

Title: Microgrid DC-DC converter control strategy

Generated on: 2026-04-09 17:55:44

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This paper provides a comprehensive and systematic review of robust control strategies in DC microgrids. Microgrids gain worldwide attention in decades regarding its effective and feasible ...

When dc microgrids are designed, dc-dc electronic power converters must be used for adjusting voltage levels between different stages of the dc microgrids. The power flow in microgrids ...

In Section 4, the control methods of DC-DC converters in the DC microgrid are reviewed, and in Section 5, the power management methods in the DC microgrid are introduced.

In response to the challenges posed by the fluctuation and instability of renewable energy generation on the energy management of DC microgrids, this paper proposes a strategy for power control of DC ...

To mitigate the bus voltage stability issue in DC microgrid, an innovative intelligent control strategy for buck DC-DC converter with constant power loads (CPLs) via deep reinforcement learning algorithm ...

In this paper, a hybrid sliding mode and H-infinity control strategy is proposed for enhanced primary and secondary regulation in a DC microgrid feeding a tightly voltage-regulated ...

However, the integration of different distributed generations has complicated the control of bus voltage and current. Therefore, several efforts have been made in the research community to ...

We present a novel structure comprising the MPPT, voltage boosting, and voltage regulating components for a DC microgrid in a single system.

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