# B&W Pantex FY 2011 Performance Evaluation Summary

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### PO #1: DSW Product Planning and Delivery

B&W Pantex performance was excellent per this Performance Objective.

### **Performance Assessment:**

Performance Target #1: Achieve DSW Directive Schedule quantities (excluding work evaluated elsewhere in the PEP) by meeting annual directive schedules and not negatively impacting NA-122 commitments.

B&W Pantex substantially exceeded planned weapon deliverables by aggressively overcoming schedule obstacles including technical issues, late receipt of critical components and equipment issues. This includes 112% of the baseline deliverables, 109% W76-I LEP deliverables, 120% scheduled dismantlements, and 99% of surveillance units.

## Performance Target#2: Complete Level 2 Milestones as identified in the Stockpile Management Implementation Plan.

B&W Pantex exceeded DSW and Mult-Site Level 2 Milestones completion as identified in the Milestone Reporting Tool (MRT).

- Successful H1700 Container development and production, inspite of sizeable challenges, supported the first RTG LLC shipment to DoD in June, on schedule.
- Dismantlements were exceeded by 120%.
- W76 LEP completed 109% of deliverables.
- B61 LEP Phase 6.2 design study and system level Gate B was completed in July, 2011.
- B61 ALT 356 assembly activities were completed in December, 2010 and shipments to DoD were completed in March.
- W78 and W87 parts disposition plan was develop and issued in April, 2011.
- RMI project initiatives to transform legacy content to RMI content, was fully supported in accordance with the Integrated Multi-Site Project Plan.
- PRIDE site-based activities including the MCAD project, Data Marts, Surveillance Data
  Delivery, QERTS and CASTLE were executed in accordance with the Program Plan volumes
  and Site Implementation Plans.

Performance Target#3: B53 - Develop, implement, and authorize a process for B53 CSA extraction that supports shipping CSAs in accordance with the FY11 schedule.

B&W Pantex substantially exceeded expectations by overcoming significant technical and scheduling challenges to receive authorization for B53 CSA extraction in mid-September, 2011 and completing the first shipment to Y12 prior to the end of the fiscal year, on schedule.

## Performance Target#4: B61 - Implement new explosive surveillance requirements for the Onionskin and FSCD in accordance with the approved FY11 schedule.

B&W Pantex met expectations by working closely with LANL to achieve surveillance requirements for Onionskin and FSCD. LANL did not finalize the EER plan, drawings and specifications for Onionskin and requested suspension of FSCD operations in September due to laboratory internal issues. However, B&W developed a new firing set for test fire applications which is beyond the scope of this performance target. Per agreement between NNSA and LANL QERs for FSCD and Onionskin will not be released until FY12.

## Performance Target#5: B83 - Complete the Tooling Upgrade project milestones in accordance with the approved plan.

B&W Pantex met performance expectations. The NNSA approved re-baselined B83 Tooling Upgrade Project Plan was received in August, 2011. B&W completed scheduled FY11 milestones including Hazard Assessment Task Team (HATT) walk-downs, the design/fabrication of tooling, validation of procedures, engineering evaluations and submittal of the Hazard Analysis Report.

### Performance Target #6: W80 - a. Transition JTA to New Mass Properties

B&W Pantex exceeded expectations by receiving the approved QER for the New Mass Properties system in April, 2011, substantially ahead of schedule. W80 JTA8, S/N 1805 and all subsequent W80 JTAs successfully utilized New Mass Properties.

### Performance Target #6: W80 - b. Complete Snowball development activities

B&W Pantex control of W80 snowball development activities have met the expectations of this performance target in spite of year long challenges, including receipt of design agency drawings four months behind schedule. B&W fired the first Process Prove-In shot in August which resulted in LLNL evaluating possible design changes to the test setup.

#### Performance Target #7: W84 - a. Develop a plan and schedule for the Known State project.

B&W Pantex met expectations by developing the W84 Known State project plan and schedule in May, 2011. The schedule has subsequently been re-base lined and supports FY12 authorization.

# Performance Target #7: W84 - b. Complete the FY11 project milestones towards the FY12 authorization to perform operations on the Known State units.

B&W Pantex met expectation asW84 Known State project milestones were met in accordance with the re-base lined schedule. The conceptual HATT review was completed in June, 2011 and the final HATT review is scheduled for October, 2011. Ninety-eight percent of the tooling have been designed and fabricated. These activities support FY12 authorization as scheduled.

Performance Target #8: W87 - Complete OSR activities during Disassembly and Inspection Cycle 35. (05/31/11)

B&W Pantex met expectations by completing W87 OSR Cycle 25 activities in May, 2011. The OSR team report which contained Post Start findings, deliberation topics and comments was released to PXSO in July, 2011. B&W addressed the issues and released a corrective action plan in August, 2011.

Performance Target #9: W88 - Qualify Insert Removal Process and support NNSA/NA-122.2 and Los Alamos as necessary in development of the required specification for the Mid-Cap component.

B&W Pantex met expectations by completing design, drafting and fabrication of the new W88 mid-cap insert removal tool. Measurements taken from the mid case after tryout of the insert removal tool verified the tool does not deform the case parts after the insert has been pressed out of the case. A LANL Engineering Evaluation Release subsequently qualified the new insert removal tool and the process.

### PO #2: Fiscal Year 2011 Getting the Job Done

B&W Pantex performance was excellent per this Performance Objective.

### **Performance Assessment:**

## Performance Target #1: Complete all limited life component exchanges to keep operationally deployed stockpile weapons active

B&W Pantex met expectations by completing 100% of the FY11 limited life component (LLC) PCD requirements. The majority of the LLC PCD shipments occurred during the last two months of the fiscal year.

### Performance Target #2: Meet the W76-1 deliveries to the Navy

B&W Pantex substantially exceeded expectations by completing 109% of the FY11 W76-1 PCD deliverables to the Navy. All scheduled surveillance rebuilds were also completed along with an additional six unscheduled repair rebuilds. This was all accomplished in spite of technical issues and receipt of components at less than full lead time, some at less than 30 day lead time, eg. the MC4700 AF&F.

## Performance Target #3: Implement integrated phase gates to complete the B61 Phase 6.2/2a activities that enable a FY17 FPU and complete W78 Phase 6.1 activities

B&W Pantex met expectations by fully supporting B61 Phase 6.2/2a phase gate activities by completing a draft production strategy, MRL assessment and the WDCR. Phase Gate B was completed in May, 2011.

B&W Pantex's role in W78 Phase 6.1 was limited during this phase of the process, but all activities were supported as needed.

# Performance Target #4: Execute all surveillance activities and exceed dismantlement quantities of retired weapons and secondaries.

B&W Pantex exceeded expectations by completing 99% of weapon base surveillance deliverables which were plagued with anomalies requiring weapon response, 106% of core surveillance deliverables and 120% of planned dismantlements. The fiscal year dismantlement requirements were completed in early August, 2011, nearly two months ahead of schedule.

# Performance Target #5: Develop and populate the component maturation framework to ensure technology insertions for the stockpile.

B&W Pantex met expectations by providing full support to the component maturation framework team through VTCs, face-to-face meeting and data calls. B&W Pantex provided for component need dates, pacing elements to reach TRL7/MRL6, current TRL/MRL status and identifying risk and funding issues.

## Performance Target #6: Meet all critical milestones for the High Explosive Pressing Facility

The B&W Projects and RTBF division provided very good support to PXSO and the USACE through the review and turn-around of requests for information (RFIs) submitted by potential bidders. This support was critical in helping PXSO and the USACE achieve the May 2011 contract award commitment made to NNSA HQ.

The B&W Projects and RTBF division have provided good support to the PXSO in achieving the required DOE Deputy Secretary approval of Baseline Change Proposal (BCP) #35. Since baseline approval, B&W Projects Controls personnel have worked very well with the USACE in attaining and uploading monthly PARS II data in a timely fashion.

## Performance Target #7: Implement the DP governance Plan to streamline operations and oversight in the nuclear security enterprise.

B&W Pantex successfully completed all actions in association with the DP Transformational Governance and Oversight Implementation Plan. These actions include participation in the JORRB process, conducting CAS affirmation self-assessments, and providing an end-of-year governance summary report.

### PO #P-3S Change 1: Component Disposition

B&W Pantex performance was excellent per this Performance Objective.

### **Performance Assessment:**

Performance Target #1: Manage the Component Disposition Program to create additional warehouse space for storage of war reserve items and reduce storage of energetic hazardous materials:

a. Establish baseline of scrap energetic materials items in buildings 12-58, 12-71 and 12-95 and reduce volume by 20%.

B&W Pantex exceeded expectations by reducing material volume 10% more than the 20% expected, for a total reduction in volume of 30%.

b. Disposition, via sanitization or shipment, 35 "PSO boxes" (box, basket, pallet) of weapon components generated from dismantlement operations or excess inventory.

B&W Pantex exceeded expectations for this target by 60 boxes over the 35expected, for a total of 95 PSO boxes.

c. Convert 10% of Legacy components (excluding Reject energetic components) to a Scrap (SC) status in MRP and remark or reissue bar code cards. (9/30/11).

B&W Pantex exceeded expectations by converting 14% more legacy components to scrap than the 10% expected, for a total of 24%.

d. Establish a baseline for Legacy components characterized vs. not characterized (1/31/11).

B&W Pantex met expectations. A total of 2,932 legacy part numbers were analyzed by component engineers. Of these, 1,604 were characterized with 1,328 remaining that require characterization.

e. Characterize 50 of the non-characterized Legacy components (09/30/11).

B&W Pantex exceeded expectations by characterizing 6 more than the expected 50 Legacy components, for a total of 56 components.

f. Establish an estimated cost and schedule for complete characterization of Legacy (09/30/11).

B&W Pantex met expectations. An estimated cost and schedule was developed for the complete characterization of Legacy components. The developed schedule is 100 components characterized per year using one full-time engineer.

Performance Target #2: Sanitize Energetic Materials a. Sanitize all pre-flight controllers in scrap status (approximately 500).

B&W Pantex exceeded expectations. 403 pre-flight controllers were in scrap status at the beginning of FY11. All 403 were sanitized at the firing site.

### b. Sanitize 5 PSO boxes containing flammable solids.

B&W Pantex exceeded expectations by sanitizing 11 more PSO boxes than the 5 expected, for a total of 16 sanitized.

c. 1) For charges generated through 2/21/11, sanitize high explosive main charges generated from B53 dismantlement so that inventory backlog is maintained at less than a three month quantity based on the PCD schedule at the beginning of FY11.

B&W Pantex exceeded expectations. B&W completed the sanitization of B53 HE main charges at a rate that had no back log and tracked evenly with the B53 Program Control Document (PCD).

2) For charges generated after 2/21/11, B&W Pantex will effectively manage the remaining charge inventory to support FY11 V.I.P. tours and NA-47 non-proliferation initiatives. If shipping becomes constrained, or warehouse space becomes inadequate, onsite sanitization or additional created storage via eliminated inventory will occur.

B&W Pantex met expectations. B&W effectively managed the remaining charge inventory by utilizing a charge packaging process for off-site shipment.

Performance Target #3: Microwave Furnace Operations a. Identify the total scope of beryllium (Be) components requiring sanitization.

B&W Pantex met expectations. The total scope of Be components requiring sanitization by the Microwave was accomplished and is reflected in the Microwave melt schedule.

b. Determine and document steady-rate microwave furnace Be sanitization operational capacity by completing Be test melts.

B&W Pantex met expectations. The steady-rate operational capacity determined is 12 lb melt per week.

c. Establish a Be melt schedule based on the Be scope and microwave furnace operational capacity.

B&W Pantex met expectations. A Be melt schedule was developed for all components to be sanitized in the Microwave operation.

Performance Target #4: Disassembly of W31 legacy trainer units a. Complete the W31 legacy weapon trainer first disassembled unit (FDU).

B&W Pantex met expectations. The first FDU was completed on October 27, 2010 without any significant complication.

### b. Disassemble four additional W31 legacy weapon trainer units.

B&W Pantex exceeded expectations by disassembling 5 trainers more than the 4 expected, for a total of 9 disassembled units.

### PO #4S: Production Tooling Upgrade Program

B&W Pantex performance was very good per this Performance Objective.

### **Performance Assessment:**

Performance Target #1: Develop a plan and schedule for performing tooling upgrades; including identification of resource requirements.

B&W Pantex met expectations by providing a production tooling upgrade plan and schedule to PXSO during December 2010 which included possible candidates for tooling upgrades. The plan was upgraded in August 2011 and provided upgrade prioritizations to be used for funding planning and resource allocations for tooling with the highest priority.

### Performance Objective #P-5S: Explosive Technologies (ExT) Program Management

B&W Pantex performance was excellent (i.e., significantly exceeded expectations) per this Performance Objective. The contractor maintained a viable HE Work-For-Others that generated 214% more revenue than FY 10. The contractor established the University of Pantex to support HE operations. The contractor started up two gas guns and completed proof-of-concept tooling, procedures, and successfully pressed two sets of Universal Hemispheres using the Dual Stack Pressing method 2 months ahead of schedule.

