

IEEE Transformers Committee Editor's Report – Spring 2002 Meeting

Between April and October 2002, a total of (73) papers in the transformer area (including both new and revised papers) were submitted to IEEE Transactions on Power Delivery. During this time (68) reviews were completed and (5) reviews are in progress. For completed reviews, the recommendations were: Accept without changes (33), Accept with mandatory changes (25), and Reject (10). A complete summary of these papers is listed below.

All members of the IEEE Transformer Committee are invited to review technical papers. To review IEEE Transaction Papers on transformers, you can sign up at: <http://tpwr-d-ieee.manuscriptcentral.com/>

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.

Finally, I would like to thank all of the reviewers who volunteered for this effort and donated many hours of their time.

Mark Christini
Editor, IEEE Transactions on Power Delivery

Accept without changes

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|--------------------|---|-------------|----------|
| TR12 0151999RA1.R1 | Transformer Phase Coordinate Models Extended for Grounding System Analysis | Svenda | Rev. No |
| 2000TR093.R1 | Accurate Modeling of Core-type Distribution Transformers for Electromagnetic Transient Studies | Noda | New No |
| 2000TR527.R3 | Dynamic Modelling of Transformer Core From Experimental Hysteresis Data | Akcay | Rev, No |
| 2000TR609.R1 | Measurement of Lambda-I Characteristics of Asymmetric Three-Phase Transformers and Their Applications | Fuchs | Rev. No |
| 2001TR178.R1 | Estimating Overpressures in Pole-Type Distribution Transformers Part I: Tank Withstand Evaluation | Hamel | New No |
| 2001TR182.R1 | Estimating Overpressures in Pole-Type Distribution Transformers Part II: Prediction | Dastous | New No |
| 2001TR244RA1.R1 | Condition Assessment of Power Transformer On-Load Tap-Changers Using Wavelet Analysis and Self-Organizing Map: Field Evaluation | Birtwhistle | New No |
| 2001TR253.R2 | Design of A High Power Brushless Linear Variable Transformer | Faiz | Rev. Yes |
| 2001TR274.R1 | A Harmonic Model For the Nonlinearities of Single-Phase Transformer With Describing Functions | Huang | Rev. Yes |
| 2001TR282.R2 | Experience With Return Voltage Measurements For Assessing Insulation Conditions in Service Aged Transformers | Saha | Rev. No |
| 2001TR394.R2 | Reducing Losses in Distribution Transformers | Olivares | Rev. Yes |
| 2001TR419.R2 | A Newly Modified Forced Oil Cooling System and Its Impact On In-Service Transformer Oil Characteristics | Wahab | Rev. No |
| 2001TR452.R2 | Study of Abnormal Electrical Phenomena Effects On GSU Transformers | Y. Liu | Rev. No |
| 2001TR454.R1 | New Solid-State On-Load Tap-Changers Topology For Transformers | Faiz | New No |
| 2001TR466.R1 | Real-Time Dynamic Loading and thermal Diagnostic of Power Transformers | Lachman | Rev. No |
| 2001TR495.R1 | Fast Ferroresonance Suppression of Coupling Capacitor Voltage Transformers | Graovac | New No |

