Managed and Operated by Consolidated Nuclear Security, LLC

Pantex Overview
Mark Padilla
Assistant Manager for Programs and Projects
NNSA Production Office
Pantex Overview

- Pantex is government owned by the National Nuclear Security Administration (NNSA), an agency within the Department of Energy

- Pantex is contractor operated by Consolidated Nuclear Security, LLC
Mission

- Provide the nuclear deterrent for our nation and allies
- Ensuring our stockpile is strong and viable
- Reducing the total nuclear weapons in the stockpile
- Supporting the stockpile as the High Explosives Center of Excellence
Pantex is Operated for the NNSA by CNS

Bechtel
- Project Management
- Construction
- Operations

Leidos
- Operations
- Information Technology
- Engineering
- Supply Chain Management

Orbital ATK
- High Explosives
- High-Hazard Operations

Booz, Allen, Hamilton
- Transformation
- Cost Savings

SOC
- Security
- Safeguarding SNM

CNS contracts with the private sector on behalf of NNSA and with oversite by the NNSA
Pantex is a Production Site in the NNSA Nuclear Security Enterprise

The NNSA Production Office and CNS LLC manages both the Pantex Plant and the Y-12 National Security Complex
Site Overview

- 617 buildings totaling 3.12M square feet
- 55.7 miles of paved and 10 miles of unpaved road
- 4 boiler, natural gas-fired steam plant
- 9.6 miles of overhead steam/condensate return line
- 21.3 miles of natural gas distribution line
- 30 miles of main line water piping
- 5 producing water wells
- 14 miles of sanitary sewer line, and 16 lift stations
- ~20 miles of aerial electrical distribution lines
- ~100 miles of underground electrical distribution lines
- 5 DOE wind turbines supply ~60 percent of plant electricity
A Proud History of Service to our Nation

- **1942** – Last of 14 bomb-loading plants constructed during WWII. Produced 250- and 500-pound bombs during WWII. Peak employment 5,254 (60% female)

- **1945** – Pantex closed

- **1947** – Texas Technological College established agricultural research farm

- **1951** – Pantex recaptured by the Atomic Energy Commission and refurbished for nuclear weapons work

- **1956** – New weapons designs and facility designs come to Pantex operations

- **1960** – New high explosives mission

- **1965** – Surveillance mission begins

- **1991** – Disassembly mission
Pantex

• Vital part of the national nuclear weapons enterprise
• Diverse workforce and unique manufacturing capabilities
• Transforming to ensure enduring security of our nation
• Vital members of our community

Your partnership is needed to transform Pantex to ensure the enduring security of our nation in the coming decades
Opportunities Overview
Steve Laggis
Senior Director, Infrastructure Programs
CNS
Pantex Opportunities - Takeaways

• Pantex is a large industrial complex with a proud history of service to the nation and a long future of serving the nation’s nuclear security

• The government has begun the revitalization of the Pantex infrastructure and is committed to continuance of the revitalization in support of the nuclear security mission

• That revitalization requires a strong partnership with the private sector

• The opportunity for this partnership is significant and sustained
  • $80-100 million per year of procurement opportunity over the next 7 years at the Pantex Plant managed by CNS
  • $80-100 million per year of procurement opportunity over the next 7 years at the Y-12 National Security Complex managed by CNS

• Partners in Excellence Outreach Forum held at Y-12 in June
NNSA is modernizing the Pantex infrastructure in support of its nuclear security mission. We need your partnership in this effort.
RECAPITALIZING PANTEX AND Y-12 INFRASTRUCTURE THROUGH AN INTEGRATED APPROACH

**REPLACE** through Line Item construction
- Y-12 Fire Station
- Pantex High Explosives Pressing Facility

**ACQUIRE** through alternatives
- Pantex Administrative Support Complex

**BRIDGE** to new facilities through Maintenance and Repair and Recapitalization
- Y-12 Building 9204-2 Annex Demolition & Structural Repair

**EXTEND** the life of facilities through Maintenance and Repair and Recapitalization
- Pantex Fire Protection Lead-in Replacement
- Y-12 Building 9204-2E Switch Gear Replacement

