

6.0 VICE CHAIR'S REPORT – SUSAN MCNELLY

The Vice-Chair's Report was presented at the Monday General Session.

6.1 IEEE PES CALENDAR OF UPCOMING EVENTS

The following are upcoming PES sponsored conferences and committee meetings. Please check the PES website at www.ieee-pes.org for further details, and additional events.

[2017 IEEE/PES General Meeting](#)

July 16-20, 2017, Chicago, Illinois

6.2 CONFERENCE PAPER SUBMITTALS FOR 2017

6.2.1 IEEE/PES General Meeting - July 16-20, 2017, Chicago, Illinois

Papers were peer reviewed and accept/reject decision were made by the March 1, 2017 deadline.

Papers Submitted: 22

IEEE Transaction Papers: 1

Transferred: 1

Rejected: 5

Approved: 15

Best Paper: 1 (17PESGM1247 - On the Development of Power Transformer Failure Models: an Australian Case Study)

Forum: 4

Poster Session: 10

Paper	Title	Recommendation	Forum/ Poster/ Best Paper	Rating
17PESGM0011	Controlled Switching of a 1200 MVA Transformer in Manitoba	TransactionPaper	-	-
17PESGM0098	A Novel Prediction Correction Method for Power Transformer States Based on Association Rule	reject	-	-
17PESGM0105	Understanding the Effect of Non-Uniform Ageing on Dielectric Response of Transformer Insulation	Accept	forum	7.1
17PESGM0207	PDTools: A Toolbox of Partial Discharge (PD) Signal Analysis for Transformer Condition Assessment	Accept	poster	6.8
17PESGM0262	Comparative Study of Single-Phase Shell & Core Type Transformers in GIC Temperature Rise Effect	reject	-	-
17PESGM0273	GIC simulation study for part of UK transmission system by ATP/EMTP	accept	Forum	7.6
17PESGM0283	The Prediction of the Gas Content Dissolved in Transformer Oil Based on Grey Linear Regression Combined Model	reject	-	-
17PESGM0318	Impacts of Substation Transformer Backfeed at High PV Penetrations	Transferred to Relay Committee	-	-
17PESGM0390	A Two-Stage Overload Strategy of Oil-immersed Transformers Considering Operation Risk	accept	poster	5.8
17PESGM0766	Design of New Iron Core for Improving Efficiency of Commercial Single-Phase Transformers Using Finite-Element Analysis	reject	-	-
17PESGM1037	An Estimation of Remaining Life Expectancy of Generator Step-Up Transformer Based on Strength Analysis of Insulating Paper	accept	poster	6.75
17PESGM1121	A New Inrush Current Identification Algorithm Based on Transformer Core Saturation	accept	poster	7

Paper	Title	Recommendation	Forum/ Poster/ Best Paper	Rating
17PESGM1145	Finite Element Analysis to Understand the Mechanical Defects in Power Transformer Winding Clamping Structure	accept	poster	6
17PESGM1165	Machine Learning Applications in Estimating Transformer Loss of Life	Accept	poster	-
17PESGM1182	Thermal Monitoring and Reliability Analysis System for Underground Substation	accept	poster	3
17PESGM1247	On the Development of Power Transformer Failure Models: an Australian Case Study	Accept	best paper	8.25
17PESGM1323	Online Detection of Partial Discharge inside Power Transformer Winding Through IFRA	accept	forum	7.5
17PESGM1699	Study on Auto-transformer Coupling Bridge-type Solid-State FCL and Its Improvement of Topology	accept	forum	7.5
17PESGM1860	Application of Multi-Port Solid State Transformer for Volt-VAR Control in Distribution System	Accept	poster	6.8
17PESGM1903	Application of Ensemble Classification Method for Power Transformers Condition Assessment	reject	-	-
17PESGM2038	A magnetization hysteresis-based power transformer protection scheme	accept	poster	6.25
17PESGM2198	Design and Experimental Verification of DC-DC Autotransformer Prototype	accept	poster	5.8

6.3 IEEE TRANSACTIONS ON POWER DELIVERY FROM 2016

Submitted by Wilsun Xu, Editor on January 24, 2017:

