

● Session Index

● Author Index

● Corporate Index

NETWORK COMPONENTS

Cable Design

- Economical 36 kV cable system for the Belgian network
Système de cable 36 kV économique pour le reseau Belge
F Musique, ELECTRABEL
J Becker, NEXANS BENELUX SA
- Evolution of the French MV cable system (includes summary in French)
F Bouanat, Draka Paricable
F Charles, Sagem
J H Fondeur, Pirelli Câbles et Systèmes SA
E Siméon, Nexans
C Boisseau, J M David, EDF
- The Gotland HVDC light project - experiences from trial and commercial operation
U Axelsson, A Holm, Vattenfall
C Liljegren, GEAB
M Åberg, K Eriksson, ABB Power Systems
O Tollerz, ABB High Voltage Cables

● Session Index

● Author Index

● Corporate Index

- Standardisation, prequalification, diagnostics, as part of cable system management (includes summary in French)

N van Schaik, E F Steennis, KEMA
J van Eerde, Pirelli Cables and Systems
B J Grotenhuis, REMU
A Kerstens, TKF Cables
M J van Riet, NUON
C J Verhoeven, Essent

Equipment Design

- Neutral grounding reactor for medium voltage networks

Impedance de compensation pour mise a la terre du neutre des reseaux moyenne tension

P Folliot, J M Boyer, S Bollé, ALSTOM

- Fast transients and their effect on transformer insulation: simulation and measurements

H De Herdt, J Declercq, Pauwels Trafo Belgium NV
T Sels, T Van Craenenbroeck, D Van Dommelen, Katholieke Universiteit Leuven

- Upgrading of compact load break switches to a circuit breaker function

A R A Pikkert, G C Schoonenberg, P R Voulon, Holec Medium Voltage

- A family of vacuum circuit-breakers with worldwide applications using common components (includes summary in French)

E Dullni, H Fink, M Heimbach, C Reuber, ABB Calor Emag Mittelspannung GmbH

- Innovative life-cycle concepts for medium-voltage switchgear on brown coal surface mining devices

S Ruhland, U Riedl, ALSTOM Sachsenwerk GmbH

● Session Index

● Author Index

● Corporate Index

- Costsaving and reliability improvement by using innovative technique for refurbishment of a substation

R Svensson, ABB Switchgear

W Lord, SwedPower

M Jarl, Vattenfall

- Advances in MV/LV substations

Evolution des postes de transformation MT/BT

T Grima, J F Faltermeier, Groupe Cahors

- Design of distribution cabins to withstand internal arcing (includes summary in French)

A Even, LABORELEC

Y Tits, D Goossenaerts, D Tenret, ELECTRABEL

J Vansantvoort, Inter-Regies

G Pietsch, C Humpert, RWTH Aachen

- Evolution of MV/LV substations - compact substations

J M Solans, C Prevé, R Farrán, R Muñoz, Schneider Electric

- Instruction panels for operating MV switchgear installed under cover in distribution networks

Panneaux didactiques pour manoeuvre de l'appareillage de coupure MT sous enveloppe installe sur les reseaux de distribution

A François, D Tenret, Y Tits, E Engel, G Weyckmans, D Vangulick, ELECTRABEL

Overhead Line Design

- Uprating using high-temperature electrical conductors

I Zamora, A J Mazón, University of the Basque Country

R Criado, C Alonso, Iberdrola SA

J R Saenz, University of the Basque Country

● Session Index

● Author Index

● Corporate Index

- An investigation on composite insulators; development and testing (includes summary in French)
M J Geramian, F Estifa, A Tajian, B Elmdoust, Niroo Research Institute (NRI)
- An assessment on brittle fracture of composite insulators' rods and factors improving their properties
M J Geramian, Z Hamnabard, M Mohseni, S Dolatshahi, Niroo Research Institute (NRI)
- Low cost secondary surface network - LCSSN
F C Melo, J A Ragone Filho, M J Ferreira, Companhia Energética de Minas Gerais - CEMIG
- 20 kV overhead lines with covered conductors
Lignes de 20kV avec câbles sous gaine plastique
W Panosch, EVN AG
K Schöngrundner, Mosdorfer GmbH
K Kominek, Schwechater Kabelwerke GmbH

Electrotechnical Materials

- Specialized polymer concrete composite material for in-situ cleansing/improvement of transformer oil
M Gunasekaran, Sekar Enterprises
- Thermal endurance of high temperature fiber reinforced cellulose insulation
S J Ferrito, R L Stegehuis, Cooper Power Systems

Maintenance of the Network and Substation Equipment

- A novel concept for substation maintenance management
R Nordin, Vattenfall Utveckling AB, Power Technology R&D
L-G Nielsen, Vattenfall Normät AB
A Vikman, Vattenfall Östnät AB

● Session Index

● Author Index

● Corporate Index

- Optimisation of overhead medium voltage line expert evaluation
Optimisation de l'expertise de lignes aeriennes moyenne tension
D Mondiere, O Vanackere, EDF R&D
- Application of a diagnostic and predictive maintenance system at an HV/MV station
G Moiana, F Gerli, AEM Elettricità SpA
G Zafferani, Ampere SpA
R Levi, Doble Engineering Company
- Designing and implementing a maintenance management system with an expert support system: methodology, implementation, expert IT-system, achieved cost reductions
P J M Hafkamp, KEMA T&D Power
G Schutters, Interelectra cvba
- Condition assessment of power transmission and distribution components
G J Cliteur, J M Wetzter, KEMA T&D Power
- A comprehensive approach to reviewing the condition of 22kV cables in Prague (includes summary in French)
M Singer, M Schneider, M Lukes, Prazská energetika, a.s.
M Singer, CERGE-EI, Charles University
- Condition based maintenance on MV cable circuits as part of asset management; philosophy, diagnostic methods, experiences, results and the future (includes summary in French)
N van Schaik, E F Steenis, KEMA T&D Power
A van Dam, ENECO
B J Grotenhuis, REMU
M J van Riet, NUON
C J Verhoeven, Essent

● Session Index

● Author Index

● Corporate Index

- Condition based maintenance of MV power cable systems on the basis of advanced PD diagnostics
F J Wester, NUON
E Gulski, J J Smit, Delft University of Technology
- Optimising the maintenance of 11kV oil filled switchgear - an example of condition based decision making
D T Hughes, EA Technology Ltd
- Technical diagnostics for power apparatus
H Sander, Kärntner Elektrizitäts AG
J Schwab, Grazer Stadtwerke
M Muhr, Technische Universität Graz

Lightning Arresters Design

- Ecological design applied to polymer housed surge arresters
Eco-conception appliquée aux parafoudres avec enveloppe synthétique
M Hassanzadeh, F Malpièce, C Bilhère, ALSTOM Parafoudres SA
- Measuring the energy handling capability of metal oxide varistors (includes summary in French)
M M R Ahmed, G A Putrus, L Ran, R Penlington, University of Northumbria at Newcastle
- Surge arresters for cable sheath preventing power losses in MV networks
A Heiss, Energie-AG (EAM)
G Balzer, Darmstadt University of Technology
O Schmitt, ABB Calor Emag Schaltanlagen AG
B Richter, ABB High Voltage Technologies AG

● Session Index

● Author Index

● Corporate Index

- The durability and performance of polymer housed metal oxide surge arresters under impulse current stresses (includes summary in French)
K Lahti, K Kannus, K Nousiainen, Tampere University of Technology

