

DRAFT REPORT

**Review of the Delivered Price
of Natural Gas to
Tariff Customers
Served from the
AGL Gas Network in NSW**

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL
OF NEW SOUTH WALES**

DRAFT REPORT

**Review of the Delivered Price
of Natural Gas to
Tariff Customers
Served from the
AGL Gas Network in NSW**

Submissions

Public involvement is an important element of the Tribunal's processes. The Tribunal therefore invites interested parties to make submissions to all its investigations.

Submissions should refer to specific issues that have been raised in relevant issues papers and interim reports. There is no standard format for the preparation of submissions. Submissions should be made in writing. If they exceed 15 pages in length, they must also be provided on computer disk in word processor, PDF or spreadsheet format.

Confidentiality

Special reference must be made to any issues for which confidential treatment is sought and all confidential parts of submissions must be clearly marked. *However, it is important to note that confidentiality cannot be guaranteed as the Freedom of Information Act and section 22A of the Independent Pricing and Regulatory Tribunal Act provide measures for possible public access to certain documents.*

Public access to submissions

All submissions that are not deemed confidential are available for public inspection at the Tribunal's offices immediately after registration by the Tribunal. They are also available via the Tribunal's website. Transcriptions of public hearings are also available.

Public information about the Tribunal's activities

Information about the role and current activities of the Tribunal, including copies of latest reports and submissions is available on the Tribunal's website at www.ipart.nsw.gov.au.

Submissions on the recommendations and options proposed in this draft decision are required no later than 5 June 2000

Comments or inquiries regarding this review should be directed to:

Elsie Choy ☎ (02) 9290 8488
Gary Drysdale ☎ (02) 9290 8477

Independent Pricing and Regulatory Tribunal of New South Wales

Level 2, 44 Market Street, Sydney Tel (02)9290 8400 Fax (02)9290 2061

E-mail ipart@ipart.nsw.gov.au

All correspondence to: PO Box Q290, QVB Post Office, Sydney NSW 1230

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1 INTRODUCTION	1
1.1 Purpose of this review	1
1.2 Review process to date	2
1.3 Timetable for final report	2
2 REFORM AND REGULATION IN THE GAS TARIFF MARKET	3
2.1 The gas market in NSW	3
2.2 Contestability in the tariff market	3
2.3 The Tribunal's regulatory duties and powers	4
2.4 Existing price regulation	5
2.5 Effects of contestability on tariff market regulation	6
2.6 Summary	6
3 REGULATORY OBJECTIVES	7
3.1 Encouraging competition	7
3.2 Promoting the efficient use of resources	8
3.3 Safety, reliability and environmental considerations	8
3.4 Equity considerations	8
3.5 Summary	9
4 ASSESSMENT OF CURRENT TARIFF PRICES	11
4.1 The cost of gas supply	11
4.2 AGLRE's price movements under its present price control	12
4.3 Comparison of revenues and costs	14
4.4 Forecast tariff market costs and revenues	15
4.5 Inter-state tariff comparison	16
4.6 Quality of service	17
4.7 Miscellaneous charges	19
4.8 Conclusions	19
5 THE RETAIL MARGIN	21
5.1 Determining an appropriate profit margin	21
5.2 Retail costs	24
5.3 Analysis of AGLRE's retail margin	26
5.4 Conclusions	30
6 FACTORS AFFECTING COMPETITION	31
6.1 Upstream access to gas	31
6.2 Economies of scale in gas retailing	31
6.3 Sunk costs in gas retailing	32
6.4 Contestability costs and protocols	32
6.5 Effective competition from electricity	33
6.6 UK experience with gas contestability	33
6.7 Conclusion	34
7 OPTIONS FOR REGULATING THE MARKET POST CONTESTABILITY	35
7.1 Making a gas pricing order	35
7.2 Removing the PCF and not regulating the gas tariff market	36
7.3 Replacing the PCF with voluntary pricing guidelines	36

8	THE TRIBUNAL'S PREFERRED APPROACH	37
8.1	Maintaining a light handed approach to regulation	37
8.2	Balancing customer interests and encouraging competition	37
8.3	The business interests of suppliers to the tariff market	38
8.4	Promoting the efficient, equitable and safe use of gas	38
8.5	Summary	38
9	THE PROPOSED FORM OF REGULATION	39
9.1	Key elements of the VPP	39
9.2	AGLRE agreement	42
9.3	Other matters	42
9.4	Summary of proposals	43
	GLOSSARY AND ABBREVIATIONS	45
APPENDIX 1	LIST OF SUBMISSIONS	47
APPENDIX 2	OVERVIEW OF SUBMISSIONS	49
APPENDIX 3	COMPONENTS OF THE COST OF RETAIL SUPPLY OF GAS	51
APPENDIX 4	VOLUNTARY PRICING PRINCIPLES	53
APPENDIX 5	PRICE CONTROL FORMULA	55
APPENDIX 6	PRICE REGULATION OF BRITISH GAS TRADING (BGT)	57
APPENDIX 7	EXISTING TARIFFS	59

EXECUTIVE SUMMARY

Introduction

This report discusses the Independent Pricing and Regulatory Tribunal's proposed regulatory arrangements for prices charged to tariff customers¹ by the incumbent retailer using the AGL gas networks in NSW (the delivered prices of gas). This review has been necessary because of the progressive introduction of contestability to the tariff market for gas.

Reform and regulation in the gas tariff market

AGL Retail Energy Ltd (AGLRE) currently supplies around 96 per cent of the natural gas market in NSW. Reforms have paved the way for new suppliers of gas to enter the market. Contestability in the tariff market started in October 1999 with the opening up to competition of larger volume users. Full retail contestability is scheduled to commence on 1 July 2000 with the opening of the low volume users segment of the tariff market.²

At present tariff market prices are regulated through a price control formula (PCF) that establishes a maximum average tariff price (MATP) for gas to tariff customers. In addition, price movements are restricted by a set of voluntary price setting guidelines designed to protect consumers from excessive price rises. For various reasons, the current PCF will not be appropriate as a form of regulation once the tariff market becomes contestable.

Regulatory objectives

Contestability in the tariff market is expected to result in competition and significant benefits to consumers and industry in terms of efficiency gains, standards of service and customer choice. However, competition may not be effective for some time and customers may not benefit in the short to medium term. Competitive market forces may also lead to undesirable outcomes, particularly in relation to equity and environmental considerations.

In these circumstances, some regulation may be appropriate following the introduction of contestability and until competition becomes effective. The cost and benefits of any regulation must be balanced if the longer term benefits of competition are to be encouraged.

Current tariff market prices in NSW

The Tribunal considers that on balance, movements in tariffs have not been unreasonable relative to cost increases and revenue growth. Total costs have fallen since the introduction of the PCF, driven largely by declining non-gas costs. Real average tariff prices (ATP) are lower than they were before the PCF with the non-residential market being the major beneficiary with real declines in ATP. However, in the past five years, the residential market has seen real price increase largely as a result of cost reflective price changes.

¹ Tariff customers are those that use less than 10 TJ of gas per annum. Within this, low volume customers are those which use less than 1 TJ of gas, being around \$10,000, per annum. These users are typically residential customers while large volume users (ie using between 1 and 10 TJ per annum) are typically industrial/commercial customers.

² The Tribunal notes that while the low volume segment of the tariff market is scheduled to become contestable from July 2000, procedures and systems to support full contestability are unlikely to be in place until the first or second quarters of 2001.

The analysis also suggests that revenue growth has been driven by strong market expansion rather than large tariff increases. The Tribunal notes that real ATP and actual tariff revenue have been generally below the MATP suggesting that AGLRE have been under-recovering the maximum revenue allowable.

Retail margin

While taking account of the limitations of the available data relating to retail margins for gas and electricity suppliers, the Tribunal notes:

- AGLRE's profit margin on its whole retail business is above the range of profit margins proposed by energy regulators in recent years which has been between 0.5 per cent and 1.5 per cent of turnover
- AGLRE's retail costs as a percentage of turnover are higher than the corresponding figures for the NSW electricity suppliers but on a \$ per customer basis are below the electricity suppliers and between those of the two other NSW gas suppliers
- AGLRE's average retail margin per customer in \$ terms is lower than those of electricity suppliers in NSW and between the two other NSW gas suppliers
- a 1 per cent reduction in AGLRE's retail margin translates into approximately a 1 per cent fall in average tariff prices.

Factors affecting the development of effective competition

Competition in the tariff market is likely to develop over time. Current structural impediments, such as limited alternative gas supply sources, the current lack of business rules and systems, economies of scale and contestability costs, are expected to diminish over the medium term. Even so, the extent of competition, the likely impact on prices and services, and the likely delivery time of the benefits from competition cannot be predicted with any degree of certainty. On balance, the Tribunal considers that competition is likely to be ineffective in the short term.

Options for regulation in the post contestability market

The Tribunal has considered three options for regulation:

- making a gas pricing order amending the PCF to allow for contestability changes
- removing the PCF and not regulating the tariff market
- replacing the PCF with a set of voluntary pricing principles (VPP) aimed at smoothing the transition to effective competition.

The Tribunal's preferred approach to regulating the tariff market post contestability

The Tribunal considers that some form of regulation of tariff market prices is appropriate in the lead up to effective competition. At this stage, the Tribunal favours maintaining a light handed approach to regulation rather than issuing a gas pricing order. The Tribunal considers that VPP could be used to protect customers interests until effective competition is established whilst at the same time minimising regulatory costs and encouraging the development of competition. The Tribunal will continue to monitor tariff market developments and will consider issuing a gas pricing order if necessary.

