

Time Table

DAY	TIME	CONFERENCE ROOMS		
		MINOS	DANAE – EUROPA	ARTEMIS-ATHENA
Sunday Sept. 25, 2011	16.00 – 20.00	Registration		
	20.00 – 22.00	Welcome Cocktail		
Monday September 26, 2011	08.00 – 09.00	Registration		
	09.00 – 11.00	<p>Introduction by:</p> <ul style="list-style-type: none"> ➤ Prof. Nikos Hatzigiorgiou, Conference Chairman ➤ Prof. Kevin Tomsovic, President ISAP Board of Directors ➤ Mr Apostolos Baratsis, Deputy CEO of PPC S.A. <p>Key Note Speech I</p> <p>“Sustainable Electric Power Systems in the 21st Century: Requirements, Challenges, and the Role of Intelligence Systems” , Prabha S. Kundur</p> <p>Key Note Speech II</p> <p>“Interconnection of Crete to the mainland Greece”, Michalis Papadopoulos</p>		
	11.00 – 11.30	Coffee Break		
	11.30 – 13.30	Paper Session 1 RES Integration	Paper Session 2 Intelligent Control	Panel 1 Active Houses and SmartGrids Organized by Aris Dimeas
	13.30 – 14.30	Lunch Break		

DAY	TIME	CONFERENCE ROOMS		
		MINOS	DANAE – EUROPA	ARTEMIS-ATHENA
Monday September 26, 2011	14.30 – 16.30	Paper Session 3 RES Forecasting	Paper Session 3 Fault Diagnosis–Protection I	Paper Session 5 Intelligent Optimization I
	16.30 – 16.45	Coffee Break		
	16.45 – 18.30	Paper Session 6 Load and Price Forecasting	Paper Session 7 Fault Diagnosis-Protection II	Paper Session 8 Intelligent Optimization II
	19.30 – 23.00	Official Dinner and Entertainment Program		
Tuesday September 27, 2011	09.00 – 11.00	Key Note Speech III “The Three Pillars of Smart Distribution realized by IEC 61850 Communications”, Z. A. Styczynski Key Note Speech IV “Smart Grids in the Greek Islands”, Aris Dimeas		
	11.00 – 11.15	Coffee Break		
	11.15 – 12.30	Panel 2 Wind Power Forecasting Organized by G. Kariniotakis	Paper Session 9 Stability and Security	Panel 3 Integration of Evs Organized by M. Kezunovic
	12.30 – 12.45	Break		

DAY	TIME	CONFERENCE ROOMS		
		MINOS	DANAE – EUROPA	ARTEMIS-ATHENA
Tuesday September 27, 2011	12.45 – 14.00	Panel 2 Wind Power Forecasting Organized by G. Kariniotakis	Paper Session 10 Energy Markets	Panel 3 Integration of Evs Organized by M. Kezunovic
	14.00 – 15.00	Lunch Break		
	16.00 – 18.30	Tour: Knossos Archeological Site		
	18.30 – 20.00	Technical Visit: Tour of Linoperamata Test Station presented by PPC S.A.		
	20.00 – 23.00	Dinner at Rogdia village		
Wednesday September 28, 2011	09.00 – 10.00	Key Note Speech V “Contributions of Complexity Theory to the Paradigm of Sustainable Electric Utilities”, Carlos Alvarez Pereira		
	10.00 – 10.30	Coffee Break		
	10.30 – 12.30	Paper Session 11 Microgrids and Smart Grids	Paper Session 12 Demand Side Management	Paper Session 13 Wide Area Measurement Systems and Control Centers
	12.30 – 13.30	Lunch Break		

DAY	TIME	CONFERENCE ROOMS		
		MINOS	DANAE – EUROPA	ARTEMIS-ATHENA
Wednesday September 28, 2011	13.30 – 15.30	Paper Session 14 Multi-Agent Systems	Paper Session 15 Smart Grids	Paper Session 16 Distribution Systems
	15.30 – 16.00	Conference Closing		
	17.00 – 22.00	Technical Visit: Plastica Kritis Wind Park Visit to Plaka village, Free time for Coffee, Dinner, etc.		