#### **Performance Assessment:**

## Performance Target #1: Implement the HE CoE Business Strategy per the approved Execution Plan.

- Enhanced the skill competence of explosive technicians, scientists and engineers by:
  - Established a Basic Explosive Qualification curriculum for personnel to attain, demonstrate and sustain a basic knowledge and skill level necessary to ensure safe explosive operations.
  - o Created the Pantex College of Energetic Materials, Science and Technology which will provide educational opportunities to Pantex Plant personnel.
  - o Improved training qualification status for High Explosive workers from 77% to 94%.
  - Developed a professional development plan for both bargaining and non-bargaining employees to promote career advancement utilizing a variety of resources, such as the University of Pantex.
  - o Consolidated all ExT facility managers in one department and attained qualification for each.
- Executed the FY 11 Business Strategy that resulted in:
  - o Completed 100% of the HE CoE Business Strategy deliverables.
  - o Maintained a viable HE Work-For-Others that generated 214% more revenue than FY 10.
  - Revised the Pantex High Explosives Center of Excellence Business Strategy for FY 11-15. This business strategy supports the NNSA Transformation Initiative and identifies critical steps for being the Center of Excellence in High Explosives manufacturing.
  - Developed the HE Center of Excellence Modernization Plan. The plan highlights the needs of the Pantex Plant to modernize their explosive facilities and to meet the future mission objectives, including both capability and capacity.
- Enhanced Work productivity and efficiency by:
  - O Developed integrated schedules as well as project and design of experiment plans for all PDRD, ESC, HEWO, and Directed Stockpile Work (DSW) deliverables in suitable software. Planned and integrated Work for Others (WFO) work into the ExT integrated schedule in order to level the work load and resources to ensure adequate service to the contract.
  - o Determined resources and populated into ExT Division Integrated Schedule to facilitate budget planning and control for all funding sources.
  - o Established a schedule to review, revise, and upgrade all procedures, DIs, WIs, and PDs to ensure operational safety and facility safety notes and precautions are flowed

- down comprehensively and accurately from the DA specification (or other source document) and are in the appropriate procedure.
- O Developed a template for project plans suitable for development work and engineering projects that captures the essential elements of project management and allows the flexibility necessary for Research and Development (R&D) work.
- Established process maps for each major ExT operating process which supported not only HRO but improved explosive operations.
- Established FCI and MTBF baselines for ExT facilities and equipment for each operating process.
- o The contractor established a Readiness Review Team that would independently review HE operations that met the criteria of PXSO Supplemental Directive, PXSO SD 1A, Conducting readiness Reviews of Hazardous Non-Nuclear Facilities and Activities. The team has completed 5 readiness reviews with this process.
- ExT successfully tested a new Ultra-High Performance Liquid Chromatography (HPLC) for use in surveillance programs and environmental analysis. The instrument was demonstrated to be approximately five times (5x) faster than conventional high performance liquid chromatography equipment (HPLC) and has the added benefit of a nearly ten-fold reduction in overall solvent usage and consequent waste.

Performance Target #2: Approve high explosive operations for the internal and external gas guns to support high explosives safety and mission essential programs.

 Completed start-up of both internal and external gas guns approximately 15% ahead of schedule.

Performance Target #3: Develop proof-of-concept tooling and procedures for pressing multiple main charge high explosives simultaneous in the yoke press.

- Completed proof-of-concept tooling, procedures, and successfully pressed two sets of Universal Hemispheres using the Dual Stack Pressing method 2 months ahead of schedule. Other Notable deliverables include:
  - o Performed bulk density of the parts to validate that the pressed parts would meet Design Agency specification.
  - Additional tooling has been designed and is currently being fabricated. The
    additional tooling will allow B&W Pantex to use the DSP method for production.
    Implementation of the DSP method for production will occur in FY12.
  - o Estimated 60% increase in HE pressing throughput utilizing the DSP method.

### PO #P-6: Core Surveillance Program

B&W Pantex performance was very good per this Performance Objective.

### **Performance Assessment:**

Performance Target #1: Complete FY11 surveillance activities in accordance with the Directive Schedule.

B&W Pantex exceeded expectations by completing 99% of the FY11 base surveillance deliverables in support of stockpile assessment and 106% of total core surveillance requirements. Three base surveillance units were missed due to technical or delivery issues beyond the control of the M&O contractor. (To compensate,) Three additional D&Is were performed for the B61, W88 and W80 Programs. The FY10 HE surveillance backlog was recovered, the High Resolutions Computed Tomography schedule was exceeded by 30% and B&W PX qualified LLNL Pit types for the Coordinate Measurement Machine for the W87, W80 and W84.

Performance Target #2: Provide evidence of completion (written report) for each activity identified in approved IWET plans or deviations as approved by the Federal Program Manager.

B&W Pantex met expectations through Daily Change Report reporting of the status of surveillance activities complete during FY11. Additionally, all required surveillance data was reported through the programmatic Quality Evaluation Report (QER) as scheduled.

#### Performance Target #3: Report FY11 surveillance activities to QERTS.

B&W Pantex met expectations by reporting 100% of FY11 surveillance data to QERTS. The MRP system provided daily updates for D&I and component status, and HE testing was reported upon submission of QERs to NNSA and SNL.

### PO #P-6S: Core Surveillance Program for High Explosives

B&W Pantex met this Performance Based Incentive.

#### **Performance Assessment:**

Performance Target #1: Complete the core surveillance activities as follows:

1. W76-1	cycle 2	(40%)
2. W78	cycle 31	(20%)
3. W78	cycle 32	(20%)
4. W76-0	cycle 32	(20%)

B&W Pantex completed all W76-1 (in parallel with W76-0 Cycle 32) testing and analysis activities with the exception of implementation of the new Onionskin testing. With NNSA approval the W76-1 Cycle 2 Onionskin test was deferred to FY12 pending Design Agency decisions related to the test setup and qualification of the design agency testing equipment.

W78 Cycle 31 testing was completed on 4/19/11.

W78 Cycle 32 testing was completed on 4/19/11.

B&W Pantex completed all W76-0 Cycle 32 (in parallel with W76-1 Cycle 2) testing and analysis activities with the exception of implementation of the new Onionskin testing. With NNSA approval the W76-1 Cycle 2 Onionskin test was deferred to FY12 pending Design Agency decisions related to the test setup and qualification of the design agency testing equipment.

# PO #P-7: Campaigns that Support DSW Work Deliverables (e.g., ADAPT, HEWO, & ESC, PRIDE and QERTS).

B&W Pantex performance was outstanding (i.e., significantly exceeded expectations) per this Performance Objective. The contractor completed all Level 2 ADAPT, HEWO and ESC deliverables. Annual Enhanced Surveillance (ESC) stockpile aging and lifetime assessment to support the TBSTP (MRT L2 #3917) was completed 8 months ahead of schedule. B&W established Mechanical Computer Aided Design (MCAD) capability through use of PDMLink software in the Tooling Design/Manufacturing and HE Design/Manufacturing areas completed 17% ahead of schedule. The contractor completed QERTS enhancements which will allow the NSE to forecast projected surveillance component arrivals at testing sites and availability for component testing (whether the testing is per component or batch test processing), and analyze "what if" scenarios almost 200% ahead of schedule. The contractor effectively managed ADAPT, HEWO, ESC, PRIDE, and QERTS deliverables within 7.35% of their FY11 cost budgets (including documented change approvals).

#### **Performance Assessment:**

## Performance Target #1: Level 2 Milestone Recording Tool (MRT) milestones for approved and funded DSW Campaigns (e.g., ADAPT, HEWO and ESC Program).

- Completed all Level 2 milestones for ADAPT, HEWO, and ESC.
  - O Annual Enhanced Surveillance (ESC) stockpile aging and lifetime assessment to support the TBSTP (MRT L2 #3917) was completed 8 months ahead of schedule. Two other documents were provided to the design labs in support of the L2 3917 milestone (1) Established relationship between PBX 9501 mechanical properties and Estane MW and reported to LANL and (2) Completed evaluation of LX-07 surveillance data and reported results to LANL.
  - Surveillance Diagnostics for Process Qualification (MRT L2 #3921) was successfully implemented and demonstrated use of both 8-beam and 10-beam (multi-probe) PDV approximately 5% ahead of schedule.
  - Advanced Inventory and Materials Management (MRT L2 # 4060) was completed on schedule. This included equipment installation, final walk-downs, equipment demonstrations, and a final report documenting the process development and testing processes. (HEWO)

## Performance Target #2: FY 11 milestones associated with PRIDE Execution Plans.

- An element of this was implementing an upgraded Data Marts technology that allows for a
  more effective external access to Pantex distributed weapons data. The project was
  completed 10% ahead of schedule.
- Established Mechanical Computer Aided Design (MCAD) capability through use of PDMLink software in the Tooling Design/Manufacturing and HE Design/Manufacturing areas. The three project tasks were completed 17% ahead of schedule.
- The contractor converted a total 156 rolls (390,000 pages) of weapons program information to accessible digital format. This resulted in completion of the W88, W78, and W76 Programs. Also, the contractor completed 8% digitization of the B61 program.

- MCAD also performed a Proof of Concept with the HEWO Readiness Predictive
   Optimization project to demonstrate and document the use of the MCAD process in an HE
   environment. This process provides information for the synthesis, formulation, machining,
   and acceptance of HE components and the capture of associated manufacturing data in a
   consolidated product structure within the PDMLink software (establishing a single source for
   the query of this data).
- The contractor reduced the security risk through the elimination of the classified laptops by completing the implementation of the CASTLE-PX application on the Pantex Classified Network from stand-alone classified laptops including data transfer of B83, W84 Sigma, W76, and Site SAR into the new Network application.
- Established the Federated Server technology which is a Proof of Concept that will be expanded to allow delivery across the NSE of information stored in varying formats and located at multiple sites to users in a more efficient and effective manner.

Performance Target #3: Enhance the current QERTS management information system to allow the user to forecast cost, scope, and schedule impacts as well as "what if" NSE-wide scenarios that supports DSW Campaigns contingency planning.

 Completed QERTS enhancements which will allow the NSE to forecast projected surveillance component arrivals at testing sites and availability for component testing (whether the testing is per component or batch test processing), and analyze "what if" scenarios almost 200% ahead of schedule.

Performance Target #4: Completion of all Execution Plans in which schedule and cost are managed within +/-10% variance (0.9-1.1) including timely updates related to cost, scope and schedule.

• Effectively managed ADAPT, HEWO, ESC, PRIDE, and QERTS deliverables within 7.35% of their FY11 cost budgets (including documented change approvals).

### PO #P-8: Weapon Quality Assurance Program

B&W Pantex performance was very good per this Performance Objective. The contractor exceeded Certificate of Inspection (CoI) and Non –CoI's by 20%. Also, B&W performed Product Quality Engineering design agency definition flow down reviews for two weapon programs, two JTAs, and one Test Bed; 150% above expected deliverables. However, corrective actions which verified stamping, packaging and shipping issues were less than adequate. An example was the JTA stenciling error in which our customer, DoD found the problem and mislabeling of RTG's that were shipped to LANL.

### **Performance Assessment:**

Performance Target #1: Maintain a rigorous B&W Pantex Certificate of Inspection (CoI) program, including hold point inspections and product acceptance stamping, that confirms delivered products meet NNSA quality requirements and incorporates the principles of continuous improvement.

Conducted 2,059 CoIs and 2,986 Non-CoI Hold point inspections in FY11. This was 20% above expected targets.

## Performance Target #2: Perform Product Quality Engineering design agency definition flow down reviews for B&W Pantex weapon and weapon related products in FY11.

 Performed Product Quality Engineering design agency definition flow down reviews for two weapon programs, two JTAs, and one Test Bed. This was 150% above expected deliverables.

## Performance Target #3: Perform Quality Implementation Reviews outside of the Quality & Performance Assurance Division.

Performed the following Quality Implementation Reviews (QIR) on B&W Pantex organizations during FY11 to validate compliance to adopted quality requirements as defined in WI 02.03.14.01.13 per the Quality Implementation Review Program (QIRP) included Facility Operations & Infrastructure, Service Subcontracts; Inventory Planning and Control; IT Application and Date Management; and Project Support. The overall quality health of these organizations reviewed was determined to be excellent.

Performance Target #4: Perform an Independent Assessment which includes a verification that corrective actions implemented to address cancellation stamping, packaging and shipping issues were appropriately completed and effective in resolving the issues.

- The contractor completed numerous independent assessments that included:
  - o Completed an Independent Assessment to determine the effectiveness of Marking, Stamping, and Shipping Issue Resolution/Process Improvements.
  - o Seven (7) Contractor Readiness Reviews.
    - B53 Non-nuclear.

- 12-86 Laser Gas Sampling System (LGSS).
- Electrical Test/Radioisotopic Thermoelectric Generator (RTG) Repackaging.
- B61 Hi-Fidelity Joint Test Assembly (HiFi JTA) Postmortem.
- **(b)** 3 Stage Right.
- B53 End Cap.
- B53 Secondary Extraction.
- Completed an Independent Assessment of Integrated Pump and Fill Station.
- The contractor commissioned a team to evaluate SNM Division operations primarily in Zone 12 to included procedure adequacy, procedure adherence, training, component identification and marking, and other aspects of formal conduct of operations. This independent review found numerous opportunities to improve the overall effectiveness of SNM Operations.
- However, corrective actions which verified stamping, packaging, and shipping issues were
  less than adequate. Examples include the JTA stenciling error; mislabeling of RTG's that
  were transported to LANL; and a shipment of unclassified parts to Savannah River Site
  where Engineering Use Only stamping had not been appropriately applied.

## Performance Target #5: Ensure B&W Pantex QC-1 survey issues are normalized and analyzed for issue rates

- NNSA Quality Assurance Survey (QAS-1) found the contractor's Weapon Quality Assurance Program to be effectively implemented with no findings or deficiencies. The NNSA team found two noteworthy practices and thirteen positive comments.
- QAS-2 on B&W PX/PXSO Acceptance Stamping Delegation & Hold Point Program that resulted in Delegation of acceptance stamps to B&W Pantex continued through December 31, 2012.

