

20 August 2003

Gas Pipelines Inquiry
Commerce Commission
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Wellington

Submission on the Draft Framework Paper for Gas Control Inquiry

1. The Commerce Commission (“the Commission”) is undertaking the Natural Gas Control Inquiry in response to a request from the Minister of Energy dated 30 April 2003. The Commission has released its Draft Framework Paper (“the Paper”) dated 16 July 2003 setting out the background to the inquiry and presenting the legal and analytical frameworks to be used.
2. In reaching its view on whether control should be introduced the Commission is to advise the Minister on:
 - a. whether gas services may be controlled in terms of section 52 of the Commerce Act;
 - b. the methodology that the Commission considers appropriate for valuation of pipeline assets for the purposes of its advice on the matters covered in the terms of reference;
 - c. the net benefits to the public of control; and
 - d. any other matters that the Commission may think relevant to a decision on whether control should be introduced.

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3. The Commission has sought submissions on the Paper from interested parties. The Paper is focused on methodologies and principles and further papers will address the application and interpretation of the findings. Our comments in this submission are therefore focused on the methodologies and principles outlined in the Paper, with further detailed analysis to be undertaken in subsequent submissions.
4. This submission conveys the views of Wanganui Gas Limited (WGL). The Wanganui Gas Company was formed as a private enterprise company in 1879. The business was subsequently acquired by the then Wanganui Borough Council in 1902. Wanganui Gas continued to operate as a Council department until it was formed into a public limited liability company in December 1992. At the same time Wanganui District Council sold a 25.1% shareholding in WGL to Natural Gas Corporation.
5. In November 2001 WGL launched Direct Energy New Zealand (Directenz) as a new brand for end users located outside the traditional sales areas of the districts of Wanganui, Rangitikei and South Taranaki. In April 2002 WGL entered the electricity retail market and now supplies both electricity and gas to residential and small business end users located in Wanganui, Rangitikei and South Taranaki.
6. WGL is the smallest Gas Pipeline Business (GPB) that is required to disclose information under the Gas (Information Disclosure) Regulations 1997. WGL's combined distribution systems are 349 kilometres long, with approximately 11,000 end users. To put this into perspective, the next largest GPB has a systems length of 2,639 kilometres with 49,381 end users. Of the GPBs included in the Information Disclosures, WGL constitutes 2% of the total pipeline kilometres and 4% of the end users.

Structure of this submission

7. The submission is presented in five key sections as follows:
 - Competition Analysis – addresses the market in which GPBs operate;

- Regulation – addresses the impact of regulation, its benefits and costs;
- Pricing Principles – covers price efficiency and in particular the method of estimating efficient prices;
- Building Block Approach – considers some of the principles underlying the Commission’s preferred approach to determining efficient prices; and
- Conclusion.

Competition Analysis

8. The Commission considers interfuel competition is insufficient to constrain gas prices. We disagree because:
 - 8.1 The gas market in New Zealand is in a state of change. Recent events such as the reassessment of the Maui reserves have had an impact on the industry, with wider ramifications than just raising wellhead gas prices. We note that the Commission draws on previous analysis of the gas market to conclude that interfuel competition is not sufficient in itself to produce workable competitive markets. Given the changes in the gas market, we consider that historical analysis is outdated and requires a major review before conclusions can be drawn.
 - 8.2 The increase in wholesale gas prices that we are experiencing will make interfuel competition more significant. As wholesale gas prices increase, so does the delivered price of gas for the consumer. While this will also impact on the cost of some alternative energy sources (such as the marginal generation costs of electricity), other fuels will become more viable alternatives to reticulated gas, thereby constraining distribution and retail charges. For industrial users these include coal, oil and LPG. For residential users, the main alternatives are electricity, propane and LPG.
 - 8.3 On our networks, we have already experience interfuel substitution arising from incremental increases in the price of gas. In one case, an isolated network was constructed to serve a major commercial end user (Flock House) with several local residential users also taking the opportunity to switch to reticulated gas once it was available. However, with no consultation with ourselves, and without our being made aware of the situation, the end user switched to LPG to meet their major energy requirements. The network assets have been identified

as unsustainable and have thus been substantially written down to their impaired value.

