

IEEE SWITCHGEAR COMMITTEE CORRESPONDENCE

Minutes: IEEE High-Voltage Fuses Subcommittee
Place: Ashville, NC
Date: Wednesday, September 24th 2014
Presiding officer: John Leach - Chair
Recorder: John Leach

MEMBERS PRESENT

Glenn Borchardt	S & C Electric Company
Garry Haynes	ABB Inc.
John Leach	Consultant - Hi-Tech Fuses, T&B/ABB
Chris Lettow	S&C Electric Company
Tim Royster	Dominion Virginia Power
Jon Spencer	T&B Hi-Tech
Mark Stavnes	S & C Electric

MEMBERS ABSENT

Dan Gardner [^]	Thomas & Betts – ABB
Jim Marek [^]	Consultant
Sean Moody	Mersen
Don Parker [^]	Alabama Power
Jan Zawadzki [^]	
R. Neville Parry	Eaton
Charles Worthington	Hubble Power Systems
Alan Yerges	Eaton's Cooper Power Systems

[^] Corresponding members

GUESTS

S. Cochran	Hubbell
J. Deverick	Dominion VA Power
D. Fitchett	
D. Fulchiron	Schneider Electric
F. Lambert	GT/NEETRAC

HONORARY MEMBERS

J. G. Angelis, L. R. Beard, R. L. Capra, S. P. Hassler, F. Ladonne, H. Pflanz, R. Ranjan, J. S. Schaffer, F. Muench

- 1. Call meeting to order** - at 1:35 PM
- 2. Approval of Agenda** – No changes requested, agenda accepted.
- 3. Member/guest introduction** – 7 members 5 guests

New member: Jon Spencer was welcomed, having met the membership requirements (be active in a working group and attend a minimum of 4 of every 6 meetings to qualify for and retain

membership). Visitor Didier Fulchiron was acknowledged and welcomed (Didier is the Secretary of IEC SC32A – High-voltage fuses). Apologies were received from Jonathan Deverick, Sean Moody, Jim Wenzel, Scott Lanning and Alan Yerges.

4. **Roster check**– roster circulated for correction.
5. **Approval of Spring, 2014 minutes** – Approved as circulated.
6. **Report from the Chair:** Nothing new to report, outside of later agenda items.
7. **Standards status report:** No changes since Spring, 2013 status report.
 - a. Attached as Annex “A”
 - b. PAR for C37.41 and C37.42 requires voting before the end of 2015 and completion by 2016.

8. Working Group Reports

a) Revision of Fuse Standards - J. G. Leach. John reported that:

- The revision of fuse standards Working Group met on Tuesday September 23rd and Wednesday September 24th with 14 members and 5 guests.
- Extensive changes to definitions had been proposed, including significant simplification of many terms and the elimination of terms not presently used in our documents. These changes were reviewed and additional changes made. Other additions, including motor starter fuse pulse withstand testing were accepted.
- There was further discussion involving alignment with Standard 4 for dielectric testing, after a report from Garry Haynes. We are faced with a choice to retain our present test methods (possibly by adding additional information from Standard 4), or adopting the preferred methods from Std 4. Garry will prepare a summary of the two choices so that the WG can conduct a vote before our Spring meeting.
- Task Group on Polymer Insulators: Chris Lettow reported that NEETRAC has begun testing on several manufacturer’s cutouts to confirm that the proposed test methods are valid and workable. It is anticipated that the testing will be completed in time to include the new testing in the PC37.41 draft before our Spring meeting.
- Task Group on Cutout testing for transformer through-faults. Chris Lettow reported that no consensus had been reached during discussions between the 10 members of the Group. He presented a “minority” report on proposed testing. With no consensus, John Leach will attempt to summarize the opposing viewpoints, conduct a conference call to include members unable to attend this meeting, and then call for a WG vote to determine what will be put in the Draft. This is to be completed before the Spring meeting.

b) Revision of Fuse Specification Standards – M. Stavnes. Mark reported that:

- The Revision of Fuse Specification Standards Working Group met, briefly, on Wednesday September 24th with 9 Members in attendance, and 2 Guests.
- Before the meeting, the revision of C37.42 was essentially complete, and the meeting was to respond to issues raised during the on-going changes to C37.41. Several of these changes had been identified, were discussed, and will be incorporated into the next revision.
- Changes to C37.45 is complete and a PAR will be sought so that it can be balloted simultaneously with C37.41 and C37.42.

