Special Issue

Application of Artificial Intelligence in Electrical Power Systems

Message from the Guest Editors

Electrical power systems are currently confronting multiple challenges, including a high percentage of new energy, source–grid–load–storage coordination, and extreme climate events. Artificial intelligence (AI), as a key enabler to address these challenges, has demonstrated transformative potential across all segments of electrical power systems. This Special Issue aims to present and disseminate the most recent advances related to the application of artificial intelligence in electrical power systems. Topics of interest for this publication include, but are not limited to, the following:

- All aspects of AI algorithms and theories for power generation, transformation, distribution, and consumption domains;
- Ultra-short-term load forecasting methods;
- Renewable energy generation forecasting;
- Power system fault diagnosis and defense;
- Robotic intelligent grid inspection;
- Large-scale market clearing algorithms for electricity trading;
- Power supply–demand interaction mechanisms.

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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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