

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) which resulted in HB-Line violating their technical safety requirements. A system engineer responsible for reviewing a maintenance work package specified that the HB-Line NIMs (nuclear incidence monitors) 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, the work package included the steps placing the H-Canyon and HB-Line NIMs in standby mode in the prerequisite section, which can be performed in any order unless specified otherwise. So the work package allowed H-Canyon to declare their NIMs inoperable and entered two separate conditions of the associated LCO prior to HB-Line. Additionally, H-Canyon personnel failed to recognize that the applicable third condition of the LCO (associated with the NIM alarms being inoperable) should have been entered. The third condition included a note stating that HB-Line may need to enter a similar LCO. The H-Canyon required action for the alarm condition is to halt all fissile material movement and processing, which was performed as part of the actions associated with the previously entered LCO conditions. Meanwhile, 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 four days after H-Canyon. On October 10, HB-Line put their NIMs back into service and exited the two LCO conditions. After discussing the situation with the system engineer and other subject matter experts, HB-Line and then H-Canyon operations personnel entered the NIM alarm LCO conditions. During an issue review H-Canyon and HB-Line personnel determined that HB-Line failed to enter the appropriate LCO and perform the required actions, which is a violation of the HB-Line Technical Safety Requirements. The corrective actions identified include communicating a lessons learned 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.