9. Report of liaison to other committees

a. ER&P Committee (J. G. Leach)

1. Most of the discussion at the meeting on September 24 involved nominations for awards. We still do not have any suitable papers for an award, but one is in the pipeline that will be recommended after it is published.
2. Fellow nominations continues to be an area of focus, and Subcommittee chairs are to recommend suitable candidates from their groups together with someone who is in a position to make the proposal. John urged anyone in either position to notify him.

10. IEC Report – J.G. Leach:

- a. There have been no meetings since the last report in April.
- b. The “Amendment 1” to IEC 60282-1 Ed7 was published in July, with some minor editorial changes (including those suggested by the USA). Redline consolidated version of Publication 60282-1 (ed.7.1) is now also available.
- c. The next meeting of MT3 is to be held in Geneva, Switzerland, at IEC headquarters, on March 18th and 18th 2015. Arrangements have been made to have a second meeting on Sunday 13th September 2015, the day before the start of the ICEFA (fuse conference) in Dresden, Germany.
- d. Since the TAG report only contains the above two items, it is not appended as usual.

11. Unfinished business – None

12. New business – None.

13. Next meetings:

Spring 2015, (April 26 – 30), Tradewinds Island Resorts, St. Pete Beach, FL

Fall 2015, (September 20 – 24), Catamaran Resort Hotel, San Diego,

Spring 2016 (25 - 29 April), Sonesta Resort, Hilton Head, SC USA

14. Adjournment – 2:30PM

Annex "A" Project status

Document	Title	Sub-Committee	WG Chair	PAR	IEEE Status	Activity/Plans
C37.40	Standard Service Conditions and Definitions for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories.	HVF	John Leach 828 256 3744 j.g.leach@ieee.org		Approved 2003 R2009	To be combined with C37.41
C37.41	Standard Design Tests for High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories	HVF	John Leach 828 256 3744 j.g.leach@ieee.org	Approved 2012-16 Revision	Approved 2008	Revision to incorporate C37.40
C37.42	Standard Specification for High-Voltage (>1000 V) Expulsion Type Distribution Class Fuses, Fuse and Disconnecting Cutouts, Fuse Disconnecting Switches, and Fuse Links, and Accessories Used with These Devices.	HVF	Mark Stavnes 773-338-1000, Ext. 2071 MStavnes@sandc.com	Approved 2012-16 Revision	Approved 2009	Revision to incorporate C37.43, C37.46 and C37.47
C37.43	Standard Specifications for High-Voltage Expulsion, Current-Limiting and Combination Type Distribution and Power Class External Fuses, with Rated Voltages from 1kV through 38kV, Used for the Protection of Shunt Capacitors	HVF	John Leach 828 256 3744 j.g.leach@ieee.org		Approved 2008	None – to be combined with C37.42
C37.45	Standard Specifications for High-Voltage Distribution Class Enclosed Single-Pole Air Switches with Rated Voltages from 1kV through 8.3kV	HVF	Mark Stavnes 773-338-1000, Ext. 2071 MStavnes@sandc.com		Approved 2007	Revision to incorporate material from C37.41 and C37.40 – PAR to be requested in 2014 for completion by 2016
C37.46	Standard for High-Voltage (>1000 V) Expulsion and Current-Limiting Type Power Class Fuses and Fuse Disconnecting Switches.	HVF	Mark Stavnes 773-338-1000, Ext. 2071 MStavnes@sandc.com		Approved 2010	To be combined with C37.42
C37.47	Standard Specifications for High-Voltage (>1000 V) Current-Limiting Type Power Class Fuses and Fuse Disconnecting Switches	HVF	Mark Stavnes 773-338-1000, Ext. 2071 MStavnes@sandc.com		Approved 2011	To be combined with C37.42
C37.48	Guide for Application, operation, and Maintenance of High-Voltage Fuses, Distribution Enclosed Single-Pole Air Switches, Fuse Disconnecting Switches, and Accessories	HVF	John Leach 828 256 3744 j.g.leach@ieee.org		Approved 2005 R2010	None - Good to 2020 PAR to combine C37.48 and C37.48.1 with IEC/TR 62655 to be sought in 2015
C37.48.1	Guide for the Application, Operation, and Coordination of High Voltage (>1000 V) Current-Limiting Fuses.	HVF	John Leach 828 256 3744 j.g.leach@ieee.org		Approved 2011	None – Good to 2021 See C37.48