/Earned Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**		
$181,168.00/$147,230.00	$0	N/A		
Definition of Complete: Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Tower cranes are erected and pass all certifications for use. The fee associated with this Earned Value at Milestone is only available until October 14, 2018.				

Deliverable			Completion Date [3]	Impact Date
All CD-3A Scope Completed/Accepted WBS: 1.07.02.09.45.60.80			October 15, 2018	November 15, 2018
Earned Value at Milestone	**Earned Value at Impact [2]**	**Earned Value at Max Stretch Goal**	**Completion Delay Reductions (Calendar Days)**	
$2,000,000.00	$0	N/A	$66,667.00/day; $2,000,000.00 max	
Definition of Complete: Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Inspections shall be performed and documented in accordance with Y15-95-912, *UPF Completion and Turnover* per procedure. Turnover shall be to the UPF Project and will include all relevant supporting documentation (e.g. material certificates of conformance, receipt inspection, test reports, as built drawings, and engineering determinations/verifications). All project documentation shall be captured in the UPF Document Management Center and maintained as a project record. The fee associated with this Earned Value at Milestone is only available until November 14, 2018.				

NOTES:

1 – Schedule Milestones are tied to definitions of complete, including any logical ties to WBS structure and standard closure evidence.

2 – Earned Value at Impact ($0) is achieved on the Impact Date for each milestone for circumstances related and attributable to CNS performance.

3 – All completion criteria are pursuant to DOE O 413.3B and assume high quality deliverables, with no deficiencies (major findings or findings: attributable to significant scope, cost, schedule or safety impacts) that would prevent the project team from executing baseline.

Schedule of Values – Fee Liquidation Schedule [1]

When Paid	Scope	Cost Objective			Schedule Objective	
		Provisional	Earned	Unliquidated	Provisional	Earned
On Completion	Start Excavation WBS: 1.07.02.09.45.60.80.10.10	$129,406.00	-	$55,460.00	$194,109.00	-
On Completion	Retaining Wall Complete WBS: 1.07.02.09.45.60.80.10.50	$86,271.00	-	$36,973.00	$129,406.00	$105,165.00
On Completion	West End Feeder Upgrade Complete WBS: 1.07.02.09.45.60.80.40.82	$77,644.00	-	$33,276.00	$230,343.00	-
On Completion	Initial Mud Mat Placement WBS: 1.07.02.09.45.60.80.20.10	$155,287.00	-	$66,552.00	$304,104.00	-
On Completion	Excavation Complete WBS: 1.07.02.09.45.60.80.10.10	$249,271.00	-	$106,830.00	$404,137.00	-
On Completion	MEB Slab Rebar on Site and Staged in Laydown Area or in Rubb-Tents WBS: 1.07.02.09.45.60.80.30.50	$4,314.00	-	$1,849.00	$12,941.00	$10,517.00
On Completion	Tower Cranes Pass Factory Acceptance Test WBS: 1.07.02.09.45.60.80.40.70	$155,287.00	-	$66,552.00	$64,703.00	-
On Completion	Lift 6 Concrete Placement Complete WBS: 1.07.02.09.45.60.80.20.20	$258,812.00	-	$110,919.00	$447,098.00	$93,597.00
On Completion	Lift 9 Concrete Placement Complete WBS: 1.07.02.09.45.60.80.20.20	$258,812.00	-	$110,919.00	$447,098.00	$93,597.00
On Completion	All Concrete Select Fill Lifts and Aggregate Backfill Placed Complete WBS: 1.07.02.09.45.60.80.20.20	$309,432.00	-	$132,614.00	$258,812.00	$223,813.00
On Completion	All Tower Cranes Operational WBS: 1.07.02.09.45.60.80.40.70	$144,072.00	-	$61,745.00	$181,168.00	$147,230.00

Schedule of Values – Fee Liquidation Schedule [1] (continued)

When Paid	Scope	Cost Objective			Schedule Objective	
		Provisional	Earned	Unliquidated	Provisional	Earned
On Completion	All CD-3A Scope Completed/Accepted [3,4] WBS: 1.07.02.09.45.60.80.60.80	$43,136.00	-	$18,486.00	-	$2,000,000.00
TBD	Final Fee Determination [5]	$1,871,744.00	UPF CD-4	$802,175.00	$2,673,919.00	$2,673,919.00

NOTES:

1 – Schedule Milestones are tied to definitions of complete, including any logical ties to WBS structure and standard closure evidence.

2 – All completion criteria are pursuant to DOE O 413.3B and assume high quality deliverables, with no deficiencies (major findings or findings: attributable to significant scope, cost, schedule or safety impacts) that would prevent the project team from executing baseline.

3 – NNSA will make an interim Fee Determination for unliquidating the remaining cost objective fee when all CD-3A scope is completed and accepted.

4 – The target cost contains an allowance event trigger for additional fixed unit rate quantities associated with excavation and backfill beyond the design volumes. As a result, the final contract price for this Annex, inclusive of fee, will be validated and adjusted by NNSA to reflect any additional required volumes and/or impacts prior to the final fee determination. However, CNS shall have the burden of proof for demonstrating and providing the basis for any adjustments. See the Allowances section for the process for triggering fixed unit rate adjustments.

