

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending February 7, 2014

Justification for Continued Operations (JCO) for Special Nuclear Material Component Requalification Facility (SNMCRF): Babcock & Wilcox Technical Services Pantex, LLC (B&W) declared a Technical Safety Requirement (TSR) violation when a B&W Fire Protection engineer discovered there was no fire damper in the task exhaust duct of a SNMCRF and the penetration seals around the duct did not meet the requirement for a 2-hour fire barrier. (See report for 1/24/14.) This week, the NNSA Production Office (NPO) approved the JCO to resume operations with one Condition of Approval (COA). The JCO states that B&W had issued a Standing Order establishing a combustible free exclusion area with a 15 foot radius centered on the point the task exhaust exits the SNMCRF. The COA states that B&W must incorporate a requirement in the Standing Order to complete an inspection of the exclusion region whenever the facility transitions from containing less than Hazard Category 3 (HC-3) quantities of nuclear material to containing HC-3 quantities. NPO stated that corrective actions to repair the suspect penetration seals and fire damper are expected to be completed by the expiration of the JCO on July 31, 2014.

High Pressure Fire Loop (HPFL) Weather Related Events: This week, the Amarillo area has experienced consecutive days with overnight temperatures in the single digits. The Emergency Services Dispatch Center (ESDC) has received several supervisory trouble signals from HPFL post-indicating valves around the site. In every case, the ESDC sent the Fire Department to inspect the valve, the Fire Department verified each valve was locked in the open position, then they silenced and tagged the fire alarm control panel. The NPO fire protection subject matter expert explained that the electrical switch attached to the stem of the valve is very sensitive to the thermal contraction of the valve parts. He also said that the supervisory trouble signal will reset itself once the condition goes away. In every case the valves were in the locked open position and there was no degradation of the HPFL; however should someone inadvertently close a valve during this period, no signal would be sent to the ESDC.

The ESDC reported receiving low temperature alarms from both of the new HPFL pump houses. During the worst outside ambient temperature of 0.0 °F, the heat tracer temperature for one of the pumps was recording 41.4 °F. B&W Utilities personnel checked the heat tracer temperature every couple of hours throughout the night shift. B&W is still performing start-up testing on the two new pump houses and the facilities have not been declared operational. (See report for 1/31/14.)

The ESDC received a system trouble signal from the training bays the following day. Fire Department personnel responded to investigate, and reported that the fire alarm control panel (FACP) did not indicate any alarm. They reported that there was condensate in the room and water was dripping into the FACP. The Fire Department silenced and tagged the FACP.

The Fire Department was dispatched to investigate a fire water system flow alarm at a non-nuclear facility. The Fire Department identified a ruptured line and Maintenance personnel were dispatched to repair the line. This rupture was not in the HPFL.