Microgrid bus voltage remains unchanged

Aiming at the problem of bus voltage stability in DC microgrid under complex conditions such as fluctuation, randomness, and random load switching of a new ener

The designed controller can accurately control the bus voltage of DC microgrid under the condition of voltage constraints, and has strong robustness. The feasibility and effectiveness of the ...

Regulating the voltage of the common DC bus, also referred to as the "load bus", in DC microgrids is crucial for ensuring reliability and maintaining the nomina

This study investigates the DC microgrid system and proposes an integrated bus voltage control method, which includes an IAVIC, a oscillation suppressor, and a voltage compensator, to ...

This paper proposes a control method for the voltage stability of DC microgrid buses based on a disturbance estimation feedforward compensation strategy, aiming to enhance the ...

The experiments prove that this method can more efectively suppress the influence of the fluctuations of impact load power on the DC bus voltage and further improves the system"s stability.

Abstract The solar power generation includes certain randomness and volatility, coupled with dynamic load involved in power fluctuations, which renders microgrid having certain unplanned ...

It is well known that accurate current sharing and voltage regulation are both important, yet conflicting control objectives in multi-bus DC microgrids. In this paper a distributed control ...

It is noteworthy that the microgrid load type is DC current, ensuring the delivered current to the load remains constant regardless of DC bus voltage variations under the three tested control strategies.

When each information state factor in the system converges to the average value, accurate current sharing according to the SOC values of BEUs and capacities is attained, and the average ...

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