

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 30, 2020

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 October 30, 2020

Salt Waste Processing Facility: After replacing two flow indicating control valves, workers completed post-maintenance testing (i.e., in-service leak test, functional acceptance check). The shift operations manager (SOM) approved the Safety Significant Equipment System Operability Checklist and declared them to be operable. This checklist included an item stating that applicable surveillance requirement (SR) implementing procedures were completed, but did not define what they were. Later on, a different SOM questioned why a particular SR had not been performed prior to declaring the valves operable. Parsons decided that the SR was required and declared a Technical Safety Requirement (TSR) violation although there were differences of opinion.

H-Canyon: A DOE-SR facility representative was walking down the 291-H stack breech house and surrounding area when he noted several issues with the breech house door, part of a safety significant confinement boundary. One bolt was missing a washer; another bolt had two washers; and the head of a third bolt was not flush against the breech house door. Further investigation and discussions with those involved in a recent maintenance evolution revealed that some of these bolts were also not lubricated as required. Without proper bolt lubrication, the gasket would not be compressed as appropriate when the bolts were torqued, which is necessary for the door to perform its post-seismic safety function. The maintenance evolution was a TSR surveillance with a frequency of 7 years. The SOM entered the appropriate limited condition for operation (LCO) for the evolution and subsequently exited the condition once the evolution was complete. Upon discovery of the condition (weeks later), the SOM re-entered the condition due to the suspect nature of the breech lock door. Fortunately, the completion time of 30 days for the LCO condition required action (restore the system to operable) had not passed by the time the issue was identified and resolved, thus this did not result in a TSR violation.

The maintenance involved the construction of a containment hut and the donning of respirators, which may have contributed to the misplaced washers and failing to notice the one bolt was not flush. However, it is not clear why the maintenance mechanic did not lubricate all of the bolts, which is not typically included in a work package, but rather considered “skill of the craft.” Further, proper lubrication was also the subject of a recent training.

Savannah River Tritium Enterprise (SRTE): Earlier this month, the resident inspector observed an oral board where the candidate showed weaknesses in the areas of safety basis knowledge, system fundamentals, Occurrence Reporting and Processing System knowledge and radiological fundamentals. After remediation, the candidate sat for a re-board this week. The resident inspector noted significant improvement regarding safety basis knowledge and system fundamentals. The board committee members noted some remaining opportunities for improvement with ORPS and radiological fundamentals despite the candidate’s improvements in those areas. The resident inspector believes that the conduct and grading of the oral board was appropriate.