

Network Planning and Operation

NPO I	Network Planning and Operation I
Wednesday, 9th September 2015, 11:30 - 12:50	
VF-002224	Voltage and Frequency Control for Future Power Systems: the ELECTRA IRP Proposal <i>Reinhilde D'hulst, Julia Merino Fernández, Evangelos Rikos, Dariusz Kolodziej, Kai Heussen, Dominik Geibel, Armaga</i>
VF-004588	DG-DemoNet Smart LV Grid - Increasing hosting capacity of LV grids by extended planning and voltage control <i>Roman Schwalbe, Markus Radauer, Andreas Abart, Ewald Traxler, Walter Niederhuemer, Helfried Brunner, Matthias</i>
VF-003395	Optimal Sizing of Small Hydro Power Plants in Consideration of Voltage Control <i>Huiting Xu, Wenxia Liu</i>
VF-003816	Multi-Agent based Hierarchical Power Scheduling Strategy for Active Distribution Network <i>Youbo Liu, Hongjun Gao, Junyong Liu, Yang Yang, Zhao Ma</i>
NPO II	Network Planning and Operation II
Wednesday, 9th September 2015, 11:30 - 12:50	
VF-000027	Effect of the Diesel Engine Delay on Stability of Isolated Power Systems with High Levels of Renewable Energy Penetr <i>Dusan Nikolic, Michael Negnevitsky, Martin de Groot</i>
VF-000515	A New Algorithm for Isolated Electricity Supply System Control <i>Konstantin Suslov, Svetlana Solodusha, Dmitry Gerasimov</i>
VF-002496	Price-Gdi: A Pilot Experience For The Integration Of Distributed Generation In Active Distribution Systems <i>Alezeia González, Juan A. Saavedra, Jorge Tello-Guijarro, David Trebolle, Marta Casas</i>
VF-002607	Performance Analysis of Islanding Detection Based on Asymmetric Tripping of Feeder Circuit Breaker under Fault Sc <i>Yuwei Shang, Shenxing Shi, Xinzhou Dong, Zhao Ma</i>
NPO III	Network Planning and Operation III
Wednesday, 9th September 2015, 14:10 - 16:10	
VF-003255	Short-term aggregated load and distributed generation forecast using fuzzy grouping approach <i>Matej Rejc, Alfred Einfalt, Tobias Gawron-Deutsch</i>
VF-003506	Modeling Renewable Energy Sources to Promote Proactivity in the Distribution Grid <i>Evangelia Xypolytou, Thomas Leber, Thomas Aichholzer</i>
VF-003727	The Research on Distribution Network Health Index Based on Real-time Information Record <i>Zonghong Hu, Shenxing Shi, Xinzhou Dong, Zhao Ma</i>
VF-004421	Logical Pattern Based Modeling: Diagram Automatic Generation and Applications <i>Taifeng Kang</i>
VF-003549	Comparison between WLS and Kalman Filter Method for Power System Static State Estimation <i>Carlos Hernández, Paul Maya-Ortiz</i>
VF-000175	Loss Minimization and Load Balancing in Distribution Network <i>Boknam Ha, Seongwoo Lee, Namhun Cho, Won Namgung, Jaewoo Yoon, Ilhyung Lim</i>
NPO IV	Network Planning and Operation IV
Wednesday, 9th September 2015, 16:40 - 18:20	
VF-001236	Reliability Assessment of Load Points Including Solar and Wind DGs <i>Abass Yahaya, Mohammad Almuahini</i>
VF-001449	Reliability Assessment of a Microgrid Distribution System with PV and Storage <i>Taiseer Tuffaha, Mohammad AlMuahini</i>
VF-001317	Autonomous Decentralized Distribution System Restoration Algorithm <i>Mohamed El-Khatib, Mohamed Ahmed, Magdy Salama, Ramadan El-Shatshat, Khaled Shaban</i>
VF-003514	Study of MVDC System Benchmark Networks <i>Juan Jose Mesas, Lluis Monjo, Luis Sainz, Joaquin Pedra</i>
VF-003522	Study of Cable Short Circuit in VSC DC Systems <i>Lluis Monjo, Juan José Mesas, Luis Sainz, Joaquin Pedra</i>
NPO V	Network Planning and Operation V
Wednesday, 9th September 2015, 16:40 - 18:20	
VF-004022	Long-term Planning of Electricity Distribution Systems Integrating Flexibility Options <i>Parvathy Chittur Ramaswamy, Constantin Delhaute, Stijn Cole</i>
VF-004111	Smart Grids in Germany: How much costs do distribution grids cause at planning time? <i>Jens Büchner, Jörg Katzfey, Ole Flörcken, Albert Moser, Henning Schuster, Sebastian Dierkes, Tobias van Leeuwen,</i>
VF-003824	A Robust Model for Multistage Distribution Network Planning <i>Hongjun Gao, Junyong Liu, Youbo Liu, Zhenbo Wie</i>
VF-002917	Probabilistic Tools for DMS <i>Oiga Vlachokyriakou, Despina Koukoulou, Dimitris Trakas, Aris Dimeas, Nikolaos Hatziargyriou, Eirini Leonidaki, Maria</i>
VF-004774	Evaluating the determinants of the scalability and replicability of islanded operation in medium voltage networks with <i>Andrea Rodriguez-Calvo, Seyedmahdi Izadkhast, Rafael Cossent, Pablo Frías</i>

