

3 July 2009

Mr Brent Alderton
Acting Director
Network Performance Branch
Commerce Commission
PO Box 2351
WELLINGTON

Dear Brent

POWERCO GAS PRICING METHODOLOGY

This letter sets out Powerco's response to the Commerce Commission's questions set out in its letters of 21 May 2009, 3 June 2009 and 4 June 2009. Powerco has already provided a copy of our medium term pricing strategy and this letter completes our response. We welcome any feedback that the Commission may provide.

1. Transparency of Pricing (per letter of 3 June 2009)

The Commission has asked for details on how Powerco's proposed prices for the 2009/10 year have been formulated. The letter of 4 June 2008 letter indicates that "The Commission expects the scope of the response to be all the mass market tariffs, and include both the fixed and variable components of each of the tariffs for each region."

Powerco's Pricing Methodology was developed in a series of steps, and detailed reasons for each step are contained in Section 3.3 of the Pricing Methodology report. The description below adds further information to section 3.3, in particular focusing on the extent of price changes and how trade-offs have been made between the pricing objectives.

The existence of legacy tariffs and the need to avoid large rate shocks to customers has made the task of determining prices complex. In particular, Powerco has not been concerned with average price changes as much as individual ones, those experienced by customers who fall at the tail ends of the consumption distribution for a particular tariff. In each step of Powerco's price development, the impacts to customers have been modelled, and if necessary, tariff movements have been adjusted to keep rate shocks within acceptable bounds.

Price development has therefore been an iterative process, and the attached appendix shows this process.

The derivation of Powerco's proposed 2009/10 prices is described below.

a. Combining G05 and G07 residential customer groups

Powerco's first step has been to merge the G05 and G07 residential tariffs in all regions. This is part of making tariffs easier for customers to understand by simplifying them. Powerco has created a fully variable tariff, G06, which lowers prices for small residential customers using up to 15 GJ gas per year.

Powerco's objective in creating the G06 group is that it be revenue neutral in terms of revenue recovered from residential tariffs. The variable rate for this tariff has been chosen by dividing the total revenue of the G07 tariff by the total GJ of the G07 group. The revenue shortfall thus created has been added to the G11 variable tariff within each network region.

b. Harmonise tariffs where possible

Powerco has two long run goals:

- to harmonise tariffs between the Wellington and Hutt Valley/ Porirua regions as they have a number of similar costs and characteristics
- to make prices more consistent across the Hawke's Bay, Manawatu and Taranaki regions.

If this rebalancing occurs in one move, the rate shock to customers would be substantial. The table in Appendix 4 of Powerco's pricing methodology report shows prices as at January 2009, and the disparities within tariff groups and between regions are obvious.

Therefore, the complete rebalancing exercise will need to take place gradually over time. As an initial step in the rebalancing, the G11 variable charge has been increased by 8% in Taranaki and by 10% in Hawke's Bay and the Hutt Valley regions. The increase to Taranaki has been tempered by rate shock concerns, as this tariff group also experienced an increase in the creation of the G06 tariff.

c. Move to 50:50 fixed/ variable revenue split

A further pricing goal is to change the proportion of revenue that is derived from fixed tariffs; at the moment, the proportion is about 44%, including metering revenue; longer term, the target is to derive about 50% of revenue from fixed charges. For this step, Powerco has increased fixed charges by 10% to all tariff groups, with the exception of:

- commercial tariffs in Taranaki, where fixed charges are already high; and
- G12 in Manawatu, where fixed charges are also relatively high, compared to other G12 tariffs.

d. Restructure price inconsistencies - Taranaki

In general, the pricing structures in the regions are relatively consistent. The exception is Taranaki. Although the tariffs in this region follow the same tariff profile, daily charges in Taranaki are higher than the corresponding charges in other regions, and variable charges are lower.

To address this imbalance, in Taranaki fixed rates for G12, G14, G16, and G18 have been lowered and variable rates for G12, G14, and G16 have been increased. Like the other price changes Powerco is proposing, these changes have been structured to limit the price increases experienced by individual customers. This is the first step in restructuring the commercial and industrial Taranaki tariffs; further restructuring is necessary in the medium term.

e. Restructure price inconsistencies – G12

In addition, the G12 tariffs need restructuring to ensure the tariff does not incentivise commercial consumers to move into lower consumption residential tariff groups.

