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Section 1-Executive Summary

The Pantex Ten-Year Site Plan is aligned with the 2011 Stockpile Stewardship and Management Plan (SSMP), 2010 Nuclear Posture Review (NPR), and the Complex **Transformation Supplemental Programmatic** Environmental Impact Statement (SPEIS) Record of Decision (ROD). As noted in the SSMP, key elements of the nuclear weapon infrastructure established during the Cold War are now 50-60 years old and are exceeding their original design lifetimes. The infrastructure must be recapitalized to be made more efficient, correctly-sized and able to execute life extension activities, dismantlement of surplus weapons, surplus fissile materials management, and other nuclear security surveillance programs. The identified path forward, with the right investments and priorities, will serve to sustain the physical infrastructure capabilities needed for the long-term.

Accomplishments

Throughout the fiscal year, Pantex worked diligently to successfully overcome a variety of challenges. These challenges involved technical issues, receipt of components that fell short of their scheduled lead times, and multiple weather events that impacted critical production facilities and operations. Attention to problem resolution and commitment to aggressive recovery schedules resulted in completion of 116% of planned weapon deliverables, including exceeding the baseline delivery schedule for the W76-1 Life Extension Program (LEP).

In support of the President's commitment for nuclear stockpile stewardship, Pantex also achieved a major accomplishment by the early completion of the W62 Dismantlement Program. This success occurred as a result of the dedication and teamwork shared among Pantex and other Nuclear Security Enterprise (NSE) sites.

Pantex achieved a significant National Nuclear Security Administration (NNSA) milestone with authorization for the B53 and W84 Seamless Safety for the 21st Century Programs (SS-21). As a result, all SS-21 programs are authorized for operations, thus completing the multi-year effort to infuse enhanced safety techniques into weapon programs.

Pantex enhanced pit surveillance effectiveness by qualifying and implementing high-resolution x-ray computed tomography for use on both Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL) pit types.

Pantex was commended by the NNSA for creatively resolving near term pit storage capacity challenges in a timely and cost-effective manner.

Pantex continued its drive to enhance operational safety performance and maintain its position as a "best-in-class" safety leader within the NSE. Employees demonstrated their strong safety culture by embracing opportunities to lead various employee-driven safety programs designed to increase operational safety performance, and achievement of the Pantex Voluntary Protection Program (VPP) Star status.

A successful partnership between NNSA and Pantex resulted in the reinstatement of the High Explosive Pressing Facility (HEPF) Project. The project is instrumental in sustaining High Explosives (HE) component manufacturing essential for current and future stockpile stewardship mission requirements.

Pantex received recertification approval of Gold Leadership level participation in the Clean Texas Program and achieved for the 17th consecutive year, no Resource Conservation Recovery Act (RCRA) violations or findings from the Texas Commission on Environmental Quality (TCEQ).

These Pantex accomplishments were the result of the staunch support received from the Pantex Site Office (PXSO) and the Plant's shared philosophy of, "One Plant, One Mission, One Team-Different Roles, Same Goals" and our partners at the



national laboratories and other Production Sites working together under the theme "One NNSA, working together".

Pantex-Current State

The Pantex Plant mission includes: manufacture of specialty HE, fabrication and testing of HE components; assembly, disassembly, maintenance, and surveillance of nuclear weapons and weapon components in the stockpile; dismantlement of retired stockpile nuclear weapons; sanitizing and disposing of components from dismantled weapons; and interim storage of nuclear components from dismantled weapons. Activities are directed through the Production and Planning Directive (P&PD), Program Control Document (PCD), and the Development and Production (D&P) Manual. Pantex supports Stockpile Systems by performing disassembly, inspection and rebuild of weapon evaluation cycle units, assembly of Joint Test Assemblies (JTAs) and post mortem analysis, assembly, disassembly, and analysis of testbed units, Limited Life Component Exchange (LLCE), programmatic alterations (usually defined as Alts or Mods), weapon repairs, weapon and component radiography and non-destructive evaluation, HE testing and explosive component evaluation, pit and non-nuclear evaluations, electrical and mechanical tests, and surveillance/evaluation testing in support of Quality Evaluation Reports (QERs). All B&W Pantex activities ultimately support the core mission of nuclear weapons stockpile stewardship.

Pantex-Future State

This TYSP defines an overall path for modernizing the NNSA Pantex Plant over the 10 and 20 year planning period. Pantex supports NNSA's long-term commitment to providing the nation a modern infrastructure ready to accomplish the NSE mission. This plan summarizes key infrastructure necessary to implement the strategies delineated in the guiding documents noted above and the P&PD and PCD. The future end state includes:

The HE Center of Excellence (CoE) is managed and operated in a manner consistent with NNSA and other national needs. Modern infrastructure maximizes productivity while minimizing operating costs. Projected HE production demands are continually assessed and addressed while maintaining essential capabilities in a continuous state of readiness to meet existing needs responsively. Mature productivity modeling ensure available capacities always satisfy manufacturing requirements.

Category I/II Special Nuclear Material (SNM), as well as weapon staging, is consolidated within the production area thus achieving more modern, efficient, and effective operations at a lower overall cost.

Comprehensive non-destructive diagnostics for weapon and weapon components evaluation, as well as reacceptance and refurbishment, are mature and responsive thus minimizing overall Enterprise costs and support increased surveillance demands.

SNM component environmental testing capabilities (relocated from LLNL as directed by the Complex Transformation SPEIS) are fully functional and competently staffed to meet corresponding surveillance and LEP requirements.

An integrated Container Logistics Center is effectively directing Enterprise-wide Type B container packaging, shipping, and related stewardship activities across the NSE from a Pantex hub.

A fully integrated Production Planning & Scheduling system is coordinating Enterprise-wide planning, provisioning, and inventory management from a Pantex Hub, thus optimizing application of critical NSE resources, enhancing Enterprise productivity and minimizing operating costs.

Mature renewable energy systems take advantage of the geographical attributes and incorporation of facility sustainability strategies have institutionalized responsible, enduring Plant environmental and energy management policies that contribute to





long-term viability.

The safety and environmental compliance endeavors have the established maturity and external oversight confidence and status to maintain the NSE benchmark.

Facility reutilization strategies have consolidated function/operations in a manner that sustains a modern infrastructure while minimizing costs and operating footprint.

Management Concerns/Gaps

In support of NNSA, B&W Pantex has identified significant facility and infrastructure gaps that require resolution to ensure implementation of NNSA's Strategic Plan. The gaps will continue to be refined, communicated to NNSA, and collectively resolved to support continued progress and, ultimately, the transformation of Pantex.

Integrated Funding to Sustain Peak Operations

Integrated funding of Directed Stockpile Work (DSW), Readiness in Technical Base and Facilities (RTBF) and Safequards & Security is needed to minimize the impacts of funding shortages in any area on the other funding source work scope. The FY12 President's budget, as proposed, supported the ramp up in W76 LEP workload with adequate funding in DSW, RTBF, and Safeguards & Security; however, the FY17 budget planning is significantly lower in RTBF and would impact RTBF's ability to support the increased dismantlement workload. Additionally, anticipated funding of Physical Security does not support the increased DSW mission workload beginning in FY13.

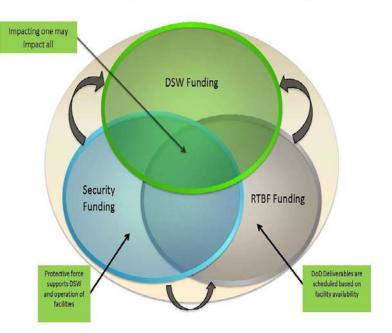
Mission Operations

Based on anticipated FY11 funding, B&W Pantex is proceeding in accordance with the workload as defined by NA-12. Future workload projections suggest enhanced testing and corresponding support activities will be necessary to satisfy basic stockpile stewardship and life extension program activities. Depending on requirements for each program, this would likely include increased non-destructive and destructive evaluation, re-qualified explosive component manufacturing, and pit requalification/reuse processes, as well as CSA surveillance. The increase in surveillance work will be addressed through the construction of a new Weapon Surveillance Facility, existing facility modifications and the installation and qualification of essential diagnostic and support equipment.

High Explosives Center of Excellence

The HE CoE has as its cornerstones the HE Pressing, HE Science, Technology & Engineering (ST&E), HE Packaging and Staging (P&S), HE Formulation, Inert Machining, and the HE Component Fabrication and Qualification facilities. These facilities are used to support all elements of the explosives mission

All Major Funding Sources At Pantex Are Closely Integrated



including research and development. The HEPF construction contract is currently being bid and is anticipated to be awarded in May 2011. The HE P&S and the HE ST&E facilities were supported by the

Т	E	Ν	•	Y	E	А	R	•	S	I.	Т	E	•	Р	L	А	
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Construction Working Group (CWG) and Critical Decision (CD)-0 documents were prepared and submitted for approval. The remaining facilities will require support to fully complete the transformation to a modern CoE capable of reliably producing and performing surveillance activities in support of the Stockpile Stewardship Program (SSP).

Facilities and Infrastructure Sustainment/Modernization

The proposed Capability Based Facilities and Infrastructure (CBFI) Program and the **Corporate Physical Infrastructure Business** Plan (CPIBP) initiatives identified the anticipated near-term, intermediate, and long-term needs of the NSE to sustain and recapitalize the infrastructure required to support NNSA mission. The common theme of the input to these two initiatives is that the infrastructure requires sustainment and recapitalization. Infrastructure includes all real property, installed equipment, and related real property that is supporting multiple program missions at a multiprogram site. Of concern are several systems and pieces of equipment that are reaching the end of their useful life or the manufacturer no longer supports the systems. The table at the right lists a few of the systems and equipment that will require replacement over the planning period to support the mission at Pantex.

Pantex has met mission deliverables within an aging infrastructure; however, risks are increasing due to failing systems and constrained and inconsistent budgets limiting modernization for future program initiatives.

Commercial application of technology is accelerating the need for "technical obsolescence" replacement. Lack of availability of replacement parts and supported software is decreasing system maintainability and reliability. As examples, manufacturers of the Ultraviolet (UV) Flame Detection System, the Radiation Alarm Monitoring (RAM) equipment, and the Lightning Location and Protection Warning System have notified Pantex that the systems are or soon will be no longer supported.

Systems at "End of Life" or Technologically Obsolete
Flame Detection System
High Pressure Fire Lead-Ins
Radiation Alarm Monitoring System
Building Systems (HVAC/Chillers/Electrical)
Fire Alarm Control Panels
Emergency Vehicles
Lightning Location and Protection System
Boiler Controls
Blast Door Interlocks
Enhanced Thermal Monitoring
Radiation Dosimetry Monitoring
On-site Transportation Trailers
Water Distribution System
Sewer Collection System
Process equipment: LINACS/Manipulators Vacuum Chambers Leak Check Manifolds Computer systems MRP II-(currently being replaced by the Operations Systems Development & Integration Project)

The current Future Years Nuclear Security Profile (FYNSP) is being reviewed to assess the ability to support "end of life" and technical obsolescence replacement of essential support systems and infrastructure.

Material Staging Facility

A new underground facility would provide the capability and capacity for safe and secure staging of weapons and weapon components while enhancing the security posture at a reduced infrastructure cost. The facility also supports the consolidation of the Pantex site and reduces the future recapitalization mortgage related to Zone 4 West and the associated Perimeter



Intrusion Detection and Assessment System (PIDAS). Pantex has performed preliminary investigations of the Department of Defense (DoD) facilities similar to the facility proposed at Pantex and submitted CD-0 documents. As this project is anticipated to be multi-program funded, Program Sponsors are required at headquarters.

Classified Material Disposition

There are currently more than 319,200 "scrap" components stored at Pantex and of these approximately 41,500 are classified. The most cost effective disposition of classified nuclear weapon components with radiologic concerns is continued shipment to the Nevada National Security Site (NNSS); however NA-242 has expressed concerns with the proposed agreement with NNSS. Cessation of shipments to NNSS of classified nuclear weapon components with radiologic concerns which have no current

sanitization disposition path would negatively impact Pantex dismantlement mission activities in terms of available type and category of storage facilities. The primary impact is based on available storage relating to radiological limits as opposed to physical storage capacity. For classified weapon components with radiologic concerns for which a sanitization disposition path can be identified or developed, either on-site or off-site, considerable cost would be incurred that is not currently within Pantex funding allocations or baseline requests. B&W Pantex identified potential short-term (FY11-FY12) actions to be implemented to address the potential for storage capacity and production schedule impacts. If shipments are not permitted to NNSS, funding will be required to implement either a subcontractor or on-site disposal.











Section 2-Site Overview and Snapshot

The Pantex Plant is operated by the Management and Operating (M&O) contractor, Babcock & Wilcox Technical Services Pantex, LLC (B&W Pantex) under the direction of PXSO. <u>Appendix G</u> contains the site overview, history, staffing profile, organizational structure, and workforce planning.

As denoted in <u>Appendix C</u> of this Site Plan, Pantex sustains core capabilities in HE development, synthesis, formulation, pressing, machining, and analytical and performance testing (C5); assembly/disassembly and HE production (C7); category I/II SNM storage (C9); and the key infrastructure supporting these capabilities (C10). Additionally, Pantex is instrumental in supporting other mission/program capabilities including surveillance of weapon components used for certifying weapons and in providing scientific, technical, and engineering basis for HE, as well as surveillance and requalification capabilities for pits. These supporting capabilities are further defined in <u>Appendix C.</u>

Pantex consists of 52 enduring Mission Critical (MC) facilities, 390 Mission Dependent Not Critical (MDNC) facilities, and 185 Not Mission Dependent (NMD) facilities. Of the 390 MDNC facilities, there are 235 Production Support facilities directly sustaining the capabilities and mission operations in the MC facilities. Over 48% of the MC and 52% of the MDNC facilities are over 40 years old. Charts showing the age of each of these categories are included in Appendix G. These facilities will require some type of refurbishment or replacement in the planning horizon. The initial CPIBP, published March 2011, identified those anticipated recapitalization infrastructure needs over the next 30 years. Red banded projects identified in the CPIBP are addressed as necessary in this TYSP in Attachment A over the period being considered.

FY 2011-2017 Operations of Facilities Budget \$ in Millions													
FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017													
Min Operable Requirement (FY12 incl. \$17.2M for Flood Recovery)	141.3	170.8	158.3	163.6	169.1	174.7	180.5						
Flood Mitigation Study (FY12) Maintain HE Press/Addt'l OPC (FY13-16)	0	2.3	13.7	6.6	4	0	0						
Target Funding	126	164.8	172	170.2	173.1	172.9	157						
Unfunded Requirement	(15.3)	(8.3)	0.0	0.0	0.0	(1.8)	(23.5)						

FY10-July 2010 flood event funding required to correct damage (\$28.3M). Received \$8.8M for mass properties equipment, repair of some electrical components impacted by flood, and repair soil wash-out. Remaining balance carried to FY11. FY11-February 2011 freeze event funding (\$4M not included in the \$ above) required to repair damage from extreme cold.









Section 3-Assumptions

This document is based on various assumptions concerning projected budget targets, projected workload, regulatory environment, available facilities, technology, productivity, the work environment, and NNSA's transformation. In some cases, operating basis assumptions are interdependent, and one may affect another.

Noteworthy assumptions include:

- Prioritization will be driven by mission need and ability to continue safe and secure operations in support of the P&PD and PCD
- Budget data for Office of Secure Transportation (OST), DSW, Campaigns, RTBF, and Safeguards & Security are based on the FY12-FY16 President's Budget Request, NA-142 Defense Program Site Splits, and the revised DSW and RTBF budget provided March 2011
- The HEPF, as well as other facilities, are key components of the W76-1 LEP, and future (B61, W80, and W78) LEPs. These facilities have been submitted for NNSA support through the CWG process and captured in the Integrated Construction Alignment Plan (ICAP)
- If the Facilities and Infrastructure Recapitalization Program (FIRP) program terminates prior to completion of the identified projects, the projects will be included as project candidates for the CBFI program and coordinated with the Site for priorities and funding requirements
- For this TYSP, CBFI is assumed to fund the first two facility (12-99 and 12-84E) upgrades for Flame Detection and Radiation Alarm Monitoring System replacement. This will generate the

needed spare parts until the Line Item (LI) projects are funded in FY17. The balance of the upgrades to facilities is captured in the Line Item Projects shown in Attachments A-1 and A-2

- Land use is expected to remain constant
- Pantex Plant's ability to meet the goals set forth by Executive Order for Energy Sustainability resides in the implementation of the Pantex Renewable Energy Project (PREP) and construction of the Administrative Support Complex (ASC)
- Maintenance and some recapitalization will continue to be required in facilities until consolidation projects are complete, operational, and the old facilities demolished
- For major LI construction, facility demolition usually occurs after operations are started. In some cases, demolition of some facilities occurs after the ten-year time frame of this TYSP
- Project schedules and funding reflect Pantex Plant needs and may be accelerated from those in the CWG ICAP
- Attachment E, Facility Square Footage Tracking, reflects those facilities that are already approved for disposition in FY12 but a funding source has not been identified. These facilities are reflected in the year where funding will be available under the CBFI Program starting in FY17 (Attachment A-3c)

Planning for the Enterprise of the future and the modernization that will occur over the next several decades will require constant revision to match changing missions, priorities, funding, and implementation impacts at all of the NSE sites.







Section 4-Changes from Prior Year TYSP

Major changes from the FY11 TYSP include:

- Attachment A-1 reflects LI projects as shown in the CWG ICAP shown in Appendix M of the FY12 TYSP Guidance
- HE Science and Engineering was renamed HE ST&E to reflect the critical nature technology plays in research and development of HE
- HE Staging Facility was renamed the HE P&S to reflect the need for HE container packaging and staging needs to support a more effective and efficient HE operation
- UV to Infrared (IR) Detector Upgrade was renamed Flame Detector Upgrade
- High Pressure Fire Loop (HPFL)-Material Access Area (MAA) is under construction and anticipated to complete on schedule
- Attachment A-3, cost projections were adjusted to reflect the targets in the TYSP Guidance
- Attachment A-4, FIRP project list changed to match the planning targets provided
- A new program, CBFI, is introduced beginning in FY13. The mission of the CBFI Program is to support capability with the recapitalization, modernization, and refurbishment of facilities and infrastructure, including utility systems; disposition of non-process contaminated facilities excess to the mission; and implementation of energy sustainability projects. The Program consists of four elements:
 - Recapitalization/Life-Extension for Enduring Facilities
 - o Infrastructure LIs
 - o Disposition
 - o Energy Sustainability

- Two buildings have been identified and added to Attachment E, and the associated projects added to Attachment A-5. A new freezer building, approximately 330 ft², is currently planned for the 12-17 B Press Upgrade and 12-62 Extrudable Capability project currently in design. The Office of Secure Transportation – Pantex is preparing to bid a new physical training facility, approximately 8,000 ft², near their current operations in Zone 16. It is anticipated that the square footage associated with this facility will be offset by OST with a transfer of square footage from other locations, as reflected in Attachment E-4.
- An incorrect formula in Attachment E-4(b) was corrected and resulted in the restatement of the FY 2018-2021 "Footprint "Banked" (gsf)" column.
- Square footage associated with the transfer of two EM facilities to NNSA was moved from FY11 to FY10 in Attachments E-4(a) and E-4(b).
- The FY11 RPV was incorrectly input in FY10 in Attachment F-2. This error has been corrected.
- Funding years for projects in Attachment A-3a were changed. All listed projects are on-going or funded by FY12.

The CBFI program would allow Pantex to modernize/recapitalize and sustain the infrastructure for current and future weapon programs, while increasing environmental and energy sustainability. CBFI project planned execution is based on the funding constraints identified in the TYSP guidance. CBFI projects include the planning of a series of facility upgrades to sustain the facilities for planned mission workload. These projects include: modernization of production facilities by replacing "end of life" systems (flame detection, RAM, fire protection lead-in, seismic upgrades, etc.) and recapitalization projects executed over several years to address Pantex needs.





Project completions in FY10 include:

- Repair of 11-55 HPFL
- Repair of 12-130 sewer line
- 12-21 Uninterruptible Power Supply (UPS) replacement
- Installed five additional electrostatic dissipating floors
- Installation of classified wiring in a portion of Zone 11 and identification of additional lines required for Zones 11 and 12
- Demolition of 12-20 and 09-145





Section 5-Future Vision and Core Capabilities

Future Vision/Core Capability 5-High Explosives R&D

Future Vision

Pantex, named as the CoE for explosives production for the NSE, ensures that all essential mission capabilities are sustained, including the ability to support of HE research and development initiatives by the national laboratories. From its roots of conducting significant explosives research and development activities primarily in concert with the national laboratories, to today, where HE development activities focus on manufacturing process improvements and HE safety. In the future, development and research information will be shared via secure media where simulations and actual test data are shared and validated and used to facilitate weapon improvements and maintain a high confidence in the nuclear stockpile. It is anticipated that consolidation of the HE functions will reduce the Plant footprint; however, the newer facilities will reduce maintenance and operating costs as well as substantially improve operating efficiencies.

Key projects needed to realize the HE CoE vision include:

- HEPF
- HE ST&E
- HE P&S
- HE Formulation
- Zone 11 HPFL Replacement
- Flame Detection Upgrade

These projects also support the HE production efforts. Refer to Attachment A for the list of projects and the mission programs supported by each project. Section 7 reflects the nominal schedule of each of these and the other real property projects.

Core Capability

Explosive production and associated development is concentrated within the elements of the programmatic explosives mission categories of synthesis, formulation, pressing, precision explosives machining and assembly, component fabrication and assembly, mechanical testing, chemical materials characterization and performance testing. Much of this work supports production qualification, stockpile-related surveillance, or process improvement initiatives.

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Modernize HE pressing and machining capabilities to maintain War Reserve (WR) production levels and support national laboratory demand for the stockpile stewardship, LEP, and national hydrodynamic programs
- Capitalize on existing Pantex Plant HE core competencies to expand and improve the HE mission work for NNSA, other government agencies, and nongovernmental organizations
- Establish project management discipline for explosives operations to ensure all production, project, and research deliverables are on time, safe, secure, and with high quality
- Integrate HE Research and Development (R&D) work with hydrotesting, detonation systems, and surveillance of the legacy stockpile through the updating testing of diagnostics for chemical, physical, and performance testing
- Maintain the capability to function test programmatic HE systems for acceptance and surveillance activities
- Actively pursue replacement of experienced personnel lost to retirement with talented scientists and engineers willing to commit to the NSE. Invest in employees' future through education and training

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- Build on Work for Others (WFO) governmental and commercial opportunities to maintain the intellectual vitality of personnel and to exercise HE processes and stockpile stewardship by being the low-cost, high quality provider of materials and services
- Complete the HE CoE transformation with the construction and startup of the HE ST&E, HE P&S, Inert Machining, HE Formulation, and HE Component Fabrication and Qualification facilities. Refer to Appendix E sheets 2 (demolition) and sheet 3 (future)

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- HE expertise necessary to support such missions is developed and sustained through a variety of programs. This expertise spans the range of synthesis, formulation, fabrication and production, surveillance, analysis, shock physics, materials characterization, experimentation, modeling, and simulation
- Be the provider of choice for all customers for material and intellectual products through the effective use of scheduled resources as realized by overall reduction in product cycle time and reduced direct costs to the customer
- Provide sufficient HE capacities and capabilities to efficiently support current and proposed NSE demands; thus,

ensuring knowledge retention through fabrication, testing, and performance

- Position the Pantex Plant to be the NSE preferred site for HE analytical chemistry and programmatic HE performance testing
- Increase WFO opportunities, performance, contributions to the site budget by maintaining a presence and reputation as HE experts and partners, and to ensure continued support of critical HE mission work
- Establish a responsive infrastructure and work processes that enable quick response to NNSA/DOE mission changes or new developments in the HE manufacturing business environment
- Increase collaboration with Universities, Design Agencies (DA), NNSA plants, and the Atomic Weapon Enterprise (AWE) to leverage technical exchange and research opportunities
- The HE CoE is managed and operated in a manner consistent with NNSA and other national needs. Modern infrastructure maximizes productivity, while minimizing operating costs. Projected HE production demands are continually assessed and addressed while maintaining essential capabilities in a continuous state of readiness to meet existing needs responsively. Mature productivity modeling ensures available capacities always satisfy manufacturing requirements





Future Vision/Core Capability 7-Assembly/Disassembly

Under the Complex Transformation Supplemental Programmatic Environmental Impact Statement, Pantex will remain the Weapons Assembly/Disassembly CoE. The Complex Transformation SPEIS also recognized the need to build a Zone 4 replacement for weapon staging and SNM storage resulting in more efficient operations and reduced security recapitalization costs.

Future Vision

Recognizing that the nuclear weapons stockpile is aging beyond its original design life, the NNSA is undertaking new surveillance initiatives that increase the projected Pantex workload. This includes augmented sampling, increased testing, and deployment of new diagnostics to meet revised testing requirements. More diagnostic tests are being conducted on components than ever before. As the Enhanced Surveillance initiative establishes new capabilities and a more predictive approach to stockpile evaluation is applied, new testing techniques are incorporated into the Core Surveillance Program.

In addition, potential options to perform nondestructive surveillance on CSAs at Pantex are currently being considered within the NSE. In cases where CSA disassembly is not required, this approach will yield timelier, less expensive, more logistically efficient data acquisition for stockpile certification purposes.

Core Capability

Include:

 Performing stockpile surveillance, retrofitting, and repairing weapons in support of both LEPs and certification of weapon

systems safety and reliability

- Requalifying/refurbishing pits for use in LEPs
- Dismantling weapons surplus to enduring stockpile needs

• Sanitizing and disposing of components from dismantled weapons

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

Planning is underway with regard to the B61 LEP scheduled for First Production Unit (FPU) at Pantex in FY17. In preparation for this LEP, the site may be required to refurbish/requalify pits used during the primary assembly. This effort will require some degree of process development and formalized process implementation at the site.

Performing CSA reacceptance at Pantex is a topic of consideration within B61 and W78 LEPs planning discussions. When applying non-intrusive processes similar in nature to those used for W76-1 pit requalification the option offers efficient component recovery and essentially eliminates inter-site transport of large quantities of CSAs during the term of the LEP. As planning proceeds, the site stands ready to provide necessary cost and schedule estimates related to such implementations upon request.

- Plan and secure resources and infrastructure required to support the FPU of the B61 LEP and sustain production schedule commitments
- Plan and apply pit pre-screening and refurbishment capabilities to include pit tube modification, as necessary, to support B-61 LEP requirements
- Plan and apply CSA reacceptance capabilities in support of the B61 LEP
- Commence and sustain two-shift operations on all plant Linear Accelerator (LINAC) systems to maintain existing surveillance schedule
- Disposition all backlogged legacy components resulting from dismantlement
- Support NNSA commitments to Congress for dismantling retired warheads
- Apply automated tracking and inventory system (RuBee), as appropriate

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- Plan and begin to apply diagnostics required to perform non-destructive CSA surveillance
- Plan, secure, and apply resources and capabilities required to support the FPU of the W78 LEP and sustain production schedule commitments
- Plan and apply pit pre-screening and refurbishment capabilities, as necessary, to support W78 LEP requirements
- Plan and apply CSA reacceptance capabilities in support of the W78 LEP
- Complete the transformation and modernization with the construction and startup of the Fire Suppression Lead-ins (FSLI), Flame Detection, Facility Installed Continuous Air Monitoring (FICAM), Non-destructive Evaluation Facility, Fire Protection Building Lead-ins, and Material Staging Facility LI projects. Refer to Appendix E sheets 1 (current footprint), 4 (demolition), and sheet 5 (future)
- Implement the CBFI program and execute the required infrastructure recapitalization, sustainment and demolition of projects identified in Attachments A-3b, c, and d

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

• Maintain, sustain, and recapitalize the infrastructure to support production commitments related to the W78 LEP

- Plan and align resources and infrastructure required to support the FPU of the W88 LEP
- Plan and apply pit pre-screening and refurbishment capabilities, as necessary, to support W88 LEP requirements
- Maintain, sustain, and recapitalize the infrastructure to support production commitments related to the W88 LEP
- Plan, secure, and apply resources and capabilities required to support the FPU of the W80 LEP
- Plan and apply pit pre-screening and refurbishment capabilities, as necessary, to support W80 LEP requirements
- Apply CSA reacceptance capabilities in support of the W80 LEP
- Maintain, sustain, and recapitalize the infrastructure to support production commitments related to the W80 LEP
- Maintain, sustain, and recapitalize the infrastructure required to support the FPU of the W87 LEP
- Complete the production modernization with the construction and startup of the Weapons Surveillance Facility item project. Refer to Appendix E sheets 1 (current footprint),4 (demolition), and sheet 5 (future)
- Continue CBFI program execution by recapitalizing, sustaining, and demolishing projects identified in Attachments A-2, 3b, c, and d





Future Vision/Core Capability 7-High Explosive Production

Future Vision

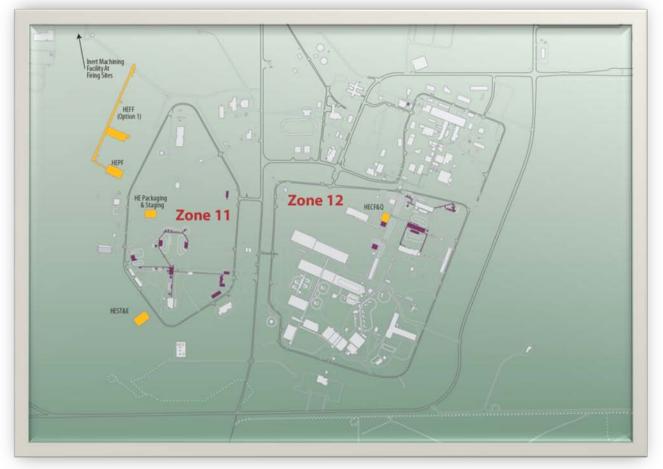
The RoD for the Complex Transformation Supplemental Programmatic Environmental Impact Statement selected Pantex Plant as the CoE for HE production and manufacturing. The HE production mission of Pantex is required to support nuclear weapons stockpile stewardship while continuously improving levels of safety and productivity. Major activities include manufacturing special stockpile explosives, fabricating explosive components, performing comprehensive destructive/nondestructive testing of explosive products, and providing explosives asset stewardship.

When the HE CoE is fully implemented, Pantex will have the sustainable infrastructure in place to support the HE need for the foreseeable future. Production will be performed in modern sustainable buildings with efficient and effective process to minimize costs and maximize operability. Explosive formulation could be performed in large lots to minimize variations and testing. Pressing will be done with near net-shape precision and machining will be minimal.

The Physics Laboratories will have validated aging models developed through the accumulation of surveillance and testing data that will allow historical materials to be minimized reducing the footprint currently required for long-term storage. Pantex will continuously manage its explosive inventory to ensure sufficient storage space to meet all future stockpile stewardship requirements.

Core Capability

Pantex HE synthesis operations are performed in an enduring facility. Pantex is currently the only national supplier of WR quality Hexanitrostilbene (HNS), booster and detonator grade High Melting Explosive (HMX), Pentaerythritol Tetranitrate (PETN),





and booster grade ultra-fine Triamino Trinitrobenzene (TATB) and Research Department Explosive (RDX) for LX-07 explosives.

Pantex currently formulates up to 200 lb batches and must blend the batches to reduce inconsistencies and variations. Quality testing is performed on each of the smaller batches. Pantex is the only producer of war reserve qualified extrudable HE XTX 8003 and 8004, LX-16, LX-07, and Mock 900-24 for test flights. Pantex is also backup for Holston for PBX-9501.

Pressing operations are being maintained in the current World War II (WWII) facility until the HEPF is completed in FY16.

Machining operations are performed in an enduring facility. Pantex is the only producer of machine finished parts for nuclear weapons production. Unique machining operations include producing HE surveillance samples to support core and enhanced surveillance, performing required safety inspections on as-pressed HE parts, producing specially-fabricated HE parts for NNSA Labs and other off-schedule customers, and sanitizing HE main charges resulting from weapon disassembly.

Main charge explosive materials recovered from dismantled weapons are either made available to DoD (after sanitization) for use in conventional munitions, transformed into commercially viable products, or destroyed by suitable means on-site.

Key projects needed to support the HE CoE production efforts include:

- HEPF
- HE ST&E
- HE P&S
- HE Inert Machining
- HE Formulation
- Zone 11 HPFL Replacement
- HE Component Fabrication and Qualification Facility
- Flame Detection Upgrade

These same projects support the HE R&D efforts. Refer to Attachment A for the list of projects and the mission programs

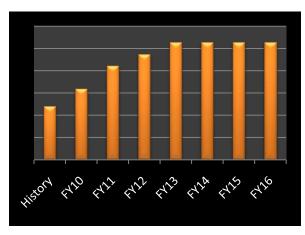
supported by each. Section 7 reflects the nominal schedule of each of these and the other real property projects.

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

Commence and sustain two-shift operations for main charge fabrication (pressing and machining) to satisfy W76-1 LEP schedule demands.

Planning is also underway with regard to the B61 LEP scheduled for FPU at Pantex in FY17. In preparation for this LEP, the site must establish appropriate Insensitive High Explosives (IHE) main charge fabrication processes. This effort will require some degree of process development and formalized implementation at the site.

- Establish and implement appropriate IHE charge fabrication process for B61 LEP scheduled for FPU at Pantex in FY17
- Implement 900 17/LM Mock HE capability for production setups and Joint Test Assemblies (JTA) applications
- Implement RuBee tracking and inventory system to enhance productivity and to regulate potential HE over-load and incompatibility issues in operations



HE Pressing Workload

• Modernize extrudable HE loading and





testing capability to meet B61 LEP requirements

- Develop and implement virtual training methods
- Implement Design to Manufacture (D2M) explosives fabrication and acceptance processes
- Deploy Non-Destructive Density determination (ND3) production system for main charge HE hemispheres inspections pending completion of prove-in and DA approval
- Complete the HE CoE transformation with the construction and startup of the HE ST&E, HE P&S, Inert Machining, HE Formulation, and HE Component Fabrication and Qualification facilities. Refer to Appendix E sheets 1 (current footprint), 2 (demolition), and sheet 3 (future)

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Sustain and recapitalize the infrastructure to support production commitments related to the W78 LEP
- Align resources and infrastructure required to support the FPU of the W88 LEP
- Sustain and recapitalize the infrastructure to support production commitments related to the W88 LEP
- Sustain and recapitalize the infrastructure to support production commitments related to the W80 LEP
- Sustain and recapitalize the infrastructure required to support the FPU of the W87 LEP
- Launch environmentally contained testing and disposition of explosives









Future Vision/Core Capability 7-Campaigns

Future Vision

Enhanced Surveillance continues to provide new or improved diagnostic techniques for detection and quantification of age-related degradation and other potential defects in the stockpile. Enhanced Surveillance works with DSW to develop and deploy new diagnostic tests that enable evaluations to be more sensitive to these concerns.

Implementation of many of the new diagnostic tools has not required new facilities; however, diagnostic tools such as high-energy x-ray imaging will require new facilities. A new Weapon Surveillance Facility (WSF) will provide the needed infrastructure for these new diagnostic tools.

The Readiness Campaign delivers process improvements to sustain critical capabilities that would otherwise become technologically obsolete. It is also focused on meeting capability demands emerging from system LEPs or other stockpile stewardship requirements. Capabilities that substantially reduce production costs and delivery times within the Enterprise are planned and delivered in an integrated fashion.

PDRD remains an invaluable part of the plant's process improvement effort continuously evaluating new manufacturing-related approaches.

Core Capability

The Campaigns and the PDRD Program will develop and implement new capabilities for weapon production and surveillance. Specific objectives follow:

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Implement improved HE performance diagnostics
- Deploy Non Destructive Evaluation (NDE) diagnostics to obtain the relevant

data on more samples without costly destructive tests

- Implement new and expanded capabilities for thermal performance, sensitivity, and mechanical properties testing of explosive materials and components
- Establish sustainable provisions for TATB and TATB-based insensitive explosives
- Implement enhancements to explosive component fabrication processes that ensure the enduring capability to support B61, W78, W88, and W80 LEP primary design requirements (i.e. Near net-shape pressing, E-fabrication, extrusion processes, etc.)
- Develop additional pit pre-screening and refurbishment capabilities to include pit tube replacement and shell overcladding in support of B-61 LEP requirements
- Develop and implement prescreening and reacceptance processes for CSAs in support of the B61 LEP
- Develop and implement diagnostics (10) required to perform non-destructive CSA surveillance
- Develop and implement process for Defense Programs Package (DPP)-1 container pit packaging for off-site shipment
- Develop procedures utilizing a DPP-1 container as a breached pit contingency that contains the component locally and facilitates shipment to LANL
- Establish and implement Type B container processes for packaging and shipping Radioisotopic Thermoelectric Generator (RTGs) to accommodate surveillance and disposition activities
- Develop and implement sustainable manufacturing processes for specialty explosive and mock formulations
- Implement D2M explosives fabrication and acceptance processes
- Facilitate enterprise-wide interactive production planning and scheduling system



- Comprehensively implement automated tracking and inventory system (RuBee)
- Develop and implement comprehensive pit and explosives surveillance diagnostics
- Develop and implement additional pit pre-screening and refurbishment capabilities in support of W-78 LEP requirements based on NNSA decisions
- Develop and implement pre-screening and reacceptance processes for CSAs in support of the W78 LEP based on NNSA decisions
- Efficiently administer NSE Type B container logistics system
- Package and transport RTGs off-site for surveillance and disposition

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Implement paperless manufacturing, assembly, and acceptance processes
- Launch contained testing and disposition of explosives
- Apply remote sensor technology for weapon/component surveillance based on NNSA decisions
- Deliver virtual training methods site-wide to improve efficiencies and reduce costs
- Develop and implement additional pit pre-screening and refurbishment capabilities in support of W-88 LEP requirements based on NNSA decisions
- Develop and implement pre-screening and reacceptance processes for CSAs in support of the W88 LEP based on NNSA decisions
- Develop and implement additional pit pre-screening and refurbishment capabilities in support of W-80 LEP requirements based on NNSA decisions
- Develop and implement pre-screening and reacceptance processes for CSAs in support of the W80 LEP based on NNSA decisions

Future Vision/Core Capability 9-Category I/II SNM Storage

This program element provides for receipt, storage, inventory and surveillance of nuclear and non-nuclear material and weapon components from dismantled weapons and disposition of legacy components. Sub-elements funded at Pantex are defined as follows:

Storage of SNM: Includes provisions for the directed storage of nuclear components at the site. Activities include planning, design, engineering, and start-up activities related to processing, packaging, and placing components in safe storage. Ancillary activities include thermal monitoring and periodic inventorying of the population. In addition, out-year forecasts of nuclear component storage requirements at the site are provided to NNSA annually.

Pit Inspection/Surveillance: Includes the inspection and various measurement activities associated with pits in storage. Activities include weight and leak testing, gas sampling, visual inspections, digital imaging, dimensional inspection, and radiography.

Disposition of Legacy Material:

Identification of legacy material, identification of currently available disposition processes, development of new disposition processes, and off-site shipment of material to ultimate disposition sites.

Future Vision

- Develop and implement process for DPP-1 container pit packaging for offsite shipment
- Develop procedures utilizing a DPP-1 container as a breached pit contingency that contains the component locally and facilitates shipment to LANL
- Execute container surveillance programs (Type B and on-site storage containers)
- Establish and implement Type B container processes for packaging and





shipping RTGs to accommodate surveillance and disposition activities

- Establish a Type B Container logistics depot to provide NSE-wide stewardship capabilities for nuclear shipping containers
- Establish required capability and capacity for dimensional inspection, laser gas sampling, and micro-focus x-ray for all pit surveillances
- Implement a Zone 12 Material Staging Facility to improve operational efficiencies and reduce PIDAS maintenance and recapitalization costs that are currently planned

Core Capability

- Continue to execute container surveillance programs (Type B and onsite storage containers
- Maintain pit pre-screening and routine surveillance capabilities
- Provide environmental control and physical security for the pits
- Ensure pit storage samples meet safety and reliability requirements as specified in DA requirements documents
- Package and facilitate transport of components, as required, to LANL for material recovery

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Implement SNM environmental testing capability at Pantex
- Provide environmental control and physical security for the pits
- Increase the storage capacity for pits in Zone 12 South through the construction of the Material Staging Facility
- Ensure pit storage samples meet safety and reliability requirements as specified in DA requirements documents
- Package and facilitate transport of components, as required, to LANL for material recovery
- Establish required capability and capacity for dimensional inspection,

laser gas sampling, and micro-focus x-ray for all pit surveillances

- Relocate Integrated Pumpdown and Fill Station (IPFS) to W76-1 requalification
- Modify facility as necessary to accept glove box for the B61 LEP pit refurbishment/re-qualification process(es) (as decided by Rigatoni PRT)

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Provide environmental control and physical security for the pits
- Ensure pit storage samples meet safety and reliability requirements as specified in DA requirements documents
- Package and facilitate transport of components, as required, to LANL for surveillance and/or material recovery

Future Vision/Core Capability 10-Infrastructure Support Facilities

Future Vision

A key tenant of the 2010 NPR is, "Modernization of the infrastructure, including major capital projects, needed to ensure safe, secure, sustainable and costeffective operations in support of scientific and manufacturing activities." Pantex with the support of the NNSA intends to sustain and recapitalize the infrastructure in order to perform the Pantex mission while supporting the consolidation, energy, and sustainability goals of the Department.

Core Capability

Pantex infrastructure capabilities include substantially constructed weapons assembly/disassembly bays and cells, HE synthesis, pressing, machining, and firing site facilities. Pantex has identified 235 facilities as Production Support (PS) facilities that directly sustain the capabilities and mission operations in the MC facilities. Examples of these essential facilities are identified in <u>Appendix G</u>.



Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

LI projects identified in the Attachments A-1 and A-2 are required to ensure reliable facilities and infrastructure to sustain longterm benefits to NNSA. Near-term, the Fire Suppression, Flame Detector Upgrade, FICAM, HE CoE, and NDE facilities will require support. Additionally, several projects identified in the CBFI Program in Attachment A-3 will enable Pantex to sustain operations until the LI projects are able to be supported with congressionally authorized funding. These projects (Flame Detection and RAMS) will minimize the disruptions to Production by upgrading individual areas and allowing the obsolete system components to be used for spares to repair those facilities that have yet to be upgraded.

The Pantex Renewable Energy Project (PREP) is being pursued as an Energy Savings Performance Contract. This project will play a key role in satisfying the President's National Objectives and the Secretary of Energy's priorities and goals for energy conservation. It will reduce greenhouse gas emissions at local power plants, enhance energy security, reduce energy costs, and lay the foundation for continued energy conservation in the future. Energy generated and used by the Plant is expected to reduce the Plant's electrical costs. The first 10-15MW will reduce the Plant's energy consumption and annual cost

Future Vision/Core Capability 13-Support of Other Mission/Program Capabilities-Material Disposition

Material Disposition (MD)

The Office of Fissile MD (NA-26) provides for the safe, secure, and environmentally sound storage of all fissile materials, thermal monitoring, storage sampling surveillance, development of processes to by approximately 55% based on preliminary analysis.

The Administrative Support Complex (ASC) is being pursued as an alternative financed facility. When complete and the identified vacating facilities are demolished, the new facility will reduce the Plant footprint by $100,000 \text{ ft}^2$ and reduce the deferred maintenance by \$13.9M.

Initiatives from other NNSA programs include site wide wireless initiatives, Homeland Security Presidential Directive (HSPD)-12 badge authentication into unclassified networks, and cyber security operations centers. These initiatives are being evaluated for potential future funding requests.

Several other LI projects are identified in Attachment A-2 such as RAM Refurbishment, Cells Upgrade, Closed Circuit Television (CCTV), Weapon Surveillance Facility, Flood Natural Phenomenon Remediation, and other replacement/refurbishment projects will require support. Refer to Appendix E sheets 1 through 7.

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

Long-term LI projects identified in the Attachment A-2 are required to address previously identified CPIBP projects to recapitalize enduring facilities and ensure reliable facilities and infrastructure to sustain long-term benefits to NNSA.

utilize the new surplus pit shipping container (MD-2), special pit shipments, and the ultimate disposition of non-weapons grade unusable fissile materials declared surplus to national security needs.

Future Vision

Develop and implement process for MD-2 container pit packaging and off-site shipment. Implement enhanced pit thermal monitoring enhanced technology. Package



and ship surplus pits to Savannah River Site (SRS) to pre-stage items supporting the Pit Disposition and Conversion Facility project.

Core Capability

Perform pit repackaging activities for surplus pit off-site shipment to the DA to support storage sample surveillance requirements and Advanced Recovery and Integrated Extraction System (ARIES) demonstrations, as directed per DOE authorization letters.

Monitor the thermal environments of pits in Zone 4 magazines and trailers and thermally characterize additional magazines for pits stored in the Sealed Insert (SI) containers. The project includes retrieval and reporting of thermal data, instrumentation of storage areas containing pits, and monitoring/characterization of storage facilities.

Inspect surplus pit storage samples, selected by the DA, to ensure they continue to meet safety and reliability requirements as specified in DA requirements.

Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Develop and implement process for MD-2 container pit packaging. Package and ship surplus pits to SRS to pre-stage items supporting the Pit Disposition and Conversion Project
- Package ship surplus pit for off-site shipment to the DA to support storage sample surveillance requirements
- Perform pit repackaging activities for surplus pit off-site shipment supporting ARIES demonstrations, as directed per DOE authorization letters
- Implement enhanced thermal monitoring of pits in Zone 4 magazines and trailers and thermally characterize additional magazines for pits stored in the SI containers. The project includes retrieval and reporting of thermal data, instrumentation of storage areas

containing pits, and monitoring/characterization of storage facilities

- Inspect surplus pit storage samples, selected by the DA, to ensure they continue to meet safety and reliability requirements as specified in DA requirements
- Support planning, development, and startup of a new Material Staging Facility

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Continue storage capability, thermal environmental monitoring, and surveillance activities as defined above
- Transition operations to the new Material Staging Facility
- Package and ship surplus pits to SRS supporting the Pit Disposition and Conversion Project

Future Vision/Core Capability 13-Support of Other Mission/Program Capabilities-Work for Others

Work for Others (WFO) Future Vision

Reimbursable projects provide unique DOE/NNSA contractor goods or services to Other Federal Agencies (OFAs) and the private sector. These projects are fully funded by the requesting agency and performed on a non-interference basis with DOE/NNSA funded work. Pantex's reimbursable work scope includes but is not limited to: Nuclear nonproliferation, Counterintelligence, HE products and services, Nuclear Counterterrorism Incident Response group, consultation, and other specialized training.

Nuclear Nonproliferation

Pantex has several WFO programs involved in arms control and the nonproliferation of nuclear warheads, materials, and technologies in the former Soviet Union, including the impact of future arms control

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treaties on Pantex and the prevention of the proliferation of nuclear warhead technologies. The current presidential administration could reopen negotiations through the Bilateral Implementation Commission of the Strategic Offensive Reduction Treaty (SORT, Treaty of Moscow) for a verification regime. If a warhead elimination régime were to be negotiated and ratified, there exists the possibility that sometime in the future a Russian delegation could visit Pantex as part of verification regime.

Counterintelligence (CI) Program

Counterintelligence (CI) interfaces and supports the Federal Bureau of Investigation (FBI), the Central Intelligence Agency (CIA), and the Department of Homeland Security (DHS).

HE Products and Services

B&W Pantex Explosives Technology (ET) Division provides HE support to NNSA's National Laboratories, as directed on a costreimbursable basis. As an added benefit the activities will assist in maintaining capabilities and threshold capacities for synthesis, formulation, pressing, machining, and analytical/performance testing of all NNSA explosives, as necessary to meet stockpile acceptance, surveillance, rebuild, JTA, and LEP requirements. These activities also support related elements such as component development, component replacement, component aging studies, and sanitization.

Nuclear Counterterrorism Incident Response (NCIR)

B&W Pantex provides qualified technical and professional personnel and equipment for Accident Response Group (ARG), ARG disposition, Joint Technical Operations Team (JTOT), and Radiological Assistance Program (RAP). These enhance DOE capability to respond to accidents and significant incidents involving nuclear weapons or components.

Secure Transportation Asset (STA) Program

B&W Pantex provides services to the Offices of Secure Transportation (OST). These services include performance of inspections, maintenance, and modifications of OST trucks/tractors, escort vehicles, Safe Secure Trailers (SSTs), Safeguard Transporters (SGTs), and associated electronics and communications equipment.

Consultation and Other Specialized Training

B&W Pantex recently began offering classes and services to Statoil of Norway, the American Public Transportation Association, numerous DOE National Laboratories and Production Sites related to High Reliability Operations (HRO)/Organization, and Causal Factors Analysis. These WFO efforts are anticipated to increase with recent world events.

Environmental Management

The DOE Office of Environmental Management (EM) and Office of NNSA have initiated the closeout of the Pantex Plant ER program and transition to Long-Term Stewardship (LTS). In FY11, NNSA will be responsible for Pantex LTS management. Pantex entered into an Interagency Agreement (IA) between the U.S. Environmental Protection Agency (EPA), Region 6, the U.S. DOE, and the TCEQ in early 2008. The IA is pursuant to Section 120(e) of Comprehensive **Environmental Response Compensation** and Liability Act (CERCLA). The IA describes the process by which the DOE/NNSA will complete cleanup activities to address impacts from legacy operations at Pantex, and defines the roles and responsibilities of each party. NNSA will be responsible for continuing to meet the regulatory requirements as documented in the ROD and amended Compliance Plan.



Near-Term (FY12-FY21) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Reimbursable systems and processes will continue to be developed and/or upgraded to ensure increased efficiencies and lower costs associated with the Pantex reimbursable work program
- Examples include:
 - Make the WFO program as seamless as possible such that the private sector wants and can do business with B&W Pantex without undue paperwork and bureaucracy
 - Maintain a site-wide integrated project baseline management system to ensure project managers can properly monitor project costs against schedule, while enabling Pantex sponsors to access the same unclassified data
 - Maintain an intellectual property function in which ideas from plantspecific activities can be patented and actively marketed for licensing potential with the commercial sector

- Maintain the capability to support HE projects for other governmental agencies with respect to the fabrication and testing of HE assemblies and evaluation of HE issues
- Provide DOE/HQ with training and training aids for Other Governmental Agencies (OGA) with respect to Weapons Incident Response

Long-Term (FY22-FY31) Capability/Needs to Achieve NNSA Strategic Goals and Objectives

- Develop an external E-Business capability enabling potential Pantex reimbursable sponsors to:
 - Identify the plant capabilities and services desired
 - Communicate with the responsible plant management
 - Enter into appropriate contractual instruments electronically
 - Enable the sponsor to update project status and receive unclassified summary reports





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Section 6-Real Property Asset Management

B&W Pantex has developed a long-range plan that balances new construction, energy conservation, and facilities disposition and is aligned with workload projections to ensure support of the mission. The details of this plan are reflected in Attachments A and E. Based on the planning assumptions, including no identified disposition funding source, Pantex square footage is anticipated to increase as shown in the TYSP timeframe.

The FYNSP funding profiles for Pantex show the Operations of Facilities budget to be adequate to support minimum operations in FY13-FY16. The current funding level for these years supports the DSW mission deliverables which includes the W76-1 LEP, surveillance requirements, and dismantlement activities. It also provides funding to support base program non-labor costs for utility services, regulatory compliance contracts, direct material, minimum unplanned expenditures and/or emerging issues, and onboard headcount. It does not fully maintain all operations or arrest the growth of Deferred Maintenance (DM). The immediate challenge is to increase the site funding for critical infrastructure improvements, upgrades needed to maintain HE pressing capabilities until new facility is operational, and stabilize the growth of DM.

The funding target for FY17 is over \$23M below the minimum operations level for Operation of Facilities. This funding level is inadequate to support the projected on board head count and the base operations. The DSW mission deliverables will be placed at high risk.

Over the past several years, Pantex has been inadequately funded to sustain facility and infrastructure requirements to support NNSA objectives. Due to these funding constraints, available resources were focused on ensuring mission critical facility availability. This was at the expense of the rest of the plant and is evidenced by the increased rate of degradation of facilities and equipment over the last several years. In FY11, the unplanned facility and equipment failures in MC facilities are resulting in a significant impact to facility availability and placing the site's ability to meet the DSW mission at risk.

New Construction-Line Item Projects

Pantex has identified facility and infrastructure LI projects in support of the site mission. NNSA evaluates and selects LI construction projects to satisfy the program requirements and funding targets identified in the FYNSP. Planned major construction of four new HE facilities, a staging facility, an evaluation facility, and an alternative financed administrative support complex in the 10 year planning horizon will result in approximately 346.000 ft² increase in owned production space and 235,000 ft² in leased space. This new square footage could result in approximately 394,000 ft² of dispositioned owned space and 53,000 ft² of dispositioned leased space. Reductions in facility utilization may not be realized until after the 10 year planning horizon and is contingent on funding for disposition activities. In the 20 year planning horizon, planned major construction of nine new facilities will result in approximately 459,000 ft² that could result in 415,000 ft² of dispositioned owned space. Over the twenty year planning horizon, this would represent a net reduction of 82,000 ft² of owned space.

The alternative financed administrative support complex is planned to be a major contributor to energy efficiency and reduction in owned space noted above. The 235,000 ft² increase in leased space could result in approximately 334,000 ft² of dispositioned owned and leased space over the 20 year planning horizon. The demolition planned as the result of this recapitalization will result in a projected energy savings of approximately \$225,000 and a reduction of approximately \$13.9M in deferred maintenance.



Funding for general plant, expense and capital equipment projects come primarily from RTBF. The current RTBF budget does not allow for adequate recapitalization of plant infrastructure nor does it allow for improvements related to environmental sustainability. Pantex Plant has historically been dependent on FIRP and Plus-Up funding for plant recapitalization and without adequate RTBF funding; the plant infrastructure will continue to deteriorate. Attachment J is provided for informational purposes and represents the backlog of unfunded General Plant Project (GPP), expense, and capital equipment projects at Pantex. Some of the key projects in the backlog include the replacement of the deteriorated high pressure fire loop lead-in piping to production and production support buildings, classified wiring for HE areas, safety and efficiency related projects, and security capital improvements.

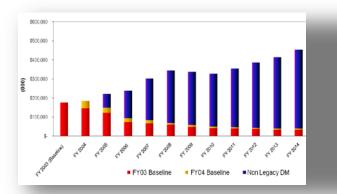
Deferred Maintenance Reduction

The DM backlog at the end of FY10 was \$317M, which is \$20M less than the end of FY09. DM buy down in FY10 was \$27M, while new growth due to the minimal inspections performed was \$7M. A significant portion of the increase, \$4M, was due to inflation of the backlog to current year dollars. DM reduction since FY03 is approximately \$246M. Projected DM reduction for FY11 is \$18M.

B&W Pantex DM estimates for deficiencies identified during Condition Assessment Survey (CAS) inspections are derived from the Condition Assessment Information System (CAIS) database. Future DM backlog projections are based on a mathematical model that includes factors for plant deterioration, inflation, and plant growth. The model is also used to estimate required maintenance based on funded and approved projects as listed in this TYSP. Estimated required maintenance is based on maintaining a 2.7% Facility Condition Index (FCI) for MC facilities, and an FCI for MDNC facilities of 11.8% in FY10 and improving to 11% in FY21 for an average

combined (MC/MDNC) FCI of 7% or below, and a stabilized total FCI of 7.5% or below through FY21.

Due to RTBF funding limitations, there is currently no funding mechanism to address DM, which impacts the plant's ability to maintain an adequate condition for all facilities and infrastructure. The result of this is evident in Attachment F-2 and Appendix J, which reflects the in-balance in the FCI for mission critical and mission dependant not critical facilities and



infrastructure.

The FIRP Program was the primary funding source used to restore, rebuild, and revitalize the physical infrastructure at Pantex. As such, the Pantex FIRP Program was the primary funding source focused on reduction of deferred maintenance that significantly increases the operational efficiency and effectiveness of facilities and systems in support of stockpile stewardship mission.

With the sunset of the FIRP Program, the Operations of Facilities funding is not adequate to arrest the growth of backlog DM. The CBFI program, currently being initiated, may allow Pantex to modernize/recapitalize and sustain the infrastructure for current and future weapon programs.

Space Utilization and Consolidation

Space management encompasses all real property owned or leased by DOE. The RTBF Program is responsible for the overall management of space. However to support





the site mission, individual facilities are assigned to functional organizations based on space requirements and specialized construction. The functional organizations are responsible for the day-to-day utilization of their assigned buildings. Space utilization remains high at Pantex with space being 97.1% utilized in FY10. Because of this high utilization, site planning efforts are closely coordinated with plant mission and support needs so that operations are in facilities appropriate for their use, and changes in facility requirements are coordinated and implemented in advance.

Sustainability

Pantex is moving to a whole facility concept to consider all facets of environmental and energy sustainability. Actions and activities for sustainability encompass the many issues of environmental protection, pollution prevention, resource conservation, waste management, energy and water management as well as the reduction of greenhouse gases resulting from Plant processes and the use of petroleum fuels. Any project can be properly developed to support sustainability, whether it is a specific project to upgrade the efficiency of a building's heating, cooling, and ventilation units; construct a new building; to replace a roof or even to decommission and deconstruct retired buildings. Pantex is striving to replace finite energy sources with sustainable and renewable wind-generated energy and as practical, solar power. Sustainability is a growing concept that will drive improvements in Plant operations for years to come.







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Section 7-Planned Projects and Cost

Pantex utilizes a risk management process to prioritize identified facilities and infrastructure projects that are reported in the Attachment A cost projection spreadsheet. Once projects are requested, they go through an evaluation phase to develop all pertinent information, then a board including program managers from RTBF, DSW, and Safeguards & Security Programs determine the perceived risk to the plant. This determination allows the project to be ranked against other known projects to compete for available funding. This ranking is then provided to all the Program Offices for their evaluation against their standing list and ranked accordingly for impact to the Pantex Plant. Those projects receiving sufficient ranking then are planned for funding and scheduled to be worked.

Emerging issues are a constant battle taking planned project funds to address more immediate needs. LI projects shown in Attachment A-1 have been approved by the CWG ICAP and are progressing through the various stages of the CD process. The LI projects shown in Attachment A-2 are proposed in the timeframes when they are needed and may be delayed by availability of funding from Congress.

As noted earlier, Pantex has met mission deliverables within an aging infrastructure; however, risks are increasing due to failing systems and constrained and inconsistent budgets limiting modernization for future program initiatives. Rapid advancements of commercial applications are driving accelerating "end of life" replacements. Availability of parts and supported software represents an increasing risk for system maintainability and reliability. Examples noted earlier included: UV flame detection systems, RAM equipment, fire alarm panels, lightning location and protection warning system, and some multi-program process equipment manufacturers have notified users that the systems are or soon will no longer be supported. A basic multi-year funded program is needed for the NSE to efficiently and effectively modernize and recapitalize the infrastructure.

Nominal Sc	hed	ule	of P	ante	ex R	leal	Pro	per	ty P	roje	cts	Bas	sed	on l	lee	ds				
per TYSP Attachment A-1																				
FY	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
HPFL, Zone 12 South, MAA																				
HE Pressing Facility																				
Fire Suppression Lead-ins Project																				
Flame Detector Upgrade																				
Pantex Renewable Energy Project (PREP)																				
HE Science & Engineering Facility																				
HE Packaging & Staging Facility																				
HE Formulation Facility																				
HE Component Fabrication and Qualification Facility																				
FICAM Equipment Replacement																				
Non-Destructive Evaluation Facility																				
High Pressure Fire Loop-																				_
Zone 11																				

Current and Approved Line Items





Fire Protection Building Lead-ins Replacement Project										
HE Inert Machining Facility										
Material Staging Facility										
Operations Systems Development & Integration Project										
Administrative Support Complex										

The following table shows the nominal schedule reflected in the Construction Working Group Integrated Construction Alignment Plan (CWG ICAP) and reflects the CWG prioritization of the Pantex Projects and is shown for comparison purposes. In this TYSP, Attachment A-1 funding profiles reflect requested need for Pantex, and the CWG ICAP is based on funding availability.

Nominal Sc	hed	lule	of F	Pant	ex	Real	Pro	opei	rty F	Proje	ects	Ba	sed	on	CW	G				
per Integrated Construction	n Ali	gnn	nent	t Pla	an fo	or P	ante	X												
FY	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
HPFL, Zone 12 South, MAA																				
HE Pressing Facility																				
Fire Suppression Lead-ins Project																				
Flame Detector Upgrade																				
Pantex Renewable Energy Project (PREP)																				
HE Science & Engineering Facility																				
HE Packaging & Staging Facility																				
HE Formulation Facility																				
HE Component Fabrication and Qualification Facility																				
FICAM Equipment Replacement																				
Non-Destructive Evaluation Facility																				
High Pressure Fire Loop- Zone 11																				
Fire Protection Building Lead-ins Replacement Project																				
HE Inert Machining Facility																				
Material Staging Facility																				
Operations Systems Development & Integration (OSD&I) Project																				
Administrative Support Complex																				

PREP Project not included in CWG ICAP but shown in A-1 based on CD-0 approval in April 2009. Project is currently being pursued as an Energy Savings Performance Contract type OSD&I Project is not included in CWG ICAP but shown in A-1 as on-going DSW funded project. Administrative Support Complex Project shown in A-1 based on CD-0 approval, December 23, 2008. The project is currently being pursued as an Alternative Financing Project.



Narrative Section

HPFL, Zone 12 South, MAA-The HPFL Zone 12 South MAA Upgrade project is to provide a reliable fire suppression system capable of supporting mission essential facilities at Pantex by replacing aging and deteriorated piping in the existing aging HPFL Zone 12 South MAA system. The project involves replacement of the existing ductile iron pipe with High-Density Polyethylene (HDPE) pipe in the fire loop, installation of new fire hydrants, and replacement of necessary valves and appurtenances. Cathodic protection for the valves and hydrants will also be included.

HEPF-The project provides a new HE main charge pressing facility with capability and capacity to meet the needs of changing weapon complexity, projected workload, and the LEP activities in the future including various programs.

Fire Suppression Lead-ins Project-This project addresses the lead-ins for 35 mission critical bays/cells. The existing piping is predominately ductile and cast iron pipe and was installed between 1979 and 1985. Since the installation of this pipe, various upgrades and maintenance activities have been performed to reduce the acceleration of pipe corrosion. Methods to reduce the rate of corrosion (e.g. cathodic protection or pipe coatings) were not installed with the existing pipe resulting in accelerated pipe degradation. Due to pipe aging and the existing soil conditions, the lead-ins have experienced degradation from corrosion, and several failures have occurred. Twenty-three failures have occurred in the total HPFL system in the last 13 years.

Flame Detector Upgrade-In January of 2003, changes in Factory Mutual standard FM3260, 2000 edition, "Radiant Energy-Sensing Fire Detectors for Automatic Fire Alarm Signaling", became effective. In May of 2002, the manufacturer (Det-Tronics) announced that current modular based UV controllers (R7404, R6006, and R1425) will not comply with the new product approval

standard and will be phased out of production. The combination of the new regulatory requirements, component obsolescence, and the availability of new technologies for increased capabilities prompted this phase out. The announcement also indicated that repair capability for these controllers will be maintained only through 2012. These controllers are currently used in the nine buildings included in this project scope.

PREP-In response to the Energy Policy Act (EPA) 2005, Executive Orders 13423 and DOE Order 430.2B stated requirements and goals; the mission need for this project is to provide Pantex with the capability to meet these requirements of 7.5% renewable energy and the Secretary of Energy's expectation to meet the requirements. Additionally, Pantex is favorably positioned geographically to advance the NNSA's ability to achieve the administration goal for green energy. As the result of installation of the PREP, Pantex should be positioned to obtain an alternative financed administrative support facility and further reduce energy consumption, maintenance, and deferred maintenance by vacating 31 inefficient and ineffective facilities.

HE ST&E Facility-Operational and technology development laboratories for HE testing and development including: environmental aging, test fire operations, new lot testing, laser measurement, and sampling technology development are currently located in 15 separate facilities which are an average of 58 years old and not constructed for today's operations and do not provide for efficient work processes. A consolidated HE ST&E Facility will support the NNSA mission to mature advanced weapons surety technologies. qualify weapon components, and provide data for annual stockpile assessments through weapons surveillance. The Mission Need and Program Requirements documents have been submitted for CD-0.

HE P&S Facility-Current staging and packing operations have reduced HE capacity limits creating inefficient operations



located in ten buildings, with an average age of 57 years old, and multiple zones at the Plant. Standard DA HE lot sizes ranging from 2,000 lbs to 5,000 lbs cannot be met with the current facility limit of 400 lbs. Consolidation of packaging and staging operations into a new HE P&S Facility will result in an estimated 38% reduction in square footage and provide for efficient work processes for both HE R&D and production. The Mission Need and Program Requirements documents have been submitted for CD-0.

HE Formulation Facility (HEFF)-HE formulation operations are currently being performed in several aged facilities. To support the expected workload and provide backup capability of sufficient quantities of HE, relocation of the formulation processes are necessary. The current facility lacks the capacity to support the expected workload and requires extensive maintenance. A new HEFF being proposed in this TYSP will relocate those HE operations currently performed in Zone 12 to the HE area of the plant in Zone 11. The HEFF will also be capable of larger more homogeneous batches of explosives improving both the quality and consistency. The new facility is consistent with plant modernization strategies and siting it in this manner ultimately advances the HE CoE for HE Manufacturing by evolving toward a consolidated Zone 11. In doing so, formulation, synthesis, pressing, and rough machining activities are collocated, thus improving logistical efficiency and operational responsiveness to better support the needs of the NNSA and the Nation.

HE Component Fabrication and Qualification Facility-To address

continued stockpile aging questions, NNSA has recently embarked on a form of surveillance transformation initiative. During the next decade the approach escalates the quantity of system evaluations performed at the site while at the same time encumbering them with the complexity of implementing new diagnostics aimed at targeting specific potential vulnerabilities. Once fully implemented however, the new methodology will serve to minimize the quantity of tests conducted per system by acquiring a limited amount of more informative data. Nonetheless, as the stockpile continues to age and the DAs continue their exploration of weapon materials aging processes, component surveillance, characterization, and lifetime predictions will remain vitally important to ensuring the long-term health of the stockpile.

FICAM Equipment Replacement-The field processors and some of the components for the existing alpha and tritium sensors are no longer available from the manufacturer. Certain parts have not been produced by a manufacturer since 1995, and Pantex has used up the entire supply of surplus parts. Additionally, the two radiation sensors are no longer manufactured or supported by the manufacturers. The field processors are board level microprocessors with custom software written for the existing Continuous Air Monitoring System (CAMS). The existing alpha sensors use technologies developed in the 1970's and the current manufacturer has indicated they will no longer manufacture or support the current models. Components are getting harder to find and the last components were purchased through the internet from a firm closing out their inventory. The tritium monitors were upgraded in the late 1990's; however the manufacturer has indicated they will not be supporting this product.

Non-Destructive Evaluation Facility-Critical non-destructive evaluations and laboratory analysis of gasses to support analytical and scientific evaluations of weapon systems are currently performed in aging, WWII structures. Temperature levels are very difficult to maintain and the building electrical system is highly unreliable. Several areas have specific temperature and electrical requirements that must be maintained precisely, otherwise extremely expensive electronic equipment is subject to failure, and analyses supporting production



will not be done. The use of state-of-the-art equipment is limited because of the existing facility's aging infrastructure. One example is technology advances in x-ray operations, mainly the use of digital equipment, which is difficult to establish in the existing facility.

HPFL-Zone 11-The HPFL is designed to provide water at a pressure, flow rate, and quantity to meet the demands of the fire suppression system in each facility. Failures in the existing system have increased over the past several years. Three failures have occurred since 1995 in the Zone 11 system. The latest of these failures occurred in July 2002. The cast iron pipe deterioration and lack of cathodic protection is expected to increase these failures.

Fire Protection Building Lead-ins Replacement Project-This project addresses the lead-ins for the mission dependent not critical facilities in Zone 12 South MAA. The existing piping is predominately ductile and cast iron pipe and was installed between 1979 and 1985. Since the installation of this pipe, various upgrades and maintenance activities have been performed to reduce the acceleration of pipe corrosion. Methods to reduce the rate of corrosion (e.g. cathodic protection or pipe coatings) were not installed with the existing pipe resulting in accelerated pipe degradation. Due to pipe aging and the existing soil conditions, the lead-ins have experienced degradation from corrosion, and several failures have occurred. Twenty-three failures have occurred in the total HPFL system in the last 13 years.

HE Inert Machining Facility-The quantity of components from dismantled weapons will significantly increase as each nation works to reach its agreed threshold limits. Each component generated from the dismantlement process will require characterization, sanitization, and disposed according to approved methodology. This increase is anticipated to exceed the current capability at Pantex. Additionally, as new HE technology is developed in conjunction with the DAs, new and unique fixtures and test apparatus will be required. Those parts and fixtures will utilize advanced technology currently unavailable.

Material Staging Facility-The Staging Area is remote to the production area. Weapons and weapon components are transported 1.3 miles between the staging and production areas. Transporting nuclear weapons and nuclear parts through limited and protected areas is an inherent safety and security risk. Relocating the staging operations to an area in proximity to production will reduce these risks and eliminates inclement weather risks that may cause production delays and postpone weapon movements between the two areas. The facility also supports the consolidation of the Pantex site and reduces the future recapitalization mortgage related to Zone 4 West and the associated PIDAS.

Operations Systems Development & Integration Project-This initiative to replace the functionality of the CAS software with a new product enhances Pantex manufacturing operations utilizing modern software solutions. The project provides a technology refresh with added capability and is in line with the Product Realization Integrated Digital Enterprise (PRIDE) vision and the Office of the Chief Information Officer (OCIO) Enterprise Architecture.

Administrative Support Complex-The Pantex Plant requires a sustainable administrative support infrastructure that has the capacity to meet the NNSA Defense Programs (DP) Mission. The new facility would address the immediate need for technological and infrastructure enhancements currently unavailable in existing facilities. Eighty-one percent of the administrative and office support space will be consolidated and eliminate 31 buildings, with a net reduction of 100,000 ft².





Proposed New Line Items

per TYSP Attachment A-2																				
FY	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Weapon Surveillance Facility																				
Cells Upgrade																				
Flood Natural Phenomena																				
Remediation																				
Steam Distribution System																				
Upgrade																				
Water Secondary Distribution																				
Upgrade Closed Circuit Television																				
Replacement, 12-005C, 12-35, 12-068 (CPIBP)																				
Radiation Alarm Monitoring System (CPIBP)																				
12-002 Replacement,																				
Administrative Support Complex																				
Sewer Collection System Manhole Refurbishment																				
Sewer Equipment Refurbishment																				
Cogeneration Plant																				
Steam Production Facility Upgrade																				
Fire Alarm Panels Replacement (CPIBP)																				
Building Upgrades (CPIBP)																				
12-064 Replacement (CPIBP)																				
Security PIDAS																				
Protective Force Portal Upgrade and Enhancement Project																				
Protective Force Live Fire Ranges																				
Upgrade and Enhancement																				
Project																				
Special Security Systems Refurbishment																				
Fencing (PIDAS, CPIBP)																				



Narrative Section

Weapon Surveillance Facility-The facility will deliver capacity for current nondestructive evaluation testing techniques and provide space for the deployment of new capabilities required to perform innovative component interrogation and requalification or reacceptance of weapons and weapon components. This facility will consist of radiological evaluation and staging bays.

Cells Upgrade-The Nuclear Posture Review (NPR) shows an increased in future dismantlement requirements for Pantex. Investments to modernize the nuclear infrastructure will ensure that the U.S. can continue to decrease this backlog in a responsible manner. Based on this information, the Pantex Plant will require additional production cell capacity to support the increase in workload while some facilities are impacted for required infrastructure upgrades.

Flood Natural Phenomena Remediation-Existing conditions within the boundaries of the Pantex Plant are inadequate to prevent facility flooding during a 25-year, 6-hour rainfall event. This emerging project was validated in the July 7, 2010, rainfall event of 10.3 inches of rain (a 6 hour 2000 year event). The system-wide drainage system was incapable of containing and removing the amount of water produced during the rain event as the hazard assessment had predicted. That event lead to significant water levels across the plant including water flows within several of the production facility areas impacting equipment, utilities, production, and personnel. For the next month, production was impacted as the recovery effort progressed to validate facility condition and capabilities.

Steam Distribution System Upgrade-

System piping experiences leaks, insulation degradation, valve failures, and alignment concerns. These leaks and insulation issues result in energy loss and increase steam production costs. Failure of pipe

anchors, expansion joints, and valves cause safety concerns due to blowing steam and possible pipe breaks.

Water Secondary Distribution Upgrade-

The majority of the 30 miles of distribution piping and valves have exceeded their service life, and we have experienced increased failures over the past several years. There are currently 15+ leaks on the system affecting 24 facilities/locations. The leaks have caused domestic water to be shutdown to some facilities (restrooms, drinking water, etc.) and supply lines.

CCTV-The project provides for installation of a CCTV system in all bays and cells in Zone 12 MAA to enhance safety and address Defense Nuclear Facilities Safety Board (DNFSB) concerns. The system allows for observations of the work areas for safety concerns and aids in accident investigations should one occur. It will allow first responders to a potential emergency situation, in a production facility, the ability to visually assess any hazardous saturation inside a bay or cell prior to entering the facility.

Replacement, 12-005C, 12-35, 12-068 (**CPIBP**)-The project will enable infrastructure refurbishment and the retention of capabilities. A replacement facility will allow the closure and demolition of old, deteriorating existing facilities and improve efficiencies by locating maintenance functions closer to the areas requiring support.

RAM System (CPIBP)-The RAMS system is required in production facilities to ensure safe working conditions for personnel. The refurbishment of the RAMS system will ensure the required infrastructure capability to safely support future workload and mission requirements.

12-002 Replacement, Administrative Support Complex-The existing medical facility, built in 1972, was not designed to accommodate the number of evaluations required by the Human Reliability Program (HRP) under 10CFR712, Drug/Alcohol



program requirements of 10CFR 707 and 49CFR40. Further the facility is out of compliance with Health Human Services "Mandatory Guidelines for Federal Workplace Substance Abuse Programs". Additionally, the facility and program at Pantex may lose its Accreditation Association for Ambulatory Health Care (AAAHC) accreditation given the new, higher facility requirements for patient confidentiality and inadequate space to perform evaluations.

Sewer Collection System Manhole Refurbishment-Increased failures.

outages, and operational issues/costs continue to be a concern with 230 manholes and system. Several manholes and lines have deteriorated to the point they have caved in causing sink holes which are a safety concern. Many manholes and lines have also been abandoned due to demolition of facilities in the area causing additional operations issues as to adequacy of flow and waste getting to the sewage lagoon for proper disposal.

Sewer Equipment Refurbishment-

Operating problems to varying degrees are being realized with 12 of 14 lift stations. Many of the stations have exceeded their useful life causing increased maintenance and repair cost. When a lift station fails it requires shutdown of the buildings/restrooms affiliated with a failed station impacting operations and personnel. These stations are primarily located in pits or manholes which are confined work spaces. This requires additional safety approvals, equipment, and time to make repairs.

Cogeneration Plant-Vulnerabilities exist in the likelihood of massive increase in electrical cost due to the local utility's coalfired plant, increasing emissions and expanding carbon footprint, and most importantly the security risk of unscheduled blackouts and/or planned disruption of the grid at a nuclear facility. Cogeneration addresses these vulnerabilities, providing a continuous availability of both electricity and steam, even during loss-of-power events. The development/installation of cogeneration will aid in energy conservation, maintaining current energy costs by reducing the amount of energy purchased from the local energy providers, and by addressing carbon footprint and emission reduction.

Steam Production Facility Upgrade-

Facility/equipment, constructed in the late 1980s, is approaching the end of its useful life and requires upgrading to maintain efficient operations. Steam leaks, outdated controls, inefficient boiler burners/controls, outdated emission control systems and outdated instrumentation are all concerns.

Fire Alarm Panels Replacement (CPIBP)-This project replaces the existing fire alarm panels in production facilities due to technical obsolescence. Existing panels will no longer be supported by the manufacturer after 2012.

Building Upgrades (CPIBP)-Several production and security facilities require electrical and mechanical system enhancements to support technology changes which require increased power and cooling requirements. Enhancements will support security and production equipment end-of-life replacements and will soon not be supported by the manufacturer. This is a rollup of several building refurbishments including 12-079, 12-044, 11-051/51A, 12-1118, 12-082, 12-001, 12-099, 12-104, 12-037, 12-042, 12-026, 12-83, 16-001, 12-066, and 12-15/15A.

12-64 Replacement (CPIBP)-This project provides continued capability in support of weapons assembly/disassembly and ensures the required capability to support future workload and mission requirements.

Security PIDAS-PIDAS complementary sensors require replacement. All of these sensors are obsolete or quickly approaching obsolescence. DOE M 470.4-2, Change 1, CH. VII.a (3) requires the PIDAS to employ multiple layers for protecting SNM. Complementary sensor technology is required.



Protective Force Portal Upgrade and

Enhancement Project-This project provides for upgrades and enhancements to the access/egress Protective Force Stations and Portals at Pantex to maintain an effective security operation today and into the Complex Transformation. The project allows Pantex Protective Force personnel adequate facilities and equipment to control personnel during entry/exit, conduct contraband searches, and house new equipment to enhance both personnel and search activities.

Protective Force Live Fire Ranges Upgrade and Enhancement Project-This

project provides for upgrades and enhancements to the live fire ranges at Pantex so they can be maintained in good condition up through the DOE Complex Transformation. The project will allow Pantex Protective Force and Office of Safeguards Transportation personnel to have adequate training facilities for the new firearms and detection equipment added for implementation of the new Graded Security Protection Policy.

Special Security Systems

Refurbishment-The mission gap for this project is infrastructure refurbishment. Security systems are required throughout the plant to maintain the safe and secure stockpile requirements. The replacement of PXAT 610.03 will ensure the required infrastructure capability to safely meet future workload and mission requirements.

Fencing-As part of the planning process, this asset is planned to be upgraded by 2020. Based on past experience, some systems included in this asset reach technical obsolescence after approximately 10 to 15 years. A key piece of this project is the PIDAS.







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RTBF includes CBFI Projects

per TYSP Attachment A-3 series			aior	or C	-crit	ical	nath	nro	iecte	-										
FY	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
UV to IR Conversion-12-99		C																		
RAMS Replacement-12-99		С																		
Metrology Lab Environmental Controls Upgrade		С																		
Environmental Controls for LEP in Production Facilities		С																		
Lightning Location and Protection System (LLPS) Replacement		С																		
Explosive Facility Lightning & Surge Protection		С																		
Asset Management Support (Roof/Roads)		С																		
Seismic Upgrades (Ceiling & Wall Modifications)			С																	
Mock HE Capability Upgrade			С																	
Sustainable Facility, 11-2/11-27			М																	
Guard Tower Stair Replacement			М																	
HVAC Replacement (4)			С																	
Num-1 Hoist Upgrade			С																	
Vacuum Chamber Upgrades			С																	
Facility Modifications for Non-Intrusive Pit Reuse			С																	
Fuel Management Upgrades (12-108, 4-147, 16-013, 16-001)				С																
Narrowband Radio Upgrade				С																
Alternate Command Center Electrical & Mechanical Sustainability				М																
Command Center Electrical & Mechanical Sustainability				М																
Fire Alarm Panel Replacements (bays/cells)				С																
Environmental Testing Facility–SNM				С																
Paint Bay Modifications for Sustained Operations					С															
UV to IR Conversion 12-084E					С															
RAMS Replacement 12-084E					С															
Production/Training Floor Space Recapture					С															
16-016 RCRA Facility Floor Replacement					С															
HE Formulation Electrical Upgrade for LEP					С															
Breath and Alcohol Testing (BAT) Facility					С															
ARGÚS AFPS (50)/RAPS (100) Replacement						С														
ARGUS AFPS (100)/RAPS (500) Replacement						С														
Uninterruptible Power Supply, 12-98						С														
Storm Drainage System Modifications							С													
BDI Replacement							С													
Capital Equipment Infrastructure Replacement										С										





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				-						1	1	1	1	
East Property Structures Demolition				С										
Buildings 4-20E, 4-24, 4-27, 4-29					С									
Trailers 09-056, 09-108, 09-054, 09- 098, 09-111					С									
Building 11-015A, 11-R-016, 11-018					С									
Building 12-024E, 12-024S					С									
Buildings 12-034, 12-034SS, 12-R- 034						С								
Building 12-005G3, 12-080, 16-010B						С								
Buildings 12-045, 12-047, 12-041SS							С							
Steam Distribution System : Replaces insulation and repair	С													
Steam Distribution System : Replace minimum of 12 failed to drain CRU	С													
Building Continuous Commissioning Program	С													
Solar hot water panels @ 3 buildings	С													
Install high efficiency burners at Bldg. 16-13		С												
Connect EMCS to bldgs. In Zones 11 and 12			С											
HPSB Compliance. Install advanced electric, natural gas, steam, and water meters				С										
Sustainable Vehicle Wash Facility					С									
Replace steam heaters in ramps that are failed to drain						С								
HPSB Compliance. Purchase and install EPA Labeled WaterSense product. (Lo-flow)								С						
Solar ventilation air preheat at Steam Plant								С						

Major is defined as a project that will significantly improve the operations or infrastructure to support the mission.

Critical is defined as a project that if not performed could impact the ability to support the mission.



Narrative Section

UV to IR Conversion-12-99-Production facility fire protection systems are required to ensure the safety envelope of weapons operations during assembly/disassembly phases. The current Ultraviolet (UV) high speed deluge trip system will be supported by the manufacturer until 2012, assuming component parts are available.

RAMS Replacement-12-99-The project replaces all alpha and tritium continuous air monitors (CAMs) equipment located in bays and cells and the field processors and reporting system. Project also replaces the individual area evacuation alarm units (EAUs) and the RAMS field processors and central alarm monitoring systems.

Metrology Lab Environmental Controls Upgrade-The project will replace aged and failing HVAC and dehumidification systems in metrology calibration laboratory. Metrology calibrates tooling and equipment required to support <u>all</u> surveillance, Life Extension Programs, and dismantlement activities. Existing systems will not adequately support projected workload including calibration of over 80 new tools, additional copies of tooling, and tooling requirements for dismantlement, and the SS21 process.

Environmental Controls for LEP in Production Facilities-Replace old pneumatic controls and devices prone to failure and thereby compromising the environment required to support surveillance and dismantlement activities. Replacing this equipment addresses deferred maintenance, supports energy savings initiatives, and supports the Life Extension Programs. Methodically upgrading and commissioning environmental control systems will significantly improve energy efficiency and ensure temperature and humidity is controlled within the strict parameters required to support production.

Lightning Location and Protection System (LLPS) Replacement-The LLPS is a safety class system that is required for certain lightning sensitive operations in multiple weapon programs and is used for personnel safety warnings. It is credited in sitewide safety documents. The LLPS system sensors and software are the primary items that have reached end of life and the manufacturer is no longer supporting our existing units. The software upgrade will be running on PCs instead of the present Unix computers and the new configuration will be simpler and more reliable. The National Lightning Detection System is upgrading their sites now and in order to remain compatible, Pantex must also upgrade the system.

Explosive Facility Lightning and Surge Protection-Upgrade 43 facilities to protect operations from a lightning assault. Protection is required on both the primary side of the facility transformer and/or at the secondary feed in the facility's main distribution panel. Additionally, some facilities require upgrade and certification of the aerial lightning protection system. Upgrade ensures compliance with DOE Explosives Safety Manual-Pantex version, Chapter 2, Sections 8.3.a and 8.3.b., as well as safe and compliant operations in explosive category facilities.

Asset Management Support

(Roof/Roads)-The project rehabilitates roadways in Zones 12, 11, and 4, which are required for safe and secure transport of weapon systems. Additionally, roof coatings are required every five years to protect roofing membranes from damage caused by infrared and ultraviolet deterioration and resulting leaks.

Seismic Upgrades (Ceiling & Wall Modifications-The project continues seismic upgrades and related improvements to walls and ceilings of specific mission critical production bay and cell facilities. Includes procurement and installation of ground motion monitoring capability at Pantex. Provides for the continuation of planned improvements as documented and





approved in the Site-wide Safety Analysis Report for Nuclear Explosive Facilities and compliance with facility seismic hazard related requirements as set forth in DOE O 420.1B Facility Safety, and DOE STD-1020 NPH Design and Evaluation Criteria for DOE Facilities. Various weapon operations could be impacted if the project is not supported.

Mock HE Capability Upgrade-Provides facility upgrade of the HE Formulation facility required to establish the capability of fabricating mock HE as required to satisfy HE mission objectives and meet weapon program requirements for fabrication of a new mock HE. A new type of mock HE is required for use in support of two weapon programs. The new mock recipe essentially eliminates the use of hazardous material in its formulation thus improving worker safety and substantially reducing waste disposal costs

Sustainable Facility, 11-2/11-27-The project provides upgrades to a facility quickly becoming uninhabitable. Replaces electrical wiring, deteriorated to the point that insulation crumbles to the touch, and electrical components to meet current code and availability. In addition, the project replaces and reconfigures the HVAC systems to support the increased heating and cooling loads. This project provides adequate office space for critical personnel.

Guard Tower Safety Enhancement-Safety upgrades to address hazards associated with ascending or descending to/from older elevated guard towers. Current access limits the ability to carry required security gear without encountering safety hazards. Emergency response personnel are also limited in their ability to carry emergency equipment and stretchers in the event of a medical emergency. Stairs do not currently meet OSHA standards.

HVAC Replacement (4)-The project is to replace mission essential chillers and HVACs in mission dependent warehouses and one mission critical laboratory. The chillers and HVACs have exceeded their design life and require frequent maintenance to remain operational. Replacement is required to ensure continuous operations and sustained required environments in those facilities

Num-1 Hoist Upgrade-Provides procurement and installation of 21 seismically qualified hoists that will not drop load during a PC-3 seismic event. Installation planned is 13 bay/cell locations as required by approved, but not implemented, Bays and Cells SAR. Installation remedies noncompliance with NTS-ALO-BWXT-2003-001 and enhanced seismic cranes provide better protection during seismic events.

Vacuum Chamber Upgrades-Modernize one vacuum chamber, no longer supported since manufacturer has gone out of business and establish second vacuum chamber bay to support projected acceptance/surveillance requirements for weapon programs. Replacement parts are not readily available and failure of the RGA(s) or cryogenic pumps would result in extended downtime with significant production impacts. The vacuum chambers play a crucial role in stockpile stewardship activities at Pantex.

Facility Modifications for Non-Intrusive Pit Reuse-Facility upgrades of the SNM Component Requalification Facility which are required to establish the capability for tube replacement and pit reuse. Pantex Plant has the mission assignment for Non-Intrusive Pit Reuse which requires facility modification to implement pit reuse capabilities, including retubulation and shell over-cladding – per the baseline. Pit tube replacement capability at Pantex Plant will result in substantial cost avoidance for NNSA and supports weapon program First Production Unit required by 2017.

Fuel Management Upgrades-Upgrade the fuel (diesel and unleaded) storage, delivery, and cathodic protection systems at four plant locations. Upgrade is required to ensure meeting the 30 Texas Administrative Code, Chapter 334, compliance for



petroleum storage tanks. These systems are required to provide power for mission critical operations in the event of primary power failure. Leaks in any of the systems could result in regulatory fines and penalties.

Narrowband Radio Upgrade-Replacement of the majority of radio system backbone electronic equipment, software, and UPS. Upgrade is necessary to meet the operational requirements of the Plant and FCC requirements to be met by January 1, 2013. In addition, replacement parts for existing system are no longer available from the manufacturer

Alternate Command Center Electrical and Mechanical Sustainability-Upgrade mechanical and electrical systems in the Security Alternate Command Center. Additional capacity is required to support the installation of new alarm and monitoring systems necessary for the protection of nuclear weapon and material assets. Upgrades are required to allow installation of equipment necessary to sustain the plant mission.

Command Center Electrical and Mechanical Sustainability-Upgrade mechanical and electrical systems in the Security Command Center. Additional capacity is required to support the installation of new alarm and monitoring systems necessary for the protection of nuclear weapon and material assets. Upgrades are required to allow installation of equipment necessary to sustain the plant mission.

Fire Alarm Panel Replacements (bays/cells)-The project replaces the existing fire alarm panels in production facilities due to technical obsolescence. Existing panels will no longer be supported by the manufacturer after 2012.

Environmental Testing Facility-SNM-The project upgrades required to support the Complex Transformation Supplemental Programmatic Environmental Impact Statement (SPEIS) Record of Decision (RoD) to move of SNM surveillance testing from Lawrence Livermore National Lab (LLNL) Site 300 to Pantex. Includes planing, design, and installation of SNM surveillance testing equipment. LLNL equipment would have to be refurbished or new equipment procured to ensure the QC-1 pedigree. LLNL is budgeting for equipment refurbishment or new equipment.

Paint Bay Modifications for Sustained Operations-The project upgrades and modifies existing equipment to support the B61 paint operations and installs maintenance catwalks to enhance accessibility to key components requiring regular maintenance. Project supports the relocation of painting operations to a modern sustainable facility to meet weapon program requirements.

UV to IR Conversion-12-084E-Production facility fire protection systems are required to ensure the safety envelope of weapons operations during assembly/disassembly phases. The current ultraviolet (UV) high speed deluge trip system will be supported by the manufacturer until 2012, assuming component parts are available.

RAMS Replacement-12-084E-The project replaces all alpha and tritium continuous air monitors (CAMs) equipment located in bays and cells and the field processors and reporting system.

Production/Training Floor Space Recapture-The project fills in five floor pits, which are no longer required, in three facilities providing additional useable floor space for training, component storage, and operations. Additional space supports mission critical operations, including nuclear component packaging and long-term storage capacity requirements.

16-016 RCRA Facility Floor Replacement. The project replaces flooring in Pantex's main hazardous waste storage facility serving as a secondary containment required by 40CFR264.175. Regulatory noncompliance, permit violations, and a reduction in permitted waste storage capacity could result from failure to contain chemical leaks or spills



HE Formulation Electrical Upgrade for

LEP-Upgrade of the electrical system in HE Formulation facility. Wiring in this circa 1945 building is aged, deteriorating, and unreliable with circuit breakers frequently tripping and severely impacting the HE Formulation processes. HE formulation capability supports the WR acceptance of materials used in the Life Extension Programs.

Breath and Alcohol Testing (BAT)

Facility-Mobile facility to provide required testing at location remote to the existing medical facility. Provide physical, sound, and visual privacy for drug/alcohol program testing.

