

## Special Issue

# Regulation and Control of Flexible Resources in Resilient and Sustainable Power Systems

### Message from the Guest Editors

Large-scale renewable energy has emerged in both centralized and distributed infrastructure to augment conventional generation and limit the impact of fossil fuels on climate change while preserving natural fuel resources. Renewable energy investment and integration, including energy storage and intelligent loading, is one critical facet of progressive power system evolution, which is defining transitional paths to sustainability. Topics for this Special Issue include, but are not limited to, the following innovations and findings:

- Flexible regulation and control of steam and hydro turbines;
- Regulation and control of renewable energy in challenging scenarios, including desert, offshore, and island at transmission and distribution levels;
- Regulation and control of virtual power plant of typical regions;
- Regulation and control of demand response, including residential, commercial and industrial loading and system interconnection;
- ICT and IoT, energy policies and grid codes, and electricity market pricing and trading mechanisms;
- Impacts of renewable generation on dispatch and unit commitment;
- The role of energy storage in control and regulation.

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### Guest Editors

Dr. Bowen Zhou

Prof. Dr. Matilde Santos

Dr. Timothy Littler

Dr. Jun Cao

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### Deadline for manuscript submissions

closed (15 October 2024)



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### Editor-in-Chief

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