

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 2, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending May 2, 2014

Technical Safety Requirement (TSR) Violation: Babcock & Wilcox Technical Services Pantex, LLC (B&W) declared a TSR violation after supply chain management personnel opened a staging facility interlock door during severe weather warnings. The safety basis allows B&W to keep the inner interlock doors open at all times for a small number of staging facilities. However, the TSR for severe weather warnings requires that at least one set of interlock doors remain closed during the warning. On Tuesday, the B&W operations center declared a severe weather warning with personnel safety conditions for high winds when they observed wind gusts in excess of 50 mph. Approximately three hours after the severe weather warning was issued, supply chain management personnel opened the outer interlock door on a facility where the inner interlock door was opened, violating the TSR. At the event critique, the supply chain management personnel stated that they went into the facility to determine if there was room to stage additional material in the facility. The only control in the safety basis preventing someone from opening this door during severe weather warnings is the communication between the Facility Representative and the affected operators, and training of the operators.

Loss of Ramp Emergency Lights: The B&W Operations Center reported receiving alpha and tritium fault alarms for one building containing several nuclear facilities. The facility manager zeroed out the Argus access to these facilities until the cause of the alarms could be determined. The following day, B&W maintenance personnel discovered that the cooling fan for the uninterruptable power supply (UPS) had fallen within the cabinet causing the battery bank breaker to trip. The battery bank in this cabinet provides back-up power to the alpha and tritium alarms, as well as the ramp emergency lights. The loss of power to the alpha and tritium alarms caused the fault signal. Maintenance personnel were able to hard-bypass the UPS system and restore power to the alpha and tritium alarms, and the ramp lighting. However, emergency lights in the ramp would not function in the event of a loss of power accident. B&W fire protection engineers established compensatory measures until the UPS could be replaced. The compensatory measures include assigning flashlights to all operations personnel working in the ramp during graveyard and swing shifts and posting information at the emergency exits in the ramp that the emergency lighting does not work. Emergency lighting in the nuclear facilities was not affected and no flashlights are required for personnel working in the nuclear facilities.

Pause in Operations: Specific operations remain paused on one weapon program due to the Potential Inadequacy of the Safety Analysis (PISA) because the Hazard Analysis Report failed to include the pressure the Sylgard™ pump exerts on the high explosive during disassembly operations. (See report for 4/18/2014.) Operations also remain paused on a different weapon program due to Sylgard™ leaking from a crack in a non-energetic component. (See report for 4/18/2014.) B&W paused operations in one facility when the Production Technicians (PTs) could not connect a cable for an electric test. The PTs noticed that the connector on the unit was damaged.