5 – NNSA will make a Final Fee Determination for cost objectives after NNSA approval of UPF CD-4 and acceptance of UPF closeout report.

Allowances – Fixed Unit Rate Adjustments [1]

ID	Description/Validation	Unit	Rate
1	**Mass Excavation** Soils removed down to the 50 Blow Count Material as defined in C2E801768A514, *Building Excavation Plan* and C2E801768A290, *Building Connector Excavation Plan. Inclusive of additional excavation for layback.* Verified via survey data and as-builts.	yd^3	$13.69
2	**Placement of Mud Mat, includes Mud Mat Concrete Material** Placement of Mud Mat Material defined by CS-ES-801768-033012-A002, *Engineering Specification for Mass Fill and Mud Mat Concrete Work* and meeting requirements of ACI 318. Verified via survey data and as-built drawings.	yd^3	$361.62
3	**Furnish and Placement of Engineered Fill** Furnish and placement of backfill material defined by CS-EC-801768-312000-A010, *Engineering Specification for Earthwork* and meeting requirements of ASTM D1557 and ASTM D6938. Verified via survey data and as-built drawings.	yd^3	$71.40
4	**Placement of Mass Fill, includes Mass Fill Concrete Material** Placement of Mass Fill Defined by CS-ES-801768-033012-A002, *Engineering Specification for Mass Fill and Mud Mat Concrete Work*, and meeting requirements of ACI 318 and ACI 207.1R. Verified via survey data and as-built drawings.	yd^3	$244.29
5	**50 Blow Count Testing** Verified from Standard Penetration Test reports performed in accordance with CS-EC-801768-312000-A010, *Engineering Specification for Earthwork* and ASTM D1586.	each	$1,647.58
6	**CNS Oversight [2]** Weekly Status Reports and Labor Reports. Includes regular and overtime hours.	day	$62,264.41

NOTES:

1 – The fixed unit rate allowance will be used by NNSA for validating and calculating any potential adjustment to the target cost and target fee in the event that any additional allowance quantities are required. The intent of the allowance is to reasonably compensate CNS for any required excavation and backfill efforts beyond the design volumes.

2 – The daily unit rate for CNS Oversight "Hotel Load" will be used by NNSA for validating and calculating any potential adjustment to the target cost and target fee in the event that any additional oversight allowance is required. The intent of the daily unit rate allowance is to reasonably compensate CNS for any realized oversight impacts, as a result of additional/required excavation and backfill oversight efforts beyond the design volumes. It is not the intent of the daily unit allowance to be applied for the entire duration or offset other performance issues.

Allowance Requirements – Fixed Unit Rate Adjustments

In the event the Project realizes a point in which the data from the subcontractor(s) identifies that excavation beyond the design volumes will be required, i.e., the event trigger, CNS shall immediately notify the Contracting Officer (CO) via formal written notice.

Initial Event Trigger: If the initial event trigger is realized, CNS shall process a level 2 Baseline Change Proposal (BCP) for $3M (approximately 50% of the budget retained in contingency for the potential growth in excavation, mudmat, select fill, and backfill quantities) within 5 working days of realizing the event trigger in order to not impact the ongoing SP/LL CD-3A scope. The initial BCP will not be based on as-built drawings, final survey data, or change requests from subcontractors. NNSA will disposition the BCP within 5 working days of receipt. Approval of this BCP does not constitute a change in target cost or target fee.

In the event the Project realizes a second point in which the data from the subcontractor(s) identifies that excavation beyond the initial $3M allowance will be required, CNS shall immediately notify the CO via formal written notice.

Second Event Trigger: If the second event trigger is realized, CNS shall process a level 2 Baseline Change Proposal (BCP) for $3M (approximately 100% of the remaining budget retained in contingency for the potential growth in excavation, mudmat, select fill, and backfill quantities) within 5 working days of realizing the event trigger in order to not impact the ongoing SP/LL CD-3A scope. The second BCP will not be based on as-built drawings, final survey data, or change requests from subcontractors. NNSA will disposition the BCP within 5 working days of receipt. Approval of this BCP does not constitute a change in target cost or target fee.

Completion Requirements:

Within the original baseline schedule: Upon completion of all Site Preparation Work as defined Work Breakdown Structure (WBS) section, CNS shall submitt standard cloure evidence the Federal Project Director (FPD) and CO to determine the final quantity adjustments for the excavation, mudmat, select fill and backfill scopes of work. The FPD will validate the information submitted within 30 calendar days of receipt. Pursuant to the annex change procedures, the CO will apply the verified values against the established fixed unit rates under this allowance in order to adjust the target cost and target fee.

Outside the original baseline schedule: Upon completion of all Site Preparation Work as defined in the WBS section, CNS shall submit a documented basis and analysis of the total schedule impact associated with the allowance quantities that that exceeded the design volumes within 30 calendar days to the FPD and CO. The FPD will evaluate the information submitted and make a recommendation to the CO within 30 calendar days of receipt. Pursuant to the annex change procedures, the CO will make a final determiniation regarding any additional overhead support required using the established fixed unit rates under this allowance in order to adjust the target cost and target fee.