The proposed form of regulation

The Tribunal proposes replacing the PCF with a new set of VPP. The VPP will apply to the incumbent retailer - AGLRE. The Tribunal will continue monitoring prices ahead of a further review of the tariff market in the second half of 2001.

The key elements of the proposed VPP are:

- continuing to make existing tariffs available for all tariff market customers until the end of 2001 (the default tariffs)
- where price structure remains the same, any increase in each default tariff from 1 July 2000 will be limited to the annual inflation rate (CPI). This price cap is to be applied to tariffs prior to the net pricing effect associated with the GST package
- default tariffs for residential and commercial/industrial customers can be restructured provided that
 - the increase in the average tariff for the particular customer class is capped at CPI; and
 - tariff increases for residential customers are not to exceed \$20 or 5 per cent in real terms per annum, whichever is greater
- new information requirements to assist the Tribunal in monitoring prices
- continued pensioner discounts.

The limitations on tariff increases for residential tariffs are subject to the final decision on AGL Gas Network's Access Arrangement and transportation charges.

The maintenance of existing tariffs is subject to the Tribunal reviewing the tariff market and developments in competition, in the second half of 2001.

The Tribunal seeks comments on appropriateness of the inclusion of contestability costs in the proposed price constraints.

The Tribunal's initial view is to not regulate AGLRE's miscellaneous charges. However, it wishes to consider further submissions on this matter.

1 INTRODUCTION

This is the draft report of the Tribunal concerning its review of the delivered price of natural gas to the tariff market served from the AGL gas network in NSW.

In reaching its proposals and recommendations, the Tribunal has taken into account the legislative duties imposed on it under sections 3(4) and 3(5) of the Gas Supply Act (NSW) 1986 and the *Independent Pricing and Regulatory Tribunal Act 1992*.

1.1 Purpose of this review

In keeping with the commitments made in 1994 by the Council of Australian Governments (CoAG), the NSW Government is introducing competition into the supply of natural gas. This involves a series of stages including:

- developing third party access regimes to gas pipeline networks whereby suppliers of gas are able to access existing transportation systems and thus, compete for customers
- gradually introducing contestability to customer groups
- regulating and monitoring prices until effective competition is established.

This report primarily addresses the Tribunal's approach to the third of these stages as it relates to the supply of gas to the tariff market. Tariff customers served by AGLRE in NSW currently pay a delivered price for gas that is regulated through a price control formula (PCF). The PCF was established as part of AGLRE's authorisation in 1986, under the *Gas Supply Act (NSW), 1986*.

The introduction of contestability to the tariff market has necessitated a review of the current price regulation arrangements. In this review the Tribunal proposes to consider whether the tariff market should continue to be regulated, and if so, how prices should be regulated.

The Tribunal has considered:

- its regulatory objectives and duties
- the reasonableness of current tariff market prices in NSW and the quality of service provided to the tariff market
- the appropriate level for the retail margin
- factors that may affect competition, prices and service levels once the tariff market becomes contestable.

The Tribunal has considered various options for regulation:

- making a gas pricing order amending the PCF to allow for changes to gas prices flowing from contestability
- removing the PCF and not regulating the tariff market
- replacing the PCF with a set of voluntary pricing principles (VPP) aimed at smoothing the transition to effective competition.

This draft report sets out the Tribunal's preferred approach to regulation in the tariff market as it moves towards full contestability.

1.2 Review process to date

In May 1998 the Tribunal began its review of the delivered price of natural gas to tariff customers served from the AGL gas network in NSW. In accordance with the processes set out in section 32(2) of the Act and Part 4 of the *Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal released an issues paper on tariff regulation and called for submissions from interested parties. Submissions from stakeholders are listed in Appendix 1.

After considering these submissions, the Tribunal resolved to postpone its determination of the delivered price of gas to the tariff market in NSW. This enables the tariff market review to run concurrently with the Tribunal's review of AGL Gas Network's (AGLGN) Access Arrangement. Coupling the reviews was appropriate because transportation prices are significantly affected by the Access Arrangement, and are the major component of the delivered price of gas to the tariff market. This decision was widely supported by submissions to the Tribunal.

The Tribunal issued its draft decision on AGLGN's Access Arrangement in October 1999.³ A final decision is expected in the second quarter of 2000. In light of this, the Tribunal is now in a position to issue a draft report on the delivered price of gas to the tariff market in NSW.

The Tribunal also reviewed the delivered prices of gas in Albury and Wagga Wagga. The final report was issued in February 2000. The Tribunal decided not to issue a gas pricing order in these areas, but to rely on VPP. The VPP allow for default tariffs in the transitional period of retail contestability. The VPP place a limit on price changes for residential customers and eliminate the requirement to notify the Tribunal prior to any tariff changes except for default tariffs.

1.3 Timetable for final report

The Tribunal invites submissions on this draft decision from interested stakeholders by 5 June 2000. The Tribunal anticipates that its final determination will be released in end June 2000. This will enable the retail market to move towards full contestability from 1 July 2000.

³ IPART, *Draft Decision, Access Arrangement for AGL Gas Networks Limited, Natural Gas System in NSW*, October 1999.

2 REFORM AND REGULATION IN THE GAS TARIFF MARKET

2.1 The gas market in NSW

Until August 1997, AGL operated its gas business as a bundled distribution and retail business servicing both tariff and contract customers⁴. An Access Arrangement was put in place for AGL in 1997 establishing AGL Gas Networks (AGLGN) as a ring-fenced gas distribution business. At the same time, AGL Retail Energy (AGLRE) commenced trading as a retailer of natural gas to tariff customers in NSW. AGL Wholesale Marketing was established to retail natural gas to contract customers.

AGLRE supplies around 96 per cent of the gas market in NSW. The other suppliers are Energy 21 (now known as Origin Energy) which supplies gas to customers in Albury, Moama, and the NSW Murray Valley towns and Great Southern Energy (GSE) which supplies gas to Wagga Wagga and surrounding regions.

Contract customers are those that consume more than 10 TJ of gas per annum. Although contract customers represent less than 1 per cent of AGL's total NSW market, these customers account for around 75 per cent of gas consumed. Contract customers include hospitals, flour milling, brick manufacture and fertiliser production.

Tariff customers, which are the subject of this review, are those that consume less than 10 TJ of gas per annum. Within this category, there are low volume customers being those that use less than 1 TJ, or around \$10,000, of gas per annum. Low volume customers are typically residential while large volume customers (those that use between 1 and 10 TJ of gas per annum) are typically industrial/commercial users.

The residential market accounts for 96 per cent by number of AGL's total natural gas customer base in NSW, but consumes only 14 per cent of the total load. About 60 per cent of all households in NSW with access to gas are connected. Average residential consumption in Sydney is about 22 gigajoules (GJ) per annum.⁵ Commercial and industrial customers account for 3 per cent by number and use 11 per cent of the total load.

2.2 Contestability in the tariff market

Reforms have paved the way for new suppliers of gas to enter the NSW gas market. A third party access regime has been developed for natural gas pipelines. With third party access to pipeline networks, suppliers are able to access existing reticulation systems and thus, compete for customers. AGLGN's Access Arrangement provides operating procedures and rights in respect of third party access to the network for contract customers.

The NSW gas market has been opened to competition progressively with large volume tariff customers becoming eligible for third party access in October 1999. Despite this, there has been little movement away from the incumbent retailer. This may be due in part to uncertainty regarding network contestability costs, limitations on the availability of alternative sources of gas and some technical/contractual issues.

⁴ Tariff (ie residential and commercial/industrial) customers are those that consume less than 10 TJ per year. Contract customers consume more than 10 TJ per year.

⁵ AGLRE letter of 10 December 1999 regarding the tariff increase proposal from January 2000.

Full contestability in the tariff market is scheduled to commence on 1 July 2000 when low volume tariff customers become eligible for third party access.⁶ This is well in advance of other States' gas contestability timetable.⁷ In NSW, the full contestability timetable for gas is also ahead of the corresponding timetable for electricity.

The Tribunal notes that while the low volume segment of the tariff market is scheduled to become contestable from July 2000, procedures and systems to support full contestability are unlikely to be in place until the first or second quarters of 2001.

2.3 The Tribunal's regulatory duties and powers

Section 32(1) of the Act empowers the Tribunal to conduct investigations that enable it to exercise its functions under the Act. An investigation must be consistent with the Act's statutory objectives. The objectives of the Act are listed in section 3(1). They are:

- (a) to encourage the development of a competitive market in gas, so as to promote the thermally efficient use of gas and to deliver a safe and reliable supply of gas in compliance with the principles of ecologically sustainable development contained in section 6 (2) of the *Protection of the Environment Administration Act 1991*, and
- (b) to regulate gas reticulation and gas supply, so as to promote customer choice in relation to gas supply.

To ensure that these objectives are met, the Minister, the Tribunal and any review panel must fulfil the duties detailed in sections 3(4) and 3(5) of the Act, as set out below.

- 3(4) In relation to persons involved in the supply of gas (authorised suppliers and licensed distributors), the duties are as follows:
 - (a) to ensure that the public receives the benefit of a competitive gas market
 - (b) to take proper account of the interests of tariff customers in respect of gas pricing and other terms of gas supply
 - (c) to take proper account of the business interests of persons supplying gas to the tariff market
 - (d) to encourage the development of competitive gas supply in the non-tariff market, with a focus on free and fair trade.
- 3(5) In relation to gas users the duties are to promote the efficient and safe use of gas.

