Special Issue

Modeling, Optimization, and Control of Distributed Energy Systems

Message from the Guest Editors

The push towards constructing clean, low-carbon, secure, and efficient distributed energy systems has gained broad consensus within the energy and power industry. Integration of diverse energy sources poses challenges to traditional modeling, optimization, and control methods due to their inability to fully address complex optimization issues, limiting synergy exploration. This Special Issue on "Modeling, Optimization, and Control Technology of Distributed Energy Systems" showcases recent advancements in this area. Topics of interest include, but are not limited to:

- Multi-time scale dynamic modeling and simulation of distributed energy systems;
- Energy management and optimal operations of distributed energy systems;
- Restoration control methods for distributed energy systems;
- Evaluation and improvement of resilience and flexibility in distributed energy systems;
- Application of artificial intelligence in the modeling, optimization, and control of distributed energy systems;
- Stable operation and control technologies for distributed energy systems.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2025)



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Editor-in-Chief

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