CHAPTER IV

RESEARCH RESULTS

This chapter will discuss in detail about the results and findings of the research. It will begin by looking at the general response on the questionnaires followed by discussion on relevant corporate matters which first is the type of businesses that are allowable within the TNB, mainly from company's MOU (Appendix C). It will continue with discussion on organisational aspect of mission and objective with the data obtained from the questionnaires, documents from the TNB as well as the informal interviews with the Station's management and staff.

The above will be followed by the discussion on the results of survey on plausible business opportunities at the Sultan Idris - II Power Station. Here the results from the observation survey as well as the questionnaires will be considered together. This chapter will then discussed the results of the questionnaires on human resources. The results from the manpower requirements study on the Station will be considered to complement the primary data. The financial and operational performance of the Station are then discussed to see the economic worth of the Station. Based on the above results, further discussion on the formation of the SBU will be made.

Response on the Questionnaires

Out of 80 staff of the Sultan Idris - II Power Station, responses from 43 staff were managed to be obtained (Table 1). This is a good sample of slightly more than 50% of the total population of the Power Station's staff. This 50% responses is considered sufficient to represent the view concerning the matters under discussion. Another 50% of the population could not be reached due to certain practical constraints.
Organisational Perspective

In this section, two issues will be discussed namely the type of business allowable within the corporate and also the mission and objective.

Type of Businesses

Clause 3, sub-clause (5) in the TNB MOA (Appendix C) states that among others "The objects for which the Company is established are :- To carry on any other business which may seem to the Company capable of being conveniently carried on in connection with the above (electricity business) or calculated, directly or indirectly to enhance the value of or render profitable any of the Company's property or rights." The emphasis contained in this paragraph is that the MOA allows the TNB to carry out any business in connection with electricity and also any other business which has been calculated directly or indirectly to enhance the value of or render profitable any of the Company's property or rights.

In this respect since the Sultan Idris - II Power Station is the property of the TNB, it has every rights to develop or venture into any business around the Power Station which may enhance the value of the Station as well as bringing in profits. Therefore the choice of plausible business ventures that can be undertaken by the Station or the TNB around the Power Station is very wide.

However part of clause 4 of the MOA (Appendix C) states that "the Company shall have full power to exercise all or any of the powers and to achieve or to endeavour to achieve all or any of the objects conferred by and provided in any one or more of the said sub-clauses provided always that nothing in this Memorandum contained shall empower the Company to carry on any life assurance business or fire insurance business or the business of banking." Thus the only type
of business that could not be entered by the Station or the TNB are life assurance business, fire insurance business and also business of banking. These are the only business that are disallowed in the organisation.

Mission and Objective

Questions 5, 6, 7, and 8 in the questionnaires (Appendix F) are concerning mission and objectives of the organisation. These questions are asked to see familiarity of the staff in working along certain mission or objectives. The questions are posted in the simplest form so as not to confuse the respondents. Furthermore, the study does not intend to see the understanding of the respondents on the difference between mission, objective or another related concept which is vision. Rather to see whether the respondents are familiar with working along the direction required by the organisation.

Question 5 and 6 asked the existence of mission or objectives within the organisation and the Station. Question 6 and 8 asked whether the mission or objectives are being written. These questions are in a way try to confirm the existence of the mission and objectives. The response for question 5, i.e. whether the TNB has a corporate mission, is 100% of the respondents answered 'yes' and on the question whether it is being written, 79% of the respondents answered 'yes' (Table 2). In actual situation the TNB does have a corporate mission (Appendix D) and the 79% 'yes' answers in question 6 further confirm the awareness of the staff on the existence of the mission.

The response for the question 7 of the questionnaires is 51% 'yes'. However 88% of the respondents answered that the mission or objectives of the station are not in written form (Table2). Informal interviews with the Station management reveals that the station actually does have certain core-business objectives especially towards operations performance such as to achieve or maintain
certain percentage of machines availability, certain cost per unit generated etc. However not every staff are aware in detail about the existence.

