Special Issue

Power Quality and Hosting Capacity in the Microgrids

Message from the Guest Editor

Microgrids, and the integration of distributed energy resource (DER) units in general, introduce a number of operational challenges that need to be addressed in the design of control and protection systems in a power grid. High power quality (PQ) is an essential requirement for all power grids, as poor PQ may result in equipment malfunction, overconsumption, or even early failure. Due to their unique characteristics, microgrids and RES-based power systems are particularly susceptible to PQ disturbances. The topics of interest for this publication include, but are not limited to, power quality and possible solutions related to the following:

- Integration of DERs;
- Energy storage;
- Harmonic distortion;
- Frequency deviation;
- Voltage unbalance;
- Microgrid control and protection.

Guest Editor

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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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