Special Issue

Monitoring and Control of Active Electrical Distribution Grids and Urban Energy Grids

Message from the Guest Editor

Many of the changes in the electrical power system are occurring on the distribution level and in the urban setting. The network infrastructure is changing due to microgrid integration, including DC grids and scenarios in which parts of the distribution system are managed like microgrids; sector coupling of e.g. electricity and gas; new load behavior, e.g. e-vehicle recharging stations and buildings; and renewable energy sources and storage. Business level changes accompany the power infrastructure changes, among them the new roles of distribution system operators, aggregators, third party service providers, and local energy exchange systems. Monitoring and control functions must be supported in a suitable automation system. This Special Issue will present the concepts, technologies, methods, and applications that promise to propel the active electrical distribution systems in the urban environment to the next level. Contributions that present the results of full-scale field demonstrations or scalable testing methods are particularly relevant.

- distribution grids
- monitor and control
- smart city
- energy management
- microgrids
- integration of renewables
- urban systems

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2020)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/28641

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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