Special Issue

Microgrids: Islanding & Operation

Message from the Guest Editor

Microgrids incorporate distributed energy resources; if part of a grid, they can detect issues with the grid, perform seamless islanding transition, and manage the island with different levels of control hierarchy. This Special Issue will explore the areas of islanding detection, taking the decision to island, transitioning between grid-connected and islanded operation of the microgrid, and safety issues in isolated grids. Further, it will discuss issues related to islanded microgrid stability such as resiliency and stability of the island, microgrid inertia (actual and virtual), voltage and frequency control, load frequency control, and developing concepts such as virtual synchronous machines. Also welcome are steady-state microgrid operational issues such as optimizing and dispatching active and reactive power in microgrids, load sharing, scheduling, PV–Diesel operations, the operation of batteries and other storage in microgrids, providing electricity to remote and rural areas, cybersecurity in microgrids, microgrid central control, hierarchical control, and DC 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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