THE FINAL PROJECT REPORT

ADVANCE DIPLOMA IN ELECTRICAL (POWER) ENGINEERING

SCHOOL OF ENGINEERING

MARA INSTITUTE OF TECHNOLOGY

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REPORT SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD OF

ADVANCE DIPLOMA IN ELECTRICAL (POWER) ENGINEERING

PROJECT TITLE

TO REDUCE MAXIMUM DEMAND DURING PEAK HOURS AND

TO ESTIMATE THE FUTURE LOADS OF ITM

ACKNOWLEDGEMENT

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PREFACE

This project present how to analyse and to reduce the maximum
demand during peak hours and also to estimate the future load
in Mara Institute of Technology.

As the content indicates, the readers is given a brief
introduction on how to analyse load distribution in ITM. First
major substation were choosen, graph were then plotted due to
voltage and current taken. All graph plotted by using lotus
123. From Graph plotted the load analysis distributed were
analysed. Estimation for future load were made based on floor
area using certain factors that provided by J.K.R Standard.
From this estimation, the transformer rating also could be
estimated by using appropriate diversity factor. Suggestions
and problems also taken into consideration.
Lastly, we hope that other student will continue this analysis
for future used with better information and data.

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1.∅   OBJECTIVES AND SUMMARY OF PROJECT

1.1 OBJECTIVES

The objective of the project is to :

      a - analyse load distribution

      b - reduce maximum demand

      c - estimate the future load

The purpose for the above objectives is to provide suggestions on how to improve load distribution, to reduce the cost of electricity and to estimate future load so that the power supply needed can be prepared.

1.2 SUMMARY OF PROJECT

The analysis is iniated by choosing major substations that are known to distribute big loads such as those listed below:

      1. Maintenance department substation

      2. Substation of School of Art & Design

      3. Substation of School of Applied Science

      4. Substation of School of Engineering 1 and 2