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Gas Pipelines Inquiry  
Commerce Commission  
PO Box 2351  
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## **Commerce Commission Gas Control Inquiry – Mighty River Power Submission June 2004**

### **Summary**

In Mighty River Power Limited's ("Mighty River Power") opinion it is vitally important for the future of the New Zealand gas industry that all pipelines that are not contestable should be regulated to ensure fair and reasonable terms and conditions for access.

### **Regulation**

Mighty River Power agrees with the Commission's findings that control of gas services supplied by NGC, Powerco, Vector and Maui Development Limited (other than the Maui Gas Contract) would be in the interest of acquirers and that these pipelines operators face limited competition.

Mighty River Power is of the opinion that non-contestable segments of industries should at the very least face a higher degree of oversight than contestable areas. In addition, if warranted, non-contestable segments should face regulation to ensure that services required by the competitive parts of the industry are available on fair and reasonable terms.

### **Inter Fuel competitiveness**

Mighty River Power believes that there is inter-fuel competition, although this may not be uniform across the whole of the gas market, and the benefits of competition in the contestable segments of the market - exploration, wholesaling and retailing - may be captured or limited by the behaviour of the non-contestable segments. In addition, if market power was exercised, the investment decisions of some gas users mean that it would be almost impossible to re-locate or bypass non-contestable parts of the gas supply chain.

Consequently, Mighty River Power supports the view that the constraints on gas prices in the contestable segments of the market, due to competition, would not be a constraint on the network component of the delivered gas price. Therefore, the effects of competition are likely to be greatest on the wholesale price, with the potential for flow-on effects to be captured by the non-contestable segments. This limits the value of competition at the retail customer level to relative transactions costs.

## **Comparative Benchmarking**

The Meyrick and Associates study engaged by the Commission addresses the question of whether New Zealand transmission and distribution businesses are less cost efficient than our Australian counterparts. The report resulting from that study suggests that if New Zealand businesses were found to be consistently less cost efficient than the normalised performance of overseas business then this would lend weight to the argument that control is in the interests of gas service acquirers.<sup>1</sup>

Mighty River Power acknowledges that the differences in customer and energy density, the small number of observations and environmental differences makes the direct comparison difficult and inexact. However, Mighty River Power submits that the finding in the report of an estimated difference in efficiency between New Zealand and Australia of 57% for transmission and 21% for distribution is significant enough to add weight to the argument for regulatory control in New Zealand.

## **Asset Valuation - ODV**

Mighty River Power has concerns about ODV as a methodology for asset valuation and that this issue should be opened further for industry debate. The valuation of assets in a regulated market is fundamental in determining the charges that acquirers face. The problem with ODV is the ability to include asset revaluations in calculating returns. As such, the ODV methodology incentivises regulated companies to increase the value of their assets through revaluations.

One only needs to look at the valuation of New Zealand electricity lines companies since ODV was introduced. From 1993 to 1999 the book value of electricity lines companies in New Zealand rose by more than 100% in a time of low inflation. This was not due to capital expenditure rather due to lines companies increasing the value of their assets following the introduction of ODV.<sup>2</sup> In fact the very concept of using ODV as a methodology for calculating returns was rejected by the inventor of the system.<sup>3</sup>

## **Asset Valuation - WACC**

The Commission is using WACC methodology to determine the appropriate returns if the gas transmission and distribution pipelines were to become regulated. The WACC methodology used by Dr Martin Lally is probably the best available at present, however, the theory must be used with caution.

Beta is used to determine the required return on equity and is an input into the WACC. Theory suggests that a higher beta (the covariance between the return on an asset and the return on the market portfolio relative to the variance of the market portfolio) should be compensated with a higher return.<sup>4</sup> There is very little empirical evidence to support correlation between beta and return.

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<sup>1</sup> Meyrick and Associates, Productivity Growth in New Zealand Gas Distribution Networks, 14 May 2004.

<sup>2</sup> Terry, Simon and Geoff Bertram, 2000, Lining Up the Charges: Electricity Line Charges and ODV.

<sup>3</sup> Ibid

<sup>4</sup> Sharpe, William F. 1964. Capital Asset Prices: A Theory of market Equilibrium Under Conditions of Risk. Journal of Finance v19, p 425-442.

The Allen Consulting Group relied on empirical evidence to establish beta values for regulated gas transmission businesses for the Australian Competition and Consumer Commission (ACCC).<sup>5</sup> The study estimated the average beta over a large number of gas transmission and distribution businesses in Australia, USA, Canada and the UK and found that equity betas averaged 0.61 in Australia, 0.12 in the US, 0.05 in Canada, and 0.07 in the UK. Asset betas ranged between 0.01 and 0.27. Further the study found that many businesses had negative betas. Such diversity suggests that beta is unreliable as an input variable for the calculation of WACC.

Fama and French<sup>6</sup> collected beta and returns data for US securities from 1962 to 1989 and found that beta and returns were very weakly correlated. Fama and French also showed that the size of a company has a greater influence on returns (the smaller the company the greater the return).<sup>7</sup>

Mighty River Power urges caution when using WACC in isolation and suggests the Commission consider overseas regulated returns, and the experience gained from setting returns at specific levels, when deciding on appropriate action in New Zealand. Mighty River Power submits that a study into how much capital investment in transmission and distribution is required in New Zealand would also be of benefit. This could be compared with infrastructure investment levels in overseas regulated markets and would make sure that New Zealand regulated returns allowed for necessary levels of capital expenditure.

## **Maui Pipeline**

Mighty River Power believes that reasonable prices, and transparency of those prices, for transmission and distribution systems are paramount for an effective gas industry. In this regard, in Mighty River Power's opinion it is particularly important that the prices and returns for delivery of gas on the Maui Pipeline are regulated. The Maui Pipeline is the major transporter of gas from the Taranaki basin and any market power in respect of the Maui Pipeline may restrict or delay investment in the exploration or production of petroleum, or worse divert investment expenditure away from New Zealand to elsewhere.

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<sup>5</sup> Empirical Evidence on Proxy Beta Values for Regulated Gas Transmission Activities prepared for the Australian Competition and Consumer Commission, July 2002.

<sup>6</sup> Fama, Eugene, and Kenneth French, 1992, The cross section of expected stock returns, *Journal of Finance*, v47:2, p 427-65.

<sup>7</sup> Fama, Eugene, and Kenneth French, 1993, Common Risk Factors in the Returns on Stocks and Bonds, *Journal of Financial Economics*, v33, p 3-56.

## **Conclusion**

Mighty River Power would like to thank the Commission for canvassing industry opinion on whether gas services should be controlled. In Mighty River Power's opinion gas transmission and distribution services in New Zealand that are not contestable should be regulated if warranted. Mighty River Power also submits that further consideration should be given to the methodology used in asset valuations and relying on WACC alone in determining the rate of return.

Yours sincerely

Neil Williams  
**GM EXTERNAL AFFAIRS**