Special Issue

Acceleration of Renewable Energies Expansion and Harvesting Technologies

Message from the Guest Editors

This Special Issue is concentrated, but not limited, on the following subjects:

- Proposing economic analysis for the expansion of renewable energy sources considering operation constraints and uncertainties in both transmission and distribution systems.
- Sizing and sitting multiple energy storage systems
 (e.g., battery energy storages, hydrogen storages, etc.)
 to provide the required flexibility considering both
 economic and practical assessment.
- Proposing optimal solutions to figure out the required flexibility in system based on the installed renewable energy capacity.
- Designing capacity, day-ahead, and real-time markets mechanism for involving renewable energies and storage systems in them.
- Proposing novel ideas for uncertainty management under a high penetration of renewable energy sources by using energy storage systems.
- Fairly dividing the required flexibility among agents who are more interested in energy arbitrage in both transmission and distribution systems.

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