

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 3, 2023

TO: Timothy J. Dwyer, Acting Technical Director
FROM: Sonia G. Thangavelu, Cognizant Engineer
SUBJECT: Nevada National Security Site (NNSS) Report for October 2023

DNFSB Staff Activity: During the week of October 16, the Board's staff participated in discussions with Nevada Field Office (NFO), Mission Support and Test Services, LLC (MSTS), and Joint Laboratory Operations Nevada personnel for a virtual staff review of the safety bases – U1a Complex Enhancements Project and 60% design of the Z-Pinch Experimental Underground System testbed project. The Board's staff did not conduct onsite activities in October.

Update to Deliberate Approach at the U1a Complex. As discussed in the monthly report for September 2023, MSTS initiated a safety stand down at the U1a Complex. MSTS implemented an action plan to improve worker safety, define roles and responsibilities between workers and supervisors, identify and mitigate worker hazards, and reestablish a strong safety culture at the U1a Complex. The plan states MSTS developed a management plan to enhance senior leadership presence on-site and conduct oversight of work activities with implemented corrective actions, including NFO oversight of MSTS activities. These corrective actions include having management re-engage in the work control process, observe formal pre-job briefs (with a checklist to grade the pre-job briefs as satisfactory, unsatisfactory, or opportunities for improvement), evaluate new work through table-top exercises, and observe executed work activities. MSTS and NFO continue to observe scheduled operations at the U1a Complex and maintain increased oversight per the MSTS management plan. MSTS will evaluate feedback received from NFO leadership and the U1a workforce about the effectiveness of its deliberate approach at the end of October.

Start-Up Notification Report. MSTS submitted the first quarter start-up notification report, as required by Department of Energy Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, to NFO. MSTS delayed the scheduled contractor readiness assessments for the small-scale dynamic vessel experiments due to lack of funding and for the coordinate measuring machine because of operability issues requiring vendor repairs. The report further states that the scheduled start date for the contractor readiness assessment for the oxide capability changed due to funding and that the readiness assessments for the enhanced staging project are delayed due to construction and redesign of the remote monitoring system to support the project. MSTS identified the Nevada capability exercises/joint technical operations team as a new operation requiring federal readiness review, with NFO as the approved startup authorization authority. NFO approved the report on November 1.

Annual Update to Joint Actinide Shock Experimental Research (JASPER) Facility Safety Basis. MSTS submitted the 2023 annual update letter for NFO approval identifying no changes to the JASPER documented safety analysis and technical surveillance requirements since the last revision that includes the gas breach change notice. MSTS concluded no critical changes are necessary after review of the unreviewed safety question determinations and new hazard controls since the last revision. Therefore, the safety basis is current and meets Title 10 Code of Federal Regulations Part 830, *Nuclear Safety Management*, requirements.