

## **ABSTRACT**

### ***KWH METER WITH BASED MICROCONTROLLER HISTORY MANAGEMENT***

Electric Energy is primary needs for Indonesia people, it could be proved by the development of tools, appliances, and devices that use electric as it energy source. By the growth of population, demand of electric energy needs always increasing. PT. PLN (persero) is the one that handle of electric energy needs owned by goverment, responsible to supply the electric energy needs. In the year of 2010 PT. PLN (persero) facilitate people to get their electric energy needs by using prepaid voucher service to supply the electric energy for their consumer. Prepaid voucher service allow user to buy the voucher at the store that selected by PLN then use the electric energy as much as the voucher amount they paid.

This final project use to develop KWh Meter device that owned by PT. PLN (persero) now. The KWh Meter used AC current from PLN as the source, arduino as microcontroller, and voltage and current sensor to find out value of watts. 1 channel relay used for switching.

The KWh meter system works to identify the value of the voltage and current value released by the sensor, the value used to calculate the electrical energy used by the user. The use of electrical energy will automatically reduce the pulses held by users of this KWh meter. From the total electrical energy consumption per day, the data is recorded and stored on the memory card to be viewed by the user at a later time.

***Keywords :*** *KWh meter, Switching,*