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Advanced Fault Detection, Diagnosis and Prognosis in a Context of Renewable Power Generation

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Message from the Guest Editors

Deregulation of the electricity market, as well as the emergence of renewable energy systems in recent years, has introduced new operating rules, several daily starts and stops, spin-no-load availability, and electrical machines pushed to their limits. To take advantage of this new reality, the short-term benefits must not be outweighed by a reduction in reliability or expected equipment life. The availability and reliability of power generation equipment are both key features that are driving utilities to implement advanced fault detection, and diagnostic and prognostic methods to move from a systematic maintenance policy to a condition-based maintenance (CBM).

In this Special Issue devoted to Advanced Fault Detection, Diagnosis and Prognosis in a context of renewable power generation, we invite practical as well as academic research and review paper to contribute and share their valuable experience.

Keywords

fault detection; diagnosis; prognosis; deep learning; condition-based-maintenance; hydro-generators; wind-turbine; renewable power; generation system



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