CNS has the burden of proof in demonstrating final quantities and schedule impacts. Thus, CNS shall provide any change order requests received from the excavation and mudmat/select fill/backfill subcontractors in support of the requested volumes and overhead support changes to target cost and target fee.

CNS shall true up the Contract Budget Base (Performance Measurement Baseline and Management Reserve) to reflect the final adjustments, and return any unused budget allowance to Federal Project Director contingency.

Work Break Down Structure (WBS)

WBS Level									Title
1	2	3	4	5	6	7	8	9	
1	07	02	09	45	60	80			**Site Preparation & Long Lead Procurement**

Description of Scope

This includes the excavation and select fill and retaining wall required to start nuclear construction. This scope also includes the procurement of long lead items such as the two tower cranes and rebar for the MEB slab foundation, which will allow UPF to meet its obligation to meet the CD-4 project date of September 2025. This WBS Level is further defined in the levels below.

Standard Closure Evidence Statement

The following statement applies to all lower level WBS elements:

Installation, completion, inspection, acceptance, and turnover of work scope per the design and subproject terms/conditions. Inspections shall be performed and documented in accordance with Y15-95-912, *UPF Completion and Turnover* per procedure. Turnover shall be to the UPF Project and will include all relevant supporting documentation (e.g. material certificates of conformance, receipt inspection, test reports, as built drawings, and engineering determinations/verifications). All project documentation shall be captured in the UPF Document Management Center and maintained as a project record.

1	07	02	09	45	60	80	10		**Site Prep Excavation**

Description of Scope

This Control Account is for CNS scope per the As-Approved CD package for the **Site Preparation & Long Lead Procurement** CD-3A including excavation for the mud mat and select fill placement, installation of storm drains and sewer line, constructing laydown area, mobilization of contractors and supporting distributables, construction of a retaining wall adjacent to PIDAS, jack and bore, maintenance of west borrow and wet spoil areas, and final as-builts required to close out construction scope in this control account (This WBS Level is further defined in the levels below.)

1	07	02	09	45	60	80	10	10	Excavation for mud mat and select fill placement

Description of Scope

• Mass Excavation of Building Foundation per engineered boundaries. Confirm presence of competent shale/bedrock. Continue excavation of UPF building foundation from elevation ~ 2 ft. above to the competent material. Fixed unit rate pricing will be used if additional excavation is

required. Coordination with Select Fill Subcontractor for placement of mud mat.

- Hauling of excavated material to West Borrow and Wet Spoil areas.
- Erosion and sediment control and water management.
- Closure of Sediment Basin 5.
- De-watering of excavated area.
- Brush and tree removal as required to facilitate rough grading activities. Interim grading of the construction site, including over excavation of unsuitable material, as required. Installation of rip rap.
- Haul Road maintenance during period of performance.
- Demolition of abandoned 18-in raw water line on the east side of the UPF building site, including associated valve pits, select storm drains in former Bear Creek Road (BCR), and adjacent parking lots.
- Demolition of civil features, underground utilities and structures.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	20	Site Prep Storm Drains and Sewer Install

Description of Scope

Installation of new storm water and site sanitary sewer systems as required for site preparation. Scope includes storm drain piping, catch basins and junction boxes, security barriers, casing pipe, precast headwalls/end walls, outlet protection, sanitary sewer line, backfill and compaction, etc.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	30	Site Prep Lay Down Area

Description of Scope

Placing fill and grading for one laydown area (~8 acres), and correcting drainage issues. Installation of laydown area infrastructure items

including site clearing, culverts, mowing, straw wattles, geotextile fabric, and stone and mineral aggregate base material.		
Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Objective evidence shall also be provided that lay down areas were installed consistent with the MOU/MOA between 1) CNS and UCOR and 2) UPO/NPO/OREM.

1	07	02	09	45	60	80	10	40	Site Prep Excavation Mobilization, Demobilization, and Trailers

Description of Scope

- Mobilization of Subcontractor including delivery of construction equipment and materials to jobsite, completion of required training, and pre-mobilization documentation.
- Installation and maintenance of temporary Subcontractor trailers.
- Demobilization of Subcontractor including site remediation, removal and cleanup of equipment and temp facilities, removal of silt fence and erosion controls, completion of all subcontractor's punch list items.

Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	50	Site Prep Retaining Wall

Description of Scope

Installation of retaining wall including formwork, rebar, embeds, and placement per design and specification.

Method of Accomplishment	**Status of Work Scope**	**Definition of Complete**
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	60	Site Prep Jack and Bore

Description of Scope

• Jack-and-bore installation of utility casing north-south for later utility installation to UPF
• Scope includes shoring (if required), level boring machine, and installation of casing pipes.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	70	Site Prep Borrow and Spoil Area Maintenance

Description of Scope

• West Borrow area and wet spoil area maintenance during period of performance of excavation performance.
• Place soil and engineered features including erosion and sediment controls, and spread and compaction of soil fill.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	10	80	Site Prep Mass Excavation Documentation

Description of Scope

Generating as-built submittals of completed work including survey data for final subgrade, casing pipe installation, retaining wall placement plans and concrete related submittals.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	20		**Site Prep Select Fill**
Description of Scope									
This Control Account is for CNS scope per the As-Approved CD package for the **Site Preparation & Long Lead Procurement** CD-3A including placement of the mud mat and select fill, mobilization of contractors and supporting distributables, and final as-builts required to close out construction scope in this control account (This WBS Level is further defined in the levels below.)									