### PO #P-9: Nuclear Materials Program Management

B&W Pantex performance was excellent (i.e., significantly exceeded expectations) per this Performance Objective. The contractor provided exceptional leadership and customer service to PXSO and NA-12 in the development of the Pre-decisional Pantex Material Staging and Storing Study. The contractor prepared and provided essential scope, cost and schedule input to the effort in support of a substantially compressed schedule. Also, the contractor completed necessary facility enhancements to allow for increased pit storage in Zone 12 South. Communication between the contractor and PXSO was transparency and timely. Finally, B&W updated two Nuclear Material Program Plans, one for Pantex and the other for DOE, approximately 10% ahead of schedule.

### **Performance Assessment:**

Performance Target #1: Implementation of nuclear safety, quality assurance, and other applicable technical documents or standards that results in a safe, secure and effective planning and management of nuclear materials requalification, surveillance, and storage.

- The contractor provided exceptional leadership and customer service to PXSO and NA-12 in the development of the Pre-decisional Pantex Material Staging and Storing Study. The contractor prepared and provided essential scope, cost and schedule input to the effort in support of a substantially compressed schedule. The action resulted in a comprehensive report comparing various options and recommending a path forward that best balances risks and costs. A significant amount of the contractor's resources were spent on this initiative which resulted in a decision to develop a Mission Needs Statement/CD-0.
- The contractor provided quarterly Nuclear Explosive Facility Utilization Reports to PXSO.
   The reports were of excellent quality and which continue to enhance nuclear material program management.

Performance Target #2: Develop and implement facility enhancements and nuclear safety basis documents that support an increase in Pantex's ability to store pits.

• The contractor completed necessary facility enhancements to allow for increased pit storage in Zone 12 South. The contractor completed the Readiness Assessment (RA) including closure of both pre and post starts findings. The PXSO RA was completed in September.

Performance Target #3: Provide timely cost, scope and schedule updates, including updates when Change Control Requests are submitted to PXSO. Provide timely updates related to baseline or programmatic approved documents.

 The contractor provided frequent ongoing communications to PXSO regarding nuclear material program management activities and projects. Interactions and communication included weekly reports, weekly meetings, and monthly nuclear material program reviews. The monthly nuclear material program reviews with PXSO included project status and any required updates to the various start-up activities.

Performance Target #4: Update the Nuclear Materials Management Plan to describe the use of the material and equipment necessary to deal with credible breached pit contingencies e.g., the use of a glove box, portable containments, etc.

The contractor updated two important Nuclear Material Management Plans that included:

- Pantex Nuclear Materials Management Plan to PXSO which was completed approximately 10% ahead of schedule.
- The Nuclear Materials Management Plan (NMMP) that is an element of the DOE larger Nuclear Materials Management Plan was submitted 12% ahead of schedule.

### PO #P-10: SNM Operations

B&W Pantex performance was very good per this Performance Objective. 107% of the deliverables identified in the Nuclear Materials Task Plan were completed with zero safety and security issues encountered. The baseline schedule was exceeded in the following areas: 160% SI Unpack; 156% FL Pit Packaging; 150% W80 CMM; and 112% H1616 Reservoir Packaging. In an effort to become an HRO, the SNM Division took the lead by becoming the first organization to perform a "deep dive" into their processes and by developing the barrier analysis methodology that will be utilized by other divisions in future fiscal years. Communication between the contractor and PXSO was transparent and timely. However, the contractor was significantly behind schedule (only met 1/3 of the production deliverables) on Laser Gas Sampling. If it wasn't for a change in the baseline schedule in September, the contractor would not have met the production schedule. Also, the contractor only completed 76% of the Pit Requalification deliverables.

### **Performance Assessment:**

Performance Target #1: Develop and implement technical, business and work place culture initiatives that will result in an improvement of formality of SNM operations while achieving scheduled milestones without any degradation in safety, security, and quality assurance systems with an emphasis on the following deliverables: a) Conduct the technical and conduct of operations reviews that will be completed with the performance period (Reservoir bay operations, SI packaging, SI Surveillance, and FL Container Packaging); and SNM Operations department manager and SNM PSM conduct monthly ISM Work Place surveillances focusing on formality of operations. Document the assessments in the Q&PA database.

- In an effort to become an HRO, the SNM Division took the lead by becoming the first organization to perform a "deep dive" into their processes (i.e. IFPS) and by developing the barrier analysis methodology that will be utilized by other divisions in future fiscal years. The results of this analysis and methodology will be used by other contractor organizations as HRO is implemented across the Pantex Plant.
- The contractor completed an independent assessment of the SNM Division.
- B&W Pantex upgraded the level of use of six procedures in the SNMCRF which resulted in dramatic improvements in formality of operations in that facility.
- Due to several incidents in SNM Operations involving formality of operations events, the B&W General Manager had to convene an independent team to conduct a comprehensive CoO review of SNM Division activities with the objective of identifying opportunities for further improvements.
- Completed all monthly ISM Work Place surveillances on schedule and entered into the Quality and Performance Assurance (Q&PA) database

## Performance Target #2: Provide timely communications to PXSO of operations and operational issues

- Over the last year, the contractor made significant improvement in timely communications
  with PXSO involving Plant operations and operational issues. In the spirit of Governance
  where the contractor is upfront with issues, B&W made exceptional progress to verifying that
  PXSO was aware of emerging issues. This was a dramatic change from last year. Some
  examples include:
  - o SNM Division Weekly Report.
  - o Weekly meetings with PXSO (Assistant Manager and Facility Representatives).
  - o Prompt phone dialogue upon identification of an operational issue.
  - o Monthly SNM project and status meetings.

#### Performance Target #3: Complete FY11 baseline scheduled deliverables.

- 107% of the deliverables identified in the Nuclear Materials Task Plan were completed with zero safety and security issues encountered. The baseline schedule was exceeded in the following areas:
  - o 160% SI Unpack.
  - o 156% FL Pit Packaging.
  - o 150% W80 CMM.
  - o 112% H1616 Reservoir Packaging.
- One significant accomplishment was the modification of a shipping container (H1700) for
  use as handling gear for Limit Life Component (LLCs) exchanges between NNSA and DoD.
  The approved container was used to package and ship the first set of RTGs to the military in
  July; meeting an NNSA deliverable for first-time shipment of RTGs as LLC items. In
  addition, procedures were developed and approval received to perform H1700 container
  refurbishment/reacceptance onsite, generating costs savings for the NNSA and further
  expanding B&W Pantex's container management capabilities.
- On the other hand, the contractor was significantly behind schedule (only met 1/3 of the production deliverables) on Laser Gas Sampling. If it wasn't for a change in the baseline schedule in September, the contractor would not have met the production schedule. Also, the contractor only completed 76% of the Pit Requalification deliverables.

### PO #P-11S Change 1: Packaging and Transportation Program Management

B&W Pantex performance was very good per this Performance Objective. The contractor completed 111% planned OPT CSA shipments. Also, the contractor prepared a thorough DT-23 procedure which was approved by NNSA OPT as well as prepared the DT-20 procedure which was transmitted to OPT for approval. However, the contractor was less than successful in shipments off-site which were a re-occurring event from FY 10. Corrective actions taken in FY 10 were not as effective as originally planned. Approximately 50% (14 out of 27) of the off-site shipping errors were in Categories 1 through 4 (Weapon, Radiological, and Explosive components or materials) where the expectation was zero.

#### **Performance Assessment:**

Performance Target #1: Implement DT container reconditioning/annual maintenance/recertification capabilities for DT-20 and DT-23 per the approved schedule.

- The contractor prepared a thorough DT-23 procedure which was approved by NNSA OPT.
- In addition, the contractor prepared the DT-20 procedure which was transmitted to OPT for approval.
- Procedures for the DT-20 container required tooling modifications to the Bell Jar which were completed approximately 10% ahead of schedule.

Performance Target #2: Complete all PCD milestones associated with CSA Shipments within  $\pm 10\%$  (0.9-1.1) schedule performance including timely updates related to scope and schedule.

• Completed 111% planned OPT CSA shipments

Performance Target #3: Continuous improvement of the Packaging and Transportation Program for both on-site and off-site that leads to a reduction of critical movement errors (e.g., violation of a facility material inventory limits, movement without move right authorization).

- In FY11 approximately 46,453 items were successfully moved on site using the Move Right System, with four errors, for an accuracy rate of 99.991%.
- The contractor was less than successful in shipments off-site which were a re-occurring event from FY 10. Approximately 50% (13) of the off-site shipping errors were in Categories 1 through 4 (Weapon, Radiological, and Explosive components or materials) where the expectation was zero. Examples include the JTA stenciling error; mislabeling of RTG's that were transported to LANL; and a shipment of unclassified parts to Savannah River Site where Evaluation Use Only stamping had not been appropriately applied.

### PO #P-12S: Reimbursables Program Management (WFO)

B&W Pantex performance was very good per this Performance Objective. The contractor performed very good in the WFO/Reimbursable work activities. The contractor enhanced WFO/Reimbursable work planning resulted in improved productivity and efficiency. Effectively managed 93 FY11 Reimbursable/WFO agreements within the mutually agreed upon period of performance.

#### **Performance Assessment:**

Performance Target #1: Implementation of nuclear safety, quality assurance, and other applicable technical documents or standards that results in a safe, secure, and effective planning and management of the WFO program.

- Enhanced WFO/Reimbursable work planning resulted in improved productivity and efficiency. Examples include:
  - O Revised and published three WIs governing the Reimbursable/WFO Program to provide clarity for WFO processes and to implement improvements, such as improving the approval and closure process. The changes strengthened and streamlined the overall process and corrected issues in two extremely important aspects of the WFO program. Four additional forms were revised and published to streamline and provide efficiencies for the Reimbursable/WFO program management processes.

Performance Target #2: Continuous growth of Pantex WFO that supports or compliments Pantex core competencies in explosives, nuclear material management, training and manufacturing.

- Increased WFO Program value by \$200K.
- Completed five ICOs (\$241K) which supported specific weapons operational requirements for the NSE. In addition, seven commercial HE agreements (\$757K) were completed for entities external to the NSE, including the DoD, Stresau Laboratory, and Reynolds Systems.
- In FY11, B&W Pantex continued to expand the WFO Program to share Pantex's extensive experience, knowledge, and capabilities in functional areas beyond HE activities, including:
  - o Weapons of Mass Destruction (WMD) training
  - o Nuclear Incident Response training and exercise(s) support
  - o Nuclear Incident Response support for the NCAA Men's Final Four, MLB World Series, and All-Star Game.
  - o HRO and Causal Factors Analysis (CFA) training
  - o Safeguards and Security Oversight Committee support
  - o Atomic Weapons Establishment (AWE) Weapons Systems support
  - o Intelligence activities including training and support
  - o DOE Explosives Safety training
  - Nuclear Surety Training NSTE-276 "Pantex Facility Safety Systems for the NES Community."

Performance Target #3: Completion of the Work Order package/document in which schedule and cost are managed within +/-10% variance including timely updates related to cost, scope and schedule.

• Effectively managed 93 FY11 Reimbursable/WFO agreements within the mutually agreed upon period of performance. Two percent of the agreements required an extension to the period of performance to resolve invoice issues with the sponsor. There were no changes in scope to any of the agreements processed in FY11.

Performance Target #4: Enhance current WFO management work processes that results in process improvements within the Pantex Plant.

 B&W Pantex streamlined and improved the Reimbursable/WFO closeout process to provide quicker response in closing contract and to begin removing stale funding from the books.
 Fifteen stale funding contracts were closed in the month of August alone due to the process changes.

# PO #P-13S: Glove-Box start-up that supports the Pit Contingency chapter of the Nuclear Materials Management Plan

B&W Pantex performance was excellent (i.e., significantly exceeded expectations) per this Performance Objective. Due to the age of the glovebox, startup was a difficult challenge. The contractor developed and implemented a Feasibility Study and Execution Plan. Both documents were found to be of high quality and thoroughness. Within the Feasibility Study, the contractor developed a comprehensive Work Breakdown Structure which facilitated the "Make or Buy" decision. The contractor developed complex Process Maps including complete Process Safety Systems and Barriers. In addition, B&W conducted a review of the existing facility and weapons DSAs. To support breached pit contingencies of which one scenario involved significant amounts of HE, the contractor developed and implemented a Secondary Containment Tent. This included development of plan that included photographs, procedures, training, and all associated support documentation regarding the tent set-up and configuration including field demonstration. Finally, the contractor completed Secondary Containment Tent Training and Qualification of Personnel as well as Tent Procedures approximately 12% ahead of schedule.

### **Performance Assessment:**

Performance Target #1: Development of an execution plan that describes cost, scope and schedule including breach pit definition once the feasibility study has been approved by PXSO.

- Completed Feasibility Study and Execution Plan. Both documents were found to be of high quality and thoroughness. The execution plan included scope, cost, and schedule for the Option 1 activities (as defined in the feasibility study and execution plan) remaining in FY11, and the breached pit definition, as required by the PO.
- Developed a Work Breakdown Structure (WBS) dictionary for each of the major WBS elements under Options 1 and 2B. The dictionary included the sub-element scope descriptions, associated deliverables, and milestones for each element. Option 2B activities are also described in the WBS dictionary and, along with the schedule, include pre- and post-breach activities. The Option 1 and 2B activities were discussed with the appropriate team members and agreement was achieved on the scope and deliverables, as noted by the signatures on the execution plan.

Performance Target #2: Development of process maps that includes safety systems and barriers. Conduct of a technical review of existing facility and weapon Document Safety Analysis and Safety Management Programs to determine if additional nuclear safety documentation is required.