The Tribunal's principal power in regulating gas tariff market prices is a gas pricing order. The Tribunal may make a gas pricing order under section 27 of the Act at any time. Essentially, a gas pricing order can:

- establish a methodology for setting tariff prices for delivered gas
- establish maximum tariffs or maximum average tariffs
- prohibit the imposition of certain charges.

⁶ As indicated earlier, procedures are unlikely to be in place to support full contestability until the first or second quarters of 2001.

⁷ For example, Victorian residential customers will be contestable from 1 September 2001.

2.4 Existing price regulation

2.4.1 Price control formula

There is currently no gas pricing order in the tariff market. At the present time, tariff market prices are regulated through a PCF.⁸ The PCF establishes a maximum average price (MATP) per GJ of gas to tariff customers. AGLRE's authorisation requires it to take all reasonable steps to ensure that the actual average tariff price (ATP) per GJ does not exceed the MATP. A detailed explanation of the PCF is contained in Appendix 5.

Essentially, the MATP in any current year is based on:

- a gas component, which includes gas field prices, haulage and certain government fees
- a non-gas component, which includes transportation costs associated with the distribution network, retail costs and a retail margin.

Increases in the non-gas component are controlled through a CPI-X formula. Prices may rise by the rise in inflation (CPI) less an amount representing efficiency gains (X). The X factor is currently 1.5 per cent.⁹ The gas component costs are passed directly onto customers.

2.4.2 Voluntary price setting guidelines

In addition to the PCF, AGLRE's authorisation contains further price control provisions for tariff gas users. AGLRE is obliged to outline the policies and principles which form the basis for the tariffs paid by different classes of tariff gas users. The principles adopted by AGLRE, known as the voluntary price setting guidelines, are summarised below:

- tariff changes usually occur no more than once a year
- the Tribunal must be provided with sufficient notice of any tariff changes
- in addition to the MATP, tariff increases at any time are to be no greater than \$5.00 per quarter or 5 per cent in real terms per annum, whichever is greater.

2.4.3 Standing charges and minimum fees

AGLRE's current authorisation requires the Tribunal's approval of any changes to AGLRE's standing charges, that is, the fee charged to supply the gas service. The standing charge was introduced in 1995, when the former Gas Council agreed to replace the minimum bill and block rate structure with a two part fee structure – a standing charge and a dollar per megajoule charge (commodity charge). This type of fee structure is commonly used by other utilities such as water and electricity to recoup some of the fixed costs of providing services to customers.

⁸ The PCF was established as part of AGLRE's authorisation granted under the *Gas Supply Act, (NSW) 1986*. It continues to have effect under cl3(1) and 3(3) of schedule 2 of the savings and transitional provisions under the Act.

⁹ This current X factor was set by the former Gas Council in its 1994 PCF review and became effective from 17 February 1995. Prior to then, it was set at 2 per cent for all regions except the Newcastle region where it was 3.5 per cent.

2.4.4 Pension rebates

AGLRE is required to provide a discount to pensioner concession cardholder.¹⁰ The amount of this concession is currently \$3.50 per quarter.

2.5 Effects of contestability on tariff market regulation

The move towards contestability has significant implications for price regulation. The Tribunal considers that the current PCF will not be appropriate as a form of regulation once the tariff market becomes contestable:

- The network charge for gas contained in the non-gas element of the PCF was previously controlled by AGL Gas Company¹¹ along with retail costs and the retail margin. The Tribunal now approves network costs in the Access Arrangement for AGLGN. As such, AGLRE no longer has control over these costs.
- AGLRE must forecast anticipated volumes of gas at the beginning of the year in order to calculate the MATP. With contestability, AGLRE may not be able to forecast volumes accurately as it may lose customers during the year as a result of competition.

Another potential problem is the inability of AGLRE to pass through contestability costs through the current PCF. These costs entail the new procedures and systems required to enable customers to change retailers. AGLGN has begun charging AGLRE a network contestability charge¹² that has been passed by AGLRE through to the 1-10TJ customers in the tariff market. This charge is currently being applied to all industrial and commercial customers irrespective of whether they change their retailer. An AGLGN network contestability charge will also be applied when the residential market becomes contestable.

2.6 Summary

The introduction of contestability in the tariff market has significant implications for price regulation. At the present time tariff market prices are regulated through a PCF that essentially establishes a maximum average price for gas to tariff customers. In addition, tariff price movements are restricted by a set of voluntary price setting guidelines designed to protect consumers from excessive price rises.

For various reasons, the PCF will not be appropriate as a form of regulation once the tariff market becomes contestable. This has necessitated this review of the regulatory framework for the tariff market.

¹⁰ Section 11(4) of the Act permits the Minister to impose a condition on a gas supplier's authorisation requiring the supplier to implement the Government's community service obligations policy. Whilst section 11(4) of the Act also requires the Government to fund these rebates, amendments to the Act in July 1997 deferred this obligation until the Tribunal issues a gas pricing order. A gas pricing order has not been issued.

¹¹ AGL Gas Company was separated into network and retail companies in August 1997.

¹² This charge has been scrutinised by the NSW Ministry for Energy and Utilities (MoEU). The charge for the interim period 1 January - 30 June 2000 is \$0.1278/GJ.

3 REGULATORY OBJECTIVES

The achievement of the Act's regulatory objectives is central in deciding whether the tariff market should be regulated after the introduction of contestability. In essence these are:

- to encourage the development of a competitive market in gas
- to promote the thermally efficient use of gas
- to deliver a safe and reliable supply of gas in compliance with the principles of ecologically sustainable development
- to promote customer choice in relation to gas supply.

3.1 Encouraging competition

The NSW gas industry is in a period of transition as it moves towards full contestability and competition. Competition is expected to deliver numerous benefits including lower or contained unit costs and lower prices to consumers. Competition is also expected to provide consumers with a greater choice in the range of services, the choice of supplier and enhanced quality and safety of service.

However, in the near term, consumers may not benefit from the introduction of contestability to the tariff market. Indeed, despite full contestability, competition in the tariff market may not become effective for some time. This reflects in part the 'natural monopoly' characteristics of the gas market, the predominance of the incumbent service provider and structural impediments such as the lack of business rules and systems to support contestability. New or potential entrants may not be able to compete effectively against the incumbent and may be discouraged from entering the market.

Thus, while the introduction of competition is favoured as a means of promoting economic reform, regulation may be necessary until competition becomes effective. In these circumstances, measures may need to be taken by the regulator to remove any barriers to the development of competition. Also, monitoring, or directly influencing pricing policies may be necessary in the early stages of competition to ensure that there is no abuse of market power such as through monopoly, discriminatory or predatory pricing.

The costs of regulatory intervention must be weighed against the costs of any market failure. Thus, whilst competition may take some time to develop, the regulator must be careful not to hinder this development through its interactions with regulated firms. For example, price regulation could act to suppress competition in the following ways:

- potential entrants may be deterred if they fear that anticipated profits associated with entry may be eroded by regulation
- entrants may be deterred if regulation lowers the incumbent's prices below entry inducing levels
- innovation by retailers (existing and potential) may be reduced if they fear any excess profit resulting from innovation will be reduced in a regulated environment
- administrative and compliance costs associated with regulation may impose a net cost on consumers.

3.2 Promoting the efficient use of resources

In a competitive economy, the market and cost reflective pricing have a key role in the efficient allocation of resources. The market mediates between competing consumption demands and limited resources. Prices operate as a signal to consumers by which they determine how much to consume. Effective competition gives suppliers an incentive to reduce their overall cost levels in order to gain a market advantage. In this way, effective competition can force suppliers to set prices according to the 'true costs' of supply.

In the absence of competition, price signals may not fully reflect costs and may distort decision making. Prices may be set artificially high forcing consumers to pay excessive prices or use less of the commodity than is efficiently required. Conversely, where prices are artificially low, consumers may be encouraged to use more resources than is efficient.

In these circumstances, regulatory intervention in the market to influence pricing may be appropriate. Regulatory oversight of pricing policies can be used to ensure that prices are cost reflective and that price increases are not excessive or overly frequent. If a regulated reduction in gas retail prices is achieved because the supplier achieves efficiency gains, consumers and the service provider will share the efficiency gains.

3.3 Safety, reliability and environmental considerations

Competition and cost reflective pricing may be desirable in terms of allocative efficiency. However, in practice, the achievement of this objective may be at the cost of other equally valuable objectives such as, equitable access to an affordable, reliable minimum standard of service and the promotion of environmentally sustainable development.

The desirability of lower costs and prices for industry and consumers needs to be balanced against the enhancement of quality and safety of services and the expansion of consumer choice. Regulation may be necessary to prevent erosion of standards and to ensure a safe and reliable minimum service standard.

Appropriate pricing of gas resources and promotion of demand management goals may also serve a broader environmental purpose in ensuring that scarce resources are not wasted. Gas is generally considered to be a 'cleaner' source of energy than its strongest competitor, coal powered generation of electricity. By ensuring that gas prices are not significantly above the cost of supply, regulation may assist in ensuring that energy consumers do not have an artificial reason not to consume this relatively 'clean' energy source. Similarly, by not allowing artificially low prices, regulation can ensure that consumers are discouraged from over consuming gas or consuming it in a thermally inefficient manner.