1	07	02	09	45	60	80	20	10	Site Prep Mud Mat
Description of Scope									
Once competent shale/bedrock is verified in main excavation, place mud mat. Coordinate with Excavation Subcontractor for placement of mud mat.									

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	20	20	Site Prep Select Fill
Description of Scope									

- Following mud mat placement, install select concrete fill and mineral aggregate base backfill; includes the areas supporting the Main Process Building, Mechanical Electrical Building, Salvage and Accountability Building, diesel generator, fire tank and pump building, and partial HEUMF Connector per design.
- Install thermocouples, monitoring and data for the lifts identified in the design.
- Install tower crane pedestals, including forming and pouring pedestals, and installing crane embedment and grounding.
- Dewatering of excavated area for duration of the select fill scope of work.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Closure evidence file shall include the following: Select Fill and Mud Mat: Objective evidence that competent material determination/verification by a geotechnical engineer and CNS certification that the mud mat was placed in accordance with plans as

		specifications. Mineral Aggregate Backfill: QC documentation verifying the aggregate backfill was installed per design (RS attribute) is complete.

1	07	02	09	45	60	80	20	30	Site Prep Select Fill Mobilization, Demobilization, and Trailers

Description of Scope

- Mobilization of Subcontractor including delivery of construction equipment and materials to jobsite, completion of required training, and pre- mobilization documentation.
- Installation and maintenance of temporary Subcontractor trailers.
- Demobilization of Subcontractor including site remediation, removal and cleanup of equipment and temp facilities, removal of silt fence and erosion controls, completion of all subcontractor's punch list items.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	20	40	Site Prep Select Fill Documentation

Description of Scope

Generating red-line submittals of completed work including mud mat test and inspections, fill test and inspections, survey data for concrete elevation of each lift.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	30		**Site Prep Permanent Plant Subcontracts**
Description of Scope									
This Control Account is for CNS scope per the As-Approved CD package for the **Site Preparation & Long Lead Procurement** CD-3A including delivery of concrete for the mud mat and select fill, 50N standard penetration testing, MEB rebar slab purchase, and vendor engineering of the personnel and freight elevators for the MEB, SAB, and MPB (This WBS Level is further defined in the levels below.)									

1	07	02	09	45	60	80	30	30	Site Prep Select Fill Concrete & Delivery Subcontract
Description of Scope									
Concrete-related bulk procurements include concrete for the mud mat and select fill, tower crane pedestals, and any miscellaneous items; Includes delivery to the site of excavation from the UPF Batch plant. Additional equipment for concrete placement is not included.									

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Unit Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	30	40	Site Prep 50N Standard Penetration Testing Subcontractor
Description of Scope									
50 blow count standard penetration testing to confirm competent shale/bedrock.									

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Unit Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Closure evidence file shall include the following: Final acceptance of the last 50N standard penetration test. Acceptance by the Site Prep geologist (RS attribute). CNS verification of above documentation.

1	07	02	09	45	60	80	30	50	MEB Slab Rebar Purchase

Description of Scope

Long-lead procurement of rebar in preparation for construction of the MEB slab.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Unit Priced Procurement	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	30	60	Site Prep Personnel and Freight Elevator Vendor Engineering

Description of Scope

Work Package includes the post award vendor design for personnel and freight elevators.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	**80**	40		**Site Preparation Support & Distributables**

Description of Scope

This Control Account is for CNS scope per the As-Approved CD package for the **Site Preparation & Long Lead Procurement** CD-3A including non-manual support, non-manual distributables to support the team, and miscellaneous contracts to support completion of the CD-3A scope (This WBS Level is further defined in the levels below.)

1	07	02	09	45	60	80	40	05	Site Prep Misc Construction Services Labor

Description of Scope

This scope consists of labor activities that support construction but which are not associated with any one specific construction scope. Support is for CNS scope only and does not apply to Subcontractors:

- Material handling at the lay-down area

- Maintenance and inspection of tools
- Fire extinguisher inspections
- Chemical control and inventory
- Distribution of water/ice, materials, tools
- Site maintenance, including snow and ice removal and maintenance of project grounds
- Maintenance of roads and walkways (Excluding Haul Road during Excavation Subcontractor work)
- Job briefings, monthly safety meetings
- Electrical and mechanical service and support for temporary construction and field activities
- Install/maintain/remove other minor temporary construction facilities (e.g., short-term shops; i.e., sealands)
- Installation of Temp Power during site prep (Excluding Construction Power)
- Maintenance of West Borrow area, Wet Soil Spoil area, and Haul Road after Excavation Subcontractor completion (as required)
- Maintenance of Laydown area (as required).

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS Craft	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	06	Site Prep Wet Spoils Expansion

Description of Scope

Prepare the Wet Spoils area to support the excavation subcontractor, as per PROC-3.17-F003 and Addendums 01-03.

