

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy Dwyer, Technical Director  
**FROM:** Tom Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending August 3, 2012

**Anomalous Units:** Recall that B&W Pantex has paused operation in two facilities because each facility contains an Anomalous unit that requires NNSA Production Office (NPO) approval to process. For additional details see weekly reports for 4/27/12, 6/21/12, 6/29/12, 7/6/12, and 7/20/12. The Justification for Continued Operations (JCO) which was sent to the NPO on July 10, 2012, was retracted by B&W Pantex and resubmitted this week. The retraction was due to NPO's request for additional controls to provide defense-in-depth for specific disassembly configurations and procedure steps. On July 31, 2012, the Engineering Division demonstrated the new controls to the NPO in a training bay. On August 3, 2012, the NPO approved the JCO.

**W76 Operations:** B&W Pantex paused assembly operations in one facility this week due to the discovery of an equator bond failure. The cracking observed is an assembly artifact and was last observed in the summer of 2009. (See reports for 8/28/09 and 10/2/09.) The production technicians made the appropriate notifications, including Nuclear Explosive Safety and NPO. Analysis and review is underway to determine the path forward. B&W nuclear explosive safety (NES), B&W process engineering, and the Design Agency representative collectively determined that the unit did not meet the definition of an anomalous unit. The decision was based on the definitions provided in the interim guidance on anomalous units recently issued by NNSA (see 4/20/12 report).

**NNSA Independent Review of NES Change Control:** This week NNSA kicked off their independent assessment of the Nuclear Explosive Safety (NES) change control process. This review is a commitment in response to the Board's March 2, 2012, letter on NES change control. This independent review is one of several commitments NNSA made in their response letter dated March 30, 2012. Other commitments include; an immediate action taken by B&W Pantex to move the contractor's NES organization directly under the Plant Manager, and an initial evaluation led by B&W Pantex's Quality and Performance Assurance Division. The high-level objectives of this review are to; confirm the adequacy of the B&W Pantex evaluation and planned corrective actions, review the implementation of the NES change evaluation process and interface with the engineering change control process, evaluate the adequacy of the NES change evaluation directives, and evaluate the adequacy of B&W Pantex and NPO oversight of the NES change control process. The final report from this review is expected in September, 2012.

**Issue G Weapon Response:** NA-12, NPO, Los Alamos National Laboratory, and Sandia National Laboratories held a video conference call this week to respond to concerns raised by the Board's staff regarding new weapon responses for mechanical and electrostatic discharge insults. In 2010, NNSA established a project team and a project plan to incorporate the Issue G weapon responses into the safety basis for nuclear explosive operations that involve conventional high explosives. The Design Agencies have not released weapon responses and stated the information is not actionable. B&W Pantex has been developing new tooling and performing Hazard Analysis Task Team activities in preparation for the new weapon responses.