



Office of Energy
Government of Western Australia

GAS TARIFFS REVIEW

Interim Report



Office of Energy Report to the Minister for Energy

June 2008

GAS TARIFFS REVIEW – INTERIM REPORT

KEY MESSAGES

- The Office of Energy is undertaking a review of regulated gas tariffs, after a previous statutory review of the *Energy Coordination (Gas Tariffs) Regulations 2000* (the “Tariff Regulations”) found that:
 - continued tariff regulation was required; and
 - the tariff caps were below costs.These findings were tabled in Parliament in November 2007.
- This Interim Report is to advise of the findings to date, and recommends an initial adjustment in the retail gas tariff caps to take effect from 1 July 2008. A further more detailed review will be undertaken for implementation in 2009/10.
- The Tariff Regulations currently provide for the tariff caps to increase annually in line with the Consumer Price Index (“CPI”).
 - However, increases above CPI are required for 2008/09, mainly due to the significant gas commodity price increases. These higher gas costs are likely to be faced by new entrant retailers *and* retailers that are renegotiating contracts.
- For the median consumer, the recommended gas tariff cap increases are at or below 10%, which is in line with the Government’s approved electricity tariff increases for residential and small business customers.
- The tariff cap increases have been designed to have less impact the lower a person’s consumption. This is intended to:
 - help protect small consumers and low-income households; and
 - provide an incentive for energy efficiency and lower gas consumption, which should drive greenhouse gas emissions reductions.
- Customers that have higher consumption can limit the impact of the tariff cap increases by reducing consumption through a number of measures such as adjusting heater thermostats, use of blankets, turning off pool heating, and turning off heating for rooms not in use.
- A significant proportion of business customers consume more than the Gas Market Moratorium threshold of 0.18 terajoules of gas per annum. Consumers above this threshold can choose between two retailers – Alinta and Synergy, so they will not necessarily be impacted by any tariff cap increases.
- Tariff cap increases above CPI for 2008/09 will help to ensure efficient operation of the gas market and contribute to maintaining viability of gas retailers. Further tariff cap increases may be necessary in 2009/10, pending the more detailed review to be undertaken by the Office of Energy.

INTERIM RECOMMENDATION

The Office of Energy recommends that the tariff caps specified under the *Energy Coordination (Gas Tariffs) Regulations 2000* (the “Tariff Regulations”) should be adjusted from 1 July 2008 as per Table 1.¹

Table 1 – Recommended Interim Gas Tariff Cap Increases		
Tariff Cap (GST Inclusive)	Current Tariff Cap (from 1 July 2007)	Revised Tariff Cap (from 1 July 2008)
Mid-West/South-West Area – Residential Customers		
Supply Charge (cents/day)	11.02	12.12
First 12 units (cents/unit)	7.81	8.15
Next 24 units (cents/unit)	5.05	7.33
Over 36 units (cents/unit)	4.10	7.33
Mid-West/South-West Area – Non-Residential Customers		
Supply Charge (cents/day)	11.02	12.12
First 100 units (cents/unit)	8.07	8.51
Over 100 units (cents/unit)	6.42	6.77
Kalgoorlie-Boulder Area – Residential Customers		
Supply Charge (cents/day)	24.77	27.25
Energy Charge (cents/unit)	6.87	7.56
Kalgoorlie-Boulder Area – Non-Residential Customers		
Supply Charge (cents/day)	24.77	27.25
Energy Charge (cents/unit)	6.13	6.74
Albany Area – Residential and Non-Residential Customers		
Supply Charge (cents/day)	11.57	12.73
Extra Dwellings (cents/day)	5.77	6.35
First 100 units (cents/unit)	8.42	9.26
Over 100 units (cents/unit)	7.05	9.26

¹ A unit of gas is equivalent to 3.6 megajoules (“MJ”).

Table 2 shows the percentage and dollar value increases to customers' bills that would result from the recommended tariff increases for consumers in each area (Mid-West/South-West, Kalgoorlie-Boulder, and Albany) and customer class (residential and non-residential), with consumption levels at the 25th, 50th, and 75th quartiles.²

Table 2 – Impact of Recommended Tariff Cap Increases on Customers			
Customer Class	Quartiles		
	25%	50%	75%
Mid-West/South-West Residential	5.4%	8.9%	16.5%
	\$12	\$32	\$83
Mid-West/South-West Non-Residential	6.1%	5.6%	5.4%
	\$17	\$83	\$257
Kalgoorlie-Boulder Residential	10.0%	10.0%	10.0%
	\$25	\$39	\$53
Kalgoorlie-Boulder Non-Residential	10.0%	10.0%	10.0%
	\$27	\$50	\$135
Albany Residential and Non-Residential	10.0%	10.0%	10.0%
	\$21	\$36	\$52

² Quartiles divide a set of data into four equal parts. That is:

- A customer that has consumption at the 25th quartile consumes more gas than 25% of the customers, and less than 75% of the customers.
- A customer that has consumption at the 50th quartile consumes more gas than 50% of the customers, and less than 50% of the customers. The 50th consumption quartile is representative of the median level of consumption in each customer class.
- A customer that has consumption at the 75th quartile consumes more gas than 75% of the customers, and less than 25% of the customers.

1. BACKGROUND

1.1 Government Policy Objectives

The Government's energy policy objectives are to:

- encourage and facilitate provision of secure, reliable, and sustainable energy services at competitive prices;
- implement appropriate market and regulatory arrangements to achieve a competitive, dynamic, and sustainable energy sector;
- ensure the Government-owned Electricity Corporations participate in the energy industry in a competitively neutral manner, whilst they endeavour to make a profit, consistent with maximising their long-term value to the State; and
- raise awareness and provide information and tools by which consumers can make informed choices about the level, source, and cost of their energy consumption.

1.2 Gas Tariff Regulations and Alinta's Tariffs

The *Energy Coordination (Gas Tariffs) Regulations 2000* (the "Tariff Regulations") apply to small use customers³ in the Mid-West/South-West area (including the Perth Metropolitan area), the Kalgoorlie-Boulder area, and the Albany area (the "Tariff Areas"). The Tariff Regulations set price caps for two classes of small use customers – residential and non-residential.

For the Mid-West/South West area, Alinta's residential tariffs have a supply charge (cents per day) and consumption charges (cents per unit) that are structured into three steps – for the first 12 units per day, the next 24 units per day, and over 36 units per day; with the price per unit decreasing as the level of consumption increases. This is referred to as a "declining block tariff structure". The Tariff Regulations limit annual tariff cap increases for the supply charge and for the first two steps of the consumption charge to the Consumer Price Index ("CPI"), and for the third step of the consumption charge to CPI+2%.

For the Kalgoorlie-Boulder area, Alinta's tariffs have a supply charge (cents per day) and single consumption charge (cents per unit) irrespective of the level of consumption. This is referred to as a "flat tariff structure". The Tariff Regulations limit annual tariff cap increases for the supply charge and for the consumption charge to CPI.

