Vice Chair's Report
Fall 2009 Meeting

Lombard, Illinois

October 25 - 29, 2009

2009 IEEE PES General Meeting

Calgary, Alberta, Canada
July 26 - 30, 2009
Theme: Investment In Workforce and Innovation for Power Systems

Call for papers opened: November 3, 2008
Paper submission closed: December 3, 2008
Authors were notified (accept, reject or revised) by: February 2, 2009
25 papers submitted, 23 accepted, 2 rejected

Transformers Panel Session:

Tuesday, July **28,** 2009, 2:00pm - 6:00pm

Summary: Natural ester seed oil based dielectric fluid is an environmentally advantaged fluid that is increasingly being used as a replacement for mineral oil and for high temperature flashpoint liquids, including silicone and R-TEMP. This report updates experience with use of the fluid over the last two years. Considerable studies have been conducted to investigate heat aging performance of cellulose, electrical contact thermal stability, dielectric strength, moisture sensitivity, and cold temperature performance. A

series of reports presents a summary of work that has been completed to date and examines customer experience with the use of Natural Esters in real transformers. The work contains both new transformers and retro-fills in Distribution and Power Transformers as well as Step Voltage Regulators and Switchgear.

Notes: Index Terms—Natural ester fluids, biodegradable, non-toxic, less-flammable liquids, insulation life, flash & fire point, coking resistant, sludge-free, retro-filling.

Panel Session Papers:

09GM0487 Progress Report On Natural Esters For Distribution And Power Transformers

09GM1580 Natural Ester Dielectric Fluid Development Update

09GM1581 Tapchangers for De-energized Operation in Natural Ester Fluid, Mineral Oil and Silicone

09GM1582 Some Considerations for New and Retrofill Applications of Natural Ester Dielectric Fluids in Medium and Large Power Transformers Revisited

09GM1583 Dielectric Properties of Natural Esters and their Influence on Transformer Insulation System Design and Performance - An Update

09GM1584 Design and Test Experience with Natural Ester Fluid for Power Transformers Update

09GM1588 Distribution Utility Experience With Natural Ester Dielectric Coolants

Conference Transactions
Session: **Transformers I**
Wednesday, July 29, 2009, 8:00am - 12:00pm

09GM0383 Experimental and Theoretical Analysis of Vacuum Circuit Breaker Prestrike Effect on a Transformer

09GM0475 On the Effects of Subsynchronous Interharmonic Voltages on Power Transformers: Single Phase Units

09GM0765 On the Effects of Subsynchronous Interharmonic Voltages on Power Transformers: Three Phase Units

09GM0873 Parameter Estimation Methods for Five-limb Magnetic Core Model

Paper Session
Session: **Transformers II**
Wednesday, July 29, 2009, 2:00pm - 6:00pm

09GM0095 Criteria Revision of Dissolved Gas Analysis for Oil-Filled Transformers in Korea

09GMO212 Experimental and Theoretical Analysis of Vacuum Circuit Breaker Prestrike Effect on a Transformer

09GM0439 Comprehensive Analysis of Load Noise of Power Transformers

09GM0719 Hydrogen Gas Generation Due to Moderately Overheated Transformer Cores

Paper Session
Session: **Transformers III**
Thursday, July 30, 2009, 8:00am - 12:00pm

09GM0856 Genetic Programming Feature Extraction with Bootstrap for Dissolved Gas Analysis of Power Transformers

09GM0875 Construction of Transformer Core Model for Frequency Response Analysis with Genetic Algorithm

09GM0939 Thermal Modeling and Simulation of Transformers

09GM1052 A New Method to Identify CT Saturation Based on the time Difference Algorithm

09GM1463 Application of a 3D Computer Simulation Tool as a Decision Making Tool for Optimizing Transformer Protection

Poster Session
Session: **Transformers I**
Monday, July 27, 2009, 5:00pm - 7:00pm

09GM0425 Intelligent Framework and Techniques for Power Transformer Insulation Diagnosis

09GM0488 Understanding Frequency & Time Domain Polarisation Methods for the Insulation Condition Assessment of Power Transformers

