Transformers Committee

Recognition and Awards Ceremony
Fall 2024 St Louis

Presented by Ed teNyenhuis
Past Chair / Awards Chair
Oct 29, 2024

Presentation Overview

1. Welcome
2. Memorial Tributes
3. New Committee Members
4. Senior Members
5. General Service Awards
6. Special Service Awards
7. PES Technical Committee Awards
8. IEEE SA Standards Award
9. Working Group Awards for Publications
10. Closing Statements

Memorial Tributes

Memorial Tributes

- The Transformers Committee takes time to recognize and remember past members and active participants who have pass away since our last meeting.
- It is our tribute to their dedication and participation in Transformers Committee activities.

Memorial Tributes

Greg Anderson

- Greg passed away March 8, 2024
- Greg was born and raised near Beaumont, TX. As a child, Greg enjoyed taking things apart to see how they worked. He got his pilot's license before his driver's license. He earned his electrical engineering degree from Lamar University, and his MBA from the University of Kansas. He worked for several companies, including Black and Veatch and OPPD, before starting his own consulting business, GW Anderson and Associates, in 2003.
- Greg and his wife, Peggy, were married for 31 years and had two children, Erik & Alicia. Greg enjoyed traveling for work and pleasure, and was able to visit many countries around the world. He always wanted the best for his family, friends, and church family, and would go out of his way to help any in need.

Memorial Tributes

Greg Anderson

- Committee member in 1997
- Chair of the Meeting Planning SC from 2010 – 2017
- Committee Treasurer from 2009 – 2017
- Chair of C57.150, Transportation Guide
- Meritorious Service Award at Fall 2008 meeting in Porto, Portugal
- Distinguished Service Award from the Committee in Fall 2014 meeting
- Most well known for his meeting planning arrangement and Association Management System (AMS)
- Committed to the work of the Transformer Committee

Memorial Tributes

Greg Anderson

Memorial Tributes

Nigel McQuinn

- Passed away July 8, 2024 at 68 years old
- Committee member in 1995
- Worked for PSM High Power Lab before being self employed in 1996
- Involved in many IEEE committees
- IEEE-PES Outstanding Engineer Award by the IEEE Pittsburgh Chapter in 2006
- Nigel's high-speed electric drive motors powered an electric racing car which currently holds several national/world land-speed-records, for both fuel-cell and battery powered vehicles, achieving over 302.9 mph on Utah Salt Flats, USA (Buckeye Bullet)

New Committee Members

New Committee Members

- Applications for voting membership in the Transformers Committee are reviewed and approved by the Administrative Subcommittee.
- Successful applicants can demonstrate **active participation** in **at least three Committee activities for at least two years** and are sponsored by at least one Subcommittee Chair.
- Specific details available at www.transformerscommittee.org

New Committee Members

The Administrative Subcommittee reviewed and approved the following voting membership applications at its October 27, 2024 meeting:

Dave Blew	**DE Blue Consulting**
Ryan Hogg	**Bureau of Reclamation**
Ion Radu	**Hitachi Energy**
Tony Reiss	**Custom Materials**
Val Tatu	**Powersmiths International**
Michael Zarnowski	**Carte**

Welcome to the Transformers Committee!

