Fermilab

Panel Labeling Meeting Notes
November 10, 2011

Attendance
Kent Collins, Randy Ortgiesen, Mike Utes, Randy Wielgos

We talked about the things learned at the EFCOG workshop in October, and subsequent communications with electrical personnel from other labs. This includes other labs' arc flash labeling programs, the completion level of which varies from lab to lab. This is a brief list of topics discussed:

- BNL's Electrical Safety Strategic Plan.
- Square D's line of "cradle-in-cradle" breaker replacements which allows use of modern breaker in an old installation
- BNL's arc flash calculation of 208V circuits
- Aging breakers and breaker maintenance
- Cost of LANL's electrical safety program
- INL's detailed answers to a set of electrical safety questions

One major concern is that once panel labeling is done, it will be hard to keep the labels current. Kent pointed out that when changes are made to circuits, it is almost never done by FESS, so the concern is documentation not getting reflected on the landlord SLED/Arc flash calcs. Kent proposed making this autocad documentation a routine part of the Arlington's T&M activities.

Panel labels can bring a false sense of security: Panel labels that are wrong because of some undocumented change can be dangerous when relied upon to be correct. They can also be wrong if old breakers in the circuit do not trip with the expected delay.

Fermilab's only energized work is in verifying. Sometimes verification is not straightforward, such as in lighting circuits when crimps are used to connect wires.

Randy W. and I will call Nehring of BNL to find out implications of their 208V study.

Randy O wants to know if we can mitigate the risk by procedure.
For example, can we label lighting circuits such that any undocumented circuit addition or change would not push the Hazard/Risk category over into the next level.

Randy asked if INL works hot. INL does manipulative energized work only very infrequently and with approval (as Fermilab does) but does do diagnostic energized work.