PUBLIC VERSION

NGC HOLDINGS LIMITED

COMMERCE COMMISSION
GAS CONTROL INQUIRY

CROSS SUBMISSION
FOLLOWING CONFERENCE

TABLE OF CONTENTS

1 EXECUTIVE SUMMARY

1.1 Introduction

1 The purpose of this cross submission is to respond to a number of issues which arose during the course of the conference on the Draft Report. NGC would also like to take this opportunity to highlight and clarify some of the matters addressed in its submission on the Draft Report and its own presentation at the conference.

2 As NGC submitted in its submission on the Draft Report, a positive control recommendation by the Commission will require both robust evidence of excess returns, and a high level of certainty in realising any net benefits the Commission proposes will be realised from control.

3 NGC and its experts, CRA, have spent a considerable amount of time analysing the Commission's Draft Report, and its model, and continue to be of the view that the Commission's framework is not capable of identifying excess returns. In particular, the Commission's model does not fully represent the uncertainty in, and resulting volatility of, the New Zealand gas market, which have resulted from recent changes in that market.

4 Further, there are significant errors in the Commission's model which need to be corrected. Many of these corrections are of such magnitude that they would individually change the Commission's recommendation. NGC also does not consider that the Commission's framework demonstrates that there will be net public benefits from imposing control. CRA, on behalf of NGC, have created an alternative model which NGC considers provides better insights into the probabilities of a regulatory regime equating revenues with costs over time and the potential impacts on welfare.

1.2 Future assumptions and volatility

5 One of the major focuses of NGC's submission on the Draft Report, and its presentation at the conference, was its submission that gas in New Zealand is different, both from electricity and from other countries. For this reason the Commission must take particular care in drawing comparisons between regulation of electricity lines businesses in New Zealand and regulation of gas pipelines in other countries.

6 The Chief Executive of NGC, Phil James, presented evidence to the Commission that demonstrated there are a number of significant reasons why the New Zealand gas market is unique. Mr James was able to draw on his own experience in the Australian gas market to highlight to the Commission fundamental market and commercial differences.

7 These differences are confirmed in CRA's report *The implications for governance of the distinctions between gas and electricity* (which was

appended to NGC's submission on the Draft Report). That report compares the New Zealand gas industry with both the domestic electricity and overseas gas industries.

8 As Mr James highlighted at the conference, gas markets in New Zealand have undergone significant and fundamental changes over the period of the Commission's study. In particular, gas prices have more than doubled and, although since the settlement of the Maui redetermination and the separate marketing of Pohokura gas there is much greater certainty in security of supply, delivery flexibility remains limited and users are concerned with long term security of supply. For these reasons, many users are considering alternative fuels.

9 Gas is a marginal fuel and demand for gas pipeline services is derived from the demand for gas. In the environment outlined in NGC's Draft Report and at the conference, gas is subject to significant competitive constraints. Pipeline services are therefore also subject to similar constraints as customers consider other options.

10 It is important that these market conditions be reflected in the Commission's analysis, both in the factual under control and the counterfactual of light handed regulation. NGC is not confident that the Commission has sufficiently taken this into account. NGC is particularly concerned that, rather than using NGC's own business forecasts (which incorporate the uncertainty and volatility described above) the Commission has constructed its own estimate of the future by averaging past performance and future expectations. However, it is clear to NGC that such averaging will not result in the best estimate of future performance in that it does not accurately reflect the market realities being faced by pipeline providers.

1.3 Forward looking approach

11 NGC submits that the Commission should use NGC's commercial forecasts as a better indicator of likely behaviour under light handed regulation in the counterfactual. In the alternative, and at the very least, if the Commission chooses to persist with averaging over the period, the Commission needs to correct its approach to compounding.

12 In addition, in developing an appropriate price control factual, the Commission needs to take into account NGC's likely behaviour under price control. The Commission's model wrongly assumes the same behaviours in both the factual and counterfactual. This is particularly relevant to the Commission's treatment of the de-optimisation of NGC's Kapuni North line.

13 In NGC's submission the benefits of control must be determined on a forward looking basis. In exaggerating the past by compounding historic

information, the Commission is, in effect, looking to "claw back" what it perceives to be excess profits earned in the past. This is neither an economically sound basis for analysing excess profits, nor permitted by the Commerce Act.

14 The following are other specific points that NGC wishes to address regarding the Commission's analysis.

1.4 NGC's pricing

15 Several questions were raised at the conference about NGC's current pricing practice. NGC takes this opportunity to explain its pricing structure and methodology. In particular, NGC wishes to emphasise to the Commission that, contrary to the Commission's ex post assumption, NGC prices on an ex ante basis. The difference in these two approaches has a significant impact on the Commission's analysis, particularly its approach to stranding risk.

1.5 NGC's investment

16 NGC would like to take the opportunity to clarify and build upon the comments on investment made by Mr James during his presentation at the conference - in particular, the implications of declining and flat demand for investment. For example, while aggregate load may be flat, decreases in demand in one area may result in stranding while, at the same time, increases in demand in another area will require NGC to invest.

1.6 Treatment of de-optimisation of the Kapuni North line

17 The Commission has treated the de-optimisation of the Kapuni North line as economic income, that is, the same as a revaluation. This is incorrect and is largely driven by the Commission's ex post assumption. The Commission has failed to consider that:

17.1 there is a mathematical bias inherent in using a short time period. This is compounded by the inclusion of a large single event in that period;

17.2 its treatment of the Kapuni North line is not taken into account in the price control factual. If NGC had known that the de-optimisation was to be treated in this way, as it would on a forward looking basis, it likely would not have brought the pipeline back into its asset base; and

17.3 its treatment of the Kapuni North line creates perverse incentives on pipeline owners not to innovate and seek to utilise stranded assets in the future as they will be forced to reduce revenues by the value of the asset to avoid a calculation of excess returns in relation to a future control period.

18 The value of the de-optimisation ($50 million) is so great that it means the difference between a recommendation for control or not.

1.7 Allocation of common costs

19 The Commission has questioned NGC's allocation of common costs and, in particular, its use of the ACAM methodology in allocating such costs. NGC does not consider that there is any basis for the Commission's concerns. NGC's estimates are robust and conservative. The Commission has not made any specific criticism of NGC's calculation and given NGC an opportunity to respond, and in these circumstances the Commission should use NGC's estimates.

1.8 Productivity and benchmarking

20 NGC submits the Commission should not assume there will be additional productivity gains under price control. The Commission has used the benchmarking analysis provided by Meyrick and Associates as providing the justification for assuming additional productivity gains. However, NGC submits sufficient doubt has been demonstrated about the utility of the Meyrick analysis that it cannot be used.

1.9 Commission's conservatism

21 The Commission stated that it has taken what it considers to be a very conservative approach to its analysis. There are a number of reasons why NGC does not agree that the Commission has been conservative in respect of its treatment of NGC. NGC responds to the list of twelve factors that the Commission cited as being conservative aspects of its approach.

1.10 Public benefits test

22 NGC does not agree with the Commission's approach to the net public benefits test. Specifically, NGC does not agree that the Commission is able to recommend to the Minister that he disregard net public benefits because of the effect of taking into account transfers to foreign owners. Further, the Commission's analysis of the effects of foreign ownership is simplistic and incomplete. NGC suggests that when properly considered, the impact of foreign ownership effects in a net public benefits analyses is at least neutral.

2 FORWARD LOOKING DECISION MAKING

2.1 General concerns regarding the use of historic information

23 NGC reiterates its concern that historic data provides limited insight into future performance when there has been a fundamental change in market conditions. Further, to the extent that NGC's historic data does provide relevant contextual information to guide forecasts, it has been incorporated into the scenarios developed for NGC's Board, which were subsequently provided to the Commission under its s70E request.

24 NGC recognises that it is the Commission's role to establish the veracity of the forecasts provided, but in this case the forecasts provided to the Commission are the views that NGC's Senior Management have provided internally to its Board as the basis for future decision-making. Accordingly, these provide the best commercially tested views of the future and the Commission should give significant weight to this information.

25 The Commission observed at the conference that, in the case of the Airports Inquiry, the historic data turned out to be a superior predictor than the forecasts that had been provided by the airport businesses. While NGC is not aware of the specifics of that case, it seems apparent that at the time of the Airports Inquiry there were unlikely to be changes as significant as those currently experienced in the gas market.

26 The fundamental changes in the gas market are both indisputable and exogenous to NGC. The Maui field is depleting with the new fields being smaller and less flexible. Pohokura and Kupe are replacing past supply sources but not adding to the options. The gas supply graph that NGC referred to in its presentation at the conference on the Draft Framework Paper illustrates the replacement roles of these two fields in the future. A copy of that graph is attached as Appendix 1.

