

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 22, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending May 22, 2020

COVID-19: CNS previously requested an extension to the mission critical operations stage of the Pantex COVID-19 response plan (see 5/8/20 report); this extension anticipated transitioning to their recovery plan beginning next week. However, given current COVID-19 case rates in the surrounding area, CNS has notified NNSA that return-to-work actions are anticipated to be postponed by two weeks. CNS has developed resumption of operations training to support the return-to-work transition. In addition to the previously authorized mission critical operations, CNS management approved restarting work associated with developing and training on a new proposed electrostatic discharge control set for one weapon program (see 3/29/19 report). In correspondence notifying NNSA of the extension to the mission critical operations stage, CNS stated that they intend to continue to analyze performing additional NNSA-prioritized work.

Electric Forklifts: Last year, a maintenance vendor identified exposed wiring in safety-related forklifts, invalidating their EE rating, and constituting a discrepant condition (see 11/22/19 and 9/27/19 reports). Last week, NNSA approved closing their condition of approval from the evaluation of the safety of the situation regarding the new information posed by the invalid EE ratings. The condition of approval stated that CNS shall take steps to ensure the safety of onsite transportation, particularly providing protection for instantaneous degradation or increasing preventive maintenance frequencies. In response, CNS identified a new manufacturer for forklifts that includes additional protective covering for wiring, and established both pre-operational and periodic preventive maintenance to ensure the EE rating is not invalidated.

High Pressure Fire Loop: This week, a diesel pump for the high pressure fire loop unexpectedly started. The Pantex emergency services dispatch center was notified via an alarm from the fire alarm receiving system. While CNS noted a water flow alarm from a nuclear explosive cell at approximately the same time, further investigation discovered no water flow in the indicated facility. The responsible facility representative entered the appropriate limiting condition for operation (LCO) for unexplained diesel fire pump start. Per the LCO required actions, the facility representative requested churn parameters to provide information regarding the cause of the start. If the diesel pump is verified to be within expected churn parameters, this data provides indication that the pump likely is recirculating water and not providing flow to the system, and therefore an indicator that the system has not activated or leaked. The information provided to the facility representative indicated that the pump was at churn. Since churn parameters were satisfied, the appropriate LCO action specified a surveillance requirement to perform a high pressure fire loop leak rate check. CNS performed this surveillance activity later in the week; the leak rate was below the required value and consistent with previous tests, allowing CNS to exit the LCO. In addition to the LCO required actions, CNS impairment and restoration personnel checked the upstream jockey pump, which functioned normally, and reset the affected diesel pump. Fact finding participants noted that they had not observed similar events in recent history.