

Special Issue

Sustainable Energy Storage and Power System Design in the Context of Carbon Neutrality

Message from the Guest Editors

Under the goal of carbon neutralization, many countries are upgrading their power systems. More and more new energies are being connected to the grids. Location, sizing, and operation of the energy storage systems are key issues of sustainable development. Power system design with multi-link energy storage is a new problem. This Special Issue focuses on multi-values of energy storage, among which the coordinate planning and operation, the business model, the profit distribution, the carbon benefits, etc., are especially of interest. The main topics include, but are not limited to: Modeling and planning of energy storage systems; Energy storage participates in the optimization of power grid regulation; Energy storage participates in market operation strategy optimization; Differentiated configuration of energy storage; Research on interaction between energy storage and new energy generation; Joint expansion planning of electric energy storage and other energy networks; Novel market mechanism and business model caused by energy storage; Carbon dioxide emission reduction using variety kinds of energy storage.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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