DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 7, 2017

TO: Steven A. Stokes, Technical Director
FROM: Douglas J. Brown, Cognizant Engineer
SUBJECT: Sandia National Laboratories Report for June 2017

Staff Activity at Sandia National Laboratories (SNL). On June 7, 2017, the Board's SNL Cognizant Engineer provided one day of oversight and interaction with SNL and Sandia Field Office (SFO) personnel. On June 8-9, 2017, the Board's SNL Cognizant Engineer supported a Board Member site visit.

Board Member Site Visit. On June 8-9, 2017, a Board Member toured the Defense Nuclear Facilities at SNL, which included all Hazard Category 2/3 facilities in Technical Area V (TA-V) as well as defense radiological facilities with the exception of the Manzano Storage Facility. The Board Member also held discussions with SNL and SFO senior leadership. Lastly, the Board Member toured the Thermal Test Complex and discussed Pipe Overpack Container testing with Dr. Robert Nelson (DOE EM 3.111) and Mr. James O'Neil (NA-LA).

Radiation Sciences Organization Work Pause Update. As originally noted in the May 2017 monthly report, the SNL contractor self-imposed a work pause in SNL's Radiation Sciences Organization. All facilities resumed programmatic operations in May 2017 with the exception of the Auxiliary Hot Cell Facility (AHCF). The delay in resuming AHCF operations was due to the need to complete Campaign 18 procedural revisions. On June 14, 2017, AHCF completed procedural revisions and resumed programmatic operations.

Sandia Pulsed Reactor Facility/Critical Experiments (SPRF/CX) Core Change. SPRF/CX personnel changed out the critical experiments core from the Seven Percent Critical Experiment (7uPCX) core to the Burnup Credit Critical Experiment (BUCCX) core. This represents the first reloading of the BUCCX core since approximately July 2002. The BUCCX core physics will be re-characterized and benchmark core configurations re-validated. This fuel may be used to support future criticality courses taught at the facility if it is determined core configurations can support course objectives. The 7uPCX will then be reconstituted to support the August 2017 criticality course.