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Frequency Regulation in Low-Inertia Renewable-Energy-Dominated Grid II

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Deadline for manuscript
submissions:

20 September 2024

Message from the Guest Editor

Dear Colleagues,

The Guest Editor is inviting submissions to a Special Issue of *Energies* on the subject area of “Frequency Regulation in Low-Inertia Renewable-Energy-Dominated Grid”. The inertia of the future power grid is expected to be much lower than that of the present system due to a higher share of renewable energy sources. With less mechanical inertia, the disturbances caused by a power mismatch between generation and demand will result in faster and larger frequency deviations.

This Special Issue invites papers with novel and efficient methods for the fast regulation of frequency in the event of a transient. Related to the above subject area, topics of interest for publication include but are not limited to:

- Control method of power electronics;
- Optimal operation of renewable energy;
- Energy storage systems;
- Virtual synchronous generator;
- Energy management;
- Power system frequency stability.



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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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