The results are giving a general scenario of mission and objectives within the organisation. Further and more relevant discussion will be made later in this chapter when proposal about the SBU of the Station will be discussed in detail.

**Business opportunities**

**Observational Survey**

Observational survey around the Sultan Idris - II Power Station, reveals that the station has quite a number of items or spots which may have some commercial value.

**The Power Station.** The first item is the Power Station itself (Figure 3, 4, 5 & 6). The Sultan Idris - II Power Station contains one major underground power plant and also a small surface power plant. The underground power plant is built in a cavern almost 1 km under the ground and contains 3 * 50MW hydro turbine generators. The turbine generators in themselves could be a technical attraction to the public. The shear fact that the power plant is built underground is another unique feature that may attract the public.

The visit into the underground Power Plant will give the opportunity for anybody to experience the thrill of going deep into the ground. The granite structures of the cavern could be observe clearly in its original form and is an attraction to anybody interested in geology or an admirer to the nature.

The construction and structure of the tunnels and the caverns could also be a wonder to the public especially to people interested in underground construction and structure.
The Swimming Pool. The Sultan Idris - II Power Station also has a swimming pool (Figure 7&8) which is currently assigned to its staff club known as Kilai Club Woh to arrange for its usage. It caters for the 100 numbers of the club members and seemingly underuse at the present moment. The location of the swimming pool which is beside the Batang Padang River makes the pool even more pleasant place for anybody to swim and relax.

The Camping Sites. Lay beside the swimming pool and along the banks of the Batang Padang River are several camping and picnicking sites (Figure 9,10 & 11). They are suitable for individual, family or even large group camping and picnicking. Some other outdoor activities like traditional fishing and fish netting could also be done in these areas.

The Jungle Tracking. The hilly primary and secondary forests around the Power Station offer many fascinating jungle tracks used primarily by the Orang Aslis who lives in the forests (Figure 12&13). To keen trackers, they could go even to Kuala Lipis in Pahang within 2 or 3 days journey following endless tracks through various forests, terrains and rivers. This is another interesting features of the station.

The Rivers. Two rivers around the Power Station, namely the Batang Padang River and the Woh River, other than to be used as camping and picnicking sites, could also be used as place for canoeing and rafting (Figure 14,15 & 16). A few small rapids may add to excitation to those people involving in these activities.

The Orang Asli Settlements. There are quite a number of Orang Asli Settlements in the vicinity of the Station (Figure 17&18). Other than their unique lifestyle, the Orang Asli also
have their own cultural heritage which could be of interest especially for tourists who often visit a well known holiday spot of Cameron Highlands some 40 kms further up the hills.

The reservoir. The Station also has one reservoir that is used to power the small surface power plant known as the Odak Power Station (Figure 19, 20 & 21). The reservoir surface area which is around 8 acres could be used for water sports activities or as a cage-fish-farm.

The Sports Facilities. The Sultan Idris - II Power Station also has quite a number of sports facilities (Figure 22, 23 & 24). Among others, it has a football field, a volleyball court, a tennis court, badminton courts, outdoor exercise facilities and also children playgrounds. At the moment these facilities are under the care of the Kilat Club Woh.

The Utility Hall. The Station also has one Utility Hall which also accommodates one indoor badminton court (Figure 25). Other than for badminton matches and some indoor games, the utility hall also could be used as a meeting or conference place.

The Golf Course. Some 10 kms further up the hills is a dam and reservoir known as Jor Dam. The reservoir is used to power the underground power plant. A 9-hole golf course was built around the reservoir and seemingly under utilised at the present moment (Figure 26).

The Woh Recreation and Caravan Park. Along the private road leading to the Sultan Idris - II Power Station is the Woh Recreation (Figure 27) and Caravan Park (Figure 28). This Park has a unique hot water spring, camping and picnicking sites along the Batang Padang River. During the weekend hundreds of visitors are normally seen camping, picnicking or swimming at
the Park. The Caravan Park also contains a few chalets, a prayer house and an open hall complete with barbecue facilities.

_Response from Questionnaires_

Question 9 in the questionnaires specifically refers to other activities that may bring financial income to the station. The results show that 31% of the respondents have the opinion that there exists other activities that can bring financial income to the station (Table 3).

