

CHAPTER IV

TENAGA NASIONAL BERHAD

This chapter provides the background of Tenaga Nasional Berhad (TNB) and the regulator that govern it. In addition, The electricity industry in which TNB is operating is also discussed.

4.1 Background

The Central Electricity Board (CEB) was established in 1949 under the Electric Ordinance Act, 1949 to take over the operation of the Electricity Department. The name of CEB was changed to National Electricity Board (NEB) in 1965. Between 1964 and 1982, NEB took over the electricity supply installations from several privately owned entities and effectively became the sole provider and distributor of electricity in Peninsular Malaysia.

TNB was incorporated as a public company in 1990 under the Malaysian Companies Act, 1965. All the assets and liabilities to which NEB was entitled or subject to were transferred to TNB, thereby corporatising the generation, transmission and distribution of electricity in Peninsular Malaysia.

TNB's operations are regulated by the Electricity and Gas Supply Department (EGSD) and was given a license valid for period of twenty-one years effective from 1 September 1990. On 28 May 1992, TNB was listed on Kuala Lumpur Stock Exchange (KLSE) at RM 8.00, a premium of RM 3.50 above its minimum issue price of RM 4.50.

As at 31 August 1996, TNB's installed generation capacity was 7621 MW. TNB's generation capacity is shown in appendix E.

4.2 TNB Organisational Structure

The organisational structure for various levels are shown in figure 4.1, figure 4.2 and figure 4.3. The structure shows the part of TNB that deals with PPC&I.

4.3 TNB Competitive Analysis

In chapter II, the Porter's Five Forces Model concept was discussed. Based on that discussion, the competitive analysis of TNB in the electricity industry is analysed the following sections.

Rivalry Among Competing Firms

Tenaga Nasional Berhad (TNB) have lost the monopoly in electric power generation when the government gave the Independent Power Producers (IPP) license to generate electricity. However, TNB still monopolise the electricity transmission and distribution sectors. Despite this fact (monopoly), there is still some competition in electricity generation between TNB and IPPs, although minimal.

For TNB to leave the generation sector is very unlikely at present as generation sector is seen as a 'cash cow'¹ sector whereby it generates funds for the investments in other sectors within TNB. In addition, mergers and acquisitions of the competing firms are not likely at present since TNB has some stakes in the IPPs. This issue could be

¹ The cash cow has a high market share in a mature market. Because growth is low and market conditions more stable, the need for heavy marketing investment is less. But high relative market share means the Strategic Business should be able to maintain unit cost levels below the competitors. The cash cow should then be a cash provider.

realised in future when the monopoly in transmission and distribution sectors by TNB is broken.

Potential Entry of New Competitors

Barriers to entry to the Malaysian electricity industry is high. This is because the industry is regulated by the government. As such, license is required for generation, transmission, and distribution of electricity. In addition, the price of the electricity is also regulated by the government.

Potential Development of Substitute Products

In Malaysia, gas is the only substitute to electricity in the industrial usage. For example industrial heating. Moreover, electricity is still regarded as 'clean energy'. Therefore, the threat of substitute product is still minimum.

Bargaining Power of Suppliers

Raw materials e.g. fuel oil for TNB's generation are purchased through the open market. TNB has no control over the price. In addition, machinery and spare parts were also purchased in the open market, but there are few vendors offering the products and services. As far as the PPC&I, the products are normally from overseas and few firms specialise in this field.

Bargaining Power of Consumers

TNB now face a greater challenge from demand by electricity consumers compared as before. They insist on the quality of electricity supply and make claim when their electrical appliances are damaged by overvoltage, for instance. For example, the 3rd August 1996 national blackout resulted public outcry and force the government to review TNB operations. Emphasis is now given to customer services for example the creation of marketing unit to enhance customer relations.

4.4 **Regulatory Framework**

The Electricity Supply Act, 1990

TNB operates under the Electricity Supply Act, 1990. Pursuant to the Act, TNB has certain duties and obligations to supply electricity. The Act confers certain powers to TNB and this include the power to enter, examine and construct plants and equipment for the purpose of transmission and distribution of electricity on any land, with the prior serving of a notice. TNB is, however, oblige to pay compensation to the owners of land for any assessed damage

The Electricity and Gas Supply Department (EGSD)

The act also provides for the formation of the EGSD whose function is to regulate matters pertaining to the electricity supply. The functions, duties and powers of its Director General includes:

- to issue licenses for supply of the electricity.
- to exercise regulatory functions in respect of the service of providing electricity.
- to promote competition in the generation and supply of electricity.
- to promote the interest of customers of electricity in respect of price to be charged, the continuity of supply and quality of services.
- to ensure that all reasonable demands for electricity are satisfied.
- to ensure that licensees are able to finance the operation of activities which they are authorised.
- to promote and encourage the generation of energy with a view of the economic development of Malaysia.

