

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2025

TO: Technical Director
FROM: Nevada National Security Sites (NNSS) Cognizant Engineer
SUBJECT: NNSS Report for July 2025

DNFSB Staff Activity: The DNFSB staff did not conduct any on-site activities in July.

Fourth Quarter Startup Notification Report (SNR). On July 3, 2025, Mission Support and Test Services, LLC (MSTS) submitted the fourth-quarter SNR to the Nevada Field Office (NFO) for approval, as required by Department of Energy (DOE) Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. In the report, the contractor readiness assessment for 6-foot vessel operations changed due to facility scheduling. The scheduled readiness assessments for the enhanced staging program and Z-Pinch Experimental Underground System testbed remain unchanged. On July 31, 2025, NFO approved the SNR.

Update to Device Assembly Facility (DAF) Safety Basis. On April 23, 2025, NFO reviewed, approved, and issued a safety evaluation report for a safety basis change to the DAF safety basis, in accordance with DOE Standard 1104-2016, *Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents*. The safety basis changes would allow simultaneous assembly operations in multiple DAF buildings, but only allow fabrication of one assembly in a building. The safety basis change also prohibits assembly operations in the presence of a completed assembly; however, staging of multiple subassemblies in approved containers is allowed. MSTS updated several surveillance requirements and limiting conditions of operations and revised the applicability of using credited controls (e.g., blast valves) by limiting the quantity of high explosives allowed during staging and assembly operations. NFO identified no conditions of approval but identified an issue for the next safety basis annual update.

On June 3, 2025, NFO approved another safety basis change. The change would authorize operations using a specific material that required revisions to existing specific administrative controls, an increase to the material-at-risk inventory limit for the material used during staging and handling operations, and use of new personal protective equipment during specified operations. NFO did not issue conditions of approval or identify issues for the next annual update.

Implementation Verification Review (IVR) for 6-Foot Vessel Operations at Principal Underground Laboratory for Subcritical Experimentation (PULSE). As mentioned in the NNSS monthly report for March 2025, the PULSE safety basis was revised to allow new process operations and technical surveillance requirements to support 6-foot vessel activities in PULSE. On May 15, 2025, MSTS issued a report following completion of an IVR for the new safety control strategy. In the report, MSTS identified two pre-implementation findings, three post-implementation findings, and four opportunities for improvement. The findings focused on revisions to verbiage for several controls and procedures to align with PULSE technical safety requirements. On May 29, 2025, PULSE declared implementation of the controls following resolution of the findings. In preparation for the contractor readiness assessment, MSTS completed the management self-assessment on July 17, 2025.