

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 4, 2022

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Austin R. Powers, Cognizant Engineer  
**SUBJECT:** Nevada National Security Site (NNSS) Report for January 2022

**DNFSB Staff Activity:** On August 26, 2021, the Board sent a letter to the Secretary of Energy that highlighted safety issues with the NNSS Radioactive Waste Facilities (RWF) safety basis. The Board's letter requested a report and brief on the actions the Nevada Field Office (NFO) has taken or plans to take to ensure that the site contractor is submitting high quality safety basis documents and the issues in the RWF safety basis are addressed. On January 25, 2022, NFO briefed the Board on its response to the reporting requirement. The staff conducted no onsite activities at NNSS during January.

**Device Assembly Facility (DAF) Severed Utility Lines:** In December, workers began an initiative to install powerline poles for a trailer at DAF. When excavating the final hole with an auger, the workers observed cut wires. The workers immediately stopped work and informed the DAF Operations Control. As a result of the severed utility lines, the Operational Command Center located in Mercury received multiple fire alarms within DAF, and Fire and Rescue initiated its response. While there were no indications of fire or fire alarms at DAF, the Local Emergency Director (LED) was activated. The LED initiated a protective action to remain indoors until more information was known. Upon arrival, Fire and Rescue confirmed that there were no active alarms at DAF and that the alarms were functioning as normal. Mission Support and Test Services, LLC (MSTS), personnel determined that one of the severed lines was the communication line that sends a signal to Dispatch in Mercury. MSTS issued a timely order that implemented a compensatory measure. MSTS closed this timely order after the severed lines were repaired in December.

MSTS performed a critique for this event and found that the workers conducted the job planning and work properly. MSTS also noted that personnel performed a ground penetrating radar survey of the proposed powerline installation area almost a month before starting the excavation. From this survey, MSTS developed a drawing that showed what utilities were found and marked the ground. Because paint markings can fade in a short timeframe, MSTS found that it is common practice at the site to reperform these surveys for markings that are over two weeks old. However, MSTS found that there is no company guidance on how much time can elapse between ground penetrating radar surveys and actual excavation. Construction personnel also highlighted issues with as-built information not being updated on system drawings.

**Start-up Notification Report:** In January, MSTS submitted the quarterly 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. In the report, MSTS highlights that several readiness activities associated with Lawrence Livermore National Laboratory projects at DAF have been delayed due to either resource deconfliction or programmatic needs. Also, MSTS delayed the readiness activities associated with a project at DAF due to the schedule for developing the safety basis that analyzes the hazard and accidents related to the new operation.