Microgrids and Fault-Tolerant Control

Guest Editor:

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Deadline for manuscript submissions:
closed (30 June 2021)

Message from the Guest Editor

The control functional requirements of a microgrid are: 1) regulation of voltage and frequency within limits, 2) active and reactive power balance and proper communication among resources, 3) seamless transition between grid-connected and islanded modes of operation, 4) economic dispatch of the resources, and 5) power flow control among microgrid components. Although many schemes and approaches have been proposed for each of the mentioned functions, possible faults and failures in any of the components of microgrids can severely affect the performance, applicability, optimality, and robustness of the proposed schemes, such that they are no longer suitable or even feasible/admissible. This means that the control schemes must be adapted appropriately to treat faults and failures in the components of microgrids.

This Special Issue aims at presenting the latest developments, trends, research solutions, and applications of fault-tolerant control to engineering problems in implementation and utilization of microgrids.

Special Issue

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Message from the Editor-in-Chief

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