Minutes of meeting

WG:	C37.010 Circuit breaker application Guide
Chair:	Helmut Heiermeier
Location:	Nashville
Participants:	28 members

23 guests

- 1.) The chair started the meeting with the introduction of all participants.
- 2.) The committee chair reviewed the IEEE patent slides.
- 3.) The committee reviewed and approved the MOM from previous meeting in (Orlando).
- 4.) The chair reviewed the agenda for the meeting.
- 5.) The working group chair reviewed proposed section 5.13 for capacitance current switching. He will re-circulate the document for comments.
- 6.) The working group chair reviewed proposed section 5.16 for shunt reactor switching. He will re-circulate the document for comments.
- 7.) The working group chair reviewed comments from Gilbert Carmona and Mirko Palazzo for section 5.10.2 for asymmetrical current switching tests. There was much discussion about additions to the document for delayed current zeros crossings. The general consensus of the working group is that the topic of delayed current zero crossings should not be discussed in great detail in C37.010. The general agreement of the working group believes this topic should be included in C37.04 and C37.09. Where C37.04 identifies data such as (peak and duration of current min / max loop) which should be provided by the circuit beaker manufacturer and C37.09 should direct users how to use the data. Nonetheless there should be a coordinated effort between all 3 standards (C37.010, C37.04, and C37.09)

Action items for "asymmetrical current switching" and "delayed current zero crossings":

- The working group chair will provide more detailed examples similar to the graphs reviewed in the meeting from file "C37_010(heiermeier)06.doc" provided by Helmut on 9-25-11 to the working group. These graphs will be included in the main body of the text.
- IEC standards such as 62271-308 could possibly be referenced in the C37.010 document and will be reviewed for C37.010 standard.
- Roy Alexander will provide wording in the main document to address meeting comments about delayed zero current crossings.
- 8.) The working group chair reviewed comments for transformer limited fault additions to C37.010 which will be added to the body of the main text.

- 9.) The working group reviewed proposed wording and comments provided by Mike Skidmore to alert users about:
 - Other limiting rating factors such as BCT thermal rating factor limits that need to be understood by the users of the guide. The general consensus was to add a note to the C37.010 document.
 - Additionally, it was agreed that a statement should be included in C37.010 about closing/opening resistor duty cycle limitations. The general consensus was to add a note to the C37.010 document.
- 10.) General comments were made about new system conditions such as wind farms, generators, system fault levels. The committee was asked to consider if new examples should be added to C37.010.
- 11.) There was a brief discussion about possible items that could be moved to an annex. For example, sections discussing oil circuit breakers and air magnetic breakers, if outdated and no longer used, should the information be moved out of the main body of the document. After some discussion, it was decided to keep the information in the main body of the text. As a result, graphs such as operating duty cycle limitations for oil breakers need to be duplicated and pulled into the document to have a good working copy for the spring meeting
- 12.) The working group committee agreed to adjourn meeting