

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 3, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Sandia National Laboratories (SNL) Report for April 2024

Implementing the Startup and Restart Process for Nuclear Facilities, Operations, and Activities:

On April 23, 2024, the National Nuclear Security Administration (NNSA) Sandia Field Office (SFO) approved the National Technology and Engineering Solutions of Sandia, LLC (NTESS) Procedure GN470109 Issue E, *Implementing the Startup and Restart Process for Nuclear Facilities, Operations, and Activities*. SFO noted that this revision addresses and closes two post-start findings from the *Final Report for the Federal Readiness Assessment (FRA) for Transient Rod Withdrawal (TRW) Submode Operations at the Annular Core Research Reactor Facility (ACRRF)* (see SNL Monthly Report for September 2023). SFO approved the procedure based on the assessment of the adequacy of Sandia's procedure in meeting the requirements specified in Department of Energy (DOE) Order 425.1 D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. SFO directed NTESS to integrate the procedure into all technical aspects of Sandia organizations responsible for startup and restart of the existing hazard category 2 and 3 nuclear facilities, operations, or activities within 90 days.

Corrective Actions Addressing the DOE Office of Enterprise Assessments (EA) Findings from Three Assessments of Emergency Management at SNL: On April 24, 2024, the Board's technical staff received the NTESS response to a request for information regarding the closure of 48 corrective actions for 12 findings from three EA assessments of the SNL emergency management program (see SNL Monthly Report for May 2022). SNL emergency management subject matter experts performed a review of three EA assessment reports (2014, 2015, and 2018) that included 12 findings and 48 corrective actions. The review evaluated 193 pieces of evidence. NTESS stated that the objective of the review was to examine all EA-33 findings within SNL's emergency management program and identify if the associated corrective actions and supporting corrective action evidence met expectations to defensibly closeout the findings. Over the course of the review, the review team lead assessor, in coordination with SNL Emergency Management's Readiness Assurance Review Board and the assessment core team, examined all findings and associated evidence in SNL's assurance management database to ensure adequacy, suitability, and defensibility, and to validate that legacy EA-33 issues were resolved. The review team found that SNL emergency management and corporate partners had defensibly closed all 48 corrective actions tied to the 12 findings and had appropriately conducted internal effectiveness reviews to ensure corrective action implementation and effectiveness. EA-33 returned to SNL in March 2024 to reassess SNL emergency management following the completion of the reexamination of the legacy finding closures. SNL emergency management is awaiting the final EA-33 report from this most recent assessment to determine whether further action is needed.

DOE Enterprise Assessment - Office of Enforcement (OE) Consent Order: On April 12, 2024, NNSA executed a consent order for a hoisting and rigging event that resulted in injury to a worker. The event occurred on March 29, 2023, at the SNL Weapons Evaluation Test Laboratory at DOE's NNSA Pantex Plant. The DOE OE concluded that NTESS's investigation was of sufficient scope and depth, and the associated causal analysis and corrective action appeared appropriate to address the causes of the event and should prevent reoccurrence. While this event did not occur at SNL Albuquerque, the Board's staff will continue to monitor the resolution this issue since DOE OE noted deficiencies in NTESS's implementation of procedures for work planning and control (including job hazard analysis, hierarchy of controls, and the equipment design/review process).