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UNIVERSITATEA TEHNICA DIN
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S.C. ELECTRICA DISTRIBUTIE
TRANSILVANIA NORD S.A.



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MPS 2010

CLUJ-NAPOCA, ROMANIA

**LOCATION: SC ELECTRICA DISTRIBUTIE TRANSILVANIA NORD SA
STR. ILIE MACELARU 28A, CLUJ-NAPOCA**

PROGRAM

Tuesday / Marți, 18 May 2010

16⁰⁰-20⁰⁰ Registration opened* / Deschidere înregistrare*

Location: "Sport" Hotel

19⁰⁰ -23⁰⁰ Welcome cocktail / Cocktail de bun venit

Location: "Sport" Hotel Restaurant

Wednesday / Miercuri, 19 May 2010

10⁰⁰ -11¹⁵ Opening Ceremony / Festivitate de deschidere

Plenary talk: "SMART GRID: un concept devenit realitate"



11¹⁵ – 11³⁰ Coffee break / Pauza de cafea

11³⁰ -13⁰⁰ Session / Lucrări pe secțiuni

13⁰⁰ -15⁰⁰ Lunch / Pauza de masa

15⁰⁰ -17⁰⁰ Session / Lucrări pe secțiuni

17⁰⁰ -17³⁰ Coffee break / Pauza de cafea

17³⁰ -19⁰⁰ Session / Lucrări pe secțiuni

Thursday / Joi, 20 May 2010

9⁰⁰ -11⁰⁰ Session / Lucrări pe secțiuni

11⁰⁰ -11³⁰ Coffee break / Pauza de cafea

11³⁰ -13³⁰ Session / Lucrări pe secțiuni

13³⁰ -15⁰⁰ Lunch / Pauza de masa

15⁰⁰ -18⁰⁰ Companies Round tables/ Mese Rotunde companii

19⁰⁰ -23⁰⁰ Conference Banquet / Cina festiva

Location: "Da Vinci" Hotel Restaurant – Sponsor



Friday / Vineri, 21 May 2010

10⁰⁰ -12⁰⁰ Session / Lucrari pe sectiuni

12⁰⁰ -12³⁰ Closing ceremony / Festivitate de închidere

*Registration will be open also on 19th and 20th of May 2010 at Electrica Distributie Transilvania Nord SA location / Înregistrarea este posibilă și în zilele de 19 și 20 Mai 2010 la locația de desfășurare a Conferinței, anume sediul FDEE Electrica Distributie Transilvania Nord SA (str. Ilie Macelarului 28A).



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Wednesday / Miercuri, 19 May 2010

11³⁰ - 13⁰⁰

MODERN TRANSMISSION SYSTEM 1

Chairmen: Gal S. and Oltean M.

1. HAȚEGAN, I., DIACONU, C., BĂRBULESCU, C., FLOREA, M. **Monitoring the Operational Behaviour of Installations from the Electricity Transmission Grid – Source of Information for Maintenance Strategies**
2. ARDELEAN, I., CHIOSA, N., SINCA, B., MIHAI, M. **Considerations regarding the reconductoring opportunity analysis of 220 kV OHL D.C. Porțile de Fier – Reșița**
3. VISAN, G., RADUCANU, F., POP, I. T., MUNTEANU, C., RACASAN, A., PACURAR, C. **Risk Management for the Investment Works in the Romanian Power Grid Company-Transelectrica SA**
4. VORONCA, S. L. **Risk Analysis and Risk Management. Development of Risk Indicators in Electricity Transmission Companies**
5. VÂLCIU, A., RODEAN, I., OLTEAN, M., MORAR, D. **National Power System Management Optimization By Developing Live Works**
6. SABAU, J., FOFANA, I., GAL, S., OLTEAN, M. **Inoxidable Oil-Paper Insulation in Free Breathing Power Transformers**

GENERAL ELECTROTECHNICS 1

Chairmen: Topa V. and Chatziathanasiou V.

1. ANDREI, I., CĂCIULAN, E., DAN, D., CIUPRINA, G., IOAN, D. **Matlab Based Parallel Deterministic Optimization of the Loney's Solenoid**
2. DUMITRIU, L., IORDACHE, M. **Generation of the Transfer Functions for MIMO Systems**
3. ANTONIADIS, A., ANDREOU, G.T., CHATZIATHANASIOU, V., KADI, S. **Temperature Field Analysis in the Vicinity of Underground Cables – A Finite Element Approach**
4. PURCAR, M., MUNTEAN, F., MAXIM, N., PACURAR, C., GARVASUC, O., GRINDEL, L., TOPA, V., MUNTEANU, C. **Optimal Design of the Deposited Layer Thickness during the Electroplating Process**
5. MICU, D., POPESCU, V., MICU, A. **Kelvin Transform Used in the Calculation of Image Charges for Two Conducting Spheres**
6. DESIDERI, D., MIRON, O., MASCHIO, A., MICU, D. **Reconstruction of an Equivalent Magnetostatic Source of a Magnetron Sputtering Device**
7. GYÖRGY, K., CHINDRIȘ, M. **Different methods for theoretical modeling and simulation of reactive sputtering process**

15⁰⁰ - 17⁰⁰

ELECTROMAGNETIC COMPATIBILITY AND ENVIRONMENTAL PROTECTION 1

Chairmen: Micu D and Cziker A.

