## The Application of GSM Mobile Phone to the Automatic Customer Outage Reporting System

Wang, Chih-Chung; Chen, Tsair-Rong; Sian, Hong-Wei; Wei, Jong-Bi

## Abstract

Nowadays, when the electric accidents happen, users often need to call the electric company for assistance. The repairing process time is quite long. If the wired telephone system is damaged by natural calamities such as earthquake, typhoon, and etc., serious losses may be caused due to the inability to get in touch with the personnel of maintenance. On the other hand, this system provides GSM (Global System for Mobile Communications) wireless communication systems, which automatically transfer error messages back to the mobile phone when the electric accidents happen at users. This study aims to set up an electric accident reporting system by integrating two segments: a power accident detecting circuit and a GSM module. The electric accidents include power outage, power repair, over voltage, low voltage, high frequency, low frequency and power reading value under normal usage. After the error message been received by mobile phone user, account status will be converted into error category so repair personnel can easily identify and locate the accident.

Key words: Automatic reporting system; GSM; Power outage