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Application of Power Electronics Converters in Smart Grids and Renewable Energy Systems

Guest Editors:

Dr. Irfan Ahmad Khan

Clean and Resilient Energy Systems (CARES) Lab, Electrical and Computer Engineering Department, Texas A & M University, Galveston, TX 77553, USA

Prof. Dr. S. M. Muyeen

Department of Electrical Engineering, Qatar University, Doha 2713, Qatar

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Message from the Guest Editors

Conventional power systems worldwide have experienced a significant transformation, which has been strongly characterized by an increased penetration of power electronic converter interfaced technologies. Among these new technologies are wind, tidal, fuel cell and photovoltaic generation, various storage technologies, FACT devices, HVDC lines, and power electronic interfaced loads. This Special Issue intends to present advanced methods involved in the applications of power electronic converters in smart grids and renewable energy systems.

Prospective authors are invited to submit original contributions for publication in this Special Issue. Topics of interest include, but are not limited to:

- Electric and hybrid vehicles;
- High-voltage DC (HVDC) systems;
- Flexible AC transmission system (FACTS) devices;
- Grid planning with large-scale renewable energy resources;
- Bulk energy storage;
- Uninterruptible power system (UPS);
- Modeling of large-scale PV and wind farms;
- Islanded and grid-connected microgrids;
- Fuel cell-based energy systems.









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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

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