

Take 5 for Safety

E. Lessard

March 17, 2015

BROOKHAVEN
NATIONAL LABORATORY

a passion for discovery



Equipment Identification Issue at NREL

- On March 10, 2015, an NREL employee was performing preventative maintenance on the fan belts of two Fan Coil Units (FCU A and B)
- Prior to working on the equipment, the employee concurrently de-energized and locked out the disconnect points for both FCUs and audibly confirmed the units stopped running
- The employee then removed the access panels for both of the FCUs in order to access the belts and began working on FCU B
- Upon completion of work on FCU B, the employee removed his lockout and flipped the switch to power that unit on
- It was at this time that FCU A unexpectedly powered on, potentially exposing the employee to unexpected mechanical energy

Equipment Identification Issue at NREL

- The immediate investigation showed that the labels at the lockouts had been reversed
- It was later discovered that FCU A and B are secondarily controlled when there is a demand for cooling; although this call for cooling action is overridden when a lockout is applied
- As the employee unintentionally powered on FCU A, it was simultaneously activated because there was a building demand for cooling at the time
- The employee could have unknowingly performed work on a system that was not properly locked out and had the potential to become energized if the call for cooling command had been delayed
- No injuries resulted from this occurrence
- A formal investigation is under way

C-AD Equipment Identification

- Labeling at many disconnects and connected equipment was reviewed over 4 years ago
- Most power supplies have lights so attempt to turn on after power supply is locked out