

Since the concept of microgrids was proposed [1], distribution DC microgrids have been attracting increasing attention. Integrated using various technologies including distributed ...

Multiple geographically separated units in a DC microgrid can coordinate effectively through voltage analysis of DC bus variations, especially the common DC bus voltage. This research presents a decentralized control technique to ...

profile-based control,¹⁸ adaptive voltage and current control,^{23,24} consensus-based control,²⁵ decentralized control,²⁶ and power filter algorithm-based control.²⁷ In Xu et al.²⁸ the optimal ...

In this chapter, a DC microgrid system is presented in which DC-DC converter is utilized to regulate the DC bus voltage under different operating conditions. This chapter ...

With the rapid development of power electronics technology, microgrid (MG) concept has been widely accepted in the field of electrical engineering. Due to the advantages of direct current (DC) distribution systems ...

DC microgrids are well known as a proper solution to link different DC sources, such as photovoltaic panels and wind turbines, directly to DC loads. ... DC bus voltage deviations are illustrated in Fig. 20 when ESS ...

This article suggests a hybrid DC microgrid (HDCMG) with different levels of DC bus voltages to use for various types of loads. The available sources in the HDCMG are wind ...

Microgrids are classified into two groups: AC Microgrids and DC Microgrids ("Alternating Current" and "Direct Current") microgrids based on their operational setup. ... The main DC bus can be branched into other low voltage ...

The stability of the DC bus in hybrid AC/DC microgrid system is the basis of the stable operation of the microgrid system [8,9,10]. At present, in actual hybrid AC/DC microgrid projects with ...

Microgrid DC bus