27 It is known with certainty both that the wholesale price of gas has doubled and that customers cannot obtain long-term contracts for gas supply to match up with long-term investments. Other options may be more attractive. These factors, which are new to the market and not observable in the historic data, make it highly unreliable to use historic data as any indicator of the future. Furthermore, averaging NGC's commercially prepared forecasts with past data does not provide a more accurate view of the future.

28 NGC submits that the usefulness of historic data is limited to informing models, such as CRA's, as to the lower bound on volatility that may be experienced in future. New Zealand is on a transition path, of uncertain duration, to a higher energy cost environment. It is NGC's view that there is no evidence available to support a contention that historic levels of

profitability are representative of likely future profitability. The past was characterised by strong growth, in a period of low gas prices, surplus supply and no reason for customers to consider that there may be future supply shortfalls. None of those characteristics remain today. By contrast, NGC faces prospects of declining through-put, greater risk of asset stranding, and considerable downside revenue risk.

2.2 Forward looking approach to analysis

29 NGC further submits that the approach of exaggerating the past by compounding historic information is not appropriate in determining the forward-looking benefits of control. For example, the scaling up of $1 of excess profits in 1997 to $1.70 in 2004, would effectively imply that NGC would seek to increase its profitability target by 70%. This is simply implausible.

30 Alternatively, the Commission's compounding approach implies, in effect, that a regulator would set a price path that suppresses returns below the cost of capital, in order to claw back and compensate for past profits. However, even in that case, it is still incorrect to exaggerate other historic data, for example, direct costs of control and productivity.

31 Section 7 of the Interpretation Act provides that an enactment does not have retrospective effect. There is nothing in the Commerce Act which indicates this important presumption is displaced and the Commission is to recover past excess profits through price control imposed in the future. Section 52 of the Act states that goods or services may be controlled if they *are, or will be,* supplied or acquired in a market in which competition *is or is likely to be* lessened. The language of the section specifically refers to the market as currently is or will be in the future. It does not refer to the past.

32 In other words, in determining whether it may impose control, the Commission may only assess competition as it is now or is likely to be in the future. Only if it finds that competition is now, or will be in the future, limited can the Commission go on to assess whether there will be net benefits to acquirers in imposing control. In doing so, the benefits to acquirers that are to be assessed are benefits that will be obtained from control if it is to be imposed in the future. In NGC's submission section 52 does not give the Commission jurisdiction to seek to recover past excess profits.

33 Further, and as a practical matter, price control can only be imposed prospectively. Neither NGC, nor the Commission, can go back into the past to improve productivity, or incur administrative costs as the Commission's model effectively implies by compounding. There is no economic logic to the Commission's compounding approach in addressing the forward-looking question of what the future costs and benefits of control would be.

34 If, despite all the evidence that the future has characteristics fundamentally different to the past, the Commission includes the historic data in its calculations, the appropriate method to calculate the average net benefits of control is to calculate the average nominal benefit or cost for each year of the price path period, and deflate back to a 2004 value. An example of how to do this is given in the following table.

Table 1: Forward-looking Administrative Costs of Control[1]

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	$,000s										
Nominal (A)	508	516	523	531	539	547	555	564	572	581	590
Indexed (2004) (B)	471	443	417	393	370	348	328	308	290	273	257
NPV (C)	3,899										
Average annual NPV (D)	354										

35 The Commission calculates the average real administrative cost of control would be $508,000 per annum. Inflating this at the CPI gives the nominal administrative costs of control (A). Discounting back to 2004 at the Commission's 75th WACC percentile gives the present value of costs in 2004 (B). The sum of these gives the net present value (C) and dividing that by the 11 years of control would give the average net present value (D).

36 Methodologically, there can be no argument that this calculation gives the correct calculation of the net present value of the costs of control, if control were to be imposed in 2005. This calculation exactly matches the Commission's stated description that the factual of control would be imposed for eleven years from 2005. However, by way of contrast, the Commission's model gives the average direct cost of control of $570,000 - some 59% higher than the correct calculation.

37 In summary, the correct method for establishing the costs and benefits of control is to project an average value for each variable in the years 2005 to

[1] At the Commission's 75th WACC percentile.

2015, and then discount those values back to give the net present value in 2004.

2.3 Forward looking implementation for the Inquiry

38 NGC submits that the appropriate basis for calculating the benefits of control would be to use its s70E data only, as the best commercial forecast of the future.

39 NGC does not support the averaging of historical data with forecast data to determine an average benefit of control, or the use of point estimates in a highly variable market. However, if the Commission proceeds with an approach that uses historic data, a more reasonable approach would be to calculate a net present value as follows:

- Calculate for each variable a real average at 2004. This involves inflating past data at the CPI, and discounting future data at a forecast CPI, then summing the resulting real values and dividing by the number of values.

- For each year of the control period for 2006 to 2015 use the average for each variable as the projected value. This can be done in nominal terms by using the inflation rate to inflate the real value into nominal terms, or in real terms.

- The NPV is calculated by deflating the projections by a nominal discount rate, if the projections are on a nominal basis, or by deflating at a real discount rate if the projections are on a real basis, and summing the deflated values.

40 Using the s70E data for NGC, (and making no other corrections to the Commission's approach, which would otherwise have the effect of reducing the benefits further) the results of the net acquirers and net public benefits tests are as follows:

Table 2: Effect of Recasting the Model on a Forward Looking Basis - NGC Distribution 2005 to 2008

	Mid WACC			75th Percentile WACC			High WACC		
	Baseline	Forward looking only 2005-2008	Difference	Baseline	Forward looking only 2005 - 2008	Difference	Baseline	Forward looking only 2005 - 2008	Difference
NAB	1,796	651	-1,145	1,077	27	-1,050	337	-590	-927
NPB	-756	-630	126	-780	-627	153	-800	-620	180
NNZPB	918	210	-708	435	-201	-636	-58	-605	-547

Table 3: Effect of Recasting the Model on a Forward Looking Basis - NGC Transmission 2005 to 2008

	Mid WACC			75th Percentile WACC			High WACC		
	Baseline	2005-2008	Difference	Baseline	2005-2008	Difference	Baseline	2005-2008	Difference
NAB	5,714	2,276	-3,438	3,322	496	-2,827	714	-1,451	-2,164
NPB	-324	-284	39	-342	-289	53	-354	-284	70
NNZPB	3,689	1,404	-2,285	2,117	229	-1,888	409	-,1052	-1,461

3 FUTURE ASSUMPTIONS AND VOLATILITY

3.1 Assumptions about the future

41 NGC would like to clarify several issues that arose during the conference regarding its own assumptions about the future, and those of other parties to the Inquiry.

42 At the conference, discussion arose during Mr James' presentation about the "stability" of future demand and supply. It is important to clarify the purpose of NGC's comments in this regard.

43 In particular, Mr James referred to a graph that showed that transmission throughput was predicted to level off over the period to 2008. NGC considers that transmission throughput will level off necessarily as a result of current and ongoing constraints in supply of gas. At this stage it is not being driven by a curtailment in demand. However, it is not NGC's submission that this levelling off in throughput will result in any reduction in the volatility of demand on different sections of the pipelines, as shown by the graphs on regional volatility of demand included in CRA's submission on the Draft Report.

44 NGC emphasises its view that pipeline providers will struggle to maintain aggregate demand, as customers react to the doubling of wholesale gas prices, and that additional marketing and investment will continue to be required to connect new customers. NGC expects that volatility will continue to exist, at least at historic levels, and it is likely that the market will become more volatile, for an indeterminate period of time.

45 NGC considers that it will be highly exposed to such volatility and will face considerable difficulty in forecasting how the various market developments will play out. This is despite the extensive experience that NGC staff have of the gas industry. It is likely that a regulator will face even greater difficulty in establishing robust forecasts of the future.

