

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer
SUBJECT: Sandia National Laboratories (SNL) Report for July 2020

COVID-19 Response: On July 13, 2020, the State of New Mexico Department of Health issued a revised Public Health Emergency Order clarifying that current Guidance Documents, Advisories, and Emergency Public Health Orders remain in effect and amending the June 30, 2020, Public Health Emergency Order closing all businesses and non-profit entities except for those deemed essential. During July 2020, SNL continued operations at a number of facilities, including Technical Area V (TA-V), while a majority of Sandia Field Office (SFO) and National Technology and Engineering Solutions of Sandia, LLC (NTESS) staff continued to telework in response to the COVID-19 pandemic. The SNL and SFO return-to-site plans remain in Phase 1 until COVID-19 conditions improve.

Annular Core Research Reactor Facility (ACRRF) Status: The ACRRF remains in maintenance mode, which is scheduled to continue through August (see SNL Monthly Reports for March 2020, April 2020, May 2020, and June 2020). During the month of July, ACRRF staff and contractors completed maintenance on the bridge crane rails, removed the damaged 15-element fuel rack from the ACRR pool, and removed the potentially compromised nickel plate located between ACRR and Fuel Ringed External Cavity II. In addition, the ACRRF staff removed the legacy central cavity and transferred it to Auxiliary Hot Cell Facility for disposal, freeing up one of the large floor storage locations at the ACRRF. NTESS plans to resume ACRR operations in September to complete the final three series of high-priority programmatic experiments.

Fourth Quarter Fiscal Year 2020 Startup Notification Report (SNR) Approval: On July 22, 2020, the SFO approved the fourth quarter fiscal year 2020 SNR that was submitted by NTESS on June 24, 2020. The NTESS submission updated the proposed schedules for three activities identified last quarter to prioritize readiness reviews for the in-service fuel cladding inspections activity and to combine the schedules for the reactor experiments and the core grid extension activities in the ACRR. The SFO agreed with the NTESS assessment of the Readiness Level Determination for the in-service fuel cladding inspections activity at the ACRR and concurred on the January 2021 date for the Federal readiness assessment. The SFO directed NTESS to continue to work with SFO staff on the development of a combined Plan of Action (POA) for the reactor experiments and core grid extension installation activities and to submit the POA in August 2020. The SFO noted their previous approval of the reactor operations activities to support neutron radiography and the transient rod withdrawal operations at ACRR and reiterated that a POA for each activity is required six months before the completion of the management self-assessment. The SFO is the Startup Authorization Authority for each activity.

Transuranic (TRU) Waste Shipment to the Waste Isolation Pilot Plant (WIPP): During July 20–24, 2020, the WIPP Mobile Loading Unit (MLU) was on site at the Sandia Pulsed Reactor Facility (SPRF) to load eleven shielded TRU waste drums into HalfPACT containers for shipment to WIPP. On July 20–21, NTESS and WIPP MLU staff completed preparations for the loading operations. On July 22–23, NTESS and WIPP MLU staff loaded the shielded TRU waste drums and one dunnage drum into four HalfPACTs (3 drums in each HalfPACT). Following the required inspection and certification of road-worthiness of the trucks and trailers, the shipment departed the SNL site on Friday, July 24, 2020.