* The Welcome Cocktail will be held at the Veranda of the Main Bar of the Creta Maris Hotel
All Key Note Speeches and Plenary Panel Sessions will be held in Conference Room "MINOS"

Accompanying Persons Tour:

Visit to Lychnostatis museum of folklore <http://www.lychnostatis.gr/>, Archanes traditional village, and Boutari local winery (Fantaxometochi), <http://www.boutari.gr/?TGvmdE1lbnU9NiwxMCZMQU5HPUVQJIBhZ2VJZD04>

Paper ID per Session

Paper Session 1

#25, #46, #104,
#123, #144, #149

Paper Session 4

#17, #19, #32,
#38, #74, #113, #126

Paper Session 7

#3, #42, #68, #108,
#142, #148, #169

Paper Session 10

#69, #110,
#115, #131

Paper Session 13

#100, #102, #106,
#109, #112, #130, #267

Paper Session 2

#5, #73, #83,
#98, #122, #177

Paper Session 5

#29, #52, #55,
#65, #66, #134, #140

Paper Session 8

#43, #79, #101, #105,
#120, #127, #135, #138

Paper Session 11

#33, #59, #92,
#107, #133, 151, #199

Paper Session 14

#21, #26, #97,
#114, #128, #150

Paper Session 16

#28, #31, #64, #71
#96, #119, #233

Paper Session 3

#7, #24, #34,
#50, #53, #60

Paper Session 6

#44, #48,
#49, #129, #139

Paper Session 9

#47, #99
#111, #141

Paper Session 12

#41, #72, #84,
#116, #118, #132

Paper Session 15

#40, #63, #121,
#152, #161, #166

TECHNICAL PROGRAM

Monday September 26, 2011

PLENARY OPENING SESSION

Monday, September 26, 09.00 – 11.00

Chair: KEVIN TOMSOVIC, NIKOS HATZIARGYRIOU,
APOSTOLOS BARATSI

Introduction by:

- Prof. NIKOS HATZIARGYRIOU, Conference Chairman
- Prof. KEVIN TOMSOVIC, President, ISAP Board of Directors
- Mr. APOSTOLOS BARATSI, Deputy CEO of PPC S.A.

KEY NOTE SPEECH I

“Sustainable Electric Power Systems in the 21st Century: Requirements, Challenges, and the Role of Intelligence Systems”
Dr. PRABHA S. KUNDUR (Canada)

KEY NOTE SPEECH II

“The Interconnection of Crete Power System to the Mainland Grid”,
MICHALIS PAPADOPOULOS, Em. Prof. of NTUA, President of
Hellenic TSO (Greece)

PAPER & PANEL SESSIONS

PAPER SESSION 1 – RES Integration

Monday September 26, 11:30 – 13:30

Chair: LARS NORDSTROM

- # 25 “Ant Colony Optimization and Analysis of Time Step Resolution in Transmission Expansion Computations for Wind Power Integration“, Ida Fuchs, Terje Gjengedal (Norway)
- # 46 “Integrating High Levels of Wind in Island Systems: Lessons from Hawaii“, Nicholas Miller, Leon Rosse, Devon Manz, Harjeet Johal, James Griffin, Sebastian Achilles (USA)
- #104 “Anemos.Rulez: Rule based Extreme Event Prediction and Alarming to Support the Integration of Wind Power“, Hans-Peter Waldl, Philipp Brandt (Germany)
- #123 “Onshore Wind Farm planning and System Simulation Analysis under Low-Carbon-Island Project at Penghu“, Yuan-Kang Wu, Ching-Yin Lee, Shao-Hong Tsai (Taiwan)
- #144 “Finding Representative Wind Power Scenarios and their Probabilities for Stochastic Models“, Jean Sumaili, Hrvoje Keko, Vladimiro Miranda, Zhi Zhou, Audun Botterud, Jianhui Wang Argonne (Portugal, USA)
- #149 “Assessment and Economic Analysis of Wind Generation on the Ancillary Services and the Unit Commitment Process for an Isolated System“, Alex Papalexopoulos, Isidoros Vitellas, Nikos Hatziargyriou, Charles Hansen, Aris Dimeas, Theodora Patsaka (USA, Greece)

