DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 6, 2017

TO: Steven A. Stokes, Technical Director
FROM: Austin R. Powers, Cognizant Engineer
SUBJECT: Nevada National Security Site (NNSS) Report for September 2017

DNFSB Staff Activity: The Board's staff did not conduct any on-site activities at NNSS during the month of September.

Device Assembly Facility (DAF) Fire Suppression System (FSS) Improvement Project: During the month of September, National Security Technologies, LLC (NSTec), continued to make improvements to the FSS in DAF. NSTec has continued construction activity for the 16th building out of the 25 buildings in which NSTec plans to make FSS improvements. Specifically, NSTec has replaced the old lead-in line and tied the new lead-in line into the firewater loop outside of the DAF. NSTec has also completed the backfilling of the lead-in line ditch with the controlled low-strength material (CLSM) concrete. Meanwhile, NSTec has continued to address the 20th building out of 25 buildings to be addressed. Specifically, NSTec has completed all construction activities to address the sprinkler deficiencies in this building. NSTec has also made all of the necessary penetrations into the building for the new piping, which will tie into the fire loop inside DAF. NSTec will tie the new piping for this building into the inside firewater loop once it resolves an issue with an isolation valve outside of DAF. Specifically, NSTec could not fully close the isolation valve, which did not allow them to disconnect the outside fire water loop from the inside firewater loop. NSTec has developed a work package to resolve this issue.

DAF Linear Accelerator (LINAC): During the month of September, NSTec completed the independent verification review for the DAF Documented Safety Analysis Change Notice 3 and declared the controls implemented and effective. Change Notice 3 addresses the new LINAC that was installed at DAF, which now has the capability of generating 9 MeV and 15 MeV. NSTec also completed the LINAC contractor readiness assessment (CRA) during the month of September. The CRA team identified two pre-start items. The first pre-start finding requires NSTec to close out the remaining nonconformance reports associated with the installation of the LINAC. The second pre-start findings requires NSTec to determine the preventive maintenance activities for the LINAC and schedule these activities in their computerized maintenance management system. The CRA team determined that the new LINAC can be safely and compliantly operated once the findings have been resolved. The new LINAC will be able to support the build of the Vega subcritical experiment.

U1a Complex Federal Operational Readiness Review (FORR): As discussed in the NNSS Monthly Report for August 2017, a FORR team was assembled to confirm operational readiness for subcritical experiment activities at the U1a Complex after completion of its upgrade to a hazard category 2 nuclear facility. The FORR team completed their review in August and issued their final report late August. The Board's staff received this report in September. In the final report, the FORR team identified six findings (two pre-starts and four post-starts) in the following areas: configuration management, fire protection, maintenance, and operations. NSTec has developed a corrective action plan for each finding and is in the process of closing them. The Nevada Field Office will validate the closure of each finding.