

## Operating Norms and Applications of Super Capacitor

### “Application of Super Capacitor in Public Transport”

In the proto-type model a bus is designed which is an **autonomous**; it runs using energy stored by Super-Capacitor. In the project a group of three super-capacitors of 2.5 V and 350 F connected in series are used. The net voltage becomes 7.5 V and net capacitance becomes 116.67 F. Now the initially charged bus moves, due to the energy stored in it by means of the super-capacitor. After the bus reaches the terminus it is charged by the super-capacitor kept at the stations. The Super-capacitors' at the stations are charged continuously by the use of charging circuit. This super-capacitor is further connected to the carbon brush placed at the roof of the terminus. These carbon brushes collect the charge from the super-capacitor. Now as the bus reaches the stations the carbon brush passes the charge to the copper plates placed at the top of the Capa-bus. These copper plates which are further connected to the super-capacitor placed inside the bus collects the charge from the carbon brush and charges the super-capacitor placed inside the bus. So as the passengers' move outside the bus and the other passengers' gets inside the bus, the bus is fully charged again, to move on and the process repeats as the bus reaches the another bus station.

### CONCLUSION

Energy storage system will effectively play dominant roles in energy transactions of all kinds. Speed of response, cost and foot print will decide the most superior one for a particular application.

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