IEEE Power Engineering Society
Switchgear Committee
C37.20.7 Working Group Report
03-May-2004

The working group met on May 3, 2004 to review D3 of the revision to C37.20.7. Attendance included 12 WG members and 20 guests. The working group members are:

C. Ball	D. Mazumdar	R. Puckett	E. Byron
P. Dwyer	T. McNamara	M. Wactor (Chair)	J. E. Smith
D. Lemmerman	T. Olsen (Vice Chair)	M. Orosz	P. Barnhart

The PAR for revision of C37.20.7 was approved by the IEEE-SA Standards Board on March 25.

D3 had been circulated March 25, 2004 for comment among the working group members and a number of other interested persons. Comments on prior drafts had been circulated earlier, and a consolidated comments list dated Jan. 8, 2004 was used to create D3.

Considerable discussion occurred concerning testing of equipment in which opening of a relay or instrument door is regarded as a part of normal operations, i.e., where arc resistance is maintained with the relay door open as well as closed. It was suggested that the accessibility types need to be redefined to reflect the two differing conditions. The objective is to create a test scenario that qualifies a maximum variety of actual relay/instrument configurations of doors, with a minimum of tests, and a uniform system of evaluation, and which laboratories can apply consistently.

No conclusion was reached on how to resolve this issue. The chair requested that anyone having suggestions or ideas on this issue forward their input by June 1.

Clause 5.2.6 was modified to emulate the latest IEC thinking, including the concept that the ungrounded system fault is the worst condition. The IEC opinion is that this results in the greatest pressures. On the other hand, since the current to ground is severely limited, it is our opinion that this does not adequately test the burn-through resistance of the enclosure. We continue to feel that the test of the grounded system is the more severe condition and must be the basis of the test required by this document. Anyone who has opinions on this issue is asked to send an E-Mail to the chair by June 1.

Indicators have been adjusted to a distance of 300mm from the face of the equipment, from 100mm in the original document. This harmonizes with the IEC approach. The participants were requested to search for information to characterize the thermal performance of the 150 g/m^2 black cotton crettone material, and to give a more definitive description of this material. This information should be provided by June 1. It is desirable to characterize the thermal characteristics of the material in terms of $calories/cm^2$ over a specified time, and further, to correlate the performance of the material (if possible) to the parameters in NFPA 70E – 2004.

Input from Canadian interests has been received and these comments were discussed. The chair is a participant in the group that is updating the original EEMAC G14-1 document, along with J. E. Smith.

A request has been made to extend the scope to encompass extension to low voltage products, including low-voltage metal-enclosed switchgear.

Future schedule:

- Input from participants due June 1, 2004
- Comments will be collated and disseminated in mid-July.
- D4 with changes discussed at this meeting will be sent in mid-July

Report submitted by: M. Wactor
WG Chair