PAPER SESSION 2 – INTELLIGENT CONTROL

Monday 11:30 am – 13:30 pm

Chair: GERMANO LAMBERT TORRES

- #5 “WRBF Network Based Control Strategy for PMSG Wind Generation System“, Chiung-Hsing Chen, Chih-Ming Hong, Ting-Chia Ou (Taiwan)
- #73 “Fault Tolerant Control scheme with PID's“, Marino Sanchez-Parra, Dionisio A. Suarez, Cristina Verde (Mexico)
- #83 “Adaptive Power Control Modeling and Simulation of a Hydraulic Turbine“, Teofana Puleva, Emil Garipov, Georgi Ruzhekov (Bulgaria)
- #98 “Model Analysis and Intelligent-ANFIS Control Design for PWM-regulated ac/dc Converters“, Michael Bourdoulis, John Spanomichos, Antonio Alexandridis (Greece)
- #122 “Pond Head Level Control in a Run-of-River Hydro Power Plant using Fuzzy Controller“, Omkar Yadav, Nand Kishor, Jesus Fraile-Ardanuy, Soumya R Mohanty, Juan I. Pérez, José I. Sarasúa (India, Spain)
- #177 “Modeling and Implementation of Hydro Turbine Power Adaptive Control Based on Gain Scheduling Technique“, Georgi Ruzhekov, Tsonyo Slavov, Teofana Puleva (Bulgaria)

PANEL SESSION 1 – ACTIVE HOUSES AND SMART GRIDS

Monday 11:30 am – 13:30 pm

Chair: ARIS DIMEAS

The goal of this workshop is to bring together experts and several leading European and national research projects active in the domain of Energy Efficiency, SmartGrids, SmartHouses and SmartCities. It is expected to act as a forum for discussion and exchange of best practices especially with focus on innovative approaches as well as the architecture and applications in real test sites across Europe. The workshop is intended to provide the field for in-depth discussions about technological concepts, usage of intelligent applications and algorithms, field experiences, and scenario analyses, as well as about the hurdles, challenges and necessary framework conditions for exploiting demand flexibility and energy efficiency in the emerging Smart Grid Era.

PAPER SESSION 3 – RES FORECASTING

Monday 14:30 pm – 16:30 pm

Chair: NICHOLAS W. MILLER

- #7 “Weather Pattern Classification and Relationships with Observational Wind Speed over Iberia“, Alvaro Pascual, Francisco Valero, M. Luisa Martin, Javier Sanz, M. Yolanda Luna, A. Morata (Spain)
- #24 “Utilising Numerical Weather Forecast for Planning Electricity Production in Cogeneration Plant“, Miron Kurska, Łukasz Ligowski, Sławomir Walkowiak, Witold R. Rudnicki (Poland)
- #34 “A Data Mining Based Methodology for Wind Forecasting“, Sérgio Ramos, João Soares, Zita Vale, Hugo Morais (Portugal)

- #50 “Short-Term Wind Power Forecasting using a Hybrid Evolutionary Intelligent Approach”, Joao Catalao, Gerardo Osorio, Hugo Pousinho (Portugal)
- #53 “Autonomous Neural Models Applied to Medium-Term Water Inflow Forecasting”, Vitor Hugo Ferreira, Caio Monteiro Leocádio (Brazil)
- #60 “Prediction of Wind Power by Artificial Intelligence Techniques”, Petre-Cristian Razusi, Mircea Eremia (Romania)

