

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 7, 2023

TO: Katherine Herrera, Acting Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Lawrence Livermore National Laboratory (LLNL) Report for June 2023

Building 332 Seismic Evaluation and Retrofit - Quarterly Update: On June 1, 2023, Lawrence Livermore National Security, LLC, (LLNS) provided a quarterly update on the seismic evaluation and retrofit projects for Building 332 to the Livermore Field Office (LFO). The update covered progress made by LLNS related to soil-structure interaction analysis, evaluation of equipment response to seismic loading, evaluation of the plenum exhaust building retrofit, and identification of engineering firms with nuclear quality assurance (NQA-1) certification to design Increment 1 retrofits.

LLNL Nuclear Maintenance Management Program (NMMP) for Non-Reactor Nuclear Facilities: On June 15, 2023, LLNS requested approval of the LLNL Institutional Manual MAN-0158, *LLNL Maintenance Management Program for Non-Reactor Nuclear Facilities*, Rev 01. LFO approval of the LLNL NMMP is required at least every three years for all hazard category 1, 2, and 3 nuclear facilities. LLNS noted that no major content changes were necessary during this update since Department of Energy (DOE) Order 433.1B, Chg. 1, *Maintenance Management Program for DOE Nuclear Facilities*, had not changed during the three-year review cycle. LLNS noted that minor changes in the manual include updating references and organizational and personnel names, as appropriate. LFO last approved the LLNL NMMP Institutional Manual MAN-0158 on September 18, 2020.

LLNL Tritium Facility (Building 331) Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) Annual Update: On June 21, 2023, LFO approved the 2023 annual update of the Building 331 DSA and TSRs. LFO received the annual update of the Building 331 DSA and TSRs per the revised Title 10 Code of Federal Regulations Part 830 (10 CFR 830.202(c)(2)), which allows submitting to DOE the latest copy or a letter stating that there have been no changes since the prior submittal. DOE approval is not required. LFO reviewed the submittal and applicable Unreviewed Safety Question Determinations (USQD) and did not identify any changes that affect the approved Building 331 safety envelope. LFO agreed that there were no significant changes to the Building 331 safety basis, noting that it is acceptable for continued use. LFO directed LLNS to add the submittal and response letter to the Building 331 safety basis within 90 days.

LLNL Radiography Facility (Building 239) DSA and TSR Annual Update: On June 23, 2023, LLNS submitted the 2023 annual update of the Building 239 DSA and TSRs. LLNS noted that this transmittal was provided for informational use in accordance with 10 CFR Part 830.202(c)(2), which has removed the stipulation requiring DOE approval of all annual updates. The annual update included USQDs from February 1, 2022, through February 1, 2023. LLNS noted that these USQDs resulted in no changes to the Building 239 DSA and TSRs.

LLNL Verification of Readiness to Start Up or Restart Nuclear Facilities: On June 29, 2023, LLNS submitted LLNL Institutional Manual MAN-2386, Rev 0, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, to LFO for review and concurrence. LLNS submitted the manual in compliance with DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. The new Institutional Manual replaces ES&H Manual Document 51.4, Rev 9, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, as part of the LLNS Nuclear Safety Functional Area Office's efforts to convert ES&H Manual Documents into an institutional document format. LLNS noted that the converted text remains largely unchanged, with a few minor additions and editorial changes.