Method of Accomplishment	Status of Work Scope	Definition of Complete
BNI managed CNS direct-hire staff	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	10	Site Prep Title III Engineering

Description of Scope

Title III scope consists of maintenance of engineering documents and the review and approval of contract submittals. Activities include:

- Supporting pre-bid meetings.
- Supporting post-award construction meetings.
- Providing a Design Authority (DA) representative, as needed, to support construction.
- Responding as needed to Field Change Requests (FCRs), Field Change Notices (FM&O), and Requests for Information (RFIs).
- Incorporating as-built information and development of other applicable Title III documents.
- Personnel and Freight Elevator vendor submittal review and coding of submittals.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS, BOA engineers	Work Planned	Physical work is complete and technical issues with vendors are resolved, and all as-built information is accepted from vendors and as-builts documentation is complete and placed into Infoworks.

1	07	02	09	45	60	80	40	20	Site Prep BNI Field Non-manual services

Description of Scope

Construction management in the field for site preparation will be performed by UPF Construction including:

- Superintendents
- Field Engineers
- Subcontract Technical Representatives

This WBS element also includes support provided to Construction by UPF functional organization staff in the field, including:

- Field Procurement
- Quality Control (QC)
- Geotech support for Subcontractor activities (e.g. 50 blow count testing)
- Project Controls
- ES&H
- Administrative support and a field document management center

Includes support to internal and external reviews of construction progress and compliance with requirements.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	25	Site Prep BNI Field Non-Manual Materials

Description of Scope

Office supplies and services (copiers, computers, etc.) , not included in CSB office subcontract, required to support the Site Preparation and Long Lead CD-3A field non-manual team.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	30	Site Prep Project Integration Support Services

Description of Scope

Office support by UPF project functional organizations providing project integration support for site preparation and long-lead procurements CD-3A scope. The departments include (but not limited to):

- Project Management
- Project Controls
- Procurement
- Engineering • Environment, Safety and Health (ES&H)
- Startup Testing

Includes support to internal and external reviews of construction progress and compliance with requirements.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	40		Site Prep CNS Radcon Support

Description of Scope

CNS Y-12 personnel that perform Radiological control (RADCON) for support of the Site Preparation and Long Lead CD-3A scope only.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	The check and verification of the final truck and material that leaves the site is complete.

1	07	02	09	45	60	80	40	41		Site Prep CNS Support Services Security FY16-FY18

Description of Scope

CNS Y-12 personnel that perform Security responsibilities, including security support during Jack and Bore activities and retaining wall activities near PIDAS, installation of razor wire on the retaining wall, portal support required for the Site Preparation and Long Lead Procurement CD-3A scope.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	Completion of the razor wire installation, completion of the retaining wall and jack and bore activities, and final completion of the CD-3A scope for the portal security efforts. Objective evidence of Y-12 pro-force acceptance of all security features.

1	07	02	09	45	60	80	40	42		Site Prep CNS Non Manual Support

Description of Scope

CNS Y-12 personnel that perform

• DAR reviews and configuration control for any Y-12 affected systems and support of review of revised drawings associated with the CD-3A scope.

• Maintenance Non-Manual planning

• Mission Engineering (Y-12 support)

• Production support (if required) when tying into plant systems.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	Final revised drawings are complete (if required), and final work of tying into the plant's electrical and communication and potable water lines are complete and project closeout report is complete.

1	07	02	09	45	60	80	40	43		Site Prep CNS Manual Support

Description of Scope

- Y-12 FI&S support for work packages
- Maintenance, Labor, and other manual support
- Connection of utilities to the Temporary Construction Trailers
- Refuse/recycling, waste management

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	44		Site Prep CNS Safety Support

Description of Scope

CNS Y-12 personnel that perform safety and industrial health support outside of the daily RADCON and construction ES&H activities during construction.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Non-manual services	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	50	Site Prep Install Temporary Trailers

Description of Scope

Temporary construction trailers will be provided by lease and installed by the supplier in proximity to the construction site to provide construction housing until the CSB can be occupied. This includes the build out of cubicles and hard walled offices.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed priced subcontractor	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Trailers approved for occupancy.

1	07	02	09	45	60	80	40	60	Site Prep Maintain Trailers

Description of Scope

Maintenance of temporary construction facilities including temporary building/facility janitor services, and maintenance of rest facilities.

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS direct hire craft	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	61	Site Prep CSB Move In Labor

Description of Scope

Labor to complete CSB move-in; includes moving of personnel boxes, computers, desks, etc. that are not part of the CSB Outfitting Subcontractor

Method of Accomplishment	Status of Work Scope	Definition of Complete
CNS Y-12 and Subcontract Support	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Complete moving of items into the CSB (that are not related to materials being purchased and set-up by the CSB outfitting subcontractor).

1	07	02	09	45	60	80	40	62	Site Prep CSB Outfitting Subcontract

Description of Scope

An office subcontract will supply and install required amenities for the Construction Support Building erected under the SIS Subproject (WBS 1.07.02.09.45.25) to enable Construction managers, staff, and crafts to occupy the building during construction of UPF; includes partitions/cubicles, office equipment/furniture, installing data and phone wiring, installing data infrastructure, installing wireless network, craft lockers, etc.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Unit Rate Subcontractor	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Amenities installed in the CSB in accordance with the office supply subcontract and verified by procurement staff. Objective evidence of CNS acceptance.

