KUVEMPU UNIVERSITY

Project Report on

GSM BASED TRANSFORMER MONITORING AND PROTECTION SYSTEM

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Abstract

The improvement of science and technology has lead to many changes in the way of life. We are using this latest technology in most of applications like robots, space research, etc., In this regard we have made an attempt to design a micro controller based system

The distribution transformers are costlier and difficult to maintain because the number of transformers are more and they are located at different places. These transformers may damage due to different reasons like over voltage, under voltage, over load, overheating, etc. So this project is aimed to overcome the above problem and to safeguard the transformer from damage by developing a model that senses various parameters such as over voltage, under voltage, over load, over heating

The system consists of sensors to check the parameters of the transformer unit. The sensors of these parameters voltage scaled to give analog voltages of 0 to 5 volts. These voltages are fed to analog inputs of micro controller for digital conversion by using ADC. The output of ADC is stored in memory locations and compares with the standard values. If the input of the ADC values exceeds the standard values, the microcontroller sends the signal to the display unit along with it sends control signals to transformers of the primary to turned off. And safe guards the transformer. At the same time GSM modem sends the message signals to the concerned authority. The software of the project is entered into the chip by using window based MPLAB software program after successful simulation.