Special Issue

Optimization and Control of PV and Modern Power Systems

Message from the Guest Editors

The optimization of renewables and power networks, as well as increasing the share of renewables is a big challenge because of many technical issues among which one can mention the high voltage level, asymmetry, overloading of the power network, PQ issues like voltage variation, negative consequences of harmonics etc. In order to solve these problems, it is necessary to address many technical issues, including:

- Active optimization of the coordination between volt/var and power flow control devices, which can adjust to new operating conditions faster and better than existing systems;
- Effective utilization of novel functionalities and methods of integration of novel functionalities with the network (e.g., Q at night and other functionalities which often remain inactive);
- Specification of new energy sources and auxiliary devices functionalities;
- Development of the set of rules and control algorithms which in optimal network conditions would make it possible to reduce constraints put on renewables to maximize energy production

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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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