DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending December 30, 2011

Generic Limiting Condition of Operation (LCO) 3.0.7: Last week, PXSO approved several actions proposed by B&W to address the site reps' concerns with the development and implementation of Generic LCO 3.0.7 (see last week's report). First, B&W has removed three specific administrative controls (SACs) from Generic LCO 3.0.7 and will now treat them as directive-action SACs. These SACs set limits on the quantity of nuclear material, explosives, and flammable material that can be staged and transported in certain areas throughout the plant (most of these limits are outright prohibitions). In most cases, the limit specified in the SAC is the same as the quantity of material analyzed in the documented safety analysis (DSA); therefore, a non-compliance with the SAC would place the affected operation in a condition that has not been analyzed in the DSA. B&W eliminated the aforementioned SACs from Generic LCO 3.0.7 because such unanalyzed conditions are not appropriate to correct using the action statements of an LCO. Second, B&W committed to eliminating Generic LCO 3.0.7 within the next year rather than waiting 5 years for the completion of the DSA Upgrade Initiative. As part of this effort, most of the SACs currently covered by Generic LCO 3.0.7 will either be eliminated or converted to separate, stand-alone SAC LCOs. B&W has also committed to enhancing the awareness and training of the SACs covered by Generic LCO 3.0.7 until it has been eliminated.

Nuclear Explosive Safety (NES) Change Evaluation (NCE): This week, PXSO approved an NCE of two process changes on the W87 program. The first change involved a modification to the software for a radio frequency (RF) tester. B&W tester design personnel have modified the software on this tester to allow technicians to document completion of the steps displayed on the tester screen once the steps have been completed. This change allows technicians to comply with reader-worker-checker protocols and addresses a post-start finding from last spring's W87 Operational Safety Review, which stated that this tester did not allow technicians to meet the requirement from DOE Manual 452.2-1A that "…completion of the operation must be documented in the stated sequence." For the second change, B&W tester design personnel upgraded the equipment that provides the interface between the RF tester and the unit by replacing a probe antenna with a strip-line antenna. The NCE group determined that both changes meet the NES standards and identified no findings.

Recovery Plan for the High Pressure Fire Loop (HPFL): As part of the ongoing HPFL upgrade project, B&W intentionally impaired a pump facility containing a diesel fire pump and tank to tie in new underground piping. The technical safety requirements specify a 14-day completion time to return the pump and tank to an operable status. Unexpected delays and inclement weather caused B&W to officially request that PXSO extend the completion time to 30 days using a recovery plan. When one of the two pump facilities is inoperable, the safety-class HPFL system is susceptible to a single-point failure. B&W's recovery plan proposed no formal compensatory measures but described ongoing efforts to keep the remaining pump facility operable. PXSO approved the recovery plan and B&W intends to restore the pump facility to an operable status by the end of next week.