

Power Transformers Subcommittee

Working Group Report

Document #:	C57.125		
Document Title:	Guide for Failure Investigation, Documentation, Analysis and Reporting fo Power Transformers and Shunt Reactors		
Chair:	Hakan Sahin	Vice-Chair	Thomas Melle
Secretary	Adam Sewell	Percent Complete	75%
Current Draft Being Worked On:	1.0	Dated:	n/a
PAR Expiration Date:	December 31, 2025		
Meeting Date:	10/28/2024	Time:	4:45pm – 6:00pm
Location:	St. Louis, MO, USA		
Attendance:	Members	26 of 41	
	Guests	71	
	Guests Requesting Membership	13	
	Total*	97	
* Attendance list for this meeting is shown at end of meeting minutes			

Meeting Minutes / Significant Issues / Comments:

Meeting was called to order at 4:45pm, October 28, 2024 at Hyatt Regency St. Louis at The Arch.

1. Administrative

- a. IEEE Patent Policy and Call for Patents
 - i. No comments from group
- b. IEEE SA Copyright Policy
 - i. No comments from group
- c. Review of agenda
 - i. No comments from group
- d. Reminder on the purpose and the scope of the working group, and the timeline
 - i. The expectation from this WG is to review and update the document as it expires on 12/31/2025.
 - ii. Projected Completion Date for Submittal to RevCom: Dec 2024
- e. Introductions of the attendees
 - i. Attendance sheets were passed out. Name/affiliation was announced as attendees spoke during the meeting.
 - ii. Secretary asked all who wanted on email distribution for the C57.125 Working Group to send him an email at: adamsewell@ieee.org
- f. Updated membership review and count for quorum
 - i. 41 members and 24 were counted as present via hand count.
 1. QUORUM ACHIEVED
 - ii. Attendance sheets after meeting completed showed 26 members attended.

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- iii. Members are expected to attend and stay in the meeting so business can be conducted.
- g. Approvals of previous minutes and agenda:
 - i. Approval of the agenda for Fall 2024
 - ii. Approval of the Spring 2024 unapproved meeting minutes
 - iii. MOTION to approve agenda/minutes – R.Verdolin, 2nd – S.Chambers
 - 1. No objection to unanimous approval – ALL APPROVED
- 2. Old Business
 - a. Review of the online voting results and comments on Section 4.2 – Flowchart, and re-vote.
 - i. 19/41 members responded, with all approved, or approved with comments. Below are the comments with approval votes:
 - 1. Hakim Dulac: I would keep the DP testing before scraping. Or at least suggest or make it optional.
 - 2. Zachary Draper: I kind of wish there was a box right before "SCRAP", that said "Consider performing a methodical tear-down investigation." Then a transformer owner doesn't immediately send for scrap, but considers trying to learn from the experience by having a slower tear-down process (before the Jawas get their hands on it), where they take photographs of key internal components, things perhaps not visible from an internal inspection when it is still in its tank. Something optional of course, but it gives the hint that something can still be learned from it. Especially when you performed all the tests leading up to that point, it would be nice to have the "smoking gun" photograph, or even to find nothing.
 - ii. MOTION to approve changes to Section 4.2-Flowchart as presented – S.Chambers, 2nd – S. Som
 - 1. After some discussion, a vote was called
 - 2. 23 – APPROVE, 1 – Abstain – MOTION PASSES
 - b. Review of the online voting results and comments on Table-8 – Internal inspection of the main tank, and re-vote
 - i. 19/41 members responded, 18 approved or approved with comments, 1 abstain. We need to vote again during this meeting (Pending quorum). Below is the only comment with approval vote:
 - 1. Hakim Dulac: I would keep "Evidence of low insulating liquid level inside tank" in the Condition of Core section.
 - ii. MOTION to approve changes to Table 8 as shown – W.Binder, 2nd – R.Musgrove
 - 1. After some discussion an amended MOTION was made to approve changes to Table 8 as shown but keep the words "Lead clamping" – T.Raymond, 2nd – S.Chambers
 - 2. Vote on the Amended MOTION to approve changes to Table 8 as shown but keep the words "Lead clamping" was taken
 - a. 21 APPROVE, 4 Abstain – MOTION PASSES

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3. New Business

- a. Officers will work on getting Draft 1 created using all the approved changes from previous meetings and will send out to the Working Group.
- b. From Enrique Betancourt – warning related to stakeholders
 - i. I wanted to look at the Draft document because I think there is a paragraph missing with some warning related to stakeholders who must approve and even witness the investigation process. When the transformer is under warranty from the manufacturer, and or there is an insurance company to be claimed about the event, they may also request some preliminary steps, before starting with the technical part of the investigation process recommended in the Guide.
 - ii. MOTION to review the stakeholders in the document – E.Betancourt, 2nd- E.Garcia Wild
 1. After some discussion, E.Betancourt WITHDREW this MOTION.

4. Membership changes

- a. Officers will look at attendance of members and member requests to make changes to WG membership list before the Spring 2025 meeting.

