

SECTION J APPENDIX A

STATEMENT OF WORK

Department of Energy, National Nuclear Security Administration Pantex Plant Management and Operation

Table of Contents

SECTION J.....	1
CHAPTER I. OBJECTIVES, SCOPE, AND REQUIREMENTS	2
1.0 Objective.....	2
2.0 Background.....	3
2.1 The NNSA Mission	3
2.2 The NNSA Organization	4
2.3 Principal Location of Performance.....	4
3.0 Scope	4
3.1 Mission	5
3.2 Financial Management	7
3.3 Enterprise Success	8
4.0 Administrative and Technical Requirements	8
4.1 Integrated Safety Management (ISM), Integrated Safeguards and Security Management (ISSM), Environmental Management System (EMS), and Quality Assurance Systems (QAS).....	8
4.2 Work Authorization (WA) System.....	9
4.3 Information Technology (IT).....	9
4.4 Governance	12
4.5 Environmental Permits and Applications	14
4.6 Defense Nuclear Facilities Safety Board and Other Government Agencies Support and Liaison.....	15
4.7 Interfaces with Other Site Users	15
4.8 Privacy Act System of Records	15
4.9 Communications and Public Affairs.....	16
CHAPTER II. WORK SCOPE STRUCTURE	17
1.0 Programs	17
1.1 Weapons Activity	17
1.2 Other NNSA Program Work	23
1.3 Strategic Partnership Programs (SPP) / Other Reimbursable Work.....	25
2.0 Functional Support.....	25
2.1 General Support.....	25
2.2 Mission Support.....	25
2.3 Site Specific Support	26
CHAPTER III. CURRENT PROJECT STATUS	27
1.0 Project Summary.....	27

CHAPTER I. OBJECTIVES, SCOPE, AND REQUIREMENTS

1.0 Objective

The objective of this Contract is to obtain nuclear production operations services, long-term plant modernization and capability enhancement/stewardship along with other required services to support National Nuclear Security Administration (NNSA) and broader national security requirements assigned to the Pantex Plant. This objective specifically includes obtaining the nuclear operations services required to meet the stockpile requirements derived from the Nuclear Weapons Stockpile Plan (NWSP) updated and released by the President of the United States annually and captured in the Stockpile Stewardship and Management Plan (SSMP). This work includes, but may not be limited to nuclear warhead production, maintenance and disassembly, and support of nonproliferation and counterproliferation activities.

The Contractor shall be responsible for establishing a plan to meet the stockpile production requirements for a minimum of 25 years, including a focus on a five-year rolling period to assist NNSA in the annual Future Years National Security Program (FYNSP) budget development and enterprise planning. This plan should include input and coordination from the NNSA design laboratories and other production plants as required. The Contractor shall be fully responsible for the procurement, processing, manufacture, fabrication, staging, storage and disposition for special nuclear material (SNM), other special materials, high-explosives and nuclear weapon assembly/disassembly functions along with the fabrication of components and final assemblies supporting laboratory and flight surveillance programs required for NNSA Stockpile Stewardship and Management Program activities directed by the Office of Defense Programs (DP). The Contractor shall also be responsible to continue to work with NNSA to identify options for major infrastructure upgrades that enable meeting future production requirements, work with NNSA to identify the optimal infrastructure upgrade approach, and ultimately develop implementation plans for these major upgrades. The Contractor shall be responsible for the management and operation of the Pantex Plant within the Nuclear Security Enterprise (NSE), integrating with other management and operating (M&O) contractors within the NSE, supporting nonproliferation and counterproliferation activities, and planning and operating in a manner that ensures production requirements are met not only annually but in outyears.

Furthermore, the Contractor shall directly support the NNSA Offices of Emergency Operations; Environment, Safety, and Health; Infrastructure; Defense Nuclear Security; Counterterrorism and Counterproliferation; and Defense Nuclear Nonproliferation in addition to other Department of Energy (DOE) offices. Beyond DOE/NNSA, the Contractor shall provide unique services to ongoing missions for other Government agencies, foreign Governments or privately owned organizations within legal and other formal established agreements on a non-interference basis with the DOE/NNSA workload.

In the near-term, the Contractor shall work closely with the NNSA Production Office (NPO) M&O Contractor to execute an effective site separation which will include developing, defining, and finalizing work/service agreements and rules of engagement to ensure the new Contractor has information technology resources and can operate the

Pantex site. This largely involves supporting the migrating of data specific to Pantex and its employees from one combined, highly-entangled network, currently operated and managed by the NPO M&O Contractor, to two separate networks providing Pantex an autonomous network that can be managed by the new M&O Contractor. Based on the anticipated schedule, the Contractor will work with the NPO M&O Contractor to develop work/service agreements which define the roles and responsibilities and associated confidentiality, integrity and availability to ensure the new Contractor can operate Pantex effectively and efficiently. See SOW Chapter I, Section 4.3 for additional information.

This statement of work (SOW) includes four Contract Line-Item Numbers (CLINs). CLIN 0001 covers Contract transition. CLIN 0002 covers the management and operation of the Pantex Plant (Pantex). CLIN 0003 covers Strategic Partnership Projects (SPP). CLIN 0004 and its Sub-CLINS cover capital construction projects.

This Contract will fully support the DOE and NNSA Strategic Vision and NNSA's management of a fully integrated, interdependent, and effective NSE, consisting of all eight NNSA sites, by achieving the following six specific strategic objectives:

- Meeting annual established deliverables/requirements while also identifying ways to improve plant performance and gain operational efficiencies in the overall completion of national security missions for nuclear production operations, including surveillance, assembly/disassembly/disposition, and high-explosive production operations; and supporting nonproliferation and counterproliferation activities requiring Pantex facilities and capabilities;
- Modernizing and maintaining plant infrastructure to ensure near- and long-term reliable production operations and improving performance of infrastructure project planning and execution;
- Developing and deploying new technologies, processes, and procedures to reduce risk to mission delivery;
- Recruiting, developing, training, and retaining the workforce and leadership cadre necessary to complete the work at the Pantex Plant in both the short- and long-terms;
- Delivering on complete mission and project portfolio while implementing efficiencies that accelerate schedule and reduce cost; and
- Identifying and supporting actions that continue to improve the integration required for the DOE/NNSA enterprise to enable success for the Pantex Plant mission(s).

2.0 Background

2.1 The NNSA Mission

The NNSA, established by Congress per the NNSA Act (Title XXXII of the

National Defense Authorization Act for Fiscal Year 2000, Public Law 106-65) as a semiautonomous element within DOE, is responsible for the management and security of the nation's nuclear weapons, nonproliferation, and naval nuclear propulsion programs. It also responds to nuclear and radiological emergencies in the United States and abroad, and NNSA federal agents provide safe and secure transportation of nuclear weapons, components, and special nuclear materials.

