

*Program of the  
11<sup>th</sup> International Conference on Deregulated Electricity Market Issues  
in South-Eastern Europe  
DEMSEE 2016*

*22-23 September 2016, Heraklion, Crete, Greece*

*Day 0 (21.09.2016)*

*17:00 – 19:00 Registration conference hall "ΠΑΣΙΦΑΗ I"*

*Day 1 (22.09.2016)*

*08:00 – 13:00 Registration conference hall "ΠΑΣΙΦΑΗ I"*

*09:00 – 09:15 Opening ceremony (Papazoglou Thales, Mavromatakis Fotis)*

*09:15 – 10:00 Keynote Speeches*

- 1. Antiopi Gigantidou** *"Renewable Sources in Crete Island"*  
*Energy Transmission & Distribution Centre of Crete, Chief Engineer, Hellenic  
Electricity Distribution Network Operator (HEDNO)*
- 2. Dr Yannis Kabouris** *"Current State of Interconnections in Greece"*  
*Director of Transmission System Planning Department  
Independent Power Transmission Operator, (IPTO/ADMIE)*

### Session A: Power System Operation and Control I

*(Chair: Urban Rudez)*

- 10:00-10:15 **Sinisa Sekulic** (*Končar - Power Plant and Electric Traction Engineering Inc, Croatia*)  
*"SCADA system at production control center of Hydro North"*
- 10:15-10:30 **Engy Adel Mohamed Mohamed** (*German University in Cairo, Egypt*)  
*"A Novel Probabilistic Technique for optimal allocation of Photovoltaic Based Distributed Generators to Decrease System Losses"*
- 10:30-10:45 **Kiriakos Siderakis** (*Hellenic Electricity Distribution Network Operator S.A., Greece*)  
*"Composite outdoor high voltage insulators in Crete – 37 years of experience"*
- 10:45-11:00 **Dr. David Raisz** (*Budapest University of Technology and Economics, Department of Electric Power Engineering, Budapest, Hungary*)  
*"Smart Centralized Control System for Active Distribution Networks with Adaptive Multi-Objective Optimization"*
- 11:00-11:15 **Istvan Taczi** (*Budapest University of Technology and Economics, Department of Electric Power Engineering, Hungary*)  
*"Possible Role and Effects of Synthetic Inertia on the Future's Power System"*
- 11:15-11:45 Coffee break

### Session A: Power System Operation and Control II

*(Chair: David Raisz)*

- 11:45-12:00 **Davide Poli** (*Dept. of Energy, Systems, Territory and Constructions Engineering (DESTeC), University of Pisa, Italy*)  
*"A sensitivity analysis of dynamic thermal rating procedures using a probabilistic Monte Carlo approach"*
- 12:00-12:15 **Miloš Stojić** (*Mihajlo Pupin Institute, Belgrade, Serbia*)  
*"Inclusion of Phasor Measurements in the State Estimator of Serbian TSO SCADA/EMS system"*
- 12:15-12:30 **Mirela Đurđević** (*Serbian Transmission System and Market Operator, Belgrade, Serbia*)  
*"The Metering Interface between SCADA and SRAAMD Systems"*
- 12:30-12:45 **Dimitrovska Teodora** (*Faculty of Electrical Engineering, University of Ljubljana, Slovenia*)  
*"CCT estimation based on Principal Component Analysis"*

- 12:45-13:00 **Ioana Pisica** (*College of Engineering, Design and Physical Sciences, Brunel University London, UK*)  
*"Lessons Learnt from Mining Meter Data of Residential Consumers"*
- 13:00-13:15 **Bruno Pavlović** (*KONČAR – Power Plant and Electric Traction Engineering Inc., Croatia*)  
*"Integration of applications for revitalization of remote control center Hydro North on river Drava in Croatia"*
- 13:15-13:30 **Urban Rudez** (*University of Ljubljana, Faculty of electrical Engineering, Slovenia*)  
*"The tool for in-depth understanding of electromechanical wave's propagation and inter-generator oscillations"*
- 13:30-15:00 **Lunch break**
- Session B: Energy markets, economics and legislation**  
(*Chair: Ninel Cukalevski*)
- 15:15-15:30 **Ivan Fuček** (*KONČAR-Power Plant and Electric Traction Engineering Inc., Zagreb, Croatia*)  
*"Information System Supporting Local Issuing Office"*
- 15:30-15:45 **Konstantinos Gkarakis** (*MA in Energy, Master in Energy, University of Piraeus, Greece*)  
*"Assessment of the implementation of Guarantees of Origin (GOs) in Europe"*
- 15:45-16:00 **Giorgos Stamtsis** (*Hellenic Association of Independent Power Producers, Greece*)  
*"Cooperative game theory solutions in regional European capacity markets"*
- 16:00-16:15 **Valentin Abze** (*University of Ljubljana, Faculty of Electrical Engineering, Slovenia*)  
*"Assessing of electrical distances - a small step toward online dynamic security assessment"*
- 16:15-16:30 **Viskadouros George** (*Department of Electrical Engineering, School of Engineering, TEI of Crete, Greece*) *"Economic and Performance Modelling of photovoltaic systems"*
- 16:30-17:00 **Coffee break**
- 17:00-20:00 **Visit the TALOS high voltage station**

20:30-22:30 [Conference dinner at the restaurant of Hotel Atlantis](#)

