COMPARISON OF EVOLUTIONARY PROGRAMMING AND MULTIAGENT IMMUNE EVOLUTIONARY PROGRAMMING TECHNIQUE IN MAXIMUM LOADABILITY IMPROVEMENT

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ABSTRACT

This paper presents the enhancement of system loadability through optimal reactive power dispatch technique using a newly developed optimization technique, termed as Multiagent Immune Evolutionary Programming (MAIEP). The concept of MAIEP is developed based on the combination of Multiagent System (MAS), Artificial Immune System (AIS) and Evolutionary Programming (EP). In realizing the effectiveness of the proposed technique, validation is conducted on the IEEE-30-Bus Reliability Test System. The program was developed by using MATLAB software. The main propose of this project is improving loadability system by using (EP) and (MAIEP) techniques. From the result, it shows that MAIEP has faster computation time compared to EP technique in maximum loadability improvement in the system.

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TABLES OF CONTENTS

CO]	NTENTS		PAGE
ABS	STRACT		vi
ACI	STRACT SKNOWLEDGMENT NBLE OF CONTENTS ST OF TABLES ST OF TABLES ST OF ABBREVIATIONS HAPTER 1: INTRODUCTION Introduction Problem Statement Project Objective Scope of work Significance of the study Thesis Organization HAPTER 2: LITERATURE REVIEW Introduction Voltage Stability Voltage Collapse Load Margin Assessment Maximum Loadability Optimization Technique 2.6.1 Evolutionary Programming 2.6.2 Autigent System	vii	
TAI	BLE OF CONTENTS		viii
LIS	T OF TABLES		х
LIS	T OF FIGURES		xi
LIS	T OF ABBREVIATIONS		xii
CH	APTER 1: INTRODUCTION		
1.1	Introduction		1
1.2	Problem Statement		3
1.3	Project Objective		3
1.4	Scope of work		3
1.5	Significance of the study		4
1.6	Thesis Organization		4
CH	APTER 2: LITERATURE REVIEW		
2.1	Introduction		6
2.2	2 Voltage Stability		6
2.3	Voltage Collapse		6
2.4	Load Margin Assessment		7
2.5	Maximum Loadability		8
2.6	Optimization Technique		8
	2.6.1 Evolutionary Programming		9
	2.6.2 Multiagent System		11
	2.6.3 Artificial Immune System		13

viii

CHAPTER 3: METHODOLOGY

Introduction 1			
2 Load Margin Assessment and Determination of Maximum			
Loading Point			
Post-Optimization Study		17	
3.3.1	Reactive Power Dispatch	17	
3.3.2	Evolutionary Programming Optimization Technique	18	
3.3.3	Artificial Immune System (AIS)	20	
3.3.4	Multiagent System (MAS)	20	
3.3.5	Implementation of EP Utilizing RPD Technique	20	
3.3.6	Multiagent Immune Evolutionary Programming		
	Optimization Technique	23	
3.3.7	Implementation of MAIEP Utilizing RPD Technique	26	
APTER	4: RESULTS AND DISCUSSION		
Introd	uction	29	
General Assumption and Comparative Study		29	
Pre-Optimization			
Post-C	Optimization	31	
APTER	5: CONCLUSION AND FUTURE RECOMMENDATION		
Concl	usion	35	
Future	Recommendation	36	
FEREN	CES	37	
APPENDIX A			
APPENDIX B			
APPENDIX C			
	Introd Load I Loadin Post-C 3.3.1 3.3.2 3.3.3 3.3.4 3.3.5 3.3.6 3.3.7 APTER Introd Gener Pre-O Post-C Post-C APTER Concl Future Future Future Future Future	Introduction Load Margin Assessment and Determination of Maximum Loading Point Post-Optimization Study 3.3.1 Reactive Power Dispatch 3.3.2 Evolutionary Programming Optimization Technique 3.3.3 Artificial Immune System (AIS) 3.3.4 Multiagent System (MAS) 3.3.5 Implementation of EP Utilizing RPD Technique 3.3.6 Multiagent Immune Evolutionary Programming Optimization Technique 3.3.7 Implementation of MAIEP Utilizing RPD Technique APTER 4: RESULTS AND DISCUSSION Introduction General Assumption and Comparative Study Pre-Optimization Post-Optimization APTER 5: CONCLUSION AND FUTURE RECOMMENDATION Conclusion Future Recommendation ERENCES PENDIX A PENDIX B PENDIX C	