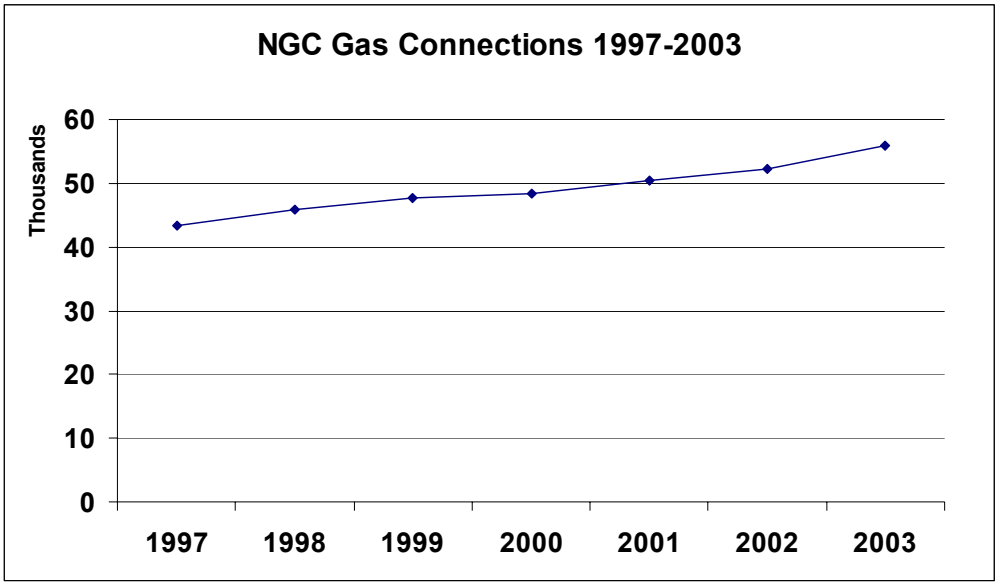
46 Currently the constraint in supply is being reflected in the step change in wholesale gas prices that has recently occurred. NGC expects that demand response will occur in time as customers are unable to secure gas at the price they require. It is important to remember that the New Zealand gas sector is largely characterised by long term supply agreements. Because of this not all gas customers have yet experienced the step change in wholesale gas price. It may therefore take some years for the full impact of those price changes to take effect.

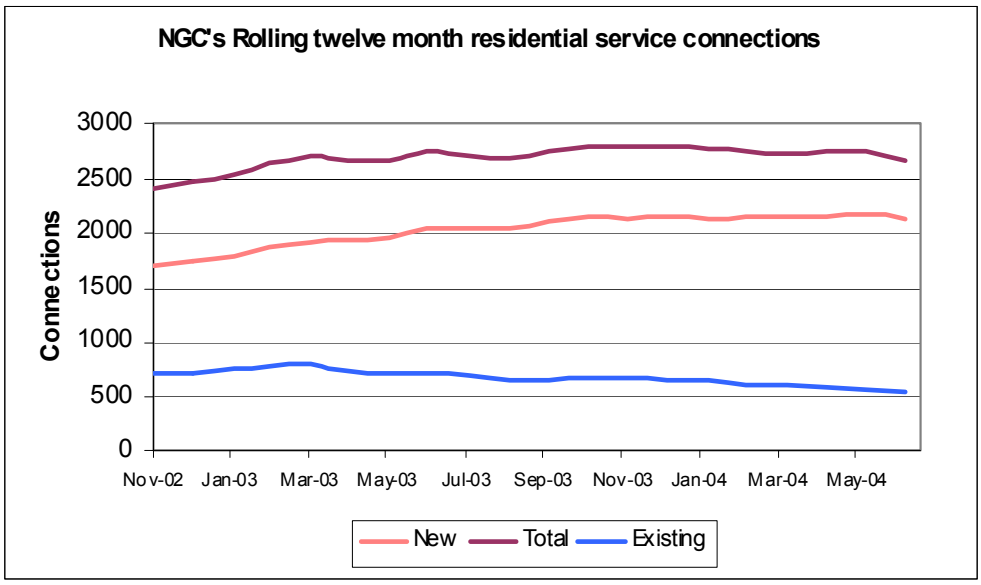
47 Further, the pattern of demand on NGC's transmission system will alter, resulting in increased stranding in regions of decreased demand. At the same time, investment may be required to reinforce the system in regions

of increased demand. For example, a third pipeline is likely to be required into Auckland, while **[ ]** is likely to become stranded.

48 At the distribution level, the step change in wholesale gas price has created, and will continue to create, significant customer churn as gas moves from being used as a low quality heat source to higher value uses that take increased advantage of its clean burning attributes (such as fuel for motors that generate electricity, or cogeneration).

49 Evidence of this churn is demonstrated in the graphs below. In particular, these graphs show that, while overall connections have grown, that growth is largely from new connections rather than re-connections of existing customers.





50 As Mr Wilson stated at the conference, there is continued uncertainty as to the nature and extent of demand side response that will occur. NGC is therefore not expecting any stability in these factors in the foreseeable future.

51 NGC notes that the extent of change currently occurring due to early Maui rundown is uncertain in a number of areas, including:

51.1 the impact of price on demand and hence gas throughput and customer churn;

51.2 the ability of the system to operate under more constrained supply flexibility going forward; and

51.3 the extent of gas reserves beyond 2011.

52 This uncertainty has commercial consequences, including influencing customer decisions on investment, explorers' behaviour, and NGC's (and other pipeline companies') assessments of the risks it faces. In NGC's submission, however, this uncertainty is not reflected in the assumptions made by the Commission in its model.

53 NGC notes the Commission's comment that there are regulatory regimes that are able to mitigate some of the risks around forecast error. However, NGC also notes that such regimes by definition involve both sharing forecast risks with customers, and regular re-engagement with the regulator. Such regimes also have the potential to reduce incentives for efficiency gains.

3.2 Impact of Methanex on future gas supply

54 NGC would like to correct what appeared to be the Commission's perception that, if Methanex were to close its operations in New Zealand, significant gas would become available for other uses (p13-14, transcript 26 July 2004). As NGC understands it, all significant gas supply for the coming years has already been contracted. NGC understands that Methanex has only secured supply at approximately Maui prices until the end of 2005, which it is expected to use. There is currently no gas contracted to Methanex beyond 2005 which would become available if Methanex were to leave New Zealand.

55 Although Methanex could bid for any new gas brought to market, including any gas from Maui that is additional to that contracted under the recent settlement, Methanex would have to expect to compete with other buyers for that gas.

3.3 Gas governance going forward

56 NGC would also like to confirm its view that the pending gas governance regime is a response to the recognition of the current uncertainties in the gas sector, and that, as a result, greater information flows are needed to encourage appropriate responses to changing market conditions.

3.4 The CRA alternative

57 NGC supports the alternative modelling approach put forward by CRA. In NGC's submission, risk and uncertainty in the gas pipeline industry are of critical relevance to the Commission's recommendation and Minister's decision. By specifically assessing variability in through-put and customer growth, in a model calibrated to observable experiences in the gas pipeline market, CRA's model provides important insights into the probabilities of a regulatory regime equating revenues with costs over time and the potential impacts on welfare. NGC's understanding of the CRA model is that it appears to offer the following advantage over the Commission's approach:

57.1 The CRA model incorporates a pricing approach that matches NGC's *ex ante* pricing method – the Commission's model is based on *ex post* pricing, which is simply unworkable in the gas pipelines market;

57.2 The CRA model incorporates behavioural changes that result from price cap regulation, where capital expenditure is sensitive to the difference between hurdle rates and the WACC used to set the price path – the Commission's model makes no adjustment to capital expenditures, and is calibrated with assumptions that bear no resemblance to market experiences;

57.3 The CRA model reflects the process for setting a price cap – the Commission's model more closely matches rate of return regulation in the manner in which prices are set; and

57.4 The CRA model examines the potential range of outcomes under price control, by using historic information on variability to simulate outcomes – the Commission's model adopts a narrow range of outcomes under price control, which are unrelated to variability in the market, or observable experiences in other jurisdictions.

58 NGC considers that these advantages of the CRA model provide compelling reason to adopt it as a preferred modelling technique and treatment of historical data, rather than the simple deterministic model developed by the Commission.

4 NGC'S PRICING

4.1 NGC Transmission pricing methodology

59 During the conference, the Commission asked several questions about how NGC structured its transmission prices. The following is an explanation of NGC's transmission tariff structure and its historic development.

60 NGC's transmission tariff structure comprises three principal elements:

60.1 **Capacity Reservation Fees**, through which NGC recovers the fixed costs of its pipeline assets. These fees are calculated in $ per GJ of Reserved Capacity per year, usually abbreviated to $/GJ of reserved MDQ or $/GJ MDQ.

60.2 **Throughput Fees**, through which NGC recovers all other costs. This fee is expressed in $ per GJ of gas delivered. The same Throughput Fee applies to gas delivered anywhere on the transmission system.

60.3 **Overrun Fees**, which apply to any deliveries made in excess of reserved MDQ (thereby giving customers an incentive to reserve MDQ as accurately as possible). These fees are expressed in $ per GJ of gas delivered in excess of reserved MDQ and can be avoided by reserving sufficient Capacity at the outset, or obtaining additional Capacity on the secondary market.