1. IACOB, A., ALEXANDRESCU, R. M., SALCEANU, C., IONESCU, I., RACOVITAN, I. **Transmitting Options for Data Acquired from Power Quality Parameter Measurements over a Public Lighting Feeding Network**
2. LUNGOCI, G., DOBRE, I., NAGY, S., DAMIR, G. **The Influence of Some Consumers on Power Quality**
3. POCAN, I., MUNTEANU, C., HEBEDEAN, C., PLEȘA, C., MORAR, R., MUNTEANU, I. O., SUĂRĂȘAN, I. **Conducted Emissions of "The Assembly Corona Electrostatic Separator –High Voltage Source" and Solutions to Reduce them**
4. CISMAȘIU, D. **DC-DC Converters in Universal-Input PFC Circuits**
5. MAHALU, G., PENTIUC, R. **Seismic Building-Stabilizing Gyroscopic System**
6. ALBU, H. C., POP, F. **Evaluation of Power Quality Problems in Office Buildings**
7. MILICI, L. D., IRIMIA, I., MILICI, M. R., IRIMIA, D. **Study of Architecture Used in Wireless Monitoring Power Plant**
8. IRIMIA, I., CHITEALĂ, N.F., MILICI, M. R., POTORAC, A. **Study of Using Digital Wireless Networks in Energy Monitoring Enplacements**

MODERN POWER SYSTEM ANALYSIS AND SIMULATION 1

Chairmen: Chindris M. and Toader D.

1. BINDIU, R., CHINDRIȘ, M., POP, G. V., GECAN, C. O. **Forecasting Spot Base Electricity Price in Romania using Artificial Neural Networks and ARIMA Time Series Model**
2. CZIKER, A., MIRON, A., CHINDRIȘ, M., UNGUREANU, S. **The Load Curves Identification and Classification**
3. GHEORGHE, D., CHINDRIȘ, M., CZIKER, A., VASILIU, R. B. **Fundamental Frequency Estimation Using Wavelet Denoising Techniques**
4. TOADER, D., HARAGUS, S., BLAI, C., CATA, I., HATEGAN, I., RUSET, P. **PSpice Simulation of Single Phase Faults in Medium Voltage Electrical Networks**
5. MURESAN, V. **Spectral Estimation Techniques - an Alternative to the Fourier Transform**
6. TOMOIAGĂ, B., CHINDRIȘ, M., CZIKER, A., MIRON, A. **Program for Load Flow Calculation on Unbalanced and Harmonic Polluted Radial Electric Systems**
7. DOMÍNGUEZ-NAVARRO, J. A., BAYOD, A. A. **An Analytical Reliability Evaluation Approach for Planning Methods**
8. VASILIU, R. B., CHINDRIȘ, M., GHEORGHE, D.N. **Present Solutions to Reduce Consumption of Electricity in Public Lighting Systems**

Wednesday / Miercuri, 19 May 2010

17³⁰ - 19⁰⁰

MODERN DISTRIBUTION SYSTEMS 1

Chairmen: Maier V. and Raider L.

1. MAIER, V., MOLDOVAN, H. A., BELEIU, H. GH., MURESAN, P. D. **Power Transformer Electrical Parameters Determination by Monitoring Permanents Regimes**
2. MAIER, V., REIDER, L., PAVEL, S. GH., NEDELICU, S. **Demand Powers and Voltage Losses in Open Loop Distribution Networks for Domestic End-Users**
3. MATEAS, M. **Low voltage electrical network organizing based on updated total economical costs**
4. POP, G. V., CHINDRIS, M., GECAN, C. O., BINDIU, R. **Power Losses Evaluation Method in Transformers Operated in Harmonic Polluted Systems**
5. VLASE, S., DUTA, M., POPESCU, S., SALCEANU, C., DOBREA, C., STEFAN, L. **Local Monitoring System of the Permissible Temperature for the Low Voltage Metal-Enclosed Switchgear and Control Gear**

MODERN TRANSMISSION SYSTEM 2

Chairmen: Toader C. and Nicolae P.

