

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 7, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Lawrence Livermore National Laboratory (LLNL) Report for August 2018

Defense Nuclear Facilities Safety Board (Board) Staff Activity: The Board's staff provided three person-weeks of on-site safety oversight at LLNL during August 2018. During the week of August 14–21, 2018, the Board's cognizant engineer was on site to observe the 2018 Annual Full-Scale Exercise and to meet with the Manager of the Livermore Field Office (LFO), the LLNL Associate Director for Nuclear Operations, and the Weapons and Complex Integration Deputy Principal Associate Director for Operations to discuss routine nuclear safety oversight items. On August 14–16, 2018, Board's staff members A.J. Miller and N.M. George were on site to review documents for an upcoming criticality safety program review.

Building 332 Transition to New Motor Control Centers (MCC): On August 7, 2018, LFO approved a request by LLNL for a one-time deviation from the Building 332 Limiting Conditions for Operation (LCO) to allow the facility to transition to two new MCCs (see LLNL Report for July 2018). On August 27, 2018, LFO issued another letter approving specific aspects of the operation of the confinement ventilation system during the LCO. The initial approval letter required that the accompanying safety evaluation report be entered into the Building 332 safety basis effective immediately. Upon successful completion of the transition to the new MCCs, but no later than October 31, 2018, the documents supporting this LCO shall be removed from the Building 332 safety basis.

LLNL 2018 Annual Full-Scale Emergency Exercise: On August 16, 2018, LLNL completed its fiscal year 2018 annual full-scale exercise. The exercise scenario was executed at Site 300, Building 801, and involved a forklift accident and simulated fire engulfing a drum containing ceramic beryllium. LLNL completed the critique of the exercise on August 20, 2018, and noted a number of items for improvement and some good practices. LLNL will issue an after-action report within 45 days of the exercise.

Building 331 Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) Annual Update: On August 20, 2018, LFO issued a letter providing comments to LLNL on the annual update to the Building 331 DSA and TSR. LFO requested that LLNL submit any revised DSA and TSR page changes incorporating comment resolutions within 60 days.

Contractor Readiness Assessment (CRA) of Transuranic (TRU) Waste Characterization Operations: On August 23, 2018, LFO approved the Plan of Action (POA) for the CRA of Transuranic Waste Characterization Operations. LFO noted that the POA has the appropriate breadth, criteria, and prerequisites, and is sufficient to assess the readiness of facility personnel, programs, and equipment to conduct work safely. LFO also agreed that the proposed CRA Team Leader has sufficient independence, experience, and technical expertise to serve in that role. TRU waste characterization is required prior to shipment to the Waste Isolation Pilot Plant.