Special Issue

Recent Contributions and Future Prospects of Converter Control in Hybrid AC/DC Microgrids

Message from the Guest Editors

Microgrids have gained more attention in the past decade since they provide the facility for the exploitation of Distributed Generator to satisfy the growing rate of electricity demand. On the other hand, developments in the power semiconductor technology have opened a new door of power-electronics applications in the power system. In particular, it creates a push to development of the facilities of DC microgrid. This special issue is devoted to the converter control in hybrid AC/DC microgrids. The state of the art of power electronics topologies as bidirectional interface converters in the AC and DC parts can be adressed. Different control structures of hybrid microgrids, their control strategies, their positive and negative aspects and applications have to be covered. The prospects, main challenges, research gaps, and the trend of the hybrid microgrid structure and control will be in the focus of this special issue.

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