

Off Grid Hybrid Renewable Energy System for Safari Camps in UAE

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Abstract

Safari camps are fully powered using diesel generators due to their remote locations which makes it very expensive to provide utility power. Safari camps operators are having hard time meeting with demand due to generator's high operating cost. In addition, concerns from municipalities and activists are rising due to pollution and vibrations from diesel generators, which are affecting the desert's sand dunes demography. The objective of the proposed project is to provide safari camps and any other remote areas with a viable 5kW off grid hybrid renewable energy system. The proposed system will significantly contribute in producing the demanded energy at lower rates and lower generator operation hours; which will consequently result in lower CO₂ emissions and oil consumption. Fig.1 shows the block diagram of the system.

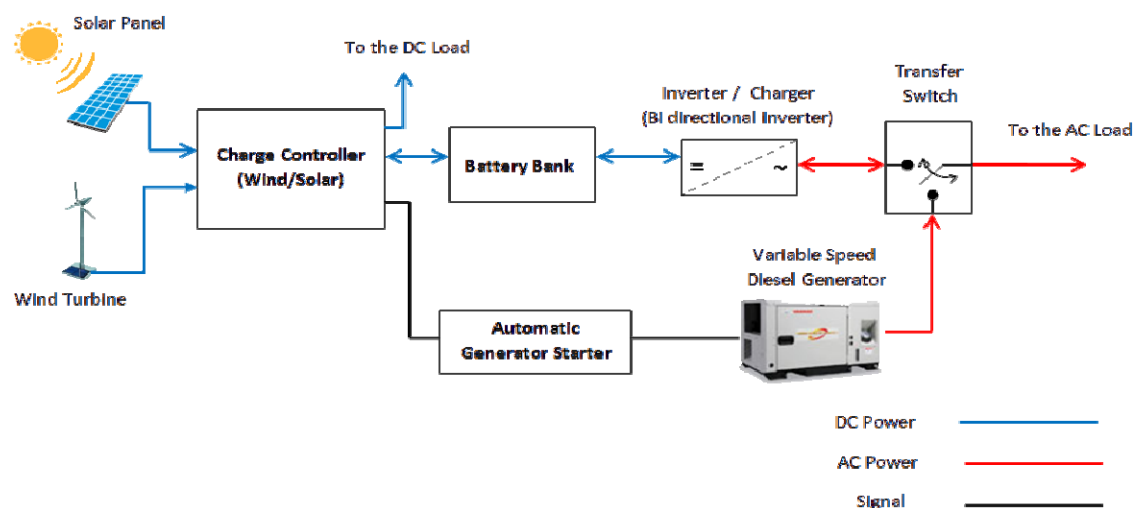


Figure 1 : Hybrid System's Block Diagram.