Network Planning and Operation

NPO VI Network Planning and Operation VI	
Thursday, 10th September 2015, 09:00 - 11:00	
VF-000639	Electric Vehicles Home Charging Impact on a Distribution Transformer in a Portuguese Island <i>R. Godina, N. G. Paterakis, O. Erdinc, E. M. G. Rodrigues, J. P. S. Catalão</i>
VF-001007	A Model and an Evolutionary Algorithmic Approach Towards Optimization of Electric Vehicle Fleet Charging <i>Sarah Detzler, Stamatis Karnouskos</i>
VF-001287	Evaluation Tool for Direct Load Control of Electric Vehicle Charging and Water Heating Systems <i>Sophiya Patel, Michael Negnevitsky</i>
VF-000159	Impacts of Participating in Different Demand Response Programs on Operational Behavior of Plug-in Electric Vehicle <i>M. Shafie-khah, F.A.S. Gil, J.P.S. Catalão, J. Aghaei, M. Barani</i>
VF-003778	Market Evolution Modeling for Electric Vehicles based on System Dynamics and Multi-Agents <i>Wei Yang, Hao Zhou, Junyong Liu, Songling Dai, Zhao Ma, Youbo Liu</i>
VF-000973	Research on the typical systems for active distribution network in China <i>Hui Hui</i>
NPO VII Network Planning and Operation VII	
Thursday, 10th September 2015, 11:30 - 12:50	
VF-000019	Low Load Diesel Perceptions and Practices within Remote Area Power Systems <i>James Hamilton, Michael Negnevitsky, Xiaolin Wang</i>
VF-000604	Frequency Improvement in Power System by Synchronization Inverter-Based Distributed Generators <i>Masaki Kawai, Yuta Sakai, Hironori Sugiyama, Hisao Taoka</i>
VF-001066	Optimal Load Shedding in Distributed Networks with Sigmoid Cost Functions <i>Manuel Ruppert, Valentin Bertsch, Wolf Fichtner</i>
VF-000124	Managing High Penetration of Renewable Energy in MV Grid By Grid Flexible Loads <i>Reza Ahmadi Kordkheili, Birgitte Bak-Jensen, Jayakrishnan R. Pillai, Mehdi Savaghebi, Josep M. Guerrero</i>
NPO VIII Network Planning and Operation VIII	
Thursday, 10th September 2015, 14:10 - 16:10	
VF-000817	Control Strategy of Energy Storage Station to Smooth Real-time Power Fluctuation <i>Shu Liu, Zhihui Cao, Jingyun Li, Haoming Liu</i>
VF-000574	Smart control of an MCHP unit combined with thermal and electrical storage systems: A case study <i>Christoph D. Ummenhofer, John Olsen, Josef Kitzbichler, Johannes Obermeier, Tim Roediger</i>
VF-000876	Control Strategy of Battery Energy Storage System to Participate in the Second Frequency Regulation <i>Hongyan Piao, Shifeng Chen, Haichao Lv, Haoming Liu</i>
VF-000892	A Real-Time Balancing Market Clearing Model for Grid-Connected Micro-grid Including Energy Storage System <i>Jiayan Yuan, Jun Ma, Ling Zhao, Haoming Liu</i>
VF-000884	Power Optimization Allocation Strategy for Energy Storage Station Responding to Dispatch Instruction <i>Ting Lei, Tao Wang, Haoran Yu, Haoming Liu</i>
VF-001058	Microgrid Evolution Roadmap: Engineering, Economics, and Experience <i>Chris Marnay, Spyros Chatzivasileiadis, Chad Abbey, Reza Iravani, Geza Joos, Pio Lombardi, Pierluigi Mancarella, Jan</i>