61 When NGC first published its open access pricing methodology in 1996, only the short run variable costs were recovered through the Throughput Fee and all other (fixed) costs were recovered through the Capacity Reservation Fee. Although it produced a very low Throughput Fee, NGC's customers did not like this approach. They believed that NGC's revenues should be more exposed to the volume variation in the market and pressured NGC to change its methodology. The result was the cost allocation methodology described above.

62 The tariff structure described above has, however, had its problems. In particular, the Capacity Reservation Fees were quite volatile at individual delivery points. While volatility is not a problem per se, it is not efficient when it is caused by the application of a cost allocation rule and does not reflect any economic volatility. For this reason NGC has not applied the cost allocation methodology since 1999 and, apart from some minor adjustments, Capacity Reservation Fees have remained unchanged since then. The adoption of this practice was a response to customer demand for stability in prices.

63 NGC considered introducing a new cost allocation methodology this year. However, in view of the number of other changes it is introducing this year,

as well as the changes being made throughout the industry at present, NGC has decided to delay. Until NGC does introduce a new cost allocation methodology, it will obtain its revenue requirement by adjusting the Throughput Fee. The adjustments in 2002 and 2003 were also made this way.

4.2 NGC price setting

64 NGC sets its prices in order to recover its forecast costs, including the cost of assets, in the period ahead. It does not attempt to recover any costs from previous periods. Unexpected costs are not recovered in subsequent years. The current light-handed regulation reinforces this approach, as the disclosure regime identifies each year's returns against the ODV value.

4.3 The ex ante approach

65 NGC explained at the conference that NGC does not use ex-post pricing, and that the Commission's assumption of ex-post pricing had, as identified by Dr Lally, biased the results in the draft report. At the conference the Commission staff asked how the Commission might "operationalise" an ex ante approach. In NGC's submission, the simplest approach would be to:

65.1 Adjust the revaluation calculation to exclude changes in the level of stranding ;

65.2 Estimate a margin over WACC for stranding risk, financial distress and self-insurance.

The estimation of a margin over WACC to reflect the ex ante pricing premium is discussed in more detail below.

4.3.1 Ex ante pricing premium

66 The Commission has identified a WACC range of 6.1% to 8.5%, with a decision point defined at the 75th percentile of 7.85%. NGC has disclosed to the Commission that it has an investment target range of 8.5% to 10%. NGC submits the 2.15% difference between the Commission's decision point and NGC high risk target (10%) provides the most robust estimate available of the ex ante pricing premium.

67 The stranding risk, financial distress and self insurance risks that must be covered by this ex ante pricing premium are discussed further below.

4.3.2 Stranding risk

68 NGC is concerned that the Commission understands that NGC bears all stranding risks. This is convenient for the customer but NGC must receive an appropriate return on investment for bearing such risks. NGC believes that significant under investment will occur if pipeline companies' returns are capped at the Commission's WACC estimate.

4.3.3 Impact of financial distress on investment

69 Commercial reality means that investment capital will be allocated to the most favourable projects, so there are significant option values attendant with capital expenditure. Regulation that reduces ex ante returns on pipeline investments would lead NGC to consider alternative investment projects, even if potential new customers would derive benefit from pipeline expansions made at NGC's investment hurdle rates.

70 For example, the Commission will be aware that during 2001 NGC's electricity retail business experienced significant difficulties which led to NGC exiting that business completely in that year. That single event constrained investment behaviour within NGC as a whole. In particular, all of NGC's existing investments were reviewed to reduce expenditure and debt exposure. NGC notes that the investment it made in expanding its gas treatment plant at Kapuni in 2003 was the first significant investment NGC has been able to make since that time. NGC's transmission and distribution investments were significantly influenced by that one event.

71 LECG also discussed the need to provide a margin over the CAPM model to allow for this factor, although at this time a method for separately estimating it is not available. However, in any event, NGC does not believe that the best estimate is zero.

4.3.4 Risk mitigation by insuring assets and business continuity

72 During the conference, the Commission discussed the role and availability of insurance for assets and business continuity. NGC would like to highlight to the Commission that it is exposed to significant financial risk from loss or damage to assets and the consequential business interruption. Very recently NGC's assets have been damaged by earthquakes, floods, land slips, erosion and third party interference. This recent damage is above the historical average. Changing weather patterns mean the risk of losses due to storms and floods is increasing. The storms that have occurred this year alone have resulted in erosion damage to six pipeline river crossings which must be repaired.

73 NGC is often exposed to loss of revenue when a pipeline is damaged and needs to be repaired. New Zealand's small and geographically spread economy means that many areas are supplied through a single gas

pipeline. Damage to a pipeline will therefore often result in a loss of supply to a whole region.

74 NGC endeavours to manage the risk of pipeline damage through the application of industry best practice risk management, including an insurance programme. The risk mitigation provided by insurance is, however, limited by the insurance policy deductibles.

75 NGC's current insurance policy specifies that damage to plant and equipment is subject to a claim deductible of A$250,000 for each and every claim. NGC's recent experience has been that the insurance company interprets this as meaning that each geographic location represents a separate claim, even when the damage is caused by the same weather event. Loss of revenue through any resultant business interruption is also subject to a 21 day claim deductible. Further, in the majority of cases NGC is unable to directly recover losses resulting from damage to pipelines. This means that NGC is fully exposed to the risk of revenue loss for that period. NGC is unable to pass such costs to customers through any ex post pricing adjustments, and covers these risks through its charges over time.

4.4 Recent NGC Transmission and Distribution price increase

76 During the conference the Commission asked NGC to provide it with a copy of the letter recently sent to customers advising them of a price increase. Copies of the two letters are attached to this cross submission as Appendix 2, one sent to transmission customers, and one sent to distribution customers. These letters were followed up with customer meetings to more fully explain the changes.

4.4.1 Transmission letter

77 In the letter sent to transmission customers, four main reasons are given for the price increase. In particular, NGC refers to increased costs which it must recover through the price increases. The bases for these costs are set out below.

Gas cost

78 As the Commission has already been informed, the cost of gas has increased significantly over the last two years. NGC is exposed to this cost through its requirement to purchase fuel gas to drive its compressors and heaters, and also to provide unaccounted for gas (UFG). While some of this increased cost was covered in NGC's 2003 price increases, gas prices have risen more significantly than expected, requiring a further increase to recover NGC's forecast costs.

Open access development costs

79 A number of projects are being initiated in the coming year in order to meet the requirements of the Government Policy Statement on Gas Governance.

One of those requirements is open access on the Maui pipeline, and the need for seamless operation between the Maui and NGC pipelines. In particular, hardware and software systems need to be developed to meet these requirements. In addition, due to the recent changes in gas supply, NGC needs to change its transmission service from a "no notice" approach to a nominations based system. Through its discussions with shippers, it has been made clear to NGC that in future shippers would prefer a greater amount of information and changes in NGC's reconciliation practices. NGC would be happy to discuss the proposed services with the Commission.

80 As outlined in the letter, NGC notes that, a decision needs to be made about whether to have one balancing system over the two transmission pipelines or two separate balancing systems. Until that decision is made any costs involved have not been included in NGC's forecasts. However, customers have been advised that such future costs will need to be provided for once a decision has been made.

Regulatory Costs

81 The Commission will be aware of the costs of the Inquiry on NGC, as it has received NGC's cost information. NGC believes its regulatory costs will increase as policy makers and regulators take a more intrusive approach across all areas of government. For example, NGC is already incurring additional costs in the movement to the co-regulatory regime.

Other costs

82 The costs referred to here relate to a number of operational cost changes that were identified in the budgeting process carried out this financial year.

83 Local Authorities have imposed increasing costs on utility companies as they adjust rating approaches and the differential applied to networks.

84 Recent events, including storm, flood, and pipeline breaches have forced NGC to revise its forward projection of the risk to pipelines from damage caused by natural and man made events. This revision has flow on effects in terms of safety and compliance, risk management, and maintenance regimes. A number of lessons have been learned from the crisis events of the last couple of years, including the extent to which NGC is able to rely on insurance in future, as well as taking risk management of its assets to a new level. To a degree this also has an impact on corporate governance, and engagement with regulatory bodies such as ESS has increased significantly.

4.4.2 Distribution letter

85 The reasons provided in the letter to distribution customers are similar to those in the transmission letter. These include regulatory costs, local authority rates and other costs. In the case of distribution, however, the

other costs relate more to risk management, safety and compliance costs. While the costs faced by the distribution business do not include the same sort of system upgrade requirements that the transmission system faces, some of the development costs do directly relate to the distribution business.

