

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Timothy Hunt and Rory Rauch, Pantex Site Representatives
DATE: 1 May 2009
SUBJECT: Pantex Plant Weekly Report

Procedure Change Control: This week, an unreviewed safety question (USQ) evaluator discovered a nuclear explosive operating procedure (NEOP) that had been revised and released for use without some of the changes receiving a USQ determination (USQD). Operations on the affected program, which had been operating with the unreviewed changes for approximately one week, were immediately suspended. The USQD on the changes was subsequently performed and found to be negative. The unreviewed changes were one of several change requests that had originated separately, but had been consolidated into the same procedure revision. Upon consolidation, the document custodian failed to incorporate all the changes associated with the revision into the form that is presented to the USQ evaluator for final review and approval. In addition, a second check to verify the changes had been properly captured was never performed. An extent of condition review found one additional issue involving a change that occurred in multiple parts of a procedure, but was only documented for the USQ evaluator in one location. Operations have resumed and a causal analysis will be conducted to determine corrective actions.

Lightning Safety: The Nuclear Weapons Complex Electromagnetic Committee met last week to discuss the actions needed to resolve outstanding lightning safety concerns. The committee has made little progress since the last meeting in March, primarily because committee-related commitments have been deferred to allow design agency representatives to work on other deliverables. Remaining open commitments include the development of weapon response on indirect effects, the implementation of a methodology to verify that facility penetrations are intrinsically bonded to the Faraday cage (thus eliminating a potential bond wire inductance hazard), and the development of the technical basis to support a documented safety analysis change that is intended to prevent potentially multi-point grounded weapon configurations.

Special Tooling: An assembly operation was suspended this week when a safety arm failed to retract as designed and damaged a component during a seating operation. The operation has been placed in a safe and stable configuration and a recovery procedure is being developed to disengage the tool from the component to which it was mated. The tool will be evaluated at that time.

Person-to-Person Coverage: B&W Pantex will introduce a new protocol for implementing person-to-person coverage on the B61 and W88 programs in July. The plan is to remove [M] designators from the margins of the procedures and add steps to set up and take down signs and stanchions when required. Process demonstrations for the planned nuclear explosive safety change evaluation will use B61 (to reflect a multi unit program) and W88 trainer units and draft procedures. The combination of these two programs is intended to demonstrate the worst case scenarios. Once approved, the B61 will pilot the new procedures in the production environment prior to other programs adopting the changes.

Electrostatic Discharge (ESD) Controls Implementation: B&W Pantex has recently implemented several ESD control improvements. Most facilities now have stickers on the floor that identify where foot checkers, barrier stanchions and eyewash stations are to be located. This standardizes and controls the locations of this equipment when previously the locations were at the discretion of the facility representatives and production technicians. Also, a new ESD program requirements procedure was issued last month. The procedure more clearly documents the operational expectations that ensure compliance with the ESD program.