



an Open Access Journal by MDPI

Optimal Operation and Control of Microgrid Systems

Guest Editor:

Prof. Dr. Hak-Man Kim

Department of Electrical Engineering, Incheon National University, Incheon 13557, Korea

Deadline for manuscript submissions: closed (20 July 2020)

Message from the Guest Editor

Dear Colleagues,

Optimal operation and control of microgrids are required to operate the microgrids in a stable and an economic way. The upper level control (operation) is required for the economic scheduling and dispatch of the power sources. At the operation level, integration of demand response, electric vehicles, and energy storage are considered, and the optimization is carried out with several objectives, such as cost minimization, emission minimization, service reliability maximization, etc. The lower level control is responsible for maintaining stabilities and improving the power qualities of microgrids. Advanced control techniques play an important role in achieving a reliable, robust, and economic operation of microgrid systems. Optimal operation and control of microgrids has been an active research area for the last decade.

This Special Issue will deal with novel optimization and control techniques for microgrids. Topics of interest for publication include, but are not limited to:

- Optimial operation of microgrids in grid-connected and islanded modes
- Optimal operation for off-grid microgrids...

Prof. Hak-Man Kim *Guest Editor*







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi