#### CHAPTER III

#### RESEARCH METHODOLOGY

This chapter elaborates the sampling design and data collections methods, namely primary and secondary data. It further explains on how the collected data were processed. In addition, it highlights the problem encountered in carrying out the research.

## 3.1 Sampling Design

This study adopted nonprobability sampling designs. The respondents were selected using the judgment of the writer due to the fact that he has very good knowledge in the field of the study. The sampling frame was taken from the published list of Malaysia Industrial Directory Buying Guide- Industrial 1995.

Six manufacturers and three suppliers were interviewed. The list is shown in the appendix A. In addition, several officers in TNB headquarters were also interviewed

## 3.2 **Primary Data Collection**

The primary data was collected using active data collection. The method of collection is by personal interview. Personal interview can be defined as person-to-person(s) discourse initiated by the interviewer for the purpose of obtaining relevant research information (Duance Davis and Robert M. Cosenza, 1993). The personal interviews approach was selected due to the nature of the study which is based on the fact of the business, in and of itself, is largely a social phenomenon dealing with people.

As a result, much of the data needed to make decisions has to come from the people themselves. Thus, it was felt that this could only be addressed through interviews.

Undisguised approach was employed whereby the respondents were told the purpose of the interview. The questions forwarded to the respondents were unstructured or loosely structured and open-ended in nature. The sample of the questions is shown in the appendix B.

The reasons undisguised approach was used is that we wanted the interviewees to give as much as information they can. Moreover, this type of study, which is trying to solicit information that normally are given to their customers, is not to be disguised. The unstructured or loosely structured and open-ended questions were used because we want the interviewees to have total freedom to answer as they please. Besides that, we wanted to make sure important data is not overlooked in the inquiry process. The drawbacks of using this type of questions are that it is difficult to code and time consuming in the analysis. However, this issue did not arise since coding was not required in this study.

Interview variability in which, the errors are those that relate to the differences inherent in the interview situation itself i.e. interview situation and the characteristics of the interviewers themselves, was also minimised since the interviews were carried by the writer himself.

### 3.3 Secondary Data Collection

Secondary data was obtained through database available at TNB headqurters. The list of contracts issued for the whole Generation Division was obtained, as shown in appendix C. From this list, the contracts for Control and Instrumentation were extracted and summarised as shown in the appendix D. The data were extracted manually.

CD-ROM ABI/INFORM search was also carried out. Bank Negara and Tenaga Nasional annual reports were also referred to.

### 3.4 Problems Encountered During Data Collection

#### Personal Interview

Nonresponse error was one of the problem encountered. One of the targeted manufacturers was scheduled for interview, but the interviewee concerned could not be reached due to his busy schedule during the period of data collection. This error was minimised by making prior appointment with the respondents through telephone.

The other problem faced was the respondent's reluctance to answer question due to confidentiality e.g. company strategy, market share, mark up price etc.

Respondent error was also experienced in this interview. This error was due directly to inaccuracies, either intentional or unintentional on the part of the interviewee. This error could be deliberated distortion of answers or simply the lack of knowledge of the interviewee.

# Secondary Data

Thus, the trend of the number of the contracts awarded could not be determined. In addition, there were only few publications on Power Plant Control and Instrumentation and vendor related topics that have been written.