



Modern Energy Storage Technologies towards Decarbonized Power Systems

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Message from the Guest Editors

Dear Colleagues,

Recently, countries have been moving towards the massive integration of renewable energy sources (RES) due to their environmental-based role in carbon-free electricity supply. However, the high penetration of these sources and the intermittency and uncertainty associated with the output power of such energy sources have brought new operational and technical challenges to electrical power systems. As a result, the importance of modern energy storage technologies (EST), as promising solutions for achieving the power system's required performance, has become critical. Modern ESTs are defined as practical and effective approaches for stabilizing the power supply to overcome such challenges and minimize energy peak demands. Moreover, they can mitigate power fluctuations due to the intermittent nature of RES. Further, EST effectively reduces system imbalances, adopts load shifting and reserves, and decreases operation costs in the system. This Special Issue focuses on the application of modern energy storage technologies in forthcoming power systems.

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Message from the Editor-in-Chief

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