2.2 The NNSA Organization

NNSA consists of multiple mission offices - the Offices of Defense Programs; Defense Nuclear Nonproliferation including the Nuclear Counterterrorism and Incident Response Program; Naval Reactors; Office of Infrastructure; Defense Nuclear Security - and various mission support offices such as the Offices of Policy; Partnership and Acquisition Services; Environment, Safety, and Health; Information Management; Cost Estimating and Program Evaluation; Congressional and Intergovernmental Affairs; Public Affairs; and Management and Budget. These offices work closely with NNSA Field Offices to execute and oversee the NNSA mission across the NSE which includes the various site and headquarters locations.

NNSA relies on M&O contractors to manage day-to-day site operations and to adhere to its policies when operating its laboratories, production plants, and other facilities in the NSE. Together, the M&O contractors implement NNSA's wide-ranging mission goals including the Stockpile Stewardship Program managed by Defense Programs, which comprises operations associated with logistics, surveillance, assessment, maintenance, surety, refurbishment, modernization, manufacture, and dismantlement of the nuclear weapons stockpile as well as research, development, qualification, and certification efforts; and the nuclear nonproliferation and counterterrorism and counterproliferation programs managed by NA-20 and NA-80 respectively to include activities such as monitoring and verification in support of arms control and nuclear incident response.

2.3 Principal Location of Performance

The work under this Contract is to be carried out at a variety of locations within and outside the United States, with the principal location of performance being the Pantex Plant (Pantex). Pantex is a government-owned plant located near Amarillo, Texas, on approximately 9,100 acres at Pantex Plant proper and 1,100 acres of detached property called Pantex Lake, approximately 2.5 miles northeast of the main plant. In addition, Pantex leases 5,800 acres south of the plant as a security buffer and owns approximately 1,526 acres of land east of FM2373 that provides an additional security buffer and is being used primarily for agriculture and is also the location of the Pantex Wind Farm. The total acreage under Federal control is approximately 17,460 acres. The facilities at Pantex consist of 602 buildings comprising approximately 3,444,000 gross square feet.

3.0 Scope

The objective of this Contract is to perform all necessary operational, coordination, and management functions required to support the NNSA and broader national security

missions assigned to Pantex. This includes but is not limited to all ongoing missions (e.g., weapons programs), projects (e.g., infrastructure modernization), and functions (e.g., safety, security, cyber security, etc.), as well as those that may be assigned during the term of the Contract. It further includes all infrastructure management and maintenance; information technology and state-of-the-art cybersecurity protocols and applications; human resource management including critical skills recruitment, training, and retention; environmental and waste management; emergency management, health, safety, and security systems; armed protective forces; safeguards; and purchasing and other administrative systems.

In the execution of this Contract, and particularly program integration, the Contractor shall meet rigorous quality, reliability, safety, and security standards essential for the U.S. nuclear deterrent; maintain sufficient production capability and capacity necessary to produce at rates defined in NNSA directive and planning documents; and implement flexible and resilient production management and execution processes to accommodate a dynamic national security environment. The Contractor shall balance risk management and lifecycle cost reduction to provide optimized value to the Government. This includes leveraging commercial practices to reduce risk and improve mission delivery. This applies both internally to this Contract and contributing to the overall cost efficiency of the NSE.

The Contractor shall be fully responsible and accountable for the safe, reliable, and secure accomplishment of all work regardless of the location of performance, whether performed by its own personnel or team members, subcontractors, staff augmentation, Inter-Entity Work Order, or other agreement or arrangement. The Contractor shall be responsible for performance of analyses requested by Program offices, planning and coordinating production and modernization schedules; integrating, managing and executing the programs; supporting and executing large and small projects; working collaboratively with National Laboratories to develop and deploy modern and essential technologies and capabilities; and completing operations and other activities as described in this SOW and Work Authorizations issued by the Contracting Officer.

3.1 Mission

The Contractor shall safely, securely, reliably and with high quality standards complete all mission responsibilities and improve overall performance in the completion of national security missions for nuclear explosive assembly/disassembly operations, surveillance activities; material staging; high explosives manufacturing; activities in support of monitoring and verification; emergency preparedness and response; and other designated national security missions, at Pantex. NNSA has a Work Breakdown Structure (WBS) that is discussed further in Section J, Appendix R. The Contractor shall perform, including but not limited to, the following:

- (i) Recruit, retain, train, and develop the necessary workforce, including leadership team, for success in both the short- and long-term.
- (ii) Sustain and improve essential capabilities and capacities for: procurement of materials and services; nuclear production; nuclear weapon

assembly/disassembly/disposition; surveillance operations; specialized applied research and development (R&D); the production and component fabrication for high-explosives and the management of SNM at Pantex.

- (iii) Develop, jointly with the NNSA and National Laboratories, the authorization basis to perform nuclear explosive operations;
- (iv) Implement, maintain, and optimize the authorization basis in such a way as to support safe, efficient, effective, and sustainable operations;
- (v) Operate material manufacturing, weapon assembly/disassembly facilities and their systems within the approved authorization basis and with discipline and rigor in operations necessary for high hazard nuclear explosive and explosive operations;
- (vi) Maintain security for facilities and assets as defined in Departmental Safeguards and Security policies and orders;
- (vii) Assure the availability of core capabilities and minimum necessary capacity, regardless of stockpile size as required by plant mission;
- (viii) Implement and oversee the nuclear explosive and weapons surety program to include nuclear weapon/nuclear explosive safety, security, use denial, and use control;
- (ix) Sustain and modernize plant infrastructure, facilities, processes, and equipment to reduce risk to mission delivery and improve efficiency;
- (x) Manage numerous small and large projects, including capital construction, major items of equipment, and information technology projects from conception through design and execution to operational readiness and improve project performance and execution;
- (xi) Interface and integrate with and support other contractors performing work at any of the NSE sites;
- (xii) Balance available resources to meet mission requirements and infrastructure sustainment while maintaining safe, secure, reliable, high quality, environmentally compliant and resilient operations;
- (xiii) Effectively partner with other contractors within the NSE to support the master production schedule by managing all production activities at Pantex and be responsible for the execution of SNM, high explosives, nuclear weapons assembly/disassembly/disposition, dismantlement, and surveillance functions in support of the Stockpile Stewardship Program. In performing this responsibility, issues between the NSE contractors will be brought to NNSA management for resolution;
- (xiv) Maintain a Nuclear Enterprise Assurance program to reduce the risk of

subversion of the U.S. nuclear weapons stockpile and equipment or its supporting NSE by a sophisticated and well-resourced adversary; and

- (xv) Support the nuclear nonproliferation and counterterrorism and counterproliferation programs managed by NA-20 and NA-80 respectively to include activities such as monitoring and verification in support of arms control and nuclear incident response.

