

Contact Energy Limited

INDEPENDENT ADVISER'S REPORT

Prepared by

GRANT SAMUEL & ASSOCIATES LIMITED

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2 November 2001

G R A N T

S A M U E L

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2 November 2001

The Directors
Contact Energy Limited
Level 1, Harbour City Tower
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WELLINGTON

Dear Directors

Takeover Offer by Edison Mission Energy

1 Introduction

On 12 October 2001, Edison Mission Energy ("EME"), through a wholly owned subsidiary Mission Energy Five Star Holdings Limited, issued a notice under the provisions of the Takeovers Code of a proposed offer (the "EME Offer") to acquire the shares not already owned by it in Contact Energy Limited ("Contact Energy"). EME holds 51.2% of the voting capital of Contact Energy.

The notice specified a consideration of \$3.85 per share payable in cash. On 2 November 2001, the consideration was increased to \$4.25 per share. A condition of the EME Offer is that the consideration would be reduced by the equivalent of the amount of any dividend paid by Contact Energy prior to the offer closing. The offer is also conditional upon acceptances being received under the offer to take EME's total shareholding (including shares already held) to 90% or more of the total number of Contact Energy voting shares on issue, excluding shares held by Contact Energy as treasury stock. This condition cannot be waived.

The EME Offer constitutes a full offer under Rule 8 of the Takeovers Code. Accordingly, the Directors of Contact Energy not associated with EME (the "Independent Directors") have engaged Grant Samuel & Associates Limited ("Grant Samuel") to prepare the Independent Adviser's Report required under Rule 21 of the Takeovers Code setting out an assessment of the merits of the EME Offer to assist Contact Energy shareholders in forming an opinion on the EME Offer. Grant Samuel is independent of Contact Energy and EME and has no involvement with, or interest in, the outcome of the proposed acquisition of the remaining shares in Contact Energy by EME.

2 Evaluation of the Merits of the EME Offer

2.1 The EME Offer is Fair and Reasonable

In Grant Samuel's opinion the full underlying value of Contact Energy shares is in the range of \$4.11 to \$4.51 per share. This value is the aggregate of the estimated market value of Contact Energy's operating divisions, the realisable value of other non-trading assets and external borrowings as at 30 September 2001. This value is made up of:

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Contact Energy – Summary of Value (\$million)		
	Value Range	
	Low	High
Generation and energy trading	2,888.9	3,097.7
Retail and metering	283.6	311.1
Fuels trading	162.0	171.4
Corporate overheads	(363.3)	(322.9)
Other assets	23.1	33.0
Enterprise value¹	3,019.6	3,253.3
Net debt as at 30 September 2001	(652.0)	(652.0)
Equity value	2,367.6	2,601.3
Number of shares outstanding (million)	576.6	576.6
Equity value per share (\$)	\$4.11	\$4.51

The principal valuation methodology applied to derive the estimated value of each division is discounted cash flow analysis. This methodology allows the valuer to take into account expected fluctuations in cash flow due to gas and electricity price paths, planned generation developments, varying lives of assets and other variables.

The value is for 100% of Contact Energy and includes a premium for control. As the EME Offer of \$4.25 per share falls within Grant Samuel's value range it is fair. As the EME Offer is fair it is also reasonable.

The EME Offer represents:

- relatively high multiples of the past year revenue and earnings. While Contact Energy has reasonable growth prospects, the valuation takes these into account through the high earnings multiples and through the growth assumptions explicitly incorporated into the DCF analysis; and
- a premium of 23% to the closing price of \$3.45 per share on the day prior to announcement of the EME Offer. This premium is broadly consistent with the premiums for control observed in takeovers.

2.2 Other Factors

In assessing the merits of the EME Offer Grant Samuel considered the following factors:

- In Grant Samuel's opinion under a full takeover offer EME should pay a price equivalent to the full underlying value to the minority shareholders despite already owning a controlling shareholding. The support for this opinion is two fold:
 - the Takeovers Code's compulsory acquisition provisions apply when the threshold of 90% of voting rights has been reached. In this instance the Takeovers Code seeks to avoid issues of premiums or discounts for minority holdings by providing that a class of shares is to be valued as a whole with each share then being valued on a pro-rata basis. In other words, the minority shareholder is to receive the full underlying value. Grant Samuel believes that the appropriate test for fairness under a full takeover offer is the full underlying value, pro-rated across all shares. If EME is successful in its takeover offer, the Takeovers Code requires the price for the remaining shares, under compulsory acquisition, to be the same as that paid under the EME Offer. The underlying rationale is that it would be inconsistent for one group of shareholders, those selling under

¹ It is important to note that the low and high enterprise values do not equal the sum of the low operating business values and high operating businesses values, as the scenarios are not mutually exclusive. For example, a low gas price scenario (with a corresponding lowering of the long term electricity price path) will have a negative impact on the generation and energy trading value, but a small positive impact on the retail and metering value. The enterprise values shown are the lowest and highest values respectively derived from a selection of scenarios.

compulsory acquisition, to receive a different price under the same offer than those who accepted the offer earlier; and

- under the Takeovers Code it is a requirement that the acquisition of more than 20% of the voting rights in a "code" company can only be made under an offer to all shareholders unless the shareholders otherwise give approval. As a result, a controlling shareholding (generally accepted to be no less than 40% of the voting rights) cannot be transferred without the acquirer making an offer, on the same terms and conditions, to all shareholders. Prior to the introduction of the Takeovers Code some market commentators held the view that, where a major shareholder had a controlling shareholding, any control premium attached only to that shareholding. One of the core foundations of the Takeovers Code is that all shareholders be treated equally. In this context any available control premium is now available to all shareholders under a takeover offer regardless of the size of their shareholding, or the size of the offeror's shareholding at the time the offer is made. Accordingly, Grant Samuel is of the opinion that not only because shares acquired under compulsory acquisition will receive a price equivalent to full underlying value, but because the control premium is now available to all shareholders, the share price under a takeover offer should be equal to or exceed the pro-rated full underlying value of the company;
- there are no other significant shareholders in Contact Energy other than EME. However, institutional shareholders own approximately 20% of the outstanding shares in Contact Energy and therefore their acceptance or rejection of the EME Offer will materially affect the success of the offer;
- EME has a shareholding in Contact Energy of 51.2% at the time of the EME Offer and has control of Contact Energy. This creates an impediment to an alternative offer. Under the Takeovers Code any offer to acquire the EME shareholding must be made to all shareholders and the acceptances pro-rated across all accepting shareholders unless the shareholders not associated with EME approve otherwise by ordinary resolution. It is unlikely that EME would accept less than full underlying value for its shareholding in Contact Energy. It would also be unlikely to sell only a proportion of its shareholding. Accordingly, for any alternative offer to be successful it would need to represent or exceed the full underlying value of Contact Energy and would most likely be conditional upon achieving acceptances of not less than 90%;
- Contact Energy is a reasonably liquid share. The EME Offer has a minimum threshold of 90%, at which point the compulsory acquisition provisions of the Takeovers Code come into effect. Unless EME received acceptances sufficient to take its shareholding to 90% and the EME Offer lapses, the liquidity in Contact Energy shares will not change;;
- in the absence of the EME Offer or any other takeover offer, Contact Energy shares, under current market conditions are likely to trade at prices below the EME Offer. In the three months prior to the announcement of the EME Offer, Contact Energy shares traded in the range of \$3.10 to \$3.50 per share, with a weighted average over the period of \$3.30 per share. Contact Energy released its results for the year ended 30 September 2001 on 24 October 2001. The reported profit after tax of \$130.7 million was 35% higher than the previous year. In the absence of the EME Offer the strong financial performance may have positively impacted the Contact Energy share price. Contact Energy's draft business plan estimates earnings for the year ending 30 September 2002 at a lower level of profitability with gradual improvements over the following four years. However, future profits and cash flows are inherently uncertain;
- the EME Offer was announced after the end of the financial year and before the final dividend for the year had been declared. The offer price is subject to a downwards reduction of the same amount of any final dividend paid prior to the offer closing. This is a usual condition given the timing of the offer. The valuation of Contact Energy has also assumed that no final dividend with respect to the year ended 30 September 2001 is paid prior to the EME Offer closing. The timing of the offer has permitted the unaudited results for the year ended 30 September 2001 to be released to shareholders and included in this report;

- the EME Offer is subject to an extensive range of conditions, which would not generally be expected given the fact that EME has been the controlling shareholder of Contact Energy for over two years. One of the conditions requires EME's bankers to agree to provide the debt finance to acquire the remaining shares in Contact Energy. Given EME's knowledge of Contact Energy it could have been expected that finance would have been arranged prior to the EME Offer being made. Grant Samuel has no knowledge of whether or not this condition will be satisfied;
- EME increased its initial offer price from \$3.85 to \$4.25 per share. If EME is not successful in achieving the 90% holding in Contact Energy at this price it may or may not choose to increase its offer. Grant Samuel has no reason to believe that EME will increase its offer again. If EME chooses to increase its offer the increased value will be available to all shareholders even if they have already accepted the \$4.25 per share offer. Attaining the 90% threshold is the only condition contained in the EME notice of offer which cannot be waived. If the condition is not satisfied, EME may be content to "creep" towards the 90% level by buying a further 5% per annum from the market or by making partial offers, in all probability at prices reflecting a portfolio interest in Contact Energy. The fact that EME has elected to make a full takeover offer rather than pursuing the creep or partial offer approach suggests that it wishes to gain access to the cash flows of Contact Energy in the near term rather than over a number of years. This view is consistent with the conditions in the EME Offer regarding financing; and
- as with any equity investment there are risks associated with the market in which the company operates. The electricity industry is considered attractive to investors because of its perceived lower risk and reasonably consistent earnings growth. The retail and generation sectors in which Contact Energy operates have characteristics which create higher levels of uncertainty and risk than the electricity distribution sector:
 - there is considerable uncertainty in the future price path for wholesale electricity. As the over capacity in the generation market reduces, the likely result is for prices to trend upwards. Despite the expectation of a rising trend in electricity prices, at least until major new capacity comes on stream, there is likely to be considerable volatility in prices due to the impact of hydrological conditions on South Island hydro generators. The winter of 2001 demonstrated this volatility due to low lake storage and inflows. Contact Energy, a net generator with thermal generating capability was a net beneficiary from the very high prices in July and August;
 - Contact Energy is exposed to gas fuel supply risk in the long term due to its current reliance on depleting Maui gas for supplying its gas fired plant. Maui gas is expected to be fully depleted by 2009-2011, with Contact Energy's contract to purchase expiring in 2009. Contact Energy will need to negotiate a new gas supply contract, probably with the manager of the Pohokura gas field. However, the price for that gas is not known at this time, other than it is widely expected to be higher than the low priced gas sourced from the Maui field;
 - the Clutha hydro system is located in a geologically unstable area. Considerable work has been undertaken to stabilise the land around Lake Dunstan behind the Clutha dam. In addition, silt is building up in Lake Dunstan near Cromwell which could have an impact on the generation at Clutha dam in the future;
 - the Kyoto Protocol is seeking to reduce greenhouse gas emissions. Contact Energy could be subject to charges for emissions from its Otahuhu B and Te Rapa thermal plants and in the future from Otahuhu C. The full extent of the charges may not be able to be passed on in electricity prices reducing the profitability of thermal plants;
 - Otahuhu B is a single shaft generation plant which could suffer a major outage significantly reducing Contact Energy's generation output and revenue. A prolonged outage occurring after the constructors warranty period expires in December 2002, while unlikely, could have a significant short term negative impact on Contact Energy's earnings if the reserve capacity provided by New Plymouth is not available;

- a proportion of Contact Energy's customer base is geographically isolated and susceptible to very high electricity costs in the event there is a constraint at a remote node;
- Contact Energy is unable to immediately pass on high wholesale electricity prices to the majority of its retail customers. Over time it is able to increase retail electricity prices, however its prices must remain competitive with other electricity retailers; and
- Contact Energy has no influence over the prices charged by distribution companies (both electricity and gas) and seeks to pass all increases on to the customer. As Contact Energy is the interface with the consumer the need to recover increased lines charges has constrained the margins earned from the electricity retail business in the past and may do so in the future.

2.3 Acceptance or Rejection of the EME Offer

Acceptance or rejection of the EME Offer is a matter for individual shareholders based on their own views as to value and future market conditions, risk profile, liquidity preference, portfolio strategy, tax position and other factors. In particular, taxation consequences will vary widely across shareholders. Shareholders will need to consider these consequences and, if appropriate, consult their own professional adviser.

The EME Offer has a minimum acceptance condition that is designed to ensure that EME can exercise the compulsory acquisition provisions of the Takeovers Code and obtain 100% of Contact Energy. It has therefore demonstrated a desire to own 100% of Contact Energy. It would be open for shareholders to reject the EME Offer in the hope that EME would increase its offer or make a subsequent higher offer. However, EME has already increased the offer price and there is no evidence that it would be prepared to increase the price again.

3 Other Matters

Grant Samuel's opinion is made as at the date of this letter and reflects circumstances and conditions as at that date.

This letter is a summary of Grant Samuel's opinion. The full report and appendix from which this summary has been prepared is attached and should be read on conjunction with and as an integral part of this summary.

This letter is for the benefit of the holders of Contact Energy shares (other than EME and its associated persons). The report should not be used for any other purpose other than as an expression of Grant Samuel's opinion as to the merits of the EME Offer.

Yours faithfully
GRANT SAMUEL & ASSOCIATES LIMITED

Grant Samuel + Associates

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Appendix

1. Comparable Energy Companies Sharemarket Ratings

1 Terms of the Takeover Offer

On 12 October 2001, Edison Mission Energy ("EME"), through a wholly owned subsidiary Mission Energy Five Star Holdings Limited, issued a notice under the provisions of the Takeovers Code of a proposed offer (the "EME Offer") to acquire the shares not already owned by it in Contact Energy Limited ("Contact Energy"). EME holds 51.2% of the voting capital of Contact Energy.

The notice specified a consideration of \$3.85 per share payable in cash. On 2 November 2001, the consideration was increased to \$4.25 per share. A condition of the EME Offer is that the consideration would be reduced by the equivalent of the amount of any dividend paid by Contact Energy prior to the offer closing. The offer is also conditional upon (inter alia):

- acceptances being received under the offer to take EME's total shareholding (including shares already held) to 90% or more of the total number of Contact Energy voting shares on issue, excluding shares held by Contact Energy as treasury stock. This condition cannot be waived;
- no event occurring or likely to occur which, in the opinion of EME's lenders providing finance for the EME Offer, has or may have a material adverse effect on the operations, financial position, assets or liabilities (including contingent liabilities) of Contact Energy, EME or any of their respective subsidiaries, compared with the position as at 12 October 2001 or the future prospects of Contact Energy or the EME subsidiary making the EME Offer or any of their respective subsidiaries;
- no material adverse change occurring:
 - in national, international political, financial or economic conditions or national or international banking, capital or equity markets;
 - in the regulatory environment governing the New Zealand electricity industry; or
 - in currency exchange rates affecting New Zealand,

which in the opinion of EME's lenders, is so material and adverse as to make it impractical or inadvisable for them to proceed with the financing of the EME Offer;

- no occurrence of:
 - any act of God, war, sabotage, terrorism, riot, insurrection, civil commotion, national emergency (whether in fact or law), strike, lock-out or other industrial disturbance, accident, uncontrollable delay in transportation, inability to obtain any necessary materials, equipment, facilities or qualified employees, or the effect of any applicable laws, orders, rules or regulations and any other matter beyond the reasonable control of EME's lenders which prevents or may prevent EME's lenders from financing this offer, or
 - an outbreak of hostilities, whether war is declared or not, which prevents or may prevent EME's lenders from financing this offer, excluding:
 - (i) peacekeeping functions involving Australia, New Zealand, the United States of America or the United Kingdom; and
 - (ii) limited involvement at the request of the United Nations, the North Atlantic Treaty Organisation or the European Union;
- no receiver or manager of the assets or property (or any part thereof) of Contact Energy or any of its subsidiaries being or being likely to be appointed and no proceedings are or are likely to be commenced and no resolution having been or being likely to be passed to appoint a liquidator in respect of Contact Energy or any of its subsidiaries.

2 Scope of the Report

2.1 Requirements of the Takeovers Code

The Takeovers Code came into effect on 1 July 2001, replacing the New Zealand Stock Exchange ("NZSE") Listing Rule requirements governing the conduct of listed company takeover activity in New Zealand. The Takeovers Code seeks to ensure that all shareholders are treated equally and on the basis of proper disclosure, are able to make an informed decision as to whether to accept or reject an offer.

The Takeovers Code prescribes the responsibilities and obligations for both EME and Contact Energy as "bidder" and "target" respectively. Contact Energy's response to the EME Offer, known as a "target company statement", must contain the information prescribed in the Second Schedule of the Takeovers Code, and is to include an Independent Adviser's Report (or summary thereof). If only a summary report is included within the target company statement, the full report must be available to Contact Energy shareholders for inspection upon request.

2.2 Purpose of the Report

The EME Offer constitutes a full offer under Rule 8 of the Takeovers Code. Accordingly, the Directors of Contact Energy not associated with EME (the "Independent Directors") have engaged Grant Samuel & Associates Limited ("Grant Samuel") to prepare the Independent Adviser's Report required under Rule 21 of the Takeovers Code setting out an assessment of the merits of the EME Offer to assist Contact Energy shareholders in forming an opinion on the EME Offer. Grant Samuel is independent of Contact Energy and EME and has no involvement with, or interest in, the outcome of the proposed acquisition of the remaining shares in Contact Energy by EME.

Grant Samuel has been approved by the Takeovers Panel to prepare the Independent Adviser's Report. The report is for the benefit of the holders of Contact Energy shares (other than EME and its associated persons). The report should not be used for any purpose other than as an expression of Grant Samuel's opinion as to the merits of the EME Offer.

2.3 Basis of Assessment

Rule 21 of the Takeovers Code requires the Independent Adviser to assess "the merits of an offer". The term "merits" has no definition either in the Takeovers Code itself or in any statute dealing with securities or commercial law in New Zealand. The Takeovers Panel has not issued guidelines as to the interpretation of the term "merits".

Under the compulsory acquisition rules of the Takeovers Code, where the 90% threshold is reached as a result of a Takeovers Code offer and 50% of the shares not held by the offeror have been acquired as a result of the offer, the price for the remaining shares is set at the price offered. In other circumstances the compulsory acquisition price is a cash price specified by the dominant owner and certified as "fair and reasonable" by an independent adviser. The Takeovers Code provides no guidance as to the definition of "fair and reasonable".

In Australia, the phrase "fair and reasonable" appears in legislation and the ASX Listing Rules as a basis for assessing takeover and similar transactions. The terms "fair" and "fair and reasonable" are both widely used tests or frameworks for analysing corporate transactions. However, there is very little useful legal or regulatory guidance as to the meaning of these terms.

The Australian approach draws a distinction between "fair" and "reasonable" in relation to takeover offers. A fair offer is one that reflects the full market value of a company's businesses and assets. A takeover offer that is in excess of the pre-bid market prices but less than full value will not be "fair" but may be "reasonable" if shareholders are otherwise unlikely in the foreseeable future to realise an amount for their shares in excess of the bid price. This is commonly the case in takeover offers where the bidder already controls the target company. In that situation, the minority shareholders have little prospect of receiving full value from a third party offeror unless the controlling shareholder is prepared to sell its controlling shareholding.

Reasonableness is said to involve an analysis of other factors that a shareholder might consider prior to accepting a takeover offer such as:

- the offeror's existing shareholding;
- other significant shareholdings;
- the liquidity of the market for the target company's shares;
- any benefits through achieving 100% ownership
- any special value of the company to the offeror; and
- the likelihood of an alternative offer.

A takeover offer could be considered "reasonable" if there were valid reasons to accept the offer notwithstanding that it was not "fair". A fair offer will always be reasonable but a reasonable offer will not necessarily be fair.

