

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy Dwyer, Technical Director  
**FROM:** Matthew Duncan and Rory Rauch, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Report for Week Ending October 15, 2010

**Operational Suspensions:** B&W declared a potential inadequacy of the safety analysis after the acceptance testing and procurement practices for certain types of static dissipative tooling came into question. Management has suspended certain portions of W80, W76, and B61 operations until engineers can perform a complete investigation of the matter.

**Electrical Power Outages:** This week, B&W completed planned electrical power outages that affected large blocks of nuclear and nuclear explosive facilities for 4-6 days at a time from October 1-11. The primary purpose of the outages was to perform corrective and preventive maintenance on aging components and connectors in the plant's primary underground electrical distribution system. Another benefit of the outage is that it will preclude the need for several smaller, less efficient outages throughout the course of the year. In preparation for the outages, manufacturing personnel placed all operations in a safe condition and entered all appropriate limiting conditions of operation for the affected safety systems.

During the outage, the High Pressure Fire Loop Project (HPFL) upgrade project team used the operational downtime to perform HPFL replacement work on the piping that feeds the 12-44 cells. The new high-density polyethylene HPFL piping attaches to the lead-in piping from the post indicator valve to the facility. Typically, the project subcontractor leaves the lead-in piping in situ. However, for the 12-44 cells, the subcontractor could not find a tie-in point to the lead-ins with sufficient integrity and B&W decided to replace the lead-in piping as well. The HPFL upgrade project work on the 12-44 cells is scheduled to be completed by October 25.

**Evaluation of the Safety of the Situation (ESS):** PXSO approved the ESS for the two weapon program processes that did not consider the hazard of vacuum lifting fixture failures prior to the complete engagement of safety catches during lifts of sensitive components (see 10/8/10 report). In the approval memo, PXSO asked B&W to consider a redesign of the vacuum lifting fixtures to incorporate a backup safety feature that will eliminate the drop event addressed in the ESS. There were no conditions of approval for the ESS and B&W, as indicated in the evaluation, will rely on the radiation protection program to mitigate the consequences of the subject accident scenario when the affected weapon programs have resumed operations.

**Pit Staging:** B&W has projected that as early as 2014 there will be no additional storage space in the plant's existing pit staging facilities. As an initial step in the effort to alleviate this situation until a facility such as the proposed pit disassembly and conversion facility is operational, PXSO has approved a safety basis change to increase the pit staging capacity for four bays and their associated interlocks in building 12-64. In these bays and interlocks, B&W plans to implement the Stage Right configuration, where pit containers are staged horizontally in pallets that can be stacked on one another. The Stage Right configuration will increase the pit storage capacity in each bay by a factor of 3-4 over the current dense-packed planar array configuration, where pit containers are staged on the floor vertically without stacking. B&W has yet to finalize the implementation plan for this change package, but the responsible project team hopes to complete the necessary facility modifications and begin staging pits in the Stage Right configuration by the fourth quarter of this fiscal year.