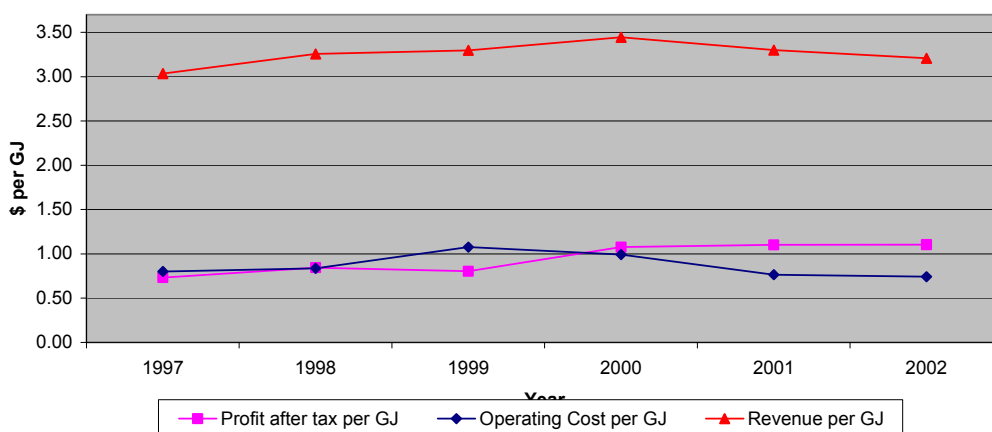
- 8.4 The threat of by-pass pipelines also constrains GPB prices, and indicates that effective competition is occurring. In some cases, the threat of bypass has resulted in distribution companies reducing prices in those areas most susceptible to bypass. In the case of WGL, we have accepted the implications of the by-pass threat and voluntarily reduced applicable charges in a number of situations to reflect this. In addition we have been approached by parties wanting to validate pricing with the intent of physical by-pass if economic.
 - 8.5 It is interesting to note that when considering interfuel substitution effects, while electricity and LPG can substitute for reticulated gas, the reverse is uncommon. Almost all existing gas consumers also have an electricity connection, and therefore can switch back to electricity with relative ease, subject to the installation of new appliances. Contrast this with the introduction of reticulated gas, which requires an additional physical connection, and new appliances or switching of most existing appliances. Gas appliances are typically more expensive than their electrical equivalent and that high retail cost acts as a barrier to people switching to gas.
 - 8.6 It is worthwhile to note that gas and electricity retailers also have an indirect, but significant role in the promotion of gas usage. Given the move toward dual-fuel retailing, retailers can alter their behaviour toward promoting the fuel that provides the most economic return for their business. In the case of companies which have electricity generation and retail, this may entail promoting electricity over gas. Higher gas prices will encourage substitution, again constraining distribution charges.
9. The use of gas has significant benefits to the market and the economy:
 - 9.1 While gas is an elective energy source, it is also seen as a source of choice. In most cases the direct consumption of reticulated gas is more efficient than the alternatives. For example, in electricity generation, gas fired stations have low energy conversion factors, meaning that typically half of the energy content is lost before the energy (in the form of electricity) leaves the generator. Additionally, significant levels of transmission losses occur as electricity is transported from generator to the consumer.

- 9.2 Furthermore, gas is a more environmentally friendly fuel than either coal or oil and its use should be promoted, rather than subject to potential additional regulation which has the potential to constrain GPBs from undertaking further investment, and increasing infill. Additional growth of GPBs will continue to promote the competitive environment for interfuel competition. Given the low subsequent infill rates for gas distribution, it is therefore paramount that dynamic efficiency (considered in paragraph 29 below) is the focus of any regulatory regime.
- 9.3 The recent publicity around the dwindling gas supplies in New Zealand, has led to a perception that gas will not be available in the medium term. While this is a perception that does not necessarily hold true with all participants across the gas sector, it may alter people's decisions when considering alternative forms of energy. The impact will again be to stifle gas infill rates and make gas more susceptible to substitution.