Summary:

Accept after editorial revision	8
Accept Without Changes	16
Administrative Reject	1
Editorial Reject	1
Reject - Do Not Resubmit	<u>28</u>
Total	54

Complete Listing of Transaction Papers:

Manuscript ID	Manuscript Title	Decision
TPWRD-01065-2015	Localization of Radial Displacement in an Actual Isolated Transformer Winding - An Analytical Approach	Accept after editorial revision
TPWRD-00632-2016	Generalized Analytical Expression for Natural Frequencies of a Completely Inhomogeneous Transformer Winding	Accept after editorial revision
TPWRD-00959-2016	Advanced DC Bias Suppression Strategy based on Finite DC Blocking Devices	Accept after editorial revision
TPWRD-00966-2015	Influence of the MV/LV transformer impedance on the propagation of the PLC signal in the power grid	Accept after editorial revision
TPWRD-00981-2015	On the Interaction of Power Transformers and Geomagnetically Induced Currents	Accept after editorial revision
TPWRD-01067-2015	Methodology to Evaluate the Electromechanical Effects of Electromagnetic Forces on Conductive Materials in Transformer Windings using the Von Mises and Fatigue Criteria	Accept after editorial revision
TPWRD-01584-2015	Effect of Different Connection Schemes, Terminating Resistors and Measurement Impedances on the Sensitivity of the FRA Method	Accept after editorial revision
TPWRD-01371-2015	A Joint Vibration and Arcing Measurement System for Online Condition Monitoring of On-Load Tap Changer of Power Transformer	Accept after editorial revision

Manuscript ID	Manuscript Title	Decision
TPWRD-00743-2015	Nonlinear Magnetic Equivalent Circuit Based Real-time Sen Transformer Electromagnetic Transient Model on FPGA for HIL Emulation	Accept Without Changes
TPWRD-00603-2015	Measuring the Pressboard Water Content of Transformers Using Cellulose Isotherms and the Frequency Components of Water Migration	Accept Without Changes
TPWRD-00914-2015	Duality Derived Transformer Models for Low-Frequency Electromagnetic Transients –Part I: Topological Models	Accept Without Changes
TPWRD-00113-2016	Equivalent Winding Capacitance Network for Transformer Transient Analysis based on Standard Test Data	Accept Without Changes
TPWRD-00443-2016	Hybrid Electromagnetic Unified Power Flow Controller: A Novel Flexible and Effective Approach to Control Power Flow	Accept Without Changes
TPWRD-00727-2016	Gray Box Modeling of Power Transformer Windings for Transient Studies	Accept Without Changes
TPWRD-01383-2015	Advanced modeling of magnetic cores for damping of high frequency power system transients	Accept Without Changes
TPWRD-00116-2016	Malfunction Detection of the Cooling System in Air-Forced Power Transformers Using Online Thermal Monitoring	Accept Without Changes
TPWRD-00246-2016	Non-minimum phase effects in transformer low-frequency bandwidth responses	Accept Without Changes
TPWRD-00283-2016	Estimation of Design Parameters of Single-Phase Distribution Transformers from Terminal Measurements	Accept Without Changes
TPWRD-01247-2015	Prediction of Pressure Drop and Flow Distribution in Disc Type Transformer Windings in an OD Cooling Mode	Accept Without Changes
TPWRD-01563-2015	Short Circuit Strength of Power Transformer Windings - Verification of Tests by a Finite Element Analysis Based Model	Accept Without Changes
TPWRD-01654-2015	Duality Derived Transformer Models for Low-Frequency Electromagnetic Transients –Part II: Complementary Modeling Guidelines	Accept Without Changes
TPWRD-00074-2016	Parameter Design and Performance Investigation of A Novel Bridge-Type Saturated Core Fault Current Limiter	Accept Without Changes
TPWRD-00904-2015	The Application of Correlation Technique in Detecting, Internal and External Faults in Three-phase Transformer and Saturation of Current Transformer	Accept Without Changes
TPWRD-00908-2015	Moisture Dependent Thermal Modelling of Power Transformer	Accept Without Changes
TPWRD-00114-2016	A System to Detect Small Amounts of Oil Leakage with Oil Visualization using Fluorescence Recognition	Administrative Reject
TPWRD-00996-2016	Split-core transformer for power supply to modular systems for harsh environment	Editorial Reject
TPWRD-00243-2016	Lighting Impulse Voltage Distribution over Voltage Transformer Windings - Simulation and Measurement	Reject
TPWRD-00617-2016	Influence of the Transformer's Load on the Lissajous Figures in Winding Deformation Diagnosis	Reject
TPWRD-00696-2016	Novel Technique for the Calculation of Eddy Current Losses and Lorentz Forces in Foil Winding Transformers	Reject
TPWRD-00798-2016	Online Short-circuit Fault Diagnosis of Transformer Windings based on Transient Overvoltage Response Performance	Reject
TPWRD-01368-2015	Suppression of Geomagnetic Induced Current Using Controlled Ground Resistance of Transformer	Reject
TPWRD-01467-2015	Electromagnetic Characteristic Analysis of Series Transformer in UPFC System	Reject
TPWRD-00044-2016	Qualitative and Quantitative FMECA on 220 kV Power Transformers	Reject
TPWRD-00064-2016	State of Health Determination for Distribution Transformers	Reject
TPWRD-00081-2016	Investigation of Gas Relay Malfunction Due to External Short Circuit Faults: Tests on 110kV Power Transformer	Reject
TPWRD-00124-2016	Localization and Severity Assessment of an Axial Displacement in an Actual Single Isolated Transformer Winding	Reject
TPWRD-00221-2016	Distribution transformers for rural networks for energetic efficiency and economic purposes: High impedance silicon steel versus amorphous core	Reject