4.5 Information Memorandum

86 The Commission asked several questions regarding the role of NGC's Information Memorandum (of which the Commission has copies). The Information Memorandum explains how NGC's transmission system can be used to transport gas. It describes the access regime and a number of related matters. Its content is prescribed by the Pipeline Access Code, to which NGC is a signatory.

4.6 Planning Horizons

87 During the conference, the Commission and NGC staff had several discussions regarding NGC's planning horizons. NGC is concerned that the answers provided could be incorrectly related to discount periods for the purposes of replicating NGC's price setting and hurdle rates and would there like to provide some further clarification as follows:

87.1 the horizon over which NGC optimises its pipelines. NGC uses a 10-year projection of demand, as recommended in the draft ODV Handbook, and optimises its pipelines to meet that demand.

87.2 the horizon over which residential reticulation is economic. The answer provided by Ian Wilson was that it was presently necessary to analyse residential projects and to use optimistic growth projections over a 20-year investment life to achieve positive NPV's.

5 NGC'S INVESTMENT

5.1 Transmission and Distribution investment

88 NGC would like to clarify a point of discussion that was raised during the conference by Commission staff regarding transmission and distribution investment, and the implications of declining and flat demand for transmission (p52-56, transcript 26 July 2004).

89 NGC reiterates that while demand appears flat, significant wholesale gas price changes have taken place, and this continues to generate uncertainty as to the nature and extent of demand response. NGC has provided real examples to the Commission of stranding risk in action such as **[ ]**, Gisborne, the Hutt Valley etc. Transmission investment is subject to what could be termed geographic or regional stranding risk.

90 The nature of commercial decision-making around transmission pipeline investment is such that large loads need to be identified and secured to justify laying a pipeline, in some ways similar in fashion to a cornerstone investor. At a minimum NGC bears the risks associated with the success or failure of those large load businesses. Very few opportunities exist for NGC to reutilise a gas transmission pipeline to the same extent when these businesses fail. This is the nature of doing business a thing market like New Zealand, which is characterised by only one or two major energy using industries per region.

91 As a consequence of the regional business environment and the sudden doubling in wholesale gas prices, NGC is facing a situation where whole regions may adjust their energy supply mix, there could be asset stranding in one part of the system, and incremental investment in another, to reach new customers. NGC will need to make quite innovative investments in order to maintain ore enhance the value of its transmission pipeline system.

92 At the distribution level, NGC is one of a number of gas pipeline businesses seeking to optimise its pipeline asset utilisation and hence value. Distribution pipelines face similar drivers for stranding risk, but the nature of customers is different. As more of a matrix structure, the opportunities for finding new customers to make up for old ones switching away from reticulated gas, are probably greater in distribution, but by nature much smaller, and therefore a great deal of time, effort and investment is required to make a significant impact in terms of throughput volume.

5.2 Impact of regulation on investment

93 During the conference the Commission either directly or by implication made the assumption that if it provided a reasonable weighted average cost of capital (WACC), then there would be little impact on the nature and extent of investment made by the regulated companies.

94 The Australian Productivity Commission's draft report – "Review of the Gas Access Regime" - makes some pertinent points on the impact of regulation on investment behaviour, and while only a draft, NGC believes the fundamental economic rationale described is unlikely to be significantly different in the final report.

95 The Productivity Commission's draft findings raised a number of concerns including regulation raising the level of risk for new investments due to uncertainty as to how regulators will use their discretionary powers and asymmetric truncation limiting returns. Both of these effects are likely to discourage investment in pipelines.

96 NGC agrees with the Productivity Commission's draft findings on these issues and believes it is also not unreasonable to interpret from this report that there are no effective regulatory measures that deal with these problems. NGC would also make the point that the context of the Productivity Commission's report is that of a more mature Australian gas market, with higher customer densities, and on the whole higher customer average demand (cf NGC's residential demand of 24 GJ per annum).

5.3 Capital contributions limit investment

97 Some discussion took place during the conference between the Commission and several presenters on capital contributions. NGC would like to clarify its position on this issue. NGC pays for its own pipes in new subdivisions where the investment meets NGC's commercial criteria, including economic returns and associated risks. If the pipeline does not meet its commercial criteria, then NGC may negotiate with developers to see if some form of compromise can be reached that results in pipeline construction. This negotiation may result in a capital contribution by the developer, or suitable terms and conditions under which pipeline construction by NGC could occur. It is NGC's experience that when these sorts of negotiations take place, pipeline construction results approximately half of the time.

5.4 Dynamic efficiency - possible future market developments under light handed regulation

98 During his presentation, Mr Wilson of NGC referred to a number of possible developments that involved investment that would further develop the New Zealand gas market. NGC would like to clarify the statements made in that presentation and to outline some of the risks associated with them.

99 Mr Wilson outlined that on the supply side, small fields are the likely immediate replacement for Maui, and in the medium term there is significant uncertainty as to the location of new fields. So configuration adjustments to allow for smaller fields are likely to increase future transmission investment requirements. Furthermore, there is the potential

need for significant re-engineering of the gas transmission system if fields are discovered beyond Taranaki.

100 With the increase in the number of small fields, a requirement could develop for some sort of market hub arrangement. NGC considers that the pipeline at Frankley Road could be an appropriate reconciliation point for the various gas fields and respective processing plants. However, even if this turned out to be the most appropriate solution in taking the New Zealand gas market forward in the future, NGC considers that its development would be significantly less certain if NGC was subject to price control.

5.5 Efficient investment under light handed regulation

101 During the conference, Mr Sell for the Commission raised the possibility with Vector that all investments made are not necessarily efficient (p 237, transcript 27 July 2004). NGC agrees with Mr Sell that all investments are not necessarily efficient from an ex post viewpoint due to fluctuating demand, price, costs etc. More important than Mr Sell's point is that appropriate incentives are in place to drive efficient investment over time. In NGC's view, this is the purpose of the ODV approach. As outlined at the conference, the level of stranding on NGC's transmission system has varied significantly over the years (1997 - 29%, 2000 - 36%, 2003 - 23%). It is appropriate that the incentives to avoid stranding and to find economic uses for stranding assets is placed on the company.

102 Investment in long-term assets requires expertise and discipline in forecasting of key factors. Any reduction in incentives to ensure this expertise and discipline is appropriately executed should be avoided. NGC believes that the introduction of price control would blunt those incentives, as the truncation of upside returns and increased uncertainty as to treatment of new investment would divert attention toward the regulator and not the business environment the pipeline companies operate within.

103 Moreover, gas is a discretionary fuel. NGC makes substantial investments in extending pipelines to reach new customers – however it cannot force those customers to use gas. So if customers are willing to pay for pipeline services, and NGC considers that ex ante returns are expected to be sufficient to justify the investment, then the investment must be efficient in the sense that both NGC and customers are better off following the investment.

104 Further, NGC believes the discipline invoked by the ODV regime and the power of customer choice in the New Zealand energy market are such that it is wrong to ascertain that any pipeline investment might be deliberately gold plated.

6 THE KAPUNI NORTH LINE

105 The Commission's treatment of the de-optimisation of NGC's Kapuni North Line is set out in paragraph 9.48 of the Draft Report. In that paragraph, the Commission states that the Kapuni North line was optimised out of NGC's asset base in the 2000 ODV valuation. NGC has since clarified with the Commission that the Kapuni North line was stranded much earlier, following the commissioning of the Maui pipeline. Since that time, NGC has been unable to recover the costs of that pipeline. The pipeline was not included in NGC's asset base in its first ODV valuation in 1991. NGC returned the pipeline to its asset base in its 2003 ODV valuation after new shippers emerged who required the transport of non-Maui gas north. This "de-optimisation" of the Kapuni North pipeline added $50 million to NGCT's asset base.

106 NGC disagrees with the Commission's treatment of the Kapuni North line in the Draft Report. In particular, NGC does not believe that it is appropriate to treat the return of the Kapuni North pipeline to NGCT's asset base as a "gain" in the same way as the Commission treats ODV revaluations. This issue is of particular importance to NGC because the impact of the Kapuni North line's inclusion is the difference between a recommendation for control and no such recommendation.

6.1 Asset return at WACC minus asset's cash value

107 At the conference Commissioner Rebstock expressed the view that there is an incentive to bring an asset back into the asset base if there is the ability to earn WACC on it (p108, transcript 26 July 2004). NGC has two comments to make on this. First, this is not the way in which the Commission has treated the de-optimisation of the Kapuni North line in its model. In the model the de-optimisation has been treated as revenue earned in the previous three years. Given the size of the de-optimisation ($50 million) this significantly distorts the model, and in fact changes the conclusions drawn from the model.