Regulation

10. We remain unconvinced that additional control of GPBs is required and that the benefits to be achieved through the introduction of control will outweigh the costs. We note that the Commission is required to advise the Minister on 'the net benefits to the public of control' (refer para. 2(c) above) but at this stage the net benefits are yet to be demonstrated. It will be a perverse outcome if the regulatory framework results in increased costs to GPBs which in turn become a barrier to further expansion of networks.
11. Furthermore, we do not consider that a 'one-size-fits-all' approach is appropriate for the regulation of GPBs. Each GPB needs to be considered on its merits. As indicated below, WGL has achieved reductions in its operating costs which it has shared both with its customers (retailers and presumably end users, through price reductions) and with shareholders (through retaining some of the efficiencies) in profits.

Financial Performance



Data Source: Wanganui Gas Limited published information in NZ Gazette except for 2002 which is provisional

12. As provided to the Commission on 30 July 2003, in response to questions 4 and 5 of their Information Request, we provided the following tables which provide price information by year and therefore, underpin the graphed trends in paragraph 11.

<i>Supply Charge \$/GJ – including UFG</i>						
<i>1996/97</i>	<i>1997/98</i>	<i>1998/99</i>	<i>1999/00</i>	<i>2000/01</i>	<i>2001/02</i>	<i>2002/03</i>
	\$3.600	\$3.785	\$3.673	\$3.342	\$3.342	\$3.276

<i>Meter Type</i>	<i>GMS Charge(\$/day)</i>						
<i>On-network</i>	<i>1996/97</i>	<i>1997/98</i>	<i>1998/99</i>	<i>1999/00</i>	<i>2000/01</i>	<i>2001/02</i>	<i>2002/03</i>
<i>M6</i>		0.4027	0.2926	0.3603	0.1008	0.1008	0.0921
<i>M12</i>		1.2356	1.2356	1.1932	0.6246	0.6246	0.6246
<i>M23</i>		1.789	1.789	1.5850	2.1760	2.1760	2.2182
<i>M43</i>		2.1726	2.1726	1.8489	2.6945	2.6945	2.6505
<i>M85</i>		3.3726	3.3726	2.6991	3.0978	3.0978	2.9593
<i>M142</i>		5.0329	5.0329	4.3175	5.9427	5.9427	5.8835
<i>M200</i>		8.0603	8.0603	5.0026	7.4661	7.4661	7.2019
<i>M300</i>		10.8192	10.8192	6.5054	9.0997	9.0997	9.3926
<i>M450</i>		13.3507	13.3507	8.3657	10.6398	10.6398	10.6398
<i>Corrector</i>				2.4890	2.6486	2.6486	2.8264
<i>Off-network</i>							
<i>M6</i>							0.1013
<i>M12</i>							0.6808
<i>M23</i>							2.3956
<i>M43</i>							2.8361
<i>M85</i>							3.1368
<i>M142</i>							6.1777

<i>Meter Type</i>	<i>Service Pipe Charge(\$/day)</i>						
	<i>1996/97</i>	<i>1997/98</i>	<i>1998/99</i>	<i>1999/00</i>	<i>2000/01</i>	<i>2001/02</i>	<i>2002/03</i>
M6					0.2502	0.2502	0.2580
M12					0.2082	0.2082	0.1813
M23					0.2418	0.2418	0.3025
M43					0.4755	0.4755	0.5049
M85					0.5467	0.5467	0.6061
M142					1.0487	1.0487	1.2051
M200					1.3175	1.3175	1.4751
M300					1.6058	1.6058	1.6575
M450					1.8776	1.8776	1.8776

13. We are of the view that for WGL, an efficient level of costs has already been reached and our performance does not suggest that control is required. Little scope exists for further reduction in costs, without putting quality and security of supply at risk by disincentivising investment and innovation.

14. WGL anticipate that as a result of the Commission's proposed framework we will be forced to develop a comprehensive regulatory function to deal with queries and compliance, particularly in relation to establishing efficient levels of costs and prices if the building block approach to pricing is implemented. Ultimately this cost will be recovered from the consumer or shareholders, and as the Commission has not demonstrated a cost benefit analysis of the proposed regime it is not clear to us that the acquirers of gas distribution services will be better off. Given that there is interfuel competition, WGL has limited ability to pass on these costs in which case shareholders will also be disadvantaged and investment will be constrained.