Smart Grid Controllers and Information and Communication Technologies (ICT)

SGC I	Smart Grid Controllers and Information and Communication Technologies (ICT) I
Thursday, 10th September 2015, 09:00 - 11:00	
VF-000043	Model-driven development of a standard-compliant Customer Energy Manager <i>Daniele Pala, Gianluigi Proserpio</i>
VF-004235	Towards Identifying an Approach for Consistency Checks to Smart Grid Descriptions <i>Marion Gottschalk, Jürgen Sauer</i>
VF-003913	Looking for the unified classification and evaluation approach of SG interface standards for the purposes of ELECTRA <i>Angelo Frascella, Jacek Swiderski, Gianluigi Proserpio, Evangelos Rikos, Armağan Temiz, Aleksander Babs, Mathias</i>
VF-001376	Field Experience of Distribution Automation System (DAS) in Korea Electric Power Corporation (KEPCO) <i>Namhun Cho, Rajatha Bhat, Jung-Ho Lee</i>
VF-000116	SecureRTU: security on RTU configuration management by Digital Signatures <i>Alessandro Distefano, Luciano Zaretti, Giandomenico Lattuada, Stefano Zanin, Danilo Dealberti</i>
VF-005053	Applicability of IEC 61499 for Event Based Smart Grid Applications <i>Thomas Rosenstatter, Richard Wanger, Stefan Huber, Thomas Heistracher, Dominik Engel</i>
SGC II	Smart Grid Controllers and Information and Communication Technologies (ICT) II
Thursday, 10th September 2015, 11:30 - 12:50	
VF-004901	Multi-Agent System based Voltage Support by Distributed Generation in Smart Distribution Network <i>Ishtiaq Ahmad, Peter Palensky, Wolfgang Gawlik</i>
VF-004626	On The Benefits of Improving Network Management Using Self-Organising Multi-Agent Architectures <i>Calum Cameron, Charalampos Patsios, Phil Taylor</i>
VF-004251	Agent-based Decentralization of Applications in Distributed Smart Grid Systems <i>Georg Kienesberger, Evangelia Xypolytou, Jürgen Marchgraber, Thomas Kaufmann, Alexander Prostejovsky, Mario F</i>
VF-004294	Smart grid communication at the interface of customer buildings with focus on demand response <i>Daniel Schachinger, Stefan Gaida, Wolfgang Kastner</i>
SGC III	Smart Grid Controllers and Information and Communication Technologies (ICT) III
Thursday, 10th September 2015, 14:10 - 16:10	
VF-000566	Smart Management of a Distributed Generation Microgrid through PLC PRIME Technology <i>Noelia Uribe-Perez, Luis Hernández, Raúl Gómez, Siro Soria, David de la Vega, Itziar Angulo, Txetxu Arzuaga, Loreto</i>
VF-000779	Islanding Operation of DC Smart Grid under DC Distribution Line Faults <i>Hidehito Matayoshi, Tomonobu Senjyu, Toshihisa Funabashi</i>
VF-002488	Active Power Consensus in Microgrids <i>Miguel Parada Contzen, Jörg Raisch</i>
VF-001015	Smart Fault Isolation and Service Restoration under Consideration of Abnormal Conditions in Distribution Systems <i>Namhun Cho, Rajatha Bhat, Jung-Ho Lee</i>
VF-000132	Evaluation of detecting the breaking of wires on medium-voltage system by three-phase sensors <i>Takaharu Ito, Katsuya Abe, Daiki Dodo, Takeshi Koike, Manabu Inai</i>
VF-004243	Research of Intermittent Energy Consumption in Active Distribution Network <i>Dong Liu, Qing Zhong, Xinhua Gao, Nanhua Yu, Yi You, Yunhui Chen</i>
SGC IV	Smart Grid Controllers and Information and Communication Technologies (ICT) IV
Thursday, 10th September 2015, 14:10 - 16:10	
VF-001104	Charging Optimization of Enterprise Electric Vehicles for Participation in Demand Response <i>Sarah Detzler, Christoph Eichhorn, Stamatis Karnouskos</i>
VF-004545	Development of an Integrated Wireless Communication System for Connecting Electric Vehicles to the Power Grid <i>George Kiokos, Erietta Zountouridou, Christina Papadimitriou, Aris Dimeas, Nikolaos Hatziargyriou</i>
VF-000183	A Modular Software Implementation for Smart Charging Stations <i>Daniel Wellisch, Stefan Kunze, Rainer Pöschl</i>
VF-001759	Reference Architecture for Interoperability Testing of Electric Vehicle Charging <i>Felix Lehmann, Martin Noehrer, Ewoud Werkman, Jose Lopez, Eduardo Zabala</i>
VF-000426	Cooperative ESS Management Strategy for Stable Islanded Operations in the Bipolar-Type LVDC system <i>Gilsung Byeon, Seul-Ki Kim, Jong-Yul Kim, Jin-Hong Jeon, Gyeong-Hun Kim</i>
VF-000507	A Principle of Power Quality Control in the Intelligent Distribution Networks <i>Konstantin Suslov, Nafisa Solonina, Vladimir Stepanov</i>