108 Second, the Commission's proposed treatment has the potential to create a perverse incentive on pipeline owners *not* to return assets to the asset base, if they are to be penalised by having the value of the asset treated as revenue in the previous three years. This is because, far from having the ability to earn WACC on the asset, the pipeline owner will be forced to reduce its revenues by the value of the asset to avoid a calculation of excess returns in relation to a future control period.

109 Contrary to the Commission's ex post assumption, NGC did not recover the write-down of the pipeline from its customers at the time that it was made. In order to do so NGC would have had to raise its prices to an extent which would simply not have been feasible. As has been made clear to the

Commission, NGC does not recover the costs of stranding from its customers ex post. NGC's policy is that stranding costs are borne by the shareholders. Stranding risk is built into NGC's pricing on an ex ante basis (this point is covered in more detail in section 4 of this cross-submission). There are therefore no "excess" profits implied by the de-optimisation.

110 Another way to consider these issues is to ask whether NGC has earned a fair return on that asset over time. NGC would have earned a return on its investment up to the point that the pipeline was stranded. From that point until 2003 the pipeline has earned NGC no income. The 2003 de-optimisation in 2003 now allows NGC an opportunity to make a return on its investment consistent with its cost of capital. However, measured over the life of the pipeline, because of the stranding NGC will likely turn out *ex post* to have earned less than its cost of capital. It is therefore inappropriate that, as the Commission's model assumes, the de-optimisation should also be accompanied by a price reduction.

6.2 Behaviour in the factual

111 When developing an appropriate price control factual, the Commission needs to take into account NGC's likely behaviour were it in a price control situation. This reflects the fact that the analysis is forward looking, assessing the costs and benefits of imposing price control in the future. In NGC's submission, the Commission's model wrongly assumes NGC would behave the same way under the price control factual as NGC behaved in the past. If price control was in place, and with knowledge of the way the Commission would treat the de-optimisation of the Kapuni North line, assuming the $50m value was earned as revenue over three years and so requiring a reduction of actual revenue by the same amount, it would not be economical for NGC to bring the Kapuni North line back into service. Therefore the Commission should not include this event in the factual, but should include the welfare costs associated with the missing market of Rimu gas not getting to Huntly.

6.3 Mathematical bias

112 Commissioner Stevens suggested at the conference that the Commission may not have symmetrically dealt with the de-optimisation of the pipeline (p108, transcript 26 July 2004). It is correct that only the de-optimisation of the pipeline occurred in the period studied by the Commission. The optimising out of the pipeline occurred well before then.

113 In fact it is the use of a short time period that introduces a mathematical bias into the Commission's analysis of NGCT's excess returns. Analysis over the full life of the asset would produce a different outcome. This is compounded by the inclusion of the de-optimisation as a single one-off event. In NGC's submission, the only pragmatic way to deal with this is to exclude the de-optimisation of the Kapuni North pipeline on the basis that it

is a one-off event that, in this case, unduly influences the Commission's recommendations.

114 In any event, it is not appropriate for the Commission to treat the de-optimisation of a pipeline the same as a revaluation gain. In this case, the effect of doing so is to add $50 million to NGC's revenue, spread over the preceding three years, thereby erroneously inflating NGCT's "excess" returns for that period to the extent of the increased revenues.

7 COMMON COST ALLOCATION

7.1 ACAM

115 The Commission raised the issue of common cost allocation with a number of submitters and NGC would like to clarify its position on this issue. NGC believes ACAM is the correct method for the Commission to use to assess an appropriate level of common costs for a stand-alone pipelines business.

116 NGC has applied the ACAM approach to its pipeline business in good faith, in the manner in which it has been adopted in other regulatory regimes, including the New Zealand electricity lines business threshold regime.

117 In its Draft Report the Commission stated that it considered there is the potential for the ACAM methodology to allow over recovery of common costs across a business' various activities. The Commission therefore included a sensitivity of the results to measure the effects of presuming common costs were 10%, 20% or 30% lower than the figures provided. The Commission indicated its preliminary view that it would include one of these adjustments in the final report.

118 At the conference Commission Rebstock stated that the 10% to 30% discount of ACAM is a "challenge to the industry to justify ACAM as a regulatory principle" (p221-222, transcript 27 July 2004).

119 It is NGC's submission that, not only is it not for the industry to justify ACAM as a regulatory principle, but there is no need for such justification as ACAM has already been acknowledged by the Government as being the appropriate regulatory principle to apply in allocating common costs.

120 The Government's proposals for the amendment of the 1997 Gas Information Disclosure Regulations include the mandatory use of ACAM (see paragraphs 123-127, 201-225 of NGC's submission on the Draft Framework Paper). ACAM has already been mandated for the electricity industry, and NGC fully expects it to be mandated for the gas industry in the future, including publication of a "Gas Information Disclosure Handbook" along the same lines as the one for electricity.

121 NGC confirmed at the conference that it had only allocated the combined equivalent of 54% of NGC's total actual common costs to the transmission and distribution businesses. Under a "net funds employed" approach the percentage is 62% (paras 114, 115, NGC submission on the Draft Report; p123, transcript 26 July 2004).

122 The Commission has not given any specific reason why NGC's allocation of common costs is unacceptable. Rather, the Commission has referred to theoretical and general concerns that may apply to the information

provided by the parties. In NGC's submission this is not an acceptable approach by the Commission. Unless the Commission can point to specific issues it has with NGC's allocation of common costs, NGC is unable to respond to the Commission's concerns. If the Commission has not given NGC an opportunity to respond to specific concerns about the figures provided, it should use NGC's figures.

7.2 Question on revenues

123 The Commission asked for an indication of the proportions calculated using revenues. The combined 2003 revenues for the two gas transportation businesses covered by the Inquiry was $107 million. NGC's total revenues from continuing activities was $472 million (refer NGC's 2003 Annual Report). The proportion of total revenue from the two transportation businesses is therefore 23%. NGC notes that the proportion of revenue is not, however, relevant to NGC's allocation of common costs. NGC's businesses have quite different cost structures and operating environments. In the case of the pipeline businesses there are high fixed costs and low returns. To allocate only 23% of common costs when 62% of NGC's total funds are employed in this business would be unreal.

8 PRODUCTIVITY AND BENCHMARKING

8.1 Use of Benchmarking in the Inquiry

124 During the conference, Commissioner Rebstock indicated that the Commission's benchmarking had been for indicative purposes only and not included in the quantification (p72, transcript 28 July 2004). However, NGC does not believe this to be an accurate reflection of the use of the benchmarking by the Commission, as the Commission's model assumes additional productivity gains under the factual of price control. NGC believes there is no robust basis for estimating additional productivity gains in the factual as compared to the counterfactual. This element should therefore be removed from the Commission's analysis.

8.2 Between country comparisons

125 During its presentation, NGC was asked a number of questions by Dr Lawrence for the Commission about the comparison between New Zealand and US gas utilities, apparently to make the point that US gas utilities operated in a culture of completely different consumer consumption. NGC acknowledges that US consumption patterns are likely to be different from New Zealand but that the same conclusions can be drawn in comparisons between New Zealand and Australia, hence the Meyrick reports are no better or worse for choosing Australia rather than the US as a data source.

126 NGC is aware, for instance that the average residential consumption in New Zealand is approximately 24 GJ per annum. The utilisation graph presented by NGC, using 2002 data from New Zealand gas distribution companies UNL, NGC, Powerco and WGL showed that average residential demand in the US and Victoria, Australia to be approximately three times that figure, and this is also the case in informal information NGC has received for Canberra in Australia, with residential consumption figures having increased above the 60 GJ per annum mark.

127 A histogram of NGC's distribution customers is attached to this cross-submission as Appendix 3. The horizontal scale is logarithmic. NGC notes that the vast majority of distribution customers use less than 100 GJ per annum. In fact, there are many more customers below 10 GJ than there are above 100 GJ per annum.

128 A second issue raised in the discussion was that of customer densities. New Zealand has very low customer densities by comparison with both Australia and the US.

129 These low customer density and average consumption figures are significant considerations in the network economics of gas pipelines and NGC believes it is essential to give due consideration to these factors. NGC maintains its view that the Meyrick reports, as they stand, do not

adequately control for either customer densities or average consumption in the residential sectors. NGC agrees with Dr Lawrence that customer numbers are a prime cost driver on distribution networks.

8.3 The role of benchmarking

130 The Commission asked Mr Kaufman, NGC's expert on benchmarking, about the role benchmarking should play in the Commission's analysis (p72, transcript 28 July 2004). NGC supports Dr Kaufman's view that real data challenges exist in this country and caution should be taken in interpreting any benchmarking results, making them indicative at best.

