

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 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 December 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 December 2018.

**Sandia Pulsed Reactor Facility (SPRF) Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) Approval:** On December 13, 2018, the Sandia Field Office (SFO) provided National Technology and Engineering Solutions of Sandia, LLC (NTESS) with their Safety Evaluation Report (SER) for the 2018 SPRF DSA and TSRs Change Notice 0. The DSA and TSRs are complete revisions transmitted from NTESS to the Sandia Field Office (SFO) on March 29, 2018. These documents combine the existing SPRF Safety Analysis Report (SAR), SPRF/Critical Experiments (CX) SAR, SPRF TSRs, and SPRF/CX TSRs. The SFO noted that the SER represented the results of its independent review of the DSA and TSRs and concluded that the 2018 SPRF Safety Basis provides reasonable assurance of adequate protection to the workers, the public, and the environment from the identified hazards and meets the requirements specified in 10 Code of Federal Regulations 830. The SFO identified no conditions of approval during the review. In addition, the SFO directed NTESS to implement the 2018 SPRF Safety Basis within 150 calendar days from the date of their letter.

**Safety Evaluation Report (SER) Addendum for the 2018 Annual Update, Change Notice 1 - Sandia Pulsed Reactor Facility (SPRF) DSA and TSRs:** On December 17, 2018, SFO approved the 2018 Annual Update SPRF DSA and TSRs Change Notice 1, via an SER Addendum. In November 2018, at the time of the SPRF 2018 Annual Update submission, SPRF Revision 0 was still awaiting approval from SFO. Therefore, the November SPRF 2018 Annual Update submittal included no proposed page changes to the existing SPRF DSA and TSRs awaiting approval and only included a summary of the negative Unreviewed Safety Question (USQ) Screens and Unreviewed Safety Question Determinations (USQDs) associated with the SPRF 2018 Annual Update submission. The safety basis as described in the SPRF DSA, and associated TSRs was unchanged based on the 113 USQ Screens and USQDs considered. Change Notice 1 included no proposed changes to the existing SPRF DSA and TSRs and no Potential Inadequacy of the Safety Analyses (PISAs). Based on the SER Addendum, the SFO considers the documentation making up the SPRF 2018 Annual Update to be accurate and acceptable documentation that meets the annual update requirements. SFO directed NTESS to implement the 2018 Annual Update SPRF Safety Basis CN 1 with the implementation of 2018 SPRF Safety Basis Revision 0.

**Technical Area V (TA-V) - Facility Representative Qualification:** As discussed in the April 2017 and May 2018 SNL Cognizant Engineer Monthly Reports, the SFO has been working to qualify new Facility Representatives in TA-V. On December 18, 2018, the second Facility Representative-in-training completed his final oral board and became officially qualified as a TA-V Facility Representative. There are now two fully qualified Facility Representatives in TA-V.