DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 26, 2021

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 February 26, 2021

Savannah River National Laboratory (SRNL): SRNL personnel have reconsidered their position on the appropriate response to notification of one (or both) fire water pumps running. After a recent event (see 1/29/21 and 2/5/21 report), SRNL personnel determined that the correct response to notification of a single fire water pump running (per the TSRs as written) was to enter the appropriate limiting condition for operation (LCO) and perform the required actions. SRNL management informed their personnel of the expected response and revised the abnormal operating procedures accordingly. The resident inspector (RI) pointed out that the aforementioned position would mean that SRNL violated the Technical Safety Requirements (TSR) considering they did not enter the LCO condition when the event occurred last month. Since that time SRNL personnel have entered the potential inadequacy of the safety analysis process, but have determined that the TSRs and documented safety analysis are appropriate as written. SRNL personnel have also now determined that entering the LCO condition for one (or two pumps) running is not necessary. SRNL's current position is that the appropriate response to notification of a pump running (or two pumps running) is to verify the fire water loop pressure is in range, monitor the tank level and investigate why the pump came online. SRNL is in the process of revising the previously revised procedures. The Board discussed TSR violations in a letter to the Secretary that included DNFSB/Tech-45, Violations of the Nuclear Safety Basis.

This week SRNL personnel identified that the fire water tank level indicator (a non-safety related indicator) in the control room began to fluctuate before no longer displaying a number. This caused SRNL personnel to question the operability of the safety significant alarm in the control room, and associated equipment. As such, SRNL personnel entered the appropriate LCO and performed the required actions, one of which includes manually verifying that the tank water level is greater than 20 feet immediately and every 6 hours thereafter.

Savannah River Tritium Enterprise (SRTE): This week an NNSA-SRFO facility representative was overseeing the removal of a lockout and observed an operator reach across a radiation boundary to inspect a tag. The facility representative called a time out. NNSA-SRFO management informed SRTE management of the event. In combination with the series of inadequacies surrounding the execution of a task earlier this month (see 2/12/21 report), this event led to SRTE management conducting safety pause briefings to the entire workforce. The RI observed one of the first briefings, which focused on clarifying expectations regarding calling timeouts and proper adherence to barricades and postings.

H-Canyon: The resident inspector observed a successful oral examination for a shift technical engineer. The examination covered appropriate areas and scenarios. However, the RI noted that, although the candidate answered questions correctly, they did not verify any answers by reviewing the TSRs after answering from memory. The board committee explained that during practice examination the candidate relied too heavily on the TSRs and was likely over-correcting due to previous feedback.