

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 4, 2015

TO: Steven A. Stokes, Technical Director
FROM: John E. Deplitch, Cognizant Engineer
SUBJECT: Nevada National Security Site (NNSS) Report for August 2015

DNFSB Staff Activity: There were no staff visits or conference calls.

Device Assembly Facility (DAF): DAF personnel are near completion of tasks associated with bypassing a second fire suppression system lead-in line. National Security Technologies, LLC (NSTec), is still considering how it will replace the lead-in lines on the south side of the facility, after discovering last month that flange connections may be located under the buildings and therefore much more difficult to reach than originally thought.

National Criticality Experiments Research Center (NCERC): NCERC personnel conducted criticality experiments on the Comet, Planet, and Flat-Top machines in August. Operations with Comet supported experimental work for others. Operations on Planet and Flat-Top supported hands-on training for the Nuclear Criticality Safety Program Managers Course. NCERC personnel are re-characterizing Godiva output with emplacement of the Top Hat. NCERC personnel should then begin execution of the Startup Plan for Godiva Burst Operations in a few weeks. Additionally, NCERC personnel built radiation test objects for emergency response personnel training and detector development.

Subcritical Experiments: At DAF and the U1a Complex, Los Alamos National Laboratory (LANL) and NSTec personnel continued to prepare for an upcoming subcritical experiment with surrogate material. In August, LANL personnel completed assembly and radiography of the next subcritical experiment device at DAF in accordance with LANL and DAF procedures. LANL then safely moved the device to the experimental room at the U1a Complex. There were no safety issues. LANL and NSTec are on schedule to complete these experiment operations within one year of the previous subcritical experiment, in order to maintain readiness to conduct subcritical experiments.

Joint Actinide Shock Physics Experimental Research Facility (JASPER): Lawrence Livermore National Laboratory and NSTec personnel successfully executed two surrogate shots, Shot 131 and 132. The experiments were executed in accordance with operating procedures with no safety issues. The shots returned 100% data.