

2009

TABLE OF CONTENTS

Session I

RELIABILITY AND SYSTEMS ENERGY QUALITY SERVICES

1.1. UTILIZATION THE MARKOV THEORY PROCESSES TO BACKGROUND THE PRACTICE OPPORTUNITIES OF CORRECTIVE MAINTENANCE FOR POWER EQUIPMENT

D. ALBUT-DANA, M. CĂRLAN, S. DZITAC, E. PROCA, P. BOCANETE, E. BARLA, A.C. BLAGA

1.2. OPTIMAL MANAGEMENT OF PARTIAL USED EQUIPMENT ON STOCK AT AN ELECTRICAL STATION (MODEL ELMAGHRABY)

D. ALBUT-DANA, M. CĂRLAN, S. DZITAC, N. RANCOV, E. BARLA, A.C. BLAGA, A.SAS

1.3. EEG ANALYSIS APPLICATION USING MATLAB

I. BARDA, R. TUDUCE

1.4. METHOD FOR AVAILABILITY SIMULATION OF THERMO-GENERATOR GROUPS

G. BENDEA, C. SECUI, C. BENDEA

1.5. IMPROVING THE INDICATORS OF CONTINUITY IN ELECTRICAL DISTRIBUTION NETWORKS (RED) BY USING THE FAULT DETECTING SYSTEMS

I. BOJA, N. COROIU

1.6. A POWER QUALITY PROBLEM ON LOW VOLTAGE DISTRIBUTION LINES

M.I. BUZDUGAN, E. SIMION

1.7. TESTING AND DIAGNOSIS METHODS FOR POWER TRANSFORMERS

C.A. CIULAVU

1.8. MULTICRITERIA DECISIONAL PROCESS OPTIMIZATION BASED ON METHODS OF ENTROPY, CLANS AND AFFINITIES

S. DZITAC, M. CĂRLAN, D. ALBUT-DANA, L.C. CĂȚRLAN, C. FLOREA, E. BARLA

1.9. ASSESSMENT METHODS OF ELECTRIC STATIONS RELIABILITY

S. DZITAC, M. CĂRLAN, D. ALBUT-DANA, L.C. CĂȚRLAN, E. BARLA

1.10. THE INFLUENCE OF THE ASYMMETRICAL MODE OF THE RELIABILITY ON THE QUALITY ELECTRIC ENERGY OF THE DISTRIBUTING NETWORKS

F. ERCHAN

1.11. PREVISIONAL RELIABILITY ANALYSIS OF ASG BY REPORTING AT STRUCTURE AND ITS FUNCTIONS IN LPHD

I. FELEA, D. MEIANU, N. RANCOV

1.12. DEFINING TECHNOLOGICAL AND RELIABILITY FUNCTIONS OF EQUIPMENT FROM LPHD – A PREMISE IN THESE PREVISIONAL RELIABILITY MODELING

I. FELEA, D. MEIANU, E. BARLA

1.13. ABOUT THE DEGRADATION MECHANISM OF UNDERGROUND POWER CABLES

I. LINGVAY, C. GROZA, I. CSUZI, C. LINGVAY, O. CIOGESCU

1.14. ABOUT NON-SINUSOIDAL SITUATIONS ENERGETICS EFFECTS IN ELECTRICAL NETWORKS

L. MATICA

1.15. CONSIDERATIONS CONCERNING EVALUATION OF NON-SYMMETRY IN ELECTRICAL NETWORKS BY SUPPLEMENTARY POWER LOSSES COMPUTATION

