Special Issue

Innovative Energy Management Strategies for Utility-Scale Hybrid Renewable Power Plants

Message from the Guest Editors

Dear Colleagues This Special Issue aims to disseminate cutting-edge research on intelligent control, optimization, and operational frameworks that directly address these barriers. Topics of interest include, but are not limited to, the following:

- Advanced forecasting methodologies for renewable generation, load demand, market prices, and grid service needs using artificial intelligence and data-driven approaches;
- Hybrid forecasting–optimization frameworks for improving system reliability and economic performance under uncertainty;
- Integrated techno-economic–environmental–social–governance (TEESG) assessment of hybrid renewable power plant;
- Life-cycle environmental impact analysis, carbon accounting, and sustainability evaluation of hybrid power plants;
- Control and Dispatch of Grid-Forming Hybrid Power Plants with Energy Storage;
- Real-time coordination, stability enhancement, and frequency–voltage control;
- Strategies to enhance financial viability and innovative investment models;
- Grid-interactive and islanded operation strategies;

Guest Editors

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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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