

ECONOMIC POWER DISPATCH OF POWER SYSTEM WITH POLLUTION CONTROL USING MATLAB OPTIMIZATION TOOLBOX

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Thesis presented in partial fulfillment for the award of the

Bachelor in Electrical Engineering (Hons)

UNIVERSITI TEKNOLOGI MARA



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ACKNOWLEDGEMENT

In the name of Allah SWT, the Beneficent, the Merciful, all praise to Allah SWT for all incredible gift endowed upon me and for giving the health and strength to complete this thesis.

I would like to take this opportunity to express my sincere appreciation and gratitude to everyone who has contributed either directly or indirectly throughout this project especially to my supervisor, PM Bibi Norasiqin Bt. Sheikh Rahimullah for the consistent consultation and invaluable advice throughout the preparation and completion of the study.

Thousands thanks and lovely appreciation to my beloved parents, Wan Azmi Bin Wan Mohamed and Asnah Bt. Awang for their financial support, prayers, expectations and encourage that has enable me to succeed. I would like to express my gratitude sincere appreciation especially for my beloved friend Khairunnisa Bt. Ramdan for his special support and encouragements. Last but not least, credits to all my friends for their ideas, suggestions and assistance in completing this project.

"May Allah bless and reward them for their generosity"

ABSTRACT

This study presents a study on solving the economic power dispatch problem of power system using MATLAB Optimization Toolbox. The objective is to minimize the total fuel cost of generation and environmental pollution control levels caused by fossil based thermal generating units and also maintain an acceptable system performance in terms of limits on generator real power outputs and system losses. The proposed approach has been evaluated on the test system contain of six generating units. The result obtained show that the purposed method can be used to solve economic power dispatch.

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