



List of accepted papers

Theme 1 : Major drivers for asset management policies

- 0004** *ISCM, Integrated Substation Condition Monitoring*
Norbert Kaiser, Siemens AG, Germany; Reinhard Wolf, Siemens AG, Germany; Chris Charlson, Siemens AG, Germany; David Kerr, Siemens AG, Germany
- 0005** *Load Economic Density of MV Lines and Asset Management Procedure of Their Conductors Optimal Cross-section Selection*
Vladimir Shiljkut, Electricity Distribution Company "Elektro distribucija Beograd", Serbia; Slobodan Maksimovich, Electricity Distribution Company "Elektro distribucija Beograd", Serbia
- 0010** *Analysis of Energy Efficiency Optimization in Distribution Transformers considering regulation constraints.*
PAOLA PEZZINI, CITCEA-UPC, Spain; ORIOL GOMIS-BELLMUNT, CITCEA-UPC, Spain; ANTONI SUDRIÀ-ANDREU, CITCEA-UPC, Spain; JOAN FRAU-VALENTI, ENDESA, Spain
- 0016** *Quantifying asset risk to optimise investment - a realistic prospect?*
David Hughes, EA Technology, United Kingdom; Paul Barnfather, EA Technology, United Kingdom
- 0019** *Optimization of reliability-centered maintenance (RCM) for power transmission and distribution networks*
Ovidiu Georgescu, The Branch of Electrical Energy Distribution Mures, Romania; Dorin Sarchiz, Petru Maior University, Romania; Dorin Bica, Petru Maior University, Romania
- 0023** *Some impacts of supply continuity regulation on decision-making of DSO at telemechanization of MV overhead distribution network*
Petr Skala, EGU Brno, a.s., Czech Republic; Vaclav Detrich, EGU Brno, a.s., Czech Republic; Jindrich Bahnik, CEZ Distribuce, a.s., Czech Republic
- 0024** *SmartLife : a European coordination project in networks Asset Management*
Christian GUILLAUME, EDF R&D, France; Christophe GAUDIN, EDF R&D, France, Hallvard FAREMO, SINTEF, Norway; Giovanni PIROVANO, ERSE, Italy; Lars LUNDGAARD, SINTEF, Norway; Laura PANELLA, ENEL Distribuzione, Italy ; Jos WETZER, KEMA, The Netherlands
- 0025** *Consideration of the incentive regulation requirements for cost analysis based on ageing models for 110-kV equipment*
Leyla Asgarieh, Technische Universität Darmstadt, Germany; Gerd Balzer, Technische Universität Darmstadt, Germany; Armin Gaul, RWE Rheinland Westfalen Netz AG, Germany
- 0026** *Asset Management Reloaded*
Lars Jendernalik, RWE Westfalen-Weser-Ems Verteilnetz GmbH, Germany
- 0027** *Asset Management - The right decisions focussed on the future: The development of sustainable long-term asset-strategies with focus on changes and new challenges*
Armin Gaul, RWE, Germany; Esko Nockmann, RWE, Germany



