GA BASED MULTIOBJECTIVE ECONOMIC LOAD DISPATCH

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This dissertation is a bonafide record of project work carried out by him under our guidance and supervision. His work is found to be outstanding and has not been done earlier.

I wish him success in all his endeavors.

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ABSTRACT

Economic Load Dispatch (ELD) is one of the main functions of modern Energy Management System (EMS), which determines the optimal real power settings of generating units. The Economic Load Dispatch (ELD) problem pertains to the optimum generation scheduling of available generators in a power system to minimize the cost of generation subject to system constraints.

A MATLAB program has been developed for Evolutionary Programming and Evolutionary Computation such as Genetic Algorithm (GA) to solve economic load dispatch problem considering transmission losses & environmental pollution.

In this thesis, the Weighting method has been used to solve Economic Load Dispatch problem for IEEE 5 Bus system using GA tool box in MATLAB R2008b and Ideal Distance Minimization technique is used to obtain the Target Point in 3D space.

CONTENTS

(i) Acknowledgement

(ii) Abstract

CHAPTER 1 INTRODUCTION

1.1 Overview……...1

1.2 Objectives and Methodology ……...2

1.3 Literature Survey ……2

1.3.1 Genetic Algorithm ……2

1.3.2 Multiobjective Optimization ……..5

1.3.3 Economic Load Dispatch ……...6

1.4 Plan of Thesis ……...9

CHAPTER 2 GENETIC ALGORITHM

2.1 Introduction ……10

2.1.1 General Structure of GA ……10

2.2 Definitions & Concepts ……..11

2.2.1 Evolutionary algorithms ……12

2.3 GA approach ……..12

2.4 Theory of GAs ……15

2.5 General algorithm of GAs ……20

CHAPTER 3 MINIMIZATION OF ROSENBROCK FUNCTION USING OPTIMTOOL BOX

3.1 Getting Started with the Optimization Tool……21

3.2 Genetic Algorithm Solver …….25

3.3 Solving Rosenbrock Function using Optimtool-Box…….29

3.3.1 Rosenbrock Function…….29

3.3.2 Algorithm to Solve Rosenbrock Function by Ga Toolbox……29

3.3.4 M-file for objective function…….29

3.3.5 Optimtool Specifications for Minimization of Rosenbrock Function…...29

3.4 Results……30

3.5 Plots……32

3.6 Conclusion……..37

CHAPTER 4 MULTIOBJECTIVE OPTIMIZATION

4.1 Introduction ……...38

4.2 Formulation of General Multiobjective Programming Problem …….38

4.3 Noninferiority …….39

4.3.1 Graphical Explanation of Noninferiority ……...40

4.3.2 Mathematical Definition of Noninferiority ……40

4.4 Weighting Method ..……42

4.5 Ideal Distance Minimization Method ……43

CHAPTER 5 MULTIOBJECTIVE ECONOMIC LOAD DISPATCH IN 3D SPACE

5.1 Introduction ……45

5.2 Load Dispatching ……...46

5.3 Economics of power generation of power plant ……46

5.4 Transmission losses ……..49

5.4.1 Formulation of Economic Load Dispatch problem ……..50

5.5 Environmental pollution ……50

5.6 Formulation of MOELD in 3D space…….51

CHAPTER 6 RESULTS AND DISCUSSION

6.1 Introduction ……53

6.2 2D Graphs ……..58

6.3 3D Graphs ……..60

6.4 Discussion ……..61

CHAPTER 7 CONCLUSIONS AND FUTURE SCOPE

7.1 Conclusions ……62

7.2 Scope of Future Work ……....62

APPENDIX ……..63

REFERENCES ……68