For the Albany area, Alinta's tariffs have a supply charge (cents per day) and consumption charges (cents per unit) that are structured into two steps – for the first 100 units per day, and over 100 units per day. Similar arrangements apply to non-residential customers in the Mid-West/South-West area. The Tariff Regulations limit annual tariff cap increases for the supply charge and the consumption charges to CPI.

Allowing the tariff caps to increase annually in line with CPI effectively means that the tariff caps will remain constant in real terms.

³ A small use customer is a customer that consumes less than 1 terajoule of gas per annum.

1.3 Tariffs Regulations Review

The Office of Energy completed a review of the Tariff Regulations for the Minister for Energy (the “Minister”) in October 2007.⁴

The Tariff Regulations Review found that:

- The Tariff Regulations are still required in Western Australia.
- There are upward pressures on the cost to retail gas to small use customers in the Tariff Areas. These cost pressures may impact on the viability of gas retailers and may act as a barrier to entry in the gas retail market if the tariff caps are maintained at their current level.

The Tariff Regulations Review Report recommended that a more detailed investigation should be undertaken regarding the level and structure of the tariff caps; and that implications for differentiation of products and services, and the ability for customers to select appropriate products should be taken into account as part of this process. This recommendation is the basis for the Gas Tariffs Review (the “Review”).

The Tariff Regulations Review Report was completed in October 2007 and tabled in Parliament by the Minister for Energy on 21 November 2007, in accordance with the requirements of Clause 8(3) of the Tariff Regulations.

1.4 Gas Tariff Review

The Minister is conducting the Review to assess the retail gas tariff cap arrangements in Western Australia, as recommended by the Gas Tariff Regulations Review. The Office of Energy is responsible for completing the Review and preparing recommendations for consideration by the Minister.

The Review will consider the appropriate structure and level of the tariff caps for small use customers in the Tariff Areas. The Review will focus on the cost reflectivity of the tariff caps; the level of tariff caps necessary to promote competition for each customer class; and incentives for gas consumers to negotiate alternative supply arrangements.

The Review recommendations will consider:

- the timing for any necessary changes to the tariff caps, including the transition process in this regard; and
- the appropriate adjustment mechanism and arrangements for regular adjustments of the tariff caps in the future.

As part of the Review process, an Issues Paper was circulated for public comment in February 2008, and responses were received in March 2008. The non-confidential details of these submissions are posted on the Office of Energy website (www.energy.wa.gov.au).

⁴ The review was completed in accordance with the requirement under Clause 8 of the Tariff Regulations.

Finalisation of a Draft Review Recommendations Report (“Recommendations Report”) addressing the terms of reference for the Review will be delayed to allow time for the Office of Energy to obtain and analyse data on wholesale supply costs. The Recommendations Report will include a more detailed set of recommendations and will be released for public comment prior to final recommendations being presented to Government. A Final Recommendations Report will be subsequently released detailing the finalised Review Recommendations, including any requirement for further tariff cap adjustments to take effect from 1 July 2009.

In the meantime, the Office of Energy has developed this Interim Report based on its findings to date.

1.5 Interim Report

This Interim Report is to advise of the Review findings to date, and recommends an initial adjustment in the retail gas tariff caps to take effect from 1 July 2008. It should be noted that this increase is to be in place of, rather than in addition to, the regular adjustment of the tariff caps currently specified in the Tariff Regulations.

2. THE WESTERN AUSTRALIAN RETAIL GAS MARKET FOR SMALL CONSUMERS

Full retail contestability (“FRC”) in gas in Western Australia was introduced in May 2004, meaning that any gas retailer can enter the Western Australian market. Despite the introduction of gas FRC, there is still only limited competition in the Western Australian gas retail market.

An exception to gas FRC is that Synergy is restricted by the Gas Market Moratorium (the “Moratorium”) to only sell gas to customers that consume more than 0.18 terajoules (“TJ”) per annum.

The Moratorium was put in place because Synergy would have a competitive advantage over other gas retailers in the absence of electricity FRC, as Synergy would be able to apply economies of scope in retailing both electricity and gas. The Moratorium threshold was reduced to 0.18 TJ per annum on 1 July 2007 to give greater choice to energy consumers in Western Australia, and to provide parity on an energy equivalency basis with the current electricity contestability threshold of 50 megawatt hours (“MWh”) per annum.⁵

As a result, there are now two gas suppliers in the Mid-West/South-West area servicing customers that consume between 0.18 TJ per annum and 1 TJ per annum – Alinta and Synergy. It should also be noted that at least 50% of this segment’s gas consumption in the Mid-West/South-West area is now sold under contract rather than under the regulated tariff.

Alinta is the sole supplier to customers in the Kalgoorlie-Boulder and Albany areas, and in the Mid-West/South-West area for consumers that consume less than 0.18 TJ per annum.

⁵ The Western Australian Government reduced the electricity contestability threshold to 50 MWh per annum on 1 January 2005, in conjunction with a range of other measures to reform the electricity industry in Western Australia.

3. INTERIM FINDINGS

Information collected by the Office of Energy as part of the Review process has highlighted the need for an interim adjustment of the tariff caps from the levels currently specified in the Tariff Regulations due to cost pressures in supplying gas to small use consumers. The cost pressures are detailed further in Section 6 of this report. The interim adjustment to the tariff caps is required to provide for the sustainable operation of the small use gas retail market within the Tariff Areas.

3.1 Interim Tariff Cap Increases

The interim tariff cap increases are presented in Table 1. These tariff cap increases are instead of the CPI-based increase that was to occur in 2008/09, and for the average customer are about 5% to 6% on top of what would have occurred under the CPI-based increase.⁶

The interim tariff cap adjustments were proposed by Alinta and verified by the Office of Energy and Frontier Economics. The verification process undertaken by the Office of Energy and Frontier Economics is detailed in Section 4.

Different approaches were utilised for the segments of the retail market where there is active retail competition (i.e. the non-residential segment of the market in the Mid-West/South-West area) and where there is only one retailer (i.e. the Mid-West/South-West residential segment, Kalgoorlie-Boulder and Albany).

For the non-residential tariff caps in the Mid-West/South-West area, the adjustment to the tariff cap is based on estimates of the costs that a new entrant retailer would face in the Western Australian retail gas market. The Office of Energy has verified that the tariff cap proposed by Alinta reasonably reflects preliminary estimates of new entrant costs. However, the Office of Energy will complete its more detailed Gas Tariffs Review for implementation in 2009/10, and is not bound by any parameters used in this interim process.

This approach for the tariff caps for non-residential customers in the Mid-West/South-West area is appropriate because a significant proportion of these consumers are able to source supply from the two retailers operating in this area. Given this competitive pressure, it is appropriate that the tariff caps should act as an upper price limit. It should also be noted that the comparative analysis conducted to date indicates that the current tariff caps for non-residential customers in the Mid-West/South-West area only need to increase by around 5% to reflect the costs that a new entrant would likely face in this segment.

