

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 24, 2016

MEMO TO: Steven Stokes, Technical Director
FROM: Ramsey Arnold and Zachery Beauvais, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending June 24, 2016

Technical Safety Requirement (TSR) Violation: CNS held and the site representative observed a critique convened to gather information necessary to determine the events that led to a TSR violation for not completing surveillance tests within the prescribed surveillance period. In February 2016, impairment and restoration (I&R) technicians were performing quarterly visual inspections on post indicator valves (PIV) installed on the high pressure fire loop (HPFL), a safety class system. Three PIVs were identified as not being able to be read due to the viewing windows being too dirty. The I&R technicians continued their surveillance inspections without pausing or notifying their supervisor. During a document review as follow-up to the first PIV-related TSR violation this month (see 6/10/16 report), an NPO facility representative noticed the discrepancy in the completed work package. After NPO notified CNS, the PIV valves were visually inspected successfully to confirm they are in the correct operational position. Maintenance work requests to replace dirty PIV viewing windows were submitted in 2012 for over 80 PIVs. Because the viewing windows are not needed for the PIVs to function properly, the work request is considered to be the lowest priority tier in the maintenance backlog system.

Maintenance Program Backlog: Prior to the management and operating (M&O) contract transition completed in July 2014, Pantex maintained a maintenance backlog of approximately 22,500 work hours. This number includes preventive and corrective maintenance. It is noteworthy that the maintenance backlog related to the operability of safety-related structures, systems, and components (SSC) is minimized—both the total number of safety-related work orders and the duration that safety-related work orders are outstanding. The overwhelming majority of the maintenance backlog consists of work that is categorized as not directly impacting safety or the Pantex mission if not completed. While the maintenance backlog remained steady prior to mid-2014, it has been steadily rising since the M&O transition. Prior to the work stoppage due to the union strike (see 8/28/15 report), metrics indicate that the backlog rose to over 30,000 work hours, a 33 percent increase. The backlog continued to increase following the strike—as of April 2016, it was over 35,000 work hours—however, some of this increase can be attributed to the strike impact. Also, CNS has been adjusting how they represent maintenance metrics to improve accuracy and better align with the CNS enterprise (i.e., Y-12) which makes it challenging for CNS and NPO management to compare past maintenance metrics to the current set. The site representative notes that if the backlog continues to increase, this could negatively affect Pantex support systems and potentially impact safety, mission, or both.

Safety Evaluation Report (SER): NPO issued a SER to approve a CNS authorization basis change package that incorporates process changes and controls relating to a stuck or damaged component into the relevant hazard analysis report. The changes being incorporated were previously approved with an evaluation of the safety of the situation and a justification for continued operation (see 3/27/15 and 7/31/15 reports, respectively).

Contractor Readiness Assessment: The CNS Pantex Site Manager issued a declaration of readiness to begin a contractor readiness assessment in preparation to startup disassembly operations on a weapon program (see 4/22/16 report).