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803	Control strategy of the bi-directional converter for hybrid AC/DC microgrid, Pan Hu; Wenyan Hu	China
808	Full Bridge Resonant Inverter for Non-ferrous Metal Induction Heating Application, Rattanakorn Phadungthin; Juthathip Haema	Thailand
812	A Reduced Capacitance UPFC with Active Filtering Capability for High PV Penetration Applications, Md Mejbaul Haque; Peter Wolfs	Australia
817	Droop Control of Current-source Converters in Bipolar-Type DC Microgrid, Chen Jiang	China
822	Design of Control Structure for Modular Multilevel Converter, Jichuan Zhang; Long Jing; Lei Shao; Xiaoyao Yuan	China
827	A Novel Precharge Control Strategy for Modular Multilevel Converter, Pan Hu; Xiaonan Yang	China
832	Crank-Nicholson Scheme based Wind Speed Modeling, Feng Wu; Weiya Kong; Yu Zhou; Linjun Shi; Junhui Huang; Liwei Qiao; Yuqing Jin; Jingdong Han; Ping Ju	China
837	Dynamic Equivalent Model of Wind Farm Based on the K Nearest Neighbor, Weijun Teng; Xifan Wang; Can Dang; Wenhui Shi	China

842	Modelling, Control and Performance Analysis of a 6 MW Wind Turbine, Adrian Jess; Rahul Sharma	Australia
847	Model Validation of a Wind Farm using Hybrid Data Simulation, Zhao Da-wei; Ma Jin; Qian Min-hui; Liu Yan-zhang; Zhu Ling-Zhi; Chen Ning	China
852	A Methodology for a Correct Sizing of Electrochemical Storage Devices, Luigi Piegari; Simone Barcellona; Enrico Tironi; Vincenzo Musolino	Italy
859	Effect of External Resistance on SOH Measurement of LFP Cells, Hsiang-Fu Yuan; Lan-Rong Dung	China
864	Simulation of Core Shape Considerations of Wireless Charging Systems for Electric Vehicles, Chiragkumar Panchal; Sascha Stegen; Junwei Lu	Australia
869	Modeling and LVRT Analysis of DFIG Wind Power System, Huqing Wen	China
874	Determination of Harmonic Source's Total Harmonic Contributions in Distribution Network and Its Realization on Platform of LabVIEW, Xiangyu Dou; Lijun Tian; Daozhu Ma; Yu Cui	China
879	Microgrid Modeling and Simulation Scenario Design for Power Quality Analysis, Kexuan Tang; Chen Shen; Weidong Chen; Bin Liu; Qing Yue; Yiwei Sun	China
884	Modelling of High Power Mechanical DC Circuit Breaker, Weixing Lin; Dragan Jovcic; Samuel Nguéfeu; Hani Saad	United Kingdom
889	Research on Adaptive Synthesis Dynamic Load Model Based on Multiple Model Ideology, Zhenshu Wang; Yangyang Ma; Xiaohui Jiang	China
894	PMU Measurement Based Dynamic Load Modeling using SVC Devices in Online Environment, Kegian Hua; Arash Vahidnia; Yateendra Mishra; Gerard Ledwich	Australia
899	A Traffic Flow Based Planning Strategy for Optimal Siting and Sizing of Charging Stations, Yue Xiang; Junyong Liu	China
904	Electromagnetic Transient Simulation of Induction Machine based on QSS Algorithm, Zun WEI; Haiyun WANG; Ying CHEN; Shaowei HUANG; Zaichi ZHANG; Zhitong YU; Qiankun CHANG	China
909	Primary-secondary Control Strategy for Meshed HVDC Transmission Grids at Steady State, Kalid Yunus; Torbjörn Thiringer	Sweden

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N/A	Control of ensembles of thermostatically controlled loads, Ian Hiskens	United States of America
916	Long Term Incentives for Residential Customers Using Dynamic Tariff, Shaojun Huang; Qiuwei Wu; Arne Nielsen; Haoran Zhao; Zhaoxi Liu	China

921	Operation Scheduling considering Demand Response in a Commercial Building with Chiller System and Energy Storage System, Joonho Son; Ryoichi Hara; Hiroyuki Kita; Eiichi Tanaka	Japan
926	Review of demand side management modelling for application to renewables integration in Australian power market, Zoe Hungerford; Anna Bruce; Iain MacGill	Australia
931	An Energy Acquisition Model for an Aggregator Considering Demand Responses, Linna Ni; Fushuan Wen; Abdus Salam; Swee Peng Ang	China

Session 2: TRANSMISSION NETWORK

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936	Investigation of interconnecting two Chinese LCC-HVDC through LCL DC/DC Converter, Weixing Lin; Dragan Jovcic; Liangzhong Yao; Wei Sun; Xiaojun Lu; Jinyu Wen	United Kingdom
941	Alternate Iteration Method for Power Flow Analysis of Interconnected System of Fractional Frequency Transmission System and Main Grid, Ming Lu; Xifan Wang; Lianhui Ning; Shenquan Liu; Yunpeng Xiao; Pengwei Sun	China
946	Numerical Optimization and 3D-Printing Fabrication Concept of High Voltage FGM Insulator, Wen-Dong Li; Xiao-Yu You; Hai-Bao Mu; Jun-Bo Deng; Guan-Jun Zhang	China
950	Model Predictive Control Considering Cyber-Physical System to Dampen Low Frequency Oscillations of Interconnected Power Systems, Xinyu Shi; Yong Li; Yijia Cao; Yi Tan; Zhisheng Xu; Min Wen	China

