Special Issue

Advanced Control and Operation of Distributed Energy Resources in Modern Power Systems

Message from the Guest Editors

This Special Issue presents state-of-the-art research on control and operational techniques that enable the effective integration of DERs into various configurations of modern power grids. We welcome contributions focusing on novel coordination strategies, hierarchical control frameworks, and data-driven approaches that enhance grid flexibility, reliability, and resilience. Submissions addressing practical implementations, policy implications, and experiment-based validations are also strongly encouraged. Keywords:

- distributed energy resources
- power distribution systems
- integration of renewable energy resources
- power system stability
- flexibility
- sector coupling
- advanced distribution management systems (ADMS)
- distributed energy resource management systems (DERMS)
- non-wires alternatives (NWA)
- microgrids
- virtual power plants
- demand response
- distribution system operator (DSO)
- TSO–DSO cooperation

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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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