DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO:Christopher J. Roscetti, Technical DirectorFROM:Austin R. Powers, Cognizant EngineerSUBJECT:Nevada National Security Site (NNSS) Report for May 2020

DNFSB Staff Activity: The Board's staff conducted no onsite activities at NNSS during May.

COVID-19 Impact on NNSS: During May, the Nevada Field Office (NFO) and Mission Support and Test Services, LLC (MSTS), developed a plan for returning to normal operations at NNSS. The plan follows the phased gating criteria outlined in the guidelines from the White House, Department of Energy, and National Nuclear Security Administration (NNSA) Headquarters. NNSA Headquarters has reviewed and approved this plan. With its approval, NNSS transitioned to Phase 1 during May (the state and communities surrounding the site meet the gating criteria of downward trending for 14 days). In Phase 1, most of the workforce will continue to work from home, and the site will continue executing approved mission-critical and high priority programmatic activities associated with the "Limited Operations" work status. Workers who have not yet returned to work, but are expected to do so during Phase 1, will be required to take training that includes a set of protocols on COVID-19 mitigation measures, social distancing, face coverings, and general cleaning/disinfection. Subject to the state meeting the gating criteria and NNSA approval, NNSS plans to transition to Phase 2 in June.

U1a Complex Safety Basis Change Notice: In April, NFO approved a change notice to the U1a Complex safety basis. In the change notice, MSTS addressed a potential inadequacy of the safety analysis associated with the U1h hoist control system's ability to stop the hoist cage from impacting the top or bottom of the shaft when traveling at full speed. MSTS identified a new specific administrative control that limits the hoist travel speed and is intended to ensure the hoist cage does not travel beyond the top and bottom of the shaft when carrying an experiment package. The new safety basis also requires operating the U1h hoist through one complete cycle of travel at or below the new speed limit no more than 24 hours prior to using it to transport an experiment package. During May, MSTS conducted an implementation verification review (IVR) for the new controls and requirements identified in the change notice. The IVR team identified one pre-start finding and no post-start findings. For the pre-start finding, the IVR team found that the procedure used to implement the surveillance requirements for the U1h hoist did not specify which mode the hoist needs to be in when performing the surveillance requirements. MSTS has since updated this procedure to address the pre-start finding. Based on the IVR and the actions taken to resolve the pre-start finding, MSTS has declared the new controls and requirements to be effective.

Joint Actinide Shock Physics Experimental Research (JASPER) Annual Update: As discussed in the NNSS Monthly Report for April 2020, NFO approved an annual update to the safety basis for the JASPER Facility. During May, MSTS conducted an IVR for the new controls and requirements identified in the annual update. The IVR team did not identify any pre- or post-start findings. As a result, MSTS has declared the new controls and requirements to be effective.