

IEEE SWITCHGEAR COMMITTEE

Minutes: IEEE High-Voltage Fuses Subcommittee
Place: Westin Beach Hotel, Fort Lauderdale, FL
Date: Wednesday, April 3, 2024
Presiding officer: Sterlin Cochran – Chair
Recorder: Jim Wenzel – Vice-Chair & Sec

VOTING-MEMBERS PRESENT (10)

Chris Borck	Eaton
Sterlin Cochran	G&W (SC Chair & Chair RFSWG)
Jeramie Cooper	Eaton
Gary Haynes	ABB Inc.
Jim Wenzel	Eaton (Vice Chair & Sec)
John Leach	Consultant/self-affiliated
Chris Morton	Morton Consulting
Pete Marzec	S&C Electric Co
Caryn Riley	GT/NEETRAC
Danish Zia	UL LLC

VOTING-MEMBERS ABSENT (7)

Jon Spencer	Utility Solutions
Randy Ward	Aluma-Form
Charles Worthington	Hubbell Power Systems
Brennen Fleming	Hubbell Power Systems
Aaron Motes	ABB Inc.
Travis Johnson	Xcel Energy
Jonathan Deverick [^]	Dominion Virginia Power

[^] correspondence only

NON-VOTING MEMBERS (6)

Eric Li	PowerTech
Carlos Nieto	S&C Electric Co
Chris Montanez	Merson
Harrison Metcalfe	Merson
Jason Beck	Dominion Energy
Sachin Pingle	ABB Inc

HONORARY MEMBERS

John Angelis, L. Ron Beard, Glenn Borchardt, Ray Capra, Steve Hassler, Frank Ladonne, Chris Lettow, Jim Marek, Frank Muench, Don Parker, R. Neville Parry, Herb Pflanz, R (Kris) Ranjan, Tim Royster, John Schaffer, Mark Stavnes, Alan Yerges, Jan Zawadzki.

- 1. Call meeting to order** – 1:40 pm (EDT)
- 2. Member/guest introduction** –. There were 10 members present, with 7 members not in attendance and 6 guests. With attendance at this meeting Eric Li and Carlos Nieto are now voting members of the HVF Subcommittee.
- 3. Approval of Agenda** – The agenda was approved by consensus.
- 4. Roster check** – Sign-in Sheet circulated.

5. **Approval of October 11, 2023 minutes** – The Fall 2023 minutes were modified in the attendees section and approved by consensus.
6. **Report from the chair** – Sterlin reported on WG for C37.41. WG circulated C37.41 for ballot. WG C37.41 met on Tuesday in 3 sessions and made great progress on resolving most of the comments from the first ballot. PAR for C37.41 will expire in 2024 and we are on schedule. C37.45 will expire in 2024 and a PAR needs to be started at the Spring 2024 meeting. We will need a chair for the C37.45 WG. C37.48 is active and published by IEEE but does not ANSI accreditation. C37.48 will need a PAR for reaffirmation and a chair for the WG to republished where we request ANSI accreditation.

7. **Standards status report**

- a. C37.41: published April 2017, Corrigenda issued May 2017. Existing **PAR** for it to be combined with C37.42-2016, approved March 2020, expires Dec 2024.
- b. C37.42: published May 2017.
- c. C37.45: Published April 2017. (Needs to be updated by 2026)
- d. C37.48: New revision published August 2020. 2020 Does not have ANSI accreditation.

8. **Working Group Reports -**

- a. Revision of fuse standards – C37.41: Sterlin Cochran

The PAR for C37.41 expires December 2024 is on track to meet the requirements for that date.

Circulated draft and we had 70 ballot members vote and they provided 379 comments.

The working group met in 3 sessions on Tuesday with 16 members, 6 non-members

At the completion of Tuesday's meetings: 200 resolved comments. 179 remaining. 20 technical comments remain. 47 general comments.

We will continue comment resolution immediately following this Subcommittee meeting.

9. **Report of liaison to other committees -**

- a. ER&P Committee – S. Cochran:
 1. Award Nomination Deadlines: (IEEE) June 15th, (SA) July 31st, (PES) Jan 31, 2025
 2. The Fall schedule will be one day longer to include an 'education' block.
- b. T&I committee – S. Cochran:
 1. HVF liaison – Jeramie Cooper
 2. Special Applications Task force: Jim Wenzel volunteered from the fuse perspective
 3. Proposed adding a study of TRV between other subcommittees
 4. T&I will add an Industry Trends topic to agenda
 5. NFPA published 70B in 2023 and it could affect products in other subcommittees including HVF(chapter 16)

10. **IEC Report – J. Leach – (full report Annex A)**

- a. Multiple meetings held for JMT 441 reviewing IEC 60050-441 Switchgear, control gear and fuses.