Power Electronics and Network Components

PE I	Power Electronics and Network Components I
Wednesday, 9th September 2015, 11:30 - 12:50	
VF-004987	Concept of a Three Phase AC Power Source with Virtual Output Impedance for Tests of Grid Connected Components <i>Peter Jonke, Johannes Stöckl, Hans Ertl</i>
VF-000108	Suitability analysis of Fuzzy Logic as an evaluation method for the selection of energy storage technologies in Smart C <i>Cong-Toan Pham, Daniel Månsson</i>
VF-003859	7-Level Cascade Multilevel Inverter Using a Single DC Source and Minimum THD of Output Voltage <i>Hassan Manafi, Homayoun Ebrahimian, Mahdi Salimi</i>
VF-004979	Effects of Unbalanced Mains Voltage Conditions on Three-Phase Hybrid Rectifiers Employing Third Harmonic Injection <i>Markus Makoschitz, Michael Hartmann, Hans Ertl</i>
PE II	
Power Electronics and Network Components II	
Wednesday, 9th September 2015, 14:10 - 16:10	
VF-004871	Performance Evaluation of Anti-Islanding Protection Technique for Micro Grids <i>Tarek Kandil</i>
VF-004197	Energy Distribution with DC Microgrids in Commercial Buildings with Power Electronics <i>Bernd Wunder, Julian Kaiser, Fabian Fersterra, Leopold Ott, Yunchao Han, Martin Maerz</i>
VF-000035	Islanding Operation Methods Integrated with Multiple Power Supplies and HEMS <i>Jun Yoshinaga, Wataru Hirohashi, Yasuhiro Hayashi, Yasuhito Isoe, Jiro Miyake, Shizuo Tsuchiya, Mikihiro Wada</i>
VF-001945	Analysis of Unbalance Plug-in Electric Vehicle Home Charging in PEA Distribution Network by Stochastic Load Model <i>Thongchai Klayklueng, Pichai Kongthong, Sanchai Dechanupaprittha</i>
VF-000736	MTDC Transmission Systems Including DC Resonant Semiconductor Breaker <i>Hiroki Ikema, Hidehito Matayoshi, Abdul Motin Howlader, Tomonobu Senjyu, Toshihisa Funabashi</i>
VF-001627	Development of 1kV DC Voltage Measurement Circuit for Solar Energy System <i>Weijie Zuo, Zhao Ma, Limei Zhou, Haiwen Yuan</i>

Special Sessions and Posters (Absent Authors)