PAPER SESSION 4 – FAULT DIAGNOSIS AND PROTECTION I

Monday 14:30 pm – 16:30 pm

Chair: **GEORGE COKKINIDES**

- #17 “Fault Location in Underground Systems Through Optimum-Path Forest”, Andre Souza, Pedro da Costa Junior, Paulo Silva, Caio Ramos, Joao Papa (Brazil)
- #19 “Smart Meters from the Angles of Consumer Protection and Public Service Obligations”, Geert Deconinck, Bram Delvaux, Klaas De Craemer, Zhifeng Qiu, Ronnie Belmans (Belgium)
- #32 “Recording and Managing Field Leakage Current Waveforms in Crete. Installation, Measurement, Software Development and Signal Processing”, Dionisios Pylarinos, Kiriakos Siderakis, Emmanuel Emmanuel Thalassinakis, Isidoros Vitellas, Eleftheria Pyrgioti (Greece)
- #38 “An Automated Classifier for Asynchronous Diagnosis of Partial Discharge Defects”, Pete Baker, Alex Mair, Martin Judd (United Kingdom)
- #74 “Neural Adaptive Notch Filter to Harmonic Detection”, Rondineli Rodrigues Pereira, Carlos Henrique da Silva, Luiz Eduardo Borges da Silva, Germano Lambert-Torres (Brazil)

- #113 Single Channel ICA-based Method for Power Quality Disturbance Analysis
Danton Ferreira, José Seixas, Augusto Cerqueira (Brazil)
- #126 “SPS Generator Tripping Planning Using Immune Algorithm“,
Chao-Rong Chen, Wen-Ta Tsai, Chin-Yin Lee, Zhen-Fa Lin
(Taiwan)

PAPER SESSION 5 – INTELLIGENT OPTIMIZATION I

Monday 14:30 pm – 16:30 pm

Chair: ZITA VALE

- #29 “Reactive Power Optimization using Evolutionary Techniques: Differential Evolution and Particle Swarm“, Florin Catalin Ionescu, Constantin Bulac, Mircea Eremia (Romania)
- #52 “Natural Optimization Applied to Medium-Term Hydrothermal Coordination“, Vitor Hugo Ferreira, Gabriel Henrique Clemente e Silva (Brazil)
- #55 “Two-Layered EPSO for Maximizing Loadability with FACTS Devices“, Hiroyuki Mori, Hajime Fujita (Japan)
- #65 “GA-based Method for Optimal Allocation of Fixed and Switchable Capacitors in Distribution Systems with Multi Level Load“, Mahmoud reza Haghifam, Alireza Salehinia, Majid Shahabi, Faezeh Mahdloo (Iran)
- #66 “Loss Reduction and Voltage improvement in Distribution System with DGs Using GA-based Optimal Capacitor Placement“, Mahmoud reza Haghifam, Alireza Salehinia, Majid Shahabi, Faezeh Mahdloo (Iran)
- #134 “Genetic Algorithms for the Capacitor Placement Problem in Distribution Networks“, Luis Vargas, Guillermo Jimenez-Estevez (Chile)
- #140 Wind Farm and Pumped Storage Integrated in Generation Scheduling Using PSO

Hassan Siahkali (Iran)

PAPER SESSION 6 – LOAD AND PRICE FORECASTING

Monday 16:45 am – 18:30 pm

Chair: HIROYUKI MORI

- #44 “Short-Term Load Forecasting with SOM Neural Networks and its Application to the Electrical Spanish Market“, MIGUEL LÓPEZ, SERGIO VALERO, CAROLINA SENABRE, JUAN APARICIO, ANTONIO GABALDON (Spain)
- #48 “A Pareto Optimization Approach of a Gaussian Process Ensemble for Short-Term Load Forecasting“, Miltiadis Alamaniotis, Andreas Ikonomopoulos, Lefteri Tsoukalas (USA, Greece)
- #49 “Application of an Intelligent System based on EPSO and ANFIS to Price Forecasting“, Joao Catalao, Gerardo Osorio, Hugo Pousinho (Portugal)
- #129 “Short-Term Electricity Load Forecasting With Generalized Additive Models“, Amandine PIERROT, Yannig GOUDE (France)
- #139 “A Load Forecasting Hybrid Method for an Isolated Power System“, George Sideratos, Isidoros Vitellas, Nikos Hatziargyriou (Greece)