15. It is also worth noting that the direct costs of a regulatory body are likely to be high relative to the size of the gas distribution sector. The costs of control (both direct and indirect) are to be spread over an end user base of 235,000 end users, imposing a significantly higher burden on consumers than in electricity sector, with its 1.8 million end users. More importantly for us, as the smallest GPB, is the relative inequity of the costs on a smaller business. While a small element of regulatory costs are likely to vary with the size of the end user base, a significant

portion of the costs will be fixed, with a comparatively higher detrimental effect on our business.

16. We note that the Commission’s proposed counterfactual is that no additional regulation is imposed. This “...might allow the gas pipeline businesses somewhat greater latitude in behaviour, leading to an increase in inefficiencies or excess pricing”¹. As noted above, if the GPBs were to continue under the light-handed regime, based on trends to date, this behaviour looks to be unlikely. We consider the Commission should reconsider its conclusion in respect of WGL to reflect improvements we have made in prices and costs to date. The light-handed approach has succeeded in bringing down prices and costs. It is not clear that the introduction of control will bring additional net benefits.
17. It is also worth noting at this point, that any purported gains from regulation may not necessarily reach the end consumer. Retailers may not pass through any of the benefits the proposed regime may generate, allowing retailers to capture benefits that should rightly accrue to the end user.
18. WGL is also concerned that the Commission does not consider in the Paper the exclusion of contestable services, such as Gas Measurement Systems (“GMS”). The exclusion of such services is consistent with, as we understand them to be, the yet to be promulgated Gas Information Disclosure Regulations replacing the 1997 Regulations or parts thereof.
19. Finally, but importantly, the introduction of regulation has the potential to significantly impact the level of investment undertaken in GPBs. The threat of regulatory interference will create further uncertainty in the sector. Further consideration to this issue is given in paragraph 57 below.

Pricing Principles

20. The Commission considers that it is necessary to judge the behaviour of GPBs against an efficient level of prices, and submits two potential approaches to determine efficient prices.

¹ Para 4.49 – Gas Control Inquiry – Draft Framework Paper 16 July 2003

Comparative Benchmarking – Principles

21. Under this approach, prices are compared with those of comparable services provided in other markets either that have effective competition or in which prices are known or assumed to be efficient.

22. Comparative benchmarking is the best basis upon which to determine efficient prices. In its discussion paper on the Regulation of Electricity Lines Business², the Commission proposed implementation criteria for evaluating a regulatory regime. These included regulatory risk and transparency, robustness and replicability, cost effectiveness and industry specific factors. We consider all of these are also relevant criteria for consideration in regulating GPBs. The ultimate test is whether the results of the selected approach are understood, reasonable and accepted. We are of the view that the comparative benchmarking approach is more transparent, simple and cost effective than the building block approach.

23. However, we also recognise the shortfalls in this approach namely:
 - 23.1 The market for the supply of gas services in New Zealand is small. While some of the larger market participants may own and operate a number of distinct networks, they are not required at this point in time to make disclosures about the operations and performance of individual networks. With this level of aggregation in the market, direct comparisons between networks becomes difficult, and it is not possible to compare networks on a like-for-like basis; and
 - 23.2 Many international gas markets have had regulation for some time with established regulatory regimes. While an argument could be made for comparing the supply of gas services in New Zealand with markets such as the US and UK, a lack of direct comparability (due to the unique nature of our market and low levels of gas penetration) makes this exercise difficult. Deriving useful comparisons from international data would require significant analysis, with resource implications for both the Commission and industry participants, without being certain the outputs will be comparable and therefore useful.

² Regulation of Electricity Lines Business – Targeted Control Regime; Resetting the Price Path Threshold Discussion Paper 30 May 2003 (section 2.6)

24. However, while recognising that there are some issues, we remain of the view that comparative benchmarking is a better approach to determine efficient prices.

