

16 March 2009

Jim Raybould  
Retail Gas Operations Manager  
Mighty River Power Limited  
9 Perrett Drive  
Wanganui 4500

Dear Jim

### **Review of Vector Capacity Arrangements**

Thank you for your comments on the Creative Energy research paper entitled 'Review of Vector Capacity Arrangements'.

In item three, you comment on the research paper's observation that Vector's current Capacity Reservation Fees (CRFs) appear to be set higher, and Throughput Fees (TFs) lower, than efficiency principles suggest. You ask if we have quantified this, and whether we considered the capped Capacity Reservation Fees.

Section 5.3 on page 30 of the research paper said:

Section 3.5 considered the application of Ramsey Pricing principles to gas transmission pricing and concluded that, where MCE is substantially below average capital costs (as is the case for VT), the mark-up of anytime prices (ie the TPF) on variable cost should be greater than the mark-up of peak demand prices (ie CRFs) on MCE.

In fact, VT only charges a mark-up on peak demand; throughput charges are based on actual variable costs. This pricing might be efficient, but only if elasticity of anytime demand (to the delivered gas price) is substantially higher than elasticity of peak demand. This seems unlikely.

Therefore, it seems likely to be the case that CRFs presently are rather high compared to the TPF and this may lead to inefficient under-utilisation of peak capacity relative to off-peak capacity.

From publically available capacity expansion information, the research paper provides an approximation of MCEs in table seven on page 24:

Pipeline	Delivery Point	Description of Expansion	Cost (\$m)	Inc TJ	MCE <sup>1</sup>	CRF
					(\$/GJ/yr)	
North	Westfield	Pap East to Smales Rd loop	26.7	116	23	60
	Whangarei	Pap East to Smales Rd loop	26.7	16	167	600
Central North	Morrinsville	Horotiu compression	11.9	42	28	326
Bay of Plenty	Kinleith	Upgrade Pokuru compressor	16.1	24	68	99
	Gisborne	Upgrade Pokuru compressor	16.1	21	77	600
South	Tawa	Upgrade Kaitoke, loop to Hima	39.8	105	38	356
South	Hastings	Upgrade Kaitoke, loop to Hima	39.8	68	58.5	600

Note 1: Assumes a real WACC of 10% to convert capital cost to annualised amount

The research paper noted that the MCE calculation assumes capacity can be added continuously, a simplification that would underestimate the MCE. The calculation also assumes that existing spare capacity is limited and expansion is required next year. However, it appears that Vector pipelines have spare capacity, so this simplification would overestimate the MCE.

The results do indicate that CRFs can be reduced (and TFs increased) before any efficiency concerns would be raised. However the degree of this adjustment would depend on the relative elasticity of peak demand and anytime demand. The research paper did not investigate this matter.

Other factors may also come into play. For example, consider the situation where the MCE is zero.<sup>1</sup> In this case capacity prices should be zero and all revenue should be raised through a variable throughput tariff. However, a further consideration is whether a flat variable tariff, or some form of distance-based tariff like that of MDL, is appropriate. The distance-based option would be suitable where variable costs are distance-related. Or perhaps a combination of flat and distance-based variable tariffs would be preferable.

In relation to capped CRFs, you can see from the table that MCEs were calculated at several capped (600 \$/GJ/year) gates. MCEs were also substantially below CRFs at these gates. However, as previously noted, work on the relative elasticity of peak demand and anytime demand is needed before actual prices can be developed.

In item five you suggest that retailers compete less to supply end users seeking short-term or peak supply than other end users, unless short-term capacity or interruptible capacity is available. Gas Industry Co notes that the overrun arrangements do offer short-term capacity. However, we recognise this is not suitable for the situation you describe — an end user not currently supplied by you, but who is seeking prices for short-term or peak supply. Therefore, as you have experienced, it is difficult to

<sup>1</sup> As would occur if there was no likelihood of pipeline expansion.

offer supply to such customers, and competition is likely to be limited. Gas Industry Co agrees that this situation would be improved if short-term or interruptible capacity were available.

In item six you suggest that Vector should be prepared to buy back capacity if a retailer no longer needs it, providing the shipper can demonstrate a load has been lost. As I understand it, Vector's position on this issue is that each retailer should, and does, price supply to customers on the basis of all the risks involved, including the risk that the customer may be lost. Vector considers that these risks are best assessed by the retailer, and that it is efficient for the full costs and benefits of the supply to lie with the retailer, including the cost of stranded capacity bookings.

A liquid secondary market for capacity should offset the risk of stranded capacity bookings. You note in item seven that liquidity in that market may not be high. However, Vector does provide shippers with a basic capacity trading arrangement on OATIS. This appears to be a low cost, fit for purpose, arrangement.

Gas Industry Co notes your:

- support for non-gas-year capacity (item eight);
- belief that there are strong incentives on Vector not to abuse its vertical integration (item nine);
- interest in returning overrun revenue to shippers, rather than Vector retaining it (item ten); and
- concern that any move to common carriage would need to preserve existing major user capacity rights (items eleven and twelve).

Gas Industry Co agrees with your item 13 — that a change to a common carriage regime will result in transport fees to some locations falling, and to others rising; 'winners and losers' as you put it. This will be true of any change to Vector's pricing methodology, and is good reason to move with caution. The research paper did not propose an alternative methodology, but we hope that it pointed to areas worthy of further consideration.

Thanks again for your comments on the research paper.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian Wilson', written in a cursive style.

**Ian Wilson**

*Senior Adviser Pipelines*