



International Conference on Condition Monitoring, Diagnosis and Maintenance 2011

CMDM 2011

- Modern Management Technology -

September 19 - 23, 2011, Radisson Blu Hotel, Bucharest, Romania

Final Conference Program

Monday, September 19, 2011, Atlas Conference Room		
12:00 – 16:00	Registration	Exhibition 16:00 – 18:00 1 st Floor, Atlas Foyer
16:00 – 16:30	Opening Exhibition	
16:30 - 18:00	Opening Plenary Location: (Atlas Conference Room) Welcome Ciprian Diaconu Chairman, CIGRÉ Romania Representative CIGRÉ Paris Keynote Speakers Romanian Ministry of Economy, Trade and Business Environment representative; Romanian Parliament representative; Romanian Academy representative; Horia Hăhăianu, President & CEO, Romanian Power Grid Company "CNTEE Transelectrica" SA Smart Grids - Transelectrica initiatives, CNTEE Transelectrica Representative; Substation Smart Grids: 400/110 kV Darste substation	
18:30 - 20:00	Welcome Cocktail Reception	

Tuesday, September 20, 2011, Atlas Conference Room		
09:00 - 10:30	Session 2: Smart Grid concepts and management Chair: Nicolai L. Fantana, Dr.Ing, ABB AG Corporate Research, Germany	Exhibition 8:30 – 18:00 1 st Floor, Atlas Foyer
	CIGRÉ 182 - Developing a smart grid strategy in Romania M. Coteanu, M. Radu, G. Lavrov, C. Burloiu – ISPE (Institute for Studies and Power Engineering), România	
	CIGRÉ 194 - Intelligent electronic system for continuous monitoring and diagnostic of high voltage substations C. Moldoveanu, V. Brezoianu, A. Vasile, V. Ursianu, F. Goni, C. Radu, I. Ioniță, M. Avramescu, S. Zaharescu, B. Toader – Nova Industrial SA, România	
	CIGRÉ 125 - A prototype Home Energy Management System H.A. Palizban, A. Jappy, C. Morrissey, W. Tigor - British Columbia Institute of Technology (BCIT), Vancouver, Canada	
	CIGRÉ 166 - Advanced technologies in disconnecting switches: Electronic control, monitoring and speed variation within the smart grid approach R. Jeanjean - RJ Consulting, France, P. Néron - Energie HT, Canada, J. Amon F., G. Vieira - Eletrobras Furnas, Brazil, F. Vieira, R. Ricceti F. - Eletrobras Eletrosul, Brazil	

