IEC Liaison Report
IEC 17B/WG5
Presented to LVSD
By P. J. Notarian
May 1, 2002

See following pages.

GE Industrial Systems

Philip M. Piqueira
Chief Engineer-Standards Integration

General Electric Company
41 Woodford Avenue, Plainville, CT 06062
860-747-7234 Dial Comm 8*756-7234
Fx: 860-747-7660 Dial Comm 8*756-7660
e-mail: Philip.Piqueira@indsys.ge.com

October 29, 2001

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

Re: IEC 17B/WG5 Meeting Trip Report (October 25-27, 2001)-Nice, France

Please find attached a copy of our trip report for the IEC 17B/WG5 meeting which took place in Nice, France on October 25-26, 2001.

I have attached those documents which are relevant to the issues discussed (NICE (01)-(03)). 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: October 29, 2001

DELEGATES: B. DiMarco
P. Piqueira

REPORT OF MEETING: IEC 17B Working Group 5

DATE AND PLACE: Nice, France
October 25-26, 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
	A. Sciani, Nuova Magrini Galileo
SOUTH AFRICA :	V. Cohen, CBI
SPAIN :	J. Garcia, AFME
SWITZERLAND :	H. Weichert, Rockwell Automation
	T. Baiatu, ABB/CMC
UNITED KINGDOM:	P. Galbreath, Merlin-Gerin
	R. Upton, MEM
U.S.A..:	B. DiMarco, Siemens
	P. Piqueira, GE
Guests :	J. Galey, Schneider, France (Electronic Expert)

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)22/01, which is attached as NICE (01).

General

- The chairman introduced the meeting with a moment of silence in memory of Renato Dosmo who was tragically killed in the airline crash in Milan on October 8, 2001.

- The chairman introduced the new delegate from Spain, Mr. Joanquin Garcia Hernandez (AFME).

1) 2nd amendment of IEC 60947-2

- The 2nd amendment of IEC 947-2 was published at the end of July.

- The consolidated edition of IEC 947-2 will be published by the end of October, 2001

ACTION : The USA delegates have not yet seen the 2nd amendment. Contact Ken Gettman to determine if the document has been received by the USNC

2) 3rd amendment of IEC 60947-2

- Mr. Upton prepared a document, IEC 17B/WG5(Upton)02/01, which is a reference document summarizing the emc requirements, including figures, throughout IEC 947-2. However, the French had a minor concern with the potential deletion of some of the figures in Annex F which are located in Annex J because they felt that the Annex J figures are unique. Consequently, the notes to (Upton)02/01 were modified slightly. This table is attached as NICE (02) and will become Table J.3 in IEC 947-2.

- The secretary prepared a document after the last meeting which is a consolidation of the published annexes B, F and J, based on the second edition (1995), amendment 1 (1997) and amendment 2 (2001). Modifications to the document were made primarily as a result of sugestions contained in the French document, IEC 17B/WG5(Nereau)04/01. This document modifies Annex J and creates a new Annex N

- The balnce of the comments associated with IEC 17B/1136/CD which had not yet been resolved were reviewed.

- Items left "under consideration" in the CD for the 3rd amendment as listed in IEC 17B/WG5(Chairman)04/01 were reviewed.
  -B.7.3.1.5 (Conducted disturbances induced by radio-frequency fields) : Most of this is covered in the consolidated document, IEC 17B/WG5(Secretary)1.
  -B8.1 b) (Routine Tests) : This is covered in IEC 947-2 (Clause 8.4.4 applies)
  -B,8.3 b) (Capability of withstanding d.c. voltages due to insulation measurements) :This will be left for the maintenance cycle.
  -B.8.12.1 (note) (Connection of auxiliary circuits) : Covered by IEC 17B/WG5(Nereau)04/01. This is covered by the new Annex N which is being proposed by the French. Otherwise the note will be deleted
  -B.8.12.4 (noter) (Conducted Radio-Frequency immunity test) : Covered by IEC 17B/WG5(Nereau)01/01
  -J.2.1(note) (Performance Criteria) : Covered by IEC 17B/WG5(Nereau)04/01. This is covered by the new Annex N which is being proposed by the French. Otherwise the note will be deleted.
  -M.1.2 (Routine Tests) : This is covered in IEC 947-2 (Clause 8.4.4 applies)
  -M.8.4.2 (Capability of withstanding d.c. voltages) : This will be left for the maintenance cycle.