For the purposes of this report, Grant Samuel is of the opinion that an assessment of the merits of a transaction is a broader test than "fair and reasonable" and encompasses a wider range of issues associated with a takeover offer. Grant Samuel has assessed the merits of the EME Offer after taking into consideration the following factors:

- the estimated value of Contact Energy;
- the existing shareholding structure of Contact Energy and the controlling shareholding of EME;
- the likelihood of an alternative offer and alternative transactions that could realise fair value;
- the likely market price and liquidity of Contact Energy shares in the absence of the EME Offer;
- other disadvantages for Contact Energy shareholders of accepting the EME Offer;
- the timing and circumstances surrounding the EME Offer;
- the likelihood of the EME Offer being declared unconditional, including:
 - EME's bankers agreeing to provide the necessary finance facilities; and
 - EME reaching or exceeding 90% of Contact Energy's voting capital (treasury stock is excluded for this purpose);
- the likelihood that the EME Offer does not achieve the 90% compulsory acquisition threshold and EME does not increase its offer; and
- the risks of the Contact Energy business.

Grant Samuel's opinion on the merits of the EME Offer are considered as a whole and that selecting portions of the analyses or factors considered by it, without considering all the factors and analyses together, could create a misleading view of the process underlying the opinion. The preparation of an opinion is a complex process and is not necessarily susceptible to partial analysis or summary.

2.4 Approach to Evaluation of Fairness

May 2001 Offer

In May 2001 EME gave notice under the NZSE Listing Rules of its intention to acquire up to 49,013,888 shares in Contact Energy in the range of \$2.90 to \$3.25 per share by way of a stand in the market or by private treaty. EME was an Insider as defined by the NZSE Listing Rules, and accordingly was permitted to acquire up to 5% of the shares on issue of Contact Energy in any 12 month period. In this instance EME wished to acquire approximately 8.5% of the shares on issue and therefore was required to issue a notice of a Restricted Transfer in relation to the proposed transactions. In accordance with the NZSE Listing Rules the Independent Directors of Contact Energy commissioned an Appraisal Report from Grant Samuel in respect of the notice of Restricted Transfer. The terms of the Restricted Transfer meant that EME could acquire shares from any Contact Energy shareholders provided the price was within the stated range. EME was not obliged to buy any shares and no shareholder was obliged to sell. Effectively EME was buying shares at or above the prevailing market price. The market price is the price for a portfolio interest and, as such, is less than the full underlying value of Contact Energy shares that might be reflected in the price paid in a full takeover offer. The Appraisal Report was required only because EME was an Insider. In Grant Samuel's opinion, the primary issue in the evaluation of the May 2001 offer was whether

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there were any reasons why the prevailing share price was not a reliable indication of the fair market value of a portfolio interest in Contact Energy. This question addressed the issue of whether EME, as an Insider, had information not available to other shareholders. Other relevant issues that also had to be considered in the context of such a Restricted Transfer were whether there were any reasons why it would not be reasonable for EME to acquire shares at sharemarket prices. EME succeeded in acquiring 43,056,250 shares, increasing its shareholding in Contact Energy to 51.2%.

On 1 July 2001 the Takeovers Code came into force and the takeover provisions of the NZSE Listing Rules under which the May 2001 offer was made were removed for all listed companies. The Takeovers Code has imposed new conditions on partial offers where the offeror holds 20% or more of the shares on issue. EME's May 2001 offer, if it had been subject to the Takeovers Code, would have had to have been made to all shareholders and the shares acquired pro-rated across all accepting shareholders, and have had a minimum acceptance level sufficient to take EME's total shareholding above 50% of Contact Energy. Alternatively EME could have used another provision of the Takeovers Code and sought shareholder approval to acquire a specified number of shares from one or more persons. The Takeovers Code provides no guidance as to the price that should be paid for partial bids other than that the price must be fair and reasonable between different classes of securities. Contact Energy has only one class of listed securities. In effect the only substantial change in conditions applying to partial bids as between the Listing Rules and Takeovers Code is that an offer under the Takeovers Code must be made to all shareholders.

In Grant Samuel's opinion the price to be paid under partial bids should equal or exceed the fair market value of a portfolio interest in a listed company.

The EME Offer

The EME Offer is for all the outstanding shares in Contact Energy and accordingly is a full takeover. In Grant Samuel's opinion the price to be paid under a full takeover should reflect the full underlying value of the company. The support for this opinion is two fold:

- the Takeovers Code's compulsory acquisition provisions apply when the threshold of 90% of voting rights has been reached. In this instance the Takeovers Code seeks to avoid issues of premiums or discounts for minority holdings by providing that a class of shares is to be valued as a whole with each share then being valued on a pro-rata basis. In other words, the minority shareholder is to receive the full underlying value. Grant Samuel believes that the appropriate test for fairness under a full takeover offer is the full underlying value, pro-rated across all shares. If EME is successful in its takeover offer, the Takeovers Code requires the price for the remaining shares, under compulsory acquisition, to be the same as that paid under the EME Offer. The underlying rationale is that it would be inconsistent for one group of shareholders, those selling under compulsory acquisition, to receive a different price under the same offer than those who accepted the offer earlier; and
- under the old takeover provisions of the NZSE Listing Rules a controlling shareholding could have been transferred to another party without reference to the remaining shareholders. Under the Takeovers Code it is now a requirement that the acquisition of more than 20% of the voting rights in a "code" company can only be made under an offer to all shareholders unless the shareholders otherwise give approval. As a result, a controlling shareholding (generally accepted to be no less than 40% of the voting rights) cannot be transferred without the acquirer making an offer, on the same terms and conditions, to all shareholders. Prior to the introduction of the Takeovers Code some market commentators held the view that, where a major shareholder had a controlling shareholding, any control premium attached only to that shareholding. One of the core foundations of the Takeovers Code is that all shareholders be treated equally. In this context any available control premium is now available to all shareholders under a takeover offer regardless of the size of their shareholding, or the size of the offeror's shareholding at the time the offer is made. Accordingly, Grant Samuel is of the opinion that not only because shares acquired under compulsory acquisition will receive a price equivalent to full underlying value, but because the control premium is now available to all shareholders, the share price under a takeover offer should be equal to or exceed the pro-rated full underlying value of the company.

Grant Samuel has considered whether the EME Offer price is fair by comparing the consideration of \$4.25 per share with an assessment of the full underlying value of Contact Energy shares. A takeover offer consideration that falls within or exceeds a valuation range estimated on this basis is fair. The estimated value was determined by:

- aggregating the ungeared valuations of each of the Contact Energy operating divisions;
- deducting an adjustment for the costs of the corporate head office;
- adding the value of other assets and non-trading liabilities; and
- deducting the net debt of Contact Energy.

The operating divisions have been separately valued at fair market value, which is defined as the estimated price that could be realised in an open market over a reasonable period of time assuming that potential buyers have full information.

The analysis attributes the full control value to each individual operating division. The aggregate therefore represents the full underlying value of Contact Energy. The resulting value exceeds the price at which Grant Samuel expects portfolio interests in Contact Energy would trade in the sharemarket in the absence of the EME Offer.

The aggregate value of the operating divisions should match or exceed the amount that would be realised in an orderly realisation of assets. The value would be likely to exceed the amount that would ultimately be distributed to shareholders to the extent that tax liabilities and any other costs are crystallised in the realisation.

2.5 Sources of Information

The following information on Contact Energy was used and relied upon in preparing this report:

- annual reports of Contact Energy for the years ended 30 September 1998, 1999 and 2000;
- half year reports for the six months ended 31 March 1999, 2000 and 2001;
- unaudited results and management discussion for the period ended 30 September 2001;
- draft 2002 business plan;
- recent brokers' reports on Contact Energy;
- Contact Energy's strategic modelling tool;
- board papers from September 2000 through to September 2001;
- review of the proposed Valley Power investment; and
- other confidential reports and working papers prepared by Contact Energy management.

Publicly available information, including the following was also utilised:

- New Zealand Electricity Market ("NZEM") prices from M-co Limited;
- various reports from the Ministry of Economic Development regarding the energy industry;
- various reports from the Market Surveillance Panel of the NZEM; and
- other information on the electricity and gas sectors and public listed energy companies, including annual reports, interim financial results, industry studies, brokers' reports and information regarding the prospective financial performance of those companies.

Grant Samuel has also held discussions with and obtained information from senior management of Contact Energy.

2.6 Limitations and Reliance on Information

The report is based upon financial and other information provided by Contact Energy. Grant Samuel has considered and relied upon this information. Grant Samuel believes that the information provided was reliable, complete and not misleading and has no reason to believe that any material facts have been withheld.

The information provided has been evaluated through analysis, enquiry, and review for the purposes of forming an opinion as to the underlying value of Contact Energy. However, in such assignments time is limited and Grant Samuel does not warrant that these inquiries have identified or verified all of the matters which an audit, extensive examination or 'due diligence' investigation might disclose.

The time constraints imposed by the Takeovers Code are tight. This timeframe restricts the ability to undertake a detailed investigation of Contact Energy. In any event, an analysis of the merits of the offer is in the nature of an overall opinion rather than an audit or detailed investigation. Grant Samuel has not undertaken a due diligence investigation of Contact Energy. In addition, preparation of this report does not imply that Grant Samuel has audited in any way the management accounts or other records of Contact Energy. It is understood that, where appropriate, the accounting information provided to Grant Samuel was prepared in accordance with generally accepted accounting practice and in a manner consistent with methods of accounting used in previous years.

An important part of the information base used in forming an opinion of the kind expressed in this report are the opinions and judgement of the management of the relevant enterprise. Grant Samuel held discussions with the management of Contact Energy and that information was also evaluated through analysis, enquiry and review to the extent practical. However, it must be recognised that such information is not always capable of external verification or validation.

The information provided to Grant Samuel included forecasts of future revenues, expenditures, profits and cash flows of Contact Energy prepared by the management of Contact Energy. Grant Samuel has assumed that these forecasts were prepared fairly and honestly based on information available to management at the time and within the practical constraints and limitations of such forecasts. It is assumed that the forecasts do not reflect any material bias, either positive or negative. Grant Samuel has no reason to believe otherwise.

However, Grant Samuel in no way guarantees or otherwise warrants the achievability of the forecasts of future profits and cash flows prepared by the management of Contact Energy. Forecasts are inherently uncertain and this is particularly so in case of the energy sector. They are predictions by management of future events that cannot be assured and are necessarily based on assumptions, many of which are beyond the control of management. The actual future results may be significantly more or less favourable.

2.7 Current Market Conditions

The opinion of Grant Samuel is based on economic, market and other conditions prevailing at the date of this report. Such conditions can change significantly over relatively short periods of time.

3 Energy Industry in New Zealand

3.1 Electricity Industry

Deregulation of the electricity sector in New Zealand began in 1987 with the corporatisation of the state-owned monopoly electricity generator, Electricity Corporation of New Zealand ("ECNZ"). Corporatisation of the locally owned retail utilities followed through the Electricity Companies Act 1993 and, in 1994 Transpower (the national grid operator) was separated from ECNZ. In 1996, ECNZ was split into two state-owned enterprises, the "old" ECNZ and Contact Energy. In early 1999, the Crown sold a 40% cornerstone shareholding in Contact Energy to EME subject to the sale of the remaining 60% of shares through an initial public offering ("IPO") in May 2001. The IPO occurred at a price of \$3.10 per share.

As a result of the Electricity Industry Reform Act 1998 (the "Reform Act"), the electricity sector is now divided into three distinct parts:

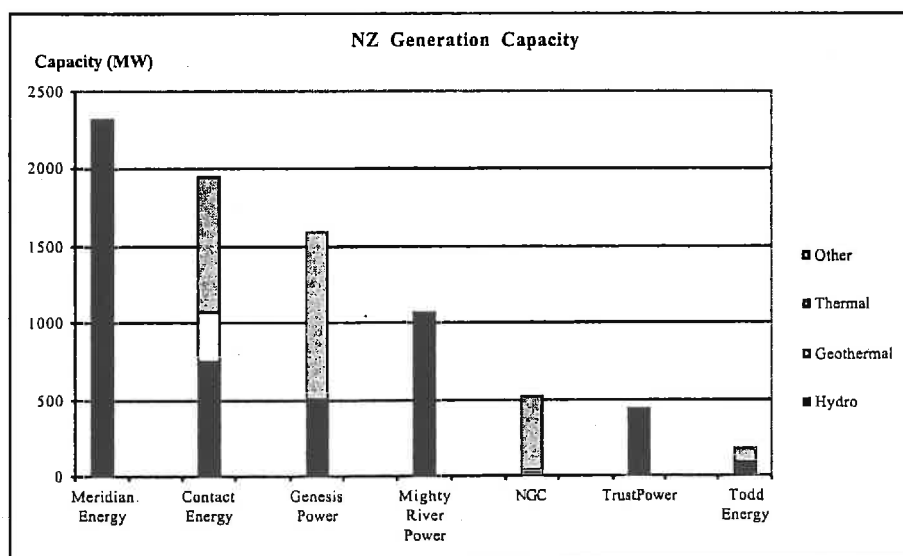
- (i) Retail/Generation – These businesses generate or purchase electricity and sell electricity to the NZEM or end user. Retail/generation businesses are prohibited from owning or operating networks to distribute the electricity to the end-use customer.
- (ii) Transmission – Transmission refers to the national high voltage distribution of electricity to local low voltage networks. This function is provided by the state-owned enterprise, Transpower.
- (iii) Distribution – Network electricity businesses are the local low voltage distribution companies that deliver electricity from the Transpower high voltage network to the end use customer. Network electricity businesses charge retail businesses for the service of delivering electricity from the point of purchase to the end-use customers.

In late 1999, the Government announced a Ministerial Inquiry into the Electricity Industry. The recommendations of the Inquiry were released in June 2000 and included the rationalisation of current industry arrangements under a single self-governing structure and the introduction of industry accepted pricing methodology for transmission and retailer/distribution contracts. The Electricity Industry Act, which was passed into law in August 2001 detailed those items which required legislation and provides a framework for a regulated environment which would be introduced if the industry fails to respond to the guiding principles outlined in a Policy Statement. The industry has reacted to the Government's initiatives and has established:

- a steering group to implement a customer complaints resolution system, including a Complaints Commissioner and codes of practice; and
- an Electricity Governance Establishment Committee made up of representatives from the existing codes being the NZEM, Metering and Reconciliation Industry Agreement ("MARIA") and the Multilateral Agreement on Common Quality Standards ("MACQS") plus Transpower and consumers are charged with the establishment of a single industry governance structure.

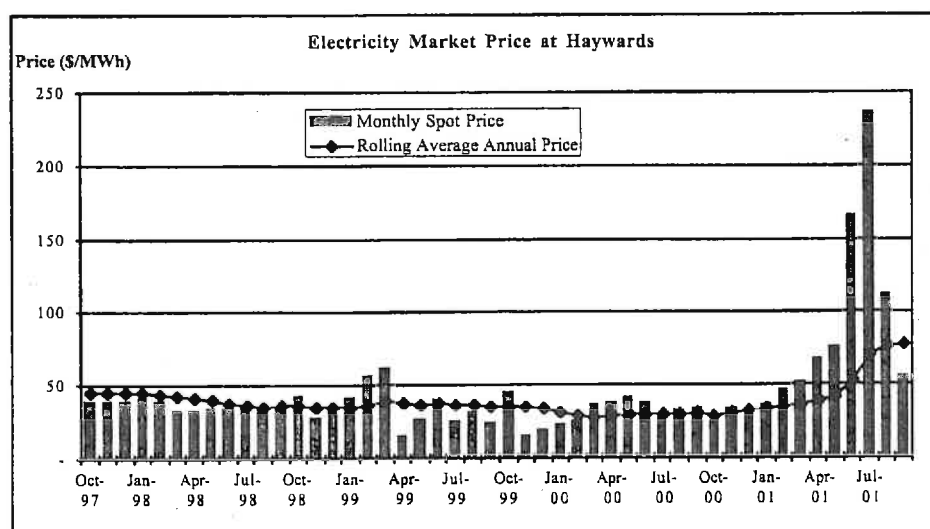
3.1.1 Electricity Generation

The electricity generation industry in New Zealand is dominated by hydro generation, accounting for approximately 65% of total generation capacity. However, in recent years new gas fired thermal and geothermal stations have been developed to meet increased demand. These new stations, together with the separation in 1999 of ECNZ into three separate state-owned enterprises (Mighty River Power, Meridian Energy and Genesis Power) have significantly increased competition in the sector. As demonstrated in the following graph, Meridian Energy and Contact Energy are the largest generators in New Zealand followed by Genesis Power and Mighty River Power:



The NZEM is a competitive wholesale electricity market, established in 1996. It involves the sale and purchase of physical electricity on a half-hourly basis. Generators offer electricity into the market, while large users and retail electricity companies bid to purchase electricity. Subject to transmission constraints, generators with the lowest prices offered get dispatched to meet the demand of the users and retail electricity companies.

Prices are discovered at 244 different points of connection to the grid (nodes). The market prices at three nodes are commonly quoted – Otahuhu (in Auckland), Haywards (near Wellington) and Benmore (in South Canterbury) and the bulk of hedge contracts are written at one of these three nodes. Wholesale and hedge prices can differ between nodes reflecting natural losses of electricity in the transmission network. The following graph maps the average monthly NZEM price at Haywards since October 1997:

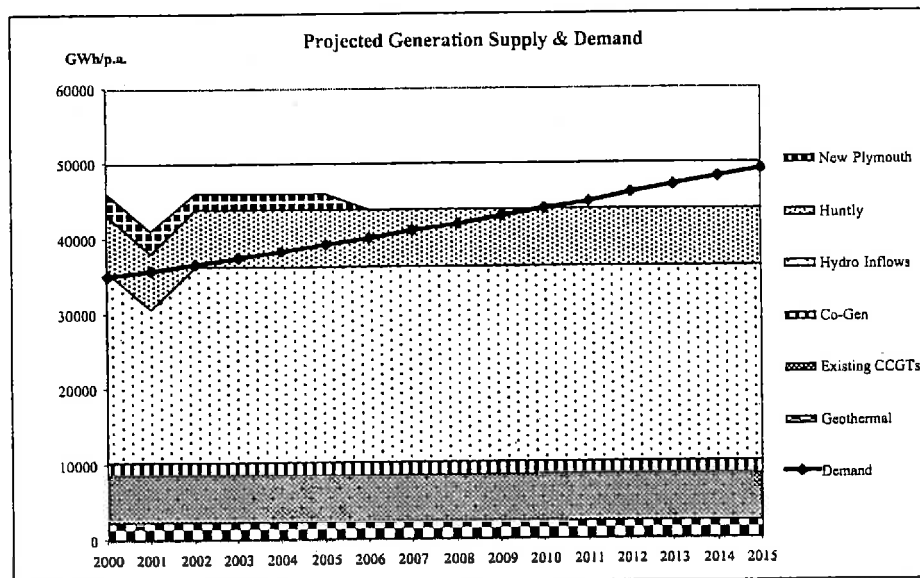


The wholesale electricity market has gone through a transition phase since the split up of ECNZ in April 1999 with prices initially being volatile although generally low due to competition for market share. Since the beginning of 2001 average prices have begun to rise but with the market continuing to display considerable volatility from time to time, caused by climatic and hydrology factors, failure of major generation plant or transmission circuits and the pricing behaviour of the generation companies.

The NZEM is non-mandatory allowing matched generation and purchases to bypass it. However 75% of volumes passes through the NZEM and therefore the prices are still a reflection of the equilibrium of total supply and total demand at any point in time.

