

**Minutes of the meeting held on Wednesday October 15, 2008  
from 1:30 PM to 3:15 PM  
WG Revision of C37.011 – Application Guide for High-Voltage Circuit  
Breakers for TRVs**

The Working Group "Revision C37.011: Application Guide for TRV for HV Circuit Breakers" met on Wednesday, Oct. 15<sup>th</sup>, with 21 members and 24 guests present.

The IEEE SA patent policies were presented and slides 1 to 4 were shown.

The aim of the new revision is to align the content with the revised C37.06 and 04b and to improve other clauses such as those on line faults, transformer limited faults and reactor faults.

On October 15<sup>th</sup>, the HVCB subcommittee gave the permission to apply for a PAR after C37.04b and C37.06 have been approved.

The following changes need to be done in the document:

- Align the content with the revised C37.06 and C37.04b

- Delete reference to ANSI C37.06.1-2000

- Update the content of 4.2.4 "Line faults", taking into account the work by CIGRE WG A3-19

- Update the part on Transformer limited faults

- Improve the wording of 4.4.2 on reactor limited faults (taking into account C57.16)

- Review the content of Annexes, in particular A1.3.1

- Improve the content of Annex B.

- Any editorial correction necessary

It was also suggested to add explanations on the determination of the surge capacitance of transformers (in Annex B).

In order to prepare the future application of a PAR, the scope, purpose and need were reformulated as follows:

#### Scope

This application guide covers procedures and calculations necessary to apply the standard transient recovery voltage (TRV) ratings for ac high-voltage circuit breakers rated above 1000 V.

#### Purpose

The purpose of this guide is to provide guidance on the application of TRV ratings given in ANSI/IEEE Std C37.04 for ac high-voltage circuit breakers. Definitions, rating structure, test procedures, and preferred transient voltage ratings and related required capabilities are included in ANSI/IEEE Std C37.04, ANSI/IEEE C37.06, ANSI/IEEE Std C37.09.

The breaking capability limits of high-voltage circuit breakers are determined to a great degree by the TRV. The different types of TRVs are presented and explanation is given on the two and four parameter envelopes that are drawn for the comparison of TRV ratings and actual system TRV.

### Need

The main objective of the revision is to align the content with the latest revisions of IEEE C37.04 and IEEE C37.06.

Another objective is to update the content with the CIGRE Technical Brochure "Line fault phenomena and their implications for 3-phase short- and long-line fault clearing".

### **Actions**

Submit the PAR when C37.04b and C37.06 are approved

Complete the list of changes that are necessary

**WG members are asked to submit proposals of changes (by e mail to the Chair)**

Based on this input, Task Forces will be formed during the next meeting

A first draft will be prepared for discussion at the Fall meeting 2009

Denis Dufournet  
Chair WG C37.011  
October 15<sup>th</sup>, 2008