IEEE Power Engineering Society Switchgear Committee Low Voltage Switchgear Devices Subcommittee

C37.17 Working Group Report May 8, 2006 – Galveston

C37.17 working group met on Monday morning May 8, 2006, with 18 persons in attendance. The WG has a PAR and was convened under the chairmanship of Jeff Mizener.

The required IEEE Patent Slides were presented.

## **Discussion Items**

- 1. PAR was submitted and approved 2005.12.12 and is valid through 2009.12.31. Document has new title, "Standard for Direct-Acting Trip Systems for Low-Voltage (up to 635 V) AC and General Purpose Low-Voltage (up to 325 V) DC Power Circuit Breaker
- 2. The notes and changes accumulated at the last meeting were reviewed. No changes in direction were required.
- 3. A great deal of discussion was had on the subject of DC breakers rated >325VDC. It was concluded that we should look at changing the Scope (and hence the PAR) to include DC breakers up to 3200V. PC37.16 includes DC breakers up to 3200V. C37.17 is written from a performance standpoint and there is no theoretical/mathematical difference in the way that protection is done in DC breakers between the lower and higher voltage ranges. More discussion will be had as we move forward.
- 4. A subgroup was assembled to propose a revision to the structure of the way that DC and AC trip functions are described in the document (merge most of section 5 and section 8) to increase clarity. There was no disagreement on this point.
- 5. It was concluded that some additional text was required in the section on undervoltage trip devices to increase clarity with respect to the presence/absence of a delay.
- 6. It was noted that there is a definition of ground fault trip function *with delay* but no definition of a ground fault trip function by itself. This was corrected, the definition being based on the one in C37.100.
- 7. Extensive discussion ensued on the subject of testing. At a previous meeting, the text in section 10.1 and onward was deleted. A subgroup was created to correct this.

## **Schedule**

1. The WG will meet again in four months.

## **Action Items**

- 1. Merge sections 5 & 8 as appropriate
- 2. Clarify UV trips in one or two sentences
- 3. Revise the section on testing
- 4. In the sections describing Long-time-delay trip functions, add text mentioning calibration marks >100% are not meant to exceed the maximum continuous current carrying capacity of the physical circuit breaker frame.
- 5. Distribute MSWord version including comments and changes made during the meeting.

Report submitted by: Jeff Mizener WG Chair