Special Issue

The Development and Characterization of Measurement Infrastructures for Low-Inertia Power Systems

Message from the Guest Editor

Modern power systems are characterized by an ever-increasing penetration of renewable energy sources. Due to their inherent volatility and lack of rotating inertia, such resources are likely to produce faster dynamics and high distortion levels that might interfere with the traditional monitoring and control schemes. In this context, accurate and prompt distributed measurement infrastructures are envisioned to maintain system stability during sudden unexpected or fault conditions, as well as supply and demand changes. In particular, an improved robustness against narrow- and wide-band disturbances is required for measurements of frequency and the rate change of frequency. In this Special Issue of *Applied Sciences*, we invite submissions exploring cutting-edge research and recent advances in the fields of inertia quantification and estimation uncertainty in non-stationary spectral analysis. Both theoretical and experimental studies are welcome, as well as comprehensive reviews and survey papers.

Guest Editor

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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.

Editor-in-Chief

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