

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Tom Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending July 27, 2012

DNFSB Staff Activity: W. Futrell, B. Laake, and C. March were at Pantex this week to perform a fire protection review.

Assessment of B&W Pantex DOE-STD-1189 Processes: In June, the NNSA Production Office (NPO) conducted an assessment of the B&W Pantex implementation of DOE-STD-1189-2008, *Integration of Safety into the Design Process* (DOE-STD-1189). This week, NPO issued the Assessment Report. Three of the five review criteria were not met. 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. During the assessment four weaknesses and two observations were identified. Two of the weaknesses are related to the use of a “Deskaid” to implement requirements and evaluate projects for compliance with DOE-STD-1189. One of the weaknesses was related to the use of an incomplete spreadsheet to flow down requirements from DOE-STD-1189 into B&W Pantex procedures. The fourth weakness was that B&W Pantex subject matter experts were not trained or qualified on DOE-STD-1189 requirements. The review was prompted by changes in the High Pressure Fire Loop (HPFL) replacement project that were not evaluated for impacts to the existing safety basis. The original HPFL project was evaluated for DOE-STD-1189 requirements. The NPO requested a response within 30 days addressing the weaknesses and observations.

W87 Operations: Last week, B&W Pantex issued a Potential Inadequacy in the Safety Analysis (PISA) and a positive Unreviewed Safety Question (USQ) determination for the W87 safety basis. W87 operations were paused once the positive USQ determination was issued. The PISA and positive USQ resulted from new weapon response data associated with a Sandia National Laboratories component. This week, the NPO approved the Evaluation of the Safety of the Situation (ESS) written by B&W Pantex on July 20, 2012. NPO’s approval is subject to one condition of approval. The condition of approval requires a revision to the *Master Authorization Agreement for Nuclear Explosive Operations at the Pantex Plant* to exclude the collocated activities of concern. W87 operations and the Operational Safety Review for mechanical assembly operations resumed on Thursday.

High Pressure Fire Loop (HPFL) Recovery Plan: This week NPO approved the recovery plan in response to “Condition A” of the Technical Safety Requirement, Limiting Condition for Operations 3.4.4 (LCO). Condition A of the LCO allows the fire pump/tank combination to be out of service for 14 days or per an approved recovery plan. The approved recovery plan simply added 14 more days to the out-of-service timeframe with no other compensatory measures. NPO approved the recovery plan with the understanding that one operational fire pump/tank combination can furnish the required volume of water for the worst case accident scenario. One of the HPFL pumps was impaired to repair a cooling water pressure regulator. During restoration of the pump, the main control valve failed to reopen. Then during replacement of the control valve, the pipe connected to the control valve was found to be corroded and failed.