Special Issue

Local Electricity Markets: Current Trends, Mechanism Design and Participation

Message from the Guest Editors

The power sector is undergoing a transition characterized by the increasing decentralization and diversification of the generation mix, a tighter coupling with other energy carriers, as well as the intensified electrification of the transport sector and industrial processes. Wholesale electricity and ancillary service markets are constantly evolving in order to accommodate the characteristics of this transition by recognizing new market roles and enabling market floors and products to allow for more efficient portfolio management and guarantee seamless grid balancing. Local electricity markets have recently received significant attention both in terms of published literature and real-world implementations, especially in the context of microgrids, energy communities and peer-topeer energy trading. Nonetheless, many challenges pertaining to the development of local electricity markets still remain. This Special Issue invites contributions from different disciplines that address current challenges and bring forward new problems in local electricity markets. Both original research and comprehensive review papers are welcome.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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