- Developed complex Process Maps including complete Process Safety Systems and Barriers.
- Developed a process map of steps anticipated for the receipt, processing, and removal of the breached items in the glovebox containment system. For each step in the process map, a detailed list of the safety systems and barriers was created.
- In addition, conducted a review of the existing facility and weapons DSAs. This review was completed with Authorization Basis (AB) department personnel input in advance of its

planned duration in the schedule to assist in the preparation of the Glovebox Feasibility Study (GFS). To support preparation of the GFS, the DSAs were reviewed to determine the type and severity of postulated insults to pits that could result in a breach. To complete this portion of the PO, it was confirmed that glovebox operations were not included in the current DSAs and that it would need to be evaluated as a new operation, if required as response to a breached item. The required tasks have been planned and discussed with the AB personnel, and are included in the Option 2B schedule and detailed in the WBS Dictionary.

Performance Target #3: Identification of equipment that will be used to directly and indirectly to support glove box barriers. Developed a comprehensive equipment identification list which will be used to support glovebox operations. Most items that were identified were parts of the Glovebox (Tooling No. 000-2-647), Glovebox Base (Tooling No. 000-2-648) and Glovebox Controller (000-2-740) that created the confinement and ventilation systems and associated controls, as was expected for this type of system. This was a unique challenge due to the age of the glovebox.

## Performance Target #4: Demonstration of the set-up and operation of a secondary containment tent.

The contractor developed and implemented a Secondary Containment Tent startup. This
included development of plan that included photographs, procedures, training, and all
associated support documentation regarding the tent set-up and configuration including field
demonstration.

# Performance Target #5: Training and qualification of glove box and containment tent personnel on procedures or other applicable management systems.

- Completed Secondary Containment Tent Training and Qualification of Personnel approximately 12% ahead of schedule.
- Completed Glove-box personnel training and qualification.

## Performance Target #6: Develop and implement glove box, containment tent and facility procedures for safe and secure operations.

- Completed Containment Tent Procedures 12% ahead of schedule.
- Completed Glove-box Operational Procedures.

### PO #P-14: Stockpile Services

B&W Pantex performance was very good per this Performance Objective.

#### **Performance Assessment:**

## Performance Target #1: Develop a Stockpile Services Program Management Plan by 06/30/11

B&W Pantex met expectations by publishing a Stockpile Program Management Plan on June 30, 2011 as scheduled. The plan identifies key work performed at Pantex within the Production Support (PS) and Management Technologies Program (MTP) as scheduled.

## Performance Target #2: Develop a common set of metrics for Production Support and MTP by 03/31/11

B&W Pantex substantially exceeded expectations by supporting all NNSA sponsored activities to develop a NSE common set of metrics for PS and MPT. On its own initiative B&W developed and proposed a set of metrics to PXSO and the Federal Program Manager that allows NNSA to better understand work performed and measure PS and MTP.

## Performance Target #3: Demonstrate the ability to integrate key components from KCP, Y12 and SRS component schedules with the Pantex Production schedule by 09/30/11.

B&W Pantex exceeded expectations by writing a B53 CSA component and HSC schedule for Y-12 in May, a W76 SRS Reservoir component delivery schedule in July, and a KCP W76 AF&F schedule in September. These activities demonstrate production schedule integration. Additionally, they provide the added benefit of being able to predict and resolve schedule conflicts before they impact production output.

### PO #P-15S: Requirements Modernization and Integration (RMI) Project

B&W Pantex performance was excellent per this Performance Objective.

### **Performance Assessment:**

#### **Performance Target #1:**

Provide resources to complete remaining FY2010 High Priority Work IAW the Lead and Sub Team detailed schedules.

B&W PX exceeded expectations by fully supporting the remaining FY2010 High Priority Work (as defined in the RMI Project Execution Plan, Rev. 4) with additional personnel to perform content inspections, consolidate comments, and write content modifications. The RAC approved Gate 3 for R001 (Product Realization) and R006 (Integrated Phase Gates), allowing them to go forward to Site Impact Analysis and imminent implementation at the plants. B&W Pantex completed multiple concurrent Site Impact Analyses on-time to support the RMI Project deliverables.

#### **Performance Target #2:**

Charter additional Lead or Sub teams to begin the FY2011 & FY2012 High Priority work identified as resources become available.

B&W PX significantly exceeded expectations by supporting over twenty different teams for developing RMI content – some of which was designated as High Priority work for FY2011 and FY2012. One member went above and beyond by seeking opportunities to correct a serious gap in component disposition that is not in the defined dismantlement process.

#### **Performance Target #3:**

Provide resources to complete the FY2011 High Priority work IAW the Lead and Sub Team detailed schedules as resources become available.

B&W PX exceeded expectations by supporting over twenty different teams. These teams contributed to completion of RMI content designated as High Priority work for FY2011. As a result, the RAC approved Gate 3 for Reviews, Gate 2 for Project Guidance, and Gate 1 for Produce and Maintain.

#### **Performance Target #4:**

Conduct RMI Gate Reviews on a monthly basis to ensure successful completion of FY10, 11 and FY12 High Priority work identified by the Lead and Sub Teams.

B&W exceeded expectations by fully supporting RMI monthly gate reviews and RMI Lead and Sub-team priority work. This required monthly travel to Albuquerque, oversight of multiple team members working on a variety of content creation, document review and gate package review. In some instances, coordination with the Site Office RAC member was required and performed in a comprehensive and detailed approach.

### **Performance Target #5:**

Deliver consolidated comments on RMI content with proposed solutions, duplicates removed, conflicting comments resolved IAW the Lead and Sub Team schedule.

B&W Pantex exceeded expectations by fully supporting the FY11 reviews of RMI content with proposed solutions and participated in comment resolution and document modifications. B&W Pantex also provided additional personnel to perform content inspections, consolidate comments, and write content modifications.

# PO #P-16 Change 2: Documented Safety Analysis (DSA) Upgrades and Improvements

B&W Pantex performance was very good per this Performance Objective.

### **Performance Assessment:**

## Performance Target #1: PXSO concurrence of DSA FY11 workload plan by October 31, 2010.

B&W Pantex met the standards of performance for this performance target. B&W Pantex provided PXSO a FY11 Authorization Basis Work Plan in time to meet the performance target date of October 31, 2011. There were a number of issues PXSO identified with the Plan, the most important of which involved issues with the quality improvement initiative. Since the quality of the initial version of the plan did not meet PXSO expectations, B&W revised the Plan and PXSO concurred with it two weeks after the target date. The quality improvement initiative is criticality important to maintaining nuclear safety at the Plant. The AB Work Plan was not maintained/updated throughout the year as issues/anomalies arose that required shifting resources, which makes it difficult to judge how successfully the plan was accomplished. However, a substantial number of unforeseen issues were worked/addressed throughout the year; 8-ESSs, 4-JCOs, and a number of time critical DSA changes necessary to support the mission. Most of the Quality criteria established by B&W in the Plan and concurred with by PXSO were completed early this FY; however, since that time there have been a number (~8) of change packages that have had significant issues, but no corresponding Quality Improvement Notices were developed to disseminate lessons learned as committed to by the quality improvement initiative.

## Performance Target #2: Accomplishment of the PXSO approved integrated DSAUGI Project Plan.

B&W Pantex *substantially exceeded the standards of performance* for this performance target. B&W was extremely engaged in preparing the Documented Safety Analysis Upgrade Initiative (DSAUGI) to ensure the long term viability of the Pantex Safety Envelop. They worked with the Site Office, the subject matter experts, the end users, and others to ensure that they addressed as many concerns as possible with the current state of the DSA. To ensure the DNFSB was aware of, and did not object to, the as envisioned DSAUGI effort, B&W presented their draft proposal to the DNFSB Staff during a site visit early in the project. B&W demonstrated enormous flexibility in revising the Plan and establishing a schedule for providing the DSAUGI Modules for PXSO approval. Additionally, B&W worked with the Design Agency to secure their support on modifying CASTLE to align with this effort. Finally, B&W developed an internal Guidance Document covering this project as an additional mechanism to ensure success. B&W provided a clear and easily understandable year end status report which also identifies additional issues for consideration in the next FY.

Performance Target #3: Number of legacy COAs, TRCs, and Pis resolved by September 30, 2011.

B&W Pantex satisfactorily met the standards of performance for this performance target. B&W developed a FY11 Authorization Basis Work Plan outlining how the Technical Review Comments (TRCs), Legacy Conditions of Approval (COAs) and Planned Operational and Safety Improvements (PIs) would be resolved this FY. Although DSA Annual Updates were prepared and sent to PXSO, only ~50% of the COAs and TRCs were addressed. Most of these legacy COAs have been in existence for many years and the TRCs represent known errors in the DSA. The PIs that are within control of B&W have also been known for many years. In line with our High Reliability Organization objectives and understanding that B&W must prioritize resources to best meet the mission, it seems that more focused management attention is necessary to resolve these issues so that errors or misunderstandings are not propagated throughout the DSAs over time. However, B&W has recently made a concerted effort to coordinate the accomplishment of a number of objectives that require DSA changes to make better use of their limited resources, thus accomplishing as much or more within their budgetary restraints.

### PO #P-17S: Operations Systems Development and Integration (OSD&I) Project

B&W Pantex performance was satisfactory per this Performance Objective.

## **Performance Assessment:**

Performance Target #1: Complete FY11 Milestones in the OSD&I Project Plan and receive CD-2/3 approval from the NNSA Co-acquisition executives by 9/30/2011.

The contractor met overall cost requirements, did not meet the original schedule requirements due to communication issues with its subcontractor and NNSA, and met technical performance requirements although multiple configuration management and traceability issues were identified. While steps have been taken to address communication, organizational, and schedule concerns, it is anticipated that the outcome of these efforts will not materialize until FY12. This results in a low satisfactory rating for the FY11 OSDI performance element.

#### PO #P-18S: Accelerated W76-0 Dismantlement

B&W Pantex met this Performance Based Incentive.

### **Performance Assessment:**

Performance Target #1: Complete accelerated (above current FY11 Pantex Production Baseline) W76-0 dismantlement as follows:

- 1. Accelerate W76-0 Dismantlement by 27% (Fee amount to equal \$240,000)
- 2. Accelerate W76-0 Dismantlement by an additional 9% (Fee amount to equal \$80,000)
- 3. Accelerate W76-0 Dismantlement by an additional 9% (Fee amount to equal \$80,000)
- 4. For each additional W76-0 dismantlement completed above the 45% target, \$15,000 of additional fee will be earned up to an additional \$150,000.

B&W Pantex accelerated W76-0 dismantlements by 44% above the FY11 Pantex Production Baseline. Additionally, the W76-0 Disassembly for Life Extension Program Conversion (DISLEP) were also accelerated by 37% above the FY11 Pantex Production Baseline.

#### PO #O-1 Change 1: Nuclear Facility Safety System Upgrades

B&W Pantex performance was very good per this Performance Objective.

#### **Performance Assessment:**

#### Performance Target #1.1a

B&W Pantex *exceeded performance* for this performance target. B&W Pantex updated the Lightning Protection Project Plan and obtained PXSO approval this FY. The Project Plan, upon update, clearly communicates what has been accomplished, and the detailed actions and dates for completion of the remaining activities.

### Performance Target #1.1b

B&W Pantex *substantially exceeded performance* for this performance target. B&W Pantex first had to locate a company capable of performing the required analysis to characterize the internal electromagnetic environment for Pantex nuclear facilities. Once they acknowledged that Boeing could, based on presentations to the B&W and the Site Office, perform the work, the next hurdle was to determine a funding source. B&W accomplished that and currently has a contract in place with Boeing to complete the analysis.

#### Performance Target #1.1c

B&W Pantex *exceeded performance* for this performance target. B&W Pantex is progressing with the evaluation of multi-point grounding in accordance with the PXSO approved latest revision of the Lightning Project Plan.

#### Performance Target #1.2a

B&W Pantex *exceeded performance* for this performance target. B&W Pantex completed the design of the new ESD footwear continuity checker, performed in place run time evaluations for operability and improvements, and then completed the final design and began ordering new units. Currently 10 checkers are on order.

#### Performance Target #1.2b

B&W Pantex *exceeded performance* for this performance target. B&W Pantex completed the plan for installation of the footwear checkers coordinated with the facility operations to make best use of resources, minimize facility downtime, and attain the necessary enhancement to safety.

#### **Performance Target #1.2c**

B&W Pantex *substantially exceeded performance* for this performance target. B&W Pantex completed the Statement of Work associate with the installation of the footwear checkers coordinated with the facility operations to make best use of resources, minimize facility downtime, and attain the necessary enhancement to safety. In addition, they accomplished the installation of two new footwear checkers.

#### **Performance Target #3**

B&W Pantex *exceeded performance* for this performance target. B&W Pantex completed the installation of the 6 NUM-1B hoists (i.e. the remaining on site inventory of new hoists) this FY. The facility down time was coordinated with operations to minimize mission interruption.

### **Performance Target #4**

B&W Pantex *exceeded performance* for this performance target. B&W Pantex completed the necessary repairs to satisfy the seismic outlier issues in six facilities this FY. The facility down time was coordinated with operations to minimize mission interruption.

#### Performance Target #5.a

B&W Pantex *substantially exceeded performance* for this performance target. B&W Pantex performed bond wire inductance testing using their own equipment and personnel while overcoming equipment issues, to successfully complete the testing in thirteen facilities (results indicate which bonds are intrinsically bonded to rebar and no longer require additional bonds).

#### Performance Target #5.b

B&W Pantex *substantially exceeded performance* for this performance target. B&W Pantex performed bond wire inductance testing and completed the reports for the 13 tested facilities. Additionally, B&W completed the necessary field modifications on 8 of the facilities.