The prices at which generators offer electricity into the market should reflect the short run marginal cost of production for each station. However they also take into account location factors (which equate to transport costs), differing contractual structures (particularly for gas thermal stations), market share objectives and the option value of holding spare capacity against the failure of plant elsewhere in a generator's portfolio. Further, hydro generation is priced to take account of the scarcity value of stored water and the uncertainty around the future inflows. This can have the effect of lowering hydro generator's offers in wet years or raising them considerably above thermal short run marginal cost in dry periods as was seen during the winter of 2001.

Under normal hydrological conditions, the generation industry operates in a state of over-supply as depicted in the graph below which illustrates hydro generation capacity based on median hydro lake inflows. With many "must run" thermal and geothermal stations and a large amount of low marginal cost hydro generation, market prices for electricity have tended to remain lower than those forecasted by analysts. In Grant Samuel's opinion this state of over-supply is expected to last for at least three to five years under normal hydrological conditions after allowing for several committed generation developments currently underway. The largest of these is the expansion of the Manapouri tailrace tunnel by Meridian Energy which will add 170 MW of capacity.



A number of new generation developments have been foreshadowed by generators including Contact Energy, Natural Gas Corporation ("NGC"), Genesis Power and Meridian Energy. Some of the proposals are for large new plants. In Grant Samuel's opinion, only one major new generation development will be required in the short term unless existing capacity is displaced. Contact Energy and Genesis Power have both been granted resource consents for combined cycle gas turbine projects though Contact Energy's consent is subject to an appeal. Final decisions to go ahead have not been made for either. Genesis Power, following the acquisition of approximately 290,000 customers from NGC, is now believed to be in the process of seeking tenders for a new combined cycle plant for its Huntly site. However, for any new significant generation development to be economically feasible, electricity prices through the NZEM or otherwise contracted need to be at or above the long run marginal cost ("LRMC") of supply. In general terms, LRMC will be the cost of production of the most recently installed plant where supply of electricity exceeds demand. Up until recently the LRMC of operating new plants has been kept artificially low because of the availability of low priced Maui gas. However, with Maui gas forecast to

deplete from 2006 onwards, prices for gas from new discoveries such as Pohokura are expected to rise, with a consequent increase in LRMC for any gas fired generation plant commissioned after that time. As a result, over the medium term market prices for electricity are expected to progressively increase and ultimately exceed the threshold required to support the entry of new generation.

The Government is in the process of developing its greenhouse gas policy in preparation for ratification of the Kyoto Protocol in 2002. Ratification will commit the country to reducing its net emissions of greenhouse gases over the period 2008 to 2012 to the net level achieved by the country in 1990. While the principal source of New Zealand's emissions is the agriculture sector, the growth of such emission levels in that industry has been minimal since 1990. Methanex (methanol production) and Comalco (aluminium smelter) are also significant producers of carbon emissions. Thermal electricity generation is also a contributor to New Zealand's emissions, producing between 5,000 and 6,000 kt of CO₂ annually. In 1990, approximately 3,500 kt of CO₂ was generated, a relatively low volume reflecting in part the high level of rainfall in that year and the corresponding higher than average use of hydro generation.

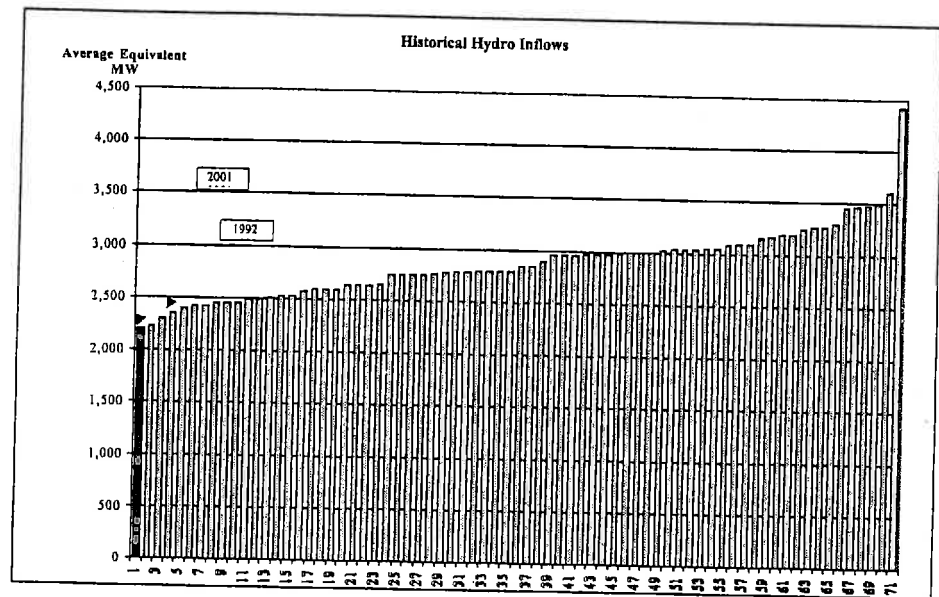
If the Kyoto Protocol is ratified, the Government must show significant progress toward the target emission levels by 2005 and therefore it is possible that an additional cost related to the level of carbon produced will fall on generators in the near future. Any increase in the cost of thermal generation is likely to increase the market price of electricity, particularly during times when thermal generation sets the marginal price. Ultimately any increased cost is likely to be passed on to electricity consumers. In this context, those generators with a higher proportion of thermal generation are likely to be disadvantaged relative to those with little thermal generation.

The Winter 2001 Power Crisis

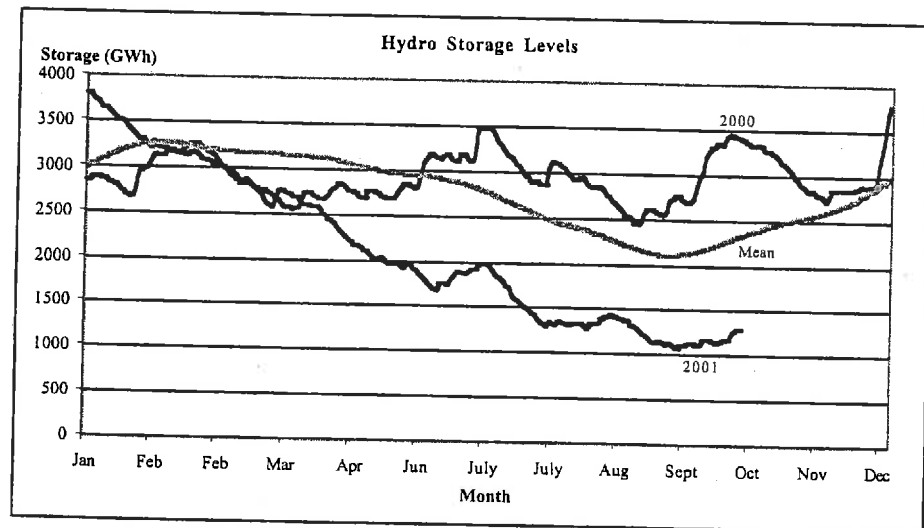
The New Zealand electricity market with its high dependence on hydro generation generally shows a correlation with water inflows into storage lakes and electricity prices. Prices tend to be lower when storage is high with regular inflows, and tend to rise during periods of lower than average storage levels and low inflows. This situation is largely caused by the fact that New Zealand has very small hydro storage reservoirs by international standards. The South Island hydro lakes which account for 70% of total storage have approximately 10 weeks of storage, whereas by comparison, hydro systems in Canada, Australia and Norway can have up to three years of storage. Total national storage is 3,760 GWh or 11% of annual electricity consumption. As a result, New Zealand cannot rely on stored water to maintain generation, and is very dependent on regular inflows into the hydro catchments.

At the start of January 2001 overall national hydro storage was 92% full and 119% of average. The South Island hydro lakes started the 2001 year with above mean levels of storage, but for the period from then until 31 July, inflows were the lowest in 71 years of record keeping, being 22% below the average historic inflows for the same period as the graph below depicts:

- 11 -

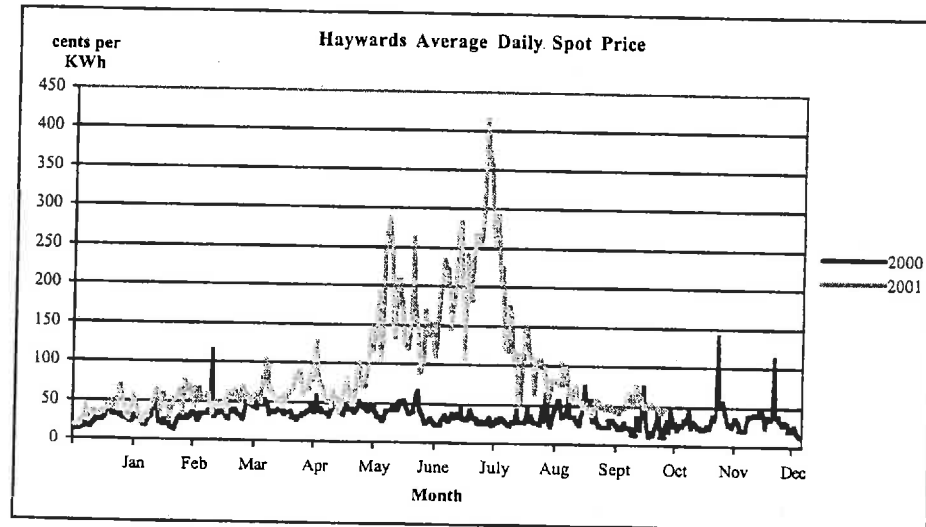


From being very full at the beginning of the 2001 year, storage levels fell to the lowest levels in 22 years (other than 1992) by the beginning of winter.



At the same time higher electricity demand and an early cold snap resulted in record levels of overall demand levels for electricity during the early part of winter. In aggregate terms demand for June and July was 5.8% higher than in the same period in 2000. This compares with average annual growth in demand of 3.2% over the previous four years. The combination of low inflows and high demand is estimated to have been the equivalent of nearly 2,400 GWh change compared with the previous winter period. This is equivalent to the loss of production of all nine of the Waikato River hydro stations for the period. As a consequence there was a significant adverse impact on hydro storage levels. By early winter all available generation was operating but, as the situation deteriorated, prices rose encouraging mothballed generation to be restored and a wide range of other initiatives to be undertaken by generators and retailers. Eventually the storage situation deteriorated to the point where the Government decided to work with industry in an effort to ensure voluntary electricity savings were achieved staving off the possibility of involuntary savings. The joint Government-industry target was to reduce demand by 10%.

The combination of low inflows, declining hydro storage and increased demand resulted in spot electricity prices sustaining record high levels five to six times above normal levels in June and July 2001, as evidenced in the graph below.



As winter progressed a combination of demand savings, a natural decline in winter demand and the approach of spring with the likelihood of rain saw prices fall away.

The high prices benefited thermal generators in particular as the higher operating cost thermal plants were run at capacity to alleviate the pressure on hydro capacity. Thermal ran at much greater levels than previous years with units committed to run earlier than usual in response to prices. Once all thermal generation was fully committed prices had to rise sharply if more generation was to be found or other initiatives undertaken to get through the winter without supply shortages occurring. Hydro generators in particular priced their generation at levels that meant they wouldn't be called so they could protect the declining hydro reserves. As a result prices did rise further and those other initiatives began to occur. The thermal generators were a beneficiary of this and a similar pattern would be expected if the same scenario occurred. A further feature of the winter 2001 is that there was no loss of generation through the high priced period. Were that to be the case in another such year prices may go higher again and supply shortages would be much more likely unless there was a greater demand response (e.g. temporarily scaling back supply to energy intensive industries).

There was some criticism from major electricity users that the high spot prices were at levels considerably above the marginal cost of thermal production for an extended period. The generators response has been to say that once all reserve thermal plant was running, the only remaining means of bringing supply and demand into balance was to elicit a strong demand-side reduction. Accordingly, spot rises rose to levels required to make such measures economic, supporting the view that the electricity market has functioned satisfactorily and the high spot prices are the normal response to a potential supply side shortage.

Other possible contributing factors to the crisis suggested by some commentators were:

- transmission constraints limiting the export of electricity out of Taranaki and across the HVDC link;
- lack of transparency in market transactions i.e. bid pricing and dispatched generation;
- vertical integration of generation and retail customers of the three state owned companies, Mighty River Power, Genesis Power and Meridian Energy; and
- barriers to effective demand side management raised by the rules and structure of the electricity market.

On 10 September 2001, the Minister of Energy announced a review of the way New Zealand's electricity system functioned over the winter. The review calls for submissions and cross-submissions from interested parties. Following this review Cabinet will make decisions on whether further changes are required to the electricity sector.

3.1.2 Retail Electricity

Electricity retailing companies (often referred to as "retailers") purchase electricity from the NZEM or direct from generators and on-sell the electricity purchased to end-use customers. The spot market price for electricity fluctuates depending on supply and demand, while the majority of consumers are charged a fixed daily charge and a flat variable rate. Retailers often hedge a portion of their purchases at contracted prices to provide some certainty of margin.

Retailers are charged by electricity distribution companies for the delivery of electricity to those consumers, and by meter owners for the use of the electricity meter at the customers' premises (and in some cases, meter reading services also).

Retail tariffs vary across the country according to geographic location, local distribution network charges, and the impact of nodal electricity pricing.

Following the introduction of the Reform Act there was a scramble by the electricity retail companies to acquire customer bases from those electricity companies that had chosen to sell their retail business and become network companies. Only TransAlta New Zealand ("TANZ"), TrustPower and King Country Energy chose to retain their energy retailing businesses. They were joined by the three state-owned generators, Genesis Power, Meridian Energy and Mighty River Power (using the Mercury Energy and First Electric brands) and other participants, Contact Energy, NGC and Todd/Pacific Hydro (through the brand FreshStart). In October 2000 NGC completed a 100% acquisition of TANZ forming the largest energy retailer in the country. NGC rebranded the combined retail businesses "On Energy".

One of the main risks facing retail businesses is loss of customers. Customers can change electricity suppliers freely in order to obtain the best tariffs. Initially there were large numbers of customers changing supplier with customer churn exceeding 10% per annum for the first two years of the competitive market. However, the rate of churn is falling as price discounting amongst retailers declines.

The winter 2001 power crisis highlighted a structural risk that electricity retailers face as a result of having an imbalance between access to hedged price electricity supply and demand for electricity from their customer base. As an example, it appears that On Energy's generation capacity was only sufficient to meet approximately 45% of its own customers electricity requirements, leaving the company exposed to the spot market for the balance of the requirement as it was unable or unwilling to secure hedge contracts to cover the risk. As the hydro storage levels diminished going into winter 2001 and the spot electricity price escalated On Energy suffered significant financial losses. When the company announced a retail price tariff increase, large numbers of its customer base started switching to retailers offering lower tariffs. The situation became financially unsustainable and On Energy sold its entire electricity customer base to Genesis Power and Meridian Energy, incurring a writedown of \$255 million in doing so. The Commerce Commission has initiated a review of these sales due to potential concerns over market dominance. It is generally expected that over the medium term the retail market will consolidate to three or four large retailers, with good economies of scale and strong brands.

Four of the major remaining retailers (Genesis Power, Meridian Energy, Mighty River Power and Contact Energy) are approximately matched depending on the situation or are net generators, i.e. they own generation capacity greater than their own customers' demand. The fifth retailer, Trust Power, is a net retailer. Partially as a result of the winter electricity crisis, generators are seeking to write new long term electricity contracts at higher prices

and it is generally expected that retail prices will tend to move upwards over the medium to long term to reflect the cost of new generation, regardless of variations in hydro storage conditions.

The risks in the spot electricity market as a whole have always been asymmetric with the median (most quoted) spot price is noticeably less than the mean (average) spot price. This asymmetry favours retailers with net generation surpluses who can consequently benefit from periods of high spot prices.

In response to Government pressure and the passing of the Electricity Industry Act the retail electricity sector has engaged with other sector participants to ensure that rules are developed to ensure that the guiding principles laid down by Government are met as far as possible. The principles in particular seek to promote and enhance competition wherever possible, and where it is not, seek outcomes that mirror, as far as possible, those that would apply in competitive markets. In Grant Samuel's opinion the outcome of the Government's review of the winter 2001 events may have some risk for vertically integrated retailers (i.e. those with generation capacity substantially meeting retail demand) because of criticism of the alleged market power demonstrated by such companies during the power crisis.

3.1.3 Electricity Metering

In the majority of cases, retailers own the electricity meters in their incumbent regions. Most retailers have established separate metering divisions, which lease meters, provide meter reading services and maintenance services to their own retail division and other electricity retailers.

The quality of a large number of the mass market meters in New Zealand is generally regarded as low, with some meters being over 40 years old. The industry has adopted a regime referred to as MARIA, which provides a system to measure the quantity of electricity sold, identify the buyer and seller, and match this information with the correct contract, all of which are overseen by an appointed National Reconciliation Manager.

Codes of practice under MARIA govern the quality standards of electricity meters and dictate the timeframes by which the standards for various meters must be met. High voltage and large capacity meters were required to be MARIA compliant by October 2000, but standard domestic meters are not required to be compliant until 1 April 2015. Some industry participants estimate that the costs to achieve and verify MARIA compliance will be significant, especially to meet the 2015 deadline for the domestic meters.

3.1.4 Electricity Transmission

Transpower owns and operates the high voltage electricity transmission system in New Zealand. It contracts with generators regarding the connection, dispatch and other services provided to connect generators to its network and contracts with distribution companies regarding the connection of their local networks to the national system.

While over 60% of New Zealand's electricity is produced in the South Island, nearly 70% of electricity demand is in the North Island. Transpower has installed a high voltage direct current ("HVDC") link between the islands primarily to deliver electricity northward.

As part of recent sector reforms the Commerce Commission has been given the power to determine Transpower's pricing methodology and to impose price controls on it in certain circumstances.

3.2 Gas Industry

The electricity industry in New Zealand has gone through a series of regulatory changes since 1987. In contrast the gas industry has remained relatively unregulated. However, the industry participants to the most extent have sought to "self-regulate" following the precedents set in the electricity industry. However in March 2001 the Government announced a review of the gas industry to assess

its overall efficiency and the regulatory environment within which it operates. Consultants to assist the Government were appointed in April and a discussion paper is expected to be released prior to the end of 2001, followed by the issue of policy options for consideration by Government.

3.2.1 Sources of Gas

The New Zealand gas industry is based around the distribution of natural gas and LPG extracted from the gas and oil fields primarily situated in and around Taranaki. The majority of gas is sourced from the Maui field (the gas rights of which are owned by the Maui Mining Companies), though all of the production from the field is channelled to the Crown and then onsold under three contracts – to Methanex, Contact Energy and NGC. Smaller developed gas fields include Kapuni, McKee, TAWN, Mangahewa and Kaimiro/Ngatoro.

The Maui field is located 35 km off the West Coast of Taranaki and is the largest producing gas and condensate field in New Zealand, supplying approximately 75% of the country's total gas requirement. At 1 January 2000, after 21 years of production, the Maui field still contained 61 per cent of New Zealand's remaining estimated oil reserves and 60 per cent of gross gas reserves (excluding the recent Pohokura discovery).

Sales of Maui output are governed by a single contract entered into between the Crown and the Maui Mining Companies. This take or pay contract for Maui gas ("Maui Gas Contract") and surrounding commercial relationships have been a significant factor in the evolution of the natural gas market in New Zealand. Under the contract, the Crown is entitled to purchase gas up to a specified maximum daily quantity ("MDQ") with a reasonable endeavours obligation to supply gas in excess of MDQ. The Maui Mining Companies cannot sell gas to any third party if such sales would affect the contractual requirement to supply the Crown. In turn, the Crown is required to pay for specified annual contract quantities ("ACQs") regardless of whether or not it takes delivery of the gas. The contract expires in 2009. Any quantities of gas paid for but not taken by the Crown in any year ("prepaid gas"), can be taken in any subsequent contract year without further payment, provided the Crown has taken its take or pay quantity for that year. Any remaining prepaid gas at the end of the contract is forfeited to the Maui Mining Companies without a refund.