3.4 Equity considerations

Regulatory intervention may also be necessary in establishing an appropriate balance between efficiency and equity where market outcomes might otherwise be inequitable. For example, while price reflectivity may encourage efficiency in the use of resources, it may also involve significant price rises for some consumers. Price rise constraints have a role in ensuring that affordable access to services is maintained. By limiting the size of price changes for consumers or by phasing in price increases, excessive price shocks can be avoided. Price change regulation is often referred to as placing 'side constraints' on price

movements. Explicit price subsidies for particular classes of consumers (such as pensioners) may also be appropriate.

In setting price rise constraints, the regulator must take into account the need for regulated firms to change their price structures to reflect changes in cost structures. If these constraints prevent the regulated firm from reflecting changes in its fixed costs in its prices, this may result in unfair cross subsidies between consumers.

3.5 Summary

The move towards full contestability in the tariff market is expected to result in competition and significant benefits to consumers and industry. However, competition may not be effective for some time and consumers may not benefit in the short term. Moreover, market forces may lead to undesirable outcomes, particularly in relation to equity and environmental considerations.

In these circumstances, some regulation may be appropriate following the introduction of contestability and until competition becomes effective. Clearly, the potential cost and benefits of any regulation must be balanced if the longer term economic benefits of competition are to be encouraged.

4 ASSESSMENT OF CURRENT TARIFF PRICES

In deciding whether to continue to regulate the tariff market the Tribunal has considered trends in AGLRE's costs, average tariffs and revenue. In addition, it has compared AGLRE's tariffs with other suppliers in NSW and other states.

The Tribunal has had regard to information and data in annual statement submitted by AGL and AGLRE as required under the Authorisation. The annual statement includes information on allowable gas costs, tariff revenue, quantities, average tariff prices, and details of adjustment factors. The statement is reviewed and signed by AGL's auditor.

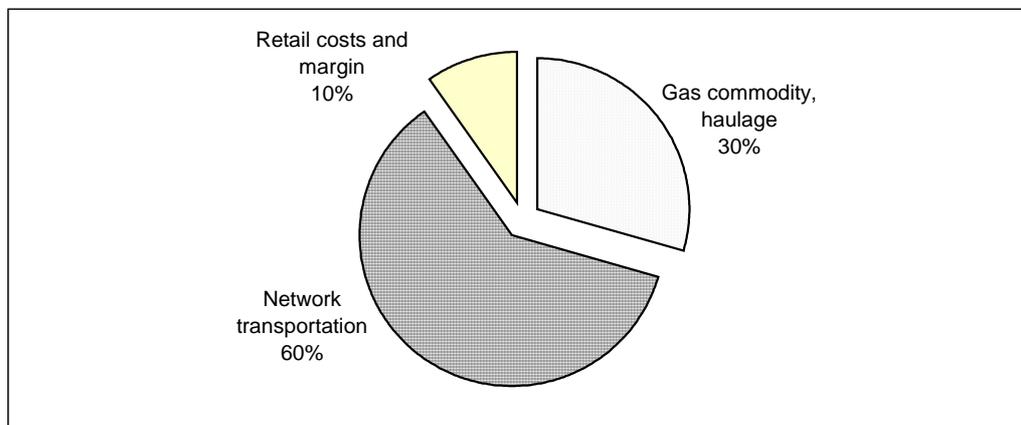
4.1 The cost of gas supply

The delivered price of gas has several components:

- *gas commodity and haulage costs* – purchasing the gas from the field and transporting it from the field to the city gate through a transmission pipeline
- *transport costs* – transporting the gas through the reticulation system¹³
- *retail costs and margin* – running the supply business, including a profit margin.

A more detailed description of each of the cost components is provided in Appendix 3.

Figure 4.1 AGLRE's supply costs in 1998/99



Note: Based on AGLRE's 1998/99 unit cost \$/GJ.

Under the current PCF, allowable gas costs, (ie gas field prices, haulage and certain government fees) are passed directly onto customers. Network transportation costs, which form the majority of the cost of gas supply, are now separately regulated under an Access Arrangement as a result of national gas reform. The remaining costs are those incurred by AGLRE and its profit margin on the retail business. As may be seen from Figure 4.1, this is the smallest of the three components.

¹³ AGL Gas Network's distribution charges are regulated by the Tribunal under the National Gas Code.

Under the current PCF, increase in the non-gas component (ie transportation costs, retail costs and margin) are subject to a CPI-X price cap formula. That is, costs comprising the non-gas element may be increased by the rate of inflation less an efficiency factor.¹⁴

The PCF commenced in June 1990. The movements in the cost of gas supply since 1990/91 are shown in Table 4.1

Table 4.1 Change in real cost of gas supply (%)

	1990/91 –1998/99		1994/95 – 1998/99	
	Cumulative	Average pa	Cumulative	Average pa
Gas cost (\$/GJ)	11.2	1.3	1.4	0.3
Non gas cost (AGL component) (\$/GJ)	-12.5	-1.7	-4.1	-1.0
Total cost of gas supply	-6.4	-0.8	-2.5	-0.6

Note:

1. Gas cost includes field price, transmission/haulage and licence fee.
2. Non gas cost includes distribution/network costs, retail cost and margin.

The Tribunal’s analysis shows that over the period 1990 to 1999, allowable gas costs have increased in real terms by 11 per cent or around 1.3 per cent per annum. Since 1994/95, real allowable gas costs have increased by a very modest 1.4 per cent or 0.3 per cent per annum. The increase in allowable costs has been largely offset by a significant reduction in the non-gas cost component. Over the period 1990 to 1999, real non-gas costs have fallen by 12.5 per cent. Since 1994/95, these costs have fallen by 4.1 per cent or 1.0 per cent per annum.

Overall, the trend in total costs over the period has been quite encouraging. Total costs have fallen by 6.4 per cent per cent over the period 1990 to 1999. Since 1994/95, total costs have fallen by 2.5 per cent or by 0.6 per cent per annum.

The Tribunal considers that this is a satisfactory outcome for consumers insofar as they have benefited from gas costs being constrained by the incentive based CPI-X price regulation.

4.2 AGLRE’s price movements under its present price control

The current PCF establishes a maximum average price (MATP) per GJ of gas to tariff customers. AGLRE is required to take all reasonable steps to ensure that the actual average tariff price (ATP) per GJ does not exceed the MATP. Table 4.2 shows the percentage change in tariffs over 1990-1999 and 1994/95-1998/99 respectively. Figure 4.2 shows the real ATP and MATP movements over the period 1994/95-1998/99.

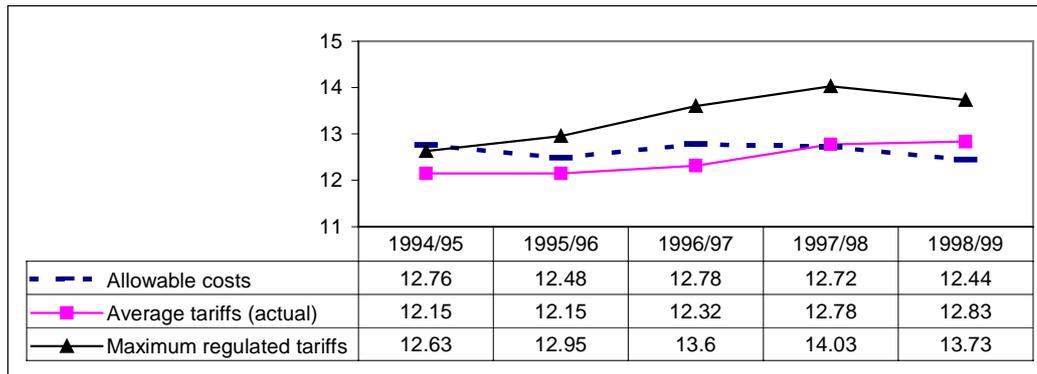
Table 4.2 Change in ATP, MATP (%)

	1990/91 –1998/99		1994/95 – 1998/99	
	Cumulative	Average pa	Cumulative	Average pa
ATP	-3.3	-0.4	5.6%	1.4%
MATP	3.3	0.4	8.8%	2.1%

Source: IPART analysis.

¹⁴ The X factor of 1.5 per cent was effective in February 1995. Prior to that it was set at 2 per cent for all regions except the Newcastle region where it was 3.5 per cent.

Figure 4.2 Real ATP and MATP - \$/GJ (1998/99 dollars)



Source: The audited annual return from AGLRE. Prices are converted into real 1998/99 dollars.
 Note: Average tariff price = total tariff revenue/total tariff consumption.

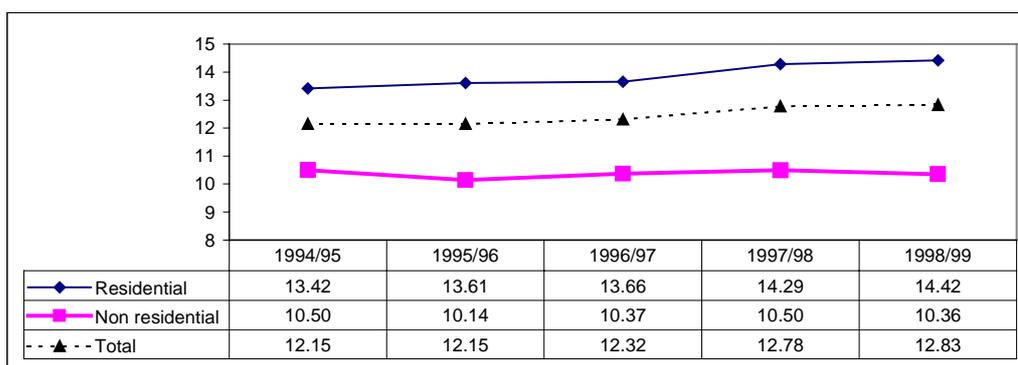
The Tribunal's analysis shows that:

- real ATP are 3.3 per cent below where they were in 1990 when the PCF was introduced
- for much of the period between 1990 and 1999, real ATP have fallen or remained steady
- the exception was 1996/97 and 1997/98 when real ATP rose by 1.4 per cent and 3.7 per cent, respectively
- in 1998/99 real ATP increased slightly by 0.4 per cent
- for much of the period since 1990, real ATP have been considerably below the MATP suggesting that AGLRE have been under-recovering the maximum allowable revenue
- in the four years since the 1994 review of prices, real ATP have increased by 5.6 per cent (or 1.4 per cent per annum) compared with an increase of 8.8 per cent in real MATP (or 2.1 per cent per annum)
- the gap between the ATP and MATP has widened in nominal terms from \$0.4/GJ in 1994/95 to \$0.9/GJ in 1998/99.