SS01	Modeling, Co-Simulation and Validation/Testing of Smart Energy Systems
Thursday, 10th September 2015, 09:00 - 11:00	
VF-003492	An Alternate PowerFactory Matlab Coupling Approach <i>Aadil Latif, Mohsin Shahzad, Peter Palensky, Wolfgang Gawlik</i>
VF-004219	Home Energy Router for Smart Consumer grids <i>Syed Ashad Mustafa Younus, Davide Brunelli</i>
VF-004324	Ancillary Service Provision by Demand Side Management: A Real-Time Power Hardware-in-the-loop Co-simulation D <i>Mazheruddin H. Syed, Paul Crolla, Graeme M. Burt, Koen Kok</i>
VF-004448	Simulation of Multi-domain Energy Systems Based on the Functional Mock-up Interface Specification <i>Edmund Widl, Wolfgang Müller, Daniele Basciotti, Sawzan Henein, Stefan Hauer, Katharina Eder</i>
VF-004863	Towards a Classification Scheme for Co-Simulation Approaches in Energy Systems <i>Florian Schloegl, Sebastian Rohjans, Sebastian Lehnhoff, Jorge Velasquez, Peter Palensky, Cornelius Steinbrink</i>
SS02	Advanced Modelling, Monitoring and Control of Low Voltage Networks
Wednesday, 9th September 2015, 16:40 - 18:20	
VF-001821	Effects of State Estimation Accuracy on the Voltage Control of Low Voltage Grids <i>Ahmad Abdel-Majeed, Stefan Tenbohlen, Krzysztof Rudion</i>
VF-004928	Hosting capacity of LV networks with extended voltage band <i>Benoit Bletterie, Julien Le Baut, Serdar Kadam, Roman Bolgaryn</i>
VF-004936	Increasing PV hosting capacity in LV grids with a probabilistic planning approach <i>Walter Niederhuemer, Roman Schwalbe</i>
VF-004995	Smart Meter Test Stand for Requirement Analysis of Advanced Smart Meter Applications <i>Matthias Stifter, Mario Windhab, Martin Zahedi, Albin Frischenschlager</i>
VF-005002	Network and Feeder Assignment of Smart Meters based on Communication and Measurement Data <i>Konrad Diwold, Matthias Stifter, Paul Zehetbauer</i>
SS03	Real Time Simulation of Smart Electrical Distribution Systems
Thursday, 10th September 2015, 11:30 - 12:50	
VF-004642	Real-Time Modeling of Multi-level Megawatt Class Power Converters for Hardware-In-the-Loop Testing <i>Jesse Leonard, Ramtin Hadidi, Curtiss Fox</i>
VF-004952	Challenges of Modeling Electrical Distribution Networks in Real Time <i>Paul Forsyth, Onyi Nzimako, Cyprian Peters, Mohamed Moustafa</i>
VF-004618	Testing 750 Node Distribution Grids and Devices Using optimized parallel delay-free real-time solvers and modern gr <i>Christian Dufour, Gianluca Sapienza</i>
VF-002283	Harmonic-by-Harmonic Time Delay Compensation Method for PHIL Simulation of Low Impedance Power Systems <i>Efren Guillo Sansano, Andrew J. Roscoe, Graeme Burt</i>
SS05	Experiences from the ELECTRA IRP Researchers Exchange
Wednesday, 9th September 2015, 14:10 - 16:10	
VF-005193	Sizing and grid impact of PV battery systems - a comparative analysis for Australia and Germany <i>Jan von Appen, Julio H. Braslavsky, John K. Ward, Martin Braun</i>
VF-005118	Frequency Restoration Reserves: Provision and Activation Using a Multi-Agent Demand Control System <i>Reinhilde D'hulst, Jef Verbeeck, Chris Caerts, Mazheruddin Syed, Ammar Zaher, Graeme Burt</i>
VF-005134	A Use Case Methodology to Handle Conflicting Controller Requirements for Future Power Systems <i>Kai Heussen, Mathias Uslar, Carlo Tornelli</i>
VF-005142	Implementation of a Fuzzy Logic Controller for Virtual Inertia Emulation <i>Konstantina Montesidi, Evangelos Rikos, Raquel Garde, Monica Aquado</i>
VF-005126	Distributed Framework for Prototyping of Observability Concepts in Smart Grids <i>Alexander Prostejovsky, Oliver Gehrke, Anna M. Kosek, Federico Coffele, Ammar S. A. E. Zaher</i>
VF-005169	Demand Side Participation for Frequency Containment in the Web of Cells Architecture <i>M. H. Syed, G. M. Burt, J. K. Kok, R. D'Hulst</i>
ASF	Poster
Wednesday, 9th September 2015 & Thursday, 10. September 2015	
VF-002461	Harmonic Contribution Assessment on the Condition of Background Harmonic Fluctuations <i>Zhengyou He, Jing Chen, Ling Fu, Tianlei Zang</i>
VF-002356	Determining the Harmonic Contributions of Multiple Harmonic Sources Using Data Clustering Analysis <i>Jianwei Yang, Yuan Yang, Jing Chen, Ling Fu, Zhengyou He</i>
VF-003875	A Method of the Switchgear State Estimation Based on the Hidden Markov Model <i>Fangyuan Chang, Erxia Li, Wanxing Sheng, Chaoqun Kang</i>
VF-001724	Business cases evaluation for electric vehicle market integration <i>Bjoern Illing, Oliver Warweg</i>