SHORT-TERM LOAD FORECASTING USING AN ARTIFICIAL NEURAL NETWORK

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ABSTRACT

This report represent the short-term load forecasting (STLF) using an artificial neural network (ANN). Load forecasting is very important for planning and operation of electric utility. STLF can give one hour a head energy load forecasted. The steps process for forecasting are collecting and preparing the hourly load data, next specifying the architecture of neural network which is back-propagation and three layer of network are chosen. Lastly, perform the forecasting. The result showed that the overall mean absolute percentage error (MAPE) as 1.93%. Which means the network is very efficient for load forecasting depends on the listed inputs.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	ACKNOWLEDGEMENT	iii
	ABSTRACT	iv
	LIST OF FIGURES	vi
	LIST OF TABLES	vii
	LIST OF SYMBOLS AND ABBREVIATIONS	viii
1	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Objective	2
	1.3 Scope of work	2
2	LITERATURE REVIEW	4
	2.1 Load forecasting	4
	2.2 Short-term load forecasting methods	5
	2.3 Neural network	6
3	METHODOLOGY	8
	3.1 Work flow	8
	3.2 Data collecting and arranging	Q

CHAPTER	TITLE	PAGE
	3.3 Preparing the network	11
4	RESULT AND DISCUSSION	12
	4.1 Daily load forecast	12
5	CONCLUTIONS AND RECOMMENDATION	28
	REFERENCES	29
	APPENDICES	31