Building Block Approach - Principles

25. The alternative approach, preferred by the Commission, is to determine efficient prices by estimating an efficient level of revenue utilising the building block approach. However, the building block approach is complex, intrusive and expensive, as in order for the building block approach to work effectively, the Commission needs to analyse each company in a significant level of detail, addressing:
- the efficient level of operating costs;
 - the efficient asset base; and
 - the efficient return on, and of, capital.
26. This is not only a significantly time consuming and subjective exercise, but the costs of undertaking this analysis will be high, increasing the direct costs of regulation. This places a further imposition on smaller companies like ourselves, resulting in greater operating costs per end user when compared to the larger network companies. The Commission must demonstrate the expected benefits of this option before accepting this is the most efficient approach. At no point to date has the Commission demonstrated the need for price control. It is our submission that market forces are already constraining our prices and that the implementation of this regime will make both consumers and shareholders worse off.
27. The building block approach also removes incentives for efficiency. The building block approach is effectively rate of return regulation (by determining allowed returns on an efficient asset base), but it is the prospect of making good returns that drives innovation and efficiency. By removing these incentives, long term investment decisions become difficult, resulting in potential delays or abandonment of investment opportunities.

28. It is this perverse outcome which has resulted in many international regimes moving from rate of return regulation to incentive based regimes, such as CPI-X. These place less emphasis on the regulator determining and monitoring the returns of the businesses, and focusing more on prices and quality, items of importance to the consumer of the services. We note that the Commission has moved away from a rate of return regime in relation to the regulation of ELBs.

Pricing Efficiency

29. In presenting relevant principles for promoting efficient prices, three aspects of efficiency are considered by the Commission:
- Allocative efficiency which considers whether the price paid by users reflects the costs incurred in meeting the consumers demand;
 - Productive efficiency which addresses the principle of meeting demand at the lowest possible costs (which is generally the case in a profit motivated entity); and
 - Dynamic efficiency which is concerned about maintaining both allocative and productive efficiency over time. Businesses can be motivated to earn higher profits by introducing innovation or undertaking further investment.
30. Dynamic efficiency is the most important aspect of efficiency in the context of determining efficient prices.
31. Dynamic efficiency must be promoted by the regulatory framework, by allowing sufficient returns to be made to incentivise monopoly businesses to invest and reinvest in their networks. The difficulty here is the asymmetric risk that these businesses face, as they need to be incentivised to innovate and invest, but face the risk of not recouping these costs under certain regulatory circumstances.
32. Dynamic efficiency is also difficult to evaluate given that it requires consideration of what investments (both current and prospective) are necessary, to ensure under and over investment do not occur. We concur with the Commission's statement that at this stage in the process the focus should be on efficient level of prices, rather than focusing on the efficiency of specific pricing methodologies. In addition, it is appropriate to focus over the long term when

considering efficiency, rather than on the short term which is vulnerable to variability. This is most important for GPBs which require a irregular investment to support incremental demand over the long term.

Building Block Approach

33. We again stress that we do not consider that the building block approach is a cost effective method for determining efficient prices. However, in response to the Paper we have considered below each of the building block components in further detail. Again, we note that at this stage in the regulatory process, our comments are addressed to the proposed framework as presented in the Paper. We anticipate making further, more detailed submissions on the points noted below, when additional detail is provided by the Commission.

Efficient level of capital - Asset Base and Valuation

34. The appropriate value of the asset base is critical in determining the return both on and of capital. When focusing on dynamic efficiency it is important that companies are rewarded for, and allowed to make a return on investment made over the life of the asset, and not face asymmetric risks of downside exposure under the regulatory framework.

Determining the asset base

35. The Commission has considered three valuation concepts for determining the efficient asset base upon which prices will be determined;

- Historical costs approach;
- Opportunity cost; and
- Replacement cost.

36. We are of the view that of the three concepts noted, replacement cost, using Optimised Deprival Value (“ODV”) is the most appropriate base to use for determining efficient prices, for the reasons noted below.

37. The ODV methodology provides information on asset replacement and when assets will wear out. It is appropriate for businesses having assets with long lives and sustainable long term demand, to consider the refurbishment or

replacement costs for assets as they reach the end of their economic life. This supports the dynamic efficiency argument.

