Special Issue

Sustainable Wind Power Systems: Recent Advancements in AC/DC Collector Grids, and High-Voltage DC (HVDC) and Low-Frequency AC (LFAC) Transmission Systems

Message from the Guest Editors

The integration of large-scale wind generation systems into the existing power grids continues to grow, as an increasing number of onshore and offshore wind farms are being installed to meet the demands of clean energy. For transmission grids in wind power systems, traditionally high-voltage AC systems have been used; however, with the flexibility and controllability that power electronic systems offer and their competitive costs, high-voltage DC (HVDC) are becoming more popular, especially as the wind farms become larger. For collector grids, which collect the power from wind turbines before sending it to an offshore/onshore substation, AC collector grids have been the primary choice of technology. However, as DC systems and their power electronic-based components gain more popularity while their cost continues to decrease, there is an interest in the use of DC systems either in medium-voltage DC (MVDC) or HVDC for collector grids. A DC collector and transmission grid system is sometimes referred to as an all-DC grid. The purpose of this Special Issue is to provide a platform for authors and the scientific community to share their recent findings on the topics of interest.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

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