R. MATICA, L. MATICA

1.16. ASPECTS REGARDING MYSQL QUERY OPTIMIZATION Â

V. MOLDOVAN, N. RANCOV

1.17. OPERATIONAL RELIABILITY IN TRANSMISSION POWER GRID Â

D. MORAR, B.D. GUZUN, C. MUCICHESCU, I. RODEAN

1.18. MANAGEMENT OF EXPERT SYSTEMS APPLICABLE TO HIGHER EDUCATION IN NATIONAL UNIVERSITIES Â

M. NICOLAU, M. VADAN, I.R. PACUREANU, C. PADURARIU, A. MALUREANU, I. PREDA

1.19. STUDY REGARDING THE RELIABILITY OF DISCONNECTORS USED IN HIGHT VOLTAGE SUBSTATIONS  
S.D.E.E BRASOV Â

D. JURAVLE, I.R. PACUREANU

1.20. THE RELIABILITY OF PROTECTION IMPLEMENTED IN LOW DISTRIBUTION NETWORK FROM BRASOV  
CITY Â

I.R. PACUREANU, D. JURAVLE, D. ALBUT-DANA

1.21. LOADS AND OPERATING CONDITIONS INFLUENCE ON THE HARMONICS CURRENTS FLOW IN A  
DISTRIBUTION SYSTEM NETWORK Â

L. PETREAN, M. HORGOS, L. NEAMT

1.22. DETERMINATION OF POWER LOSSES IN TRANSFORMERS WORKING IN UNBALANCED AND HARMONIC  
POLLUTED NETWORKS Â

G. POP, M. CHINDRIS, R. BINDIU

1.23. THE INFLUENCE OF SHORT-CIRCUIT CURRENTS ON THE RELIABILITY OF THE DISTRIBUTIVE ELECTRIC SYSTEMS

V. POPESCU

1.24. APPLICATION OF STOCHASTIC PETRI NETS MODELING FOR STUDYING THE RELIABILITY OF ELECTRICAL SUBSTATIONS

D. POPOVICI, I. FELEA, S. POPOVICI

1.25. ASPECTS REGARDING EXPERIMENTAL DETERMINATION OF THERMAL INERTIA AT ASYNCHRONOUS MOTORS OPERATING IN HARMONICS REGIME