This restructuring involves:

- decreasing the G12 variable charges to ensure that they are less than the G11 variable charge in three regions (Hawke's Bay, Wellington and Hutt Valley)
- increasing the G12 variable charge and decreasing the G14 variable charge in the Manawatu/Horowhenua region to ensure they both fit the pricing patterns of decreasing variable charges with increasing capacity
- increasing the fixed G12 tariff in the Hutt Valley / Porirua region to bring it more in line with G12 tariffs in other regions.

Finally, Powerco applied a CPI increase to all prices not previously adjusted, with the exception of Wellington (as part of aligning Wellington and Hutt Valley prices). Minor adjustments were also made of prices to ensure compliance with our allowable revenue.

2. **Distributed Cost Pricing Action (Question 5 of letter of 21 May 2009)**

The Commerce Commission asked, in their letter of 21 May 2009:

“Please provide a more detailed summary of problems with distributed cost, and recognising these problems, explain why the fully distributed cost concept is elevated to an important objective as reflected in the ‘aim is to move to prices that are based on fully distributed costs over time’”.

This issue was discussed at Powerco’s meeting with Commerce Commission staff and the Commission’s economic advisors on 29 May 2009. As Powerco commented at the meeting, this issue seems to be caused by a different interpretation of the report than what Powerco intended.

a. Problems with Distributed Cost

A detailed summary of the problems with distributed costs is set out at paragraphs 4.6 to 4.13 in the Commerce Commission’s 2002 *Final Report, Part IV Inquiry into Airfield Activities at Auckland, Wellington, and Christchurch International Airports*.

b. Why the fully distributed cost concept is elevated to an important objective as reflected in the ‘aim is to move to prices that are based on fully distributed costs over time’

In section 3.3 of Powerco’s Pricing Methodology we include “move to a more fully distributed cost pricing over time” as a heading in summarising the overall pricing strategy for the control period.

This heading has to be read in the context of the comments made immediately below it:

“Powerco considers that it is important for gas distribution customers to pay for the costs that are incurred in providing their services. However, this consideration needs to be balanced against the price sensitivity of customers.”

And in section 3.2.3:

“Charge customers a reasonable share of the costs of using the network
As far as is practicable, customers should be charged a price that reflects the costs of providing the service to them. However, fully distributed costs are not the only factor to consider in determining suitable prices.

As Professor Alfred E. Kahn has written,⁹

The basic defect of full cost distribution as the basis for pricing is then that they ignore the pervasive discrepancies between marginal and average cost. [T]hose discrepancies may require prices that take into account not just the costs but also the elasticities of demand of the various categories of service if the company is to recover its total costs. Whenever there is some separable portion of the demand sufficiently elastic that a rate below fully distributed costs for it would add more to total revenue than to total costs, any insistence that each service or group of patrons pay their fully allocated costs would be self-defeating. It would force the firm to charge a price that would result in its turning away business that would have covered its marginal costs in other words would prevent it from obtaining from customers with an elastic demand the maximum possible contribution to overheads.

Powerco has taken fully distributed costs into consideration in determining its proposed tariffs, but equally it is concerned to ensure that customers face prices that are perceived to be a reasonable and fair reflection of the service provided.”

Powerco is aware that fully distributed costs have deficiencies with regard to their use in pricing. The statement that Powerco intends to move toward “a more fully distributed cost pricing over time” comes from Powerco’s intention to reflect:

- The Commerce Commission’s guidance “to make pricing as cost-reflective as possible.”⁴ and
- The Commerce Commission’s draft paper on Pricing Principles which states that “Efficient pricing should ensure that the full costs of producing and transporting gas are signalled to consumers subject to consumer demand characteristics (including the demand for particular levels of service quality)”².

This is not the sole objective, and it is balanced against the other outcomes Powerco wishes to achieve with its pricing strategy: Powerco has also taken consumers’ demand responsiveness into account, to the extent practicable, in line with the Commission’s second pricing principle. For example, Powerco has tailored the new G06 residential tariff to the preferences of small customers.

¹ Michael Clark, Letter to Nathan Strong of Vector, 12 December 2008.

² Commerce Commission, Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd, DRAFT DECISIONS PAPER – PRICING PRINCIPLES, GUIDELINES, AND REPORTING REQUIREMENTS, 7 December 2007, Page 8

3. Allocating Consumers to Load Groups (Question 8 of letter of 21 May 2009)

The cost of supply model re-allocated consumers to particular load groups 'based on historical consumption volumes and type of meter'. The Commerce Commission asked

"The cost of supply model re-allocates consumers to particular load groups 'based on historical consumption volumes and types of meter'. It is not clear whether this re-allocation is done solely for the purposes of the cost of supply model, or whether the basis of charging between Powerco and the retailers will also be on the basis of this re-allocation. Please clarify."