	<p>CIGRÉ 187 - Interests of S.T. Timisoara On Remote Without Personnel Stations <i>N. Chiosa, I. Ardelean, A. Cucu - CNTEE Transelectrica S.A., Timișoara Transportation Branch – România</i></p> <p>CIGRÉ 181 - Development of new automation functions in the Power System to integrate efficiently large share of dispersed energy resources and renewable energy sources <i>A. Popescu, H. Albert, M. Coteanu – ISPE (Institute for Studies and Power Engineering, România)</i></p>
10:30 - 11:00	Coffee Break
11:00 - 12:00	<p>Tutorial No.1 – SMART GRIDS : Electrical Networks of the Future <i>Mircea Eremia, Prof. Dr., "Politehnica" University of Bucharest, Romania</i> <i>Lucian Toma, Dr., "Politehnica" University of Bucharest, Romania</i></p>
12:00 - 13:00	<p>CIGRÉ 208 - Smart Grids in the European Context <i>P. Arsene - European Commission , Directorate General Information Society and Media</i></p> <p>CIGRÉ 207 - Smart-Grid Technology in Japan and User Perspective <i>T. ASANO - Toshiba Corporation , Japan</i> <i>G. P. BABER - Toshiba International (Europe) Ltd, UK</i></p> <p>CIGRÉ 199 - Addressing the smart grids control system as customer - oriented electricity network <i>R. Porumb, N. Golovanov, C. Toader, P. Postolache - University Politehnica of Bucharest, România</i></p> <p>CIGRÉ 136 - Short-Term Wind Prediction to Forecast Sudden Changes in Power Grid Load <i>Y.Todorov, D. Pauli, S. Feller, B. Rupp, R. Apel - FCE Frankfurt Consulting Engineers GmbH and Siemens AG, Germany</i></p>
13:00 - 14:00	Lunch & Break
14:00-15:30	<p>Session 3A: Condition monitoring and diagnosis for power equipment Chair: Mircea Eremia, Prof. Dr., Romania</p> <p>CIGRÉ 164 - Reliability of Dissolved Gas Analysis as tool for diagnose of faults in Power Transformers <i>J. Nunes, B. Pahlavanpour, C. Wetterholm, K. Sundkvist & P. Wiklund Nynas AB, Sweden</i></p> <p>CIGRÉ 139 - The true meaning of CO & CO2 in power transformers learned through on-line DGA monitoring <i>J. Hinshaw, R. Dunn, S. Lindgren - Serveron, USA</i></p> <p>CIGRÉ 138 - Catastrophic failure of 500 kV GSU Transformer avoided based on 8-gas on-line analyzer data <i>J. Hinshaw, R. Dunn, S. Lindgren - Serveron, USA</i></p> <p>CIGRÉ 145 - Impact of renewable generation on protection systems <i>F. Balașiu - Transelectrica SA, Gh. Moraru - Smart SA , România</i></p> <p>CIGRÉ 203 - The Monitoring of Romanian TSO's Power Quality <i>C. Stanescu, s. Gal, c. Lisman - CNTEE Transelectrica, p. Postolache, a. Poida, f. Vatra - Society of Power Engineers Bucharest, România</i></p>
15:30 - 16:00	Coffee Break
16:00 - 17:00	<p>Tutorial No.2. Obtaining value from on-line substation condition monitoring (WG B3.12) <i>Nicolaie L. Fantana, Dr.Ing, ABB AG Corporate Research, Germany</i></p>
17:00 - 18:00	<p>CIGRÉ197 - Expert systems for condition assessment of power transformers <i>C. Moldoveanu, V. Ursianu, M. Avramescu, I. Ioniță, F. Goni, E. Mihalcea, M. Nestor - SC NOVA INDUSTRIAL SA , România</i> <i>C. Diaconu, I.D. Hațegan - CNTEE TRANSELECTRICA SA, România</i></p> <p>CIGRÉ 141 - Improving Management of Ageing Transformer Populations by Learning from Failures <i>H. Ding, R. Heywood, J. Lapworth & S. Ryder - Doble PowerTest, UK</i></p> <p>CIGRÉ 151 - Frequency Response Analysis (FRA) in the Service of Reliability Analysis of Power Transformers <i>J. Rosenlind, H. Tavakoli, and P. Hilber - The Royal Institute of Technology, Sweden</i></p> <p>CIGRÉ 201 - From fragmented asset sensor data up to Integrated Substation Condition Monitoring (ISCM) <i>L. van Groningen, R. Wolf, N. Kaiser, M.Schuler - Siemens AG, Germany</i></p> <p>CIGRÉ 153 - On line and off line maintenance of OLTC on power transformers <i>M. Oltean, A. Farcaș, M. Lapaduș - Smart SA Sibiu Branch, I. Borçsa - Arc Brasov S.A., România</i></p>