N. RANCOV

1.26. EXPERIMENTAL ANALYSIS OF THERMAL INERTIA AT ELECTRICAL TRANSFORMERS OPERATING IN HARMONICS REGIME

N. RANCOV, V. MOLDOVAN, D. ALBUT-DANA

1.27. APPLICATIONS OF POWER TRANSMISSION AND DISTRIBUTION NETWORKS BASED ON THE MATHEMATICAL MODEL OF MAINTENANCE

D. SARCHIZ, D. BICA, D. BUCUR

1.28. RELIABILITY INDICES ASSESSMENT OF POWER DISTRIBUTION SUBSTATIONS CONSIDERING THE LOAD TRANSFER AT THE CONSUMERS

D.C. SECUI, G.V. BENDEA

1.29. ANALYSIS OF THE DISTORTION STATE IN PUBLIC ELECTRICAL POWER SUPPLY SYSTEMS

V. VARVARA, G. GEORGESCU, B. NEAGU

Session II

RENEWABLE SOURCES OF ENERGY. SUSTAINABLE ENERGY TECHNOLOGIES

2.1. EXPLOITABILITY OF GEOTHERMAL RESOURCES IN PANNONIA DEPRESSION Â

C. ANTAL, A. SETEL, O. GAVRILESCU

2.2. EXPERIMENTAL MODELS TO USE GEOTHERMAL ENERGY Â

C. ANTAL, A. SETEL, O. GAVRILESCU

2.3. INFLUENCE OF SOME POLY-OXOMETALATES ON THE ELECTROCHEMICAL BEHAVIOR OF CARBON STEEL IN ACID MEDIA Â

G.E. BADEA, A. FODOR, D. IONITA, C. PORUMB, S. DZITAC, S. KATONA

2.4. HIGH SOLAR FRACTION HEATING AND COOLING SYSTEMS Â

C. BENDEA, M. RO^CA, K. KARITSAS

2.5. RECOVERING HEAT FROM DISCHARGED WATER FROM THE EMISSARY OF THE TREATMENT PLANT FROM ORADEA Â

A.C. BLAGA, E. GLIGOR

2.6. FUEL CELL â€“ A CONCEPTION IN WEAR OR A HOPEFUL FUTURE FOR RENEWABLE SOURCES OF ENERGY? Â

C. BOGU^

2.7. MANAGE PIPELINE INTEGRITY BY PREDICTING MITIGATING HIGH VOLTAGE AC INTERFERENCE Â

L. BORTELS, Marius PURCAR

2.8. RENEWABLE ENERGY AND INNOVATION FOR SUSTAINABLE GREENHOUSE DISTRICTS Â

C. CAMPIOTTI, G. ALONZO, A. BELMONTE, C. BIBBIANI, F. DI CARLO, F. DONDI, M. SCOCCIANI

2.9. PHOTOVOLTAIC SYSTEMS CONNECTED TO DISTRIBUTION GRID Â

N. COROIU, I. BOJA, M. CIUNGAN

2.10. ROMANIAN OFFSHORE WIND ENERGY POSSIBILITIES Â

C. NICOLAE, I. BOJA, C.T. DU^E, S. COROIU

2.11. SOLAR ENERGY USE IN THE PHOTOVOLTAIC INSTALLATIONS Â

E. DALE

2.12. MODELING THE THERMAL CHARACTERISTICS OF SOLAR PANELS Â

R.C. DINU, L. RUIENEANU, C. BRATU, F.E. IVAN

2.13. DETERMINATION OF ENERGY PRODUCTION OF THE WIND TURBINES Â

D. DRAGOMIR, N. GOLOVANOV, P. POSTOLACHE, C. TOADER

#### 2.14. ASPECTS REGARDING DC DISTRIBUTION SYSTEMS

C.O. GECAN, M. CHINDRIA, G.V POP

#### 2.15. TECHNIQUES FOR REMOVING NITROGEN AND PHOSPHORUS THROUGH CHEMICAL ADDITION

E. GLIGOR, A. C. BLAGA

#### 2.16. DEVELOPMENT OF DIRECT-USE PROJECTS

J. W. LUND

#### 2.17. ENERGY EFFICIENCY, RENEWABLE ENERGIES AND SUSTAINABILITY – THREE KEY FACTORS OF NEW ENERGY DEVELOPMENT STRATEGIES

K. POPOVSKI, S. POPOVSKA VASILEVSKA

#### 2.18. DYNAMIC BEHAVIOUR OF STRATIFIED DOWNDRAFT GASIFIERS

G. LAZAROIU, U. DESIDERI

#### 2.19. ENVIRONMENTAL IMPLICATIONS OF ENERGY PRODUCTION

I. MAIOR, G.E. BADEA, D.I. VIREANU, A. COJOCARU, S. C. PR RESCU

#### 2.20. ICEMENERG 2009 – RESEARCH FOR A BETTER LIFE

Gh. OLTEANU, D. ZLATANOVICI

2.21. WIND ENERGY FORECAST BASED ON DATA MINING

S.V. OPREA, B. ADELA

2.22. MODELLING WIND SPEED WITH NEURAL NETWORKS FOR MONITORING THE AIR POLLUTION

F. POPENTIU, A. LUNGU, R. CREOATEANU

2.23. SOLAR ENERGY FOR GREENHOUSES

S. POPOVSKA VASILEVSKA, K. POPOVSKI

2.24. DESIGN AND OPTIMIZATION OF PIPELINE CATHODIC PROTECTION SYSTEMS

M. PURCAR, L. BORTELS

2.25. A COMPLEX PILOT STATION USING RENEWABLE RESOURCES: SMALL HYDROPOWER, WIND TURBINE AND PHOTOVOLTAIC SYSTEMS

V. RADULESCU

2.26. POSSIBILITIES FOR GEOTHERMAL POWER GENERATION IN ROMANIA

M.G. ROACA, K. KARZTSAS, D. MENDRINOS

2.27. THE THERMODYNAMICS AND CORROSION OF WELDMENTS

S. SZABŐ, I. BAKOS

2.28. RENEWABLE ENERGY GENERATORS AND ELECTROMAGNETIC POLLUTION: A CASE STUDY ON RESIDENTIAL SOLAR ENERGY



G. VASILESCU, F. POPENTIU

2.29. INCREASED THERMAL EFFICIENCY OF THE COAL FIRED STEAM GENERATORS OPERATING AT THE COGENERATION POWER PLANT OF ORADEA

