

CHAPTER 4

METHODOLOGY

4.1 INTRODUCTION

This chapter describes the methodology involved in carrying out the study. This study is retrospective whereby it investigates projects which have been implemented or in various stages of implementation. It relies mainly on secondary data obtained from TNB. Data collection methods were through the retrievals and readings of various reports, papers and circulars on relevant matters. Primary data were also obtained to ascertain and enrich the secondary data. This is done through interviews with several managers and other relevant personnel. The interviews were loosely structured with no formal questionnaires.

4.2 THE PROCESS

More specifically, the study was carried out as follows:

- a. A review of TNB's corporate policies on capital budgeting and investments were undertaken. This is done by going through relevant financial circulars and guidelines and their amendments from 1985 to 1993. Among the circulars reviewed were;
 - i. Financial Instruction to Revenue and Capital Budget 1991/92
 - ii. Financial Instruction to Revenue and Capital Budget 1992/93
 - iii. Financial Instruction to the Capital Works Authorisation Forms, September 1993

- iv. Financial Instruction to the Treasury Management Unit,
December 1989
 - v. Financial Instruction to the Accounting for Strategic Business
Units/Business Units, March 1994
- b. An examination of capital budgeting practices of TNB was carried out. This was done by way of analysing four selected projects, namely:
- i. **The Pergau Hydro Electric Project**
 - ii. **The 132 kV Prai-Kota Star Transmission line and the Kulim Hi-Tech System Development Project.**
 - iii. **An Electricity Distribution Project to a Housing Estate in Taman Indah Muhibbah, Setiawan.**
 - iv. **Feasibility and Evaluation Study to Develop a Proposed Highrise Office Building on Lot P.T.335, Section 41, Kuala Lumpur.**

The above projects were sample projects, representing each SBU/Division which is responsible for undertaking them. Analysis were made based on the four stages of capital budgeting which were:

- i. Generation of investment proposal
- ii. Evaluation and selection of proposal
- iii. Implementation of projects and
- v. Post auditing or review of the projects.

- c. The capital budgeting practices executed for the four selected projects were then compared with theory. The analysis looked into any deviations or differences between the two with respect to the approach, procedures, assumptions, decision-making criteria and techniques used.

- d. Whilst carrying out detailed examination into the capital budgeting practices of the above four selected projects, a general investigation was carried out on the four SBU's which had undertaken them. This is to ascertain whether similar practices were employed for other projects in the SBU. This investigation was, however, not carried out based on project reports, but through interviews with relevant personnel and through circulars, guidelines or other unwritten rules on capital budgeting practices.

- e. To supplement the above, and to obtain a better insight of the capital budgeting practices in TNB, several managers and other relevant personnel were interviewed. They include;
 - i. Senior Manager, Planning Section of the Corporate Services Division.
 - ii. Senior Manager, Implementation Section of the Corporate Services Division.

- iii. Senior Planning Manager, Development Planning Unit, involved in the planning and evaluation of projects for the Transmission and Generation SBUs.
- iv. Senior Manager, Projects Section of the Transmission SBU.
- v. Senior Manager, Projects Section of the Generation SBU.
- vi. Senior Accountant involved in auditing Distribution Projects.
- vii. Senior Planning Manager, Planning Section, Distribution SBUs.
- viii. Senior Manager, Projects Section of The Distribution SBUs.

Questions put forward to the interviewees include the procedures involved in the generation of project proposals and their evaluation, the selection criteria, decision making committees and authorities, bureaucracies involved, difficulties, procedures in implementation, financing, post-auditing and justification of projects.

4.3 Methodology Flow Chart

A methodology flow-chart of the sequence of process to be carried out are as in Figure 4 - 1.

FIGURE 4-1

METHODOLOGY FLOW CHART

1 CONDUCT AN INVESTIGATION INTO TNB'S BACKGROUND

Investigation looks into the overall development of the electricity utility industry in Malaysia with particularly emphasis on TNB.

Investigation also reports on TNB's regulatory framework, its system of operation an corporate structure.

2 SELECT FOUR SAMPLE PROJECTS FOR STUDY, ONE FROM EACH SBU/DIVISION

Each of the four selected projects represents projects implemented in the SBU.

Reports pertaining to the generation, evaluation, selection and implementation of the four projects are obtained.

3 INVESTIGATE CAPITAL BUDGETING PRACTICES OF THE FOUR PROJECTS

Investigation carried out through the four stages of the capital budgeting process.

Investigation carried out based on the available reports supplemented by informal interviews with relevant managers.

4 INVESTIGATE CAPITAL BUDGETING PRACTICES OF THE FOUR IMPLEMENTING SBU'S/DIVISION

Investigation conducted through available circulars, guidelines and procedures.

Investigation supplemented by informal interviews with relevant managers.

Investigation conducted through the four stages of the capital budgeting process.

5 COMPARE CURRENT PRACTICES OF TNB TO THEORY

Results obtained from investigation on the four projects and their implementing SBU's are analysed and compared to theory.