Special Issue

Risk and Reliability Analysis for Power Systems

Message from the Guest Editors

Recent years have seen the fast development of power system design towards high efficiency, digitalization and intelligentization by means of interconnections. Risk and reliability analysis for power systems faces new challenges, and the convergence of safety, security and resilience concerns should be properly addressed. The topics of interest for publication include, but are not limited the following:

- Reliability modeling and optimization for power systems;
- Coping with imprecision in reliability analysis;
- Reliability and maintenance solutions in the operation of power systems (with the assistance of advanced methods);
- Artificial intelligence for reliability and availability;
- Hazard analysis, risk and resilience assessment for power systems and interdependent infrastructure systems;
- Modeling and analysis of cascading failure propagation and mitigation;
- Fault-tolerant and attack-resilient power system design;
- Solutions for climate change and extreme weather event impacts on power system risk and resilience;
- Modeling and analysis of risks in the power sector's low-carbon transition.

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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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