

Joint Special Section on:

New Trends in Intelligent Energy Systems

TODAY'S POWER AND ENERGY SYSTEMS are in a transformation process towards a smarter grid in order to cope with the large scale integration of Distributed Energy Resources (DER), Intelligent and Controllable Loads and E-vehicles. Advanced Information and Communication Technology (ICT) solutions and management concepts are one of the key enablers of the future Smart Grid. In order to cope with ever increasing complexity of the Smart Grid itself and its corresponding Cyber-Physical components and devices new architectures, concepts, algorithms, and procedures are necessary. The main objective of this Special Section is to provide a forum for researchers and practitioners to discuss and exchange their latest achievements to manage the ever increasing complexity in energy systems.

Editors invite original manuscripts presenting recent advances in these fields with special reference to the following topics:

- Computational intelligence and soft computing in complex energy systems and modeling of complex energy systems
- Smart grid control, advanced simulation methods for Smart Grid development, advanced control and optimization algorithms and intelligent grid participants (e.g., DER, intelligent buildings, storages, charging devices) and algorithms for automatic market participation
- Integration of DER devices, storages and intelligent loads (e.g., intelligent buildings) into Smart Grids, standard-related topics (e.g. CIM, IEC 61850) for intelligent energy systems and Smart Grids
- Integration of (distributed) stochastic energy generation, recent developments in SCADA and distributed control technology and ancillary services for DER components
- Topic related to e-vehicles (from a grid point of view), advanced communication systems and approaches for energy systems and cyber-security issues in intelligent energy systems, training and educational aspects
- Innovative forecasting methods for smart grids, smart building/home control, demand side management in smart grids and microgrids and smart devices for power and energy management.

Manuscript Preparation and Submission:

Authors should be aware that Papers will be published in TIE or TII depending on the paper technical content and the space available in both journals. Check carefully the style of the journals described in the guidelines "Information for Authors" in the IEEE- IES web site: <http://www.ieee-ies.org/publications>.

Please submit your manuscript in electronic form through: <https://mc.manuscriptcentral.com/tie-ieee/> or <https://mc.manuscriptcentral.com/tii/>.

On the submitting page #1 in pop-up menu of manuscript type, select: "SS on New Trends in Intelligent Energy Systems", then upload all your manuscript files following the instructions given on the screen.

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Timetable

Deadline for manuscript submissions:	Information about manuscript acceptance:	Publication date:
31 January, 2014	Summer, 2014	Winter, 2014