Session 3: SOLAR PV

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955	Assessing the Representativeness of ‘Live’ Distributed PV Data for Upscaled PV Generation Estimates, Navid Haghdadi; Anna Bruce; Iain MacGill	Australia
960	Real Time Generation Mapping of Distributed PV for Network Planning and Operations, Navid Haghdadi; Jonathan Dennis; Anna Bruce; Iain MacGill	Australia
965	Hosting Capacity of Solar Photovoltaics in Distribution Grids under Different Pricing Schemes, Riccardo Carollo; Sanjay Chaudhary; Jayakrishnan Radhakrishna Pillai	Denmark
970	Field Investigation of Voltage Quality Issues in Distribution Network with PV Penetration, Annapoorna Chidurala; Tapan Saha; Mithulananthan Nadarajah	Australia
975	Development of an automatic Cleaning System for Photovoltaic Plants, Alireza Gheitani	New Zealand
979	Residential Electricity Costs – Assessment of Queensland Electricity Tariffs for Solar Households, Manisha Senadeera; Wendy Miller; Manisha Senadeera	Australia
983	Construction of PV Simulator by using Geographic Information System and Digital Surface Model, Yuki Koyamatsu; Thongchart Kerdphol; Yaser Qudaih	Japan

988	Short-term Power Forecasting for Photovoltaic Generation Based on Wavelet Neural Network and Residual Correction of Markov Chain, Xie Hua; Yang Le; Wang Jian; Vassilios Agelidis	China
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Session 4: ELECTRICITY VEHICLE AND ENERGY STORAGE

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993	Power and Hour Capacity Requirement for an Energy Storage from Grid Codes, Masakazu Ito; Yu Fujimoto; Masataka Mitsuoka ; Hideo Ishii; Yasuhiro Hayashi	Japan
998	Residential Tariff Structure and Battery Energy Storage Impact in Queensland LV Network, Christopher Du Pless; Geoffrey Walker; Houman Pezeshki	Australia
1003	Dynamic Load Control at a Bidirectional DC Fast Charging Station for PEVs in weak AC grids, Mohsen Ahmadi; Mithulananthan Nadarajah; Rahul Sharma	Australia
1008	A Tool to Estimate Maximum Arbitrage from Battery Energy Storage by Maintaining Voltage Limits in an LV Network, Shohana Rahman Deeba; Rahul Sharma; Tapan Saha; Debraj Chakraborty	Australia
1013	Optimal Configuration of Battery Energy Storage System for Peak-load Regulation, Guodong Xu; Haozhong Cheng; Sidun Fang; Qinyong Zhou; Hailei He; Pingliang Zeng	China
1018	Battery Integration with More Electric Aircraft DC Distribution Network Using Phase Shifted High Power Bidirectional DC-DC Converter, Mohd Tariq; Ali Maswood; Chandana Gajanayake; Gabriel H. P. Ooi; Pradip Chatterjee; Sandeep Madishetti; Devinda Molligoda; Amit Kumar Gupta	Singapore

Session 5: ELECTRICITY MARKET

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1023	Rethinking Business Models for Network Service Providers – Shadow Pricing against Storage, Jenny Riesz; Joel Gilmore	Australia
1028	A Stress Testing Analysis on China's Power Market in the Future Under the New Power Reform Policy, Peng Li; Qiuyan Li; Lili Wang; Yong Guo; Xiangrui Kong; Dong Han; Zheng Yan; Yiqun Song	China
1033	Day-ahead Scheduling Strategy of Virtual Power Plant under Uncertainties, Songli Fan; Qian Ai	China
1038	Planning in the Australian National Electricity Market - Challenges and Opportunities, Neil Raffan; Anna Bruce; Lain MacGill	Australia
1043	Renewable Energy Integration in Indian Electricity Market, Kaushik Dey; S.S. Barpanda; S.C. Saxena; Harish Rathour; K V N Pawan Kumar	India

Session 6: TRANSFORMER AND ASSET MANAGEMENT

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1048	How is Climate Change Likely to Affect Queensland Electricity Infrastructure into the Future? ,	Australia

	Erin Oliver; Daniel Martin; Olav Krause; Simon Bartlett; Craig Froome	
1054	Developing Simplified Thermal Models for 11 kV Underground Cables in Australia, Johnathon Fulcher; Daniel Martin; Olav Krause; Greg Caldwell, Australia; Simon Rowland; Ognjen Marjanovic	United Kingdom
1059	Vibration Measurement and Signal Processing for Condition Assessment of OLTC of Transformer, Junhyuck Seo; Hui Ma; Tapan Saha	Australia
1064	Multi-objective Optimal Control Strategy of Thyristor Controlled Transformer for Power Quality Improvement, Xue Feng; Yuankai Wang; Xuchong Wang; Wei Gu	China
1069	Simulation Analysis of Power-frequency Electromagnetic Field Interference on Smart Meters, Yunan Zhu; Jian Liu; Qing Xu; Qifeng Huang	China
1074	Towards a Best Practice Asset Management Framework for Electrical Power Distribution Organisations, Sohail Abdul Khaliq; Muhammad nateque Mahmood; Narottam Das	Australia

Additional Papers

1079	An Analysis to the Concentric Relaxation Vulnerability Area of Voltage Sag in Power System, Wang Tengting; Tian Lijun	China
1084	Identification of Critical Buses and Weak Transmission Lines Using Inherent Structural Characteristics Theory A. S. Alayande; A. A. Jimoh; A. A. Yusuff	South Africa
1089	Prediction of Voltage Collapse through Voltage Collapse Proximity Index and Inherent Structural Characteristics of Power System Isiah G. Adebayo; Adisa A. Jimoh; Adedayo A. Yusuff	South Africa