AUTOMATIC ELECTRIC METER READING SYSTEM

Energy meter reading is a monotonous and an expensive task. Now the meter reader people goes to each meter and take the meter reading manually to issue the bill which will later be entered in the billing software for billing and payment automation. If the manual meter reading and bill data entry process can be automated then it would reduced the laborious task and financial wastage. "Automatic Electric Meter Reading (AMR) System" is a metering system that is to be used for data collecting from the meter and processing the collected data for billing and other decision purposes. In this paper we have proposed an automatic meter reading system which is low cost, high performance, highest data rate, highest coverage area and most appropriate for Indian perspective. In this AMR system there are four basic units. They are reading unit, communication unit, data receiving and processing unit and billing system. For reading unit we identified the disk rotation of the energy meter and stored the data in microcontroller. So it is not required to change the current analog energy meter. An external module will be added with the current energy meter. In the communication unit Wimax transceiver was used for wireless communication between meter end and the server end because of its wide coverage area. In the data receiving and processing unit meter reading will be collected from the transceiver which is controlled by another microcontroller. There will be a computer application that will take the data from the microcontroller. This will also help to avoid any tampering or break down of energy meter. There are various AMR systems all over the world. Our proposed system is completely new.