

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 5, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer  
**SUBJECT:** Sandia National Laboratories (SNL) Report for February 2021

**SNL Operating Status in Response to COVID-19:** On February 5, 2021, the New Mexico Governor issued Executive Order 2021-04, which renewed and extended previous Public Health Emergency Orders and county-by-county restrictions due to COVID-19. This order remains in effect through March 5, 2021. The operating status of SNL remained unchanged during February. The Sandia Field Office (SFO) and National Technology and Engineering Solutions of Sandia, LLC (NTESS) continued to operate under Phase 2 of their recovery and re-entry plans while encouraging maximum telework for SFO and NTESS staff members.

**Approval - Second Quarter Fiscal Year 2021 Startup Notification Report (SNR):** On February 11, 2021, SFO approved the Second Quarter Fiscal Year 2021 SNR. As noted in a prior SNL Monthly Report (January 2021), NTESS identified four activities planned for the Technical Area V nuclear facilities in the next twelve months and two activities after twelve months that will require readiness reviews. SFO agreed with the readiness level determination for five of these activities but not with the checklist readiness assessment for the Fuel-Ringed External Cavity Version II (FREC-II) Operations for Class I and Class II Experiments. SFO reviewed the Readiness Level Determination for the FREC-II Operations for Class I and Class II Experiments based on the requirements in Department of Energy Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. The DOE Order states that a Federal Readiness Assessment (FRA) is required for “Restart after an extended shutdown for a Hazard Category 1 or 2 nuclear facility, activity, or operation. (For a Hazard Category 2 nuclear facility, activity, and operation, an extended shutdown is 12 months).” SFO determined that the FREC-II activity involves operations that could affect the Annular Core Research Reactor (ACRR) core, which is Hazard Category 2. Therefore, SFO determined that an FRA for the FREC-II activity is appropriate. SFO approved the submitted SNR with a few additional conditions.

**Final Report - Contractor Readiness Assessment (CRA) for In-Service Fuel Cladding Inspection:** On February 10, 2021, the CRA team issued their final report as part of the readiness assessment activities for in-service fuel cladding inspection at the ACRR. The CRA team evaluated all aspects of ACRR in-service fuel cladding inspection activities identified in the approved Plan of Action and Implementation Plan. The review addressed facility personnel, systems, structures and components, and documentation relevant to ACRR fuel inspection operations, including procedures, standards, codes of record, and authorization bases. The CRA provides the Startup Authorization Authority with independent confirmation of the readiness to proceed with ACRR in-service fuel cladding inspection activities, and confirmed that TA-V has the necessary leadership, strategy and team in place to ensure the safety and health of the facility, equipment, workers, and the public, as well as protection of the environment. The CRA team identified no findings and made 56 informational observations, some of which were related to observations identified during the Management Self-Assessment but not yet fully addressed through the SNL corrective action process. The CRA team concluded that TA-V has adequately demonstrated readiness, including equipment, procedures, and personnel, to proceed with ACRR in-service fuel cladding inspections. The FRA for this activity is scheduled to begin on April 12, 2021.