

# Workshop on Smart Grid Modeling & Simulation

To be held at 2nd IEEE International Conference  
on Smart Grid Communications (SmartGridComm 2011)

October 17, 2011 • Brussels, Belgium

## CALL FOR PAPERS

The electric power industry around the world is undergoing a transformation unlike anything it has seen in over a century. The entire supply chain of electricity, including how it is generated, transmitted, distributed and consumed is being overhauled with the goal of establishing a more sustainable energy future for the planet. Adoption of new technologies and associated market restructuring is a complex undertaking that requires an understanding of many interacting variables and conflicting cost functions of various market participants, such as power producers, system operators, load serving entities, regulators, aggregators, service providers, and consumers.

To meet the enormous challenge of creating the sustainable energy infrastructure of the future, driven by a 'Smart Grid', researchers and practitioners need quantitatively to investigate the complex interactions between different components of the electricity grid and evaluate the impact of new ideas and technologies, taking into consideration interdependencies between markets, power flows and information & communication networks. To help with this need for a quantitative understanding of the grid, there is an unprecedented need for (near) real-time visibility into the state of the grid and loads with volumes of data being collected from smart meters and other sensing devices being added to the grid.

The 2nd IEEE International Conference on Smart Grid Communications (SmartGridComm) is organizing a one day workshop on modeling and simulation of the Smart Grid on October 17, 2011. The workshop aims at bringing together researchers from Academia, Industry, and National Labs to exchange research ideas and practical experiences in developing and using simulation and modeling software to understand the interactions of the smart grid.

Prospective authors are invited to submit original contributions (standard two-column IEEE format, up to 6 pages) on all aspects of Smart Grid Modeling & Simulation research, including the following topics:

- Static and dynamic models for generators, transmission & distribution system components, and loads
- Steady state & transient simulation of the grid
- Integration of renewable generation and bulk-energy storage technologies to the grid
- Retail Market Competition, Dynamic Pricing & Demand Response
- Impact of Wholesale Market Competition
- Distributed Energy Resources, Micro-Grids, Distributed Storage, and Electric Vehicles
- Modeling of communication network characteristics and protocols
- Smart Grid Data Analytics
- Generation, Load, and Price forecasting in deregulated markets

*Note: Proceedings will be published on IEEE Xplore.*

### IMPORTANT DATES

**Paper Submission Deadline:** Aug. 8, 2011  
**Notification of Acceptance:** Sep. 1, 2011  
**Camera Ready Paper Due:** Sep. 5, 2011  
**Author Registration Deadline:** Sep. 5, 2011

### TPC CO-CHAIRS

**Amit Narayan, Stanford University, USA**  
**Chris Develder, Ghent Univ. – IBBT, Belgium**  
**Craig Rodine, EPRI, USA**

#### TECHNICAL CO-SPONSORS:



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