I. VASIU

2.30. METHOD FOR EVALUATION OF TECHNICAL STATE OF HYDROGENERATORS

D. ZLATANOVICI, R. ZLATANOVICI, C. CICIRONE, S. DUMITRESCU, D.G. BADEA, L.E. NOVAC

Session III

EVOLUTION OF POWER ELECTRIC SYSTEMS TRANSPORT AND DISTRIBUTION. ENERGY SYSTEMS PERFORMANCE

3.1. INFLUENCE OF HEAT TREATMENT ON THE PERFORMANCE OF AN Al-Zn-In ALLOY USED AT SACRIFICIAL ANODES

E.K. AHMIED, F.A. EMHMMED, M.A. KHALIL

3.2. THE POWER ELECTRIC AUDIT OF AN URBAN TRANSPORT OPERATOR

I. FELEA, M. CĂMPAN, F. DAN

3.3. EUROPEAN PERSPECTIVES IN CO<sub>2</sub> EMISSIONS REDUCTION FOR PASSENGER CARS

Gh. LAZAROIU, I. STAN, O.E. TAMAI

3.4. SOME ASPECTS OF USING UNDERGROUND PROTECTORS FOR PVC POWER CABLES

J. LELÄK, V. URMAN, J. PACKA

3.5. CONTRIBUTION TO DEVELOP A MODERN TECHNICAL SOLUTION FOR INCREASE OF MAINTENANCE AND RELIABILITY OF UNDERGROUND POWER LINES BY CORROSION CONTROL OF THE UNDERGROUND POWER CABLES

I. LINGVAY, C. LINGVAY, I. CSUZI

3.6. THE CONGESTION MANAGEMENT IN THE NATIONAL POWER SYSTEM

M. MIGA-PAPADOPOL

3.7. SMART GRIDS AND NETWORKS OF THE FUTURE

M. PAUN, N. COROIU

3.8. LIGHTING FOR MUSEUMS AND ART GALLERIES

C.L. PORUMB, I. PANTEA, G. BADEA

3.9. LIGHTING MODEL TO AN ART GALLERY

C.L. PORUMB, L. MUDURA, G. BADEA

3.10. BUILDINGS ENERGETICAL BALANCE INFLUENCES

F.E. STAN IVAN, I. MIRCEA, R.C. DINU

3.11. APPLIED MODERN SOLUTIONS FOR PROCESS AUTOMATION IN HIGH CAPACITY GENERATION UNITS

V. VAIDA, C. SAVULESCU

3.12. THEORETICAL VIEWS AND PRACTICAL ACHIEVEMENTS REGARDING THE SECONDARY CONTROL FROM POWER GENERATION UNITS OF THE ROMANIAN POWER SYSTEM Â