**ELIMINATE** excess facilities
- Pantex Mobile Structure Demolition
- Y-12 Buildings 9111 & 9112 Demolition

**REINVEST** cost savings
- Y-12 Post 20 and 23 Restroom Installations

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Project execution is increasing to recapitalize aging infrastructure and reduce mission risk
- FY17 Project Portfolio (all funding programs): 244 projects
- Recapitalization Program execution: FY16—$42M; FY17—$103M; FY18—$128M
Preparing Pantex for Future Decades of National Service

Nuclear forces, along with our conventional forces and other instruments of national power, are therefore first and foremost directed towards deterring aggression and preserving peace. Our goal is to convince adversaries they have nothing to gain and everything to lose from the use of nuclear weapons.

Recapitalizing the nuclear weapons complex of laboratories and plants is also long past due; it is vital we ensure the capability to design, produce, assess, and maintain these weapons for as long as they are required. Due to constant underfunding, significant and sustained investments will be required over the coming decade to ensure that National Nuclear Security Administration will be able to deliver the nuclear weapons at the deeded rate to support the nuclear deterrent into the 2030s and beyond.

The President’s 2018 Nuclear Posture Review sets recapitalization of the NNSA Nuclear Security Enterprise as a priority over the coming decade.
Preparing Pantex for Future Decades of National Service

HR 2810, the National Defense Authorization Act for fiscal year 2018

“…Administrator for Nuclear Security shall….establish and execute infrastructure modernization milestones that reduce the deferred maintenance and repair needs of the nuclear security enterprise by not less than 30 percent by 2025.”

H.R.1625 Vehicle for Consolidated Appropriations Act

“Maintenance and Repair of Facilities. —…includes funds above the budget request to address the significant backlog of deferred maintenance at the NNSA sites.”

“Recapitalization - …includes funds above the budget request to address….deferred maintenance.”

Congressional action also sets recapitalization of the NNSA Nuclear Security Enterprise as a priority over the coming decade.
Multi-year revitalization plans have been developed for CNS based upon the executive and congressional priority and budget planning guidance. A robust vendor base is needed to successfully accomplish these plans.
Facility consolidates high explosives operations, improving efficiency and safety

Manufacturing throughput is expected to increase 180 percent

Transportation cost for the life of the building will save $92 million
Work Scope Examples

- Transformer Replacement
- Piping Replacement
- Failed Power Pole Replacements
- Storm Drain Damage
- Construct Replacement Facilities
Recapitalization and Repair Needs

- Steam Coils
- Chilled Water Piping
- Flooding
- Asbestos Insulated Piping
- Fan Refurbishment
- Gas Lab & X-ray
- Roof Leak over Fire Alarm Panel
Additional Pantex Opportunities

• Roof Asset Management Program (RAMP)
  • Anticipate growth
  • Managed at Kansas City Plant
  • Contacts:
    • KCP: John Demski (816) 488-5463
    • Technical Assurance: Dan LaFountain (440) 953-3147 ext.131

• Chiller & Heating Asset Management Program (CHAMP)
  • Anticipate growth
  • Managed at Lawrence Livermore National Laboratory
  • Just getting started
  • Contact: Barb Quivey (925) 784-651
Pantex Opportunities - Takeaways

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Expectations for Partners in Excellence
David Crump
Director, Projects Management
CNS
• Weapons assembly and disassembly
• Life Extension Programs and surveillance for active weapons
• Plutonium pit surveillance
• High explosives components

• Disassembly, refurbishment, and reassembly of canned subassemblies
• Safe, secure uranium storage
• Highly enriched uranium fuel for the United States Navy
• Specialized response training and material recovery to support nonproliferation
MISSION SUCCESS
SAFE—SECURE—ZERO DEFECTS—DELIVER AS PROMISED

CORE CAPABILITIES AND CENTERS OF EXCELLENCE

PEOPLE

PROCESSES AND SYSTEMS

INFRASTRUCTURE

TECHNOLOGY AND INNOVATION

OUR PRINCIPLES
A Learning Organization

- Know Before You Do
- Own the Outcome
- Make the Right Decision for the Right Reasons

- Set High Standards
- Verbatim Compliance
- Attention to Detail
- Eliminate Undesirable Conditions

