

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 13 July 2007
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: C. Martin was at Pantex to observe the second week of the Bays and Cells Nuclear Explosive Safety (NES) Master Study.

NES Change Control: Recently, BWXT issued, and PXSO approved, a revision to the Pantex unreviewed safety question (USQ) procedure. The procedure revision included removal of the evaluation by BWXT's NES department to determine whether a more rigorous NES review is necessary to assess the procedure, safety basis, or other changes that are covered by a given USQ (i.e. to determine whether the proposed change falls within the scope of previous NES studies). The BWXT NES department has evaluated its current change control processes and has determined that other requirements for NES approval (e.g. approval of procedure, facility, tooling, and equipment changes) provide sufficient opportunity for BWXT to identify proposed changes or other topics that should require additional NES evaluation. Similarly, BWXT does not believe that NES personnel need to evaluate changes to the safety basis because of the other mechanisms provided for NES personnel to assess proposed changes. Additionally, two of the seven BWXT personnel who perform NES change control retired this week.

W61 Anomaly: Twice during recent B61 disassembly operations, production technicians discovered that the main charge high explosive had prematurely released from the radiation case. The technicians stopped operations and contacted appropriate personnel. BWXT developed a recovery procedure that utilizes existing tooling and is somewhat similar to the normal operating process. BWXT considered, and decided against, removing a small explosive component from the unit as part of the recovery process. Normally, removal of this component is not performed by the production technicians and is not performed in the nuclear explosive bay. NNSA performed an NES change evaluation (NCE) to evaluate the recovery process and did not identify any nuclear explosive safety concerns. Also, the NCE team did not have significant concerns with BWXT's plan to add the recovery procedure to the normal operating procedure as a contingency. BWXT is planning to perform these recovery procedures next week.

W88 Cell Operations Restart Project: PXSO has validated BWXT's closure packages for the two post-start findings from the NNSA readiness assessment that evaluated the proposed restart of W88 Step I cell rebuild operations. Subsequently, PXSO approved BWXT to authorize the limited scope rebuild operations. BWXT plans to begin processing the first of three units next week.

Implementation of Technical Safety Requirements (TSRs): PXSO recently directed BWXT revise the requirements for implementing TSRs to include DOE approval of any implementation plans for TSRs that will not be implemented within 30 days of TSR approval. This appears to be another attempt to improve future configuration management of the safety basis.

High Reliability Organizations: This week, Pantex hosted representatives from the Atomic Weapons Establishment, an organization from the United Kingdom that is responsible for maintaining the British nuclear stockpile, to discuss the practices and operating philosophies of high reliability organizations.