- 0029** *Securing Sustainable Asset Management By Life Cycle Initiatives -The Life Cycle Asset Management Practice of Shanghai Municipal Electric Power Company*
Wanrong Xu, Shanghai Municipal Electric Power Company, China; Letian Teng, Shanghai Municipal Electric Power Company, China; Wei Xie, Shanghai Municipal Electric Power Company, China
- 0031** *Amorphous materials and energy efficient distribution transformers*
Christophe ELLEAU, EDF R&D, France; Olivier GENIN, EDF R&D, France; Bertrand JARRY, EDF R&D, France
- 0032** *Using A Comprehensive KPI Framework To Evaluate And Monitor The Overall Asset Management Performance*
li Shen, State Grid Corporation of China, China; Letian Teng, Shanghai Municipal Electric Power Company, China; Wanrong Xu, Shanghai Municipal Electric Power Company, China
- 0033** *Power infrastructure development and the impact of renewable energy sources in a Romanian distribution company*
Costica Vlad, Electrica Distributie Muntenia Nord SA, Romania; Daniel Craciun, Electrica Distributie Muntenia Nord SA, Romania; Constantin Coman, Electrica Distributie Muntenia Nord SA, Romania; Radu Somodi, Electrica Distributie Muntenia Nord SA, Romania
- 0034** *A technical experience during network asset replacement: investigating cable and transformer switching interactions*
Rui Zhang, University of Manchester, United Kingdom; Tony Byrne, United Utilities, United Kingdom; Darren Jones, Electricity Northwest, United Kingdom; Zhongdong Wang, University of Manchester, United Kingdom
- 0037** *Dealing with High Impact Low Probability (HILP) events such as attacks, natural disasters, in Asset Management ?*
Yves ZONTA, ERDF, France; Christophe GAUDIN, ERDF, France
- 0038** *Best Practice Impact on Performance*
Scott Sidney, PA Consulting Group, United States
- 0039** *Research on Application of Life Cycle Asset Management In Material Procurement*
Lu Shuang, Shanghai Municipal Electric Power Company, China; Chen Hongbing, Shanghai Municipal Electric Power Company, China; Xiao Fuli, Shanghai Jiulong Management Consulting Co.,Ltd, China
- 0043** *Quality of service target planning and risk analysis for effective asset management - The case study of Enel Distribuzione*
Gianluca Palumbo, Enel Distribuzione S.p.A., Italy; Laura Panella, Enel Distribuzione S.p.A., Italy; Laura Ventura, Enel Distribuzione S.p.A., Italy
- 0052** *Energy risks and asset management problems caused by an unexpected weather conditions in electricity distribution of Iran*
Naser Khodabakhshi Javinani, K. N. Toosi University of Technology, Iran, Islamic Republic of; Hamed Valizadeh Haghi, K. N. Toosi University of Technology, Iran, Islamic Republic of; Masoud Aliakbar Golkar, K. N. Toosi University of Technology, Iran, Islam
- 0059** *Asset Simulation and Automatic Asset Optimization*
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- 0060** *A risk based model supporting long term maintenance and reinvestment strategy decision making*
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- 0066** *Modelling the impact of preventive maintenance over the lifetime of equipments*
Yacine GUESSOUM, EDF R&D, France; Jean AUPIED, EDF R&D, France
- 0067** *ERDF electrical network substations Control command systems : ageing and strategies of renewal*
Francis GALLON, ERDF, France; Mbaye SARR, ERDF, France
- 0070** *Optimized Asset Management - An Integrated Approach*
Ramón Nadira, Siemens, United States; Juan Carlos Ledezma, Siemens, United States; Jorge Martinez, Siemens AG, Germany
- 0073** *Laws and regulation of electrical distribution system in Sweden 1996-2012-learning from novel approaches such as less good experiences*
Carl Johan Wallnerström, Royal Institute of Technology - KTH, Sweden; Lina Bertling, Royal Institute of Technology - KTH, Sweden
- 0074** *Condition Assessment and Asset Management in Electric Power T&D Networks*
Juan Ledezma, Siemens Energy, Inc., United States; Carlos Dortolina, Siemens Energy, Inc., United States; Horst Hakelberg, Siemens AG, Germany; Karin Furuno, Siemens AG, Germany
- 0075** *Impact of Risks as a Part of Asset Management on Maintenance Task Allocation*
Mahmoud-Reza Haghifam, Tarbiat Modares University, Iran, Islamic Republic of; Elham Akhavan, Tarbiat Modares University, Iran, Islamic Republic of; Alireza Fereidonian, Tarbiat Modares University, Iran, Islamic Republic of
- 0077** *Opex reduction in monitoring MV compensated network parameters*
Francesco Ortolani, ENEL Spa, Italy; Roberto Calone, ENEL Spa, Italy; Albert Leikermoser, ARS GmbH, Austria
- 0079** *Managing Ageing Assets*
Jazimah Abdul Majeed, TNB, Malaysia; Halim Osman, TNB, Malaysia; Dr. Prodipto Ghosh, RUP Consulting Inc., Canada
- 0082** *Prospects of the owner and customer in the new electricity distribution business environment*
Juha Haakana, Lappeenranta University of Technology, Finland; Jukka Lassila, Lappeenranta University of Technology, Finland; Samuli Honkapuro, Lappeenranta University of Technology, Finland; Jarmo Partanen, Lappeenranta University of Technology, Finland
- 0086** *Granularity of asset management*
Yongxing Zhou, Shanghai Power, China; Jiping Liu, Shanghai Power, China; Weiguo Wang, Shanghai Power, China; Yuelu Zhang, Shanghai Power, China; Lei Wang, Shanghai Power, China
- 0089** *Implementation of Condition Based Maintenance for Medium Voltage Underground Cable System for TNB Distribution*
Jazimah Abdul Majeed, TNB, Malaysia; Halim Osman, TNB, Malaysia; Prodipto Ghosh, RUP Consulting Inc., Canada; Ahmad Basri Abd Ghani, TNB, Malaysia



