

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 1, 2017

TO: Steven Stokes, Technical Director
FROM: Bradford Sharpless, Idaho Cleanup Project Cognizant Engineer
SUBJECT: Idaho National Laboratory (INL) Report for August 2017

DNFSB Staff Activity: The Board's staff did not conduct any on-site activities at INL during August 2017. The Board's staff provided an average of 1.4 person-weeks per month of on-site oversight for the first eleven months of fiscal year 2017.

Radioactive Waste Management Complex (RWMC). On August 16, 2017, two electricians performed troubleshooting activities on an energized Variable Frequency Drive (VFD) in the Accelerated Retrieval Project (ARP)-IX facility (WMF-1622) at RWMC. A Programmable Logic Controller indicated a fault on the VFD and the electricians were directed to check/reset the received fault codes.

The lead electrician (LE), safety electrician, and the electrical and systems engineers had previously walked down the job and discussed the work and its associated hazards. When the work commenced, the engineers took up an observation position at a distance from the work. The safety electrician took up a position to the side to establish a safety barrier and in a position to assist the LE in reading the LED indicator lights on the VFD panel.

The electricians donned the required personal protective equipment (PPE) prior to accessing the VFD. They checked the VFD for visible problems and found none. The LE attempted to reset the power, which did not correct the problem. The LE then began pushing the buttons on the VFD to scroll through the error codes. However, the buttons were too small to push while wearing gloves, so the LE removed his gloves.

This event became ORPS-reportable because the LE, contrary to work requirements, removed his PPE (gloves). No worker came into contact with an uncontrolled energy source. RWMC's Nuclear Facility Manager suspended all minor maintenance work pending the completion of corrective actions.

Idaho Nuclear Technology and Engineering Center (INTEC). On August 23, 2017, the senior Department of Energy Facility Representative at INTEC observed maintenance workers painting the Delta barrier (vehicle access control barrier) north of INTEC's CPP-603 facility. The maintenance workers were protected from inadvertent Delta barrier operation by two energy isolating devices (bent steel rods) secured in place by locks. However, no lockout/tagout (LOTO) had been implemented for the work, nor was one required by the associated minor work order.

Although the workers were not endangered due to the use of long-reach tools to conduct the maintenance and the use of the security locks and steel rods to prevent closure of the Delta barrier, the failure to protect employees using singularly identified LOTO locks was a deviation from OSHA requirements. Fluor Idaho, LLC managers determined the event to be ORPS-reportable as a Group 10 Management Concern and Issues, Sequence Number 2, Significance Category 4.