

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2019

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Daniel B. Bullen, Ph.D., P.E., Cognizant Engineer  
**SUBJECT:** Sandia National Laboratories (SNL) Report for August 2019

**Approval of the Waste Isolation Pilot Plant (WIPP) Mobile Loading Unit (MLU) Readiness Activity Determination and the Third Quarter Fiscal Year 2019 Startup Notification Report (SNR):** On August 1, 2019, the Sandia Field Office (SFO) approved the Third Quarter Fiscal Year SNR. In their submission to the SFO, National Technology and Engineering Solutions of Sandia, LLC (NTESS) stated that there were no status changes for the Waste Isolation Pilot Plant (WIPP) Mobile Loading Unit (MLU) project, which is currently in the readiness review process. The SFO's correspondence noted that there are no other startup or restart activities planned for the Technical Area-V nuclear facilities in the next twelve months. In its approval letter, the SFO also directed NTESS to provide any updates related to the WIPP MLU readiness review process.

**Preliminary Notice of Violation (PNOV) for Electrical Safety-Related Deficiencies:** On August 6, 2019, the Administrator of the National Nuclear Security Administration (NNSA) issued a PNOV to NTESS in response to three electrical safety-related events that occurred between April and June 2018. None of these events occurred within a defense nuclear facility. NNSA noted that the electrical events exposed weaknesses in NTESS's implementation of the requirements of 10 CFR Part 851, *Worker Safety and Health Program*. The events, which occurred at the Coyote Test Field, Thunder Range, and the Scaled Wind Farm Technology (SWiFT) sites, revealed deficiencies in: (1) management responsibilities and hazard identification and assessment, (2) electrical safety, (3) emergency response, (4) training and information, and (5) recordkeeping. NNSA noted that the events occurred at remote sites (Coyote Test Field and Thunder Range located on south and east portions of Kirtland Air Force Base, and SWiFT located west of Lubbock, TX, respectively) causing NNSA to reiterate its concerns with NTESS's implementation of worker safety and health program elements at remote locations. Since NNSA imposed a monetary penalty on NTESS as a result of these violations, NNSA decided not to propose no civil penalties for the Part 851 violations. NNSA noted that it will continue to monitor the completion of corrective actions until the matter is fully resolved.

**Emergency Management Program Corrective Actions:** On August 12, 2019, the SFO issued a request for corrective actions for the April 17, 2019, and May 22, 2019, SNL Emergency Management Full-Scale Exercises. The SFO observed the exercises and reviewed the NTESS after-action report. The SFO noted that while no individual findings or observations were identified during their evaluation, significant issues were identified that demonstrated numerous weaknesses that require a higher level of management attention. The SFO binned their observations from both exercises into four significant groups: (1) Organizational Culture, (2) Design/Conduct/Control of Exercises, (3) Formality of Operations, and (4) Common Operating Picture/Communications. The SFO Evaluation Team determined that the responses performed during both exercises were inadequate and did not demonstrate the appropriate level of readiness required by DOE Order 151.ID, *Comprehensive Emergency Management System*. The SFO requested NTESS's corrective actions by September 30, 2019.