

APPRAISAL REPORT

**Deloitte Touche
Tohmatsu**



14th November 1995

The Independent Directors
The New Zealand Refining Company Limited
Private Bag 9024
WHANGAREI

Dear Sirs

INDEPENDENT APPRAISAL REPORT ON THE PROCESSING ARRANGEMENTS OF THE NEW ZEALAND REFINING COMPANY LIMITED

INTRODUCTION

The New Zealand Refining Company Limited ("NZRC" or "the Company") has renegotiated its processing arrangements with its major shareholders, BP Oil New Zealand Limited ("BP"), Caltex Oil (N.Z.) Limited ("Caltex"), Mobil Oil New Zealand Limited ("Mobil") and Shell New Zealand Holding Company Limited ("Shell").

These four major shareholders are also NZRC's major customers. They are collectively referred to as the "User Companies" in this appraisal report.

The fee structure of the previous processing arrangements applicable from January 1992 to December 1994 contained three components:

- a fixed fee component which reduced each year;
- a variable fee component; and
- a Market Related Element ("MRE") which received increasing weight as part of the total processing fee each year.

The fee structure in the new processing arrangements moves more towards a fully market related fee.

The new processing fee formula is calculated at 70% of the Gross Refinery Margin ("GRM"). There are no fixed or variable fee components.

The GRM calculation process essentially calculates the difference between landing all the refinery-produced products at New Zealand ports, based on Singapore quoted prices, and the landed crude prices at the refinery, also based on Singapore quoted prices.

The processing fees are subject to a "floor" of NZ\$80 million in 1995 which is escalated in subsequent years and a ceiling value at a GRM equal to US\$9 per barrel.

The term of the new processing arrangements will initially run from 1 January 1995 until 31 December 1996 with an annual review from 31 December 1996.

The processing arrangements are subject to Listing Rule 9.2 of the New Zealand Stock Exchange Listing Rules ("the Rules"). Rule 9.2 requires that shareholders not associated with the User Companies approve the processing arrangements by ordinary resolution. Rule 9.2 also requires that the non-associated shareholders (collectively referred to as the "Public Shareholders") are provided with an appraisal report on the processing arrangements prepared by an independent appropriately qualified firm.

Accordingly the three independent directors of the Company, being those directors not associated with the User Companies, have requested Deloitte Touche Tohmatsu ("Deloitte") to prepare an independent appraisal report which sets

out our opinion on whether the processing arrangements between NZRC and the User Companies are fair to the Public Shareholders.

OPINION

In our opinion, the terms and conditions of the processing arrangements are fair to the Public Shareholders.

The processing arrangements are reasonable from an industry view. A direct comparison with other refineries must be qualified by the unique nature of the Company's refinery and its low capital base. However, NZRC's processing fees in 1995 and 1996 are projected to exceed toll processing fees in Singapore. Furthermore, NZRC's processing fees are projected to exceed cash operating costs whereas Singapore toll processing fees are expected to not always fully cover cash operating costs.

The allocation of 70% of GRM to NZRC and 30% to the User Companies is not unreasonable relative to the risks borne by the parties. The inclusion of a 70% GRM factor should help to provide sufficient funds for new investment requirements when industry economics are favourable. The allocation of 30% to the User Companies together with their indirect interest should provide a sufficient incentive for them to optimise their use of NZRC's capacity.

The processing arrangements are simpler and more transparent than the previous processing arrangements. They are fully market related whereas the previous process arrangements were partly market related and partly cost related.

The processing arrangements are projected to result in higher processing fees in 1995 and 1996 than would have been expected under the previous processing arrangements. Processing fees for 1995 and 1996 are projected to be approximately NZ\$143 million and NZ\$132 million respectively. If the previous processing arrangements were to continue, processing fees would be projected to be approximately NZ\$140 million in 1995 and NZ\$123 million in 1996. Furthermore, if the new processing arrangements had applied in 1994, processing fees would have been approximately NZ\$168 million compared with the actual processing fee of NZ\$145 million.

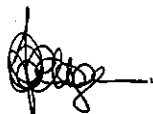
The processing arrangements may increase the volatility of the Company's earnings and cash flows and hence increase the Company's business risk. However, the Company's processing fees over the next six years are projected to be higher than they would have been under the previous processing arrangements. Movements in refinery margins will have a more pronounced effect on earnings. However, the risk of this volatility is reduced by the floor component of the processing fee formula which approximately covers NZRC's fixed costs. The floor of NZ\$80 million is lower than the previous processing arrangements (approximately NZ\$110 million). However, the ceiling of approximately NZ\$315 million under the new processing arrangements is considerably higher than under the previous processing arrangements (approximately NZ\$190 million). Accordingly, the Company has much greater scope to increase its earnings and cash flows under the new processing arrangements. Projections of processing fees show that the previous floor of approximately NZ\$110 million is always expected to be exceeded. Further, the previous ceiling of approximately NZ\$190 million will likely be exceeded in 1999 and the year 2000.

We note that forecasts are inherently uncertain. They are predictions of future events which cannot be assured. They are based on assumptions, many of which are beyond the control of NZRC and its management. Actual results will vary from the forecasts and these variations may be significantly more or less favourable.

This letter is a summary of Deloitte's opinion. The detailed appraisal report from which this summary has been extracted is attached.

Yours faithfully

DELOITTE TOUCHE TOHMATSU



John C Hagen

**INDEPENDENT APPRAISAL REPORT ON
THE PROCESSING ARRANGEMENTS OF
THE NEW ZEALAND REFINING COMPANY LIMITED**

NOVEMBER 1995

TABLE OF CONTENTS

Section

1.	Introduction
2.	Terms of Reference
3.	Reliance on Information
4.	Arthur D Little International, Inc.
5.	General Information on NZRC
6.	History of Previous Processing Arrangements
7.	Details of the New Processing Arrangements
8.	Basis of Assessment of the New Processing Arrangements
9.	Comparison with Industry Toll Processing Arrangements
10.	Risks and Rewards
11.	Projected Processing Fees
12.	Analysis of Financial Returns
13.	Use of the Appraisal Report

Appendix

I	Statement of Qualifications and Independence
II	Sources of Information

LIST OF ABBREVIATIONS

ADL	Arthur D Little International, Inc.
BP	BP Oil New Zealand Limited
Caltex	Caltex Oil (N.Z.) Limited
Company	The New Zealand Refining Company Limited
Deloitte	Deloitte Touche Tohmatsu
EBIT	Earnings before interest and tax
EGM	Extraordinary General Meeting
GRM	Gross Refinery Margin
MRE	Market Related Element
Mobil	Mobil Oil New Zealand Limited
NZRC	The New Zealand Refining Company Limited
ODRC	Optimised Depreciated Replacement Cost
Petrocorp	Petroleum Corporation of New Zealand Limited
PPI	Producers Price Index
Public Shareholders	NZRC shareholders other than the User Companies
Rules	New Zealand Stock Exchange Listing Rules
Shell	Shell New Zealand Holding Co Limited
TRM	Topping/Reforming Margin
User Companies	BP, Caltex, Mobil and Shell