1	07	02	09	45	60	80	40	70	Site Prep Tower Crane Procurement, Installation, & Maintenance

Description of Scope

Procurement of two tower cranes that will be used in building construction, including erection, certification, and maintenance.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Priced / Fixed Unit Price Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Tower crane is erected and passes certification for use. Maintenance is performed through the period of performance of the CD-3A scope (maintenance might not be required if MEB is ready to start prior to first planned maintenance).

1	07	02	09	45	60	80	40	80	Site Prep Construction Power Labor

Description of Scope

Installation of construction power across the construction site, as required to prepare site for post Site Prep construction. Scope excludes construction power for Site Prep activities which will be covered under Site Prep Misc Construction Services Labor work package.

Method of Accomplishment	Status of Work Scope	Definition of Complete

CNS direct hire craft	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	81	Site Prep Construction Power Materials

Description of Scope

Materials purchase for construction power for the Site Preparation CD-3A scope of work. Scope includes transformers, boxes, panels, etc. for construction.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Price Purchase Order	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	82	Site Prep West End Feeder Upgrade S/C

Description of Scope

The West End Feeder project will provide power distribution in support of UPF construction activities including the Concrete Batch Plant, Substation and planned Construction warehouse. This temporary line will begin at Pole 5269 of Line 1371 (The New Bear Creek Road power lines) and continue west along the Haul Road to the new Substation, the Concrete Batch Plant, and to the planned Rubb Tents/ New Warehouse. Four unfused cut-outs for maintenance and potential distribution changes have been placed strategically along the line at the tie-in points: substation, batch plant, and warehouse. This project consists of approximately 9,000 linear feet down the right of way with 34 Class 1 wooden poles using ACSR (Merlin) conductor. Power distribution for the Concrete Batch Plant consists of a cut-out switch on the North side of the Haul Road for isolation and an additional span across the road to the area in which the Batch will be constructed.

This scope does not include any EPC past the cut-out switches at the Batch Plant (e.g. sizing the fuses, fused cut-out, conduit installation, etc.). This scope has already been baselined in the Batch Plant Subcontract. Final tie-in for the construction warehouse, once approved, will also be completed by the warehouse contractor at a later date.

Clearing and grubbing the right-of-way is included (~2 acres).

Survey for permanent plant overhead line right of way, from Substation to Pole 5269 of Line 1371, is included in this West End Feeder scope.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Price Subcontract	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

1	07	02	09	45	60	80	40	85	Site Prep BNI Field Procurements & Materials

Description of Scope

Purchase of:

• Materials needed for installation and maintenance of utilities to the Temporary Construction Trailers/facilities & Subcontractor Trailers

• Materials for site maintenance (silt fence, gravel, ice melt, straw, seed, etc.)

• Materials for maintenance of roads and walkways (gravel, concrete, fencing, geotextile fabric, etc.)

• Sealands for short-term shops

• Miscellaneous/supplemental purchases during scope execution

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Price Purchase Orders	Work Planned	All physical work identified in the scope of the CD-3A package is complete and CNS has accepted installation and construction of defined scope. Support for subproject closeout report is complete.

1	07	02	09	45	60	80	40	90	Site Prep Construction Equipment, Tools & Supplies

Description of Scope

Purchase of:

• Hand tools: shovels, hammers, saws, drills, etc.

• Safety supplies (PPE) and consumables: hard hats, gloves, glasses, etc.

• Field Communications including two-way radios, wireless utilities

• Traffic Control: barrels, signs, etc.

• Construction equipment purchase and rental, including General Services Administration (GSA) vehicle agreements

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Price Purchase Orders and GSA agreements	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement. Note: Materials and equipment received and accepted by CNS.

1	07	02	09	45	60	80	40	95	Site Prep Misc Construction Subcontracts

Description of Scope

- Surveys to confirm mass concrete fill boundaries through mass excavation and final subgrade elevations.
- Independent subject matter expert (SME) testing of concrete, soil compaction, and penetration testing
- Hoisting and rigging activities.
- Trucking and hauling of soil, rock, and debris to approved disposal areas.

Method of Accomplishment	Status of Work Scope	Definition of Complete
Fixed Unit Price Subcontractors	Work Planned	Completion of scope supported by the evidence cited in the standard closure evidence statement.

