ABSTRACT

We can see a person standing in front of our house from electricity board, whose duty is to read the energy meter and handover the bills to the owner of that house every month. This is nothing but meter reading. According to that reading we have to pay the bills. The main drawback of this system is that person has to go area by area and he has to read the meter of every house and handover the bills. Many times errors like extra bill amount, or notification from electric board even though the bills are paid are common errors. To overcome this drawback we have come up with an idea which will eliminate the third party between the consumer and service provider, even the errors will be overcome.

In this project the idea of IOT Enabled smart digital EB meter have been introduced. In this method we are using Arduino because it is energy efficient i.e. it consume less power, it is fastest and has two UARTS. In this project, potential and current transformers are used to calculate voltage and current level. The Arduino controller convert the data's into power unit using some simple calculations. User can recharge their energy meter using given android application or non android users can recharge their account through web page. Once amount recharged the power supply is tripped and consumption power is calculated. If the balance is reach minimum level warning will be provided to user and it will cut off the supply when the available balance below the unit charge.