Editor's Report – Spring 2005 Jackson, MS Meeting

Between October 21, 2004 and March 10, 2005 a total of 38 papers in the transformer area were submitted to IEEE Transactions on Power Delivery for possible publication. During this time 23 reviews were completed and 15 reviews are still in-progress. For completed reviews, the recommendations were: Accept without changes – 10; Revise and Resubmit – 8; and Reject - 5. A complete summary of these papers is listed herein.

Many of the papers in this rotation have been revised and resubmitted at least once.

I would like to thank all of the reviewers who volunteered for this effort and donated their time, and would like to encourage everyone associated with IEEE Transformers Committee activities to consider becoming a Reviewer.

There are several papers that are related to transformer condition assessment methodologies. In particular these papers deal with insulation and oil analysis, moisture determination, DGA, fluids, ageing, etc. There seems to be a lack of available experts in these areas willing to review these papers. If you have the necessary background or know of someone who does, please advise me.

Respectfully Submitted, Stephen Antosz Editor, IEEE Transactions on Power Delivery santosz@ieee.org

All members of the IEEE Transformer Committee are invited to review technical papers. Please sign up at: <a href="http://tpwrd-ieee.manuscriptcentral.com/">http://tpwrd-ieee.manuscriptcentral.com/</a>

## INSTRUCTIONS FOR SIGNING UP TO REVIEW IEEE TRANSACTIONS PAPERS

- 1. Before you create a new account, please check for an existing account by clicking on: "Check for Existing Account"
- 2. Assuming that you do not get an existing account notification email, click on "Create New Account" and enter in your information.
- 3. Please specify any "Specialty / Area of Expertise" according to the 5 numerical codes below:

13a: Power and Instrument Transformers

13b: Insulating fluids category

13c: Dielectric Testing

13d: Audible Noise and Vibration

13e: Transformer Modeling Techniques

- 4. Please specify any "Key Words" such as: distribution transformers, core losses, oil DGA, or thermal, for example.
- 5. Submit your information.
- 6. Click on "Request Reviewer Status" to be enabled as a reviewer.