I. INTRODUCTION

- 1.1 The New Zealand Refining Company Limited ("NZRC" or "the Company") has renegotiated its processing arrangements with its major shareholders, BP Oil New Zealand Limited ("BP"), Caltex Oil (N.Z.) Limited ("Caltex"), Mobil Oil New Zealand Limited ("Mobil") and Shell New Zealand Holding Co Limited ("Shell"). These four major shareholders are collectively referred to as the "User Companies" in this appraisal report.
- 1.2 The User Companies collectively hold approximately 71.4% of the shares in the Company. The User Companies are also NZRC's major customers.
- 1.3 The directors of the Company have called an Extraordinary General Meeting ("EGM") of shareholders on 14 December 1995 to seek approval of the processing arrangements.
- 1.4 The processing arrangements stem from an unsigned agreement between NZRC and the User Companies which was compiled in May 1992 and reviewed in May 1995. This document is intended to govern processing arrangements and fees for the two years from 1 January 1995 through until 31 December 1996. In addition to this document, there are also various exchanges of correspondence between NZRC and each of the User Companies which refer specifically to the new processing fee formula and which confirm each User Company's agreement to the formula.
- 1.5 The document itself has remained unsigned, and there are still various unresolved issues. However, we understand that none of these unresolved matters relate to the new processing fee formula and that it is the intention of NZRC and the User Companies to sign the document once the Company's shareholders have approved the processing arrangements.
- 1.6 We viewed the unsigned document and the related correspondence as together comprising binding accords between NZRC and each of the User Companies. Furthermore, the subsequent commercial dealings and in particular the invoicing by NZRC to User Companies has reflected the terms of the new processing fee formula and therefore provides evidence that binding agreements concerning the new processing fees exist.
- 1.7 The fee structure in the previous processing arrangements that applied from January 1992 to December 1994 included three components:
- a fixed fee which decreased each year by NZ\$5 million but was subject to an annual inflationary escalation;
 - a variable fee; and
 - a Market Related Element ("MRE") which received increasing weight as part of the total processing fee each year.
- 1.8 The fee structure in the new processing arrangements moves more towards a fully market related fee.
- 1.9 The new processing fee formula is calculated based on 70% of the Gross Refining Margin ("GRM"). There are no fixed or variable fee components:
- 1.10 The GRM calculation process essentially calculates the difference between landing all the refinery-produced products at New Zealand ports, based on Singapore quoted prices, and the landed crude prices at the refinery, also based on Singapore quoted prices.
- 1.11 The processing fees are subject to a "floor" of NZ\$80 million in 1995 which is escalated in the following year by an index related to various subgroups of the Producers Price Index ("PPI"). The processing fees are also subject to a ceiling value at a GRM equal to US\$9 per barrel.
- 1.12 The term of the new processing arrangements will initially run for two years from 1 January 1995 until 31 December 1996 with an annual review from 31 December 1996. The processing fee formula cannot be changed during the two year period to 31 December 1996. On 31 December 1996 and each year thereafter, the processing fee formula will be subject to review. Should the review result in a change to the processing fee formula, then the Public Shareholders will be required to approve the renegotiated processing arrangements. Conversely, if the annual review results in no change to the processing fee formula, then no further approval of the Public Shareholders will be sought. Therefore the Public Shareholders are being asked to approve new processing arrangements that will be in place until such time that the processing fee formula is renegotiated. The earliest that such a change can occur is 31 December 1996.

1.13 A history of previous processing arrangements is set out in section 6. Details of the new processing arrangements are set out in section 7.

2. TERMS OF REFERENCE

2.1 The three independent directors of the Company, being those directors not associated with the User Companies, have requested Deloitte Touche Tohmatsu ("Deloitte") to prepare an independent appraisal report which sets out our opinion as to whether the processing arrangements between NZRC and the User Companies are fair to the existing NZRC shareholders who are not party to these arrangements (referred to as the "Public Shareholders").

2.2 Listing Rule 9.2.1 of the New Zealand Stock Exchange Listing Rules ("the Rules") stipulates that an issuer shall not enter into a material transaction with a related party without obtaining the approval of the non-associated shareholders by ordinary resolution.

2.3 The processing arrangements are a material transaction as defined by Rule 9.2.2 (d) as the income derived by NZRC from the User Companies in respect of the processing arrangements will exceed 0.5% of NZRC's shareholders' funds.

\$639K

2.4 Rule 9.2.5 (b) requires that the Notice of EGM be accompanied by an appraisal report. Further, Rule 1.2.1 requires that the appraisal report be prepared by an independent appropriately qualified firm previously approved by the Market Surveillance Panel of the New Zealand Stock Exchange.

2.5 Deloitte has been approved by the Market Surveillance Panel as an independent appropriately qualified firm to prepare this appraisal report. A statement of our qualifications and independence is set out at Appendix I.

2.6 The services of Arthur D Little International, Inc. ("ADL") have been employed to assist us with the preparation of the appraisal report. ADL is an international consulting firm with extensive experience in technical, economic and commercial refinery evaluations globally, throughout the Asia Pacific region and in New Zealand. ADL has been approved by the Market Surveillance Panel to assist us in the preparation of the appraisal report.

2.7 Rule 1.2.2 requires that the appraisal report address the following:

- whether, in our opinion, the processing arrangements are fair to the Public Shareholders;
- whether, in our opinion, the information provided by NZRC to the Public Shareholders is sufficient to enable the Public Shareholders to understand all relevant factors and to make an informed decision in respect of the processing arrangements;
- whether we have obtained all the information that we believe desirable for the purposes of preparing the appraisal report, including all relevant information which was or should have been known to any director of NZRC and made available to the directors;
- state any material assumptions on which our opinion is based; and
- state any term of reference which may have materially restricted the scope of the appraisal report.

2.8 Deloitte issues this appraisal report for the benefit of the Public Shareholders to assist them in considering the processing arrangements. The appraisal report should not be used for any other purpose.

2.9 The major assumptions upon which our opinion is based are covered within the body of the appraisal report.

2.10 We are not aware of any term of reference which may have materially restricted the scope of the appraisal report.

3. RELIANCE ON INFORMATION

3.1 In forming our opinion on the processing arrangements, we have reviewed and relied upon the principal sources of information set out at Appendix II.

- 3.2 While we have taken care in our examination and use of the information provided to us, we are not in a position to verify such and accordingly we cannot accept any responsibility for the consequences of errors or omissions contained therein.
- 3.3 The preparation of this appraisal report does not imply in any way that we have audited the management accounts or other records of NZRC. We do not warrant that our enquires have revealed all of the matters that an audit or extensive examination might disclose.
- 3.4 The information provided to us includes forecasts of the Company's future revenues, expenditure, profits and cash flows prepared by NZRC management and forecasts of future processing fees prepared by ADL. In no way do we guarantee or otherwise warrant the achievability of the forecasts of future profits and cash flows of NZRC. Forecasts are inherently uncertain. They are predictions of future events which cannot be assured. They are based on assumptions, many of which are beyond the control of NZRC and its management. Actual results will vary from the forecasts and these variations may be significantly more or less favourable.
- 3.5 The independent directors of the Company have confirmed that we have been provided, for the purpose of the appraisal report, with all information relevant to the processing arrangements that is known or should have been known to the independent directors and that all the information is true and accurate in all material aspects and is not misleading by reason of omission or otherwise.
- 3.6 Including this confirmation, we have obtained all the information that we believe necessary for the purpose of preparing the appraisal report.
- 3.7 In our opinion, the information provided by the Company to the Public Shareholders is sufficient to enable the Public Shareholders to understand all the relevant factors and to make an informed decision in respect of the processing arrangements.
- 4. ARTHUR D LITTLE INTERNATIONAL, INC.**
- 4.1 We have utilised ADL's specialist refining expertise to assist us with our appraisal of the processing arrangements.
- 4.2 ADL has reported to us their opinion in respect of:
- whether the terms of the processing arrangements are fair relative to industry toll processing arrangements; and
 - whether the terms of the new processing arrangements are more favourable than the previous processing arrangements.
- 4.3 ADL's opinion is set out in their report to us dated 16 October 1995. Their report covers:
- an assessment of the NZRC refinery operations;
 - the global outlook for crude oil and petroleum products;
 - the Asia Pacific refining outlook;
 - third party processing in the Asia Pacific region; and
 - an assessment of NZRC's processing fees.
- 4.4 ADL has forecast NZRC's processing fees for the years from 1995 to 2000 under the new processing arrangements. It has also forecast for comparative purposes the processing fees that NZRC would earn in the years from 1995 to 2000 using the previous processing arrangements in place during the 1994 year. In addition, ADL has calculated what NZRC's 1994 processing fees would have been if the new processing arrangements had been in place last year.
- 4.5 We have relied on the information provided by ADL and their forecasts of processing fees set out in their report to us. However, we cannot accept any responsibility for the contents thereof.
- 4.6 We have included all of ADL's salient comments and conclusions within this appraisal report where we have considered it to be appropriate.

