



Sustainable Power System Planning and Analysis

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Message from the Guest Editors

The primary objective of a power system is to safely provide reliable energy services to society at an affordable cost. Achieving this objective must be done according to a fast transformation from fossil to sustainable energy sources, new paradigms for transmission, distribution, and consumption. Existing power system analysis and planning methods are potentially compromised by the rapid transition occurring globally, characterized by the increasing penetration of variable renewable energy (VRE), inverter-based resources (IBR), and distributed energy resources (DER). New analysis and planning methods must also consider the flexibility of the electric power system—often defined as the ability to cope with variability and uncertainty.

This Special Issue is focused on new approaches for power system analysis and planning accounting for technical and economical challenges to the transition to a decarbonized and sustainable environment. Contributions to this Special Issue are expected to address the most relevant challenges of today's power system operation and planning.





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Message from the Editor-in-Chief

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