**SURVEILLANCE SYSTEM FOR EXCESS ENERGY CONSUMPTION**

**Abstract**

In this project we are analysing KSEB bill history of a customer and predicting excess usage of electricity without permission from KSEB, for Domestic customers KSEB providing electricity in a much cheaper tariff than an industrial customer , so whenever a domestic customer uses much large quantity of electricity (Large scale illumination works for mirage ,high current consuming construction works etc. ) without permission then the board will have lots of financial loss when considering a large number of customers doing the same , so to prevent this we are using a predictive analysis based on each customers electricity bill

When there is a significant difference in bill amount the system will check for this customers permission status, If that customer took sufficient permission’s for extra usage then the system will issue bill otherwise the system will assign a KSEB service engineer to check house hold wiring for wiring related issue, after the inception based on engineers feedback the system will issue bill with sufficient fine to the customer, Whenever a suspicious conception occurs in a line then the system will issue sufficient warnings to the user and nearest KSEB division office

By using this technology we can save KSEB from huge economic and power crisis by analysing each customers activity with the help of this EXCESS ENERGY CONSUMPTIONalgorithm

**BLOCK Diagram**

ATMEGA 328p

Energy meter

Firebase RTB

WiFi

Node MCU

KSEB User/ Admin APP

SMS SERVER APP

LCD Display

Opto coupler