- 0091** *"best-offer" Purchasing of medium voltage Joints based on Robustness test.*
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- 0093** *Ageing Power Transformer End-of-Life Modelling: Statistical Approach and Physical Process*
Qi Zhong, University of Manchester, United Kingdom; Zhongdong Wang, University of Manchester, United Kingdom; Peter Crossley, University of Manchester, United Kingdom
- 0094** *A framework for handling high impact low probability (HILP) events*
Gerd Kjølle, SINTEF Energy Research, Norway; Oddbjørn Gjerde, SINTEF Energy Research, Norway; Agnes Nybø, SINTEF Energy Research, Norway
- 0096** *Evaluation of the replacement of a distribution substation*
Britta Heimbach, ewz, Switzerland; Hansruedi Luternauer, ewz, Switzerland; Jürg Bader, ewz, Switzerland; Lukas Küng, ewz, Switzerland
- 0098** *Risk analysis for power systems, overview and potential benefits*
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- 0101** *EURELECTRIC Views Business Trends in the European Power Industry: A Revision of the Economic Situation of the Electricity Distribution Business*
Ignacio Martinez del Barrio, UNESA, Spain; Michael Längle, UNESA, Spain
- 0104** *Model-Based Optimization Framework using Predictive Health Model for Asset Management*
Gautam Bajracharya, Delft University of Technology, Netherlands; Tomasz Kultunowicz, Delft University of Technology, Netherlands; Dhiradj Djairam, Delft University of Technology, Netherlands; Johan Smit, Delft University of Technology, Netherlands
- 0111** *Risk-based distribution system asset management*
Maria Daniela Catrinu, SINTEF Energy Research, Norway; Knut Samdal, SINTEF Energy Research, Norway; Dag Eirik Nordgård, SINTEF Energy Research, Norway
- 0125** *Asset management proves to secure sustainability*
Benoit Houssard, ORES, Belgium



Theme 2 : Impact of future technologies and energy policy on asset management

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Simon Blake, Durham University, United Kingdom; Philip Taylor, Durham University, United Kingdom; Alan Creighton, CE Electric UK, United Kingdom; David Miller, CE Electric UK, United Kingdom

0009 *Home Automation easing Active Demand Side Management*
Francisco Lobo-Llata, CITIC, Spain; Ana Cabello, CITIC, Spain; Francisco Carmona, CITIC, Spain; Juan Carlos Moreno, CITIC, Spain; David Mora, Ericsson, Spain

0011 *Smart metering – opportunity or threat to the power industry ?*
Eva Fosby Livgard, TNS Gallup, Norway

0017 *Smart Grid Enabled Asset Management*
Paul Myrda, Electric Power Research Institute, United States; Mark McGranaghan, Electric Power Research Institute, United States

0018 *Innovative network design & optimization using smart metering data*
Frederic Gorgette, ERDF, France; Guillaume Roupioz, EDF R&D, France

0022 *Managing Assets in the Age of Smart Grid*
Francisco Romero, Telvent, Spain; Andy Zetlén, Telvent, Spain

0030 *Decentralised Voltage and Thermal Management to Enable More Distributed Generation Connection*
Thipnatee Sansawatt, The University of Edinburgh, United Kingdom; Luis F. Ochoa, The University of Edinburgh, United Kingdom; Gareth P. Harrison, The University of Edinburgh, United Kingdom

0036 *Smart Grid Technology Roadmap for Austria*
Andreas Lugmaier, Siemens AG Austria, Austria; Friederich Kupzog, Vienna University of Technology, Austria; Hubert Fechner, FH Technikum Vienna, Austria; Andreas Abart, Energie AG Netz, Austria; Helfried Brunner, Austrian Institute of Technology, Austria

0040 *GROW-DERS: Grid Reliability and Operability with Distributed Generation using Flexible Storage*
Petra de Boer, KEMA, Netherlands; Dieter Gutschow, KEMA, Netherlands; Gabriel Bloemhof, KEMA, Netherlands