3.1a Projects

The Contractor shall safely, securely, reliably and with high quality standards complete all infrastructure projects to include small scale infrastructure maintenance and improvements and large-scale infrastructure modernization projects. The Contractor shall develop and implement project plans commensurate with the size and complexity of the project being undertaken, incorporating commercial best practices and innovative approaches to drive schedule and cost performance improvements.

3.2 Financial Management

The Contractor shall support the DOE/NNSA Planning, Programming, Budgeting and Evaluation (PPBE) process. In supporting PPBE, the Contractor shall provide financial data for Government systems, such as:

- Standard Accounting and Reporting System (STARS)
 - STARS information is provided under the Institutional Cost Reporting Categories
- iMANAGE
 - Budget Data and Information Systems. The budget information shall be collected in accordance with the Work Breakdown Structure (WBS) (see Section J, Appendix R)
- Facilities Information Management System (FIMS)
- NNSA Integrated Data Warehouse (IDW)

The Contractor shall maintain financial cost reporting systems to provide detailed cost reports for cost, scope, and schedule for direct and indirect costs for all work performed under this Contract. The cost reports shall include labor costs, leave/hours not worked, staff augmentation, fringe, pension, legacy, materials, services-subcontractors, direct service centers, other expenses, capital, labor category, and full-time equivalent (FTE) resource usage for all direct and indirect costs and utilize cost benefit analyses to determine the appropriate level of support functions and risks. The Contractor shall provide NNSA transparency into those financial cost reporting systems and shall provide routine reports to allow NNSA visibility into program and cost management supporting reports to external sources (see Section J, Appendix O, *Program Management and Cost Reports*). The Contractor's financial cost reporting systems shall support the DOE STARS, iMANAGE, Budget and support systems, such as FIMS, as well as other Government systems as they are developed and implemented.

The NNSA will provide the initial historical cost and planning Work Breakdown Structure (WBS) information, FTE data and scope framework during the Transition

Period of the Contract. In accordance, with Section F-7 of the Contract an Annual Control Baseline (ACB) framework and the ACB submission shall be provided for approval. In accordance with Section B-8 of the contract, for subsequent fiscal years, the Contractor shall develop for approval an ACB for all Contractor direct programs and indirect support costs.

The Contractor shall have in place systems and tools to: (1) manage mission and indirect changes in scope, cost, and schedule; (2) compare actual cost of work performed (ACWP) to budgeted cost of work performed (BCWP) and budgeted cost of work scheduled (BCWS); (3) accurately forecast estimate to complete (ETC) and estimate at completion (EAC); and (4) document deviations from the baselines described above in this paragraph and, on a timely basis, notify the Contracting Officer of such changes. Changes shall be minimal and limited to changes outside the Contractor's control. The Contractor shall not make retroactive changes to records pertaining to work performed that will change previously-reported costs, except for correction of errors and routine accounting adjustments and not make retroactive changes for funding fluctuations or revisions in EAC.

3.3 Enterprise Success

The Contractor shall participate with NNSA and other NNSA M&O contractors in developing, evaluating, planning, and implementing strategic initiative activities that optimize mission and business operations across the NSE. The goal of these initiatives is to increase the overall efficiency and cost effectiveness of the NSE from a business and mission perspective, to include:

- Improve plant operations efficiency;
- Improve work practices that benefit both Pantex, as well as other NNSA sites;
- Reduce administrative costs and lead times for both the Contractor and the DOE/NNSA;
- Innovate and collaborate to improve products and delivery methods; and
- Recruit, retain, train, and develop the workforce and leaders required for short- and long-term enterprise success.

NNSA expects these and other initiatives to result in operational improvements, increased resiliency, and efficiency gains within the NSE.

The Contractor shall team with the other NNSA and NSE contractors in identifying potential cross-NSE benefits to be derived from sharing lessons learned, benchmarking, and best practices to benefit the NSE in the areas of mission and enterprise functional support. The Contractor shall team with the NPO M&O Contractor for a successful network separation.

4.0 Administrative and Technical Requirements

4.1 Integrated Safety Management (ISM), Integrated Safeguards and Security Management (ISSM), Environmental Management System (EMS), and Quality Assurance Systems (QAS)

The Contractor shall ensure that ISM, ISSM, EMS, and QAS are integrated into its operations and that its Contractor Assurance System (CAS) accurately reflects timely and relevant Contractor integrated performance data related to these systems, their impacts to mission success, and use the data to improve operations and prevent operational incidents.

4.2 Work Authorization (WA) System

Specific work requirements under this Contract will be established annually and updated as needed by the Contracting Officer in accordance with the applicable DOE Order, NNSA Supplemental Directive 412.1, and the Contract's Section I Clause entitled "DEAR 970.5211-1, *Work Authorization*."

4.3 Information Technology (IT)

Notice: The Contractor will be delayed in full control of the unclassified and, potentially, the classified network and its applications until such time as full site separation is achieved between the NPO M&O Contractor and the Contractor. Specifically, the following information is provided:

The Contractor will not have its own autonomous networks or applications (i.e., business, HR, procurement, email, finance, training, IT service desk, performance management/hiring, etc.) upon transition start. The Contractor will have to work with the NPO M&O Contractor to develop Work/Service Agreements (e.g., transition service agreements) to determine "how" the Contractor will work on the NPO M&O Contractor's networks until network applications are ready for the Contractor to manage from the NPO M&O Contractor's network. The unclassified network development and transition is a two-step process with the following anticipated key milestones: Phase 1, anticipated by February 18, 2025, in which the Contractor will have the ability to manage its own business system applications which reside on the NPO M&O Contractor network; and Phase 2, anticipated by September 30, 2026, in which the Contractor will have its own autonomous network. Until approximately September 30, 2026, the daily continuity of information solutions and services will require the NPO M&O Contractor continue to be solely responsible for providing all enterprise IT/Cybersecurity services throughout the duration of the multistep separation process. This may also include the classified network. In this role, the NPO M&O Contractor must retain configuration authority over all systems and services residing on the Enterprise Unclassified Network (EUN) and, potentially the classified network, until the new Pantex network is complete.

Although IT and Cybersecurity employees would be transitioned to the Contractor, it is anticipated they will be managed and directed by the NPO M&O Contractor until the Pantex network is ready and in accordance with the agreement(s) established by the Contractor and the NPO M&O Contractor. The Contractor will work in concert with the NPO M&O Contractor to support ongoing network applications and data migration with the Contractor's IT and cybersecurity employees working under the direction of the NPO M&O Contractor to continue to build-out the network.

Pantex is responsible for the acquisition, development, operation, maintenance, and disposal of federal IT, including national security systems (NSS), information systems, and operational technologies (herein generally referred to as information resources) on both

classified and unclassified networks. The Contractor shall ensure these information resources conform with applicable federal statutes, regulations, and policies.

