DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 26, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: M. T. Sautman, Resident Inspector
SUBJECT: Savannah River Site Activity Report for Week Ending July 26, 2019

235-F: After performing maintenance on an exhaust fan, a mechanic removed the single point lockout/tagout (SPLT) and left the electrical disconnect open for the fan. During turnover of the fan SPLT status between an experienced shift operations manager (SOM) and a newer one, the former did not highlight that the SOM was responsible for ensuring the disconnect was restored properly (i.e., closed) before starting the fan. The fan switching procedure also did not have a step to ensure the starting fan had electric power. Later, an operator shut down the running fan while attempting to start the fan which had underwent maintenance. However, since the disconnect was still open and neither fan was now operating, the vacuum started to drop and this set off a safety-significant E1 low vacuum alarm and activated an interlock, which shut down the supply fan. The operator heard the supply fan shut down and immediately restarted the previously running fan. Workers evacuated 235-F. There was no spread of contamination.

Salt Waste Processing Facility: As part of their process of achieving readiness, Parsons conducted a management self-assessment (MSA-3). (Parsons knew they were not fully ready at this time since 27 Operational Readiness Review prerequisites are still open). The team identified 15 pre-start and 5 post-start findings and concluded that 6 of the previously closed prerequisites needed to be reopened. The team noted that the focus to date has been on cold commissioning (chemical operations) and more emphasis needed to be placed on preparing for hot nuclear operations such as performing more simulated radiological operations and practicing the implementation of Technical Safety Requirements. After the team identified that Parsons did not require comprehensive written exams as part of the qualification process, Parsons began testing operations staff this week. Prior to declaring readiness, Parsons intends to have both the MSA-3 and Implementation Verification Review teams conduct a follow-on verification to review items that were not ready the first time around and to review the closure of their findings.

H-Canyon: During the determination of an electrical lockout, the determiner discovered a breaker locked closed instead of being in the required open position. The lockout had already been installed and verified by two separate operators. When the first operator initially approached the breaker, it was in the required open position, however, the operator believed that they needed to change the configuration prior to installing the lockout and did not fully read and understand the work order. The second operator, who performed the verification incorrectly, does not often work with the type of device used to lockout the breaker and misunderstood the configuration. In addition to the errors associated with the physical installation and verification, discussions during the issue review revealed several other shortcomings. For instance, although those involved with the event stated that they held an informal pre-job brief, they did not discuss the fact that the previous shift had already positioned the breaker or review the work package. Additionally, the operators involved do not typically hang lockouts in this area; however, due to time pressure they were tasked with it. This lockout had not been established, thus no one was exposed to hazardous energy. In response to this error, H-Canyon personnel are issuing a lessons learned.