## [Day 2 \(23.09.2016\)](#)

08:00-13:00 Registration conference hall "ΠΑΣΙΦΑΗ I"  
Keynote Speech

09:00-09:15 **Dr Nikos Zografakis** "*Perspectives of Sustainable Energy Sector in Insular Systems*"  
Head of the Regional Energy Agency of Crete

### [Session C: Renewable energy sources, Distributed Generation,](#)

#### [Smart Grids I](#)

(Chair: Ole Gjerde)

09:15-09:30 **Konstantinos Brellas** (School of Electrical & Computer Engineering, Technical University of Crete, Greece)  
"*Reducing solar dish park production volatility utilizing lithium-ion batteries*"

09:30-09:45 **Muhammad Naveed Shaikh** (Department of Engineering & Applied Sciences, Frederick University, Cyprus)  
"*Electrical Modeling of a Photovoltaic Module*"

09:45-10:00 **Mahmoud M. Othman** (Electrical power and machine Department, Faculty of Engineering, Ain shams University, Cairo, Egypt)  
"*Short Circuit Analysis in Unbalanced Distribution Systems in the Presence of High Wind Power Penetration*"

10:00-10:15 **Fotis Mavromatakis** (School of Engineering, Department of Electrical Engineering, TEI of Crete, Greece)  
"*Spectral performance of PV modules of different technologies*"

10:15-10:30 **Sokratis Pastromas** (High Voltage Laboratory, University of Patras, Greece)  
"*Typical Lightning Protection System of Wind Turbines*"

10:30-10:45 **Dimitris Papastefanakis** (School of Engineering, Department of Electrical Engineering, TEI of Crete, Greece)  
"*Designing the grid protections to accommodate distributed generation*"

10:45-11:00 **Sofia Yfanti** (Municipality of Hersonissos, Technical Service, Greece)  
"*Energy savings in municipal road lighting: The case of Municipality of Hersonissos*"

11:00-11:30 [Coffee break](#)

[Session C: Renewable energy sources, Distributed Generation,](#)

[Smart Grids II](#)

**(Chair: Rafael Mihalic )**

- 11:30-11:45 **Nikos Savvakis** (School of Environmental Engineering, Technical University of Crete, Greece)  
*"Phase change materials in Photovoltaics: A preliminary assessment of system performance under actual Mediterranean climate conditions"*
- 11:45-12:00 **Dr. David Raisz** (Budapest University of Technology and Economics, Department of Electric Power Engineering, Budapest, Hungary)  
*"Optimal Charging/Discharging of PHEVs for Predictability Enhancement of Wind Power Generation"*
- 12:00-12:15 **Antonios Tsikalakis** (Hellenic Distribution Network Operator/Island Systems Management Department/Crete-Rhodes Division, Greece)  
*"Estimation of Hosting Electric Vehicles capacity in the transformers on the island of Crete"*
- 12:15-12:30 **Athanasios Coutsolelos** (Chemistry Department, University of Crete, Greece)  
*" A Reversible Self-assembling Light-Harvesting System based on a Diphenylalanine – Porphyrin Motif"*
- 12:30-12:45 **Ioannis Kougioumtzoglou** (Wind Energy & Power System Synthesis Laboratory – TEI of Crete, Greece)  
*"An experimental evaluation of a flexible wind turbine rotor"*
- 12:45-13:00 **Waldemar Dolega** (Wroclaw University of Technology, Poland)  
*"Problems, barriers and perspectives of RES development in Poland"*
- 13:00-13:15 **Syllignakis John** (Department of Electrical Engineering, School of Engineering, TEI of Crete, Greece)  
*"Study and evaluation of three phase induction motor controlled by inverter to identify power losses and energy saving"*
- 13:15-15:00 [Lunch break](#)

### Session D: Island's and Small Scale Power Systems

*(Chair: Karapidakis E.)*

- 15:00-15:15 **Yiannis A. Katsigiannis** (Department of Environmental and Natural Resources Engineering, TEI of Crete, Greece)  
*"Effect of pumped hydro storage units installation on the operation of the autonomous Cretan power system"*
- 15:15-15:30 **John Syllignakis** (Department of Electrical Engineering, School of Engineering, TEI of Crete, Greece)  
*"Laboratory tests, Modeling and Study of small Double Fed Induction Generator (DFIG) in autonomous and connected to network scenarios."*
- 15:30-15:45 **Emmanouil Skounakis** (School of Applied Sciences, TEI of Crete, Greece)  
*"A Cost-effective Standalone Multisensory System for Energy Consumption and CO<sub>2</sub> emissions control in Smart-Homes via Internet and Mobile Devices, using a network of Arduino Microcontrollers"*
- 15:45-16:00 **Maria Apostolaki and Michael Golovanis** (Region of Crete)  
*"Integrated and Sustainable Energy Planning"*
- 16:00-16:15 **Yiannis A. Katsigiannis** (Department of Environmental and Natural Resources Engineering, TEI of Crete, Greece)  
*"Energy Management System for Water Distribution Systems: Application to Crete"*
- 16:15-16:30 **Nikolina Arapoglou** (Department of Electrical Engineering, TEI of Crete, Greece)  
*"Differential protection schemes and techniques for power transformers"*
- 16:30-16:45 **Syllignakis John** (Department of Electrical Engineering, School of Engineering, TEI of Crete, Greece)  
*"Automatic speed controller of a DC motor using arduino, for laboratory applications"*
- 17:00-17:30 **Closing Ceremony**  
From the 11<sup>th</sup> to the 12<sup>th</sup> DEMSEE  
Thales Papazoglou, Yüksel Kaya