In 1990, the Crown put in place three significant back to back contracts for the onwards sale of its contractual uplift of Maui gas. The contract purchasers are:

- NGC under take or pay terms, expiring in 2009;
- Contact Energy under take or pay terms, expiring in 2009; and
- Methanex under take or pay terms, expiring in 2009, but with delivery committed only to 2005.

These contracts largely mirror the Crown's obligations under the Maui Gas Contract. Thus, the three purchasers themselves have separate take or pay obligations for specified MDQs and minimum ACQs. In addition to using their gas uplift for their own purposes, NGC and Contact Energy are the major gas wholesalers in the New Zealand market. Methanex uses Maui gas primarily as feedstock for its petrochemical plants in Taranaki and is the largest single end user of gas in New Zealand.

The purchase price for Maui gas under the Maui Gas Contract is based upon an initial price of 37 cents per million British thermal units established in 1975, adjusted annually by approximately half the rate of inflation for the preceding year. This adjustment mechanism has led to a fall in the real value of the gas price year by year compared with other sources of energy, thereby encouraging the consumption of Maui gas. The price of gas under the three back to back contracts is based on that of the Maui Gas Contract but incorporates an Energy Resources Levy and in the case of NGC and Contact Energy, a margin for the Crown.

Up until 2000, Contact Energy and NGC had failed to uplift their full ACQs of Maui gas, leading to each having holdings of prepaid gas. However, each has since begun accessing prepaid gas having entered contracts to sell large volumes of gas to third parties.

As a result of this situation, market prices for delivered gas have been low, discouraging exploration for and development of alternative gas supplies. Under the Maui Gas Contract, MDQs and ACQs peaked during the 1988 to 1997 period. Thereafter, contractual commitments decline in line with physical expectations for the field, such that by 2007 – 2008 production is expected to be approximately 40 per cent of 1997 levels, at a time when total demand for gas in New Zealand is forecast to continue to grow.

It is possible that the Maui field will still contain economically recoverable gas at the expiration of the Maui Gas Contract in 2009. If this is the case, the contract will continue, provided that no party has given the required 12 months notice of termination. If the contract does expire, the Maui Mining Companies are free to sell gas to third parties at market prices, as they are currently free to do provided their ability to deliver ACQs and MDQs is not compromised.

The Pohokura discovery is the first gas find of any significance since Maui was developed, but is still relatively small by Maui standards. This field and other proven gas reserves are estimated to meet approximately ten years of post-Maui demand.

The onshore Rimu oil field has also been proven to hold small quantities of gas. Swift Energy is currently building processing facilities. Genesis Power recently announced an agreement with Swift Energy to purchase 40 PJ of gas from this field over a 10 year period.

3.2.2 Gas Transmission and Distribution

NGC owns and operates all of New Zealand's high pressure gas transmission lines, except the Maui Gas pipeline, owned by the Maui Mining Partners, but which is operated by NGC.

Gas is reticulated through localised low pressure networks to end-use customers. Companies owning gas distribution networks are subject to a less stringent information disclosure regime than that applying to electricity distributors. Unlike the electricity industry, there is no regulation requiring the ownership separation of gas distribution networks and gas retailing businesses. However, some gas retailers voluntarily separated their distribution and retail functions at the same time as the separations in the electricity industry.

3.2.3 Retail Gas

Selected retailers of gas in New Zealand also retail electricity (e.g. Contact Energy and Fresh Start). However there are also specialist gas retailers such as e-gas and Auckland Gas Company. NGC (through On Energy), Nova Gas and Wanganui Gas are each retailers and distributors of gas.

The benefits of one energy supplier for both gas and electricity are being marketed in New Zealand, with retailers beginning to offer discounts for purchasing both products from one retailer.

4 Profile of Contact Energy

4.1 Background & History

Contact Energy was formed in 1995 when the Government separated the assets of the state-owned monopoly generator ECNZ into two state-owned enterprises, Contact Energy and ECNZ.

In May 1999, the Government sold a cornerstone 40% shareholding in Contact Energy to EME. EME purchased its stake for \$1.2 billion, equivalent to approximately \$5.00 per share. The remaining 60% of Contact Energy was sold through an IPO at a price of \$3.10 per share. The IPO was the largest ever undertaken in New Zealand and was regarded as being highly successful with many households purchasing shares for the first time. The IPO attracted over 200,000 investors and Contact Energy continues to have the largest number of shareholders of any New Zealand company listed on the NZSE. Contact Energy also maintains a listing on the Australian Stock Exchange as a foreign exempt company. Contact Energy is the fourth largest New Zealand company by market capitalisation on the NZSE.

EME

EME is a wholly owned subsidiary of the US energy company Edison International. Edison International is one of the world's largest international developers of power stations with total generation capacity in excess of 10,000 MW. Edison International operates in many countries, including the US, Spain, Turkey, Australia, Thailand, Indonesia, Philippines, Italy and United Kingdom. Edison International also owns Southern California Edison.

Edison International's purchase of the cornerstone stake in Contact Energy represented several firsts for the company:

- first investment in another publicly listed company;
- first retail energy investment; and
- first investment involving significant gas assets.

By virtue of a share buyback undertaken by Contact Energy of approximately 4.5% of its issued capital during 2000 and early 2001, and through the purchase by EME of further shares on market, EME had increased its shareholding on Contact Energy to 42.7% by April 2001. On 30 April 2001 EME issued a notice of a restricted transfer in which it proposed to increase its holding in Contact Energy through the purchase of up to a further 8.5% of the issued capital at prices in the range of \$2.90 to \$3.25 per share. On 5 June 2001 EME announced it had acquired 43,056,250 shares (being 7.5%) as a result of the restricted transfer. EME then acquired 6,000,000 shares on 26 June 2001 and 300,297 on 27 June 2001, giving it a total interest in Contact Energy of 48.9% based on total issued shares (or 51.2% based on issued shares excluding treasury stock).

4.2 Principal Business and Activities

Contact Energy is one of New Zealand's most diversified electricity and gas utilities. It is the second largest electricity generator with a capacity of 1,940 MW, or approximately 25% of total New Zealand capacity. Contact Energy is also one of the largest energy retailing companies, with approximately 387,000 electricity and 107,000 gas customers. Contact Energy is a significant gas wholesaler with contracted rights to approximately 30% of New Zealand's natural gas reserves, principally from the Maui field.

4.2.1 Electricity Generation and Trading

Generation Assets

Contact Energy's generation assets consist of the following:

Contact Energy – Summary of Generation Assets			
Station	Type	Net Capacity (MW)	Year of Commissioning
<i>New Zealand</i>			
Otahuhu A	Diesel	40	1968
Otahuhu B	CCGT ¹	380	1999
Te Rapa	Co-generation	44	2000
Ohaaki	Geothermal	104 ²	1989
Poihipi	Geothermal	55 ³	1997
Wairakei	Geothermal	165	1958
New Plymouth	Gas	400	1976
Clyde	Hydro	432	1992
Roxburgh	Hydro	320	1956
Total New Zealand		1,940	
<i>Australia</i>			
Oakey ⁴	Gas and distillate	282	1999

Until May 2001 Otahuhu A had been mothballed to a state where it had no generation capacity but provided voltage support to the high voltage transmission system. However, the two 20 MW diesel turbines were recommissioned during winter 2001 to provide additional security in the event of a major planned outage. They have yet to be required.

The Otahuhu B combined cycle gas fired plant has high efficiency factors compared with older thermal stations and is designed to operate in a base load⁵ mode. It benefits from being located in Auckland, the centre with the largest consumption of electricity in New Zealand.

The Te Rapa gas fired cogeneration plant was commissioned during 2000. The plant is located adjacent to the Fonterra milk processing facility at Te Rapa and supplies electricity to the facility and the local network and steam to the plant. The station supplies the high demand of the peak dairy season in summer, and typically has surplus capacity to offer to the wholesale electricity market during the higher demand winter months.

Ohaaki, Wairakei and Poihipi are geothermal plants located near Taupo in the central North Island. They are reliable, low marginal cost plants suitable for base loading with a high load factor. The steam reservoir supplying Ohaaki is depleting faster than expected and the station which has a design capacity of 104 MW currently operates at only 42 MW. Contact Energy will shortly commence a "deep drilling" programme at Ohaaki to access further steam to increase capacity to sustain production at 50 MW. The Poihipi station was acquired in early 2000. Steam supply to the 55 MW station is restricted due to resource consents and the station is running below capacity. Contact Energy intends to utilise steam from its adjacent Wairakei steamfield to operate the plant at full capacity.

The New Plymouth plant was originally commissioned in 1976 as an oil fired station with five turbines of 116 MW each. It was converted to burn gas but remains, relative to newer thermal plants, inefficient. New Plymouth has been retained to run when market conditions are favourable. One 116 MW turbine was decommissioned in 1999 and a further is to be mothballed by 2004 in accordance with an agreement between Contact Energy and

¹ Combined cycle gas turbine.

² Ohaaki capacity is restricted by steam supply and currently operates at a capacity of 42 MW.

³ Poihipi capacity is currently restricted to 37 MW.

⁴ Contact Energy has a 25% interest and is the operator.

⁵ Base load is the term used when a generation station is run round the clock to meet minimum electricity demand.

Greenpeace in order to reduce carbon emissions. The remaining four turbines have each been derated to 100 MW in acknowledgment of the age of the facility. Throughout the past cold and dry winter, New Plymouth operated consistently adding value as prices firmed. In doing so it proved its value as both a back up to Contact Energy's own portfolio as well as an important source of reserve capacity for the whole system.

Contact Energy's two hydro stations (Clyde and Roxburgh) are located on the Clutha river catchment system in the South Island. Clyde is the newest large hydro station in New Zealand.

On its formation Contact Energy inherited a range of older stations from ECNZ, although it has since developed or purchased the Otahuhu B, Poihipi and Te Rapa stations to increase its generation capacity. During the same period, Contact Energy decommissioned and sold the associated assets from the Whirinaki diesel and Stratford gas fired stations and mothballed parts of the New Plymouth and Otahuhu A stations.

Contact Energy's New Zealand generation portfolio is the most diverse in the country in terms of plant type, fuel and location.

Contact Energy – New Zealand Generation Capacity by Fuel Type		
Fuel Type	Capacity (MW)	% of Total
Gas	824	43.4%
Geothermal ⁶	324	17.0%
Hydro	752	39.6%
Total	1,900⁷	100.0%

The mix of fuel sources and geographic locations means that Contact Energy is strategically well placed to react to the various demand, fuel and weather scenarios, in comparison to its competitors. In particular, Contact Energy enjoys less exposure to dry-year hydro risk than its competitors - Meridian Energy and Mighty River Power which are both majority hydro generators and Genesis Power is approximately 30% hydro.

The nature of Contact Energy's portfolio with its geographical spread and different fuel sources lends it considerable flexibility. This flexibility is an important feature in revenue optimisation enabling management of the combined portfolio including retail shape hedge contracts and plant outage risks.

Electricity Transmission

Contact Energy has a number of arrangements with Transpower, governing:

- provision by Transpower of the assets which connect Contact Energy's generation stations to the national grid;
- the grid operating services provided by Transpower (e.g. black start functionality, instantaneous reserves⁸, and others);
- payments to Contact Energy for supply of voltage support and black start functionality; and
- an injection contract in respect of Contact Energy's use of the transmission grid.

Each of these arrangements is an individual contract negotiated between Contact Energy and Transpower rather than arrangements for services provided under Transpower's posted terms and conditions.

⁶ Assuming Ohaaki design capacity of 104 MW.

⁷ Ignores Otahuhu A's 40 MW capacity

⁸ Instantaneous reserve is a "back up" capacity required in the event that any unit unexpectedly fails to generate electricity when requested to by the dispatcher.

Currently industry governance rules are being rationalised. Under the new arrangements a single independent Electricity Governance Board will be formed which in regard to transmission will assume the role of negotiating rules with regards to Transpower services. Rules are currently being developed which will apply across the industry and a pricing methodology will be agreed between the Electricity Governance Board (or one of its committees) and Transpower. In the event that agreement cannot be reached, the Commerce Commission will make binding decisions on these issues. This change is expected to come into effect in approximately six months. Contact Energy personnel have been active in the development of the new arrangements.

Contact Energy regularly monitors the "instantaneous reserve market" and has some ability to offer into this market at lower prices than other participants if it believes necessary to protect itself from a high charge, which may arise through its contract with Transpower. Transpower purchases the required instantaneous reserve through the market and on charges the larger generators connected to the grid.

Electricity Trading

Contact Energy's Electricity Trading group's primary function is to maximise the company's net electricity revenue while maintaining control of volatility of the combined earnings stream. Essentially there are three ways in which price is established for electricity generated:

- the wholesale electricity market – a highly volatile outlet with varying prices depending on supply (hydrology, station availability, transmission constraints, etc) and demand (ambient temperature, seasonality, time of day etc). As there is no maximum price, Contact Energy is at times able to achieve very high spot prices for its generation output. At the other extreme prices can be often near zero providing little revenue for base load generation which cannot be easily "turned off" for short periods;
- hedge contracts – Contact Energy has hedge contracts in place with other electricity retailers and large industrial customers to provide bulk electricity at fixed prices usually for periods of one to five years. While these contracts provide a secure revenue stream, the margin over expected average price is usually quite low; and
- retail customer base – Contact Energy's electricity retail customer base provides a relatively stable volume market. However, there are still significant fluctuations in load demand at times depending primarily on ambient temperature and the time of day.

The Electricity Trading group modulates generation production to match the demand while seeking to optimise revenue flows.

Contact Energy uses a value at risk approach to establishing the optimal hedge cover or balance between total generation and net generation. Hedge terms vary depending on Contact Energy's view of spot prices. Historically this has meant that the company usually has around 70% of expected generation for a year ahead hedged either through its own retail business or locked in under these financial contracts/contracts for differences. The remaining production is exposed to the volatile wholesale market, providing Contact Energy with significant upside in its earnings during periods of high electricity prices as was experienced in the last winter, and during some downside in periods of depressed market conditions.

Opportunities

Contact Energy has identified several new generation opportunities so that it is able to respond quickly when demand projections indicate that further generation capacity will be required in New Zealand. These include:

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- a site adjoining the Otahuhu A and B plants has been identified as being suitable for building a second combined cycle gas turbine plant. Contact Energy has obtained the necessary resource consents for a station of up to 400 MW capacity, although an appeal has been lodged against the air discharge consent in regard to CO₂ emissions. The company is now actively seeking a secure gas supply for the station, prior to making a final decision to proceed with the project. The decision to proceed will be influenced in part by if and when Genesis Power proceeds with its planned 400 MW combined cycle plant at Huntly, and the actual growth in demand for electricity. While Contact Energy has announced that it expects to have its plant operational by 2005, Grant Samuel believes that if Genesis Power proceeds with its plant at Huntly; commissioning of Otahuhu C will be likely to take place between 2005 and 2007,
- a longer term option for a further combined cycle plant is a development to replace the New Plymouth station. This site has the advantage of being close to gas supplies and port facilities though it is currently exposed to transmission constraints;
- Contact Energy is also seeking new resource consents for a 80-100 MW CCGT plant to be located at the Whirinaki site. This will provide the company with a further generation opportunity should an economic natural gas supply be located on the East Coast;
- Contact Energy has recently been granted resource consents to develop a 15 MW station on the Tauhara geothermal field, which is close to its Wairakei steamfield. Grant Samuel has been advised that the field is expected to have sufficient steam to support a 50 MW power station for at least 50 years. No decision has been made on the type of development but options include the sale of steam to direct users in the area, a generation project that utilises second hand plant acquired as part of the Poihipi station purchase, or a power project using new plant;
- a project to install a 10 MW binary plant to utilise waste heat on the Wairakei site is on hold until such time as the economics of the station can justify the capital expenditure. Resource consents have been gained for this investment;
- resource consents to develop a further geothermal station of approximately 50 MW utilising the Mokai field will be sought by Contact Energy. The company owns land overlying the field adjacent to the privately owned geothermal station at Mokai; and
- further long term opportunities include the possibility of extending Contact Energy's hydro scheme on the Clutha by the addition of a number of smaller facilities upstream of the Clyde dam. While Contact Energy owns some land in the area, it is acknowledged that such a development is likely to be over 10 years from commencing.

Contact Energy has indicated that it will only develop further significant generation capacity when market conditions in relation to price and demand justify the investment.

Risks

Contact Energy faces a number of ongoing business risks with its generation operations. Contact Energy's greatest electricity business uncertainty is the future price path for electricity. Prior to the winter of 2001 the industry assumed that the market was still experiencing over capacity of generation and prices were consistent with this position. As a result of this winter it has become apparent that there is little over capacity. As a consequence, Grant Samuel considers it is likely that average wholesale prices will continue to trend upwards until significant new capacity comes on stream.

The largest volume risk relates to hydrological conditions. Hydro generation has accounted for 40 to 50% of Contact Energy's total output over the period since the company has been established. Generation output is at risk if a dry period in the South Island reduces inflows

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and storage levels in the Clutha catchment area. However, wholesale electricity prices typically rise in response to short falls in supply and Contact Energy has the flexibility to increase thermal generation (through New Plymouth) as utilised throughout last winter so long as it is able to acquire gas to supply the station. Contact Energy has followed a policy of not retaining firm gas supply for New Plymouth to avoid the fixed costs associated with such supply. However, as the Maui contract nears the end of its term the flexibility reduces and Contact Energy will become more reliant on making short term arrangements to fuel New Plymouth when market conditions allow.

Contact Energy is exposed to long term fuel supply risk in respect of its current reliance on Maui gas for supplying its North Island thermal plant. Maui gas is widely believed to be fully depleted by 2009 to 2011 or possibly earlier, with Contact Energy's contract to purchase expiring in June 2009.

Up until 2000 there were no substantial economic replacement gas fields for Maui. However, since then the offshore Pohokura field has been proven to have significant reserves. While this field, which is operated by Shell, is the most likely new field to be developed the gas is yet to be placed on the market.

The Otahuhu B station involves relatively new combined cycle generation technology. The problems with the station to date have been costly and time consuming to rectify, although Contact Energy has been covered by warranty provisions and liquidated damages received from the gas turbine manufacturer. The three year availability guarantee (which commenced at commissioning) with the manufacturer expires in December 2002, however a separate maintenance agreement runs for a further three years to the 50,000 hour outage. Contact Energy faces some limited risk that technology problems will arise after this period.

Contact Energy faces the possibility of geological risk relating to the Clutha hydro system. Considerable stabilising works have had to be undertaken around Lake Dunstan and the current status and the land slide performance is monitored and reported to an International Review Panel on a regular basis. Further, there is some build up of silt upstream of the hydro lakes. Silt trapped at the head of Lake Roxburgh may affect water levels and will be an important issue in the consenting process. As part of an agreement between Contact Energy and the Crown, Contact Energy is contributing \$6.8 million towards a flood protection programme for Alexandra and the surrounding areas. Contact Energy has also committed to continue flushing Lake Roxburgh to mitigate the Alexandra flood risk.

Contact Energy is required to renew resource consents under the Resource Management Act for both the Clutha river hydro system and the Wairakei geothermal station. Applications have been filed for both and these are being processed. Some issues have been identified in relation to the renewals (e.g. operating levels of Lake Hawea, quality of discharge water entering the Waikato River etc) which the company believes will be able to be managed.

Contact Energy has significant thermal generation capacity in New Zealand. As such, the impact of any future charges/costs relating to production of greenhouse gas emissions could be significant. However, it is likely that the market price of electricity will increase as thermal generators seek to recover such costs. Contact Energy's Otahuhu B and Te Rapa thermal stations have allowed it to decommission less efficient thermal stations (Whirinaki, Stratford and parts of New Plymouth and Otahuhu A), which produced higher levels of CO₂ emissions per unit of electricity generated than the new stations. Contact Energy's geothermal stations also emit a low level of CO₂, but as geothermal systems naturally emit CO₂ there may be little additional cost to Contact Energy.

