

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 10 March 2006
SUBJECT: Pantex Plant Weekly Report

Multi-Unit Operations in Nuclear Explosive Bays: An approved safety basis, applicable readiness reviews, and a nuclear explosive safety (NES) study are prerequisites to authorizing nuclear explosive operations. On 24 February, the Deputy Secretary of Energy met with NNSA management at Pantex and spoke about the need for NNSA to make reasonable, risk-informed decisions to help increase weapon throughput. PXSO subsequently directed BWXT to prepare safety basis documentation that analyzes multi-unit operations in nuclear explosive bays for all weapon programs. In addition, PXSO has requested that NNSA reconsider approving a NES study *minority* opinion, which evaluated W78 multi-unit staging operations and determined that the proposed control set was adequate; this opinion was previously approved and rescinded by NA-12. Reapproving the minority opinion would likely set a precedent that would allow consideration of multiple bay operations during future NES change evaluations; as other weapon program operations are modified. BWXT has calculated that overall throughput increases of 10-15 percent could be realized through the authorization of multi-unit operations in nuclear explosive bays.

Special Nuclear Material Component Requalification Facility (SNMCRF): SNMCRF was previously scheduled to be operational by April 2006 to support W76 process prove-in activities. Late delivery of key workstation components, delinquent completion of workstation drawings and equipment testing, and inadequate facility as-built drawings have contributed to a delay of Critical Decision-4, which is currently forecasted for September 2006. There persist a number of startup issues associated with the remaining three workstations that may additionally impact the final CD-4 date. Also, the Preliminary Safety Analysis Report and Preliminary Hazard Analysis have been revised by BWXT to remove the commitment for the SNMCRF workstations to meet functional seismic requirements of Performance Category-2.

Configuration Management (CM): Currently, BWXT does not have a sitewide CM plan that has been approved by PXSO. Last August BWXT issued a policy document, which PXSO subsequently found acceptable, as a first step in standardizing the CM process. At the time, BWXT committed to publish a development plan to implement the policy. Last week BWXT issued the CM program development plan that will establish formally documented elements and processes defined in the policy for weapon operations and facilities. BWXT actions scheduled to be completed by June include performing a CM policy assessment, creating implementing procedures, and drafting a program document that describes CM processes. PXSO has also tasked BWXT to review recommendations from a February 2006 *Independent Oversight Status Report on Essential System Functionality* for applicability of identified CM and safety system improvements to Pantex.

Technical Safety Requirements (TSRs) Control Implementation: Last November, PXSO formalized its expectation that all controls derived from approved Documented Safety Analyses (DSAs) be implemented by 1 May 2006. BWXT subsequently committed to have all DSAs and most of the associated controls take effect by that date. Although only two controls have been implemented and made effective since October 2005, BWXT expressed confidence that the May deadline will be met, assuming readiness resources will not be redirected to support SS-21 startup assessments. There are dozens of additional controls that BWXT plans to implement by other startup projects before the end of fiscal year 2006 – excluding facility structure and equipment seismic attributes which are still being evaluated.