# IEEE C37.13, Low-Voltage AC Power Circuit Breakers Used in Enclosures

# Meeting Minutes

Meeting Date: 09 October 2023

Meeting Time: Session #1: 1:30 PM - 3:15 PM;

Session #2: 3:45 PM - 5:30 PM

**Location:** Catamaran Resort, San Diego, CA

#### A. Call to order

The meeting was called to order at 3:34PM PST.

### B. Approval of agenda

The meeting agenda was reviewed. Motion to approve the agenda was made by Mike Lafond and seconded by Marcelo Valdes. The agenda was approved by unanimous consent

### C. Introductions/Attendance

Introductions were made of all attendees. Attendees are listed below. Quorum was confirmed with 15 of 18 members present and a total of 34 attendees

First Name	Last Name	Affiliation	Member Type
Emmanuel	Ankrah	KEMA Powertest LLC	Non-Voting Member
Ayyaswamy	Ashok	Volta	Non-Voting Member
Francis	Beauchemin	Hydro-Quebec	Non-Voting Member
Randy	Blake	Schneider Electric	Non-Voting Member
Robert	Burns	Eaton Corporation	Non-Voting Member
Ted	Burse	Powell Industries, Inc	Voting-Member
Clint	Carne	Schneider Electric	Secretary
Daniel	Delfino	ABB	Voting-Member
Arkandiusz (Eric)	Doroz	Eaton	Non-Voting Member
Doug	Edwards	Siemens Industry, Inc.	Voting-Member
Keith	Flowers	Siemens Industry, Inc.	Chair
Jonathan	Goldberg	IEEE	Observer
Lou	Grahor	Eaton Corporation	Voting-Member
Erin	Hardy	Eaton	Voting-Member
Tom	Hawkins	Siemens Industry, Inc.	Non-Voting Member
Dan	Hrncir	Eaton	Voting-Member
Terry	Hunt	Westinghouse	Non-Voting Member
Shah	Jamal	Avangrid	Non-Voting Member
John	Kaminski	Siemens Industry, Inc.	Non-Voting Member
Umer	Kahn	ABB	Non-Voting Member
Michael	Lafond	U.L.	Voting-Member
Ryan	McClarnon	Utility Relay Co.	Non-Voting Member
Jeff	Mizener	Siemens Industry, Inc.	Voting-Member
Darryl	Moser	ABB	Voting-Member
Owen	Parks	ABB	Voting-Member
Paul	Rakus	Eaton	Voting-Member
Amy	Rowell	Schneider Electric	Non-Voting Member
Todd	Sauve	Rockwell Automation	Non-Voting Member
Kevin	Sippel	Eaton Electric	Voting-Member

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Christo	Thomas	SCHNEIDER ELECTRIC USA INC	Voting-Member
Marcelo	Valdes	ABB	Voting-Member
Will	Weishuhn	ABB	Non-Voting Member
Eddie	Wilkie	Eaton Corporation	Non-Voting Member
Danish	Zia	UL LLC	Voting-Member

#### D. Approval of Spring 2023 Meeting Minutes

Spring 2023 IEEE C37.13 Working Group meeting were reviewed. Motion to approve the minutes was made by Mike Lafond and seconded by Christo Thomas. The meeting minutes were approved by unanimous consent.

### E. Participant Behavior - Individual Method

The attendees were reminded of IEEE's Code of Ethics and Conduct guidelines.

Also noted was that when following the "Individual Method" the attendees are to vote based on their own engineering judgement and not as a directed vote or representing their employer or client(s).

The attendees were also advised about IEEE's policy regarding dominance.

The related slides may be downloaded at the following website:

https://standards.ieee.org/wp-content/uploads/import/documents/other/Participant-Behavior-Individual-Method.pdf

### F. Rules and guidelines for conducting working group meetings

Along with other business conduct guidelines, the IEEE Patent Policy was reviewed.

After a call for essential patents, no declarations were made.

The policy may be downloaded at the following website:

"INSTRUCTIONS FOR CHAIRS OF STANDARDS DEVELOPMENT ACTIVITES" and "IEEE SA COPYRIGHT POLICY"

#### G. Working group P&Ps

The attendees were reminded of the Switchgear Committee Working Group Policies and Procedures – Individual Method. The approved policy manual can be downloaded from the following website:

https://www.ewh.ieee.org/soc/pes/switchgear/O-and-P/PES\_SWG\_WG\_PnP\_Final\_2019-03-19.pdf

## H. Document status report

PAR request date: 07 May 2019PAR approval date: 05 Sep 2019

• PAR expiration date: 31 Dec 2025 (Document also expires 31 Dec 2025)

#### I. Old business

- Thermal testing power circuit breakers ad hoc report and discussion
  - Mike Lafond reported out on the status of the work of the Ad Hoc. Ask from chair is the Ad Hoc out prior to end of 2023 calendar year.
    - Next Actions

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- Mike Lafond to schedule doodle poll to setup virtual Ad Hoc
- Time-Current Curves ad hoc report and discussion
  - Text of Annex E Documentation of time-current curves was reviewed
    - **ACTION**: Add labels "minimum trip signaling time" and "maximum clearing time" to Fig. E.4
    - Discussion was held around need to state which trip system and which switching device is represented by the TCC
    - Discussion was held around the fact that short circuit clearing times during testing are not check against the manufacturers TCC
    - Discussion was held around non-automatic circuit breakers and how a proper TCC would be a combination of the switching device the external protective relay signaling time
    - **Motion:** Make Annex E Informative. Made by Darryl Moser and seconded by Marcel Valdes. Motion carried 9 affirmative, 4 nay votes
- WG took break at 3:15PM and resumed at 3:50PM.
- Class Ratings ad hoc report and discussion
  - Clint Carne provided report out of the Ad Hoc work
    - Discussion was held around if C37.13 or if C37.13.1 was the appropriate location. The Class II device look like C37.13 devices and was the rational to add this into C37.13
    - Discussion was held around the risk of having both Class I and Class II devices in the market. A key market driver for Class II is the renewable market.
    - **Motion:** Preferred ratings for Class II be limited to circuit breakers rated above 730V ac. Made by Marcelo Valdes and seconded by Ted Burse. Motion carried 11 affirmative, 3 nay votes

### J. New business

- "Smart" circuit breakers
  - Awareness Message: A request from the IEEE PES China Chapter to re-review inclusion of "Smart" circuit breakers be added to the scope of 37.13. A virtual meeting will be scheduled in the future.
- Classification of insulating materials
  - A review comparing the text "Classification of insulating materials" in C37.13 7.3 and C37.14 8.3 was presented. There is large consistency between the two standards with only a few differences. Ad Hoc proposal is to align both sections, make C37.13 the main home for this text, and C37.14 will reference C37.13 7.3.
  - **Motion:** Accept the recommendation of the solo Ad Hoc to incorporate the proposed text into the next C37.13 draft. Made by Ted Burse and seconded by Jeff Mizener. Motion carried by unanimous consent.
  - Motion: Motion to approve the creation of the WG ballot with the text as proposed. Contingent upon the successful completion of WG activity, then move to approve the creation of SA ballot. Made by Ted Burse and seconded by Jeff Mizener. Motion carried by unanimous consent.

#### K. Next steps

- Target updated draft towards end of October. Allow 2-3 weeks for comments to be received. Target a virtual WG meeting 1<sup>st</sup> week of December.
- The next planned in-person meeting: Spring 2024, Westin Beach, Fort Lauderdale, FL

### L. Adjourn

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Meeting minutes respectfully submitted by Clint Carne