The respondents were also asked to state any activities that came across their mind. Table 3 shows list of the items stated by the respondents and also the percentage of respondents suggesting the items.

Top of the list, with 18% responses is to attract visitors and tourists to the Station through organising camps (retreat, education, motivation etc.) and jungle tracking (Table 3). This is followed by opening of the swimming pool to the public and charging them with certain fees and also renting out sports facilities with 16% responses each. The next activity with 4% responses is fish farming. The rests of the proposals obtained 2% and below responses.

_Human Resource Perspective_

Question 10 & 11 of the questionnaires specifically try to see the attitude of the staff in terms of their participation in whatever business activities that may be undertaken by the station. 47% of the respondents stated that they are willing to participate voluntarily (Table 4) while 75% of the respondents stated that they are willing to participate in activities that may bring financial income to them as well as the station.
Question 12 of the questionnaires further asked the respondents in terms of the number of hours that they could spend in the activities during working hours besides attending to their daily duties. 73% of the respondents stated that they could spend some time everyday (Table 4). The longest hour stated is 3 hours (Table 5). This is stated by 9% of the respondents. The majority of the respondents, i.e. 46% of them stated that they could spend 2 hours. Another 9% stated that they could spend an hour a day, and the rest could spend below an hour.

Strategic Business Unit

From the above results it is quite clear that there exist business opportunities at the Sultan Idris - II Power Station. The most plausible type of business that could be derived from the study is to offer places, facilities and services for people to enjoy life and nature, to spend their holiday, to have a retreat, to recreate, to sports, to increase knowledge and experience, and to have relaxation.

The greatest strength that the Station has is that all the facilities, places and also the potential manpower are almost at hand and it only need certain organisation and perhaps also a small amount of capital initially for it to be in action on this type of business venture.

There exist a few options upon which the business can be offered to the public. The first options is to do a separate business operations on all or some selected business items or activities as found in this study and charge the participants separately. Another option is to offer the places, facilities and the services as a package. This package could also be arranged in such a way that allows the customer to choose from a variety of activities.

At present the existence of such a business is not apparent in this area, however about 4 kms down the road on the way to Tapah Town (nearest town to the Sultan Idris - II Power Station), an entrepreneur with a much inferior location and facilities (Figure 29&30) is
apparently starting to embark on this business. He is currently in the process of developing the place. It is interesting also to note that, in other TNB's hydro power stations, especially at Sultan Mahmud Hydro Power Station in Kenyir, Terengganu, this type of business is currently being undertaken in a slightly bigger scale by other people.

Another apparent business that could be carried out at the station as found in this study is to have a cage fish farm at the reservoir of the Odak Power Station. This type of business has been quite successful in many places around the country. Several cages could be accommodated by the reservoir at any one time and its surface area is quite sufficient to provide the economic of scale to carry out the business as compared to other places around the country. In fact about 2 kms down the road on the way to Tapah Town, a company with a much smaller pondage area is doing very well on the business (Figure 31 & 32). However, detail study has to be done to determine the type of fish that is most suitable to be reared in the reservoir.

The information that were gathered from informal interviews with the management and staff of the station reveals more innovative ideas on possible business ventures that could be explored at the station such as planting durian trees, setting up golf driving range, and various others. However, for the purpose of understanding the SBU concept in the context of the station, this study would discuss only the above two business ventures in a slightly more detail. On the other hand, this does not mean that the other business ventures do not have any potential in them. They are always open to further study to determine their worth. And the true test for any business ventures is the market itself.

**Management**

The above business ventures could be undertaken by the TNB's Generation SBU or the Sultan Idris - II Power Station. However, in line with the objective of this study, which is to
propose the transformation of the Power Station itself into a Strategic Business Unit, the discussion would assume that the Station would venture into the business.