ARGUS AFPS (50) /RAPS (100) Replacement-The project provides for replacement of 50 existing access control ARGUS Field Panels (AFPS) and 100 Remote Access Panels (RAPS) required to access various areas of the Plant. Replacement supports migration to the enhanced ARGUS system adopted by NNSA and the safeguard and security mission assigned to Pantex as well as the Directed Stockpile Workload.

ARGUS AFPS (100) /RAPS (500) Replacement-The project provides for replacement of 100 existing access control ARGUS Field Panels (AFPS) and 500 Remote Access Panels (RAPS) required to access various areas of the Plant. Replacement supports migration to the enhanced ARGUS system adopted by NNSA and the safeguard and security mission assigned to Pantex as well as the Directed Stockpile Workload.

Uninterruptible Power Supply, 12-98-Replace four UPSs that are approximately 30 years old and prone to failure. The uninterruptible power supply (UPSs) for Bldg. 12-98 is required to provide emergency power for safe shutdown including: Emergency Lights, Blast Door Interlock, RAMs, and communications in the area. Replacement ensures continued operations.

Storm Damage System Modifications-

Upgrade storm water drainage system in accordance with site-wide drainage evaluation, to prevent damage to mission critical facilities. Includes repair, modification, and installation of: culverts, ditches, surface contours, curb and gutter, erosion control features. Today, the storm water drainage system does not meet DOE Natural Phenomenon Hazard Performance Criteria. The rainfall event of July 7, 2010, along with other rainfall events, have resulted in significant impact to operations and damaged critical equipment and facilities emphasizing the importance of upgrading drainage system

BDI Replacement-The project replaces the blast door interlock (BDI) system and the operational machine interface (OMI) system utilized to mitigate high explosive machining risk. The current programmable logic controller is obsolete and replacement parts are not available. Project is required to maintain operability of the BDI/OMI system which is a required engineered safety system for mission critical explosive processing operations supporting all weapon systems. HE component manufacturing capabilities/ capacities in support of the LEPs are at risk if systems fail.

Capital Equipment Infrastructure

Replacement-Replaces multi-program infrastructure equipment required to support the plant mission.

East Property Structures Demolition-Demolition of structures no longer needed to accomplish the plant mission.

Buildings 4-20E, 4-24, 4-27, 4-29-Demolition of structures no longer needed to accomplish the plant mission.

Trailers 09-056, 09-108, 09-054, 09-098, 09-111-Demolition of structures no longer needed to accomplish the plant mission.

Building 11-015A, 11-R-016, 11-018-Demolition of structures no longer needed

Demolition of structures no longer needed to accomplish the plant mission.



Building 12-024E, 12-024S-Demolition of structures no longer needed to accomplish the plant mission.

Buildings 12-034, 12-034SS, 12-R-034-Demolition of structures no longer needed to accomplish the plant mission.

Building 12-005G3, 12-080, 16-010B-Demolition of structures no longer needed to accomplish the plant mission.

Buildings 12-045, 12-047, 12-041SS-Demolition of structures no longer needed to accomplish the plant mission.

Steam Distribution System: Replaces Insulation and Repair-The project provides restoration of approximately 10,000 linear feet of steam and condensate pipe insulation damaged by the July 2010 flood event.

Steam Distribution System: Replace Minimum of 12 failed to Drain CRU-

Condensate Return Units (CRUs) require replacement with energy conserving compressed air units.

Building Continuous Commissioning Upgrade-Perform continuous

commissioning of Plant buildings to optimize building system equipment and operations. Building commissioning is the best mechanism to achieve optimal performance and efficiency for a site's existing buildings to meet: Greenhouse Gas requirements of EO13514 §2(a) and (b); Energy reduction requirements of EO 13423 §2(a) and HPSB requirements of EOs 13423 and 13514.

Solar Hot Water Panels at Three Buildings-This project provides progress

toward DOE O 430.2B, CRD 5.b. to reduce use of thermal renewable energy by 7.5%.

16-13 Boiler Burner and Control/CRU Upgrade-The project replaces the central steam plant boiler burners and control system with more efficient low Nitrogen Oxide (NOX) burners and efficient controls to save natural gas and reduce greenhouse gas emissions resulting from steam production. The existing boiler burners and control systems are greater than 20 years old with control inefficiencies that consume more natural gas and create more greenhouse gases than necessary. Replacement and upgrade of the burners and controls are critical to maintain efficient, reliable steam production, helping to meet: Greenhouse Gas requirements of EO13514 §2(a) and (b); and Energy reduction requirements of EO 13423 §2(a).

HPSB Compliance-Install Advanced Electric, Natural Gas, Steam, and Water

Meters-Design and install building metering systems for electricity, water, and steam systems. Advanced metering is a requirement of EPACT 2005 §103, EISA §432, 434(b), and DOE Order 430.2B and will provide the tracking and trending of energy usage allowing high use areas to be identified and remediated.

Vehicle Wash Facility-Construct a new vehicle wash facility for Plant vehicles. Car wash will utilize water from Pump and Treat remediation project and eliminate fuel consumption to existing car wash (~60 mile round trip). Utilizing on-site car wash helps meet numerous EO 13423 and 13514 requirements especially Greenhouse Gas reduction.

Replace steam heaters in ramps that are failed to drain-Condensate Return Units (CRUs) require replacement with energy conserving compressed air units.

Lo-Flow Devices in 31 Buildings-Purchase and install EPA-labeled WaterSense products (faucets, lavatories and toilets) in 31 buildings. Project would reduce potable water consumption by replacing out-of-date, inefficient faucets, lavatories, and toilets. Fixtures would meet the requirements: Greenhouse Gas requirements of EO13514 §2(a) and (b); Energy reduction requirements of EO 13423 §2(a) and HPSB requirements of EOs 13423 and 13514.

Solar Ventilation Air Preheat at Steam Plant-This project provides progress toward DOE

O 430.2B, CRD 5.b. to reduce use of thermal renewable energy by 7.5%.





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Facilities and Infrastructure Recapitalization Projects

F	Y 12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Chiller Replacement, 12-109																				
Site-Wide Pipe Replacements (FSB contract)																				
12-21 Refurbishment Part 1																				
FY11 Mechanical Task (Chiller Replacement, 12-032, 12-042, 16-012)																				
RAMP Site Support (FY12)																				
Chiller Replacement, 12-021																				
Piping Upgrade, 12-021																				
Chiller Replacement, 12-085																				
Chiller Replacement, 12-096																				
Chiller Replacement, 12-068A																				
FY13 RAMP Site Support																				
Electrical Upgrade, 12-021																				
Steam Pipe Refurbishment (Wes Loop)	t																			

Chiller Replacement, 12-109-The project will install two new chillers at mission dependent facility. One chiller replaces existing trailer mounted temporary chiller and second chiller which provides dual capability for surrounding facilities. Project utilizes chillers procured through the Energy Savings Performance Contract.

Site-wide Pipe Replacements (FSB contract)-Replaces domestic water line and valve replacements in Zone 12 and Zone 11 amounting to approximately 2,776 linear feet of pipe, 28 valves, and 13 hydrants.

12-21 Refurbishment Part 1-The project will refurbish 12-021 with funding from the remaining funding from the FIRP LI projects at Pantex.

FY11 Mechanical Task (Chiller Replacement, 12-032, 12-042, 16-012)-Upgrade the HVAC, boiler, and other ancillary mechanical equipment, that has failed or is near failure. The mechanical equipment is required to meet environmental requirements and/or personnel environments in Buildings 12-32, 12-42A, and 16-12. The mechanical equipment will be replaced with energy



efficient equipment and will reduce maintenance costs.

RAMP Site Support (FY12)-Represents the site support costs, (i.e. Project & Construction Management, Security, etc.) associated with roof repairs/replacements executed through the enterprise wide Roof Asset Management Program (RAMP).

Chiller Replacement, 12-021-Replace two chillers at Building 12-21. Both chillers have exceeded their design life and one chiller has failed. Replacement will ensure continued operations in this Mission Critical Facility.

Piping Upgrade, 12-021-Project provides replacement of piping that has exceeded its useful life, subject to failure, and is sporadically impacting operations. Piping to be upgraded includes: domestic water (hot and cold), steam, condensate, chill water supply, and chill water return. Project replaces piping in this circa 1940's building and will address a major cause of impacts to production.

Chiller Replacement, 12-085-The project replaces the chiller that has exceeded its design life and prone to failure. Replacement ensures continuous operation in a Mission Critical Facility.

Chiller Replacement, 12-096-The project replaces the chiller that has exceeded its design life and prone to failure. Replacement ensures continuous operation in a Mission Critical Facility.

Chiller Replacement, 12-068A-The project replaces the chiller that has exceeded its design life and prone to failure. Replacement ensures continuous operation in a mission dependent facility.

FY13 RAMP Site Support-The project represents the site support costs, (i.e. Project and Construction Management, Security, etc.) associated with roof repairs/replacements executed through the enterprise wide Roof Asset Management Program (RAMP).

Electrical Upgrade, 12-021-The wiring in Building 12-021, circa 1940's, is no longer sufficient to adequately support the instruments for the NDE and Gas Lab and/or technological upgrades. New wiring, combined with other upgrades, will allow capacity of facility to be maximized.

Steam Pipe Refurbishment (West Loop) The project repairs the damaged west loop of the steam piping system. Repair will restore redundancy to the system which supplies steam for facility heat and weapon and high explosive production processes.





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Appendices

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Appendix A-NNSA Missions

NNSA is responsible for the management and security of the nation's nuclear weapons, nuclear non-proliferation, and naval reactor programs. It also responds to nuclear and radiological emergencies in the U.S. and abroad. Additionally, NNSA federal agents provide safe and secure transportation of nuclear weapons and components and special nuclear materials along with other missions supporting the national security.

Code	Mission	Description
M1	Managing the Stockpile	Maintaining the safety, security, and effectiveness of the nuclear deterrent without nuclear testing, especially at lower numbers, requires increased investments across the NSE. Program elements include the following:
		 Design and build 21st Century uranium and plutonium processing facilities Ensure the capabilities to complete ongoing Lifetime Extension Programs Strengthen science, technology and engineering base Reinvest in the scientists and engineers who perform the mission
М2	Preventing Proliferation	 Keeping Weapons of Mass Destruction (WMD) out of the hands of state and non-state actors requires a coordinated effort on the part of suppliers of proliferation-sensitive materials, equipment, and technologies. Even advanced countries with elaborate trade control systems frequently lack the capability to make those systems truly effective in detecting, deterring, and interdicting illicit WMD-related trade. NNSA prevents and counters WMD proliferation by strengthening export control systems in other countries and transitioning WMD expertise and infrastructure in partner countries to peaceful purposes. Program elements include the following: Domestic Export Licensing International Export Control Cooperation Scientist Engagement and Redirection
МЗ	Powering the Nuclear Navy	 Providing militarily effective nuclear propulsion plants and ensuring their safe, reliable, and long-lived operation. The Naval Nuclear Propulsion Program comprises the military and civilian personnel who design, build, operate, maintain, and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet. The program has cradle-to-grave responsibility for all naval nuclear propulsion matters. Program responsibilities are delineated in Presidential Executive Order 12344 of February 1, 1982, and prescribed by Public Laws 98-525 of October 19, 1984 (42 USC 7158), and 106-65 of October 5, 1999 (50 USC 2406). Program elements include the following: Research, development, and support laboratories Contractors responsible for designing, procuring, and building propulsion plant equipment Shipyards that build, overhaul, and service the propulsion plants of nuclear-powered vessels Navy support facilities and tenders Nuclear power schools and Naval Reactors training facilities Naval Nuclear Propulsion Program Headquarters and field offices





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M4	Emergency Response	Ensuring that capabilities are in place to respond to any NNSA and DOE facility emergency. It is also the nation's premier responder to any nuclear or radiological incident within the U.S. or abroad and provides operational planning and training to counter both domestic and international nuclear terrorism. Program elements include the following:
		 Planning for Emergencies Responding to Emergencies Counterterrorism International Programs Emergency Communications Operations Center Emergency Operations Training Continuity Program
M5	Continuing Management Reform	Managing and securing the nation's nuclear weapons, nuclear non-proliferation, and naval reactor programs. It also responds to nuclear and radiological emergencies in the United States and abroad. Additionally, NNSA federal agents provide safe and secure transportation of nuclear weapons and components and special nuclear materials along with other missions supporting the national security.
M6	Recapitalizing Infrastructure	Investing in the transformation of a Cold War nuclear weapons complex into a 21st Century NSE.





Appendix B-NNSA Programs

NNSA Programs from TYSP Guidance for reference

Directed Stockpile Work (DSW)	The DSW program is responsible for maintaining and enhancing the safety, security, and reliability of the U.S. nuclear weapons stockpile without using underground testing.
(0311)	Program elements include the following:
	Life Extension Program (LEP)
	Stockpile Systems
	Weapons Dismantlement & Disposition (WDD)
	Stockpile Services
Science Campaign	The Science Campaign supports the development of the knowledge, tools, and methods used to assess the performance of the nuclear explosive package of a nuclear warhead.
	Program elements include the following:
	Primary Assessment Technologies
	Secondary Assessment Technologies
	Dynamic Materials Properties
	Advanced Radiography & Transformational Technologies
	Advanced Certification
Engineering Campaign	The Engineering Campaign provides the complex with modern tools and capabilities in engineering sciences and technologies to ensure the safety, security, effectiveness and performance of the current and future U.S. nuclear weapon stockpile without further underground testing, and provides a sustained basis for stockpile certification and assessments throughout the lifecycle of each weapon.
	Program elements include the following:
	Enhanced Surety
	Weapon Systems Engineering Assessment Technology
	 Nuclear Survivability
	 Enhanced Surveillance (ESV)
Inertial	The ICF Campaign provides the experimental capabilities and scientific understanding in
Confinement	High-Energy Density Physics (HEDP) necessary to maintain a safe, secure, and reliable
Fusion (ICF)	nuclear weapons stockpile without underground testing.
Campaign	ICF Campaign has three strategic objectives: (1) achieve thermonuclear ignition in the laboratory and develop it as a routine scientific tool to support stockpile stewardship; (2) develop advanced capabilities including facilities, diagnostics, and experimental methods that
	access the High-Energy Density (HED) regimes of extreme temperature, pressure, and density required to assess the nuclear stockpile; and (3) maintain the U.S. preeminence in
	HED science and support broader national science goals.
	Program elements include the following:
	Ignition
	Support of Other Stockpile Programs
	NIF Diagnostics, Cryogenics, and Experimental Support
	Pulsed Power Inertial Confinement Fusion
	Joint Program in High Energy Density Laboratory Plasmas
	Facility Operations and Target Production
	Inertial Fusion Technology
	High-Energy Petawatt Laser Development
Advanced	The ASC Campaign's mission is to provide leading-edge, high end simulation
Simulation and	capabilities needed to meet weapons assessment and certification requirements and to
Computing	predict, with confidence, the behavior of nuclear weapons through comprehensive,
(ASC) Campaign	science-based simulations.
	Program elements include the following:
	Integrated Codes (IC) Diversion and Environmental Models
	Physics and Engineering Models
	Verification and Validation (V&V)
	Computational Systems and Software Environment (CSSE)
	Facility Operations and User Support (FOUS)
Readiness	The Readiness Campaign identifies, develops, and deploys new or enhanced processes,



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Campaign	technologies, and capabilities to meet current nuclear weapon design, production, and dismantlement needs and provides quick responses to national security requirements.
	Program elements include the following:
	Advanced Design and Production Technologies
	 High Explosives and Weapons Operations
	 Non-nuclear Readiness
	Stockpile Readiness
	Tritium Readiness
Readiness in	The goal of the RTBF program is to operate and maintain NNSA program facilities in a safe,
Technical Base	secure, efficient, reliable, and compliant condition.
and Facilities	RTBF includes: including facility operating costs (e.g., utilities, equipment, facility personnel,
(RTBF)	training, and salaries); facility and equipment maintenance costs (e.g., staff, tools, and
	replacement parts); Environment, Safety, and Health (ES&H) costs; and the costs to plan,
	prioritize, and construct state-of-the-art facilities, infrastructure, and scientific tools within
	approved baseline costs and schedule. Program elements include the following:
	Operations and Maintenance Operations of Facilities
	 Material recycle and Recovery Containers
	o Storage
	Construction
	 Capability Based Facilities and Infrastructure (CBFI) - planned to be initiated in FY2013.
	Program elements include the following:
	 Recapitalization/Life Extension
	o Infrastructure LI
	o Disposition
	o Sustainability
Secure	The STA mission is to provide a capability for the safe and secure transport of nuclear
	warheads, components, and materials that will meet projected DOE, Department of Defense
Transpor-tation	(DoD), and other customer requirements.
Asset (STA)	
Program	
Nuclear	The NCTIR Program mission is to ensure that capabilities are in place to respond to any
Counterterrorism	DOE/NNSA facility emergency, nuclear, or radiological incident within the United States or
Incident	abroad, and to provide operational planning and training to counter both domestic and
Response	international nuclear terrorism and assure that DOE can carry out its mission-essential
(NCTIR)	functions.
	Program elements include the following:
	Emergency Management
	Emergency Response
	NNSA Emergency Management Implementation
	Emergency Operations Support
	National Technical Nuclear Forensics
	International Emergency Management and Cooperation
	Nuclear Counterterrorism
Facilities and	The FIRP mission is to restore, rebuild, and revitalize the physical infrastructure. FIRP applies
Infrastructure	direct appropriations to address an integrated, prioritized series of repair and infrastructure
	projects focusing on completion of deferred maintenance that significantly increases
Recapitalization	operational efficiency and effectiveness of NNSA.
Program (FIRP)	Sunsets in FY13
	Program elements include the following:
	Recapitalization
	Facility Disposition
	FIRP Construction
0:44 044444	Cite Otenuerdekiele miesien is te engene en insurrentel engeligen en teinek ""
Site Stewardship	Site Stewardship's mission is to ensure environmental compliance, sustainability, and energy
Site Stewardship	Site Stewardship's mission is to ensure environmental compliance, sustainability, and energy and operational efficiency, while modernizing, streamlining, consolidating, and sustaining the stewardship and vitality of the sites as they transition within NNSA.

TEN • YEAR • SITE • PLAN





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	 Program elements include the following: Environmental Projects and Operations (EPO) Nuclear Materials Integration Energy Modernization and Investment Program (EMIP) Construction
Defense Nuclear Security (DNS)	 DNS is responsible for the development and implementation of security programs for the NNSA. In this capacity, DNS is the NNSA line management organization responsible for security direction and program management with respect to prioritization of resources, program evaluation, and funding allocation. Program elements include the following: Program Management Performance Assurance Resource Management Protective Force Physical Security Systems Information Security Personnel Security Materials Control and Accountability (MC&A)
Cyber Security	 NNSA Cyber Security Program's mission is to ensure that sufficient information technology and information management security safeguards are implemented throughout the NNSA complex to adequately protect the NNSA information assets. Program elements include the following: Infrastructure Program Enterprise Secure Computing Technology Application Development
Global Threat Reduction Initiative	 The Global Threat Reduction Initiative identifies, secures, removes and/or facilitates the disposition of high risk vulnerable nuclear and radiological materials around the world, as quickly as possible, that pose a threat to the United States and the international community. Program elements include the following: Research Reactor Conversion Nuclear and Radiological Material Removal Nuclear and Radiological Material Protection





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Appendix C-NNSA Core Capabilities

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C1 0	C1 1	C1 2	C1 3
SITE	Design, Certification, Testing, Surveillance, and ST&E Base	Plutonium Operations and Pit Manufacture	Uranium Operations and Secondary and Case Fabrication	Tritium Operations & R&D	High Explosives (HE) R&D	Non-Nuclear component production / testing	Assembly / Disassembly & High Explosive (HE) Production	Transportation	Category I/II SNM Storage	Infrastructure Support Facilities	Nuclear Non-Proliferation	Counter-Terrorism	Support of Other Mission / Program Capability
Kansas City Plant (KCP)						Х				Х			
Lawrence Livermore National Laboratory (LLNL)	х	х		х	х					х	х	х	х
Los Alamos National Laboratory (LANL)	х	Х		Х	Х	Х			Х	х			
Nevada National Security Site (NNSS)	х				Х					х			
Pantex Plant (PX)					Х		Х		Х	Х			Х
Sandia National Laboratory (SNL)	х				х	х				х			
Savannah River Site (SRS)				Х						Х	Х		
Y-12 National Security Complex (Y-12)	х		Х				Х		Х	х	х		
Office of Secure Transportation (OST)								Х		Х			

Pantex Supporting Capabilities

The capability and capacity for synthesis, formulation, pressing, machining, and analytical and performance testing of all NNSA explosives to meet acceptance, surveillance, rebuild, JTA, and LEP requirements. These explosive materials also support activities such as development work, component replacement, component aging studies, and sanitization activities.	C1, C5, C6, C13
Capability and capacity for synthesis, formulation, pressing, machining, and analytical and performance testing of all NNSA explosives to meet acceptance, surveillance, rebuild, JTA, and LEP requirements. These explosive materials also support activities such as development work, component replacement, component aging studies, and sanitization activities.	C1,
Pantex has several programs involved in arms control and the nonproliferation of nuclear warheads, materials, and technologies in the former Soviet Union. These programs look at diverse issues such as the impact of future arms control treaties on Pantex and the prevention of the proliferation of nuclear warhead technologies.	C11
Pantex provides qualified technical and professional personnel and equipment for Accident Response Group (ARG), ARG disposition, Joint Technical Operations Team (JTOT), and Radiological Assistance Program (RAP). These enhance DOE capability to respond to accidents and significant incidents	C11, C12





involving nuclear weapons or components.	
Pantex provides services to the OST supporting the secure transportation of nuclear weapons, nuclear components, and other cargoes related to the maintenance of stockpiled weapons. These services include scheduling and performance of inspections, maintenance, and modifications of OST trucks/tractors, escort vehicles, Safe Secure Trailers (SSTs), Safeguard Transporters (SGTs), and associated electronics and communications equipment.	C8, C13
DOE Office of Environmental Management (EM) closed out the Pantex Environmental Restoration (ER) program in FY10. NNSA's Environmental Projects & Operations (EPO) will be responsible for Pantex Long Term Stewardship (LTS) management. Funding is to be part of RTBF Operations of Facilities.	C13
Sanitizing and disposing of components from dismantled weapons.	C7





Appendix D-NNSA Workload

NNSA Programs

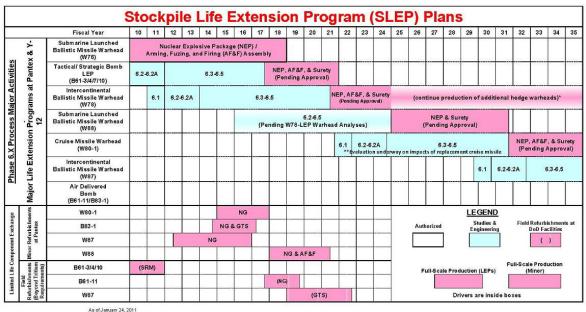
The NNSA workload includes weapons and other NNSA activities. The predominant workload at Pantex is direct or indirect support of weapons assembly and disassembly. Funding targets are shown in Appendix F.

The nuclear stockpile P&PD has been updated as a result of changes to the 2010 NPR. The P&PD will incorporate new schedules for LEPs through FY40. The

directive covers major activities that require operations at the Pantex and Y-12 production facilities, minor refurbishments that also need to be conducted at Pantex, and other refurbishments that may be executed in the field (e.g., at U.S. Navy or Air Force facilities).

Weapons Workload Forecast

Operational planning is based on the NNSA weapons workload provided in the P&PD and PCDs.



Notes

¹⁵⁰⁰ * Some hedge warheads are built during the FY 2021-2024 timeframe **The Air Force is leading an Analysis of Alternatives (AoA) for the future of long range stand-off vehicles (Ref. Section 1251 Report to Congress, November 2010)

Dates shown in pink represent deliveries of given components and/or refurbishments to the Department of Defense (DoD)

NG - Neutron Generator GTS - Gas Transfer System SRM - Spin Rocket Motors

There are numerous alternative pathways being explored that could impact future SLEP Plans, for instanc - NPR recommendation for the evaluation of the W78 ICBM warhead LEP and the possibility for use on m - Technical drivers as discovered within the framework of the surveillance program - Other technical and programmatic issues that may arise on muliple platforms

Service life extension options, if deemed necessary by policy makers and approved, will not require in any case a resumption of underground nuclear tests. The full-scale production (LEP Phase 6.6) of W76-1 Navy reentry body warheads and the options study for the B61 bomb family are the only two LEP activities presently underway. The latter effort is identifying the feasibility, design definition specifics, and detailed

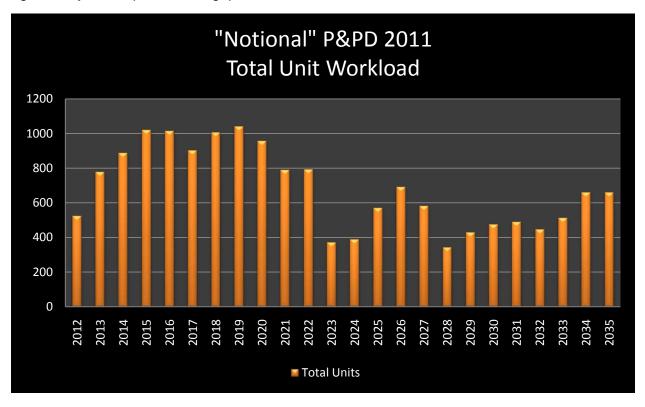
costs (Phase 6.2/2A) for possible options for the Air Force's B61-3/4/7/10 non-strategic and strategic bombs. Pending authorization of development engineering activities (Phase 6.3), the B61 Phase 6.2/2A study is being funded under the DSW/Stockpile Systems efforts further discussed in Chapter 2. Potential future studies may involve options for extending the life of the W78 reentry vehicle warhead.





A detailed design definition and a rigorous cost estimate study are conducted early in such projects (during a Phase 6.2A – in accordance with the previously cited Development and Production Manual).

Forecasts and plans are developed based on the best estimate of weapons workload for FY12 to FY22 provided by NNSA. The workload projected for Pantex is changing significantly and impacts funding, personnel, and facilities. The unit workload chart below shows the weapons workload based on the "Notional" P&PD 2011. This chart shows that the workload increases from FY12 and peaks in FY19. The increase during this period is attributable to a ramp-up on the W76 LEP, the W87 Neutron Generator (NG) change out beginning in FY13, and the B83 NG change out beginning in FY15.





Disassembly and HE component fabrication for the B61 LEP begins in FY16 and FPU is scheduled for FY17. This creates a threeyear overlap during which the B61 and W76 LEPs are running concurrently. One factor that will impact production capacity during this time period is the HPFL lead-in replacement and the Flame Detection Upgrade projects. These replacements are currently scheduled from FY17 through FY20. Various production facilities will be taken off-line for up to six weeks while this work is being performed. In order to stay within capacity constraints during this time, Pantex may be required to move some dismantlement into FY21 and beyond.

Workload projections for weapons are provided to Pantex as numbers of stockpile weapons, or units by type. B&W Pantex uses this information to develop labor and facility projections required to process the weapons. The weapons workload is not always linearly proportional to the number of units processed. Production workload is more accurately defined by the amount of direct and supporting labor required to

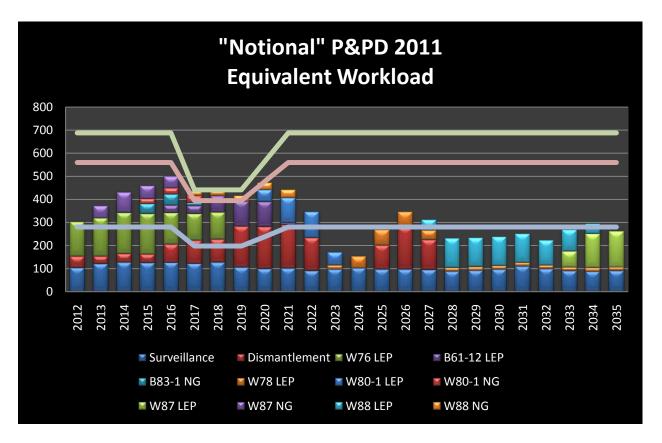




perform work on units of varying complexity that are being processed through the production plant.

Capacity through the production line varies based on the type of weapon system and the activity being performed, as well as the complexity of the weapon system. Retired weapon dismantlement is relatively simple and can be accomplished more quickly than Disassembly and Inspection (D&Is) and rebuilds, which are more complex and require more time and resources. LEPs are the most complex and consume the most man-hours and facility resources.

The labor adjusted weapons workload for FY12 through FY35 is provided in figure below noted as "Notional" P&PD 2011 Equivalent Workload.



Projected Out-Year Weapons Work

Staffing levels at Pantex are driven by workload assigned by NNSA, and security and safety requirements. A variety of measures will be used to execute the workload, including hiring personnel, outsourcing, subcontracting, and increasing the efficiency of the incumbent workforce. Pantex is currently loading data into a new version of the Long Range Pantex Production Model (LRPPM) which will provide better forecasting of facility requirements and utilization of the cell, bay, LINAC, mass property, and explosive pressing facilities during the P&PD planning horizon.





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Appendix E-Pantex Maps

Current

The map provides the current layout of the Pantex Plant Zones 11 and 12.

High Explosives Related Demolition

The map provides the planned demolition in the 10 and 20 year time frames related to the HE CoE.

High Explosives Future Construction

The map provides the planned construction in the 10 and 20 year time frames related to the HE CoE.

Production Related Demolition

The map provides the planned demolition in the 10 and 20 year time frames related to the Production CoE.

Production Future Construction

The map provides the planned construction in the 10 and 20 year time frames related to the Production CoE.

Support Related Demolition

The map provides the planned demolition in the 10 and 20 year time frames related to the Support infrastructure.

Support Future Construction

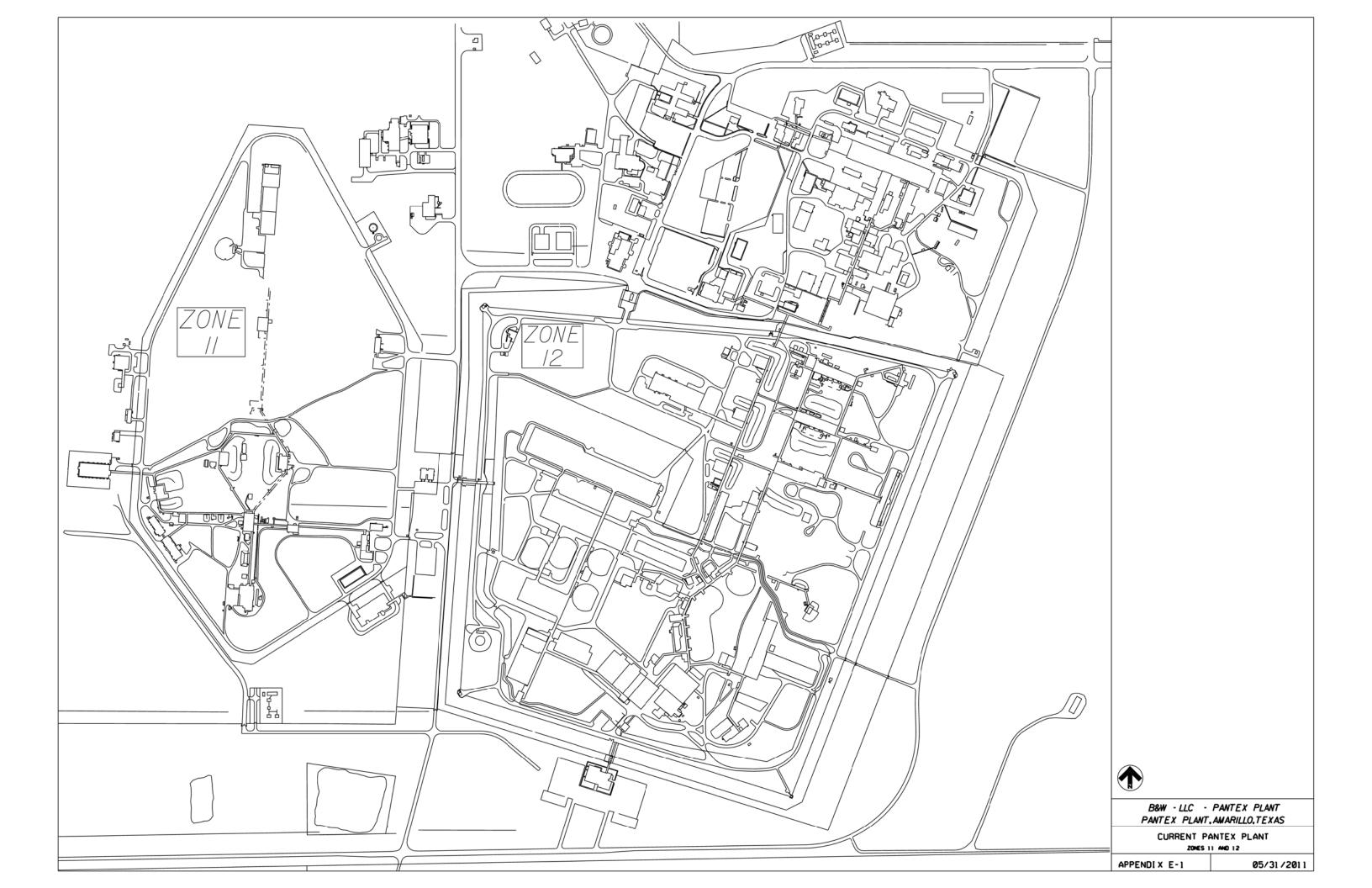
The map provides the planned construction in the 10 and 20 year time frames related to the Support infrastructure.



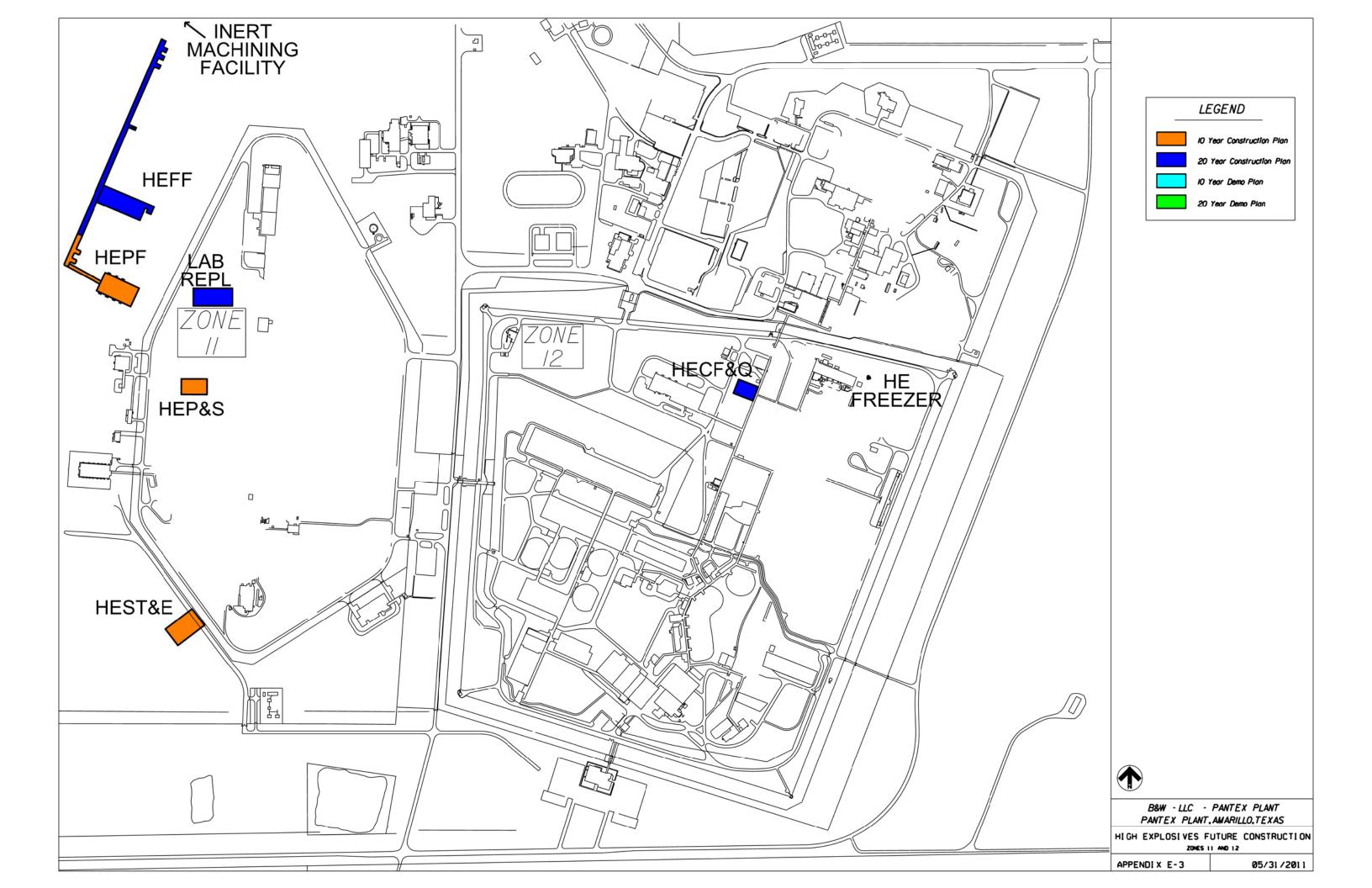


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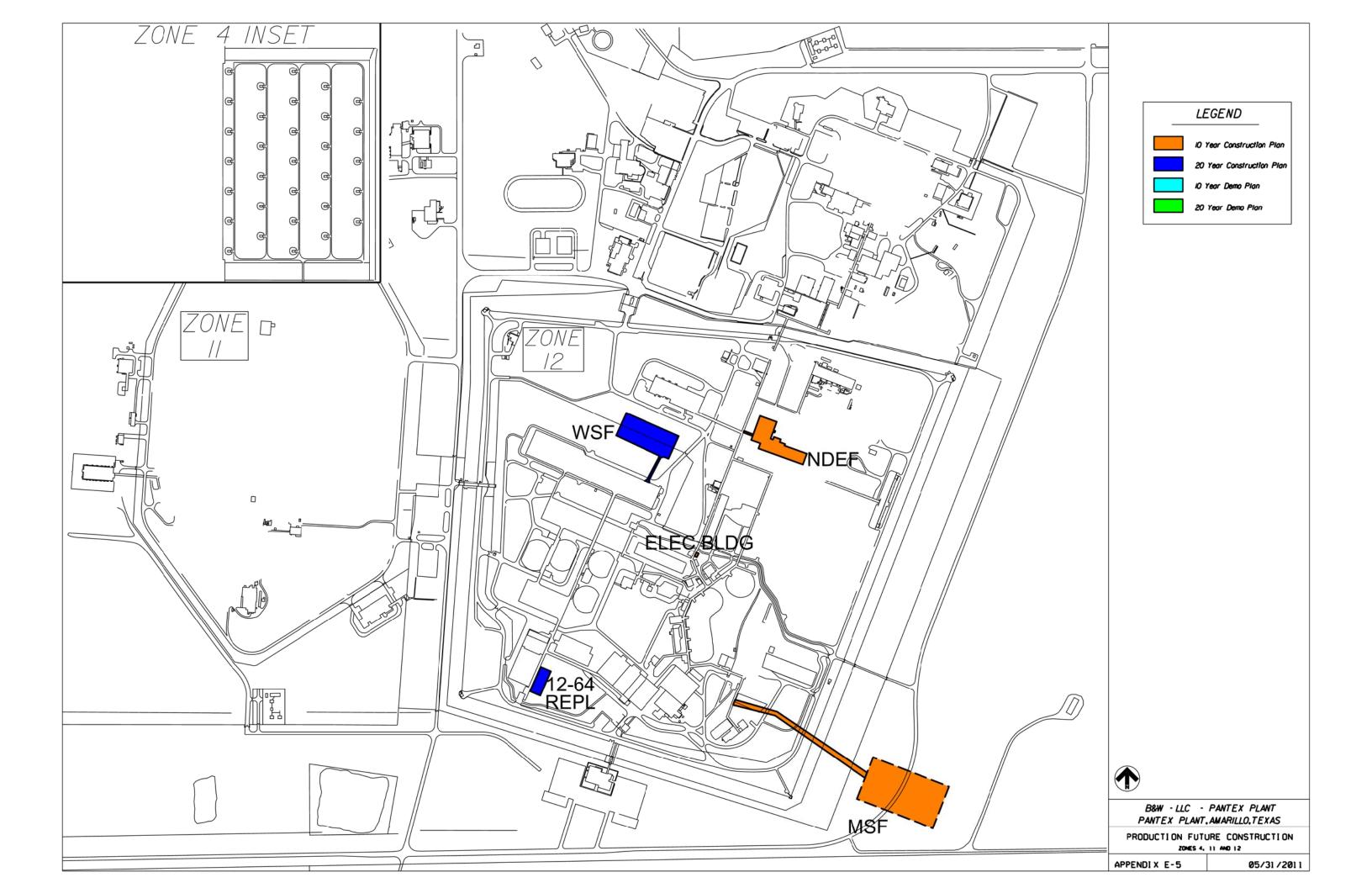
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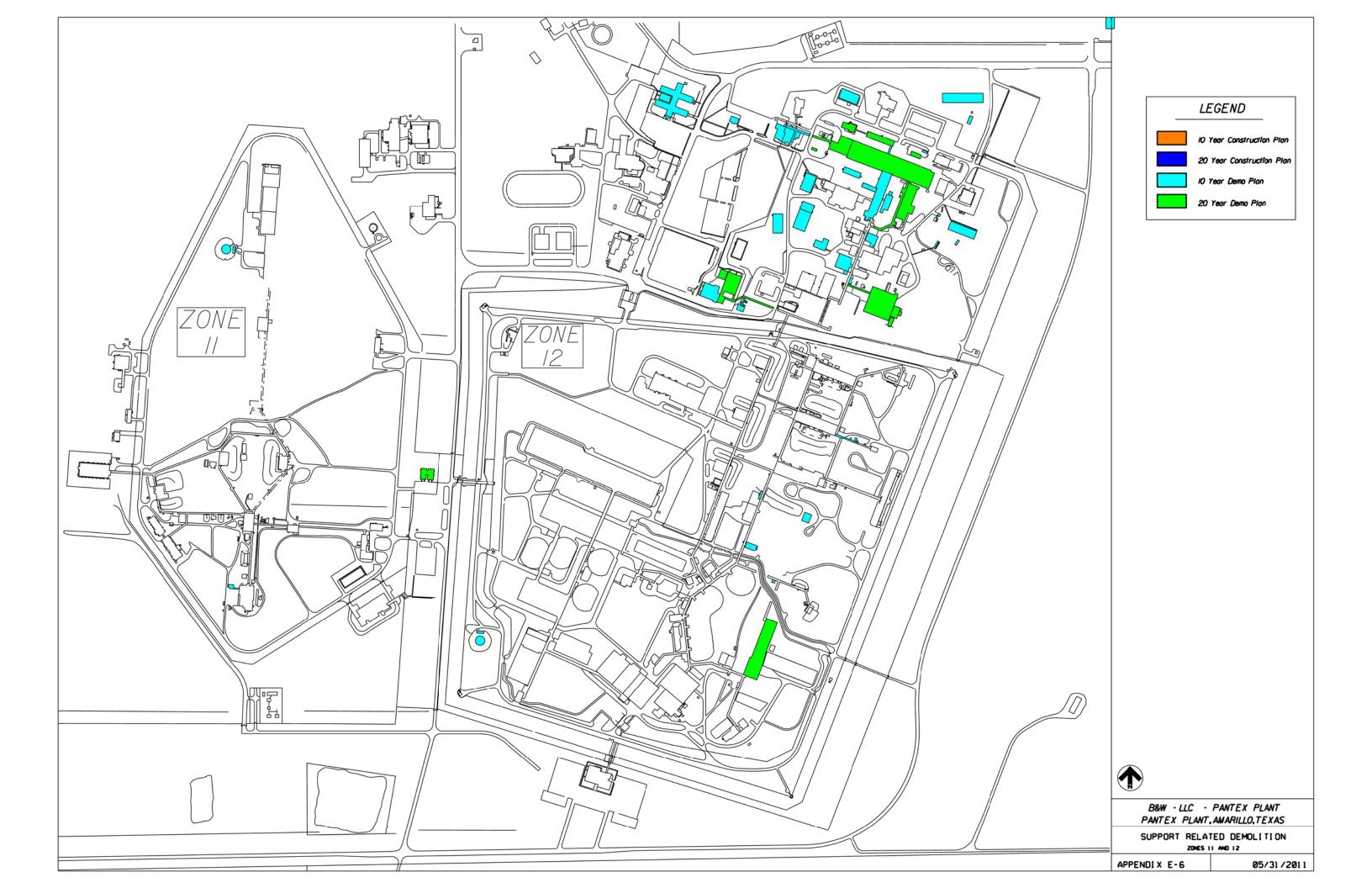


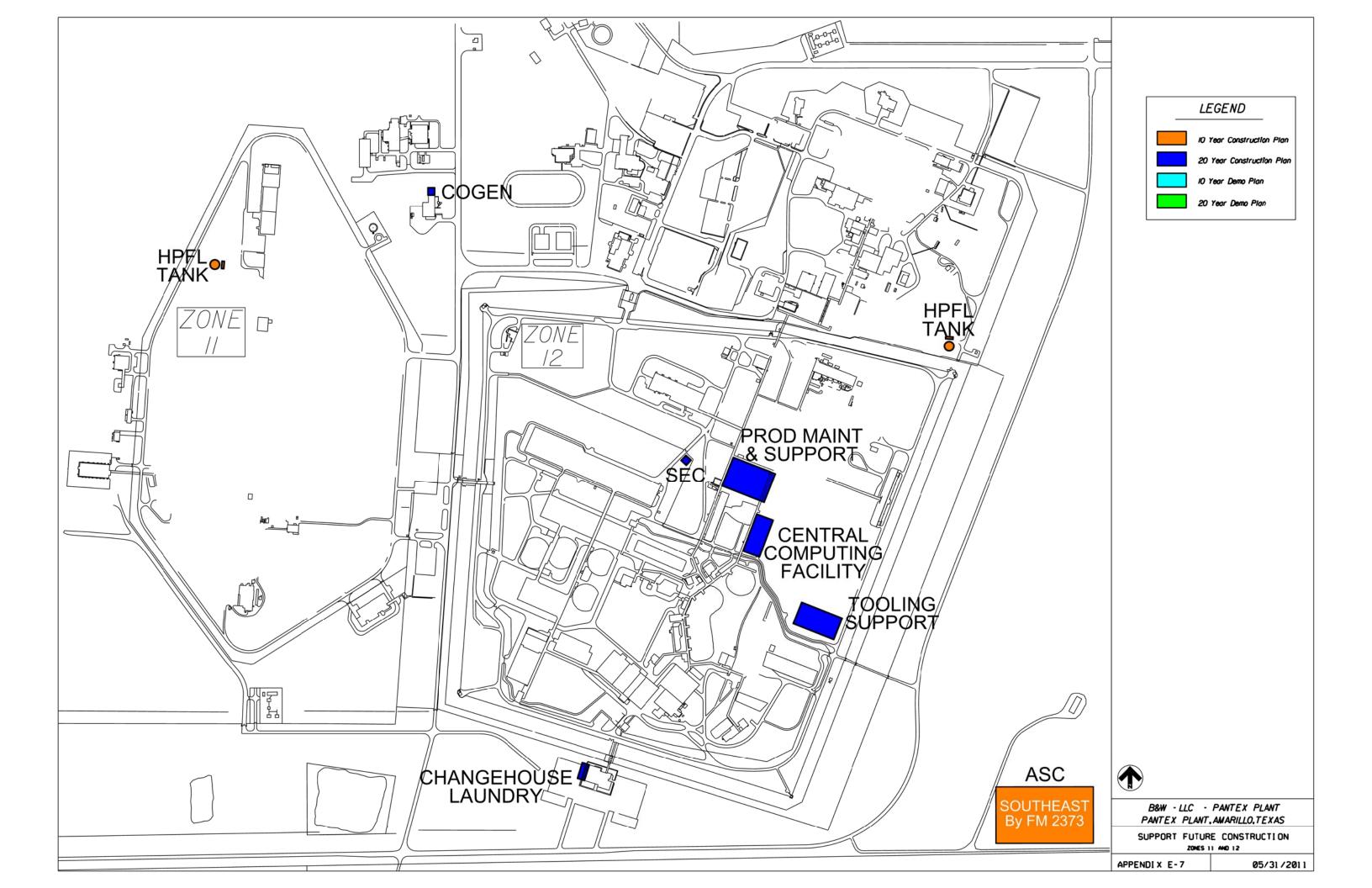














Appendix F-Pantex Funding Targets

	Pantex Fu	Inding Ta	rgets (\$00	0s) ²				
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016		
DSW3								
Life Extension Program	38,506	48,560	49,729	54,952	53,492	61,782		
Stockpile Systems	43,971	51,665	57,754	61,651	68,987	67,862		
Weapons Dismantlement &								
Disposition	24,627	17,922	19,555	17,856	20,620	21,111		
Stockpile Services	92,089	102,001	89,550	96,161	83,542	85,420		
DSW Total	199,193	220,148	216,588	230,620	226,641	236,175		
Campaigns								
Enhanced Surveillance	3,300	2,175	3,461	3,083	3,034	3,103		
ADAPT/Non Nuclear								
Readiness	295	-	700	1,840	1,840	1,840		
HEWO	2,211	-	4,750	4,500	4,500	4,500		
Campaigns Total	5,806	2,175	8,911	9,423	9,374	9,443		
RTBF4								
Operations of Facilities	127,475	164,848	172,020	170,204	173,096	172,920		
Program Readiness	3,568	-	-	-	I	-		
Containers	4,367	3,883	3,837	3,882	4,012	4,105		
Storage	8,246	13,146	17,524	12,340	12,608	12,802		
Line Item Construction	30,000	66,960	24,800	11,844	10,000	-		
RTBF Total	173,656	248,837	218,181	198,270	199,716	189,827		
FIRP	11,775	10,482	10,482	-	-	-		
Capability Based Facilities								
& Infrastructure	-	-	15,000	35,000	50,000	50,000		
Security (Cyber & Physical)	142,043	141,210	142,081	143,481	144,581	144,781		
Other DP (NCIR & STA)5	7,510	7,569	7,752	7,898	8,035	8,112		
Site Stewardship	11,319	14,630	15,781	21,245	23,905	24,627		
MD	6,093	4,107	4,572	4,718	4,870	5,027		
Reimbursable6	8,362	8,000	8,250	8,500	8,500	8,500		
Grand Total	565,757	657,158	647,598	659,155	675,622	676,492		

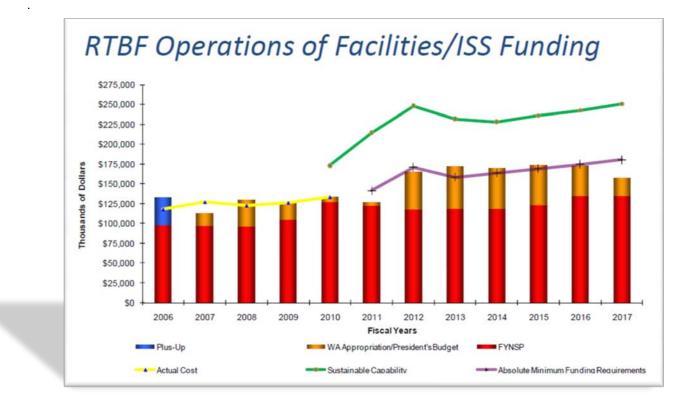
¹ FY11 Target data is consistent with the Current Year Top Down Report for Current Year Target (as of March 2011).

