

PC37.17 Sub-Group Meeting on Firmware Updates  
IEEE STANDARD FOR TRIP SYSTEMS FOR LOW-VOLTAGE (1000 V AND BELOW) AC  
AND GENERAL PURPOSE (1500 V AND BELOW) DC POWER CIRCUIT BREAKERS  
JEFF MIZENER, CHAIRMAN  
CLINT CARNE, VICE-CHAIRMAN

**Meeting Date:** 25 February 2020  
**Meeting Time:** 1:00PM-3:00PM, Central Time  
**Location:** Online Conference Call

**A. Call to order**

The meeting was called to order at 1:00PM

**B. Introductions**

Participants could see the other attendees, and all knew each other, individual introductions were dispensed with.

**C. Approval of agenda**

By attending, the participants indicate their approval of the agenda stated at the last meeting.

**D. Approval of the minutes from the previous meeting**

There were no previous minutes to approve.

**E. Rules and guidelines for conducting working group meetings**

All participants have seen the patent slides by virtue of attendance at previous in-person meetings. The link is repeated here for completeness.

<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

**F. Working group P&Ps**

All in attendance are aware of the Switchgear Committee P&P in the case of procedural questions. Link repeated here for completeness:

[http://www.ewh.ieee.org/soc/pes/switchgear/O-and-P/PES\\_WG\\_PP-Switchgear--approved-\(2013-09-19\).pdf](http://www.ewh.ieee.org/soc/pes/switchgear/O-and-P/PES_WG_PP-Switchgear--approved-(2013-09-19).pdf)

**G. Document status report**

- Current document: PC37.17\_D02\_2019.08.26\_V0.2

**H. New business**

- The purpose of this meeting was to discuss clause 12.2, "Trip system software updates". Attendees volunteered at the last meeting to participate so that Clause 12.2 could be revised and added to the document so that it could be circulated as Draft 3.
- The main point made was not to inadvertently expand the scope of the document with a large number of requirements for testing that would potentially circumvent or encroach on Clause 7 of C37.50.
- It was agreed that changes to the core protective functionality (L, S, I & G) should require an evaluation together with the hardware (breaker mechanism) according to applicable standards. Clause 7 of C37.50 only tests the core functionality and should limit the scope of additional requirements.

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- It was agreed that some specific statements (requirements, normative) could be added regarding software updates, but recommendations should be placed in an informative annex. Draft 3 will reflect that.
- UL 5500, Remote Software Updates will be referenced in both the informative annex and added to the bibliography. It was noted that this standard specifically governs **remote** updates and does not cover “– Field updates done with physical access by qualified personnel;”.
- The group did not conclude that remote updates should be disallowed, only that it is strongly recommended that updates be done over a local network or locally by a qualified person in front of the device.

**I. Conclusion**

- Draft 2 will be updated with the suggested changes and circulated as Draft 3 to the working group for discussion at the next in-person meeting in Reno on May 4.
- Meeting ended at approximately 2:30pm

Meeting minutes respectfully submitted by Jeff Mizener

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**Attendees List:**

Last Name	First Name	Affiliation	Role
Delfino	Daniel	General Electric	Member
Dunne	David	Schneider Electric	Member
Mizener	Jeff	Siemens Industry, Inc.	Chair
Moser	Darryl	ABB	Member
Rakus	Paul	Eaton	Member
Rohr	Richard	Powell Electrical Systems	Member
Sippel	Kevin	Eaton Electric	Guest
Wiese	Greg	Schneider Electric	Guest