-M.8.11 (note 2) (Verification of mechanical and electrical endurance) : This will be left for the maintenance cycle.

-M.8.13 (Failure of auxilliary supply) : The proposal made by Mr. Nereau in IEC 17B/WG5(Nereau)02/01 was accepted.

- Items left ''under consideration'' in IEC 17B/1135/FDIS (2nd amendment) were reviewed.
  -F.4.2.1 (note) (Alternative test for electronic controls) : This will be left for the maintenance cycle.
  -L.3 (note) (CBI's for equipment and circuit protection) : This will left for the maintenance cycle. The USA agreed to develop a proposal.

ACTION : The USA agreed to develop a proposal for CBI's for euipment and circuit protection for the next maintenance cycle.

- A discussion took place with respect to the French proposal concerning Annex N (EMC requirements for devices not covered by Annex B, F, and M. Several alternatives were discussed recognizing the problems associated with the introduction of new work into the CDV at this stage. As a compromise, WG5 agreed to review the document, via correspondence, by December 15, 2001. If the comments received support the document then the chairman will decide if there is a benefit to incorporating Annex N as part of the CDV. If there are controversial comments, then Annex N will have to be incorporated as part of the maintenance cycle. Annex N is attached as NICE (03).

ACTION : The USA TAG should review Annex N and develop appropriate comments before December 15, 2001.

- M.8.2.1.1 & M.8.13-It was agreed to remove the 3rd dash in M.2.1.1 and modify M.8.13 appropriately by replacing ''auxiliary supply '' with ''voltage other than the line voltage.''

- It was agreed that a CDV will be prepared (with an introductory explanatory note). It is anticipated that the CDV will be issued by December 31, 2001. The comments will then be reviewed at the next meetingof WG5 (July, 2002).

3) Behaviour and application of RCDs

- This issue came fromTC 64/WG 22 which stated that earthing of a phase conductor in a three phase system influences the wave form of a pulsating DC earth fault current and, as a result, RCD type-A devices may not be able to operate." WG 22 came to the conclusion that it would be important for the relevant product standards tor require that the manufacturers literature contain information indicating that A - type RCDs are not suitable for use in supply systems other than earthed neutral systems.

- WG5 agreed that further background information is necessary and, recognizing that SC 23E/WG1 has also been asked to look at this issue, WG5 will wait for further information.

4) SC 17B Advisory Group

- Mr. Wolff delivered his report which is contained in IEC 17B/WG5(Chairman)14/01. The FDIS for the 2nd amendment of IEC 947-1 has been accepted.

- Among the items to be covered by MT11 of IEC 947-1 are the following :

-Annex X
-Annex O
-Equipment with more than one open position EMC
-Power frequency dielectric tests
-Contacts mechanically linked with power contacts

-Use of metal foil
-New definitions
-Torque test
-Power frequency withstand after humidity treatment.

5) SC23E/WG1 & WG2

- A verbal report concerning the IEC 23E/WG1 and 23E/WG2 meetings which took place in Florence the previous week was delivered by Mr. Cohen. WG1 and WG2 will meet in April, 2002 in Palermo, Sicily.

6) Simplified testing

- It was agreed that, due to the difficulty in demonstrating the difference under short scircuit conditions between current limiting circuit breakers and selective type circuit breakers, it was practically useless to prepare a simplified testing table. Consequently, this item will be withdrawn from future agendas.

7) Other matters

- Instantaneous Tripping of Circuit-Breakers-This issue was raised by Mr. Cohen and dealt with his concerrn that IEC 947-2 does not adequately define an instantaneous trip level. However, it was pointed out that there is a .2 sec limit in the standard. Further a change to a lower level might require extensive re-testing of circuit breakers. Consequently, this is an extensive technical change and no further work will be done on this issue.

- Temperature-rise test in test sesequence IV (Icw)-This issue was raised by Mr. Adam, IEC 17B/WG5(Adam)01/02, and deals with a temperature rise test being required for a given frame size regardless of In or the overload release setting. His proposal suggested that the test could be omitted on the sample on minimum In or minimum overload release setting. WG5 agreed and a second paragraph, similar to the one from 8.3.4.4, will be added to 8.3.6.3.

8) Next meetings

- July 9-11, 2002 : United Kingdom

P.M. Piqueira B. DiMarco