5. GENERAL INFORMATION ON NZRC

History

5.1 The history of the Company up to 1990 is described in detail in the book "The Point at Issue" by Mike Paterson. Details of the Company's activities since 1990 are set out in the various NZRC annual reports. Rather than recounting much of this information, we have set out below the key events in the Company's history.

- NZRC was formed in 1961 to establish an oil refinery at Marsden Point.
- Building of the refinery started in 1962 and was completed in 1964.
- Following the oil shocks of the 1970's, the New Zealand Government actively promoted projects to reduce the country's reliance on imported energy. A cornerstone of the Government policy was a project to expand the Marsden Point refinery.
- The expansion project commenced in 1981 and was completed in 1986 at a cost of \$1.84 billion. Funding of the expansion project was by way of Eurodollar loans underwritten by the Government. The pipeline from Marsden Point to Wiri, south of Auckland, and the Wiri terminal were completed as a related project.
- In 1987 the Government stated its intention to deregulate the New Zealand petroleum industry, leading to the passing of the Petroleum Sector Reform Act 1988.
- The refinery was deregulated in May 1988. The Government assumed direct legal liability for the Eurodollar loans. It also made a payment of \$85 million to the Company spread over three years as compensation for breaking its contractual arrangements immediately after the completion of the Government sponsored expansion project.

Nature of Operations

- 5.2 NZRC's core business is the processing and refining of crude oil into a variety of petroleum products.
- 5.3 NZRC operates as a toll processing refinery. It is responsible for operating the refinery and pumping product through the Wiri pipeline. However, the ownership of the crude oil (referred to in the refining industry as "feedstock") and the refined product remains with the User Companies at all times. The Company earns its revenue by charging fees for processing feedstock rather than buying feedstock and selling the refined products.
- 5.4 The Company has a monopoly in the domestic refining market, and the User Companies collectively represent an oligopoly in the downstream market for the distribution and sale of refined petroleum products in New Zealand.
- 5.5 The User Companies supply various cargoes of feedstock to the refinery on a scheduled basis. The Company then refines the feedstock and provides a yield of products agreed for each type of feedstock.
- 5.6 The products are uplifted by the User Companies by ship from the refinery or from the Wiri terminal. Product is pumped from the refinery to the Wiri terminal through the Wiri pipeline.
- 5.7 NZRC owns the terminal at Wiri. It leases the land on which the terminal is sited from the User Companies and rents the terminal to Wiri Oil Services Limited, a company owned by the User Companies. The User Companies have an option to purchase the Wiri terminal at the market value of NZRC's interest in the terminal.



5.8 The Company's principal products are:

- premium and regular motor gasoline (petrol);
- gas oils (diesel);
- aviation jet fuel; and
- light and heavy fuel oils.

5.9 Other related products include bitumen and sulphur.

5.10 The NZRC refinery is considered to be among the better, more efficient moderately complex refineries in the Asia Pacific region. The original refinery was built as a simple hydroskimming refinery with a capacity of approximately 75,000 barrels per day. The expansion project increased the refinery's capacity to approximately 95,000 b/d. The refinery typically runs at close to maximum capacity. A minor quantity of products is exported as the profile of NZRC's output does not exactly match the mix in domestic demand.

5.11 New Zealand's demand for petroleum products is currently approximately 110,000 b/d. NZRC provides approximately 56% of the country's annual motor gasoline requirements and 100% of the normal demand for all other domestic products.

Shareholding Structure

5.12 NZRC has equity capital of 24,000,000 ordinary shares of \$1 each, fully paid.

5.13 The ten largest beneficial shareholders at 9 November 1995 were:

TOP TEN SHAREHOLDERS		
Name	No. of Shares	% of Total
BP	5,677,716	23.7%
Mobil	4,608,000	19.2%
Shell	4,114,284	17.1%
Petroleum Corporation of New Zealand Limited	3,407,000	14.2%
Caltex	2,724,201	11.4%
National Mutual Funds Nominees	496,626	2.1%
Trustee and Executors Agency	412,700	1.7%
Citibank Nominees Limited	172,250	0.7%
Guardian Royal Exchange Assurance	160,000	0.7%
Perpetual Nominees Chch Limited	107,010	0.4%
	<u>21,879,787</u>	<u>91.2%</u>

5.14 The User Companies hold 17,124,201 shares at 9 November 1995, representing 71.4% of the Company's total share capital. Of the remaining 28.6% of the shares held by the Public Shareholders, 14.2% is held by Petroleum Corporation of New Zealand Limited ("Petrocorp"). The remaining 14.4% is held by institutional investors and the general public. No single institutional investor has an interest greater than 2.1% and no single general public shareholder has an interest greater than 0.21%.

Historic Financial Performance

5.15 A summary of NZRC's historic financial performance is set out below.

SUMMARY OF FINANCIAL PERFORMANCE				
	Year Ended 31 December			6 Months
	1992	1993	1994	30 June 1995
	<i>(audited)</i>	<i>(audited)</i>	<i>(audited)</i>	<i>(unaudited)</i>
	<i>NZ\$m</i>	<i>NZ\$m</i>	<i>NZ\$m</i>	<i>NZ\$m</i>
Operating Revenue	168.0	179.3	185.7	77.8
Net Profit Before Taxation	79.8	85.1	73.3	20.6
Taxation	26.8	28.6	24.7	6.8
Net Profit After Taxation	53.0	56.5	48.6	13.8
	<i>NZ\$</i>	<i>NZ\$</i>	<i>NZ\$</i>	<i>NZ\$</i>
Earnings per share	\$2.21	\$2.36	\$2.03	\$0.58
Dividends per share				
ordinary	\$1.25	\$1.45	\$1.60	\$0.50
special	-	\$7.50	-	-
Feedstock intake (000 tonnes)	4,472	4,624	4,705	2,473

- 5.16 The majority of NZRC's operating revenue is derived from the processing fees charged to the User Companies. This accounts for approximately 85% of operating revenue. Additional revenues are derived from the operation of the Wiri pipeline and from the rental of the Wiri terminal.
- 5.17 The historic operating revenue levels are influenced by changes in the basis of calculating the processing fees, movements in refining margins and movements in the US\$/NZ\$ exchange rate. In general terms, the trend in operating revenue between 1992 and 1994 has been in line with the increased volumes of feedstock intake. The decrease in operating revenue in the first half of 1995 was due to lower refinery margins. A detailed analysis of the projections of the Company's future processing fees is set out in section 11.
- 5.18 NZRC's main operating cash costs are the purchase of chemicals and utilities, wages and salaries and maintenance and contractor payments. While costs such as the purchase of chemicals and utilities are largely variable, the majority of the Company's costs are fixed.
- 5.19 The Company's earnings from operations have been relatively stable, particularly in the last two years. However, the varying levels of interest income received on investments has had a significant impact on the Company's recorded levels of net profit before taxation. For example, earnings before interest and tax ("EBIT") in 1993 and 1994 was in the vicinity of NZ\$67 million each year. However, interest income in 1993 amounted to NZ\$20 million whereas only NZ\$5 million was recorded in 1994.
- 5.20 The significant decrease in interest income in 1994 arose from the liquidation of the majority of the Company's investment in Government stock in 1993 and 1994 to fund the payment of special dividends totalling NZ\$180 million (NZ\$7.50 per share) in November 1993 and April 1994.

