



## Optimal Operation and Planning of Smart Power Distribution Networks

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### Message from the Collection Editor

Power distribution networks are in a transformation from passive to active distribution networks, also called smart distribution networks, owing to the fast development of emerging information and communication technologies, and the integration of advanced metering infrastructure. The main reason for the transformation to smart distribution networks is the need to accommodate the high penetration of distributed generation, especially renewable energy sources, in order to meet the environmental targets for gas emission reduction and sustainability.

- Smart power distribution networks
- Active distribution networks
- Information and communication technologies
- Advanced metering infrastructure
- Active network management
- Power flow management
- Network reconfiguration management
- Optimal operation of smart distribution networks
- Optimal planning of smart distribution networks
- Optimal allocation of distributed energy resources
- Distributed energy resources
- Distributed generation
- Renewable energy sources
- Energy storage systems
- Voltage control

