

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 12, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending June 12, 2020

COVID-19: On Monday, CNS entered stage one of their COVID-19 recovery plan. CNS based the decision to transition from the mission critical operations stage of their COVID-19 response plan to the first stage of recovery on community and Pantex COVID-19 case data and confidence in onsite mitigation and protective measures. Stage one measures largely involve preparatory actions to ready the site for resumption of paused operations and construction, and do not involve significant additional staffing. CNS intends to enter stage two of their COVID-19 recovery plan next week, with the intent that stage two will be a multi-week ramp up effort to return production, maintenance, and construction work to a fully operational status, while continuing to maximize telework.

Safety Basis: Last week, CNS safety analysis engineering (SAE) personnel declared a potential inadequacy of the safety analysis (PISA) regarding hazards associated with the loading and unloading of one configuration into an enhanced transportation cart (ETC) during assembly operations for one weapon program. These operations were omitted from the evaluated assembly process in the respective hazard analysis report (HAR). This week, SAE personnel performed an unreviewed safety question (USQ) determination, and upgraded the PISA to a positive USQ. The operational restrictions established following the declaration of the PISA—prohibiting operations involving loading and unloading of the configuration into an ETC-1 during the assembly process—remain in effect. Additionally, CNS conducted a fact finding to gather information regarding the timeline of events. Fact finding participants determined that the HAR omission was a legacy issue dating back over five years. Participants noted that the omission occurred during the HAR's migration to the current HAR database. SAE noted that production technicians rarely perform the affected operations; however, the operations were authorized and described in a nuclear explosive engineering procedure.

Lightning Detection and Warning System: This week, CNS deactivated the lightning location and protection system (LLPS) server. The LLPS malfunctioned in April, following which, CNS published a safety basis supplement implementing additional lightning detection measures, removing reliance on the LLPS, and stating that the NEXRAD system must be operable or the site would enter lightning warnings (see 4/24/20 and 5/1/20 report). The age of the LLPS server operating system prevented necessary installations, and facility engineering decided to deactivate the system early this week. In deactivating the LLPS server and removing network access, CNS disabled two firewall rules; however, the effects of disabling the firewall rules had not been appropriately determined, and the operations center momentarily lost NEXRAD and METTower (an additional meteorological source) access. Operations center personnel were able to immediately switch to the emergency communications network and regain NEXRAD and METTower access, and given the limited timeframe of inoperability, did not determine a need to enter lightning warnings. CNS subsequently reversed the changes to firewall rules, restoring operations center access to NEXRAD and METTower via typical network connections.