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Energy Management of Smart Grids with Renewable Energy Resource

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Message from the Guest Editors

Energy crisis and climate change have prompted countries to make great efforts to develop renewable energy sources. Many WTs and PVs have been integrated into existing grids, bringing dramatic changes and new challenges for the energy management of smart grids. The introduction of significant intermittent generation will affect the way in which smart grids operate. It requires more accurate prediction of renewable energy generation, more flexible operation of power systems, more active response of distributed energy resources, and more extensive utilization of energy storages. The dynamics of power systems will likely be dominated by the dynamics of WTs and PVs in the near future. These challenges require more precise models of WTs and PVs, and more powerful simulations for smart grids. To face the above-mentioned challenges, novel ideas, methods and technologies have emerged. In this Special Issue, we invite original and unpublished submissions on the energy management of smart grids with renewable energy resources.

Dr. Lixiong Xu

Guest Editor



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Special Issue



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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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