Environmental Aspects of Substations and Switchgear

- How to use a greenhouse effect gas while being environmentally friendly : SF₆ case in medium voltage distribution (includes summary in French)
N Bernard, S Théoleyre, Schneider Electric
G Valentin, EDF
- Environmentally friendly, low cost HV/MV distribution substations using new compact HV and MV equipment
V Colloca, G Como, F Pozzana, S Sciarra, ENEL Distribuzione SpA
F Illiceto, University of Rome
C Di Mario, Gestore Rete Trasmissione Nazionale
E Colombo, CESI SpA
- High voltage distribution lines, which are going through cities
A L Ivanovski, A I Repin, Siberian Power Research Institute

Diagnosis

- Continuous moisture management: extending transformer service life
M Wilkinson, Bowden Bros Ltd
P Dyer, 24Seven Utility Services Ltd
- Detecting and locating MV failure before it occurs. Experience with live line partial discharge on underground paper insulated 11kV cables in London (includes summary in French)
C M Walton, London Power Networks

● Session Index

● Author Index

● Corporate Index

- Follow up of distribution transformers (includes summary in French)
A Even, LABORELEC
E Engel, A François, Y Tits, D Vangulick, ELECTRABEL
- Determining high voltage cable conductor temperatures (includes summary in French)
G Van der Veken, Euromold NV
- Further statistically analyzed results of measurements of the dielectric strength of oil in distribution transformers
G P Andreou, Public Power Corporation
S I Spartalis, M G Danikas, V G Roussos, Democritus University Thrace
- On-site diagnosis for cast-resin transformers
B Louyot, FRANCE-TRANSFO
- Remote diagnosis of electrical distribution networks (includes summary in French)
Diagnostic a distance des reseaux de distribution électrique
A Gilot, Schneider Electric
- Partial discharge mapping of medium voltage cables - TNB's experience
M S Chong, Tenaga Nasional Berhad
- Analysis and location of partial discharges in power transformers by means of electrical methods
H Tatzawa, Instituto de Eletrotécnica e Energia da USP (IEEUSP)
G F Burani, Escola Politécnica da USP (EPUSP)

● Session Index

● Author Index

● Corporate Index

- Evaluation of on-site dielectric response methods for non-destructive testing of water treed MV XLPE cables
S Hvidsten, SINTEF Energy Research
P Werelius, Royal Institute of Technology (KTH)
J Christensen, DEFU
- Cable diagnosis. In-situ tests with returned voltage diagnosis method in Romania
Diagnosticque du cable. Essais in situ dans Roumanie avec methode du tension retourne
C S Pispiris, TRANSELECTRICA
- Complex methods to diagnose the technical state of the medium and high voltage circuit breaker after short-circuit events
I Manea, C Chiciu, ICMET
F Balasiu, N Tulici, TRANSELECTRICA
- Insulation condition assessment of medium voltage power cables using on-site PD detection and analysis techniques
E Gulski, B R Hamerling, F J Wester, J J Smit, Delft University of Technology
E Groot, NUON Infracore
P Schikarski, Haefely Test AG
- On-line condition monitoring of tap changers - field experience
P Kang, D Birtwhistle, Queensland University of Technology
- Comparison among different diagnostic systems for medium voltage cable lines
V Colloca, A Fara, ENEL Distribuzione SpA
M de Nigris, G Rizzi, CESI SpA

● Session Index

● Author Index

● Corporate Index

- Diagnostic of overheating underground distribution cable joints
Diagnostic de l'échauffement excessif des raccords de câbles dans le réseau souterrain de distribution
D Fournier, N Amyot, Institut de recherche d'Hydro-Québec (IREQ)

Innovations

- Remote current sensing on overhead power lines
N P Tobin, Consultant Engineer
M McCormack, E O'Loughlin, K Tobin, SMF Technology
- Applications of HTS fault current limiters in the Danish utility network
J N Nielsen, NESA
J J Ostergaard, DEFU
- Design aspects of an inductive type superconducting fault current limiter
I Vajda, S Semperger, A Györe, Budapest University of Technology and Economics

POWER QUALITY AND EMC

Cable Design

- Economical 36 kV cable system for the Belgian network
Système de câble 36 kV économique pour le réseau Belge
F Musique, ELECTRABEL
J Becker, NEXANS BENELUX SA

EMC and Safety

- Ground potential rise influence near HV substations in urban areas
L Grcev, V Filiposki, V Arnautovski, St Cyril and Methodius University

● Session Index

● Author Index

● Corporate Index

- Software methods for analysis of transient voltages coupled to shielded cables in HV substations
L Grcev, St Cyril and Methodius University
- Use of a global earthing system to implement the safety requirements for protecting against indirect contacts in HV systems
Utilisation d'un système de mise à la terre globale aux fins de rencontrer les impositions de protection contre les contacts indirects en haute tension
M Desmedt, ELECTRABEL
J Hoeffelman, CPTE
D Halkin, LABORELEC
- Comparative measurements of magnetic field from low voltage switchgears
Å Bohlin, ABB Kabeldon
T Ahlberg, J-O Larsson, University College of Borås
- Towards a global strategy to mitigate power-frequency magnetic fields from secondary substations
E Salinas, A Bondeson, J Daalder, Y Hamnerius, Chalmers University of Technology
- A new approach to analyse and reduction of RF conducted emission due to PWM in a buck converter
A Farhadi, Niroo Research Institute (NRI)
- Evaluation of low-frequency emissions of switchgear by a type proof
B W Jäkel, A B Müller, Siemens AG
- Some aspects of magnetic shielding of a transformer substation using alternative shielding techniques
M Istenic, P Kokelj, P Zunko, Faculty of Electrical Engineering
B Cestnik, T Zivic, Milan Vidmar Electric Power Research Institute

● Session Index

● Author Index

● Corporate Index

- Consequences of Slovenian environmental legislation regarding non-ionizing radiation on new medium-voltage lines
B Cestnik, Milan Vidmar Electric Power Research Institute
- Evaluation of currents and charge in surge protective devices in low-voltage distribution networks due to direct lightning strikes (includes summary in French)
W Bassi, A Piantini, N M Matsuo, University of São Paulo
- The policy of STEE Sibiu about protection against switching and lightning overvoltages
F Balasiu, L Jurca, N Tulici, ST Sibiu
F Goni, SC ICEMENERG SA
- Experimental study on safety aspects of cellular phone systems in HV towers
J B M van Waes, Eindhoven University of Technology
M J M van Riet, NUON Technisch Bedrijf
A P J van Deursen, Eindhoven University of Technology
F Provoost, J F G Cobben, NUON Technisch Bedrijf
- Numerical estimation of drained lightning currents on MV lines (includes summary in French)
L F Ferreira Aicardi, F Ponta, H L Soibelzon, Universidad de Buenos Aires
- Safety issues related to the connection of MV and HV grounding systems outside substations
Y Rajotte, J Fortin, G Lessard, Institut de recherche d'Hydro-Québec (IREQ)

Voltage Dips and Interruptions

- Study of a cement plant experiencing power quality problems in Uruguay
D Bentancur, G Pérez, A Pardo, A Rondoni, UTE

