# Vice Chair’s Report – Susan McNelly

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

## 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](http://www.ieee-pes.org) for further details, and additional events.

[2018 IEEE PES TRANSMISSION AND DISTRIBUTION CONFERENCE AND EXPOSITION](http://www.ieeet-d.org/IEEE18/public/enter.aspx)

April 16 - 19, 2018, Denver, Colorado

[2018 IEEE/PES General Meeting](http://pes-gm.org/2018/)

August 5 – 9, 2018, Portland, Oregan

## Conference Paper Submittals For 2018

### 2018 IEEE PES Transmission and Distribution Conference and Exposition – April 16-19, 2018, Denver, Colorado

Paper reviews and accept/reject decisions were not yet final at the writing of this report.

Papers Submitted: 13

IEEE Transaction Papers: 0

Transferred in: 1

Rejected: 3

Approved: 8

Under Review/Revision: 2

Best Paper: TBD

Forum: TBD

Poster Session: TBD

| **Paper** | **Title** | **Recommendation** |
| --- | --- | --- |
| 18TD0042 | Online Monitoring Data Cleaning of Transformer Considering Time Series Correlation  | Pending review |
| 18TD0048 | Electric Substation Large Power Equipment Innovative and Cost Effective Methods for Repairing Oil and Gas Leaks | Rejected |
| 18TD0085 | Online Sequential Extreme Learning Machine for Partial Discharge Pattern Recognition of Transformer | Accept |
| 18TD0102 | Newly Developed, Optimized, and Cost-Effective Submersible Dry-Type Network Transformers | Accept |
| 18TD0107 | Residual Magnetic Flux of Three-Phase Three-Leg Transformer for Controlled Switching | Accept |
| 18TD0133 | Limiting Voltage Dips and Inrush Currents When Energizing Power Transformers | Accept |
| 18TD0167 | Submersible Transformer Inspection Robot (STIR) - A Change of Paradigm | Accept |
| 18TD0225 | Bushing 101 Design, Application, Field Issues, Solutions and New Technology | Rejected |
| 18TD0257 | Understanding the Sympathetic Inrush Phenomenon in the Power Network using Transformer Explorer | Pending review |
| 18TD0283 | Ester-based Dielectric Liquid for Grid Resilience and EHV Mobile Transformers | Accept |
| 18TD0398 | High temperature insulation systems: an option for resilient transformers | Accept |
| 18TD0401 | Monitoring Gas Generation in Transformers | Accept |
| 18TD0448 | 765 KV BUSHING FLASHOVERS CASE STUDY | Rejected |

Panel Session submittals:

Three Panel Applications Submitted

| **Title** | **Duration** | **Moderator** | **Expected Recommendation** |
| --- | --- | --- | --- |
| Keeping grids resilient – Transformer exchange within a few days and further options to maximize network stability (along the entire energy value chain) | 4 Hrs | E. Schweiger | Accept |
| Improving grid stability with variable shunt reactors and phase shifters | 2 Hrs | J McIver | Accept |
| Welcome to the future: sustainable urban energy | 4 Hrs | J McIver | Reject |

### IEEE/PES General Meeting - August 5 - 9, 2018, Portland, Oregon

Paper submittals are still in progress at the writing of this report.

## IEEE Transactions on Power Delivery To Date in 2017

Status as of October 21, 2017 - Submitted by Wilsun Xu:

