

POWER QUALITY PROBLEM AT LEVEL TWO
BENDAHARI BUILDING

This thesis is presented in partial fulfillment for the award of the Bachelor of
Electrical (Hons) Engineering

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ABSTRACT

Power quality has become a major concern of both electricity providers and their customers. For customer such as UiTM the data loses in computer due to computer failure will make all their staff work disturb. For utilities, system disturbances can lead to customer dissatisfaction. In this paper the ground loop phenomena and harmonic disturbances will be discuss and an application of separately derived system. In this project the Bendahari Building was selected for power quality study problem.

The data findings for this power quality study will analyze before state any recommendation to overcome the power quality problems that occur in Bendahari Building.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Power quality has become a major concern of both electricity providers and their customers. For customer, the economic impact of power disturbances can range from several hundreds dollars to repairs or replace home appliances to million of dollars in products losses, production losses and cleanup. For utilities, system disturbances can lead to customer dissatisfaction.

Power quality term can be defined as the quality of the current and voltage provided to the customers, providing customers with a clean sinusoidal waveforms at 50Hz without sags or spikes. Power quality also provides power to allow customers' sensitive electronic equipment operates reliably.

Power quality study become more important with the wide spread use of sensitive electronic equipment. Customers become much more aware and sensitive to transient and other power anomalies. Nowadays the power is just no longer to switch on and off the light and to start the motor. We are now used more sensitive and nonlinear devices that can creates harmonic in the power system. The study of power quality can help us to solve the problem.

UiTM as a learning institution is also expanding energy usage increase rapidly. Therefore the energy usage keeps on increasing and the quality of electrical supplies will increasingly concerned too.