

CONCLUDING REMARKS

In concluding this research paper, it was essential to compare the planning practices from other utilities. Research on updated findings required readings from foreign publications and this has very much assist in the completion of this paper. This study has been useful in comparing and relating TNB situation to the findings by other researchers. More so it is realised that there is an urgent need for the concept of planning to change within the Malaysian electricity environment. The industry is presently adjusting to new approaches for planning through constant meetings with the regulators of the industry.

However, as indicated in the recommendations the follow-up study on this subject should be for TNB to formulate an alternative approach to least cost planning such as the weighted probability approach.

planning but in the meantime TNB can gain from the situation.

Secondly, TNB need to look into other forms of capacity planning strategy. This may be from segmentation of its market, plant life extension strategy, minimal capital expansion strategy, peak load shifting strategy or a strategy to confine to shorter lead time plants. These strategies can assist in meeting the challenges in issues related to capacity planning other than adding new plants to meet country's demand. If there are any 'dog' in the system, effort to push it to a 'star' units should be considered. After all as mentioned earlier, these power plants have costed the company.

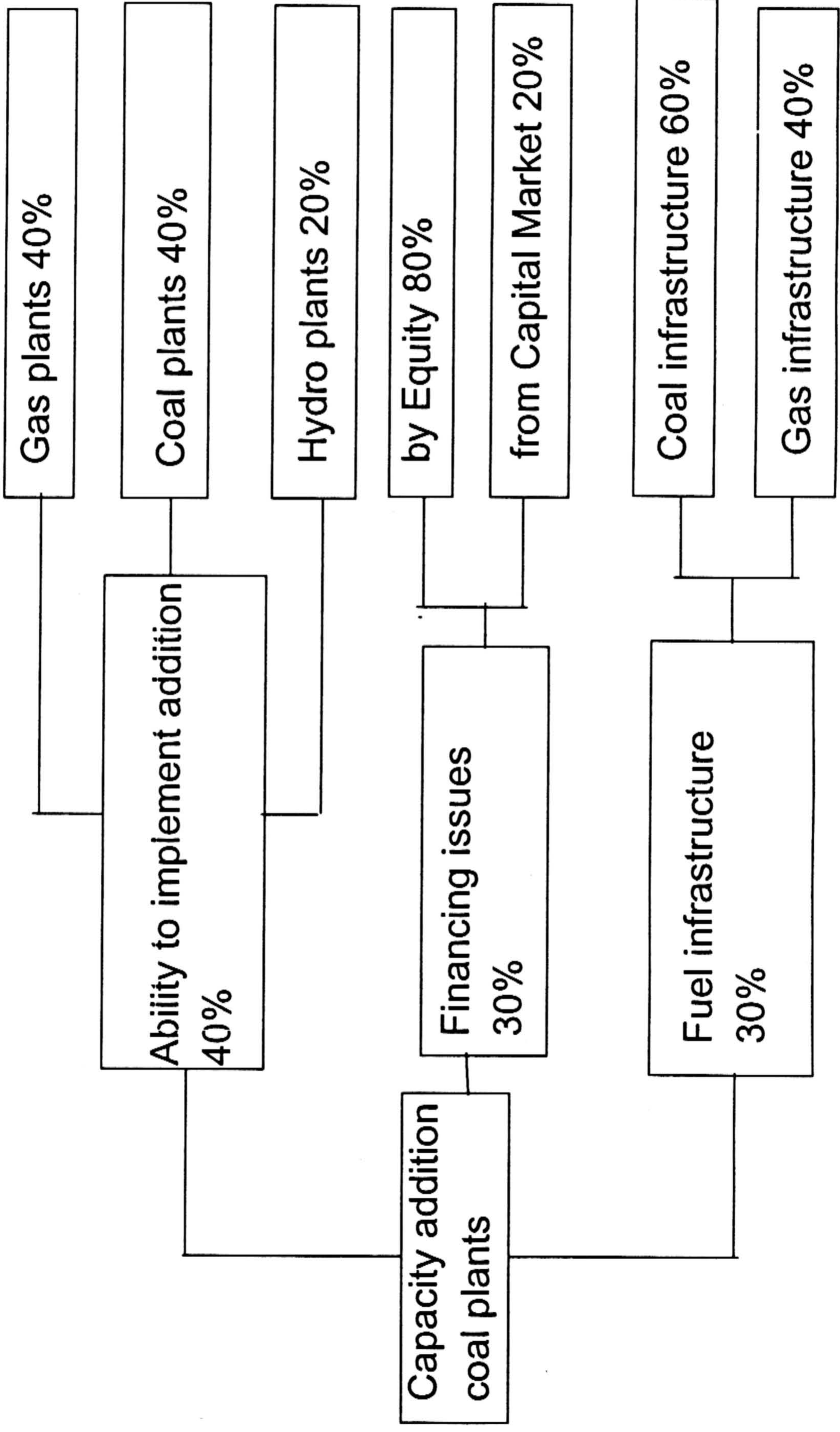
Thirdly, because planning will be under many uncertainties, scenario planning approach is more important today. This is viewed from a company perspective, meaning TNB have to be prepared for all the uncertainties in its capacity planning. As an example, if TNB viewed repowering of old units adds more value to the company than a new capacity addition elsewhere due to constraints such as uncertain fuel infrastructure or policy, site acquisition cost or other strategy of intensifying transmission and distribution sector of the supply side. This will require scenario planning with appropriate judgement on the probability of each scenario. The scenario planning is as illustrated overleaf (Figure 1).

It is recommended here that the next step after this study is the development of a complete financial software to conduct scenario planning.

With the Government declared goal of becoming industrialised by

Sample of weighted probability approach

FIGURE 1



2020, TNB's role in providing the electricity infrastructure is predominant for the industrialisation process and fuelling the economy growth. With competition in the electricity supply industry, TNB is facing these challenges and endeavouring to provide electricity reliably and economically from generation to distribution, yet to maintain its profitability.

CHAPTER 6

RECOMMENDATION

With the findings and conclusions drawn in the last chapter, some recommendations may be put forward. At least three major recommendations are made here.

Firstly, TNB need to recognise its important role in capacity planning. In this context, transparency in capacity planning is important. The latest call from the Government (directive from Govt., 1996) indicated that capacity planning will be through open competition (bidding) as has been practice by another ASEAN country, Thailand. In this scenario the Government is responsible for indicating capacity addition to the system. Although TNB's role can safely be identified as a support or input to this identification, but this role has to be fully deliberated, recognised and understood between the Government and TNB. Two possibilities are, if TNB provides the support, input or practically do the capacity planning for the country, what has TNB gained from this role? After all the power plants are going for open bidding. Secondly, providing technical expertise and advise can be beneficial from the point of reflecting competency of the company, but providing service in terms of capacity planning scenario can be a source of revenue for the company too, especially when the capability is currently with TNB. There is no doubt that in the future the Government will setup its own mechanism for capacity