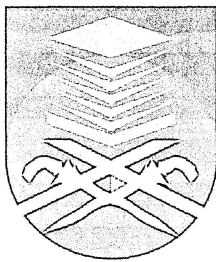


**OPTIMAL LOCATION AND SIZING OF DISTRIBUTED  
GENERATION FOR VOLTAGE PROFILE IMPROVEMENT AND  
LOSS MINIMIZATION**

This thesis is presented in partial fulfillment for the award of the  
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## **ABSTRACT**

This paper presents the optimal location and sizing of distributed generation(DG) for voltage profile improvement and loss minimization. The study involves the development of Evolutionary Programming as an optimization technique. This technique was developed to two differences of programming which are for optimization the improving of minimum voltage profile and minimizing the total power loss as objective function. Comparison with respect to single and multiple DG was conducted in order to highlight its objective function. The proposed technique was tested on IEEE 69-bus distribution test system. The results had shown that the voltage profile and power loss having its improvement by using multiple DG.

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