

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 March 2, 2012

Nuclear Explosive Safety (NES) Rule (NESR) Violation: This week, the W76 Operational Safety Review (OSR) team observed technicians performing a two-person verification of the position of a component using an image from a computed tomography (CT) scan. One of the specific NESRs on the W76 program requires this particular verification to be independent. The OSR team judged that this verification was not performed independently. The technicians executed the procedure properly, but the procedure did not prevent the second technician from being present while the first technician read the image of the CT scan and recorded the results. W76 CT operations are currently paused. B&W has initially categorized this event as a NESR violation. B&W plans to critique the event next week.

Conduct of Maintenance: Last week, a utility technician isolated the compressed air supply to a nuclear material facility without receiving formal authorization. The loss of compressed air to this facility did not affect any safety systems, but it did impact operations. The utility technician closed an isolation valve at the request of crafts personnel who were in the area preparing to perform preventive maintenance on the facility air compressor. The crafts personnel had not yet received authorization to perform this preventive maintenance activity from facility management and the utility technician failed to contact his supervisor to verify that his role in the activity had been authorized, per procedure. This event occurred the day after maintenance division management briefed the entire division on the importance of procedure adherence.

Safety System Configuration Management: Last June, B&W fire protection engineers made the decision to extend configuration management of the pressure boundary for the safety-class high pressure fire loop (HPFL) to all interface piping, including lead-in piping to non-nuclear facilities. Last week, a system engineer discovered that utilities personnel had recently performed a repair to the fire suppression lead-in piping for a non-nuclear facility outside of configuration management (i.e., the change was not reviewed for compliance with quality assurance requirements or to assess its impact to the authorization basis). B&W fire protection engineers and authorization basis personnel subsequently reviewed the design package for the repair and found that it met all applicable requirements. An initial review of the possible cause of the event revealed that the document utilized by system engineers to track systems under configuration management had not been updated to reflect the change to the HPFL pressure boundary. B&W plans to perform an extent-of-condition review and full causal analysis of this event in the coming weeks.

NES Change Evaluation (NCE): Last week, the PXSO manager approved the final report for the NCE of operations with a new electrical tester on the W87 program. The tester is used to verify the position of a stronglink at various points during W87 assembly and disassembly operations. It replaces an older tester that performed the same function, but did not meet several of the criteria in Design Guide, DG10001, *Electrical Testers for Use with Nuclear Explosives*. The NCE group identified no findings. One of the deliberation topics captured the fact that this tester is capable of mating with the wrong connector on the nuclear explosive. The NCE group determined that such a connection would not be a threat to NES; however, in the approval memo, the PXSO manager directed B&W to modify the applicable operating procedure to minimize the potential for technicians to mate the new tester with the wrong connector.