FIGURE 4.1

Power Supply Division
Organisational Structure

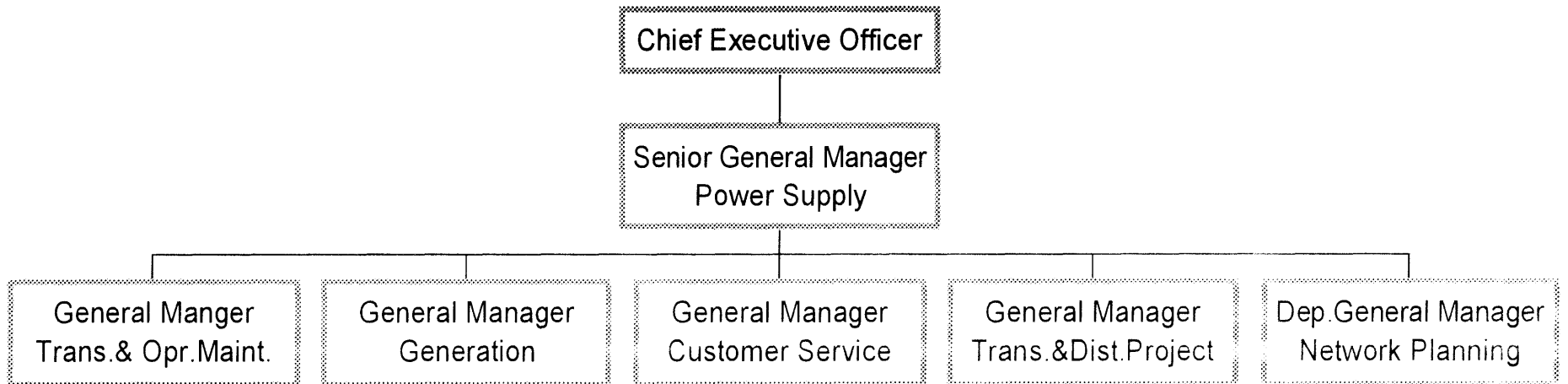


FIGURE 4.2

Generation Division Organisational Structure

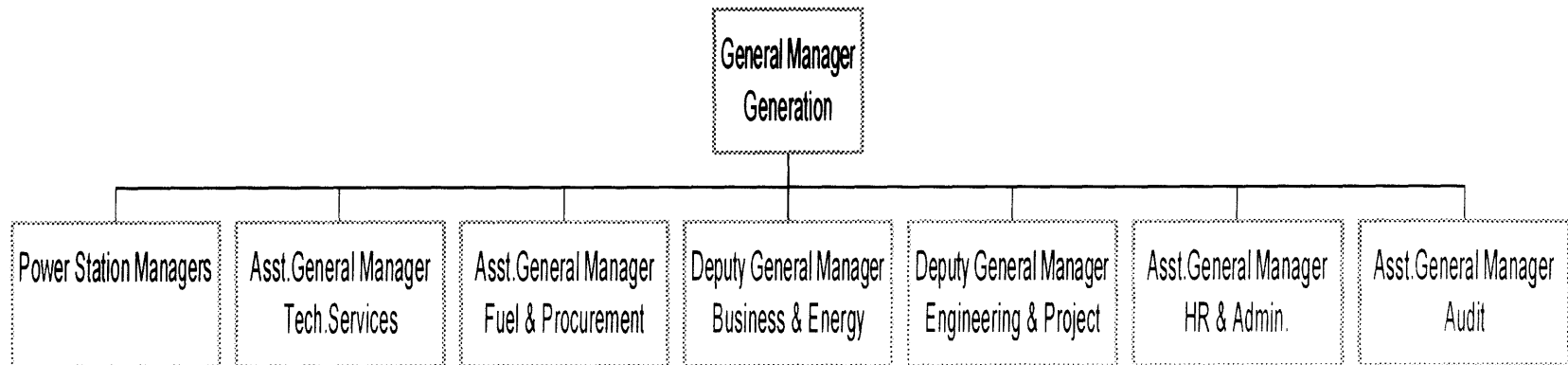


FIGURE 4.3

Power Station
Organisational Structure (Typical)

