

Task Force Agenda
Low-Voltage Power Circuit Breakers for Emerging Technologies

Meeting Minutes

A. Call-to-Order and Agenda

The Task Force for Low-Voltage Power Circuit Breakers for Emerging Technologies teleconference was called to order at 2 PM CDT on March 27, 2018 by TF Chair, Keith Flowers.

The meeting agenda was reviewed approved by consent.

B. Attendance

Introductions were made of all attendees. Attendees are listed below.

Six Task Force members were present, with no guests in attendance. Quorum was met. Attendance recorded in 123Signup.

Attendees:

<i>Name</i>	<i>Affiliation</i>	<i>Member / Guest</i>
<i>Clint Carne</i>	<i>Schneider Electric</i>	<i>member</i>
<i>Dan Delfino</i>	<i>General Electric</i>	<i>member</i>
<i>Dave Dunne</i>	<i>Schneider Electric</i>	<i>member</i>
<i>Keith Flowers</i>	<i>Siemens Industry</i>	<i>chair</i>
<i>Lou Grahor</i>	<i>Eaton Corporation</i>	<i>member</i>
<i>Jeff Mizener</i>	<i>Siemens Industry</i>	<i>member</i>

C. Rules and guidelines for conducting working group / task force meetings

The IEEE Patent Policy and Business Conduct slides were reviewed by the attendees prior to registration to the meeting. No patent declarations were made known. The IEEE patent policy may be reviewed at the following web site:

<http://standards.ieee.org/board/pat/pat-slideset.pdf>

D. Working Group P&Ps

The Task Force adopted the Switchgear Committee Working Group P&P's. They are posted on the Switchgear Committee website at the following website:

[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)

Meeting Minutes

E. Previous Meeting Minutes

This is the first meeting of the Task Force. No previous meeting minutes.

F. Document Status

Not applicable at this time.

G. Technical Discussion Highlights

The following is a high-level summary of the technical discussions from this meeting.

i. Is there a need?

A discussion was held to consider whether requirements presented by emerging technologies (such as wind, solar, energy storage, etc) are adequately covered by existing circuit breaker standards such as IEEE Std C37.13 and IEEE Std C37.14, and if not, are modifications and/or additional standards required.

Several examples were noted such as:

- In many solar applications, the available “short-circuit” current is as low as 125% of the continuous current load.
- High harmonic content has damaged current sensors, and introduced measurement errors in air-core current sensors.
- There are applications which introduce special environmental conditions well outside of the normal service conditions stated in IEEE Stds C37.13 and C37.14.

The general conclusion of the discussion was that there are some opportunities to define special circuit breaker classifications, ratings, or some other term distinguishing those circuit breakers from standard general-purpose circuit breakers, when they have been adapted for these special applications.

ii. How to address?

IEEE Std C37.13 only addresses “general-purpose” ac circuit breakers. IEEE Std C37.14 addresses multiple types of dc circuit breakers with differing requirements – for example “general-purpose,” “mining,” “semi-high-speed,” “high-speed,” and “rectifier” circuit breakers.

IEEE Std C37.20.7-2018 covers common requirements in the base document, and product specific requirements, preferred ratings, markings, and test procedures in individual, product specific annexes.

The task force agreed in general that this combining these two concepts would be the best path, provided further action is recommended by the task force.

Meeting Minutes

H. Next Steps

The Chair will circulate a draft proposal for integrating new requirements into C37.13-2015 for the members to review and comment on. The working proposal will be reviewed in more detail at the Spring 2018 face-to-face meeting in Lake Buena Vista, FL. A potential PAR request would be discussed at that time.

The meeting was adjourned at 2:45 PM.

I. Upcoming Meetings

The face-to-face Working Group meetings are held in conjunction with the IEEE PES Switchgear Committee meetings. Additional teleconferences are scheduled as needed. The upcoming Switchgear Committee meetings are tentatively planned for:

Spring 2018 (23 April 2018 at 8 AM), Disney's Contemporary Resort, Lake Buena Vista, FL
Fall 2018 (14 Oct – 18 Oct), Kansas City Marriott Downtown, MO
Spring 2019 (28 Apr – 01 May), Hilton, Burlington, VT
Fall 2019 (06 Oct – 10 Oct), Catamaran Resort, San Diego, CA
Spring 2020 (04 May – 08 May), Peppermill Resort, Reno, NV
Fall 2020 (04 Oct – 08 Oct), Sheraton Sundance Square, Fort Worth, TX
Spring 2021 (18 April – 23 April), Hilton Charlotte University Place, Charlotte, NC

Specific date and locations are subject to change based on the overall Switchgear Committee schedule. IEEE PES Switchgear Committee meeting announcements and registration can be found at the following link:

http://www.ewh.ieee.org/soc/pes/switchgear/NextMeeting/Future_Meetings.html

Minutes submitted by:
Keith Flowers
Task Force Chair
March 27, 2018