



**FESHCOM  
Electrical Safety Subcommittee  
Meeting with FESS to discuss SLEDs, Arc Flash Calculations, and Electrical Panel Labeling**

**September 19, 2011**

**Meeting Minutes**

**Attendance**

Mike Utes	P	John Anderson	P	Tim Martin	P
Randy Ortgiesen	P	Kent Collins	P	Randy Wielgos	P
Jim Niehoff	P	John Reid	P		

Meeting Called to Order: 15:03

This meeting was called to assemble members of FESS and ESS together to discuss possible ways to address the finding of the Fermi Site Office in June 2010 during their Safe Electrical Work Practices Assessment, which states that: “there is no formal path forward for managing and sustaining the effectiveness of the Laboratory-wide initiative for documenting SLEDs, performing flash protection boundary calculations, and providing precautionary labeling of electrical distribution equipment.”

A suggestion was made to find out how the other labs are handling this issue. We can find this out since the ESS Chair will attend the EFCOG Electrical Safety Workshop in October.

John A. showed his comparison of some of the arc-flash calculations CMT had done for the Computing Division versus the NFPA 70E table 130.7 (C) (9). He found that in some cases the CMT calculations did not agree with the tables for Hazard/Risk Category. Assuming the calculations were done correctly, the PPE required by the calculations did not come up with the same PPE requirements as the tables. These discrepancies went both ways, either underprotective or overprotective depending on the circumstance, and in some cases there was a large discrepancy. We agreed that Randy Wielgos should meet with John and review some of these calculations. It was pointed out that the tables make certain assumptions as referred to in their “General Notes” and that this may be the reason that these discrepancies exist. Since the tables could be underprotective in some cases, FESS realized that relying on the NFPA 70E tables was not wise in these cases.

A suggestion was made to make arc flash calculations and panel labels for key circuits, and to follow these calculations instead of the tables. This needs further discussion.

It was also pointed out that, for those breakers going without maintenance, fault clearing times may not be in spec, and the calculations may be wrong, leading to mislabeling of electronic equipment.

Another question was asked if the SLEDs really make us safer. Perhaps this expensive effort is counterproductive, and if so, we should present evidence to management to back this up.

The lab's failure to replace retiring engineers was also brought up as a concern.

Also discussed was the ESS recommendation that SLEDs and arc flash calculations should be provided by the AE firm at the time of completion of new construction and large renovations. It was agreed that this was a good idea and if done, would have to be paid for by the landlord, and could add significantly to the cost of a project.

Another suggestion was that we should be prioritizing the risk and deal with the higher priorities.

=====  
The meeting adjourned at 16:04

Minutes Drafted by M. Utes