● Session Index

● Author Index

● Corporate Index

- Optimal policy for exploitation and construction of HV/MV substation low side
A Arcos Vargas, J González Lara, Endesa Distribución
- Mitigation of voltage sags embracing a prediction technique and the use of a dynamic voltage restorer
C P Fitzer, Y S Lim, C Zhan, V K Ramachandaramurthy, A Arulampalam, M Barnes, G Strbac, N Jenkins, UMIST
- Power quality initiatives in Singapore
S T Chang, K Y Chua, C C Siew, L T Tan, PowerGrid Ltd
- Analysis and design of a three-phase constant voltage transformer based on ferroresonance (includes summary in French)
T Van Craenenbroeck, I Van den Broek, R Belmans, Katholieke Universiteit Leuven
K Van Wijmeersch, J Declercq, Pauwels Trafo Belgium NV
- Interruption cost analysis for the electrical power customers in Greece
E N Dialynas, S M Megaloconomos, V C Dali, National Technical University of Athens
- Electronic process equipment compatibility evaluation project for power quality enhancement - a Malaysian experience
A J Hamid, Tenaga Nasional Berhad
K M Nor, University Malaya
O Badar, Texas Instrument Malaysia Sdn.
- Developing a new algorithm to participate power quality variations in tariff: an experience in Iran
M R Haghifam, Tarbiat Modarres University
M Daneshgar, Azad University
- Goal planning and risk analysis for distribution reliability indices
N Kagan, C C B Oliveira, University of São Paulo

● Session Index

● Author Index

● Corporate Index

- Statistical correlations between indicators of power supply and consumers' satisfaction
Les corrélations statistiques dans les indicateurs d'énergie et satisfaction des consommateurs
E M Gastaldo, Federal University of Rio Grande do Sul
G J Capeletto, Regulatory State Agency
H R Bittencourt, Federal University of Rio Grande do Sul
- Estimating the annual frequency and cost of voltage sags for customers of five Finnish distribution companies
P Heine, P Pohjanheimo, M Lehtonen, E Lakervi, Helsinki University of Technology
- Method of statistical control of the supply reliability (includes summary in French)
P E Issouribehere, J C Barbero, IITREE-LAT
J L Martínez, A Galinski, ENRE
- Relationship between quality of service demanded and tariff
C Guidi, J Espain, J Garcia, PA Consulting Services SA
- Industrial power quality problems
A El Mofty, K Youssef, Alexandria Electricity Company
- Recent resolutions of Italian regulator on the continuity of electricity supply
G Gola, AEI
P Ribaldone, AEM Torino
M Silvestri, ENEL Distribuzione SpA
F Vertemati, AEM Milano
- Practical solutions for the shutdown process in industrial facilities depending on network disturbances
G Drera, S Pedrazzini, A Previ, L Tonelli, CESI SpA

● Session Index

● Author Index

● Corporate Index

- Voltage dips and sensitivity of consumers in low voltage networks
G Brauner, Vienna University of Technology
C Hennerbichler, ABB Automation Ltd
- 25 years outage data, ready for the future
G A Bloemhof, W T J Hulshorst, KEMA Nederland BV
J Janssen, EnergieNed

Disturbing Loads and Phenomena

- The influence of voltage variations on estimated load parameters
F T Dai, J V Milanovic, N Jenkins, UMIST
V Roberts, EA Technology Ltd
- The effects of harmonics on differential relay for a transformer
J M Ho, C C Liu, Chung-Yuan University
- Connection of a plant with arc furnaces to the Andalucian network (includes summary in French)
A Chofré, Sevillana de Electricidad I
M Pinilla, J M^a Romero, Sevillana de Electricidad I (Grupo Endesa)
- The concept of short-circuit power and the assessment of the flicker emission level (includes summary in French)
M Couvreur, UCL
E De Jaeger, LABORELEC
P Goossens, A Robert, CPTÉ

● Session Index

● Author Index

● Corporate Index

- Initial results of the harmonic measurement campaign on the French low-voltage networks
Premiers resultats de la campagne de mesure des harmoniques sur les reseaux basse-tension Français
L Berthet, EDF R&D
D Boudou, EDF GDF Services
X Mamo, EDF R&D
- System connection of very large variable speed drives for compressor purposes
K H Krüger, M Loskarn, C Unger, R Witzmann, Siemens AG
- A filter concept for an electrolysis in a chemical plant
D Stade, M Malsch, Ilmenau Technical University
H Solf, Dr Solf & Partner GmbH
- Evaluation of flicker level in a T&D network with a large amount of dispersed windmills
H Knudsen, V Akhmatov, NESA Transmission Planning
- Voltage unbalance in low voltage distribution networks
P V Santos Valois, COPEL
C M Vieira Tahan, N Kagan, University of São Paulo
H Arango, Federal School of Engineering at Itajubá
- Symmetrizing Steinmetz circuitry behavior in harmonic polluted networks
M D Chindris, A C Cziker, S Stefanescu, Technical University of Cluj-Napoca
- Comparison load models in harmonic flows (includes summary in French)
V F Corasaniti, R Bianchi, F Viollaz, IITREE-LAT

● Session Index

● Author Index

● Corporate Index

- Survey of harmonic distortion in LV and MV networks: results and corrective strategies
E Bompard, E Carpaneto, R Napoli, Politecnico di Torino
P Ribaldone, C Vercellino, Azienda Energetica Metropolitana Torino

PQ Monitoring and New Technologies

- Does power quality monitoring provide financial return? (includes summary in French)
T Detroz, LEM SA
- Power quality monitoring
D Guillot, Alstom T&D Protection and Control
- Power quality : monitoring and innovation in PFC and harmonic filtering (includes summary in French)
J-M Lupin, Rectiphase
P Ferracci, Schneider Electric
- Custom power interface
Interface clientele de puissance pour les clients
G Tanneau, EDF R&D
D Boudou, EDF GDF Services
- Enhancing of power quality and availability in distribution systems by means of voltage source converters
R Grünbaum, ABB Power Systems AB
- Harmonic filters for industrial applications. Technology procurement report from the Swedish National Energy Administration
N Gothelf, Harmonizer Power Quality Consulting AB
A Lewald, Swedish National Energy Administration

● Session Index

● Author Index

● Corporate Index

- Advanced power quality rating under the conditions of deregulated markets
M Mühlwitz, Stadtwerke Dresden GmbH
J Meyer, G Winkler, Dresden University of Technology
- Automated analysis of power quality disturbances
M Kezunovic, Y Liao, Texas A&M University
- Evaluation of power quality in regional distribution networks
P Santarius, J Gavlas, Technical University Ostrava
P Vasenka, SME a.s. Ostrava
V Vyskocil, Z Spacek, J Hurková, EGU Brno, a.s.
K Procházka, J Hanzlik, EGC, s.r.o. České Budejovice
- Power quality monitoring as integrated with distribution automation
A Mäkinen, M Parkki, P Järventausta, Tampere University of Technology
M Kortessluoma, P Verho, ABB Substation Automation Oy
S Vehviläinen, MX Electrix Oy
R Seesvuori, Tampere Power Utility
A Rinta-Opas, Koillis-Satakunnan Sähkö Oy
- Integrated power quality in distribution equipment
R Borlotti, ABB SACE
C Gemme, ABB Ricerca SpA
R Tinggren, ABB Secheron SA
- Economical power quality enhancement in MV distribution networks by power electronics solutions
G Mauthé, ABB T&D Management Ltd.
L Heinemann, ABB HV-Products
D Westermann, ABB HV-Technology

NETWORK COMPONENTS

Cable Design

- Economical 36 kV cable system for the Belgian network
Système de câble 36 kV économique pour le réseau Belge
F Musique, ELECTRABEL
J Becker, NEXANS BENELUX SA

EMC and Safety

- Ground potential rise influence near HV substations in urban areas
L Grcev, V Filiposki, V Arnautovski, St Cyril and Methodius University
- Software methods for analysis of transient voltages coupled to shielded cables in HV substations
L Grcev, St Cyril and Methodius University
- Use of a global earthing system to implement the safety requirements for protecting against indirect contacts in HV systems
Utilisation d'un système de mise à la terre globale aux fins de rencontrer les impositions de protection contre les contacts indirects en haute tension
M Desmedt, ELECTRABEL
J Hoeffelman, CPTE
D Halkin, LABORELEC
- Comparative measurements of magnetic field from low voltage switchgears
Å Bohlin, ABB Kabeldon
T Ahlberg, J-O Larsson, University College of Borås

