

IEEE/PES Transformers Committee Working Group on Requirements  
For Three-Phase Submersible Transformers (C57.12.24)

**Virtual Meeting Minutes**  
Tuesday, October 20, 2020

Members present

Israel	Barrientos	Prolec GE
Piotr	Blaszczyk	Specialty Transformer Components
John	Chisholm	IFD Corporation
Rhett	Chrysler	ERMCO
Douglas	Craig	Richards Manufacturing Co.
Michael	Dahlke	Central Moloney, Inc.
Thomas	Dauzat	General Electric
Larry	Dix	Quality Switch, Inc.
William	Elliott	General Electric
Benjamin	Garcia	Southern California Edison
Carlos	Gaytan	Prolec GE
Said	Hachichi	Hydro-Quebec
Kenneth	Hampton	Baltimore Gas & Electric
Robert	Kinner	FirstPower Group LLC
Brad	Kittrell	Consolidated Edison Co. of NY
Brian	Klaponski	Carte International Inc.
Charles	Morgan	Eversource Energy
Michael	Morgan	Duke Energy
George	Payerle	Carte International Inc.
Jarrold	Prince	ERMCO
Juan	Ramirez	CELECO
James	Ratty	Electronic Technology Inc.
Pedro	Salgado	Electronic Technology Inc.
Michael	Thibault	Pacific Gas & Electric
Alan	Traut	Howard Industries
Reinaldo	Valentin	Duke Energy
Jeremy	Van Horn	IFD Corporation
John	Vartanian	National Grid

Guests present

Scott	Abbott	PPG
Jerry	Allen	Metglas, Inc.
Kevin	Biggie	Weidmann Electrical Technology
Ali	Ghafourian	H-J Enterprises, Inc.
Zoran	Goncin	PTI Transformers
James	Holt	Memphis Light, Gas & Water
*Ramadan	Issack	American Electric Power
Charles	Johnson	Hitachi ABB Power Grids
Kyle	Knous	EATON Corporation

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Andrew	Larison	Hitachi ABB Power Grids
Olivier	Lejay	Huaming USA Corp.
Vinay	Patel	Consolidated Edison Co. of NY
Clemens	Reiss IV	Custom Materials, Inc.
Albert	Sanchez	Knoxville Utilities Board
Dan	Schwartz	Quality Switch, Inc.
Ewald	Schweiger	Siemens Energy
Jeremy	Sewell	Quality Switch, Inc.
Adam	Sewell	Quality Switch, Inc.
Nick	Sewell	Alabama Power
Avijit	Shingari	Pepco Holdings Inc.
Audrey	Siebert-Timmer	IFD Corporation
*Christopher	Sullivan	Westmark Partners
*Radoslaw	Szewczyk	Specialty Products Poland Sp. z o.o.
Joseph	Tedesco	Hitachi ABB Power Grids
Eric	Theisen	Metglas, Inc.
Joshua	Verdell	ERMCO
Duy	Vo	Central Maine Power (AVANGRID)
Shelby	Walters	Howard Industries
*Kyle	Zemanovic	EATON Corporation

The F20 Webex meeting was called to order at 9:25 AM CT with Ben Garcia as chair, Tom Dauzat as vice-chair and George Payerle as secretary. There were 28 members and 29 guests in attendance. There was a quorum. Membership requirement for 12.24 is that you have attended 2 meetings in a row or 3 of the last 5. Four guests requested membership at the F20 meeting. Christopher Sullivan, Audrey Siebert-Timmer, Ramadan Issack have now met membership requirements and will be members at the S21 meeting. Kyle Zemanovic does not qualify yet but will if he attends the S21 meeting.

Previously three people qualified and became members at the Columbus meeting: Fred Friend, Larry Dix, and Jim Spaulding.

George Payerle moved to approve the agenda and Israel Barrientos seconded. The motion passed unanimously. Jeremy Sewell moved to accept the minutes of the fall 2019 meeting in Columbus and Brian Klaponski seconded. The minutes were approved unanimously. The chair showed the patent slides. There were no disclosures. The chair showed the copyright slides and the secretary provided a brief explanation.

The Chair noted that work on the PAR was begun at the S19 Anaheim meeting. The PAR will expire December 31, 2023. We have 4 working meetings to finalize the draft and get it to review and resolve comments.

Old business: - Revision of table 6 which concerns minimum material thickness was delayed until the Spring 2020 Toronto (or Virtual) meeting.

Will Elliott and Tom Dauzat presented their findings from salt spray testing samples for 1000 and 3000 hours. Details of the presentation will be posted on the website. Will noted that though the test calls for 5 samples to be tested, only one was tested. Results of the testing may prompt a reevaluation of the numbers in Table 6. One of their findings was that paint protects CU bearing steel. Brian Klaponski noted that corrosion may also depend on the temperature of the environment that the equipment is operating in.

The chair went through the standard and there was a discussion on Section 4.1 Cooling air temperature limit. After much discussion, members voted on an amended motion made by Brian Klaponski and

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seconded by George Payerle to add the words "for any 15 minute period" after the words "shall not exceed 50 degrees C". The motion was carried with 15 votes for and 6 votes against.

There was also discussion on section 2 Normative references specifically how IEEE C57.12.00-2015 is referenced. All the other standards are referenced without date and it is expected that the user will look for the most recent version of the standard. It was decided that this is correct and that to make the standard more correct, table 2 from C57.12.40 should be included in C57.12.24.

The meeting was adjourned at 10:38 AM CT. The next meeting will be either virtually or in Toronto, Ontario, Canada on Tuesday April 27, 2021.

Respectfully Submitted by: Ben Garcia, Chairman C57.12.24 Working Group