

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 3, 2014

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Thomas Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending January 3, 2014

**High Pressure Fire Loop (HPFL) Electric Pumps:** Babcock & Wilcox Pantex (B&W) has temporarily lost the use of one of the electric pumps in the HPFL. B&W Maintenance personnel had the pump locked out to repair a leak in the recirculation loop for that pump. After fixing the leak, they turned on the electric pump and heard a loud screeching noise and immediately turned off the pump. B&W has impaired the pump for an undetermined period of time. The diesel pumps are the safety-class control, and the electrical pumps are not required to be operational per the Technical Safety Requirements (TSRs).

The B&W Emergency Services Dispatch Center (ESDC) reported receiving a HPFL electric pump start from a second electric pump approximately five hours after impairing the electric pump mentioned above. B&W Maintenance personnel were unsuccessful at resetting (turning off) the pump and the Operations Center initiated a conference call to discuss the HPFL system pressure. B&W Maintenance personnel discovered a fire hydrant leaking approximately three gallons per minute, and closed the valve to stop the leak. The system pressure recovered, and the electric pump was reset.

The following day, the ESDC reported receiving another unscheduled electric pump start. The Operations Center personnel noted that there were no maintenance activities ongoing that could have caused the pump to start, and contacted maintenance personnel to investigate. B&W Maintenance personnel discovered that the jockey pump in this pump house was not running. B&W Maintenance personnel placed the jockey pump in manual mode and turned the pump on. The HPFL system pressure was restored and the electric pump was reset. The jockey pump remains running in manual mode. At no time during these events were the diesel pumps impaired and all TSRs were met.

**Nuclear Explosive Operations:** This week, the Site Representative observed nuclear explosive operations in one facility. The Production Technicians (PTs) were performing disassembly and inspection operations on a physics package. The PTs demonstrated expert knowledge of the nuclear explosive operation and two-person control. B&W Process Engineering personnel were also in the facility to take photographs of a specific component prior to its removal. These photographs are required by the Design Agency and are incorporated into the procedure. While in the facility, the Site Representative had the opportunity to look at two load bearing special tools for any signs of wear. No visible signs of wear were observed.