This analysis demonstrates that AGLRE has abided by the price constraints imposed under the PCF maintaining ATP below the MATP. It also suggests that over the longer term, customers have benefited with average tariffs falling since the PCF was introduced. Price movements over the past few years have been mixed although in the most recent year the increase was very modest. Moreover, customers have benefited to the extent that AGLRE has recovered tariff revenue below that allowed under the MATP.

The Tribunal has also considered the differential impact on customers.

Figure 4.3 - Real ATP by customer classes - \$/GJ - (1998/99 dollars)



Source: AGLRE.

The Tribunal's analysis shows that over the period 1994/95 to 1998/99:

- real ATP for residential customers have increased by 7.5 per cent or 1.9 per cent per annum
- real ATP for non-residential customers have fallen by 1.3 per cent or 0.3 per cent per annum.

The increase in residential prices is partly due to the tariff restructure in 1997/98 when real residential ATP rose by 4.6 per cent. In the two years prior, real ATP had increased by just 1.4 per cent and 0.4 per cent, respectively while in 1998/99 it rose by 0.9 per cent. The price change was done to improve cost reflectivity in tariff market pricing.

This analysis shows that the main beneficiary has been the non-residential market which has experienced real declines in ATP. The Tribunal notes that the residential market has seen real price increases over the period but considers that these were in part the inevitable result of reforms aimed at making gas tariff pricing policies more cost reflective. The Tribunal also notes that the increase in residential ATP have been modest in the years since the tariff restructuring.

4.3 Comparison of revenues and costs

The Tribunal has examined growth in the tariff market, allowed costs under the MATP, and revenues for the period 1994/95 to 1998/99. These are summarised in Table 4.3.

Table 4.3 Tariff market growth, prices and revenues (real 1998/99 dollars)

	1994/95	1995/96	1996/97	1997/98	1998/99	Av % change
Tariff growth						
Tariff quantity (TJ)	21,703	23,023	24,032	25,434	26,831	5.4
No of customers						
- residential	618,597	649,230	673,465	699,239	727,421	4.1
- other tariff	22,868	23,205	23,631	23,994	24,329	1.6
- total	641,465	672,435	697,096	723,233	751,750	4.0
Actual Inflation (Sydney)	3.5%	5.0%	1.4%	0.1%	1.7%	2.3%
Real costs, average price vs MATP						
Allowed costs under MATP \$/GJ	12.76	12.48	12.78	12.72	12.44	-0.6
Adjustment (A factor)	-0.13	0.47	0.82	1.31	1.29	
MATP (maximum prices)	12.63	12.95	13.60	14.03	13.73	2.1
Average tariff price (ATP)	12.15	12.15	12.32	12.78	12.83	1.4
Real revenue comparison						
Actual tariff revenue	264	280	296	325	344	6.9
Maximum revenue under MATP	274	298	327	357	368	7.7

Note: The licence cost is part of the network charges post 1997/98.

Over the period 1994/95 to 1998/99:

- actual tariff revenue increased in real terms by 6.9 per cent per annum compared with growth in the maximum revenue allowed under the MATP of 7.7 per cent
- the volume of gas sold has increased by 5.4 per cent per annum while customer growth has been 4.0 per cent per annum
- ATP increased by 1.4 per cent per annum.

The Tribunal notes that the gap between AGLRE's actual revenue and that allowed under the MATP has increased from \$10m to \$24m in real terms. This is due to the adjustment factor in the price control formula, which provides a catch up provision from year to year, allowing the formula to be self-correcting in case of forecasting errors.

The Tribunal notes that AGLRE's revenue and price movements over the past four years comply with the price constraint under the current PCF.

4.4 Forecast tariff market costs and revenues

AGLRE has submitted information on estimates of allowed costs under the MATP and revenues. It should be noted that as a result of national gas market reforms and AGL's company restructure, only the retail costs are now within AGLRE's control.

AGLRE's estimates suggest that in 1999/2000:

- the cost of gas supply will increase in nominal terms by around 0.2 per cent with a fall in distribution and retail costs being offset by an increase in allowable gas costs (ie gas commodity and haulage)
- the MATP will fall by 2.4 per cent in nominal terms
- ATP will increase by 0.3 per cent, in line with the increase in the cost of gas supply

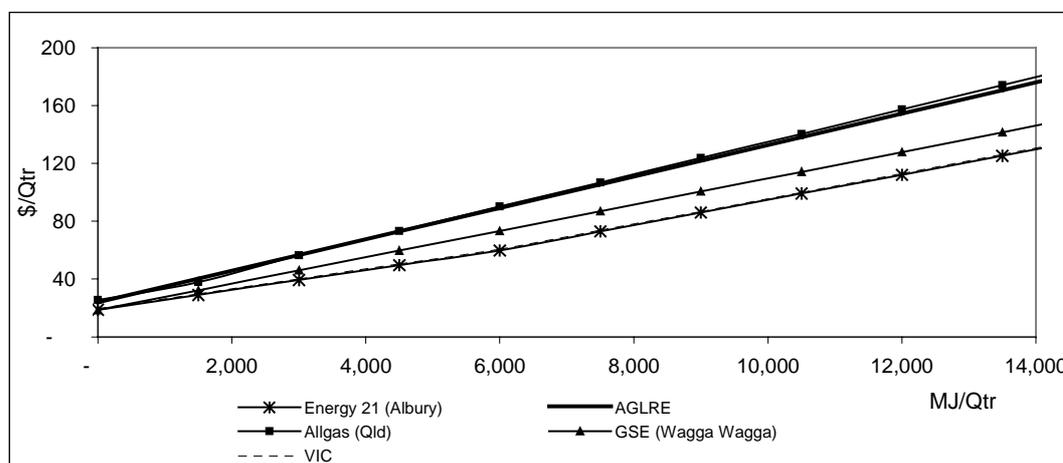
- the ATP will increase by more than the MATP, but in dollar terms would remain below the MATP if the PCF regulation were to continue in 1999/2000
- tariff revenue will increase by 4.7 per cent driven largely by growth in sales volume rather than an increase in average tariffs.

4.5 Inter-state tariff comparison

The Tribunal has compared AGLRE's tariff prices with:

- Great Southern Energy, the supplier in Wagga Wagga NSW
- Origin Energy (formerly Energy 21) in Albury
- maximum tariffs in Victoria per the Victorian Gas Industry Tariff Order 1998¹⁵
- Allgas, the supplier in Queensland.

Figure 4.4 Residential tariffs comparison



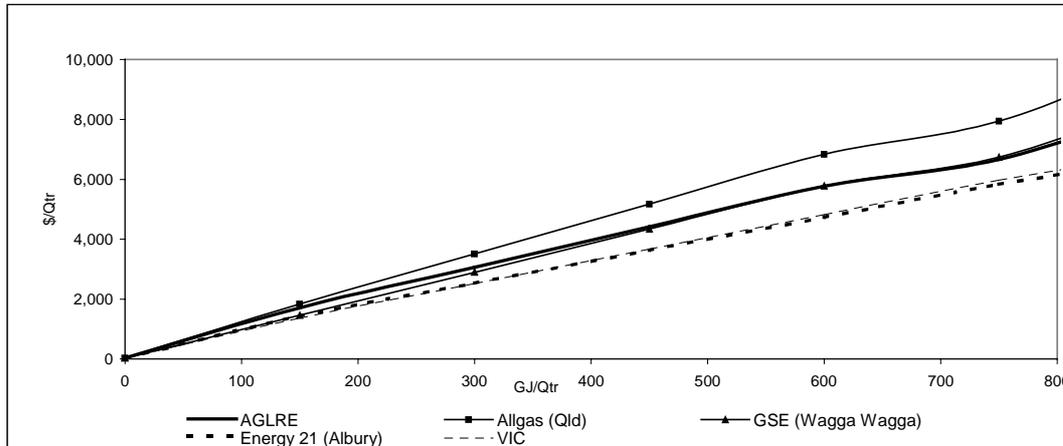
Source: IPART's analysis.¹⁶

For residential tariffs, the quarterly bill under AGLRE's tariff is higher than that charged by GSE and the Victorian distributors. AGLRE's tariff price is just lower than Allgas in Queensland except the small consumption bands.

¹⁵ Based on the amended schedule of maximum uniform tariffs for each of Origin Energy (formally Energy 21), Ikon Energy and Kinetik Energy, with effect from 1 January 2000.

¹⁶ Victorian tariffs are based on the maximum uniform tariffs in the Victorian Gas Industry Tariff Order. The quarterly bills calculated for tariff customers in Victoria and Albury are based on the peak commodity charge. Actual bills are expected to be lower than the level shown in this graph.