Otahuhu B is one of the largest unit generators in New Zealand and consequently shares the bulk of Transpower's instantaneous reserve with the other large units - NGC's Taranaki station and the Cook Strait HVDC link (which is a pseudo generator in Transpower's pricing regime). At times when the other large units are not operating, the cost of instantaneous reserves is much greater. However, Contact Energy has sources of

instantaneous reserve (through its New Plymouth and Te Rapa stations) and therefore has some ability to manage its net costs of reserves in the market. As further new large units are developed (Genesis Power's Huntly and Contact Energy's Otahuhu C developments are considered the most likely) more parties will share the cost, thereby reducing each party's exposure.

As a large unit generator Otahuhu B incurs an "incident" fine from Transpower if it has an unplanned outage.

Some of Contact Energy's older thermal stations have a restricted ability to meet all of the technical specifications required by Transpower. There is a small risk that at some stage in the future additional charges will be created to reflect the cost to other generators of these deficiencies.

4.2.2 Fuels Trading

Contact Energy is a significant participant in the wholesale natural gas market in New Zealand. It holds the rights to a significant portion of the gas produced from Maui via its contract with the Crown and to all of the gas currently produced from the TAWN fields in Taranaki. Contact Energy also purchases gas from NGC, though the parties recently announced that this contract will now terminate on 30 September 2002. Contact Energy is committed to gas purchase contracts that include "take or pay" obligations, under which it must pay for an annual contract quantity irrespective of demand.

Contact Energy supplies gas for use in its generation stations and to its retail and industrial customer base. In addition, Contact Energy sells gas to competing generators and to a number of wholesale customers. In total between 80 and 90% of Contact Energy gas is ultimately used for electricity generation. A breakdown of sales volumes is shown below:

Contact Energy – Gas Sales by Volume (PJ)				
		Year ending 30 September		
		1999	2000	2001
Internal use -	generation	27.1	31.4	37.7
-	retail/industrial customers ⁹	5.3	12.0	15.8
External sales		46.1	40.7	48.1
Total sales		78.5	84.1	101.6

Contact Energy's largest external customers include Methanex, Shell (for on sale to NGC's Taranaki station), Genesis Power (for use at the Huntly power station), NGC (for on sale to its retail customer base) and the New Zealand Co-operative Dairy Company (now part of Fonterra).

During the 2000 year Contact Energy entered into an option agreement with Fletcher Challenge Energy (now part of Shell) under which Shell has the option to purchase up to 10 PJ of gas in each of the 2001 and 2002 financial years from Contact Energy. Shell did exercise the option for the second but not the first annual period.

The volume of gas required to be purchased by Contact Energy under its Maui contract varies each year and Contact Energy attempts to match this volume under its sale arrangements. Management of its take or pay obligation is a key value driver for Contact Energy. A contract to supply 130 PJ of gas to Methanex signed in September 1999 has reduced Contact Energy's potential take or pay deficit and should ensure that the company has a relatively good balance between its gas purchases and sales. In the year ending 30

⁹ In April 2000, Contact Energy purchased Orion's remaining gas customers (being a group of large industrial customers). Contact Energy had a wholesale gas sale agreement with Orion and by purchasing the customers outright these gas sales have changed from being "external sales" to "internal use" in this table.

September 2000, Contact Energy used 11.5 PJ of its accumulated prepaid gas, and the remaining 31.1 PJ was used in the year to 30 September 2001.

Gas Transmission

Contact Energy has a number of gas transmission agreements with NGC as the pipeline owner and operator including one for each of its gas fired generation stations. Most of these arrangements are long term, but some (particularly relating to retail customers) can be cancelled at Contact Energy's option at the end of each contract year. As Maui gas is purchased at any point on the Maui pipeline (which runs from Oaonui in Taranaki to Huntly), gas transmission arrangements are only required for delivery between the Maui pipeline and the site where the gas is used.

Contact Energy has outstanding disputes with NGC regarding force majeure claims by Contact Energy at times when the Otahuhu B station has been unable to take gas during outages.

Risks

Contact Energy's fuels trading business faces uncertainty over gas supply at the expiration of its Maui gas contract. Maui gas accounts for 85% of Contact Energy's gas requirements and provides Contact Energy with significant length of supply. To date, no long term future gas supply arrangements have been made by the company. Development of finds at the Pohokura, Mangahewa, Kupe and Rimu gas fields provide potential significant future sources of gas, but only a few of these provide significant length post Maui. Any field that provides significant supply post Maui is likely to be at a higher price than Maui gas which is priced at low levels relative to other fuels because of a historic pricing formula. Contact Energy has had preliminary negotiations with the owners of these fields with a view to securing a post Maui supply of gas. However, Contact Energy has advised that these discussions have not yet proceeded to a point where it has indication as to the price it would pay for longer term supplies.

Natural gas prices in New Zealand are low by world standards because of the influence of the Maui gas contract pricing structures established around 1975 prior to development of the field in 1979. Generators in New Zealand pay in the range of \$2.00 to \$3.80/GJ for natural gas, whilst generators in the United Kingdom and US could expect to pay the equivalent of \$5.75 and \$7.00/GJ. This is partially mitigated because New Zealand discoveries tend to have high liquid yields improving the economics of exploration. The low prices in New Zealand are believed to have acted as a disincentive to international oil and gas exploration companies mounting exploration campaigns here.

However, it is expected that as Maui moves towards the end of its economic life prices negotiated for gas from undeveloped fields such as Pohokura will rise. If prices do not increase then Contact Energy faces the risk of uncertainty about future gas supplies as the exploration companies have no financial incentive to mount programmes in New Zealand.

While Maui is the major source of gas in New Zealand, Contact Energy's gas transmission costs are minimised due to the delivery arrangements over the Maui pipeline. Additional transmission costs are likely to be incurred to deliver gas from any new field developed. This provides the company with an advantage while it is a major user of Maui gas.

NGC, as the owner of New Zealand's high pressure gas transmission network excluding the Maui pipeline to Huntly, is subject to only light regulation by the gas information disclosure regime and is in a monopoly position. The gas industry review currently being undertaken by the Government is expected to review regulation of gas transmission.

4.2.3 Retail Business

Contact Energy took the initiative of the opportunities for vertical integration offered by the Electricity Reform Act to quickly acquire electricity and gas retailing businesses. The

company acquired eight retail electricity customer bases for a total consideration of \$134.3 million and the Enerco gas customer base for \$100.5 million, giving it a total of 345,000 electricity customers and 105,000 gas customers at that time. The customer bases were acquired at relatively low values of approximately \$380 per customer in a market where other acquisitions were reputedly made at levels as high as \$1,200 per customer. The lower price paid by Contact Energy may have in part reflected the mix of customers acquired and their lower average consumption. For example, while Contact Energy has 22% of the customers by number, its retail sales represent only 12% by volume. Also, Contact Energy appears to have been a more prudent acquirer of customers than some of its competitors.

In June 2000, Contact Energy purchased Empower. Empower is a successful start-up retailer which signed up approximately 25,000 residential electricity customers and approximately 10,000 business customers in its first two years of operation. Contact Energy paid the equivalent of approximately \$400 per residential customer and on average \$1,700 per business customer for Empower. Empower is being run as a separate entity within Contact Energy with the Empower principals continuing to seek customers and being paid under an earn-out arrangement forming part of the acquisition. The back office systems (electricity purchasing, billing and customer service) have been integrated with Contact Energy's existing systems.

Contact Energy has integrated its customer bases to enable it to achieve the synergy benefits forecast at the time of the acquisitions. Integration has involved merging various billing systems into one, reducing the number of call centres to two (Levin and Dunedin) and rebranding each geographic location to the brands – Contact Energy and Empower.

The most complex part of the integration of the customer bases is a programme to rationalise a very diverse range of electricity tariffs. The revised and standardised pricing structure is designed to ensure tariffs accurately reflect the costs of supply for each customer type (residential, commercial, etc). The rationalisation programme has in most cases included the implementation of the government requirement for electricity retailers to offer at least one tariff for residential customers with a fixed component representing less than 10% of the average retail customer's bill.

Contact Energy currently has a total of approximately 500,000 retail customers (electricity and gas) as outlined below:

Contact Energy – Retail Statistics			
	Year ending 30 September		
	1999	2000	2001
<i>Electricity</i>			
No. of customers at year end	344,000	381,000	387,000
Total volume supplied (GWh)	na	3,976	4,448
<i>Gas</i>			
No. of customers at year end	106,000	111,000	107,000
Total volume supplied (PJ)	5.3	12.0	15.8
Total No. of customers	450,000	492,000	494,000

Customer churn has not impacted Contact Energy as significantly as it has some of its competitors. This is in part due to the bulk of the customer base being located in rural and provincial areas which have not been as vigorously targeted as city customers by rival electricity suppliers. Contact Energy has focused on introducing appropriately structured tariffs in order to ensure it is retaining customers at acceptable margins. Contact Energy has recently joined the FlyBuys rewards scheme with the intention of both retaining existing customers and attracting new customers.

In Grant Samuel's opinion the acquisition of On Energy's customers by Meridian Energy and Genesis Power is likely to have an impact on the stability of electricity customers and on the volatility of electricity prices. Previously, a number of small new entrants, NGC and the major generators had competed for customers. The four largest generators now have large customer bases and are more likely to focus on increasing retail margins and

improving customer service than attracting customers from competitors by offering low margins.

TrustPower has an imbalance of customer demand exceeding its generation capacity. It has mitigated this risk to some extent by entering into a hedge contract with NGC. TrustPower has been the subject of takeover speculation on a number of occasions, but it is likely that its appeal to the four major generators may have lessened with the putting in place of the hedge contract with NGC.

Contact Energy's retail electricity customer base ownership has reduced the wholesale market risks associated with its generation portfolio. For the September 2001 year, Contact Energy's customers purchased electricity approximately equivalent to 56% of the company's total production.

Contact Energy has launched a marketing programme targeted at its gas customer base with the objective of also signing them up as electricity customers. Contact Energy retail gas customer bases are spread over Auckland, Wellington, Manawatu and Hawkes Bay. The "Dual Energy" offer allows Contact Energy access to potential customers particularly in Auckland and Wellington where it has little presence as an incumbent electricity retailer.

Contact Energy has identified high quality service as a core strategy for retaining customers and is increasing its expenditure on call centres and information systems.

Risks

Contact Energy, as the incumbent retailer in a large number of geographical locations, faces some risk due to the reconciliation methodology for electricity billing stipulated by MARIA. The methodology obliges each non-incumbent retailer to submit the volume of electricity used by its customers plus losses on a monthly basis. Any remaining electricity distributed to that distribution network as measured by the meters at the national grid connection points supplying that network, is charged to the incumbent retailer. It is known that distribution losses of up to 5% to 6% can occur in some locations between the grid exit points and delivery of electricity to individual customers.

Due to the geographically diverse location of a portion of Contact Energy's customer base (in particular East Cape and Northland), it is susceptible to high energy costs at times when transmission to a remote node is constrained. Prices within its incumbent retail areas can rise well above the Haywards reference price especially during transmission outages which cause significant constraints. On one occasion the price at one electricity node was ten times that at Haywards. Contact Energy actively monitors such transmission constraints and the impact on nodal prices and where appropriate, has undertaken hedging to protect itself from such spikes in price. In addition, the systems that enable Contact Energy to shed load by triggering ripple relays, which control hot water heating, have been improved to react more quickly when the need arises.

4.2.4 Metering

Contact Energy, in common with most retailers, owns gas meters in most of its incumbent areas and electricity meters in approximately half of its incumbent areas. Where a customer has switched to an alternative retailer, Contact Energy will often lease the meter to the new retailer. In turn, Contact Energy also leases meters and contracts meter reading services for customers it has gained outside its incumbent areas, including for all of Empower's customers.

Due to the number of customer bases purchased by Contact Energy it has acquired a large number of meters of varying type, age and quality. The industry has sought temporary dispensation and/or suggested a process to resolve the various non-compliances. There is some risk that the MARIA governance board will accelerate the timetable for all meters to be compliant. Contact Energy has initiated an active programme to replace a number of gas regulators and gas meters it owns as part of an upgrade programme.

As part of its rationalisation programme, Contact Energy has established a separate metering division to ensure the appropriate costs are capable of being recovered through the revenue earned from meter leasing.

4.2.5 Offshore Investments

Following Contact Energy's corporatisation, the Board determined to diversify revenue streams through targeted offshore expansion. In the 1998 financial year the company acquired a 27.7% share in Southern Hydro, a portfolio of established hydro facilities located in Victoria, Australia with a combined capacity of 479 MW. However, it was required to divest its shareholding in Southern Hydro when EME acquired its cornerstone shareholding in Contact Energy because of cross ownership restrictions that were applied because of EME's existing ownership of other generation assets in Victoria.

Oakey

Contact Energy acquired a 16.7% share in a consortium developing the Oakey 282 MW gas fired peak load generation station in Queensland. In addition to the equity stake, Contact Energy provided project management during the construction phase and has a fifteen year contract to provide operating and maintenance services following the December 1999 commissioning of the plant. Contact Energy increased its ownership in Oakey to 25% during the financial year ending September 2000 through the acquisition of a part of a shareholding of a withdrawing consortium member. Contact Energy is evaluating several options with respect to its ownership of Oakey including acquiring the 75% it does not own. Grant Samuel has reviewed these options and reflected the range of outcomes in the valuation of Contact Energy.

Valley Power

Contact Energy has acquired from EME an interest in a 300 MW gas-fired open-cycle peaking generation plant (Valley Power) to be located beside EME's large Loy Yang B base load plant in Victoria. Contact Energy will initially have a 40% interest with the option to increase its ownership to 50%. The Independent Directors commissioned an independent review of the investment opportunity.

Contact Energy management are actively reviewing a number of strategic development opportunities in New Zealand and Australia. None have reached Relevant Information status or are sufficiently mature to warrant inclusion in this Independent Adviser's Report.

4.3 Financial Performance

The actual earnings performance of Contact Energy for the years ending 30 September 2000 (audited) and 2001 (unaudited) and forecast earnings for the year ending 30 September 2002 are summarised below:

Contact Energy – Financial Performance (\$million)			
	Year ending 30 September		
	2000 (audited)	2001 (unaudited)	2002 (draft plan)
Revenue			
Wholesale electricity revenue	269.9	716.3	415.6
Wholesale gas revenue	121.8	156.3	117.7
Retail electricity revenue	430.3	491.0	563.5
Retail electricity purchases	(161.0)	(447.2)	(245.6)
Net retail electricity sales	269.3	43.8	317.9
Retail gas revenue	118.7	138.9	148.8
Net trading revenue	779.8	1,055.3	1,000.0
Other income	88.2	42.1	12.9
Total revenue	868.0	1,097.4	1,012.9
EBITDA	232.5	355.8	286.7
Depreciation and amortisation	(74.7)	(82.8)	(83.2)
Net interest expense	(56.9)	(64.6)	(56.1)
Provisions	14.4	(14.3)	(1.6)
Operating surplus before tax	115.3	194.1	145.8
Taxation	(19.2)	(63.1)	(43.7)
	96.1	131.0	102.0
Associate earnings	0.0	(0.2)	-
Share of Partnership Profit	0.9	0.0	-
Net surplus after tax	97.0	130.7	102.0

In reviewing the earnings performance the following should be taken into account:

- the estimates for the year ended 30 September 2002 are from the draft business plan for that year. The projections in that plan are still under discussion and in the process of being finalised. The areas of uncertainty are wholesale electricity revenue and operating costs. In relation to the first issue, current indications are that the actual results for October 2001 will be somewhat below the level anticipated in the draft business plan. This may be partially offset by potential savings in operating costs;
- the major assumptions behind the draft business plan are:
 - total generation of 8,835 GWh;
 - time weighted average wholesale spot price of \$44/MWh (at Haywards);
 - demand growth of 2.3%;
 - electricity retail sales of 4,728 GWh; and
 - total gas sales and use of 74.1 PJ
- the generation business group comprising generation operations and energy trading sells electricity to three markets:
 - Contact Energy's retail customers;
 - the wholesale spot electricity market; and
 - hedge market;
- Contact Energy's earnings are very sensitive to electricity price and volume movements. The earnings in the year ended 30 September 2000 were below those of the previous year due to very low wholesale electricity prices. The unaudited earnings for the year ended 30 September 2001 reflect the significantly higher wholesale electricity prices in June, July and August and higher volumes of electricity generated by Contact Energy from the New Plymouth plant. Earnings are expected to decline in the year ending 30 September 2002, in anticipation of lower electricity prices than those that prevailed during the winter of 2001;
- other income comprises:

Contact Energy – Other Income (\$million)			
	Year ending 30 September		
	2000 (audited)	2001 (unaudited)	2002 (draft plan)
Sale of plant and investments	33.4	13.2	-
Liquidated damages received	28.8	14.4	-
Sale of steam	10.2	6.9	7.0
Other	15.8	7.6	5.9
Total	88.2	42.1	12.9

- net operating costs comprises the operating costs of the various generation plants, the Wellington head office and the two retail call centres;
- the increase in provisions in the year ended 30 September 2001 of \$14.4 million relates to doubtful debts, flooding in Alexandra, a dispute over the escalation of the Crown margin in relation to Maui Gas and the writeoff of spare parts;
- the gains on sale of surplus plant in the years ending 30 September 2000 and 2001 relate to the sale of generation plant from the Whirinaki and Stratford generation stations which have now been fully decommissioned;
- wholesale gas sales increased due to higher sale of gas to third party generators and sales to Methanex under a contract entered into in 1999; and
- retail gas revenue increased by 17% at the year ended 30 September 2001 over the previous year due to an increase in tariffs in March 2001 and a full year of revenue from the Orion customers acquired in May 2000.

4.4 Cash Flows

Contact Energy – Cash Flows (\$million)		
	Year ending 30 September	
	2000 (audited)	2001 (unaudited)
Net surplus	97.0	130.7
Add/(less) non cash items		
Depreciation	65.7	73.3
Goodwill amortised	9.0	9.5
Liquidated damages	(14.0)	(4.6)
Gain on sale of fixed assets	(24.1)	(13.3)
Other items	(14.0)	15.2
Change in working capital	(18.7)	45.1
Net cash flow from operations	100.9	255.9
Cash flows from investment activities		
Cash was provided from:		
Proceeds from sale of fixed assets	3.0	42.8
Proceeds from refund of stamp duty	29.2	0.0
Proceeds from sale of investments	56.7	4.0
	88.9	46.8
Cash was applied to:		
Purchase of fixed assets	(80.7)	(28.2)
Purchase of investments	(34.1)	(4.3)
	(114.8)	(32.5)
Net cash (outflow to) investing activities	(25.9)	14.3
Ordinary dividend paid to shareholders	(96.6)	(103.6)
Purchase of treasury stock	(50.1)	(23.4)
Net cash flow (outflow)	(71.7)	143.2
Net draw down (repayment) of debt	216.1	(153.5)
Net movement in cash balances	144.5	(10.3)

- the improved operating cash flow reflects in part the increase in operating earnings from the high electricity prices in July and August 2001 and the substantial quantity of prepaid gas which was used;
- capital expenditure has declined following the completion of Otahuhu B;
- the proceeds from the sale of investment of \$56.7 million in the year ended 30 September 2000 represented the sale of Contact Energy's investment in the Southern Hydro Partnership;
- the purchase of investments of \$34 million in the year ended 30 September 2000 comprised Empower (\$24 million) and Orion Gas Trading (\$10 million); and
- the ordinary dividend paid reflects the actual cash paid to shareholders in the financial year as opposed to that provided in respect of the financial year. Contact Energy has paid an interim dividend of 5.5 cents in respect of the financial year ending 30 September 2001. At the time of writing this report no decision on the payment of a final dividend has been taken.

