

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 7, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Sandia National Laboratories (SNL) Report for November 2018

Defense Nuclear Facilities Safety Board (Board) Staff Activity: The Board's staff provided zero person-weeks of on-site safety oversight at SNL during November 2018.

Annular Core Research Reactor (ACRR) Resumes Programmatic Operations: On November 7, 2018, SNL management authorized the restart of programmatic operations at the ACRR following successful completion of all portions of the *Annular Core Research Reactor Reactivity Control System (RCSU) Upgrade Restart Plan*. The Restart Plan addressed all of the issues identified in the Federal Readiness Assessment and included the completion of testing not completed during the RCSU conversion including:

- Full pre-operational check.
- Completion of the remaining portion of the Acceptance Test Plan requiring control rod movement.
- Completion of the remaining section of the Rod Drive Calibration procedure.
- Final review of the Technical Safety Requirements surveillance requirements.
- Testing in steady state at Delayed Critical and in pulsed mode.

The Restart Plan also addressed continuing improvement in operator proficiency with each operation as evaluated by the conduct of operations (ConOps) senior supervisory watch (SSW). The ConOps SSW observed and documented every operation and evolution during the RCSU restart period.

Auxiliary Hot Cell Facility (AHCF) Fire Protection Assessment Corrective Action Plan: On November 9, 2018, SNL management provided a corrective action plan to the Sandia Field Office (SFO) in response to the results of an SFO assessment of fire protection at ACHF that SFO provided to SNL on September 14, 2018. The SFO fire protection assessment identified areas for improvement associated with: functionality of the fire alarm system at Technical Area V (TA-V); fire alarm systems inspection, testing, and maintenance deficiencies; discrepancies between the Fire Hazard Analysis (FHA) and the Basis for Interim Operation; delayed completion of FHA; and non-current and incomplete fire alarm drawings. The assessment identified a total of five issues; including three minor findings and two observations. SNL management noted in its response that corrective actions for previously identified deficiencies in Sandia's Corporate Fire Protection Program are already being tracked in Sandia's Assurance Information System (AIS). SNL management also noted that new items identified in the SFO assessment will be documented and tracked in AIS. SNL staff will provide status updates for the corrective actions to SFO during bi-weekly meetings conducted between SNL Building and Fire Safety staff and the SFO Fire Protection Engineer.