Wednesday, September 21, 2011, Atlas Conference Room		Exhibition 8:30 – 18:00 1 st Floor, Atlas Foyer
09:00 - 10:30	Session 3B: Condition monitoring and diagnosis for power equipment Chair: Stanislaw Gubanski, Prof. Dr, Sweden	
	CIGRÉ 123 - On-line monitoring technologies for large power transformers <i>C. Kane - Dynamic Ratings, Inc., USA</i>	
	CIGRÉ 122 - The importance of correlating dynamics when performing partial discharge measurements and analysis <i>C. Kane, A. Golubev - Dynamic Ratings Inc., USA</i>	
	CIGRÉ 135 - Fiber Optics Temperature/Vibration, Moisture and PD Monitoring in Power Transformers <i>P. Kung, L. Wang, M. I. Comanici - QPS Photonics, Canada</i>	
	CIGRÉ 131 - Axial Clamping Forces Monitoring of Power Transformers <i>A. Marinescu, ACER - Romanian EMC Association, România & Research and Testing Institute ICMET, România</i>	
	CIGRÉ176 - Complex system for the monitoring of Sibiu South 400/220/110/20 kV Power Station Transformers <i>A. Romanescu, V. Zaharescu, A. Moraru - CNTEE Transelectrica SA, M. Pasculescu - Universitatea Petroșani, B. Guzun - "Politehnica" University of Bucharest, România</i>	
	CIGRÉ 185 - Comparison Between IEC 60354 and IEC 60076-7 on the Overloading Possibilities of the Large Power Transformer Units <i>T. Ene, T. Chiulan – CNTEE Transelectrica SA, România</i>	
10:30 - 11:00	Coffee Break	
11:00 - 12:00	Tutorial No. 3 - Dielectric response of transformers for moisture assessment of insulation <i>Stanislaw Gubanski, Prof. Dr. Chalmers University of Technology, Department of Materials and Manufacturing Technology, Gothenburg, Sweden</i>	
12:00 - 13:00	CIGRÉ 154 - Modern techniques for condition assessment and diagnosis of power transformers <i>T. Făgărașan, M. Oltean, A. Farcaș, L. Brabete - SMART SA Sibiu Branch, România</i>	
	CIGRÉ 169 - Online monitoring system for power transformers insulation systems, based on absorption – desorption currents <i>P. V. Notingher - "Politehnica" University of Bucharest, G. Tănăsescu - Simtech International, D. Popa - ICMET Craiova, Gh. Batir - Electrica Serv, M.D. Groza - University of Oradea, România</i>	
	CIGRÉ 148 - Noise Suppressed PD Measurement by using Multi-Channel and Real-Time Data Evaluation <i>S.M.Hoek, K. Rethmeier, A. Kraetge - OMICRON Electronics, Austria, D. Ziemer - OMICRON Electronics, Germany</i>	
	CIGRÉ 168 - Using health index in power transformer maintenance <i>Authors: B. Gorgan, L.-V. Badicu, P.V. Notingher - "Politehnica" University of Bucharest, G. Tanasescu - Simtech International SRL, România</i>	
13:00 - 14:00	Lunch & Break	
14:00 - 15:30	Session 3C: Condition monitoring and diagnosis for power equipment Chair: Dan Zlatanovici Prof. Dr., ICEMENERG SA, Romania	
	CIGRÉ 161 - Assessment of the electric hydro generator stator insulation condition by means of on-line partial discharge measurement <i>D. Zlatanovici, S. Dumitrescu - Energy Research and Modernization Institute – ICEMENERG, Romania</i>	
	CIGRÉ 132 Turbine generator 760 MVA supervisory system <i>M. R. Siniscalchi, C. L. M. Prates – Eletronuclear Brazil H.C. Smith - Roving Dynamics A/S, Denmark</i>	
	CIGRÉ 124 - Use of resistive thermal devices as a partial discharge sensor in rotating equipment <i>C. Kane, A. Golubev - Dynamic Ratings Inc., USA</i>	
	CIGRÉ 198 - New Techniques for the Detection of Earth-Faults and related Insulation Problems in Medium Voltage Compensated Networks <i>D. G. Dumitrașcu - EnergoBit S.R.L., R. Matica - F.I.S.E. ELECTRICA SERV, S.I.S.E. ELECTRICA TRANSILVANIA NORD, A.I.S.E. Oradea, România</i>	
	CIGRÉ 191 - Bearing fault detection using Acoustic Emission Technique <i>H. Karimi, CM Department of Zagros Petrochemical Company, Iran</i>	