The adjustment to the tariff caps has been conservative in the gas retail market segments where there is only one retailer, in recognition of the lack of retail competition in these segments. Whilst regulated tariff caps are intended to act as an upper price limit on retail gas supply charges, since there is no active competition in these segments, it is more likely that the regulated tariff caps will effectively be the prices that the consumers face. The tariff caps

⁶ The increase for the non-residential tariff caps in the Mid-West/South-West area represents, on average, an increase of only about 1% on top of what would occur under the standard CPI adjustment. The increase for residential gas consumers in the Mid-West/South-West will be between 1% and 11% on top of the CPI adjustment, with lower increases for lower usage consumers, and larger increases for larger consumers.

suggested by Alinta for these segments have been verified by the Office of Energy and Frontier Economics as likely being below the levels that a new entrant gas retailer would need to recover its costs and retain an appropriate margin. However, the Office of Energy will complete its more detailed Gas Tariffs Review for implementation in 2009/10, and is not bound by any parameters used in this interim process.

Table 2 (page 3) shows the percentage and dollar value increases to customers' bills that would result from the recommended tariff cap increases for consumers in each of the Tariff Areas and customer classes (residential and non-residential), with consumption levels at the 25th, 50th, and 75th quartiles.

3.2 Tariff Structures

3.2.1 Mid-West/South-West Residential Tariff Structure Change

The tariff cap increases for the Mid-West/South-West residential tariffs have been structured such that the customers with lower consumption will see a smaller tariff increase than will customers with larger consumption. This tariff has a declining block tariff structure with three tiers, and the higher-consumption tariff blocks have been increased by a larger amount than have the lower-consumption tariff blocks.

- The smaller tariff increase that has been applied to lower-consumption tariff blocks is intended to minimise the impact on small use and low-income consumers.
- The larger tariff increases that have been applied to higher-consumption tariff blocks is intended to provide an incentive for energy efficiency and lower gas consumption, which should drive greenhouse gas emissions reductions.

Specifically the interim tariff change alters the structure of this tariff such that for 2008/09 the second and third blocks have pricing at the same level, effectively removing the third tariff block.

This change in the tariff cap structure is in recognition that the majority of residential customers within the Mid-West/South-West area have consumption that does not enter into the third tariff block. Such a change to the third tariff block will therefore only be likely to impact those consumers with above average levels of gas consumption.

3.2.2 Albany Tariff Structure Change

As indicated in Section 1.2, the Albany tariff caps have a declining block structure with two blocks. The interim tariff change alters this structure such that both blocks have pricing at the same level, effectively converting the tariff caps into a flat tariff structure.

This change in the tariff cap structure is in recognition that the consumption of most of the customers is such that the pricing in the second consumption block is not applied. This means that the tariff structure change will therefore only be likely to impact consumers with above average levels of gas consumption.

3.2.3 The Other Tariffs

The structures for the other tariff caps (the Mid-West/South-West non-residential tariff, and the Kalgoorlie-Boulder residential and non-residential tariffs) have not been altered.

4. VERIFICATION PROCESS

The Office of Energy and Frontier Economics have undertaken a comparative cost stack analysis to ensure that the tariff cap increases proposed by Alinta are reasonable.

The general method for constructing a tariff is by separately considering each cost that a retailer faces, plus an appropriate retail net margin, and adding these costs to derive the tariff charge to be applied. This is more commonly known as a “cost stack” analysis.

Alinta provided the Office of Energy with cost stack analysis to support the proposed adjustments to the tariff caps. Alinta provided cost stacks based on its views of the costs that a new entrant retailer would face. The Office of Energy and Frontier Economics have verified the calculations and the parameters that underlie the various components in these cost stacks and compared these figures against the proposed tariff increases. The following cost components were incorporated into the cost stack analysis:

- Transmission Costs (including imbalances/overruns);
- Distribution Costs;
- Retail Operating Costs;
- Retail Net Margin; and
- Gas Commodity Cost.

It should be noted that costs from a national greenhouse gas emission trading scheme (“ETS”) were not considered under the cost stack analysis at this time due the current uncertainty as to how the proposed ETS will work. Further, ETS costs were not included in this cost stack analysis because the cost stacks relate to a proposed adjustment to the tariff caps for the 2008/09 period only. The Office of Energy intends to address ETS costs in its more detailed Gas Tariffs Review.

4.1 Transmission Costs

Gas is transported from the production fields to distribution areas via transmission pipelines. There are two main pipelines in Western Australia:

- the Dampier to Bunbury Natural Gas Pipeline (“DBNGP”), which connects the North West Shelf with the Mid-West/South-West area; and
- the Goldfields Gas Pipeline (“GGP”), which connects the North West Shelf with the Kalgoorlie-Boulder area.

While the DBNGP is a covered pipeline under the Gas Access Code,⁷ and there is an Access Arrangement in place for the DBNGP, current applicable charges for the DBNGP are stipulated under the terms and conditions of the DBNGP Standard Shipper Contract (“Shipper Contract”). The Shipper Contract will remain effective in its current form until 2016.

Transmission costs for the Mid-West/South-West area were based on the applicable rates in the Shipper Contract, and for the Kalgoorlie-Boulder area on the GGP Access Arrangement. These transmission costs are regulated by the Economic Regulation Authority, and have been independently verified by Frontier Economics.

The transmission of LPG to the Albany area is reliant on road transport from Kwinana to feed the reticulated system. Assumptions relating to these transportation costs have been included with the cost of delivered LPG based on Alinta’s actual costs, which have been independently verified by Frontier Economics through the review of invoices for the supply of LPG to the Albany area.

An additional cost component for the transmission of gas on the DBNGP is the recent addition of imbalance/overrun charges. Shippers on the DBNGP are required to maintain a balance between the gas that they inject onto the pipeline and take off of the pipeline, and are required to pay imbalance and overrun charges if they cannot maintain the balance within certain tolerances. As shippers on the DBNGP, retailers will not be able to maintain a perfect balance between pipeline injections and offtake, as the amount of their gas offtake will be dependent on their customers’ actual consumption, which can be highly variable.

The imbalance/overrun charges included in the cost stacks were based on Alinta’s actual imbalance/overrun costs. The calculation of these charges has been verified by Frontier Economics based on data provided by Alinta.

4.2 Distribution Costs

Gas that is transported to customers in the Tariff Areas must then be transported from the outlet of the transmission pipelines to homes and businesses via distribution systems.

The distribution systems for the Tariff Areas are owned by AlintaGas Networks, are operated by WestNet Energy, and are regulated by the Economic Regulation Authority.

The natural gas distribution networks are characterised by limited interconnection, and sub-networks are typically supplied by a single transmission pipeline, although the Metro-North sub-network in the Mid-West/South-West area is connected to both the DBNGP and the Parmelia Pipeline.

Distribution costs for all three Tariff Areas were based on the regulated rates determined by the Economic Regulation Authority, and have been independently verified by Frontier Economics.

⁷ The *Gas Pipelines Access (Western Australia) Act 1998* implemented the National Third Party Access Code for Natural Gas Pipeline Systems.

4.3 Retail Operating Costs

Retail operating costs are the costs that retailers incur in acquiring and serving their customers, and include costs for billing and revenue collection systems, call centres, and related corporate functions. Factors that influence the cost to serve include customer location, regulatory obligations, other market administration costs (such as the fees associated with operation of the Retail Energy Market Company, Energy Safety, etc), and labour costs.

