

## ABSTRACT

DC regulated Supply requires more time to charge super capacitors, as it is unable to provide the required high current instantaneously. Secondly, supplying a large burst of current from the battery as in the case of motor startup will degrade battery plates. Therefore, in this research we will be developing a fast super capacitor charging system along with complete PV system. Photovoltaic system is used along with boost converter to supply power to motor acting as a load. As the motor load requires heavy current therefore switching circuit of battery and super capacitor is added to hybrid energy management system for meeting up the load requirements efficiently. This research work is implemented in MATLAB to obtain results and analyze a hybrid PV system with super capacitor.