● Session Index

● Author Index

● Corporate Index

- Towards a global strategy to mitigate power-frequency magnetic fields from secondary substations
E Salinas, A Bondeson, J Daalder, Y Hamnerius, Chalmers University of Technology
- A new approach to analyse and reduction of RF conducted emission due to PWM in a buck converter
A Farhadi, Niroo Research Institute (NRI)
- Evaluation of low-frequency emissions of switchgear by a type proof
B W Jäkel, A B Müller, Siemens AG
- Some aspects of magnetic shielding of a transformer substation using alternative shielding techniques
M Istenic, P Kokelj, P Zunko, Faculty of Electrical Engineering
B Cestnik, T Zivic, Milan Vidmar Electric Power Research Institute
- Consequences of Slovenian environmental legislation regarding non-ionizing radiation on new medium-voltage lines
B Cestnik, Milan Vidmar Electric Power Research Institute
- Evaluation of currents and charge in surge protective devices in low-voltage distribution networks due to direct lightning strikes (includes summary in French)
W Bassi, A Piantini, N M Matsuo, University of São Paulo
- The policy of STEE Sibiu about protection against switching and lightning overvoltages
F Balasiu, L Jurca, N Tulici, ST Sibiu
F Goni, SC ICEMENERG SA

● Session Index

● Author Index

● Corporate Index

- Experimental study on safety aspects of cellular phone systems in HV towers
J B M van Waes, Eindhoven University of Technology
M J M van Riet, NUON Technisch Bedrijf
A P J van Deursen, Eindhoven University of Technology
F Provoost, J F G Cobben, NUON Technisch Bedrijf
- Numerical estimation of drained lightning currents on MV lines (includes summary in French)
L F Ferreira Aicardi, F Ponta, H L Soibelzon, Universidad de Buenos Aires
- Safety issues related to the connection of MV and HV grounding systems outside substations
Y Rajotte, J Fortin, G Lessard, Institut de recherche d'Hydro-Québec (IREQ)

Voltage Dips and Interruptions

- Study of a cement plant experiencing power quality problems in Uruguay
D Bentancur, G Pérez, A Pardo, A Rondoni, UTE
- Optimal policy for exploitation and construction of HV/MV substation low side
A Arcos Vargas, J González Lara, Endesa Distribución
- Mitigation of voltage sags embracing a prediction technique and the use of a dynamic voltage restorer
C P Fitzer, Y S Lim, C Zhan, V K Ramachandaramurthy, A Arulampalam, M Barnes, G Strbac, N Jenkins, UMIST
- Power quality initiatives in Singapore
S T Chang, K Y Chua, C C Siew, L T Tan, PowerGrid Ltd
- Analysis and design of a three-phase constant voltage transformer based on ferroresonance (includes summary in French)
T Van Craenenbroeck, I Van den Broek, R Belmans, Katholieke Universiteit Leuven
K Van Wijmeersch, J Declercq, Pauwels Trafo Belgium NV

● Session Index

● Author Index

● Corporate Index

- Interruption cost analysis for the electrical power customers in Greece
E N Dialynas, S M Megaloconomos, V C Dali, National Technical University of Athens
- Electronic process equipment compatibility evaluation project for power quality enhancement - a Malaysian experience
A J Hamid, Tenaga Nasional Berhad
K M Nor, University Malaya
O Badar, Texas Instrument Malaysia Sdn.
- Developing a new algorithm to participate power quality variations in tariff: an experience in Iran
M R Haghifam, Tarbiat Modarres University
M Daneshgar, Azad University
- Goal planning and risk analysis for distribution reliability indices
N Kagan, C C B Oliveira, University of São Paulo
- Statistical correlations between indicators of power supply and consumers' satisfaction
Les corrélations statistiques dans les indicateurs d'énergie et satisfaction des consommateurs
E M Gastaldo, Federal University of Rio Grande do Sul
G J Capeletto, Regulatory State Agency
H R Bittencourt, Federal University of Rio Grande do Sul
- Estimating the annual frequency and cost of voltage sags for customers of five Finnish distribution companies
P Heine, P Pohjanheimo, M Lehtonen, E Lakervi, Helsinki University of Technology
- Method of statistical control of the supply reliability (includes summary in French)
P E Issouribehere, J C Barbero, IITREE-LAT
J L Martinez, A Galinski, ENRE

● Session Index

● Author Index

● Corporate Index

- Relationship between quality of service demanded and tariff
C Guidi, J Espain, J Garcia, PA Consulting Services SA
- Industrial power quality problems
A El Mofty, K Youssef, Alexandria Electricity Company
- Recent resolutions of Italian regulator on the continuity of electricity supply
G Gola, AEI
P Ribaldone, AEM Torino
M Silvestri, ENEL Distribuzione SpA
F Vertemati, AEM Milano
- Practical solutions for the shutdown process in industrial facilities depending on network disturbances
G Drera, S Pedrazzini, A Previ, L Tonelli, CESI SpA
- Voltage dips and sensitivity of consumers in low voltage networks
G Brauner, Vienna University of Technology
C Hennerbichler, ABB Automation Ltd
- 25 years outage data, ready for the future
G A Bloemhof, W T J Hulshorst, KEMA Nederland BV
J Janssen, EnergieNed

Disturbing Loads and Phenomena

- The influence of voltage variations on estimated load parameters
F T Dai, J V Milanovic, N Jenkins, UMIST
V Roberts, EA Technology Ltd

● Session Index

● Author Index

● Corporate Index

- The effects of harmonics on differential relay for a transformer
J M Ho, C C Liu, Chung-Yuan University
- Connection of a plant with arc furnaces to the Andalusian network (includes summary in French)
A Chofré, Sevillana de Electricidad I
M Pinilla, J M^a Romero, Sevillana de Electricidad I (Grupo Endesa)
- The concept of short-circuit power and the assessment of the flicker emission level (includes summary in French)
M Couvreur, UCL
E De Jaeger, LABORELEC
P Goossens, A Robert, CPTÉ
- Initial results of the harmonic measurement campaign on the French low-voltage networks
Premiers resultats de la campagne de mesure des harmoniques sur les reseaux basse-tension Français
L Berthet, EDF R&D
D Boudou, EDF GDF Services
X Mamo, EDF R&D
- System connection of very large variable speed drives for compressor purposes
K H Krüger, M Loskarn, C Unger, R Witzmann, Siemens AG
- A filter concept for an electrolysis in a chemical plant
D Stade, M Malsch, Ilmenau Technical University
H Solf, Dr Solf & Partner GmbH
- Evaluation of flicker level in a T&D network with a large amount of dispersed windmills
H Knudsen, V Akhmatov, NESA Transmission Planning

● Session Index

● Author Index

● Corporate Index

- Voltage unbalance in low voltage distribution networks
P V Santos Valois, COPEL
C M Vieira Tahan, N Kagan, University of São Paulo
H Arango, Federal School of Engineering at Itajubá
- Symmetrizing Steinmetz circuitry behavior in harmonic polluted networks
M D Chindris, A C Cziker, S Stefanescu, Technical University of Cluj-Napoca
- Comparison load models in harmonic flows (includes summary in French)
V F Corasaniti, R Bianchi, F Viollaz, IITREE-LAT
- Survey of harmonic distortion in LV and MV networks: results and corrective strategies
E Bompard, E Carpaneto, R Napoli, Politecnico di Torino
P Ribaldone, C Vercellino, Azienda Energetica Metropolitana Torino