#### **Performance Target #5.c**

B&W Pantex *substantially exceeded performance* for this performance target. B&W Pantex performed bond wire inductance testing and completed the work packages for 8 of the 13 tested facilities.

#### Performance Target #6

B&W Pantex *exceeded performance* for this performance target. B&W Pantex completed the replacement of deluge valves in 12-84 Bays, 3, 5, &6 this FY. The completed work orders were reviewed PXSO and it was determined that they provided objective evidence of the completed work. This completes the replacement of all seven deluge valves in 12-84 East.

### Performance Target #7

B&W Pantex satisfactorily met the standards of performance for this performance target. The intent of this performance objective was to eliminate the need for humans to perform Fire Watch activities if the Fire Suppression System was unavailable. This requires both the evaluation of the combustibles in the facility, an update to the Combustible Loading Disposition documents, and the implementation of any required changes to the processes and facility to actually use the "safe havens."

At the Mid-year PXSO appraisal, B&W Pantex was briefed that;

"There are instances where B&W focus appears to have been on delivery of the Performance Targets rather than on completion of Performance Objectives (PO). This creates the potential for "paper success" but not successful accomplishment of the objective. Successful implementation of certain objectives should be an innate expectation of the completion of the Performance Objective. Examples include:

- Complete required CLD updates for the B61, B83, and W84 nuclear explosive weapon programs. "

After the Mid-year, this PO was changed to reflect what B&W Pantex determined they could actually accomplish based on our feedback. Subsequently, fire modeling has been completed for the B61, B83, and W84 weapon programs. The CLDs for B61, B83, and W84 have been revised to capture the stand-off requirements on the fire modeling. The thermal response of various components provided by the labs was used in the FDS fire models. These fire model files have been attached to ESD-005 and placed in Classified OPTIX. A review was performed on these files to ensure accuracy. The model inputs such as facility size, ventilation, and physical properties were consistent with actual field conditions. The output files were reviewed to ensure the values were reasonable and that no error codes resulted from the calculation run. Also, hand calculations and a CFAST model were performed to predict the hot gas layer temperature in the bay with a 1000kW fire. The results of these calculations showed similar temperatures (166-194°C) to the FDS model thermocouples after a 25 minute fire. The comparison calculations and the fire model review provides reassurance that the FDS model results have been accurately calculated.

After revision, this PO also specified the full implementation of the CLDs for W76 program cell activities. This implementation included a review of the weapon procedures to integrate stand-off requirements at each hold step. Changes have been made to the NEOPs in order to have a fire safe configuration after each stopping point; however, there are some facility modifications that are still needed to actually use the W76 "safe haven." These are identified as removal of the task exhaust hose when not in use, wrapping the hoist pendent in a fire retardant fabric, and coating the emergency light with an intumescent coating. These have not been fully implemented as expressed in the B&W Pantex end of year Self-Assessment; however, these final activities are dependent on funding availability.

## PO #O-2: Contractor Assurance System (CAS)

B&W Pantex performance was very good per this Performance Objective. The contractor provided exceptional CAS support which included: disposition 30 directives; disposition of 12 specific directives by NA-10; Supported S-2 initiative in evaluating seven (7) directives. B&W completed 100% of the TSR, Safety Management Program, and Prime Contract List B assessments. The reviews were thorough and of high quality. The contractor provided a draft CAS Assessment Risk Model and Assessment Schedule approximately 10% ahead of schedule. Finally, B&W Pantex provided the final (baseline) FY12 CAS Assessment Risk Model and Assessment Schedule (Primavera) to PXSO for sufficient time for PXSO to develop the Pantex Site Integrated Assessment Plan.

#### **Performance Assessment:**

Performance Target #1: Governance Improvement Initiative: a. Schedule and administratively support meetings of the Joint Operating Requirements Review Board (JORRB). Based on operating experience of the JORRB, revise the charter to incorporate the lessons learned, and when possible, institutionalize the JORRB in Pantex procedures approved by PXSO. Technical evaluations submitted to the NNSA/HQ EORRB Executive Operations Requirements Review Board (EORRB) will be of sufficient quality, thoroughness, and completeness that "re-work" will be minimized.

- Supported the Pantex JORRB that dispositioned 30 directives.
- As directed by NA-10, Pantex completed disposition of 12 specific directives.
- Supported S-2 initiative in evaluating seven (7) directives. B&W provide exception support and leadership in reviewing draft Orders.

Performance Target #2: Assessments Planning and Execution: a) Using the CAS, assess contractor requirements from 20% of the DOE Orders and Manuals listed in Attachment 1 of DOE Order 410.1. (Note: There are 11 orders and manuals applicable to B&W Pantex in DOE Order 410.1); b) Using the CAS, assess at a minimum 20% of the TSR controls in the Pantex Documented Safety Analysis (DSA), including administrative controls, specific administrative controls, surveillance requirements, and in-service inspections; c) Using the CAS, assess at a minimum 20% of the Safety Management Programs (SMPs) in the DSA (i.e., Chapters 6 through 18); d) Select a "Smart Sample" of List B directives and, using the CAS, assess the contractor requirements contained in the selected directives; e) Provide DRAFT B&W Pantex CAS Assessment Risk Model used for FY12 CAS assessment planning by 8/17/11; and f) f. Provide final B&W Pantex CAS Assessment Risk Model used for FY12 CAS assessment planning and FY12 CAS Assessment Schedule (Primavera) by 9/30/11.

- Completed assessments of Supply Chain Management (Packaging & Transfer/Transportation) and Engineering (Facility Safety).
- Completed 100% of the TSR assessments. The assessments completed by the contractor were of significant quality and thoroughness.

- Completed two Safety Management Program (SMP) of Radiation Protection (Chapter 7) and Radioactive and Hazardous Waste Management (Chapter 9).
- Completed 100% of the Prime Contract List B assessments.
- Provided a Draft CAS Assessment Risk Model and Assessment Schedule approximately 10% ahead of schedule.
- B&W Pantex provided the final (baseline) FY12 CAS Assessment Risk Model and Assessment Schedule (Primavera) to PXSO for sufficient time for PXSO to develop the Pantex Site Integrated Assessment Plan.

Performance Target #3: CAS Report - Provide routine CAS reports to PXSO to identify emerging Plant issues having significance to B&W Pantex Senior Management; delineate actions developed to address the issues and mitigate their impact on performance; report progress toward issue resolution/reduction; and monitor performance on an ongoing basis to continuously recognize high performing processes, evaluate execution of critical-to-business processes, continuously identify emerging issues, and measure the success of improvement actions.

- The CAS Quarterly Report was provided to PXSO as scheduled. The CAS Report focused on the identification of site-level issues which demonstrates the contractor's ability to analyze a wealth of information (e.g., ORPS, PAAA, PERs, etc) and communicate to PXSO unfavorable performance trends.
- Continuous improvement of the CAS Quarterly Report by the contractor has improved but
  elements of the report continue to provide a status of Plant wide activities. The report does
  not clearly articulate what all of the data collected by the contractor means (i.e., analysis).

## PO #O-3 Change 2: Facilities and Infrastructure Recapitalization Program (FIRP)

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

#### Performance Target #1:

a. Complete design for 12-21 Piping Upgrade and Chiller Replacement.

B&W Pantex met expectations. Design completed 09/2011.

b. Complete design for Chiller Replacements Buildings 12-068A, 12-085, & 12-096.

B&W Pantex met expectations. Design completed 09/2011.

c. Minimize Carryover costing 87% of Operating dollars and 50% of Capital dollars by the end of the fiscal year. Costing targets to exclude baseline amounts of those projects executed as Federal Small Business outside control of B&W Pantex and underruns from completed FIRP Utility Line Items (i.e. remaining capital funds and/or funds reprogrammed to Operating).

B&W Pantex exceeded expectations in costing objective (costing at 89% of available funds).

Performance Target #2: Reduce Deferred Maintenance by \$5M using appropriate funding sources.

B&W Pantex substantially exceeded expectations, reducing Deferred Maintenance by \$11M, overall. This included DM reduction of \$5.288M in Roof Replacement projects and \$302k DM reduction from HVAC replacements with FIRP funding.

# PO #O-4: Project Management activities associated with all FIRP, Line Item Construction and applicable Operations of Facilities

B&W Pantex performance was excellent per this Performance Objective. In addition, B&W Pantex's responsiveness and flexibility in working with PXSO COR to meet Albuquerque Complex's procurement processes enabled the plant to receive an additional \$1.2M of FY11 FIRP Federal Small Business funds.

#### **Performance Assessment:**

### **Performance Target #1:**

a. Establish project baselines as reported in Financial Reports 9/30/10, for existing projects.

B&W Pantex met expectations by providing baseline in the 1<sup>st</sup> QTR.

b. Maintain a monthly reporting system to track cost and schedule variances by program and project.

B&W Pantex met expectations through interactions with FPD's, monthly meetings, EVMS focused attention and training.

c. Maintain at least 90% of all baselined projects in green status based on accepted reporting thresholds.

B&W Pantex met expectations, with approximately 90% of projects maintaining green status throughout the fiscal year.

## Performance Target #2:

a. High Pressure Fire Loop.

B&W Pantex exceeded expectations. Earned Value measurements for the project have been favorable throughout the fiscal year. SPI ranged from 0.98 to 1.03, with an overall average of 1.01. CPI ranged from 1.13 to 1.19, with an overall average of 1.15.

#### b. HE Pressing Facility (Maintain PARS SPI & CPI Data Only).

B&W Pantex exceeded expectations. B&W Projects Controls personnel have worked well with the U.S. Army Corps of Engineers (USACE) in attaining and uploading monthly data in a timely fashion.

Performance Target #3: Provide support to PXSO for HE Pressing Facility Project as required to ensure success.

B&W Pantex met expectations. B&W Projects and RTBF personnel have provided adequate support to U.S. Army Corps of Engineers (USACE) and Pantex Site Office in managing the project.

Performance Target #4: Continue to support PREP documentation and FAA application.

B&W Pantex met expectations. B&W Projects and RTBF personnel have provided adequate support to Pantex Site Office in Request for Proposal (RFP) development and FAA issues resolution.

## PO #O-5: Complete installation of irrigation system Tract 4

B&W Pantex performance was very good per this Performance Objective.

### **Performance Assessment:**

### Performance Target #1: Notice to Proceed issued by December 17, 2010

B&W Pantex performance was very good, by issuing Notice to Proceed ahead of schedule to Midwest Fabricators on December 1, 2010. A letter was transmitted to PXSO on December 7, 2010 indicating this and a reply from PXSO indicating concurrence of this PT was issued January 12, 2011.

### Performance Target #2: Meet milestones in the Project Execution Plan.

B&W Pantex performed good considering several issues with project management of subcontractors. This resulted in schedule delays and a revised execution plan.

#### PO #O-5S: Subsurface Irrigation System Operation and Maintenance

B&W Pantex performance was excellent per the Performance Objective.

#### **Performance Assessment:**

#### Performance Target #1: Apply enhanced acid application on tracts 101, 201 and 301.

B&W Pantex met expectations. B&W Pantex met expectations by providing a letter identifying date of enhanced acid application and volume applied. While this PT has been met the PXSO feels that more effort could have been put forth in meeting this PT.

## Performance Target #2: Evaluate biologic growth inhibitor and revise concentration application recommendation and lagoon application.

B&W Pantex met expectations by providing a letter that identified biological growth inhibitor application change rate on March 8, 2011 and May 12, 2011.

## Performance Target #3: Prepare Interim Subsurface Irrigation System Operation and Maintenance Manual.

B&W Pantex met expectations by providing a copy of the interim subsurface irrigation system operation and maintenance manual on July 1, 2011.

#### Performance Target #4: Implement comprehensive system dosing.

B&W Pantex met expectations by providing a letter identifying results of the comprehensive system dosing on July 29, 2011 ahead of the July 31, 2011 suspense date. PXSO did request that B&W keep us updated on the flushing and chlorination schedules, the chlorine concentration and application rates, and the when they apply biological growth inhibitor; so that we can ensure that proper maintenance is being maintained on the TLAP of which so many resources have been devoted to installation.

## Performance Target #5: Revise Subsurface Irrigation System Operation and Maintenance Manual for long-term operation based on results of system remediation.

B&W Pantex met expectations by providing a copy of the revised Subsurface Irrigation Operation and Maintenance Manual on August 18, 2011 ahead of the August 21, 2011 suspense date.

#### PO #O-6S Change 1: Energy Management

B&W Pantex performance was very good per this Performance Objective.

#### **Performance Assessment:**

**Performance Target #1: Water Intensity** 

Pantex has met objective for 16% reduction based on 2007 baseline – Maintain current status.

Performance Target #2: Renewable Energy – Demonstrate progress in performing actions with the intent of producing 7.5% of electricity from onsite renewable sources by 2013.

B&W Pantex has met objective

**Performance Target #3:** 

Sustainable Buildings – LEED Gold Standard for all new construction and major building renovations over \$5M.

B&W Pantex has met objective

Performance Target #4: Continuous Commissioning - Establish a list of candidate facilities for continuous commissioning (system operation and optimization). Based on this list, perform continuous commissioning improvements on three (3) buildings.

B&W Pantex has met objective

Performance Target #5: Assess 13 (25%) of the available buildings for energy efficiency upgrades from the list of 52 (EISA) covered buildings. Develop a list of energy efficiency projects for assessed buildings.

B&W Pantex has met objective

#### PO #O-7: Comprehensive Emergency Management System

B&W Pantex performance was very good per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Re-baseline EOC functionality and operability, based on PXSO directives, via a needs assessment (equipment to include video wall, maps, charts, white boards, table configuration, classified systems, etc.).