There are basically two levels of managerial aspects that need to be addressed in the context of the transformation into an SBU. The first level is to market the idea of an SBU to the higher management at TNB headquarters, to get their approval, and subsequently to prepare the relevant supporting structures such as the legal status, budget allocation, renumeration scheme, income code, profit percentage distribution, manpower scheme, and other aspects essential for the Power Station to operate as a business unit. The important point that need to be stressed at this juncture is to simplify as much as possible all bureaucracy pertaining to this aspect.

The second level of management that need to be considered is the management at the level of the power station itself in the light of embarking into the business ventures. In this context there are basically two forms of managements that could be adopted.

The first is for the Power Station itself to become a subsidiary company wholly owned by the TNB and the business ventures would be undertaken by the Power Station Company. Currently the operation and financial performance of the station is very encouraging and with rough calculation of only 0.8 cent cost per unit generated (Table 6&7), it is really a gold mine compared to 15 cent per unit that the TNB buys from the YTL. This is one factor that may permit the Sultan Idris - II Power Station to become a company by itself.

The second is for the management of the Power Station to remain as it is and to regards the business ventures as the Station projects. Later on, after the projects could become profit centres, steps maybe taken to convert them into subsidiary companies to the Power Station or the TNB. In fact this is quiet a common strategy that have been adopted by many companies and organisation and one example is the successful Johor State Economic Development Corporation (JSEDC) (Figure 33). Under this strategy currently the JSEDC is having almost 200 subsidiary companies
and their growth and strength is testified by the convincing performance of Amanah Saham Johor and also Dana Johor.

For the purpose of this study, further discussion would go along the second option whereby the management of the station would remain as it is and the business ventures would be regarded as business projects undertaken by the Power Station.

Implementation

The implementation of the business projects could be in several forms. Some of the forms are; to totally manage by the Power Station, to joint venture with other interested parties, or to totally let other interested parties to run the business with certain commission and maintenance fees given to the Power Station. The following factors also would varies according to the forms of business ventures that are chosen.

Human Resources. The manpower requirements study conducted on two maintenance sections shows that apparently the Station has just sufficient people to cater for its maintenance (Appendix G). However based on the research results, we could see that there is a good possibility for the Sultan Idris - II Power Station to get the service of the existing staff to participate in the business ventures because there is still some room for quite a number of its staff to squeeze some activities during their working hours. However careful planning and organising have to be done so as not to disrupt the current core business activities.
External expertise and personnel can also be invited to contribute and partly run the business projects especially in the areas where the Power Station experience is still lacking. Another aspect that needs to be considered is the constant training, support, and encouragement that normally be required by the personnel especially at the beginning of the projects.

To obtain the maximum output and contribution from the staff through coordinated effort and mutual cooperation etc. it is very important for as many staff as possible to know and understand clearly what is happening around them so that there will be a greater uniformity of action. Therefore, in this respect, it is very important to set clear objectives, mission or vision as the general guidelines and in as much as possible be disseminated to the staff through printing, display etc. The same is applicable to the business projects.

**Financial Resources.** Financial resources depending very much on the forms of business ventures that were going to be adopted. If the business ventures are totally run by the Power Station, naturally, the whole financial resources would come through budget allocation from the TNB. It is important also for the control of the financial aspects to be flexible but justifiable. This would help to reduce the unnecessary obstacle to the success of the business projects.

**Marketing.** A very important aspect that must be undertaken by the Station SBU is to carry out marketing to promote the businesses. Marketing could come in several forms. It could ranges from distributing pamphlets to potential customers or to do actual market survey. Constant improvement to the businesses is also important to suit the customers' requirements as well as to improve the quality.

**Risk and Limitation.** The research results showed that the basic places and facilities that may require a large sum of capital are already prepared at the Sultan Idris - II Power Station.
Therefore it is anticipated that the amount of capital required to start the business ventures is relatively small. Effort may be made also to reduce the capital by looking at the possibility of using as much natural resources as possible or renting whatever items required by the businesses. Therefore in this respect, the financial risk that may be faced by the Station SBU is considerably small.

The Power Station and the TNB also must understand that not every business would succeed easily. Research has shown that out of 50 business ideas, only one idea would likely to become successful. Therefore the important factor in this regards is to continue striving and trying to become successful.