

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 20 October 2006
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: J. Deplitch was at Pantex this week to observe the second week of the W88 Nuclear Explosive Safety Study (NESS).

Integrated Implementation Plan (IIP) Controls: BWXT recently declared that its actions to support implementation of about 200 sitewide and facility Technical Safety Requirement controls have been completed. The three-year effort resulted in the implementation of some “new” controls and improved the overall quality of the safety basis documents. Several controls outside of the scope of the IIP, which apply to processes that have yet to start, will be implemented by other projects. PXSO has verified implementation of 138 of the 201 IIP controls. It is unclear if PXSO is planning to verify the remaining 63 controls.

W88 Nuclear Explosive Safety Study (NESS): The NESS for the W88 cell operations restart project concluded this week with two significant conclusions. First, the NESS group deduced that current controls may not adequately ensure that units selected for disassembly will meet a criterion specified by the design agency. BWXT is currently planning to develop a procedural control that would require verification by a NES representative prior to disassembly that the unit does meet the design agency’s criterion. Second, the NESS group concluded, based on design agency input, that aging of the units has not affected the sensitivity or mechanical integrity of certain components in a way that would prevent the safe disassembly of three units.

Uninterruptible Power Supply (UPS) Batteries: Six of 30 UPS batteries servicing 12-64 failed the quarterly voltage test. Based on a recommendation from the BWXT system engineer, the UPS was placed in by-pass mode. There are no technical safety requirement implications for these UPS batteries as they only power the radiation monitoring equipment in the bays. UPS batteries have historically been changed out every five years, but a replacement plan was formulated last year that extended the schedule because of maintenance resource issues. The subject batteries were installed greater than five years ago and were currently scheduled for replacement in July 2007 based on the extended replacement schedule. A recent functional assessment performed by PXSO system engineering identified that UPS battery replacements were not being performed in accordance with industry standards and requested that BWXT evaluate its battery replacement plan and monitor system performance.

Nuclear Explosive-Like Assemblies (NELA): While attempting to remove a highly hazardous component during NELA build operations, the vacuum fixture holding the component inadvertently released. The production technicians appropriately suspended operations and solicited management direction. The recovery action was to remove the component by hand and transfer it to the workbench several feet away. NELA operations do not implement the safety benefits of the SS-21 process such as minimizing or eliminating handling of hazardous components.