**Summary:**

No decision 9

Accept Without Changes 11

Review and Resubmit 3

Administrative Reject 0

Editorial Reject 4

Reject - Do Not Resubmit 30

 **Total** **57**

**Complete Listing of Transaction Papers Submitted to Date:**

|  |  |  |
| --- | --- | --- |
| **Manuscript ID** | **Manuscript Title** | **Decision** |
| TPWRD-00031-2017 | Design Optimization of Distribution Transformers with Nature-Inspired Metaheuristics - A Comparative Analysis | Editorial Reject |
| TPWRD-00036-2017.R1 | Real-Time Evaluation of the Dynamic Loading Capability of Indoor Distribution Transformers | Accept Without Changes |
| TPWRD-00040-2017 | Using a 3D Simulation to Study the Frequency Response of Transformers: a Case Study | Reject |
| TPWRD-00046-2017 | The Saturation Processes in the Magnetic System of the Three-phase Power Transformer during Simultaneous AC and DC Flow in the Winding | Reject |
| TPWRD-00054-2017 | Short Circuit Fault Analysis of Delta-ZigZag Transformer | Editorial Reject |
| TPWRD-00113-2017 | Transformer Tank Rupture Withstand Capacity – A Sensitivity Study on Tank Flexibility and Gas Generation | Reject |
| TPWRD-00123-2017 | A Systems Theoretic Approach to Transformer Monitoring | Reject |
| TPWRD-00172-2017.R1 | Evaluating Failure Probability of Power Transformers based on Insulation Loss of Life  | Reject |
| TPWRD-00246-2016.R3 | Non-minimum phase effects in transformer low-frequency bandwidth responses | Accept Without Changes |
| TPWRD-00320-2017.R1 | Decision-Making in Emergency Operation for Power Transformers with Regard to Risks and Interruptible Load Contracts | Accept Without Changes |
| TPWRD-00366-2017 | Single-phase inductive elements’ magnetic cores faults study using FRA approach | Reject |
| TPWRD-00432-2017 | Transformer Winding Disk Deformation: A Precise Step towards Understanding of Variation in Frequency Response Spectrum | Reject |
| TPWRD-00452-2017.R2 | Estimating the Equivalent Air-cored Inductance of Transformer Winding from Measured FRA | Accept Without Changes |
| TPWRD-00478-2017 | Development of a Hot-Spot Temperature Calculation Method for the Loss of Life Estimation of an ONAN Distribution Transformer | Reject |
| TPWRD-00488-2017 | Practical Experience in Modeling GIC Effects on Three-Phase, Five-Leg Transformers | Reject |
| TPWRD-00515-2017.R1 | Experimental Verification of Dimensional Analysis Results on Flow Distribution and Pressure Drop for Disc Type Windings in OD Cooling Modes | Accept Without Changes |
| TPWRD-00520-2017 | A Comparison of Different Transformer Modeling Methods in Transient Recovery Voltage Studies in Case of Transformer Limited Faults  | Reject |
| TPWRD-00521-2017 | Frequency Response Analysis (FRA) of Transformers as a Tool for Fault Detection and Location: A Review | Reject |
| TPWRD-00523-2017 | A Novel Digital Pressure Protection for Oil-Immersed Power Transformers | Reject |
| TPWRD-00537-2017.R1 | Noniterative Method for Combined Acoustic-Electrical Partial Discharge Source Localization | Revise and Resubmit |
| TPWRD-00541-2017 | Buckling Strength Analysis of Transformer Inner Windings | Editorial Reject |
| TPWRD-00543-2017.R1 | Internal Faults Discrimination and Classification During Transformer Energization Using Extended Kalman Filter and Support Vector Machine |   |
| TPWRD-00550-2017.R1 | On Savitzky-Golay Filtering for Online Condition Monitoring of Transformer On-Load Tap Changer  | Accept Without Changes |
| TPWRD-00554-2017.R2 | Frequency Response Features of Axial Displacement Winding Faults in Autotransformers with Split Windings | Accept Without Changes |
| TPWRD-00652-2017 | Contribution of Inrush Current to the Mechanical Fatigue of Transformer Windings | Reject |
| TPWRD-00667-2017.R1 | Novel DC Bias Suppression Device Based on Adjustable Parallel Resistances |   |
