### Chapter 1

# Introduction

The privatisation of Malaysia's electric utility, Tenaga Nasional Berhad (TNB) has led to the setting up of subsidiary companies to diversify its activities and take advantage of expertise within the company to provide services to external customers. Thus far there are four wholly owned subsidiaries staffed by TNB personnel on assignment. There will be more subsidiaries that will be set up, either wholly owned or as a joint venture with others.

The objective of this paper is to provide a guide to manage the initial year of operation of a subsidiary company including its process of inception. The guide makes use of the principles of management obtained throughout the entire MBA course and therefore it is basically a compressed content of the entire MBA program applied to the real business. The Engineering & Project Development (E&PD) Department (Generation Division) of Tenaga Nasional Berhad has been chosen as an example in this paper. The department has been identified as a potential wholly owned subsidiary since it is providing a non core service. While thus far the department is a component of the total company mechanism, privatising it will make it responsible for the entire company role and responsibilities. If planning was previously undertaken by Corporate Planning and finance is by the Corporate Finance, the management of the new company have to undertake the combined role of planning, finance manager, human resource manager, etc. almost overnight. The prospect is most daunting and it is hoped that this paper will be a useful tool for the new company to set out on the right footing. It is by no means a comprehensive guide to management nor is it intended to, but nonetheless something to refer to.

The author is currently the Business Development Manager of E&PD department and is actively involved in the transformation of the department into a service business company.

## 1.1 Background

Tenaga Nasional Berhad has its origins in the government agency set up through the Electricity Act 1949 as the Central Electricity Board. It was subsequently changed to Lembaga Letrik Negara (National Electricity Board, NEB) before being corporatised in September 1990 as Tenaga Nasional Berhad (TNB). It was later listed on the Kuala Lumpur Stock Exchange in July 1992 with the government maintaining a majority equity through its agents, Khazanah Holdings and Finance Minister Incorporated. Together they account for 71% of TNB's shareholding.

The Malaysian Government embarked on a privatisation program of its agencies including the NEB. This is to reduce its involvement in business. Instead, under the Malaysia Incorporated Concept, the government will be the catalyst to business and industry growth while not actively involved in it. This would also mean the government will reduce its commitment to guaranteeing loans in the capital intensive power industry. Another reason is to introduce competition into the industry so as to increase efficiency and productivity of the then statutory organisation.

The vision of the organisation is to be an international standard utility and rank among the best and efficiently run utility. This means that it equals the standards set by the best in the world in terms of productivity (number of customer per staff and electrical unit sold per staff) and the quality of supply (minutes of supply interruptions per year). In terms of profitability, TNB is among the best in the world giving a return on investment of 8%.

#### TNB's mission is

To provide an essential part of the national economic infrastructure by:

- continuously meeting customers' requirements for energy safely, reliably and economically
- encouraging the growth of efficient enterprises to service the needs of the energy supply industry

whilst meeting the needs of all shareholders.

It is the second mission that has led TNB to create subsidiaries that will be actively involved in the power sector. They will spearhead the external projects mostly in joint ventures with other local companies. This is to involve other companies in the power industry which is technology oriented and involve large capital expenditure. On a national scale, this means support of the "umbrella concept" under the government's vendor development program. The program requires major companies to support and encourage the growth of small and medium scale industries. While it may take time to establish such industries, TNB has taken the lead to set up subsidiaries in joint ventures with other companies to jump start the program.

In the 5 years that TNB was established, it has undergone 5 restructuring exercises. While such frequent major changes are arguably disruptive to the organisation, it must be noted that with each restructuring, the emphasis on focus and sense of business accountability and responsibility to the departments are increasingly evident. The long term strategic plan for the organisation is to place emphasis and focus on the core business at the same time to allow the non core business to play a significant role in the group profits. This is finally made clear in the latest restructuring exercise in November 1995.

The core business which consist of generation, transmission and distribution of power supply is placed under one senior general manager (power supply). This

is the regulated business where the government has decided that its return should be limited to 6%. The core business comes under the regulations of the Jabatan Bekalan Elektrik (JBE). This also the part of TNB that faces stiff competition from the independent power producers that to date has 45% of the total generation capacity, up from zero just three years previously. The distribution of electricity has also been privatised in some parts of the country although their market penetration is minimal since they are localised while they currently purchase bulk power from TNB.

The latest restructuring interestingly introduced the post of the Senior General Manager (Business Ventures) where the subsidiaries, joint venture companies and associated companies are placed. The role of the SGM (BV) is to coordinate, monitor and audit the operations of these companies. For the first time, the role of the subsidiaries are placed under close scrutiny by the organisation whilst previously there have been cases where the subsidiaries have departed from the original objective of their existence. While these subsidiaries are answerable only to their Board of Directors, the setting up of the Business Ventures Division has given a closer and more accurate reporting of the subsidiaries activities.

The latest restructuring circular is given in Appendix 1.

# 1.2 The Engineering & Project Development Department

In 1974, the National Electricity Board formed the Generation Projects

Department responsible for the implementation of power plant projects; new thermal and gas plants as well as rehabilitation of old plants. Hydro power plant projects was handled by the Hydro Projects Department.

When LLN was privatised, both the Generation Projects and Hydro Projects departments were merged to form the Engineering & Project Development

(E&PD) Department under the Generation Division. The department was headed by a deputy General Manager answerable to the General Manager (Generation).

The role of E&PD remains essentially the same; to implement generation projects. Planning is done by the Development Planning Department and submits recommendation to the Board of Directors on power plant requirements. Once approved, the Board instructs the E&PD to implement the project; from tender specification, floating, adjudication, recommendation. Once awarded by the BOD and Ministry of Finance, E&PD will manage the project until completion and plant handing over to the power station staff.

The skills of power plant engineering, design and project management have accumulated over the years and successful projects. These are:

Prai	2x60MW & 4x120MW Oil fired plant	1976
Port Klang Ph. 1	2x300MW Oil/Gas fired plant	1981
Connaught Bridge	2x100MW gas fired plant	1981
Port Klang Ph. 2	2x300MW Coal fired plant	1984
Paka. Ph. 1	6x110MW Gas fired plant	1985
Paka. Ph.2	3 x110MW Combined Cycle plant	1987
Kenyir	4x100MW hydro plant	1986
Connaught Bridge	4x135MW gas fired plant	1991
Connaught Bridge	1x105MW Combined Cycle plant	1992
Pasir Gudang	2x87MW Gas fired plant	1991
Paka Power Stn	2x87MW gas fired plant	1991
Serdang	2x110MW gas fired plant	1993
Serdang	3x135MW gas fired plant	1994
Melaka	2x110MW gas fired plant	1994
Port Klang Ph. 4	3x110MW gas fired plant	1994
Pasir Gudang	2x110MW gas fired plant	1995

Besides the above there are several projects under construction namely the Port Klang 2x500MW coal fired plant, Pergau 4x150MW hydro plant and Sg. Piah 57MW hydro plant.

As can be seen from Diagram 1.1 below the rate of power plant up reduced in the late 80's and to overcome the shortfall in available power, Independent Power producers were introduced in Malaysia. They have since completed their projects and contributing some 4000MW into the national grid. IPPs will continue to remain in the future and the Economic Planning Unit (EPU) of the Malaysian Government has decided that future power projects will be based on bids submitted by both TNB and IPPs. For example, when the EPU has identified that there is a need for a power plant in Yan, Kedah by the year 2000, it will invite proposal or bids for the construction and operation of the plant in 1996 (to allow for the long gestation period). Criteria for successful selection will include efficiency of the plant, choice of fuel and the selling price of electricity to the grid. Therefore what used to be automatic planting up by TNB is now placed under severe competition with the IPPs. The direct impact of the coming of the IPPs is that E&PD will not implement many TNB projects in the future.

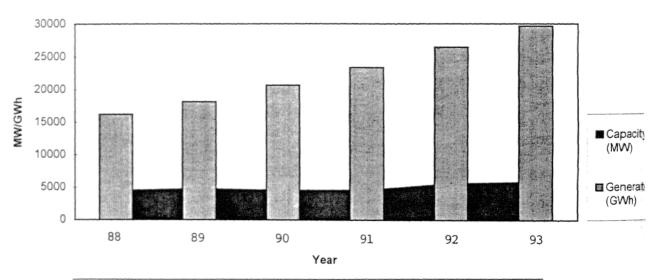


Diagram 1.1: Generating Capacity & Generated Power Growth

Due to the above, the department has , since 1994, embarked on projects outside of TNB, i.e. to provide a service to those that require the expertise of power plant engineering such as potential IPPs in Sabah & Sarawak and also regionally. This is in tandem with TNB's investment and diversification into power planting up in India, Pakistan and elsewhere. Since 1994, these ventures into the foreign market has been on ad hoc basis with minimal marketing. The sponsors of these projects approach TNB to form a consortium to be IPPs in those places. TNB is usually requested to be the engineering adviser during the construction phase and manage the plant. Beside power plant projects, the E&PD department have also given services on hydrology, project feasibility studies, etc.

Considering the foregoing, the management of the department has decided that it is time to turn it into a subsidiary for the following reasons:

- the department conducts non core business which is not regulated by the JBE. This gives an opportunity to provide higher returns than the core business.
- The formation of a subsidiary will protect TNB from legal liabilities associated with non core activities.
- The manpower in the department can be detached from the Generation
   Division thus immediately increasing the Division's productivity index and
   reducing the overhead cost of the Division. This is then reflected in the
   reduced overall production cost of the Division making it more competitive.
- The bank of expertise in E&PD can be used to provide high technology services to assist Malaysian companies who wish to be involved in the power generating business.

A memorandum was prepared for the Management Committee for consideration formation of a subsidiary company called Tenaga Nasional Power Generation Sdn. Bhd. It was subsequently approved. At the time of writing, the proposal is awaiting the Board of Director's approval. A copy of the proposal paper is in **Appendix 2.**