Historic Financial Position

5.21 A summary of the audited balance sheet of NZRC as at 31 December 1994 and its balance sheet as at 30 June 1995 is set out below.

SUMMARY OF FINANCIAL POSITION		
	31 Dec 1994	30 June 1995
	(audited)	(unaudited)
	NZ\$m	NZ\$m
Current Assets	78.6	101.7
Current Liabilities	(75.3)	(78.0)
Operating Working Capital	3.3	23.7
Fixed Assets	1,152.7	1,106.0
Loan Settlement Payment	(1,051.3)	(996.2)
Future Taxation Benefits	4.4	3.2
Capital Employed	109.1	136.7
Cash and Short Term Deposits	29.9	3.5
Investments	8.7	-
Bank Overdraft	(0.9)	(1.2)
Provision for Dividend	(21.6)	(12.0)
Shareholders' Funds	125.2	127.0

5.22 The increase in operating working capital largely reflects:

- increased accounts receivable arising from a higher amount of excise duty recoverable from the User Companies;
- the higher excise duty payable offset by a reduction in trade payables; and
- provisional tax payments in excess of the Company's taxation liability at 30 June 1995.

5.23 Included in fixed assets are "expansion assets" which have a book value equivalent to, and offsetting the balance of the loan settlement payment. The expansion assets represent the assets acquired during the expansion project completed in 1986. When the Government assumed liability for the Eurodollar expansion loans in 1988, NZRC agreed not to claim depreciation allowances on the expansion assets for income tax purposes.

5.24 The Company has accounted for the expansion assets by recording them on its balance sheet at their cost and depreciating these assets for accounting purposes but not for income tax purposes. The Company has also recognised a compensating provision (the loan settlement payment) equating to the expansion loans assumed by the Government. The loan settlement payment is amortised for accounting purposes at the same rate as the depreciation of the expansion assets so that the credits offset the expansion assets depreciation expense and therefore the net impact on the Company's profit is nil. No allowance for income tax is provided for in respect of this amortisation.

5.25 The impact of the Company's treatment of the expansion assets is that the Company's recorded level of capital employed and shareholders' funds is extremely low for a refinery. The effect of this low capital base when assessing financial returns is discussed in further detail in section 12.

5.26 The decrease in cash and short term deposits and investments is largely due to the liquidation of these financial instruments to fund the 1994 final dividend of NZ\$21.6 million (NZ\$0.90 per share) paid on 27 April 1995.

Share Price History

5.27 The Company's share price history since January 1991 is summarised below:

Period	Share Price (NZ\$)		Closing Price (NZ\$)	Volume Traded (000's shares)
	Low	High		
<i>Month Ending</i>				
October 1995	22.00	25.00	24.50	40
September 1995	22.00	24.50	23.00	44
August 1995	28.00	29.00	28.50	44
July 1995	27.50	29.50	29.00	43
June 1995	26.00	28.00	27.50	40
May 1995	26.25	30.00	26.25	56
April 1995	28.40	29.75	29.75	54
March 1995	25.50	28.00	28.00	35
February 1995	26.00	27.40	26.50	71
January 1995	27.00	27.75	27.70	4
<i>Year Ending</i>				
December 1994	22.75	42.50	27.50	1,004
December 1993	20.75	45.00	34.00	1,476
December 1992	13.20	24.00	23.40	704
December 1991	6.05	14.35	13.20	849

5.28 Trading in the Company's shares is extremely thin. Approximately 86% of the shares are held by the User Companies and Petrocorp. These five largest shareholders do not regularly trade in the shares.

5.29 The highest price of NZ\$45.00 was recorded on 3 September 1993. This followed the announcement on 26 August 1993 of a special dividend of NZ\$6.00 per share.

5.30 The lowest price for the current year was NZ\$22.00 recorded on 4 September 1995 on a volume of 800 shares. This was shortly after the Company's half year announcement on 31 August 1995.

6. HISTORY OF PREVIOUS PROCESSING ARRANGEMENTS

6.1 The underlying factor behind all previous processing arrangements has been that the User Companies will take and pay for the whole capacity of the refinery.

6.2 Prior to deregulation in 1988 NZRC's processing fees were aimed at a full cost recovery plus a 12.5% return on shareholders' Funds. The actual return on shareholders' Funds was sometimes less than 12.5%. There was no real incentive, other than good management principles, to control costs and improve product yields. Regulated prices in the market allowed the User Companies to recover the processing fees.

6.3 Following deregulation, a "Heads of Agreement for Revised Processing Agreement" was signed in August 1988 between NZRC and the User Companies. The key elements were:

- the processing agreement was to continue indefinitely subject to termination on twelve months' notice;
- a commitment by the User Companies to fully utilise the refinery capacity;
- each User Company was required to pay a predetermined fixed fee for use of the refinery capacity;
- NZRC was to undertake processing at predetermined yields and costs (this element was subsequently abandoned as it proved impracticable);



- all User Companies were to enjoy identical terms; and
 - User Companies were obliged to meet variable processing costs.
- 6.4 Following the signing of the Heads of Agreement, NZRC and the User Companies embarked on extensive negotiations to finalise the precise fee structure and conclude other terms and conditions. The key objectives within this process for NZRC were:
- to obtain incentives for the Company to improve its efficiency;
 - to provide a suitable environment for the evaluation of capital expenditure projects; and
 - to reflect to some extent margins in the worldwide refining industry rather than adopting a cost plus arrangement. This factor became known as the MRE.
- 6.5 Various interim arrangements were arrived at for the years between 1988 and 1992. The concept of the MRE in the processing fee gradually became accepted and was introduced for the first time in 1991.
- 6.6 At the EGM on 14 December 1993, the Public Shareholders approved the processing arrangements negotiated between NZRC and the User Companies applicable for the three year period from January 1992 to December 1994 (referred to hereinafter as the "previous" processing arrangements).
- 6.7 Details of the previous processing arrangements are set out in the appraisal report dated 1 November 1993 prepared by Arthur Andersen and in the Company's 1994 annual report. In summary the fee structure of the previous processing arrangements included three components:
- a fixed fee designed to approximately recover fixed refinery operating costs. The fixed fee decreased each year but was indexed to various subgroups of the PPI for the previous year;
 - a variable fee related to the use of processing units averaging around NZ\$1.00 to NZ\$1.20 per barrel; and
 - a MRE which was calculated in accordance with a formula based on prevailing Singapore market prices and refining margins. The MRE formula took into account both GRM and published Topping/Reforming Margins ("TRM") in Singapore. This formula was accompanied by certain minima and maxima, and the MRE component received increasing weight as a part of the total processing fee from 30% in 1992 to 50% in 1994.
- 6.8 Other fees arranged under the previous processing arrangements included:
- a pipeline fee of NZ\$1.40 per barrel pumped;
 - rent for the use of the Wiri terminal at NZ\$6.525 million per annum;
 - a fee for blending mogas components of NZ\$0.60 per barrel received; and
 - a fee for loading road tankers with bitumen of NZ\$35 per tonne.
- 6.9 The Market Surveillance Panel granted the Company a waiver from the application of the former Listing Requirement 9.1.2 (now Rule 9.2) in March 1994 in respect of non-substantive changes to previous processing arrangements. This was on the basis that:
- the Company provide a short synopsis of the processing arrangements and any changes agreed during the year in its annual reports;
 - the Company's auditors certify that the processing arrangements were as described and that no substantive changes had been made; and
 - the shareholders endorse the processing arrangements at the Annual General Meeting.

