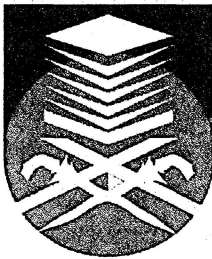


**STUDY OF BREAKDOWN OCCURRENCE ON THE 11KV
SEWERAGE PLANT SUBSTATION IN UITM SHAH ALAM**

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

**FACULTY OF ELECTRICAL ENGINEERING
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ABSTRACT

This paper describes the characteristics of environment of 11kV outdoor distribution substation that was affected to underground cable supply. There is some visual checking and site testing to detect breakdown on the cable and calculated cost involve comparing to suggested solution. The cause of breakdown must be effectively found so that further solution could be decide in order to minimize any spending cost on substation maintenance. The main course that seriously studies in this case is the effect of moisture to the 11kV substation. The effect of moisture could cause faulty which are not be able to confirm and standardize its characteristics at any different place or case. There might be changes of environment that could create moisture around substation environment. Details inspection and testing are usually perform if any tripping or fault occur. In this case, breakdown of insulation cable was studied on how it could be solve with less cost spend. First, inspection and testing was performed in order to find point of fault. Then analysis of data and information was estimated that moisture is the main cause contributes to this case of fault. Afterwards, the affected part was identified so that repairing work could be done. It was confirmed that gear involved in switchgear truck, interconnected bus-bar and insulation of cable was affected and will not be able to operate. Repairing work cost was studied by comparing it with the suggested solution. The suggested solution is to eliminate Sewerage Plant substation from operation supported by availability considered.

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