PQ Monitoring and New Technologies

- Does power quality monitoring provide financial return? (includes summary in French)
T Detroz, LEM SA
- Power quality monitoring
D Guillot, Alstom T&D Protection and Control
- Power quality : monitoring and innovation in PFC and harmonic filtering (includes summary in French)
J-M Lupin, Rectiphase
P Ferracci, Schneider Electric

● Session Index

● Author Index

● Corporate Index

- Custom power interface
Interface clientele de puissance pour les clients
G Tanneau, EDF R&D
D Boudou, EDF GDF Services
- Enhancing of power quality and availability in distribution systems by means of voltage source converters
R Grünbaum, ABB Power Systems AB
- Harmonic filters for industrial applications. Technology procurement report from the Swedish National Energy Administration
N Gothelf, Harmonizer Power Quality Consulting AB
A Lewald, Swedish National Energy Administration
- Advanced power quality rating under the conditions of deregulated markets
M Mühlwitz, Stadtwerke Dresden GmbH
J Meyer, G Winkler, Dresden University of Technology
- Automated analysis of power quality disturbances
M Kezunovic, Y Liao, Texas A&M University
- Evaluation of power quality in regional distribution networks
P Santarius, J Gavlas, Technical University Ostrava
P Vasenka, SME a.s. Ostrava
V Vyskocil, Z Spacek, J Hurková, EGU Brno, a.s.
K Procházka, J Hanzlik, EGC, s.r.o. České Budejovice

● Session Index

● Author Index

● Corporate Index

- Power quality monitoring as integrated with distribution automation
A Mäkinen, M Parkki, P Järventausta, Tampere University of Technology
M Korttesluoma, P Verho, ABB Substation Automation Oy
S Vehviläinen, MX Electrix Oy
R Seesvuori, Tampere Power Utility
A Rinta-Opas, Koillis-Satakunnan Sähkö Oy
- Integrated power quality in distribution equipment
R Borlotti, ABB SACE
C Gemme, ABB Ricerca SpA
R Tinggren, ABB Secheron SA
- Economical power quality enhancement in MV distribution networks by power electronics solutions
G Mauthé, ABB T&D Management Ltd.
L Heinemann, ABB HV-Products
D Westermann, ABB HV-Technology

OPERATION, CONTROL AND NETWORK CONTROL

Fault Management and Outage Reduction

- Incipient fault detection and management of underground LV networks (includes summary in French)
C M Walton, London Power Networks
- Optimising customer information and the fault management process
D C Newis, L Roberts, EA Technology Ltd
J Barnett, NEDL
- A genetic based fault location algorithm for transmission lines
K M El-Naggar, College of Technological Studies

● Session Index

● Author Index

● Corporate Index

- Earth-fault detection in a compensated earthed network, without any voltage measurement : a new protection principle (includes summary in French)
P Bertrand, Schneider Electric
R Kaczmarek, X Le Pivert, P Bastard, Supélec
- Results of earth fault measurements in an earth fault compensated 110-kV-system
P Märtel, Energieversorgung Sachsen Ost AG
H -J Radtke, Stadtwerke Dresden GmbH
P Schegner, O Seifert, Dresden University of Technology
- Fast fault locating in rural MV distribution networks
H Roman, H Hylla, Mitteldeutsch Energieversorgung AG
- Fault management in electrical distribution networks
R Apel, R Küssel, C Jaborowicz, ABB Utility Automation GmbH
- Communications architecture in modern distribution systems
P D Roth, Cooper Power Systems
- Automatic fault management in distribution networks
Gestion automatique des défauts dans les réseaux de distributions
M Lehtonen, Helsinki University of Technology
A Matsinen, VTT Energy
E Antila, ABB Substation Automation Oy
J Kuru, Tekla Oy
P Vuorenpää, E Matinlassi, Kouvola Seudun Sähkö Oy
S Pettissalo, Vaasa Electronics Oy

● Session Index

● Author Index

● Corporate Index

- Radio remotely controlled system of electric network subsidiary, TG. Mures, Romania - realizations and prospects
S Crisan, B Balasy, SC Electrica SA
- Neutral connection to earth in medium voltage networks: operation experience
B Ceresoli, CESI SpA
A Cerretti, ENEL Distribuzione SpA
E De Berardinis, CESI SpA
A Gallerani, P Perna, G Valtorta, ENEL Distribuzione SpA

Maintenance and Refurbishment

- Managing assets using infrequent inspections (includes summary in French)
M Black, A T Brint, University of Salford
J R Brailsford, EA Technology Ltd
G Davidson, 24Seven Utility Services Ltd
- Maintenance scheduling according to reliability targets and actual equipment performance
V Polimac, J Polimac, PB Power UK Ltd
- Reliability study for the refurbishment of a HV/MV transformer substation
A Osterholt, U Prause, W Zimmermann, ABB Calor Emag Schaltanlagen AG
- Maintenance and refurbishment strategies for MV substations
G Balzer, Darmstadt University of Technology
O Schmitt, M Halfmann, ABB Calor Emag Schaltanlagen AG
A Höble, Pfalzwerke AG

● Session Index

● Author Index

● Corporate Index

- Efficiency of replacement of power devices installed in distribution networks prior to the final date of their technical service life (includes summary in French)
V Blazek, R Javora, Brno University of Technology
- Risk management: cost minimization using condition-based maintenance
E Solvang, L Lundgaard, B Gustavsen, A O Eggen, SINTEF Energy Research
S Fretheim, Norwegian Electricity Association
- Tools for quality assessment of distribution cable networks
E R S Groot, NUON InfraCore
E Gulski, Delft University of Technology
P Wester, NUON InfraCore
F J Wester, C G N de Jong, M van Riet, D M Harmsmen, NUON
J Pellis, H Geene, Pirelli Cables and Systems
- Increasing the capacity of cable systems using cable asset management based on thermal and mechanical properties
B J Grotenhuis, REMU
J E Jaspers, KEMA
A Kerstens, TKF Cables
A H van der Wey, F H de Wild, KEMA

Protection and Control

- MV network control and protection policy: technical and functional aspects (includes summary in French)
Y Laperches, M Braipson, P Parent, R Hatert, ELECTRABEL

● Session Index

● Author Index

● Corporate Index

- Protection relays: innovations for the benefit of the user
Relais de protection: des innovations au service de l'exploitant
C Petit, Schneider Electric
 - Substation computers life cycle maintenance
Maintien en condition operationnelle des calculateurs de poste
G Le Gall, Alstom T&D Protection and Control
 - Expanding the scope of protective relays across traditional boundaries
G Aldinger, EnBW Ostwürttemberg Donauries AG
G Koch, Siemens AG
 - Reliability of protection and control equipment in the context of compensation for power supply interruptions
G Kjølle, SINTEF Energy Research
Y Aabø, BKK Nett AS
 - New strategies for substation control, protection and access to information
V W Lohmann, ABB Power Automation Ltd
 - Reliable protection of low voltage distribution systems with precision breakers
V Cohen, Circuit Breaker Industries Ltd
- Distribution Automation and Distribution System Management (Part 1)**
- Benefits of large scale urban distribution network automation and their role in meeting enhanced customer expectation and regulatory regimes (includes summary in French)
C M Walton, London Power Networks

