Special Issue

Advanced Energy Storage and Load Forecasting Solutions in Modern Distribution Networks

Message from the Guest Editor

Energy storage in a distribution network involves the use of technologies which helps stabilize the grid, improve power quality, manage load, and facilitate the integration of renewable energy. These systems, known as Distributed Energy Storage (DES), enhance the grid's reliability and adaptability. Dispatching energy in a distribution network involves intelligently managing the flow of electricity from substations to end-users, often incorporating distributed energy resources (DERs). Load forecasting becomes a key aspect of realising effective and profitable dispatching of energy from DERs. Topics of interest for publication include, but are not limited to, the following:

- Novel energy storage solutions and applications in modern distribution networks
- Innovative applications of energy storage solutions in demand management, grid-stabilisation, power quality improvement, load management, and renewable energy integration
- Frequency Control Ancillary Services (FCAS) and other economic benefits of energy storage
- Dispatching energy in a distribution network
- Advanced approaches to modern load forecasting
- Optimised use of energy storage combined with load forecasting

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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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