5. Next meeting: March, 2025 in Denver, CO, USA.

6. Close of meeting

- a. Meeting adjourned at 6:00pm

Submitted by: Hakan Sahin Date: 11/15/24

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October 28, 2024 Meeting Attendance (RM = Request Membership):

Last Name	First Name	Company (Affiliation)	Role
Bedoya	Duvier	Hitachi Energy	Guest
Betancourt	Enrique	Prolec GE	Member
Binder	Wallace	WBBinder Consultant	Member
Boettger	William	Boettger Transformer Consulting LLC	Member
Bolar	Sanket	Oncor	Member
Bradshaw	Jeremiah	Bureau of Reclamation	Guest
Brodeur	Samuel	Hitachi Energy	Guest
Chambers	Stuart	EPRI	Member
Craven	Michael	Qualus Power Serv.	Guest
Crockett	Daniel	Ameren	Guest-RM3
DaSilva	Roberto	Maschinenfabrik Reinhausen	Guest
Debass	Samson	EPRI	Guest-RM3
Dillon	Nikolaus	Dominion Energy	Member
Dolloff	Paul	East Kentucky Power	Guest
Foata	Marc	Maschinenfabrik Reinhausen	Guest
Garcia Wild	Eduardo	Siemens Energy	Member
Gardner	James	Prolec GE Waukesha	Guest
Gorzin	Alireza	Black & Veatch	Guest-RM2
Greaves	Brad	Weidmann Electrical Technology	Guest
Hamoir	Didier	Transformer Protector Grp	Guest
Hernandez	Ronald	Doble Engineering Co.	Member
Hollrah	Derek	Burns & McDonnell	Guest
Johnson	Christopher	Oncor	Guest-RM2
Lamontagne	Donald	Ariz Public Svc	Guest
Li	Weijun	Braintree Electric Light Dept.	Member
Lopes Mamede	Gabriel	Siemens Energy	Guest
Lucas, P.E.	Tiffany	Prolec GE Waukesha	Guest
Machain	Jose Luis	Prolec GE	Guest-RM2
Mani	Balakrishman	Delta Star Inc	Guest
Manzano	Moses	Hyosung HICO	Guest
McBride	Jim	JMX High Voltage	Guest
Melle	Tom	Highvolt	Member-ViceChair
Mills	Francis	Power Engineers	Guest-RM3
Morales-Cruz	Emilio	Qualitrol	Member
Munoz	Marta	Hitachi Energy	Guest
Murray	David	TVA	Member
Musgrove	Ryan	Oklahoma Gas & Electric	Member
O'Malley	Anastasia	Consolidated Edison Co. of NY	Member
Panasar	Parminder	Virginia Transformer Corp.	Member
Pedro	Pedro	EFFACEC Energia	Guest
Pellon	Verena	FPL	Guest
Plisic	Goran	Siemens Energy	Guest
Raymond	Timothy	Inductive Reasoning	Member
Reyes Perez	Juan	Hitachi Energy	Guest
Saad	Mickel	Hitachi Energy	Member
Sahin	Hakan	Virginia Transformer Corp.	Member-Chair
Sarkar	Amitabh	Virginia Transformer Corp.	Member
Scardazzi	Alaor	Siemens Energy	Guest
Schleismann	Eric	Southern Compnay	Guest-RM1

Last Name	First Name	Company (Affiliation)	Role
Schwartz	Dan	Quality Switch, Inc.	Guest-RM1
Sewell	Adam	Quality Switch, Inc.	Member-Secretary
Sewell	Russ	Quality Switch, Inc.	Guest
Snyder	Jason	First Energy	Guest
Som	Sanjib	Pennsylvania Transformer	Member
Steele	Hampton	TVA	Guest
Tanaka	Troy	Burns & McDonnell	Member
Thompson	Ryan	Burns & McDonnell	Guest
Uhlmann	Olivier	Reinhausen Canada	Guest
Vanderwalt	Alwyn	ECI	Guest
Veeran	Kannan	Georgia Transformer	Guest-RM1
Verdolin	Rogério	Verdolin Solutions Inc.	Member
vonGemmingen	Richard	Dominion Energy	Member
Washburn	Alan	Burns & McDonnell	Member
Weyer	Daniel	Monolith	Guest-RM2
Wright	Jeffrey	Duquesne Light Co.	Guest
Yang	Fei	Hitachi Energy	Guest-RM1
Yuan	Guang	Hitachi Energy	Guest-RM2
Yun	Joshua	Virginia Transformer Corp.	Member
Kim	Seungmo	Hyosung HICO	Guest
Li	Chao	EATON Corporation	Guest
Lim	Donggi	Iljin Electric	Guest
Kim	Yonghui	Iljin Electric	Guest
Pandya	Manan	Siemens Energy	Guest
Chanda	Sudip	Delta Star Inc	Guest-RM1
Zhu	Zhixzang	Chimt	Guest
Bailey	Anne	A-Line E.D.S.	Guest
Labh	Ashwini	Hitachi Energy	Guest
Tekle	Samuel	WEG TX USA	Guest
Sexton	Aron	Kinectrics	Guest
Sanchez Rodriguez	Jesus	Voltyo	Guest
Trujillo	Pedro	Hyundai Electric	Guest
Park	Dean	Hyosung HICO	Guest
Keels	Andy	kEElectric Engineering PLLC	Guest
Munoz	Martin	Orto de Mexico	Guest
Garza	Hector	Orto de Mexico	Guest
Kesedogi	Nihat	Hitachi Energy	Guest
Zhang	Hongzhi	Hitachi Energy	Guest
White	Elliot	SD Myers	Guest
Janes	Braxton	SD Myers	Guest
Hruac	Miljenko	Hitachi Energy	Guest
Garner	Joshua	Independent Dielectrics	Guest
Cheksi	Bhaumilc	Hitachi Energy	Guest
Finn	Mark	Hitachi Energy	Guest
Kurz	Andreas	Maschinenfabrik Reinhausen	Guest
Herron	Bill	Reinhausen	Guest
Pavicic	Tomislav	Siemens Energy	Guest
Swarna	Sunny	Virginia Transformer Corp.	Guest