Figure 4.5 Commercial tariffs comparison



Source: IPART's analysis.¹⁷

In the commercial/industrial tariff market, a similar pattern follows. AGLRE's tariffs compare favourably with Allgas in Queensland but are generally higher than those charged by GSE, Origin Energy and Kinetic in Victoria.

The price differential appears to be driven mainly by network transportation costs. As noted above, network charges are now regulated under the National Gas Code. In broad terms, the level of transportation depends on a wide range of factors, including network design, utilisation, customer density, efficiency and topography.

4.6 Quality of service

Economic regulation of gas pricing requires the quality and level of service to be considered. The key issue is the service provider's ability to maintain or improve its profit without adverse effect on service standards whilst achieving efficient prices. The Tribunal does not have a direct role in regard to the regulation of quality of service in the gas industry. However, the Tribunal's consideration of the quality of service standards is integral to any pricing or access review.

As required under s12 of the *NSW Gas Supply (Customer Protection) Regulations 1997*, AGLRE has adopted the Australian Gas Association's Natural Gas customer service code as its customer service code. AGLRE has included additional sections on debt collection policy, complaints and dispute resolution processes and a copy of its standard contract with customers. This code sets the minimum standards under which AGLRE may supply and sell reticulated gas to customers.

Under the *NSW Gas Supply (Customer Protection) Regulations 1997*, the code must provide for:

- standard form contracts (s16)
- standards of service (s17)
- form and content of bills (s18)
- charges and meters (s19)

¹⁷ See footnote 16.

- debt collection procedures (s20)
- dispute resolution procedures (s21).

AGLRE provides a summary of its customer charter on its web site.¹⁸ AGLRE is required to send a copy of the natural gas customer charter, free of charge to each customer's address. The full version of this charter is available from AGLRE at a nominal charge, or may be inspected during business hours in standard and large print at AGLRE's office.

The AGL Customer Council also plays an important role in monitoring customer services and is consulted on policy issues affecting tariff customers.¹⁹ Members of the Gas Customer Council include customer and welfare groups.

The Tribunal has sought data on customer services from AGLRE. AGLRE has provided records of customer complaints for the period January-June 1999. AGLRE has advised that data prior to January 1999 is not comparable due to system reporting errors.

For the six months, January-June 1999, number of complaints as a percentage of total number of customers was below 0.1 per cent. On average over the six month period, the percentage of complaints to total number of customers was 0.05 per cent. This data has been provided to the MoEU under condition 3.10 of AGLRE's authorisation.

The Tribunal acknowledges that the data on the quality of service and key performance indicators is limited. Although the results for the six months presented for number of complaints are positive, the results need to be qualified by the limited data available.

In Victoria, the Office of the Regulator General (ORG) has developed gas industry guidelines and reporting framework covering the specification of key performance indicators for distributors and retailers. ORG's key performance indicator specification for gas retailers in Victoria includes:

- affordability indicators. These indicators measure trends in customers' capacity to pay for gas services and cover availability of payment schemes to customers.
- inquiries, complaints and billing indicators. These indicators monitor customers' perception of service quality.

Under the current authorisation, AGLRE is required to keep records including statistics resulting from gas user inquiries and complaints. The Tribunal considers that AGLRE should provide more comprehensive information on customer services. Consideration should be given to the reporting framework developed in Victoria. This could include AGLRE publicly reporting its performance against agreed customer service benchmarks. The reporting and monitoring service standards are matters for the MoEU. This requirement may necessitate amendments to AGLRE's authorisation.

¹⁸ www.agl.com.au

¹⁹ The AGL Customer Council was formed in June 1998. The Council acts as a forum for two way communication between AGL and representatives from residential and small business customers.

4.7 Miscellaneous charges

Miscellaneous charges are imposed to signal to customers the costs of providing these services. AGLRE's current miscellaneous charges are shown in the following table. Also provided in the table are some of the maximum allowable charges in electricity.²⁰ Unlike the electricity industry charges that are regulated by the Tribunal, AGLRE's miscellaneous charges have never been regulated. One reason for this may be the lack of customer complaints relating to these charges.

Table 4.4 Miscellaneous charges²¹

Fee or Charge	AGLRE's charges	Maximum allowable charge for electricity industry
Account establishment fee	\$20	\$35
Collector call fee	\$30	\$30
Reconnection fee (following disconnection for debt)	\$70	\$60
High bill inquiry ¹	\$49	N/A ⁽²⁾
Late payment fee	\$10	\$5
Change of ownership reconnection	\$20	\$35
Dishonoured payment fee	\$21	Twice bank fee

Note:

1. A high bill inquiry relates not only to looking for errors in calculations, but may also involve a site visit to check the customer's meter or to check appliances for gas leaks. This fee is refundable if an error favouring the company is found in the meter or billing process.
2. N/A = Not applicable.

The above table suggests that miscellaneous fees charged by AGLRE are generally in line with the maximum allowable charges for electricity.

The Tribunal notes that the late payment fee increased from \$5 to \$10 from 1 July 1999. At the time, AGLRE advised the Tribunal that it had consulted with its Customer Council on the proposed increase.

With the introduction of full retail contestability and given the lack of customer complaints regarding these charges, the Tribunal is not inclined to introduce regulation of these charges. However, the Tribunal seeks comments regarding the current levels of these charges and the Tribunal's preliminary position on this issue.

4.8 Conclusions

The Tribunal considers that on balance, movements in tariffs have not been unreasonable relative to cost increases and revenue growth:

- total cost have fallen since the introduction of the PCF, driven largely by non-gas costs
- real average tariff prices (ATP) are lower than they were before the PCF was introduced

²⁰ For the exhaustive list of maximum charges for miscellaneous services for electricity see IPART, *Regulation of NSW Electricity Networks, Determination and Rules under the National Electricity Code, December 1999*, Table 15.

²¹ Security deposits and pensioner security deposits are not miscellaneous charges as they are repaid with interest when customers close their accounts.

- the non-residential market has been the major beneficiary with real declines in ATP
- the residential market has seen real price increase largely as a result of cost reflective price reforms but since then the rise in residential ATP has been more modest
- real ATP and actual tariff revenue have been generally below the MATP suggesting that AGLRE have been under-recovering the maximum revenue allowable
- revenue growth has been driven by a combination of strong market expansion rather than tariff increases
- prices are similar to Queensland but above Victoria and GSE – the main difference is in regulated network charges.

In relation to miscellaneous charges, the Tribunal's initial view is to continue its light handed approach, and allow these charges to remain unregulated. The Tribunal wishes to consider submissions on this matter prior to its final determination.

5 THE RETAIL MARGIN

This chapter presents the Tribunal's analysis of an appropriate range for the retail margin in gas supply and an analysis of AGLRE's retail margin. The retail margin represents those costs controlled by AGLRE, being the costs of providing retail services to customers (ie gas supplier's retail costs) and a profit margin. Other costs, such as gas purchase costs, haulage, network prices and the net cost of the GST package, are passed through by retailers to end customers.

In determining the appropriate level for a retail margin, the Tribunal considers that allowing sufficient 'headroom' on the retail margin is important if potential competitors are to be encouraged to enter the gas market.

The following terminology is used in this report:

Retail margin includes the gas supplier's retail costs and profit margin, also referred as gross retail margin or gross margin.

Profit margin refers to the gas supplier's profit level (ie net of retail costs), this is sometimes referred as net retail margin or net margin.

5.1 Determining an appropriate profit margin

The purpose of a retail margin is to allow the retailer to recover legitimate retail costs as well as a reasonable profit margin. Essentially, a profit margin is a reward to investors for risk taken. Hence, the profit margin incorporated in the delivered price of gas should reflect the risk gas retail businesses face compared to alternative business or investment opportunities.

5.1.1 Profit margins in gas

In its 1997 determination of AGLGN's Access Arrangement, the Tribunal decided that an appropriate benchmark for the retail margin for both the contract and the tariff market was 2 per cent. The Tribunal allocated 70 per cent of this margin to the tariff market and 30 per cent to contract market customers. This resulted in a profit margin (after retail costs) of 3 per cent to tariff customers.

Since then, the Tribunal has noted the following:

- Market analysis suggesting that AGL Sales and Marketing is likely to be able to earn profit margins over the next few years of 3.5 to 4.5 per cent for gas and electricity sales.²²
- A proposal by OFGEM setting a profit margin for British Gas Trading (BGT) of 1.5 per cent on turnover,²³ from 1 April 2000. This is intended to cover the costs of all interest paid by the business including the cost of working capital. BGT's cost of capital is estimated at 8 per cent in real terms. Profit margins on individual tariffs reflect differences in attributable working capital balances.

²² Credit Suisse First Boston - The Australian Gas Light Company, May 1999.

²³ Office of Gas and Electricity Market, Review of BGT's Price Regulation, Final Proposals, February 2000. The previous profit margin for customers using 2,500 therms or less, of gas per annum was also 1.5 per cent. See Appendix 6 for further detail on price regulation of BGT for domestic customers.

In setting BGT's profit margin, OFGEM took into account several factors including:

- consistency with the 1.5 per cent of turnover margin proposed in its reviews of public electricity suppliers (PES). OFGEM believes 1.5 per cent is appropriate return for BGT, given the PES proposals included a two year cap on generation and other costs
- an assessment that despite the fact that the removal of the pass through regime involved an element of risk for BGT, uncertainty about BGT's market share and gas volume risk was considerably less than at the time of the last review.

