



IEI² 2023 Special Session 07

Key technologies of ac/dc hybrid distribution networks

Introduction and topics

Hybrid AC/DC distribution networks encounter challenges ranging from seamless integration of AC and DC components, coordination of control strategies, voltage and power quality management across modes, designing fault protection schemes for both AC and DC scenarios, ensuring reliable energy management and optimization, addressing interoperability and standardization concerns, managing transitions during faults and extreme weather, and safeguarding against cyber threats to ensure data integrity, collectively necessitating innovative solutions for efficient and resilient operation.

Topics of interests(including but not limited to):

- \\ Risk evaluation of AC/DC system
- \\ AC and DC Fault protection of distribution networks
- \\ Fault-tolerant operation and post-fault restoration of AC/DC distribution networks
- \\ Smart local energy trading using peer-to-peer
- \\ Low-carbon and economic operation of source-network-load-storage interaction
- \\ Planning and operation of soft open point
- \\ Emergence power supply for extrem weather
- \\ Reliable and low cost power electronics devices for hybrid AC/DC distribution networks
- \\ Interaction between TSO and DSO
- \\ Prevent cyberattacks and ensure data integrity for distribution networks

Special Session Chairs


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Publication



Website

The conference papers will be published by the IEEEExplore website and indexed by EI, and high-quality papers will be recommended to Energy Conversion and Economics, Energy Internet, Journal of Modern Power Systems and Clean Energy (MPCE), CSEE Journal of Power and Energy Systems (CSEE JPES), Applied Energy, and others.

Submission Link: <https://easychair.org/conferences/?conf=ei22023>

Full Paper Submission Deadline: Oct. 31th, 2023

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