² FY12-FY16 Budget data for all efforts other than Reimbursable are consistent with the President's Budget Request distributed by NA-62 February 14, 2011, unless noted below.

- ³ FY13-FY16 NA-10 and NA-70 Budget is based on Post Senior Management Review Site Splits (3/25/11).
- ⁴ Other DP is comprised of Nuclear Counterterrorism Incident Response (NCIR)/replaces Weapons Incident Response and Secure Transportation Asset (STA)/replaces OST.



⁵ Reimbursable Targets consistent with WFO Summary estimates provided to the Albuquerque Service Center for FY12; estimated FY13-FY16.



FY12 RTBF

Minimum Operations of Facilities budget number includes \$17.2M for flood recovery.

The FYNSP funding profiles for Pantex show the Operations of Facilities budget

to be adequate to support minimum operations in FY13 through FY16. FY17 funding level does not fully support projected on-board head-count nor will base operations. The DSW mission deliverables will be placed at high risk.





Appendix G-Site Overview and Snapshot Template

Location: Amarillo, Texas

Type: Multi-Program Site

Web site: http://www.pantex.com

Site Overview

The Pantex Plant, located 17 miles northeast of Amarillo, TX, resides on 11,606 acres owned by the DOE including the land acquired just east of FM 2373. Pantex

operations near the southern boundary require DOE to lease

approximately 5,800 acres of land between the Plant and U.S. Highway 60 from Texas Tech University (TTU), primarily for safety and security buffer areas. An additional 9 acres are leased for support functions. Approximately 2,500 acres of Pantex Plant proper are used for industrial operations, the burning grounds, and firing

sites. Some land not actively used for Plant operations is provided to TTU for agricultural purposes through a service agreement. Approximately 8,070 acres of agricultural land within the combined main plant area and the Pantex Lake property are managed by TTU through a service agreement with DOE for farming and ranching use.

The Pantex Ordnance Plant was originally authorized February 24, 1942, as a conventional munitions site to support World



FM 293

Contract Operator: B&W Pantex, LLC

Responsible Field Office: Pantex Site Office

Site Manager: S. Erhart

War II and was operated by Certain-Teed Products Corporation. The plant consisted of 15 "Zones" and was supported by rail lines to each. The site was closed in 1946 after the end of the war. In 1951, the

> Atomic Energy Commission recaptured the Plant from Texas **Technological College** research and refurbished some of the structures to support HE research and nuclear weapon assembly operations. The plant was managed and operated by Procter & Gamble from 1951 to 1955. Operating contractor changed in 1956 to Mason & Hanger – Silas Mason Co. Inc. Mason & Hanger continued to

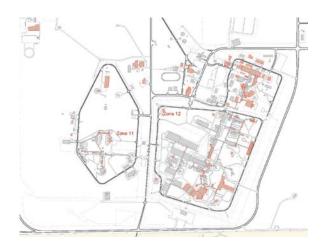
operate the plant until being bought by Day & Zimmerman in 2000. Day & Zimmerman was replaced by the current contractor, Babcock & Wilcox Technical Services Pantex, LLC. Pantex is operated by the M&O contractor, Babcock & Wilcox Technical Services Pantex, LLC (B&W Pantex) under the direction of the PXSO.

The Pantex mission supports Stockpile Systems by performing disassembly, inspection and rebuild of weapon evaluation cycle units, assembly of JTAs and JTA post mortem analysis, assembly and disassembly of testbed units, LLCE, programmatic alterations (usually defined as Alts or Mods), weapon repairs, weapon and component radiography and non-destructive evaluation, HE testing and explosive component evaluation, pit and non-nuclear evaluations, electrical and mechanical tests, and surveillance/evaluation testing in



support of (QERs). All B&W Pantex activities ultimately support the core mission of nuclear weapons stockpile stewardship. Pantex consists of approximately 627 buildings containing 3,120,874 square feet. This facility square footage is consistent with Facility Information Management System (FIMS) as of September 30, 2010. There are 52 enduring MC facilities, 390 MDNC facilities, and 185 NMD facilities. Of the 390 MDNC facilities, 235 have been identified as Production Support (PS) facilities and directly sustain the capabilities and mission operations in the MC facilities. Examples of the PS facilities includes: weapon and component staging, explosive storage, MC equipment rooms and fan rooms that are not physically adjoined to the building, tooling, maintenance facilities, utility systems (including steam generation and distribution, compressed air, water, sewer, and electricity and natural gas distribution), generator facilities, guard stations, guard headquarters and alternate command post.

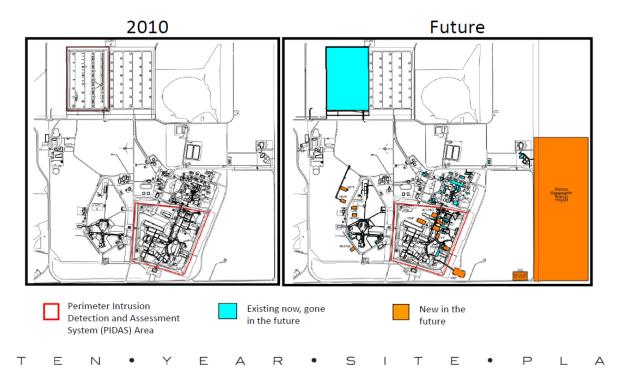
In 2004, DOE/NNSA/PXSO completed consultations with the Texas State Historic Preservation Office (SHPO) and the President's Advisory Council culminating in a final Programmatic Agreement and Cultural Resource Management Plan





(PA/CRMP). This plan identifies a range of preservation activities for 173 eligible facilities including preservation in-situ of 10 mission-related buildings (Buildings 11-20, 12-17, 12-17A, 12-17B, 12-17E, 12-26, 12-33, 12-44 Cell 1, 12-60, and 12-64). Other buildings determined eligible for the Register, can be Decontaminated and Demolished (D&D) when measures are developed to resolve any adverse effects to the property and agreed upon measures have been taken to preserve the historic significance of the property.

N







Future plans for Pantex include

modernization of the plant to be smaller and more responsive to the country's needs in accordance with the strategies delineated in the Complex Transformation SPEIS and the nation's nuclear posture. Those initiatives include developing and refining the HE CoE,

consolidating laboratory destructive surveillance operations, consolidating category I/II SNM, providing non-destructive testing evaluation, developing area attribute for renewal energy, and executing dismantlements planned and authorized by NNSA.

FY10 Funding by Source:

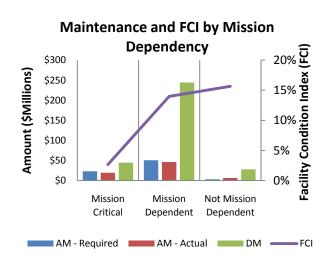
FY10 Total Site Operating Cost: \$ 545.2 M

FY10 Total NNSA/DOE Costs: \$ 538.1M

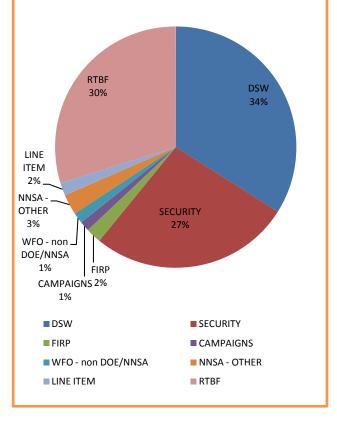
FY10 Total Non-NNSA Work: \$7.1M

Real Property

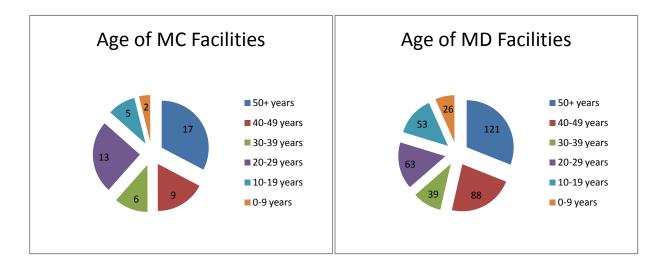
- 17,415 Acres (Leased / Owned)
- 627 Buildings/Trailers:
- 3,030,041 gsf Active & Operational
- 90,833 gsf Non-Operational
- 86,332 gsf Leased
- Replacement Plant Value: \$ 3.65B
- DM: \$317M
- Facility Condition Index:
- MC: 2.7 %
- MD: 14.0 %
- Asset Utilization Index (Overall): 97.1 %



FY2010 Funding by Source







Staffing

Approximately 3,575 people are employed at the Pantex Plant. The exact number varies weekly based on terminations and new hires. This population consists of PXSO, B&W Pantex, Office of Secure Transportation (OST), Sandia National Laboratory's (SNL) Weapons Evaluation Testing Laboratory (WETL), and the Tri-Lab Project Office personnel. Numerous other organizations also have a presence at Pantex including the DNFSB, the State of Texas Division of Emergency Management, and several subcontractors. Other major groups on site include technical subcontractors and construction personnel. The numbers of construction personnel are anticipated to increase with the award of the HEPF in May 2011. Both PXSO and the B&W Pantex organizations are flat to minimize duplications and provide better communication channels both up and across the organizations.

Pantex provides ongoing workforce planning to insure the needed skills are available as workload changes occur. This planning provides a map to workforce restructuring, realignment, staffing, and employee development. Pantex skill mix

Organization	Number of Employees
B&W Pantex	3296
DOE/PXSO	85
Office of Secure Transportation	166
SNL	21
Tri-Labs	7
Subtotal	3575
Other (excludes construction personnel)	264
Construction Personnel	458
Total	4297

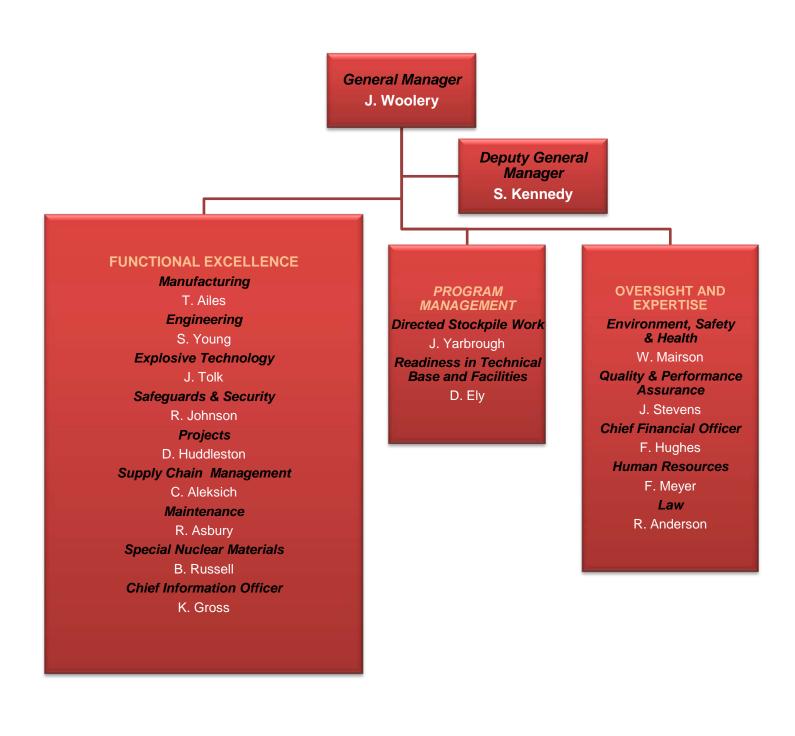
continues to adjust to the needs of mission work. Forecasts and plans are developed based on the NNSA weapons workload for FY11 to FY38 provided by the P&PD and PCDs. Critical skills staffing requirements for FY11-20 have been identified at 1,400 with a staffing focus on engineers and technicians. Pantex continues to partner with regional universities to provide a pipeline for the critical skill needs for future missions. In addition, compensation and benefits are monitored to stay competitive for talent in the lean technical market. Attrition has increased from 3% in FY10 to 5% in FY11 due to market/economy improvements easing concerns for those ready to retire and the DOE announcement of a two-year wage freeze.















Appendix H-Real Property Asset Management

Assumptions:

Information in the below table is based on information as of September 30, 2010. Number of assets in Mission Dependency includes Other Structure and Facilities (OSFs). Laboratory space at Pantex has a FIMS usage code of manufacturing/production related laboratories.

Warehouse includes staging magazines and trailers (all 400 series FIMS usage codes).

Replacement Plant Value (RPV)		\$3	3,649	Million				
Total Deferred Maintenance (DM)		\$	317	Million				
Site Wide Facility Condition Index (FCI)		8	.8%		'			
			—	1 .				
			Facility Condition	Asset Utilization	# of Assets	Gross Square Feet (GSF)		
			Index	Index	A33613	Buildings & Trailers		
			(FCI)	(AUI)		(000s)		
	Mission Critical		Mission Critical		2.7%	96.9%	52	992,787
Mission Dependency	Mission Depende	nt	14.0%	98.9%	463	1,817,887		
	Not Mission Dependent		15.6%	87.1%	198	310,200		
	Office		8.0%	97.4%	64	414,102		
Facility	Warehouse		5.5%	97.5%	235	711,474		
Use	Laboratory		6.4%	100%	9	78,447		
	Housing		N/A	0%	0	0		





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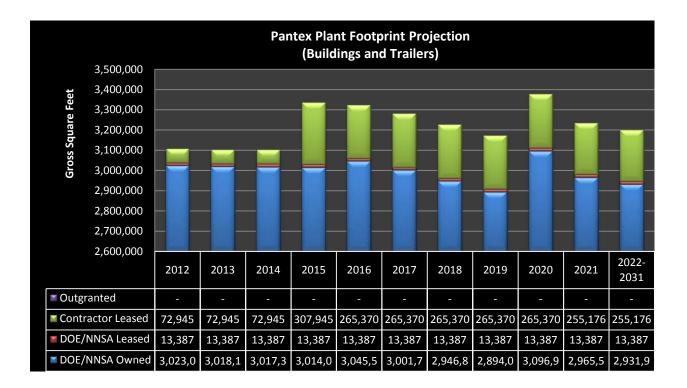
Appendix I-Site Footprint (Current and Future) Template

Assumptions:

In order to be consistent with Attachment E for years 2012 through 2021, the square footage for any proposed project shown in A-2 as completed on or before 2021 is shown in 2022-2031. Square footage related to the Weapon Surveillance Facility is shown in 2022-2031.

Square footage related to the Administrative Support Complex is shown in 2015, and associated demolition is captured in 2016-2020.

All demolition associated with new construction, including CBFI new construction, is included, even for buildings shown in A-2 as completion in 2031.







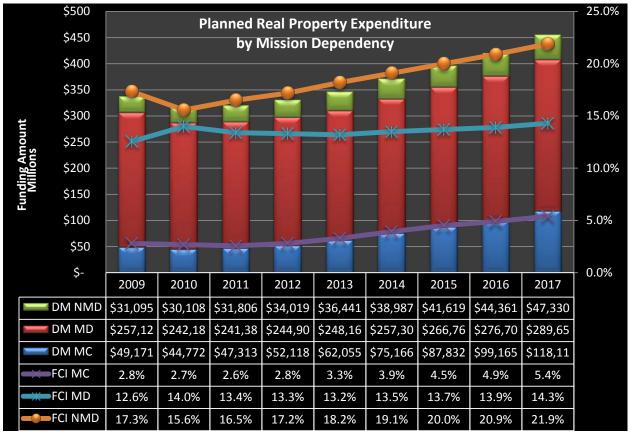
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Appendix J-Deferred Maintenance & Facility Condition Index Template

Due to RTBF funding limitations and the sunset of FIRP, there is currently no funding mechanism to address DM, which impacts the plant's ability to maintain an adequate condition for all facilities and infrastructure. The result of this is evident below and in Attachment F-2, which reflects the in-balance in the FCI for MC and MDNC facilities and infrastructure.

The estimated FCI below is based on funded and approved projects identified in Attachments A-1 and all tables in A-3. Shown below and in Attachment F-2, the FCI for MC facilities goes from 2.8% in FY09 to 5.4% in FY17, and the FCI for MDNC facilities grows from 12.6% in FY09 to 14.3% in FY17.







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Appendix N – Acronyms

AAAHC	Accreditation Association for Ambulatory Health Care
AEMS	Automated Energy Management System
ARG	Accident Response Group
ARIES	Advanced Recovery and Integrated Extraction System
AUI	Asset Utilization Index
AWE	Atomic Weapon Enterprise
BDI	Blast Door Interlock
CAIS	Condition Assessment Information System
CAMS	Continuous Air Monitoring System
CAS	Contractor Assurance System
CBFI	Capability Based Facilities & Infrastructure program
CCTV	Closed Circuit Television
CD	Critical Decision
CERCLA	Comprehensive Environmental Response Comprehensive and Liability Act
CFA	Causal Factors Analysis
CI	Counterintelligence
CIA	Central Intelligence Agency
CPIBP	Corporate Physical Infrastructure Business Plan
CRU	Condensate Return Unit

CSA	Canned Sub Assembly
СТ	Computed Tomography
CWG	Construction Working Group
D&D	Decontaminated and Demolished
D&I	Disassembly and Inspection
D&P	Development and Production Manual
D2M	Design to Manufacture
DA	Design Agency
DHS	Department of Homeland Security
DM	Deferred Maintenance
DNFSB	Defense Nuclear Facilities Safety Board
DoD	Department of Defense
DOE	Department of Energy
DPP	Defense Programs Package
DSW	Directed Stockpile Work
EM	DOE Office of Environmental Management
EMCS	Energy Management and Control System
EPA	Environmental Protection Agency
EPACT	Energy Policy Act
EPO	NNSA Environmental Projects & Operations
ER	Pantex Environmental



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	Restoration Program
ES&H	Environment Safety and Health
ET	Explosives Technology
FBI	Federal Bureau of Investigation
FCI	Facility Condition Index
FICAM	Facility Installed Continuous Air Monitoring
FIMS	Facility Information Management System
FIRP	Facilities and Infrastructure Recapitalization Project
FPU	First Production Unit
FSB	Federal Small Business
FSLI	Fire Suppression Lead In
FY	Fiscal Year
FYNSP	Future Years Nuclear Security Profile
GHG	Greenhouse Gas
GPP	General Plant Project
GSF	Gross Square Feet
HDPE	High-Density Polyethylene
HE	High Explosive
HE CoE	High Explosives Center of Excellence
HEFF	High Explosive Formulation Facility
HE P&S	HE Packaging and Staging Facility

HEPF	HE Pressing Facility
HE ST&E	HE Science, Technology, and Engineering
HMX	High Melting Explosive
HNS	Hexanitrostilbene
HPFL	High Pressure Fire Loop
HRO	High Reliability Organization
HRP	Human Reliability Program
HSPD	Homeland Security Presidential Directive
HVAC	Heating, Ventilation, and Air Conditioning
IA	Interagency Agreement
ICAP	Integrated Construction Alignment Plan
ICPP	Integrated Construction Project Plan
IPFS	Integrated Pump down and Fill Station
IR	Infrared
JTA	Joint Test Assembly
JTOT	Joint Technical Operations Team
LANL	Los Alamos National Laboratory
LCOs	Limiting Conditions for Operations
LEP	Life Extension Program
LI	Line Item
LINAC	Linear Accelerator
LLCE	Limited Life Component



	Exchange
LLNL	Lawrence Livermore National Laboratory
LRPPM	Long Range Pantex Production Model
LTS	Long Term Stewardship
M&O	Management and Operating
MAA	Material Access Area
MC	Mission Critical Facilities
MD	Material Disposition
MD-2	New surplus pit shipping container
MDNC	Mission Dependent, Not Critical Facilities
MRP	Material Requirements Planning
NCIR	Nuclear Counterterrorism Incident Response
ND3	Non-destructive density determination
NDE	Non Destructive Evaluation
NG	Neutron Generator
NMD	Not Mission Dependent Facilities
NNSA	National Nuclear Security Administration
NNSS	Nevada National Security Site
NOX	Nitrogen Oxide
NPR	Nuclear Posture Review
NSE	Nuclear Security Enterprise

OCIO	Office of the Chief Information Officer
OFA	Other Federal Agencies
OGA	Other Governmental Agencies
OMI	Operational Machine Interface
OSF	Other Structures and Facilities
OSHA	Occupational Safety and Health Administration
OST	Office of Secure Transportation
P&PD	Production and Planning Directive
PA/CRMP	Programmatic Agreement and Cultural Resource Management Plan
PBX	Plastic Bonded Explosive
PCD	Program Control Document
PDRD	Plant Directed Research, Development and Demonstration
PETN	Pentaerythritol Tetranitrate
PIDAS	Perimeter Intruder Detection and Assessment System
PREP	Pantex Renewable Energy Project
PRIDE	Product Realization Integrated Digital Enterprise
PS	Production Support
PXSO	Pantex Site Office
QER	Quality Evaluation Report
R&D	Research and Development
RAM	Radiation Alarm Monitoring



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RAMP	Roof Asset Management Program
RAMS	Radiation Alarm Monitoring System
RAP	Radiological Assistance Program
RAPS	Remote Access Panels
RCRA	Resource Conservation Recovery Act
RDX	Research Department Explosive
RGA	Residual Gas Analyzer
RoD	Record of Decision
RPV	Replacement Plant Value
RTBF	Readiness in Technical Base and Facility
RTG	Radioisotopic Thermoelectric Generator
SGT	Safeguard Transporters
SHPO	State Historic Preservation Office
SI	Sealed Insert
SNL	Sandia National Lab
SNM	Special Nuclear Material
SORT	Strategic Offensive Reduction Treaty
SPEIS	Supplemental Programmatic Environmental Impact Statement
SS-21	Seamless Safety for the 21st Century Programs

SRS	Savannah River Site
SSMP	Stockpile Stewardship and Management Plan
SSP	Stockpile Stewardship Program
SST	Safe Secure Trailers
STA	Secure Transportation Asset
ТАТВ	Triamino Trinitrobenzene
ТВР	Technical Business Practices
TCEQ	Texas Commission on Environmental Quality
TTU	Texas Tech University
TYSP	Ten-Year Site Plan
UPS	Uninterruptible Power Source
UV	Ultraviolet
VPP	Voluntary Protection Program
WETL	Weapons Evaluation Testing Laboratory
WFO	Work For Others
WMD	Weapons of Mass Destruction
WR	War Reserve
WSF	Weapon Surveillance Facility
WW	World War

Attachment A Summary Facilities and Infrastructure Cost Projection Spreadsheet Projects for <u>Pantex Plant</u> (\$000s)

Backup Sheet (Attachment)	Site Name	Title	Total	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
A-1	РХ	Costs for All NNSA Site Line Items	2,257,425	58,101	69,561	86,111			84,600		412,238	472,400	252,000	316,700	14,300	8,900	_	_	_	_	-	-	_	_	
A-1	PX	Costs for ALL Non-NNSA DOE Alternative Financing Line Items	200,000			00,111	500	196,000	1,000	2,500			202,000		11,000	0,000				_		_			
A-1	РХ	Costs for ALL Non-NNSA <provide name="" program=""> Line Items</provide>							1,000																
A-2	PX	Costs for All NNSA Site Line Items	2,983,073	-	-	3,000	4,700	70,400	157,600	43,400	234,950	457,750	386,360	107,800	272,213	71,000	114,723	84,277	62,300	251,650	126,900	113,723	182,127	145,073	93,127
A-2	РХ	Costs for ALL Non-NNSA <provide name="" program=""> Line Items</provide>	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	
A-2	РХ	Costs for ALL Non-NNSA <provide name="" program=""> Line Items</provide>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A-3a		RTBF/Operations of Facilities (Facilities & Infrastructure reported under this category)	38,702	27,532	1,970	9,200	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3b	РХ	RTBF/Capability Based Facilities & Infrastructure - Recapitalization Projects	224,847	-	-	-	7,257	30,300	46,500	33,650	34,600	29,050	14,840	11,000	17,650	-	-	-	-	-	-	-	-	-	-
A-3c	РХ	RTBF/Capability Based Facilities & Infrastructure - Disposition Projects	7,700		-	-		-	-	-	400	5,900	1,100	300	-	-		-		-		-	-	-	-
A-3d		RTBF/Capability Based Facilities & Infrastructure - Sustainability Projects	59,280		-	-	7,743	3,500	2,200	6,350	9,650	17,500	4,500	-	7,837	-		-		-	-	-	-		-
A-4	РХ	Facilities and Infrastructure Recapitalization Program (FIRP)	47,469	14,805	11,700	10,482	10,482	-		_	_	-	-	<u>.</u>	_	_	-	_	-	_	-	-	-	-	-
A-5	РХ	Costs for NNSA Security Other Facilities and Infrastructure Costs	10,720	10,720	-	-	-	_	-	_	-	-	_	-	-	-	-	-	-	-		-	-	-	-
A-5	PX	Costs for NNSA Readiness Campaigns/OST Other Facilities and Infrastructure Costs	4,070	375	2,945	500	250	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-
A-5	РХ	Costs for ALL Non-NNSA <provide name="" program=""> Other Facilities and Infrastructure Costs</provide>	-		-	-		-	_	-	-	-	-	_	-	-	_	-	_	-		_	_	_	
A-5	PX	Costs for ALL Non-NNSA <provide name="" program=""> Other Facilities and Infrastructure Costs</provide>	-		-	-		-	_	-	-	-	-	_	-	-		-		-		-	-	-	
		TOTAL	5,833,286	111,533	86,176	109,293	138,308	333,790	291,900	427,448	691,838	982,600	658,800	435,800	312,000	79,900	114,723	84,277	62,300	251,650	126,900	113,723	182,127	145,073	93,127

Attachment A-Summary

Attachment A Summary Facilities and Infrastructure Cost Projection Spreadsheet Projects for <u>Pantex Plant</u> (\$000s)

Backup Sheet (Attachment)	Site Name	Title	Total	Prior Years	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
(Funding	Current	FYNSP	FYNSP	FYNSP	FYNSP	FYNSP															

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Attachment A-1 Facilities and Infrastructure Line Item Cost Projection Spreadsheet APPROVED Line Item Projects for Pantex Plant (\$000s)

																(\$000s)																		
Site Nam (59)	Fiscal Year (23)	Source SSP Conservation SSP FEMP Measure Measure Name* #*	Included in the SSP? P (Y/N) (33)		Score (56)	Mission Code (39)	Core Capability Code (8)	Special Interest Code #1 (61)	Special Interest Code #2 (62)	FIMS Property Sequence Number* (50) (22)	Fi Deferred Maintenance Identifier(s) (10)	RP Legacy Deferred Maintenance Reduction (36)	Deferred Maintenance Reduction (13)	FIM Mission Dependency (40)	S Mission Dependency Program (41)	GSF Added or Eliminated (32)	i Fund d Type (27)		Funding Cur)11 Frent F	FY F) 2012 201 YNSP FYN (29) (25	SP FYNSP		FY 2016 FYNSP (29)	2017 2	FY F) 1018 201 (30) (30	19 2020		FY FY 2022 2023 (30) (30)		FY FY 2028 2029 (30) (30)		FY 2031 Notes (30) (43)	
		Technical Base and Facilities (RTBF) Construction L						1									OPC	1,465	1,365	100									· · · · ·		1		FIRP funded design	4
PX	2004	High Pressure Fire Loop-Zone 12 South 06-D-160-01 MAA	Yes	1	N/A	M6	C10	RC	DM				1,598	MD	RTBF		PE&D LI Total (TPC) OPC	1,686 40,716 43,867	1,686 40,716	100	- 200	- 300		-		-		-	-	 -	 	-	(PE&D). Project is still constructing the HPFL tanks and pump houses. Partially included in SSP	is.
PX	2003	RTBF - LI HE Pressing Facility 04-D-103-02	Yes	2	N/A	M1	C7	RC	SY					MC	RC	53,712	2 LI Total (TPC)	7,948 132,509 145,297	7,948 613 30 10,639 30	,000	60,000 41, 60,200 42,	896 096 300	400	1,013	338	-		-	-	 _	 -	· · · · ·		
PX	2011	RTBF - LI Fire Suppression Lead-ins	No	3	7.91	M6	C10	RC	DM	207146 HPFL Water Piping		314	610	MD	RTBF		PE&D			200	500 12, 500 13,	830		60,000		0,000 15,	000 1,000 000 15,000 000 16,000	500	1,000	 	 			
PX	2011	RTBF - LI Flame Detector Upgrade *	No	4	6.79	M6	C10	RC	None					MD	RTBF		OPC PE&D LI Total (TPC)	19,900 116,000					200	1,000	2,000	2,400 1,	700			_			Formally named UV to Infrared (IR) Detector Upgrade.	
PX	2009	Pantex Renewable RTBF - LI Energy Project PX-R-01/ TC11	Yes	5		M6	C10	SY	None					MD	RTBF		OPC PE&D	756			151	200 200	200	01,000	30,000	2,400 1,							Project shown in A-1 based on CD-0 approval in April 2009. Project currently being	al
		(PREP) HE Science,															LI Total (TPC) OPC PE&D	28,756	405 28	,000 ,200 100	151 200		200	- 200	500	800 1,	500 1,800	-	_	 -	 	_	pursued as an Energy Savings Performance Contract (ESPC) type.	_
PX	2011	RTBF - LI Technology & Engineering *	No	6	7.48	M1	C7	RC	None					MC	RC	35,000	Total (TPC)	64,000	-	100 100	200 200	500 8.700	5,200	200 200	40,000 2 40,500 2 500	4.800 1.	500 1,800 500 1,700	-	_	 -	 	-	Formally named HE Science and Engineering	ıg.
PX	2011	High Explosive RTBF - LI Packaging & Staging	No	7	7.13	M1	C7	RC	None					MD	RC	20,000	D LI Total (TPC) OPC	58,200 77,800 14,000	-			5,000	8,900	200	30,000 2 30,500 2	8,200 9,000 1,	500 1,700 800 2,000		4,000	 -	 		Formally named HE Staging Facility.	
PX	2013	RTBF - LI High Explosive Formulation Not Provided	Yes	8	7.9	M1	C7	RC	SY					MC	RC	35,000	PE&D LI Total (TPC)	16,000 131,000	-	-	-	-	1,000	1,300	16,000	1,000	131,000 800 133,000 900 2,000	2,600	4,000	 -	 		_	
PX	2014	HE Component Fabrication and Qualification	Yes	9	8.16	M1	C7	RC	SY					MC	ENG	15,000	PE&D LI Total (TPC)	17,000 139,000 170,000	-	-	-	-	1,000	1,100	17,000	139, 1,000 139,	900 2,000	2,900		 _	 -	· · · · ·		
PX	2011	Multi Material Staging Program Facility	No	10	2.843	M1	C9	RC	None					MD	DSW	+100,000 tc 177,000	Total (TPC)	20,000 460,000 530,000	- 2		2,500 18,	500 5,000	6,000	200,000	5,000 200,000 6 205,000 6	0,000 4,000 10,	,000 10,000		_	 -	 		Anticipated to be multi- program funded.	
PX	2013	RTBF - LI FICAM	No	11	6.38	M6	C10	RC	DM	207082 RAMS			5,601	MD	RTBF		PE&D						19,500	1,200		3,000				 _	 			
PX	2015	RTBF - LI Non-Destructive Evaluation Facility	No	12	6.97	M1	C7	RC	None					MC	DSW	40,000	OPC PE&D	16,000 11,000 110,000					1,000	2,000	1,500 11,000	1,500 1,								
PX	2014	RTBF - LI Zone 11 High Pressure Fire Loop	No	13	6.39	M6	C10	RC	DM	207146 HPFL Water Piping		1,078	2,421	MD	RTBF		OPC PE&D	19,000 9,000 66,000				- 900	1,500		1,100	1,000 6, 66,	000 7,000							
PX	2013	RTBF - LI Fire Protection Building Lead-ins	No	14	6.6	M6	C10	RC	DM	207146 HPFL Water Piping		85	194	MD	RTBF		OPC PE&D	19,000 35,000 196,000		-		700 1,900	0 1,700 35,000	1,000	1,600	6,000	500 3,000	1,500	-	 -	 -	-		
PX	2015	RTBF - LI Inert Machining Facility	No	15	3.364	M1	C7	RC	None					MD	RC	20,000	Iotai			-	- 1,	700 1,900	200	300	1,600 19 200 5,000	100	200 200 28,000		-	 -	 			
B. RTBF		Ility Based Facility and Infrastructure (CBFI) Infrastru CBFI - ILI	<pre>select></pre>	ms (ILI)		<select></select>	<select></select>	<select></select>	<select></select>								(TPC) OPC PE&D LI Total (TPC)	· ·		-	-		200	300	5,200	100	200 28,200	800		 -				
		Infrastructure Recapitalization Program (FIRP) Line																	-	-	-	-		-	-	-		-	-	 -	 	_		
<selects< td=""><td></td><td>FIRP - LI</td><td><select></select></td><td></td><td></td><td><select></select></td><td><select></select></td><td><select></select></td><td><select></select></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>OPC PE&D LI Total (TPC)</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></selects<>		FIRP - LI	<select></select>			<select></select>	<select></select>	<select></select>	<select></select>								OPC PE&D LI Total (TPC)	-																
																	(TPC)	-	-	-	-	-	-	-	-	-		-	-	 -	 	-	-	-

																	APPRO	VED Line	(\$000s)	ects for Pa	antex Plar	t																			
												F	IMS		IRP		F	IMS				Prior	FY F	Y FY	FY	FY	FY	FY	Y F	Y F)	Y FY	(FY	FY	FY FY	FY	FY	FY	FY FY	FY		
Site Name	Fiscal Year	Fund Source SSP Cor	or	oject Number or FEMP Measure #*	e (Y/N)	Priority	Score	Mission Code	Core Capability Code	Code #1	Interest Code #2	Property Sequence Number*	Facility Name*	Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance Reduction	Reduction	Mission Dependency	Mission	GSF Added or Eliminated	Fund Type	Total	Years 2	011 20		2014 P FYNSP	2015 FYNSP	2016 FYNSP		018 20					2024 2025				2029 2030			Notes
(59) D. Safegua	(23) Irds & Se	(26) (vector) (2	48) ms	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46) (28) (2	9) (29)	(29)	(29)	(29)	(30) (30) (3	0) (30	0) (30) (30)	(30)	(30) (30)	(30)	(30)	(30) (,30) (30)	(30)		(43)
<select></select>		S&S - LI			<select></select>			<select></select>	<select></select>	 <select:< li=""> </select:<>	 <select></select> 									OPC PE&D LI Total (TPC)			_	-				-	-	-	-			-			_				
E. Other D	efense Pr	ograms Line Items	(Stockpile Serv	ices Operating	g)	1	1	1	1		-	1	1	1	1	1	1	1	1	OPC	45 240	3 200	7 050 21	.860 9,05	0 2.000	<u>г г</u>		1		1			<u> </u>							1	
РХ	1	Other DP - Operation LI Integration			No	1	N/A	M1	C7	RC	None						MD	DSW		PE&D LI Total (TPC)	45,240						-	-	-	-	-		-	-			_			-	
																Cost	s for All NNSA V	Noopone Activ	ition Account	SubTotal	2 257 425	58 101 6	0.561 96	111 107 37	6 33 590	84 600	341.548 4	12 220 47	2 400 252	000 316	700 ###										
F. Nuclear	Nonproli	feration (NN) Line It	ems													COSI		neapons Activ	nies Account		2,237,423	36,101 0.	5,501 00	,111 107,37	0 33,390	04,000	341,340 4	412,230 41	2,400 232	000 310,	,700 ###			-		- -	- 1				
<select></select>		NN-LI			<select></select>			<select></select>	<select></select>	<selects< td=""><td> <select></select> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>OPC PE&D LI Total (TPC)</td><td></td><td></td><td>_</td><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></selects<>	 <select></select> 									OPC PE&D LI Total (TPC)			_	-				-	-	-	-			-							
																		Costs for	All NNSA Site	Total	2 257 425	58 101 6	2 561 86	111 107 37	6 33 590	84 600	341 548	12 238 47	2 400 252	000 316	700 ###										
G. Non-NN	SA Line I	tems - Other: DOE	Alternative Fina	ncing Project	t									n.	1	<u>.</u>	á.	00313 101		Line items	2,201,420	30,101 0.	5,501 00	,111 107,57	0 00,000	04,000		12,200 41	.,400 202	000 010,	,100 ###	0,500									
		Non- NNSA - Administr	-																	OPC PE&D	5,000			50	0 1,000	1,000	2,500													based on Decembe	being pursued
PX	2009	NNSA - Administr. Program Support C A LI			No	1	N/A	M6	C10	SY	QOL						MD	RTBF	235,000	LI Total (TPC)	195,000				0 196,000		0.500													Financing	Project. rofile shown s the CD-0 Line Item
											-	-			1	1			-	Total		-	-				2,500	-	-	-	-		-	-			-	-		· ·	
H Nor-NN	SA Line H	tems - Other: <prov< td=""><td>vide Program na</td><td>me or descrip</td><td>ntors</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Costs for no</td><td>n-NNSA DOE A</td><td>Iternative Fina</td><td>ncing Project</td><td>Line Items</td><td>200,000</td><td>-</td><td>-</td><td>- 50</td><td>0 196,000</td><td>1,000</td><td>2,500</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>- - </td><td>-</td><td></td><td></td><td>•</td><td></td></prov<>	vide Program na	me or descrip	ntors											Costs for no	n-NNSA DOE A	Iternative Fina	ncing Project	Line Items	200,000	-	-	- 50	0 196,000	1,000	2,500	-	-	-	-		-	-	-	- -	-			•	
<select></select>		Non- NNSA - Program B LI			<select></select>			<select></select>	<select></select>	 <select:< li=""> </select:<>	- <select></select>									OPC PE&D LI Total (TPC)		-	_	-				-	-	-	-			-			_				
																Cos	ts for non-NNS	A <provide pro<="" td=""><td>ogram name></td><td>Total Line Items</td><td>-</td><td>-</td><td></td><td>_</td><td></td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td></provide>	ogram name>	Total Line Items	-	-		_		-		-	-	-	-		-	-			-				
																					2 457 425	58 101 6	9 561 86	,111 107,87	6 229 590	85 600	344 048	12 238 47	2 400 252	000 316	700 ###	### 8.900		_							
Score show	n in colun	nn 56 represents the	CWG Final Scor	es from FY 20	10 and FY 2	011. Project	ts new in F	FY 2011 wer	e scored on a	a different sca	lle.									Total	2, 101, 120	00,101 0	00	107,07	220,050	00,000			,100 232		,	0,300									
Note: Fund Note: The	ling profile total form	es are based on the Mula in section G was	lission Need doc evised to exclud	uments and M e the total in se	lission Gap S ection F. It i	sheet submit s assumed t	tted to the that NNSA	CWG. Infor totals is not	mation is bas to be include	sed on need i ed.	ather than fu	nding availabili	ty.																												

