Power Theft Smart Detection System

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Abstract: *Bypassing or hooking are the two main strategies used to steal power. The home current distribution is therefore done indirectly from the electric pole to an intermediate distributor box and then to the individual residences in order to identify it, a method (current measurement and comparison) is recommended. Periodically, the current in the distributor box is measured, and using a GSM/GPRS module, each house's current is sent to the server database. Similar to this, each home's electric metre is built to measure current value and regularly send it to the server database using GSM/GPRS module. A user-friendly mobile application is used to save the users' information in the database at the time of electric metre installation. This information includes the address, latitude, longitude, and a photo of the user's home or region using mobile GPS. If we find even a little variation between the current numbers after successfully comparing those from the electric metre and distributor box in the server, then the theft has been discovered. Finally, the user's information, including the area's address and photo, is exchanged with the approved mobile application. The region of the theft is also displayed on Google maps using the latitude and longitude. Therefore, the necessary actions are done..*

Keywords: Energy Metre, Power Usage, and Arduino UNO

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