Special Issue

Planning, Operation, and Control of New Power Systems: 2nd Edition

Message from the Guest Editors

The global energy landscape is undergoing a profound transformation driven by the rapid advancement and integration of communication technologies, multi-energy systems, and distributed power generation. As the adoption of new power systems accelerates, they are playing a critical role in reshaping energy structures and supporting the transition toward cleaner, more resilient, and more intelligent energy networks. With the proposal of a carbon neutrality goal and the continuous improvement of the penetration rate of renewable energy, traditional optimization methods face growing challenges. New power systems demand advanced, adaptive solutions to navigate their inherent complexity and support intelligent decision-making. Meanwhile, the continuous refinement of electricity and carbon market mechanisms necessitates stricter requirements for the planning and operation of new power systems. This 2nd Edition of the Special Issue invites original research articles and comprehensive reviews that address emerging methods, models, and technologies for the optimal planning, operation, and control of new power systems.

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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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