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	Number TPWRD-00293-2004;	Title On the Estimation of Elapsed Life of Oil-Immersed	Key Words life, insulating fluids, furans,	Author Mr. Manoj	Decision
1	Rev 1	Power Transformers	DP, oil testing, ageing	Pradhan	Accept
2	TPWRD-00325-2005; Rev 1	Performances Of Distribution Transformers Installed in Metallic Enclosures - An Australian Experience	distribution transformer,	Mr. Selver Corhodzic	Accept
3	TPWRD-00512-2004	Understanding the Impacts of Moisture and Thermal Ageing on the Condition of Transformer Insulation	moisture, ageing, polarisation, insulation	Tapan Saha, Prithwiraj Purkait	Reject
4	TPWRD-00515-2004	Temperature Rises in an OFAF Transformer at OFAN Cooling Mode in Service	hot-spot, <u>thermal.</u> top-oil temperature	Dejan Susa	Revise & Resubmit
5	TPWRD-00516-2004	Modeling the Effects of Geomagnetically Induced Currents (GIC) in a Power System	GIC, solar, geomagnetic	Waruna Chandrasena	Reject
6	TPWRD-00265-2004;	A Pattern-Based Fault Classification Algorithm for	transfer function, FRA	Dr. Seung	Revise &
7	Rev 1 TPWRD-00290-2004; Rev 2	Power Transformers  New Diagnosis Approach to Epoxy Resin Transformer  Partial Discharge	, ,	Jeona Mr. L. J. Chen	Resubmit Revise & Resubmit
8	TPWRD-00565-2004	Field Experiences with Measurements of Dielectric Response in Frequency Domain for Power Transformer Diagnostics	dielectric/frequency response, oil-paper insulation, water content	Jörgen H. M. Blennow	Revise & Resubmit
9	TPWRD-00515-2004; Rev 1	Temperature Rises in an OFAF Transformer at OFAN Cooling Mode in Service		Dejan Susa	Accept
10	TPWRD-00606-2004	PD PULSE BURST CHARACTERISTICS OF TRANSFORMER OILS	oil, PD,	Prof. Massimo Pompili	Revise & Resubmit
11	TPWRD-00607-2004	A solution to the dilemma inrush/fault in xfmr differential relaying using MRA and wavelets	relay, differential, wavelet, protection	Dr. Guzmán Díaz	Reject
12	TPWRD-00613-2004	Estimation of Transformer Saturation Characteristics from Inrush Current Waveforms	magnetics, core, inrush	Prof. Wilsun Xu	Accept
13	TPWRD-00614-2004	A Coupling Capacitor Voltage Transformer Model from Measurements	emtp, ferroresonance, electro- magnetics, ccvt	Dr. Damásio Fernandes Júnior	Reject
14	TPWRD-00619-2004 TPWRD-00071-2004;	Fault Diagnosis Model for Power Transformers based on Information Fusion transient recovery voltage of power transformers - a	dga, neural networks, fuzzy	Mr. Ming Dong Mr. Wolfgang	Reject
15	Rev 1	model-based determination procedure  Novel Analytical Solution to Fundamental	FRA, transient, TRV	Hribernik	Resubmit
16	TPWRD-00411-2004; Rev 1	Ferroresonancei <sup>a</sup> Part I: Power Frequency Excitation Characteristic	emtp, ferroresonance	Wei Shi	Revise & Resubmit
17	TPWRD-00412-2004; Rev 1	Novel Analytical Solution to Fundamental Ferroresonance"CPart II: Criterion and Elimination	emtp, ferroresonance	Wei Shi	Revise & Resubmit
18	TPWRD-00265-2004; Rev 2	A Pattern-Based Fault Classification Algorithm for Power Transformers	transfer function, FRA	Dr. Seung Jeong	Accept
19	TPWRD-00275-2004; Rev 1	Numerical Calculations of Three-Phase Transformer's Transients	inrush current, transient analysis, ferroresonance	Mr. Amir Tokic	Accept
20	TPWRD-00290-2004; Rev 3	New Diagnosis Approach to Epoxy Resin Transformer Partial Discharge	ultrasonic, dry-type, partial discharge	Mr. L. J. Chen	Accept
21	TPWRD-00482-2004; Rev 1	Transformer tank vibration modelling as a method of detecting winding deformations. Part 1: Theoretical foundation	frequency, vibration	Prof. Belén García	Accept
22	TPWRD-00483-2004; Rev 1	Transformer tank vibration modelling as a method of detecting winding deformations. Part 2: Experimental verification	frequency, vibration	Prof. Belén García	Accept
23	TPWRD-00071-2004; Rev 2	transient recovery voltage of power transformers - a model-based determination procedure	FRA, transient, TRV	Mr. Wolfgang Hribernik	Accept
24	TPWRD-00169-2004; Rev 1	Calculation of Stress Dependent Life Cycle Costs of a substation component -Demonstrated for Controlled Energisation of Unloaded Power Transformers	economics,	Dr. Diego Politano	
25	PESL-00001-2005	Fault Localization in Power Transformers via Spatio- Temporal Correspondence	PD, test, acoustic	Dr. Pubudu Pathirana	
26	TPWRD-00019-2005	Accurate Ferroresonance Analysis of Power Transformers	ferroresonance, cores	Mr. Chia-Ching Ning	
27	TPWRD-00023-2005	Design of New Iron Core for Improving Efficiency of Commercial Single-Phase Transformers Using Finite- Element Analysis	FEA, finite element,inrush	Prof. Li Wang	
28	TPWRD-00043-2005	A GA-based grey prediction model for predicting the gas-in-oil concentrations in oil-filled transformer	DGA, genetic algorithim, neural network	Dr. Youyuan Wang	
29	TPWRD-00050-2005	Wavelet Aided SVM Tool for Impulse Fault Identification in Transformers	impulse, ANN, wavelet	Dr. PRITHWIRAJ PURKAIT	
30	TPWRD-00055-2005	Earthquake Simulator Testing of Base-Isolated Power Transformers	seismic, earthquake	Dr. Nobuo Murota	
31	TPWRD-00075-2005	HIGHER ORDER BANDED CHAOTIC AND SUBHARMONIC FERRORESONANT SOLUTIONS - PART II: SENSITIVITY ANALYSIS	ferroresonance	Mr. Saravanaselva n Raian	
32	TPWRD-00076-2005	HIGHER ORDER BANDED CHAOTIC AND SUBHARMONIC FERRORESONANT SOLUTIONS - PART I: DESCRIPTION OF THE	ferroresonance	Mr. Saravanaselva n Raian	
33	TPWRD-00370-2004; Rev 1	Transformer Insulation Life Assessment	life, insulating fluids, furans, DP, oil testing, ageing	Kshira T Muthanna	
34	TPWRD-00093-2005	Multi-Terminal Transformer Model Based on Two Winding Leakage Inductances	Multi-winding xfmr model, leakage inductance	Mr. Robert Del Vecchio	
35	TPWRD-00097-2005	Effects of Moisture in Oil/Paper Insulation On Power Factor Measurements	dielectric/frequency response, oil-paper insulation, water content	Dr. K Abdolall	
36	TPWRD-00100-2005	Analysis of Partial Discharge Signal Using the Hilbert- Huang Transform	partial discharge, instrument transformers	Dr. xiaodong wang	
37	TPWRD-00112-2005	Frequency Response of Oil Impregnated Pressboard Samples for Estimating Moisture in Transformer Insulation	dielectric/frequency response, oil-paper insulation, water content	Mr. Chandima Ekanayake	
38	PESL-00019-2005	Experimental determination of saturation and hysteresis characteristics with the WVAV method	core, hysteresis	Prof. Aurelio Medina	
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