DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 2024

TO: Timothy J. Dwyer, Technical Director

FROM: L. Lin, Z.C. McCabe, and E.P. Richardson, Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending March 15, 2024

L-Area: L-Area and rigging personnel successfully up-righted the research reactor cask containing spent fuel that fell off a flatbed trailer last week (see 3/8/24 report). The rigging team executed the critical lift plan without incident and staged the cask on cribbing. Radiological Protection Department (RPD) personnel found no detectable contamination on the portion of the cask that was on the ground. L-Area personnel cleaned the cask of soil and inspected the cask for damage. The inspection revealed four bent fins on the cask. The non-destructive evaluation of the lifting and base components showed no crack or damage that would compromise the structural integrity of the cask. SRNS personnel are in the process of developing a method for transporting this and similar casks within the L-Area fenceline, which will need to be finalized before the cask can be moved into the facility to inspect the fuel elements within.

Salt Waste Processing Facility (SWPF): Technicians calibrated two pieces of safety significant radiation instrumentation as part of a Technical Safety Requirement (TSR) surveillance. Two days later, a Quality Control inspector signing out measurement and testing equipment (M&TE) for a different calibration noticed that the model used for the previous calibration was not an approved model per the procedure. Engineering determined the instruments were still operable during that time. The surveillance was re-performed satisfactorily with a correct M&TE model before the surveillance due date. During the issue investigation, personnel discussed that the M&TE did not have the specific model number on the units, and the datasheet (which is manually generated) for the M&TE had the incorrect instrument model associated with the M&TE number. There was also discussion on whether the work order is normally provided to and checked by the M&TE issuer to ensure the correct equipment is provided. As part of the corrective actions, personnel will label all M&TE with their model number.

Savannah River National Laboratory (SRNL): SRNL's implementation verification review (IVR) continued this week with the onsite portion that consisted of interviews, discussions, and walkdowns in support of determining the readiness for SRNL personnel to implement revision 3 of the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) (see 2/23/24 report). The IVR team will continue to document their assessment in the coming weeks, but thus far have identified concerns regarding the complexity of the TSRs and the training of SRNL personnel on the revised DSA and TSR. The resident inspectors (RI) observed the majority of the planned walkdowns, discussions, and interviews along with personnel from DOE-SR. The revised SRNL safety basis includes 40 new Specific Administrative Controls (SAC), including 6 limiting conditions for operation (LCO) formatted SACs and 24 TSR Surveillance Requirements (SR).