- Completed Staff Work
- Questioning Attitude
- Participative Decision-Making
- Continuous Improvement

INTEGRITY

TRUST

RESPECT

TEAMWORK

EXCELLENCE
Mission

- Provide the nuclear deterrent for our nation and allies
- Ensuring our stockpile is strong and viable
- Reducing the total nuclear weapons in the stockpile
- Supporting the stockpile as the High Explosives Center of Excellence
John C. Drummond Center (formerly Administrative Support Complex)

- ≈343,000 square foot facility will house about 1,100 employees
- Replaces 52 aging buildings
- Includes general office space, a conference center, cafeteria, visitor's center, medical, and employee health and fitness facilities
- Leased facility
High Explosives Pressing Facility (HEPF)

• Facility consolidates high explosives operations, improving efficiency and safety
• Manufacturing throughput is expected to increase 180 percent
• Transportation cost for the life of the building will save $92 million
High Explosives Science & Engineering Facility (HES&E)

- 73,000 square feet greenfield construction project
- The complex will consist of an HE Lab, HE Staging, and an Technology Development & Deployment lab
- Facility will replace 15 WWII-era facilities with an average age of 64 years old
Working at Pantex

- Pantex is located in Carson County, TX approximately 25 miles northeast of Amarillo, TX. (FM2373 & Highway 60)

- Authorized access is required for all work at the plant site

- Security Police Officer (SPO) escorts are required in security-restricted areas

- All work must be approved in advance to ensure safety and quality requirements are met

- Laydown areas are provided for equipment and materials

- Golden Spread Redi-Mix operates a concrete batch plant located at Pantex for subcontractor purchased products for use on site (806) 373-3270

- CNS is working to consolidate like requirements
Pantex Project Execution Process Improvements

• Pantex initiated a process improvement initiative following the Toyota Production System. The Pantex initiative focuses on project execution within recapitalization projects while sharing the improvements with the entire site.

• To date, the improvement team has focused on security work schedules, contractor access, and laydown areas
  • Results:
    • Security is working 12-hr/day to allow contractors to work ~10/day
    • Pantex opened an additional security gate to streamline access to Zone 12 South saving 45+ minutes/worker/day
    • Pantex is testing the use of laydown areas in the MMA/PA. Round-trip time savings to laydown area exceed 1 hour 30 minutes

• Future improvements will focus on modularization and offsite sub-assembly construction as well as implementing an automated submittal process
Pantex Opportunities – Recapitalization Examples

• **Bay and Cell Modernizations**
  • $124 million (FY19 – FY24)
  • Design Engineering (Electrical, Mechanical), Construction (Safety Class)

• **Lightning Protection System Repairs**
  • $18 million (FY20 – FY24)
  • Design Engineering (Electrical, Mechanical), Construction

• **Building 12-37 Secondary Electrical Feed**
  • $16 million (FY19 – FY21)
  • Design Engineering (Electrical, Mechanical), Construction

• **Multiple Buildings - UPS Installation & Generator Installs**
  • $30 million+ (FY19 – FY24)
  • Design Engineering (Electrical), Construction
Pantex Opportunities – Defense Nuclear Security Examples

• **Replacement of Security Booths**
  - $2 million+ (FY19)
  - Engineering (Electrical, Mechanical, Civil), Construction

• **Security Systems & Infrastructure Upgrades**
  - $25 million+ (FY20 – FY24)
  - Engineering (Electrical, Civil), Construction

• **Vehicle Barrier Installations**
  - $4 million+ (FY22 – FY23)
  - Engineering (Electrical, Civil), Construction
Pantex Opportunities – Disposition & Demolition

• **Zone 11 Facilities**
  • $4 million+ (FY19 – FY21)
  • Planning, Design Engineering, Demolition, Transportation

• **Zone 12 Facilities**
  • $9 million+ (FY19 – FY22)
  • Planning, Design Engineering, Demolition, Transportation

• **Miscellaneous Facilities**
  • $15 million+ (FY20 – FY22)
  • Planning, Design Engineering, Demolition, Transportation

• **JCDC Impacted Facilities**
  • $30 million (FY19 – FY24)
  • Planning, Design Engineering, Demolition, Transportation
Additional Pantex Opportunities – Larger in Scale