5.1.2 Profit margins in electricity

The Tribunal recognises that retail margins in electricity may not be directly comparable with those of gas retailers. This reflects the different markets and varying degrees of risk from competition. However, electricity margins do provide an indication of the level being earned by energy retailers elsewhere, and thus provide point of reference.

Analysis provided by London Economics for the Tribunal in 1996 stated that retail margins for electricity should be somewhere between 1 and 3 per cent of sales revenue. The Tribunal also notes the treatment of retail margins by other regulators:

- In March 1999 the ACTEW Corporation proposal to IPARC, the ACT regulator, included a profit margin of around \$2m for 1999/00, equivalent to 1.4 per cent of sales turnover.²⁴
- In November 1999, the Office of the Tasmanian Electricity Regulator (OTTER) set 1.5 per cent profit margin for Aurora reflecting the "low risk faced by the retail activity".²⁵
- The average profit margin earned by New Zealand electricity retailers in 1994/95 was about 1 per cent, which was equivalent to a 10 per cent return on assets.²⁶
- In 1993, OFFER set UK electricity supply price controls that allowed a 1 per cent profit margin on turnover (estimated to be equivalent to 10 per cent on assets employed). OFFER noted that the financial risk is relatively low for electricity supply businesses.²⁷
- In 1995, the Monopolies and Merger Commission (MMC) allowed Scottish Hydro-Electric a 0.5 per cent margin on turnover as it considered the 1 per cent return allowed by OFFER to be 'unnecessarily generous'. The 0.5 per cent return on turnover was estimated to be equivalent to a 7 per cent return on assets.²⁸
- In 1997, the MMC allowed Northern Ireland Electricity a 0.5 per cent margin on turnover. This provided a return of 7.5 per cent on CCA net assets.²⁹
- In 1997, OFFER incorporated a 1.5 per cent margin on turnover in supply price controls. This was said to cover "volume risk, return on capital employed and efficient management". The 1.5 per cent was determined by allowing a return of 0.5 per cent

²⁴ ACTEW Corporation, Response to IPARC Draft Price Direction, 1999/00 – 2003/04, March 1999.

²⁵ OTTER, *Investigation into the Electricity Supply Industry Pricing Policies, Final Report*, November 1999.

²⁶ London Economics, *Retail margins for the NSW distribution businesses, Final Report*, February 1996.

²⁷ OFFER, *The Supply Price Control: Proposals*, July 1993.

²⁸ MMC, Scottish Hydro-Electric plc, May 1995.

²⁹ MMC, Northern Ireland Electricity plc, March 1997.

for a case where price and volume risk are minimal and adding an allowance of 1 per cent for the quantity risk the PESs will face in the competitive market.³⁰

- In October 1999, OFGEM's initial proposal for price constraints on two basic domestic tariffs for 2000/01 included a 1.5 per cent profit margin.³¹ While the majority of PESs argued this was too low, half the Electricity Consumers' Committees that commented on the OFGEM proposals supported the 1.5 per cent. The rest argued that the appropriate level of margin should be seen in the context of encouraging competitive entry.³²
- In December 1999, OFGEM final proposal stated that "the 1.5 per cent is the appropriate level to apply to prices which reflect areas of the market in which PESs face relatively few competitive pressures".³³

From this analysis it would appear that the range of profits margins proposed by energy regulators has been between 0.5 per cent and 1.5 per cent of turnover.

The following table shows actual operating profit margins earned by UK electricity retailers over several years. While the range has been extremely wide, the average over the past few years is around 1 per cent of turnover.

Table 5.1 Operating profit margins in the UK (%)³⁴

Company	1991/92 ¹	1992/93 ¹	1993/94 ¹	1994/95 ²	1997/98 ²
Eastern	0.2	1.5	1.8	1.8	-8.4
East Midlands	0.8	2.0	1.2	2.5	-1.6
London	-0.3	0.4	0.3	1.2	1.2
Manweb	-0.1	0.8	3.6	2.0	4.4
Midlands	-0.5	1.7	3.0	2.5	2.2
Northern	0.6	0.2	0.7	3.5	2.3
NORWEB	0.4	1.2	1.3	2.5	3.5
SEEBOARD	0.0	1.0	1.2	1.5	4.7
Southern	0.1	0.8	1.5	1.0	2.4
SWALEC	0.5	1.0	1.3	1.8	3.9
South Western	-0.7	1.5	3.1	2.1	3.8
Yorkshire	1.0	0.3	1.2	2.1	1.6
Scottish Power	0.9	0.1	-1.1	1.0	3.5
Hydro Electric	0.1	-0.1	0.2	1.6	-0.7
Weighted-average	0.2	0.9	1.4	1.9	1.1%

Sources:

1. The Centre for Regulated Industries, The UK Electricity Industry: Electricity Services and Costs 1993/94. (As quoted by London Economics, in their report to IPART entitled *Retail margins for the NSW distribution businesses*, February 1996.)
2. OFFER and OFGAS *Review of Domestic and Small Business Electricity Price Regulation - A Consultation Document*, June 1999. Figures refer to margins of 'first tier' suppliers.

³⁰ In addition, OFFER incorporated a margin equivalent to 3 per cent on turnover, to cover the cost of hedging pool price risk on electricity purchases in the competitive market. OFFER, *The competitive electricity market from 1998: price constraints proposals*, October 1997, p 30.

³¹ OFGEM, *Review of Public Electricity Suppliers 1998 to 2000 and Supply Price Review - Initial Proposals*, October 1999.

³² OFGEM, *Supply Price Control Review - Final Proposals*, December 1999.

³³ *ibid.*

³⁴ 'Operating profit' is the retailer's net earnings before depreciation and other fixed asset adjustments, exceptional costs, working capital, and provisions.

5.2 Retail costs

A regulated retail margin should allow retailers to recover efficient costs incurred in providing a retail service to customers. In the gas industry, retail costs are expenses incurred to run the retail component of the gas business. These may include: general corporate expenses, marketing, billing, customer advisory and inquiry services, regulatory compliance, and time spent negotiating gas supply, haulage and reticulation contract. Where retailers are responsible for maintaining customer service standards, these costs must be covered in their retail margin. In NSW, the cost of metering customers is currently incorporated in network revenues.

With the introduction and implementation of retail contestability, there are additional costs faced by AGLGN as gas distribution network operator, and AGLRE as a retailer. Additional costs incurred by AGLGN will be reflected in the local network charges and will be passed through to customers. The Tribunal understands that business rules and systems are being developed by the Gas Retail Project Steering Committee to deal with retail contestability. The cost impact on AGLRE is currently unknown. The Tribunal is of the view that AGLRE should be able to recover contestability costs from customers. However, any price changes may need to be phased in over time.

There appears to be limited publicly available information on retail costs incurred by gas retailers in Australia. During this review, the Tribunal has noted the following:

- In its submission to the Tribunal's draft decision on AGLGN's Access Arrangement, AGLRE comments that its retail margin is small and states that the gross margin per average residential customer is less than \$35.³⁵
- Market analysis forecasts of AGL's average retailing cost for AGL in the next few years of just over 3 per cent of sales turnover (see Table 5.2). However, this analysis appears to be for the whole customer base (electricity and gas), rather than tariff customers or franchise customers.

Table 5.2 AGL sales and marketing - operating costs/sales turnover (%)

	1998	1999	2000	2001
Gas & Electricity	3.1	3.3	3.4	3.2
Gas	3.1	3.7	3.8	3.6
Electricity	3.0	2.7	2.7	2.4

Source: Credit Suisse First Boston - The Australian Gas Light Company, May 1999.

- In its final proposals for BGT, OFGEM's assessment suggests that retail costs account for 12 per cent of BGT's costs of serving domestic gas customers in 1999/2000.³⁶ However, it should be noted that BGT's supply costs include cost of meter reading. This differs from retailers in NSW where such costs are currently included as network costs.

³⁵ Submission by AGL Energy Sales and Marketing Ltd, and AGLRE on the Draft Decision on AGLGN's Access Arrangement, November 1999, p 2.

³⁶ OFGEM's final proposals for BGT, February 2000.

The Tribunal has also considered retail costs incurred by electricity suppliers:

- The Tribunal concludes that an allowance of 4 per cent of turnover appears a reasonable amount to allow the electricity retailers to recover the costs of retailing.³⁷
- ACTEW Corporation has proposed to IPARC that its electricity retail costs will be in the order of \$8m in 1999/00. This is equivalent to \$65 per customer or 5.8 per cent of sales turnover (including metering costs).³⁸ Assuming \$20 per customer for metering costs,³⁹ this is equivalent to \$45 per customer or 4 per cent of sales turnover.
- In the UK, retail costs incurred by the PESs in 1997/98 in serving customers with a demand less than 100 kW include the cost of meter reading. However, the quantum of meter reading costs is not published by OFGEM.

Table 5.3 PES supply business operating costs for customers under 100kW (1997/98)

	£Stg per customer	\$A per customer ⁴⁰	% of sales turnover
Eastern	16.94	43	3.6
East Midlands	15.87	40	3.6
London	25.34	65	5.1
Manweb	13.46	34	2.9
Midlands	21.65	55	4.6
Northern	26.39	67	6.1
NORWEB	14.37	37	3.2
SEEBOARD	18.82	48	4.4
Southern	18.01	46	3.7
SWALEC	18.06	46	3.8
South Western	14.37	37	3.0
Yorkshire	21.73	55	4.7
Scottish Power	20.68	53	3.3
Hydro Electric	45.32	116	6.5
Average	19.56	50	4.2

Sources: OFGEM, Supply Price Review Initial Proposals, October 1999.
OFFER and OFGAS Review of Domestic and Small Business Electricity Price Regulation A Consultation Document, June 1999.

