



Large Grid-Connected Wind Turbines

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Message from the Guest Editors

Dear Colleagues,

The renewable energy penetration rate has increased rapidly since the last decade. Among the different renewable sources, such as wind, solar, biomass/biogas, tidal, geothermal, etc., wind energy is playing a vital role in the energy market. 10 MW class wind turbines will be available commercially in the near future and growth will continue.

To maximize the energy production from wind turbines, and transfer this power to the power grid, different types of power electronic converters are being used presently as interfacing devices. Controller and filter design tasks are becoming more complex. System stability is becoming a headache for transmission and distribution operators, when large scale wind farms are connected with existing weak networks. The energy storage system appears as a crucial part of grid tied to large scale wind turbine generator systems. This Special Issue aims to collect important works addressing the stability, variability, and scalability of large-scale, wind-turbine, grid-interfacing techniques and challenges.

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Message from the Editor-in-Chief

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