

Title: Microgrid voltage reactive power compensation module

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Compensating and reducing these voltage and current distortions requires efficient and cost-effective solutions. This article proposes two new topologies of DC series-parallel active ...

A multi-microgrid is developed using MATLAB and test-ed with and without DVR for LLLG, LLG and LG fault conditions by connecting a non-linear load and results are presented in this paper.

By dynamically adjusting reactive power and improving voltage profiles, the proposed solution supports both stable grid operations and cost-effective EV charging.

Subsequently, the challenges and power quality issues faced in the microgrid are observed and succeeded by a review of compensation methods against these concerns using various control ...

Therefore, subjecting to the issue that DG units rationally shares reactive power, this paper proposes a reactive power-voltage control strategy for a microgrid based on adaptive virtual impedance.

To address voltage stability challenges in power grids with high penetration of distributed generation (DG), this paper proposes an optimal configuration method for reactive power ...

This paper reviews key reactive power compensation technologies and control strategies for microgrids, including static and dynamic devices (e.g., SVC, SVG) and coordinated control approaches ...

This paper is a review of different reactive power compensation methods in microgrid in terms of control methods, algorithms and devices.

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