0042 *Low carbon policies : possible medium term impacts on distribution network*
Gaudin Christophe, ERDF, France

0047 *Reducing uncertainty caused by distributed generation in medium voltage network planning.*
Miquel Ramon, Endesa Distribución Eléctrica S.L., Spain; Andreas Sumper, CITCEA-UPC, Spain; Roberto Villafañila, CITCEA-UPC, Spain; Julia Ferrer, Endesa Distribución Eléctrica S.L., Spain; Victor Albet, Endesa Distribución Eléctrica S.L., Spain



- 0049** *Improving distribution reliability by integrating asset management and outage management tasks*
Yimai Dong, Texas A&M University, United States; Mladen Kezunovic, Texas A&M University, United States
- 0051** *Impact of large-scale stochastic generation and flexible demand on network design and proposals on mid- and long-term asset management*
Hamed Valizadeh Haghi, K. N. Toosi University of Technology, Iran, Islamic Republic of; Masoud Aliakbar Golkar, K. N. Toosi University of Technology, Iran, Islamic Republic of
- 0053** *ESB is adopting Smart Neutral Treatments on its 20 kV system. The operational performance of low impedance earthing is driving us to adopt a policy change to High Impedance Earthing. We will present the results of two trials:-1)ESB patented Faulty Phase E*
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- 0054** *Asset Management Benefits from a Wide Area Power Quality Monitoring System*
Lance Irwin, Schneider Electric, United States
- 0055** *Experiences from operations after a full-scale smart metering rollout*
Lars Garpetun, Vattenfall Distribution Nordic, Sweden
- 0056** *Improving short-term load forecast accuracy by utilizing Smart Metering*
Petri Valtonen, Lappeenranta University of Technology, Finland; Samuli Honkapuro, Lappeenranta University of Technology, Finland; Jarmo Partanen, Lappeenranta University of Technology, Finland
- 0065** *SMART GRIDS! The basis of SMART GRIDS are "SMART" planning rules.*
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- 0068** *Generation and battery modelling and integrated control strategies for a better acceptance of intermittent renewable energy sources in the electric distribution system*
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Marie-Cecile Alvarez-Herault, G2Elab, France; Raphaël Caire, G2Elab, France; Bertrand Raison, G2Elab, France; Nouredine Hadjsaid, G2Elab, France; Wojciech Bienia, G-scope, France; Justine Descloux, ENSE3, France
- 0071** *T&D Europe Vision on Future of Smart Grid Infrastructures in the European context*
Giuliano Monizza, T&D Europe, Belgium; Jean-Luc Bessède, T&D Europe, Belgium; Paolo Scalera, T&D Europe, Belgium; Andreas Luxa, T&D Europe, Belgium; Fabrice Huré, T&D Europe, Belgium; Guillermo Amman, T&D Europe, Belgium; Geert Segers, T&D Europe, Belgium
- 0076** *Development of Operation and Control for Autonomous Demand Area Power System - Comparing Voltage Regulation Effect using SDIF with using Line Sensor in Power Distribution System -*
Satoshi Uemura, Central Research Institute of Electric Power Industry, Japan; Hiromu Kobayashi, Central Research Institute of Electric Power Industry, Japan



