

Special Issue

Towards a Seamless Integration of DER in Power Systems: Future Prospects, Challenges and Solutions

Message from the Guest Editors

We are looking for original research that proposes, tests and validates new methodologies for future power systems' operation, planning and addresses:

- Transmission/distribution network operation and planning, considering technology adoption rates and the spatiotemporal uncertainty of DER behavior;
- Joint operation and planning of distribution and transmission networks;
- Predictive management and control of distribution and transmission networks with high shares of renewable energy;
- Strategies to improve system resilience in the face of increasing variability from renewable generation and consumption;
- Methodologies to exploit synergies between different energy networks (electricity, gas, district heating/cooling, transportation);
- DER participation in future electricity markets under uncertainty;
- Design of policy incentives to reduce uncertainty and optimize the spatiotemporal impacts of DER in power systems' operation and planning;
- Methods to foster consumer participation in flexibility services and to reduce uncertainty;
- Aggregated modeling of active distribution grids;
- Autonomous operation of clusters of microgrids.

Guest Editors

Prof. Dr. Filipe Soares

Prof. Dr. Carlos Moreira

Dr. André Madureira

Deadline for manuscript submissions

closed (31 March 2020)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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