V. VAIDA, N. CODREANU, D. ILIĂIU

3.13. EFFICIENT UTILIZATION OF ENERGY IN THE PUBLIC SECTOR Â

V. RUGINA, M. RUGINA

3.14. EVALUATION AND MONITORING OF ENERGY EFFICIENCY MEASURES Â

V. RUGINA, A. BADEA

Session IV

MARKET AND STOCK-MARKET OF POWER. MANAGEMENT OF POWER SYSTEMS

4.1. DEDICATED SOFTWARE FOR OPTIMAL CHOICE OF ENERGY TARIFFS IN ROMANIA Â

R. BINDIU, M. CHINDRIĂ, C. GECAN

4.2. MANAGEMENT SYSTEM OF PUBLIC LIGHTING IN ORADEA CITY Â

I. BOJA, N. COROIU

4.3. INFORMATION SYSTEM A PREREQUISITE OF ECONOMIZING NATURAL RESOURCES Â

A. CARABULEA, N. STELEA, M. V DAN

4.4. SAFE OPERATION OF NATIONAL POWER SYSTEM IN THE FRAME OF ELECTRICITY MARKET LIBERALIZATION Â

M. CERNAT

4.5. RENEWABLE FUEL FOR THE PROFIT ABLENESS OF THE ENERGY PRODUCTION IN NATIONAL ENERGY SYSTEM'S THERMAL POWER PLANTS Â

I. D. GHEORGHIU, A. CARABULEA, L. POPPER

4.6. THE SENSIBILITY AT RISK OF THE AGILE PRODUCTION SYSTEMS Â

T. PAZITOR, A. POPESCU, N. STELEA, M. POPPER, G. POPPER, A. MALUREANU, A. PURCAREA, M. DUMITRESCU

4.7. MANAGEMENT OF EXPERT SYSTEMS APPLICABLE TO HIGHER EDUCATION IN NATIONAL UNIVERSITIES Â

C. POPESCU, C. BUCUR, I. NICOLAE, C. P DURARIU, I.R PACUREANU

4.8. THE REENGINEERING OF CUMULATED CONSUMPTIONS ADAPTED TO THE PROJECT MANAGEMENT OF NUCLEAR PLANTS Â

GH. POPESCU, C. POPESCU, G. ANA, I. PACUREANU, D. POPESCU, S.C. VALECA

4.9. HUMAN RESOURCES STRESS MANAGEMENT IN INDUSTRIALLY REENGINEERED ENERGY SYSTEMS Â

G. POPPER, M. POPPER, T. P ZITOR, M. V DAN, A. TUDOR, I. MOCANU, A. ALBEANU, DR. R.L. NICOLAE, M. NICOLAU

4.10. MODELS FOR OPTIMIZATION INDUSTRIAL SYSTEMS IN APPROACH OF GENETIC ALGORITMS Â

G. POPPER, M. POPPER, N. STELEA, M. V DAN, G. ANCA, GH. POPESCU, T. P ZITOR, M. POPESCU, D. POPESCU, C. SOFRONIE, I. NICOLAE, M. FRATU, S. GHERGHEL

4.11. THE MODELING OF DECISIONAL CUANTIC AND SUPERCUANTIC COMPUTERIZED PROCESSES IN NEUROGENETIC CONCEPT Â

M. POPPER, G. POPPER, L. POPPER, C. VĂ, JAEAC, D. RADA, D. BĂ, GU, C. BUCUR, C. SOFRONIE.

4.12. E-LEARNING- AN INNOVATIVE APPROACH OF USING A FLASH PLAYER SOFTWARE PLATFORM Â

C.L. PORUMB, C. GROZAV, G.E. BADEA, L. MUDURA

4.13. SOFTWARE REENGINEERING MODELED IN CONCEPT EVOLUTION SYSTEMS Â

P. RO^CAN, D. RO^CAN, M. POPPER, I. SAVA, T. P ZITOR, N. STELEA, M. V DAN, A. TUDOR, C. SOFRONIE, P.V.C. RO^CAN

4.14. SYSTEMS ANALYSIS AND DESIGN INFORMATION Â

D. RO^CAN, P. RO^CAN, N. CRĂ, Ž^MARU, P.V.C. RO^CAN

4.15. THE OPERATIONAL PROJECTING OF THE ENERGETICAL SYSTEMS IN ARHEMO-SYSTEMIC CONCEPTION Â

D. RO^CAN, P. RO^CAN, N. CRĂ, Ž^MARU, P.V.C. RO^CAN

4.16. HUMAN RESOURCE MANAGEMENT STRESS IN INDUSTRIAL RE-ENGINEERING CONCEPT Â

N. STELEA, M. VADAN, A. TUDOR, I. MOCANU, M. POPPER, G. POPPER, A. ALBEANU, R.I. NICOLAE

4.17. RE-ENGINEERING INPUTS CUMULATION OF ENERGOTECHNOLOGIC RESOURCES MODEL IN CONCEPT

## MANAGEMENT Â

P. TUDOR, D. JURAVLE , I. SAVA, C. SOFRONIE, R. P CUREANU, G. POPPER, M. POPPER, N. STELEA, M. V DAN, A. MALUREANU

### 4.18. ENERGY MARKET MONITORING Â

O. UNGUROIU, I. CR CIUN, M.S. PETRESCU

### 4.19. PROMOTION OF ENERGY EFFICIENCY UNDER THE ENERGY MARKET CONDITIONS Â

V. RUGINÍ, M. RUGINÍ, A. BADEA