● Session Index

● Author Index

● Corporate Index

- A modern distribution management system for regional electricity companies
Un système de gestion de la distribution moderne pour les compagnies d'électricité regionales
A Roberts, T Berry, W D Wilson, Schneider Electric
- In search of world class performance under fault conditions
C Murphy, R Ballentine, Northern Ireland Electricity plc
H Rooney, Compaq Computer Corporation
- Sharing data in a modern control centre configuration: architecture and experiences
J Rosa, I Xisto, EDP Distribuição Energia
L Pinheiro, EDINFOR
A Rodrigues, EFACEC
- Experience in the implementation of interfacing work between substation control system to legacy SCADA system in TNB, Malaysia
Z Tajul - Arus, W A Wan-Kamarulzaman, Tenaga Nasional Berhad
- "Distribution dispatching" the missing link in electrical industry in developing countries
R Khalili, Tehran South-East Distribution Company
M Mehri, Tehran Center Distribution Company
- Distribution management system at Empresas Publicas de Medellin (Colombia)
R Céspedes, KEMA Consulting
L Mesa, Empresas Públicas de Medellin
A Schierenbeck, Siemens AG
- Design of the Mexico's Luz y Fuerza distribution automation system
D G Cáceres, R Céspedes, KEMA Consulting
F J Robledo, Luz y Fuerza del Centro

● Session Index

● Author Index

● Corporate Index

- Implementation of advanced distribution automation in U.S.A. utilities
N S Markushevich, A P Berman, Utility Consulting International
C J Jensen, JEA
J C Clemmer, OG&E Electric Services
- Network calculation and quality management integrated in a remote control system
Calcul de reseau et gestion de la qualite depuis un systeme de teleconduite des reaux
F Grosmanin, UEM Usine d'Electricite de Metz

Distribution Automation and Distribution System Management (Part 2)

- Process automation for distribution operations management
S Fustar, KEMA Consulting
- Power applications - a powerful tool for distribution networks management
D S Popovic, V C Strezoski, University of Novi Sad
N A Katic, EPS Elektrovojvodina
- A novel microscada system for Middle Egypt Electricity Company
M Ghaly, Middle Egypt Electricity Company
M R Ghononemy, Engineering Office for Integrated Projects (EOIP)
A El-Bialy, A Hisham Kandil, Cairo University
H A Darwish, Menoufiya University
M M Ali, Middle Egypt Electricity Company
- Remote control of HV stations and MV substations in Milan
S Barbieri, AEM Elettricit  SpA

● Session Index

● Author Index

● Corporate Index

- Workflow automation improves operational efficiency in control centres and beyond
K Herger, O Vollmeier, F Werner, Telegyr Systems Corp.

DISPERSED GENERATION - MANAGEMENT & UTILISATION OF ELECTRICITY

Dispersed Generation

- Enhancing flexibility and transparency in the connection of dispersed generation
C E T Foote, G W Ault, G M Burt, J R McDonald, University of Strathclyde
- Power quality assessment from a wave-power station
R G Alcorn, W C Beattie, The Queen's University of Belfast
- Potential solutions to voltage control issues for distribution networks containing independent generators (includes summary in French)
P Glendinning, PB Power UK Ltd
- Micro combined heat & power: potential impact on the electricity supply industry
J D Harrison, EA Technology Ltd
- Simulation of a wind farm performance under wind speed changes
J R Saenz, ESII
G Tapia, J X Ostolaza, A Tapia, EUITI-D
R Criado, J L Berasategui, Iberdrola SA
- Connection requirements for dispersed generation: evolutions of existing requirement and need for further standardization
Prescriptions de raccordement pour la production décentralisée: évolutions des conditions existantes et nécessité d'une normalisation complémentaire
M Dussart, P Lauwers, S Magnus, Y Leperches, ELECTRABEL

● Session Index

● Author Index

● Corporate Index

- Connection of EDF's remote control system to dispersed generation units
Connexion du système de conduite EDF aux unités de production décentralisées
P Bongrain, EDF R&D
J-L Fraisse, EDF GDF Services
- A new voltage control system to facilitate the connection of dispersed generation to distribution networks
Une nouvelle fonction de régulation de tension pour faciliter le raccordement de producteurs décentralisés sur le réseau de distribution
A Bonhomme, D Cortinas, EDF R&D
F Boulanger, J-L Fraisse, EDF GDF Services
- PRAOGEN : a tool for studying connection of generating plant onto the medium-voltage network
PRAOGEN: outil d'études de raccordement des producteurs sur les réseaux moyenne tension
J-L Fraisse, F Boulanger, EDF-DEGS
P Juston, P Lemerle, O Jeannin, EDF R&D
- Technical requisites for producer connection to the public electric power grids in France: administrative requirements
Conditions techniques pour le raccordement des producteurs aux réseaux publics d'électricité en France; les prescriptions administratives
P Cruchon, Technical Department of Electric Energy and Large Dams
- Protection of embedded generation connected to a distribution network and loss of mains detection (includes summary in French)
M Guillot, C Collombet, P Bertrand, B Gotzig, Schneider Electric

● Session Index

● Author Index

● Corporate Index

- Applications with proton exchange membrane (PEM) fuel cells for a deregulated market place
B Kohlstruck, ALSTOM BALLARD GmbH
- Integration of distributed generation in a typical USA distribution system
L A Kojovic, R D Willoughby, Cooper Power Systems
- Lightning protection for offshore wind turbines
T Sorensen, DEFU
F V Jensen, N Raben, SEAS
J Lykkegaard, Eltra
J Saxov, Elsam
- Fuel cell plant - a proposed analysis for economical feasibility of implantation (includes summary in French)
A G Amendola, M C Rocha, Electrobrás
- Wind turbines in weak grids - constraints and solutions
J O G Tande, K Uhlen, SINTEF Energy Research
- The influence of voltage sags on the stability of 10kV distribution networks with large-scale dispersed co-generation and wind generators
G C Paap, Delft University of Technology
F Jansen, F K A M Wiercx, NUON Infra North
- Potential for renewable energy generation in an urban distribution network
A M van Voorden, J G Slootweg, G C Paap, L van der Sluis, Delft University of Technology
- Economic assessment of the installation of natural gas-fuelled microturbines and results of preliminary tests
S Buonanno, ENEL Distribuzione SpA
W Palenzona, G Pasin, G Torsello, CESI SpA

● Session Index

● Author Index

● Corporate Index

- Operating and planning issues of distribution grids containing diffuse generation
S Barsali, University of Pisa
G Celli, University of Cagliari
M Ceraolo, R Giglioli, P Pelacchi, University of Pisa
F Pilo, University of Cagliari
- A model of cogeneration plants based on small-size gas turbines
S Banetta, University of Pisa
M Ippolito, University of Palermo
D Poli, A Possenti, University of Pisa

Management and Utilisation of Electricity

- Recent developments in the design and applications of utility-scale energy storage plant (includes summary in French)
A Price, B J Davidson, Innogy Technology Ventures Limited
- The application of an industrial demand-side management expert system for the analysis of electroheat technology retrofits (includes summary in French)
R A Harper, J E Gilmour, T N Oliver, Aston University
M Booth, Energy Services UK Ltd
- Product differentiation and non-price competition in liberalised energy markets: what potential for energy services? (includes summary in French)
R A Harper, T N Oliver, Aston University
- Energy savings with variable speed drives (includes summary in French)
K Pauwels, LABORELEC