7. DETAILS OF THE NEW PROCESSING ARRANGEMENTS

7.1 The negotiation of the new processing arrangements commenced in mid 1994. The Company's declared intent was to move the basis of the processing fee more towards a fully market related fee, with an acceptance that this would entail greater risk and volatility in the Company's income, but should increase long term profitability.

7.2 The negotiations took longer than anticipated to complete, and it was not until July 1995 that agreement was reached with the User Companies. The Heads of Agreement provide that the re-negotiated processing fee is effective retrospectively from the date of expiry of the previous arrangements (ie 31 December 1994).

7.3 The new processing fee formula is related solely to GRM. The formula is as follows:

$$\text{Processing fee} = 70\% \times \text{GRM} \times \text{Volume} \times \text{RIX}$$

where:

- 70% is the agreed margin share for NZRC;
- GRM is each User Company's individual GRM calculated using an existing agreed price formula basis for feedstocks and products, converted to US\$/per barrel. The GRM reflects both natural gas and other blendstocks treated as feedstocks in the calculation methodology;
- Volume is the number of barrels in each User Company's allocation, inclusive of blendstocks and natural gas; and
- RIX is the rate of exchange from US\$ to NZ\$.

7.4 The new processing fee formula includes both purchased natural gas and gasoline blendstocks as feedstocks since they are no longer accounted for in refinery costs (natural gas) or blending fees (gasoline blendstocks).

7.5 The new processing fees are subject to a "floor" in 1995 of NZ\$80 million. This floor only comes into effect at the end of the calendar year.

7.6 In 1996 this floor will be escalated by an index comprising:

- 50% Labour Cost Index
- 20% PPI - Insurance and Financing
- 15% PPI - Machinery and Metal Products
- 15% PPI - Electricity, Gas and Water.

7.7 This floor guarantees the User Companies access to NZRC capacity and approximately covers NZRC's fixed operating costs. The NZ\$80 million is lower than the minimum fee of approximately NZ\$110 million under the previous processing arrangements but this disadvantage is offset by the potentially higher processing fees under the new formula noted below.

7.8 The processing fees are subject to a "ceiling" value at a GRM equal to US\$9 per barrel. As discussed in section 11, this would yield a maximum processing fee of approximately NZ\$315 million per annum. This ceiling only comes into effect when at the end of the month the rolling three month average industry GRM is greater than US\$9 per barrel. This ceiling is considerably higher than the ceiling of approximately NZ\$190 million under previous processing arrangements.

7.9 The term of the new processing arrangements will initially run from 1 January 1995 until 31 December 1996 with an annual review from 31 December 1996.

7.10 The term of the new processing arrangements are fixed for the two year period to 31 December 1996. In other words:

- NZRC's margin share is fixed at 70%; and
- the basis of the calculation of GRM based on an agreed price formula to calculate feedstocks and products will not be changed.

7.11 The new processing arrangements will be subject to a review on 31 December 1996. The Company acknowledges that should the review result in any changes to the processing fee formula set out in paragraph 7.3 then the renegotiated processing arrangements will require the approval of the Public Shareholders in line with Rule 9.2. Accordingly, unlike under the previous processing arrangements, no waiver from Rule 9.2 has been sought from the Market Surveillance Panel for the new processing arrangements. Conversely, if the review of the processing arrangements on 31 December 1996 or each year thereafter results in no change to the processing fee formula, then the processing arrangements will be deemed to carry on and as such no approval will be sought from the Public Shareholders. Accordingly, the approval of the Public Shareholders at the EGM will apply to the processing arrangements until such time as the processing fee formula is changed under the review process.

7.12 Other fees to be charged by the Company are:

- a pipeline fee unchanged of NZ\$1.40 per barrel pumped;
- rent for the use of the Wiri terminal at NZ\$6.525 million per annum increasing to NZ\$6.922 million from 1 June 1995; and
- a fee for loading road tankers with bitumen unchanged of NZ\$35 per tonne.

8. BASIS OF ASSESSMENT OF THE NEW PROCESSING ARRANGEMENTS

8.1 Rule 9.1.2 requires an opinion as to whether the processing arrangements are fair to the Public Shareholders.

8.2 The term "fair" has no legal definition. In our opinion, the following factors should be considered in determining whether the processing arrangements are fair:

- whether the processing arrangements discriminate against the Public Shareholders as compared with the User Companies; and
- whether the new processing arrangements provide an improved risk-adjusted return to shareholders than under the previous processing arrangements.

8.3 In order to assess whether the processing arrangements discriminate against the Public Shareholders we have:

- compared the processing arrangements with industry norms;
- identified the relative risks borne by the User Companies and NZRC;
- analysed the relative rewards received by the User Companies and NZRC.

8.4 In order to assess whether the new processing arrangements provide an improved risk adjusted return, we have:

- analysed forecast processing fees under the new processing arrangements and under the previous processing arrangements;
- analysed whether the new processing arrangements lead to a significant change in the Company's business risk profile; and
- compared historic and forecast financial returns under the two processing arrangements.

9. COMPARISON WITH INDUSTRY TOLL PROCESSING ARRANGEMENTS

9.1 A comparison of NZRC with other refineries can be misleading as NZRC operates in a unique environment. New Zealand is a net importer of petroleum products and is geographically isolated from major refining centres such as Singapore. Furthermore, the Company's recorded capital base is very low due to the Government assuming the liability for the loans which financed the expansion assets. The result of these factors is that NZRC's circumstances are unlike those found in any other refinery. Consequently direct comparisons with other processing fee arrangements, whilst useful, are not directly relevant.

9.2 ADL has compared the new processing arrangements with toll processing arrangements in Singapore. While Singapore toll processing refineries provide the most relevant industry comparisons, the following significant differences must be borne in mind:

- New Zealand is an isolated location well away from major international markets while Singapore is a major refining centre supplying markets across South East Asia;
- NZRC is a relatively small conversion refinery whereas the Singapore refineries are large topping/reforming toll processing refineries;
- the User Companies operate under a long term contract whereas most toll processing contracts in Singapore are for one year or less;
- the User Companies have a long term commitment to 100% of the Company's capacity whereas Singapore users are only committed through their contract;
- the User Companies are NZRC's majority shareholders. They directly benefit from the full utilisation of NZRC capacity and they share in the profits from NZRC's operations;
- the User Companies own both the feedstocks and refined products and thus assume the risk of variations in crude and product prices. Many Singapore refineries own both the crude and products and thus assume this risk; and
- the new processing arrangements include a minimum fee provision which approximately covers the Company's fixed operating costs whereas Singapore toll processing contracts do not normally include a minimum fee provision.

