

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Rory Rauch, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending May 4, 2012

DNFSB Staff Activity: T. Spatz was at Pantex to augment site rep coverage.

Nuclear Explosive Safety (NES): Last week, B&W issued the corrective action plan for the NES change control investigation report issued March 19, 2012 (see 3/23/12 report). The corrective actions are primarily intended to ensure that the process used by B&W NES personnel to maintain familiarity with ongoing nuclear explosive operations is sufficiently rigorous to support NES change control. Other corrective actions of note include reviewing and modifying, as necessary, the roles and responsibilities of B&W NES personnel and revising the training and documentation associated with how and when to initiate stop work authority. Most of the corrective actions are due to be completed by the end of the fiscal year (FY). The plan also contains an action for the B&W General Manager to assign the NES department to an organization that is not responsible for nuclear explosive mission work by June 1, 2012.

Failed In-Service Inspections (ISIs): The electrostatic discharge (ESD) floor covering is a safety-class design feature that requires an annual ISI to verify that the resistance of the floor to facility ground is less than $10^8 \Omega$. This week, while reviewing work packages documenting completion of this ISI, a system engineer discovered that the ESD floors in two facilities were deemed to have passed the ISI despite documented readings greater than the $10^8 \Omega$ acceptance criterion. Each facility had 2 test points (out of 15) between 10^8 and $10^9 \Omega$. Both ESD floors were tested in March 2012. The crafts personnel who performed the test and the facility manager who signed off on the work packages have indicated that they did not realize the readings between 10^8 and $10^9 \Omega$ did not meet the less than $10^8 \Omega$ acceptance criterion.

The facility operations department manager suspended operations in the affected facilities after being notified of the suspect work packages. The hazard analysis report for the operations in these facilities does not credit the ESD floor for the operations that need to take place to empty the facility and retest the floors. As an extent-of-condition review, system engineers reviewed the most recent work packages documenting completion of the ISI for all ESD floors. They found one additional suspect work package in which crafts personnel failed to include the order-of-magnitude of the resistance reading for each test point. This facility contained a unit in its handling gear at the time of the discovery. Manufacturing management directed the technicians to remove the unit from the facility as part of achieving a safe configuration. Crafts personnel will retest all suspect ESD floors with oversight from a qualified system engineer before nuclear explosive operations can resume in these facilities. System engineering is working with maintenance and manufacturing personnel to identify the procedure and training improvements needed to prevent recurrence of this issue.

Generic Limiting Condition of Operation (LCO) 3.0.7: B&W has encountered a number of events that indicate weaknesses in the development and implementation of Generic LCO 3.0.7 (see 12/23/11 report). This week, as the first step towards its elimination, PXS0 approved a safety basis change removing 35 of the 54 SACs covered by Generic LCO 3.0.7. These SACs will now be treated as stand-alone, directive-action SACs. As the final step in eliminating this LCO, B&W is preparing a safety basis change that will treat the remaining SACs as separate LCOs with individual performance criteria and surveillance requirements.