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|----------------------|---|------------|----------|
| 2001TR580.R2 | A Novel Extension Method for Transformer Fault Diagnosis | M. H. Wang | New, No |
| 2001TR632.R1 | Evolving Neural Nets For Fault Diagnosis of Power Transformers | Y-C Huang | New, No |
| TPWRD-00037-2002.R1 | Data Mining Approach for Analysis of Power Transformer Dissolved Gas Records Using the Self-Organising Map | Thang | New, No |
| TPWRD-00039-2002.R1 | A Study on Transformer Loading in Manitoba -- Part I: Peak-load Ambient Temperature | X. Li | New, No |
| TPWRD-00049-2002.R2 | PSpice Computer Model of a Non-linear Three-phase Three-legged Transformer | Pedra | Rev. No |
| TPWRD-00058-2002.R1 | A New Data Mining Approach for Dissolved Gas Analysis of Oil-Insulated Power Apparatus | Y-C Huang | New, No |
| TPWRD-00066-2002.R2 | Coolant Flow Distribution and Pressure Loss in ONAN Transformer Windings - Part 1: Theory and Model Development | J. Zhang | Rev. Yes |
| TPWRD-00067-2002.R2 | Coolant Flow Distribution and Pressure Loss in ONAN Transformer Windings - Part 2: Optimization of Design Parameters | J. Zhang | Rev. Yes |
| TPWRD-00106-2002.R1 | Proposed Standards for Frequency Conversion Factors of Transformer Performance Parameters | teNyenhuis | New, Yes |
| TPWRD-00109-2002.R2 | Computation of Very Fast Transient Overvoltages in Transformer Windings | Popov | Rev. No |
| TPWRD-00140-2002 | A wide-band lumped circuit model of eddy current losses in a coil with a coaxial insulation system and a stranded conductor | Holmberg | New, No |
| TPWRD-00145-2002.R1 | Temperature Responses to Step Changes in the Load Current of Power Transformers | H. Nordman | New, No |
| TPWRD-00152-2002.R1 | Harmonic Frequency Leakage Fluxes in 3-Phase, 3-Winding Converter Transformers | Forrest | New, No |
| TPWRD-00186-2002.R2 | Prediction of Hottest Spot Temperature (HST) in Power and Station Transformers | Pradhan | Rev. No |
| TPWRD-00196-2002 .R1 | A new Method for the calculation of the Hot-spot Temperature in power Transformers with ONAN Cooling | Radakovic | Rev. No |
| TPWRD-00212-2002.R1 | A simple method for calculating core temperature rise in power transformers is complete. | Ryder | New, Yes |
| TPWRD-00223-2002.R2 | REVIEW OF TIME-DOMAIN POLARISATION MEASUREMENTS FOR ASSESSING INSULATION CONDITION IN AGED TRANSFORMERS | Saha | Rev. No |

Revise and Resubmit

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|---------------------|--|------------|---------|
| TR9 028 1999 | Characterizing Internal Faults in Distribution Transformers Using Computer Simulation And Field Experiments | K. Butler | Rev, No |
| 2000TR527.R1 | Dynamic Modeling of Transformer Core From Experimental Hysteresis Data | Akcay | Rev, No |
| 2000TR527.R2 | Dynamic Modeling of Transformer Core From Experimental Hysteresis Data | Akcay | Rev, No |
| 2001TR253.R1 | Design of A High Power Brushless Linear Variable Transformer | Faiz | Rev. No |
| 2001TR282.R1 | Experience With Return Voltage Measurements For Assessing Insulation Conditions in Service Aged Transformers | Saha | Rev. No |
| 2001TR394.R1 | Reducing Losses in Distribution Transformers | Olivares | Rev. No |
| 2001TR419.R1 | A Newly Modified Forced Oil Cooling System and Its Impact On In-Service Transformer Oil Characteristics | Wahab | Rev. No |
| 2001TR452 | Study of Abnormal Electrical Phenomena Effects On GSU Transformers (Part 1 of 2: Effects of Switching Transients) | Y. Liu | Rev. No |
| 2001TR452.R1 | Study of Abnormal Electrical Phenomena Effects On GSU Transformers (Part 1 of 2: Effects of Switching Transients) | Y. Liu | Rev, No |
| 2001TR453 | Study of Abnormal Electrical Phenomena Effects On GSU Transformers (Part 2 of 2: Effects of SFC Operation & Lightning) | Y. Liu | Rev. No |
| 2001TR580.R1 | A Novel Extension Method for Transformer Fault Diagnosis | M. H. Wang | New, No |
| TPWRD-00010-2002.R1 | Transformer Design Optimization with Consideration of Restrained Inrush Current and Low Leakage Inductance | Cheng | Rev. No |

