



**BUILDING SURVEYING DEPARTMENT
FACULTY OF ARCHITECTURE, PLANNING & SURVEYING
UNIVERSITI TEKNOLOGI MARA
SHAH ALAM**

**EFFICIENCY AND EFFECTIVENESS OF LIQUIFIED NATURAL GAS (LNG)
SUPPLY SYSTEM FOR HOTEL BUILDINGS**

**AZUAN BIN MAT OMAR
2005631735
BACHELOR OF BUILDING SURVEYING (HONS)**

APRIL 2007

DECLARATION

I declare that this dissertation is the result of my own research and that all sources are acknowledged in the references'

Supervisor's Name : En. Md Nadzari Bin Mohd Jalil

Supervisor's signature :

Student's Name : Azuan Bin Mat Omar

Student's signature :

Date : 28th March 2007

ABSTRACT

The preparation of this dissertation was mainly motivated by desired to provide an overview of efficiency and effectiveness of Liquefied Natural Gas (LNG) supply system for hotel building.

The study has specific aim and objective to achieve in the end. In short these are the aim of this research is to increase awareness on the potentiality of gas supply to be developed and to be used in hotel building, supply concept, maintenance, cost factor and advantages.

The dissertation is divided into six chapters to cover the development of the study from the background investigation and research to the final conclusion and comments. The dissertation including outlines the introduction to the subjects, background and objectives in Chapters 1.

Chapter 2 described the gas supply in Malaysia. The gas supply in Malaysia is described in detail the chapter, which has gas historical background, properties of Gases, gas distribution system and maintenance Procedure.

Chapter 3 described the aspects of efficiency and effectiveness includes the definition design factors, cost factors and safety measures.

Chapter 4 highlight the research methodology have been applied in this study according to the desk study, it will focus on literature study, which has been obtained from books, journal, brochures, magazines and other written media. The field research has been conducted by instructed personal interviews and makes a survey and questionnaire.

Chapter 5 discussed on the analysis from the interview and then it will analysed according to the comparison.

Last Chapter summarized the conclusion from the research finding of the study and from conclusion the recommendations will find out for future improvement.

TABLE OF CONTENTS

	Pages
<i>Acknowledgement</i>	i
<i>Abstract</i>	ii
<i>List of Pictures</i>	iv
<i>List of Figures</i>	vi
<i>List of Tables</i>	vii
<i>List of Appendices</i>	viii
Chapter 1 : Introduction	1
1.1 Introduction	1
1.2 Issue	2
1.3 Objective	2
1.4 Methodology	3
Chapter 2 : Gas Supply In Malaysia	
2.1 Historical Background	4
2.1.1 Development of Gas Usage In Malaysia	
2.1.2 Development of Gas Supply For Hotel Building	7
2.2 Properties of Gases For Hotel Building Uses	8
2.2.1 Liquefied Natural Gas (LNG)	9
2.2.2 liquefied Petroleum Gas (LPG)	11
2.3 Gas Distribution System For Hotel Building	13
2.3.1 Direct System – LNG	13
2.3.2 Indirect System – LPG	15