131 In short, NGC maintains its view that the Commission can place no confidence in its draft determination model that assumes an increase in productive efficiency would occur under regulation. NGC believes that the only appropriate stance the Commission should take is to assume equal productive efficiency under the factual and counterfactual.

9 NGC'S TAX FORECASTS

9.1 Clarification

132 The adjustment results presented at the conference were related to the under estimation of future tax expenses and not the interest rate tax shield.

10 COMMISSION'S CONSERVATISM

133 On the first day of the conference, Commissioner Rebstock referred to a list of factors which indicated that the Commission had been conservative in its estimate of excess returns (p32, transcript 22 July 2004). This may have been intended at an industry or aggregate level. NGC does not accept that the Commission's estimates related to NGC's businesses are conservative.

134 For example, Commissioner Rebstock stated that the Commission:

- ignored revaluation gains prior to 1997. In NGC's view this is not an example of conservatism by the Commission but rather the correct approach given the de-regulation of the industry and re-negotiation of the 1980 contracts;

- has not challenged parties' allocation of direct and common costs in a significant way. In fact the Draft Report states that Commission intends to discount parties allocations of common costs by 10% to 30%. This issue is discussed in section 7 above;

- did not challenge parties' ODV or depreciation. The Commission has in fact used its own estimate of depreciation, not those provided by NGC in response to the s70E notice or presented in NGC's information disclosure material. In NGC's case, its ODV valuations are largely based on the Draft ODV Handbook which NGC submits is uncontroversial and certainly not an indicator that the Commission has been conservative in this regard. NGC notes that its approach to ODV was approved by the Commission's own expert.

- did not challenge parties' forecasts of demand and revenues. This is not correct. In fact, the Commission has compounded and averaged past and future data to build its own model of what the demand/supply mix will be. In doing this the Commission has ignored the forecasts NGC has provided to its Board without giving any reasonable justification for taking such a approach.

- did not challenge the value and scope of other assets. In fact the Commission challenged the value and scope of two types of NGC's assets – metering and easements. On metering, the Commission has included metering in NGC's asset base even though metering is contestable (as acknowledged by the Commission) and its inclusion unfairly biases Meyrick's productivity analysis against NGCD. For easements, rather than using NGC's assessment of replacement cost, the Commission has imposed its own assessment of value based on a notional historic cost.

- did not challenge capex, direct costs including maintenance and opex. NGC notes that it is difficult to see why the Commission would have challenged these figures;

- did not challenge revaluation gains going forward. NGC has a significant issue with the treatment of NGC's de-optimisation of the Kapuni North line which is covered in section 6 of this cross-submission. In NGC's submission the Commission's approach is anything but conservative in this regard. Indeed for NGC the Commission's approach is the difference between a recommendation for or against control. In the case of distribution, several errors on NGC's part resulted in erroneous revaluation figures being included in its forecasts. NGC has subsequently corrected these figures. The corrected figures should be used by the Commission, as the Commission's approach treats metering incorrectly in the forecasts.

- in dealing with optimisation, the Commission assumed no gold-plating or imprudent investment. There is no evidence to suggest that any of NGC's investments have been imprudent or that NGC is gold plating its investments. This is therefore not necessarily an indicator of the Commission being conservative. However, NGC disagrees with the Commission's treatment of optimisation and, in particular, the Commission's assumption that stranding risk is recovered from NGC's customers on an ex post basis. Changes in the level of stranding are not relevant to the estimation of excess profits. This issue is covered in more detail in section 4 of this cross submission.

- assumes no capital contributions by third parties. NGC pays for all of the pipelines it lays where it is economic to do so. Where a pipeline is not economic, NGC may request a capital contribution from the developer. This request is only taken up in about half of the cases. If it is not accepted then the pipeline is not laid;

- included metering. As Commissioner Rebstock noted, metering is competitive and therefore, in NGC's submission, should not have been included in the Inquiry. Further, NGC submits that the Commission's proposed treatment of metering (that is, to only include meters which belong to pipeline owners) creates perverse outcomes including incentives on pipeline owners to divest meters to non-pipeline owning companies. The inclusion of meters in NGCD's data in the Meyrick report has also biased that report against NGCD. NGC considers that there is a very real inconsistency in Commissioner Rebstock's comment that the inclusion of metering "would have brought down the average and masked some of the excess returns if there were any in the non-competitive part." In NGC's submission, if metering is acknowledged by the Commission to be competitive then it should not be included.

- discounted the estimated benefits of control by 20% to allow for regulatory error and consumer surplus by 36% to account for allocative inefficiencies. In NGC's submission, a discount of 20% for regulatory error is very small considering that it is equivalent to only 2-3% of revenues or 0.2-0.4% of WACC. In particular, NGC does not consider that the Commission's model incorporates sufficient of the uncertainty and likely volatility in the gas industry going forward to enable the Commission to predict the potential for regulatory error under price cap regulation.

- uses the 75th percentile of the WACC range. The impact of WACC on NGC's future investment is discussed in more detail in section 5 of this cross submission.

11 PUBLIC BENEFITS TEST

135 NGC agrees that the Commission is obliged under the legislation to assess what the net benefits to acquirers (NAB) will be of control. NGC also agrees that the Commission is required to report to the Minister on the net public benefits (NPB) of control. NGC does not agree that the Commission should recommend to the Minister that he disregard the NPB test because of the effect of taking into account transfers to foreign owners. In NGC's submission, the Minister is obliged to consider the net public benefits of control and it is not open to him to disregard them.

136 In NGC's submission, the NPB test is the most appropriate test for determining the overall welfare impacts of control. NGC agrees that the Commission is obliged to consider the effect of foreign investment as a relevant consideration. However, NGC considers that the Commission's analysis is over-simplified. No attempt is made to assess the impact of foreign ownership of purchasers, and the Commission does not assess the wider impacts of basing a control decision on the treatment of transfers to foreigners.

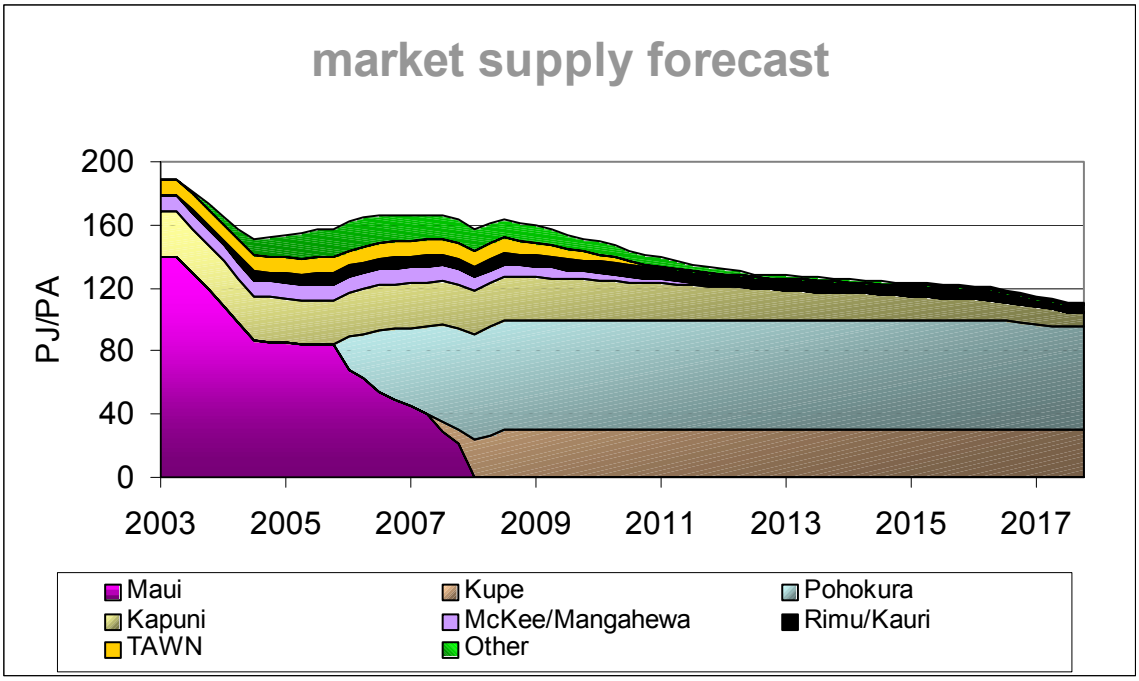
137 In NGC's submission, if the Commission is to assess net benefits to New Zealanders it must, at the very least, analyse the extent to which each element of the gas supply chain, including acquirers, are in foreign or domestic control, and it must estimate the impact on investment long term of imposing price control in response to foreign ownership.