PAPER SESSION 7 – FAULT DIAGNOSIS AND PROTECTION II

Monday 16:45 am – 18:30 pm

Chair: GEERT DECONINCK

- #3 “Controlling of Artificial Neural Network for Fault Diagnosis of Photovoltaic Array“, Syafaruddin Syafaruddin, Engin Karatepe, Takashi Hiyama (Indonesia, Turkey, Japan)
- #42 “An Ontology Model for Intelligent Tools Applied to Transformer Condition Evaluation“, Filipe Giacomelli, Thiago Inoue, Diego Morais, Jacqueline Rolim (Brazil)
- #68 “A Bayesian Network Approach to Fault Diagnosis and Prognosis in Power Transmission, Systems“, Raimundo Teive, Jorge Coelho, Celso Camargo, Paulo Charles, Thales Lange, Leonardo Cimino (Brazil)
- #108 “On-line Diagnosis of a Power Generation Process Using Probabilistic Models“, Pablo H. Ibarguengoytia ,Alberto Reyes (Mexico)
- #142 “A Novel Fault Classification Approach Using Manifold Learning Algorithm“, Yufan Guan, Mladen Kezunovic (USA)
- #148 “Transformer Fault Diagnosis Based on Autoassociative Neural Networks“, Adriana Castro, Vladimiro Miranda, Shigeaki Lima (Brazil, Portugal)
- #169 “A Novel and fast Moving Window Based Technique for Transformer Differential Protection“, Hassan Abniki (Iran)

PAPER SESSION 8 – INTELLIGENT OPTIMIZATION II

Monday 16:45 am – 18:30 pm

Chair: ANASTASIOS BAKIRTZIS

- #43 “Double Branch Outage Modeling and Its Solution Using Differential Evolution Method“, Oguzhan Ceylan, Aydogan Ozdemir, Hasan Dag (Turkey)
- #79 “Transmission Expansion Planning by Enhanced Differential Evolution“, George Orfanos Pavlos Georgilakis, George Korres, Nikos Hatziargyriou (Greece)
- #101 “Application of Fuzzy Inference Systems for Evaluation of Failure Rates of Power System Components“, Yong Liu, Chanan Singh (China, USA)
- #105 “A GPU Accelerated PSO with Application to Economic Dispatch Problem“, Stelios Papadakis, Anastasios Bakirtzis (Greece)
- #120 “Invasive Weed Optimization Feature in Market-Based Transmission Expansion Planning“, Monazzah Ebrahimi Gardeshi, Ashkan Rahimi Kian (Iran)
- #127 “Reconfiguration and Capacitor Placement in Radial Distribution Systems for Loss Reduction and Reliability Enhancement“, Pooya Rezaei, Mehdi Vakilian, Ehsan Hajipour (Iran)
- #135 “A Memetic Algorithm Based on Mixed Ant Colony Optimization and Genetic Algorithm for Optimal Capacitor Placement“, Max Chianca Pimentel Filho, Manoel Firmino Medeiros Jr.
- #138 “ASISTO: An Integrated Intelligent Assistant System for Power Plant Operation and Training“, Alberto Reyes, Pablo H. Ibarguengoytia ,Francisco Elizalde, Liliana Sánchez, Alondra Nava (Mexico)

Tuesday, September 27, 2011

Tuesday, September 27, 09:00 – 10:30

Chair: DAGMAR NIEBUR, ISIDOROS VITELLAS, MANOLIS VOUMVOULAKIS

KEY NOTE SPEECH II

“The three pillars of Smart Distribution realized by IEC 61850 Communications”, Prof. Z. A. STYCZYNSKI (Germany)

KEY NOTE SPEECH IV

“Smart Grids in the Greek Islands”, Dr Aris DIMEAS

PANEL SESSION 2 – WIND POWER FORECASTING

Tuesday 11:15 pm – 14:00 pm

Chair: GEORGE KARINIOTAKIS

PAPER SESSION 9 – STABILITY AND SECURITY

Tuesday 11:15 pm – 12:30 pm

Chair: LOUIS WEHENKEL

- #47 “Transforming Continuous Attributes using GA for Applications of Rough Set Theory to Control Centers”, Germano Lambert-Torres, Marcos Alberto Carvalho, Carlos Henrique Valério Moraes, Luiz Eduardo Borges da Silva, Adelson Vivaldi (Brazil)

