



Special Session on Micro and Smart Grids: Modeling, Design, Planning, Control, and Energy Management

www.icrera.org

The integration of renewable energies in the buildings applications is generally supported by the using of energy storage devices that can be grid-connected in the new trends of smart grid development. This association can promote the self-consumption of energy, but can also introduce some new constraints for example by increasing the energy management complexity for grid managers. The active participation of consumers in the energy market requires today the rules in aims to provide significant savings by avoiding or minimizing energy buying from the grid. Due to random behavior of renewable energies and the variability of consumers' requirement, an optimal sizing and efficient control are necessary to ensure the electrical grid reliability and stability.

This special session is focused on the following topics, but it is not limited to:

- Modeling, Design, Planning, control, and energy management of Micro and Smart Grids;
- Renewable energy (Wind Power, Hydropower, Solar, Wave Energy, Tidal energy,...) and energy storage devices association : design, optimal planning and location, economic dispatching and pricing;
- Electric Vehicles integration in Smart Grid, Smart Home and Smart Cities;
- Power quality, Grid reliability and availability;
- Power electronic converters design and control for Micro or Smart Grids;
- Renewable energy and energy storage integration in transportation or industrial applications;
- Power flow optimization methods (dynamics programming, genetic algorithms, loss minimization, cost minimization, etc.);
- Agent-based approaches for micro-grid management

organized and co-chaired by:

Dr. Mamadou Baïlo CAMARA, University of Le Havre, France, Email: mamadou-bailo.camara@univ-lehavre.fr

Dr. Mahamadou Abdou TANKARI, University of Paris-Est Creteil, France, Email: mahamadou.abdou-tankari@u-pec.fr

Author's schedule: Deadline for papers submission

June 31, 2017

Notification of acceptance

July 20, 2017

Deadline for final manuscripts submission **September 2, 2017**