ULTRACAPACITOR – FUTURE OF REGENERATIVE STORAGE IN ELECTRIC VEHICLE

CHETAN UPADHYAY & HINA CHANDWANI

Electrical Engineering Department, Faculty of Technology and Engineering, The M. S. University of Baroda, Vadodara, India

ABSTRACT

No Energy Storage System has the ideal characteristics required for the grid integration as well as for the electric vehicle. In relation to Battery Storage System, the regenerative becomes most impossible due to its slow charging and rapid power available. Ultracapacitor (UC) s have the characteristics of fast charging and discharging. In this paper, the attempt is made to show that the UC has suitable characteristics to meet with the regeneration of Electric Vehicle braking and also decrease the weight of it.

KEYWORD: Ultra Capacitor, Modeling, State of Charge (SOC), Regenerative Breaking, Electric Vehicle