Special Issue

Near-Optimal Operation of Distributed Energy Resources Based on Microgrids

Message from the Guest Editor

Distributed energy resources are currently being deployed on a large scale to meet the requirements of increased energy demand and achieve socio-economic benefits for sustainable development. The integration of such distributed energy sources into the utility grid paves the way for microgrids, which are considered self-sustained systems for the efficient integration and management of distributed energy sources and multiple types of loads. This Special Issue aims to present and disseminate the most recent advances related to the theory and application of near-optimal operation of distributed energy resources based on microgrids. Topics of interest for publication include, but are not limited to, the following:

- Distributed resource aggregation and planning;
- Electricity market design for the efficient integration and management of distributed energy sources;
- Advanced optimization theory for microgrids planning and operations;
- Advanced optimization theory for active distribution networks with large-scale distributed energy sources;
- Grid-forming technologies for distributed energy sources and microgrids.

Guest Editor

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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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