4.5 Financial Position

The financial position of Contact Energy as at 30 September 2000 and 2001 is summarised below:

Contact Energy – Financial Position (\$million)		
	As at 30 September	
	2000 (audited)	2001 (unaudited)
Current Assets	216.3	168.9
Current liabilities	(183.6)	(125.1)
Net working capital	32.7	43.8
Plant and equipment	2,143.5	2,105.9
Customer bases and goodwill	184.5	173.7
Prepaid gas	30.0	-
Investments and advances	9.0	5.1
Total assets	2,399.7	2,328.5
Other term liabilities	(19.0)	(15.0)
Net debt	(795.2)	(652.0)
Net equity	1,585.5	1,661.5

In reviewing the above table the following should be taken into account:

- the majority of plant and equipment comprises power stations. These assets are revalued every three years. In the year ended 30 September 1999 the Clyde, Roxburgh, Wairakei and Ohaaki power stations were revalued upward by approximately \$700 million;
- customer bases and goodwill relate to the purchase cost (less amortisation) of the retail customers bases purchased by Contact Energy during 1998, 1999 and 2000 (Empower);
- the reduction in net debt of \$143 million reflects the strong cash flow generated during the year ended 30 September 2001; and
- Contact Energy's balance sheet would appear to be able to support a higher level of debt and thereby fund the proposed new generation projects without recourse to shareholders and without reduction in the dividend policy.

4.6 Outlook for 2002 and beyond

The year ended 30 September 2001 was unusual for reasons discussed. Hydrological conditions can change rapidly, and it is conventional within the industry to assume a reversion to mean inflow conditions within a two to three month period for planning purposes. Current indications are that snowmelt (an important feature of spring inflow) and cyclical weather patterns increase the

likelihood of continuing low average inflows and storage in the short term, and therefore the earliest that the hydrological conditions would likely revert to mean would be early in calendar year 2002.

The only new generation capacity coming on line during the next 12 months is a 170 MW extension to the Manapouri project. Contact Energy's draft business plan assumes a time weighted median price at Haywards of \$44/MWh for 2002. This compares with an average price received by Contact Energy's Generation group of approximately \$83/MWh in the year ended 30 September 2001 and \$31/MWh in the previous year.

Contact Energy's draft business plan includes a lower level of earnings for the year ending 30 September 2002 than in the year ended 30 September 2001. The outcome is highly dependent upon the level of hydro storage at the beginning of next winter. This will largely be determined by hydrology but also by the management of the storage lakes. Increased use of thermal stations during summer (in particular the use of Huntly by Genesis Power) could result in a lower weighted average price during next winter. Another important factor potentially influencing next year's earnings and indeed those of subsequent years will be the extent to which Contact Energy is able to restore retail margins by a combination of price increases and cost of service reductions. Current retail tariffs do not reflect the current and forecast cost of electricity and Contact Energy expects that it could take five to six years to achieve prices which will ensure that Contact Energy is earning an acceptable retail margin.

Contact Energy's draft business plan reflects the benefit of a full year of generation from Otahuhu B and the use of New Plymouth as a back up station which may also run when market prices justify using this high cost plant. If, as is currently predicted, relatively high electricity prices are a feature of the 2002 winter, Otahuhu B will again be a significant contributor to earnings.

Beyond 2007-2009, there is increased uncertainty in the earnings as contracted Maui gas supply declines and new contracts have to be established at prices which are not known at this time. There is an expectation that gas prices will be higher than those being paid today. New Zealand's electricity prices, which are among the lowest in the world, have benefited from low priced hydro and Maui gas keeping the price below the long run marginal cost of new entrant plant. Aside from the winter of 2001, the low price of electricity has constrained the earnings of the electricity retailer/generators. It would not be unreasonable to expect that as the price of gas increases so will the long run price of electricity increasing the earnings of electricity retailers. The low prices experienced in 1999 and 2000 are less likely to be seen again except in an unusual hydrological conditions such as a wet and mild autumn and winter. Contact Energy has a balance of hydro and thermal generation capacity and is well placed to benefit from the increase in the overall price of electricity. While it continues to maintain New Plymouth as back up or reserve generation for its own purposes, it should have the ability to benefit from any unusually high prices as it did in the winter of 2001 provided it can procure gas to run the station.

Contact Energy's earnings continue to benefit from long term gas contracts to Genesis Power and Shell for onsale to the Taranaki generation station. The contracted volumes of these contracts which are linked to the Maui field begin to reduce in 2002 and expire in 2009.

Contact Energy has identified a number of options for expanding its generation capacity with comparatively modest increases at Ohaaki and Wairakei and new plants at Tauhara and Mokai. The most significant investment in new generation is likely to be Otahuhu C. The timing of when Otahuhu C would come into production is uncertain, and will depend in part on the prevailing and long term price demand and availability of gas. Otahuhu C will be located in a near ideal location and will support Contact Energy's growth by enabling it to at least maintain and possibly enhance its position as one of the most profitable electricity companies in New Zealand.

In the long term Contact Energy is expected to demonstrate growth in earnings. Contact Energy's draft business plan includes earnings for the year ending 30 September 2002 that are below those for the year ended 30 September 2001. Grant Samuel has reviewed the draft business plan. The final earnings outcome will be strongly influenced by the electricity price in the winter of 2002. It is expected, and Contact Energy has assumed in its draft business plan, that electricity prices will again be affected positively by the residual impact of low storage in the beginning of the year but conditions are assumed to revert to mean over a period of three months. The volatile nature of the

New Zealand wholesale electricity market is such that the actual outcome could be materially below or above the current draft business plan estimate. However, Contact Energy's comprehensive risk management strategies have been designed with the intention of reducing both the downside and upside volatility in earnings and these policies, combined with a maturing of the market and the likelihood of a reduced number of participants should result in more stable earnings over the longer term.

4.7 Capital Structure and Ownership

As at 30 September 2001, Contact Energy had 603,950,000 fully paid ordinary shares on issue. At that date the company's 20 largest shareholders held a total of 69% of total issued capital, excluding treasury stock. Treasury stock of 27,316,018 shares exists as a result of a share buyback programme.

A number of the registered shareholders are nominee companies holding shares on behalf of a wide range of shareholders. The major shareholders as at 30 September 2001 are set out in the table below:

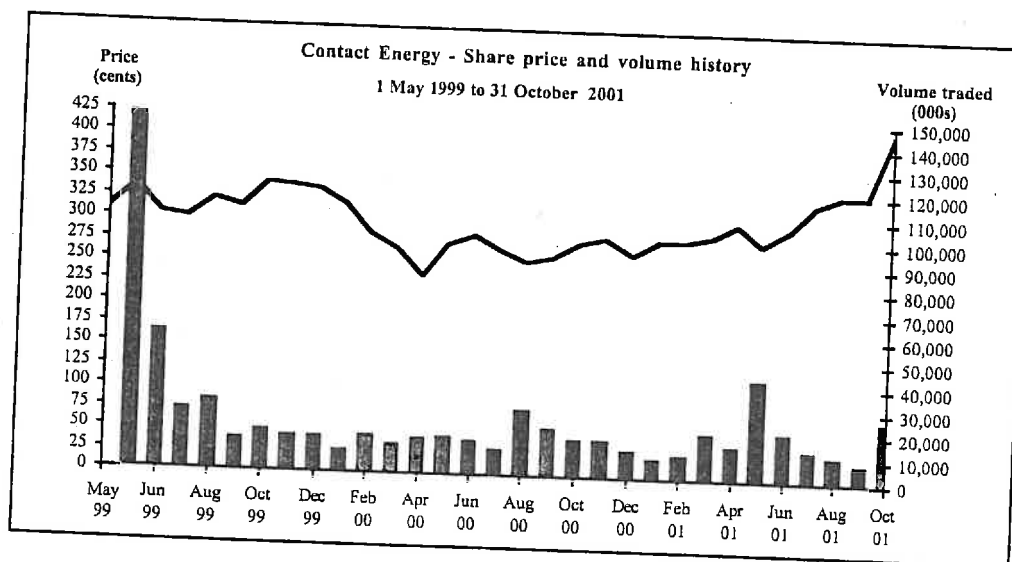
Contact Energy – Top 20 Registered Shareholders as at 30 September 2001		
	Ordinary Shares	
	No. of Shares (000)	%
Edison Mission Energy	295,369	51.2
National Nominees NZ Limited	28,042	4.9
Westpac Banking Corporation	15,819	2.7
Citibank Nominees (NZ)	7,691	1.3
ANZ Nominees Limited	7,414	1.3
AMP Life Limited	6,434	1.1
Trustees Executors & Agency Co	6,404	1.1
National Mutual Life Assurance	5,888	1.0
AMP Superannuation Tracker Fund	4,784	0.8
Hong Kong Bank Nominees (NZ) Limited	2,815	0.5
Accident Rehabilitation & Compensation Corp	2,693	0.5
Premier Nominees Limited	2,384	0.4
NZ Guardian Trust Co. Limited	2,233	0.4
BNZ Nominees Limited	2,047	0.4
AXA NZ Nominees Limited	1,602	0.3
NZGT Nominees Limited	1,504	0.3
Royal & Sun Alliance	1,237	0.2
Guardian Trust Investment Nominees	1,228	0.2
TEA Custodians Limited	1,190	0.2
Tracker Nominees Limited	1,115	0.2
Sub total	397,893	69.0
Others	178,741	31.0
Total outstanding	576,634	100.0
Treasury stock	27,316	
Total shares issued	603,950	

4.8 Share Price Performance

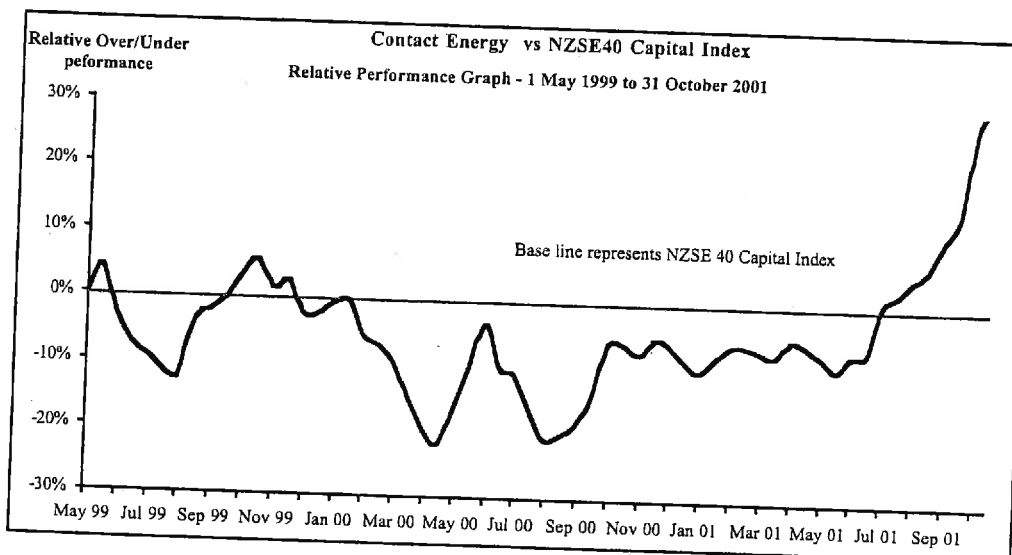
Contact Energy's ordinary shares are traded on the NZSE. The trading share price and volume of trading is summarised below:

Contact Energy - Share Price History				
	Share Price (cents)			Volume traded
	Close	Low	High	(000)
1999 (from 11 May)	335	290	377	319,354.9
2000 (month ended)				
January	318	305	340	9,416.0
February	285	270	314	15,730.8
March	267	251	297	12,529.6
April	236	233	275	14,982.5
May	275	234	290	15,509.3
June	285	274	309	13,995.5
July	268	262	298	11,124.3
August	258	247	271	27,923.0
September	262	250	272	19,715.2
October	278	253	293	15,650.2
November	285	274	305	15,406.8
December	265	259	295	11,465.6
2001 (month ended)				
January	284	262	286	8,250.5
February	284	278	297	10,317.5
March	289	282	315	19,344.5
April	306	284	309	14,012.2
May	282	281	306	42,668.0
June	300	276	304	20,159.3
July	329	329	336	13,255.4
August	341	311	350	11,043.1
September	340	310	343	8,192.7
October	415	335	417	26,428.2

The share price performance of Contact Energy since listing on the NZSE is illustrated in the following graph:



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Contact Energy commenced a share buyback programme on 30 March 2000 which continued until March 2001. 4.5% of Contact Energy's issued shares were repurchased at an average price of \$2.69 per share. EME increased its shareholding from 42.7% to 51.2% through a stand in the market at prices between \$2.90 and \$3.25 per share in May 2001 and further purchases in June 2001.

On the day before the announcement of the full takeover offer by EME, the share price closed at \$3.45. Following the announcement the shares have consistently traded at prices above the original offer price of \$3.85 but consistently below the increased offer price of \$4.25 per share, reaching a peak of \$4.17 on 29 October 2001.

5 Valuation of Contact Energy

5.1 Valuation Methodology

Grant Samuel has assessed the value of Contact Energy by aggregating the estimated fair market value of its operating divisions and other assets and deducting external borrowings. The valuation is on the basis of full value as a going concern in an open market over a reasonable period of time assuming potential buyers have full information.

There are four primary methodologies for valuing businesses:

- discounting projected cash flows ("DCF analysis");
- capitalisation of earnings or cash flow;
- industry rules of thumb; and
- estimation of the aggregate proceeds from an orderly realisation of assets.

Each of these methodologies has an application in different circumstances and the primary factor in determining which methodology is appropriate is the actual practice adopted by purchasers of the type of businesses involved. Grant Samuel has adopted different methodologies for each of Contact Energy's operating businesses, as appropriate, and has utilised alternative methodologies where appropriate to confirm each value. Each methodology is described in more detail in Appendix I of this report.

DCF analysis has a strong theoretical basis. It is the most commonly used method for valuation in a number of industries, including mining, and for the valuation of start-up projects where cash flow and earnings during the first few years can be negative. DCF valuations involve calculating the net present value of projected cash flows. The cash flows are discounted using a discount rate which reflects the risk associated with the cash flow stream. Considerable judgement is required in estimating future cash flows and the valuer generally places great reliance on medium to long term projections prepared by management. In addition, even where cash flow forecasts are available for up to, say, ten years, the terminal or continuing value is usually a high proportion of value. Accordingly, the multiple used in assessing this terminal value becomes the critical determinant in the valuation (ie. it is a "de facto" cash flow capitalisation valuation). The net present value is typically extremely sensitive to relatively small changes in underlying assumptions, few of which are capable of being predicted with accuracy, particularly beyond the first two or three years. The arbitrary assumptions that need to be made and the width of any value range mean the results are often not meaningful or reliable. Notwithstanding these limitations, DCF analyses are commonly used in valuing industrial companies and can at least play a role in providing a check on alternative methodologies, not least because explicit and relatively detailed assumptions as to expected future performance that need to be made. In this case, they can capture some of the critical issues such as price cyclicality and capital expenditure timing. Grant Samuel considers DCF analysis the most appropriate methodology for valuing the majority of Contact Energy's operating businesses. It allows fluctuations in the future price paths of gas and electricity and variations in capital expenditure to be incorporated into the value calculation.

Capitalisation of earnings or cash flows is the most commonly used method for valuation of industrial businesses. This methodology is most appropriate for industrial businesses with a substantial operating history and a consistent earnings trend that is sufficiently stable to be indicative of ongoing earnings potential. This methodology is not particularly suitable for start-up businesses, businesses with an erratic earnings pattern or businesses that have unusual expenditure requirements. This methodology involves capitalising the earnings or cash flows of a business at a multiple that reflects the risks of the business and the stream of income that it generates. These multiples can be applied to a number of different earnings or cash flow measures including EBITDA, EBITA, EBIT or net profit after tax. These are referred to respectively as EBITDA multiples, EBITA multiples, EBIT multiples and price earnings multiples. Price earnings multiples are commonly used in valuing whole businesses for acquisition purposes where gearing is in the control of the acquirer.

Application of this valuation methodology involves:

- estimation of earnings or cash flow levels that a purchaser would utilise for valuation purposes having regard to historical and forecast operating results, non-recurring items of income and expenditure and known factors likely to impact on operating performance; and
- consideration of an appropriate capitalisation multiple having regard to the market rating of comparable businesses, the extent and nature of competition, the time period of earnings used, the quality of earnings, growth prospects and relative business risk.

The choice between EBITDA, EBITA, or EBIT is usually not critical and should give a similar result. All are commonly used in the valuation of industrial businesses. EBITDA can be preferable if depreciation or non-cash charges distort earnings or make comparisons between companies difficult.

In determining a value for Contact Energy, Grant Samuel has placed primary reliance on DCF analysis. The implied multiples for the business have been compared with the EBITDA multiples derived from an analysis of comparable listed companies.

Industry rules of thumb are commonly used in some industries. These are generally used by a valuer as a "cross check" of the result determined by a capitalised earnings valuation or by discounting cash flows. While they are only used as a "cross check" in most cases, industry rules of thumb can be the primary basis on which buyers determine prices in some industries. In any event, it must be recognised that rules of thumb are usually relatively crude and prone to misinterpretation.

Valuations based on an estimate of the aggregate proceeds from an orderly realisation of assets are commonly applied to businesses that are not going concerns. They effectively reflect liquidation values and typically attribute no value to any goodwill associated with ongoing trading.

5.2 Valuation Summary

Grant Samuel has estimated the equity value of Contact Energy as at 30 September 2001 in the range of \$2,367 million to \$2,601 million or \$4.11 to \$4.51 per share. This value is made up of:

Contact Energy – Summary of Value (\$million)		
	Value Range	
	Low	High
Generation and energy trading	2,888.9	3,097.7
Retail and metering	283.6	311.1
Fuels trading	162.0	171.4
Corporate overheads	(363.3)	(322.9)
Other assets	23.1	33.0
Enterprise value¹⁰	3,019.6	3,253.3
Net debt as at 30 September 2001	(652.0)	(652.0)
Equity value	2,367.6	2,601.3
Number of shares outstanding (million)	576.6	576.6
Equity value per share (\$)	\$4.11	\$4.51

¹⁰ It is important to note that the low and high enterprise values do not equal the sum of the low operating business values and high operating businesses values, as the scenarios are not mutually exclusive. For example, a low gas price scenario (with a corresponding lowering of the long term electricity price path) will have a negative impact on the generation and energy trading value, but a small positive impact on the retail and metering value. The enterprise values shown are the lowest and highest values respectively derived from a selection of scenarios.

This value implies the following capitalisation multiples:

Contact Energy – Multiples implied by Valuation		
	Low	High
Value range (per share)	\$4.11	\$4.51
Enterprise value (\$million)	3,020	3,253
EBIT multiples		
- 2001 actual	11.1	11.9
- 2002 forecast	13.1	14.1
EBITDA multiples		
- 2001 actual	8.5	9.1
- 2002 forecast	9.5	10.2

The implied forecast multiples are higher than the actual 2001 multiples due to the exceptionally high earnings achieved by Contact Energy in the past financial year.

It should be noted that the 2002 forecast EBIT and EBITDA used to calculate the multiples in the above table are those forecasts which Grant Samuel has derived for the purpose of this valuation. While Grant Samuel has reviewed Contact Energy's draft business plan, Grant Samuel has chosen to adopt different assumptions in respect of electricity prices for the 2002 financial year reflecting the current low inflows and storage levels. As such the 2002 forecast EBIT and EBITDA figures do not equal Contact Energy's draft business plan figures.

Grant Samuel expects that average electricity prices for the current year will be less than those of the past year, and the 2002 forecast EBIT and EBITDA are expected to be approximately 16% and 10% lower respectively than actual results achieved for the year to 30 September 2001.

