

# 2015 16th International Scientific Conference on Electric Power Engineering (EPE)

Wednesday, May 20, 2015 – first day of the conference

Short presentations - Session I (ROOM 500)

Guarantee: Petr Moldřík (VŠB - TU Ostrava, CZ)



Time	No	Authors	Title of paper
16:00 - 18:30	2	Martin Kašpírek, David Mezera	Harmonic Voltage Measurements in the Low Voltage Distribution Grid
	3	David Mezera, David Šimáček	Voltage Quality in the HV Distribution Grid
	6	Maroš Ďurica	Application of a Random Number Generator for Calculations of the Trolley Mains Dimensioning
	10	David Mezera	Voltage Quality in the Low Voltage Distribution Grids with the High Penetration of Distributed Energy Sources
	23	Miroslaw Kornatka	Assessment of working conditions of 110 kV line - a case study
	28	Tomáš Hrubý, Stanislav Kocman, Pavel Pečínka	Using Active Filter for Harmonic Mitigation in Power Grid of Industry Plant
	29	Pavel Hahn, Radek Polansky	Estimation of the service lifetime of cable sheath materials designed for working in harsh operating environment
	34	Michal Krbal, Petr Siuda	Design and Construction Solution of Laboratory Tesla Coil
	36	Anna Gawlak	The Influence of Investment on Reducing Energy Losses in Distribution Networks
	37	Jan Švec, Jakub Ehrenberger	Analysis of Current Unbalance in Meshed Transmission System
	38	Jakub Ehrenberger	Use of Directional Overcurrent Protection Scheme for Distributed Generation Systems
	41	Jan Jiříčka, David Mezera	Electric Power Savers – Operating Measurements of Practical Installations
	53	Mayada Daboul, Jaroslava Orsagová, Tomáš Bajánek, Vojtěch Wasserbauer	Testing Protection Relays Based on IEC 61850 in Substation Automation Systems
	56	Michal Spacek, Zdenek Hradilek, Petr Moldrik	Cooperation between Photovoltaic and Biogas Power Plants within 22kV Network
	65	Lukáš Harvánek, Tetjana Tomášková, Václav Mentlík, Pavel Trnka	Modification of Epoxy Resin Used in High-Voltage Technology
68	Vladimir Kral, Stanislav Rusek, Radomir Gono	Processing of Input Databases of Technical Condition and Importance and Definition of Order for Maintenance of 110 kV / MV Transformers	

Supported by **Central European Energy Institute** CZ.1.07/2.2.00/28.0256



Time	No	Authors	Title of paper
16:00 - 18:30	71	Ladislav Novosád, Zdeněk Hradílek	Power Analysis of Co-Generation Units at Biogas Station
	78	Tomáš Bajánek, Emil Kalina, Roman Pernica, Drahomír Tůma	Experience with Pressure Rise Calculation in Medium Voltage Switchgear
	89	Anton Cerman, František Janíček, Milan Kubala	Resistive-type Network Model of Stray Current Distribution in Railway DC Traction System
	101	Michal Váry, Terézia Janúšková Skoršepová, Jaroslav Lelák, Thorsten Ruhnke, Peter Kubinec	HV Very Low Frequency Method for Evaluation of 6 kV Cable Type 6-AYKCY 3x240 Parameters Changes During the Thermal Aging
	104	Bystrík Dolník	Contribution to Analysis of Daily Diagram of Supply Voltage in Low Voltage Network: working days versus non-working days
	123	Martin Knenicky, Radek Prochazka	Hight Voltage Test Circuit for Harmonic and Impulse Voltage Stress
	126	Miroslav Müller, Zdeněk Müller, Josef Tlustý	Icing Influence Simulation Using 3-DOF Overhead Line Modelling
	127	Rudolf Bayer, Michal Brejcha, Zuzana Pelánová, Jan Zálešák	Road Lighting Design by Means of Genetic Algorithm
	128	Vit Houdek, Stanislav Rusek, Radomir Gono	Analysis of Results for 110 kV Power Lines Restoration Methodology
	135	Jozef Bendík, Attila Kment, Marek Pípa	Enumeration of magnetic flux density generated by power transmission lines
	139	Marek Pípa, Attila Kment, Jaroslav Lelák, František Janíček	Assessment of Usability of Armoured Single-Core Low Voltage Power Cables
	141	Matej Cenký, Marek Pípa, Attila Kment	Computations of electrical parameters of untransposed overhead lines
	146	Michal Regula, Alena Otcenasova, Roman Bodnar, Marek Hoger	Digital Protection Relay for 22 kV Power Line Model with Partial Power Quality Measurement
	154	Michal Kolcun, Martin Kanálik, Dušan Medved', Zsolt Čonka	Measuring of Real Value of Short-circuit Power in Island Operation Condition
	175	Jakub Kosmák, Stanislav Mišák, Lukáš Prokop	Power Quality Dependence on Connected Appliances in an Off-Grid System
189	Frantisek Janicek, Anton Cerman, Milan Perny, Igor Brilla, Lubomir Marko, Stefan Motycak	Applications of superconducting quantum interference device	
190	Radim Čumpelík, Petr Krejčí	Undefined Parameters And Two-Limit Parameters in Standard EN 50160 ED. 3	

Supported by **Central European Energy Institute** CZ.1.07/2.2.00/28.0256



INVESTMENTS IN EDUCATION DEVELOPMENT