



DC Grids: Recent Advances and Future Trends

Guest Editor:

Dr. Peng Li

School of Engineering, University
of Aberdeen, Aberdeen AB24 3UE,
UK

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Message from the Guest Editor

The development of DC power grids co-playing with existing AC systems can facilitate large-scale integration, wide area transmission, and smart usage of renewable energy with enhanced reliability and operating efficiency. MVDC and LVDC are advocated not only to upgrade the existing infrastructure but also to meet new emerging applications along with power system liberalisation processes.

This Special Issue aims to invite the latest developments and new perspectives for DC grid-related technologies from the wide community. Topics will cover but not be limited to:

- HVDC system, modelling, control, and protection;
- MVDC onshore and offshore applications, DC microgrid architecture, and operating strategy;
- Integration of energy storage element;
- Power electronics converters for HVDC and MVDC;
- DC fault localisation algorithms and DC circuit breakers;
- DC grid planning and optimisation;
- Interaction and coordination between DC and AC systems;
- DC grid standardisation and grid code proposals.





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

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Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
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