

## IEEE SWITCHGEAR COMMITTEE CORRESPONDANCE

Minutes: IEEE High-Voltage Fuses Subcommittee, C37.41 PAR Study Group  
Place: San Diego, CA  
Date: Tuesday October 8<sup>th</sup> 2019  
Presiding officer: Jim Wenzel/Sterlin Cochran– Chair  
Recorder: John Leach –Vice Chair/Secretary

### PRESENT

Chris Borck	Eaton
Sterlin Cochran	Oak & Shield LLC (Chair)
Jeramie Cooper	Eaton
Anil Dhawan	ComEd
Rodolfo Elizondo	Peak Demand
Paul Found	BC Hydro
Jose Gamboa	HJ
Gary Haynes	ABB Inc.
Hemanth Jala	S&C
Travis Johnson	Xcel Energy
John Leach	Consultant (Sec.)
Eric Li	Powertech Labs
Chris Morton	PowerTech Labs
Caryn Riley	GT/NEETRAC
Jon Spencer	Utility Solutions
Jim Wenzel	Eaton (Chair)
Randy Ward	Alumaform
Will Weishuhn	ABB
Robert Wolf	Hubbell Power Systems
Charles Worthington	Hubbell Power Systems

1. **Call meeting to order** – 8:00am
2. **Approval of Agenda** – No agenda had been prepared.
3. **Introductions** – 20 present
4. **Discussion of objectives**
  - a) Jim Wenzel (SC Chair) and John Leach (SC Secretary) gave the background concerning the issues involving the need for a PAR to revise C37.41 and C37.42.
  - b) The salient points were:
    - C37.41 and C37.42 were revised in 2016 and must be revised again no later than 2026 – revision process takes approx. 4 and a half years so revision has to start no later than 2021, i.e. within approx. next 18 months.
    - HVF SC had agreed that in order to aim for user friendliness they would work towards one document. At the time there were six. The process was to be undertaken in two stages, the first being to produce two documents, one, C37.41, to cover testing (old standards C37.40, C37.41) and one for specifications, C37.42 (old standards C37.42, C37.43, C37.46, and C37.47). The first stage was completed in 2016 (IEEE Std C37.41 and IEEE Std C37.42),

with the second stage, a single document, C37.41, to be completed by 2026 or earlier.

- The first attempt at C37.41-2016 had problems with cutout Test Series 4 being difficult to perform in a way that it could be determined that a test had met the requirements. Together with editorial problems, this led to a Corrigendum being issued in 2017. Questions still lingered concerning the correctness of the testing to achieve the stated aims.
- A request was in to NEETRAC to study TRV values on the system concerning Series 4 for cutouts, which might have a bearing on changes to the next revision of C37.41

## 5. Formation of Working Group

Jim Wenzel called for a volunteer to lead the new Working Group. John Leach said that he wanted someone younger than him to lead the WG (he has been Revision of Fuse Standards WG Chair for a number of years) but that if the new Chair wished, he would be happy to be the secretary, to assist the Chair in the technical aspects of standards development based on his experience (and available time). Sterlin Cochran volunteered, and there being no other volunteers, he was appointed new WG chair by Jim. Sterlin agreed to have John as secretary.

Jim then chaired the remainder of the meeting.

## 6. Development of the PAR

John had prepared a preliminary PAR for the combining of C37.41 and C37.42, in case we had not been able to hold the Study Group meeting (by error the group had not been scheduled as of the previous Friday). Those present went through the propose Scope and Purpose (which reflects a conflation of those from C37.41 and C37.42) and with minor changes these were agreed.

## 7. Conclusion

A motion was made by **Will Weishuhn**, seconded by **Chris Borck** that **the PAR** study group request that the HV Fuses Subcommittee approve the submission of a PAR for the revision of C37.41, to include the information from C37.42, together with any other topics they see fit to address. This motion was approved unanimously. Other issues discussed and generally agreed was that a Task force be launched by the new WG to work in parallel studying the Test Series 4 for cutouts, assessing the test conditions (based partly on the NEETRAC study, if approved by the NEETRAC board) together with manufacturer's experience. Other issues left from the last revision, that it is suggested the WG tackle, included clarification of polymer insulator tests and BIL issues.

## 8. Adjournment – 9:30am

Respectfully submitted,  
John Leach, Secretary