Attachment A-1 Facilities and Infrastructure Line Item Cost Projection Spreadsheet APPROVED Line Item Projects for Pantex Plant

Attachment A-2 Facilities and Infrastructure Line Item Cost Projection Spreadsheet <u>PROPOSED</u> Line Item Projects for Pantex Plant (\$000s)

																			(\$000s)																				
			Project Name	Project Number	Included in				Core	Special	Special		FIMS	FIF	P	Deferred	F	MS Mission	_		Prior FY	FY	FY	FY	FY 2015	FY 2016	FY 2017 2	FY 018	FY FY 2019 2020	FY	FY	FY	FY 2024	FY	FY FY			FY FY 2030 2031	
Site Name	Fiscal Year		or SSP Conservation Measure Name*		the CCD2	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	Property Sequence	Facility Name	Maintenance	Legacy Deferred Maintenance	Maintenance Reduction	Mission Dependency	Dependency	GSF Added or Eliminated	Type Total	Years 2011 Funding Curren	2012 nt FYNSP		2014 FYNSP		FYNSP	2017 2	018	2019 2020	2021	2022	2023	2024	2025	2026 2027	2028	2029	2030 2031	Notes
(59)	(23)	(26)	(48)	#* (49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	Number* (50)	(22)	Identifier(s) (10)	Reduction (36)	(13)	(40)	(41)	(32) (2	7) (64)	(46) (28)	(29)	(29)	(29)	(29)	(29)	(30)	(30)	(30) (30)	(30)	(30)	(30)	(30)	(30)	(30) (30)	(30)	(30)	(30) (30)	(43)
A. Readine	ess in Te	chnical B	ase and Facilities (R	BF) Construction Li	ne Items						1						[[01	PC 55,00	0	3,000	3,000	4,000	4,000	3,000	5,000	6,000	10,000 12,0	0 5,00	0								_
PX	2012	RTBF - L	Weapon Surveillanc Facility	e	No	1	7.7	M1	C7	None	None						MC	DSW	198,000 L		0			50,000	31,000	2	200,000 20	08,000											Square footage based on IPT 2008 Prime Option
			1 dointy																To (TF	C) 544,00		- 3,000	3,000	54,000	35,000	3,000 2	205,000 2	14,000	10,000 12,0				-	-	-				3.1B.
												137174							PE	C 5,50 &D 11,50	0			500	800	500 11,500	400	400		0 50	0 500	1,000							
PX	2014	RTBF - L	I Cells Upgrade		No	2		M1	C7	RC	DM	137181 137131	0		193	605	MC	DSW	То	l 68,00 tal									68,000										
													Assembly Cell						OI	C) 85,00 C 4,00	0		100	500 600	500	12,000 500	400 500		68,400 50 800	0 50	0 500	1,000	-	-	-		-	-	
PX	2013	RTBF - L	Flood Natural I Phenomena		No	3		M6	C10	HS	None	133381	Site Prep, Grading, and				MD	RTBF	PE	&D 9,00 I 52,00	0			9,000	52,000														-
			Remediation										Landscaping							C) 65,00			100	9,600	52,500	500		1,000	800						-				
			Steam Distribution										Steam						PE	C 14,50 &D 9,80	0					1,500	1,500	2,200 9,800	2,300 1,00	2,50									
PX	2016	RTBF - L	Steam Distribution System Upgrade		No	4		M6	C10	RC	DM	134221	Steam Distribution		1031	4,061	MD	RTBF	То	l 87,00 tal										87,00									
																			0	PC) 111,30 PC 15,50	0		-	-			1,500		2,300 1,00 1,500 1,00	00 89,50 00 2,00		3,000	-	-	-		-		•
PX	2016	RTBF - L	Water Secondary Distribution Upgrade		No	5		M6	C10	RC	DM	134222	Domestic Water Piping		16694	60,875	MD	RTBF	L	&D 16,50 I 134,00	0							16,500		134,00	0								_
			Distribution opgrade										water riping						To (TF	PC) 166,00						1,500		18,500		0 136,00	3,000	3,000			-				
																			PE	PC 1,00 &D 2,00	0		100	100 2,000		100	100	200	300										
PX	2013	RTBF - L	I CCTV		No	6		M4	C10	HS	None						MD	RTBF	То	l 13,00							13,000												
																			OI	C) 16,00 C 28,00	0		100	2,100	100	100	13,100	200	300	- 2,00	 0 2,200	- 2,800	- 1,400	- 1,400	- 1,400 2,80	 0 2,800	- 8,400	2,000 800	-)
PX	2021	RTBF - L	12-005C, 12-035, I 12-068 Replacement	t	No	7		M6	C10	RC	None	83557	Shops; Maintenance				MD	RTBF	70,000 L	&D 42,00 I 210,00	0											20,023	21,977		53,150 55,95	0 33,523	17,377	10,923 ####	¥
			(CPIBP)									130732 130496	Shop and Utilities;						(TF	tal PC) 280,00					-		-		-	- 2,00	2,200	22,823	23,377	1,400	54,550 58,75	36,323	25,777	12,923 ####	¥
			Radiation Alarm Monitoring System																PE	PC 7,70 &D 33,00																3,300	2,200	1,100 1,100 33,000	Does not include funding requirements for the
PX	2028	RTBF - L	I (RAMS) Refurbishment		No	8		M6	C10	RC	DM	207082	RAMS			5,601	MD	RTBF	То	l tal	-																		project past 2031
			(CPIBP) 12-002 Replacement	t.															OI	PC) 40,70 PC 7,70	0		-	-	-	-	-	-	-	-		-	-	-	-	- <u>3,300</u> <u>3,300</u>	2,200 2,200	34,100 1,100 1,100 1,100	Does not include funding
PX	2028	RTBF - L	Administrative Support Complex	.,	No	9		M6	C10	RC	None	83463	Central Health and Offices				MD	RTBF	235,000 L		-																	33,000	requirements for the project past 2031
			(CPIBP)																To (TF	C) 40,70					-										-	- 3,300	2,200	34,100 1,100	(179,300K).
-			12-079										Component					2011	PE	C 1,00 &D 3,00	0														300 20	3,000	100		Does not include funding requirements for the
PX	2026	RIBF - L	I Refurbishment (CPIBP)		No	10		M6	C10	RC	DM	137200	Warehouse		60	1,825	MD	DSW	То	l 15,00																			project past 2031
B. RTBF - C	Capabilit	ty Based F	acility and Infrastrue	ture (CBFI) Infrastru	cture Line It	tems (ILI)			I					· · · · · ·				L		PC) 19,00	·		-	-	-	-	•	-	-	-		-	-	-	300 20	0 3,100	100	100 ####	¥ ())
DY		0051 1	Sewer Collection I System Manhole						C10	50		007400	Sewer System			4 000		DTDE		C 3,50 &D 2,50				500	500	500 2,500	400	300	600 3										-
PX	2014	CBFI - IL	Refurbishment		No	20		M6	C10	RC	DM	207130	Components		415	1,033	MD	RTBF	То					500	500	0.000	400		8,500 3,50										
																			OI	PC) 18,00 PC 2,50 &D 2,50	0		-	400	400	3,000 300 2,500	400 300	300 200	9,100 3,80 400 20			-	-	-	-		-		-
PX	2014	CBFI - IL	Sewer Equipment Refurbishment		No	21		M6	C10	RC	DM	207130	Sewer System Components			29	MD	RTBF		I 12,00						2,500			8,500 3,50	00									_
																			(TF	PC) 17,00				400		2,800	300	200	8,900 3,70			-	-		-				
PX	2014	CREL II	I Co-generation Facili	DV E 02/TC10	Yes	22		M6	C10	SY	None						MD	RTBF	PE	&D 6,00	0			300	400	3,000	200 3,000		200 20		J								-
FA	2014	CBFIFIL	Co-generation racii	y FX-E-03/1010	165	~~~		INIO	CIU	31	NOTE						WD	KIDF	То	l 32,00 tal PC) 40,00				300	400	3,200	3,200		14,360 17,64 14,560 17,84										
												207134	Steam Boiler #1, 6805401;						OI	C 9,70 &D 4,20	0	_		300			1,000		1,000 9			1,150	-	-	-		-		-
PX	2016	CBFI - IL	Steam Production System Upgrade		No	33		M6	C10	RC	DM	207136	Steam Boiler #2, 6805402;		80	869	MD	RTBF	L	I 23,00								4,200	8,0	60 14,94	D								-
													Steam Boiler						(TF	PC) 36,90 PC 3,00				-	-	1,000		5,200 300	1,000 8,90 150 1		0 1,650		-	-	-		-		
PX	2017	CBEL- II	12-044-5/12-044-6 I Refurbishment		No	43		M6	C7	RC	DM	137179	Assembly Cell;		80	443	MC	DSW	PE	&D 4,50	0						400	300	4,500			400	1,100						-
. ^	2017		(CPIBP)		.10				5,		2111	137180	Assembly Cell		80	-43		5000	То							-	450	300	4,650 1		3 ##### 3 ######	400	1,100		-	-	-		
			11-051/11-51A/12-									83434	Material Evaluation						OI	C 9,00 &D 13,50	0								900 4	60 45									_
PX	2018	CBFI - IL	I 118 Replacement (CPIBP)		No	48		M6	C7	RC	None	140501	Laboratory; Analytical				MC/MD	RC, DSW	35.000 L	67.50	0										#####								
													Laboratory;						(TF	tal PC) 90,00 PC 1.50	0 -		-	-	-	-	-	1,350	900 13,9 225 1	i0 45	0 ##### 5 75	33,777 75	2,300	2,700	- 450		-	-	
PX	2019	CBFI - II	12-082 I Refurbishment		No	54		M6	C10	RC	DM	137202	Technical Acceptance		188	780	MD	DSW	PE	C 1,50 &D 2,25 I 11,25	0									2,25	D	11,250	130	500	100				-
			(CPIBP)					-					Bay						То	tal (C) 15,00				-	_	-	-	-	225 1	50 2,32		11,325	150	300	450		-		
			10 001 5										0						OI	PC 1,50 &D 2,25	0										5 75								-
PX	2019	CBFI - IL	I 12-001 Replacement (CPIBP)	IL .	No	55		M6	C10	RC	None	83461 83462	Changehouse; Laundry				NMD	NA	6,000 L	I 11.25	0											2,323							
				1	1				I	1	I	I				L	ļ	ļ	(TF	tal PC) 15,00	0 -			-	-		-	-	225 1	50 2,32	5 75	2,398	9,077	750	-			-	

Attachment A-2 Facilities and Infrastructure Line Item Cost Projection Spreadsheet <u>PROPOSED</u> Line Item Projects for Pantex Plant (\$000s)

																			(\$000s)																				
Site Name	Fiscal Year	Fund Source		Project Number or SSP FEMP Measure	Included in the SSP? (Y/N)	Priority	Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	Property Sequence	FIMS Facility Name*	Fl Deferred Maintenance Identifier(s)	Legacy Deferred Maintenance	Deferred Maintenance Reduction	FI Mission Dependency	MS Mission Dependency	GSF Added or Eliminated	Type Total	Prior FY Years 2011 Funding Curre		FY 2013 FYNSP	2014	FY F) 2015 201 YNSP FYN	6 2017	FY 2018	FY F 2019 20:			FY 2023	FY 2024		FY FY 2026 2027			FY FY 2030 2031	1 Note	es
(59)	(23)	(26)	Measure Name* (48)	#* (49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	Number* (50)	(22)	Identifier(s) (10)	Reduction (36)	(13)	(40)	(41)	(32) (2	7) (64)	(46) (28)	(29)	(29)	(29)	(29) (29) (30)	(30)	(30) (3			(30)	(30)	(30)	(30) (30)		(30)	(30) (30)) (43	3)
PX	2021	CBFI - I	LI Fire Alarm Panels Replacment (CPIBP)		No	62		M6	C10	RC	DM	134215	Fire Alarm Panels		153	1,576	MD	RTBF	PE	C 5,000 &D 7,500 I 37,500 tal									/	750 500 7,500			450	400 5	1,000	0 750		_	
			(or br)										T driel3						(TF	tal PC) 50,000 PC 4,000				-	-	-		-		750 8,000 600 400		20,250			500 1,000 400 900				
PX	2021	CBFI - I	12-099 LI Refurbishment (CPIBP)		No	63		M6	C7	RC	DM	137134	Assembly Bays		5	1,754	MC	DSW	PE	&D 6,000 I 30,000 tal											6,000			17,975					
																			(TF	PC) 40,000				-	-	-		-	- 6	00 400 900	600	300	300	18,375 4 300 6	400 900 600 600		- 1,200		
PX	2022	CBFI - I	12-104 LI Refurbishment (CPIBP)		No	64		M6	C7	RC	DM	137135	Assembly Bays		206	4,225	MC	DSW	PE L To	&D 9,000 I 45,000 tal												7,000	2,000	5,000 40,0	000			_	
			12-037										Central Computer						OI	C) 60,000 C 12,023 &D 16,500			-	-	-	-	-	-	-	- 900 1,500	1,125			5,300 40,6 325 3			1,200 1,000 5,90	- 0	
PX	2022	CBFI - I	LI Refurbishment/ New Facility (CPIBP)		No	65		M6	C7	RC	DM	83518 83519	Facility; Central		507	959	MC	RTBF	35,000 L To	I 82,500														29,375 9,5				-	
			12-042										Computer						OF	PC) 111,023 PC 2,500 &D 3,750			-	-	-	-		-	-			17,223 350		29,700 9,8 125 1		00 <u>37,850</u> 50 400		0	
PX	2023	CBFI - I	LI Refurbishment (CPIBP)		No	66		M6	C10	RC	DM	137149	Warehouse		456	2,357	MD	DSW	L To	l 18,750 tal PC) 25,000								_			375	350	3,875	125 1	18,750		750	-	
PX	2022		12-026 East Refurbishment and LI 12-026N/S		No	67		M6	C10	RC	DM	137042 137043	vvarenouse;		22	2,413	MD	DSW	OI	PC 5,500 &D 8,250															275 500	00 500	650 1,60	10	
FA	2023	opri - l	LI 12-026N/S Replacement (CPIBP)		UVI	57		OIVI	010	RU	DW	137120 137121	Tooling		33	2,413	WU	500	To (TF	l 41,250 tal PC) 55,000	-			-	-				-		825	600	8,525		275 15,250	50 26,500 50 27,000			
PX	2023	CBFI - I	LI 12-064 Replacement (CPIBP)		No	68		M6	C7	RC	None	137194 137196	Assembly Bays Equipment				MC	DSW	15,000 L	PC 4,100 &D 7,500 I 37,500			-						_		750	700	250 7,500	2502		50 400 00 17,500	250 1,00	0	
			(CFIBF)									13/190	Room						To (TF	tal PC) 49,100 PC 1,400				-	-	-		-	-		750	700 250	7,750 75			50 <u>17,900</u> 50 <u>100</u>		0	
PX	2023	CBFI - I	12-083 LI Refurbishment (CPIBP)		No	69		M6	C10	RC	DM	137090	Explosives Staging		6	1,553	MD	RC	PE	&D 2,250 I 11,250											220	200	2,250		11,250			_	
																			(TF	C) 14,900 PC 2,800 &D 4,500				-	-	-	-	-	-		225 450	250 400	2,325 150		75 11,400 150 150		450 200 80	- 00	
PX	2023	CBFI - I	16-001 LI Refurbishment (CPIBP)		No	70		M6	C10	RC	DM	83801	Vehicle Maintenance		110	2,207	MD	RTBF	PE L To	&D 4,500 I 22,250 tal														4,500	_		10,000 ####	##	
			12-066																(TF Of	PC) 29,550 PC 2,000 &D 3,000				-	-	-	-	-	-		450	400		100 1	150 150 100 100 000		10,200 #### 400 90		
PX	2025	CBFI - I	LI Refurbishment (CPIBP)		No	71		M6	C7	RC	DM	137197	Component Staging		345	859	MC	DSW	L To	l 17,000 tal																	14,500 2,50		
			12-015/12-015A									83486	Education and Training;						OF	PC) 22,000 PC 3,000 &D 4,500			-	-	-	-	-	-	-		-	-	200 300	150 1	100 100 150 150 500		14,900 3,40 600 1,35	50	
PX	2025	CBFI - I	LI Refurbishment (CPIBP)		No	72		M6	C7	RC	DM	130676	Education and Training		240	1,197	MD	DSW		l 22,500 tal PC) 30,000								_					300	150 4.6	650 15	50 300	15,000 7,50 15,600 8,85		
C. Facilities	and Inf	astruct	ure Recapitalization Pro	gram (FIRP) Line Ite	ms	1				1	1								0	PC .																			
<select></select>		FIRP - L	LI		<select></select>			<select></select>	<select></select>	<select></select>	<select></select>								PE L To	&D																			
D. Safeguar	ds & Se	curity (S	S&S) Line Items											1					(TF	°C)	-			-	-	-	-	-	-		-	-	-			· ·			
PX	2013	S&S - L	I PIDAS		No	1		M1	C10	RC	None	207063	Fencing				MD	DNS	L	PC 16,000 &D 64,000 J 360,000			1,500	2,000	1,500 54,000	300 80		3,300 3, 160,000	,600							+		_	
																				tal PC) 440,000 PC 10,500			1,500		55,500 1,500 1,4		202,500		,600		-		-						
PX	2014	S&S - L	Protective Force I Portal Upgrade and Enhancement Project		No	2		M1	C10	RC	None						MD	DNS	5,160 L	&D 11,500					11,	500		97,000								\blacksquare		_	
			Protective Force Live																(TF	C 119,000 C 8,000 &D 5,000				1,000	1,500 13, 900 1,	1,00	800		,500 ,500 2,0		-	-	-						
PX	2015	S&S - L	-I Fire Ranges Upgrade and Enhancement		No	3		M1	C10	RC	None						MD	DNS	3,600 L To	.I 37,000 tal						5,00		37,	,000					=	+				
			Project Special Security Systems																IT) OI DE	C) 50,000 C 18,000 &D 27,000			-	-	900 1,	000 6,000	800	800 38		00 1,800	- 900 27,000	- 900	- 900	- 1,800 1,7	800 3,60	0 1,800	- 1,800		
PX	2021	CBFI - I	LI Refurbishment/ Replacement		No	4		M1	C10	RC	DM	207080	Special Security Systems		518	21,961	MD	DNS	L	I 135,000														35,000				1	
			(CPIBP)																OF	PC) 180,000 PC 16,400 &D 61,500			-	-	-	-	-	-	- 2,7	700 1,800	27,900	900	900 1	36,800 1,8 6,1	3,600 150 4,10	00 1,800 00 2,050 61,500	1,800 2,050 2,05	- 50 Does not inclue requirements f	de funding
PX	2027	CBFI - I	LI Fencing (PIIDAS, CPIBP)		No	5		M1	C10	RC	DM	207063	Fencing		452	1,459	MD	DNS	L						_												2,050 2,05	project past 20	ior the
E. Other Def	ense Pr	ograms	Line Items (for example	, Campaigns/Directe	ed Stockpil	le Work (D	SW))			1	· [1	1	·								_	1				1										2,223 2,00		
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										<u> </u>						Cont		Weapone Act	Vities Account Line I	PC) Total	-	. 3.000	4 700	70,400, 4	57 600 42	100 234 054	457 750	386 360 107	800 272 2	13 ###### 4	-	84 277	62 300 2	51 650 126	900 ####		145.073 ###	-	
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			Project Name	Project Number	Included	in			Co	ore S	pecial	Special		FIMS			IRP	Defe		FI	MS Mission	_			Prior	FY	FY	FY	FY	FY	FY F 016 20	Y F 17 20				FY F 021 20	Y FY 22 2023				FY 2027	FY 2028	FY	FY 2030	FY	
Site Name	scal Fu 'ear Sou	ource S	or SSP Conservation Measure Name*	or SSP FEMP Measu #*	the SSP	? Priority	Score	Mission Code	Co Capa Co	ability Ir ode C	pecial terest ode #1	Interest Code #2	Property Sequence Number*	Facility Na	ame* Ma	Deferred intenance entifier(s)	Legacy Defe Maintenan Reductio	ce Redu	nance ction	Mission Dependency	Dependenc	y or Flimit	ided nated Fund Ty	ype Total	Funding	2011 Current	FYNSP	FYNSP	FYNSP	FYNSP F	/NSP	n7 20	18 20	19 20	20 2	021 20	22 2023	5 2024	202	2026	2027	2028	2029	2030	2031	Notes
(59)	23) (2	(26)	(48)	(49)	(33)	(47)	(56)	(39)	(8	8)	(61)	(62)	(50)	(22)		(10)	(36)	(1	3)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	29) (3	(3	0) (3	0) (3	30) (30) (3) (30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(43)
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G Non NNS	Line Itoma	c Other:	aprovido Brogra	am name or descri	intor																Costs to	or All NNSA	Site Line Ite	ms 2,983,07	3		3,000	4,700	70,400 1	57,600 4	3,400 234	4,950 457	,750 386	i,360 107	7,800 27:	2,213 ##	### 114,7	23 84,2	77 62,3	00 251,65	126,90	0 ######	######	145,073	#####	
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H. Non-NNS.	Line Items	s - Other:	<provide progra<="" td=""><td>im name or descri</td><td>ptor></td><td>_</td><td>_</td><td>_</td><td>_</td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></provide>	im name or descri	ptor>	_	_	_	_				_																																	
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Note:																								otal 2,983,07	3		3,000	4,700	70,400 1	57,600 4	3,400 234	4,950 457	,750 386	i,360 107	7,800 272	2,213 ##	### 114,7	23 84,2	77 62,3	00 251,65	126,90	0 #######	######	145,073	#####	
The purpose program prio	f this spread ies, and oth	adsheet is to ther factors	to allow each Site t will limit/dictate w	to propose/forecast hich projects ultima	t NEW high-p tely receive f	oriority NNSA unding. Eac	A line item o h site may	construction p also list its p	orojects ar roposed N	ind resubmit Non-NNSA	UPDATE Program li	<u>D</u> constructi ine item proj	on projects ects by prog	oreviously no ram.	otsupported	or prioritize	ed by the CW	G for Headqua	rters consid	deration. Site	s may propos	e projects th	at are above	their FYNSP	constraints.	However, b	udget realiti	ies,																		

Note: Funding profiles are based on the Mission Need documents and Mission Gap Sheet submitted to the CWG, adjusted to meet future funding targets. Information is based on need rather than funding availability.

Attachment A-2 Facilities and Infrastructure Line Item Cost Projection Spreadsheet <u>PROPOSED</u> Line Item Projects for Pantex Plant (\$000s)

			Pr	roiect Name	Project Numbe	r									FIMS	F	RP	Deferred	i	FIMS				Prior	FY	FY	FY	FY FY	FY	FY	FY	FY	FY	FY	FY FY	FY	FY	FY	FY	FY	FY	FY	FY	
Site Na	ne Fisca Year	al Fund r Source	l e SSP Mei	or Conservation easure Name*	or SSP FEMP Meas #*	ure Included the SSP (Y/N)	in ? Prio	rity Score	• M	ission Code	Core Capability Code	Special Interest Code #1	Special Interest Code #2	Property Sequence Number*	Facility Name	F Deferred Maintenance Identifier(s) (10)	Legacy Deferred Maintenance Reduction	Maintenance Reduction	Mission Dependency	Mission Dependency Program	GSF Added or Eliminate	Fund Type	Total	Years Funding	2011 Current	2012 FYNSP F	2013 2 YNSP F	2014 201 YNSP FYN:	5 2016 SP FYNSP	2017	2018	2019	2020	2021 :	2022 202	3 2024	2025	2026	2027	2028	2029	2030	2031	Notes
(59)	(23)) (26)		(48)	(49)	(33)	(47	7) (56)		(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29) (29) (29)	(30)	(30)	(30)	(30)	(30)	(30) (30	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(43)

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Attachment A-3a Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Operations of Facilities Projects for Pantex Plant

																(\$000s	5)																			
	r Sourc	e or SSP Conservation	or SSP FEMP Measure	Included in the SSP? e (Y/N) (33)	Priority		Code	Core Capability Code (8)	Special Interest Code #1 (61)	Special Interest Code #2 (62)	FIMS Property Sequence (50) (22)	Maint	FIRP erred Legacy Defe enance Maintenan	e Reduction	Fi Mission Dependency	MS Mission Dependency (41)	GSF Added or Eliminated		Total	Prior F Years 20 Funding Cur	FY 11 2012 ent FYNSP	FY FY 2013 201 FYNSP FYN (29) (29)	FY 2015 P FYNS	5 201 5 FYN: 5 FYN:	FY 6 2017 8P	FY FY 2018 2019	FY 2020	FY 2021 2	FY FY 022 202	FY 3 2024		FY F 2026 20		2029	FY FY 2030 2031	
(59) (23) (26) RTBF	(48)	(49)		(47)	(56)	(39)					`	10) (36)	(13)	(40)		(32)	(27)			3) (29)	(29) (29	(29)	(29) (30)	(30) (30)	(30)	(30) (30) (30) (30)	(30)	(30) (3	0) (30)	(30)	(30) (30)	(43)
PX 200	9 OPS	Upgrade	FY09-05	No	Note 1		M6	C10	LR	RC	134217 Irrigation S	/stems			NMD	RTBF		E	5,635	5,635																
PX F1 200	9 OPS	 12-17 HVAC Replacement 	FY09-48	No	Note 1		M1	C7	RC	None	136999 Dismantle Support				MC	RC		E	4,043	4,043																
PX F1 201	0 RTBF	 Mass Properties Equipment 	FY10-42	No	Note 1		M1	C7	RC	None	N/A N/A				N/A	N/A		N/A	5,924	5,924																
EV FY	RTBF	 Install Irrigation System - Tract 4 	FY10-35	No	Note 1		M6	C10	LR	None	134217 Irrigation S	/stems			NMD	RTBF		GPP	2,000	2,000																
	RTBF	- Utility Line Erosion	FY10-45	No	Note 1		M6	C10	RC	None	134216 134222 Gas Distri Domestic Dining				MD	RTBF		E	755	755																
PX F1			FY10-16	No	Note 1		M6	C10	RC	None	207063 Fencing				MD	DNS		Е	757	757																
PX F1 201	RTBF	- Electrical Equipmer	t FY10-48	No	Note 1		M1	C7	RC	None	137194 137203 Assembly	Bays		225	MC	DSW	320	GPP	2,765	865	1,900															
PX F)		- Storm Drainage	FY11-2	No	Note 1		M6	C10	RC	None	207060 Storm Dra	age		17	MD	RTBF		E	1,000	1.000																
	RTBF	- Station 711 Cate	FY10-17	No	Note 1		M6	C10	RC	None	207063 Fencing	9-		183		DNS		E	675	675																
PA 201		5000 D/(10 00)	1110-17	140	Note 1		1010	010	NO	None	Condensa			100	WID	DING		-	0/3	0/5										_						
PX 201	0 OPS	Replacement Support	FY10-30	No	Note 1		M6	C10	HS	RC	207133 Return	3			MD	RTBF		E	70	70																
PX F1 201	0 OPS	12-6 HVAC	FY10-09	No	Note 1		M6	C10	RC	None	83474 Office Bui	ing		177	MD	DSW		E	4,999	4,999																
PX F1 201		 Replace Notifier Panels 	FY10-25	No	Note 1		M6	C10	RC	None	134215 Fire Alarm	Panels			MD	RTBF		E	420	420																
PX F1 201		 Security Spotlight Replacement 	FY10-35	No	Note 1		M6	C10	RC	None	207102 Security L	ihts			MD	DNS		E	239	239																
PX F1 201	0 RTBF	 WETL ARGUS Booth Replacement 	FY10-34	No	Note 1		M6	C10	RC	None	202155 Argus Acc Control Bo	ss oth			NMD	DNS		E	150	150																
PX F1 201	1 OPS	Support	TBD	No	Note 1		M6	C10	HS	RC	207133 Condensa Return			58	MD	RTBF		Е	70		70															
PX F1 201	RTBF 1 OPS		FY11-4	No	Note 1		M6	C10	RC	None	131697 Firing Rar Building			12	MD	DNS		E	1,000	1,	000															
PX F1 201	RTBF	-	FY11-5	No	Note 1		M1	C7	RC	HS	207146 HPFL War Piping	r		6	MC	RC		E	100		100															
PX F1 201	RTBF	 Repair Freeze 	FY11-7	No	Note 1		M6	C10	RC	HS	83557 Tool and I	e Shop			MD	DSW		E	500		500															
PX F1 201	RTBF 1 OPS	 Cathodic Protection VMF Fuel Tanks 	- FY11-3	No	Note 1		M1	C10	RC	None	207076 16-1 Diese Tanks	/Gas			MD	RTBF		E	300		300															
PX F1 201	RTBF	 Repair Building Exteriors 	TBD	No	2		M6	C10	RC	SY	TBD TBD				TBD	TBD		E	7,300		7,300															
			*	·				•	•	•			TOTAL	- 678			320		38,702	27,532 1,	970 9,200	-	-	-		-		-	-		-	-	-	· -		•
* Oalvera Lie	dates in the	een - when annlie	In the state for my day	- EV 0040	0.444			and the second	E	Den est (-	(

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP Note 1: Ongoing projects not prioritized. Pantex has no funding identified for specific RTBF projects pas 2012. CEDR) and/or the agement System (FIMS)

Attachment A-3a Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Operations of Facilities Projects for Pantex Plant

Fiscal Year Project Name Project Name Project Name Project Number (NN) Project Name Project Number (NN) Project Name Project Name Project Number (NN) Project Name Project Name Project Number (NN) Project Name	FY F
Site Name riska runu or the SSP? Priority Score mission Capability Interest Interest Property are the SSP? Priority Score mission Capability Interest Interest Deferred Legacy Deferred Maintenance Mission Mission Site Name runu runu runu runu runu runu runu run	
	2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 NG
Subject September 201 Septembe	FYNSP
(59) (23) (26) (48) (49) (33) (47) (56) (39) (8) (61) (62) (50) (22) (10) (36) (13) (40) (41) (32) (27) (64) (46) (28) (29) (29) (29) (29) (29) (29) (29) (29	(29) (30) (30) (30) (30) (30) (30) (30) (30

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CBFI -RCAP

CBFI -RCAP

CBFI -RCAP

CBFI -RCAP

CBFI -

RCAP 12-084E CBFI - RAMS Replacemen RCAP 12-84E

CBFI-RCAP Production / 1 Floor space recenture

Mechanical Sustainability Fire Alarm Panel

Replacements (bays/cells)

Environmental

Sustained Oper

UV to IR Conversion

Production / Training

recapture

Testing Facility - SNM Paint Bay Modifications for

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

26

30

No 27

No 28

No 29

No

No 31

No 32

No 34 M6

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RC

RC

HS

HS

RC

None

None

RC

None

None

RC

RC

HS

137085

83564 130737 130738

134215

137137

137137

137203

207082

83/86

03400 137172 137194

Alternate Command Cente

Command Center; Computer Room; Command Center Additio

Fire Alarm Panels

Special Purpose Bays

Special Purpose Bays

Assembly Bays

Education and Train Office Building Assembly Bays

RAMS

Site Nam

(59)

(\$000s) Prior FY Project Name or SSP Conservation (48) Project Number or SSP FEMP Measure (49) Included in the SSP? Priority Score (Y/N) (33) (47) (56) Core Special Special Capability Interest Interest Code Code #1 Code #2 (8) (61) (62) Fiscal Fund Year Source FIMS Mission GSF Added Fund Type Mission Code Mission Total F Deferred Maintenance (10) Legacy Deferred Maintenance Property Sequence Facility Name* Maintenance Reduction (26) (36) (40) (41) (32) (27) (64) (39) (50) (13) (22) 2013 CBFI-RCAP 12-99 N/A No 1 M6 C10 HS RC 137134 Assembly Bays MC RTBF E 9,672 1,592 8,080 CBFI - RAMS Replacement RCAP 12-99 No RC N/A 2 M6 C10 DM 207082 PAMS MD RTBF Е 7,322 1,309 6,013 83539 83539 83540 130714 130715 83541 Metrology Lab CBFI -RCAP Environmental Controls Upgrade f No 3 M6 C10 RC None MD DSW Е 10,000 4,438 3,393 1,469 N/A 700 trology Laboratory Surveillance. 130716 Assembly Cell: Assembly Cell: Assembly Cell: Assembly Cell: Assembly Cell: Component Storage: Assembly Cell: As 137175 137176 137176 137178 137179 137180 137181 137203 137205 Environmental Controls for LEP in 2013 CBFI -RCAP RC 6,300 N/A No 4 M1 C7 None MC DSW Е 300 1,200 1,200 1,200 634 1,766 137205 137127 137128 137129 137130 137131 137135 137137 luction Eacilitie Lightning Location and Protection System Replaceme 207086 207087 Lighting Protection; Lightning Detection Systen CBFI -RCAP N/A No 5 M6 C10 HS DM MD RTBF 1,000 1,000 11 Е CBFI -RCAP Various (43 buildings) 6 C7 HS 9,000 919 3,725 2,000 N/A No M1 None Various (43 buildings) RC Е 1,356 1,000 MC/MD Lightning Protectio Upgrade Asset Managemei CBFI -RCAP N/A No 7 TBD Е 9,000 1,000 1,000 TBD 1,000 1,000 1,000 Support MD/MC of/Roads) Assembly Bays; Assembly Bays; Assembly Bays; Special Purpose Bays; Assembly Cell; 137203 137134 137135 137137 137175 137175 137176 137178 137179 137180 12-085 12-096 137128 137129 137130 CBFI - Seismic Upgrades (Ceiling & Wall No 12 M6 C10 HS RC 11,800 N/A MC DSW Е 2.400 1.000 1.300 2.600 ssembly Cell xplosive Form CBFI - Mock HE Capability 2014 CBFI-RCAP Upgrade N/A No 13 M1 C7 RC None 137014 MC RC GPP 2,250 500 1,000 750 Material Evalu Office Building and Changehouse; CBFI - Sustainable Facility RCAP for 11-2/11-27 83394 83416 No 14 M6 C10 RC SY MD RC GPP 9,000 500 7,700 800 N/A Office Building Guard Tower; Guard Tower; Guard Tower; Guard Tower; 136974 136975 137071 137072 CBFI -RCAP Guard Tower Stair Replacement No 15 M6 C10 HS DM GPP 3,700 1,700 N/A MD DNS 2,000 137073 Guard Tower Central Chilled Water 137038 Central Chilled Water Equipment Room and; Tooling Warehouse; Component Warehouse; Component Warehouse; Explosives Staging; Component Warehouse Assembly Cell; 137038 137042 137043 137149 137193 137198 137200 HVAC and Chiller CBFI - Projects for RCAP Surveillance & Dismantlement 16 RC No M1 C7 DM MC Е 7.750 7.000 N/A 1.188 DSW 750 137179 137179 137180 137205 137127 137128 137129 137130 137134 Assembly Cell; CBFI -RCAP Num-1 Hoist Upgrade N/A No 17 M1 C7 HS None MC DSW 3,300 1,300 100 1,900 Е Assembly Bays 2014 CBFI - Vacuum Chaml RCAP Upgrades Vacuum Chamber 137135 18 M1 C7 RC MC DSW 6,500 1,000 5,500 N/A No None Е 137137 Special Purpose Bays Facility Modifications for Non-Intrusive Pit Reuse CBFI -RCAP Inert Assembly and Test/SNMCRF N/A No 19 M1 C7 RC None 137123 MC GPP 4,000 3,000 500 DSW 500 Generator Building; 136979 137079 207075 207076 CBFI-RCAP Fuel Management Upgrades (12-108, 4-147, 16-13, 16-1) Fuel Management Engine Generator No 23 M6 C10 RC HS 16-1 Ethanol Tank; 16-1 Diesel/Gas Tanks; Е 3,000 1,000 1.000 N/A MD RTBF, DNS 207144 16-13, Fuel Oil Tank 2015 CBFI -RCAP Narrow Band Radio N/A No 24 M6 C10 RC None 201877 Narrow Band Radio Facility MD RTBF GPP 7.000 6.300 700 Alternate Comma Alternate Comma Center Electrical / Mechanical Sustainability Command Center Electrical / Mechanical CBFI -RCAP No C10 RC

MD

MD

MD

MC

MC

MC

MD

MC/MD

DNS

DNS

RTBF

DSW

DSW

DSW

RTBF

DSW

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GPP

GPP

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GPP

5,000

8,000

5,500

10,000

1,300

9.672

7,322

600

Attachment A-3h Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Recapitalization Projects for Pantex Plant

NNSA FY 2012 TYSP

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	
2020 (30)	2021 (30)	2022 (30)	2023 (30)	2024 (30)	2025 (30)	2026 (30)	2027 (30)	2028 (30)	2029 (30)	2030 (30)	2031 (30)	Notes (43)
1,000	1,000											

FY 2018

(30) (30)

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1,000

1,100

1,100

500

1,100

3,733

200

8.080

6,013

500 4.000

500 7,500

1,100 1,100

482 5,785

1,100

1,592

1,309

600

1,000

FY 2019

Attachment A-3b Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Recapitalization Projects for Pantex Plant

																		(\$000s	5)																						
Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation	Project Number or SSP FEMP Measure	Included in the SSP? (Y/N) (33)	Priority	Score	Code	Core Capabili Code (8)	ty Interes Code #	I Specia t Interes 1 Code # (62)	Property Sequence	FIMS Facility Name*	Maintenance	RP Legacy Deferred Maintenance	Reduction	FI Mission Dependency	MS Mission or Dependency	GSF Added r Eliminated Fund		Total I Fu	Prior /ears 2 Inding Cu	FY FY 2011 2012 urrent FYNSP (28) (29)	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP		FY F 2018 20			FY 2022	FY 2023	FY F 2024 20	Y FY 25 2026	FY 2027	FY 2028 2	FY FY 2029 203	FY 0 2031	Notes	
(59)	(23)	(26) CBEL-	(48)	(49)		(47)	(56)	(39)					(22) RCRA Hazardous Waste	(10)	(36)	(13)	(40)	(41)	(32) (2	27)		(46) ((28) (29)	(29)	(29)	(29)		(/	(30) (3) (30)	(30)	(30)	(30)	(30) (3	0) (30)	(30)	(30) ((30) (30)) (30)	(43)	
PX			16-16 RCRA Fac. Floor replacement HE Formulation	N/A	No	35		M6	C10	RC	DM	130831	Staging			307	MD	RTBF		E	3,800						200	2,600	1,000										_		
PX	2016	CBFI - RCAP	Electrical Upgrade for LEP	N/A	No	36		M1	C7	RC	None	137014	Explosive Formulation and Material Evalu				MC	RC	I	E	5,500						500	2,100	2,900												
PX	2016	RCAP	Breath and Alcohol Testing (BAT) Facility	N/A	No	38		M6	C10	RC	None	N/A	N/A				NMD	RTBF	G	PP	245						245														
PX		RCAP	ARGUS AFPS (50) / RAPS (100) - Bay / Cells	N/A	No	39		M6	C10	RC	None	Various	Various				MC	DSW	I	E	1,700							340	340	340	68										
PX	2017		ARGUS AFPS (100) / RAPS (500) - Personnel Access	N/A	No	40		M6	C10	RC	None		Various				MD/NMD	DNS	I	E	4,000							800	800	800	1,60										
PX	2017	CBFI - RCAP	12-98 UPS Upgrade	N/A	No	41		M1	C7	RC	None	137128 137129 137130 137131	Assembly Cell				MC	DSW	1	E	3,500							1,000	2,500												
PX	2018	CBFI - RCAP	Storm drainage repair based on study	N/A	No	45		M6	C10	HS	None	207060	Storm Drainage				MD	RTBF	1	E	7,000								2,144 1,	600	3,25	5									
ΡX	2018	RCAP	BDI Replacement	N/A	No	46		M1	C7	нз	RC	83433 130661 137175 137176 137178 137178 137178 137180 137203 137203 137127 137128 137127 137129 137130 137131 137137 137081	Assembly Cell; Assembly Cell; Assembly Cell; Assembly Cell; Assembly Cell; Assembly Bays; Assembly Bays; Special Purpose Bays;				МС	RC, DSW		E	40,000								0,000 10,	000 10,0	00 10,00										
PX	2021		Capital Equipment Infrastructure Replacement	N/A	No	61		M1	C7	RC	None	N/A	N/A				MD	DSW	G	PE	1,114										1,11										
										*				TOTAL	-	1,630			-		224,847	-		- 7,257	30,300	46,500	33,650	34,600	29,050 14	840 11,0	17,65	- 10	-	-	-		-	-			

* Column Headers in green - when applicable; data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Projects listed in CEDR as "Cancelled" in the "Conservation Measure(s) Status" column are not considered as included in the Pantex SSP. These projects do contribute to sustainability. Assumes Roof Asset Management Program continues within CBFI Program, and a RAMP type program will be initiated for road replacement/repair; therefore roof replacements/coatings or road replacement/repair are not included in Site CBFI project Listing. Outyear targets (FY 2029 and FY 2031) do not exactly match the CBFI target funding. It is assumed that funding can be adjusted to support the Line Item funding profiles.

Attachment A-3c Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Disposition Projects for Pantex Plant (\$000s)

Site Name ຖ	Fiscal Year		Project Name																																					
		Fund Source	or	Project Number or n SSP FEMP Measu	Included in the SSP?		Score	Mission Code	Core Capability Code	Special Interest	Special Interest	Property	IMS Facility		Legacy Deferred	Deferred Maintenance Reduction	Mission	MS Mission Dependency	GSF Added	Fund	Total	Prior Years	FY FY 2011 201 Current FYN		FY 2014	FY 2015	FY 2016		FY FY 2018 2019	FY 2020		FY 2022 2	FY FY 2023 2024		FY F 2026 202			FY FY 2030 203		Notes
			Measure Name*	#*	(Y/N)					Code #1	Code #2	Sequence Number*	Name*	Maintenance Identifier(s)	Maintenance Reduction		Dependency	Program																						
(59) ((23)	(26)	(48)	(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28) (29) (29)	(29)	(29)	(29)	(30)	(30) (30)	(30)	(30)	(30) (30) (30)	(30)	(30) (3	0) (30) (30)	(30) (30		(43)
PX 2	2017	CBFI - DISP	East Property Structures Demolition	N/A	No	44		M6	Other: See Comments		None	N/A	N/A			-	N/A	N/A	N/A	E	400							400												
PX 2	2018	CBFI - DISP	Buildings 4-20E, 4-24, 4-27, 4-29	N/A	No	49		M6	Other: See Comments		DM	136876 136900	Component Staging; Staging Magazine; Staging Magazine;			588	NMD	DSW	(6,233)	E	1,000							,	1,000											
PX 2	2018	CBFI - DISP	Trailers 09-056, 09-108, 09-054, 09-098, 09-111	N/A	No	50		M6	Other: See Comments	FD	DM	130586 130634 130584 130624 130637	Manazine: Radiation Safety Emergency Support; Break Area; Inert			149	NMD	RTBF, DNS, OFO	(1,259)	E	300								300											
PX 2	2018	CBFI - DISP	Building 11-015A, 11-R-016, 11-018	N/A	No	51		M6	Other: See Comments	FD	DM		Inert Storage; Ramp from 11-020 to 11- 021; High Voltage			1,199	NMD, MC	DSW, ENG, NA	(4,139)	E	1,200								1,200											
PX 2	2018	CBFI - DISP	Building 12-024E, 12-024S	N/A	No	52		M6	Other: See Comments		DM	137038	High Voltage Central Chilled Water Equipment Room and; Electrical			1,547	MD, NMD	DSW	(4,070)	Е	3,400							:	3,400											
PX 2	2019	CBFI - DISP	Buildings 12-034, 12-034SS, 12-R-0	34 N/A	No	56		M6	Other: See Comments	FD	DM	137052 137053 137100	Flammable Liquid Storage; Shade Structure; Ramp from			167	NMD	DSW, NA	(1,468)	Е	500								50	0										
PX 2	2019	CBFI - DISP	Building 12-005G3 12-080, 16-010B	, N/A	No	57		M6	Other: See Comments		DM	130491 83571 130827	Maintenance Inert Storage; Drivers Wait Building; Vehicle			39	NMD	RTBF, NA	(1,409)	E	600								60	0										
PX 2	2020	CBFI - DISP	Buildings 12-045, 12-047, 12-041SS	N/A	No	58		M6	Other: See Comments	FD	DM	137184 137185 137143	Inert Storage; Inert			37	NMD	RTBF, DSW	(380)	E	300									300										
				RTBI	-/Capability	/ Based Fa	cilities & Ir	nfrastructure	- Disposition	Projects (F	acilities & Inf	rastructure	reported unde	TOTAL r this category)	-	3,726			(18,958)		7,700	-	-	-		-	-	400	5,900 1,10	0 300	-	-	-		-	-		-	-	

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Note: As new facilities receive funding, the associated demolition will be added.

