

Special Issue

Advancements in Real-Time Simulation of Power and Energy Systems

Message from the Guest Editors

This Special Issue aims to address recent advances in real-time HIL simulation in several domains (also in new and promising areas), including technique improvements to promote its wider use. It welcomes innovative papers, including industrial relevant experiences, related (but not limited) to the following topics: Advances in HIL testing of power electronic converters: distributed generation and storage inverters, HVDC/FACTS (e.g., testing of replicas) etc.; Advances in HIL testing of power system protection; Advances in HIL testing of smart grid/microgrid controllers, energy management systems, wide area protection, and control; Apparatus modeling for real-time simulation and model validation; Interfacing methods of PHIL and CHIL simulation: improvement of stability and accuracy; HIL co-simulation, cyber-security, cyber-physical energy systems, and other multidomain systems; Geographically distributed HIL and real-time simulators coupling/challenges; Mechanical and multiphysics HIL simulation; Industrial experiences, HIL in standardized testing, and standardization of HIL.

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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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