**Minutes of meeting** **16. May. 2011**

**WG: C37.010 Circuit breaker application Guide**
**Chair: Helmut Heiermeier**
**Location Orlando**

**Participants: 28 members**
**14 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 approved the MOM from previous meeting in (Las Vegas)

4.) The chair reviewed the agenda for the meeting

5.) The MOM from the last meeting in (Las Vegas) was reviewed. One comment was received by Arben Bufi for the committee to take into account and alert users about the special use of high voltage circuit breakers located in positions that switch generators into the transmission system. The breakers under discussion are not a "true" generator circuit breaker that is directly connected to the generator but a circuit breaker that is typically located on the high voltage side of a generator step up transformer. Such breakers and not necessarily considered in C37.013 and not currently addressed in C37.010. A short discussion took place and most members believed that it would be a good idea to consider such breakers in the C37.010 application guide. Breaker used for this application may have special needs such as:

- A high number of switching operations (mechanical and electrical) (e.g. CB used for peaking units)
- Higher than normal X/R ratio
- High cumulated nominal currents?
- Usual and/or unusual service conditions
- Possible cases for higher than normal over voltage conditions for extended periods of time (e.g. bus voltage to generator voltage before synchronization to the system and if exciter field is abnormally removed)

Helmut Heiermeier will provide such wording in C37.010 to alert users to such applications. In addition, some hints should be given in part 2 which address special service conditions for these breakers.

6.) The chair gave the status of the working group:
PAR received with end date 2014

7.) In order to assist the chair, a secretary as well as a vice chair was requested:
Mike Skidmore has been found as Secretary
Sean (Xi) Zhu has been found as Vice Chair

8.) Additional discussion of comments: Denis Dufournet suggested that the detailed TLF description should be placed at one place only. In his opinion, the correct place to discuss in detail the TLF TRV is not the C37.010 application guide and that TLF TRV should be discussed in C37.011. C37.010 should refer users to the TRV application guide C37.011. This was agreed upon by the working group. Helmut Heiermeier will coordinate with Denis Dufournet which parts may be overtaken by the TRV application guide and modify the proposal accordingly.

9.) A question came up on the part of inductive current switching. (Heiermeier_01 ) whether the possibility to modify the system parameters by adding capacitances are really used.
Helmut Heiermeier will check C 37.015 and either delete this sentence or add some more explanations.

10.) Several comments have been received on Anne Bosma 01 which deals with controlled switching. Anne Bosma took all this comments into account and modified it correspondingly ( Bosma 03 )

11.) In the chapter of asymmetrical currents, something should be added to discuss how to determine the duration of the major (and minor) loop. This could be either a formula or a table. Helmut Heiermeier will provide this addition information in C37.010.

12.) All examples need to be checked to verify if they are still appropriate. Some examples in the guide may not be used anymore and/or outdated.

13.) A question and suggestions came up on how to appropriately address new requirements for cases such as wind farms. Everybody was asked to provide such information if available

14.) If necessary, all references in C37.010 need to be checked and corrected

15.) Biography in C37.010 needs to be checked

16.) In the foreword a remark should be given that some chapters may be applicable also to circuit switchers.

17.) The working group committee agreed to adjourn meeting