

SMART POWER SHARING SYSTEM IN MODERN POWER PLANT USING DUAL CURRENT TRANSFORMER

ABSTRACT

This project deals that share the generator power depending on the power demand when the consumed load demand is increased above the (source) voltage during peak load, loads have the inefficient power from the generator. We can avoid this problem by load sharing technique. In this project generator power is shared automatically depending on the load demand. We are using two transformers, one is act as the main generator and remaining one acts as additional generator. The load is connected these two generators parallel. The current transformer will convert the load current into lower values; that current output will be converted in to voltage with the help of the shunt resistor.

Then the corresponding the AC voltage will be rectified with the help of the precision rectifier. The precision rectifier circuit connected to the microcontroller circuit. The Arduino controllers is using in this project. When the consumed load is more than the generator, the microcontroller activate the relay setup. So the second generator is connected to the load through the relay. So the generator is shared according to the consumed power.

BLOCK DIAGRAM

