DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 9, 2015

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending January 9, 2015

High Pressure Fire Loop (HPFL) Weather Related Events: Consolidated Nuclear Security, LLC (CNS) has taken action to enhance the freeze protection for both of the new HPFL pump houses after the Emergency Services Dispatch Center (ESDC) received low temperature alarms from both houses. (See report for 1/2/2015.) CNS had set the heat traces on the pump supply lines and the supply tank heaters to be activated at 48°F, and to alarm at 42°F. CNS raised the activation set point for the heat trace on the pump supply lines and the heaters in the supply tanks to 55°F. CNS also lowered the alarm set points to 40°F. CNS also identified that one of the temperature probes on an outside line was exposed to ambient air. CNS modified the temperature probe so it is now reading the water temperature.

CNS has taken one of the two older pump houses offline, but still relies on the second. The second older HPFL pump house has experienced weather related problems. The ESDC received an electrical power trouble signal and a system trouble signal from the fire alarm control panel in this pump house. The Fire Department silenced and tagged the control panel and notified the ESDC. CNS facility representatives troubleshooting the system found and replaced a bad surge suppressor on the fire alarm control panel, replaced a fuse in the control panel, reset the alarms, and notified the ESDC that the system was operational. Two days after that, the ESDC received the same two signals again. The Fire Department responded and silenced and tagged the fire alarm control panel. CNS then discovered that the facility heater was tripping the breaker. CNS took the heater offline and placed portable heaters in the facility for freeze protection. The pump house is fully operational, except for the use of portable heaters to heat the facility.

Emergency Lighting Limiting Conditions for Operation (LCO): CNS entered the LCO for inoperable emergency lights in a nuclear explosive operating facility because two emergency lights burned out. The LCO states that the facility must have at least seven emergency light fixtures illuminated, a 30 minute battery backup power source, and an automatic transfer capability from normal facility power to battery backup power. Additionally, the LCO requires immediate action to be taken when two of the emergency light fixtures are found to be inoperable. Specifically, the LCO requires the nuclear material and explosives in the facility to be limited to the current unit, and the emergency lights to be made operable prior to a new unit being brought into the facility. The following day CNS removed all material from the facility in preparation for the annual maintenance, and exited the LCO.

Positive Unreviewed Safety Question (USQ) Determination for Electro-Static Discharge (ESD) Scenario: In December 2014, CNS declared a positive USQ determination for ESD hazards on one weapon program. (See reports for 12/19/2014 and 12/26/2014.) Operations on this weapon program remain paused. CNS is preparing to send a Justification for Continued Operation (JCO) to perform limited operations on units in the Ultimate User configuration prior to sending over a JCO for the rest of the operations on this program.