- #99 “An Intelligent Voltage Control System - Training, Learning, and Control”, Haomin Ma, Dan Lin, Mei Tao (China)

- #111 “Geometric Properties of the Loadability Surface at SNB-SLL Intersections and Tangential Intersection Points“, Magnus Perninge, Lennart Söder (Sweden)
- #141 “Power System Voltage Stability Analysis Using ANN and Continuation Power Flow Methods“, Balasubramanian R, Rhythm Singh (India)

PANEL SESSION 3 – INTEGRATION OF ELECTRICAL VEHICLES

Tuesday 11:15 pm – 14:00 pm

Chair: MLANDEN KEZUNOVIC

- EV#1 “Power System Level Impacts of EVs and PHEVs“, Author/presenter: A. P. Sakis Meliopoulos
- EV#2 “Analysis of the Optimal Battery Sizing for Plug-in Hybrid and Battery Electric Vehicles on the Power Consumption and V2G Availability“, J. Van Roy, S. De Breucker, and J. Driesen
- EV#3 “Virtual Power Plant Control Concepts with Electric Vehicles“, A. F. Raab, M. Ferdowsi, E. Karfopoulos, I. Grau Unda, S. Skarvelis-Kazakos, P. Papadopoulos, E. Abbasi, L.M. Cipcigan, N. Jenkins, N. Hatziargyriou, and K. Strunz
- EV#4 “Introducing Electric Vehicles in the Microgrids Concept“, Evangelos L. Karfopoulos, Panagiotis Papadopoulos, Spyros Skarvelis-Kazakos, Inaki Grau, Liana M. Cipcigan, Nikos Hatziargyriou and Nick Jenkins
- EV#5 “An Evaluation Study of Wireless Access Technologies for V2G Communications“, Erietta Zountouridou, George Kiokas, Nikolaos Hatziargyriou, Nikolaos Uzunoglu
- EV#6 “Adapting EV-Microgrid Concepts to European Grid Standards Related to Power Quality“, Marios Moschakis, Evangelos Karfopoulos, Erietta Zountouridou, Stavros Papathanassiou

PAPER SESSION 10 – ENERGY MARKETS

Tuesday 12:45 pm – 14:00 pm

Chair: MANISA PIPATTANASOMPORN

- #69 “Preventing Loop Flows Using Fuzzy Set Theory and Differential Evolution”, Gulcihan Ozdemir Dag, Mustafa Bagriyanik (Turkey)
- #110 “Cost Dependent Strategy for Electricity Markets Bidding Based on Adaptive Reinforcement Learning”, Tiago Pinto, Zita Vale, Fátima Rodrigues, Isabel Praça, Hugo Morais (Portugal)
- #115 “Supporting Services for Real Time Wheeling Transactions Requests”, Andreas Vlachos, Pandelis Biskas (Greece)
- #131 “Regional Power Trade Modeling”, Peter Kadar (Hungary)

Wednesday, September 28, 2011

Wednesday, September 28, 09:00 – 10:00

Chair: VLADIMIRO MIRANDA, EMMANOUIL THALASSINAKIS

KEY NOTE SPEECH V

“Contributions of Complexity Theory to the Paradigm of Sustainable Electric Utilities”, Carlos Alvarez Pereira (Spain)

