

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 4, 2016

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Douglas J. Brown, Cognizant Engineer  
**SUBJECT:** Sandia National Laboratories Report for October 2016

**Staff Activity at Sandia National Laboratories (SNL).** There were no onsite Defense Nuclear Facilities Safety Board (Board) staff reviews or oversight visits in October.

### **Sandia Field Office Completion of *Evaluation of Existing Facilities to DOE-STD-3009-2014*:**

The Department of Energy's (DOE) Office of Environment, Health, Safety and Security (EHSS) issued OE-I:2015-01, *Evaluation of Existing Facilities to DOE-STD-3009-2014* in June 2015. This Operating Experience (OE) document required that the Sandia Field Office (SFO) perform an evaluation of the Documented Safety Analyses (DSA) for existing defense nuclear facilities to gain insights that may enhance protection of the public from nuclear hazards based on the newly revised DOE-STD-3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*, by 1 October 2016. The OE required specific actions to identify, evaluate, and document the analysis of DSAs against provided evaluation criteria. The Sandia Corporation (Sandia) presently operates three nuclear facilities subject to Subpart B of Title 10, Code of Federal Regulations, Part 830 (10 CFR 830) at Technical Area-V (TA-V). Those three facilities are the Auxiliary Hot Cell Facility, the Sandia Pulsed Reactor Facility/Critical Experiments, and the Annular Core Research Reactor (ACRR). Only the ACRR met the threshold for evaluation, and was analyzed to the evaluation criteria. Of note, an administrative operational limit on the Material-at-Risk ensures unmitigated consequences remain less than the threshold for evaluation and offsite consequences never challenge the evaluation guideline. Additionally, any unique experiments above the administrative operational limit requires Safety-Significant or Safety-Class controls to prevent offsite consequences and must be approved by SFO in writing. The review of the ACRR concluded that the DSA meets the expectations of DOE-STD-3009-2014. SFO considers Sandia's efforts to address OE-I:2015-01 appropriate and satisfactory.

### **National Nuclear Security Administration's Chief of Defense Nuclear Safety Biennial**

**Review:** The Office of the Chief of Defense Nuclear Safety (CDNS), NA-511, is conducting a Biennial Review of the SFO and Sandia National Laboratories in Albuquerque, New Mexico, during the last quarter of calendar year 2016. The CDNS Team review of SFO started on October 4, 2016, with a defined scope of nine functional areas. CDNS team members were instructed to contact their SFO Points of Contacts (POC) and finalize the criteria review and approach documents in their functional areas as well as discuss opportunities to shadow assessments and operational awareness activities. The joint kickoff meeting with the CDNS POCs and SFO POCs was held on October 18, 2016, during which the SFO POCs briefed their organization and oversight process, the results of the most recent SFO Nuclear Safety Self-Assessment, the status of the contacts for each of the functional areas being reviewed, and other requested agenda items. The Board's staff members plan to observe the mid-December deliberations on-site, as well as individual assessments/activities when schedules permit.