

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2026

**TO:** Technical Director  
**FROM:** Nevada National Security Site (NNSS) Cognizant Engineer  
**SUBJECT:** NNSS Report for February 2026

**DNFSB Staff Activity:** For each subcritical experiment (SCE), a device response methodology (DRM) summary report and dynamic criticality safety evaluation (DCSE) are required to ensure the device does not introduce new hazards into NNSS nuclear facilities. The DRM summary report typically goes through the unreviewed safety question process, which provides assurance that the safety control strategy defined in the facility safety basis is not compromised by the proposed SCE and identifies whether any changes to the facility safety basis are required. The DCSE provides further assurance that the proposed SCE will remain inherently subcritical under both normal and abnormal conditions during operational activities. During the week of February 9, a DNFSB staff team was on-site at the Lawrence Livermore National Laboratory (LLNL) to conduct a review of the approach used to develop DRM and DCSE documentation for LLNL-designed SCEs conducted at NNSS. The staff previously performed a similar review for Los Alamos National Laboratory (LANL)-designed SCEs (see NNSS Monthly Report for January 2025). The staff plans to complete its evaluation of LANL and LLNL processes for developing DRM and DCSE documentation in the near future.

**Redefinition of the Site Boundary at NNSS:** The U.S. Department of Energy (DOE) Standard 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*, requires the identification of safety controls to prevent or mitigate accident scenarios in which the calculated radiological dose consequences exceed DOE's dose consequence thresholds for workers and the public. These dose calculations depend on the distance, with shorter distances generally resulting in higher consequences. To determine the dose to the maximally exposed offsite individual (e.g., offsite public), the DOE site boundary is typically used. DOE Standard 3009 defines the site boundary as a geographic boundary where public access is controlled and activities are governed by DOE and its contractors. On January 13, 2025, the Nevada Field Office (NFO) directed Mission Support and Test Services, LLC (MSTS), to change the NNSS site boundary to include the adjacent military testing and training area controlled by the U.S. Air Force for use in radiological dose consequence calculations. NFO further directed MSTS to ensure that the memorandum of understanding between the National Nuclear Security Administration and the Air Force is sufficient to adequately control public access to the testing and training area and that communication protocols exist such that the Air Force can implement protective actions at the testing and training area in the event of an emergency at NNSS. NFO also directed MSTS to re-evaluate the site boundary in the safety basis for NNSS nuclear facilities. This change will potentially reduce the calculated radiological dose consequences to the public. The Board's staff is currently evaluating how this change will impact the functional classification of identified safety controls, including the seismic control strategy at the Device Assembly Facility.