

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 14, 2016

TO: S. A. Stokes, Technical Director
FROM: Z. C. McCabe Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending October 14, 2016

H-Area: H-Canyon personnel failed to enter a specific condition of a limiting condition for operations (LCO) and used inadequate technical work documents to remove H-Canyon NIMs (nuclear incident monitors) from service which led to HB-Line violating their technical safety requirements. A system engineer responsible for reviewing a maintenance work package specified that the HB-Line NIMs and alarms be put into standby mode prior to the H-Canyon NIMs. This sequence was specified because the HB-Line safety basis includes credible criticality accidents that require alarms in areas within H-Canyon to be operable when HB-Line is processing material. However, a generic H-Canyon work package (that did not mention the HB-Line NIMs) was used to place the H-Canyon NIMs in standby on October 3. When H-Canyon placed their NIMs in standby mode, the control room received a trouble alarm indicating that the remote alarm system operability was indeterminate. Although H-Canyon previously entered two separate conditions of a LCO associated with their NIMs, they failed to recognize that an applicable third condition of the LCO (associated with the remote alarm operability being indeterminate) should have been entered. The third condition also included a note stating that HB-Line may need to enter a similar LCO and required halting all fissile material movement and processing in H-Canyon, which was already performed as a required action of the two other LCO conditions. HB-Line did not place any of their NIMs or alarms in standby mode or enter two of the appropriate LCO conditions (omitting a similar condition to the one H-Canyon failed to enter) until October 10. After discussing the situation with the system engineer, HB-Line and then H-Canyon operations personnel entered the NIM alarm LCO conditions that should have been entered originally. During an issue review H-Canyon and HB-Line personnel determined that HB-Line failed to enter the appropriate LCO condition and perform the required actions, which is a violation of the HB-Line Technical Safety Requirements. The corrective actions identified include issuing a shift order for communication requirements, clarifying the H-Canyon procedures, and additional NIMs system training for applicable personnel.

H-Canyon: During H-Canyon steam outage activities, an additional work activity was added to an approved lockout work package. The site procedure that governs the SRS lockout/tagout processes requires approval from all original reviewers when work is added to a preexisting lockout work package. Although the work was within the lockout boundaries, H-Canyon operations personnel failed to have engineering approve the revised work package with the additional scope before releasing the work activity. On October 10, H-Canyon maintenance personnel identified the issue while reviewing the work packages. The requirement for all original reviewers of a lockout work package to re-review all revised work packages was established in a recent revision to the site procedure. Although H-Canyon personnel were trained on the changes to the site procedure, operations personnel were not familiar with the requirements because adding scope to a lockout work package is not common. Discussions during an issue review revealed that H-Canyon personnel are expected to review uncommonly performed reference procedures such as this to ensure the requirements are met. The corrective actions include requiring management approval when scope is added to lockout work packages until the appropriate personnel are trained on the issue.

Target Residue Material (TRM): DOE completed the readiness assessment of the TRM project this week. DOE identified 13 findings that include issues with procedure performance and quality.