SUBNETWORK AND TRANSMISSION PATH FOR VOLTAGE SECURITY REINFORCEMENT

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ABSTRACT

This thesis presents the formation of subnetwork and transmission path for voltage security reinforcement. The aim is to identify the weakest bus from the voltage stability point of view, the most loaded transmission path for that bus, again from the voltage security point of view. Once weak buses are found by the assessment function, enhancement controls actions may be recommended. In realizing the proposed technique, IEEE 30-bus system is used as the test specimen.

Keywords- voltage stability; voltage collapse; voltage security; power flow

TABLE OF CONTENTS

CHAPTER	DESCRIPTION	PAGE
1.	**INTRODUCTION**	
	1.1. Introduction	1
	1.2. Project Objective	2
	1.3. Scope of Work	2
	1.4. Thesis Organization	2
2.	**LITERATURE REVIEW**	
	2.1. Introduction	4
	2.2. Power Flow Analysis	4
	2.2.1 Newton Raphson Method	6
	2.2.2 Power Flow Solution	8
	2.2.3 Power Flow Equation	9
	2.2.4 Newton Raphson Power Flow Solution	10
	2.2.5 Power Flow Program	14
	2.2.6 Data Preparation	16
	2.3. Voltage stability	19
	2.3.1. Voltage stability and voltage instability	19
	2.4 Theory of Fast Voltage Stability Index (FVSI)	21
	2.5 Weak Area Clustering Technique	23
3.	**METHODOLOGY**	
	3.1 Introduction	25
	3.2 Weak bus identification	25
	3.3 Transmission path identification	28
	3.4 Subnetwork identification	28

CHAPTER	DESCRIPTION	PAGE
4.	**RESULTS AND DISCUSSION**	
	4.1 Introduction	31
	4.2 Weakest bus at the maximum loadability	32
	4.3 Transmission path clustered	32
5.	**CONCLUSION**	37
6.	**REFERENCES**	38
7.	**APPENDICES**	40