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(57) Abstract :

One of the most widely used alternative energy sources is photovoltaic energy. Integrating Photo Voltaic power systems with other energy sources may help overcome inconsistency in power production. They are a potential choice because of their high efficiency, modularity, and fuel adaptability; nevertheless, one significant disadvantage is their sluggish dynamics. On the other hand, existing batteries are often incapable of delivering the long-term power required by escalating demands. PV power systems can be employed in various applications in conjunction with hybrid fuel cell and battery systems to deliver continuous, high-quality energy. For example, a hybrid PV/fuel cell power system may even be employed to continuously provide a reliable energy source. The design of a hybrid power system and the control mechanisms for power management are discussed in this paper.

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