



an Open Access Journal by MDPI

Research on Planning and Operation of Smart Grid Systems and Related Technology

Guest Editor:

Dr. Muhammad Majid Hussain

School of Engineering & Physical Sciences, Heriot-Watt University, Edinburgh, UK

Deadline for manuscript submissions: closed (15 February 2024)

Message from the Guest Editor

Dear Colleagues,

Smart grid technology and its complex digitalised systems are a relatively new concept to increase the efficiency, reliability, and security of power systems. Smart grids integrate communication, control, protection, and sensing technologies to monitor and automate the energy flows, thus meeting electricity demands. Recent technological advancements in electric vehicles (EVs), demand-side management, energy storage systems, distributed energy resources, and forecasting methods expanded the scope of planning and operation in smart grids. Therefore, it is essential to develop new technologies and innovate a framework for effective and sustainable solutions for resolving planning and operational issues to make smart grids efficient, reliable, and secure for electricity operations.

Hence, this Special Issue invites research contributions from academia and industry to bring together innovative developments for new technologies, challenges, and solutions in smart grid planning and operations for smooth integration into the existing network.

Dr. Muhammad Majid Hussain Guest Editor





mdpi.com/si/181651





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies_mdpi