**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

**MEMO TO:** J. Kent Fortenberry, Technical Director
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives
**DATE:** 2 September 2005
**SUBJECT**: Pantex Plant Weekly Report

**Sitewide Power Interruption:** Last Friday, the plant experienced a power interruption to a number of nuclear facilities as a result of a 12.47 kV circuit breaker trip at the north substation. Some facilities lost power for approximately two hours while other facilities only experienced a "blink" before power was restored. A combination of informal communications between BWXT and the electrical subcontractor that installed a new transformer, unapproved subcontractor actions, and faulty assumptions led to a misapplication of the over-current protection. Plant personnel are still evaluating whether any equipment damage was done by the outage.

**Operational Near Miss:** During disassembly operations in a nuclear explosive facility, the operating procedure instructed the production technician (PT) to remove a ball pin before rotating a tool that was holding a section of the main charge high explosive (HE) and the pit. The production technician accidentally removed the wrong ball pin and caused the tooling to hinge open. Actions taken by a second PT prevented the pit from possibly falling a few feet to the floor . A defense-in-depth safety feature on the fixture operated as designed to provide a secondary barrier against the HE dropping out of the tooling BWXT is planning to suspend disassembly operations on the subject weapon program later this month until SS-21 tooling and processes are implemented.

**Special Tooling – Loose Fasteners:** During a pit lifting operation in a cell, a PT noticed three loose screws on the vacuum fixture, a tool credited in the safety basis. The fasteners were installed in the load path of the tooling and were supposed to have been torqued in accordance with the site standard. There was not a specific step in the procedure for the PTs to inspect the three fasteners prior to installation and use of the vacuum fixture. Because the PT recognized an anomaly and brought it to the attention of the Production Section Manager, the operation was halted before the lifting procedure was initiated. BWXT is developing an engineering procedure to replace the deficient tooling; including retorquing the fasteners and ensuring thread locking adhesive is applied.

**Missed In-service Inspection (ISI):** At Pantex, ISIs are required to be periodically performed, as specified in the site-wide document titled *Technical Safety Requirements (TSR) for Pantex Facilities*, to verify that safety critical design features have not degraded over time. This week, BWXT discovered that a yearly structural ISI, which requires two loading docks to be visually inspected for damage, corrosion, and missing hardware, had not been performed since March 2004. It appears that the inspections had been planned for execution within the required periodicity but were simply overlooked by the responsible individual. BWXT did not declare a TSR violation because the two missed inspections are not considered a failure of the overall ISI program. BWXT is still determining if other ISIs have been missed.

**W70 Contractor Readiness Assessment (CRA):** BWXT completed its W70 component disposition CRA this week with six, relatively minor, pre-start findings. BWXT believes the new affidavit process, used by operations personnel to prepare for readiness reviews, contributed to a more efficient and effective assessment, with improved results. The estimated year-long campaign to disposition the remaining W70 components is expected to begin shortly.