In considering retail operating costs, determinations in other jurisdictions can be viewed as benchmarks. However, issues specific to Western Australia need to be taken into account in estimating appropriate retail operating costs for incumbent and new entrant retailers in the State. In addition, retail operating costs for retailing gas or electricity should not differ to a great degree, given that the operating costs are independent of the type of fuel retailed.

Frontier Economics has verified that retail operating costs in the cost stack analysis are in line with that utilised in the review of the regulated electricity tariffs in the Electricity Retail Market Review. The retail operating costs determined under the Electricity Retail Market Review were the costs that an efficient new entrant electricity retailer would incur.

An \$80 per customer retail operating cost was used in the cost stack analysis for all customer classes in the Tariff Areas, with the exception of the non-residential customers in the Mid-West/South-West area. It is recognised that the allowance for operating costs recommended under the Electricity Retail Market Review for small use consumers was \$75 per customer in real terms, rather than \$80 per customer. However, the higher cost to serve utilised in the gas tariff cost stacks accounts for FRC costs, which are not currently incurred in the electricity market.

A \$150 per customer retail operating cost was used for non-residential customers in the Mid-West/South-West area. Recognising the different mix of small and large non-residential gas customers in the Mid-West/South-West area relative to businesses on contestable electricity tariffs, this amount is broadly in line with the retail operating costs utilised under the Electricity Retail Market Review for contestable business customers. These retail operating costs reflect the need for a larger cost allowance to cover the costs of increased customer service activity needed to manage these types of customers. Note that, although the retail operating costs are high on a per customer basis, given the higher consumption of non-residential customers, the cost per unit is actually lower than for the residential customers.⁸

The Office of Energy will undertake a full review of the appropriate retail operating cost for all customer class in all Tariff Areas as part of its more detailed Gas Tariffs Review to be implemented in 2009/10.

⁸ It is noted that Alinta submitted that the unit supply costs for residential customers are higher on average than for non-residential customers (including for small business customers) as a result of lower average consumption, a higher 'winter peak' usage capacity component, and a higher cost to serve through greater customer service activity. This view was generally supported by Synergy. This lower unit supply cost remains consistent with the above assumptions given the higher average levels of gas consumption by non-residential customers.

4.4 Retail Net Margin

The retail net margin is added to the cost stack to allow retailers to manage risks associated with servicing customers, and to allow retailers to make a profit on retailing gas. In its response to the Issues Paper, Alinta submitted that the key factors that must be considered for supply of gas to small use customers include:

- Risk:
 - regulatory risk over the term of a pricing review;
 - financial exposures through energy markets;
 - financial exposure to end-customer debt; and
 - reputation risk around failure to supply.
- Commitment:
 - long-term gas purchase and pipeline capacity commitments;
 - scale of financial commitment;
 - size of customer base; and
 - average residential customer revenue.

Alinta also suggested that there is a case for a higher retail margin (at least 6%) due to higher risks associated with volatile energy prices, the risk associated with long-term pipeline capacity commitments, the small market size of only 580,000 customers, and low average residential customer revenue. Synergy's submission suggested that an appropriate retail margin would be at least 5%.

The cost stack analysis has included a 5% net retail margin assumption for all customer classes in all three Tariff Areas.

A 5% net margin is consistent with the margin accepted for contestable electricity tariffs, as determined under the Electricity Retail Market Review. The Electricity Retail Market Review utilised a benchmarking approach to setting the net retail margin based on determinations on retail margins in other Australian jurisdictions.

The Office of Energy will undertake a full review of the appropriate margin for all customer classes in all Tariff Areas as part of its more detailed Gas Tariffs Review to be implemented in 2009/10. This review will consider the particular risks associated with retailing gas to small use customers in Western Australia.

4.5 Gas Commodity Cost

The gas commodity cost is the cost that retailers face for buying gas from upstream suppliers.

The cost stack analysis used a gas commodity cost of \$6.50 per GJ. This is consistent with the gas costs utilised for the Electricity Retail Market Review. The gas costs in the Electricity Retail Market Review represent the gas costs faced by new entrant generators.⁹

⁹ The gas cost used in the Electricity Retail Market Review was \$8 per GJ for delivered gas, which equates to around \$6.50 per GJ for the gas commodity cost alone.

The gas commodity cost included in the cost stack analysis was based on a conservative load factor to take into account portfolio benefits. This load factor may not be achievable by new entrant gas retailers. The load factors used were independently verified by Frontier Economics, as were the gas commodity costs adjusted for those load factors. However, it should be noted that the Office of Energy will undertake a more extensive review of the appropriate load factor for use in setting tariffs in the more detailed Gas Tariffs Review, to be implemented in 2009/10, as discussed previously. The more detailed Gas Tariffs Review will have to consider whether the load factor used should be based on the load factor achievable by a new entrant retailer or some other method. The more detailed Gas Tariff Review will also consider the appropriate gas commodity cost.

In relation to the Albany distribution licence area, commodity costs for LPG were verified by Frontier Economics. The LPG commodity cost was \$28 per GJ including delivery charges.