Senior Member

New IEEE Senior Members

Pragnesh Vyas

Amitabh Sarkar

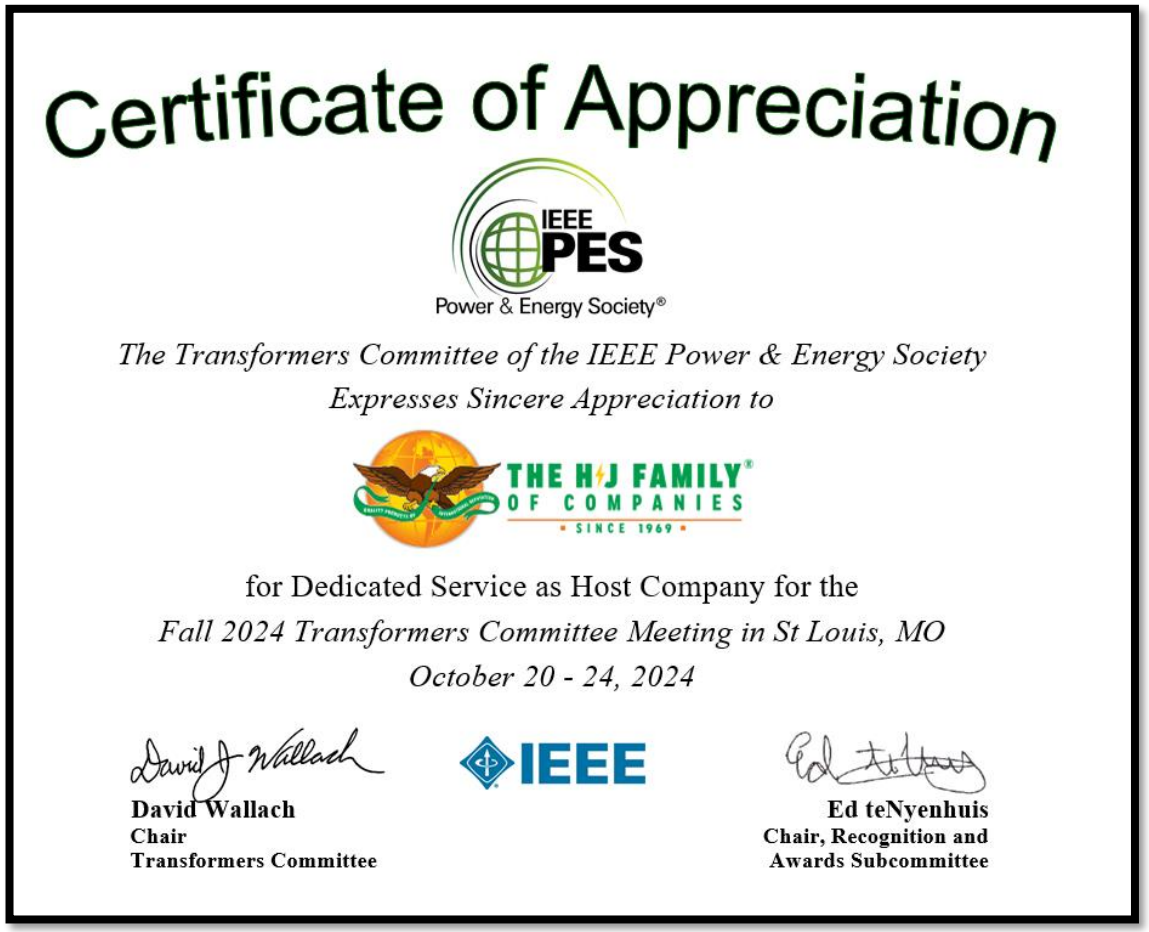
John John

Life Senior Member

General Service Awards

Certificates of Appreciation

Meeting Host Company



Certificate of Appreciation

IEEE PES Power & Energy Society®

The Transformers Committee of the IEEE Power & Energy Society
Expresses Sincere Appreciation to

THE HJ FAMILY® OF COMPANIES • SINCE 1969 •

for Dedicated Service as Host Company for the
Fall 2024 Transformers Committee Meeting in St Louis, MO
October 20 - 24, 2024