9.3 NZRC's processing fees in 1994 amounted to NZ\$144.6 million. This represented a processing fee of NZ\$4.21 per barrel (US\$2.51 per barrel). ADL forecasts that NZRC's processing fees in 1995 and 1996 will be US\$2.60 and US\$2.18 per barrel respectively. The forecast reduction in processing fees is discussed in section 11.

9.4 ADL advises that NZRC's actual and projected processing fees are considerably higher than the toll processing fees currently achieved in Singapore. Singapore toll processing fees in 1994 averaged around US\$1.00 to US\$1.10 per barrel and are forecast by ADL to remain at approximately US\$1.00 to US\$1.20 per barrel. Toll processing fees in Singapore have not always fully covered cash operating costs of approximately US\$0.80 to US\$1.25 per barrel. On the other hand, NZRC's processing fees have historically exceeded cash operating costs and are projected to continue to do so under the new processing arrangements.

9.5 Bearing in mind the differences between NZRC and Singapore refineries, the new processing arrangements would appear to be reasonable when compared with industry toll processing arrangements.

10. RISKS AND REWARDS

10.1 In economic terms, there is a positive relationship between risk and rewards. The greater the risks borne by a party, the greater the required rewards.

10.2 The comparison between NZRC and Singapore toll processing refineries set out in paragraph 9.2 highlights that NZRC bears comparatively lower risk than the Singapore toll processing refineries. NZRC's lower comparable risks arise primarily due to:

- NZRC has a long term commitment from the User Companies to 100% of its capacity;

- NZRC does not own the feedstock and refined products. Accordingly, the Company does not bear the risks in respect of financing and holding the crudes and products; and
 - the processing arrangements include a minimum fee provision thereby guaranteeing NZRC a minimum level of earnings.
- 10.3 The result of the above arrangements is that the associated risks not borne by NZRC are effectively transferred to the User Companies. The User Companies are committed to NZRC's capacity, they bear the feedstock and refined products ownership risks and they are obligated to paying the minimum fee.
- 10.4 Conversely, the User Companies are protected from extremely high margins through the ceiling component in the processing fee formula. This element of the formula is for the sole benefit of the User Companies.
- 10.5 In order to assess the reasonableness of the allocation of 70% of the GRM to NZRC and 30% to the User Companies, it is important to take into account the relative risks borne by the parties. Furthermore, the allocation should ensure that:
- NZRC's share provides sufficient funds for new investment requirements when industry economics are favourable; and
 - the User Companies' share provides sufficient incentive to optimise their use of NZRC's capacity.
- 10.6 If all the risks were borne by NZRC, then it could be argued that NZRC's share of the GRM should be 100%. Clearly NZRC does not bear all the risks. These are shared to some degree with the User Companies and accordingly they should be rewarded for bearing those risks.
- 10.7 The risks specifically borne by the User Companies include:
- the risks and associated costs of maintaining crude purchasing and product sales teams;
 - the finance and currency costs and risks associated with maintaining crude and product inventories;
 - shipping and demurrage risks; and
 - the guarantee of the minimum processing fee.
- 10.8 Based on the above, we are of the opinion that the allocation of 70% of GRM to NZRC and 30% to the User Companies is not unreasonable as it provides sufficient rewards to both parties relative to the risks they bear.

11. PROJECTED PROCESSING FEES

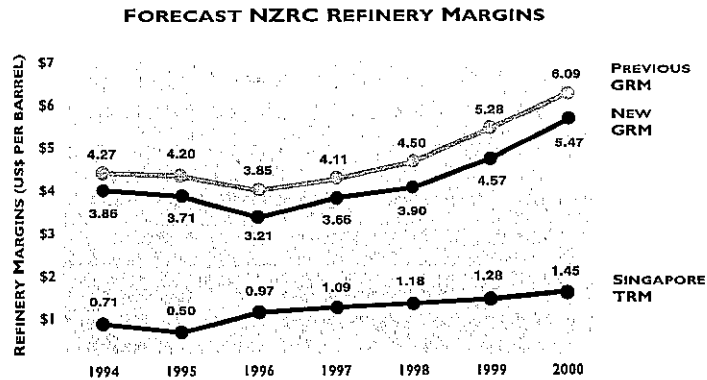
Analysis by ADL

- 11.1 ADL has forecast NZRC's processing fees for the years from 1995 to 2000 under the new processing arrangements. It has also forecast the processing fees that NZRC would earn in the years from 1995 to 2000 under the previous processing arrangements for comparative purposes. In addition, ADL has calculated what NZRC's processing fees for 1994 would have been if the new processing arrangements had been in place last year.
- 11.2 ADL's projections of NZRC refinery margins and its processing fees are based on material balances provided by NZRC. Feedstock and product prices are based on landed prices into New Zealand in appropriate size vessels. Refinery costs are not included as elements under the new processing formula, but gasoline blend components and natural gas are accounted for as feedstocks in the GRM calculation in line with industry norms.

Forecast Refinery Margins

- 11.3 A graph of NZRC and Singapore refinery margins from January 1993 to November 1994 is set out on page 10 of the Company's 1994 annual report. This showed that NZRC GRM varied from approximately US\$2.80 to US\$6.10 per barrel during the period.

11.4 ADL's forecasts of refinery margins under the new and previous processing formulae along with Singapore TRM are shown in the graph below. Refinery margins under the new formula are lower than under the previous processing formula due to the inclusion of natural gas and gasoline blending components as feedstocks.



Source: ADL

11.5 Refinery margins in 1995 are projected to decline from the 1994 level due to low margins in the first half of 1995. This decline in GRM is projected to continue through 1996 but margins are expected to gradually improve beyond 1996 in line with ADL's more favourable outlook for refining margins in the Far East. By the year 2000 ADL projects margins to increase to US\$6.09 per barrel under the previous formula and to US\$5.47 per barrel under the new formula. This projected increase should result in substantial increases in NZRC's processing fees, especially under the new formula as a greater portion of the margin is reflected in the processing fee formula.

Forecast Processing Fees

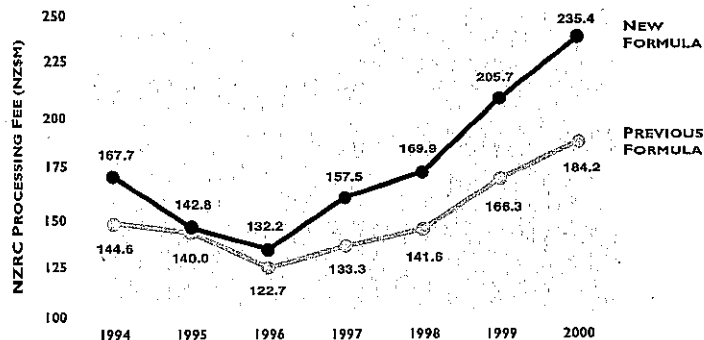
11.6 ADL's forecast of processing fees for the years from 1995 to 2000 using the previous and new formulae are set out below, together with the actual 1994 processing fee and ADL's estimate of the 1994 processing fee under the new formula. The processing fees exclude process material recoveries.