Reporting Requirements	
The Federal Project Director and Contracting Officer, with inputs from other Government personnel, will verify the on time submission of project reports that meet DOE/NNSA requirements contained in the Data Item Descriptions (DIDs). The Government will perform this verification by comparing the DOE/NNSA requirements contained in the following DIDs to the deliverables provided by the Contractor:	
Data Item Description	Title
DID-PM-0026/T	Monthly Project Report
DID-PRG-0022/T	Integrated Program Management Report (IPMR)
DID-PRG-0021	Monthly Status PARS II Report
DID-PM-0001/T	Document of Trend Board/Change Control Board Meetings
DID-PM-0027/T	Resource Loaded Schedule (Baseline and Forecast to be provided monthly)
DID-PM-0029/T	Total Project Cost
DID-PM-0036/T	Federal Project Director Quarterly Project Review (to be provided monthly)
DID-PM-0041/T	Project Closeout Report
DID-ENG-0002	As-Built Drawings
DID-ENG-0021	Engineering Drawings
DID-PM-0004	Project Completion Verification
DID-PM-0022	WBS & WBS Dictionary
DID-SAF-0017	Occurrence Report
DID-SAF-0018	Lesson Learned Report
NA	Monthly Labor Charges Report
NA	Weekly Construction Status Report

OT-CST-1006	Weekly Working Construction, Engineering, and Procurement Schedules. Shall be provided as hard copy AND native format.
OT-CST-1005	Daily Construction Status Reports
NA	Construction Work Packages
TBD	Weekly Work Plan (per Y17-95-64-818, Rev. 2)
DID-ENG-0026	Request for Deviation
DID-PM-0001	Change Control Board Log and Minutes
DID-PRG-0022	Contract Performance Report
DID-SAF-0005	Hazards Analysis Report
DID-SAF-0014	Integrated Safety Management Plan
DID-SEC-0003	Security Plan

APPENDIX B

COST PLUS INCENTIVE FEE (CPIF) MODEL/GRAPH

SP/LL CD-3A Incentive Fee - Terms

The Government will use the following CPIF Model terms for SP/LL fee calculation.

P_T = Target Price // Estimated Target Price ($) if all available fee earned.

F_A = Available Fee // Combined unrealized Target Fee and Schedule Fee ($).

C_T = Target Cost // Negotiated Target Cost ($).

F_T = Target Fee // Negotiated Target Fee ($).

F_S = Schedule Fee // Negotiated Schedule Fee ($).

C_{UT} = Under Target Cost // Actual Costs ($) when Maximum Fee realized.

F_{MAX} = Maximum Fee // *Maximum Fee ($) realized for Under Target Cost.*

C_{OT} = Over Target Cost // Actual Costs ($) when Minimum Fee realized.

F_{MIN} = Minimum Fee // *Minimum Fee ($) realized for Over Target Cost.*

C_{TAC} = Total Allowable Cost // Actual Cost ($) the Contractor can claim.

F_{TA} = Target Fee Adjustment // Calculated Fee Adjustment ($) for Under/Over.

F_{ATF} = Adjusted Target Fee // Calculated Fee Adjustment ($) applied to Target Fee.

F_{AFF} = Adjusted Final Fee * // Calculated Fee Adjustment ($) for Schedule.

P_C = Contract Price ** // Calculated Contract Price ($) after Final Fee applied.

* Final fee determination will be made using Government CPIF Excel model formulas.

** Earned fee rules apply in determining final Contract Price.

Share Ratios: Government Under/Over Target Shares, expressed as the Government percentage share of cost risk over the Contractor percentage share of cost risk.

Under Target Share = S_{GU}/S_{CU} // Government Share (%)/Contractor Share (%).

Over Target Share = S_{GO}/S_{CO} // Government Share (%)/Contractor Share (%).