| TPWRD-00671-2017 | Multi-parametric Sensitivity Analysis of Improved Transformer Thermal Models Considering Nonlinear Effect of Oil Time Constant | Reject |
| TPWRD-00737-2017 | A Markovian Model for Power Transformer Maintenance | Reject |
| TPWRD-00772-2017 | Study of the Parameters Affecting The Resonance Stresses In The High Voltage Power Transformers | Reject |
| TPWRD-00774-2017 | A Probabilistic Approach for Forecasting the Allowable Current of Oil-Immersed Transformers  | Revise and Resubmit |
| TPWRD-00783-2017 | Three-dimensional Thermal Modeling of Transformers in Transformer Room for Spatial and Temporal Failure Analysis | Reject |
| TPWRD-00801-2017 | Graded Interleaving of EHV Transformers for Improved Transient Response against Surge Type Incident Voltages | Reject |
| TPWRD-00831-2017 | Characterization of Power Auto-transformer ‎FRA Signature: Experimental and FEM Study | Reject |
| TPWRD-00868-2017 | Reduction of Distribution Transformer Failures Rates by Diagnoses and Isolating Mechanism | Reject |
| TPWRD-00882-2017.R1 | Calculating a Health Index for Power Transformers Using a Subsystem-based GRNN Approach. |   |
| TPWRD-00927-2017 | New Transformer Inrush Current Limiting Technology based on Three Pole Simultaneous Switch Control Method |   |
| TPWRD-00957-2017 | Magnitudes and characteristics of tank vibrations of Power Transformers |   |
| TPWRD-00998-2017 | Experimental Data Based Current Transformer Mathematical Simulation in Micro-Cap Program | Reject |
| TPWRD-01009-2017 | Retrofitting the BCTRAN Transformer Model with Non-Linear Magnetizing Branches for the Accurate Study of Low-Frequency Saturating Transients | Revise and Resubmit |
| TPWRD-01043-2017 | Localization of Partial Discharge in Transformers with Convolutional Iterative Filtering | Editorial Reject |
| TPWRD-01058-2017 | Saturable Reactor Hysteresis Model Based on Jiles–Atherton Formulation for EMT Studies | Reject |
| TPWRD-01126-2017 | Topology Correct Reversible Model of Three-Phase, Five-Limb Transformer |   |
| TPWRD-01137-2017 | Advanced On-line Condition Monitoring and Inter-turn Short Circuit Detection of power transformerof Power Transformers  |   |
| TPWRD-01154-2017 | Evaluation of Full-Wave Response of Transformer Windings |   |
| TPWRD-01175-2017 | Experimentally Validated Method to Measure the λ-i Characteristics of Asymmetric 3phase transformer  |   |
| TPWRD-01253-2016 | Split-Winding Transformer Design Using New Hybrid Optimization Algorithm Based on PSO and I-BB-BC | Reject |
| TPWRD-01274-2016 | Classification and Discrimination among Winding Mechanical Defects, Internal and External Electrical Faults and Inrush Current | Reject |
| TPWRD-01275-2016.R2 | An Online Data-Driven Technique for the Detection of Transformer Winding Deformations  | Accept Without Changes |
| TPWRD-01313-2016.R2 | A New Leakage Flux Based Technique for Turn to Turn Fault Protection and Faulty Region Identification in Transformers | Accept Without Changes |
| TPWRD-01322-2016.R1 | A New Analytical Model for Transformer Saturation and Inrush Current | Reject |
| TPWRD-01323-2016 | Mixed core design for power transformers to reduce core losses | Reject |
| TPWRD-01391-2016.R2 | Interpretation of Hot Spot Factor for Transformers in OD Cooling Modes | Accept Without Changes |
| TPWRD-01397-2016 | Analysis of Ability to Withstand DC Bias in Power Transformers Using a Novel Analytical Criteria | Reject |
| TPWRD-01403-2016.R1 | An Integrated Filtering Technique for the Detection of Current Transformer Saturation | Reject |
| TPWRD-01407-2016 | Current Status and Future Trends in Condition Monitoring of On-Load Tap-Changers | Reject |
| TPWRD-01484-2016.R1 | Investigation of Thermal Behavior of an Oil Directed Cooled Transformer Winding | Accept Without Changes |
| TPWRD-01507-2016 | A Model for Calculating Transformer Hot-Spot Temperature Considering Multiple Overloads | Reject |

Respectfully,

Susan McNelly

Vice Chair

October 29, 2017