The Contractor must balance the need for information resources that meet mission and business requirements while also efficiently using government resources. The Contractor must develop and implement information resources plans and architectures to maintain a modern computing environment for Pantex. The Contractor must prioritize cross-NSE interoperability and collaboration and is encouraged to do the same with other relevant mission partners. These plans shall include, but are not limited to, the implementation of integrated manufacturing-based information systems that support weapons production, SNM accountability, production scheduling and flow, surveillance, weapon retirement, process knowledge archiving, and preservation of production and certification records across multiple NSE sites. The Contractor is encouraged to leverage existing commercial and government services, to the extent, practicable.

The Contractor shall realize the goal of full site autonomy. Some characteristics of site autonomy are:

1. Assumed administration of information systems for Pantex, including those information system services leveraged from commercial and government organizations. It is assumed that information systems offered as a service will likely have shared administration responsibilities between the M&O and service provider.
2. Assumed administration of local-area-network management and network resources for Pantex, except where services are leveraged from commercial and government organizations;
3. Assumed administration of networked operational technologies for Pantex, except where services are leveraged from commercial and government organizations;
4. Operate mission and business processes that leverage information resources, except where a service provider may administer certain technologies.

The Contractor should develop network modernization plans to fully implement Internet Protocol version 6 (IPv6), according to FAR 11.002(g); Personal Identity Verification requirements, according to FAR 4.13.

The Contractor shall establish an IT Governance Board for the review and approval of IT acquisitions and procurements according to DOE Orders and NNSA guidance. The IT Governance Board, in coordination and under the guidance of the Contractor Chief Information Officer (CIO), must ensure that Federal IT Portfolio Management processes, procedures, and reporting requirements are met and that IT procured by the Contractor shall be appropriately identified, coded, and accounted for in the Kansas City National Security Campus (KCNSC) Supply Chain Management Center (SCMC) reporting. The Contractor will adhere to the oversight and recommendations provided by the NNSA Investment Review Board (IRB).

The Contractor, prior to using any Contractor- or Parent-owned software and systems where reimbursement is expected, shall request approval by the Contracting Officer.

The Contractor agrees to and does hereby grant to the Government an irrevocable, nonexclusive, paid-up license by or for the Government, in any Contractor-owned

software and systems brought in and used. Said license shall be limited to the continued nuclear production work by successor contractors. Until the government replaces, or no longer needs the Contractor-owned software, the Contractor will provide current/security updates at no cost. If proprietary hardware is incorporated, the Contractor will provide maintenance and operational support for a minimum of 10 years upon end of the contract, at cost, or until the Government replaces or no longer needs the hardware.

- 43.1 Cybersecurity:** The Contractor is to implement a comprehensive, modern, risk-based cybersecurity program including a cybersecurity architecture aligned with the cybersecurity program, enterprise architecture, and direction of the NNSA Office of the Associate Administration for Information Management and Chief Information Officer (NA-IM). The Contractor shall conduct cybersecurity operations to meet the requirements of Federal, DOE, and NNSA data protection and cybersecurity program at all respective security classification levels, at all times, and as provided and authorized by the federally appointed authorizing official, or enterprise authorizing official, as appropriate. The Contractor shall, as directed, address urgent security concerns identified by NNSA including but not limited to cybersecurity incident management activities. The Contractor shall allow full, unfettered access to system logs and cybersecurity sensor data for all information resources on DOE and NNSA networks to the NNSA Enterprise Security Operations Center, and other entities as directed by NA-IM. The Contractor shall follow the NNSA SD 205.1 for implementation of a cybersecurity baseline program, provide adequate performance metrics to generate a risk-based budget process for the NSE, and adhere to data calls. The Contractor will develop an Annual Operating Plan (AOP) consistent with NA-IM guidance and will perform to the annual NNSA OCIO Performance Execution Guide (PEG). The utilization of COMSEC must comply with all federal requirements as given by National Security Agency (NSA) and Committee on National Security Systems (CNSS), and associated program requirements within the DOE Technical Security Program (TSP) and NNSA TSP. All wireless activities must be reviewed and evaluated by a federal Certified TEMPEST Technical Authority (CTTA), and associated TEMPEST plans must be kept current. The Contractor shall fully integrate the enterprise eGRC tool, adjusting processes to coincide with out of the box implementation, and transition off of the standalone platform currently in place to the enterprise cloud instance as it is stood up. The Contractor shall utilize enterprise approved documentation to the fullest ability.

The Contractor and all subcontractors are subject to and must meet NIST Special Publication 800-171 "Protecting Controlled Unclassified Information in Nonfederal Information systems and Organization" requirements, when conducting work for the federal government. These systems are subject to review and validation of requirements by a designated NNSA inspection team. The Contractor is accountable for issues associated with these contracting activities.

4.4 Governance

Governance is the system of management and controls exercised in the stewardship of the organization. The governance system shall be consistent with NNSA governance documents (such as DOE Order 226.1B and NNSA Supplemental Directive 226.1C, or successor documents, included in Section J, Appendix B, *List of Applicable Directives*).

Contractors must deliver high-quality mission results in a safe, reliable, and secure manner. The Contractor will focus on NNSA transformation activities that maximize the ability to complete the mission in a way that ensures effective and efficient stewardship of the taxpayers' money. The Contractor shall streamline operations and improve efficiency to maximize mission accomplishment through a common understanding of expectations and performance accountability, supported by a strong Contractor Assurance System (CAS). The Contractor shall have a CAS as a subordinate and supporting feature of Governance as described in 4.4.1 below.

4.4.1 Contractor Assurance System: The Contractor shall establish and implement a Contractor designed and utilized system to manage performance consistent with Contract requirements. The CAS shall be a primary tool used by Contractor management to measure and improve performance, ensure that mission objectives and Contract requirements are fully integrated into all operations and effectively met; ensure that workers, the public, and the environment are protected; ensure that security and cyber security requirements are met and maintained; and ensure that operations, facilities, and business systems are efficiently and effectively operated, maintained, and protected. An effective CAS integrates Contractor management, supports parent organization(s) governance and facilitates Government oversight systems as described in DOE Order 226.1B. NNSA oversight shall not be relied upon by the Contractor as the primary feedback in assessing its performance. The Contractor is fully accountable for performing its own assessment of these areas.

4.4.2 Standards and Directives Reform: The Contractor shall submit a plan within 180 days after the start of Base Period that identifies standards (e.g., ISO 9001, 14001, 18001, or other international or industry standards) to be utilized to replace other DOE requirements and provide the ability for the Contractor to operate with industry best practices. The plan shall describe how quickly the Contractor will achieve ISO certifications or other recommended standards but commit to completion no later than by the end of the second year of the Base Term. In addition, the Contractor, as part of its governance, shall continuously evaluate and examine DOE directives, orders, and requirements to propose needed exemptions or modifications to allow the Contractor to operate in the most effective and efficient manner.

