

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 28, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending March 28, 2014

High Pressure Fire Loop (HPFL) Event: Babcock & Wilcox Technical Services Pantex, LLC (B&W) experienced the second leak in the HPFL in two weeks. (See report for 3/21/2014.) The Emergency Services Dispatch Center received notification that the electric pump in one pump house and the diesel pump in a second pump house had started. Within ten minutes, B&W Utilities personnel discovered a leak in the main line outside an equipment room for Cell facilities. The Fire Department was able to isolate the leak. Shortly after isolating the leak the Emergency Services Dispatch Center received a low level alarm in one of the HPFL tanks. The B&W Facility Representative entered the appropriate Technical Safety Requirement (TSR) Limiting Conditions for Operation (LCO) and dispatched the Fire Department to manually measure the level of water in the tank. The Fire Department measured the water level in the two HPFL tanks, reset the low level alarm, and the B&W Facility Representative exited the LCO. B&W has stated that the only facility affected is the mechanical room.

New HPFL Hardware Update: B&W has not placed the new HPFL diesel pumps into service yet. This week, while B&W was performing flow tests on the new diesel pumps, the pumps stopped on their own. B&W and their subcontractor are still evaluating the cause. B&W's subcontractor installed run timers on the jockey pumps in both new pump houses. The run timers were installed to correct a problem B&W experienced with frequent cycling on and off of the jockey pumps when they were first put into service. (See report for 1/31/2014.) B&W performed acceptance testing and the jockey pumps were brought online.

Lightning Protection System: B&W declared lightning warnings multiple times on a mostly clear day this week. It takes multiple sensors within the Pantex vicinity detecting a radio-frequency (RF) spike before lightning warnings are declared. The Operations Center detected RF spikes from two sensors on at least seven separate occasions. The National Weather Service did not detect these lightning strikes. B&W and their subcontractor for the lightning protection system are evaluating the hardware to determine why the system is experiencing the large number of discrepancies with the National Weather Service.