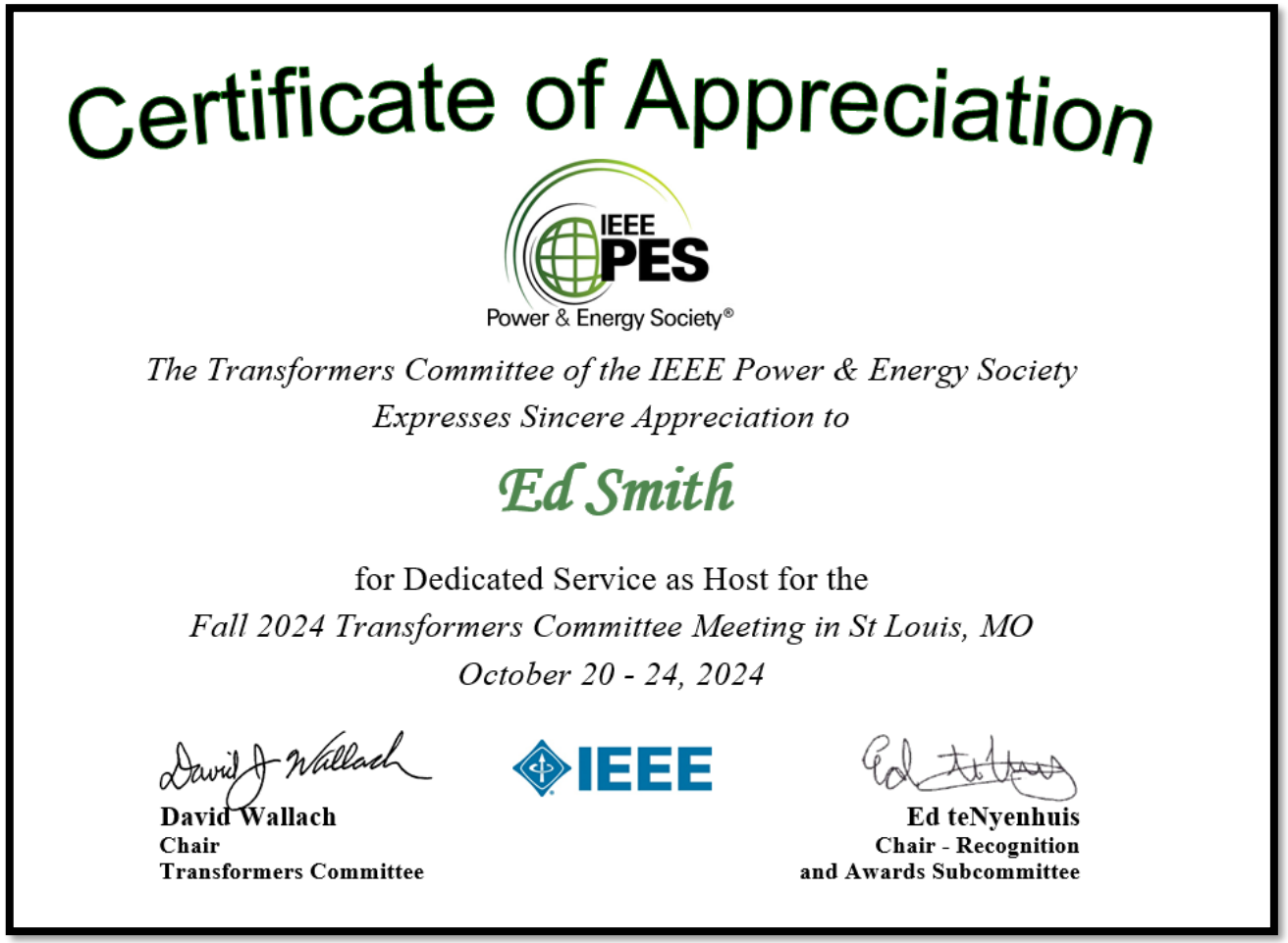
David Wallach
Chair
Transformers Committee

IEEE

Ed teNyenhuis
Chair, Recognition and
Awards Subcommittee

Certificates of Appreciation

Meeting Host



Certificate of Appreciation

IEEE PES Power & Energy Society®

The Transformers Committee of the IEEE Power & Energy Society
Expresses Sincere Appreciation to

Ed Smith

for Dedicated Service as Host for the
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October 20 - 24, 2024

David Wallach
Chair
Transformers Committee

IEEE

Ed teNyenhuis
Chair - Recognition
and Awards Subcommittee

Transformers Committee Outstanding Service Award

Outstanding Service Award

(a Transformers Committee Award)

- Many people work very hard to help the Transformers Committee achieve its goals.
- The Committee strives to recognize the dedication and service offered by its members.
- The Outstanding Service Award is bestowed upon individuals who have demonstrated exceptional dedication and support, and who have selflessly devoted their time and energy to the betterment of the Committee and the industry we serve.

