

The purpose of this chapter is to review the advantages and disadvantages of AC/DC hybrid grids and analyze potential applications that would benefit from such infrastructures.

In this paper, a novel hybrid AC/DC microgrid architecture with a hierarchical control strategy is proposed to achieve nearly/net-zero-energy-targeted buildings.

This paper provides an overview on Hybrid AC/DC micro grid and highlights the issues in these system and the methods to overcome them by help of simulations.

This paper introduces a novel design for a universal DC-DC and DC-AC converter tailored for DC/AC microgrid applications using Approximate Dynamic Programming and Artificial Neural...

In this study using HOMER Pro--a simulation program for analyzing renewable energy systems--we investigate the optimal architecture for an AC DC microgrid. The study covers an overview of ...

To enhance the power supply reliability of the microgrid cluster consisting of AC/DC hybrid microgrids, this paper proposes an innovative structure that enables backup power to be accessed ...

In this paper, an AC/DC optimal power flow method for hybrid microgrids and several key performance indicators (KPIs) for its techno-economic assessment are presented. The combination of both ...

Abstract: In this paper, a hybrid AC/DC microgrid planning problem is considered. The hybrid grid architecture consists of both AC and DC bus/terminals where a bidirectional converter links these ...

This research paper introduces an innovative hybrid AC/DC microgrid configuration that integrates a worldwide approach to compensate for the reactive power of an AC microgrid entirely through the ...

To validate the proposed optimization framework for hybrid AC/DC microgrids, the methodology was implemented and tested within the FOSS nanogrid, a fully operational research ...

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