SMS FIRE ALERT SYSTEM

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ABSTRACT

Fire hazards are considered to be a nightmare when working in the power plant. Fire hazards in the power plant usually due to fire prevention methods which are not efficient in the working place. Fire hazards will cause damage and million dollars losses as well as reduce spin-national reserve by loads and eventually affect electricity consumers throughout Peninsular Malaysia. Since disasters are considered dangerous to the country, the appropriate response which are efficient or warning system must be implement to inform the unit operator at an early stage so that precautionary measures can be taken to avoid any circumstances. This paper presents the temperature level alarm system that was developed by using the thermocouple and GSM technology. The system focuses on remote monitoring of temperature levels and uses the connection of Global System Mobile (GSM) and Short Messaging System (SMS) to deliver data from the sensors to the users via their mobile phones, respectively. Hardware systems including recorder unit, three (3) thermocouple, and a GSM module. Software used for the system is Gammu thru (ATtention) AT commands. It is hoped that this project will benefit power plant workers and the country and will act as a precautionary measure in case of fire hazards. With early detection, the unit operator can take action quickly when there is a drop in temperature and stop the fire disaster to avoid higher losses.

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CHAPTER 1

INTRODUCTION

1.1   BACKGROUND

Mobile phones are vital in modern day communication these days. For communication community, mobile phones act as a medium to communicate, interact or as a device to gain knowledge. Mobile phone is defined as a communication device used to interconnect between different geographical areas. There are many features available in modern mobile phones nowadays that would satisfy users. Among the most popular applications in a mobile phone is Short Messaging System (SMS).

Based on a research by Mr Hillebrand and Mr Trosby in the book "SMS the creation of Personal Global Text Messaging" (published by Wiley 2010), SMS text messaging is the most widely used data application in the world, with 2.4 billion active users, or 74% of all mobile phone subscribers [7]. Although the latest development of SMS is Multimedia Messaging System (MMS) which has greater advantage compared to SMS, users still prefer to use SMS as their main source of communication. There are several features that facilitate SMS applications. It is one of the simplest and cheapest applications offered in a mobile phone. Although MMS have the ability to display voice and image, most countries still lacks the facility of 3G. For instance, rural areas are mostly still not equipped with 3G transmitters hence, MMS service still limited to users in rural areas. The other factor is that SMS is capable to distribute real time results. With the help of SMS, users would like to receive information at faster rate compared to other applications. SMS is made to be user friendly for all kind of people and this makes it convenient to be used.

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