Special Issue

New Insights on Renewable Energy Integration in Power Systems

Message from the Guest Editors

This Special Issue explores all the challenges related to the integration of a large share of renewables into the power system, including wind, solar, hydropower, geothermal, biomass, wood and wood waste, municipal solid waste, biogas, biodiesel, and green hydrogen. Topics addressed in this Special Issue include, but are not limited to, the following:

- Voltage and frequency stability in the presence of an increasing share of renewables;
- Grid code requirements to connect renewable power plants to the grid;
- Power quality issues;
- Virtual inertia;
- Economic aspect of renewable integration and decision-support models;
- Coordination mechanisms between renewable power generation units,
- energy storage systems and the grid;
- Service-based energy storage systems for renewable integration, renewable firming, energy arbitrage, ancillary services;
- Flexible demand integration in future power systems based on batteries and electrolyzes for green hydrogen production.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

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