In Grant Samuel's view the multiples implied by the value range are reasonable and are consistent with those of other energy companies listed either on New Zealand or overseas sharemarkets having regard to the specific attributes of Contact Energy and the characteristics of its market environment. The following table summarises the market evidence derived from prices at which shares in selected companies are trading:

Listed Energy Companies – Sharemarket Ratings		
	EBITDA Multiples	
	Historical	Forecast
Contact Energy – closing share price on 11 October	7.7	8.6
Contact Energy – EME Offer	8.4	9.3
TrustPower		
NGC	11.8	11.7
	8.3	9.3
Australian – average	8.0	7.8
United States – average	10.3	9.0
United Kingdom – average	9.3	8.5

More detail on individual companies incorporated in the above averages is included in Appendix 1. In addition, it should be noted that:

- the multiples are based on share prices on 24 October 2001. The share prices, and therefore the multiples, do not include a premium for control. Shares in a company normally trade at a discount to the underlying value of the company as a whole;
- the balance dates vary across the selection of comparable companies, none of which have the same financial year end as Contact Energy. As demonstrated by the recent winter 2001 power crisis, the performance of energy businesses tends to follow the domestic cycle of the local economy and to the extent that different market conditions apply, caution needs to be exercised in comparing the implied earnings multiples over different financial periods;
- within New Zealand the companies most similar to Contact Energy are Genesis Power, Meridian Energy and Mighty River Power. However, as each is a state owned enterprise trading information is not available;

- TrustPower, while operating in the same domain as Contact Energy, is a net retailer rather than a net generator as is Contact Energy. TrustPower is therefore a net purchaser of electricity generating insufficient electricity to supply its customer base and is exposed to a different risk profile than Contact Energy. TrustPower has also been the subject of a drawn out ownership contest between its major shareholders, Australia Gas Light Corporation ("AGL"), Infratil and Alliant. In the absence of this activity Grant Samuel would expect TrustPower's share price to trade at lower levels;
- NGC reported a net loss after tax of approximately \$302 million for the year ended 30 June 2001 due to the exceptionally high spot wholesale electricity prices during the winter 2001 power crisis and related decisions to write down in value its electricity retailing assets. In August 2001, NGC sold its North Island commercial and South Island residential electricity customers to Genesis Energy. Having exited from electricity retailing, NGC will focus on its gas transmission, gas wholesaling and electricity generation operations. Since mid September 2001, NGC's share price has risen sharply from \$0.90 to close of \$1.20 on 24 October 2001, amid market speculation of a possible takeover bid by AGL, its controlling shareholder;
- care needs to be exercised when comparing multiples of New Zealand companies with trading multiples of foreign companies. Differences in regulatory environments, sharemarket and broader economic conditions, taxation systems and accounting standard hinder comparisons. In particular, the presence of the NZEM with its volatile pricing due to New Zealand's dependence on hydrology and transmission constraints may expose Contact Energy and the other New Zealand companies to greater price fluctuations than comparable international companies;
- Australian electricity and gas suppliers face future earnings uncertainties from the likely actions of State energy regulators over the next 12 to 18 months;
- the recent collapse in spot wholesale electricity prices, a lower forward electricity price curve and continued fall out from the power crisis in California had a negative impact on the share price of many listed energy companies in the US. Although share prices of some listed utilities appear to have strengthened since 11 September 2001;
- in March 2001, a New Electricity Trading Arrangement ("NETA") was introduced in the UK, under which wholesale electricity is traded and energy suppliers must contract with generators to meet their full electricity requirements. NETA has enabled most integrated energy companies to profit through energy trading however, suppliers with limited capacity to trade and single station independent power producers appear to have been disadvantaged by these new arrangements; and
- share prices of listed energy companies have also been affected by significant takeover activity and higher input prices, most notably the price of gas relative to wholesale and forward electricity contract prices.

In September 2000, NGC successfully acquired TANZ through a takeover offer at a price of \$2.79 per share (or equivalent in shares of NGC). The cash offer was equivalent to 11.0 times historical EBIT and 7.1 times historical EBITDA. While the EBIT multiple calculated for this transaction is in line with the implied multiples derived from Grant Samuel's valuation, the EBITDA multiple is below the implied multiple range. Grant Samuel attributes this difference to the strength of Contact Energy as a net generator, compared with TANZ which like TrustPower was a significant net retailer and as such was very exposed to the risks associated with volatile electricity prices. While TANZ had the ability to benefit from low electricity prices, unlike Contact Energy, it is extremely exposed to high prices. For this reason the asymmetry of the NZEM works against net retailers and correspondingly it would be expected that a capitalisation multiple for a net retailer would be less than that for Contact Energy.

5.3 Valuation of Generation and Energy Trading

Grant Samuel has valued the combined generation and energy trading businesses of Contact Energy at \$2,889 to \$3,098 million, using DCF analysis. DCF analysis is considered the most appropriate methodology in this instance as it enables variations in electricity prices, fuel costs and capital expenditure to be taken into account. Importantly, it allows long term electricity price assumptions to be incorporated. The primary assumptions used in Grant Samuel's base case valuation are detailed as follows:

- a short term electricity price path based on current prices and hydrology. This price path is higher than that of Contact Energy's draft business plan (though not as high as the actual price for the year to 30 September 2001), as the current inflows and storage levels continue to be less than average;
- a medium term electricity price path based on the LRMC i.e. the price required to achieve an acceptable return of capital for the next new block of generation. The LRMC has been calculated to be approximately \$54/MWh (at Haywards, 2001 real price), based on the following assumptions:
 - the next significant block of generation will be a combined cycle station of broadly similar technical specifications to Otahuhu B, and in all likelihood built in the northern part of the North Island;
 - a delivered gas price of \$4.50/GJ (2001 real price) when Maui supplies are exhausted, based on an expected gas price in Taranaki of \$3.70/GJ plus delivery cost to the site; and
 - a capital cost based on an estimated cost of US\$466/MW (NZ\$1,146/MW) capacity (derived from Contact Energy's knowledge of recently contracted prices for stations elsewhere in the world.
- load growth of 2.3% per annum;
- gas cost for thermal stations as currently contracted with replacement gas to be acquired at \$3.70/GJ (2001 real price) in Taranaki plus delivery costs. This price reflects the mid-point of the range in which Grant Samuel expects the price of future gas contracts to be set;
- the development of Otahuhu C with commissioning in 2007;
- the development of the three geothermal projects Wairakei Binary, Tauhara and Mokai;
- ongoing capital expenditure sufficient to retain the stations in good working order over expected lives, taking into account maintenance regimes for thermal stations, costs of ongoing drilling of steam wells for geothermal stations, long term capex for upkeep of hydro plants, etc;
- a 14 year term with a terminal value to reflect the perpetual life of the majority of Contact Energy's generating assets with no real growth included;
- a discount rate of 8.9% (nominal, post tax) based on a weighted average cost of capital calculated using the following inputs:
 - risk free rate = 10 year treasury stock = 6.2%
 - debt margin = 1.7%
 - debt to equity ratio = 0.67
 - equity beta = 0.7
 - market risk premium = 7%
 - corporate tax rate = 33%
- inflation of 1.8%

A range of scenarios around the central assumptions above were undertaken to enable a value range to be assessed. Alternative scenarios included variations in the replacement gas cost of between

\$3.40/GJ and \$4.00/GJ (2001 real price) at Taranaki (and incorporating the impact of this variation in gas price on the LRMC), impact of not proceeding with Otahuhu C (and the corresponding uplift in price at the Otahuhu node), impact of not proceeding with the three geothermal developments, load growth of 1.8% per annum and a reduction in discount rate to 8.7% (based on a decrease of equity beta of 0.04).

The post Maui price and its impact on LRMC and therefore the electricity price path is the key driver of value for Contact Energy. A change of \$0.10/GJ in the replacement gas price has approximately \$19 million impact on the value of Contact Energy's generation business. This translates to approximately \$0.03 per Contact Energy share. Small changes in discount rate also have a significant impact on value. The decrease in equity beta of 0.04 added approximately \$78 million to the generation business value. Other scenarios reviewed had a smaller impact on value.

The multiples implied by the value estimated for Contact Energy's generation and energy trading businesses are summarised below:

Contact Energy – Multiples implied by Generation Valuation		
Value (\$million)	Low	High
EBITDA multiples - 2001 actual	\$2,889	\$3,098
- 2002 forecast	8.6	9.2
	9.8	10.4

While there are a number of energy companies listed on overseas markets which focus on generation, few provide a suitable comparative company to Contact Energy at this time. In the US many generators are aggressively expanding operations either by acquisition or developing substantial new generation assets. In the UK many of the listed energy companies are integrated retail and generation businesses. A notable exception is British Energy, which is primarily focused on generation but has substantial nuclear power assets and has operated at close to breakeven in the recent past due to its high fixed operating cost structure relative to the wholesale electricity prices. In Australia, Pacific Hydro and Energy Developments are both expanding generation capacity and investing in new, more environmentally friendly power generation alternatives. NGC provides perhaps the best comparison and though its current share price is thought to reflect recent speculation of a potential takeover, its results for the year ended 30 June 2001 had a substantially negative impact on its share price. NGC is currently trading at approximately 9.3 times forecast EBITDA for the year ending 30 June 2002.

5.4 Valuation of Retail and Metering

Grant Samuel has valued the combined retail and metering business of Contact Energy in the range \$284 to \$311 million using DCF analysis. DCF analysis is considered the most appropriate valuation methodology, particularly as it enables the future expectations of sustainable retail margins to be incorporated. The forecast margins are substantially higher than those margins currently being achieved.

The primary assumptions used in Grant Samuel's DCF modelling are:

- all electricity tariff adjustments as currently planned are implemented. Further electricity and gas tariff increases are implemented annually as necessary to ultimately achieve target long term margins;
- customer numbers continue to increase in the short term (through to 2003) reflecting the growing Empower customer base, followed by real growth of 1% for electricity and 2% for gas customers respectively for a period of 10 years;
- electricity cost path matching that used for the generation business revenue stream, but adjusted for the location and demand weightings relevant for the spread and loads of Contact Energy's electricity customers;

- any increases in distribution company charges (both electricity and gas) will be passed through to the customer;
- gas cost based on current contracts with replacement gas as required acquired at \$3.70/GJ (2001 real price) in Taranaki plus delivery costs;
- electricity and gas meter lease revenue as per standard tariff pricing, and external electricity and gas meter lease costs as per current rates charge;
- operating costs based on Contact Energy's current forecasts with ongoing capital expenditure on information systems;
- a 14 year term with a terminal value reflecting the perpetual nature of the majority of customers. No real growth is included in the terminal value;
- a discount rate of 8.5% (nominal post tax) based on an average weighted cost of capital calculated using the following inputs:
 - risk free rate = 10 year treasury stock = 6.2%
 - debt margin = 1.7%
 - debt to equity ratio = 0.67
 - equity beta = 0.6
 - market risk premium = 7%
 - corporate tax rate = 33%
- inflation of 1.8%.

A range of scenarios were calculated to enable the appropriate value range to be assessed. Alternative scenarios included the flow on impact of future gas prices on the electricity price curve on the retail business, a reduction in sustainable retail margins, a reduction in growth and a reduction in discount rate to 8.4% (based on a decrease of equity beta of 0.04).

The value range of the combined retail and metering businesses implies, on average, a value of between \$575 and \$630 per installation (including metering and relays). This appears to be in line with the prices paid by Contact Energy for Empower in 1999 and with the sales of NGC's electricity customers to Genesis Power and Meridian Energy respectively and the corresponding sale of Genesis Power's electricity metering assets to NGC.

5.5 Valuation of Fuels Trading

Grant Samuel has valued the fuels trading activities of Contact Energy at between \$162 and \$1701million using DCF analysis. DCF analysis is the most appropriate methodology to use because it allows the short term nature of this activity to be taken into consideration. Contact Energy operates a fuels trading business largely by virtue of the fact that it is the holder of a significant Maui gas contract, which it can onsell to other large scale users in addition to supplying gas for its internal use (generation and retail sales). It is likely that as this contract nears the end of its term the parties to whom Contact Energy onells gas are each likely to negotiate with the next major gas source suppliers directly. Contact Energy is currently undertaking its own negotiations. Contact Energy is unlikely, in Grant Samuel's opinion, to be able to sustain its position as a middleman of the same scale in the gas market post 2009.

The primary assumptions used in the DCF methodology are:

- the cost of gas is set at current contracted prices with any replacement gas required purchased at \$3.70/GJ (2001 real price) in Taranaki;
- contracted sales continue through to end of contract terms;

- zero terminal value beyond the end of Contact Energy's current contracted purchase and sales in 2009;
- a discount rate of 8.4% (nominal post tax) based on an average weighted cost of capital calculated using the following inputs:
 - risk free rate = 10 year treasury stock = 6.2%
 - debt margin = 1.7%
 - debt to equity ratio = 0.67
 - equity beta = 0.6
 - market risk premium = 7%
 - corporate tax rate = 33%
- inflation of 1.8%.

Scenarios varying the replacement gas price between \$3.40/GJ and \$4.00/GJ, the impact of removing the increased flexibility of the proposed long term contract to supply the proposed Otahuhu C station and a reduction in discount rate to 8.4% (based on a decrease of equity beta of 0.04) were undertaken. As the fuels trading group is essentially a margin trader and given Grant Samuel's assumption on the continuation of this role, variations in gas price have little value impact.

5.6 Valuation of Corporate Overheads

Grant Samuel had deducted an amount of between \$323 and \$363 million to reflect the cost of corporate overheads of Contact Energy.

For the purposes of this valuation Grant Samuel has applied a multiple of between 8.0 and 9.0 times to the forecast adjusted corporate overhead costs before depreciation for the year ended 30 September 2002. For valuation purposes Grant Samuel has used forecast adjusted corporate overhead costs to be \$40.4 million. Adjustments were made to Contact Energy's budgeted corporate and business development group costs to reflect:

- the reallocation of costs which are best met by the various operating divisions e.g. branding, the portal project, business development costs relating to specific generation projects, allocation of some information management costs to retail and generation;
- removal of one off impacts expected, for example an expected refund of insurance;
- removal of revenue and expenses related to assets and investments which have been valued in the Other Assets section of the report, e.g. property rental; and
- removal of expenses relating to operation as a listed company.

The level of expenditure deemed "corporate" is high in Contact Energy as little allocation of costs across operating divisions is undertaken. It includes such items as insurance, finance and accounting functions (including associated information systems costs), legal fees, cost of the head office facilities, etc.

5.7 Other Assets and Liabilities

Contact Energy has a number of other assets and liabilities which are not included in the valuation of the individual business units. These include:

- overseas investments;
- surplus land;
- contingent liability;
- tax refund due; and
- legal claims.

In total these have been valued at between \$23 and \$33 million.

Overseas Investments

Contact Energy has a 25% shareholding in Oakey, a 282 MW gas fired peak load generation station in Queensland. Contact Energy is evaluating several options with respect to its ownership of Oakey including acquiring 100% of the shares. Grant Samuel has valued the investment at between \$11.0 and \$13.7 million based on prices suggested by the various options being considered.

As at 30 September 2001, Contact Energy had not provided any funds to the Valley Power project. Given the small NPV of the investment, Grant Samuel has attributed a small value to Contact Energy's interest in the Valley Power project.

Surplus Land

Contact Energy owns surplus land in the upper and lower Clutha that was acquired for a potential hydro development. The site of the former Whiriniki thermal station is surplus however this land may be used for a new thermal generation plant if gas at an economic price is available on the East Coast. Similarly, at Stratford the land of a previous thermal plant is now surplus. In total these land holdings have been valued at between \$12.2 million (latest rateable value) and \$15.1 million (estimated value of a registered valuer).

Cross Border Leases

Contact Energy has been negotiating to put in place a cross border lease over the assets of the Otahuhu B thermal station. The lease would have produced an expected one off taxable benefit of approximately \$21 to \$24 million to the company. However, the lease is expected to have an offsetting adverse impact on EME. In recognition of the differential value impact of the lease on its shareholders, the company agreed to put in place an indemnity arrangement with EME to equalise the expected benefits of the lease among its shareholders. Detailed negotiations on the lease were progressed on this basis.

Subsequent to those discussions there has been further information on the extent of liability under the indemnity arrangements, and the Board now believes that the expected liability will negate the value of the lease. Accordingly, the directors have now suspended any further work to advance the lease, pending final confirmation of the advice on the net benefits position. While this advice has yet to be received, it is virtually certain that the lease will not proceed. In that circumstance, Contact Energy will be liable for costs associated with putting in place the lease (\$4.0 to \$4.7 million after tax). The precise amounts will be subject to negotiations with the counterparties.

In addition to the Otahuhu B cross border lease, Contact Energy had given preliminary consideration at management level to entering into a similar lease over the Clutha River hydro-generation assets within the next 12 months. The estimated benefit to Contact Energy would have been significantly higher from this transaction than the forecast benefits of the Otahuhu B lease.

It is arguable whether it is appropriate or not to include in the valuation an estimate of the likely proceeds from the cross border leases. As noted above, the Directors of Contact Energy have concluded that it is virtually certain that the leases will not proceed. The fact that EME is a major shareholder of Contact Energy will have been a major factor in the directors reaching the decision to suspend work to advance the lease.

Tax Refund

The provisional tax paid in anticipation of concluding a cross border lease over Otahuhu B which is now not to proceed will be refunded by the IRD.

Legal Claims

Contact Energy has made provisions in relation to some legal claims. Grant Samuel has reviewed the advice provided to Contact Energy by its legal advisers and has made a probability weighted estimate of the likely amount which could be paid. The total of the legal claims is between \$10.3 and \$13.9 million.

6 Evaluation of the Merits of the EME Offer

6.1 The EME Offer is Fair and Reasonable

In Grant Samuel's opinion the full underlying value of Contact Energy shares is in the range of \$4.11 to \$4.51 per share. The value is for 100% of Contact Energy and includes a premium for control. As the EME Offer of \$4.25 per share falls within Grant Samuel's value range it is fair. As the EME Offer is fair it is also reasonable.

The EME Offer represents:

- relatively high multiples of the past year revenue and earnings. While Contact Energy has reasonable growth prospects, the valuation takes these into account through the high earnings multiples and through the growth assumptions explicitly incorporated into the DCF analysis; and
- a premium of 23% to the closing price of \$3.45 per share on the day prior to announcement of the EME Offer. This premium is broadly consistent with the premiums for control observed in takeovers.