Attachment A-3c Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Disposition Projects for Pantex Plant (\$000s)

																			(,,																					
			Project Nan	e Pro	oject Number								FI	IMS		FIRP	Deferred	FI	NS				Prior	FY	FY	FY FY 2013 201	FY	FY	FY	FY FY	FY	FY	FY FY	FY	FY	FY	FY FY	f FY	FY	FY	
Site	ame Fisc	al Fund	or		or	the SSP?	Priority	Score	Mission	Canabilit	Spec Intere	al Special	Property	Facility	Deferred	Legacy Deferred	Maintenance	Mission	Mission	GSF Added	Fund	Total	Years	2011	2012	2013 201	4 2015	2016	2017 2	2018 201	9 2020	2021 2	022 202	3 2024	2025	2026 7	2027 202	18 2029	2030	2031	Notes
0.00	Yea	ar Sourc	SSP Conserva	ion SSP F	FEMP Measure	(Y/N)		000.0	Code	Code	Code	#1 Code #2	Sequence	Name*	Maintenance	Maintenance	Reduction	Dependency	Program	or Eliminated	Туре		Funding	Current	FYNSP F	YNSP FYN	SP FYNSP	FYNSP						/ /							1000
			Measure Nan	e^	#^								Number*		Identifier(s)	Reduction			riogram	(32)														/ /							
(5	9) (23	5) (26)	(48)		(49)	(33)	(47)	(56)	(39)	(8)	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29) (29) (29)	(29)	(30)	(30) (30) (30)	(30) ((30) (30) (30)	(30)	(30)	(30) (30)) (30)	(30)	(30)	(43)

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Attachment A-3d Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Sustainability Projects for Pantex Plant

																		(\$	000s)																				
Site Name	Fiscal Year	Fund Source	Project Name or SSP Conservation	or	Included i the SSP?	n Priority	Score	Mission Code	Core Capability Code (8)	Special Interest Code #1 (61)	Special Interest Code #2	Property	MS Facility Name*	Fl Deferred Maintenance	RP Legacy Deferred Maintenance	Deferred Maintenance Reduction	FII Mission Dependency	MS Mission Dependency	GSF Added Fund or Eliminated Type	Total	Prior Years Funding	FY FY 2011 2012 Current FYNSP (28) (29)	FY 2013 FYNSP	FY 2014 FYNSP	FY 2015 FYNSP	FY 2016 FYNSP	FY 2017	FY 2018 2	FY FY 2019 202	FY 2021	FY 2022	FY 2023 2	FY FY 024 2025	FY 2026	FY 2027	FY FY 2028 202	9 2030	FY 2031	Notes
(59)	(23)	(26)	(48)	(49)	(Y/N) (33)	(47)	(56)	(39)	(8)	(61)	Code #2 (62)	Sequence (50)	(22)	(10)	(36)	(13)	(40)	(41)	(32) (27)	(64)	(46)	(28) (29)	(29)	(29)	(29)	(29)	(30)	(30)	(30) (30)	(30)	(30)	(30)	30) (30)	(30)	(30)	(30) (30)) (30)	(30)	(43)
PX	2013	CFBI - SUSY	Steam Distribution System : Replaces insulation and repair	PX-E-06/T7	Yes	8		M6	C10	RC	SY	134221 E	Steam Distribution				MD	RTBF	E	10,000			7,000	3,000															
PX	2013	CFBI - SUSY	Steam Distribution System : Replace minimum of 12 failed to drain CRU.	PX-E-04/TC7	Yes	9		M6	C10	RC	SY		Condensate Return				MD	RTBF	E	200			200																
PX	2013	CFBI - SUSY	Building Continuous Commissioning Program	PX-R-08-03	Yes	10		M6	C10	RC	SY	Various V							GPP	4,500			500	500	500	500	500	500	500	1,000									
PX	2013	CFBI - SUSY	Solar hot water panels @ 3 buildings	PX-R-03/TC11	Yes	11		M6	C13	SY	None	83559 83596 130761	Cafeteria; Cafeteria and Changehouse; Physical Fraining Facility				MD/NMD	DNS/NA	GPP	43			43																
PX	2015	CFBI - SUSY	Install high efficiency burners at Bldg. 16-013	PX-E-01/TC1	Yes	25		M6	C13	SY	RC	130828 5	Plant-Wide Steam Production				MD	RTBF	GPP	3,700					1,700	2,000													
PX	2016		Connect EMCS to bldgs. In Zones 11 and 12	PX-E-00/TC7	Yes	37		M6	C13	SY	None	Various V	/arious						GPP	10,000						3,850	6,150												
PX	2017	CFBI - SUSY	HPSB Compliance. Install advanced electric, natural gas, steam and water meters.	PX-H-01/TC18	Yes	42		M6	C13	SY	None	Various V	/arious						GPP	25,000							3,000	13,000 3	3,700	5,300									
PX	2018	CFBI - SUSY	Sustainable Vehicle Wash Facility	NNSA-0140-0010	Yes	47		M6	C10	RC	SY	N/A N	N/A				NMD	RTBF	GPP	4,000								4,000											
PX	2019	CFBI - SUSY	Replace steam heaters in ramps that are failed to drain.	PX-E-05/TC4	Yes	53		M6	C10	SY	RC	Various V	/arious				MD	NA	E	300									300										
PX	2021	CFBI - SUSY	HPSB Complaince. Purchase and install EPA Labled WaterSense product. (Lo-flow)	NA	Yes	59		M6	C13	SY	None	Various V	/arious						GPP	1,500										1,500									
PX	2021	CFBI - SUSY	Solar ventalation air preheat at Steam Plant	PX-R-02/TC11	Yes	60		M6	C13	SY	RC	130828 5	Plant-Wide Steam Production				MD	RTBF	GPP	37										37									
														TOTAL	-	-	-		-	59,280	-		7,743	3,500	2,200	6,350	9,650	17,500 4	4,500	- 7,837	-	-	-		-	-	-		
* Column	Hoodor	o in area	en - when applicab	le: data from the	- EV 201	D Citon Cu	otoinohi	lity Dian / C	Concolidato		oto Doport) and/or the	Equilities Inform	motion Monor	amont Sustam																							

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-3d Facilities and Infrastructure Project Cost Projection Spreadsheet RTBF/Capability Based Facilities & Infrastructure - Sustainability Projects for Pantex Plant

(\$000s)

	Fi	iecal	Fund	Pro	ject Name	Pro	oject Number	Included	l in			Mission	Core	S	pecial	Special		FIMS		IRP	Deferred	F	MS	GSE Added	Fund	Total	Prior	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY F	Y FY	FY	FY	FY	FY	FY	FY	
Site	Name Y	Year	Source	SSP	or Conservation	SSP	or FEMP Measu	the SSF	P? Pri	ority	Score	Code	Capabili	y Ir	iterest	Interest Code #2	Property Sequence	Facility Name*	Deferred Maintenance	IRP Legacy Deferred Maintenance (36)	Maintenance Reduction	Mission	Mission	or Eliminated	Туре	Total	Years Funding	2011 Current	2012 FYNSP	2013 FYNSP	2014 FYNSP	2015 FYNSP	2016 FYNSP	2017	2018	2019	2020 2	2021 2	022 2	2023 20	24 202	5 202	6 2027	2028	2029	2030	2031	Notes
(59) ((23)	(26)	00. 0	(48)	00	(49)	(33)	(4	47)	(56)	(39)	(8)	Ŭ	(61)	(62)	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29)	(29)	(29)	(29)	(30)	(30)	(30)	(30)	(30) (30) ((30) (3	0) (30) (30	(30)	(30)	(30)	(30)	(30)	(43)

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Attachment A-4 NNSA Facilities and Infrastructure Project Cost Projection Spreadsheet Facilities and Infrastructure Recapitalization Program (FIRP) for Pantex Plant

																	(\$000e)	on Program (FIR																					
Site Name Year	Fund Source (26)	or	Project Number or SSP FEMP Measure (49)	Included in the SSP? Pr e (Y/N) (33)		Score Mis Co (56) (3	ision ode	Core Capability Code (8)	Special Interest Code #1 (61)	Special Interest Code #2 (62)	Property Sequence (50)	FIMS Facility Name* (22)	Fi Deferred Maintenance (10)	RP Legacy Deferred Maintenance (36)	Deferred Maintenance Reduction	F Mission Dependency	MS Mission Dependency	GSF Added Fun or Eliminated Typ (32) (27	d Total e (64)	Prior Years Funding	FY 2011 Current	FY 2012 FYNSP	FY 2013 FYNSP F	FY 2014 FYNSP F	FY 2015 FYNSP (20)	FY 2016 FYNSP (20)	FY FY 2017 201 (20) (20	FY 8 2019	FY 2020 (20)	FY F 2021 20	Y FY 22 202	FY 2024	FY 2025 (20)	FY 2026 2	FY FY 2028	FY 2029 (20)	FY FY 2030 203 (30) (30	11 N	otes (43)
(59) (23) PX 2011		Planning & Design o	PX-P-11-01	No				C 10	RC	DM	(30) N/A		(10)	-	- (13)	(40)	(41)	- E	2,10		2,100		(23)	(23)	(23)	(23)	(30) (30) (30)	(30)	(30) (3	(30) (30)	(30)	(30)	30) (30)	(30)	(30) (30	,,	(43)
PX 2009	FIRP	Bldg. 12-021 Roof Replacement	PX-R-09-02	No	1	65 N	/16	C7	RC	DM	137023	Nondestructive Evaluation and Gas	P-DM-MZ12-35	4	1,095	МС	DSW	- E	2,63	4 2,360	274																		
PX 2009	FIRP	FY09 Rehab Roads	PX-R-09-03	No	2	65 N	/16	C10	RC	DM	133399	Lab Primary Roads; Secondary Roads	P-DM-47-02-01	1,069	3,191	MD	RTBF	- E	4,34	2 4,051	291																		
PX 2009	FIRP	DM Electrical Task Part 2	PX-R-09-04	No	3	60 N	/6	C10	RC	DM	84027 83471 137072 83521 137057 137121 137023	Firing Site; Maintenance Fire System Shop; Guard Tower; Office Building and Emergency Vehicle St Inert Staging; Electrical Substation; Nondestructive Evaluation and Gas Lab	; P-DM-04-12	541	782	MC/MD/NMD		- E	78	5 900	(115																		
PX 2009	FIRP	DM Mechanical Tas 1 & 2, Phase 2 (Bldg 11-051)	PX-R-09-05	No	4	65 N	<i>N</i> 6	C7	RC	DM		Material Evaluation Laboratory	P-DM-11-01	360	526	MC	RC	- E	3,00	0 2,800	200																		
PX 2010	FIRP	, FY10 RAMP Site Support	PX-R-10-01	No	5	75 M	16	C10	RC	DM	130325 130326 130389 130330 130330 130345 130345 130345 130352 130353 130355 130355 130355 130361 130366 130367 130366 130372 130384 130376 130376 130372 130384 130382 130384 130385 130328 130384 130328 130384 130328 130384 130385 130384 130385 130375 130385 130375 130385 130375 130385 130375 137137 13	Explosive Storage; Explosive Sto	P-DNM-MZ-24 P-DM-R-05-05 P-DM-12M-01	2	3,919	MC/MD	DSW	- E	56	4 1,307	(743																		
PX 2010	FIRP	Bldg. 12-017 Roof Replacement	PX-R-10-04	No	6	65 N	<i>N</i> 6	C7	RC	DM	126000	Pressing and Dismantlement Support		38	775	MC	RC	- E	1,27	5 1,761	(486)																	
PX 2010	FIRP	NA-52 Detail Support	t PX-R-10-05	No	7	N	one	None	None	None	N/A	N/A	NA	-	-	NA		- E	2	6 26																			
PX 2010	FIRP	Demolish 11-010, 11-030, 12-002B		No	8	34 N	<i>N</i> 6	C10	FD	DM	83419 83465	Warehouse; Security Training; Office Building and Transportation	P-DNM-11-010 P-DNM-12-002E		561	NMD	DSW, DNS	(6,325) E	1,60	0 1,600																			
PX 2011	FIRP	Support	PX-R-11-01	No	9	55 M	16	C10	RC	DM	83390 137062 137063 137064 137200 137202 137081 137081 136976 136976 136976 136976 136976 136942 84015 130841 84017	Component Warehouse; Explosives Processing and Demilitarizati; Pressing Control Room; Component Warehouse; Technical Acceptance Bay; Assembly Bays; Explosives Machining; Ramp from 12-082 to 12-R-086; Guard Station; Guard Station; Building; Emergency Power Station; Detonator Staging	n: P-DNM-10-007 P-DNM-MZ12-07 P-DNM-MZ12-07 P-DM-12M-01 P-DM-MZ12-04 P-DM-MZ12-04 P-DM-MZ12-07 P-DNM-MZ12-02 P-DNK-R-05-06 P-DM-R-05-05	900	5,898	MC/MD/NMD		- E	3,97	9	3,979																		
PX 2011	FIRP	Replacement	PX-R-11-02 NNSA-0141-0013	Yes	10	65 N	<i>l</i> 6	C10	RC	DM	137142	Central Chilled Water Equipment Room	P-DM-MZ12-07	2	40	MD	RTBF	- E	1,90	0	1,900																		
PX 2011	FIRP	Site-Wide Pipe Replacements (Federal Small Contract)	PX-R-11-03	No	11	55 N	//6	C10	RC	DM	134222	Domestic Water Piping	9 P-DM-650-08	1,020	2,049	MD	RTBF	- E	1,45	0	1,450																		
·					•																_		• —	• =	-			_			_		-	• =			·		-

Attachment A-4 NNSA Facilities and Infrastructure Project Cost Projection Spreadsheet Facilities and Infrastructure Recapitalization Program (FIRP) for Pantex Plant

(59) (23) (26) S X 2011 FIRP S S X 2011 FIRP S C X 2011 FIRP B S C X 2011 FIRP B S C X 2011 FIRP B S S X 2011 FIRP S S S X 2011 FIRP S S S X 2012 FIRP S S S	Project Name or SSP Conservation (48) Site-Wide Pipe Replacements (Site Support for FSB Contract) Bidg, 12-021 Gas Lab Refurbishment	or SSP FEMP Measure (49) PX-R-11-03(a)	Included in the SSP? (Y/N) (33) No	(47)		(39)	Core Capability Code (8)	Special Interest Code #1 (61)	Special Interest Code #2 (62)	Property Sequence (50)	FIMS Facility Name* (22)		egacy Deferred Maintenance	Deferred Maintenance Reduction	F Mission Dependency	IMS Mission	GSF Added or Eliminated		Total	Prior FY Years 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY F 2016 20	Y FY 17 2018	FY 2019	FY FY 2020 2021	FY 1 2022	FY 2023	FY FY 2024 202	FY 5 2026	FY 2027	FY 2028 2	FY FY 2029 203	FY 2031	Notes
X 2011 FIRP S X 2011 FIRP B X 2011 FIRP H X 2011 FIRP F X 2012 FIRP S X 2012 FIRP S	Replacements (Site Support for FSB Contract) Bldg. 12-021 Gas				55			<u> </u>				(10)	(36)	(13)	(40)	Dependency (41)	(32)	(27)	(64)	Funding Current (46) (28)	FYNSP (29)	FYNSP (29)	FYNSP (29)	FYNSP F (29)	YNSP (29) (3		(30)	(30) (30)		(30)	(30) (30) (30)	(30)	(30) ((30) (30) (30)	(43)
X 2011 FIRP La X 2011 FIRP FI X 2012 FIRP FI X 2012 FIRP FI						M6	C10	RC	DM	134222	Domestic Water Piping	P-DM-650-08	180	326	MD	RTBF	-	E	250	250																	
X 2011 FIRP H H X 2012 FIRP F S		PX-R-11-04	No	13	55	M6	C7	RC	None	137023	Nondestructive Evaluation and Gas Lab		-		MC	DSW	-	E	-																		Project pending reprogramming of Line Item funding. Required funding not shown.
	FY11 Mechanical Task (Chiller/ Boiler/ HVAC replacements Bldgs. 12-32, 12-42, 16-12)	PX-R-11-05	No	14	65	M6	C7	RC	DM	137050 137149 83801	Electric Cart Charging and Weapon Trainer Storage; Component Warehouse; Office Building	P-DM-MZ12-07 P-DM-MZ12-27	768	391	MC/MD	ENG, DSW, RTBF	-	E	4,800	2,600	2,200																
X 2012 FIRP	FY12 RAMP Site Support		No	15	55	M6	C10	RC	DM	127014	Explosive Formulation and Material Evalu	Various	324	2,088	MC	RC	-	E	1,500		1,500																
	Building 12-021 Chiller Replacement	NNSA-0141-0007	Yes	16	65	M6	C7	RC	DM		Nondestructive Evaluation and Gas Lab	P-DM-MZ12-35	230	280	MC	DSW	-	E	2,500		2,500																
X 2012 FIRP P	Building 12-021 Piping Upgrade		No	17	65	M6	C7	RC	DM		Nondestructive Evaluation and Gas Lab	P-DM-MZ12-35	325	413	MC	DSW	-	E	2,082		2,082																
A 2012 FIRP 12	Replace Chiller Bldg. 12-085		No	18	65	M6	C7	RC	DM	137205	Assembly Cell	P-DM-MZ12-35	5	88	MC	DSW	-	E	1,200		1,200																
	Replace Chiller Bldg. 12-096		No	19	65	M6	C7	RC	DM	137127	Assembly Cell	P-DM-MZ12-35	10	88	MC	DSW	-	E	1,000		1,000																
ZUIS FIRF BI	Replace Chillers Bldg. 12-068A		No	20	65	M6	C10	RC	DM	130732	Special Tooling Dimensional Inspection	P-DM-12M-02	15	64	MD	DSW	-	E	1,200			1,200															
	FY13 RAMP Site Support		No	21	55	M6	C10	RC	DM	TBD	TBD	Various	750	300	MC/MD		-	E	1,500			1,500															
X 2013 FIRP fo	Building 12-21 Electrical Upgrade for LEP/ Surveillance Programs		No	22	65	M6	C7	RC	DM	137023	Nondestructive Evaluation and Gas Lab	P-DM-MZ12-35	-	83	MC	DSW	-	E	1,982			1,982															
X 2013 FIRP R	Cteam Dine		N											0.050	ND	RTBF		F	5,800			5,800															
	Steam Pipe Refurbishment (West Loop)		No	23	65	M6	C10	RC	DM	134221	Steam Distribution	P-DM-645-01 TOTAL	-	2,053 25,010	MD	RIDE	(6,325)	-		14,805 11,700																	

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Per TYSP Guidance, FIRP projects are planned through FY13. If funding is not available in FY13, the site will re-prioritize within available funding, Note: Projects listed in CEDR as "Cancelled" in the "Conservation Measure(s) Status" column are not considered as included in the Pantex SSP. These projects do contribute to sustainability.

Attachment A-5 Facilities and Infrastructure Project Cost Projection Spreadsheet For Pantex Plant (\$000s)

			Bro	ject Name	Project Number							FIMS	FI	IRP	Deferred	FI	NS			Pri	or FY	FY	FY	FY	FY FY	F	Y FY	FY	FY FY	FY	FY I	FY FY	FY	FY	FY FY	FY	FY	
Site Name	Fiscal Year		ind	or		Included in the SSP?	Priority Score	Mission Code	Core Capability Code	Special Interest Code #1	Special Interest	Property Facility	Deferred Maintenance	Legacy Deferred Maintenance		Mission Dependency	Mission Dependency	GSF Added F or Eliminated T	und Tot	al Yea Fund		2012 nt FYNSP	2013 FYNSP		015 201 NSP FYNS		017 2018	2019	2020 2021	2022	2023 2	024 2025	2026	2027 2	028 2029	2030	2031	Notes
			Mea	sure Name*	#*	(Y/N)			Code			Sequence Name*	Identifier(s)	Reduction			Program																					
(59) A. NNSA	(23) Facilitie	(20 es and In	frastructure		(49) on Spreadsheet (Se	(33) curity)	(47) (56)	(39)	(8)	(61)	(62)	(50) (22)	(10)	(36)	(13)	(40)	(41)	(32)	(27) (64) (46	6) (28)	(29)	(29)	(29) (29) (29) (3	30) (30)	(30)	(30) (30)	(30)	(30) (3	30) (30)	(30)	(30) (30) (30)	(30)	(30)	(43)
PX	2011	Secu	urity Video	amera / Digital		No	1	M1	C10	RC	None				764	MD	DNS	C	SPP 2	842 2,	842																	
PX	2011	Secu	urity MotoMe	sh Expansion		No	2	M1	C10	RC	None					MD	DNS	0	GPP 4	499 4,	499																	
PX	2011	Secu	urity Range 9 Replace	Bullet Trap ment		No	3	M6	C10	RC	None	Security Training 130835 Support Facility and F				MD	DNS	c	SPP	800	800																	
PX	2011	Secu	urity 12-143 F	Parking Lot		No	4	M1	C10	RC	None	207048 Parking Areas				MD	DNS	C	GPP	682	682																	
PX	2011	Secu	urity 12-75 R Project	enovation		No	5	M6	C10	RC	None	83564 Command Center			52	MD	DNS	0	GPP	515	515																	
PX	2011	Secu	urity Armory System	Inventory		No	6	M1	C10	RC	None					MD	DNS		E	932	932																	
PX	2011	Secu	urity Building Modifica			No	7	M1	C10	RC	None	136980 Garage				MD	DNS		E	30	30																	
PX	2011	Secu	urity Portal G Pillars	amma Monitor		No	8	M1	C10	RC	None					MD	DNS		E	100	100																	
PX	2011	Secu	urity Building Area	12-125 ESS		No	9	M1	C10	RC	None	Physical 130761 Training Facility				MD	DNS		E	100	100																	
PX	2011	Secu	urity Zone 12 Deterrer	Rabbit It Fence		No	10	M1	C10	RC	None	207063 Fencing				MD	DNS		E	220	220																	
								c	osts for NNS/	A Security (fa	acilities & in	frastructure reported unc	Sub-Total ler this category)		816			-	10	720 10,	720		-	-	-	-		-	-		-	-	-	-	-		-	
B. NNSA	Facilitie	s and In	nfrastructure	Cost Projecti	on Spreadsheet (Re	adiness Can	npaign/OST)	1	1	1	1		1	[1	1				1			1 I															naludaa daalaa far batb
PX	2011	Readir Camp	iness baign Project		DSW-10-563	No	1	M1	C7	RC	None	137001 137060 Explosives Pressing; Extrudable Explosives Processing				MC/MD	RC	330 0	GPP 2	370	375 1,24	5 500	250														E F E F a	Includes design for both Extrudable Upgrade and B- Press Upgrade, but only construction for Extrudable Upgrade. Funding source for FY12 and FY13 has not been dentified.
PX	2011	OS	ST and Inte	al Training ermediate Force Facility	,	No	1	M6	C13	QOL	None					MD	STA	7,450 0	GPP 1	700	1,70	0															0, 2, 0	Size and dollar amount, based on USACE Work Order Request, is subject to change.
							Costs	for NNSA Rea	adiness Camp	paign/OST (fa	acilities & in	frastructure reported unc	Sub-Total der this category)		-			7,780	4	070	375 2,94	5 500	250	-	-	-		-	-		-	-		-	-		-	
C. Non-N <select></select>	NSA Fac	cilities a	Ind Infrastruc	ture Cost Pro	jection Spreadshee	t (Program A <select></select>	A)	Ortest	<select></select>	Output	Ortest		1	1	1	1				-		1	1 1															
<select></select>						<select></select>		<select></select>	<select></select>	<select></select>	<select></select>	I I	Sub-Total							-																		
D. Ner. M			and infrast	ture Cost D	visation Cursod-har	(Dreaman P	2)	Costs for	Non-NNSA P	Program A (fa	acilities & in	frastructure reported unc			-			-		-	-	-	-	-	-	-		-	-		-	-	-	-	-		-	
<select></select>	NOA Fac	unues al	ing intrastruc	ture Cost Pro	pjection Spreadshee	<select></select>		<select></select>	<select></select>	<select></select>	<select></select>																											
								Costs for	Non-NNSA P	Program B (fa	acilities & in	frastructure reported unc	Sub-Total der this category)		-			-		-	-		-	-	-	-		-	-		-	-	-	-	-		-	
										Costs for t	facilities & ir	frastructure reported un	Total der this category		816			7,780	14	790 11,	095 2,94	5 500	250	-	-	-		-	-		-	-	-	-	-		-	

* Column Headers in green - when applicable; data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-5 Facilities and Infrastructure Project Cost Projection Spreadsheet For Pantex Plant (\$000s)

					Project Name	Project Numbe									FIMS	i	IRP	Deferred	FI	NS				Prior	FY	FY	FY	FY FY	FY	FY	FY	FY	FY F	Y FY	FY	FY	FY F	Y FY	FY	FY	FY	FY	[
Site	Name Fis	scal ear	Fund Source	SS	or SP Conservation Measure Name*	or SSP FEMP Measu #*	re Included the SSF (Y/N)	d in P? Priori	y Score	Mission Code	Core Capabili Code	ty Inter Code	sial Spe est Inte #1 Cod	est Property #2 Sequence	Facility Name*	Deferred Maintenance	Legacy Deferred Maintenance Reduction	Maintenance Reduction	Mission Dependency	Mission Dependency Program	GSF Added or Eliminated	Fund Type	Total	Years Funding	2011 Current	2012 FYNSP F	2013 2 FYNSP FY	014 2015 NSP FYNS	2016 P FYNSF	2017	2018	2019	2020 20	21 202	2 2023	2024	2025 20	026 202	2028	2029	2030	2031	Notes
	(59) (2	23)	(26)		(48)	(49)	(33)	(47)	(56)	(39)	(8)	(61) (6	(50)	(22)	(10)	(36)	(13)	(40)	(41)	(32)	(27)	(64)	(46)	(28)	(29)	(29) (29) (29)	(29)	(30)	(30)	(30)	(30) (3	0) (30) (30)	(30)	(30) (3	30) (30	(30)	(30)	(30)	(30)	(43)

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Attachment A-6(a) - FY 2011 - FY 2017 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Currently FUNDED or APPROVED Security Infrastructure Projects for Pantex Plant (\$000s)

										Plann	ed Funding So	urce (26)			
Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI- RCAP A-3b	RTBF-CBFI- DISP A-3c	RTBF-CBFI- SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded or Approved?
(47)	(23)	(48)	(49)	(40)	(41)	(64)									
FY 2011 Pro	-														
1		Fixed Camera / Digital Video		MD	DNS	2,842							Security GPP	N	Funded
2	2011	MotoMesh Expansion		MD	DNS	4,499							Security GPP	N	Funded
3	2011	Range 9 Bullet Trap Replacement		MD	DNS	800							Security GPP	N	Funded
4	2011	12-143 Parking Lot		MD	DNS	682							Security GPP	N	Funded
5		12-75 Renovation Project		MD	DNS	515							Security GPP	N	Funded
6	2011	Station 728 Gate Replacement	FY10-16	MD	DNS	757		Х						N	Funded
7	2011	Station 711 Gate Replacement	FY10-17	MD	DNS	675		Х						N	Funded
8	2011	Armory Inventory System		MD	DNS	932							Security Oper	N	Funded
9	2011	Building 4-148 Modifications		MD	DNS	30							Security Oper	N	Funded
10	2011	Portal Gamma Monitor Pillars		MD	DNS	100							Security Oper	N	Funded
11	2011	Building 12-125 ESS Area		MD	DNS	100							Security Oper	N	Funded
12	2011	Zone 12 Rabbit Deterrent Fence		MD	DNS	220							Security Oper	N	Funded
ETC.															<select></select>
FY 2012 Pro	jects														
ETC.															<select></select>
FY 2013 Pro	jects														
ETC.															<select></select>
FY 2014 Pro	jects														
ETC.															<select></select>
FY 2015 Pro	jects														
ETC.															<select></select>
FY 2016 Pro	jects														
ETC.															<select></select>
FY 2017 Pro	jects														
ETC.															<select></select>
Note: Prioritiz	ze for each Fis	cal Year (FY11, FY12 and FY13) in sequentia	I order site Security Infi	astructure projec	ts/activities.										

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-6(a) - FY 2011 - FY 2017 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Currently FUNDED or APPROVED Security Infrastructure Projects for Pantex Plant (\$000s)

										Plann	ed Funding So	ource (26)			
Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI- RCAP A-3b	RTBF-CBFI- DISP A-3c	RTBF-CBFI- SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded or Approved?
(47)	(23)	(48)	(49)	(40)	(41)	(64)									

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Attachment A-6(b) - FY 2011 - FY 2017 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Currently UN-FUNDED Security Infrastructure Projects for Pantex Plant

(\$000s)

										Plar	nned Funding S	Source (26)			
Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI- RCAP A-3b	RTBF-CBFI- DISP A-3c	RTBF-CBFI- SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded of Approved
(47)	(23)	(48)	(49)	(40)	(41)	(64)									
2011 Pr	ojects														
1	2011	12-75 Water Heater	FY10-10	MD	DNS	265		Х						Ν	
2012 Pr	ojects														
1	2012	Fixed Cameras Phase II		MD	DNS	1,500							Security GPP	N	
2	2012	Electronic Locking at 711		MD	DNS	700							Security GPP	Ν	
3	2012	12-103 Lighting		MD	DNS	375							Security GPP	Ν	
2013 Pr	ojects														
1	2013	Reduntant Camera Fiber		MD	DNS	2,000							Security GPP	Ν	
2	2013	Firearms Training Simulator		MD	DNS	3,763							Security GPP	Ν	
3	2013	PIDAS		MD	DNS	440,000	Х							Ν	
2014 Pr	ojects														
1	2014	Reduntant Camera Fiber		MD	DNS	2,000							Security GPP	Ν	
2	2014	Firearms Training Simulator		MD	DNS	2,150							Security GPP	N	
3	2014	East/West Gate Automation		MD	DNS	2,000							Security GPP	Ν	
4	2014	Protective Force Portal Upgrade		MD	DNS	119,000	Х							N	
2015 Pr	ojects														
1	2015	Reduntant Camera Fiber		MD	DNS	2,000							Security GPP	N	
2	2015	16-24 Equipment Storage		MD	DNS	2,761							Security GPP	N	
3	2015	Protective Force Live Fire		MD	DNS	50,000	Х							Ν	
2016 Pr	ojects									•					
ETC.															
2017 Pr	ojects	·					<u> </u>	·		•	· · · · · · · · · · · · · · · · · · ·				
ETC.															

* Column Headers in green - when applicable: data from the FY 2010 Sites Sustainability Plan / Consolidated Energy Data Report (SSP/CEDR) and/or the Facilities Information Management System (FIMS)

Attachment A-6(b) - FY 2011 - FY 2017 NNSA Facilities and Infrastructure Cost Projection Spreadsheet Currently UN-FUNDED Security Infrastructure Projects for Pantex Plant

(\$000s)

											Plar	ned Funding	Source (26)			
F	Priority	Fiscal Year	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Mission Dependency	Mission Dependency Program	Total	Line Item A-1	RTBF-OPS A-3a	RTBF-CBFI- RCAP A-3b	RTBF-CBFI- DISP A-3c	RTBF-CBFI- SUSY A-3d	FIRP A-4	Other A-5	DBT Related? Y or N	Funded or Approved?
	(47)	(23)	(48)	(49)	(40)	(41)	(64)									

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	1												FY 20	012 - FY2	-									_			
			Project Name	Project Number			Deferred	Legacy Deferred	Deferred						P	er FIMS							Yearly	Total Estimated	Contaminated	Included	
Fiscal Year	Priority	Score	or SSP Conservation	or SSP FEMP	Funding Source	Ŭ	Maintenance	Maintenance	Maintenance (Note 1)	Property	Facility ID	Facility Name	Property	Ownorship	Mission	Mission	Status	Gross Square	Excess Indicator	Excess	Estimated Disposition	Actual Annual Maintenance	S&M Costs	Disposition	(Yes/No)	in the SSP?	Notes
rear			Measure Name*	Measure #*	Cource	Type	Identifier	Reduction	(000)	Sequence Number	Number	Facility Name	Type (B/L/S/T)	Ownership	Dependency	Dependency Program	/ Status	Feet (GSF)	(Yes/No)	Year	Year	Cost (Note 2)	(000)	Cost (TEC)	(Note 3)	(Yes/No)	
(23)	(47)	(56)	(48)	(49)	(26)	(27)	(10)	(000) (36)	(13)	(50)	(21)	(22)	(51)	(45)	((40)	(41)	(63)	(32)	(18)	(19)	(16)	(1)	(68)	(000) (64)	(7)	(33)	(43)
(20)	()	()	emolish Richmond	(/	(20)	()	()		()	(00)	(= .)	()	(01)	DOE	((10)		Shutdown	(02)	(10)	()	()	(.)	(00)	(0.)	(•)	(00)	Proposed for CBFI funding in 2018.
2012	2 1		lagazines		TBD	E			- 60	136872	04-020E	Component Staging	В	Owned	NMD	DSW	Pending	1,568	Yes	2011	2012	5,560	1	1,000	Yes	No	Shown in E as currently available for
			-														D&D										demolition. Proposed for CBFI funding in 2018.
2012	1	D	emolish Richmond		TBD	Е		65	5 124	136876	04-024	Staging Magazine	в	DOE	NMD	DSW	Shutdown Pending	1,555	Yes	2009	2012	_	1	with 04-	Yes	No	Shown in E as currently available for
2012		M	lagazines		100	-		00	, 124	100010	04 024	oluging magazino	D	Owned	THINE .	Dom	D&D	1,000	100	2000	2012			020E	100	110	demolition. National Register Eligible (NRE)
																	Shutdown										Proposed for CBFI funding in 2018.
2012	2 1		emolish Richmond lagazines		TBD	Е		65	5 129	136900	04-027	Staging Magazine	В	DOE Owned	NMD	DSW	Pending	1,555	Yes	2009	2012	-	1	with 04- 020E	Yes	No	Shown in E as currently available for
			-														D&D Shutdown										demolition, NRE Proposed for CBFI funding in 2018.
2012	2 1		emolish Richmond		TBD	Е		65	5 80	136902	04-029	Staging Magazine	в	DOE Owned	NMD	DSW	Pending	1,555	Yes	2009	2012	-	1	with 04- 020E	Yes	No	Shown in E as currently available for
		IV	lagazines											Owned			D&D							020E			demolition, NRE
2012	2 2		emove Temporary		TBD	F			- 26	130584	09-054	Inert Storage	т	DOE	NMD	OFO	Operating	556	No		2012	-	1	300	No	No	Proposed for CBFI funding in 2018. Shown in E as currently available for
2011		Т	railers			_			20	100001		mont otorago		Owned		0.0	opolaling				2012			000			demolition.
004/		R	emove Temporary		TOD	-	P-DNM-09-			400500	00.050	Radiation Safety	Ŧ	DOE		DTDE	Shutdown	450) (0000	0040				Nie	Nie	Proposed for CBFI funding in 2018.
2012	2 2	Т	railers		TBD	E	056		- 24	130586	09-056	Emergency Support	1	Owned	NMD	RTBF	Pending D&D	156	Yes	2009	2012	-	1	with 09-054	No	No	Shown in E as currently available for demolition.
		R	emove Temporary				P-DNM-09-							DOE			Shutdown										Proposed for CBFI funding in 2018.
2012	2 2		railers		TBD	E	028		- 30	130624	09-098	Range Cleaning Facility	/ Т	Owned	NMD	DNS	Pending D&D	236	No		2012	-	1	with 09-054	Yes	No	Shown in E as currently available for demolition.
														DOF			Shutdown										Proposed for CBFI funding in 2018.
2012	2 2		emove Temporary		TBD	E			- 30	130634	09-108	Break Area	Т	DOE Owned	NMD	DNS	Pending	75	Yes	2008	2012	-	1	with 09-054	No	No	Shown in E as currently available for
-							-		-								D&D										demolition. Proposed for CBFI funding in 2018.
2012	2 2		emove Temporary		TBD	Е			- 39	130637	09-111	Maintenance Storage	т	DOE Owned	NMD	OFO	Operating	236	Yes	2011	2012	-	1	with 09-054	No	No	Shown in E as currently available for
			Tallers											Owned													demolition.
2012	3		emolish Utility		TBD	Е		114	4 626	137038		Central Chilled Water	в	DOE	MD	DSW	Operating	3,234	Yes	2007	2012	18,616	6	3,400	Yes	No	Proposed for CBFI funding in 2018. Shown in E as currently available for
	-	В	uildings									Equipment Room and		Owned		-		-, -			-	-,	-	-,		-	demolition.
2012	2 3	D	emolish Utility		TBD	-			- 807	137039	10.0046	Electrical Substation	Р	DOE	NMD	DSW	Shutdown Pending	836	Vee	2009	2012		4	with 12-	No	No	Proposed for CBFI funding in 2018.
2012	3	В	uildings		IBD	E			- 007	137039	12-0245	Electrical Substation	Б	Owned	NIVID	D2M	D&D	030	Yes	2009	2012	-	1	024E	INO	No	Shown in E as currently available for demolition.
	_					_	P-DNM-12-					Flammable Liquid	_	DOE			Shutdown										Proposed for CBFI funding in 2019.
2012	2 4	D	emolish 12-034		TBD	E	034		- 24	137052	12-034	Storage	В	Owned	NMD	DSW	Pending D&D	129	Yes	2008	2012	-	1	750	Yes	No	Shown in E as currently available for demolition.
							P-DNM-12-							DOE			Shutdown										Proposed for CBFI funding in 2019.
2012	2 4	D	emolish 12-034		TBD	E	034SS	2	2 6	137053	12-034SS	Shade Structure	В	Owned	NMD	DSW	Pending	339	Yes	2008	2012	-	1	with 12-034	No	No	Shown in E as currently available for
																	D&D										demolition. Proposed for CBFI funding in 2019.
																											Shown in E as currently available for
2012	2 4	D	emolish 12-034		TBD	Е	P-DNM-12-R- 034	21	I 115	137100	12-R-034	Ramp from 12-019 to 12-034	В	DOE Owned	NMD	NA	Operating	1,000	Yes	2008	2012	-	3	with 12-034	No	No	demolition. Note that only part of the ramp will be
							004					12-004		Owned													demolished and is reflected in square
																											footage (does not match FIMS).
2012	5		emolish Maintenance		TBD	E			- 18	130491	12-00563	Maintenance Inert	в	DOE	NMD	RTBF	Operating	493	Yes	2009	2012	-	1	710	No	No	Proposed for CBFI funding in 2019. Shown in E as currently available for
	-	S	tructures			_						Storage	_	Owned		=.							-				demolition.
2011	5	D	emolish Maintenance		TBD	E		c	3 13	83571	12.090	Drivers Wait Building	Р	DOE	NMD	NA	Shutdown	117	Vee	2008	2012		1	with 12-	No	No	Proposed for CBFI funding in 2019.
2012	2 5	S	tructures		IBD	E		c	5 13	63571	12-060	Drivers wait building	Б	Owned	NIVID	NA	Pending D&D	117	Yes	2008	2012	-	1	005G3	No	INO	Shown in E as currently available for demolition.
-		П	emolish Maintenance											DOE			Shutdown							with 12-			Proposed for CBFI funding in 2019.
2012	2 5		tructures		TBD	E				130827	16-010B	Vehicle Wash System	В	Owned	NMD	RTBF	Pending D&D	799	Yes	2007	2012	-	2	005G3	No	No	Shown in E as currently available for demolition.
			emolish Maintenance											DOF			Shutdown							with 12-			
2012	2 5		tructures		TBD	E		5	5 28	83584	12-093	Inert Storage	В	DOE Owned	NMD	RTBF	Pending	303	No		2012	-	1	005G3	Yes	No	Available for demolition
																	D&D Shutdown										
2012	2 5		emolish Maintenance		TBD	Е		10	8	130486	11-R-016	Ramp from 11-020 to 11-021	В	DOE Owned	NMD	NA	Pending	267	Yes	2009	2012	-	1	with 12- 005G3	No	No	Available for demolition
	ł			<u> </u>	 	+			+		├						D&D Shutdown										Proposed for CPEL funding in 2020
2012	6		emolish Storage		TBD	Е			- 2	137143	12-041SS	Shade Structure	в	DOE	NMD	DSW	Pending	140	Yes	2009	2012	-	1	300	No	No	Proposed for CBFI funding in 2020. Shown in E as currently available for
		В	uildings											Owned			D&D										demolition.
2012	6		emolish Storage		TBD	Е		-	5 16	137184	12-045	Inert Storage	в	DOE	NMD	RTBF	Operating	100	Yes	2009	2012		4	with 12-	No	No	Proposed for CBFI funding in 2020. Shown in E as currently available for
2012		В	uildings						10	13/104	12-040	ment olorage	D	Owned		NIDF	Operating	100	165	2009	2012	-	I	041SS	INU	NU	demolition.
	_	n	emolish Storage			_			_				_	DOE										with 12-			Proposed for CBFI funding in 2020.
2012	2 6		uildings		TBD	E		5	8	137185	12-047	Inert Storage	В	Owned	NMD	RTBF	Operating	140	Yes	2009	2012	-	1	041SS	No	No	Shown in E as currently available for demolition.
				<u> </u>																							
							-								-										-		

													FY 20	012 - FY20													
		Project		Project Number	F F		Deferred	Legacy Deferred	Deferred						Pe	er FIMS							Yearly	Total Estimated C	Contaminated	Included	
Fiscal Year	Priority	Score SSP Cons		or SSP FEMP	Funding Source	Funding Type	Maintenance	Maintenance	Maintenance (Note 1)	Property Sequence	Facility ID	Facility Name	Property Type	Ownership	Mission	Mission Dependency	Status	Gross Square	Excess Indicator	Excess	Estimated Disposition	Actual Annual Maintenance	S&M Costs	Disposition	(Yes/No)	in the SSP?	Notes
		Measure		Measure #*		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Identifier	Reduction (000)	(000)	Number	Number	T denity Marrie	(B/L/S/T)	Ownership	Dependency	Program		Feet (GSF)	(Yes/No)	Year	Year	Cost (Note 2)	(000)	Cost (TEC) (000)	(Note 3)	(Yes/No)	
(23)	(47)	(56) (48)	(49)	(26)	(27)	(10)	(36)	(13)	(50)	(21)	(22)	(51)	(45)	((40)	(41)	(63)	(32)	(18)	(19)	(16)	(1)	(68)	(64)	(7)	(33)	(43)
2013	1	Demolish 12-	003		TBD	Е	P-DNM-12- 003	7	176	83466	12-003	Inert Storage	В	DOE Owned	NMD	NA	Operating	2,062	Yes	2007	2013	-	3	1,750	No	No	
2013	1	Demolish 12-	003		TBD	Е	P-DNM-12- 003L	-	9	130489	12-003L	Generator Building	В	DOE Owned	NMD	NA	Shutdown Pending D&D	87	Yes	2007	2013	-	-	with 12-003	No	No	
2013	1	Demolish 12-	003		TBD	Е	P-DNM-12- 030	20	10	130497	12-R-003	Ramp from 12-003 to 12-R-001	В	DOE Owned	NMD	NA	Shutdown Pending D&D	588	Yes	2007	2013	-	2	with 12-003	No	No	
2013	2	Demolish 12-	030		TBD	Е	P-DNM-12-R- 003	47	64	137044	12-030	Break Area	В	DOE Owned	NMD	NA	Shutdown Pending D&D	453	Yes	2010	2013	-	1	700	No	No	
2013	3	Demolish Wa Storage Tank			TBD	Е		21	10	137113	15-024A	High Pressure Fire Loop Pump Facility	В	DOE Owned	MD	RTBF	Operating	839	No		2013	41,398	2	6,200	No	No	TEC includes cost of associated water storage tank (15-024). 15-024/24A may be retained.
2013	3	Demolish Wa Storage Tank			TBD	E		20	7	130817	15-025A	High Pressure Fire Loop Pump Facility	В	DOE Owned	MD	RTBF	Operating	824	No		2013	34,887	2	with 15- 024A	No	No	
2014	1	Demolish FS	-004		TBD	Е		57	109	84018	FS-004	Firing Site	В	DOE Owned	NMD	RC	Shutdown Pending D&D	792	No		2014	-	2	5,000	Yes	No	NRE
2014	1	Demolish FS	-004		TBD	E		-	15	130519	FS-004A	Vacuum and Methane Building	в	DOE Owned	NMD	RC	Shutdown Pending D&D	37	No		2014	-	1	with FS-004	Yes	No	
2015	1	Demolish 12-	023		TBD	E		14	315	137032	12-023	Office Building	В	DOE Owned	MD	DSW	Operating	3,260	Yes	2009	2015	26,004	6	1,900	Yes	No	
																											Or attraction or an addition of the
2016	1	Remove Lea Facilities	sed Admin		TBD	Е	P-DNM-09- 060	-	-	131523	09-060	Leased Office Building	В	Contractor Leased	MD	DSW	Operating	-	No		2016	13,834	-	700	No	No	Contingent on completion of the Administrative Support Complex (ASC). Leased square footage not included in totals
2016	1	Remove Lea Facilities	sed Admin		TBD	E	P-DNM-09- 061	-	-	131716	09-061	Leased Office Building	в	Contractor Leased	MD	NA	Operating	-	No		2016	17,549	-	with 09-060	No	No	Contingent on completion of the ASC. Leased square footage not included in totals.
2016	1	Remove Lea Facilities	sed Admin		TBD	Е		-	-	141933	09-129	Leased Office Trailer	Т	Contractor Leased	NMD	RTBF	Operating	-	No		2016	-	-	with 09-060	No	No	Contingent on completion of the ASC. Leased square footage not included in totals.
2016	1	Remove Lea Facilities	sed Admin		TBD	Е		-	-	143737	09-130	Leased Office Building	В	Contractor Leased	MD	RTBF	Operating	-	No		2016	21,879	-	with 09-060	No	No	Contingent on completion of the ASC. Leased square footage not included in totals.
2016	2	Demolish Ad Facilities - Gr			TBD	Е		-	6	130633	09-107	Radio Equipment Storage	Т	DOE Owned	NMD	RTBF	Operating	127	No		2016	-	1	60	No	No	Contingent on completion of the ASC
2016	2	Demolish Ad Facilities - G	min		TBD	Е		42	1,668	83463	12-002	Central Health and Offices	В	DOE Owned	MD	RTBF	Operating	11,516	No		2016	136,727	13	3,400	No	No	Contingent on completion of the ASC
2016	2	Demolish Ad	min		TBD	Е		57	133	83464	12-002A	Analytical Laboratory	в	DOE	MD	RTBF	Operating	1,793	No		2016	12,223	4	with 12-002	Yes	No	Contingent on completion of the ASC
2016	2	Facilities - Gr Demolish Ad	min		TBD	Е	P-DNM-12-		87	83485	12-014	Office Building	в	Owned DOE	NMD	DSW	Operating	837	Yes	2007	2016	1,176	3	775	No	No	Contingent on completion of the ASC
		Facilities - Gi Demolish Ad					014	-				-	В	Owned DOE						2007			3				· ·
2016	2	Facilities - G	oup 1		TBD	E		53	105	83561	12-072	Office Building	В	Owned	NMD	RTBF	Operating	2,577	No		2016	25,097	5	640	No	No	Contingent on completion of the ASC
2016	2	Demolish Ad Facilities - Gr			TBD	E		1	237	83594	12-101	Office Building	В	DOE Owned	MD	DSW	Operating	5,398	No		2016	36,346	7	1,300	No	No	Contingent on completion of the ASC
2017	1	Demolish Ad Facilities - Gr			TBD	Е		125	281	83482	12-011A	Office Building	В	DOE Owned	MD	DSW	Operating	5,934	No		2017	13,342	9	1,600	No	No	Contingent on completion of the ASC
2017	1	Demolish Ad	min		TBD	Е		-	96	83598	12-106	Office Building	В	DOE	MD	RTBF	Operating	5,448	No		2017	79,900	7	4,700	No	No	Contingent on completion of the ASC
2017	1	Facilities - Gr	min		TBD	E		-	152	83599	12-106A	-	в	Owned DOE	MD	RTBF	Operating	12,724	No		2017	26,856	14	with 12-106	No	No	Contingent on completion of the ASC
2017	1	Facilities - Gr Demolish Ad	min		TBD	E		_	349	83600	12-100/1	Office Building	B	Owned DOE	MD	DSW	Operating	10,058	No		2017	85,405	12	2,600	No	No	Contingent on completion of the ASC
2017	1	Facilities - Gr	min		TBD	E			343	83612	-	Office Building	В	Owned DOE	MD	DSW	Operating	9,589	No		2017	52,037	10	2,500	No	No	Contingent on completion of the ASC
2011	•	Facilities - G				_					/			Owned				5,000				52,001	.0	_,000			
2018	1	Demolish Ad Facilities - Gr	oup 3		TBD	E		414	3,643	83515	12-036	Office Building	В	DOE Owned	MD	DSW	Operating	33,287	No		2018	1,022,089	47	10,900	No	No	Contingent on completion of the ASC
2018	1	Demolish Ad Facilities - Gi			TBD	Е		-	127	83516	12-036A	Conference Building	В	DOE Owned	MD	DSW	Operating	4,530	No		2018	9,142	7	with 12-036	No	No	Contingent on completion of the ASC
2018	1	Demolish Ad Facilities - Gr	min		TBD	Е		-	24	130704	12-036P	Generator Building	В	DOE Owned	NMD	DSW	Operating	86	No		2018	-	-	with 12-036	No	No	Contingent on completion of the ASC
2018	1	Demolish Ad Facilities - G	min		TBD	E		-	43	130705	12-036S	Electrical Substation	В	DOE Owned	NMD	DSW	Operating	265	No		2018	-	-	with 12-036	No	No	Contingent on completion of the ASC
2018	1	Demolish Ad Facilities - Gi	min		TBD	E		2	108	83558	12-069	Office Building	В	DOE Owned	MD	DSW	Operating	10,930	No		2018	55,064	12	3,100	No	No	Contingent on completion of the ASC
2018	1	Demolish Ad	min		TBD	Е		-	152	83595	12-102	-	В	DOE	MD	RTBF	Operating	5,823	No		2018	45,287	6	1,600	No	No	Contingent on completion of the ASC
		Facilities - Gr	oup 3			-							_	Owned	-			2,020					Ĵ	.,	-		3 ,

