DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 9, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: M. T. Sautman and Z. C. McCabe Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending August 9, 2019

Tank Farms: In July, SRR declared a Technical Safety Requirements (TSR) violation when they unintentionally exposed a saltcake mound in an evaporator drop tank and began interstitial liquid removal without determining if the waste tank needed to enter gas release mode (see 7/19/19 report). SRR is proposing to modify the TSR to exclude salt mounds under drop risers in evaporator drop tanks from this requirement. SRR is making a qualitative argument that the hydrogen released from exposed saltcake mounds are an insignificant additional hydrogen release. A key change in this proposal is switching from an instantaneous gas release assumption to a rate limited one.

HB-Line: HB-Line personnel identified the premature implementation of over one hundred installed process instrumentation (IPI) calibrations change requests that were intended to be implemented during the upcoming layup of HB-Line. The IPI changes shifted the calibration frequency to 99 years for general service, criticality safety related and safety significant equipment. HB-Line personnel submitted these change requests to the database administrator, but intended the administrator to keep them on hold until the HB-Line safety documentation and layup plan allowed the calibrations to stop; however, this was not communicated to the administrator. Further, the form the cognizant engineers fill out for an IPI change request does not have a location to indicate a required hold on the implementation. The HB-Line surveillance tracking database still accurately reflects the current safety basis, and HB-Line personnel were able to confirm that they had not missed performing a TSR surveillance due to these errors.

L-Area: L-Area operations personnel were performing a task preview when they discovered that the 85-ton crane did not have power. They later determined that maintenance personnel inadvertently left the main disconnect for the motor control center open despite restoring the system to service. (It had been locked out for preventative maintenance). The subsequent investigation revealed that the generic work order directed the maintenance personnel to record (i.e., hand-written) the as-found condition in a blank table; however, the mechanic did not include the main disconnect with the other nine disconnect switches in the table. This likely contributed to the individual restoring the system failing to close the main disconnect. This event also revealed several other shortcomings. For instance, per the lockout, maintenance personnel had already opened all of the disconnects and performed their safe energy determination before other personnel performed the work order step that directed them to record the as found conditions. Instead of stopping work and calling a time out, the individual recorded the as-found conditions in the work order based on notes written on tape placed near the disconnects when the other personnel performed the safe-energy determination.

Salt Waste Processing Facility: The resident inspector (RI) observed portions of the failed contactor and loss of ventilation off standard tests. Following the pre-job briefing, the RI found that some control room staff did not know the function of three fans they were about to turn off.