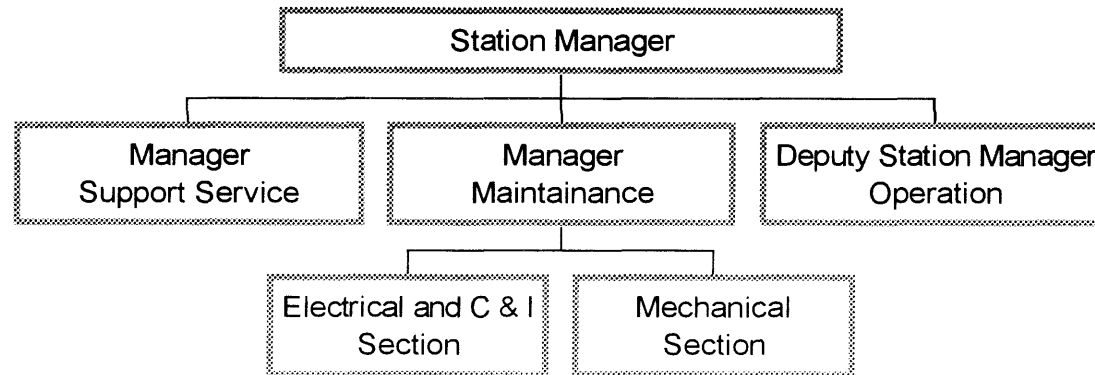
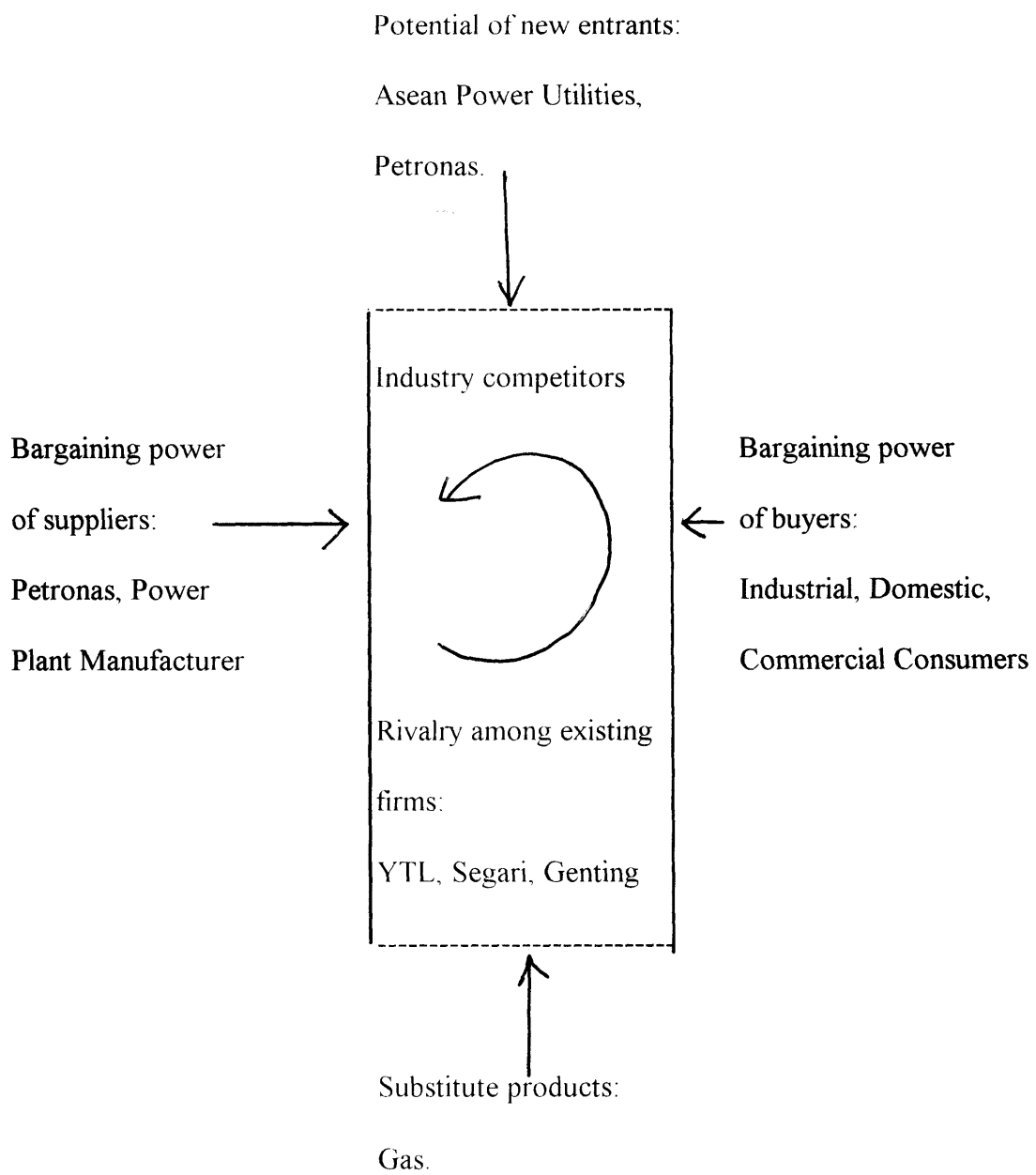


FIGURE 4.4

Porter's Five Forces Model



Source: Fred R.Davis, Strategic Mangement