DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 4, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Sandia National Laboratories (SNL) Report for September 2019

Defense Nuclear Facilities Safety Board Staff On-Site Activity: On September 17-19, 2019, the Board's cognizant engineer for SNL conducted on-site oversight at the site. The Board's cognizant engineer completed a walk down of Technical Area V (TA-V) including discussions with the Facility Representative regarding recent renovations and facility improvements. The Board's cognizant engineer observed the mobile loading unit contractor readiness assessment completed by National Technology and Engineering Solutions of Sandia, LLC (NTESS) in preparation for the shipment of 11 shielded contact-handled waste containers to the Waste Isolation Pilot Plant (WIPP). The Board's cognizant engineer also observed an emergency management tabletop drill.

TA-V Continuous Improvement Plan (CIP): On September 3, 2019, NTESS issued a revision to the TA-V CIP. NTESS issued this CIP as a follow-up to the corrective action plan (CAP) from the federal readiness assessment for the Reactivity Control System Upgrade at the Annular Core Research Reactor Facility. The CAP identified areas that require long-term targeted improvements in the overall level of formality and rigor applied to processes in TA-V. The scope of the CIP includes long-term improvements resulting from the readiness process, identified weaknesses resulting from an extent-of-condition review following the readiness process, and the implementation of NQA-1 as the quality standard for TA-V. NTESS revised the CIP to update roles and responsibilities due to personnel changes, update the communications plan to better suit the needs of TA-V, provide clarification to information and requirements in various sections, and to expand on the current state of the project. NTESS is currently completing Phase 1 of the three phase plan.

Mobile Loading Unit (MLU) Contractor Readiness Assessment (CRA): On September 6, 2019, NTESS declared their readiness to proceed with the MLU CRA. The CRA was completed on September 18, 2019. The CRA included an extensive pre-job briefing conducted by the staff members for each organization participating in the activity. The CRA also included a walk down of the area where the MLU activities will take place. Over the course of their assessment, the CRA team was focused on roles and responsibilities, communication, stop work authority, and normal and abnormal operations. The CRA report will be completed in approximately 30 days. The Start-Up Authorization Authority for the MLU activities is the NTESS Director of Radiation and Electrical Science.

Emergency Management Tabletop Drill: On September 19, 2019, NTESS completed an emergency management tabletop drill. The drill scenario involved a fire in a conference room in the Gamma Irradiation Facility and a simulated injury and fall by a victim evacuating another facility in TA-V. The drill included participation by TA-V managers and staff, SNL emergency management staff, the Kirtland Air Force Base Fire Department, and Protective Force officers. The objectives of the drill included demonstration of the ability of SNL response organizations to provide access to TA-V, demonstration of effective communications between Field and Emergency Operations Center assets, and the successful operation of a unified command. The drill is one of a series of activities undertaken to improve performance by the emergency management organization at SNL.