- 0078** *Smart grids are the efficient base for future energy applications*
 Joachim Schneider, RWE Rheinland Westfalen Netz AG, Germany; Armin Gaul, RWE Rheinland Westfalen Netz AG, Germany; Torsten Hammerschmidt, RWE Rheinland Westfalen Netz AG, Germany
- 0081** *Effects of Demand Response on the End-Customer Distribution Fee*
 Nadezhda Belonogova, Lappeenranta University of Technology, Finland; Jukka Lassila, Lappeenranta University of Technology, Finland; Jarmo Partanen, Lappeenranta University of Technology, Finland
- 0087** *New Concepts for Smart Systems - from a Smart Grid via Smart Buildings to Smart Billing*
 Maria Aigner, Institute of Electrical Power Systems/TU Graz, Austria; Christian Raunig, Institute of Electrical Power Systems/TU Graz, Austria; Ernst Schmutzner, Institute of Electrical Power Systems/TU Graz, Austria; Lothar Fickert, Institute of Electrical Power Systems/TU Graz, Austria
- 0088** *Consideration of Safety Requirements for People and Electrical Equipment in Smart Grids*
 Maria Aigner, Institute of Electrical Power Systems / TU Graz, Austria; Christian Raunig, Institute of Electrical Power Systems / TU Graz, Austria; Ernst Schmutzner, Institute of Electrical Power Systems / TU Graz, Austria; Lothar Fickert, Institute of Electrical Power Systems/TU Graz, Austria
- 0090** *Grid Asset Management Suite (GAMS) - reference Framework for Strategic Grid Management*
 Thomas Glückselig, Siemens AG, Germany; Michael Schwan, Siemens AG, Germany; Christian Heuer, Siemens AG, Germany, Fin Jennrich, Siemens AG, Germany
- 0092** *European Energy Regulators' Position on Smart Grids*
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- 0095** *A smart grid approach to distribution management systems (DMS) for electric networks*
 Antonio De Bellis, ABB - BU Network Management, Italy; Samuele Grillo, University of Genova, Italy; Stefano Massucco, University of Genova, Italy; Sandra Scalari, ENEL - Ingegneria e Innovazione, Italy; Paolo Scalera, ABB - BU Power Systems, Italy; Federico Silvestro, University of Genova, Italy
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 Johan König, Royal Institute of Technology, Sweden; Lars Nordström, Royal Institute of Technology, Sweden; Mathias Ekstedt, Royal Institute of Technology, Sweden
- 0103** *- Smart Grids and Networks of the Future - EURELECTRIC Views*
 Gunnar Lorenz, EURELECTRIC, Belgium; Mihai Paun, EURELECTRIC, Belgium
- 0107** *Cost-efficient integration of dispersed integration using voltage dependent reactive power control*
 Juergen Backes, EnBW Regional AG, Germany; Christian Schorn, EnBW Regional AG, Germany; Hauke Basse, EnBW Regional AG, Germany



0110 *Energy Resources Management for More Sustainable Distribution Systems: an Intelligent Approach*

Zita Vale, ISEP/GECAD, Portugal; Hugo Morais, ISEP/GECAD, Portugal; Carlos Ramos, ISEP/GECAD, Portugal; João Soares, ISEP/GECAD, Portugal

0112 *Optimal CHP operation in microgrids to defer network assets' upgrade.*

Susanna Mocci, University of Cagliari, Italy; Fabrizio Pilo, University of Cagliari, Italy; Giuditta Pisano, University of Cagliari, Italy; Gian Giuseppe Soma, University of Cagliari, Italy

0114 *Socioeconomic Analysis of Implementing Smart Grid Technologies*

John Saymansky, West Virginia University, United States; Ali Feliachi, West Virginia University, United States; John Sneckenberger, West Virginia University, United States

0115 *E-island (expandable internet sustained load and demand side management for the integration into virtual power plants)*

Hans Schaefers, Harbour City University Hamburg, Germany; Franz Schubert, Harbour City University Hamburg, Germany

0119 *Effects of PHEVs on distribution networks: reviews and analyses*

TUAN LE, CHALMERS UNIVERSITY OF TECHNOLOGY, Sweden; OLA CARLSON, CHALMERS UNIVERSITY OF TECHNOLOGY, Sweden; LINA BERTLING, CHALMERS UNIVERSITY OF TECHNOLOGY, Sweden

0120 *Prepare your "Smart Grid" implementation strategy - Key factors and tools*

Robert Denamur, ESRI BeLux, Belgium; Peter Vranckx, ESRI BeLux, Belgium

0122 *Early-stage Smart Grid deployment: leveraging DNO's legacy assets.*

Rosa Mora, Siemens, Spain; Alberto Lopez, CEDETEL, Spain; Alberto Sendin, Iberdrola, Spain; Iñigo Berganza, Iberdrola, Spain

0123 *Evaluation of an Energy Storage System on a Distribution Feeder with Distributed PV Systems*

YAHIA BAGHZOUZ, UNLV, United States

0138 *Successful integration of EMS//DMS and asset management for increased business value*

Roy Jean-Luc, Areva -T&D, France; Coullon Jean-Louis, Areva -T&D, France; Murray CJ, Areva -T&D, France

0139 *Asset Management of GIS equipment in the context of the renewal of European MV Grid Infrastructuresauteurs*

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