

PROPOSAL OF RE-RING DISTRIBUTION SYSTEM AT
MARA INSTITUTE OF TECHNOLOGY (ITM) SHAH ALAM

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By

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CONTENT

Aknowledgement	iii
Abstract	v
Chapter 1	
Introduction	1
1.1 Site distribution system	1
1.2 Substations	2
1.3 High voltage radial network	3
1.4 High voltage ring main network	5
1.5 The II KV underground cable	8
1.6 Protection	9
Chapter 2	
Existing distribution system at 17m	11
2.1 Power Supply	13
2.1 ITM main intake substation	14
2.3 Ring main system	14
2.4 Radial and spur circuit	18
2.5 Weakness of existing system	18
2.6 Off - point	21
Chapter 3	
Underground system	37
3.1 Types cable	37
3.2 Underground joints and terminations	40
3.3 Cable laying	42
Chapter 4	
Design of II KV underground network	49
4.1 Planning	49
4.2 Designing II KV system	50
Chapter 5	
5.1 First proposal : ring main unit	52
5.2 Second proposal : Duplicate ring system	63
5.3 Discussion	71
Chapter 6	
Conclusion	72
Appendix	74

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ABSTRACT

A study of an existing distribution system and alternative ring system arrangement at ITM has been made. In this proposal, the high tension underground cable networks have also been suggested namely the ring main circuit and duplicate ring circuit. The quantities of current rating, voltage drop, cable sizes, short circuit rating and estimating of 11 KV cables were calculated. Comparison between the two ring circuit arrangements is also included in the last chapter.

CHAPTER 1

INTRODUCTION

Electricity supplies are provided for commercial and industrial complexes with widely varying requirements. The voltage and nature of supply and its distribution around the site depend on a number of factors such as the magnitude of total load, the level of security desired and the disposition of loads supplied on the site.

The distribution circuits between the main intake and load centres may be radial or ring main. The choice of the voltage for the main distribution will generally depend upon the economic considerations arising from distance between the various load centres and the main intake position. The system should be simple yet reliability and easy to maintain safely.

1.1 Site distribution systems

The distribution system should be designed to provide as much flexibility as possible within the cost limit allowance and provision should be made for any known future extensions.