1. SIRBU, I. G., NICOLAE, P. M., BOJOI, R. **Aspects on the Simulation Model of an Electric Transportation System**
2. SACERDOTIANU, D., HUREZEANU, I., MARINESCU, A., MANOLEA, GH., PURCARU, I. **Modern Equipment for Monitoring and Diagnosis of Transformer Substations, Implemented in Electric Retechnologized Substations in Romania**
3. RUSU, I. **Absorbent Water Battery set up in the Tank of Oil Transformers**
4. RUSU, I. **Mechanical protection of aerian electric lines at rime and wind**
5. CUJBĂ, T. O., CERNOMAZU, D. **Current Solutions in the Field of Gas Relays**
6. NICOLAE, P.M. MOTOCU, M., NICOLAE, I.D., STĂNESCU, D.G., **Improvement of Operation Safeness and Efficiency for a Power Group through the Modernization of 400 kV Electric Stations**



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Thursday / Joi, 20 May 2010

9⁰⁰ – 11⁰⁰

RENEWABLE ENERGY AND THEIR INTEGRATION IN NATIONAL POWER GRID 1

Chairmen: Vadan I. and Buda C.

1. BURLOIU, C. A., ALBERT, H., ILISIU, D., ASAN, V., POPESCU, V. **Wind Power Plants Participation to the Voltage – Reactive Power Control in the Operation of National Power System. Norms – Possibilities – Necessity**
2. CORREIRA, G., SUMPER, A., CASTRO, R., VILLAFILA-ROBLES, R., SUDRIA-ANDREU, A. **Modeling Wind Turbine Generation Systems for Load Flow and Short Circuit**
3. Demean, A., TOPA, V., RIZZO, R., BELLUCCI, M. **Influence of the Generators' Types on the Reactive Power Capability of a Wind Park**
4. Demean, A., TOPA, V., RIZZO, R., BELLUCCI, M. **Influence of HV Equipments on the Reactive Power Capability of a Wind Park**
5. GECAN, C. O., CHINDRIȘ, M., BINDIU, R., POP, G. V. **A Generalized Photovoltaic Model for Real Operating Conditions**
6. SOREA, N., CERNOMAZU, D. **Considerations Regarding the Use of Dish/Stirling Systems in Heliotechnics**
7. CERNOMAZU, D., MANDICI, L., SOREA, N., UNGUREANU, C. **Actual Stage of the Solutions in the Field of the Solar Engines Developed At the „Ștefan Cel Mare” University Of Suceava**

MODERN DISTRIBUTION SYSTEMS 2

Chairmen: Pavel S. and Sarchiz D.

1. ARDELEANU, M. E., MANDACHE, L., MARINESCU, A. **Utilization of Damped AC Voltage to Evaluate the Condition of MV Electrical Cables Insulation**
2. MARTINEAC, C., SURDU, F., ARDELEAN, S., VERMEȘAN, C., ȘTEFĂNESCU, S. **Comparative Study for Calculation Methods for Active Energy losses along 110 kV Overhead Lines**
3. DUB, V., SARCHIZ, D., BUCUR, D. **Measuring Power Grids Robustness Oriented Enlargement Degree**
4. DULĂU, M., SARCHIZ, D., BUCUR, D. **Expert System for Maintenance Actions in Transmission and Distribution Networks**
5. JURAVLE, D., GANEA, T., DALALAU, M., VAIDA, B., DOBRE, I., CONSTANDACHE, N. **Performant Informatics Systems Used In Energy Distribution**
6. MUREȘAN, P. D., MAIER, V., MOLDOVAN, H., BELEIU, H. **Comparative Analysis of the Estimating Methods for the Electrical Parameters Afferted to the Electrical Energy Distribution Systems Elements**
7. PAVEL, S. GH., TĂMAȘ, A., MAIER, V., BIROU, I., NEDELICU, S. **Medium Voltage Network Efficiency Determination for the Urban Zone of Cluj Using Paladin Design Base**

11³⁰ – 13³⁰

ELECTROMAGNETIC COMPATIBILITY AND ENVIRONMENTAL PROTECTION 2

Chairmen: Visan G. and Munteanu C.