5. Comparative Analysis

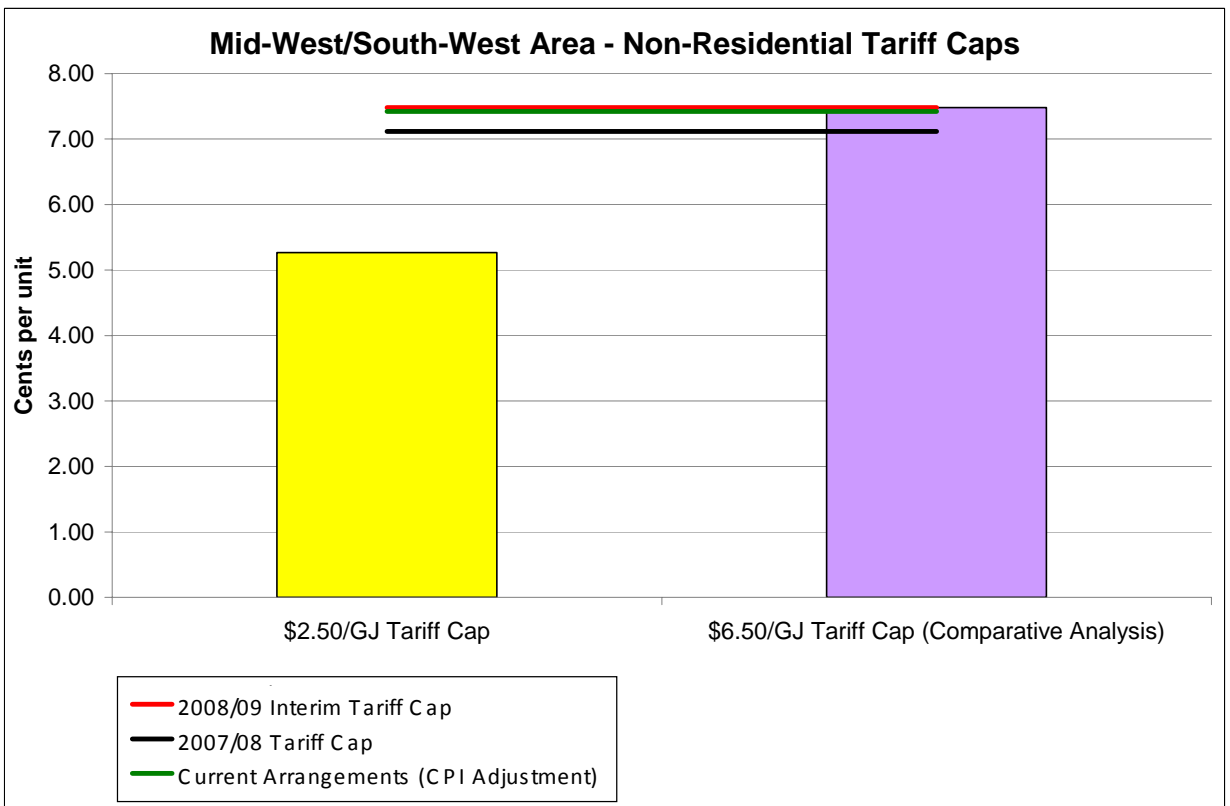
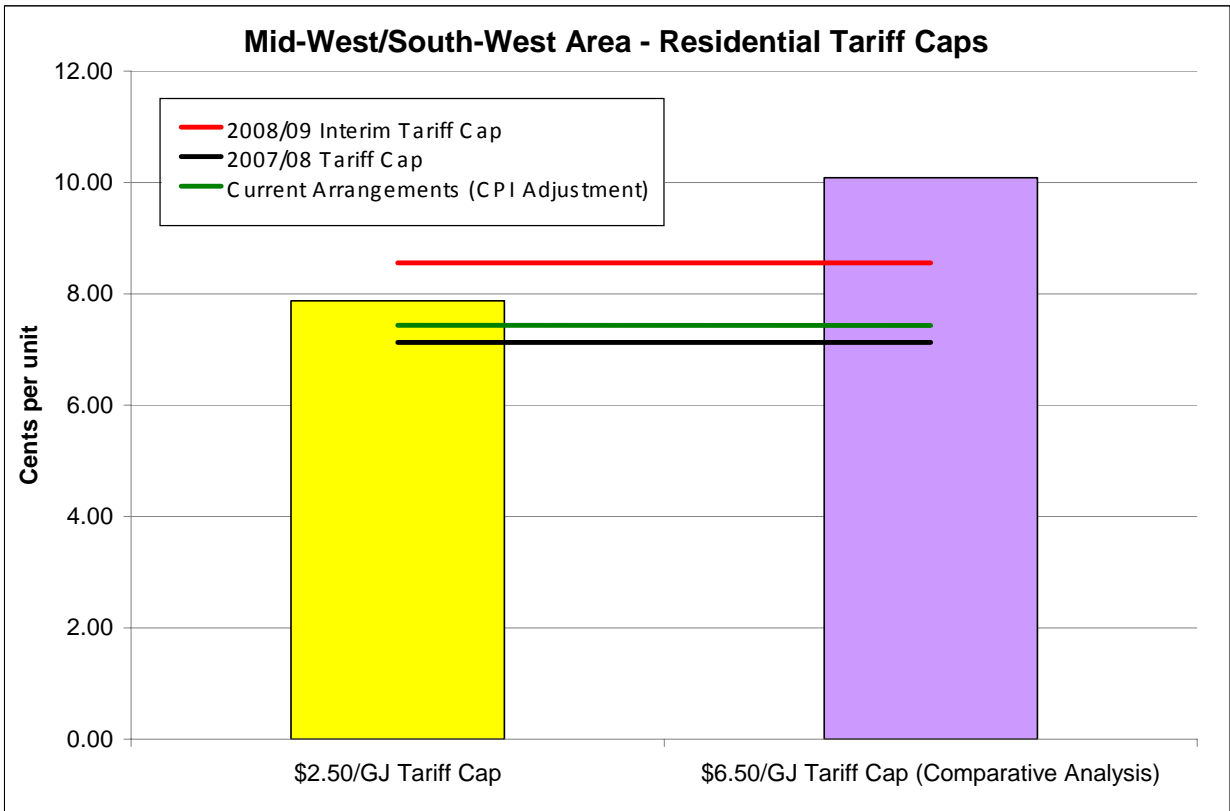
The Office of Energy has compiled a comparative analysis to consider the recommended increases to the tariff cap levels for each customer class in the Tariff Areas against the tariffs that would be associated with a cost stack based on a gas commodity price of \$6.50 per GJ (wellhead) for the Mid-West/South-West and Kalgoorlie-Boulder areas, and a LPG commodity cost of \$28 per GJ (delivered) for the Albany area. For comparative purposes, the Office of Energy has also included an estimate of the tariff caps that would result under a continuation of the tariff cap arrangements in their current form (with CPI-based escalation of the tariff caps),¹⁰ the current tariff cap, and a tariff cap based on the historical gas price of \$2.50 per GJ.