Powerco can confirm that charging between Powerco and retailers will be on the basis of the re-allocation contained in the cost of supply model.

4. Possible Changes in Metering Prices (Question 12 of letter of 21 May 2009)

The Commission's letter of 21 May 2009 requested:

"The report does not examine in any detail any possible changes in metering prices. Operating costs for meters are presumably very low, with the bulk of the tariff reflecting capital charges. Please provide information on the installed cost of the different sizes of gas meters and show the extent to which proposed charges reflect the relative capital costs."

a. Operating Costs for Meters

The operating costs for Powerco's metering business are provided in the "Powerco Cost of Supply - Metering Model" in the sheet 'Cost & Revenue Forecasts'. These costs are linked through the "Powerco Cost of Supply – Network Model" and are presented in the following table:

3. Indirect Costs						
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Reactive Maintenance	40,000	39,000	39,000	38,000	38,000	38,000
Scheduled Maintenance	151,000	144,000	139,000	131,000	128,000	128,000
Customer Initiated Maintenance	392,000	392,000	264,000	264,000	68,000	68,000
Administration	947,060	969,713	992,497	1,014,754	1,014,754	1,014,754
Engineering Support	429,213	427,237	411,433	411,433	411,433	411,433
Pass Through Costs						
Audit Fees	-	-	-	-	-	-
Indirect Rates	-	-	-	-	-	-
Statutory Levies	-	-	-	-	-	-
Other Indirect Costs	-	-	-	-	-	-
Return on Assets						
Depreciation of Meter Assets	675,537	684,088	698,620	725,314	725,314	725,314
Amortisation of Intangibles	-	-	-	-	-	-
WACC Return on Meter Assets	721,701	776,221	810,646	872,816	872,816	872,816
Taxation	76,111	81,829	85,396	91,973	91,973	91,973
Net Forecast Costs and Revenues						
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Net Forecast Costs & Revenues	3,432,623	3,514,088	3,440,593	3,549,290	3,350,290	3,350,290
Percentage of Asset Capital Charges to Total Costs	40.7%	41.6%	43.9%	45.0%	47.7%	47.7%

As shown, maintenance, administration, and engineering support costs total around \$2.0m to \$1.7m per annum, compared to the asset related expenses of Depreciation and Return on Assets of around \$1.4m to \$1.6m per annum. These figures compare to total annual expenses of around \$3.4m to \$3.5m.

b. Meter Installed Costs

The installed cost of the different sizes of gas meters is provided in sheet 'Stand Alone Cost Analysis'. This sheet displays the Replacement Cost (RC) per individual meter for meter types MT10 to MT300, and the much larger industrial MTPOA meter type. Also provided are the freight and installation costs for each type of meter. These costs are presented in the table below.

The RC per unit for MT10, MT25 and MT60 are those provided by the Commerce Commission in its ODV handbook. The costs of MT85 to MT300 and MTPOA meters have been provided by Powerco's engineering staff.

Installation costs for the MT10 and MT25 meters are estimates sourced from Powerco's engineering department. Installation costs for larger meters are very site specific and difficult to estimate for a generic case. As there is no basis for determining a representative installation cost, a conservative approach has been adopted in the pricing methodology, and zero installation costs are used for meters MT60 and above.

Freight cost estimates have also been provided by Powerco's gas engineering department. The costs for MT10 are considered to be negligible, as these meters are relatively small and are generally freighted in bulk.

Meter	RC / Meter	Installation Cost	Freight Costs	Total RC / Meter
MT10	\$ 386	\$ 104	\$ -	\$ 490
MT25	\$ 1,350	\$ 170	\$ 30	\$ 1,550
MT60	\$ 4,000		\$ 300	\$ 4,300
MT85	\$ 6,354		\$ 300	\$ 6,654
MT140	\$ 13,002		\$ 300	\$ 13,302
MT200	\$ 14,704		\$ 300	\$ 15,004
MT300	\$ 23,002		\$ 300	\$ 23,302

