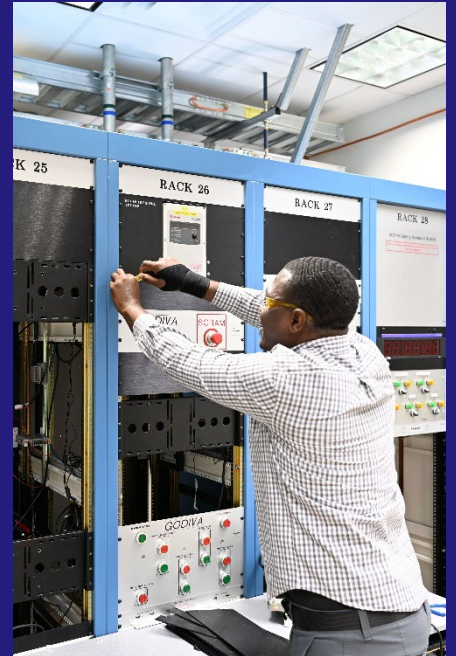


#NEUTRON PULSE



4th QUARTER 2023 EDITION

LA-UR-24-21811

NEUTRON PULSE

4th QUARTER 2023 EDITION

OPERATIONS SUMMARY

NCERC hosted two criticality safety classes; one for the Nuclear Criticality Safety Program and one for PF-4 personnel. Additionally, NCERC completed an Office of Environment, Safety and Health Assessment (EA-32) evaluation, performed a Nuclear Material Control & Accountability (NMC&A) 100% annual inventory, and progressed on control room upgrades.

CRITICALITY SAFETY CLASSES

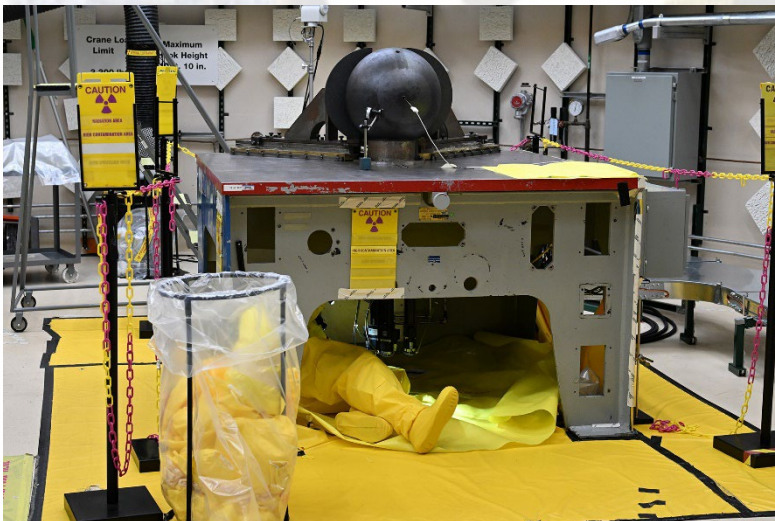
Criticality safety classes are an essential component of NCERC's and NCSP's mission. These classes involve classroom and hands-on demonstrations to familiarize students with the physical parameters that affect neutron-multiplying systems. Students learn the fundamentals of criticality safety by reviewing DOE orders and standards, identifying how their role is important to criticality safety, and participating in hands-on demonstrations with neutron-multiplying systems. These classes provide a controlled environment where students can learn from experts.



▲ Kelsey Amundson (NEN-2) gives the subcritical hands-on demonstration portion of the NCSP criticality safety class with the BeRP Ball.

ADDITIONAL ACTIVITIES

NCERC preventive maintenance, surveillances, and in-service inspection procedures were performed on schedule. NCERC coordinated with the NNSS M&O contractor to complete an NMC&A 100% annual inventory with no issues. The EA-32 assessment identified effective use of pre/post job briefings at establishing each person's role during activity level work. NCERC fully disassembled the Control Room 2 control consoles and constructed a floor mounted cable management system. NCERC qualified four new Cognizant System Engineers who maintain the critical assembly machines.



▲ NCERC-FO maintenance worker performs a visual inspection of the Flat-Top control rod drive mechanism during quarterly maintenance.