• **Gas Lab Replacement Facility**
  - $10 million + (FY19-FY21)
  - 11,000+ sf lab with offices, restrooms, and breakroom
  - Engineering, Construction

• **High Explosives Science & Engineering Facility**
  - $60 million+ (FY20-23) – Congressional Line Item (DOE O 413.3B)
  - 73,000 sf complex consisting of three structures and ramps
  - Construction

• **Material Staging Facility**
  - $750 million+ (FY20-FY24) – Congressional Line Item (DOE O 413.3B)
  - 150,000+ sq warehouse with 6 loading docks
  - Conceptual Design, Engineering, Construction
Expectations for Partners in Excellence

The government is committed to revitalizing the Pantex infrastructure in support of its nuclear security mission.

That revitalization requires a strong partnership with the private sector.
Quality Requirements

• The DOE/NNSA has established Quality Assurance Requirements for Nuclear Safety
  • 10 CFR 830 Subpart A / DOE O 414.1D
    • Quality Assurance Requirements for Nuclear Facilities
  • ASME NQA-1a-2008, 2009/2011
    • Quality Assurance Requirements for Nuclear Facility Applications
  • NAP-24A
    • DOE/NNSA Weapon Quality Policy

• Pantex relies heavily on the Supplier’s Quality Management System to ensure these requirements are met
Evaluation of Supplier’s Quality Management System (QMS)

- CNS will perform an audit of the subcontractor's QMS for placement on the Quality Approved Supplier List (QASL)
  - On-site audit at the subcontractor’s facility
  - Review of Quality Assurance Program
  - Verification of implementations
  - Additional evaluation for subcontractors who perform welding
  - Qualification required prior to award of contract

- Re-evaluation every 3 years

- Periodic surveillances will be performed within the 3 year period

- Project specific QA Plans will be required for each project
Questions?
Doing Business with CNS Pantex
Ryan Johnston
Small Business Program Manager
CNS Pantex
Key Facts

- Facility Size - Operations at Pantex are primarily conducted on 2,000 acres of the 18,000-acre site. Pantex has 617 buildings, including its own water-treatment, sewage, and steam-generating plants.

- Workforce - 3,300 full-time personnel

- CNS FY2017 Procurement Spend - $490 million

- Pantex FY2017 Local Area Spend - $45 million

- CNS FY2017 Small Business Goal – 50%
Pantex Site Overview
Acquisition Process

The primary objective of CNS Procurement is to obtain the best value in the products and services purchased. All CNS procurements emphasize safety, security, mission delivery, quality and cost efficiency.

Procurement Methods:

- Existing Subcontracts – Blanket Ordering Agreements (BOA), Enterprise wide agreements
- Purchase Cards (P-cards)
- Formal Request For Proposal/Purchase Order (RFP)/(PO)
Acquisition Process Continued

Commercial items under $5,000 are usually purchased with a P-card.

The majority of dollars spent under $150,000 are evaluated on a competitive basis and are typically set-aside for small business participation.

Purchases over $150,000 are competitively solicited under a formal written solicitation. As a general rule, awards are made to the lowest priced technically acceptable offer or to the offeror determined to represent the best value to CNS and the Government.

If Best Value is used the criteria will be provided with the solicitation.

The CNS Small Business Program ensures the utilization of small businesses by providing the maximum practicable opportunities to participate in subcontracting of services and products. Small businesses include businesses classified as small, small disadvantaged, 8(a), woman-owned, HUBZone, veteran-owned, and service disabled veteran-owned small businesses.
Registration

Supplier Information Profile

Pantex invites businesses to fill out the **Supplier Information Form** and submit it via e-mail. This profile provides information about your company and its products and services. This profile provides data on your capabilities to Procurement Specialists as requirements are generated. Completing the form does not obligate Pantex to solicit requests for your services. If you require an update to a previously submitted profile, please complete the form in its entirety and resubmit. This will replace the previous entry.