● Session Index

● Author Index

● Corporate Index

- Overview of energy storage systems for an improved power quality and load managing on distribution level (includes summary in French)
T Sels, C Dragu, T Van Craenenbroeck, R Belmans, Katholieke Universiteit Leuven
- The scope for energy saving in the EU through the use of energy-efficient electricity distribution transformers
H De Keulenaer, European Copper Institute
D Chapman, Copper Development Association
S Fassbinder, Deutsches Kupfer-Institut
- New solutions for the automation of large industrial networks
L Hossenlopp, Alstom T&D Protection and Control
- Multipurpose reconfiguration of distribution systems using fuzzy reasoning approach (includes summary in French)
A Abrahimi, Isfahan University of Technology
S Mohseni, Isfahan Regional Electric Company
- Inefficiency of international standards in the production and use of electrical equipment and devices in different parts of the world
G A Shahryari, Hormozgan Regional Electric Co.
M R Haghifam, Tarbiat Modarres University
A Ahanchi, University of Maastricht
C Ford, Ardlin Ltd. Co.
- Intelligent energy management of electrical power systems with distributed feeding on the basis of forecasts of demand and generation
G Winkler, C Meisenbach, M Hable, Dresden University of Technology
P Meier, Allgäuer Überlandwerk GmbH

● Session Index

● Author Index

● Corporate Index

- Pool forecasts for the spot and forward markets for a trader with a variable customer base and decentralised grid input
T Eble, e.on ENERGIE AG
I Heinrich, P Tölke, IemLeipzig Last-und Energiemanagement
A Liebscher, Stadtwerke Dresden GmbH
- Power delivery infrastructure differences and their impacts on different types of power line communications for automatic meter reading
S T Mak, Consultant
- The energy consultant paid by the electricity bill and the energy consultant's involvement in activities
H Andersen, J W Poulsen, DEFU
- Simple model for load forecast weather sensitive
D R Palacio, Edenor SA
- Hourly load curve improvement through the promotion of compact fluorescent lamps in Argentine households
G S Dutt, C G Tanides, Universidad de Buenos Aires
- An integrated resource planning formulation using a simultaneous electric/thermal production system
M S Elsobki Jr, Cairo University
H A El-Salmawy, Zagazig University
- Electrotechnologies for energy end uses: application of mechanical vapour recompression to food industry
W Grattieri, C Medich, R Vanzan, CESI SpA

SYSTEM DEVELOPMENT

Issues Related to Short and Long Term Development of Distribution Networks

- How to secure MV networks so as to cope with extreme weather conditions
Securisation des reseaux de distribution vis-à-vis des phenomenes climatiques exceptionnels
A de la Bourdonnaye, Ministere de l'Economie des Finances et de l'Industrie
L Gauthier, M Gratton, EDF R&D
- Integration of new switching technologies in medium-voltage systems
C Heinrich, H Schmitt, Siemens AG
- Tariff development for consumer groups in internal European electricity markets
P Stephenson, Kingston University
I Lungu, A.N.R.E.
M Paun, I Silvas, G Tupu, ELECTRICA SA
- Safety: a very important factor in cost-optimal low-voltage distribution network design (includes summary in French)
P M van Oirsouw, Phase to Phase BV
F Provoost, NUON Technisch Bedrijf
- Application of benchmarking to distribution companies' 10 billion dollar investment plans
Evaluation de la performance des plans d'investissement de 10 milliards de dollars des societes de distribution
D I Bailey, J A K Douglas, F Castro Sayas, C H Morris, PB Power UK Ltd
- Squeezing margins: reducing costs while balancing risks
G A Bloemhof, J Knijp, KEMA T&D Power

● Session Index

● Author Index

● Corporate Index

- Use of 690 V for LV industrial distribution network to save capital cost and improve network efficiency
Utilisation de 690 V comme basse tension pour les reseaux de distribution industriels afin reduire les coûts d'investissement et ameliorer le rendement du resaux
P Lionetto, R Brambilla, Foster Wheeler Italiana SpA
P Vezzani, Tecnimont
E Picatoste, Iberdrola SA
- Achieving real benefits by distribution automation solutions
P H Dondi, Y Peeters, ABB Power Automation AG
N Singh, Etrans AG
- Increasing of the capacity of low-voltage networks with higher exploitation of their components
F Vybíralík, Stredočeska energeticka a.s.
J Tlustý, Czech Technical University in Prague
- Development planning in power distribution companies in Poland
J Andruszkiewicz, Energetyka Poznanska S.A.
- System planning to achieve automation of network operation and reduction of operation costs
T Connor, E Petrossian, Siemens AG
H Horn, Adam Opel AG
- Method for calculation of cost of electrical power system losses
E Jordanger, K Sand, SINTEF Energy Research
R Kristensen, Norwegian Water Resources and Energy Directorate

● Session Index

● Author Index

● Corporate Index

- Some strategies for developing the electrical equipment for distribution and supply of electric energy in Romania - problems and solutions
G Mazilu, S Coculescu, A Mazilu, ELECTRICA SA
- Network development for cost efficient distribution
G Brauner, Technische Universität Wein
D Hohenstein, ALSTOM Energietechnik GmbH
A Wahi, repas AEG
- Economic choice of optimum feeder cable considering risk analysis
I Camargo, F Figueiredo, University of Brazilia
M de Oliveira, The Brazilian Regulatory Agency
- System development extensive rural electrification programs - Egypt case
E Ali, A Hassan, L Mohy, Ministry of Electricity and Energy
- Storms in France at the end of 1999. Firms' intervention conditions; feedback
Tempetes de fin d'année 1999 en France; conditions d'intervention des entreprises et retour d'experience
P Cochet, EDF
D Deverre, SERCE
G Gallet, ANROC
M Lapeyre, FNCCR

Planning Methodologies and IT Tools to Support Distribution Network Development

- Can we delay the replacement of this component? - An asset management approach to the question
J Østergaard, A Norsk Jensen, DEFU

● Session Index

● Author Index

● Corporate Index

- Optimal MV feeder development in rural areas (includes summary in French)
N G Boulaxis, S A Papathanassiou, M P Papadopoulos, National Technical University of Athens
- Rural electrification planning software (LAPER)
Logiciel d'aide a la planification pour l'electrification rurale (LAPER)
R Fronius, M Gratton, EDF R&D
- Optimal distribution planning - increasing capacity and improving efficiency and reliability with minimal-cost robust investment
L A F M Ferreira, P M S Carvalho, Instituto Superior Tecnico (IST)
S N C Grave, IOA
L M F Barruncho, EDINFOR
L A Jorge, E Quaresma, J A Martins, F C Branco, F Mira, EDP Distribuição Energia
- Tools for optimal operation and planning of urban distribution systems
E Carpaneto, G Chicco, Politecnico di Torino
A Mosso, Azienda Energetica Metropolitana Torino
A Poggi, Politecnico di Torino
P Ribaldone, Azienda Energetica Metropolitana Torino
- Determination of energy losses
J Bilbao, E Torres, P Eguía, University of the Basque Country
J L Berasategui, Iberdrola SA
J R Saenz, University of the Basque Country

● Session Index

● Author Index

● Corporate Index

- Peak load demand forecasting by using a fuzzy classification system combined with the convolutive aggregation method

Prévision de demande de charge de pointe en utilisant un système de classification fuzzy combiné avec la méthode d'agrégation convolutive

A Quijano López, M García Pellicer, Universidad Politécnica de Valencia
R Criado Calero, M Irizar Moyua, Iberdrola SA

- A new method for the computation of technical losses in electrical power distribution systems

C C B Oliveira, N Kagan, A Méffe, University of São Paulo
S Jonathan, S Caparroz, J L Cavaretti, Electropaulo - Eletricidade de São Paulo

- Artificial neural network-based distribution substation and feeder load forecast

J Yasuoka, University of São Paulo
J L P Brittes, Companhia Paulista de Força e Luz (CPFL)
H P Schmidt, J A Jardini, University of São Paulo

- System of aid in decision-making for low-voltage networks

Système d'aide a la decision pour les etudes de reseaux basse tension

O Jeannin, P Loevenbruck, EDF R&D

- Loadability enhancement by optimal load dispatch in subtransmission substations: a genetic algorithm

M R Haghifam, A Ghanbarnezhad, Tarbiat Modarres University
H Lavaee, Tehran Regional Electric Co.
G Khoshkholg, Hormozgan Regional Electric Co.

