



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY



Cairo University

OPTIMAL ROUTING OF RADIAL DISTRIBUTION SYSTEMS USING MATHEMATICAL PROGRAMMING TECHNIQUES

By

Maged Gamal Lotfy Mohamed Zahra

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE

In

Electrical Power and Machines Engineering

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Under the Supervision of

Prof. Dr. Mahmoud Ali Mahmoud Farrag

Professor of Electrical Power System
Electrical Power and Machines Department
Faculty of Engineering, Cairo University

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Approved by the Examining Committee

Prof. Dr. Mahmoud Ali Mahmoud Farrag Thesis Main Advisor

Prof. Dr. Hussein Abd El Khalik Attia Internal Examiner

Dr. Waleed Mohammed Mostafa Seada External Examiner
General manager of electrical sector in El-Watania Group
for Awqaf Investments company

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
2020

Name: Maged Gamal Lotfy Mohamed Zahra

Date of Birth: 26/1/1986

Nationality: Egyptian

E-Mail: Mgegypt2004@gmail.com

Phone: 01024598459

Address: 8th district, 6 October city, Giza

Registration Date: 1/10/2017

Awarding Date:/....../2020

Degree: (Master of Science)

Department: Electrical Power and Machines Engineering

Supervisors: Prof. Dr. Mahmoud Ali Mahmoud Farrag

Examiners:

Prof. Mahmoud Ali Mahmoud Farrag (Thesis Main advisor)

Prof. Hussein Abd El Khalik Attia (Internal examiner)

Dr. Waleed Mohamed Mostafa Seada (External examiner)
(El-Watania Group for Awqaf Investments company)



Title of Thesis:

OPTIMAL ROUTING OF RADIAL DISTRIBUTION SYSTEMS USING
MATHEMATICAL PROGRAMMING TECHNIQUES

Key Words:

Radial distribution system, Minimum cost planning, Mathematical programming technique, Capital cost, Energy loss cost.

Summary:

This thesis presents accurate model for optimal routing of radial distribution system using mixed integer quadratic programming technique. If the solution technique failed to give global solution due to the large number of integer variables, the thesis presents another method to solve the system with mixed integer linear programming technique to get sub optimal solution

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used have cited them in the references section.

Name: **Maged Gamal Lotfy Mohamed Zahra**

Data:

Signature:

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