

JUTHAPORN WINITPIROJE : AN EVALUATION ON RETURN ON INVESTMENT IN SUBMARINE-CABLE EXTENSION PROJECT OF PROVINCIAL ELECTRICITY AUTHORITY. THESIS ADVISOR : MRS. NANTAPORN BIDAYA AND MR. PHASOOK LONGSOMBOON, 293 pp. ISBN 974-578-536-9

The purpose of this study is to study the Submarine-Cable Extension Project of Provincial Electricity Authority, the capital expenditures, the revenue expenditures and the income generation of the project. This study also analysed the causes of income and expenses variance between the project feasibility study and the actual operation, and evaluated a return on investment of the project, including the case of electricity consumption varying by 10 percent, and to find out whether the present electricity tariff can cover variable expenses of the project. The project lasts 30 years which is the economic life of the submarine cable. Data used in this study come from Provincial Electricity Authority, the Tourism Authority of Thailand, the National Economic and Social Development Board, Ministry of Interior, Ministry of Industry and Amphoe Koa Samui, Surathani Province, including the survey of the electricity consumers in Koa Samui by questionnaires.

The result of this study showed that the capital expenditures, the revenue expenditures and the income from project operation were higher than the project feasibility study. This was due to the increase of tourism industry at the rate higher than the expectation, more usage of luxurious electrical implements, more stringent bill collection and the devaluation of Baht against foreign currencies. The evaluation on return on investment based on the new forecast comparing with the feasibility study showed that the payback period was shorter, the net present value and the internal rate of return were higher. Even with the decrease of electric consumption by 10 percent the payback period was also shorter than the feasibility study, while the net present value and the internal rate of return were higher than the feasibility study and the electricity tariff could skill cover the whole variable expenses.