Outstanding Service Award

IEEE PES
Transformers Committee
Outstanding Service Award
October 29, 2024

Presented to

Joe Watson

For Longstanding Commitment and
Support of Committee Activities

IEEE PES
Transformers Committee
Outstanding Service Award
October 29, 2024

Presented to

Mike Sharp

For Longstanding Commitment and
Support of Committee Activities

PES Technical Committee Awards

Award for Outstanding Standard or Guide

C57.168-2023 – IEEE Guide for Low-Frequency Dielectric Testing for Distribution, Power, and Regulating Transformers

WG Chair: Daniel Sauer

Secretary: Sergio Hernandez

Significant Contributors:

Bertrand Poulin
Hamid Abdelkamel
Drew Welton
Jeffrey Britton
John Foschia
Ajith Varghese
Kyle Stechschulte

Prize Paper Award

Three-Phase Three-Legged Wye-Wye Transformers With Only One Neutral Grounded and No Stabilizing Winding–Part I: Zero-Sequence Performance

IEEE TRANSACTIONS ON POWER DELIVERY VOL. 39, NO. 3, Pages 1451 – 1461

Luis A. Alvarez-Gomez, Xose M. Lopez-Fernandez, Francisco de Leon, Angel Ramos

Three-Phase Three-Legged Wye-Wye Transformers With Only One Neutral Grounded and No Stabilizing Winding–Part I: Zero-Sequence Performance

Luis A. Alvarez-Gomez, Xose M. Lopez-Fernandez, *Senior Member, IEEE*, Francisco de Leon, *Fellow, IEEE*, and Angel Ramos

***Abstract*—In this article (Part I), a study of the zero-sequence stray losses in wye-wye-connected transformers without a (stabilizing) tertiary winding is presented. The paper shows where and when eddy losses and circulating current losses appear in the transformer structural metallic components. The overheating hazard potential due to the presence of zero-sequence flux is categorized (as severe, serious, and moderate) by the permitted neutral current. The method is successfully applied to (and experimentally verified with) three-phase, three-legged, core type, wye-wye-connected transformers based on factory acceptance tests (FATs) data. It is uncovered that the severity of the overheating is determined by the phase angle difference between the zero-sequence current and the positive-sequence current. This is formulated by the proposed complex current capacity factor (CCF_o). In the companion paper**

RNM	Reluctance netwok method.
SW	Stabilizing winding.
LV	Low voltage.
Y-Y	Wye-Wye connection.
YG	Wye-Ground connection.
CCF_o	Current capacity factor (a complex number).
CCF_o	$= \frac{I_o}{I_1} = \frac{I_o}{I_1} \angle\alpha = CCF_o \angle\alpha$.
CCF_{oi}	*i*th current capacity factor.
I_{oi}	*i*th phase zero-sequence current.
I_1	Balanced load phase AC current.
I_{1A}	HV balanced load current of phase A.
I_{1a}	LV balanced load current of phase a.

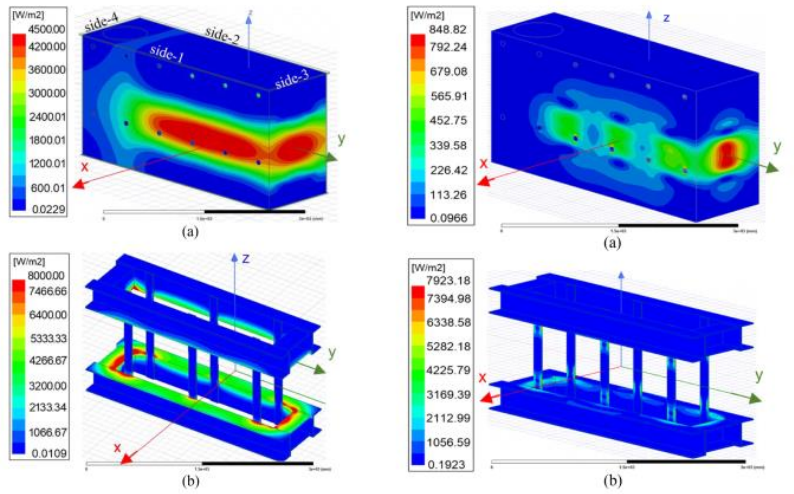

Fig. 13. 3D distribution of stray losses at zero-sequence non-load test (30% of rated current through neutral ($CCF_o = 0.3\angle\alpha$) at min. current taps). (a) Stray loss density on tank walls. (max. value is 4500 W·m^{-2}). (b) Stray loss density on yoke clamps, crossbars, and flitch plates (max. value is 8000 W·m^{-2}).