- Coordinated comprehensive design of distribution systems at medium and low voltage levels

M R Ganjavi, Ghods-Niroo Consulting Engineers Co.

● Session Index

● Author Index

● Corporate Index

- GIS based distribution simulation and analysis
L V Trussell, Stoner Associates
- Reconfiguration of the operation diagrams of urban electricity distribution networks by minimizing the energy losses
V Dumbrava, G Comanescu, Politehnica University of Bucharest
S Coculescu, ELECTRICA SA
- A fuzzy multiobjective approach for optimal operation of distribution systems using evolutionary algorithms
D Radasanu, E Barladeanu, Technical University "Gh. Asachi" Iasi
- Use of extended modeling of electrical loads for distribution networks - implementation and practical experience
P Behrens, EUS GmbH
E Handschin, Universität Dortmund
L Jendernalik, C Mensmann, RWE Net AG
U Schlücking, EUS GmbH
- Model for losses calculation and breakdown in distribution systems
R O Ferreyra, P J Paoletich, EDEA SA

Supply Quality Evaluation and Improvement

- Designing MV networks to meet quality of supply targets
P L Clarkson, Clarkson Database Systems
W R Hodgkins, Mathematical & Computer Modelling
P Leather, Norweb Distribution
- Assessment of industrial distribution system reliability using Six Sigma methodology
P E Sutherland, GE

● Session Index

● Author Index

● Corporate Index

- Choice of appropriate approach to evaluating the level of reliability of supplying consumers from MV distribution networks
V Detrich, K Matonoha, Z Spacek, EGU Brno, a.s.
- Methodology for enhancing the performance of non-insulated overhead distribution lines
J A Ragone Filho, E L F Pinto, A J B Cunha, Companhia Energética de Minas Gerais - CEMIG

MANAGEMENT, ORGANISATION, SKILLS

New Tasks of Management

- Asset Governance: a radically new way to manage distribution networks in a competitive and deregulated market (includes summary in French)
N Cornish, K Morton, London Power Networks
- Development of a balanced scorecard system for the network business of an energy supply enterprise with focus on technical processes
T Kohlstrung, RWE Net AG
N Rehnelt, S Mierzowski, Accenture GmbH
- Customer satisfaction in the Hungarian electricity distribution
Le contentement des consommateurs dans la distribution d'électricité en Hongrie
G Reketye, Pécs University
T Tersztyánszky, Hungarian Energy Office
- Quality dependent revenue caps - a model for quality of supply regulation
T Langset, F Trengereid, Norwegian Water Resources and Energy Directorate
K Samdal, J Heggset, SINTEF Energy Research

● Session Index

● Author Index

● Corporate Index

- Expansion of the electric energy transmission system in Argentina. Impact on the distribution business - need for regulatory changes
E O De Agostino, L A Casamitjana, EDEA SA
- Electric energy supply deregulation - retail competition
C Guidi, J Spain, PA Consulting Services SA
- Indicators models about service continuity (includes summary in French)
L Ruiz Diaz, Edenor SA

Organisational Structures and New Skills

- The strategic technology programme - a model for high value and focussed collaborative technology development
M Lees, EA Technology Ltd
J Thomson, ESAA
R Gibbons, STP (NZ) Inc.
- Emerging aspects of risk management within distribution businesses
S Curcic, EA Technology Ltd
A Creighton, Yorkshire Electricity Group
- Effects of deregulation on electricity distribution: a review of distribution remuneration schemes
J R Saenz, University of the Basque Country
J Arceluz, J Marín, Iberdrola SA
E Fernández, E Torres, P Eguía, University of the Basque Country
- EBR - successful technical co-operation between companies in Sweden and the influence of deregulation
L A Olsson, Göteborg Energi Nät
K Åhs, Svensk Energi

● Session Index

● Author Index

● Corporate Index

- Supplied power distribution sector in year 2021
La mise en service de la section de la distribution de l'électricité en 2021
S M Torabi, Hamadan Power Distribution Company
- A "hands-on" or "hands-off" approach in electricity distribution; outsourcing of business processes in a HRM perspective
P Lohmann, NESA
- Risk management in incentive-based regulated grid companies
B O Uthus, H Grønli, SINTEF Energy Research
S Fretheim, Norwegian Electricity Association
Ø Hovden, Østfold Energi Nett AS
- Trends and developments in the Norwegian power network sector
H T Ylvisåker, BKK Nett AS
- Planned organizational change of the distribution subsidiary of Brasov into an electric power supply company operating in a competitive environment
N Topoleanu, I O Rusu, Brasov Power Distribution Subsidiary
- Electricity reform status in Romania and the assessment of the distribution privatization requirements
G Indre, SC Electrica SA
M Indre, Bucharest Distribution Subsidiary
I Conecini, TRANSELECTRICA

● Session Index

● Author Index

● Corporate Index

- Outsourcing maintenance processes in electricity utilities
P Wester, NUON InfraCore
J J Smit, Delft University of Technology
E R S Groot, NUON InfraCore
- Conventional engineering and regulatory engineering in distribution companies in Argentina
Ingenierie conventionnelle et ingenierie regulatrice dans les entreprises de distribution en Argentine
M V González Sábato, O Ramati, Distributers Association of the Argentina Republic (ADEERA)
- How do different environments influence the investments of state and privatized electrical companies?
Quelle est l'influence du contexte sur les investissements des compagnies électriques de l'état et privatisées?
H M Laspada, Provincial Regulatory Agency of Mendoza
R Stival, Provincial Company of Energy of Sta.Fe-Argentina
- Effects of electricity market liberalisation on management organisation skills
E Piccagli, AEM Elettricità SpA
- The deregulation of the electricity market in the view of a regional Austrian utility
H Sander, Kärntner Elektrizitäts AG
J Schwab, Grazer Stadtwerke
M Muhr, Technische Universität Graz

● Session Index

● Author Index

● Corporate Index

Business Opportunities Made Possible by Technological Development

- Integrated upgradable information systems and local electricity suppliers
L'informatique intégrée et évolutive destinée aux entreprises locales de distribution
J Pouliquen, Steria
E Julien, R.E.D.V.
A Rongiere, Regie du SIEDS
- Striving towards strategic IT & business alignment in small and medium-sized electric utilities - a pragmatic approach
M Haglind, Royal Institute of Technology (KTH)
K H Cheong, University Tanaga Nasional (UNITEN)
- Functionality oriented design as response to requirements of liberalized electricity markets - the PS-1 substation concept (includes summary in French)
C Payerl, G Friberg, ABB Power Distribution
- IT support for new business processes connected with the liberalisation of the energy market in Germany
L Kirchner, Siemens AG
N Vierheilig, FrankenData GmbH
W Zimmermann, STW Würzburg AG
- ODEL - standard format for exchange of metering and settlement information
H Sæle, I Graabak, P Støa, SINTEF Energy Research
- Medium-term load forecasting with artificial neural network models
M Gavrilas, Technical University "Gh. Asachi" Iasi
I Ciutea, C Tanasa, SC Electrica SA



Session Index



Author Index



Corporate Index

- Methodology for the development and implant of information systems into an electric energy distribution company
E E Minio, Edenor SA
- Internet service provider - load forecast
P H Dondi, J Germann, C Iderman, ABB Power Automation AB
A Marcuzzi, A Gal, Enterprises Electriques Fribourgeoises EEF