

## IEEE SWITCHGEAR COMMITTEE CORRESPONDENCE

Minutes: Working Group on Revision of Fuse Standards-C37.41, High-Voltage Fuses  
Subcommittee  
Place: Fort Lauderdale  
Date: April 2<sup>nd</sup>, 2024  
Chair: Sterlin Cochran  
Secretary: John Leach

WG Voting Members “VM”, non-voting members “NVM”, and non-members “NM” present

| Name                | Employer/Affiliation       | Status |
|---------------------|----------------------------|--------|
| Tim Anderson        | Aluma-Form                 | VM     |
| Jason Beck          | Dominion Energy VA         | NVM    |
| Chris Borck         | Eaton                      | VM     |
| Sterlin Cochran     | G&W Electric (Chair)       | VM     |
| Jeramie Cooper      | Eaton                      | VM     |
| Brenden Flemming    | Hubbell Power Systems      | VM     |
| Gary Haynes         | ABB Inc.                   | VM     |
| Robert Hinshaw      | Hubbell                    | NM     |
| Travis Johnson      | Xcel Energy                | VM     |
| John Leach          | -/Self (V-Chair/Secretary) | VM     |
| Eric (Qian) Li      | Powertech Labs             | VM     |
| Pete Marzec         | S&C Electric               | VM     |
| Harison Metcalf     | Mersen                     | NVM    |
| Chris Montanez      | Mersen                     | NM     |
| Chris Morton        | -/self                     | VM     |
| Aaron Motes         | ABB–Hi-Tech                | VM     |
| Carlos Nieto        | S&C Electric               | VM     |
| Sachin Pingle       | ABB                        | VM     |
| Caryn Riley         | Georgia Tech/NEETRAC       | VM     |
| Jon Spencer         | Utility Solutions          | VM     |
| Dustin Sullivan     | Hubbell Power Systems      | VM     |
| Francois Trichon    | Schneider                  | NM     |
| Randy Ward          | Aluma-Form                 | VM     |
| Jim Wenzel          | Eaton                      | VM     |
| Charles Worthington | Hubbell Power Systems      | VM     |
| Danish Zia          | UL LLC                     | VM     |

Names = member not present

### 1. Meeting Call to Order

The WG meeting was called to order on Tuesday April 2<sup>nd</sup> at 8:05 am.

### 2. Approval of agenda

The provisional agenda distributed before the meeting, had no changes proposed so was approved as circulated.

### **3. Attendee introductions**

Attendees were asked to sign in. We have two new voting members at this meeting, Sachin Pingle and Tim Anderson. John Leach stated that “Visitors” (classed as non-members) need to contact him, or check the “request membership” box on the sign-in sheet, if they wish to become members of the WG, in which case they become non-voting members until they have attended 2 of 4 meetings, at which time they become eligible, at their next meeting, to become voting members.

### **4. Approval of Tuesday/Wednesday October 9<sup>th</sup>/10<sup>th</sup> 2023, San Diego, meeting minutes**

The October minutes were reviewed and accepted as circulated.

### **5. Report from the Chair**

Sterlin welcomed everyone and explained that the last draft of C37.41 (a combination of the present IEEE Std C37.41 and C37.42) had been circulated as a ballot, with a closing date of Saturday March 23<sup>rd</sup>. John had received the ballot comments (378) on Monday March 25<sup>th</sup> and, with some input from Sterlin had prepared provisional responses/ input to the WG for the majority of the comments, many of which were editorial (and generated by problems with the IEEE Template). Most of the TRV comments and TS4 comments were left for the WG. Sterlin reported that we have to get all of our standards approved by ANSI (this is normally automatic but it was not done for some documents). It should be automatic for C37.41 when it is completed.

### **6. Report and Discussion of Relevant IEC activities – John Leach**

John stated that there had been no significant IEC activity relevant to the HV Fuses subcommittee in the last six months and a full report will be given during the HV Fuses Subcommittee meeting.

### **7. Revision of C37.41/42 – review of ballot comments.**

Approximately 75% of the ballot comments were editorial. It was decided to concentrate on the technical comments (as there were too many comments to review during this meeting) but on some of the more general editorial comments, that would significantly affect the standard, decisions would be made to assist John in getting the document ready for a recirculation. The following are some of the more significant decisions made.

- 1) Concern had been expressed about the IEC comparison in the overview (1.3, but changed to 1.4 to accommodate IEEE requirements for word usage). The complaint was that it was informational. The WG felt that while it contains elements of information (as do all the parts of the overview) it also expresses an important caution related to safety issues, and if moved to an Annex (as was suggested) this cautionary aspect would be lost. Since this IEC comparison (praised by another balloter) has been in our standard for many years without complaint from IEEE Editorial Staff, it was decided to retain it with some additional amplification (called for by another ballot).
- 2) Tables 4 and 5 – it was decided to retain the tables but have the ratings increase horizontally not vertically.
- 3) There was debate over numbering all equations in the document. Initially this was thought to be appropriate, until all equations were reviewed. Most are not of “key importance” (a style manual criterion) and it was decided to follow, primarily, existing practice. Key equations (in Annex J for example) will be numbered.

- 4) It was decided to continue to just use AWG for conductor specification and not add metric dimensions (this approach is permitted by IEEE). Equivalent sizes in mm<sup>2</sup> would not necessarily give correct results due to cable stranding, etc.
- 5) It was decided that, for Test Series 4 for cutouts using replaceable fuse links, no testing for a 65K link or higher would be specified, because there are very few applications for such fuses, and we are having trouble finding the appropriate test current. The standard will state that use of such fuses for transformer protection will be subject to agreement between manufacturer and user.

It was agreed that the remaining ballot comments would be addressed in a series of on-line meetings, with the plan to achieve a recirculation in June.

**8. New Business** None

**9. Old Business** None

**10. Next meeting**

Fall 2024, (October 13<sup>th</sup> – 17<sup>th</sup>) OMNI Hotel, Oklahoma City, OK

Spring 2025, (April 13<sup>th</sup> – 17<sup>th</sup>) Wyndham Grand Orlando Resort Bonnet Creek, Orlando, FL

Fall 2025 (October 5<sup>th</sup> – 9<sup>th</sup>) Peppermill Resort, Reno NV

**11. Adjournment:** the meeting was adjourned at 12:00 pm on April 2<sup>nd</sup> 2024.

Respectfully Submitted,  
John Leach, Secretary (04/05/24)