Normal Normal<								Legacy					FY 20	12 - FY20		er FIMS								Total			
No. No. <th>Fiscal</th> <th></th> <th>or</th> <th></th> <th>Fundina</th> <th>Fundina</th> <th></th> <th>Deferred</th> <th></th> <th>Property</th> <th></th> <th></th> <th>Property</th> <th></th> <th></th> <th></th> <th></th> <th>Gross</th> <th>Excess</th> <th></th> <th>Estimated</th> <th>Actual Annual</th> <th></th> <th>Estimated</th> <th></th> <th></th> <th></th>	Fiscal		or		Fundina	Fundina		Deferred		Property			Property					Gross	Excess		Estimated	Actual Annual		Estimated			
No. No. <th>Year</th> <th>Priority</th> <th>SSP Conservation</th> <th></th> <th>Source</th> <th>Туре</th> <th></th> <th></th> <th>· · · · · · · · · · · · · · · · · · ·</th> <th>Sequence</th> <th></th> <th>Facility Name</th> <th>Туре</th> <th>Ownership</th> <th></th> <th>Dependency</th> <th>Status</th> <th>Square</th> <th>Indicator</th> <th></th> <th>Disposition</th> <th>Maintenance</th> <th></th> <th></th> <th></th> <th>SSP?</th> <th>Notes</th>	Year	Priority	SSP Conservation		Source	Туре			· · · · · · · · · · · · · · · · · · ·	Sequence		Facility Name	Туре	Ownership		Dependency	Status	Square	Indicator		Disposition	Maintenance				SSP?	Notes
1 1	(23)	(47)			(26)	(27)	(10)	· · · ·	· · · /			(22)	` ´	(45)			(63)		` '			Cost (Note 2)	` ´	· · /	(7)	· · · ·	(43)
No No No No No <td>(2.0)</td> <td>(1)</td> <td></td> <td>(43)</td> <td>(20)</td> <td>(21)</td> <td>(10)</td> <td>(30)</td> <td>(13)</td> <td>(30)</td> <td>(21)</td> <td></td> <td>(31)</td> <td>()</td> <td>((+0)</td> <td>(+)</td> <td>(00)</td> <td>(32)</td> <td>(10)</td> <td>(13)</td> <td>(10)</td> <td></td> <td>(00)</td> <td>(04)</td> <td>(1)</td> <td>(00)</td> <td></td>	(2.0)	(1)		(43)	(20)	(21)	(10)	(30)	(13)	(30)	(21)		(31)	()	((+0)	(+)	(00)	(32)	(10)	(13)	(10)		(00)	(04)	(1)	(00)	
N N	2019	1	Facilities - Group 4		TBD	E		37	1,138	83559	12-070	Cafeteria	В	Owned	NMD	NA	Operating	12,460	No		2019	138,245	14	3,700	No	No	Contingent on completion of the ASC
1 <td>2019</td> <td>1</td> <td></td> <td></td> <td>TBD</td> <td>E</td> <td></td> <td>-</td> <td>46</td> <td>130766</td> <td>12-132</td> <td>Office Building</td> <td>В</td> <td>Owned</td> <td>MD</td> <td>RTBF</td> <td>Operating</td> <td>10,152</td> <td>No</td> <td></td> <td>2019</td> <td>34,931</td> <td>11</td> <td>2,900</td> <td>No</td> <td>No</td> <td>Contingent on completion of the ASC</td>	2019	1			TBD	E		-	46	130766	12-132	Office Building	В	Owned	MD	RTBF	Operating	10,152	No		2019	34,931	11	2,900	No	No	Contingent on completion of the ASC
-1 </td <td>2019</td> <td>1</td> <td></td> <td></td> <td>TBD</td> <td>E</td> <td></td> <td>-</td> <td>729</td> <td>83814</td> <td>16-012</td> <td>Office Building</td> <td>В</td> <td></td> <td>MD</td> <td>RTBF</td> <td>Operating</td> <td>30,227</td> <td>No</td> <td></td> <td>2019</td> <td>155,743</td> <td>32</td> <td>9,000</td> <td>No</td> <td>No</td> <td>Contingent on completion of the ASC</td>	2019	1			TBD	E		-	729	83814	16-012	Office Building	В		MD	RTBF	Operating	30,227	No		2019	155,743	32	9,000	No	No	Contingent on completion of the ASC
b b b b f b<	2020	1	Demolish Admin		TPD		P-DNM-12-		806	92474	12.006	Office Puilding	Р	DOE	МР	DSW	Operating	10 710	No		2020	796 072	20	0.100	No	No	Contingent on completion of the ASC
bit bit<		1						-					В										23	· · ·			
No. No.44, All Plot E Plot Plot Plot Plot <th< td=""><td></td><td>1</td><td></td><td></td><td></td><td></td><td>006B</td><td>-</td><td>200</td><td></td><td></td><td>-</td><td>В</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>17,209</td><td>10</td><td>ł ł</td><td></td><td></td><td></td></th<>		1					006B	-	200			-	В									17,209	10	ł ł			
10^{-1} Splitter (mode) 10^{-1}		1						1	5				в	Owned								-	1	ł ł			
A A		1	Facilities - Group 5			E	P-DNM-12-	-	41			-	В	Owned			Operating					-	-	ł ł			
1 0	2020	1	Facilities - Group 5		TBD	E	007	-	312	83476	12-007	Office Building	В	Owned	MD		Operating	2,799	No		2020	32,569	6	with 12-006	No	No	Contingent on completion of the ASC
1 1	2020	1			TBD	E		-	-	140246	12-007A	Rapid Prototype Facility	В		MD	DSW	Operating	495	No		2020	-	1	with 12-006	No	No	Contingent on completion of the ASC
N N D E POMP D <td>2021</td> <td>1</td> <td></td> <td></td> <td>TBD</td> <td>E</td> <td></td> <td>17</td> <td>1,114</td> <td>83400</td> <td>11-015</td> <td></td> <td>В</td> <td></td> <td>NMD</td> <td>DSW</td> <td>Operating</td> <td>5,960</td> <td>No</td> <td></td> <td>2021</td> <td>51,440</td> <td>9</td> <td>28,000</td> <td>Yes</td> <td>No</td> <td>Contingent on completion of HE Packaging & Staging (HEPS) NRE</td>	2021	1			TBD	E		17	1,114	83400	11-015		В		NMD	DSW	Operating	5,960	No		2021	51,440	9	28,000	Yes	No	Contingent on completion of HE Packaging & Staging (HEPS) NRE
No. No. Constrained Finders No. Constrained Finders No. No. No. No. N	2021	1	Demolish ET Facilities -		TBD	E	P-DNM-11-	9	915	83401	11-015A		в	DOE	NMD	DSW	Pending	2,334	Yes	2011	2021	3,785	5	with 11-015	Yes	No	
No. No. <td>2021</td> <td>1</td> <td>Demolish ET Facilities -</td> <td></td> <td>TBD</td> <td>E</td> <td></td> <td>7</td> <td>39</td> <td>83414</td> <td>11-025</td> <td>Explosives Staging</td> <td>в</td> <td>DOE</td> <td>MD</td> <td>RC</td> <td></td> <td>861</td> <td>No</td> <td></td> <td>2021</td> <td>4,130</td> <td>2</td> <td>with 11-015</td> <td>Yes</td> <td>No</td> <td>Contingent on completion of HEPS</td>	2021	1	Demolish ET Facilities -		TBD	E		7	39	83414	11-025	Explosives Staging	в	DOE	MD	RC		861	No		2021	4,130	2	with 11-015	Yes	No	Contingent on completion of HEPS
No. No. <td>2021</td> <td>1</td> <td>Demolish ET Facilities -</td> <td></td> <td>TBD</td> <td>E</td> <td></td> <td>7</td> <td>21</td> <td>83422</td> <td>11-037</td> <td>Explosives Staging</td> <td>В</td> <td>DOE</td> <td>MD</td> <td>RC</td> <td>Operating</td> <td>2,018</td> <td>No</td> <td></td> <td>2021</td> <td>22,394</td> <td>3</td> <td>with 11-015</td> <td>Yes</td> <td>No</td> <td>Contingent on completion of HEPS, NRE</td>	2021	1	Demolish ET Facilities -		TBD	E		7	21	83422	11-037	Explosives Staging	В	DOE	MD	RC	Operating	2,018	No		2021	22,394	3	with 11-015	Yes	No	Contingent on completion of HEPS, NRE
1 1	2021	1	Demolish ET Facilities -		TBD	E		11	999	83427	11-042	Explosives Staging	в	DOE	MD	RC	Operating	3,217	No		2021	33,508	4	with 11-015	Yes	No	Contingent on completion of HEPS, NRE
1 Operation F Tractions TRO 8 Constrained and strained an	2021	1	Demolish ET Facilities -		TBD	E		11	22	130657	11-042E	Equipment Room	в	DOE	MD	RC	Operating	52	No		2021	-	-	with 11-015	No	No	Contingent on completion of HEPS
Name Obstack Freedome Top E Construct Signation	2021	1	Demolish ET Facilities -		TBD	E		-	41	83435	11-053	Rest Room	В	DOE	NMD	NA	Operating	265	No		2021	18,430	1	with 11-015	No	No	Contingent on completion of HEPS
1 Dancials TF addits TB0 E PAMPAT 750 65 9004 900 9004 900 9004 9004 9004 <	2021	1	Demolish ET Facilities -		TBD	E		-	35	130443	11-R-005		В	DOE	MD	NA	Operating	1,639	No		2021	-	3	with 11-015	No	No	Contingent on completion of HEPS
202 1 Demoish Ef Facilities - Group 4 TBO E	2021	1	Demolish ET Facilities -		TBD	E		76	634	130446	11-R-007	Ramp from 11-015 to	В	DOE	MD	NA	Operating	4,605	No		2021	-	6	with 11-015	No	No	Contingent on completion of HEPS
202 1 0 0 1 0 0 0 1 0	2021	1	Demolish ET Facilities -		TBD	Е	001	44	114	130526	11-R-022	Ramp from 11-015 to	В	DOE	MD	NA	Operating	7,015	No		2021	2,593	9	with 11-015	No	No	Contingent on completion of HEPS
20: 2 Renove GP-059 TBD E P-DMAGe 099 13150 GP-059 Leased Office Building B Contractor Leased MD RTBF Operating No Z21 14.055 S22 No No S225 No No <	2021	1	Demolish ET Facilities -		TBD	E		4	204	130528	11-R-042	Ramp from 11-R-004 to	в	DOE	MD	NA	Operating	3,895	No		2021	177,743	5	with 11-015	No	No	Contingent on completion of HEPS
2 202 3 Group 2 100 1 000 10000 1000 1000 1	2021	2			TBD	E		-	-	131503	09-059		в	Contractor	MD	RTBF	Operating	-	No		2021	14,053	-	225	No	No	Technology, and Engineering (HESTE). Leased square footage not included in
2021 3 Demokes FT Facilities - Group 2 TBD E 368 472 8339 11-00 Material Properties B B Owned MC RC Operating 9.446 No 2021 95.68 17 with 11-002 Yes No Contingent on completion of HESTE, NR 2021 3 Demokes FT Facilities - Group 2 TBD E 98 1.222 8339 11-04 Demokes FT Facilities - Group 2 No 2021 187,907 14 with 1-002 Yes No Contingent on completion of HESTE, NR 2021 3 Demokes FT Facilities - Group 2 TBD E 14 48 83403 11-01 Explosives Thormal B DOC Owned MD RC Operating 7,675 No 2021 9,879 2 with 11-002 Yes No Contingent on completion of HESTE 2021 3 Demokes FT Facilities - Group 2 TBD E 17 174 83407 11-02 Veriphowere Marcing Mongent Ameering Ameering <td< td=""><td>2021</td><td>3</td><td></td><td>-</td><td>TBD</td><td>E</td><td></td><td>21</td><td>626</td><td>83394</td><td>11-002</td><td></td><td>В</td><td></td><td>MD</td><td>RC</td><td>Operating</td><td>10,516</td><td>No</td><td></td><td>2021</td><td>94,942</td><td>17</td><td>60,000</td><td>No</td><td>No</td><td>Contingent on completion of HESTE</td></td<>	2021	3		-	TBD	E		21	626	83394	11-002		В		MD	RC	Operating	10,516	No		2021	94,942	17	60,000	No	No	Contingent on completion of HESTE
2021 3 Demolish ET Facilities Group 2 TBD E 98 1.22 83.99 11-04 Technology Origon and O		3	Demolish ET Faciilities	-	TBD	E	002	36	472	83395	11-005	Material Properties	в	DOE	MC	RC	+ +	9,446	No		2021	95,668	17	with 11-002	Yes	No	Contingent on completion of HESTE, NRE
222t 3 Demolesh ET Facilities - Group 2 TBD E 14 48 83403 11-00t Treatment MD RC Operating 431 No 2021 9,879 2 with 11-002 Yes No Contigent on completion of HESTE, RRI Group 2 2021 3 Demolesh ET Facilities - Group 2 TBD E 1 7 17.4 83407 11-00t Testing and and Small Energetic dard Small Energetic Group 2 B Dote Our dard Small Energetic Our dard Small Energetic Group 2 B Dote Our dard Small Energetic Our dard Small Energetic dard Small Energetic dard Small Energetic Group 2 No Coll 201 2021 16.08 3 with 11-002 Yes No Contigent on completion of HEST, RRI Our dard Small Energetic Group 2 2021 3 Demolesh ET Facilities - Group 2 TBD E 19 23 83411 11-02 Leboratory Support Facility Support Group 2 B Dote Our dard Small Energetic Our dard Small Energetic Demolesh ET Facilities - Group 2 TBD E 19 23 83411 11-02 Leboratory Support Facility Support Group 2 Ro Operatin Group 2<	2021	3	Demolish ET Faciilities	-	TBD	E		98	1,222	83399	11-014	Technology Development and	в	DOE	MD	DSW	Operating	7,675	No		2021	187,907	14	with 11-002	Yes	No	Contingent on completion of HESTE
2021 3 Demoish ET Facilities - Group 2 TBD E -257 83406 11.018 High Voltage Testing and Small Energetic B $ODe enting 1.538 Yes 2011 2021 16.088 3 with 11-002 Yes No Contingent on completion of HESTE, NRIand Small Energetic 2021 3 Demoish ET Facilities -Group 2 TBD E 7 7174 83407 11-019 Inert Annealing andTesting B ODe enting 10.014 No 2021 -2202 with 11-002 Yes No Contingent on completion of HESTE, NRITesting 2021 3 Demolish ET Facilities -Group 2 TBD E -7 7174 83407 11-02 Borde Testing Testing$	2021	3	Demolish ET Faciilities	-	TBD	E		14	48	83403	11-016	Explosives Thermal	В		MD	RC	Operating	431	No		2021	9,879	2	with 11-002	Yes	No	Contingent on completion of HESTE
2021 3 Demolish ET Facilities- Group 2 TBD E 1.01 1.014 No 2.021 No	2021	3	Demolish ET Faciilities	-	TBD	E		-	257	83406	11-018	High Voltage Testing	В	DOE	MC	ENG	Operating	1,538	Yes	2011	2021	16,038	3	with 11-002	Yes	No	Contingent on completion of HESTE, NRE
2021 3 Demolish ET Facilities - Group 2 TBD E 19 238 83411 11-022 Laboratory Support Facility MD RC Operating 1,140 No 2021 11,164 4 with 11-002 Yes No Contingent on completion of HESTE, NRI 2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 027 23 425 83416 11-027 Office Building B DOE Owned MD RC Operating 5,138 Yes 2009 2021 58,401 6 with 11-002 No No Contingent on completion of HESTE, NRI 2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 027 23 425 83417 11-028 Technology Devolopment and Devolopment RC Operating 5,138 Yes 2009 2021 31,838 4 with 11-002 No Contingent on completion of HESTE, NRI 2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 029 23 RS MD RC Operating 1,843 No 2021<	2021	3	Demolish ET Faciilities	-	TBD	E		7	174	83407	11-019	Inert Annealing and	В	DOE	MD	RC	Operating	1,014	No		2021	-	2	with 11-002	Yes	No	Contingent on completion of HESTE, NRE
2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 027 23 425 83416 11-027 Office Building B DOE Owned MD RC Operating 5,138 Yes 2009 2021 58,401 6 with 11-002 No No Contingent on completion of HESTE 2021 3 Demolish ET Facilities - Group 2 TBD E Contingent on completion of HESTE Development and Deployment B DOE Owned MD RC Operating 5,138 Yes 2009 2021 31,838 4 with 11-002 No No Contingent on completion of HESTE 2021 3 Demolish ET Facilities - Group 2 TBD E Contingent on completion of HESTE B DOE Owned MD RC Operating 1,843 No 2021 31,838 4 with 11-002 No Contingent on completion of HESTE 2021 3 Demolish ET Facilities - Group 2 TBD E Contingent on completion of HESTE B DOE Owned MD NA Provide and bein and b	2021	3	Demolish ET Faciilities	-	TBD	E		19	238	83411	11-022	Laboratory Support	В	DOE	MD	RC	Operating	1,140	No		2021	11,164	4	with 11-002	Yes	No	Contingent on completion of HESTE, NRE
2021 3 Demolish ET Facilities - Group 2 TBD E - 324 83417 11-028 Technology Development and Deployment MD RC Operating 1,843 No 2021 31,838 4 with 11-002 Yes No Contingent on completion of HESTE, NRI Deployment 2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 029 92 504 83418 11-029 Photography Laboratory B DOE Owned MD NA Shutdown Plab 4,315 Yes 2021 17,745 6 with 11-002 Yes No Contingent on completion of HESTE, NRI 2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 029 92 504 83418 11-029 Photography Laboratory B DOE Owned MD NA Pinding Plab 4,315 Yes 2007 2021 17,745 6 with 11-002 Yes No Contingent on completion of HESTE, NRI 2021 3 Demolish ET Facilities - TBD E 11 387 83423 11-028 Explosives Test Fire	2021	3	Demolish ET Faciilities	-	TBD	E		23	425	83416	11-027		В	DOE	MD	RC	Operating	5,138	Yes	2009	2021	58,401	6	with 11-002	No	No	Contingent on completion of HESTE
2021 3 Demolish ET Facilities - Group 2 TBD E P-DNM-11- 029 92 504 83418 11-029 Photography Laboratory B DOE Owned MD NA Psp ding DB 4,315 Yes 2007 2021 17,745 6 with 11-002 Yes No Contingent on completion of HESTE 2021 .3 Demolish ET Facilities - Group 2 TBD E .11 .387 83418 11-029 Photography Laboratory B DOE Owned MD NA Psp ding DB 2007 2021 .17,745 6 with 11-002 Yes No Contingent on completion of HESTE	2021	3	Demolish ET Faciilities	-	TBD	E		-	324	83417	11-028	Development and	в	DOE	MD	RC	Operating	1,843	No		2021	31,838	4	with 11-002	Yes	No	Contingent on completion of HESTE, NRE
2021 3 Demolish ET Facilities - TBD E 11 397 93423 11.028 Explosives Test Fire B DOE MC PC Operating 7.210 No 2021 77.690 12 with 11.002 Voc No Contingent on completion of HESTE NEL	2021	3		-	TBD	E		92	504	83418	11-029	Photography	в		MD	NA	Pending	4,315	Yes	2007	2021	17,745	6	with 11-002	Yes	No	Contingent on completion of HESTE
	2021	3	Demolish ET Faciilities Group 2		TBD	E		11	387	83423	11-038	Explosives Test Fire and High Voltage Te	в	DOE Owned	MC	RC		7,210	No		2021	77,690	12	with 11-002	Yes	No	Contingent on completion of HESTE, NRE

								-	-				FY 20	012 - FY20	21												
			Project Name	Project Number			Deferred	Legacy Deferred	Deferred						P	er FIMS							Yearly	Total Estimated C	Contaminated	Included	
Fiscal Year	Priority	Score	or SSP Conservation	or SSP FEMP	Funding Source	Funding Type	Maintenance	Maintenance	Maintenance (Note 1)	Property	Facility ID	Eacility Name	Property	Ownorship	Mission	Mission	Status	Gross	Excess	Excess	Estimated	Actual Annual Maintenance	S&M Costs	Disposition	(Yes/No)	in the SSP?	Notes
T Car			Measure Name*	Measure #*	Cource	турс	Identifier	Reduction (000)	(000)	Sequence Number	Number	Facility Name	Type (B/L/S/T)	Ownership	Dependency	Dependency Program	y Status	Square Feet (GSF)	Indicator (Yes/No)	Year	Disposition Year	Cost (Note 2)	(000)	Cost (TEC) (000)	(Note 3)	(Yes/No)	
(23)	(47)	(56) De	(48) emolish ET Faciilities -	(49)	(26)	(27)	(10)	(36)	(13)	(50)	(21)	(22)	(51)	(45) DOE	((40)	(41)	(63)	(32)	(18)	(19)	(16)	(1)	(68)	(64)	(7)	(33)	(43)
2021	3		roup 2 emolish ET Faciilities -		TBD	E			4	130482	11-045	Inert Storage Ramp from 11-014 to	В	Owned DOE	NMD	RC	Operating	101	No		2021	-	1	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	iroup 2 emolish ET Faciilities -		TBD	E		3	_	130442	11-R-004	11-028 Ramp from 11-017 to	В	Owned DOE	NMD	NA	Operating	2,480	No		2021	-	4	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	eroup 2 emolish ET Faciilities -		TBD	E			1 437	130447	11-R-008	11-020 Ramp from 11-016 to	В	Owned DOE	MD	NA	Operating	4,326	No		2021	-	6	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	iroup 2 emolish ET Faciilities -		TBD	E			- 290	130448	11-R-010	11-022 Ramp from 11-016 to	В	Owned DOE	MD	NA	Operating	3,492	No		2021	7,625	5	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	iroup 2 emolish ET Faciilities -		TBD	E			- 51	130524	11-R-011	11-017 Ramp from 11-002 to	Р	Owned DOE	MD	NA	Operating	948	No		2021	6,697	2	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	iroup 2 emolish ET Faciilities -		TBD	E			1 533	130525	11-R-013 11-R-	Ramp from 11-017 to	В	Owned DOE	NMD	NA	Operating	4,674	No		2021	648	6	with 11-002	No	No	Contingent on completion of HESTE
2021	3	Gi	eroup 2 emolish Richmond		TBD	E		1:	2 289	134173	013A	11-048 Weapon and	В	Owned DOE	NMD	NA	Operating	2,300	No		2021	-	3	with 11-002	No	No	Contingent on completion of HESTE
2021	4	M	lagazines - Group 1 emolish Richmond		TBD	E			- 9	136848	04-019	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,555	No		2021	-	1	3,000	No	No	Contingent on completion of MSF, NRE
2021	4	M	lagazines - Group 1 emolish Richmond		TBD	E			1 12	136873	04-021	Component Staging Firearms Ammunition	В	Owned DOE	MD	DSW	Operating	1,555	No		2021	-	1	with 04-019	No	No	Contingent on completion of MSF, NRE
2021	4	M	lagazines - Group 1		TBD	E		6	5 124	136874	04-022	Staging	В	Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-019	Yes	No	Contingent on completion of MSF
2021	4	M	emolish Richmond lagazines - Group 1		TBD	E		6	5 124	136875	04-023	NELA/JTA Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-019	Yes	No	Contingent on completion of MSF, NRE
2021	4		emolish Richmond Iagazines - Group 1		TBD	E			7 12	136877	04-025	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-019	No	No	Contingent on completion of MSF, NRE
2021	5		emolish 04-026		TBD	E			3 637	136878	04-026	Loading Dock and Transfer Station	В	DOE Owned	MD	DSW	Operating	4,537	No		2021	23,787	7	3,400	No	No	Contingent on completion of MSF, NRE
2021	6	M	emolish Richmond lagazines - Group 2		TBD	E		6	5 125	136901	04-028	Firearms Ammunition Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	1,800	No	No	Contingent on completion of MSF, NRE
2021	6	M	emolish Richmond lagazines - Group 2		TBD	Е			1 25	136906	04-030	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-028	No	No	Contingent on completion of MSF, NRE
2021	6		emolish Richmond lagazines - Group 2		TBD	E			- 15	136907	04-031	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-028	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	E		1	7 14	136908	04-032	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	4,200	No	No	Contingent on completion of MSF, NRE
2021	7	M	emolish Richmond lagazines - Group 3		TBD	E		1) 14	136909	04-033	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	3	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	E		9	1 60	136910	04-034	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	3	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	Е		9.	4 37	136911	04-035	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	3	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	Е		:	3 17	136912	04-036	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	3	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	Е		1	74	136913	04-037	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	7		emolish Richmond lagazines - Group 3		TBD	Е		1	54	136914	04-038	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-032	No	No	Contingent on completion of MSF, NRE
2021	8		emolish Richmond lagazines - Group 4		TBD	E		1	0 10	136915	04-039	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	3,600	No	No	Contingent on completion of MSF, NRE
2021	8		emolish Richmond lagazines - Group 4		TBD	E		1:	2 4	136916	04-040	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-039	No	No	Contingent on completion of MSF, NRE
2021	8		emolish Richmond lagazines - Group 4		TBD	E			7 7	136917	04-041	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-039	No	No	Contingent on completion of MSF, NRE
2021	8		emolish Richmond lagazines - Group 4		TBD	E		1:	2 61	136918	04-042	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-039	No	No	Contingent on completion of MSF, NRE
2021	8	De	emolish Richmond lagazines - Group 4		TBD	E			7 15	136919	04-043	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-039	No	No	Contingent on completion of MSF, NRE
2021	8	De	emolish Richmond lagazines - Group 4		TBD	E			7 115	136920	04-044	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,555	No		2021	-	1	with 04-039	No	No	Contingent on completion of MSF, NRE
2021	9	De	emolish SAC lagazines - Group 1		TBD	E		8	4 47	136931	04-101	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021	9	De	emolish SAC lagazines - Group 1		TBD	E		15	3 77	136932	04-102	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-101	No	No	Contingent on completion of MSF, NRE
2021	9	De	emolish SAC lagazines - Group 1		TBD	E		9	4 51	136933	04-103	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-101	No	No	Contingent on completion of MSF, NRE
2021	10	De	emolish SAC lagazines - Group 2		TBD	E			- 22	136934	04-104	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021	10	De	emolish SAC lagazines - Group 2		TBD	E			- 255	136935	04-105	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-104	No	No	Contingent on completion of MSF, NRE
2021	10	De	emolish SAC lagazines - Group 2		TBD	E		12	6 61	136936	04-106	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-104	No	No	Contingent on completion of MSF, NRE
2021	11	De	emolish SAC		TBD	E			- 305	136937	04-107	Weapon and	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021	11	De	lagazines - Group 3 emolish SAC		TBD	E			4 110	136938	04-108	Component Staging Weapon and Component Staging	В	DOE	MD	DSW	Operating	1,183			2021	-	1	with 04-107	No	No	Contingent on completion of MSF, NRE
└─── ↓		M	lagazines - Group 3	ļ ļ			Į	l	-		Į	Component Staging		Owned	L			L	ļ	+		L		↓ ↓		<u> </u>	

								-			FY 2	012 - FY20	021												
		Project Name	Project Number		Deferred	Legacy Deferred	Deferred						P	er FIMS							early	Total Estimated	Contaminated	Included	
Fiscal Year Priority	Score	or SSP Conservation	or SSP FEMP	Funding Source	Type Maintenance	Maintenance	Maintenance (Note 1)	Property Sequence	Facility ID	Facility Name	Property Type	Ownership	Mission	Mission Dependency	Status	Gross Square	Excess Indicator	Excess	Estimated Disposition	/ lotadi / linidai	S&M Costs	Disposition	(Yes/No)	in the SSP?	Notes
		Measure Name*	Measure #*		Identifier	Reduction (000)	(000)	Number	Number		(B/L/S/T)	Currerentp	Dependency	Program	Claids	Feet (GSF)	(Yes/No)	Year	Year	maintenance	000)	Cost (TEC) (000)	(Note 3)	(Yes/No)	
(23) (47)	(56)	(48) Demolish SAC	(49)	(26)	(27) (10)	(36)	(13)	(50)	(21)	(22)	(51)	(45) DOE	((40)	(41)	(63)	(32)	(18)	(19)	(16)	(1)	(68)	(64)	(7)	(33)	(43)
2021 11		Magazines - Group 3		TBD	E	117	63	136939	04-109	Weapon and Component Staging	В	Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-107	No	No	Contingent on completion of MSF, NRE
2021 12		Demolish SAC Magazines - Group 4		TBD	E	18	30	136940	04-110	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 12		Demolish SAC Magazines - Group 4		TBD	E	11	21	136941	04-111	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-110	No	No	Contingent on completion of MSF, NRE
2021 12		Demolish SAC		TBD	E	14	73	136942	04-112	Weapon and	В	DOE	MD	DSW	Operating	1,183	No		2021	-	1	with 04-110	No	No	Contingent on completion of MSF, NRE
2021 13		Magazines - Group 4 Demolish SAC		TBD	Е	13	11	136943	04-113	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 13		Magazines - Group 5 Demolish SAC		TBD		11	26	136944	04-114	Component Staging Weapon and		Owned DOE	MD	DSW	Operating	1,183	No		2021		1	with 04-113	No	No	Contingent on completion of MSF, NRE
		Magazines - Group 5 Demolish SAC			-		-			Component Staging Weapon and	5	Owned DOE									-				
2021 13		Magazines - Group 5 Demolish SAC		TBD	E	8	21	136945	04-115	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	-	1	with 04-113	No	No	Contingent on completion of MSF, NRE
2021 14		Magazines - Group 6		TBD	E	11	12	136946	04-116	Component Staging	В	Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 14		Demolish SAC Magazines - Group 6		TBD	E	9	23	136947	04-117	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-116	No	No	Contingent on completion of MSF, NRE
2021 14		Demolish SAC Magazines - Group 6		TBD	E	6	10	136948	04-118	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-116	No	No	Contingent on completion of MSF, NRE
2021 15		Demolish SAC Magazines - Group 7		TBD	E	11	15	136949	04-119	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 15		Demolish SAC Magazines - Group 7		TBD	E	9	15	136950	04-120	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-119	No	No	Contingent on completion of MSF, NRE
2021 15		Demolish SAC Magazines - Group 7		TBD	E	34	(8)	136951	04-121	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-119	Yes	No	Contingent on completion of MSF, NRE
2021 16		Demolish SAC Magazines - Group 8		TBD	E	-	16	136952	04-122	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 16		Demolish SAC Magazines - Group 8		TBD	E	-	18	136953	04-123	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-122	No	No	Contingent on completion of MSF, NRE
2021 16		Demolish SAC Magazines - Group 8		TBD	E	-	20	136954	04-124	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-122	No	No	Contingent on completion of MSF, NRE
2021 17		Demolish SAC Magazines - Group 9		TBD	E	-	13	136955	04-125	Weapon and	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	2,300	No	No	Contingent on completion of MSF, NRE
2021 17		Demolish SAC		TBD	E		52	136957	04-126	Component Staging Weapon and	В	DOE	MD	DSW	Operating	1,183	No		2021	-	1	with 04-125	No	No	Contingent on completion of MSF, NRE
2021 17		Magazines - Group 9 Demolish SAC		TBD	E	-	17	136958	04-127	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	-	1	with 04-125	No	No	Contingent on completion of MSF, NRE
2021 17		Magazines - Group 9 Demolish SAC		TBD	E	-	17	136959	04-128	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	10,449	1	with 04-125	No	No	Contingent on completion of MSF, NRE
2021 17		Magazines - Group 9 Demolish SAC		TBD	Е		15	136960	04-129	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021		1	with 04-125	No	No	Contingent on completion of MSF, NRE
2021 18		Magazines - Group 9 Demolish SAC		TBD	F		16	136961	04-130	Component Staging Weapon and	в	Owned DOE	MD	DSW	Operating	1,183	No		2021		1	2,300	No	No	Contingent on completion of MSF, NRE
2021 18		Magazines - Group 10 Demolish SAC		TBD	E		12	136962	04-131	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021		1	with 04-130	No	No	Contingent on completion of MSF, NRE
2021 18		Magazines - Group 10 Demolish SAC		TBD			12	136963	04-132	Component Staging Weapon and	P	Owned DOE	MD	DSW		1,183			2021			with 04-130	No		Contingent on completion of MSF, NRE
		Magazines - Group 10 Demolish SAC				-	12			Component Staging Weapon and	В	Owned DOE			Operating		No			-				No	
2021 18		Magazines - Group 10 Demolish SAC		TBD	E _	-	12	136964	04-133	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	-		with 04-130	No		Contingent on completion of MSF, NRE
2021 18		Magazines - Group 10 Demolish SAC		TBD	E	-	14	136965	04-134	Component Staging Weapon and	В	Owned DOE	MD	DSW	Operating	1,183	No		2021	-	1	with 04-130	No	No	Contingent on completion of MSF, NRE
2021 19		Magazines - Group 11		TBD	E	-	14	136966	04-135	Component Staging	В	Owned	MD	DSW	Operating	1,183	No		2021	-	1	2,300	No	No	Contingent on completion of MSF, NRE
2021 19	ļ	Demolish SAC Magazines - Group 11		TBD	E	-	11	136967	04-136	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-135	No	No	Contingent on completion of MSF, NRE
2021 19		Demolish SAC Magazines - Group 11		TBD	E	-	12	136968	04-137	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-135	No	No	Contingent on completion of MSF, NRE
2021 19		Demolish SAC Magazines - Group 11		TBD	E	-	12	136969	04-138	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-135	No	No	Contingent on completion of MSF, NRE
2021 19		Demolish SAC Magazines - Group 11		TBD	E	-	14	136970	04-139	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-135	No	No	Contingent on completion of MSF, NRE
2021 20		Demolish SAC Magazines - Group 12		TBD	E	-	14	136971	04-140	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	1,400	No	No	Contingent on completion of MSF, NRE
2021 20		Demolish SAC Magazines - Group 12		TBD	E	-	19	136972	04-141	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-140	No	No	Contingent on completion of MSF, NRE
2021 20		Demolish SAC Magazines - Group 12		TBD	E	-	14	136973	04-142	Weapon and Component Staging	В	DOE Owned	MD	DSW	Operating	1,183	No		2021	-	1	with 04-140	No	No	Contingent on completion of MSF, NRE
2021 21		Demolish Security		TBD	E	4	43	136974	04-143	1	В	DOE Owned	MD	DNS	Operating	375	No		2021	917	3	3,000	No	No	Contingent on completion of MSF
2021 21		Demolish Security		TBD	E	-	54	136975	04-144	Pantex Building	В	DOE	MD	DNS	Operating	375	No		2021	3,057	3	with 04-143	No	No	Contingent on completion of MSF
	1	Infrastructure	1	l		1		1	1		1	Owned	1	-	,		-		1	- /	-	-	-		· · · · · ·

										-			2012 - F 120	/21												
			Project Name	Project Number				Legacy	Deferred					F	Per FIMS							Yearly	Total		Included	
Fiscal Year	Priority	Score	or SSP Conservation Measure Name*	or SSP FEMP Measure #*		Funding Type	Deferred Maintenance Identifier	Deferred Maintenance Reduction (000)	Maintenance (Note 1) (000)	Property Sequence Number	Facility ID Number Facility	Name Property (B/L/S/T	Ownership	Mission Dependency	Mission Dependency Program	Status	Gross Square Feet (GSF)	Indicator	Excess Year	Estimated Disposition Year	Actual Annual Maintenance Cost (Note 2)	Costs	Estimated Disposition Cost (TEC) (000)	Contaminated (Yes/No) (Note 3)	in the SSP? (Yes/No)	Notes
(23)	(47)	(56)	(48)	(49)	(26)	(27)	(10)	(36)	(13)	(50)	(21) (2	2) (51)	(45)	((40)	(41)	(63)	(32)	(18)	(19)	(16)	(1)	(68)	(64)	(7)	(33)	(43)
2021	21		Demolish Security Infrastructure		TBD	Е		-	67	136981	04-149 Pantex Build	ding B	DOE Owned	MD	DNS	Operating	497	No		2021	21,126	3	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		-	16	136982	04-150 Pantex Build	ding B	DOE Owned	MD	DNS	Operating	497	No		2021	11,255	3	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		27	141	136976	04-145 Pantex Build	ding B	DOE Owned	MD	DNS	Operating	392	No		2021	32,228	3	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		-	13	136977	04-145A Pantex Build	ding B	DOE Owned	MD	DNS	Operating	164	No		2021	2,620	2	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		16	57	136978	04-146 Rest Room	В	DOE Owned	NMD	DNS	Operating	283	No		2021	-	3	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		-	3	136979	04-147 Generator B	uilding B	DOE Owned	MD	DNS	Operating	515	No		2021	31,743	3	with 04-143	Yes	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		-	96	136980	04-148 Garage	В	DOE Owned	NMD	DNS	Operating	676	No		2021	8,701	3	with 04-143	No	No	Contingent on completion of MSF
2021	21		Demolish Security Infrastructure		TBD	E		-	47	136844	04-004 Break Area	В	DOE Owned	NMD	DSW	Operating	264	No		2021	-	1	with 04-143	No	No	Contingent on completion of Material Staging Facility (MSF)
			Tota	als				3,129	28,258								418,542				4,035,469	576	207,310			

(Note 1) Per TYSP guidance, the deferred Maintenance column in E-1 is total DM less legacy, or "Non-Legacy DM" (Note 2) Actual Annual Maintenance Cost is shown in whole dollars as shown in FIMS, not thousands. (Note 3) Potential for contamination based on Active Facilities Data Collection System (AFDCS) model code.