4.4.3 Parent Organization(s): Recognizing M&O contractors are entities formed exclusively for the purpose of a particular contract, Parent Organization(s) have an important role in supporting Contract performance through stewardship, oversight, and reachback. On an annual basis, the Contractor shall develop, at a date established by the Contracting Officer with input from the Contractor, a multi-year Parent Organization(s) Plan, in accordance with

Section H-17 Parent Organization(s) that addresses the areas below.

Pantex Plant Stewardship

As valued partners, the NNSA recognizes that its M&O contractors are stewards of more than just the physical site. Each of the NNSA M&O sites represents an institution with a rich history and a critical mission. Parent Organization(s) have an important role in helping the Contractor to be a thoughtful steward of the institution and the workforce. To that end, on an annual basis, the Contractor shall secure commitments from its Parent Organization(s) to assist the Contractor in its stewardship of the Pantex institution. The commitments shall include, but are not limited to, the Parent Organization(s) identifying and bringing specific world class and best practices to enhance the long-term vitality of the site. Commitments shall respond to issues at the site and should position Pantex to respond to future production and security challenges.

Oversight

Parent Organization oversight is essential to improving Contractor management and performance, ensuring compliance, as well as providing independent reviews of functional areas related to mission work. The Contractor shall identify in the Parent Organization(s) Plan opportunities for the use of Parent Organization's(s') corporate systems and corporate home and branch office personnel for the purposes of monitoring plant performance and assisting the plant in meeting its mission and operational requirements. The term "systems" means any discrete process, procedure, program, document, or instrument where cost of use under this Contract can be identified and quantified to the Parent Organization(s).

Parent Organization Reachback

Parent Organization(s) have unique expertise, and extensive reachback to many employees nationally and worldwide. During Contract performance, support from Parent Organization(s) may be required to address unique tasks and challenging issues related to mission work at Pantex, provide surge support and subject matter experts as needed, and provide any other workforce reachback as needed. The Contractor's Parent Organization Plan shall address how its Parent Organization(s) will provide reachback support to enhance Contract performance.

- 4.4.4 Performance Evaluation and Measurement Plan:** The Contractor shall participate in the formulation of Performance Evaluation and Management Plans (PEMP) that covers a defined period of time. The PEMP shall include performance goals, objectives, and key outcomes, and may include other measures of performance as developed by NNSA as a part of its Corporate Performance Evaluation Process (CPEP).
- 4.4.5 Performance Metrics:** The Contractor shall propose a list of performance metrics that provide Contractor and NNSA management an overall

assessment of mission execution and the “health of the supporting operations” quickly and accurately. Once established, the metrics shall be part of the CAS and be provided with transparency to aid in the identification and understanding of significant performance issues.

4.5 Environmental Permits and Applications

In recognition of the Contractor's responsibility to operate in compliance with all applicable environmental requirements, the Contractor is responsible for signing environmental permits and applications as "operator or co-operator" at the site.

- (i) The Contractor shall assist in the NNSA’s National Environmental Policy Act (NEPA) implementation, in a manner consistent and compliant with federal law and regulations (including DOE regulations at 10 CFR 1021) and the NNSA NEPA program as implemented by the NEPA Compliance Officer (NCO), or as may otherwise be directed by the Contracting Officer. The Contractor is not authorized to undertake any action on NNSA’s behalf that is subject to the National Environmental Policy Act (NEPA) until NNSA has notified the Contractor that the NNSA has satisfied applicable NEPA requirements. Additionally, the Contractor shall implement an auditable system of internal controls to ensure that NEPA reviews are completed before decisions are made on the implementation or performance of proposed programs, projects, or other activities. The Contractor shall perform an annual performance assessment on the internal NEPA completion controls compliance; report the results to the head of the program or field office; provide access to all data and analyses associated with NEPA compliance activities; and report, as required by the appropriate NEPA Compliance Officer, on issues and activities that may require NEPA reviews.
- (ii) If bonds, insurance, or administrative fees are required as a condition for such permits, such costs shall be allowable. In the event that such costs are determined by NNSA to be excessive or unreasonable, NNSA shall provide the regulatory agency with an acceptable form of financial responsibility.
- (iii) The Contractor shall accept, in its own name, service of notices of violations or alleged violations (NOVs/NOAVs) issued by Federal or State regulators to the Contractor resulting from the Contractor’s performance of work under this Contract, without regard to liability. The allowability of the costs associated with fines and penalties shall be subject to clauses of this Contract. The Contractor shall notify the Contracting Officer promptly when it receives service from the regulators of NOVs/NOAVs and fines and penalties. Nothing stated above shall affect the Contractor’s right to challenge or contest the applicability or validity of such NOVs/NOAVs and fines and penalties.
- (iv) In the event of termination or expiration of this Contract, NNSA will require the new Contractor to accept transfer of all environmental permits executed by the Contractor.
- (v) When providing NNSA with documents that are to be signed or co-signed by

NNSA, the Contractor will accompany such document with a certification statement, signed by the appropriate Contractor corporate officer, attesting to NNSA that the document has been prepared in accordance with all applicable requirements and the information is, to the best of its knowledge and belief, true, accurate, and complete.

4.6 Defense Nuclear Facilities Safety Board and Other Government Agencies Support and Liaison

The Contractor shall support NNSA in interfacing with various Government agencies such as the Defense Nuclear Facilities Safety Board (DNFSB), Department of Defense and state regulatory agencies.

The Contractor shall conduct activities in accordance with the applicable DOE directive and guidance on interface with the DNFSB. The Contractor shall be accountable for ensuring that subcontractors at any tier adhere to these requirements.

4.7 Interfaces with Other Site Users

Within 90 calendar days after the start of the Transition Period, the Contractor shall submit, for Contracting Officer approval, an Interface Management Plan (IMP) to identify and manage all site interfaces/services between DOE, NNSA, DOE/NNSA contractors, and tenant entities engaged in onsite activities. The IMP will also incorporate contractors and subcontractors to these entities, as directed by the Contracting Officer. The IMP should identify any costs related to other site users. Services may be provided by the Contractor on a cost recoverable basis as approved by the Contracting Officer. The IMP shall also address security in accordance with Section J, Appendix A, *Statement of Work*, Chapter II, 1.2.4, Defense Nuclear Security. The Contractor IMP(s) will become part of the Contract as Section J, Appendix Q, *Interface Management Plan*. The Contractor shall be responsible for developing and implementing a plan for interfacing and integrating activities with other site contractors and tenant entities consistent with DOE technical direction. Services that require interface agreements shall be provided in accordance with existing or newly developed memoranda of understanding or other appropriate agreements. The Contractor will provide input to the local NNSA office regarding effective support toward common site security and operational objectives. The Government will not consider such input if one contractor has any potential Organizational Conflict of Interest (OCI) with the other contractor that is not adequately mitigated to the satisfaction of the Contracting Officer in an approved OCI mitigation plan.