6.2 Other Factors

In assessing the merits of the EME Offer Grant Samuel considered the following factors:

- In Grant Samuel's opinion under a full takeover offer EME should pay a price equivalent to the full underlying value to the minority shareholders despite already owning a controlling shareholding. The reasons for this opinion are set out in Section 2.4 of this report;
- there are no other significant shareholders in Contact Energy other than EME. However, institutional shareholders collectively own approximately 20% of the outstanding shares in Contact Energy and therefore their acceptance or rejection of the EME Offer will materially affect the success of the offer;
- EME has a shareholding in Contact Energy of 51.2% at the time of the EME Offer and has control of Contact Energy. This creates an impediment to an alternative offer. Under the Takeovers Code any offer to acquire the EME shareholding must be made to all shareholders and the acceptances pro-rated across all accepting shareholders unless the shareholders not associated with EME approve otherwise by ordinary resolution. It is unlikely that EME would accept less than full underlying value for its shareholding in Contact Energy. It would also be unlikely to sell only a proportion of its shareholding. Accordingly, for any alternative offer to be successful it would need to represent or exceed the full underlying value of Contact Energy and would most likely be conditional upon achieving acceptances of not less than 90%;
- Contact Energy is a reasonably liquid share. The EME Offer has a minimum threshold of 90%, at which point the compulsory acquisition provisions of the Takeovers Code come into effect. Unless EME received acceptances sufficient to take its shareholding to 90% and the EME Offer lapses, the liquidity in Contact Energy shares will not change;;
- in the absence of the EME Offer or any other takeover offer, Contact Energy shares, under current market conditions are likely to trade at prices below the EME Offer. In the three months prior to the announcement of the EME Offer, Contact Energy shares traded in the range of \$3.10 to \$3.50 per share, with a weighted average over the period of \$3.30 per share. Contact Energy released its results for the year ended 30 September 2001 on 24 October 2001. The reported profit after tax of \$130.7 million was 35% higher than the previous year. In the absence of the EME Offer the strong financial performance may have positively impacted the Contact Energy share price. Contact Energy's draft business plan estimates earnings for the year ending 30 September 2002 at a lower level of profitability with gradual improvements over the following four years. However, future profits and cash flows are inherently uncertain;

- the EME Offer was announced after the end of the financial year and before the final dividend for the year had been declared. The offer price is subject to a downwards reduction of the same amount of any final dividend paid prior to the offer closing. This is a usual condition given the timing of the offer. The valuation of Contact Energy has also assumed that no final dividend with respect to the year ended 30 September 2001 is paid prior to the EME Offer closing. The timing of the offer has permitted the unaudited results for the year ended 30 September 2001 to be released to shareholders and included in this report;
- the EME Offer is subject to an extensive range of conditions, which would not generally be expected given the fact that EME has been the controlling shareholder of Contact Energy for over two years. One of the conditions requires EME's bankers to agree to provide the debt finance to acquire the remaining shares in Contact Energy. Given EME's knowledge of Contact Energy it could have been expected that finance would have been arranged prior to the EME Offer being made. Grant Samuel has no knowledge of whether or not this condition will be satisfied;
- EME increased its initial offer price from \$3.85 to \$4.25 per share. If EME is not successful in achieving the 90% holding in Contact Energy at this price it may or may not choose to increase its offer. Grant Samuel has no reason to believe that EME will increase its offer again. If EME chooses to increase its offer the increased value will be available to all shareholders even if they have already accepted the \$4.25 per share offer. Attaining the 90% threshold is the only condition contained in the EME notice of offer which cannot be waived. If the condition is not satisfied, EME may be content to "creep" towards the 90% level by buying a further 5% per annum from the market or by making partial offers, in all probability at prices reflecting a portfolio interest in Contact Energy. The fact that EME has elected to make a full takeover offer rather than pursuing the creep or partial offer approach suggests that it wishes to gain access to the cash flows of Contact Energy in the near term rather than over a number of years. This view is consistent with the conditions in the EME Offer regarding financing; and
- as with any equity investment there are risks associated with the market in which the company operates. The electricity industry is considered attractive to investors because of its perceived lower risk and reasonably consistent earnings growth. The retail and generation sectors in which Contact Energy operates have characteristics which create higher levels of uncertainty and risk than the electricity distribution sector:
 - there is considerable uncertainty in the future price path for wholesale electricity. As the over capacity in the generation market reduces, the likely result is for prices to trend upwards. Despite the expectation of a rising trend in electricity prices, at least until major new capacity comes on stream, there is likely to be considerable volatility in prices due to the impact of hydrological conditions on South Island hydro generators. The winter of 2001 demonstrated this volatility due to low lake storage and inflows. Contact Energy, a net generator with thermal generating capability was a net beneficiary from the very high prices in July and August;
 - Contact Energy is exposed to gas fuel supply risk in the long term due to its current reliance on depleting Maui gas for supplying its gas fired plant. Maui gas is expected to be fully depleted by 2009-2011, with Contact Energy's contract to purchase expiring in 2009. Contact Energy will need to negotiate a new gas supply contract, probably with the manager of the Pohokura gas field. However, the price for that gas is not known at this time, other than it is widely expected to be higher than the low priced gas sourced from the Maui field;
 - the Clutha hydro system is located in a geologically unstable area. Considerable work has been undertaken to stabilise the land around Lake Dunstan behind the Clutha dam. In addition, silt is building up in Lake Dunstan near Cromwell which could have an impact on the generation at Clutha dam in the future;
 - the Kyoto Protocol is seeking to reduce greenhouse gas emissions. Contact Energy could be subject to charges for emissions from its Otahuhu B and Te Rapa thermal plants and in

the future from Otahuhu C. The full extent of the charges may not be able to be passed on in electricity prices reducing the profitability of thermal plants;

- Otahuhu B is a single shaft generation plant which could suffer a major outage significantly reducing Contact Energy's generation output and revenue. A prolonged outage occurring after the constructors warranty period expires in December 2002, while unlikely, could have a significant short term negative impact on Contact Energy's earnings if the reserve capacity provided by New Plymouth is not available;
- a proportion of Contact Energy's customer base is geographically isolated and susceptible to very high electricity costs in the event there is a constraint at a remote node;
- Contact Energy is unable to immediately pass on high wholesale electricity prices to the majority of its retail customers. Over time it is able to increase retail electricity prices, however its prices must remain competitive with other electricity retailers; and
- Contact Energy has no influence over the prices charged by distribution companies (both electricity and gas) and seeks to pass all increases on to the customer. As Contact Energy is the interface with the consumer the need to recover increased lines charges has constrained the margins earned from the electricity retail business in the past and may do so in the future.

6.3 Acceptance or Rejection of the EME Offer

Acceptance or rejection of the EME Offer is a matter for individual shareholders based on their own views as to value and future market conditions, risk profile, liquidity preference, portfolio strategy, tax position and other factors. In particular, taxation consequences will vary widely across shareholders. Shareholders will need to consider these consequences and, if appropriate, consult their own professional adviser.

The EME Offer has a minimum acceptance condition that is designed to ensure that EME can exercise the compulsory acquisition provisions of the Takeovers Code and obtain 100% of Contact Energy. It has therefore demonstrated a desire to own 100% of Contact Energy. It would be open for shareholders to reject the EME Offer in the hope that EME would increase its offer or make a subsequent higher offer. However, EME has already increased the offer price and there is no evidence that it would be prepared to increase the price again.

7 Qualifications, Declarations and Consents

7.1 Qualifications

Grant Samuel and its related companies provide financial advisory services to corporate and other clients in relation to mergers and acquisitions, capital raisings, corporate restructuring, property and financial matters generally in Australia and New Zealand. One of its activities is the preparation of company and business valuations and the provision of independent advice and expert's reports in connection with mergers and acquisitions, takeovers and capital reconstructions. Since its inception in 1988, Grant Samuel and its related companies have prepared more than 200 public expert or appraisal reports.

The persons responsible for preparing this report on behalf of Grant Samuel are Michael Lorimer, BCA, CA, John Mandeno, BCom and Nicola Taplin, BE (Chem), Dip Bus. Each has a significant number of years experience in relevant corporate advisory matters.

7.2 Disclaimers

It is not intended that this report should be used or relied upon for any purpose other than as an expression of Grant Samuel's opinion on the merits of the EME Offer. Grant Samuel expressly disclaims any liability to any Contact Energy shareholder that relies or purports to rely on the report for any other purpose and to any other party who relies or purports to rely on the report for any purpose.

This report has been prepared by Grant Samuel with care and diligence and the statements and opinions given by Grant Samuel in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading. However, no responsibility is accepted by Grant Samuel or any of its officers or employees for errors or omissions however arising in the preparation of this report, provided that this shall not absolve Grant Samuel from liability arising from an opinion expressed recklessly or in bad faith.

7.3 Independence

Grant Samuel does not have at the date of this report, and has not had within the previous two years, any shareholding in or other relationship with Contact Energy or EME, that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the proposed offer. Grant Samuel has prepared an Independent Appraisal Report for Contact Energy (dated 11 May 2001) with respect to the proposed restricted transfer as EME sought to acquire further shares in Contact Energy.

Grant Samuel had no part in the formulation of the EME Offer. Its only role has been the preparation of this report and its summary. Grant Samuel will receive a fixed fee for the preparation of this report. This fee is not contingent on the outcome of the EME Offer. Grant Samuel will receive no other benefit for the preparation of this report.

Accordingly, Grant Samuel considers itself to be independent for the purposes of the Takeovers Code.

7.4 Information

Grant Samuel has obtained all information, which it believes is desirable for the purposes of preparing this report, including all relevant information which is or should have been known to any Director of Contact Energy and made available to the Directors. Grant Samuel confirms that in its opinion the information to be provided by Contact Energy and contained within this report is sufficient to enable Contact Energy shareholders to understand all relevant factors and make an informed decision, in respect of the EME Offer.

7.5 Declarations

Contact Energy has agreed that to the extent permitted by law, it will indemnify Grant Samuel and its employees and officers in respect of any liability suffered or incurred as a result of or arising out

of the preparation of the report. This indemnity will not apply in respect of the proportion of liability found by a court to be attributable to any conduct involving negligence or wilful misconduct by Grant Samuel. Contact Energy has also agreed to indemnify Grant Samuel and its employees and officers for time spent and reasonable legal costs and expenses incurred in relation to any inquiry or proceeding initiated by any person except where Grant Samuel or its employees and officers are found to have been negligent or engaged in wilful misconduct in which case Grant Samuel shall bear such costs.

Advance drafts of this report (and parts of it) were provided to Contact Energy. Certain changes were made to this report as a result of the circulation of the draft report. However, there was no alteration to the methodology, conclusions or recommendations made to Contact Energy shareholders as a result of issuing the drafts.

Grant Samuel's terms of reference for its engagement did not contain any term, which materially restricted the scope of the report.

7.6 Consents

Grant Samuel consents to the issuing of this report in the form and context in which it is to be included in the information to be sent to Contact Energy shareholders. Neither the whole nor any part of this report nor any reference thereto may be included in any other document without the prior written consent of Grant Samuel as to the form and context in which it appears.

7.7 Other

The accompanying letter dated 2 November 2001 and attached appendix form part of this report.

GRANT SAMUEL & ASSOCIATES LIMITED
2 November 2001

Grant Samuel + Associates

Appendix 1
Comparable Energy Companies Sharemarket Ratings

Comparable Energy Companies Sharemarket Ratings				
Company	Historical Balance Date	Market Capitalisation	EBITDA	
			Historical	Forecast
New Zealand				
TrustPower		NZ\$		
NGC	31-Mar-01	605	11.8	11.7
Average	30-Jun-01	922	8.3	9.3
			10.1	10.5
Australia				
Australian Gas Light Company		A\$		
Origin Energy	30-Jun-01	3,177	8.4	8.4
United Energy	30-Jun-01	1,794	8.4	7.3
Average	31-Dec-00	1,115	7.1	7.6
			8.0	7.8
United States				
American Electric Power		US\$		
GPU Inc	31-Dec-00	13,900	9.2	nc
Mirant Corporation	31-Dec-00	4,866	7.5	nc
Reliant Energy	31-Dec-00	9,864	14.2	9.9
Orion Power Holdings	31-Dec-00	8,353	7.1	nc
TXU	31-Dec-00	2,665	15.5	nc
Average	31-Dec-00	11,505	8.6	8.0
			10.4	9.0
United Kingdom				
Scottish and Southern Energy		£		
PowerGen	31-Mar-01	5,434	8.5	8.2
Centrica	31-Dec-00	4,858	10.3	9.6
Innogy Holdings	31-Dec-00	9,718	11.5	10.2
Average	31-Mar-01	2,268	7.0	6.1
Total Average			9.3	8.5
			9.5	9.0

- TrustPower is an electricity generator and retailer with generation assets comprising 37 power stations with the capacity to produce 1900 GWh of electricity and is estimated to have a retail base of more than 230,000 customers (including approximately 100,000 customers in the Tauranga-Taupo region). TrustPower benefits from sourcing over 30% of its core energy requirements from Kaimai Hydropower and Wheao and Hinemaiaia stations at relatively low cost. In June 2001, Infratil, Alliant and AGL all made bids to increase their shareholdings in TrustPower in a price range of \$3.20 - \$3.95 per share. Prior to this, TrustPower had already announced an anticipated reduction in half results, but as the winter 2001 crisis progressed, interest died away. Currently each of the three companies' ownership stakes are less than before June 2001. TrustPower's current share price is \$3.30 per share;
- NGC is a fully vertically integrated gas utility owned 64% by Australian Gas Light ("AGL"). NGC operates the high pressure gas transmission system in New Zealand, as well as 2300 km of low-pressure distribution network. NGC also owns significant gas entitlements, and as a result of the acquisition of 100% of TANZ (in September 2000) and the subsequent sale of its electricity customer base, generation assets of approximately 466 MW capacity, gas and electricity meter assets and a large gas customer base;
- AGL is a leading Australian utility with major investments in transmission distribution and marketing of natural gas, electricity and LPG. In response to the changing regulatory landscape, AGL commenced a major restructure of its business including the floating of its transmission pipeline assets into the listed Australian Pipelines Trust and the establishment of a specialised infrastructure asset management company, Agility. AGL is one of the largest retailers and energy infrastructure owner/operators in Australia, and is diversifying geographically from its traditional NSW gas base. In January 2000, AGL acquired South Australian retailer ETSA Power and during 2000 formed a JV with ACTEW. In addition to its activities in Australia, AGL has been active in New Zealand, increasing its stake in NGC from 33.3% to 76% and buying into local retailer/generator, TrustPower. AGL is the joint preferred developer (with Petronas) of the PNG Pipeline, which is expected to be a positive for the company;

- Origin Energy was listed in February 2000, following the separation of Boral's energy assets and building products assets. The company is Australia's only vertically integrated energy company with operations in exploration and production, retail and trading, generation and distribution networks. In April 2001, Origin Energy announced its intention to acquire Powercor's electricity retail business for A\$315 million. Prior to the acquisition of Powercor, the company was a gas focussed energy retailer with 940,000 natural gas customers, 249,000 LPG customers and only a few large industrial electricity customers. Powercor's electricity retail business has 582,000 electricity customers in a complementary retail territory that covers almost all of Victoria and gives Origin Energy a total customer base second only to AGL. Origin Energy also recently announced it has reached agreement with a major generator, which is expected to reduce its exposure to wholesale electricity price fluctuations. The acquisition of Powercor's electricity business has provided Origin Energy with a natural hedge between its upstream gas production business and a growing portfolio of generation businesses. Origin Energy also recently completed a A\$125 million placement of equity securities;
- in 1994 the distribution and retail business of the State Electricity Commission of Victoria was divided into five corporatised entities. United Energy was the first of these entities to be privatised and the company was listed on the Australian Stock Exchange in 1998. United Energy's core distribution business encompasses a distribution network covering parts of Melbourne, where it serves more than 555,000 customers. The company's retail operations cover Victoria and New South Wales. United Energy manages and operates Ikon Energy and Multinet Gas, which provides natural gas to over 500,000 customers in Victoria. United Energy offers other energy retailers a range of back office services including metering, billing, credit and collection and call centre. United Energy also owns 66% of Uecomm, which supplies bandwidth to customers for data and video transmission and has significant ongoing capital requirements;
- American Electric Power ("AEP") is a multinational energy company based in Columbus, Ohio. In June 2000, AEP merged with Central and South West Corp to form one of the largest energy providers in the USA. The company has more than 38,000 MW of generating capacity and delivers electricity to more than 4.9 million customers in eleven states, as well as serving 2.4 million customers outside the US through holdings in Australia, Brazil, China, Mexico and the UK. AEP management focus is on the wholesale business and the company is working towards corporate separation of regulated and deregulated activities;
- GPU Inc is a holding company that does not directly operate any utilities but owns three domestic utilities - Jersey Central Power & Light Company, Metropolitan Edison Company and Pennsylvania Electric company. GPU Electric owns, operates and funds the acquisition of electric distribution and gas transmission systems outside of the US. Other subsidiaries include GPU Advanced Resources, which is involved in retail energy sales and Myr Group Inc, which is a utility infrastructure construction services group. GPU is seeking regulatory approvals for a proposed merger with First Energy Corp; and
- formerly Southern Energy, Mirant Corporation has energy operations in North America, Europe and Asia. The company develops, constructs, owns and operates power plants and sells wholesale electricity, gas and other energy related products. The company controls more than 20,000 MW of generating capacity round the world with another 9,000 MW under development. Mirant has also been very acquisitive with more than 20 acquisitions since 1995, including three new purchases in the current year;
- Reliant Energy is a large, diversified electric and natural gas utility holding company. Its regulated activities distribute electricity and gas to nearly 4 million customers in the southern US and Minnesota, and generate 14,000 MW of electricity. Earlier this year Reliant Energy separately listed Reliant Resources, its non-regulated generation, wholesale marketing and trading operator, selling down a 20% equity interest to the public. Reliant Resources operates power plants with 12,700 MW capacity and markets and trades energy in Europe and the US. Reliant Resources subsequently has made a bid to acquire Orion Power;
- Orion Power Holdings delivers a broad range of wholesale energy and related products and services for independent systems operators, utilities, municipalities, co-operatives and retail aggregators. The company owns and operates more than 80 primarily fossil fuelled power plants, with a generating capacity of about 5,900 MW. The company also has an additional 5,000 MW of capacity under construction;
- TXU Corporation is a holding company, which engages, through its subsidiaries, in the generation, purchase and distribution of electricity; the processing transmission, distribution and marketing of natural gas, as well as power development and telecommunications. The company has 30,000 MW of generation and sells annually 270 TWh of electricity and two trillion ft³ of gas to approximately 11 million customers.

TXU is endeavouring to sell generation assets in the US and UK and gain Supreme Court approval to securitise regulatory assets, to reduce debt. It has sold three major assets this year realising approximately US\$950 million in sale proceeds. In addition, TXU has recently completed an US\$875 million offering of equity units;

- Scottish and Southern Energy is an integrated energy company with operations in Scotland, southern England and Wales. The company is one of the US's largest suppliers serving 4 million electricity customers and 1 million gas customers. The company has more than 6,700 MW of generating capacity and has a subsidiary handling the company's energy trading and marketing. With the deregulation in the UK, Scottish and Southern has been expanding through acquisitions. It has also been moving into telecommunications and building fibre optic networks in northern Scotland and southern England;
- PowerGen is one of the largest electricity generators and distributors in the UK. The company has generating capacity of 7,500 MW and serves 2.4 million residential and business customers through its subsidiary, PowerGen Energy. The group also sells gas to retail customers and trades wholesale energy in the UK. In the US, its subsidiary LG&E Energy generates 8,300 MW and distributes electricity and gas to 1.1 million customers. PowerGen is currently selling most of its independent power plant interests in Asia, Australia and Europe. German utility company EON recently announced a bid to buy PowerGen subject to regulatory approvals;
- Centrica is the UK's largest gas supplier, providing gas to 14 million households under the British Gas and Scottish Gas brands. It also has substantial electricity assets. After emerging from the 1997 British Gas split with the rights to the British Gas brand, Centrica has branched into other areas; financial services, electricity (where it serves 4 million customers) and telecommunications services. The company offers consumer guides and credit cards under the Goldfish name and home and motor insurance and roadside services through its subsidiary, Centrica's Automobile Association. Centrica has a very low level of debt and strong operating cash flows. It is well placed to participate in the ongoing rationalisation of European energy markets. Since January 2001, Centrica has made seven acquisitions with a combined value of more than £600 million. However, Centrica faces potential regulatory intervention as it expands given its dominance in gas and growing presence in electricity markets in the UK; and
- Innogy Holdings was formed to control the UK operations of National Power, whose non-UK businesses have been organised as International Power. Innogy's primary activities are energy supply, generation and trading. Innogy owns Npower, a retail electricity and gas business with 5.4 million customers since acquiring Yorkshire Power. Innogy recently announced plans to swap its Yorkshire Power distribution arm for the electricity and gas supply businesses of Northern Electric, which would make it the second largest energy retail supplier in the UK. Innogy is also has 8,000 MW of generation capacity. It's other businesses include engineering services and cogeneration and renewable energy products.