

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 24, 2012

Fire Barrier Penetration Seals: This week, B&W Pantex submitted a Justification for Continued Operation (JCO) to continue operations in facilities with suspect fire barrier penetration seals. (See weekly reports for 8/17/12, 8/10/12, and 11/4/11.) The JCO contained three categories of compensatory measures to; improve the reliability of the wet-pipe sprinkler system and the high pressure fire loop, minimize ignition sources in the interlocks, and minimize combustibles in the interlocks. B&W Pantex will perform monthly inspections of control valves with third-party verification and ensure that two fire pumps are operable at all times to improve reliability. B&W Pantex will unplug all electrical equipment in the interlocks with verification recorded in the facility logbook, to minimize ignition sources. Finally, B&W Pantex will remove all non-essential combustibles from the interlock and fire protection personnel will perform bi-weekly inspections of the interlocks. The B&W Pantex scheduled completion of fire penetration seal replacement is on February 28, 2013, when the JCO will expire. The NNSA Production Office (NPO) has approved the JCO and issued a Safety Evaluation Report. B&W Pantex will resume operations in the affected facilities once the new controls are implemented.

The current safety basis credits the two diesel fire pumps. B&W Pantex can have one diesel pump operational and one under a Limiting Condition of Operation allowing 14 days to get the second diesel pump on line. The compensatory measure requires B&W Pantex to keep one electric pump operational during any outage of a diesel pump.

Assessment of B&W Pantex DOE-STD-1189 Processes: In July, the NNSA Production Office (NPO) issued an assessment report of the B&W Pantex implementation of DOE-STD-1189-2008, *Integration of Safety into the Design Process* (DOE-STD-1189). (See report for 7/27/12.) Last week, B&W Pantex issued the corrective action plan and provided responses to the weaknesses and observations identified in the NPO report. Recall that weaknesses were identified in the areas of flow-down of requirements, screening for compliance with DOE-STD-1189, and training and qualification related to DOE-STD-1189. B&W Pantex could not identify a corrective action that can be validated as achievable in the area of formal training. B&W Pantex stated that they informally trained Projects Division personnel; however the National Training Center does not offer a course for DOE-STD-1189 in the current 2012 – 2013 course calendar.

Human Factors: Last week, the NNSA Production Office (NPO) returned a safety basis change package to B&W Pantex without approval of the change. The proposal was the submission of a revised Chapter 13, *Human Factors*, to the Sitewide Safety Analysis Report. NPO stated that the change proposal did not adequately address human interfaces with safety Structures, Systems, and Components (SSCs) for those SSCs where human performance is important for ensuring performance of the SSCs. NPO further stated that the discussion of the interfaces were limited to the surveillances required to ensure operability of the SSCs. NPO's letter did not state a deadline to resubmit the change package.