

**SECTION J
APPENDIX A**

STATEMENT OF WORK

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

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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).

The Contractor shall be responsible for establishing a plan to meet the stockpile production requirements for a minimum of a 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. 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, 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.

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 objectives:

- Improving plant performance in the overall completion of national security missions for nuclear production operations, surveillance; and assembly/disassembly/disposition operations, high-explosive production operations centers of excellence; and support 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, retaining, and developing 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; Naval Reactors; Emergency Operations; Office of Infrastructure; Defense Nuclear Security; and Counterterrorism and Counterproliferation - 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; incident response; and other designated national security missions, at Pantex. 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; 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.
- 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. 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.

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, collaborate, and 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 remaining sections will be provided later in the Draft Request for Proposal.