38. All of the GPBs calculate ODV and use it for disclosure purposes and the information is therefore readily available.
39. The asset registers used for ODV are robust, they are linked to physical assets in the field through GIS systems which are maintained for operational purposes.
40. There is less regulatory risk if the methodology is not subject to change from that currently used.
41. Systems will continue to be maintained for local authority rating, financial reporting and asset management purposes and therefore the ODV framework is efficient and low cost, and will require very little additional regulatory compliance cost going forward.
42. The prescriptive nature of the draft Gas ODV Handbook also allows the replacement costs method to achieve consistency between the businesses.
43. As ODV is used across all GPBs , increased costs are likely to be incurred if it becomes necessary to move away from the existing framework.
44. The ODV values are robust, transparent, reliable, and can be audited at a given point in time to ensure comparability (as in the case of the ELBs) and on an annual, or other recurring time period, as required.
45. The draft Gas ODV Handbook does not face similar issues to those experienced by electricity companies in that the Gas ODV Handbook was created in 2000. The Gas ODV Handbook has yet to be formally promulgated, but we understand its use as a guide is widespread.
46. The optimisation element of the ODV methodology reduces the opportunity for gold-plating of assets, is already in place and well understood by the industry,

and can be applied consistently and at a lower cost than other methodologies such as ‘used and useful’ tests that would be required in the Historical Cost framework.

47. The ODV model employs both asset based and market based components, such that replacement costs are constrained by the Economic Value (“EV”) analysis.
48. The correct use of replacement cost approaches results in same NPV over the life of the assets life as Historical Cost does, if revaluations are reflected in income.
49. ODV avoids complications arising from different accounting treatments associated with fixed assets such as determination of repairs and maintenance costs as distinct from capitalised fixed assets.
50. However, we note that there are other issues that need to be considered in relation to optimisation that we will address in more detail in the second stage of the regulatory process. These include:
 - 50.1 Optimisation in GPBs will generally be higher than that experienced by ELBs, unless a longer term view of demand growth is considered. The high optimisation arises as a result of the low level of infill of gas therefore the capacity to accommodate growth. GPBs tend to oversize pipelines in relation to initial load growth. This occurs mainly due to the difficulty of incrementally increasing the capacity of the network at a later date. It is necessary to build the network to reflect all of the assumed load and future growth. For ELBs in contrast, significantly increasing the level of infill is less of an issue, as electricity already has high infill and is considered to be a necessity (as opposed to gas which is viewed as an elective fuel).
 - 50.2 In addition, the risk of assets requiring economic writedown in the gas distribution sector is higher than in the electricity sector. Some consumers have a perception that gas reserves are depleting, such that gas will not be available for their consumption in the medium future. We are aware of consumers altering their decisions away from investment in gas appliances in response to this perceived risk. Evidence indicates that gas by-pass occurs, however we are

uncertain whether it occurs to the same extent in electricity. Fuel substitution is more likely to occur in gas than electricity. This poses a significant problem for GPBs, who are faced with the risk of being left with stranded assets.

51. We do not consider that Historical Cost is an appropriate basis for determining the efficient asset base. There are a number of issues associated with the Historical Cost approach that makes it impractical to apply into the proposed regime.
 - 51.1 While WGL has financial asset records that date back many years, there are a number of issues concerning their accuracy. The costing methodologies have evolved significantly over the last ten years or so, but until recently the full cost of capitalised assets were not reflected. While the direct construction costs may be included, appropriate allocations of overheads have not been incorporated.
 - 51.2 Historical Cost does not ensure consistency across the industry. The valuation of system assets for financial reporting purposes is covered by Financial Reporting Standard 3 (“FRS-3”) Accounting for Property, Plant and Equipment (promulgated in 2002). Prior to the release of FRS-3, the GPBs were required to report under Statement of Standard Accounting Principle 3 (“SSAP-3”) Accounting for Depreciation (1984) and SSAP-28 Accounting for Fixed Assets (1991). The impact of these two promulgations was that entities were allowed to value at Historical Cost or at Modified Historical Cost (ie at valuation), and they also provided some guidance on the capital and maintenance split, although this was not specific. There was some debate about whether SSAP-28 applied to infrastructure assets such as GPBs, and this was resolved in 1998 with the promulgation of ED-82 Accounting for Property, Plant and Equipment, which, although not mandatory, prohibited infrastructure accounting. FRS-3 is mandatory and provides more specific guidance for the capital and maintenance expenditure split, but is only forward looking. Therefore incorrect classifications between maintenance and capital expenditure made in the past are now locked into Historical Cost numbers.
 - 51.3 WGL has been in existence for 124 years and we are able to produce fairly accurate, although understated historical cost records. However we recognise that the other GPBs, in which there has been a change, or several changes in ownership, are unlikely to be able to produce records of a similar nature. Not

only may records have been misplaced, but assets are likely to have been recorded at transacted values rather than actual historical costs at the time of construction.