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|---------------------|--|-----------|----------|
| TPWRD-00031-2002 | Experimental Development of Superconducting Fault Current Limiting Transformer (SFCLT) for Electric Power System | Hiroaki | Rev. No |
| TPWRD-00037-2002 | Data Mining Approach for Analysis of Power Transformer Dissolved Gas Records Using the Self-Organising Map | Thang | Rev. No |
| TPWRD-00049-2002 | PSpice Computer Model of a Non-linear Three-phase Three-legged Transformer | Pedra | Rev. No |
| TPWRD-00049-2002.R1 | PSpice Computer Model of a Non-linear Three-phase Three-legged Transformer | Pedra | Rev. No |
| TPWRD-00057-2002 | Seismic Response of Transformer-Bushing Systems | Ersoy | Rev. No |
| TPWRD-00066-2002.R1 | Coolant Flow Distribution and Pressure Loss in ONAN Transformer Windings - Part 1: Theory and Model Development | J. Zhang | Rev. Yes |
| TPWRD-00067-2002.R1 | Coolant Flow Distribution and Pressure Loss in ONAN Transformer Windings - Part 2: Optimization of Design Parameters | J. Zhang | Rev. Yes |
| TPWRD-00160-2002 | A Simplified Transformer Thermal Model Based On Thermal-Electric Analogy | Tang | Rev. No |
| TPWRD-00186-2002.R1 | Prediction of Hottest Spot Temperature (HST) in Power and Station Transformers | Pradhan | Rev. No |
| TPWRD-00196-2002 | A new Method for the calculation of the Hot-spot Temperature in power Transformers with ONAN Cooling | Radakovic | Rev. No |
| TPWRD-00212-2002 | A simple method for calculating core temperature rise in power transformers is complete. | Ryder | New, Yes |
| TPWRD-00223-2002 | Review of Time-domain Polarization Measurements for Assessing Insulation Condition in Aged Transformers | Saha | Rev. No |
| TPWRD-00223-2002.R1 | Review of Time-domain Polarization Measurements for Assessing Insulation Condition in Aged Transformers | Saha | Rev. No |

Reject

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|---------------------|--|----------|---------|
| 2001TR453.R1 | Study of Abnormal Electrical Phenomena Effects On GSU Transformers (Part 2 of 2: Effects of SFC Operation and Lightning) | Y. Liu | Rev, No |
| 2001TR649 | De-rating of Distribution Transformers For Non-Sinusoidal Load Currents Using Finite Element Method | Faiz | Rev, No |
| TPWRD-00010-2002.R2 | Transformer Design Optimization with Consideration of Restrained Inrush Current and Low Leakage Inductance | Cheng | Rev. No |
| TPWRD-00040-2002.R1 | A Study on Transformer Loading in Manitoba -- Part II: Loading Capability | X. Li | Rev, No |
| TPWRD-00044-2002.R1 | Research on a New and Efficient Spherical Adsorbent for On-Site Regeneration of Transformer Oil | Peng | Rev, No |
| TPWRD-00117-2002 | Power Flow Analysis in Transformers by Electromagnetic Fields | Edwards | Rev, No |
| TPWRD-00191-2002 | A Novel Extension Neural Network for Power Transformer Fault Diagnosis | Wang | Rev, No |
| TPWRD-00233-2002 | A Grey-Extension Method for Power Transformer Fault Forecasting | Wang | Rev, No |
| TPWRD-00258-2002 | The Needs for Derating of the Distribution Transformers in Macedonian Power System | Shikoski | Rev, No |
| TPWRD-00295-2002 | Wavelet Transform based Impulse Fault Pattern Recognition in Distribution Transformers | Purkait | Rev, No |

Still In Progress

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|------------------|--|--------------|--|
| TPWRD-00213-2002 | Procedures for detecting Winding Displacements in Power Transformers by the Transfer Function Method | Christian | |
| TPWRD-00246-2002 | Vibro-acoustic techniques to diagnose power transformers | Bartoletti | |
| TPWRD-00354-2002 | An Improved Low Frequency Transformer Model for use in GIC Studies | Chandrasenai | |
| TPWRD-00359-2002 | Wide Band Modeling of Power Transformers | Gustavsen | |
| TPWRD-00390-2002 | Numerical Determination of Losses in the Tank Walls of Pad-Mounted Transformers: A Two-Dimensional | Olivares | |