Attachment E-2 Plan Footprint - New Construction for Pantex Plant FY 2012 to FY 2021

Fiscal Year	Priority	Score	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Funding Source	Funding Type	Deferred Maintenance Identifier	Legacy Deferred Maintenance Reduction	Deferred Maintenance	Facility Name	Property Type (B/L/S/T)	Ownership	Mission Dependency	Mission Dependency Program	Gross Square Feet (GSF)	Year of Beneficial Occupancy	Included in the SSP? (Yes/No)	Notes
(23)	(47)	(56)	(48)	(49)	(26)	(27)	(10)	(36)	(13)	(22)	(51)	(45)	((40)	(41)	(32)	(67)	(33)	(43)
2012	2		12-064 Electrical Equipment Building	FY10-48	RTBF	GPP	N/A	N/A	N/A	Electrical Equipment Building	В	DOE Owned	MD	RTBF	320	2012	No	
2004	3		Zone 11 HPFL Pump Facility	06-D-160-01	RTBF	LI	N/A	N/A	N/A	Zone 11 HPFL Pump Facility	В	DOE Owned	MD	RTBF	1,012	2012	No	
2004	4		Zone 12 HPFL Pump Facility	06-D-160-01	RTBF	LI	N/A	N/A	N/A	Zone 12 HPFL Pump Facility	В	DOE Owned	MD	RTBF	1,012	2012	No	
2011	5		B-Press and Extrudable Upgrade Project		DSW	GPP	N/A	N/A	N/A	HE Freezer Building	В	DOE Owned	MD	RC	330	2012	No	
2011	12		Physical Training and Intermediate Use Of Force Facility		STA	GPP	N/A	N/A	N/A	Physical Training and Intermediate Use Of Force Facility	В	DOE Owned	MD	STA	7,450	2012	No	
2015	8		Administrative Support Complex		RTBF/Alt Financing	Alternative Financing	N/A	N/A	N/A	Administrative Support Complex	В	Contractor Leased	MD	RTBF	235,000	2015	No	Alternative Financed, leased facility
2003	1		HE Pressing Facility	04-D-103-02	RTBF	LI	N/A	N/A	N/A	HE Pressing Facility	В	DOE Owned	MC	RC	53,712	2016	Yes	Includes HEPF, staging structures, and ramp.
2011	6		HE Science, Technology, & Engineering		RTBF	LI	N/A	N/A	N/A	HE Science, Technology, & Engineering	В	DOE Owned	MC	RC	35,000	2020	No	
2011	7		High Explosive Packaging & Staging		RTBF	LI	N/A	N/A	N/A	High Explosive Packaging & Staging	В	DOE Owned	MD	RC	20,000	2020	No	
2011	9		Material Staging Facility		RTBF	LI	N/A	N/A	N/A	Material Staging Facility	В	DOE Owned	MD	DSW	177,000	2020	No	Anticipated to be multi- program funded.
2015	10		Non-Destructive Evaluation Facility		RTBF	LI	N/A	N/A	N/A	Non-Destructive Evaluation Facility	В	DOE Owned	MC	DSW	40,000	2021	No	
2015	11		Inert Machining Facility		RTBF	LI	N/A	N/A	N/A	Inert Machining Facility	В	DOE Owned	MD	RC	20,000	2021	No	
			Tot	als				-	-						590,836			

Attachment E-2 Plan Footprint - New Construction for Pantex Plant FY 2012 to FY 2021

Fiscal Year	Priority	Score	Project Name or SSP Conservation Measure Name*	Project Number or SSP FEMP Measure #*	Funding Source	Funding Type	Deferred Maintenance Identifier	Legacy Deferred Maintenance Reduction	Deferred Maintenance	Facility Name	Property Type (B/L/S/T)	Ownership	Mission Dependency	Mission Dependency Program	Gross Square Feet (GSF)	Year of Beneficial Occupancy	Included in the SSP? (Yes/No)	Notes
(23)	(47)	(56)	(48)	(49)	(26)	(27)	(10)	(36)	(13)	(22)	(51)	(45)	((40)	(41)	(32)	(67)	(33)	(43)

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Attachment E-3 FY 2011 Leased Space for Pantex Plant

							Per FIMS							Dantal						
Fiscal Year	Funding Source	Property Sequence Number	Facility ID Number	Facility Name	Property Type (B/L/S/T)	Ownership	Mission Dependency	Mission Dependency Program	Status	Gross Square Feet (GSF)	# of Occupants	Excess Year	Actual Annual Maintenance Cost	Rental Rate per Rentable SF	Annual Cost	Leased Type	Lease Term - yrs	Exp. Month / Year	Renewal Options	Notes
(23)	(26)	(50)	(21)	(22)	(51)	(45)	((40)	(41)	(63)	(32)	(44)	(19)	(20)	(54)	(2)	(35)	(34)	(20)	(53)	(43)
2008	RTBF	131503	09-059	Leased Office Building	В	Contractor Leased	MD	RTBF	Operating	10,194	46	N/A	14,053			Full	5	9/30/2013	0	
2008	RTBF	131523	09-060	Leased Office Building	В	Contractor Leased	MD	DSW	Operating	11,827	30	N/A	13,834			Full	5	9/30/2013	0	
2008	RTBF	131716	09-061	Leased Office Building	В	Contractor Leased	MD	NA	Operating	10,220	16	N/A	17,549			Full	5	9/30/2013	0	
2008	RTBF	141933	09-129	Leased Office Trailer	т	Contractor Leased	NMD	RTBF	Operating	1,442	7	N/A	-			Full	5	9/30/2013	0	
2008	RTBF	143737	09-130	Leased Office Building	В	Contractor Leased	MD	RTBF	Operating	19,086	117	N/A	21,879			Full	5	9/30/2013	0	
2006	RTBF	203876	09-140	Leased Office Trailer	Т	Contractor Leased	NMD	RTBF	Operating	859	10	N/A	-			Full	5	7/30/2011	0	
2006	RTBF	203877	09-141	Leased Changing Trailer	т	Contractor Leased	NMD	RTBF	Operating	165	0	N/A	-			Full	5	7/30/2011	0	
2006	RTBF	203878	09-142	Leased Changing Trailer	Т	Contractor Leased	NMD	RTBF	Operating	165	0	N/A	-			Full	5	7/30/2011	0	
2006	RTBF	203879	09-143	Leased Changing Trailer	т	Contractor Leased	NMD	RTBF	Operating	165	0	N/A	-			Full	5	7/30/2011	0	
2009	RTBF	126039	18-001	Leased Office Building	В	DOE Leased	NMD	RTBF	Operating	7,218	9	N/A	27,600			Full	5	9/30/2014	5	
2009	RTBF	126038	18-002	Leased Storage	В	DOE Leased	NMD	RTBF	Operating	6,169	0	N/A	-			Full	5	9/30/2014	5	
2006	NCTIR	204056	AP-314	Leased Nuclear Incident Response Program	В	Contractor Leased	NMD	NWIR	Operating	1,271	0	N/A	-			Full	5	5/31/2011	2	
2006	NCTIR	204057	AP-315	Leased Nuclear Incident Response Program	В	Contractor Leased	NMD	NWIR	Operating	2,551	0	N/A	-			Full	5	5/31/2011	2	
2006	NCTIR	204058	AP-317	Leased Nuclear Incidence Response Progra	В	Contractor Leased	NMD	NWIR	Operating	15,000	7	N/A	10,684			Full	5	5/31/2011	2	
2009	RTBF	616	18-002A	Leased Storage	S	DOE Leased	NMD	RTBF	Operating	N/A	N/A	N/A	-			Full	5	9/30/2014	5	
2006	NCTIR	204059	AP-LAND	NIRP Compound	L	Contractor Leased	NMD	N/A	Active	N/A	N/A	N/A	-			Full	5	5/31/2011	2	
2009	RTBF*	84134	TECH TRACT I AND II	Texas Tech Tract I and Tract II	L	DOE Leased	NMD	N/A	Active	N/A	N/A	N/A	-			Full	5	9/30/2014	1	
2009	RTBF*	84139	TECH TRACT III	Texas Tech Tract III	L	DOE Leased	NMD	N/A	Active	N/A	N/A	N/A	-			Full	5	9/30/2014	1	
2009	RTBF*	84136	TEXAS TECH BULL BARN	Texas Tech Bull Barn Land	L	DOE Leased	NMD	N/A	Active	N/A	N/A	N/A	-			Full	5	9/30/2014	1	
2009	RTBF*	84138	TEXAS TECH KILGORE	Texas Tech Kilgore Land	L	DOE Leased	NMD	N/A	Active	N/A	N/A	N/A	-			Full	5	9/30/2014	1	
Tot	als									86,332	242		105,599	8	47,863					

Note: Utility related agreements and easements are not included. Note: Per the FY 2012 TYSP Attachment Instructions, the totals for Rental Rate per Rentable SF and the Annual Cost is the average costs. Only building/trailer lease information is included in the average. * Plant M&A is used to pay for for the Texas Tech land leases.

Attachment E-3 FY 2011 Leased Space for Pantex Plant

							Per FIMS							Rental						
Fiscal Year	Funding Source	Property Sequence Number	Facility ID Number	Facility Name	Property Type (B/L/S/T)	Ownership	Mission Dependency	Mission Dependency Program	Status	Gross Square Feet (GSF)	# of Occupants	Excess Year	Actual Annual Maintenance Cost	Rate per Rentable SF	Annual Cost	Leased Type	Lease Term - yrs	Exp. Month / Year	Renewal Options	Notes
(23)	(26)	(50)	(21)	(22)	(51)	(45)	((40)	(41)	(63)	(32)	(44)	(19)	(20)	(54)	(2)	(35)	(34)	(20)	(53)	(43)

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Attachment E-4(a) FOOTPRINT TRACKING SUMMARY SPREADSHEET Pantex Plant Site Footprint Tracking Summary - <u>NNSA</u>

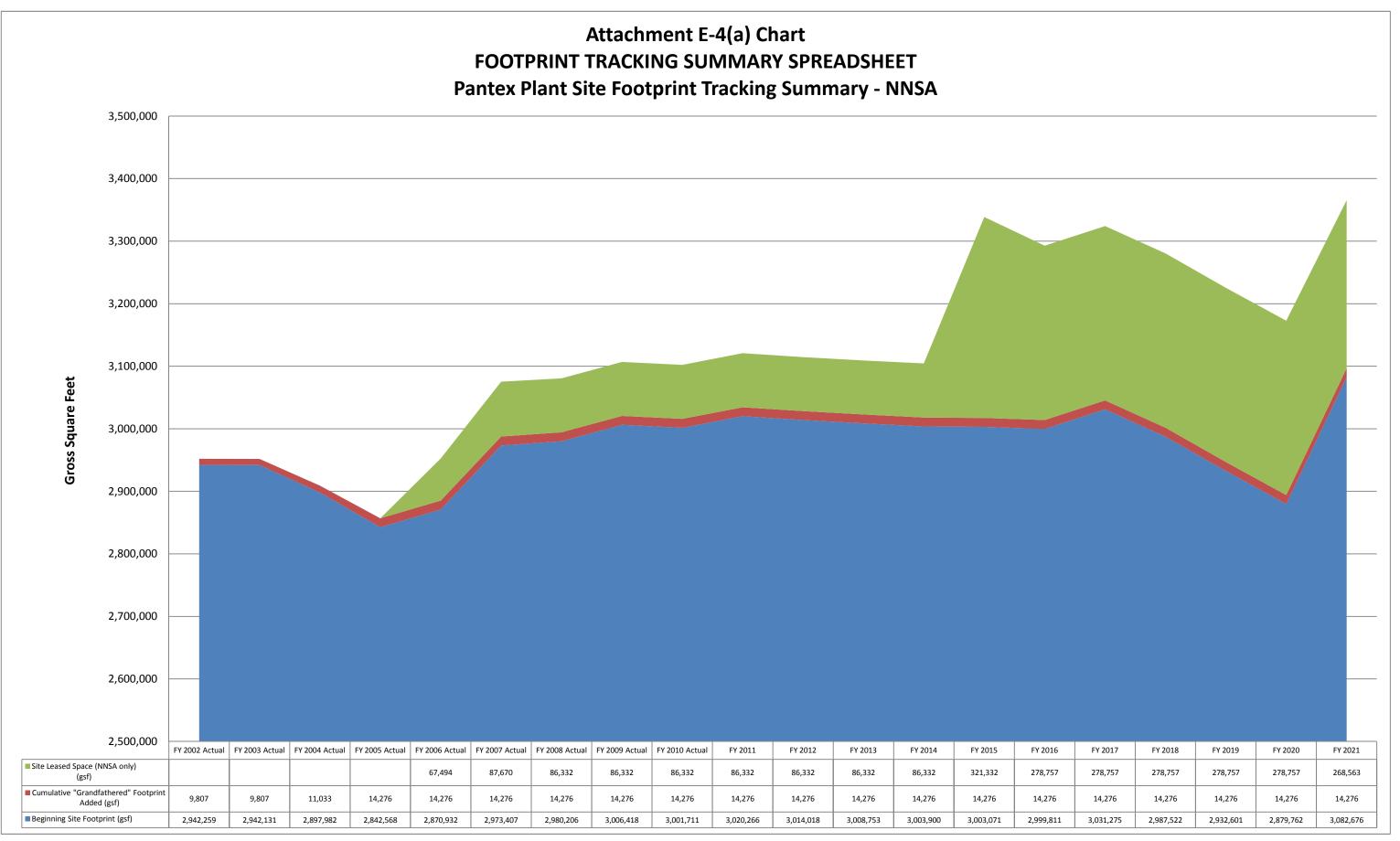
Fiscal Year	Beginning Site Footprint (gsf)	Excess Facilities Footprint Elimination (gsf)	New Construction/ Footprint Added (gsf)	Site Footprint Reduction by FY (gsf)	Footprint "Banked" (gsf)	Waiver/ Transfer (gsf)	"Grandfathered" Footprint Added (gsf)	Cumulative "Grandfathered" Footprint Added (gsf)	Site Total Footprint (NNSA only) (gsf)	Site Leased Space (NNSA only) (gsf)	Weapons Activities Account (gsf)
(23)	(6)	(17)	(42)	(57)	(25)	(65)	(31)	(9)	(60)	(58)	(66)
FY 2002 Actual	2,942,259	-128	0	2,942,131	-128		9807	9,807	2,951,938		N/A
FY 2003 Actual	2,942,131	-44,373	224	2,897,982	-44,277		0	9,807	2,907,789		NA
FY 2004 Actual	2,897,982	-59,572	4,158	2,842,568	-99,691		1226	11,033	2,853,601		N/A
FY 2005 Actual	2,842,568	-20,933	49,297	2,870,932	-71,327		3,243	14,276	2,885,208		N/A
FY 2006 Actual	2,870,932	-66,710	42,289	2,846,511	-95,748	-62,776	0	14,276	2,860,787	67,494	-3,934
FY 2007 Actual	2,973,407	-10,036	16,835	2,980,206	-88,949		0	14,276	2,994,482	87,670	-10,036
FY 2008 Actual	2,980,206	-27,697	53,909	3,006,418	-62,737		0	14,276	3,020,694	86,332	-27,697
FY 2009 Actual	3,006,418	-5,393	686	3,001,711	-67,444		0	14,276	3,015,987	86,332	-5,393
FY 2010 Actual	3,001,711	-4,162	14,727	3,012,276	-56,879	10,389	0	14,276	3,026,552	86,332	-4,162
FY 2011	3,020,266	-6,325	77	3,014,018	-63,127		0	14,276	3,028,294	86,332	-6,325
FY 2012	3,014,018	-15,389	10,124	3,008,753	-75,842	-7,450	0	14,276	3,023,029	86,332	-16,214
FY 2013	3,008,753	-4,853	0	3,003,900	-80,695		0	14,276	3,018,176	86,332	-4,853
FY 2014	3,003,900	-829	0	3,003,071	-81,524		0	14,276	3,017,347	86,332	-829
FY 2015	3,003,071	-3,260	0	2,999,811	-84,784		0	14,276	3,014,087	321,332	-3,260
FY 2016	2,999,811	-22,248	53,712	3,031,275	-53,320		0	14,276	3,045,551	278,757	-64,823
FY 2017	3,031,275	-43,753	0	2,987,522	-97,073		0	14,276	3,001,798	278,757	-43,753
FY 2018	2,987,522	-54,921	0	2,932,601	-151,994		0	14,276	2,946,877	278,757	-54,921
FY 2019	2,932,601	-52,839	0	2,879,762	-204,833		0	14,276	2,894,038	278,757	-52,839
FY 2020	2,879,762	-29,086	232,000	3,082,676	-1,919		0	14,276	3,096,952	278,757	-29,086
FY 2021	3,082,676	-191,364	60,000	2,951,312	-133,283		0	14,276	2,965,588	268,563	-201,558

The FY2006 Footprint "Banked" (gsf) includes the square footage transfer approved in the Bruce Scott to James Rispoli memo dated October 12, 2006.

The FY 2007 Beginning Site Footprint is a hard coded number and reflects revised plant square footage resulting from remeasuring existing facilities. Grandfathered footprint square footage was also revised. The FY 2011 Beginning Site Footprint is a hard coded number that reflects current square footage and the removal of trailers that were reclassified as personal property based on guidance provided by HQ. The FY 2010 transfer includes assets transferred from EM to NNSA following the approval of CD-4 for Environmental Management work scope at Pantex and the NNSA acceptance of EM assets (NNSA e-mail dated 9-22-2010). This square footage is included in the hard coded FY2011 Beginning Site Footprint.

They FY 2012 includes an expected transfer of square footage to off-set the construction of the OST Physical Training and Intermediate Use of Force Facility. This square footage is added to the FY 2012 "Banked" square footage.

Future demolition is shown in years when the facility is available for demolition, even when funding has not been identified. This is not consistent with the planned funding years for CBFI demolition.



Attachment E-4(b) FOOTPRINT TRACKING SUMMARY SPREADSHEET Pantex Plant Site Footprint Tracking Summary - Site Wide

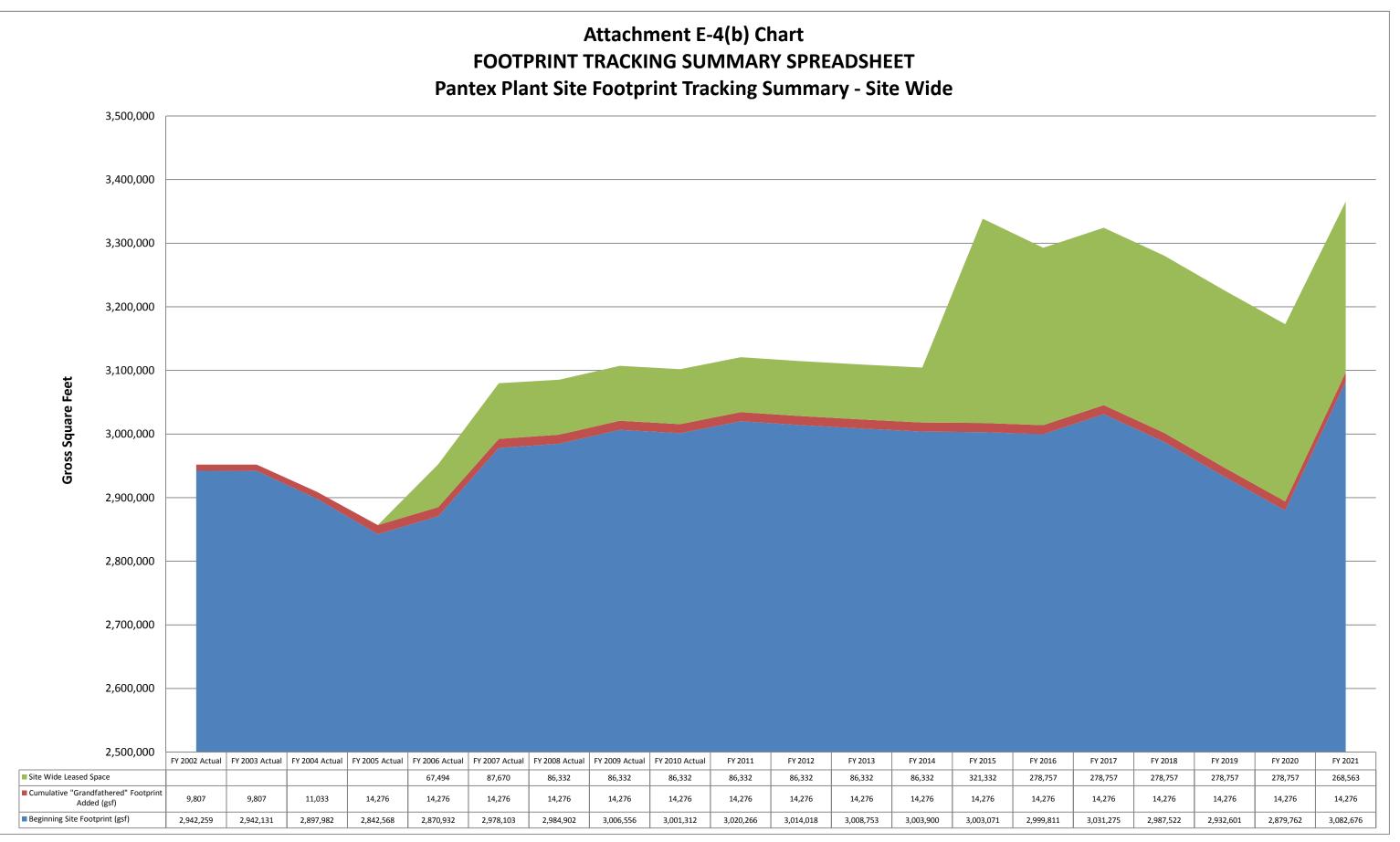
Fiscal Year	Beginning Site Footprint (gsf)	Excess Facilities Footprint Elimination (gsf)	New Construction/ Footprint Added (gsf)	Site Footprint Reduction by FY (gsf)	Footprint "Banked" (gsf)	Waiver/ Transfer (gsf)	"Grandfathered" Footprint Added (gsf)	Cumulative "Grandfathered" Footprint Added (gsf)	Site Wide Total Footprint (gsf)	Site Wide Leased Space	Weapons Activities Account (gsf)
(23)	(6)	(17)	(42)	(57)	(25)	(65)	(31)	(9)	(60)	(58)	(66)
FY 2002 Actual	2,942,259	-128	0	2,942,131	-128		9807	9,807	2,951,938		
FY 2003 Actual	2,942,131	-44,373	224	2,897,982	-44,277		0	9,807	2,907,789		
FY 2004 Actual	2,897,982	-59,572	4,158	2,842,568	-99,691		1226	11,033	2,853,601		
FY 2005 Actual	2,842,568	-20,933	49,297	2,870,932	-71,327		3,243	14,276	2,885,208		
FY 2006 Actual	2,870,932	-66,710	42,289	2,846,511	-95,748	-62,776	0	14,276	2,860,787	67,494	
FY 2007 Actual	2,978,103	-10,036	16,835	2,984,902	-88,949		0	14,276	2,999,178	87,670	
FY 2008 Actual	2,984,902	-32,255	53,909	3,006,556	-67,295		0	14,276	3,020,832	86,332	
FY 2009 Actual	3,006,556	-5,930	686	3,001,312	-72,539		0	14,276	3,015,588	86,332	
FY 2010 Actual	3,001,312	-4,162	14,727	3,011,877	-61,974	10,389	0	14,276	3,026,153	86,332	
FY 2011	3,020,266	-6,325	77	3,014,018	-68,222		0	14,276	3,028,294	86,332	
FY 2012	3,014,018	-15,389	10,124	3,008,753	-80,937	-7,450	0	14,276	3,023,029	86,332	
FY 2013	3,008,753	-4,853	0	3,003,900	-85,790		0	14,276	3,018,176	86,332	
FY 2014	3,003,900	-829	0	3,003,071	-86,619		0	14,276	3,017,347	86,332	
FY 2015	3,003,071	-3,260	0	2,999,811	-89,879		0	14,276	3,014,087	321,332	
FY 2016	2,999,811	-22,248	53,712	3,031,275	-58,415		0	14,276	3,045,551	278,757	
FY 2017	3,031,275	-43,753	0	2,987,522	-102,168		0	14,276	3,001,798	278,757	
FY 2018	2,987,522	-54,921	0	2,932,601	-157,089		0	14,276	2,946,877	278,757	
FY 2019	2,932,601	-52,839	0	2,879,762	-209,928		0	14,276	2,894,038	278,757	
FY 2020	2,879,762	-29,086	232,000	3,082,676	-7,014		0	14,276	3,096,952	278,757	
FY 2021	3,082,676	-191,364	60,000	2,951,312	-138,378		0	14,276	2,965,588	268,563	

The FY2006 Footprint "Banked" (gsf) includes the square footage transfer approved in the Bruce Scott to James Rispoli memo dated October 12, 2006.

The FY 2007 Beginning Site Footprint is a hard coded number and reflects revised plant square footage resulting from remeasuring existing facilities. Grandfathered footprint square footage was also revised. The FY 2011 Beginning Site Footprint is a hard coded number that reflects current square footage and the removal of trailers that were reclassified as personal property based on guidance provided by HQ. The FY 2010 transfer includes assets transferred from EM to NNSA following the approval of CD-4 for Environmental Management work scope at Pantex and the NNSA acceptance of EM assets (NNSA e-mail dated 9-22-2010). This square footage is included in the hard coded FY2011 Beginning Site Footprint.

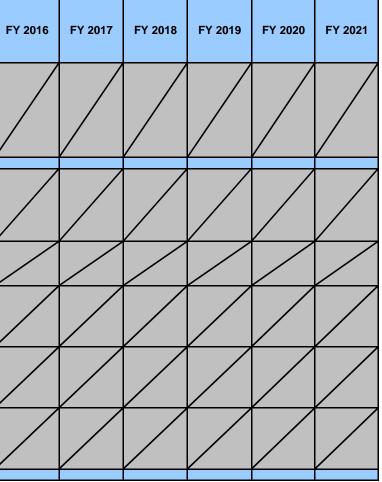
They FY 2012 includes an expected transfer of square footage to off-set the construction of the OST Physical Training and Intermediate Use of Force Facility. This square footage is added to the FY 2012 "Banked" square footage.

Future demolition is shown in years when the facility is available for demolition, even when funding has not been identified. This is not consistent with the planned funding years for CBFI demolition.



Attachment F-1 NNSA FIRP Legacy (FY03 and FY04) Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline at Pantex Plant (\$000s)

Category of Maintenance	Spreadsheet Intruction #	Legacy (FY03 & FY04) Baseline	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	F
1. FIRP LEGACY DEFERRED MAINTENANCE (DM) BASELINE (FY03 & FY04) (<u>Excludes</u> Programmatic Real Property or Equipment)	(37)	214,669	145,800	122,046	73,400	68,087	68,751	57,260	49,910	46,203	44,957	44,192			/
2. LEGACY DEFERRED MAINTENANCE BASELINE (DM) REDUCTION TOTAL	(38)		30,555	29,709	54,601	11,268	14,186	11,491	7,350	3,706	1,246	765			
A. Reduction in Legacy DM Baseline (total due to FIRP ONLY) for all F&I	(38)		21,200	10,940	21,286	3,148	7,048	7,735	4,874	3,706	1,246	765			
i. Reduction in Legacy DM for <u>Mission-Critical</u> F&I (due to FIRP ONLY)	(38)				752	1,578	171	1,464	99	814	1,011	375			
ii. Reduction in Legacy DM for <u>Mission Dependent, Not Critical</u> F&I (due to FIRP ONLY)	(38)				734	1,139	6,294	6,271	4,649	2,854	235	390			
iii. Reduction in Legacy DM for <u>Not</u> <u>Mission Dependent</u> F&I (due to FIRP ONLY)	(38)				19,800	431	583	-	126	38	-	-			



Attachment F-1 NNSA FIRP Legacy (FY03 and FY04) Deferred Maintenance Baseline and Projected Deferred Maintenance Reduction from Baseline at Pantex Plant (\$000s)

Category of Maintenance	Spreadsheet Intruction #	Legacy (FY03 & FY04) Baseline	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
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Attachment F-2 NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction at Pantex Plant

(\$000s)

	-							(40005)												
Pantex Plant	Spreadsheet Intruction #	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010 (Actual)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
1. ANNUAL REQUIRED MAINTENANCE for F&I	(4)	31,625	32,256	35,000	51,090	59,898	65,856	64,330	74,072	77,298	80,390	83,606	86,950	90,428	94,045	97,807	101,719	105,788	110,019	114,420
2. ANNUAL PLANNED MAINTENANCE <u>TOTAL</u>	(3)	31,625	32,256	36,602	54,616	59,898	65,856	64,330	72,618	77,517	84,974	80,168	78,885	80,226	80,146	72,749	74,204	75,688	77,202	78,746
a. Direct	(3)	31,625	32,256	36,602	54,616	59,898	65,856	64,330	72,618	77,517	84,974	80,168	78,885	80,226	80,146	72,749	74,204	75,688	77,202	78,746
b. Indirect	(3)																			
3. DEFERRED MAINTENANCE (DM) <u>TOTAL</u> (E <u>xcludes</u> Programmatic Real Property or Equipment) = Inflation Prior Year DM Total + DM New - Prior Year DM Reduction	(15)	176,000	169,800	221,486	237,712	302,266	344,854	337,395	317,060	320,503	331,046	346,660	371,461	396,221	420,228	455,096	483,623	514,409	554,796	595,718
i. Backlog Inflation Rate (%)	(5)									2.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
ii. DM Inflation	(11)		3,872	3,736	4,873	44,369	25,430	25,117	4,265	6,341	6,090	6,290	6,587	7,058	7,528	7,984	8,647	9,189	9,774	10,541
iii. DM NEW	(12)		14,528	98,444	62,862	42,421	49,409	5,173	2,171	14,628	9,061	12,702	18,347	18,780	16,775	27,187	29,333	31,382	31,264	31,142
A. DM, Mission-Critical F&I ONLY	(5,11,12,15)				40,415	47,190	54,225	49,171	44,772	47,313	52,119	62,055	75,167	87,832	99,166	118,113	139,355	163,735	188,704	214,081
B. DM, Mission-Dependent, Not Critical F&I ONLY	(5,11,12,15)				172,266	227,947	263,179	257,129	242,180	241,384	244,909	248,163	257,307	266,770	276,701	289,653	294,926	298,410	310,646	322,878
C. DM, Not Mission-Dependent F&I ONLY	(5,11,12,15)				25,031	27,129	27,450	31,095	30,108	31,806	34,019	36,442	38,988	41,619	44,362	47,330	49,342	52,265	55,446	58,759
4. DEFERRED MAINTENANCE (DM) REDUCTION TOTAL	(14)		24,600	50,494	51,509	22,149	32,251	37,750	26,772	17,527	4,607	3,378	132	1,078	297	304	9,452	9,784	651	761
i. Reduction Total attributed to FIRP ONLY	(52)		21,200	10,940	33,555	10,241	19,540	18,116	21,430	17,074	4,382	3,265								
A. Reduction in DM for Mission-Critical F&I	(14)				7,297	9,705	3,058	10,053	4,255	8,656	4,253	608	115	1,073	-	-	444	-	-	196
1. Reduction attributed to FIRP ONLY	(52)				741	4,031	1,016	4,717	4,195	8,650	4,028	608								
B. Reduction in DM for Mission-Dependent. Not Critical F&I	(14)				12.387	9,816	26,211	27,112	21.013	8,272	354	2,770	17	5	297	304	7.962	9.578	614	564
1. Reduction attributed to FIRP ONLY	(52)				990	4,490	16,110	13,311	16,315	7,825	354	2,657	\langle							
C. Reduction in DM for <u>Not Mission-Dependent</u> F&I	(14)				31,825	2,628	2.982	585	1,504	599	_	_	-	_	_	_	1,046	206	37	-
1. Reduction attributed to FIRP ONLY	(52)				31,824	1,720	2,414	88	920	599	-	-								
 5. REPLACEMENT PLANT VALUE (RPV) for Facilities and Infrastructure (F&I) = Inflation of PY RPV + Increase or Decrease due to other causes 	(55)	2,050,543	2,130,200	3,020,800	3,181,847	3,386,119	3,670,154	3,982,712	3,609,405	3,829,667	3,902,430	3,976,576	4,052,131	4,129,122	4,207,575	4,421,439	4,661,446	4,897,014	4,990,057	5,084,868
A. RPV for Mission-Critical F&I ONLY	(55)				1,438,844	1,524,391	1,565,158	1,756,077	1,684,250	1,828,560	1,863,303	1,898,705	1,934,781	1,971,542	2,009,001	2,181,092	2,378,533	2,570,725	2,619,569	2,669,340
B. RPV for Mission-Dependent, Not Critical F&I	(55)				1,489,751	1,584,798	1,872,600	2,047,356	1,732,711	1,807,896	1,842,246	1,877,248	1,912,916	1,949,261	1,986,297	2,024,037	2,062,494	2,101,681	2,141,613	2,182,304
C. RPV for Not Mission-Dependent F&I	(55)				253,252	248,470	232,396	179,280	192,443	193,211	196,882	200,623	204,435	208,319	212,277	216,310	220,420	224,608	228,876	233,224
D. RPV Increase from prior year attributed to inflation	(55)				153,981	184,566	287,824	309,495	(373,307)	214,262	66,098	74,146	75,555	76,990	(62,004)	213,864	246,274	236,705	(536,243)	(58,189)
E. RPV Increase / decrease attributed to causes other than inflation	(55)				20,068	19,706	(3,789)	3,063	-	6,000	6,666	-	-	-	140,457		(6,267)	(1,138)	629,286	153,000

Attachment F-2 NNSA Total Deferred Maintenance and Projected Deferred Maintenance Reduction at Pantex Plant

(\$000s)

Pantex Plant	Spreadsheet Intruction #	FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010 (Actual)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Facility Condition Index (FCI)		FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010 (Actual)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
FCI TOTAL		8.6%	8.0%	7.3%	7.5%	8.9%	9.4%	8.5%	8.8%	8.4%	8.5%	8.7%	9.2%	9.6%	10.0%	10.3%	10.4%	10.5%	11.1%	11.7%
FCI Mission Critical					2.8%	3.1%	3.5%	2.8%	2.7%	2.6%	2.8%	3.3%	3.9%	4.5%	4.9%	5.4%	5.9%	6.4%	7.2%	8.0%
FCI Mission Dependent, Not Critical					11.6%	14.4%	14.1%	12.6%	14.0%	13.4%	13.3%	13.2%	13.5%	13.7%	13.9%	14.3%	14.3%	14.2%	14.5%	14.8%
FCI Not Mission Dependent					9.9%	10.9%	11.8%	17.3%	15.6%	16.5%	17.3%	18.2%	19.1%	20.0%	20.9%	21.9%	22.4%	23.3%	24.2%	25.2%
Asset Condition Index (ACI)		FY 2003 (Baseline)	FY 2004 (Actual)	FY 2005 (Actual)	FY 2006 (Actual)	FY 2007 (Actual)	FY 2008 (Actual)	FY 2009 (Actual)	FY 2010 (Actual)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
ACI TOTAL		0.91	0.92	0.93	0.93	0.91	0.91	0.92	0.91	0.92	0.92	0.91	0.91	0.90	0.90	0.90	0.90	0.89	0.89	0.88
ACI Mission Critical					0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92
ACI Mission Dependent, Not Critical					0.88	0.86	0.86	0.87	0.86	0.87	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.86	0.85	0.85
ACI Not Mission Dependent					0.90	0.89	0.88	0.83	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.78	0.77	0.76	0.75

Note: Unfunded demolition is not included in future DM calculations.

Attachment J - Requested Small Projects above FYNSP Targets

				(\$00	Ds)										
Priority	Project Name	Deferred Maintenance Reduction	Funding Type	Project Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
XPENSE	·										-	-	-		
1	12-84 Stairway Replacement		E	Safety	100										
2	12-68 Freeze Repairs		Е	Capability	2,500										
3	Additional Freeze Repairs		Е	Capability	1,000										
4	ESD Flooring		Е	Safety	175	1,200	1,200	1,200	1,000	1,000					
5	12-75 Locker Hot Water - Construction		E	Capability	245										
6	Unplanned Emergency Repairs		E	Capability	1,030										
7	Pressing Upgrades Required to Maintain Operational Viability ¹		E/GPE	Capability	15,000	15,000	10,000								
8	UV to IR Conversion (Prototype Design)		E	Safety	660										
9	12-68 De-chlorinator for Distilled Water System		E	Capability	150										
10	Re-skin Building 4-026		E	Capability	1,000										
11	12-130 Warning Sirens		E	Safety	2,000										
12	UV to IR Conversion (Prototype Build)		E	Safety	1,000										
13	Repair Facility HPFL lead-in lines		E	Safety	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,00
14	12-5 North Parking Lot Walkway		E	Safety	600	,	,	,	,	,	,	,	,	,	,
15	11-55 Rotoclone/scrubber access modified		E	Safety	2,000									1	
16	Installation of material from ESPCII - Lighting		F	Capability	500	500	500	500	500	500				1	
17	12-19 Electrical Upgrade		E	Safety	3,500									<u> </u>	
18	VMI Carousels Installation		F	Capability	650										
19	12-23/12-42F Office Mods		E	Capability	1,800										
20	12-36 Vault Modifications		E	Capability	300										
21	12-36 Window Replacements		E	Capability	500										
22	Install Duct smoke detectors in 12-62		E	Safety	2,000										
23	Emergency pump for 13-48 lift station failure		E	Capability	500									<u> </u>	
23	PPA Drainage (L) - Tech		F	Safety	500										
24	PPA Drainage (L) - Area D		 E	Safety	500										
25	12-86 HVAC		E	Capability	3,000									ł	
	12-35 HVAC		E	. ,										┢─────	<u> </u>
27	Access to the rooftop of 12-138		_	Capability	3,000									<u> </u>	
28			E	Safety	1,000	4 500								<u> </u>	
29	Misc. Electrical Safety Enhancements	4.000	E	Safety		1,500								<u> </u>	
30	Misc. DM Reduction Projects	1,600	E	DM		5,000								<u> </u>	
31	Misc. Safety Enhancements		E	Safety		2,000								<u> </u>	
32	Misc. Infrastructure Modifications		E	Capability		5,000								┥────	
33	Misc. Envir. Protection Enhancements		E	Environment		1,000									
34	Misc. Electrical Safety Enhancements		E	Safety			1,500							───	
35	Misc. DM Reduction Projects	1,600	E	DM			5,000	ļ						┢────	
36	Misc. Safety Enhancements		E	Safety			2,000							Ļ	Ļ
37	Misc. Infrastructure Modifications		E	Capability			5,000							<u> </u>	ļ
38	Misc. Envir. Protection Enhancements		E	Environment			1,000							L	
39	Misc. Electrical Safety Enhancements		E	Safety				1,500						L	L
40	Misc. DM Reduction Projects	1,600	E	DM				5,000							L
41	Misc. Safety Enhancements		E	Safety				2,000							
42	Misc. Infrastructure Modifications		E	Capability				5,000							
43	Misc. Envir. Protection Enhancements		E	Environment				1,000							
44	Misc. Electrical Safety Enhancements		E	Safety					1,500						

Attachment J - Requested Small Projects above FYNSP Targets NNSA Facilities and Infrastructure Cost Projection Spreadsheet

		RTBF/Oper	ations of	Facilities Ii (\$00)		ture for I	Pantex F	Plant							
Priority	Project Name	Deferred Maintenance Reduction	Funding Type	Project Type	FY 2011	FY 2012	FY 2013	FY 2014		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	Misc. DM Reduction Projects	1,600	E	DM					5,000						
	Misc. Safety Enhancements		E	Safety					2,000						
47	Misc. Infrastructure Modifications		E	Capability					5,000						
	Misc. Envir. Protection Enhancements		Е	Environment					1,000						
49	Misc. Electrical Safety Enhancements		Е	Safety						1,500					
50	Misc. DM Reduction Projects	1,600	Е	DM						5,000					
51	Misc. Safety Enhancements		E	Safety						2,000					
52	Misc. Infrastructure Modifications		E	Capability						5,000					
53	Misc. Envir. Protection Enhancements		E	Environment						1,000					
54	Misc. Electrical Safety Enhancements		E	Safety							1,500				
55	Misc. DM Reduction Projects	1,600	E	DM							5,000				
56	Misc. Safety Enhancements		E	Safety							2,000				
57	Misc. Infrastructure Modifications		E	Capability							5,000				
58	Misc. Envir. Protection Enhancements		E	Environment							1,000				
59	Misc. Electrical Safety Enhancements		E	Safety								1,500			
60	Misc. DM Reduction Projects	1,600	E	DM								5,000			
61	Misc. Safety Enhancements		E	Safety								2,000			
62	Misc. Infrastructure Modifications		E	Capability								5,000			
63	Misc. Envir. Protection Enhancements		E	Environment								1,000			
64	Misc. Electrical Safety Enhancements		E	Safety									1,500		
	Misc. DM Reduction Projects	1,600	E	DM									5,000		
	Misc. Safety Enhancements		E	Safety									2,000		
	Misc. Infrastructure Modifications		E	Capability									5,000		
	Misc. Envir. Protection Enhancements		E	Environment									1,000		
69	Misc. Electrical Safety Enhancements		E	Safety										1,500	
	Misc. DM Reduction Projects	1,600	E	DM										5,000	
71	Misc. Safety Enhancements		E	Safety										2,000	
	Misc. Infrastructure Modifications		E	Capability										5,000	
	Misc. Envir. Protection Enhancements		E	Environment										1,000	
	Misc. Electrical Safety Enhancements		E	Safety											1,500
	Misc. DM Reduction Projects	1,600	E	DM											5,000
	Misc. Safety Enhancements	,	E	Safety											2,000
	Misc. Infrastructure Modifications		E	Capability											5,000
	Misc. Envir. Protection Enhancements		E	Environment											1,000
	Expense Subtotal				46,210	32,200	27,200	17,200	17,000	17,000	15,500	15,500	15,500	15,500	15,500

Attachment J - Requested Small Projects above FYNSP Targets NNSA Facilities and Infrastructure Cost Projection Spreadsheet RTBF/Operations of Facilities Infrastructure for Pantex Plant

				(\$00	0s)						
Priority	Project Name	Deferred Maintenance Reduction	Funding Type	Project Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
GPP		-									
1	B-Press Upgrade (construction only)		GPP	Capability	260						
2	Remove Smoking Areas in Zone 12		GPP	Safety	150						
3	Relocate 35 Acct operations to 12-118 / Relocate IH Personnel to 11-51A		GPP	Capability	1,200						
4	Installation of Misc Classified Drops		GPP	Capability	3,000						
5	12-2 Mods for Drug/Alcohol sampling		GPP	Capability	500						
6	Enhanced Thermal Monitoring System Upgrade		GPP	Safety	100	2,500	2,500				
7	Zone 4 HPFL Loop		GPP	Safety	10,000						
8	Alternate Road for Intra-Plant Shipments		GPP	Safety	6,400	F 000					
9	Technology Upgrade		GPP	Capability		5,000					
10	Capability Upgrades		GPP	Capability		5,000	5 000				
11	Energy Conservation Upgrades	_	GPP	Capability			5,000				
12	Technology Upgrade		GPP	Capability			5,000				
13	Capability Upgrades		GPP	Capability			5,000				
14	Energy Conservation Upgrades		GPP	Capability				5,000			
15	Technology Upgrade		GPP	Capability				5,000			
16	Capability Upgrades		GPP	Capability				5,000			
17	Capability Upgrades		GPP	Capability					5,000		
18	Energy Conservation Upgrades		GPP	Capability					5,000		
19	Technology Upgrades		GPP	Capability					5,000		
20	Capability Upgrades		GPP	Capability						5,000	
21	Energy Conservation Upgrades		GPP	Capability						5,000	
22	Technology Upgrades		GPP	Capability						5,000	
23	Energy Conservation Upgrades		GPP	Capability							5,000
24	Capability Upgrades		GPP	Capability							5,000
25	Technology Upgrades		GPP	Capability							5,000
26	Energy Conservation Upgrades		GPP	Capability							
27	Capability Upgrades		GPP	Capability							
28	Technology Upgrades		GPP	Capability							
29	Energy Conservation Upgrades		GPP	Capability							
30	Capability Upgrades		GPP	Capability							
31	Technology Upgrades		GPP	Capability							
32	Energy Conservation Upgrades		GPP	Capability							
33	Capability Upgrades		GPP	Capability							
34	Technology Upgrades		GPP	Capability		L					
35	Energy Conservation Upgrades		GPP	Capability							
36	Capability Upgrades		GPP	Capability							
30		-	GPP								
31	Technology Upgrades GPP Subtotal		GFF	Capability	21,610	12,500	17,500	15,000	15,000	15,000	15,000

Note all estimates are Preliminary Rough Order of Magnitude

(2017	FY 2018	FY 2019	FY 2020	FY 2021
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				5,000
				5,000
				5,000
15,000	15,000	15,000	15,000	15,000

Attachment J - Requested Small Projects above FYNSP Targets NNSA Facilities and Infrastructure Cost Projection Spreadsheet

				(\$00	Ds)				-						
Priority	Project Name	Deferred Maintenance Reduction	Funding Type	Project Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
GPE						4 4 9 9			1	1	1	1	r		
1	LINAC Equipment + Manipulator		GPE	Capability		4,100								'	───
2	LINAC Equipment - Gantry		GPE	Capability		4,800								'	───
3	Sealed Vacuum Pump		GPE	Capability		330								 '	
4	Compression Press		GPE	Capability		555								 '	
5	X-Ray Equipment		GPE	Capability		4,600								'	<u> </u>
6	R-1 Lid Replacement		GPE	Capability		80									
7	HC&NO Analyzer		GPE	Capability		180									
8	CCTV System Upgrade		GPE	Capability		690									
9	LC-Mass Spectrometer		GPE	Capability		300									
10	HPLC		GPE	Capability		180									
11	Robotic Equipment		GPE	Capability			3,600								
12	Lightning Detection & Static Monitoring Systems		GPE	Capability		1,200									
13	COLOSSIS		GPE	Capability				13,000							
14	LINAC Equipment		GPE	Capability					3,300					3,500	
15	Horizontal Air Bearing		GPE	Capability						6,800					
16	Leak Check Manifolds		GPE	Capability						200					
17	Vacuum Chambers		GPE	Capability		1,500			600	1,300					
18	LINAC Equipment		GPE	Capability						2,600					
19	Rad Safe Equipment		GPE	Capability							350				
20	LINAC Equipment		GPE	Capability											2,900
21	Infrastructure Capital Equipment		GPE	Capability	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
22	Information Technology Capital Equipment		GPE	Capability	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
23	Rescue Apparatus		GPE	Capability	350										
24	Hazardous Material Response Vehicle		GPE	Capability	350										
25	105' Aerial Apparatus		GPE	Capability	600										
26	Hose Tender Replacement		GPE	Capability	150										
27	Compressed Air Foam System Tanker Replacement		GPE	Capability	300									[]	1
28	Ambulance Replacements (3)		GPE	Capability	200	200				200					<u> </u>
29	Fire Engine Replacement (4)		GPE	Capability	800				900					1,100	1,200
30	MSA Self Contained Breathing Apparatus		GPE	Capability	550										<u> </u>
31	Linac Manipulator Controls		GPE	Capability	1,500									'	<u>├</u> ───
32	High resolution mass spectrometer		GPE	Capability	2,700										
33	Linac Replacement		GPE	Capability	3,500									'	┼───

Attachment J - Requested Small Projects above FYNSP Targets NNSA Facilities and Infrastructure Cost Projection Spreadsheet

(\$000s)															
Priority	Project Name	Deferred Maintenance Reduction	Funding Type	Project Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 202
34	HE Radiography		GPE	Capability	3,100										
35	Mass Spectrometer		GPE	Capability	750										
36	Bottle & Container Evacuation Station		GPE	Capability	150										
37	Linac Manipulator Controls		GPE	Capability											
38	Transport Trailer - Onsite (4)		GPE	Capability									4,000		
39	Integrated Pumpdown & Fill Staions (3) Replacement		GPE	Capability										ſ	6,00
40	Laser Gas Sampling Replacement		GPE	Capability										ſ	1,30
41	Integrated Pit Inspection Station Replacement		GPE	Capability									1	ľ	1,10
42	Leak Test Station Replacement		GPE	Capability									ĺ		50
43	Coordinate Measurement Machine Replacement		GPE	Capabiltiy					1,300				ĺ		70
44	Radiation Dosimetry Equipment		GPE	Capabiltiy		900							ĺ		
45	Narrow Band Radio System		GPE	Capabiltiy									ĺ		
46	HE Mills (4)		GPE	Capability					8,750				ĺ		
47	HE Lathes (5)		GPE	Capability					7,000						
48	HE Saws (2)		GPE	Capability					2,600				1		
49	HE Machining Coordinate Measuring Machines (2)		GPE	Capability						1,650			(
50	Blast Door Interlock Control Replacement		GPE	Capability		400							(
	GPE Subtotal				21,000	26,015	9,600	19,000	30,450	18,750	6,350	6,000	10,000	10,600	19,70
	•	•											1		
TAL ABC	IVE FYNSP				88,820	70,715	54,300	51,200	62,450	50,750	36,850	36,500	40,500	41,100	50,20

Attachment J - Requested Small Projects above FYNSP Targets NNSA Facilities and Infrastructure Cost Projection Spreadsheet RTBF/Operations of Facilities Infrastructure for Pantex Plant (\$000s)														
Priority	Project Name	Deferred Maintenance Reduction	Project Type	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021

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