- 51.4 Given the difficulties faced in determining historical cost values, and the need for consistency across GPBs (i.e. all businesses need to have their assets valued on the same basis), the Historical Cost methodology is not appropriate for valuing the fixed assets. Strictly speaking, Historical Cost is not a valuation basis, rather it is a collection of costs (not necessarily complete costs) incurred at the date of construction or purchase that might not bear a strong relationship with the most cost effective means of providing distribution services today.
- 51.5 The Historical Cost approach does not intuitively encourage efficient investment and has the potential to lead to ‘gold plating’ of assets. Under these circumstances, the asset base can not be deemed to be an efficient base from which a return on capital can be determined. This can be mitigated to some degree through the introduction of ‘used and useful’ tests, however these have their own complications. Decisions would be required on whether the ‘used and useful’ test would be undertaken on an ex-ante or ex-post basis. Ex-ante tests would effectively require the GPBs to receive regulatory clearance prior to investments being undertaken, resulting in the regulator effectively ‘managing’ the business investment operations. Ex-post testing exposes the GPBs to the risk of the regulator refusing to allow assets to be entered into the efficient asset base, which could significantly distort investment decisions.
- 51.6 Furthermore, a lack of consistency of treatment of items such as refurbishment, replacement and maintenance costs may lead to diverging Historical Cost asset values by different owners over time.
52. The Commission has also given consideration in the Paper to the use of opportunity cost as a basis upon which to value the distribution assets. We support the view of the Commission that this basis is not appropriate, given the low asset base that would result. The opportunity cost method fails to meet the dynamic efficiency criteria, as investors would not be prepared to undertake additional capital investment when returns would be diminished below acceptable levels.

53. In summary, we consider that under the building block approach, identifying the efficient asset base is critical to the determination of efficient revenues and therefore efficient prices. ODV is the preferred approach as it is already in use, well understood, robust, transparent, efficient, least cost, reflects the need for the businesses to maintain and replace the asset over the long term, is consistent with the dynamic efficiency criteria, and allows for comparability and consistency of value across the businesses.

Return on capital – WACC

54. Determining WACC is a complex area. As the Commission’s Paper focuses on methodologies and principles, with the application of these being considered in stage two of the inquiry, we have limited our comments to matters of principle rather than detail on the WACC methodology itself.
55. Generally a business’ WACC only measures those risks that it is designed to capture. The required rate of return for a regulated GPB may need to be set at a higher level since there are significant downside risks arising from obsolescence issues which are asymmetric (i.e. have downside risk which is not offset by the potential for upside and which are not addressed by a conventional WACC estimate). However, where possible it is preferable that these risks be compensated through the use of accelerated depreciation rates, and revaluation losses or gains accounted for through income.
56. For the purposes of this submission we have addressed those characteristics of the gas distribution sector in respect of WACC that do not appear to have been considered in the Paper.

Determination of Asset Betas:

57. The most contentious issue in relation to assessing an appropriate WACC is determining the asset beta.
58. It is tempting to compare gas distribution activities in New Zealand to electricity distribution, given the long term nature of the assets, and the perception that they have monopoly characteristics. However a GPB faces more risks than an

ELB. As New Zealand's gas supply moves toward a number of smaller gas fields, the efficiencies associated with scale production are lost, with a resulting increase in underlying gas prices. GPBs are also faced with a significant initial capital investment for higher future capacity but with low immediate connections.

59. This needs to be considered when considering returns on capital. As the risk associated with GPBs increases, investors will seek higher returns, making financing more expensive. This must be reflected in the return on capital, otherwise capital will not be available to finance further investment.
60. We also note that the introduction of prescriptive (referred to as heavy handed) regulation in other regimes has led to the increases in betas of listed entities. This has been the experience in both the UK and the US, although care needs to be taken to isolate the effect, as the impact may differ depending on the nature of the regulatory regime (price and/or revenue cap, and rate of return regulation).
61. It is worth noting that dynamic efficiency can be hindered if investment decisions are influenced by the valuation approach adopted. Investors make investment decisions taking into account their view of the future and risks that may arise. In sectors characterised by monopoly assets, investors consider regulatory risk as the most significant risk, particularly when they perceive that the regulatory regime may change over time. It is essential that there is sufficient certainty in the regulatory regime (for example, the valuation of the asset base) to allay these concerns.
62. We note the Commission's concerns about determining betas given the difficulties associated with 'pure play comparisons', both here in New Zealand, and against international gas distribution companies, where unique differences in the market and operating environment make comparison difficult.