1. APETREI, D., POSTOLACHE, P., SILVAȘ, I. **Power Quality Time Series Analysis Improved Means to Extract Events**
2. STANESCU, C., GAL, S., PISPIRIS, S., POSTOLACHE, P. **The TSO's Power Quality Monitoring Systems**
3. BELEIU, H. G., MAIER, V., MUREȘAN, P. D., MOLDOVAN, H. A. **Effects and Methods of Estimating Power Quality Issues**
4. GOLOVANOV, N., LIPAN, L., PISICĂ, I., PORUMB, R., POSTOLACHE, P., TOADER, C. **Analysis of Single Line Voltage Sags with Symmetrical Components**
5. MUNTEANU, C., VISAN, G., SERBAN, T., MERDAN, E., POP, I. T., SUCALA, I. **Recent Advances on the Electromagnetic Field Analysis inside High Voltage Substations**
6. CZIKER, A., CHINDRIȘ, M., MIRON, A. **Power Quality Indices of the Real Operating States of Electrical Distribution Grids**
7. MIRON, A., CZIKER, A., CHINDRIȘ, M. **The Interaction between the Electrical Energy Production and the Romanian Environment**
8. MIRON, A., CZIKER, A., CHINDRIȘ, M. **Propagation of Conducted Electromagnetic Disturbances in Distribution Power Grids**

MODERN POWER SYSTEM ANALYSIS AND SIMULATION 2

Chairmen: Istrate M. and Varvara V.

1. BHARAMIAZAR, A., NAJAFISAADATPISHEH, B. **HTS Cables Impact on Dynamic and Transient Stability in Power Networks**
2. BOTEZAN, A., BĂLAN, H., TÎRNOVAN, R., VĂDAN, I., ȘTEFĂNESCU, S. **Real Time Simulation of a Single Phase Shunt Active Filter**
3. BOTEZAN, A., MAIER, V., ȘTEFĂNESCU, S. **Reference Current Estimation for Shunt Active Filter Control**
4. ISTRATE, M., VARVARA, V., DRAGOMIR, M. **The Influence of the Power Frequency on the Accuracy of the Synchrophasors Measurements**
5. MACHIDON, D., ISTRATE, M., GUȘĂ, M., DRAGOMIR, M. **Rolling Sphere Method Application for HV Lines**
6. MATICA, R. I., MATICA, L. M., DALE, L. **Considerations about Electrical Networks in Non-symmetric Situations**
7. RATA, M., RATA, G., BOBRIC, E. C. **Automatically Switching of Backup Power Equipment for Students Teaching**
8. SÎRBU, I. G. **Software Tools for Electrical Signals Processing**

Friday / Vineri, 21 May 2010

10⁰⁰ – 12⁰⁰

GENERAL ELECTROTECHNICS 2

Chairmen: Munteanu C. and Brojboiu M.

RENEWABLE ENERGY AND THEIR INTEGRATION IN NATIONAL POWER GRID 2

Chairmen: Tirnovan R. and Chindris M.

1. IRIMIA, D., CERNOMAZU, D. **Mathematical Model for Electric Resistance Calculus in Solid Plate Mediums**
2. TRIFA, V., HAO, C., RADULESCU, M. **Magneto-static Model of an Outer-Rotor Reluctance Motor for Light Electric Vehicles**
3. BROJBOIU, M., IVANOV, V. **Concerning the Operating Regime of the Magnetron**
4. CRET, R., DĂRĂBANT, L. **Numerical Simulations for Estimating the Effective Permittivity of Matrix Dielectric Mixtures**
5. PLEȘA, C., POCAN, I., VĂDAN, I., MUNTEANU, C., HEBEDEAN, C., MORAR, R., PLEȘA, T. **Horizontal Laboratory Vibratory Conveyors Electromagnetic Compatible for Electro separators**
8. MUNTEANU, C., GRINDEI, L., PACURAR, C., GARVASUC, O., PURCAR, M., TOPA, V. **Multi-Objective Optimization using a Strength Pareto Evolutionary Algorithm**
6. RATIU, I., RATIU, V., MORAR, R. **Experimental Research on Determining the Specific Load of the Radiating Cables**
7. RATIU, I., RATIU, V., BILICI, M., MORAR, R. **Ambient Heating Systems with Electric Radiant Cables**

1. BREAZ, E., TIRNOVAN, R., VADAN, I., LEACH, F. **PEM Fuel Cell System for Didactical Application**
2. TIRNOVAN, R., BREAZ, E., VADAN, I., BALAN, H., BOTEZAN, A. **Analysis of the Dynamic Performance of a Proton Exchange Membrane Fuel Cell Stack for Stand-Alone Applications**
3. LEACH, F., VADAN, I., MUNTEANU, R. A., COZORICI, I., CAPATANA, D. **Modelling of a Small Wind Power Generation System**
4. ILISIU, D., MUNTEANU, C. **Unit Tests for Capability to Deliver Ancillary Services**
5. ILISIU, D. **Technical Requirements Similarity between Classical and Renewable Units**
6. KOVÁCS, B. S., POP, F. **Wind Monitoring Near the Town Târnăveni, Meteorological Station Bobohalma**
7. MONDOC, B., POP, F. **Factors Influencing the Performance of a Photovoltaic Power Plant**



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