B&W has met PXSO expectation, and submitted white paper that addressed life cycle management of equipment that is currently available (in particular the video wall) in the EOC.

Performance Target #2: Develop options for solving the communications problem (Web EOC) identified by PXSO.

B&W has met PXSO's expectations in that they have obtained the software (Web EOC 7.3) and the members of the Emergency Management staff have completed training.

Performance Target #3: Review and revise ERO training requirements.

B&W has met PXSO's expectation by improvements in ERO training requirements.

Performance Target #4: Develop controller/evaluator training for those B&W Pantex and PXSO personnel controlling/evaluating drills and exercises.

B&W has met PXSO's expectations course CR 52.20 (Controller/Evaluator Training) was developed and provided to B&W and PXSO personnel who controlled/evaluated the Full Participation Exercise (Double Dare).

Performance Target #5: Reassess the way the EOC is staffed and the way ERO members achieve "qualification".

B&W has met PXSO expectation in the staffing and qualifications of ERO members.

Performance Target #6: Plan for two alternate EOC exercises to include one that requires a plant evacuation.

B&W has met PXSO expectation in the planning of exercises designed to challenge the EM program.

Performance Target #7: Develop a better working relationship between Emergency Management (EM), Safeguards & Security (S&S), Fire Department (FD), and balance of plant (BOP)

B&W has met PXSO expectation in that they have improved relationships with various internal organizations.

Performance Target #8: Develop/Maintain an Emergency Planning Hazards Survey (EPHS) that provides a complete listing of all plant facilities and areas, to include a brief description of each facility, the identified facility emergency hazards to include all areas identified in DOE O 151.1C CRD Section 2.a.

B&W has met PXSO expectation by developing/maintain EPHS.

#### PO #O-8: Nuclear Incident Response Program (NIRP)

B&W Pantex performance was excellent per this Performance Objective. Throughout the year the NIRP performed very well meeting National needs as required. In addition, B&W Pantex training exercises and took on additional work to ensure National response needs, assets, and personnel were effective in relation to the Pantex core mission.

#### **Performance Assessment:**

#### Performance Target #1: Develop an annual operating plan for the NIRP.

B&W Pantex develop and delivered a comprehensive operating plan for all NIRP related activities. In addition, a formal review of all operational activities was conducted resulting in a clear indication that NIRP activities are meeting DOE Order requirements as well as customer expectations.

#### Performance Target #2: Plan for classified operations at the NIRP Compound.

B&W Pantex developed a plan which will form the basis for moving to classified operations, should the need arise. The needs analysis developed to support this plan identified critical needs as well as the specific requirements for additional resources to move the NIRP to classified operations.

### PO #O-9: Coordinated/Integrated Continuity Program

B&W Pantex performance was very good per the Performance Objective. They supported the Site Office through assistance in assuring a comprehensive program was consistent/integrated with Emergency Management endeavors.

#### **Performance Assessment:**

Performance Target #1: Review Continuity Program requirements (DOE O 150.1, CRD) and cross-walk to current Emergency Management Program requirements (DOE O 151.1C, CRD).

B&W has met PXSO's expectations; an assessment was completed and a cross-walk was developed and submitted to the site office.

Performance Target #2: Combine the Pantex Continuity Program and the Pantex Emergency Management Program into one program that addresses both including records, IT, and others.

B&W has met PXSO's expectations; a combined Pantex Continuity Program was developed and submitted to the site office.

#### PO #O-10S Change 1: High Reliability Organization (HRO)

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

#### **Performance Target #1:**

Publish with PXSO concurrence the Pantex Pinnacle and Plateau event lists. October 30, 2010

B&W met the target. A list of pinnacle and plateau events was generated through several meeting between B&W and PXSO. The list reflects definitions for each and the events that senior leadership agreed were the ones that could cripple the ability of the plant to execute its mission.

# Performance Target #2: Publish draft of Pantex Barrier Analysis process document. November 30, 2010.

B&W exceeded expectations for the target. B&W developed its first ever comprehensive barrier analysis process that helps provide a structured method for systems mapping and barrier analysis. Five barrier analyses were completed in FY11.

# Performance Target #3: Publish the multi-year Pantex HRO Implementation plan with PXSO concurrence March 31, 2011.

B&W exceeded the expectations for this target. The original agreement was for B&W to publish a HRO implementation plan in December 2010. However, meetings between B&W and PXSO on the approach to implementing HRO resulted in fundamental changes to what first was assumed to be a straightforward effort. In the end, a Pantex HRO end-state was defined in terms of the four HRO practices with a description of what the program was aspiring to achieve with measurable attributes and provided in a format available to workers.

# Performance Target #4: Enhance Pantex High Reliability Operations (HRO) by implementing the work as outlined in the FY11 Pantex HRO Implementation Plan.

B&W exceeded expectations for this target. B&W finalized the approach to systems mapping and barrier analysis by shifting from a pinnacle event approach to a mission or product approach that afforded a more comprehensive analysis and the identification of support services vital to the mission based systems that also lend themselves to systems mapping and barrier analysis. B&W conducted systems mapping and barrier analysis under the revised model for IPFS and marking for product requalification. Additionally, the methodology for shop floor level barrier analysis was developed and the SNM Division mapped a process to conduct a McKinsey 7S framework analysis for their operations.

#### **Performance Target #5:**

At the end of FY11, revise the Pantex HRO Implementation Plan with PXSO concurrence for action in FY 12.

B&W Pantex met expectations and published the draft plan based on lessons learned from FY11 and discussions with PXSO on FY12 objectives.

#### PO #O-11: Work Control

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Evaluate all Activity Level Work Planning and Control functions in the Maintenance Division.

The contractor exceeded expectations in conduct of this review. A very in-depth review of all elements of Maintenance Division work control was conducted resulting in an improved understanding of the strengths and weaknesses of the existing system. The results of the review allowed the contractor to obtain a much clearer idea of work as planned versus work as imagined. The assessment provided the needed baseline of activities to support a Work Control Improvement Plan.

#### PO #O-11S: Work Control

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Develop an Activity Level Work Planning and Control Improvement Plan from the assessment conducted as part of O-11.

The contractor Activity Level Work Planning and Control Improvement Plan developed by the B&W Pantex Maintenance Division exceeded expectations for this deliverable. The contractor did a commendable job evaluating the results of O-11 and determining areas of weakness that needed improvement, areas that were working but could be improved and defining achievable corrective actions on a realistic manageable schedule. The areas of focus for this plan were: Consolidation of Work Planning, Consistency of Work Planner training and qualifications, work planner job walk-downs, and strengthening of the worker feedback loop regarding adequacy of work planning.

# Performance Target #2: Develop metrics to measure and evaluate effectiveness of the proposed changes.

The contractor met expectations with regard to this deliverable. No new metrics were defined as a result of this effort, however the contractor was able to define a manageable set of existing metrics they believe will be adequate to monitor effectiveness of changes. Each of the metrics was adequately defined and rationale was provided for why it was the appropriate metric to measure the desired work control element to be improved. It also defined functional areas that would require metrics as the improvement plan is implemented.

#### **PO #O-12: Environmental Protection Program**

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Receive no significant violations or adverse regulatory actions from environmental regulators due to Pantex noncompliance with environmental regulations.

B&W Pantex exceeded this expectation. Demonstrations of exceeding include:

- 17<sup>th</sup> consecutive year without a RCRA violation and no regulatory enforcement of any environmental programs (air, water, waste, natural resources, cultural resources, etc)
- Renewal and maintenance of Gold Level rating for Clean Texas Program
- Renewal of Flexible "like" Air Permit. Complicated due to TCEQ and EPA's disagreement over State of Texas authority and air compliance requirements.
- Recycled 74% of hazardous waste generated
- Successful air stack testing to sanitize classified beryllium weapon components via microwave technology
- Successful renewal of wastewater discharge permit and strong arguments developed for permitting action of irrigation permit
- Numerous remediation program equipment rework and maintenance completions, and strategic program adjustments to support upcoming 5 year Environmental Remediation regulatory negotiations

#### PO #O-13: Enhancement of Supplier Nuclear Quality Assurance

B&W Pantex performance was very good per this Performance Objective. The contractor mentored four subcontractors (100% more than was required) on development of NQA-1 assurance plans. This required a significant amount of the contractor's time and effort in mentoring these small subcontractors. In addition, the contractor mentored subcontractors on Pantex code compliant welding requirements. Finally, the contractor provided S/CI training to subcontractor personnel and conducted monthly inspections of subcontractor construction sites. However, the recent PXSO welding assessment found a lack of timely feedback which diminished the overall effectiveness of the subcontractor mentoring initiative.

#### **Performance Assessment:**

Performance Target #1: Enhancement of Supplier Nuclear Quality Assurance Implementation

- a) Mentor two construction subcontractors (protégé companies) during FY11 regarding a formal Quality Assurance Plan (QAP) in compliance with ASME NQA-1, Part 1, Requirements 1 through 18, as applicable to their project;
- The contractor mentored 100% more subcontractors on NQA-1 requirements, specifically development of their overall quality assurance plans and project specific quality assurance plans. While B&W Pantex takes credit for mentoring four subcontractors on NQA-1 requirements; these mentoring sessions do not appear to be robust. The Mentoring Report supplied by B&W did indicate that Supplier Quality held meetings but the depth and breathe of training did not exceed expectations.
- b) Mentor two construction subcontractors during FY11, regarding a documented AWS and ASME code-compliant welding program for each;
- The contractor mentored 100% more subcontractors regarding AWS and ASME code-compliant welding requirements program. The recent PXSO welding survey indicates that while subcontractors are adequately mentored on how to weld and inspect welds to meet Pantex specifications, there is a lack of timely and adequate feedback to the supplier quality group. This lack of feedback diminishes the effectiveness of the mentoring initiative.
- c) Provide information and training to construction subcontractors on the S/CI Prevention Program (Qualified instructor to provide briefs at 16-12);
- The contractor provided quarterly S/CI training for subcontractors.
- d) Conduct random monthly inspections, with subcontractors, to evaluate on-site construction material for S/CI.
- The contractor conducted monthly inspections of subcontractor's construction sites for S/CI.

#### PO #S&S-1S: Defense Nuclear Security (DNS) Management Excellence

B&W Pantex performance was excellent per the Performance Objective. Development and execution of the Strategic Operations Efficiencies Review was considered the standard in the complex and provided Pantex a solid path forward to reducing resource requirements, linking of requirements to resources and adapting to the uncertainties associated with future year budgets. Quarterly program reviews and AOP deliverables exceeded expectations and were submitted on or before scheduled due dates.

#### **Performance Assessment:**

## Performance Target #1: Maintain effective performance, completed on-time, and within budget.

In FY11 the B&W Pantex S&S Division budget formulation process was transparent and involved the Site Office throughout. It was detailed, and consistent with the established costing principles as approved by both the Site Office and NA-70 leadership. Department managers provided detailed submittals for their components to include FTEs, Non-Labor requirements, and supporting data detailing budget requirements for each department, including security risks and mission impacts for requirements not funded. The Division utilized a detailed review process to obtain final approval of the budget submittal which included reviews and concurrence by B&W Pantex Senior Management, the PXSO Assistant Manager for Safeguards and Security, and the PXSO Site Office Manager. B&W Pantex Year-End report for Physical and Cyber Security reflected a 1.6% variance which is considered a highly effective use of resources and management of the budget.

# Performance Target #2: FS-20 Budget Request provides linkage of resources i.e., dollars and Full Time Equivalent (FTE) to AOP work packages/ activities.

The B&W FY11 budget demonstrated clear linkage between FTEs and funding as shown on both the AOP and PF supplemental. The budget execution process is considered effective and comprehensive. B&W Pantex also ensures any changes are identified and submitted to a formal change control process that includes not only PXSO, but NA-70 depending on the dollar level involved. Additionally, B&W Pantex improved the acquisition management process and now includes all projects/acquisitions over \$10K to control and monitor the status of all projects/acquisitions from cradle to grave. B&W Pantex conducts monthly budget analyses and provides various reports to PXSO for review. Additionally, B&W Pantex senior security management have developed a Program Management Budget Deep Dive internal report that is distributed to all Division managers every six weeks and discussed at a manager's meeting. This report provides the budget highlights in each S&S functional area and is a very effective tool in the budget execution area. The Chief, Defense Nuclear Security and NA-70 representatives conducted a "budget deep-dive" in FY11. The purpose of the review was to examine the S&S Program to identify DNS funded site activities that may involve a scope of work above or below baseline policy or does not meet DNS costing principles. The scope of the review included areas primarily related to non-core vulnerability assessment activities in Program Management and Support, Protective Force, and Physical Security Systems. The team commended B&W on their openness and amount of information provided to support the review.

## Performance Target #3: Progress is tracked and reported to PXSO at Quarterly Program and Budget Reviews.

B&W Pantex submitted quarterly Management Systems Assurance Program (MSAP) reports that included annual operating plan updates and performance metrics. Additionally, a quarterly briefing was presented to PXSO AMSS organization with status updates on budget execution, PEP objectives and targets, program health and effectiveness of each of the topical areas, accomplishments and areas of focus. As demonstrated through each of these briefings and reports there was a clear incorporation of traceability between planning and execution.

## Performance Target #4: Final approved AOP is provided to Defense Nuclear Security by 08/01/11.

The FY12 AOP and Protective Force Supplemental were submitted to PXSO and provided to DNS on time and included all requested information.

## PO #S&S-2: Security Footprint Reduction

B&W Pantex performance was excellent per this Performance Objective. The stretch goal of 10% was achieved in several areas thereby significantly exceeding the 5% goal for this objective.