	CIGRÉ 177 - Dynamic Thermal Line Rating in Slovenia <i>M. Gabrovšek, M. Kovač, - C&G Skupina d.o.o., V. Lovrenčič - C&G D.O.O. Ljubljana, J. Kosmač, G. Lakota Jeriček, A. Souvent- Eimv, Slovenia</i>	
15:30 - 16:00	Coffee Break	
16:00 - 17:00	Tutorial No. 4 Guide for on-line monitoring of turbo-generators (WG A1.11) <i>Dan Zlatanovici Prof. Dr., Energy Research and Modernisation Institute – ICEMENERG, Romania</i>	
17:00 - 18:00	CIGRÉ 147 - Using Autoregressive Models on Large Hydro Generating Units Condition Monitoring <i>J.Q. Assis Neto - Itaipu Binacional, G.C. Brito Jr. - Western Parana State University, T. Cristiani - Unioeste, Brazil</i>	
	CIGRÉ 134 - Condition monitoring, reliability related to the integrity of the insulation layer, temperature and vibration monitoring of the end winding <i>P. Kung, L. Wang, M. I. Comanici - QPS Photonics, Canada</i>	
	CIGRÉ 149 - Measurements on a 200 kV AC Prototype for on-site testing of long HV Cables <i>T. Mehl, P. Mohaupt - Mohaupt High Voltage GmbH, Austria</i>	
	CIGRÉ 192 - Training Centre for LW Human Operator - RDLWT of NPG <i>I. Rodean, D. Morar - CNTEE Transelectrica SA, România</i>	
	CIGRÉ 180 - Process Monitoring, Diagnosis and Maintenance System in Thermal Power Plants <i>L. Țânțăreanu, D. Marin, R. Ciocșirescu, M. Stroiescu – ISPE (Institute for Studies and Power Engineering), România</i>	
	CIGRÉ 188 - Investigation of Amin pump in Razi Petrochemical <i>S.Ahmadi, S.Rasouli - Iranian National Petrochemical, Razi petrochemical, Iran</i>	

Thursday September 22, 2011 , Atlas Conference Room		
09:00 – 10:30	Session 4A: Modern maintenance tools and technologies Chair: <i>Constantin Moldoveanu, Dr. Ing., Technical Expert, NOVA INDUSTRIAL SA</i>	
	CIGRÉ 127 – Condition Assessment with Predictive Maintenance Modelling <i>A.B. Jonasson - ABJ&RGK Engineering, B.D. Evensen - Statnett , T. Ohnstad – Statnett , I. Eyfells - Landsnet, T. Gudmundsson – Landsnet, W. Marshall – LineTech Consulting, Iceland-Norway</i>	
	CIGRÉ 184 – Condition Management – Decision Ground and Prioritisation <i>C. Diaconu, I. Hațegan, M. Florea, C. Bărbulescu – CNTEE Transelectrica S.A., România</i>	
	CIGRÉ 178 – Efficient – paperless maintenance complements and add value to the existing maintenance process <i>M. Gabrovšek – Miga D.O.O., M. Kovač , M. Gabrovšek – C&G Skupina D.O.O., V. Lovrenčič – C&G D.O.O. Ljubljana, R. Tomažič, D. Kozjek – Elektro Slovenia</i>	
	CIGRÉ 152 – Live maintenance on high voltage equipments in substations <i>S. Gal – CNTEE Transelectrica SA, M. Oltean, T. Făgărășan, I. Sevastre, L. Brabete – SMART SA Sibiu Branch, România</i>	
	CIGRÉ 172 – On-site transformer drying method by oil circulation <i>I. Stancu, Trafo Proiect Bucharest, România</i>	
	CIGRÉ 140 – A Procedure for Selecting Suppliers of Medium and Large Transformers <i>S. RYDER- Doble PowerTest, UK, L. Cornelissen, P. Leemans & F. Seghers – Elia Engineering, Belgium</i>	
	10:30 – 11:00	Coffee Break
11:00 – 12:00	Tutorial no. 5 Guide for transformer maintenance (CIGRÉ WG A2.34) <i>Constantin Moldoveanu, Dr. Ing., Technical Expert, NOVA INDUSTRIAL SA</i>	
12:00-13:00	CIGRÉ 133 - Power transformer on load tap changer condition assessment using off line dynamic contact resistance measurements <i>T. Noonan & B. Diggin, ESBI, Ireland</i>	
	CIGRÉ 202 - Recent developments concerning the Investment Works Risk Management in the Romanian Power Grid Company - Transelectrica SA <i>I. T. POP, C. DIACONU, F. RADUCANU - CNTEE Transelectrica, C. MUNTEANU, Technical University of Cluj-Napoca, România</i>	
	CIGRÉ 206 - Practical Considerations for Applying Process Bus. IEC 61850 Process Bus <i>R. Hunt, P. Gaggero, J.Herrmann - GE Digital Energy</i>	

