Abstract

This paper presents a solar – wind hybrid system modelling with a storage system that provided backup for the system. The main aim is to maintain the power supply continuity to the load of 10 kW which is followed by an inverter and a DC bus. A Simulink model of the hybrid system is developed to study its behaviour under different conditions. The conditions have been assumed in order to show the variation of output at the DC bus and the load with varying the input parameters. The switching between the three systems has been done effectively in order to eliminate discontinuous power supply. For minimum output required, the proper controlling of all the three systems has been done. The power electronics interfacing is also required for conversion of ac to dc and dc to ac.
References


Index Terms

Computer Science  Information Sciences

Keywords

Solar photovoltaic, Wind energy, renewable power system, Hybrid power generation.