

ABSTRACT

PLN's main power supply is very important o providing electricity for public services, both large and small. However, one day there will be a blackout that can be caused by interference with the PLN system. So that if PLN OFF, then the electricity supply will stop, and as a result all activities originating from electricity will stop. Based on the above, there must be a back-up in the form of a generator set (genset) so that the power source remains available. By using the ATS-MF system that is controlled using Arduino Mega 2560 as the control center, the transfer of the source can be controlled and monitored wirelessly by utilizing the Internet of things (IOT), so that i tis easy to operate. Arduino Mega 2560 fuctions as a control center of input and output. The input used is a voltage sensor as a detection of a power loss of 220VAC from PLN and will control the arduino Mega 2560 output signal will be sent to the internet using a modem via ethernet Shield and router. So that the generator status can be monitored from be done wirelessly through the Android application to keep the generator engine good. In order for the system to work when PLN's electricity is diconnected, a transfer of power supply between the PLN Source and Genset Source circuit, and to maintain the capacity of the battery to remain fully used , the charger circuit works automatically. So that the battery will be durable, undamaged, and keep functioning.

Key word: Arduino Mega 2560, Genset, Android, Automatic Transfer Switch, charger

