

# Literature Survey for Electricity Theft Detection Using Gsm & Gps

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## ABSTRACT:

*In this paper literature survey of a detection of power theft in every houses for meter tampering methods of theft done. As Electrical energy is very important for everyday life and spine for the industry. Electricity is indiscipline to our daily life with increasing need of electricity the power theft is also increasing, power theft is a problem that continues to plague power sector across whole country the objective of this project is to design such a system which will try to reduce the illegal use of electricity and also reduce the chances of theft. In this proposed system objective is to find the place where the electricity is being theft and intimate it to Electricity distribution authority through the GSM and GPS networks. In the Proposed system theft identification module contains GSM and GPS module a modem connected to the microcontroller. GSM technology is used to establish cellular connection. A SMS will be transmitted containing where theft occurred.*

**KEYWORDS:** Literature Survey, theft, Microcontroller, GSM, GPS

## INTRODUCTION:

Electricity theft is a very common problem in country, where population is very high and the use of electricity are ultimately tremendous. In India, every year there is very increasing number of electricity thefts across domestic electricity connection as well as industrial electricity supply,

which results in loss of electricity companies energy and because of which we are facing the frequent problems of load shading in urban as well as rural areas so as to overcome the need of electricity for whole state. Electricity power theft takes place in a variety of forms and thrives with the support of people from different walks of life: utility staff, consumers, labour union leader, political leaders, bureaucrats and high level utility officials. The problem challenging power utilities worldwide is the electricity, in other words using electricity from utility company without the company's consent. Significantly, it is enough to destroy the entire power sector of country. According to source 20% losses means the masses would have to pay extra 20% in terms of electricity tariffs. This paper discusses the problem of electricity theft as well as proposed new method for calculate and judge the seal braking and also whether electricity stealing is happened or not. Also the ways using which theft can be done are innumerable so we can never keep track of how a theft has occurred, and this issue is needed to be solved as early as possible. In This abstract we propose an electricity theft detection system to detect the theft which is a made by the most common way of doing the theft and that is tampering of energy meter. The proposed system meter has nut-bolt assembly connected with switch if any one try to

open the meter the switch is pressed. Now the microcontroller senses that and sent the information to GSM to sent a message to the distribution authority and also the supply of the consumer get off.

The authorities send this information to the limens working on the side through application with the GPS location and consumer ID. If now consumer wants to starts the supply they are only relie on the linemen with access key to start the mere and the supply of the consumer.

### **LITERATURE SURVEY:**

H. E. Amhenrior; F. O. Edeko; E. A. Ogujor; J. O. Emagbetere , This paper analysis by the design and implementation of automatic tamper detection and reporting capability of Energy meter.[1]

Thomas B.Smith,Discuss In this literature we are anlyzing, What are the type of electricity theft and what are the technical solution , measure to prevent the theft.[2]

Amin S. Mahmoud, This paper deals with automatic meter reading and theft control system in energy meter. This model reduces the manual manipulation work and theft. control.[3]

ZHOU Wei, electricity-stealing prevention became a big problem to the electricity board. Based on the kind of electricity-stealing and actual demand of prevention of stealing electricity, realizes the behaviour of electricity-stealing with remote monitoring.[4]

Siddarameswara H.N. This paper analysis seal tampering which is provided on energy meter. An electric meter tamper detection system for

sensing removal of electric meter from a corresponding meter socket.[5]

Kalaivani. R, Gowthami. M, Savitha.S, Mohanvel.S, This paper deals with automatic meter reading using GSM module in order to avoid the displeasure for the user from theftly bill irrespective of the use of electricity due to theft .[6]

### **CONCLUSION:**

In this paper we conclude that our project literature survey has done & it helps us for making hardware of electrical theft detection by GPS & GSM. In developing countries like India electricity theft is a common practice especially in remote areas or slum areas. As this paper will help to researcher who work in this area.

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