

The 38th Annual Conference of the IEEE Industrial Electronics Society

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Proposal for IECON 2012 Special Session Send your proposal to the SS chairs

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Special Session on: {include the name of the special session}

Energy and Information Technology

Special Session Organizers (names and contact emails): Peter Palensky (Peter.Palensky@ait.ac.at)

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Technical Outline of the Session (50 words) and Topics:

Numerous attempts are made to solve energy problems, especially reducing CO2 or promoting natural energy. In smart grid, smart community, smart city and other concerning new approaches, energy management or control technologies have been actively studied. In particular, interdisciplinary alliances are required to solve these problems, and among them, information technology and its applications show a big potential for energy problems. Information technology is a key component from data acquisition for control to on-line energy trading over networks, and is penetrating all aspects of these prediction, design, operation and validation of concerning systems.

- ♦ Interoperability of Energy Technology and Information Technology
- Demand response system
- ♦ Distributed energy resources
- Micro grids / Smart grids / Smart communities
- ♦ Energy controlling system
- Information Technology used in power grid and power markets
- Internetworking and interoperability
- Wide area automation technology
- New energy services
- Power markets and energy business
- Integration of distributed generation
- Renewable energy resources
- ♦ Energy distribution automation
- ♦ Resource optimization
- ♦ Protection and Power Quality
- Simulation and evaluation of energy systems
- Electric power system
- End-use applications and loads of energy

IES Technical Committee Sponsoring the Special Session (if any):

Technical Committee of the Building Automation, Control and Management (TC BACM)