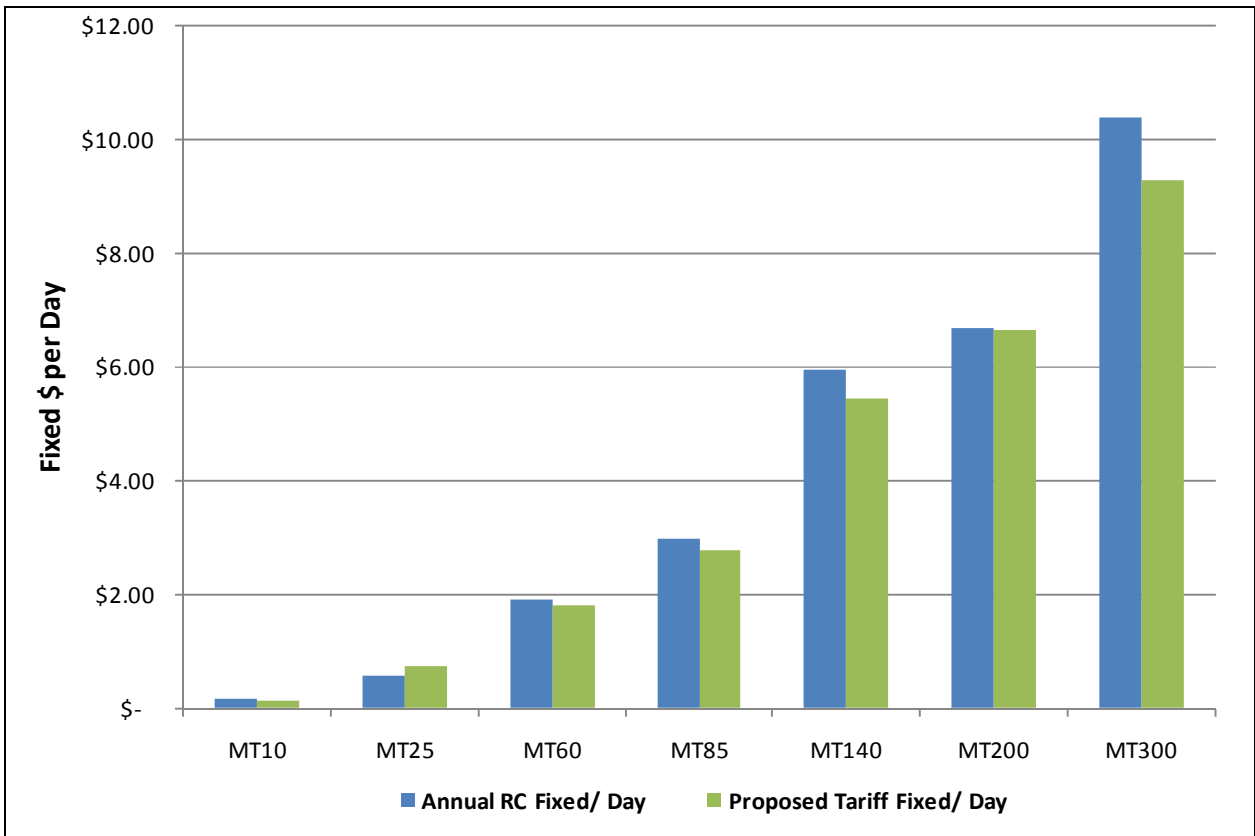
The average meter lives and the sources of these lives are shown below.

Average MT10-MT25 Life	25	Source: Commerce Commission's Authorisation Model - Asset Sheet
Average MT60+ Life	15	Source: Powerco's engineering staff

c. Extent to which proposed charges reflect the relative capital costs

The installed costs per gas meter can be compared against the proposed metering tariffs for 2009/10.

Meter	Total RC / Meter	Depreciation	WACC Return	Annual Capital Cost of Replaced Meter	2009/10	
					Annual RC Fixed/ Day	Proposed Tariff Fixed/ Day
MT10	\$ 490	\$ 20	\$ 47	\$ 67	\$ 0.18	\$ 0.13
MT25	\$ 1,550	\$ 62	\$ 149	\$ 211	\$ 0.58	\$ 0.73
MT60	\$ 4,300	\$ 287	\$ 412	\$ 699	\$ 1.92	\$ 1.80
MT85	\$ 6,654	\$ 444	\$ 638	\$ 1,082	\$ 2.96	\$ 2.77
MT140	\$ 13,302	\$ 887	\$ 1,276	\$ 2,162	\$ 5.92	\$ 5.42
MT200	\$ 15,004	\$ 1,000	\$ 1,439	\$ 2,439	\$ 6.68	\$ 6.63
MT300	\$ 23,302	\$ 1,553	\$ 2,235	\$ 3,788	\$ 10.38	\$ 9.26



5. Conclusion

Powerco welcomes feedback from the Commission on the questions raised and our responses. We appreciate the assistance that the Commerce Commission staff have provided in this process.

Yours Sincerely

Paul Goodeve
Regulatory & Business Manager