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IoT Based Real Time Healthcare Monitoring of Substation Transformer with Overload Alert and Protection

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Abstract: *Transformers are a vital part of the transmissions and distribution systems. Monitoring transformers for problem before they occurs can prevent fault that are costly to repair & results in a loss of services. Current system can provides information about the state of a transformers, but are either off line or very expensive to implement. Transformer is essential part of power transmission system, are costly, as is the cost of power interruption. Because of the cost so of scheduled & unscheduled maintenance, especially at remote site, the utility industry has begun investing instrumentation & monitoring of transformers. Online transformer diagnostics using conventional technologies like carrier power line communications & Radio frequency based control systems & Supervisory controls & data acquiring system, Distributed control systems & Internet based in communications are having their own limitations is an open digital cellular technology use for transmitting mobiles voice & data services. This project objective is to develop low cost solution for monitoring health condition so remotely located distributions transformers using GSM technology to prevent premature failures of distributions transformers & improving reliability of services to the customers.*

Keywords: IOT web Server, Transformer, Overload Protection, Microcontroller, GSM Module, Sensor.

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