	<p>CIGRÉ 179 - Power flow analysis in electric networks under conditions of missing data <i>C. Bărbulescu – CNTEE Transelectrica S.A., G. Grigoraș, G. Cârțină - "Gheorghe Asachi" Technical University of Iași, România</i></p>
	<p>CIGRÉ 165 – Identification of Crack in Variable Cross Section Beam Using Particle Swarm Optimization and Artificial Neural Network <i>M. Karimi, B. Asmar, G. Azizpour , F. Nazari – Bu-Ali Sina University, Hamedan, Iran, S. Baghalian – Young Researchers Club, Hamedan Branch, Islamic Azad University, Hamedan, Iran</i></p>
	<p>CIGRÉ 173 – Identification of Crack in Functionally Graded Beams Using Artificial Neural Network <i>H. Aminpour- Shahid Chamran University, Ahvaz, Iran, S. Baghalian, F. Nazari – Young Researchers Club, Hamedan Branch, Islamic Azad University, Hamedan, Iran, M. Karimi, B. Asmar – Bu-Ali Sina University, Hamedan, Iran</i></p>
	<p>CIGRÉ 174 – Applying Genetic Algorithm for Identification of Crack in Circular Cross Section Beams <i>B. Asmar, M. Karimi , M. Behzadi – Bu-Ali Sina University, Hamedan, Iran, M.A. Kazemi, F. Nazari – Young Researchers Club, Hamedan Branch, Islamic Azad University, Hamedan, Iran</i></p>
	<p>CIGRÉ 189 – The Effect of External Forces on Vibration of BFW Pump <i>H. Karimi, K. Siavashi, J. Ghaseminejad – CM Department of Zagros Petrochemical Company, Iran</i></p>
13:00 – 14:00	Lunch & Break
14:00 – 18:00	Visits – Bucharest
19:00 – 22:00	Conference Networking Party

Friday September 23, 2011, Atlas Conference Room	
	<p>Session 4B: Modern maintenance tools and technologies Chair: Mr. Umberto Cosmai, Italy</p>
	<p>CIGRÉ 193 - Online wireless PD monitoring system for detection of contamination over high voltage power overhead transmission lines <i>A. Levinzon, D. Kottick - Israel Electric Company (IEC), R. Knijnik, L. Frenkel – Metrycom, Israel</i></p>
	<p>CIGRÉ 183 - Behavior of Romanian Overhead Lines in operation <i>E. Kaytar, B. Ciurumelea, N. Matei – ISPE (Institute for Studies and Power Engineering), România</i></p>
09:00 - 10:30	<p>CIGRÉ 196 - On-line assessment of electrical and mechanical condition of overhead power lines <i>C. Matea - CNTEE Transelectrica SA , C. Moldoveanu - Nova Industrial SA, România, R. Bernard & P. Arnez - Flycom d.o.o., Slovenia</i></p>
	<p>CIGRÉ 158 - Unified status evaluation for reliability assessment of overhead power grids <i>J. Gomes Mota, Albatroz Engineering , Portugal</i></p>
	<p>CIGRÉ 204 - Real-Time Rating of OHL Monitored parameters <i>L. Niculae - Nexans, România</i></p>
	<p>CIGRÉ 159 - Commissioning tests analysis on a step-up transformer 19/400kV 500MVA <i>C. Mantakas, G. G. Pilichou - Terna S.A., N. Kapetanios, A. Arapakis - Public Power Corp. S.A. Transmission System, V. G. Samoilis – ex. Public Power Corp. S.A. Transmission System, Greece</i></p>
10:30 - 11:00	Coffee Break
11:00 - 12:00	<p>Tutorial No. 6 - Assessment of Conductor Vibration Severity <i>Mr. Umberto Cosmai, Italy, Convenor CIGRÉ WG B2.25</i></p>
12:00 –13:00	<p>CIGRÉ 171 - Criticality Indices for Lines and Substations <i>Authors: L. C. Pinto, J. Casaca - REN – Rede Eléctrica Nacional, Portugal</i></p>
	<p>CIGRÉ 126 - New On-line Methods to Detect Rotor Insulation Problems <i>M. Sasic, Iris Power LP, Canada</i></p>
	<p>CIGRÉ 175 - Transformer oil analysis. The method for prevent costly failures in power transformers - trends, impacts and outlook. <i>M. Grisar, Israel Electric Corp. Ltd, Israel</i></p>

	CIGRÉ 200 - Solutions for icing prevention M.L.GOIA - RNC-WEC , <i>România</i>	
13:00 - 13:15	Closing Plenary	
14:30 - 18.00	Technical Visits – Bucuresti Sud Substation	

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