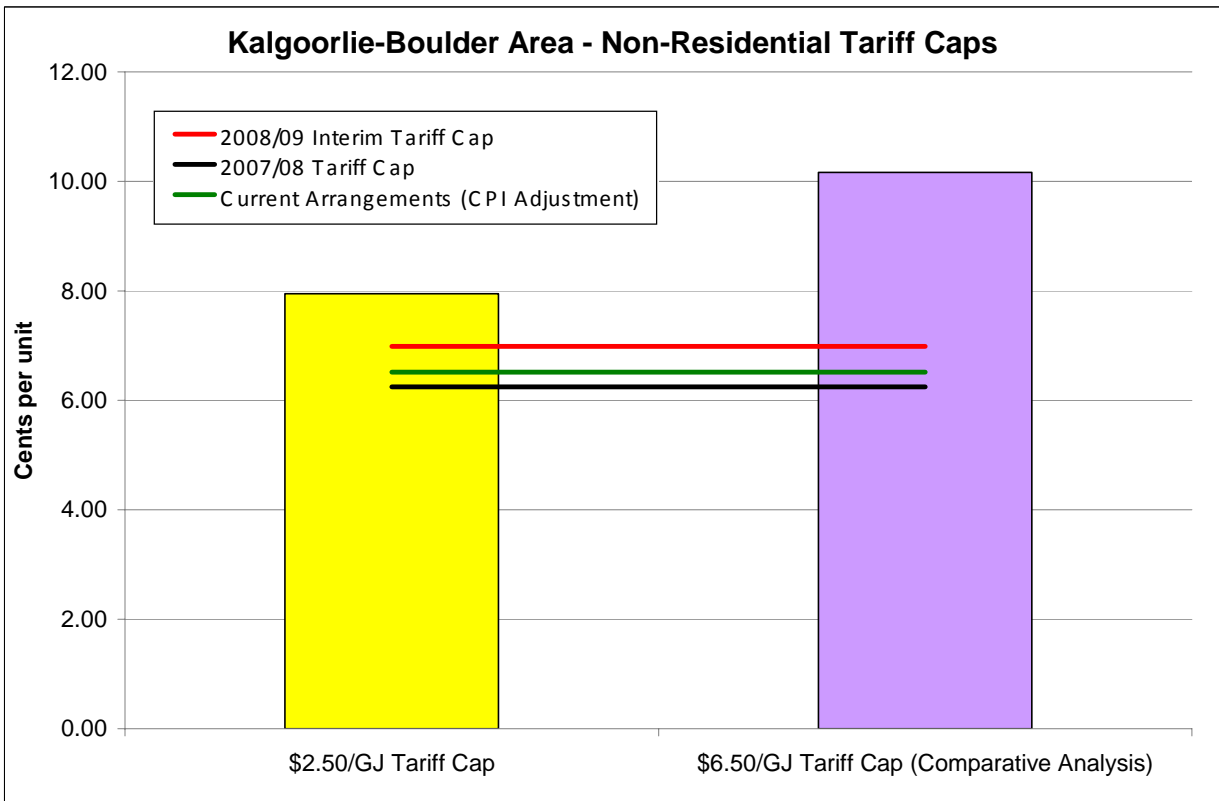
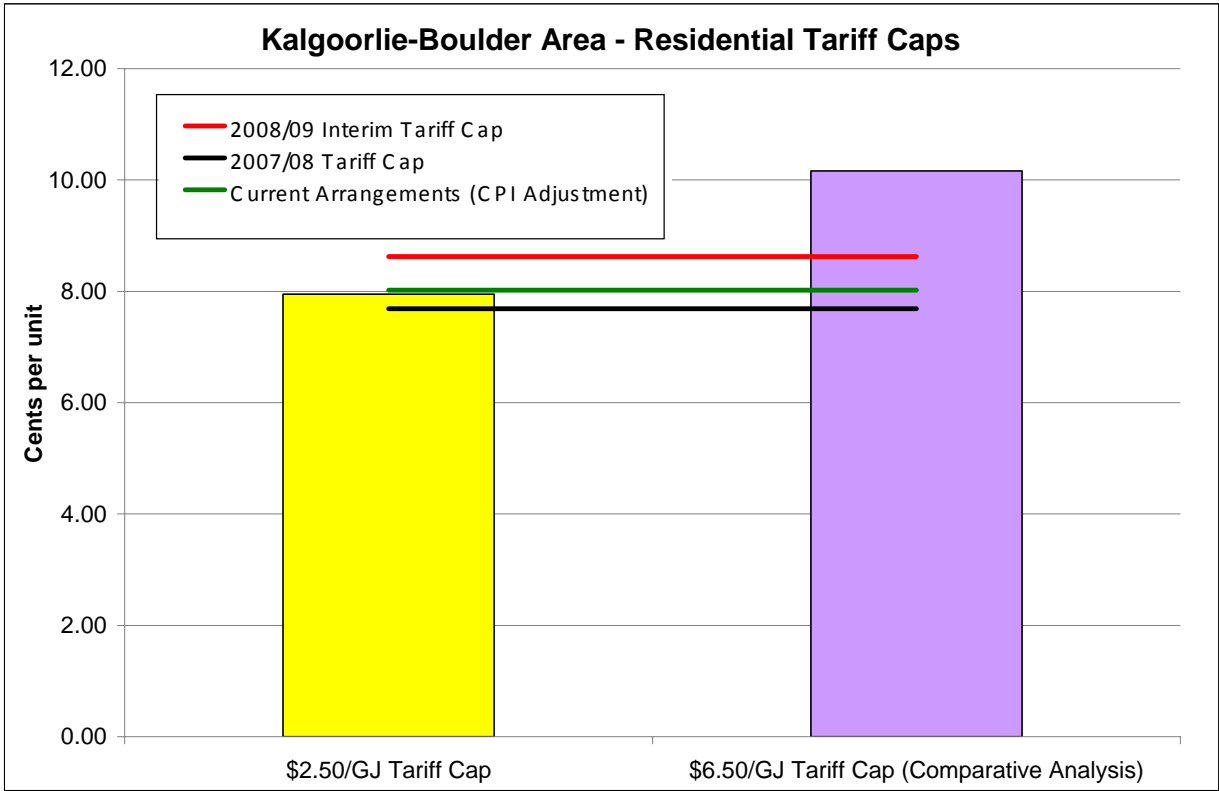
The results of this comparative analysis are presented in the charts below. This analysis indicates that in all cases but one, the proposed interim tariff caps for 2008/09 are below the comparative cost stack analysis figures on a cents per unit basis (based on average consumption levels within each Tariff Area). The exception is for the non-residential tariff cap in the Mid-West/South-West area, which is at the comparative cost stack line. This is because this tariff cap for these customers was closer to cost-reflective levels than the other tariff caps, as discussed in Section 3.1.

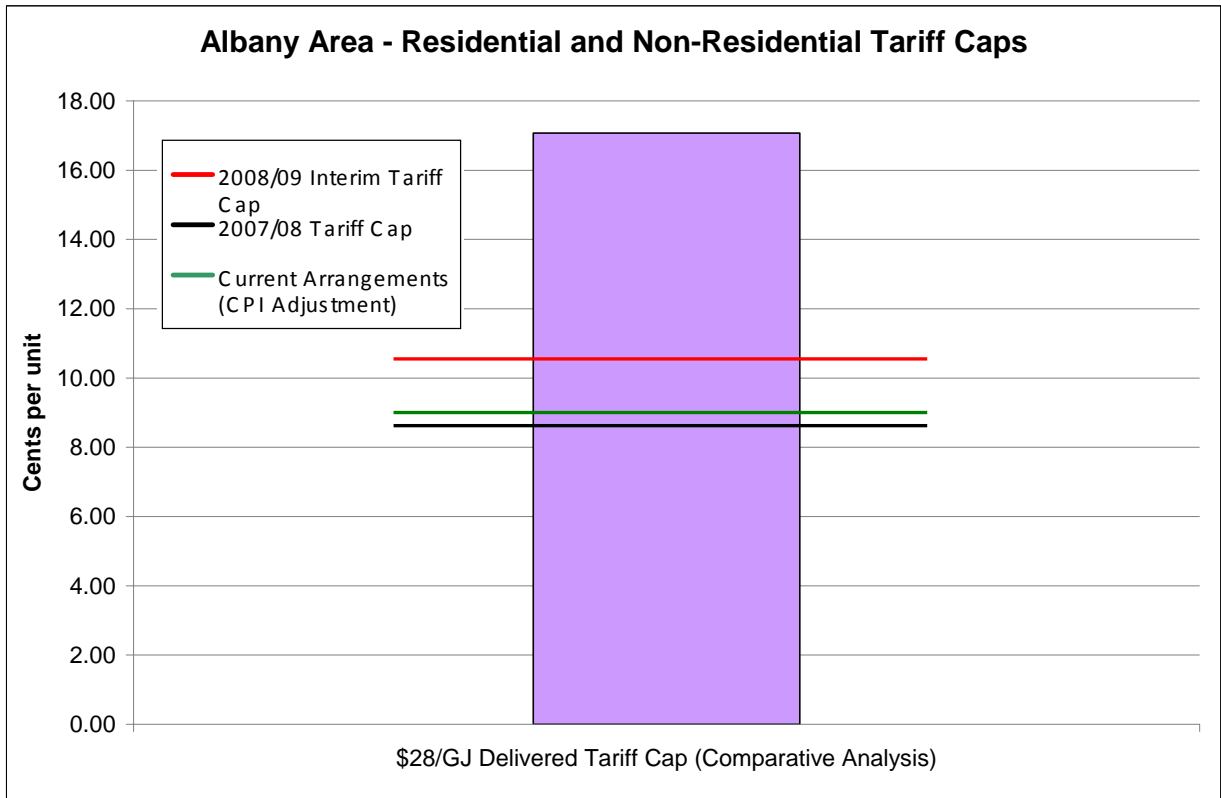
The cost pressures faced by gas retailers are clear from the charts. Even in the case of \$2.50 historical gas prices, the tariff caps for the residential consumers in the Mid-West/South-West area and for non-residential consumers in the Kalgoorlie-Boulder area would need to increase above the CPI adjustment. Cost pressures are discussed in Section 6 in more detail.

