

FINAL YEAR PROJECT REPORT

ON-LINE LOAD MONITORING

AND

CONTROL MANAGEMENT SYSTEM



A PROJECT REPORT

Submitted by

HAROON AHTSHAM 091420256

MUHAMMAD KAMRAN 091420326

USAMA HAIDERBUKHARI 091420387

In partial fulfillment of the requirements for the award of degree of

BACHELOR OF SCIENCE

IN ELECTRICAL ENGINEERING

SCHOOL OF ENGINEERING

UNIVERSITY OF MANAGEMENT AND TECHNOLOGY

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A report submitted to the department of electrical engineering

*In partial fulfillment of the requirements for the award of degree of***BACHELOR**

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HAROON AHTSHAM

MUHAMMAD KAMRAN

USAMA HAIDER BUKHARI

SCHOOL OF ENGINEERING

UNIVERSITY OF MANAGEMENT AND TECHNOLOGY

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Director of Project:

Project Advisor:

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.....

(091420256 Haroon Ahtsham)

.....

(091420326 Muhammad Kamran)

.....

(091420387 UsamaHaider Bukhari)

The above statement has been signed in front of me, and is correct to the best of my knowledge.

(Signature of advisor & date)

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ABSTRACT:

Load management and energy conservation are currently being considered and adopted by many power utilities around the world. The common situation is the limited capacity of energy resources and increasing demand. Electricity demand is increasing rapidly, as more and more people are getting connected and appreciating the advantages of electrical energy. Load management reduces peak electric demand during the hottest afternoons of the summer. When the demand is increased, it is compulsory to manage the load properly, so different techniques are used to manage the load. In this project, work is done to suggest a way of managing the load according to capacity of grid. In this way load management is efficient and accurate, which is reliable for the grid. Load management using parallel operation of transformers is done in this project. Power load management enables energy utilities to reduce peak loads and thereby save money. Due to the large number of different loads, power load management is a complicated optimization problem. In the project work is done by giving an idea to manage distributed load at grid, using three transformers of same wattage which comes in parallel with respect to load. As load increases the transformers will be connected in parallel to fulfill the demand of load. When there will be less consumption of load then extra transformers will be disconnected automatically. By using this phenomenon we can save the transformers from losses e.g. Eddy-Current losses, Hysteresis losses etc. To make it wireless we are using ZigBee module and all the data will appear on our monitor.

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