

## IEEE SWITCHGEAR COMMITTEE

Minutes: IEEE High-Voltage Fuses Subcommittee  
Place: Hilton Orlando Bonnet Creek  
Date: Wednesday April 13<sup>th</sup>, 2022  
Presiding officer: Sterlin Cochran – Chair  
Recorder: Jim Wenzel – Vice-Chair/Secretary

### MEMBERS PRESENT (13)

Sterlin Cochran	Oak and Shield LLC (SC Chair & Chair RFSWG)
Gary Haynes	ABB Inc.
Hemanth Jala	S&C Electric Co
Travis Johnson	Xcel Energy
John Leach	Consultant
Pete Marzec	S&C Electric
Chris Morton	PowerTech
Caryn Riley	GT/NEETRAC
Jon Spencer	Utility Solutions
Randy Ward	Aluma-Form
Jim Wenzel	Eaton (Vice Chair & Sec)
Charles Worthington	Hubbell Power Systems
Danish Zia	UL LLC

### MEMBERS ABSENT (5)

Glenn Borchardt	S and C
Chris Borck	Eaton
Jonathan Deverick <sup>^</sup>	Dominion Virginia Power
Robert Wolf	Hubbell Power Systems
Bobby Moorhead	Dominion Virginia Power

<sup>^</sup> correspondence only

### GUESTS (6)

Jeramie Cooper	Eaton
Mohit Chhabra	S and C
Brennen Fleming	Hubbell Power Systems
Sumitabha Pal	Schneider Electric
Sachin Pingle	ABB Inc.
Dustin Sullivan	Hubbell Power Systems

### 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** - 12:39 pm (EDT)
- 2. Approval of Agenda** – The agenda was approved (proposed John Leach, seconded Pete Marzec).
- 3. Member/guest introduction** – Hemanth Jala is now a member of the SC. There were 13 members present, with 5 members not in attendance and 6 guests.

4. **Roster check** – Sign-in Sheet circulated. Jeramie Cooper will become a member of the SC in Fall.
5. **Approval of April 21<sup>st</sup> 2021 minutes** – The Fall 2021 minutes were approved (proposed John Leach, seconded Caryn Riley).
6. **Report from the chair** – Sterlin reported there are 3 Task Forces active in providing input into the 37.41 WG.
7. **Standards status report**
  - a. C37.41: published April 2017, Corrigenda issued May 2017. **New 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.
  - d. C37.48: New revision published August 2020.
8. **Working Group Reports -**
  - a. Revision of fuse standards – C37.41: Sterlin Cochran  

Sterlin reported that the 3 Task Forces (TF1 Disconnecting Devices; TF2 Dielectric Tests; and TF3 Test Series 4 for Cutouts) for 37.41 met on Monday, April 11<sup>th</sup>. Progress has been made on the Task Forces but work will continue.

Sterlin also reported WG meetings were held at 8:00 am and continued at 10:15 am on April 13<sup>th</sup>. Twenty-four people were present 16 members and 8 guests. A draft document (PC37.41\_D2f) had been produced and work continued reviewing the document. The WG has progressed through the fuse link tests and will resume in Fall with current limiting fuses.

The PAR for C37.41 expires December 2024 and the WG will continue to work to that date.
9. **Report of liaison to other committees -**
  - a. ER&P Committee – S. Cochran: Nothing to report out. Just a general reminder for papers and reviewers.
10. **IEC Report – J. Leach – (full report Annex A)**
  - a. The IEC General meeting will be in San Francisco October 29-November 2, 2022.
  - b. TC32/WG1 is working on a standard for DC fuses over 1500 V (the present limit for LV fuses). It is planned to cover all types of fuses (industrial, semiconductor, photovoltaic, and battery).
  - c. WG2 for HV fuses tested as LV fuses has been formed but as of yet there is no convener.
11. **Unfinished business** – nothing to report.
12. **New business** – nothing to report.
13. **Future meetings -**
  - Fall 2022 (October 16 – 21), Hilton Lake Champlain, Burlington, VT
  - Spring 2023, Clearwater, FL
  - Fall 2023 (October 08 – 13), Catamaran Resort, San Diego, CA
  - Spring 2024, St. Petersburg, FL
  - Fall 2024, Phoenix, AZ
  - Spring 2025, Hilton Head, SC
  - Fall 2025, Reno, NV
14. **Adjournment - 2:30 pm**

Submitted by Jim Wenzel, 4/25/2022

## Annex A

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

Dr. John G. Leach, Technical Advisor ♦ [j.g.leach@iecc.org](mailto:j.g.leach@iecc.org) ♦ 828-256-3744

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## **IEC Report 2022-1 October 2021 to April 2022**

**From:** Dr. John G. Leach, Technical Advisor TC32 and SC32A, April 8<sup>th</sup> 2022

### **Summary**

Since the October 2021 report there have been no SC32A maintenance team meetings, but on-line meetings of TC32 Chair's Advisory Group and TC32/WG1. After significant correspondence we were able to secure an invitation (the last) to attend the 2022 General Meeting in San Francisco (October/November).

### **TC 32 CAG web meeting, September 13<sup>th</sup> 2021**

This was scheduled for January 17<sup>th</sup> but due to the Chair having to attend a colleague's funeral it was postponed until February 17<sup>th</sup>. Plans for the general meeting (San Francisco) were discussed and since we had not yet been invited, provisional alternative plans for a meeting in Paris, late November/early December were made. Subsequent to the meeting, John Leach contacted the US NC (ANSI) and after some discussion an invitation was issued to TC32/SC32ABC to attend the GM. This invitation was quickly accepted.

A second draft of the TC32 Strategic Business Plan was presented and discussed. Since it was found that IEC has a new format, members will comment in writing and after the next meeting (in May) a final draft will be prepared to be presented at the TC meeting on November 2<sup>nd</sup> in San Francisco.

There was a report on the progress of WG1 (HV DC fuses) and members were told that it is in the PWI stage (preliminary work item). It is anticipated that there will be an NP (New Work Item Proposal) circulated mid-2022. There was also further discussion on WG2 of the Technical Committee (AC fuses above 1000 V not tested to present HV fuse standards). Although after canvassing, a number of experts have joined this WG (there were only 2 after its controversial formation), it has not been possible, so far, to find a convener interested in taking up this project. Note that SC32B did make an indirect approach to John Leach but he declined on the basis of being reluctant to endorse the fundamental idea of such devices. If a convener is not found, the project will be abandoned.

### **TC32/WG1 web meetings**

There have been a number of on-line meetings of this WG developing a standard for HV DC fuses. John Leach is a member of this group and they have been steadily working through a proposed document that combines several of the LV fuse standards for both industrial and semi-conductor fuses.

**Date and place of next meetings:** Next CAG meeting May 17<sup>th</sup> 2022. TC32/WG1 meetings, April 25<sup>th</sup>, and May 16<sup>th</sup>. Next in-person TC/SC/MT meetings at the 2022 General Meeting in San Francisco, USA, October 29<sup>th</sup> – November 2<sup>nd</sup>, 2022.

John Leach, 4/08/22