

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**DATE:** 10 February 2006  
**SUBJECT:** Pantex Plant Weekly Report

**DNFSB Staff Activity:** R. Rauch and outside expert L. McGrew were onsite to observe the start of the W87 Nuclear Explosive Safety Study (NESS). W. Von Holle was onsite observing the orientation meeting for the B61 NESS.

**Electrical Arc Investigation:** Last week, BWXT issued a report that documented a BWXT/PXSO investigation of the electrical arc flash incident that occurred on 10 December. The scope of the investigation included evaluations of training, safety management systems, and procedures to identify contributing factors to the incident, corrective actions, and judgments of need. The causal factors and judgments of need identified in the report included the following: no procedures to control the practice of energized switching, energized switching was perceived as routine work, the approval authority for energized work needs to be higher within the organization, all electrical modification packages need to be reviewed by system engineering, training and qualification of high voltage personnel need to be evaluated, and unacceptable utility practices ingrained in site culture need to be identified. It appears that BWXT has implemented appropriate compensatory measures until the corrective actions are completed.

**Conduct of Operations:** BWXT Manufacturing Division management continues to drive improvements in the conduct of operations program. A group comprised of production managers, a production section manager, a nuclear safety officer, a union safety officer, and several production technicians has been formed to address numerous issues affecting the formality of operations. Reader-worker-checker routines were evaluated last week looking for potential process improvements. There is a belief that all operations, not just those requiring person-to-person coverage, should be standardized and consistently performed.

**W62 Dismantlement:** Operations were moved to another bay last week as a result of a recent issue with a unit failing to separate when expected. The anomalous unit was placed in a safe and stable configuration in the original bay while BWXT Engineering continues to evaluate the technical issues associated with the unit. It appears the tooling as currently designed is unable to facilitate dismantlement of some older units. BWXT plans to focus W62 dismantlement operations on newer units, which are not expected to have the same dismantlement difficulties, until the tooling and process issues are resolved.

**W76 Work Suspension:** During nuclear explosive operations last week, production technicians attempted, per procedure, to remove a metal strip that connects a weapon component to the physics package. The end of the strip broke, which prevented the completion of the removal as designed. Although there are records of a few pieces breaking similarly in the past, the cause of this most recent break has not been conclusively determined to be a process, technique, or material issue. Subsequently, three engineering procedures have been exercised in failed attempts to complete the operation. The unit is in a safe configuration while BWXT Process Engineering evaluates alternate disassembly strategies.

**Union Wage Negotiations:** The Metal Trades Council members will vote on 12 February to accept or reject the BWXT offered wage increase. BWXT placed all nuclear explosive operations in a safe and stable configuration late this week as a contingency in the event of a strike. BWXT has developed a strike contingency plan that would provide for very limited production operations, critical utility operations, and facility maintenance.