FORECAST PROCESSING FEES		
Year	New Formula	Previous Formula
	NZ\$m#	NZ\$m#
1994	167.7	144.6*
1995	142.8	140.0
1996	132.2	122.7
1997	157.5	133.3
1998	169.9	141.6
1999	205.7	166.3
2000	235.4	184.2

NZ\$m are expressed in nominal terms
* Actual

11.7 Processing fees under both the previous and new formulae are forecast to decrease in 1995 and again in 1996 due to reducing refinery margins. However, processing fees under the new formula are projected to be higher each year than under the previous formula. This is because NZRC's 70% share of GRM under the new formula is higher than the sum of the fixed fee, variable fee and MRE (based on 50% of GRM) under the previous formula. Accordingly as refinery margins increase, the fully variable processing fee under the new formula increases by a greater extent.

FORECAST PROCESSING FEES



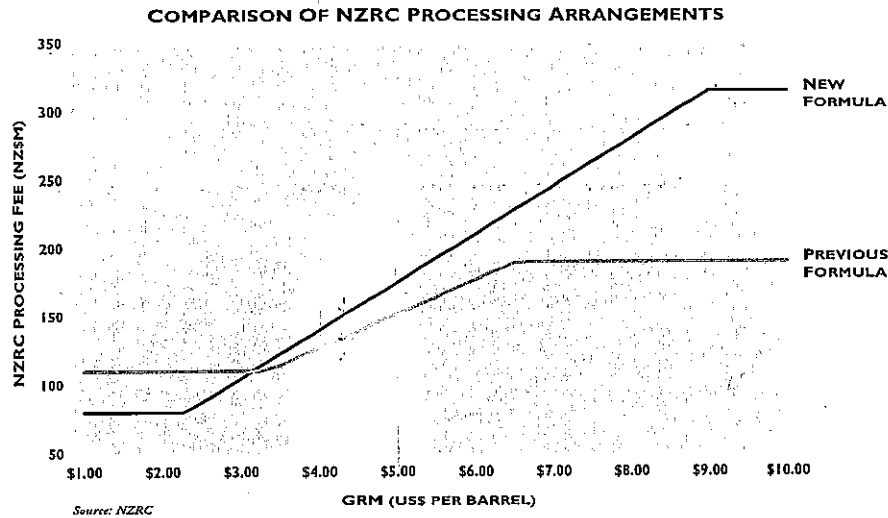
Source: ADL

- 11.8 ADL projects that refinery margins will increase steadily after 1996. Processing fees in the year 2000 are projected to be in the vicinity of NZ\$235 million under the new formula and NZ\$184 million under the previous formula.
- 11.9 The projected processing fees are sensitive to changes in GRM, volumes and exchange rates. Given that the new formula is based entirely on GRM, it is more sensitive to each of these factors. The previous formula is less sensitive to GRM and exchange rates due to its fixed and variable fee components.
- 11.10 Set out below is an analysis of the sensitivity of the forecast 1995 processing fee under the new formula to changes in GRM, volumes and exchange rates.

SENSITIVITY ANALYSIS		
	1995 Processing Fee	Change
	NZ\$m	NZ\$m
ADL forecast (GRM US\$3.71; 36.3 million barrels per annum; NZ\$1 = US\$0.66)	142.8	
GRM + US\$0.50 (US\$4.21)	162.1	19.3
GRM - US\$0.50 (US\$3.21)	123.6	(19.2)
Volumes + 1 million (37.3 million)	146.8	4.0
Volumes - 1 million (35.3 million)	138.9	(3.9)
NZ\$1 = US\$0.68	138.6	(4.2)
NZ\$1 = US\$0.64	147.3	4.5

MINIMUM AND MAXIMUM PROCESSING FEES

- 11.11 Minimum and maximum levels of processing fees have been built into both the new and previous formulae through floor and ceiling components. The range of processing fees resulting from varying GRM under both the new and previous formula is set out below. This is based on a volume of 33 million barrels per annum, TRM of 0.71 and an exchange rate of NZ\$1 = US\$0.66.



- 11.12 Under the previous formula, NZRC was guaranteed a minimum fee of approximately NZ\$110 million (assuming the refinery was fully operational). However, the increase in the processing fee was relatively slow with the MRE factor of 50%. The maximum processing fee under the previous formula was approximately NZ\$190 million at a GRM of US\$6.51 per barrel.
- 11.13 Under the new formula, NZRC is guaranteed a minimum fee of only NZ\$80 million, but the higher GRM factor of 70% results in a much more rapid increase in the processing fee with higher refinery margins.
- 11.14 The maximum processing fee under the new formula is approximately NZ\$315 million. This is based on a GRM of US\$9 per barrel. This ceiling provides protection to the User Companies during periods of extremely high margins. However, margins have only occurred at this level for short periods of time during major supply disruptions such as the Gulf War and Iranian crisis. ADL's forecasts show that this ceiling will not be reached during the period up to the year 2000.
- 11.15 The maximum processing fee under the new formula is sensitive to changes in volumes and exchange rates. The figure of approximately NZ\$315 million is based on a volume of 33 million barrels per annum and an exchange rate of NZ\$1 = US\$0.66. If volumes increased by 3 million barrels to 36 million barrels per annum, the maximum processing fee would increase by about NZ\$29 million to approximately NZ\$344 million. If the exchange rate was NZ\$1 = US\$0.68 the maximum processing fee would decrease by about NZ\$9 million to approximately NZ\$306 million.
- 11.16 ADL's forecasts of processing fees fall between the minimum and maximum levels throughout the forecast period. The forecast processing fees also exceed the minimum under the previous formula.
- 11.17 ADL's forecasts of processing fees in 1999 and the year 2000 exceed the ceiling under the previous processing arrangements of approximately NZ\$190 million. Accordingly, the new processing arrangements allow for the Company to earn higher processing fees than it otherwise would have under the previous processing arrangements.
- 11.18 The reduction in the minimum fee of approximately NZ\$110 million under the previous formula to NZ\$80 million in the new formula is more than offset by the significant increase in the maximum processing fee. The minimum provision of NZ\$80 million still approximately covers the Company's fixed costs. ADL projects that processing fees over the next six years will not be below the floor of NZ\$110 million under the previous processing arrangements.

Conclusion

- 11.19 In our opinion, the new processing arrangements are more favourable than the previous processing arrangements for the following reasons:
 - the new formula is much simpler and more transparent;



- processing fees under the new formula would have exceeded the processing fees under the previous formula by approximately NZ\$23 million in 1994;
- processing fees under the new formula are projected to be approximately NZ\$3 million higher in 1995 and approximately NZ\$9 million higher in 1996 than under the previous formula;
- processing fees under the new formula are forecast to exceed those under the previous formula each year through to 2000;
- processing fees under the new formula include 70% of GRM versus 50% of MRE under the previous formula. Thus NZRC will benefit more fully from the projected improvements in refinery margins beyond 1996 under the new formula;
- processing fees are capped at approximately NZ\$315 million under the new formula compared with approximately NZ\$190 million under the previous formula. The ceiling under the previous formula is projected to be exceeded in 1999 and the year 2000; and
- processing fees under the new formula are projected to always exceed the previous floor of approximately NZ\$110 million.

