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July 25, 2001

Mr. Ken Gettman
National Electrical Manufacturers Association
1300 North 17th Street
Suite 1847
Rosslyn, VA 22209

Re: IEC 17B/WG5 Meeting Trip Report (July 10-12, 2001)-Toulouse, France

Please find attached a copy of our trip report for the IEC 17B/WG5 meeting which took place in Toulouse, France on July 10-12, 2001.

I have attached those documents which are relevant to the issues discussed (TOULOUSE (01)-(02)). However, if there are any other documents which are referenced but not included, please don't hesitate to contact me.

Philip M. Piqueira

cc: Cutler-Hammer	C. Kimblin
NEMA	V. Baclawski
Siemens-Atlanta	B. DiMarco J. Young
Square D-Cedar Rapids	G. Gregory
Square D-Lexington	R. Reed
Underwriters Laboratories	P. Notarian

REPORT OF INTERNATIONAL MEETING

DATE: July 25, 2001

DELEGATES: B. DiMarco
P. Piqueira

REPORT OF MEETING: IEC 17B Working Group 5

DATE AND PLACE: Toulouse, France
July 10-12, 2001

COUNTRIES/DELEGATES ATTENDING:

FRANCE:	H. Wolff, Chairman WG5 J. Nereau, Schneider M. Delaplace, Secretary 17B
GERMANY:	B. Adam, Siemens H. Tebbe, Klockner Moeller
ITALY:	M. Bossi, Bticino-Italy R. Dosmo, ABB Sace A. Sciani, Nuova Magrini Galileo
SOUTH AFRICA :	V. Cohen, CBI
SWITZERLAND :	H. Weichert T. Baiatu, ABB/CMC
UNITED KINGDOM:	P. Galbreath, Merlin-Gerin R. Upton, MEM
U.S.A.:	B. DiMarco, Siemens P. Piqueira, GE
Absences :	J. Garcia-AFME, Spain
Guests :	P. Vankerkhove-South Africa

IMPACT STATEMENT

WG5 consists of experts from various countries which have the assigned responsibility from sub-committee 17B for the development of low voltage standards covering industrial molded case and power circuit breakers defined by separate UL, NEMA, and ANSI domestic standards.

RATIONALIZATION FOR PARTICIPATION

The development of any new standard or related appendix involving the above mentioned product lines could greatly affect future domestic designs and marketing decisions. Active participation is required to insure that present USA application and safety requirements are not jeopardized.

OVERVIEW OF MEETING

The meeting was essentially conducted in line with the chairman's agenda, 17B/WG5(Chairman)08/01, which is attached as TOULOUSE (01).

1) 2nd amendment of IEC 60947-2

- The FDIS for the 2nd ammendment has been accepted and the document should be published by the end of July. 21 P-members voted (19 voted in favor ; Denmark and Finland voted against it). The results are contained in IEC 17B/1145/RVD.

- There were also two additional affirmative comments from China and Japan which will be considered as part of the 3rd amendment.

2) 3rd amendment of IEC 60947-2

- The chairman introduced this subject by indicating that there were 83 comments on the document and that a significant number of the comments dealt with the controversial subject of classification. The Italian nd French proposals to expand the classification categories were effectively neutralized by the diametrically opposed USA proposals to eliminate the classifications entirely. After a lengthy discussion, the UK suggested that an appropriate compromise would be to eliminate the classifications in Annex B, except for the B.3.1.2.2.1 devices. Single-phase devices (i.e. UL 943 type devices) are covered by B.8.9.2. Consequently, IEC 947-2 will be modified as follows :
    - B.2.3.2 **CBR functionally independent of line voltage** : CBR for which the functions of detection and evaluation, and the actuating means of interruption (see B.2.3.6) do not depend on line voltage.
        ~~Note :--This device is defined in 2.3.2 of IEC 755 as a residual current device without auxiliary source~~
    - B.2.3.3 **CBR functionally dependent of line voltage** : CBR for which the functions of detection and/or evaluation, and/or the actuating means of interruption (see B.2.3.6) depend on line voltage.
        ~~Note 1 :--This definition partially covers the definition of residual current devices with auxiliary source given in 2.3.3 of IEC 755~~
    - B.3.1.2.2 *Not opening automatically in the case of failure of line voltage but able to trip under specified conditions in the case of an earth fault arising on failure of line voltage*
      Note : Classification under this clause includes CBRs unable to open automatically when no hazardous situation exists
    - B.8.9 : *Verification of the behavior of CBR's functionally dependent on line voltage as classified under B.3.1.2.2 in the case of failure of line voltage*
    - B.8.9.1 *Case of loss of one phase in a 3-phase system (for 3-pole or 4-pole CBR's)*
- The UK comment disagreeing with ''negative marking'' (B.5 c)) was discussed and, after much discussion, it was agreed that ''negative marking'' was better than any other marking. However, it was modfied slightly to conform to the internationnally recognized symbol.
- Table B.3 : Delete the center line, 3rd line replace B.3.1.2.2.1 with B.3.1.2.2 and replace ''opening'' by ''operating''
- A lengthy discussion took place with respect to Italian Comment # 48. According to the Italian comment, there is information given in Annex J which is not applicable to all the Annex B/Annex F products (in particular the test set-up which are specific to current supplied devices only). However, WG5 did not agree with the proposal to rewrite Annex J as suggested in the Italian comment but the UK (Ray Upton) agreed to develop a matrix, by mid-August, which would provide a more accurate cross-reference (the Italians will provide information on errors which exist in the present document).

- It was agreed to accept FR 32 (# 72). However, it was also agreed to apply this acceptance to B.7.2.6.

ACTION : Check if any USA circuit breakers with ground fault protection would be submitted to IEC 947-2 Annex B. If so, this Annex B modification will be a problem.

- The South African delegate (Viv Cohen) submitted a proposal to eliminate sub-clause M.8.9 due to his concerns that this subclause was too design-specific. However, there was no consensus and, consequently, a compromise was reached. M.8.9 will be modified to reflect two alternatives to testing.

- IEC 17B/WG5 agreed that the document would be consolidated by the chairman and the secretary and would be distributed to the WG5 members as an internal document to be completed at its next meeting in Nice in October. After that meeting it would be issued as a CDV document. The comments are attached as TOULOUSE(02)

- The electronic experts are to review all items left under consideration before the next meeting of the working group

3) Behaviour and application of RCDs

- This was not discussed due to a lack of time but will be discussed at the next meeting in October.

4) Advisory Group

- This was not discussed due to a lack of time but will be discussed at the next meeting in October.

5) SC23E/WG1 & WG2

- This was not discussed due to a lack of time but will be discussed at the next meeting in October.

6) Simplified testing

- This was not discussed due to a lack of time but will be discussed at the next meeting in October.

7) Other matters

- There were no other matters discussed

8) Next meetings

- October 25, 26, 27 (AM) : Nice, France
- March 19-21, 2002 : United Kingdom (tentative).
- October, 2002 : Beijing, China (IEC 17B subcommittee meeting-tentative pending an invitation from China)

P.M. Piqueira B. DiMarco