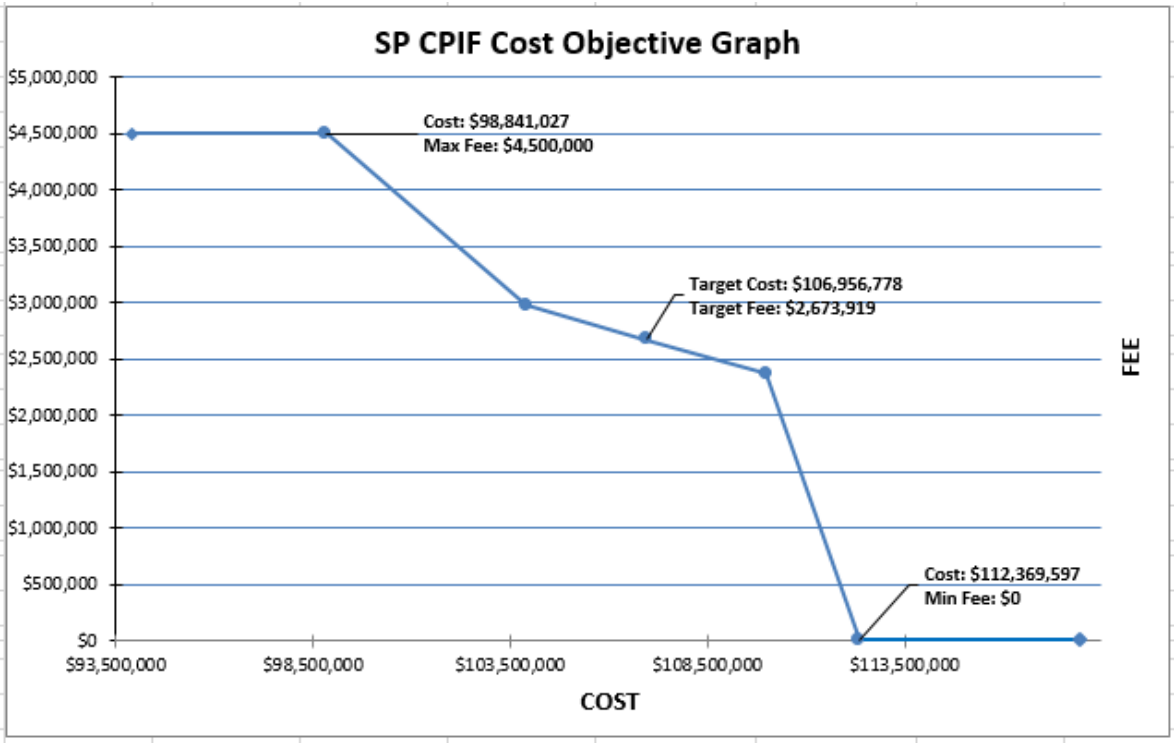

Figure 1: SP CPIF Cost Objective Graph

APPENDIX C
GOVERNMENT OVERSIGHT MODEL

Cost Objective: The Government will oversee Cost Performance by verifying the Contractor's approved baseline data to ensure mission commitments are met with timely, high quality deliverables, in accordance with DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Cost Objective includes, but not limited to:

- Complete authorized scope in accordance with the approved Performance Measurement Baseline; provide timely project reporting.
- Manage a deliverable-based Work Breakdown Structure (WBS); cost control accounts, work packages and planning packages consistent with WBS/scope.
- Use established DOE earned value methods, measure work accomplishment, and assess project performance; perform variance analysis to identify, correct, and report problems; and monthly evaluate Estimates at Completion (EAC).
- Expend funds and resources that optimally provide the maximum benefit to the Government; perform proactive and effective subcontract management oversight of subcontractors to ensure effective cost performance controls.
- Maintain the total cost under configuration control to ensure impacts of design evolution on procurement, construction, and commissioning are managed effectively; ensure retroactive adjustments to the baseline are not allowed.
- Produce cost estimates compliant to the GAO Best Practices for Developing and Managing Capital Costs Guide and DOE G 413.3-21, Cost Estimating Guide; consider life cycle cost when evaluating proposed project changes.
- Demonstrate effective procurement and subcontract management oversight by driving costs down through competition, making best use of tier two subcontracting opportunities, including maximizing use of fixed price subcontracts and small business participation.
- Establish and maintain a project organization that implements a disciplined conduct of business, EPC commercial best practices, contract management, systems, processes, and procedures in accordance with applicable DOE directives and project requirements.
- Execute quality work products with minimal rework, e.g., designs, specifications, plans, procurement, construction, testing, and commissioning; demonstration of implementation of an approved DOE O 414.1D Quality Program.
- Identify, quantify, avoid and mitigate technical, programmatic, schedule, and cost risks.

APPENDIX C - Continued

Schedule Objective: The Government will oversee Schedule Performance by verifying the Contractor's Integrated Master Schedule (IMS) data to ensure mission commitments are met with timely, high quality deliverables, in accordance with Part III-Section J, Appendix, Appendix N, DOE Order 413.3B and ANSI/EIA-748B, or as defined in Contract. The Government's purview of the Contractor's project management responsibility related to Schedule Objective includes, but not limited to:

- Execute scope in accordance with NNSA approved Project Execution Plans.
- Manage an IMS to support project management, implementation and control; include the total scope of baselined work and identify Work Breakdown Structure (WBS) elements for all activities and milestones; identify interdependencies between project activities/milestones to reflect a credible, logical project sequence; activity durations which are reasonable, measureable, and appropriately detailed for effective management; appropriate activity and resource calendars are employed.
- Baseline the IMS and control the content using the project change control board processes; maintain current project status and credible start/finish forecasts for all to-go tasks and milestones; include project and management controls milestones (e.g., critical decisions, major design reviews, and technology, procurement, construction, testing, and commissioning); incorporate labor, material and equipment resources and ensure reasonable/available.
- Manage a credible critical path as determined by the calculated IMS logic network; ensure adequate schedule margin has been included and clearly defined; ensure the number of lags/leads and activity constraints is reasonable. Incorporate subcontracted activity into schedule/critical path to ensure visibility to the Government.
- Compliance with all applicable environmental, safety, and security requirements. No formal notices of violation or similar citations from a Federal, State, or local regulatory agency; excellent safety DART/TRC rates; no safeguards and security incidents.
- Minimize construction down times; delays to construction activities are minimal, and all delays are proactively identified, tracked, analyzed for patterns, evaluated for quick resolution, and reported expeditiously to CO/FPD.
- Design and engineering products, including material and equipment, shall have the necessary technical and constructability (fabrication) quality to accomplish procurement, fabrication and construction expeditiously without major problems or delays (Title II).
- Provide Resident Engineering representation as directed to support Construction and oversee the design's intent and requirements; exceptions are rare to non-existent without problems or delays (Title III).
- Perform pre-award/award/post-award, surveillance/oversight functions to support

and/or accomplish requirements. Proper source/destination inspection and acceptance provisions are Government special interest items to ensure receipt of quality subcontracted products/materials.

- Identify, quantify and mitigate project schedule risks; perform schedule risk assessments to predict the probability of completing on time.