

Power Transformer Subcommittee

Working Group Report

Document #: C57.131

Document Title: Standard Performance Requirements and Test Methods for Tap-changers

Chair: Craig A. Colopy Vice-Chair: Axel Kraemer

Secretary: Adam M. Sewell Percent Complete: 99%

Current Draft Being Worked On: 1.2 Dated: October 2022

PAR Expiration Date: December 31, 2024

Meeting Date: 17 October 2022 Time: 9:30am-10:45am

Location: Charlotte, NC, USA

Attendance: Members 33 out of 44

Guests 32

Guests Requesting Membership Send email to secretary

Total* 65

* Attendance list for this meeting is shown at end of meeting minutes

Meeting Minutes / Significant Issues / Comments:

1. Meeting was called to order at 9:45am, October 17, 2022 at SHERATON CHARLOTTE & LE MÉRIDIEN CHARLOTTE HOTELS Symphony 1 room.
2. Distribution of attendance sheets
 - a. If you didn't receive an email from this working group before this meeting or are not on the attendance sheet, please send an email to adamsewell@ieee.org with the subject: C57.131 EMAIL to be added to the C57.131 WG email list
3. Quorum Check / Introductions
 - a. Introductions were made by name and affiliation
 - b. 33 members out of 44 were in attendance – QUORUM MET
 - c. Member requests can be sent to ADAMSEWELL@IEEE.ORG
4. Approval of Agenda and Approval of minutes from Spring 2022 Denver Meeting
 - a. Motion – H.Flores 2nd-M.Stank. No opposition to unanimous approval. APPROVED
5. Discussion of Draft 1.1 located on PSC website
 - a. Current C57.131-2012 expires Dec. 31, 2022 and PAR expires Dec. 31, 2024
 - b. Chair reviewed changes from last meeting that were posted on PSC website
6. Discussion of Draft 1.2 generated from work session held on October 16, 2022
 - a. 17 members attended 10/16/22 work session and created Draft 1.2
 - b. Changes were shown to working group which were in annexes and editorial
7. OLD BUSINESS - Keep the following notes for joint revision with IEC 60214-1
 - a. Section 6.1.15 Protection against access to hazardous parts - check if there is an equivalent designation in NEMA 250 for IP1X

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- i. Chair discussed this with working group and explained the wording shown in the current draft for this item.
 - b. Section 7.2.2 Temperature rise - To be considered in a future joint IEC/IEEE revision. Some discussion is warranted regarding the difference between contact temperatures of OLTC and DETC along with defining contact test temperature methodology to normalize testing. This could include switch orientation, liquid volume and parameters you have to prevent unwarranted advantageous results.
 - c. Table 3 values for switching impulse test values
 - i. Current IEEE and IEC standards do not list switching impulse values less than 100kV and for joint revision, switching impulse values will be looked at for less than 100kV. 69kV was a value brought up in the 3/28/22 meeting.
- 8. NEW BUSINESS - Discussion from S. Patel (WG Guest) about reactor type vs reactance type and resistor type vs resistance type wording change that was done on previous draft.
 - a. Chair agreed to change wording back to reactance type and resistance type where the current wording has reactor type and resistor type.
 - b. No MOTION was made to vote on this change to the document, so Draft 1.2 wording will not be changed. Draft 1.1 and 1.2 have both had this wording when worked on at work sessions on 3/26/22 and 10/16/22. Both drafts were voted on by the working group members as accepted changes.
 - c. Chair will follow-up with S. Patel on this discussion
- 9. Chair asked for unanimous approval to move Draft 1.2 of C57.131, Standard Performance Requirements and Test Methods for Tap-changers to ballot
 - a. No objections – 100% approval
 - b. Motion to be made in Power Subcommittee Meeting on 10/19/2022 to move Draft 1.2 to ballot
- 10. Next meeting: March 20 at Spring 2023 Transformer Committee Meeting scheduled for March 19-23, 2023, Milwaukee, WI, USA.
- 11. Close of meeting – 10:00am
 - a. Motion – T.Dauzat, 2nd – P.Kleine. No opposition to unanimous approval.ADJOURNED.
- 12. Working group membership changes – members who only attended one of the virtual meetings (on 4/26/21 or 11/15/21) and no further meetings have been changed to guest status. New membership for Spring 2023 meeting will be 41 members.