Notice

Under 15 U.S.C. 645(d), any person who misrepresents a firm’s status as a small, HUBZone small, small disadvantaged, or woman-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(a) for a definition of program eligibility, shall - (i) Be punished by imposition of fine, imprisonment, or both; (ii) Be subject to administrative remedies, including suspension and debarment; and (iii) Be ineligible for participation in programs conducted under the authority of the Act.
Supplier Information Form

Registration on System for Award Management website is required (www.sam.gov)

NAICS code should accurately reflect the principal work preformed

When completed send to: Procurement-Pantex@onenet.cns.doe.gov
Top Ten NAICS Codes - By Dollars Spent FY2017

- Software Publishers
- Other Computer Related Services
- Engineering Services
- Machine Shops
- All Other Professional, Scientific and Technical Services
- Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
- Industrial Building Construction
- Analytical Laboratory Instrument Manufacturing
- Commercial and Institutional Building Construction
- Testing Laboratories
Subcontracting Forecasts

Our goal is to provide you with CNS (Pantex and Y-12) procurement projections based on the best information presently available. This information is provided for planning purposes.

Keep in mind that these requirements may be revised or cancelled, depending on program budget funding or departmental needs.

Forecast link:

http://pantex.energy.gov/suppliers/subcontracting-forecasts
Terms and Conditions

https://pantex.energy.gov/suppliers/documents-and-forms
Receiving a Copy of the RFP

• Unclassified information will be able to be distributed to subcontractors by email or other electronic form. However, Controlled Unclassified Information (CUI) does require extra protection and training prior to dissemination.

• In order to receive hardcopy CUI, which can consist of certain drawings, technical specifications, etc., the offeror and any employee of the offeror must take a teleconference training course. The course is approximately 30 minutes and instructs the offeror on how to protect and control CUI.

• Anyone that will view CUI must go through this training.

• All sub-tiers to the offeror will also be required to complete this training before viewing CUI information.

• Electronic transmission of CUI is allowed but requires an offeror’s computer system to be certified by CNS.

• Briefings for are provided every Thursday at 3:00 p.m. EST as a conference call.
  • Call In #: 1-877-709-4225
  • Participant code: 6023138

• For more information contact: Blake Villanueva, 806-477-5291, Blake.Villanueva@cns.doe.gov.
Pre-Bid Conference

Pre-Bid meetings will be held to discuss the requirements of each solicitation.

Offerors are not required but are highly encouraged to attend and must RSVP as indicated in the bid package.

Pre-Bids include:

- Messages from Safety, Quality, Project Manager, Subcontract Technical Representative, Buyer, Waste Operations, Environmental, and Security
- Review of technical requirements and Scope
- Walk down of site conditions

All questions asked are compiled and sent to all offerors

Pre-Bid conferences are non-reimbursable
Seller Environment, Safety & Health Performance

It is the policy of the company to award agreements only to firms that have demonstrated safety performance equal to or better than the industry average. In order to be considered for award, the offeror must have the most recent three-year average interstate Experience Modification Rate (EMR) not to exceed one (1). When the EMR average exceeds one (1), the Company’s Safety Department may waive this requirement based on a specific review of the work package, documentation, and proposed compensatory measures. As such, offeror is requested to provide the following:

• OSHA 300 Log for the 3 past calendar years

• Completed Seller Safety Qualification Questionnaire (UCN-21752)

Offers received from firms that do not meet these minimum requirements must be approved by the Safety Department to be considered.
Mentor Protégé Program

CNS Pantex is an active participant in the DOE Mentor Protégé Program

• The program is designed to encourage DOE/NNSA prime contractors to assist in the development of small businesses, Historically Black Colleges and Universities (HBCUs), and other Minority Educational Institutions (MEIs) of higher learning.

• The agreements are designed to enhance the protégé’s business and technical capabilities, to foster long-term business relationships between these small businesses and DOE prime contractors, and to increase the overall number of small businesses receiving awards.

Interested candidates should contact the Pantex Small Business Program office for more details.
Contact Information

Pantex Plant (Amarillo, TX)

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Small Business Program Manager  
806-573-4417  
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http://pantex.energy.gov/

Y-12 National Security Complex (Oak Ridge, TN)

**Lisa Copeland**  
Small Business Program Manager  
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Closing Remarks
Darrell Graddy
Vice President, Operations Support
CNS
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