138 If the Commission was to do this analysis, in NGC's submission the result would be that the Commission would have to, at best, give a zero rating to foreign ownership.

139 Commissioner Rebstock commented at the conference that the Commission highly discounts excess returns in its model, and, additionally, that the way the NPB test works the Commission will never find a net public benefit of control (p167, transcript 26 July 2004). NGC disagrees that the Commission's analysis is conservative (this issue discussed in more detail in section 10 of this cross submission). Further, NGC considers that it is the role of the Minister to evaluate the trade-offs between favouring a narrow segment of the economy and potential losses of aggregate welfare. The Minister has requested that the Commission provide both the net acquirers and net public benefits test, presumably to enable him to make that evaluation. NGC submits that the net public benefits test (omitting the transfer benefit from foreigners) provides the Minister with relevant information on the real resource and welfare losses attendant with a declaration of control, and the Commission should give significant weight to that test as an indication of long-term welfare impacts of control.

APPENDIX 1

GRAPH OF PROJECTED NEW ZEALAND GAS SUPPLY



Source: NGC Estimates, 2003

APPENDIX 2

The NGC Building
44 The Terrace
Private Bag 39980
Wellington Mail Centre
Phone +64 4 462 8700
Fax +64 4 462 8600
DDI (04) 462 8662

18 June 2004

«Address»

Dear «Dear»

1 October Network Services Price Adjustment

This letter is notification of the proposed adjustment to Distribution Services posted prices that will be effective as of 1 October 2004.

NGC's gas distribution network business has faced a number of substantial cost increases this year. For the 2004/05 Contract Year it is proposed that Residential fees will become fully variable and increase on average by approximately 7.6%. In the case of all other categories, the daily fixed fees will remain unchanged but the variable fee will increase by 9.7%. The current and proposed fees are as follows:

NGC Existing Distribution Services Fees

		$/day	$/GJ
Residential		0.15	8.38
Capacity Group 1	<10 scm/hr	0.26	6.43
Capacity Group 2	10-40 scm/hr	0.35	6.10
Capacity Group 3	40-200 scm/hr	2.50	5.67
Capacity Group 4	200-400 scm/hr	7.00	4.91
Capacity Group 5	>400 scm/hr	10.00	3.27
CNG			3.81

NGC Proposed Distribution Services Fees

		$/day	$/GJ
Residential		-	11.47
Capacity Group 1	<10 scm/hr	0.26	7.05
Capacity Group 2	10-40 scm/hr	0.35	6.69
Capacity Group 3	40-200 scm/hr	2.50	6.22
Capacity Group 4	200-400 scm/hr	7.00	5.39
Capacity Group 5	>400 scm/hr	10.00	3.59
CNG			4.18

The shift to a fully variable Residential fee structure is in response to Government's desire to offer this customer group a low fixed charge option. The Electricity and Gas Industries Bill provides for regulation of retailers and distributors to ensure that such tariffs are offered. The proposed fully variable Residential network price should make it easier for retailers to comply and so avoid the kind of Government regulation that is currently being developed for the electricity sector.

The significant cost increases experienced by the network business include:

- **Regulatory costs.** The costs of the Section 56 Commerce Commission inquiry have far exceeded our expectations. Irrespective of the outcome, regulatory costs for pipeline owners are expected to continue to be significantly higher than in the past.

- **Local authority rates.** The Local Government (Rating) Act passed in 2002 provided for the inclusion of gas pipelines as rateable property. Actual costs for this year were double the budgeted estimates for local authority rates. For the coming financial year NGC anticipates a continuing escalation of rates costs.

- **Others Costs.** A range of increases in other cost items are also putting pressure on prices, including; technical and safety compliance, risk management and corporate governance, statutory compliance, information technology and operating and maintenance.

The proposed price adjustments have taken these factors into account. NGC appreciate that no price increase is welcome and NGC particularly regrets the need to move transport prices at a time when gas prices have dramatically increased.

I will contact you shortly to arrange a meeting to discuss these matters and any other issues of concern. Please give me a call on (04) 462 8662 if you would like to discuss any of this information ahead of our meeting.

A final price notification will be sent by the third Friday in August.

Yours sincerely

Ian Wilson

Manager Gas Transport Services

The NGC Building
44 The Terrace
Private Bag 39980
Wellington Mail Centre
Phone +64 4 462 8700
Fax +64 4 462 8600
DDI (04) 462 8662

18 June 2004

«Address»

Dear «Dear»

1 October Transmission Services Price Adjustment

This letter is notification of the proposed adjustment to the Transmission Services posted prices that will be effective as of 1 October 2004.

NGC's transmission business has faced a number of substantial ongoing cost increases in recent years. These include:

- **Gas Cost.** Last year, NGC Transmission budgeted a 20% increase in the cost of fuel gas it requires for its compressors, line heaters and for unaccounted for gas (UFG). Unfortunately, the actual increase has been significantly more than this amount.

- **Open Access Development Costs.** NGC has needed to review its open access regime due to changes in the gas supply market and the moves towards open access to the Maui Pipeline. The development and implementation of the necessary new arrangements and supporting systems will be at considerable cost.

- **Regulatory Costs.** The costs of the Section 56 Commerce Commission inquiry have far exceeded NGC's expectations. Irrespective of the inquiry outcome, regulatory costs to pipeline owners are expected to be significantly higher than in the past.

- **Others Costs.** A range of other costs are also putting pressure on prices, including;

    - the increasing extent and level of Local Authority rates on pipelines (as permitted by the Local Government (Rating) Act passed in 2002)

- increased costs for; technical and safety compliance, risk management, corporate governance, statutory compliance, information technology, compressor maintenance (as the major maintenance cycle for the Rotowaro compressors is progressed during the next few years)

- exceptional ongoing costs associated with the February flooding in the Hawkes Bay and contamination issues on the south pipeline.

In addition to these cost increases, growth in the volumes of gas transported is less than it has been over the past few years, so NGC is unable to hold prices as done in previous years. This may be the beginning of a demand response to the sharply escalating gas prices.

The transmission pricing methodology has recently been reviewed in the context of the evolution of NGC's access regime. It was discussed in the March Issues Paper and May Position Paper. NGC concluded that the current set of Capacity Reservation Fees should remain unchanged and that any pricing adjustments should be accommodated in the Throughput Fee. Accordingly, NGC proposes moving the Throughput Fee from $0.50/GJ to $0.61/GJ.

However, this price adjustment does not allow for any price increases, which may arise from new balancing gas arrangements. From the Position Paper and subsequent discussions you will be aware that NGC Transmission will need to contract with external parties for its balancing gas requirements when open access is implemented on the Maui pipeline. You will also be aware that there is considerable uncertainty over the cost and availability of such gas. In view of this uncertainty, NGC proposes to wait until the timing and extent of outsourced balancing gas costs are known before further adjusting the Throughput Fee to recover those costs. This could mean that there may be a further, possibly significant, increase in the Throughput Fee at any time from 1 April 2005 onwards. NGC will continue to keep its customers informed of these developments.

The price of the system balancing gas, which NGC Transmission currently purchases from NGC Energy, has already increased. NGC Transmission will pass this price increase through immediately. Accordingly, as of 1 July 2004 the Sell Price will be $8.00/GJ and the Buy Price will be $4.00/GJ.

In summary:

- It is proposed, as of 1 October 2004, to increase the Throughput Fee from $0.50/GJ to $0.61/GJ.
- Capacity Reservation Fees will remain unchanged.
- The Throughput Fee will increase further as and when increased outsourced balancing costs are incurred.
- The mismatch gas Buy and Sell prices will increase to $4.00/GJ and $8.00/GJ respectively, as of 1 July 2004.

It is unfortunate that, after a long period of price stability, transmission prices need to move ahead of inflation and will do so again this year. I will contact you shortly to arrange a meeting to discuss these matters and any other issues of concern.

The price and capacity reservation notification procedure will be the same as last year. That is:

- Good faith preliminary reservations must be sent to NGC prior to the 2nd Friday in August (13 August)
- NGC will advise its acceptance or rejection of these preliminary reservations and confirm final prices by the 3rd Friday in August (20 August).
- Final reservations for the 2004/05 Year must be sent to NGC by the 4th Friday in September (24 September 2004)

Please give me a call on (04) 462 8662 if you would like to discuss any of this information ahead of our meeting.

Yours sincerely

Ian Wilson
Manager Gas Transport Services

APPENDIX 3

HISTOGRAMS OF NGC'S CUSTOMER CONNECTIONS