Special Issue

Optimal Schedule of Hydropower and New Energy Power Systems

Message from the Guest Editors

This Special Issue focuses on cutting-edge research in the optimal scheduling of hydropower and new energy power systems. Topics of interest include, but are not limited to, the following:

- Hydropower and renewable energy coordination:
 Strategies for jointly optimizing hydropower and variable renewable energy sources.
- Stochastic and robust optimization: Approaches to handle the uncertainties in renewable energy generation and water inflows.
- Multi-objective scheduling: Trade-offs between economic, environmental, and reliability objectives in scheduling decisions.
- Energy storage integration: The role of batteries, pumped storage, and other energy storage technologies in enhancing system flexibility.
- Al and data-driven methods: Applications of machine learning, deep learning, and reinforcement learning in power scheduling.
- Market mechanisms and policy implications: The impact of electricity market structures and regulatory policies on optimal scheduling.
- Resilience and risk management: Methods for ensuring grid stability under extreme weather conditions and other uncertainties.

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About the Journal

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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