PAPER SESSION 11 – MICROGRIDS AND SMART GRIDS

Wednesday 10:30 pm – 12:30 pm

Chair: MEN-SHEN TSAI

- #33 “Design Tool for Isolated Micro-Grids Based on Methods of Computational Intelligence“, Maïke Stark, Gerhard Krost (Germany)
- #59 “A Framework for Evaluating Possible Contribution from Integration of Storage Units in a Centralised Voltage Control System for active MV Distribution Networks“, Diana Moneta, Claudio Carlini, Mario Belotti, Paolo Mora (Italy)
- #92 “Smart Optimal Control of DC-DC Boost Converter for Intelligent PV Systems“, Mohamed Elshaer, Ahmad Mohamed, Osama Mohammed (USA)
- #107 “Independent and Clean Electricity Supply for a Hospital in Palestine Controlled by Fuzzy Rules and Time Estimator“, Mohammed Mushtaha, Gerhard Krost (Germany)
- #133 “Trustworthy Injection/Curtailment of DER in Distribution Network Maintaining Quality of Service“, Shahid Hussain, Nicholas Honeth, Rune Gustavsson, Claes Sandels, Arshad Saleem (Sweden)
- #151 “Gossip Based Message Dissemination in Future Power Systems“, Aleksandra Krkoleva, Vesna Borozan, Aris Dimeas, Nikos Hatziargyriou (FYROM., Greece)
- #199 “Feasibility Study of Semantic Sensor Networks in the context of Smart Grids“, Ruben F. Perez, Oscar Perez, Antonio de la Villa, Pedro Cruz, Rafael Martinez-Tomas, Gonzalo Leon (Spain)

PAPER SESSION 12 – DEMAND SIDE MANAGEMENT

Wednesday 10:30 pm – 12:30 pm

Chair: PETER KADAR

- #41 “Contextual Intelligent Load Management with ANN Adaptive Learning Module“, Luis Gomes, Filipe Fernandes, Tiago Sousa, Marco Silva, Hugo Morais, Zita Vale, Carlos Ramos (Portugal)

- #72 "Implementation and Test of Demand Response using Behaviour Descriptions", Daniel Kullmann, Oliver Gehrke, Henrik Bindner (Denmark)
- #84 "DSM Impact Prediction Through a Model of the Italian Residential End-Use", Alberto Prudenzi, Andrea Silvestri, Giuseppe Lucci (Italy)
- #116 "Decentralized, Agent-Mediated Participation of Flexible Thermal Loads in Electricity Markets", Dimitrios Papadaskalopoulos, Pierluigi Mancarella, Goran Strbac (United Kingdom)
- #118 "Impact of Large-Scale Integration of Intelligent Meters to the Operation of the Power System of Crete", Georgia Asimakopoulou, Emmanouil Voumvoulakis, Aris Dimeas, Nikos Hatziargyriou (Greece)
- #132 "Demand Response Programs Definition Supported by Clustering and Classification Techniques", Sérgio Ramos, Hugo Morais, Pedro Faria, Zita Vale, João Soares (Portugal)

**PAPER SESSION 13 – WIDE AREA MEASUREMENT
SYSTEMS AND CONTROL CENTERS**

Wednesday 10:30 pm – 12:30 pm

Chair: R. BALASUBRAMANIAN

- #100 “Impact of GPS Signal Quality on the Performance of Phasor Measurements“, yong liu, yong jia, zhenzhi lin, yingchen zhang, lei wang, Kevin Tomsovic, Yilu Liu (USA)
- #102 “Power System Islanding Detection Based on Wide Area Measurement Systems“, Zhenzhi Lin, Tao Xia, Yanzhu Ye, Ye Zhang, Lang Chen, Yilu Liu, Kevin Tomsovic, Terry Bilke (USA)
- #106 “Distributed MPC of Wide-Area Electromechanical Oscillations of Large-Scale Power Systems“, Da Wang, Mevludin Glavic, Louis Wehenkel (Belgium)
- #109 “Intelligent Behavior in a Cyber-Ambient Training System for Control Center Operators“, Luiz Faria, António Silva, Carlos Ramos, Luís Gomes, Zita Vale, Albino Marques (Portugal)
- #112 “Wide-Area Measurement System Control to Coordinate HVDC Links in Large Scale Power Systems“, Robert Eriksson, Lennart Söder (Sweden)
- #130 “Optimal Placement of Phasor Measurement Units: A Literature Review“, Nikolaos Manousakis, George Korres, Pavlos Georgilakis (Greece)
- #267 “Distribution System Monitoring and Control for the AEGEAN Islands: PPC’s Procurement of the New SCADA and DMS“, N Silva, M Champakis, N. Fountas, E. Voreadi (Portugal, Greece)

