

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1. CONCLUSION

Based on calculation of Capital Budgeting and analysis using the Real Option Valuation, the conclusion are :

1. Based on comparisons of Phase 1 (Power Plant 5 MW), Phase 2A (Power Plant Extension 10 MW), and Phase 2B (Power Plant Extension 10 MW – Postpone 1 year) from the Financial Projection point of view, as a whole the Phase 1 has more advantages compared to Phase 2A and Phase 2B.
2. Based on Approach 1 analysis in Real Option Valuation, the company can implement Phase 1 because it has a better NPV result, which is US\$ 1,380,999. While, the IRR is 20.69% with a payback period of 4 years 8 months.
3. Based on Approach 2 analysis in Real Option Valuation, the company can implement Phase 1 or Phase 2A because those Phases has a great result of NPV compared to Phase 2B. But then again, Phase 1 has a better result of NPV, IRR, and payback period than Phase 2A.
4. Based on Approach 3 analysis in Real Option Valuation, by using the scenario analysis, all Phase can be applied in the company in best condition, while the other condition result negative for some Phase.

- For worst condition, the company cannot choose for Phase 1, Phase 2A, and Phase 2B because of the lower price prediction of electricity and steam.
 - For normal and best condition, the company can choose for Phase 1 and Phase 2A.
 - Overall, the best decision is that the company can choose Phase 1 because it has the best result of the expected NPV compared to the other Phase.
5. Based on Approach 4 analysis in Real Option Valuation, the best value of investment for the company is to run Phase 1, which is US\$ 452,628. However, writer also tried to create another calculation in increasing by 0.5% growth from the previous expected growth which result all phases are acceptable.
6. As a whole, by using the Real Option Valuation analysis, the best decision for The Company is to run Phase 1 because it has the best result of value of investment.

5.3 RECOMMENDATION

The recommendations in conjunction with the results of the analysis are as follows :

1. The project is feasible to run by the company with condition that all assumptions in the analysis is fulfilled. Although it might be changed and

make the analysis inappropriate. If this happened, then we should take a deeper analysis to determine the feasibility of the project.

2. To obtain the best value of investment in this project, writer recommends the company to choose Phase 1, which is the power plant of 5 MW.
3. For the next project, the valuation can be completed by using other valuation methods, such as Tobin's Q, as a benchmark.
4. If the company chooses to extend the power plant for 10 MW, it is suggested that the company to re-appraise the additional capital expenditure (investment), the price of electricity and steam, and also the appropriate period, adjusted to the company's cash flow. Therefore, the company will gain more profit and this project can be more feasible.