In addition, it should be noted that the tariff cap for the Albany area is significantly below costs. While this tariff has been below cost reflective levels for some time, the degree of non-cost-reflectivity has become much worse due to the recent increases in the cost of LPG of around 225% compared to historic levels.

¹⁰ The CPI escalation scenario has been conducted using an assumed CPI = 4.3%.







6. TARIFF INCREASE ANALYSIS

Analysis by the Office of Energy has shown that some of the cost components in the cost stacks have increased above CPI, thereby providing upward pressure on the tariff caps beyond the regular annual tariff cap increases.

Generally speaking, the main drivers of the cost pressures are the transmission costs and the gas commodity costs. Both of these costs have been increasing well above CPI levels, with gas commodity costs increasing significantly above CPI. The gas commodity pressure is discussed in more detail below. Further details on the increases in the cost components of the cost stacks for the residential tariff in the Mid-West/South-West area since the year 2001/02 (the last time a reset of the gas tariff caps occurred) is provided in Section 6.2.

6.1 General Discussion on Gas Commodity Costs

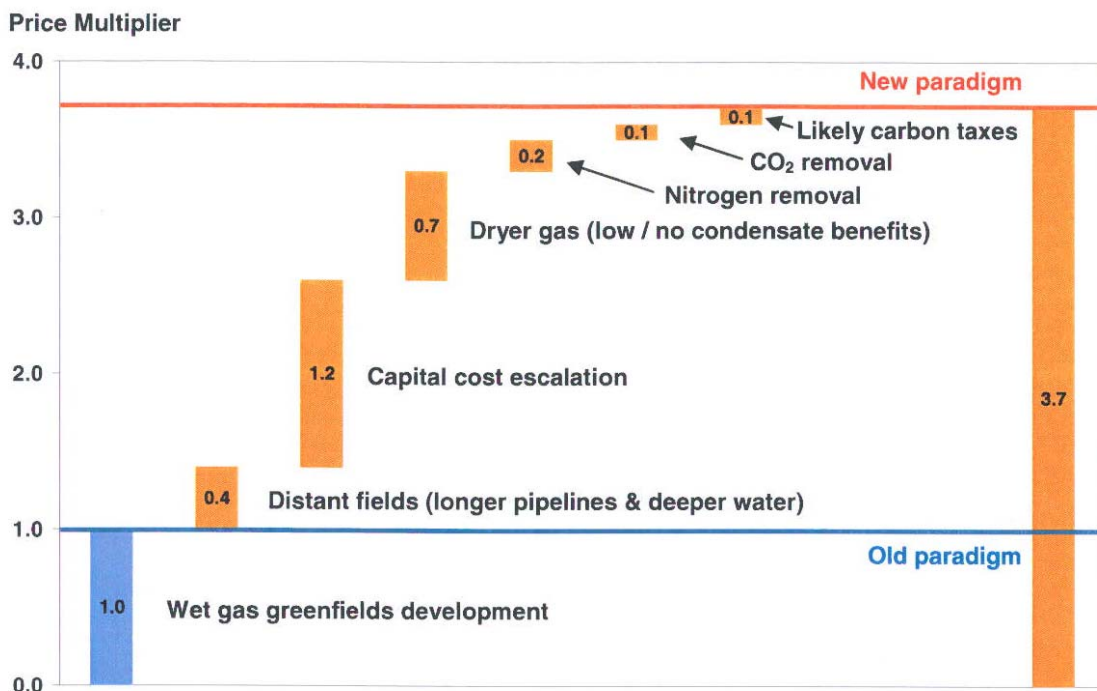
Natural gas commodity costs in the Western Australian domestic market have increased dramatically in the past 12 months, moving sharply away from historical prices in the \$2.50 per GJ range earlier this decade. Whilst contracts for the domestic supply of natural gas are generally confidential, information collected as part of the Tariff Regulations Review indicated that natural gas prices for new domestic contracts were in the \$5.50 to \$6.00 per GJ range at

the time of that review.¹¹ Further, the Electricity Retail Market Review found that a \$6.50 per GJ gas commodity cost was appropriate for setting the electricity tariff arrangements.

In addition, forecast growth for LNG prices is strong globally.¹² To the extent that domestic natural gas prices are related to global prices for LNG, this suggests that the domestic price of natural gas may continue to rise.

Synergy has suggested that commodity prices of around \$3.00 per GJ are no longer available, and that a \$6.00 per GJ gas price assumption is more realistic in the current and future environment. Synergy also noted that natural gas producers in Australia are attempting to link gas prices with global crude oil prices, as evidenced in Western Australia where Santos and Apache ran a tender for gas from the Reindeer field, and requested bid prices directly linked to the TAPIS crude oil price. Synergy also noted that where local gas fields can only serve domestic markets, prices tend to be driven by competing local sources of energy, such as coal.

A submission from Woodside highlighted the changing paradigm in the discovery, development and production of gas in Western Australia. Woodside noted that this change is having a significant impact on gas supply costs, as explained in the diagram below.



Source: Woodside Energy Pty Ltd, Submission response to Gas Tariffs Review Issues Paper, 13 March 2008.

Woodside also noted that with the exception of the North West Shelf Project, current domestic gas production in the immediate term is largely being sourced from projects in relatively

¹¹ Office of Energy, "Gas Tariff Regulations Review Report", 2007.

¹² ABARE, "Australian Energy, National and State Projections to 2029-30", ABARE Research Report 06.26, December 2006, p.44 and ABARE, "Australian Commodities", Vol.14 No.3, September Quarter 2007, p.458.

shallow water (depths below 80 metres) and located within 100 kilometres from the coast. However, Woodside suggested that in the longer term, the provision of additional large scale domestic supply is likely to be associated with remote deepwater fields. This suggests that such supplies will be sourced in association with LNG projects, which afford the opportunity to create the scale of project and financial returns required to underwrite the significant infrastructure costs associated with these sources of supply.

The Office of Energy acknowledges that the factors indicated by Woodside (use of more distant fields, capital cost escalation, dryer gas, costs for removal of nitrogen and CO₂, and carbon costs) will impact the cost of gas in Western Australia, but has no basis to verify the relative magnitude of the impacts suggested by Woodside. Further, the Office of Energy does not accept that natural gas prices in Western Australia should reflect global LNG prices.