Manuscript ID	Manuscript Title	Decision
	designs	
TPWRD-00404-2016	A Practical Method for Life Cycle Assessment of Mineral Oil Power Transformers	Reject
TPWRD-00489-2016	Vibration Characteristic Investigation on Transformer under DC Bias Based on Motion Transmission Model	Reject
TPWRD-00610-2016	Development and Analyses of a New High Efficient Distribution Transformer	Reject
TPWRD-00622-2016	Dynamic Thermal Model for Dry-Type Distribution-Class Toroidal Transformers	Reject
TPWRD-00648-2016	Investigation and Analysis of Gas Relay Malfunction Due to External Short Circuit Faults: Tests on 110kV Power Transformer	Reject
TPWRD-00947-2016	Study of No-load Characteristics Measurement of Transformer Using Low-frequency Method	Reject
TPWRD-01061-2016	Improving Transformer Sizing in Planning Studies by Taking into Account its Thermal Inertia	Reject
TPWRD-01063-2016	Contribution of Inrush Current to the Mechanical Fatigue of Transformer Windings	Reject
TPWRD-01089-2016	Dynamic Thermal Model for Dry-Type Distribution-Class Toroidal Transformers	Reject
TPWRD-01274-2016	Classification and Discrimination among Winding Mechanical Defects, Internal and External Electrical Faults and Inrush Current	Reject
TPWRD-01308-2014	Testing small transformers with direct current components	Reject
TPWRD-01606-2015	A New Diagnostic Method to Determine the Extent of Axial Displacement in a Transformer Winding	Reject
TPWRD-01711-2015	Enhancements to Frequency Domain Spectroscopy Measurements of Oil-paper Insulation for Energized Transformers	Reject
TPWRD-01739-2015	A Comprehensive Comparison of the Numerical Indices Proposed for the Interpretation of the Frequency Response Analysis	Reject
TPWRD-01860-2015	A Proposal of a Standard Procedure for Mechanical Withstand Safety Margin Analysis of Transformers	Reject
TPWRD-00060-2016	Reduction in the Net Axial Short-Circuit Forces on the Transformer Windings under their Height Mismatch Condition	Reject
TPWRD-01544-2015	The nature of the first resonance in the frequency response of transformer winding	Reject

Respectfully,
Susan McNelly
Vice Chair
April 2, 2017