Fig. 14. 3D distribution of stray losses at rated load (minimum current taps). (a) Stray loss density on tank walls (max. value is 848.82 W·m^{-2}). (b) Stray losses density on clamps, crossbars, and flitch plates (max. value is 2120 W·m^{-2}).

Recognition Award for Outgoing Committee and Subcommittee Chairs

Eric Weatherbee - Bushings Subcommittee Chair (2020 -2024)
Casey Ballard - Dry Type Subcommittee Chair (2019 -2024)
Ulf Radbrandt – HVDC Subcommittee Chair (2019 -2024)
Tom Sizemore – Instrument Subcommittee Chair (2019 -2024)
Rogerio Verdolin – Performance Characteristics SC (2020-2024)
George Payerle – STNP Subcommittee Chair (2019 -2024)
Scott Reed – Insulating Fluids Subcommittee Chair (2020 -2023)
Ed teNyenhuis – Committee Chair (2022-23)

Working Group Recognition

Awards are mailed directly from IEEE-SA, but we want to recognize these hard-working participants as well…

C57.163™-2023

IEEE Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances

WG Chair: Daniel Blaydon

WG Vice Chair: Ramsis Girgis

WG Secretary: Scott Digby

Plaques

Mats Bernesjo

Certificates of Appreciation

Afshin Rezaei-Zare

Gary Hoffman

Ion Radu

Joe Watson

Mark Tostrud

C57.12.200™-2022

IEEE Guide for the Dielectric Frequency Response Measurement of Bushings

WG Chair: Jun Deng

WG Vice Chair:

WG Secretary:

Plaques

Certificates of Appreciation

Charles Sweetser

Poorvi Patel

Evgeni Ermakov

Ismail Guner

C57.12.40™-2023

IEEE Standard for Network, Three-Phase Transformers, 2500 kVA and Smaller; High Voltage, 34 500 V and Below; Low Voltage, 600 V and Below; Subway and Vault Immersed

WG Chair: John Vartanian

WG Vice Chair:

WG Secretary: Daniel Schwartz

Plaques

Brian Klaponski

David Blew

Certificates of Appreciation

Avijit Shingari

Jeremy Sewell

Michael Zarnowski

Nabi Almeida

C57.169™-2023

IEEE Guide for Determination of Maximum Winding Temperature Rise in Liquid-Immersed Transformers

WG Chair: Scott Digby

WG Vice Chair:

WG Secretary: Cihangir John Sen

Plaques

Certificates of Appreciation

Gilles Bargone
Jean-Noel Berube
Ricardo Castro-Lopez
Hakim Dulac
Gary Hoffman
Ryan Musgrove
Jason Varnell
Pedro Pedro

C57.150™-2024

IEEE Guide for the Transportation of Transformers and Reactors Rated 10 000 kVA or Higher

WG Chair: Gregory Anderson

WG Vice Chair: Ewald Schweiger

WG Secretary: Marnie Roussell

Certificates of Appreciation

Hamid Abdelkamel
Mario Alonso
Wallace Binder
W Boettger
Jeremiah Bradshaw
Paul Dolloff
Marcos Ferreira
Eduardo Garcia
Jerzy Kazmierczak
Peter Kleine
Andrew Lawless
Mario Locarno
Ryan Musgrove
Shankar Nambi
Kraig Nunn
Rakesh Rathi
Amitabh Sarkar
Alfons Schrammel
Cihangir Sen
Stephen Shull
Alwyn Van Der Walt
Roger Verdolin
Krishnamurthy Vijayan
David Wallach
Joe Watson
Bruce Webb
Daniel Weyer
Kris Zibert

Closing Statements

This concludes the Fall 2024 Awards Ceremony!

Thank You for Attending!

Meetings resume at 1:45 PM