Task Force Minutes

Low-Voltage Power Circuit Breakers for Emerging Technologies

Meeting Minutes

Meeting Date: 30 April 2019
Meeting Time: 8 AM – 12 PM EDT
Location: Hilton Burlington Lake Champlain, Burlington, Vermont

A. Call to order

The Task Force for Low-Voltage Power Circuit Breakers for Emerging Technologies teleconference was called to order at 8:01 AM EDT on April 30, 2018 by TF Chair, Keith Flowers.

B. Attendance

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

Twelve Task Force members were present, with twenty-two guests in attendance. Quorum was met. Attendance recorded in 123Signup.

Attendees:

Name	Company	Member/Guest
Keith Flowers	Siemens Industry, Inc.	Chair
Paul Sullivan	DuPont	Secretary
Georges Auguste	Ameren MO	Guest
Gautami Bhatt	Bechtel OGC	Guest
Dave Booth	Exiscan	Guest
Ted Burse	Powell Industries, Inc	Guest
Clint Carne	Schneider Electric	Member
David Dunne	Schneider Electric	Member
Doug Edwards	Siemens Industry, Inc.	Member
Michael Flack	Southern Company Services, Inc.	Guest
Lou Grahor	Eaton Corporation	Member
Paul Grein	Circuit Breaker Sales, Co, Inc, - GroupCBS	Guest
John Harley	FirstPower Group LLC	Guest
Tom Hawkins	Siemens Industry, Inc.	Member
Dan Hrncir	Eaton	Member
Chad Kennedy	Schneider Electric	Guest
Michael Lafond	ABB	Guest
James Lagree	Eaton	Guest
Jeff Mizener	Siemens Industry, Inc.	Member
Charles Morse	Siemens Industry, Inc.	Guest
Darryl Moser	ABB	Member
Owen Parks	ABB	Guest
Paul Rakus	Eaton	Guest

Dave Riffe	Westinghouse Electric Company	Guest
Richard Rohr	Powell Electrical Systems	Guest
Tim Rohrer	Exiscan	Guest
Carl Schneider	Schneider Electric	Guest
Dean Sigmon	Eaton Corporation	Guest
Kevin Sippel	Eaton Electric	Member
Christopher Slattery	FirstEnergy	Guest
Nick Vonfeldt	Ameren Missouri	Guest
Jeff Ward	Doble Engineering Company	Guest
Gerard Winstanley	NEMA	Guest
Danish Zia	UL LLC	Member

C. Approval of agenda

The meeting agenda was reviewed approved by consent.

D. Rules and guidelines for conducting working group meetings

The attendees were reminded of the IEEE Patent Policy and Business Conduct guidelines. The IEEE Patent Policy and Business Conduct slides may be reviewed at the following website:

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

E. Working group P&Ps

Each Working Group must operate under a IEEE-SA approved Working Group Policies and Procedures protocol. The Task Force was reminded that the meeting would be conducted within these procedures. The approved template for the Switchgear Committee is:

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

F. Document status report

Not applicable. No specific document was being considered at this juncture.

G. New business

The following discussions were held during the Task Force meeting.

- **Should type testing and conformance testing requirements from ANSI C37.50 be incorporated into a Switchgear Committee document?**

  The consensus of the Task Force and guests was to bring the type testing and conformance testing requirements from ANSI C37.50 a Switchgear Committee document. NEMA personnel are aware of this potential action. The Task Force has no

specific suggestions on how the material should be incorporated into a Switchgear Committee document. Some possibilities discussed were 1) including the material in an annex in IEEE Std C37.13, 2) including the material in the body of IEEE Std C37.13, or 3) create a new Switchgear Committee standard with the material from ANSI C37.50.

- **How does a change in IEEE Std 1547 and ANSI C84.1 to change the allow operating voltage of 110% of nominal affect IEEE Std C37.13 devices?**

  The consensus of the Task Force was the increased allowed operating voltage from approximately 105% to 110% could cause significant issues with IEEE Std C37.13 devices, other devices included in the Switchgear Committee scope, and other equipment such as end user equipment.

  The Task Force recommends no changes to IEEE Std C37.13 at this time.

  The Task Force recommends informing the LVSD Subcommittee the concern this Task Force has with the proposed increased allowed operating voltage.

- **How do surge protection recommendations in IEEE Std 1547 affect IEEE Std C37.13 devices?**

  The Task Force recommends no specific action at this time concerning surge protection requirements in IEEE Std 1547.

- **Should we add 1200 A as a preferred frame size to IEEE Std C37.13?**

  The Task Force recommends adding 1200 A as a preferred frame size to IEEE Std C37.13.

- **Should we add temperature deratings to IEEE Std C37.13?**

  The Task Force does not recommend adding temperature ratings to IEEE Std C37.13. The temperature performance depends highly on the enclosure were the IEEE Std C37.13 equipment is installed.

- **Should we add altitude deratings to IEEE Std C37.13?**

  The Task Force determined this information is already included in IEEE Std C37.13. The Task Force recommends no additional action concerning altitude deratings.

- **Should we add aging testing for lubricants used in IEEE Std C37.13 devices?**

  The Task Force discussed the issue and determined it would be good to create a Task Force to investigate how the aging of circuit breaker lubricates affects circuit breaker operation. The Task Force was presented the following motion:

  > Motion by Doug Edwards: LVSD form a Task Force to investigate development of a standard test method for aging testing of lubricants used in circuit breakers.
  >
  > Motion seconded by Richard Rohr.
  >
  > Motion passed unanimously.

- **Should changes be made to the 50/60 Hz testing requirements for IEEE C37.13 devices?**

The Task Force discussed the issue and determined it did not have enough information about potential concerns with the existing language to make recommend changes to this section.

- **Should a change be made to the scope and/or title of IEEE C37.13?**

  The Task Force discussed the issue and determined that no Task Force recommendations result in a need to change the scope of IEEE C37.13. The Task Force does recommend adding the voltage range information to the title of IEEE Std C37.13.

H. Conclusion

The Task Force work did not identify any needed changes to the scope of IEEE Std C37.13.

The Chair will present the results of the Task Force work at the May 1, 2019 LVSD meeting.

The Task Force Chair will be submitting a PAR based on the previously approved scope of work as approved by the LVSD Subcommittee.

With no further discussion, the meeting adjourned at 11:49 AM.

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:

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:
Paul Sullivan
Task Force Secretary
May 1, 2019