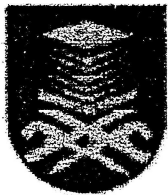


# **VARIATION OF VOLTAGE SUPPLY ON ENERGY CONSUMPTION**

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In the name of ALLAH

Most Gracious and Most Merciful

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Shah Alam

## ABSTRACT

In engineering terms, power is the rate of delivering energy and is proportional to the product of the voltage and current. The power supply system can only control voltage supply, it has no control over the currents that that particular loads might drawn. So changes in voltage supply will affect power drawn by the system. This project is aimed to investigate the possibility of saving energy through reduction of voltage within the allowable voltage limits of supply system.

Power drawn by loads on variation of voltage supply analysis is performed experimentally. Voltage varied by autotransformer. Curves of power versus voltage are fitted for passive load, lighting (fluorescent lamp), induction motor and composite load determine. Conceptual on effect of voltage variation on loads determine to ensure proper experimental result. If it is proof through analysis of experiment, voltage variation can take as mean energy saving.

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