

IEEE Power Engineering Society  
Switchgear Committee  
C37.20.2 Working Group Report  
02-Oct-2006

The working group met for on Monday, October 2, at 1:35PM.

Attendance included 14 WG members and 10 guests. Attendance is as shown below:

Members	Members	Members	Guests
P. Barnhart (P)	R. Hartzel (P)	M Orosz (P)	T. Burse (P)
E. Byron (P)	T. Hood (A)	R. Puckett (E)	E. Farkas (P)
V. Coletta (A)	F. Mayle (P)	C. Schneider (P)	H. Josten (P)
R. Cabbage (A)	T. McNamara (E)	J. Smith (P)	C. Lam (P)
P. Dwyer (P)	D. Mazumdar (P)	A. Storms (P)	D. Lemmerman (P)
L. Farr (A)	A. Morgan (P)	C. Taylor (P)	N. McQuin (P)
D. Gohil (A)	T. Olsen (P)	M. Wactor (P)	C. Morris (P)
			D. Pearson (P)
			G. Schoonenberg (P)
			S. Toe (P)

P = present, E = excused, A = absent

IEEE-SA rules on Patents were reviewed prior to further discussions.

D2 of the document was distributed by E-Mail, and the document was reviewed during the meeting.

- WG members are requested to further consider current transformer requirements (5.7 and 8.7.1).
- WG members are requested to review the topic of partial discharge testing (6 and annex C) and limits.
- On 7.2, some modification of the words is needed.
- Annex D discusses controlgear concept from 1999. We should also consider other similar issues, such as:
  - use of grounding switches, in which the terminal to be grounded is not insulated.
  - use of ground studs, ground bails, or similar devices, in which the device may or may not be provided with an insulating cover of some sort. In most cases, such coverings would not pass the foil test specified in 6.2.1.3.
  - insulation or non-insulation of the live terminal of surge arresters or surge capacitors.
- Several sections discuss “no intentional openings” (e.g., 3.1.6.b, 7.7, and D.6). It is agreed is that this statement is not sufficiently descriptive and that modification of the language is needed.
- DC testing is mentioned in table 1, but there is general unhappiness about this, as it is not supported the industry. Agree to consider moving discussion of dc testing, either to an annex, to the field test section, or to the installation section.
- 6.2.7 calls for tests intended for NEMA LI-1 materials. There is some discussion that this is inappropriate for cast parts.
- Metal thickness. Mr. Byron had raised the issue of conflicting metal thicknesses in the various C37.20.X documents. Mr. Olsen will forward a summary of relevant information to the chair.
- Electronic voltage transformers. Mr. Barnhart raised concern that these are not adequately addressed in the standards. Mr. McQuin discussed issues such as the introduction of multiple grounds, inability to remove all grounds for certain kinds of testing, and other issues. Also mentioned effect of a open-circuit failure of the “low” leg of a resistance divider, which would place line-ground voltage at the sensing connection. Messrs. Barnhart and McQuin will research, and will welcome any input from participants.
- What do we do to coordinate with the change to C37.04 to have cable-connected vs. line-connected TRV capabilities?
- 6.2.8 covers the flame resistance test for applied insulation. Why don't we adopt the UL94V-0 test instead? Our test applies flame for five 15s intervals whereas UL94V-0 uses five 5s intervals.

Participants are invited to submit input on these issues to the chair.

For information, the assignments made in the previous WG meeting are listed below. Those who have not yet completed their assignments are requested to do so by October 31.

From the May, 2006 minutes:

The entire document must be reviewed. Responsibility for reviewing specific clauses was assigned as follows. All interested parties are invited to submit comments or suggestions for any clauses, not restricted by the responsibilities shown below:

Clause	Subject	Responsible
1	General	M. Wactor
2	References	M. Wactor
3	Definitions	C. Schneider A. Storms
4	Ratings	T. Olsen
5.3	Grounding	M. Wactor
5.4	Control and secondary circuits	C. Taylor D. Edwards
5.10	Markings	T. Olsen
5.11 -5.19	Interlocks to X-Ray	T. Olsen
5.101-5.109	Internal fault to test cabinet	J. Smith
5.102.3.1	Barriers	D. Mazumdar
6.2-6.2.101	Dielectric	M. Wactor
6.3-6.5	Temperature rise	T. Olsen
6.6	Short-circuit	T. Hood
6.7-6.9	Degree of protection to EMC	A. Storms
6.100	Auxiliary	T. Olsen M. Wactor
6.101	Mechanical endurance	P. Dwyer
6.102	Flame-resistance and track resistance	M. Orosz
6.103	Flame resistant tests for applied insulation	J. Smith
6.104	Coating test	M. Orosz
6.105	Rain test	D. Gohil
7	Production tests	C. Schneider
8.1	Unusual service conditions	D. Gohil
8.1.4.6	Seismic	R. Hartzel
8.2-8.3	System voltage and insulation	M. Wactor
8.4	Current	A. Storms
8.5 – 8.8	Short-circuit to protection and isolation	T. Olsen
10	Installation	A. Morgan
A	Enclosure	P. Barnhart
B	Bibliography	T. Olsen
added	Partial discharge	J. Smith

It is requested that all input be provided to the chair by Oct. 31, 2006. A consolidated draft of the document, comments, and suggestions will be distributed to those interested in Mid-November.

The meeting was adjourned at 5:40PM.

Report submitted by:

M. Wactor, WG Chair