Other WACC comments

63. We concur with the Commission that it is appropriate to use a nominal WACC for the purposes of assessing an efficient return on assets, given the general acceptance of its use and general familiarity with its derivation. Further, we agree that if a nominal WACC is used to determine an efficient return, then revaluations of the asset base should be included within income of the GPB.
64. The Commission considers that actual leverage should be used to determine the leverage ratio for the purpose of determining WACC. We concur with the use of actual gearing, if the firm's actual costs are being considered. However, if an efficient return is being considered (based on efficient costs and capital base) then it would be more appropriate to use an efficient level of debt for the purposes of determining WACC.
65. In determining the impact of personal taxes on the Cost of Equity, we note that the Commission has adopted the Brennan-Lally approach of taking into account personal tax rates that differ across both investors and sources of income. Brennan-Lally assume that the average investor faces a 33% marginal ordinary tax rate (T_i), and therefore calculates the cost of equity (R_e) as
- $$R_e = R_f (1 - T_i) + \beta_e (\text{Tax Adjusted Market Risk Premium})$$
66. We note that PricewaterhouseCoopers apply 28% as the effective tax rate of the average investor. We also understand that this has been subject to a separate submission by PricewaterhouseCoopers in relation to the Regulation of Electricity Line Business³.
67. We do not consider it appropriate that returns above WACC should also be viewed as 'excess profits' if in fact they represent superior levels of performance. It is not appropriate to punish superior performance, and the creation of profits in excess of an efficient WACC return should act as an incentive to strive for further efficiency.

³ Submission on the Draft Decisions for the Targeted Control Regime for the Regulation of Electricity Line Businesses. PricewaterhouseCoopers 28 February 2003.

Return of capital

68. WGL supports the use of an ODV asset basis for the determination of efficient revenues, under the building block approach. We do not consider it appropriate to apply tilted depreciation. While tilted depreciation may give a better depreciation profile, the complexities around its calculation and the additional time and cost involved in doing so, negate its efficient use. For simplicity, we support the application of straight line depreciation to replacement costs to determine the depreciated replacement cost of the assets.

Level of operating costs

69. The determination of efficient operating costs under the building block approach will require significant time and effort by the Commission, or its advisors, to understand the drivers, and unique circumstances of each distribution business. It is not appropriate to simply extrapolate historical operating expense performance improvements, given that our GPB operates at high levels of economic efficiency.

Conclusion

70. We summarise below the key points of our submission:
71. WGL has already achieved cost efficiencies which it has shared with both its customers (retailers and presumably end users) and owners, and considers that the Commission does not need to introduce prescriptive control on WGL.
72. The market in which GPBs operate is competitive. Market forces, including the threat of by-pass and energy source substitutability restrain prices.
73. The Commission has not demonstrated that the benefits arising from the introduction of a prescriptive regime, will outweigh any associated costs.
74. The purported benefits of any regulatory regime may not be passed on to end users by the retailers.

75. The costs of regulation to be borne by WGL will be disproportionate, given our comparative size in relation to other GPB businesses.
76. In our opinion, the building block approach is complex, intrusive and expensive to implement. In addition, it removes incentives for efficiency, putting future investment at risk.
77. If the building block approach is adopted by the Commission, it is our view that ODV is the most appropriate methodology to be used for determining a valuation (efficient asset base). Historical Cost and Opportunity Cost methods are considered inappropriate.
78. GPBs are characterised by large capital investments over long time periods, with capital returned on assets with long lives. GPBs are exposed to increasing risks and require certainty and stability from the regulatory regime to ensure additional capital investment by owners will be undertaken.
79. We look forward to discussing this submission with you at the Conference on the Draft Framework Paper.
80. If you have any queries in relation to issues raised in this submission, please contact Geoff Evans on (06) 349 1282.

Yours sincerely



Trevor Goodwin
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