PAPER SESSION 14 – MULTI AGENT SYSTEMS

Wednesday 13:30 pm – 15:30 pm

Chair: JOAO CATALAO

- #21 “An Autonomous Distributed Agent Approach to Power System Restoration“, Takeshi Nagata, Shinnosuke Fukunaga (Japan)
- #26 “Coordinating a Society of Switch Agents for Power Distribution Service Restoration in a Smart Grid“, Wan-Yu Yu, Von-Wun Soo, Men-Shen Tsai, Yen-Bo Peng (Taiwan)
- #97 “Simulation Results of Cogeneration Units as System Reserve Power Source Using Multiagent Modeling“, Dániel Divényi, András Dán (Hungary)
- #114 “Detecting Cyber Intrusions in SCADA Networks Using Multi-Agent Collaboration“, Ahmed F.Shosha, Pavel Gladyshev, Shinn-Shyan Wu, Chen-Ching Liu (Ireland)
- #128 “Knowledge Based Support for Real Time Application of Multiagent Control and Automation in Electric Power Systems“, Arshad Saleem, Lars Nordström, Morten Lind (Sweden, Denmark)
- #150 “Scheduling Algorithms for Agent Based Control and Scheduling of Microgrids“, Despoina Koukoura, Aris Dimeas, Nikos Hatziargyriou (Greece)

PAPER SESSION 15 – SMART GRIDS

Wednesday 13:30 pm – 15:30 pm

Chair: GERHARD KROST

- #40 “General Communication Strategy for Control of Distributed Energy Resources in Smart Grids via International Standards“, Samer Jaloudi, Egon Ortjohann, Andreas Schmelter, Worpong Sinsukthavorn, Paramit Wirasanti (Germany, United Kingdom)

- #63 “Smart Grid Information Clearinghouse: A Content Collection and Knowledge Discovery Model“, Saifur Rahman, Manisa Pipattanasomporn (USA)
- #121 “Situation-Aware Demand Response in the Smart Grid“, Babis Magoutas, Dimitris Apostolou, Gregoris Mentzas (Greece)
- #152 “Engineering of Trustworthy Smart Grids Implementing Service Level Agreements“, Rune Gustavsson, Shahid Hussain, Lars Nordström (Sweden)
- #161 “Symbolic Integration and Autonomous State Estimation: Building Blocks for an Intelligent Power Grid“, Sakis Meliopoulos, George Cokkinides, Sungyun Choi, Evangelos Farantatos, Renke Huang, Yonghee Lee (USA)
- #166 “Heuristic Optimal Restoration Based on Constructive Algorithms for Future Smart Grids“, Sarina Adhikari, Fangxing Li, Qinran Hu, Zhenyuan Wang (USA)

PAPER SESSIONS 16 – DISTRIBUTION SYSTEMS

Wednesday 13:30 pm – 15:30 pm

Chair: OLIVER GEHRKE

- #28 “Electrical Consumers Data Clustering Through Optimum-Path Forest“, Caio Ramos, Andre Souza, Rodrigo Nakamura, Joao Papa (Brazil)
- #31 “Intelligent Monitoring of the Health and Performance of Distribution Automation“, Susan Rudd, John Kirkwood, Euan Davidson, Scott Strachan, Victoria Catterson, Stephen McArthur (United Kingdom)
- #64 “Logic Programming and Fuzzy Monte Carlo for Distribution Network Reconfiguration“, Zita Vale, Bruno Canizes, João Soares, Pedro Oliveira, Tiago Sousa, Tiago Pinto (Portugal)
- #71 “Control Strategy for an Autonomous Energy System with Electricity and Heat Flows“, Victor Velez, Laura Ramirez-Elizondo, G.C.Bob Paap (Netherlands)

- #96 "Feeder Reconfiguration for Accommodating Distributed Generations Interconnection", Rung-Fang Chang, Ya-Chin Chang, Chan-Nan Lu (Taiwan)
- #119 "Distribution System to Fault Classification Using Negative Sequence and Intelligent System", Angelo Oliveira, Paulo Augusto Garcia, Leonardo Oliveira, Jose Luiz Pereira, Hleio Silva (Brazil)
- #233 "Applications of Hybrid EP-ACO for Power Distribution System Loss Minimization under Load Variations", Men-Shen Tsai, Chieh-Cheng Chu (Taiwan)