12. ANALYSIS OF FINANCIAL RETURNS

New Versus Previous Processing Arrangements

- 12.1 A comprehensive analysis of financial returns is not necessary to conclude that refinery operating profits should be greater under the new processing arrangements than under the previous processing arrangements. The refinery operating costs will not differ under the two processing arrangements. Accordingly, the higher processing fees forecast under new processing arrangements will result in higher refinery operating profits.
- 12.2 Similarly, if it is assumed that the increase in the Wiri terminal rent which is effective from June 1995 would have been negotiated irrespective of the processing fee formula negotiations, then the only difference in the Company's EBIT under the new and previous processing arrangements would be due to the higher processing fees under the new processing arrangements.
- 12.3 Given this, we have not included a detailed comparison of financial returns under the two processing arrangements. The conclusion can be drawn that based on ADL's forecasts of refinery margins and processing fees, the returns to shareholders will be greater under the new processing arrangements than under the previous processing arrangements.

Risk Profile of Earnings and Cash Flows

- 12.4 The magnitude of the increased pre-tax returns to shareholders in 1995 and 1996 under the new processing arrangements is forecast to be approximately NZ\$3 million and NZ\$9 million respectively, in line with the higher forecast processing fees as set out in paragraph 11.6.
- 12.5 The critical questions when comparing the financial returns in this instance are:
- do the new processing arrangements lead to the possibility of greater volatility in the Company's earnings and cash flows and hence greater risk? and
 - if so, what additional rate of return would rational investors require to compensate for this greater risk?
- 12.6 In our opinion, the new processing arrangements provide the possibility of greater volatility in the Company's earnings and cash flows. However, the scope for increased earnings and cash flows is considerably higher than the scope for a reduction in earnings and cash flows. ADL's forecasts of processing fees exceed the floor of approximately NZ\$110 million under the previous processing arrangements. In addition, their forecasts of processing fees in 1999 and the year 2000 exceed the ceiling under the previous processing arrangements of approximately NZ\$190 million.
- 12.7 As discussed in paragraphs 11.11 to 11.18, the range of the Company's possible processing fees will change from approximately NZ\$110 million to NZ\$190 million under the previous processing arrangements to approximately NZ\$80

million to NZ\$315 million under the new processing arrangements. Given the nature of the Company's costs, the spread in potential processing fees effectively translates into the potential spread in the Company's EBIT. ADL's forecasts show that the Company will benefit from this increased spread in 1999 and the year 2000.

- 12.8 Given ADL's projections of the processing fees, we are of the opinion that the reduction in the minimum fee from approximately NZ\$110 million to NZ\$80 million is more than offset by the significant increase in the maximum processing fee.
- 12.9 Based on the above, we conclude that the new processing arrangements will increase the volatility of the Company's earnings and cash flows to some degree and hence increase the Company's business risk. However we do not consider the increase in risk to be material and therefore we are of the view that any increase in investors' required rates of return will not be significant.
- 12.10 Given that the scope for changes in earnings and cash flows is heavily slanted towards increases rather than decreases, we are of the opinion that the new processing arrangements should, at worst, have a neutral effect on the market value of NZRC's business.

Analysis of Financial Returns

- 12.11 It is common practice to analyse the returns generated by a business utilising accounting information and/or on an economic basis. For example, analyses are often undertaken of growth in earnings per share, the return on equity or the return on the optimised depreciated replacement cost ("ODRC") of the Company's operating assets.
- 12.12 We have not set out such analyses in the appraisal report as we are of the view that the analyses would not be relevant to this assessment.
- 12.13 NZRC is unique in the New Zealand corporate environment in that it faces no domestic competition, its operating assets have no alternative use and the majority of its income is derived from the processing arrangements. It is not comparable with any other listed company in New Zealand.
- 12.14 We are advised by the independent directors that the new processing arrangements represent that the most advantageous processing fee structure that NZRC could negotiate with the User Companies on an arms-length basis. Accordingly, the Company has no alternate means of deriving revenue from the use of its assets.
- 12.15 The market value of a business is determined by its ability to generate free cash flows. Therefore, the market value of NZRC will be determined by investors' expectations of the Company's future free cash flows and the assessed risks of the cash flows. Both the carrying value and the ODRC of the Company's operating assets are largely irrelevant in this instance.

Conclusion

- 12.16 We are of the view that the analysis of financial returns in determining whether the new processing arrangements are fair to the Public Shareholders should focus on the shifts in the risk profile of the Company's earnings and cash flows. Absolute accounting or economic returns on the shareholders' investment are less meaningful in this instance.
- 12.17 In our opinion, the new processing arrangements do increase the risk of volatility in the Company's earnings and cash flows to a small degree but this risk is offset by the forecast higher processing fees under the new processing arrangements.

13. USE OF THE APPRAISAL REPORT

- 13.1 This appraisal report has been prepared for the independent directors of NZRC solely for the purpose set out in paragraph 2.8.
- 13.2 Deloitte consents to the issuing of this appraisal report in the form and context in which it is included in the Notice of EGM to be sent to shareholders of NZRC. Neither the whole nor any part of this appraisal report nor any reference thereto may be included in any other document without the prior written consent of Deloitte as to the form and context in which it appears.
- 13.3 The appraisal report cannot be used as the basis for any recommendation to buy or sell shares in NZRC. Shareholders must determine their individual position as regards the processing arrangements after due consideration of the information provided by the Company to shareholders regarding the processing arrangements. We have reviewed this information and it is, in our opinion, sufficient to enable shareholders to understand all relevant factors and to make an informed decision as regards the processing arrangements.

STATEMENT OF QUALIFICATIONS AND INDEPENDENCE

Deloitte is an international firm of Chartered Accountants, Business Advisers and management Consultants.

The firm and its partners are independent of the parties to the processing arrangements namely:

- NZRC
- BP
- Mobil
- Shell
- Caltex

Deloitte is not the auditor of NZRC, BP, Mobil, Shell or Caltex.

The persons in the firm responsible for issuing this report are John C Hagen and Peter A Simmons.

J C Hagen is the Executive Chairman of Deloitte and is the Partner in the Financial Advisory Services division of the firm's Auckland office. He is the past President of the New Zealand Society of Accountants and is the Chairman of the Accounting Standards Review Board. He is a former member of the Market Surveillance Panel of the New Zealand Stock Exchange.

P A Simmons is the Senior Manager in the Financial Advisory Services division of the firm's Auckland office. He has over eleven years experience in the chartered accountancy profession in New Zealand and the United Kingdom and specialises in corporate valuations and financial investigations.

The firm, J C Hagen and P A Simmons have significant experience in the independent investigation of financial transactions and issuing opinions as to whether the terms thereof are fair and reasonable.

The firm has been approved by the Market Surveillance Panel of the New Zealand Stock Exchange in terms of Rule 1.2.1 as an independent appropriately qualified firm for the purpose of this appraisal report.

SOURCES OF INFORMATION

In forming our opinion on the processing arrangements, we have reviewed and relied upon the following principal sources of information:

- The NZRC annual reports for 1990 to 1994;
- The NZRC interim report for the six months ended 30 June 1995;
- The NZRC General Manager's reports for the years ended 31 December 1992 to 1994;
- The NZRC forecast operating results for the year ended 31 December 1995;
- The NZRC cash flow forecasts for 1996 to 2001;
- The ADL report dated 16 October 1995 on the processing arrangements;
- The detailed Arthur Andersen appraisal report dated 29 October 1993 and the abridged Arthur Andersen appraisal report dated 1 November 1993;
- The Arthur Andersen supplementary information memorandum sent to shareholders on 7 December 1993;
- The Chem Systems Limited report entitled "NZRC An Appraisal of Processing Agreements" prepared for Arthur Andersen dated November 1993;
- Correspondence between NZRC and the User Companies in respect of the new processing arrangements;
- Discussions with the independent directors and senior management of NZRC.