09GM0565 Frequency Effect on Calculation for Voltage Distribution of Winding

2009 IEEE PES General Meeting Rejected Papers:

09GM0923 Determination of Partial Discharge Location in Power Transformers Using Bayesian Network and Fuzzy ARTmap Neural Network

09GM1500 Dielectric Properties of Natural Esters and their Influence on Transformer Insulation System Design and Performance - An Update

2010 IEEE PES T&D Conference & Exposition

New Orleans, LA USA
April 19 thru 22, 2010
Theme: Smart Solutions For A Changing World

Paper submission closed: August 25, 2009
Authors will be notified (accept, reject or revised) by: November 23, 2009
21 papers submitted, 0 accepted, 0 rejected

Conference Paper*:*
Transformers Committee

2010TD0020 Detection of Inrush Current Using S-Transform and Probabilistic Neural Network

2010TD0225 Transformer diagnosis using probabilistic vibration models

2010TD0272 Review of Recent Changes to Mineral Insulating Oil Specifications

2010TD0276 Experimental Research of Vibration Sweep Frequency Response Analysis to Detect the Winding Deformation of Power Transformer

2010TD0294 Detection of Inrush Current Based On Wavelet Transform and LVQ Neural Network

2010TD0300 HPLC method for the study of degradation products of cellulosic insulation materials in a power transformer

2010TD0311 Investigating Short-circuit in Power Transformer Winding with Quasi-static Finite Element Analysis and Circuit-based Model

2010TD0387 Methods to improve cycle of vacuum-drying process for power

transformers

2010TD0409 Design of a Planar Power Transformer for High Voltage, High Frequency Use

2010TD0424 Investigation of EMTP Transformer Model for TRV Calculation after Fault Current Interrupting by Using FRA Measurement

2010TD0475 On-Site Methods for Reliable Moisture Determination in Power Transformers

2010TD0492 Utilizing Piecewise Linear Approximation and Harmonic Regression to Analyze Power Transformer Insulating Oil On-Line Dissolved Gas Samples

2010TD0521 Thermal Modeling of Electrical Utility Transformer Using Finite Element Modeling Technique and Thermal-Electrical Analogy

2010TD0528 Moisture in Transformers and Online Dryer Performance

2010TD0607 New consolidated findings in use of Maintenance Free Breathing Systems for Transformers

2010TD0636 Improvements for the Drying and Insulation of Power Transformers with Related Technology

2010TD0649 Development of a Fluid Structure Interaction Tool for the Study and Prevention of Transformer Tank Explosions

2010TD0687 Distribution Transformer Incorporating External Vacuum Fault Interruption Switch for Fault Protection

2010TD0691 The Use and Advantages of Amorphous Metal in Distribution Transformers

2010TD0711 Transformer Diagnostics using Frequency Response and Terminal Impedance Analysis

2010TD0726 Environment Friendly Power Transformer Technologies

IEEE PES Calendar of Upcoming Events

2010
T&D Conference and Exposition (Sponsored by PES)
April 20 - **22,** Morial Convention Center, New Orleans, LA, USA,
Contact Tommy Mayne, 30523 Woodland Dr., Lacombe, LA 70445, +1 504 427 3390, fax +1 985 882 8059, t.w.mayne©c©ieee.org Web: http://www.ieeet-d.orql

IEEE PES Conference on Innovative Smart Grid Technologies
January 19-21, 2010, NIST Conference Center, Washington D.C. (Metro)

A forum for the participants to discuss the state-of-the-art innovations in smart grid technologies. The

Conference will feature special sessions and tutorials by international experts on smart grid applications.

2010 PES General Meeting
July 25 - 30, 2010
Minneapolis, Minnesota USA
Theme: "Power Systems Engineering in Challenging Times"

The 2010 PES General Meeting call for papers has been posted on the IEEE/PES Call for Papers web page.

Minneapolis Convention Center, 1301 Second Avenue South, Minneapolis, Minnesota 55403, 612-335-6000

Hilton Minneapolis, 1001 Marquette Ave, Minneapolis, Minnesota 55403, 612-376-1000

Notable Presentations
Including selected panel sessions, plenaries, special technical sessions, presentations with audio (*new!*), focused technical meetings, and other roundtables and forums.

"Robert's Rules of Order" Program

Copies of "Robert's Rules Of Order Newly Revised', "In Brief" are available upon request.