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Modelling, Analysis and Control of AC/DC Power Systems with High Penetration of Renewable Energy

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Message from the Guest Editors

At present, large-scale renewable energy and HVDC are been integrated into the power system and the penetration of renewable energy has been increasing year by year. As a result, the nonlinear characteristics of renewable energy and HVDC increase the difficulty of performing modelling analysis and controlling AC/DC power systems. Furthermore, the fluctuation, intermittency and vulnerability properties of renewable energy may increase the risk of the instability of AC/DC power systems.

In order to discuss the key technologies and issues related to AC/DC power systems with high penetration of renewable energy in modelling, analysis and control, we invite experts and scholars to submit papers discussing the latest academic and technological achievements. Topics to be covered in this Special Issue include, but are not limited, to the following:

- Modelling of AC/DC power systems;
- Optimal control method for power systems;
- Frequency regulation techniques for power systems;
- Wide-band frequency oscillation analysis for AC/DC power systems;
- Power quality improvement technique for AC/DC power systems.

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Message from the Editor-in-Chief

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