## **Performance Assessment:**

## Performance Target #1: Achieve 5% reduction.

All targets achieved the goal for a 5% reduction established for this objective. Reference S&S-2S for greater detail.

#### PO #S&S-2S: Stretch - Security Footprint Reduction

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Achieve 10% reduction (5% above essential PO).

B&W Pantex developed and PXSO approved a plan to reduce the site security footprint. This aggressive reduction incorporated an analysis of plant operations, communicated material collection and destruction documentation requirements, and targeted four specific initiatives to reduce unnecessary facilities and surplus materials. Initiatives accomplished included: (1) destruction of 7,979 of 10,174 linear inches of classified documents, or 78.44% of the inventory; (2) closure of a vault containing 3,604 pieces of legacy Classified Removable Electronic Media (CREM) holdings were destroyed or returned to the owner.; (3) destruction of 13,177 of 106,462 classified components for a 12% reduction and 429,469 of 3,944,968 controlled unclassified components for a 11% reduction; and (4) surplus equipment were reduced by 56 firearms and 750,000 rounds of various ammunition.

#### PO #S&S-3S: Security Operational Efficiencies

B&W Pantex performance was excellent per this Performance Objective. Through the conduct of a strategic operations efficiency review numerous positions/posts and patrols were identified for reduction and several processes were evaluated and improved upon to reduce variability and increase barriers to failure. The identified efficiencies were outlined in a strategic plan that looks five (5) years into the future and B&W began progress in execution of the plan in FY11. Additionally, PF planning, tactics, and training were enhanced to include more details and integration of the strategy developed by Management.

### **Performance Assessment:**

Performance Target #1: Develop site-specific condition assessments and life cycle management plans for all FS-20 security systems and components.

B&W Pantex S&S Management conducted an initiative termed a Security Operational Efficiencies Review (SOER). The purpose of the review was to conduct a requirements-based review of all personnel assignments within the S&S Division, identify areas where new technology and revised procedures could increase PF efficiency, analyze the effectiveness of tactical command and control, and review training methodology and resourcing. The SOER resulted in a reorganization of the Division and the identification of positions that could be eliminated from the FY 2012 budget submission. One of the goals of the SOER was to balance technology, tactics, and procedures in the PF with corresponding reductions in staffing while maintaining compliance with the Graded Security Protection (GSP) policy. In addition, the effort resulted in recommendations for acquiring and implementing new security related technologies that could be used to increase the effectiveness of the PF, and result in a future reduction of PF staffing and a change in the protection strategy.

The effort helped develop the rationale for reconfiguring the PF post and patrol numbers, posture, and tactical employment. The site developed a strategic plan describing a planned six-year phased approach to implementing new technology and fully reconfiguring the PF and briefed both PXSO and the DNS on the plan. The projected net savings by the end of FY 2017 are roughly \$39 million. The technology recommendations were designed to increase the overall effectiveness of the physical protection of the plant in several key areas: increased sensing, increased surveillance, increased Command, Control, and Communications (C³), increased survivability and lethality of the PF, increased delay, and increased capability to mount an aggressive counterattack as part of the site's recapture and recovery strategy. This is an aggressive and comprehensive set of actions to modernize the Protective Force and Physical Security Systems.

Subsequently, the Technology Deployment Plan identifying those current and future technologies that are or will be deployed at the site was updated to align with the site's strategic plan outlined in the SOER and clarified B&W Pantex's technology strategy for the site. Additionally, in FY11, all security assets were loaded into the Remedy system, the established lifecycle management system used to track the projected life expectancy of each item and provide a basis for planned replacement before the equipment exceeds its projected "end of life" operating period. Using the Remedy system will facilitate the reduction of failures and maintenance cost associated with operating outdated equipment and provides management an effective tool to project, procure and implement security systems while increasing fiscal transparency. This system was recognized by HSS as well as by DNS during the Budget Deep Dive as a noteworthy endeavor.

PF Senior Management directed the enhancement of the TACDOC/SIRP to include more detailed, specific tactics, techniques, and procedures (TTPs). Additionally, new weapons systems, such as M110 SASS and MK 48, were fielded to enhance PF lethality. As a result, Battle Plans were developed providing PF commanders and responders with enhanced TTPs for defeating GSP threat scenarios and live intrusions on the 3 target sets. Subsequently, to facilitate effective implementation of the new direction and to address "on-shift" training, B&W established the Advanced Demonstration Evaluation Performance Team (ADEPT). The role of the ADEPT is to ensure timely and effective implementation of significant operational changes affecting the Protective Force such as the Battle Plans. Additionally, through battle drills and rehearsals, the ADEPT ensures proficiency on Mission Essential Task List (METL) training topics within the scope of the current tactical plans.

B&W Pantex received NTC site certification for the Tactical Response Force I (TRF I) course in FY11. They are the only NNSA Site to receive this certification to date. Additionally, B&W was awarded a three year site certification for the TRF II course along with a five year approved renewal of the Training Approval Program (TAP). The TRF II course contains the department's current materials for standardizing the basic training for SPO III personnel across the Enterprise. The course is 200 hours in length, and is the most demanding training that a Security Police Officer (SPO) can undergo. Both the TRF I and TRF II courses were successfully conducted in FY11 with the TRF I class graduating all 35 candidates that began the course. Following the initial TRF II training course and site certification, B&W trained incumbent SPO III personnel on the new course materials ("gap" training). An analysis of the old and new courses was conducted, and training was modified to address the identified gaps. All incumbent SPO III personnel were fully trained as part of their maintenance training block.

A "Tactical Leader 2" course was developed focusing on command and control, fire control techniques, control of maneuver elements, and post incident consolidation and reorganization. PF leaders commanding response elements received this training in FY11. A "Fire and Maneuver TTPs for Responders" training was also developed to raise the skill level of SPOs to also improve fire control, maneuver, and counterattack TTPs. Both PF leaders and responders demonstrated increased proficiency in subsequent limited scope performance tests and force-on-force exercises. Finally, a Lieutenant (LT) leadership course was developed to increase the knowledge and skills of personnel selected for LT positions. The course was designed to provide training to assist new leaders in making the transition from SPO to Officer. A class of eight (8) new LTs received the training and provided positive feedback as to the value of the course.

#### Performance Target #2: Completed on-time and within budget.

During the Defense Nuclear Security "budget deep-dive" which included areas primarily related to non-core vulnerability assessment activities in Program Management and Support, Protective Force, and Physical Security Systems the Team concurred B&W is taking proactive measures to identify and implement measures to achieve efficiencies to meet pending budget challenges. The documents supporting the operational efficiencies were submitted timely and approved by PXSO.

# ${\bf PO~\#S\&S\text{-}4S:~Security~Reform~Improving~Mission~Effectiveness~and~Driving~Cost~Efficiency}$

B&W Pantex performance was very good per this Performance Objective and achieved 100% implementation of the issued NAPs 70.2 and 70.4.

#### **Performance Assessment:**

Performance Target #1: Within 12 months of issuance all security plans, policies, and procedures are to be updated to reflect NNSA security policy or identified in an approved implementation plan.

B&W Pantex achieved 100% implementation of both NAP 70.2 Physical Protection and NAP 70.4 Information Protection during FY11.

#### PO #S&S-5: Effective S&S Programs in all Functional Areas

B&W Pantex performance was excellent per this Performance Objective. The B&W Pantex annual assessment included all topical areas. Over the course of the year B&W Pantex completed approximately 200 individual performance tests and self-assessments. All topical areas were rated as satisfactory.

#### **Performance Assessment:**

Performance Target #1: Achieve a satisfactory or effective rating in Site Office surveys or assessments with no repeat findings or deficiencies.

During the FY there was an increased focus of the contractor assurance system (CAS). B&W Pantex developed a risk ranking methodology for all S&S topical areas. This methodology was then used to rank all possible assessment activities. From that ranking a list of essential assessment activities were established by the use of past performance and mission importance. B&W worked very closely with the PXSO to develop integrated CAS scope and schedule for FY2012. A large well orchestrated workshop was developed that contained a number of presentations/training. Representatives from other B&W organizations, other sites, and NNSA HQ participated in the workshop.

B&W Pantex provided the PXSO with monthly status briefs, comprehensive quarterly program reviews, and MSAP report. The metrics used to track performance clearly indicate significantly improved program health, management effectiveness, CAS effectiveness, as well as a reduction in the number of incidents of security concern. B&W Pantex has consistently focused on critical management issues and concerns communicating them to the PXSO and NNSA HQ, as appropriate. The overall issues management program for S&S is well led and covers all topical areas. As a result of B&W efforts in this area the Pantex Plant S&S function is ahead of the complex in the implementation of NAP-21.

## PO #S&S-6: Best Practices and Lessons Learned Process

B&W Pantex performance was excellent per this Performance Objective.

### **Performance Assessment:**

Performance Target #1: Developed and implemented by the end of the  $2^{nd}$  Quarter of FY11.

B&W S&S developed and implemented best practices and lessons learned process before the end of the  $2^{nd}$  quarter of FY-11and has reported the cost savings and efficiencies in the Quarterly MSAP Reports.

PO #S&S-7S: Develop and implement an effective Sitewide Contractor Assurance System (CAS) that is validated, verified, and approved by the Site Office

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Obtain PX Site Office "certification" of CAS for all topical areas by November 19, 2010. This would include the identification and reporting of metrics that have performance goals, the self-assessment, issue identification and reporting, corrective action tracking, and issue resolution elements of CAS. Goal is to provide or demonstrate ability to self identify and resolve issues.

B&W Pantex received certification from PXSO of the Contractor Assurance System and has reported the metrics in the quarterly MSAP reports. B&W the FY-12 Performance Assurance and Self Assessment Program Plans and provides the S&S Program Evaluation data to the Quality Division for inclusion into the Contractor Assurance System.

#### PO #S&S-8S: Cyber Security Program

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Ensure effective performance of the classified and unclassified cyber security program(s) by achieving milestone completions in approved Risk Management Framework implementation plan.

One of the top actions for B&W to work through this past FY was achieving milestone completions in the approved Risk Management Framework (RMF) implementation plan. The RMF is key to reducing the documentation workload and moving the approval process to the ISSM for the M&O. The RMF was approved, and submitted to the NNSA Cyber Security Program Manager, on November 16, 2010. The implementation plan to flow the through transition of system decommissions, and approval/updates has been met through the course of the year. B&W provided quarterly updates to show status of systems, and has taken on the responsibility for unclassified Threat Assessments (TA), Baselines (BA), and Risk Assessments (RA). Review of these documents through the course of the past FY shows they do follow their defined processes, making appropriate determinations. They will be ready to take up the review and approval of classified TAs, BAs, and RAs upon the annual review, update, and approval of the RMF. In the course of this past FY B&W has completed 12 Information System Security Plans (ISSP) into the RMF format along with 20 ISSP attachments and the de-commission of 8 ISSPs.

Performance Target #2: Effectively implementing the vulnerability assessment management process and change control process, which has feedback and improvement mechanisms to identify cyber security vulnerabilities, reduce them from site networks, prevent their recurrence or receive DAA acceptance of risk.

B&W Pantex has effectively implemented the vulnerability assessment management process and change control process, providing feedback and improvement mechanisms to identify cyber security vulnerabilities, reduce them from site networks, prevent their reoccurrence or receive DAA acceptance of risk. This process has included integrating with Information Technology (IT) groups assessing vulnerabilities and proper remediation. The Vulnerability Assessment Management (VAM) program has been highlighted by multiple outside inspection teams and internal audit as comprehensive in scope and effectiveness. VAM demonstrated reduced the number of vulnerable hosts within PUCNET by 47% while PUCNET increased its host population by 9%, a marked improvement in the security posture of PUCNET. Vulnerabilities, whose risk had been accepted by Pantex DAA, were reduced by 55%. Overall, vulnerabilities were reduced by 46%. The VAM process allowed for the remediation of 177 vulnerabilities. All remaining potential vulnerabilities continue to be researched and mitigated.

Performance Target #3: Establishing and maintaining a comprehensive self-assessment and issues resolution program for the Cyber Security Program, to include POA&M monitoring and reporting to PXSO. Ensure third party review of high risk areas and penetration testing is accomplished, with completed report by July 15, 2011.

B&W Pantex has made significant improvements in the establishment and maintenance of a comprehensive self-assessment (SA) and issues resolution program for the Cyber Security Program, to include POA&M monitoring and reporting to PXSO. B&W Pantex has completed (or will be completed by the end of FY2011) 18 self assessments, two Management Self Assessments (MSA), one ad-hoc CSP SA and one Internal Audit. Third party reviews included a Site Assistance Visit from NNSA HQ and follow-up by the 2010 IG audit. NIARC personnel were also brought onsite to conduct classified penetration testing. These external review events were all completed prior to July 15th, 2011. Additionally, the RMF has been integrated within the CAS process as demonstrated within the development and submission of the FY12 Program Monitoring and Assessment (PMA) Plan.

Performance Target #4: Implementing an effective risk management process, including incident management, to ensure unique site risks are fully evaluated.

B&W Pantex continues to implement and provide an effective risk management process. This includes incident management, integration with counter intelligence, and the telecommunications and TSCM groups, to ensure unique site risks are fully evaluated.

Performance Target #5: Provide comprehensive residual risk summaries through the C&A, risk assessment, technical assessment and baseline development process that supports why the controls utilized were selected.

B&W Pantex provides comprehensive residual risk summaries through the Certification and Accreditation (C&A) process, threat and risk assessments, and baseline developments. They maintain a strong working relationship with the DAA, ensuring risk awareness and acceptance as necessary. They have developed strong defense-in-depth measures that effectively mitigate many issues, to include mitigation of emerging threats.