In relation to the Albany distribution licence area, commodity costs for LPG have also increased, with the international benchmark price for propane moving from around A\$400/tonne to A\$900/tonne since January 2004 – an increase of around 225%.¹³

6.2 Tariff Increase Analysis for the Residential Tariff in the Mid-West/South-West Area

Gas commodity cost increases are the most significant factor in the need to increase gas retail tariff caps, as gas commodity costs have increased substantially since 2001/02 (the last time that gas tariff caps were reset).

The Office of Energy has analysed the cost components that were applied in the analysis of the tariff caps for 2001/02¹⁴ compared to the cost components in 2008/09 for the residential tariff cap for the Mid-West/South-West area.

A gas commodity cost of \$2.59 per GJ was assumed in the retail tariffs analysis in 2001/02, and as indicated in Section 5, if gas commodity costs were still at this historic level, then the required adjustment to the tariff caps would be below the level of the interim tariff cap increase.

However, as indicated in Section 6.1, it is unlikely that a retailer could negotiate a gas supply contract at \$2.50 per GJ in the current environment. Therefore, depending on the gas commodity costs that a retailer can negotiate in the current environment, gas commodity costs represent a significant cost pressure. Depending on a retailer's load factor, gas commodity costs of \$6.50 per GJ at the wellhead could represent an increase of about 150% in gas costs since 2001/02.

Costs for the other components of the residential tariff cap in the Mid-West/South-West area, as indicated in Section 4, have also increased substantially since 2001/02. The cost increases since 2001/02 for the other components of this tariff cap area are as follows:

- Transmission 50% (which includes imbalance/overrun cost. This is a new cost since 2001/02).¹⁵

¹³ The Saudi Aramco Contract Price is used as the benchmark, as Saudi Arabia is the major supplier of LPG to term contract buyers in the Asian region.

¹⁴ Note that the cost components in 2001/02 were the Office of Energy view of these costs, and were checked with Alinta at the time.

- Distribution 18%.¹⁶
- Retail operating costs 60%.¹⁷

For comparative purposes, the Perth CPI has increased by about 25% since 2001/02, while the weighted average CPI of the eight Australian capital cities has increased by around 17% since 2001/02.¹⁸

It can be deduced that similar cost pressures are also relevant to the tariff caps for the other customer classes and in the other Tariff Areas.

Therefore, since gas tariff caps have increased based on CPI movements since 2001/02, it is clear that gas tariff caps require an increase above CPI for 2008/09, and potentially again in 2009/10.

The prime reason for the required tariff cap increases is the escalation increase in the commodity cost of natural gas; while transmission, retail operating, and distribution costs have also contributed to this requirement.

7. TRENDS IN RESIDENTIAL GAS PRICES IN AUSTRALIA

Cost pressures experienced in other parts of Australia are similar to those being experienced in Western Australia, although the gas commodity price pressure has been far more significant in Western Australia than in the eastern States. This cost pressure has resulted in continued increases to residential gas prices across the country.

The graph below shows that the gas tariff increases have been moving at around the same pace in Western Australia as in the other jurisdictions since 2001, with the exception of Sydney, which has been increasing its gas tariffs at a faster rate than other jurisdictions. However, the other jurisdictions have been increasing their gas tariff rates by more than Western Australia in the last two years.

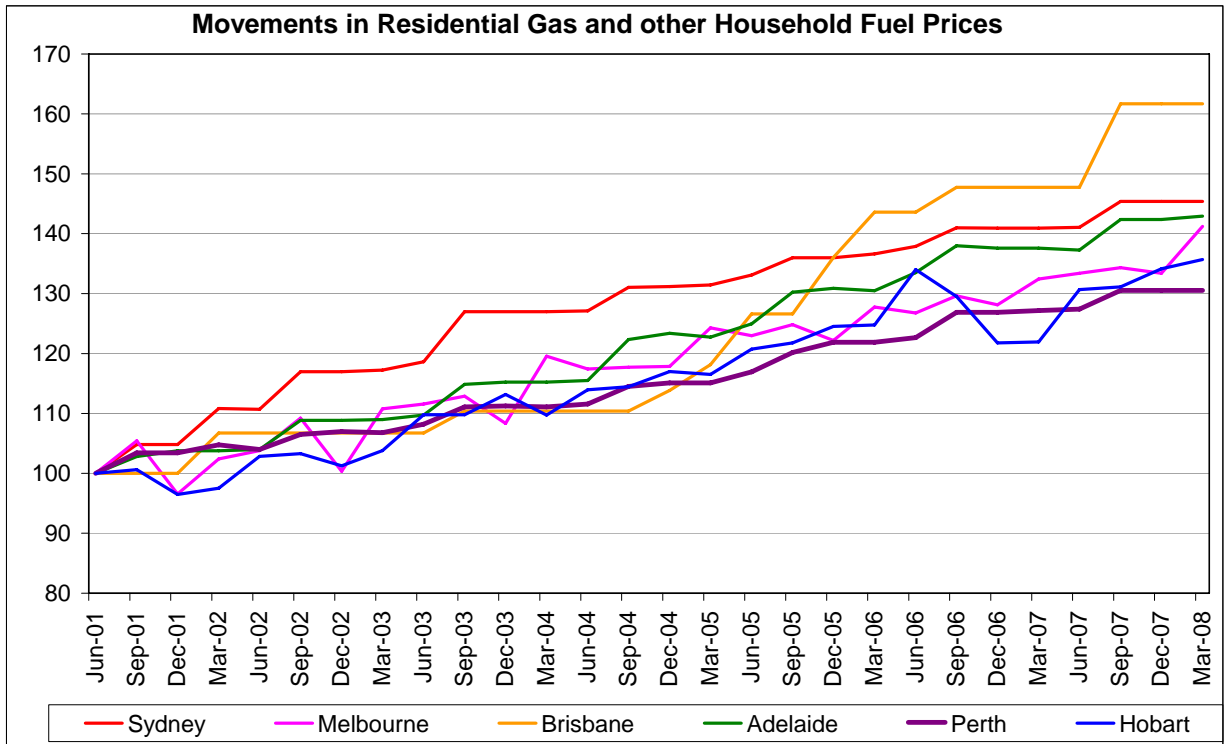
This graph is sourced from Australian Bureau of Statistics, and is based on periodic Household Expenditure Surveys and sales data provided by retail suppliers. The data includes purchases of reticulated gas, LPG, and other more minor household fuel commodities.

¹⁵ Based on increases in tariffs on the DBNGP.

¹⁶ Based on increases in tariffs on the AlintaGas Networks Coastal Distribution System.

¹⁷ Based on a comparison of the \$80 per customer preliminary benchmark for the retail operating costs for an efficient retailer against the \$50 per customer retail operating costs that were included in the retail tariff caps when they were set in 2001/02.

¹⁸ Note – the Gas Tariffs CPI calculation is based on the All Groups index number, weighted average for 8 capital cities, not the Perth CPI.



Source: Australian Bureau of Statistics, Catalogue 6401.0