1. John represents fuses SC32A.
2. Progress is slow with no participation from SC32B and SC32C.
- b. Team MT3 for CL fuses has had no technical activity. John has stepped back as Convenor.
 1. Dirk Wilhelm(Germany) is now the Convenor
- c. MT4 for IEC 60282-2 and 60282-4, waiting for our IEEE WG to finish the revisions to consider as changes to the 60282-2.
 1. Sterlin is Convenor
 2. Fuses nor Switchgear are invited to 2024 General Meeting in Edinburgh.
 3. Timing won't be convenient for 2025 General Meeting in India
 4. Sought an invitation from France Plenary meeting Spring 2025 but France won't invite Fuses.
 5. No meetings planned at the moment.
- d. MT6 for the IEC version of the Guide is in final editing of the Committee Draft(CD)
 1. CD (32A/360/CD) circulated December 2023 and closed March 2024
 2. 142 Comments to be resolved/addressed
- e. TC 32/WG1 High Voltage DC fuses being run under the Technical Committee. Primarily limited to Semiconductor, Photovoltaic and Battery fuses.

11. Unfinished business – nothing to report

12. New business –

- a. Officer rotation: Sterlin and Jim finish 3-year term in Fall 2024. Contact Sterlin if interested in Chair or Vice-Chair as of Spring 2025

13. Future meetings -

Fall 2024, (October 13th – 17th) OMNI Hotel, Oklahoma City, OK

Spring 2025, (October 13th – 17th) Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL

Fall 2025 (October 5th – 9th) Peppermill Resort, Reno NV

Spring 2026 (April 26th – 30th) Sheraton Sand Key Resort, Clearwater Beach FL

Fall 2026 (October 4th-9th) Catamaran Resort, San Diego CA

Spring 2027 (April 3rd-8th) Hyatt Regency, Orlando FL

14. Adjournment – 2:18 pm ESDT

Submitted by Jim Wenzel, 5/20/24

Annex A

TC32/SC32A - U.S.A. Technical Advisory Group

Dr. John G. Leach, Technical Advisor ✉ j.g.leach@ieee.org ✉ 828-256-3744

IEC Report 2024-1 October 11th 2023 to March 31st 2024

From: Dr. John G. Leach, Technical Advisor TC32 and SC32A, March 31st 2024

Summary

Since the October 2023 report there have been TC32-TAG and JMT 441 on-line meetings. CDs for TC32-WG1 and SC32A-MT6 have been circulated.

SC32A MT3 - HV current-limiting fuses

There has been no activity except that in November 2023, Dirk Wilhelm (Germany) replaced John Leach as Convenor. There have been no requests for additions or changes to the documents covered by this MT (IEC 60282-1, and IEC 60644), and the MT will probably meet at the next plenary meeting (to be decided).

SC32A MT6

The CD prepared by this MT, 32A/360/CD, was circulated on 2023-12-22 and closed on 2024-03-15. There were 142 comments. The CC should be circulated shortly.

TC32/WG1

HV DC fuses. A CD (32/265/CD) was issued on February 23rd, with a closing date for comments of May 17th, 2024. Comments to John Leach, please.

JMT 441

John Leach is a member of this joint maintenance team for the Electropedia section 441 (IEC 60050-441 Switchgear, controlgear and fuses). The aim is to bring up-to-date the definitions in this section. Since October 2023 there has been 1 meeting on February 28th 2024. It has proved difficult to get a reasonable number of members to participate in meetings (there has been no participation, or input, from SC32B or C), and due to staff shortages there have been no processing of change requests to the Electropedia recently. TC17 (switchgear) have now requested a number of changes, including to the definition of “fuses” (although not substantive).

TC21 CAG

The Chair’s advisory Group (chairs and secretaries of TC32, SC32A, SC32B, and SC32C) met in an on-line meeting on March 13th 2024. The purpose of this meeting was to decide when to next meet for a Plenary meeting. We had agreed at the last meeting in San Francisco (November 2022) to try and get an invitation for the 2024 general meeting in Scotland, UK. This was not forthcoming (and even TC17 did not get invited). We had received an invitation to apply for a place at the 2025 GM in India, and another possibility was to meet with ICEFA which had been scheduled for September 2024 in Greece. It was decided that the timing of the Indian GM was not convenient and that the 6 months to ICEFA was insufficient to organise everything (many official reports have to be generated and circulated before a Plenary meeting). Instead, it was decided to seek an invitation from the French national Committee to meet in Paris early in 2025 (a meeting in Paris had been organized, but cancelled due to COVID in 2020/2021). Subsequent to the CAG meeting, we discovered that an invitation in the first half of 2025 from France would not be possible, so there are no plans for a meeting at the moment.

Plans for future meetings – none at the present.

John Leach, 3/31/24