4.8 Privacy Act System of Records

The Contractor shall design, develop, and maintain a system of records on individuals to accomplish an agency function in accordance with the Contract's Section I Clause entitled "FAR 52.224-2, *Privacy Act*." The applicable systems of records are available on the Federal Register. A list of applicable records will be finalized after Contract award.

4.9 Communications and Public Affairs

The Contractor shall conduct communications, information, and public affairs programs including internal and external communications; community involvement and outreach; interactions with the media, businesses, and the scientific and technical community; and liaison with local, state, Tribal, and federal agencies. The Contractor will coordinate all communications and public affairs efforts with the field office, which will maintain alignment and coordination with NNSA's Office of Public Affairs and NNSA's Office of Congressional and Intergovernmental Affairs.

CHAPTER II. WORK SCOPE STRUCTURE

1.0 Programs

The Contactor shall support the following program activities:

1.1 Weapons Activity

Stockpile Requirements: The National Nuclear Security Administration Act (50 U.S.C. § 2401, *et seq.*) directs DOE/NNSA, “To maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, produce, and test, to meet national security requirements.” The required stockpile levels are identified in the annual NWSP and codified by the President through the issuance of a National Security Presidential Memorandum. The NWSP specifies the size and composition of the stockpile for a projected multiyear period, generally the Future Years Defense Program (FYDP) and Future Years Nuclear Security Program (FYNSP) periods, which the United States needs to maintain to ensure a credible deterrent. Additionally, supplemental policy related to the employment of the Nation’s nuclear capability is provided in other applicable Presidential Policy Directives and National Security Presidential Memoranda. The weapons activity, within NNSA, is specifically tasked with the responsibility to maintain a safe, secure, and effective stockpile for the Nation’s nuclear deterrent without using underground testing. Within the weapons activity construct, Defense Programs (DP) is responsible for assuring that the requisite nuclear warheads, bombs, and weapons-related materials and components are available for the Department of Defense (DoD) for deployment on specified weapon systems in accordance with Presidential direction.

1.1.1 Defense Programs: Within DP, the types of activities include, but are not limited to, stockpile research, technology, and engineering; stockpile management; and secure transportation.

1.1.1.1 Stockpile Research, Technology, and Engineering. This activity provides the foundation for science-based stockpile decisions, tools, and components; focuses on the most pressing investments the nuclear security enterprise needs to meet DoD warhead needs and schedules; and enables assessment and certification capabilities used throughout the NSE. The activity provides the knowledge and expertise needed to maintain confidence in the nuclear stockpile without additional nuclear explosive testing.

1.1.1.1.1 Weapon Technology and Manufacturing Maturation: Technology Maturation is the focused efforts to address critical capabilities needed to achieve key future program objectives. Technology Maturation activities are technically challenging, multi-function efforts that have definitive milestones and specific work plans. Projected work scope within this program includes, but is not limited to:

- 1.1.1.1.1 Supporting advanced technology projects in support of the NSE such as microwave deployment and high explosives development and
- 1.1.1.1.2 Supporting the transition of designated technology projects to production.
- 1.1.1.2 Any production site can be requested to perform research, development, testing, and engineering work for the current and future weapon systems and fabrication of development and test hardware in support of the National Laboratories which consume part of the site's capacity.
- 1.1.1.2 **Stockpile Management.** This activity provides a safe, secure, and effective nuclear weapon stockpile through stockpile modernization, stockpile sustainment, weapons dismantlement and disposition, and production operations support programs.
 - 1.1.1.2.1 **Stockpile Modernization** includes the approved warhead acquisition programs. The programs are necessary to extend the expected life of stockpile systems for an additional 20 to 30 years. Projected work scope includes, but is not limited to:
 - 1.1.1.2.1.1 Meeting current Life Extension Programs (LEP) deliverables inclusive of component assemblies, subassemblies, piece parts; initiation and maintenance of assembly, disassembly, and surveillance operations; shipping container provisioning, shipments to other NSE sites, and shipment and receipt of nuclear weapons from DoD (e.g., B61-12, W88 ALT 370); and
 - 1.1.1.2.1.2 Supporting planning and development for upcoming and future LEPs and weapon programs (e.g., W80-4, W87-1, W93).
 - 1.1.1.2.2 **Stockpile Sustainment** includes maintenance, surveillance, assessment, surety, and management activities for all enduring weapons systems in the stockpile. Projected work scope includes, but is not limited to:
 - 1.1.1.2.2.1 Meeting requirements and schedules defined in Program Directive Documents inclusive of component assemblies, subassemblies, piece parts; initiation of and maintenance of assembly, disassembly, and surveillance

operations; container provisioning; shipments to other NSE sites; and shipment and receipt of nuclear weapons from DoD (e.g., B61, W76, W78, W80, B83, W84, W87, W88, and W93); and

1.1.1.2.2.2 Providing 800-1200 weapon systems equivalent unit operations per year for assembly/disassembly for: (1) surveillance sample disassembly and rebuild, LEP and replacement warhead production, and dismantlement; (2) Joint Test Assemblies (JTA) and Test Beds; and (3) Limited Life Component Exchanges (LLCEs). [The W76 LEP (Assembly/ Disassembly) is the standard equivalent unit. All other weapons program deliverables are defined as either 0.xx or 1.yy equivalent units.]

1.1.1.2.3 **Weapons Dismantlement and Disposition** includes retired weapons disassembly, recycling of material and hardware for other applications, disposition of retired excess weapons components, and ensuring the on-going safety of retired systems through testing prior to their dismantlement. Projected work scope includes, but is not limited to:

1.1.1.2.3.1 Meeting requirements and schedules defined in Program Directive Documents inclusive of initiation of and maintenance of dismantlement operations, safety testing, and disposal of components; container provisioning, shipments to other NSE sites, and shipment and receipt of nuclear weapons from DoD (B61, W76, W78, W80, B83, W84, W87, and W88); and

1.1.1.2.3.2 Interim staging of SNM components;

1.1.1.2.3.3 Disposition of excess legacy components from weapons activities.

1.1.1.2.4 **Production Operations** provides engineering and manufacturing labor, quality assurance, and programmatic equipment support for the manufacturing base that enables the individual site capability and capacity to sustain the NSE's production mission. Enables modernization of existing production capabilities to improve efficiency and resilience. These areas include but are not limited to:

1.1.1.2.4.1 **Engineering Operations** are internal plant-

wide activities that establish product process flows and improvements, develop and maintain operating procedures, determine critical design parameter and manufacturing process capabilities, establish process controls, metrics and quality indices, and establish and maintain process safety controls/assessments;

1.1.1.2.4.2 **Manufacturing Operations** are activities that manage and provide oversight to manufacturing departments and all internal non-weapon-type specific manufacturing operations and processes, material controls, supervision, planning and scheduling, inventory control, packaging, shipping and procurement, internal production-related transportation, and internal production related safety activities. It also includes classified manufacturing operations that cannot be associated with a particular warhead;

