

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	i
ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
1.0 INTRODUCTION	1
1.1 Objectives of Study.....	2
1.2 Significance of Study.....	3
1.3 Organisation of Investigation.....	4
2.0 LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Capital Budgeting by Utilities	7
2.3 Capital Budgeting Practices:	
A. In the U.S.A.....	10
B. In the United Kingdom.....	17
C. In Japan.....	19
D. In Malaysia.....	20
2.4 Summary.....	21
3.0 TENAGA NASIONAL BERHAD	22
3.1 Introduction.....	22
3.2 Historical Perspective.....	22
3.3 Regulatory Framework.....	24
3.4 TNB's System of Operation.....	27
3.5 TNB's Corporate Structure.....	30

4.0	METHODOLOGY.....	34
4.1	Introduction.....	34
4.2	The Process.....	34
4.3	Methodology Flow Chart.....	37
5.0	RESULTS OF STUDY.....	39
5.1	A. Capital Budgeting in the Generation SBU.....	39
	B. PROJECT 1: Pergau Hydro Electric Project.....	44
5.2	A. Capital Budgeting in the Transmission SBU.....	48
	B. PROJECT 2: Transmission System Development for Kulim Hi-Tech & 132kV Transmission line from Prai-Kota Star.....	54
5.3	A. Capital Budgeting in the Distribution SBU.....	58
	B. PROJECT 3: Project to Supply Electricity to a Housing Scheme in Taman Indah Muhibbah, Setiawan.....	63
5.4	A. Capital Budgeting in the Corporate Services Division.....	67
	B. PROJECT 4: Implementation of a Proposed Highrise Office Building on Lot P.T. 335, Section 41, Kuala Lumpur.....	71
6.0	SUMMARY AND CONCLUSIONS.....	73
6.1	Introduction.....	73
6.2	Summary of Capital Budgeting Practices in TNB.....	73
6.3	Rationale and Reasons for Differences in Practices.....	76
6.4	Proposals and Suggestions for Future Improvement.....	82
6.5	Limitations and Proposals for Further Research.....	83
6.6	Conclusion.....	83
	BIBLIOGRAPHY.....	84

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
Table 2-1	Past Surveys of Capital Budgeting Practices - Percentage of respondents using each technique	11
Table 2-2	Capital Investment Evaluation Methods in 100 Large UK Firms	18
Table 2-3	Capital Investment Evaluation Methods in 100 Large UK Firms - (Frequency of Use in 1992)	19
Table 5-1	Summary of NPV's for Pergau with various Installed Capacities	46
Table 5-2	Details and Cost Summary for Four Options for Transmission SBU Project	55
Table 5-3	Results of Economic and Financial Analyses for the Four Options for Transmission SBU Project	56

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
Figure 3-2	Tenaga Nasional Berhad's Major Power Stations and Installed Capacity	28
Figure 3-3	Tenaga Nasional Berhad's National Grid System	29
Figure 3-4	TNB's Corporate Structure	31
Figure 4-1	Methodology Flow Chart	38
Figure 5-1	Flow Chart on the Process of Implementing a Generation SBU Project	40
Figure 5-2	Flow Chart on the Process of Implementing a Transmission SBU Project	49
Figure 5-3	Flow Chart on the Process of Implementing a Distribution SBU Project	59
Figure 5-4	Flow Chart on the Process of Implementing a Corporate Services Division Project	67