Performance Target #6: Demonstrate WIDS capability for 802.11 wireless infrastructure in the PPA by September 2011.

B&W Pantex completed the Wireless Intrusion Detection System (WIDS) capability testing for 802.11 wireless infrastructures in the PPA ahead of the original September 2011 delivery date. Since the demonstration of the WIDS for 802.11, they have also demonstrated the ability to detect cell phones in areas of concern, and continued expanding the testing and implementation of the WIDS.

Performance Target #7: Develop a project plan for implementation of PHIRE with PeopleSoft to establish effective separation of duties. Complete implementation of PHIRE by June 2011.

B&W Pantex has completed the development of a project plan for implementation of PHIRE with PeopleSoft as defined in the stretch objective. PHIRE provides effective separation of duties.

Performance Target #8: Implement an automated process to improve both technical and policy manual personnel process, to include utilizing SharePoint or other like system.

B&W Pantex has continued to look for ways to automate cyber security processes and their implementation. One of the tools implemented this past year is SharePoint. This tool allows auto tracking of the progress of document reviews, versions of the documents and document approvals. This implementation together with the implementation of the RMF has allowed realignment of on Full Time Employee (FTE) from the policy group to the technical group, enhancing the technical team's capabilities.

The B&W Pantex S&S Division budget formulation process is utilized for cyber security and involves the Site Office throughout. It is detailed, and consistent with the established costing principles as approved by both the Site Office and NA-02 leadership. The CIO and Department manager provided detailed submittals for their components to include FTEs, Non-Labor requirements, and supporting data detailing budget requirements for each section, including security risks and mission impacts if requirements are not funded.

#### PO #B-1: FY 2011 Business Systems Oversight Plan (BSOP)

B&W Pantex performance was very good per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Satisfactory performance of all Business Areas captured in the LOP-BM. The Business Areas are:

- 1. Purchasing
- 2. Personal Property
- 3. Information Resource Management
- 4. Internal Audit
- 5. Budget Formulation and Execution
- 6. Finance and Accounting
- 7. Records and Information Management
- 8. Training
- 9. Human Resource Management
- 10. Contracts

#### All Business Areas are equally weighted.

B&W Pantex exceeded many of the significant areas of the Business System Oversight Program. In the area of Procurement, B&W successfully converted to a new Procurement System, successfully addressed all business attributes, exceeded almost all performance measures, in particular the small business goals to include receipt of the Dwight D. Eisenhower Award from the Small Business Administration. In the area of Property, B&W exceeded almost all performance measures, successfully addressed all business attributes, and received the highest rating of "Outstanding" from a third party review team.

In the area of Information Technology, B&W exceeded many of the attributes, exceeded NNSA expectations in support of several complex-wide initiatives, and did an outstanding job in implementing Pantex Plant IT transformation initiatives. In the area of Internal Audit, B&W continues to be a best-in-class organization, providing internal control assurance to both B&W Pantex and the NNSA. B&W Internal Audit delivered quality audits throughout the year in spite of unexpected challenges.

In the area of Budget Formulation and Execution, B&W exceeded many of the performance expectations related to the business attributes, particularly, successful funds control and rate management in an environment of programmatic emphasis on extremely low planned carryover, implementation of Enterprise Portfolio Analysis Tool, proactive management of the pension plan, strong self-assessment, and support to the Directives Reform Initiative. A focus area for 2012 is to reduce use of outside legal counsel for day-to-day fiscal requirements interpretation. In the area of Finance and Accounting, B&W overall rating was very good in meeting all the quarterly financial measures and B&W internal audit self assessments was noteworthy.

In relation to records management, B&W exceeded all business attributes to include development of the records retention schedule, validation of 30% of records, continued migration of records into the Universal Records Manager, and elimination of active weapon unit folders to be captured digitally. The contractor's training program continues to significantly exceed expectations. In the area of training, the contractor reduced annual training requirements by 8%. The

contractor's line managers observed and evaluated 108% of the training courses and developed an external web page which was populated with Pantex-created multimedia lessons learned videos. In the area of Human Resources Management, B&W performed at the satisfactory level including addressing EEO corrective actions, addressing duplicate Fair Labor Standards Act (FLSA) findings, and implementation of a Pantex Plant wellness program. Focus areas for 2012 include continued initiatives to address the EEO corrective action plan, enhancing internal controls to ensure compliance with the FLSA, and enhancing documentation related to all human resource actions. In the area of Contract Management B&W significantly exceeded all expectations and was instrumental in administering its Pantex plant contract to include Contract extensions, several modifications, implementation of numerous directives, executive orders and policy flashes, and research on multiple contract requirements.

#### PO #B-2S: Supply Chain

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

Performance Target #1: Optimize utilization of eProcurement tools with an emphasis on SCMC provided tools (i.e. eSourcing, eStore) or resident equivalent tools as a means to drive supply chain cost savings.

B&W continues to be a leader in "eSourcing" awards and specifically B&W Pantex performance was *outstanding* in the categories of number of awards and percentage of procurement dollars made through eSourcing.

Performance Target #2: Provide personnel and actively participate on SCMC commodity teams.

B&W Pantex is an active team member on the SCMC commodity teams and was successful in "leveraging" agreements in the areas of electrical systems and supplies, security equipment, and safety supplies.

Performance Target #3: Increase the utilization of SCMC developed commodity agreements/contracts as a means to drive supply chain cost savings.

B&W Pantex has substantially exceeded expectations by increasing utilization by over 300% as compared to FY 2010.

Performance Target #4: Provide personnel to participate on a multi-site demand management work group. Work group shall focus on development of a "demand management" definition, benchmarking and sharing of best practices.

B&W Pantex exceeded expectations in the optimizing various demand planning methods standardizing requirements.

Performance Target #5: Continue development and execution of NSE wide human capital roadmap.

B&W Participation resulted in the establishment of the "Best Practice" repository on the SCMC Portal and the establishment of the "Competency" tool repository on the SCMC Portal.

#### Performance Target #6: Support SCMC growth strategy development.

B&W Pantex substantially exceeded expectations by maximizing utilization of eSourcing tools and expanding the use of eStore, which resulted in B&W Pantex leading the NSE in Savings to Procurement dollars spent ratio.

#### PO #B-3S: Pantex Wireless Program

B&W Pantex performance was excellent per this Performance Objective.

#### **Performance Assessment:**

## Performance Target #1: Publish a Pantex specific Wireless Program Management Plan by 12/1/10

B&W Pantex surpassed its goal to provide a strategic program management plan with goals, objectives and governance models to direct the implementation of wireless technologies at the Pantex Plant through its assignment of a dedicated office, staffed with a very senior level IT manager. PXSO recognizes the priority and emphasize that B&W Pantex has placed on the wireless initiative and its and leadership role of the NSE's larger Wireless Initiative. Consolidation of Pantex wireless networks, where possible, and the related cost savings should remain a focus area in FY12 and beyond.

## Performance Target #2: Develop the "to-be" architectural and security designs for the Pantex Wireless instrastrure by 2/1/11

PXSO is very pleased with B&W Pantex's progress related to the "to be" architectural and security designs for future wireless technologies. Notable is the level of cooperation between B&W IT and B&W Cyber/TSCM/Tempest with NNSA counterparts in achieving security configurations that are acceptable by all parties. B&W is commended on its rapid development and deployment of Pantex's latest Apple form factor device.

## Performance Target #3: Develop 3 year Wireless Implementation Roadmaps for the key applications areas identified during the MITRE study by 3/1/11

B&W excelled in being one of the few NSE sites to have a majority of its out-year wireless projects accepted for future funding. This is truly a reflection of B&W Pantex's strong support and participation in the NSE's Wireless Initiative.

# Performance Target #4: Complete an unclassified pilot project that demonstrates the ability to secure and utilize technologies in the Property Protection Area by 9/1/11

B&W successfully piloted and demonstrated the ability to secure and utilize wireless technologies in the PPA. Additionally, Pantex hosted HQ NNSA personnel to evaluate Pantex's wireless deployment configuration and physical layout, receiving HQ support from a security aspect. That visit will assist Pantex in future system deployments due to HQ's recognition that Pantex ensures a high level of security in its wireless designs and planning.

# Performance Target #5: Develop and prioritize work packages for FY12 implementation by 9/1/11

Once again, B&W excelled in being one of the few NSE sites to have a majority of its out-year wireless projects accepted for future funding. This is truly a reflection of B&W Pantex's strong support and participation in the NSE's Wireless Initiative. Additionally, B&W Pantex is on track to successfully complete all of its FY12 wireless projects milestones.

#### PO #B-4: General Management of the Pantex Plant

B&W Pantex exceeded almost all significant award fee criteria, overcame significant funding challenges, and met or exceeded schedule and technical performance requirements of the contract as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.

In close coordination with the Nuclear Security Enterprise (NSE), B&W Pantex completed 112% of the baseline weapon deliverables, including 120% of baseline dismantlements, 99% of baseline surveillances, and 109% of baseline W76-1 Life Extension Program deliveries to the Navy. The B53 was dismantled one year ahead of schedule, exceeding the baseline by 140%. In addition, at the request of the Under Secretary of the Navy to the NNSA Administrator, additional W76 workload was accomplished resulting in considerable cost savings to the government. This additional workload was accomplished without additional funding provided to the Pantex Plant and without impacts or interruptions to the overall schedule.

In relation to safety and health, B&W Pantex established the lowest Total Recordable Case Rates at the Pantex Plant which includes its subcontractor's safety performance as well. B&W Pantex received several safety awards throughout the rating period to include the Department of Energy VPP Superior Star award and the National Safety Council's Occupational Excellence Award. During the fiscal year, several milestones were reached and initiatives implemented including: a 50% reduction in the Electrical Severity Index, implementation of multiple employee and management safety teams to further enhance safety at the Pantex Plant, received the national Accreditation Association for Ambulatory Health Care, and received accreditation for its Radiation Safety Internal Dosimetry Program.

In the area of security, B&W Pantex exceeded expectations including reducing the overall security incident rate for FY11 from 1.49 to .85, resulting in the lowest overall security incident rate in the DOE and NNSA complex. B&W Pantex partnered with the NNSA to effectively formulate and execute the security budget, exceed expectations related to enhancing performance through the reduction of the security footprint, development and execution of security planning documentation, continued modernization of the Protective Force, effective Contractor Assurance System, and effective Cyber Security Program. In addition, B&W Pantex hosted the annual Security Protection Officer Team Competition which included 19 teams from across the NSE and other national and international security teams.

In the area of Secure Transportation Asset (STA), B&W Pantex Fleet provided excellent support of mission vehicle mechanical recovery and excellent in support of the OST Mission. Highlights from FY11 include outstanding and thorough electrical maintenance diagnostics on the EVHC platform. The development of a corrective action procedure for this EVHC issue was also completed. B&W Pantex VMF also successfully developed an execution plan and initiated the pilot Armored Tractor Refurbishment project.

In regard to Plant operations, B&W Pantex continued to perform at an outstanding level in view of the considerable shortfalls in operational and general maintenance funding provided to the Pantex Plant. B&W Pantex effectively worked with the NNSA to ensure facility availability for mission workload in spite of residual damage from the 2010 significant rain event, overall ageing facility, and major freeze event. In addition, B&W Pantex effectively managed the High Pressure Fire Loop line item construction project to include integration with production operations to minimize impacts to both activities. Further, during the fiscal year, B&W Pantex successfully

initiated a power outage of the southwest and southeast high voltage electrical distribution systems as part of a major preventive, corrective, and modification maintenance initiative. During the rating period, the B&W Pantex Public Affairs Office had numerous noteworthy accomplishments and events and performed at an outstanding level which led to further recognition of the Pantex Plant as a high performing organization. Through the development of the Pantexan, social media, special events, community events, and outstanding protocol, the Pantex Plant received solid recognition for its professionalism and dedication. Throughout the year, B&W Pantex did an outstanding job of hosting multiple visitors and events to include hosting the NNSA Public Affairs Conference.

In addition, B&W Pantex continued to manage and operate the Pantex Plant consistent with the attributes of a good corporate neighbor, High Reliability Organization, outstanding community relations, and multiple outreach initiatives. During the rating period, B&W Pantex continued to provide strong leadership and contributions to the United Way Campaign, Food Bank donations, military care packages, corporate donations program, and Thanksgiving Dinner for disadvantaged elderly. Further, B&W Pantex participated in two Science Bowl competitions, Middle School Hydrogen Fuel Cell Car Race, Nuclear Science Merit Badge for Boy and Girl Scouts, Career Days, and scholarship programs to promote science to area students.

Recognizing the high performance as described above, there were areas for improvement identified during the course of the year requiring focused attention in FY12. Specifically, focused attention should be placed on increasing operational discipline and personal reliability to enable error-free operations. In addition, continued emphasis should be placed on ensuring strong internal controls and continued improvements in relation to the Fair Labor Standards Act and Equal Employment Opportunity. Further, there are opportunities for improvements in the overall operations of the Human Resources organization. Additionally, a more effective and efficient use of in-house legal services as opposed to out-side legal counsel is an area requiring improvement, as well as, in-house legal services interaction with the Internal Audit Organization, Equal Employment Office Organization, and Employee Concerns Program Organization in order to ensure continued independence of the three organizations. Finally, continued focus on improving transformation to the Operations Systems Development and Integrations is warranted.

## PO #MS-1 Change 2: Stockpile

B&W Pantex performance met the requirements for this Performance Based Incentive.

## **PO #MS-2: Enterprise Integration**

B&W Pantex performance met the requirements for this Performance Based Incentive.