1.1.1.2.4.3 **Quality Supervision and Control** includes activities dealing with quality control; supervision of general in-line inspection and radiography; procedures development and execution; process control certification for Mark Quality products; measurement standards and calibration techniques; calibration of equipment, tooling, gages and testers; and Quality Assurance-related equipment/processes for certification;

1.1.1.2.4.4 **Tool, Gauge, and Equipment Services** are activities that include preparation of specifications and designs for non-weapon-type specific tooling including tools, gages, jigs and fixtures and test equipment, as well as design and development of tester software including tester control and product assurance. This category also includes work related to verification/qualification of hardware and software, procurement processes, and maintenance, both corrective and preventative that directly support production-related equipment/process components;

1.1.1.2.4.5 **Electronic Product Flow** activities include planning, engineering, supplier management, and logistics activities associated with the materials supply chain; and

1.1.1.2.4.6 **Purchasing, Shipping, and Material**

Management activities include internal plant-wide purchase, design, development, installation, configuration, testing, training, and maintenance of classified and unclassified computer systems including hardware and software. These activities are directly linked to the performance of site-specific production functions, but are separate and distinct from general-use administrative and office-automated systems. Supported systems in both unclassified and classified environments enable manufacturing and quality assurance functions.

1.1.1.2.5 Nuclear Enterprise Assurance

is NNSA's countersubversion program formally established in FY2023 that addresses adversarial threats to nuclear weapons (NW) and the NW-enabling capabilities required to perform R&D, design, produce, and test nuclear weapons.

1.1.1.3 Secure Transportation Asset: This activity includes the movement of weapons and materials between NNSA and DoD sites. Key facilities are located near Albuquerque, New Mexico, Amarillo, Texas and Oak Ridge, Tennessee. Support under this Contract shall include maintenance of facilities, vehicle maintenance and support, and other related activities.

1.1.1.4 Production Modernization (PM): This activity includes programs related to Pantex Modernization activities (High Explosives & Energetics and Warhead Assembly). These Programs are responsible for modernizing critical material production and processing capabilities and capacities to meet NNSA's strategy and program of record. Types of activities to support these Programs include, but are not limited to, major capital acquisitions, numerous small projects, new technology development and deployment, operations of process equipment, and managing the transition out of legacy production facilities. Major initiatives include the design, construction, and operation of High Explosives Science and Engineering Facility and High Explosive Synthesis, Formulation, and Production Facility. Major ongoing activities include additive manufacturing.

1.1.2 Infrastructure and Operations: Infrastructure and Operations provides the physical and operational infrastructure required to conduct the scientific, technical, and manufacturing activities of the Stockpile Stewardship Program. The I&O mission is to ensure that the sites comprising the NSE are implementing the technologies and methods necessary for acquisition, sustainment, disposition, and space management to make infrastructure and

operations safe, secure, reliable, energy efficient, and cost effective and that the right facilities and infrastructure are in place to manufacture and certify the 21st century nuclear weapons stockpile.

The key areas within I&O include the people, systems, and processes that NNSA needs to succeed in delivering mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of NNSA's existing facilities and infrastructure as well as executing a world-class project management program that enables the timely delivery of complex major construction and capital projects for the Nuclear Security Enterprise. Projected work scope within this program includes the following to execute NNSA's infrastructure and operations mission, but is not limited to:

- (i) Planning, project and program management, and real estate support of acquisition, operations, maintenance, modernization, and disposition for NNSA's infrastructure;
- (ii) NNSA Operations of Facilities Program;
 - A. Manage and disposition waste generated at the plant;
 - B. Operate the Wind Energy System (Pantex Wind Farm) as part of the Pantex Renewable Energy Project (PREP);
- (iii) NNSA Recapitalization Program;
 - A. Disposition Program to support footprint reduction;
 - B. Streamlined Project Execution, Acquisition & Recapitalization (SPEAR);
 - C. Energy Resilient Infrastructure and Climate Adaptation (ERICA) Projects;
- (iv) Maintenance & Repair Program;
 - A. Oversee roofing projects under Enterprise-wide Roofing Asset Management Program;
 - B. Oversee cooling and heating projects under the Enterprise-wide Cooling and Heating Asset Management Program;
 - C. Maintain BUILDER information management systems;
 - D. Maintain the Wind Energy System (Pantex Wind Farm) as part of the Pantex Renewable Energy Project (PREP);
- (v) Project Management
 - A. The Contractor shall perform design and construction activities for all minor construction and General Plant Projects. New major construction projects, including Expense and Line Item, may be included if determined by the NNSA to be in the Government's best interest.

- B. The Contractor shall perform initial project development (for all projects, including IT related projects, regardless of dollar value), project management, design, and construction management activities in accordance with required DOE Orders.
- C. The Contractor shall recognize existing Construction Labor Agreements and shall require subcontractors engaged in construction on the construction project to recognize the Construction Labor Agreement.
- D. Line Item Capital Projects covered by this Contract include, but are not limited to:
 - High Explosive Science and Engineering (HESE) Facility
 - High Explosive Synthesis, Formulation and Production (HESFP) Facility
 - Material Staging Facility (MSF)
 - The status of Line Item Projects is described further in Chapter III, below.

1.2 Other NNSA Program Work

1.2.1 Environment, Safety and Health: These programs include Site Stewardship, Long-term Environmental Stewardship, Nuclear Materials Management Team, and energy savings initiatives required by the DOE. Projected work scope within this program includes, but is not limited to:

- (i) The Contractor shall maintain project baselines, develop Documented Safety Analysis, define quality requirements, ensure NEPA compliance, provide quarterly reports to the NNSA for assigned projects, support external reviews, and meet other requirements as directed by the Contracting Officer;
- (ii) Maintain and deliver containers according to Shipment Schedules in support of stockpile management and other missions;
- (iii) Execute the Long Term Stewardship program to meet NNSA and regulatory requirements;
- (iv) Safe and secure storage, management, transportation, and disposition of nuclear and non-nuclear materials (weapon and test assemblies, pit staging, high-explosives materials, mark quality materiel storage) and satisfy NNSA and other DOE customer material requirements;
- (v) Support DOE enterprise-wide nuclear materials management and storage initiatives including, supporting the development and update of material management plans, and supporting the DOE Nuclear Materials Management Team, as requested;

- (vi) Support packaging safety and program execution activities;
- (vii) Develop and implement of Site Sustainability plans and other related documents;
- (viii) Support waste management activities; and
- (ix) Support ESH-driven data analytics activities, including Safety Analytics, Forecasting Evaluation & Reporting (SAFER).

