

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 8, 2013

MEMO To: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending November 8, 2013

Positive Unreviewed Safety Question (USQ) Declared: Babcock & Wilcox Pantex (B&W) upgraded the Potential Inadequacy in the Documented Safety Analysis for a fragment impact scenario resulting from a facility piping failure to a positive USQ. B&W Authorization Basis personnel discovered the approved Justification for Continued Operation for the release of Issue H Weapon Response Summary document did not address the change in weapon response values in the Vacuum Chamber Safety Analysis Report (SAR). (See report for 11/1/2013.) Late last week, B&W sent the Engineering Evaluation and the Evaluation of the Safety of the Situation (ESS) documents to the NNSA Production Office (NPO) for review and approval. This week, NPO approved the ESS and issued the Safety Evaluation Report with no conditions of approval or technical review comments.

B&W declared the positive USQ when the Issue H weapon response due to projectile impact was increased for the accident scenario where the vacuum chamber process equipment ruptures. B&W performed an engineering evaluation that showed a high velocity fragment was not credible for the equipment at the maximum operating pressure of 150 psig.

Start-up Authorization for Limited Life Component Exchange (LLCE) Operations: This week, the NPO Manager authorized B&W to commence LLCE operations on a weapon program after the NNSA Readiness Assessment report was issued. The NNSA Readiness Assessment team found no pre-start or post-start findings and one observation. These LLCE operations had been previously performed and there were no facility modifications associated with the start-up of these operations. The NNSA Readiness Assessment team observation stated that the B&W Emergency Management performance has been self-identified as needing improvement.

B&W had originally planned to start up these LLCE operations in fiscal year 2012. B&W experienced delays associated with component availability from Sandia National Laboratories, as well as changes in the weapon response values given for a select set of accident scenarios. (See reports for 7/13/2012 and 7/20/2012.) This start-up activity was also at the core of the issues associated with the suspect fire penetration seals of the inner interlock wall. In August 2012 NPO expressed concern with performing this start-up activity when the safety basis for the facility had a known deficiency. (See report for 8/10/2012.) B&W resumed LLCE operations on this weapon program this week.

Revision to USQ Procedure: NPO issued a Safety Evaluation Report (SER) approving the *Pantex Plant Unreviewed Safety Questions Procedure, Issue 10*. NPO reviewed the revision to the Pantex USQ procedure against the requirements given in *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*, DOE G 424.1-1B. The NPO SER had no conditions of approval and no technical review comments.

Pantex Visitor: Mr. Bruce Held, Acting NNSA Administrator, was at Pantex this week. Mr. Held gave separate all-hands meetings to the federal employees and the contractor, and toured several facilities.