Submitted by: Craig A. Colopy

Date: 10/25/2022

Power Transformer Subcommittee

Working Group Report

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Meeting Attendance 10/17/2022:

Last Name	First Name	Company (Affiliation)	Role
Aikens	Tom	VTC	Guest
Aldenlid	Jennie	Hitachi Energy	Member
Arora	Kush	Maschinenfabrik Reinhausen	Guest
Betancourt	Edwin	Siemens Energy	Guest
Blaszczyk	Piotr	Specialty Transformer Components LLC	Member
Calitz	David	Siemens Energy	Member
Colopy	Craig	EATON Corporation	Chair
Cruz Valdes	Juan Carlos	Prolec GE	Member
Dauzat	Thomas	General Electric	Member
Debass	Samson	EPRI	Guest
Dillon	Nikolaus	Dominion Energy	Guest
Dix	Larry	Quality Switch, Inc.	Member
Dutta Rey	Samragui	Siemens Energy	Guest
Faur	Florin	Prolec GE Waukesha	Member
Flores	Hugo	Hitachi Energy	Member
Franchitti	Anthony	PECO Energy Company	Member
Griesacker	Bill	Duquesne Light Co.	Member
Gustavsson	Niklas	Hitachi Energy	Member
Gyore	Attila	M&I Materials Ltd	Member
Hardin	Michael	H-J Family of Companies	Guest
Hayes	Ramon	Dominion Energy SC	Guest
Johnson	Christopher	Oncor	Guest
Kleine	Peter	US Army Corps of Engineers	Member
Kraemer	Axel	Maschinenfabrik Reinhausen	Vice-Chair
Kurth	Bernhard	Maschinenfabrik Reinhausen	Guest-RM
Lejay	Olivier	Huaming USA Corp.	Member
Mellin	Toni	Vaisala	Guest
Mills	Francis	Power Engineers	Guest
Montanha	Juliano	Siemens Energy	Guest
Mora	Joseph	GlobeCore	Guest
Munoz Molina	Martin	Orto de Mexico	Member
Neild	Kristopher	Megger	Member
Patel	Sanjay	Smit Transformer	Guest
Pollaro	Dominic	NASS	Guest
Posadas	Daniel	Prolec GE	Guest
Pruente	John	Prolec GE Waukesha	Member
Rehkopf	Sebastian	Maschinenfabrik Reinhausen	Member
Richardson	Michael	Ameren	Guest

Power Transformer Subcommittee

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Document #: C57.131

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Last Name	First Name	Company (Affiliation)	Role
Rock	Patrick	American Transmission Company	Guest
Sanchez	Oliverio	PGE	Guest
Schleismann	Eric	Southern Company Services	Member
Schwartz	Dan	Quality Switch, Inc.	Member
Sewell	Adam	Quality Switch, Inc.	Secretary
Sewell	Jeremy	Quality Switch, Inc.	Member
Sewell	Russ	Quality Switch, Inc.	Guest
Shertukde	Hemchandra	University of Hartford	Guest
Snyder	Jason	First Energy	Guest
Solano	William	Maschinenfabrik Reinhausen	Guest
Sparling	Brian	Dynamic Ratings, Inc.	Member
Stacy	Fabian	Hitachi Energy	Member
Staley	Brad	Leeward Renewable Energy	Guest
Stank	Markus	Maschinenfabrik Reinhausen	Member
Stechschulte	Kyle	American Electric Power	Member
Szczechowski	Janusz	Maschinenfabrik Reinhausen	Guest
Tanaka	Troy	Burns & McDonnell	Guest
Thompson	Clifton	Voltyx/NASS	Guest
Tillery	Timothy	Howard Industries	Member
Vijayan	Krishnamurthy	PTI Transformers	Guest
Vogel	Herman	TJH2b	Guest
Waldrop	Hugh (Mike)	Memphis Light, Gas & Water	Member
Washburn	Alan	Burns & McDonnell	Member
Whitehead	William	H2scan Corporation	Member
Whitten	Christopher	Hitachi Energy	Member
Yang	Baitun	R.E. Uptegraff	Guest-RM
Yaw	Nyanteh	Hyosung Hico	Guest

Meeting Attendance Draft 1.2 Work Session on 10/16/2022:

Last Name	First Name	Company (Affiliation)	Role
Aldenlid	Jennie	Hitachi Energy	Member
Blaszczyk	Piotr	Specialty Transformer Components LLC	Member
Colopy	Craig	EATON Corporation	Chair
Dauzat	Thomas	General Electric	Member
Dix	Larry	Quality Switch, Inc.	Member
Faur	Florin	Prolec GE Waukesha	Member
Ferreira	Marcos	Bridge View Resources	Member
Gustavsson	Niklas	Hitachi Energy	Member
Jhala	Aniruddh	Transformers & Rectifiers (India) Ltd	Guest
Kraemer	Axel	Maschinenfabrik Reinhausen	Vice-Chair

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Lejay	Olivier	Huaming USA Corp.	Member
Pruente	John	Prolec GE Waukesha	Member
Rehkopf	Sebastian	Maschinenfabrik Reinhausen	Member
Schwartz	Dan	Quality Switch, Inc.	Member
Sewell	Adam	Quality Switch, Inc.	Secretary
Sewell	Jeremy	Quality Switch, Inc.	Member
Sewell	Russ	Quality Switch, Inc.	Guest
Solano	William	Maschinenfabrik Reinhausen	Guest
Szczechowski	Janusz	Maschinenfabrik Reinhausen	Guest
Tillery	Timothy	Howard Industries	Member
Whitten	Christopher	Hitachi Energy	Member