1.2.2 Nuclear Counterterrorism and Incident Response (NCTIR): The NCTIR program, comprised of the Offices of Counterterrorism and Counterproliferation and Emergency Operations, not only ensures the Department's emergency preparedness and response, it also assesses nuclear and radiological threats and uses the scientific knowledge resident at the U.S. national laboratories to inform domestic and international policies and regulations, contingency planning, training, and international capacity-building. These activities strengthen national and international counterterrorism, counterproliferation, and nuclear incident response capabilities. Projected work scope within this program includes, but is not limited to:

- (i) The Contractor shall provide a responsive, flexible, efficient, and effective incident response framework and capability;
- (ii) Apply unique technical expertise within the nuclear security enterprise to prepare, prevent, mitigate, and respond to a nuclear or radiological event domestically or abroad;
- (iii) Partner with DOE/NNSA laboratories to leverage infrastructure, resources, and expertise in support of counterterrorism and counterproliferation goals and objectives.; and
- (iv) Establish and maintain a documented emergency management program that complies with the Contractor Requirements Document within DOE O 151.1D Comprehensive Emergency Management System.

1.2.3 Nuclear Nonproliferation and Arms Control: NNSA's Office of Defense Nuclear Nonproliferation (DNN) works globally to prevent state and non-state actors from developing nuclear weapons or acquiring weapons-usable nuclear or radiological materials, equipment, technology, and expertise. Projected work scope within this program includes, but is not limited to:

- (i) Provide effective and rapid response to emergent nonproliferation and international security requirements;
- (ii) Partner with DOE/NNSA laboratories to leverage resources and expertise in support of nuclear nonproliferation goals and objectives;

and

- (iii) Support of global nonproliferation activities
- (iv) Bolster expertise and technology critical to sustaining NNSA's arms control mission and accelerate the development of new monitoring and verification (M&V) technologies and approaches.

1.2.4 Defense Nuclear Security (DNS): The DNS program protects NNSA interests from theft, diversion, sabotage, espionage, unauthorized access, compromise, and other hostile acts which may cause unacceptable adverse impacts on national security, program continuity, security of employees, and the public. The Contractor shall maintain a safeguards and security program in accordance with the directives and requirements listed in Section J, Appendix B, List of Applicable Directives.

As required by the security assets, the Contractor shall provide a highly trained, competent, qualified, and certified Protective Force (PF) to protect nuclear explosives, SNM, classified matter, and other NNSA property. The actual PF staffing is determined by the posts and patrols and their required hours of operation. The Contractor is expected to provide staffing to meet requirements in a cost-effective manner. These responsibilities include planning, integration, management, and execution of all program elements excluding drug and alcohol testing for all site personnel.

1.3 Strategic Partnership Programs (SPP) / Other Reimbursable Work

This includes the management and execution of other assigned programs related to national security missions for DOE, other Government agencies, foreign governments, or privately owned organizations on a non-interference basis. Work within this scope must be approved by the Contracting Officer.

2.0 Functional Support

The Contractor shall provide:

2.1 General Support

General management and program management functions including executive direction, human resources, financial support services, procurement, legal services, central administrative services, program and project controls, information outreach, information services, and other general support functions.

2.2 Mission Support

Mission support functions including environment, safety and health, facilities management, maintenance, utilities, safeguards and security, logistics support, quality assurance, and laboratory/technical support.

In addition, the Contractor will provide services and support, as directed by NNSA, in the following areas:

- (i) Office of Secure Transportation facilities;
- (ii) DOE Tri-Laboratory Office; and
- (iii) DOE Weapons Evaluation Test Laboratory (WETL) operations operated by SNL.

23 Site Specific Support

Provide site specific support including management and incentive fee administration, state and local taxes, and direction of a DOE-approved Plant-Directed Research, Development and Demonstration (PDRD) Program that supports science-based manufacturing related to the NNSA weapons mission, and encourages advanced research, development, and demonstration work to enhance the science and technology capabilities and core competencies required to fulfill the mission of nuclear production.

CHAPTER III. CURRENT PROJECT STATUS

1.0 Project Summary

1.1 Capital Construction Projects

Project	Site	Capital or MIE	Last CD Approval & Date	TPC or Range (\$M)	CD-4 Date
High Explosive Synthesis Formulation & Production (HESFP) Facility	Pantex	Capital	CD-1: 02/11/2021	\$505 - \$699M	4Q FY2030

- High Explosive Synthesis Formulation & Production (HESFP) Facility Project** – The project consists of planning, design, and construction of three new buildings, access roads, and perimeters for a single synthesis and formulation facility and a blending facility using the current batch process for synthesis at the Pantex Plant. The total facility square footage, based upon the preliminary design, is expected to be about 100,000 square feet. These structures will replace the aging facilities in Zone 11 and 12 with new facilities in Zone 11 that better support program requirements and meet current codes and standards:
 - HESFP Main Building: HE synthesis and HE formulation production to create small batches of HE material.
 - Blending Building: Large scale blending (minimum 5000 pounds per batch). The Blending Building was designed as a separate structure distanced from the other structures to meet explosive safety requirements.
 - Magazine Building: The Magazine Building includes an HE packaging bay and four HE material storage bays. The magazine exhibits a storage capacity of about 20,000 pounds of HE material.

The FY 2024 NNSA budget did not request funding for the project until FY 2027, so the project will be placed on hold until funding is received. However, there is a maintenance plan that allows for the performance of yearly maintenance reviews of the mission, technology and process development, code of record, adjacent infrastructure, and market conditions to note changes that would impact the project upon restart.

Project	Site	Capital or MIE	Last CD Approval & Date	TPC or Range (\$M)	CD-4 Date
High Explosive Science & Engineering (HESE) Facility	Pantex	Capital	CD-2/3: 04/13/2022	\$228M	1Q FY2028

- High Explosive Science & Engineering (HESE) Facility Project** – The project will build three structures totaling 68,500 square feet with associated weather-proofed ramps totaling 4,000 square feet. These structures will replace the aging facilities in Zone 11 with new

facilities that meet current codes and standards and better support program requirements:

- HE Laboratory: Equipment and facility designed to achieve HE Operational Limit of 12 pounds ($\pm 15\%$) HE equivalent.
- HE Staging: Equipment and facility designed to achieve HE Operational Limit of 50 pounds ($\pm 15\%$) HE equivalent for temporary storage.
- Technology Development and Deployment Laboratory (TDDL): Provide necessary laboratory/office space for approximately 73 personnel to support the weapons complex mission.

The HESE project is in the early stages of construction and is expected to have cost and schedule growth with projected total project cost increase of 20-35% and a CD-4 approval delay of 1 to 2 years.

Project	Site	Capital or MIE	Last CD Approval & Date	TPC or Range (\$M)	CD-4 Date
Material Staging Facility (MSF)	Pantex	Capital	CD-0: 11/24/2015	TBD	TBD

Material Staging Facility (MSF) Project – The project has been placed on hold due to the unavailability of funding in the NNSA budget, but it may receive funding during the term of this contract.