From the above analysis, it would appear that regulated retail costs and actual retail costs of energy suppliers vary significantly between regulators and businesses. The range is also quite wide. However, it must be stated that the usefulness of these comparisons is limited by the fact that some estimates include the cost of metering whilst others do not.

The Tribunal considers that the convergence of gas and electricity suppliers is likely to achieve economies by providing 'dual' energy supplies to customers. The benefit of this will be lower costs and consequently lower prices and/or better customer service.

³⁷ IPART, *Pricing for the Retail Supply of Electricity to Franchise Customers*, December 1999 p 22.

³⁸ ACTEW Corporation, Response to IPARC Draft Price Direction, 1999/00 – 2003/04, March 1999. Note that this estimate includes meter and meter reading costs.

³⁹ The Secretariat does not have access to information about ACTEW's metering costs. However, SRC's report on retail contestability estimates the cost of metering to be between \$33 and \$330 per customer. The Secretariat therefore considers \$20 to be a reasonable estimate, given age, level of sophistication, and technology considerations.

⁴⁰ Assumes \$A2.55 to £Stg.

5.3 Analysis of AGLRE's retail margin

5.3.1 AGLRE's retail margin

The Tribunal's analysis of AGLRE's retail margin covers the three year period 1997/98-2000/01 based on actual results and forecasts.⁴¹ The actual results are shown in Table 5.4.

Table 5.4 Analysis of AGLRE's tariff market retail margin (nominal \$)

	1997/98	1998/99
Tariff revenue (\$m)	319.5	344.3
Tariff quantity (TJ)	25,434	26,831
Average tariff price (ATP) \$/GJ	12.56	12.83
No of tariff customers	723,233	751,750
<i>Retail margin % of tariff revenue</i>	<i>8.4</i>	<i>9.9</i>
<i>Retail margin \$/customer</i>	<i>37</i>	<i>46</i>

Source: Based on information provided by AGLRE under its Authorisation and IPART's analysis.

Using average tariff prices and allowed costs, AGLRE's retail margin for the tariff market was 9.9 per cent of sales turnover in 1998/99 and is projected to be 9 per cent in 1999-2000. The analysis shows that AGLRE's average retail margin per tariff customer was around \$46 in 1998/99.

The Tribunal has also noted the reported profitability of AGLRE for 1997/98 and 1998/99, covering both regulated tariff market and non-regulated activities. Prior to 1997/98, AGL operated as a bundled business. Any estimate of AGLRE's retail margin therefore involves a judgement of cost allocation between distribution and retail costs, and between tariff and contract customers. Such a cost allocation may be arbitrary.

Table 5.5 Analysis of AGLRE's profit margin (including sales in the regulated tariff market)

	1997/98	1998/99
\$m		
Sales revenue	319	357
Profit before tax (PBT)	6.9	9.7
Earnings before interest and tax (EBIT)	7.4	10.5
<i>Profit margin (EPBT/sales) %</i>	<i>2.3</i>	<i>2.6</i>

Source: AGL Retail Energy Limited audited financial statement for 1998/99

Note:

1. The change in accounting policy for revenue recognition resulted in an increase of \$5.9m in operating profit before tax for 1997/98 with a related increase of \$52m in revenues for the year.
2. AGLRE's sales revenue is slightly different from those presented in the annual statement submitted under authorisation due to the altered definition of tariff customers.

In 1997/98, AGLRE's profit margin was 2.3 per cent of sales turnover. This improved to 2.6 per cent in 1998/99. The Tribunal notes that the reported profit margin is for AGLRE's retail business as a whole, including miscellaneous income, sundry income and non-regulated income.

⁴¹ AGLRE was established on 1 August 1997 to operate as an unbundled gas retailing business in NSW.

5.3.2 Comparison of AGLRE's costs with other NSW gas retailers

The Tribunal has compared AGLRE's retail margin with the other two gas retailers in NSW, GSE and Origin Energy. However, the usefulness of these comparisons is qualified due to:

- considerable difference in company structure and size
- meter reading is excluded from the retail costs of AGLRE and GSE but included in that of Origin Energy.⁴² For residential customers, meters are read quarterly in areas served by AGLRE and GSE and bi-monthly by Origin Energy (formerly Energy 21)
- information on retail cost for Origin Energy is based on customers using less than 1 TJ.⁴³

The comparison is summarised in Table 5.6.

Table 5.6 Comparison of gross retail margin between NSW gas retailers

	Origin Energy Albury ⁽¹⁾	GSE Wagga Wagga	AGLRE NSW Network
	1999/00	2000	1998/99
Customer no	15,900	14,616	751,750
Total volume (TJ)	705	763	26,831
Total revenue	6.7	7.8	344.3
Av tariff/GJ	9.51	10.19	12.83
Customer/retail cost %	17.1	2.4 ⁽²⁾	8.6
Net profit margin %	2.2	0.6 ⁽²⁾	1.4 ⁽³⁾
Non retailer costs %	80.7	97.0	90.0
Total retail margin (\$/GJ)	1.83	0.30	1.28
Retail cost (\$/customer)			
Excl meter reading	NA	12	40
Incl meter reading ⁽⁴⁾	72	22	44
Retail cost (\$/GJ)			
Excl meter reading	NA	0.24	1.11 ⁽⁴⁾
Incl meter reading	1.62	0.41	1.13

Source: This analysis is undertaken based on the information provided by Energy 21 and GSE during the tariff review of the delivered price of natural gas in Wagga Wagga and Albury and AGLRE.

Note:

1. The information covers the Albury district only and does not include Moama. It includes domestic and small commercial and industrial customers under 1-10 TJ per annum. All contestable customers above 1 TJ pa are excluded. The year 1999/2000 revenue and gas sales figures include actual revenue and gas sales for the period July to October inclusive. Revenue from October is based on forecast volumes and standard weather conditions.
2. In the GSE Access Arrangement review, GSN assumed a total of \$500,000 retail margin (retail costs and profit margin) to unbundle its gas retail and network costs for the whole market (contract and tariffs). The assumption of \$229,000 for tariff customers in year 2000 is considered low compared given there is only 13 contract customers.
3. If other income (miscellaneous fees, recovery of bad debts) of \$3.9m is included in the tariff revenue, the average tariff would be \$12.98/GJ resulting in a profit margin of 2.4 per cent.
4. The forecast meter reading cost for Great Southern Network in 1999 is \$130,433 or on average \$9.1 per customer (both contract and volume customers). As for AGLGN, the proposed meter reading charges are: (a) for meters read monthly - \$42.63 pa and (b) for meter read quarterly - \$4.47 pa.
5. This includes AGLRE's cost associated with miscellaneous income.

⁴² The costs of maintaining meters and recovery of meter asset costs are treated as network costs for the three incumbent gas retailers in NSW.

⁴³ In Albury, there are about 54 customers using between 1-10 TJ.

After adjusting for meter reading cost, the comparison suggests that AGLRE's retail margin per GJ and per customer is between that of Origin Energy and GSE. However, the Tribunal notes the significant difference in these retailers' gross retail margin. Given the wide disparities it is questionable whether the three gas retailers' supply costs are usefully comparable.

5.3.3 Comparison of retail costs between gas and electricity suppliers

Table 5.7 shows a comparison of retail costs between gas and electricity retailers in NSW and those reported by OFGEM for the retailers in UK. This analysis is undertaken in terms of retail cost per customer and retail cost expressed as a percentage of turnover.

Table 5.7 Comparison of retail margins

	Electricity suppliers					Gas suppliers			
	Energy Australia	Integral	Advance	GSE elect	North Power	AGLRE	Origin Energy (Albury)	GSE gas	BGT (UK)
No of tariff/franchise customers	1,378,929	762,733	119,340	226,828	354,986	751,750	15,900	14,616	
Retail cost \$m	59	35	6	10	15	30	1.1	0.2	
Av revenue per residential customer	676	725	694	627	609	324	422	509	NA
Av revenue per franchise/tariff customer	842	866	962	927	828	458	NA	561	NA
Retail cost % of turnover	5.1	5.1	5.1	5.1	5.1	8.7	17	2.4	12.0
Retail cost \$ per customer	43	46	49	44	42	40	72	13	85
Retail margin \$/customer	56	60	63	57	55	46	81	16	85

Note:

1. The retail margin for the NSW electricity suppliers is based on the costs/margin in 2000. For AGLRE, Albury and GSE, the information is for the year 1999. For the UK suppliers, the information is for the year 2000.
2. Average revenue per customer is for the year 1998/99. The average revenue per customer for Albury is based on tariff customers using <1 TJ pa.
3. The Albury and BGT figures include meter reading costs.
4. OFGEM's final proposals for BGT result in an average supply cost allowance over all price controlled customers in 2000/01 of £33.46/customer. The assessment is based on an efficiency target of 8 per cent. The allowance varies for different tariff customers ranging from £20-45 per customer. OFGEM's allowance in the final proposals for PES price controlled customers in 2000/01 was £37.79. This is higher than OFGEM's supply cost allowance for BGT's price controlled customers in 2000/01. OFGEM states that BGT's supply costs can be expected to be below the average PES because of its ability to benefit from significant economies of scale and scope.
5. Assumes 2.55 A\$ to the £ Stg.

From the above it may be seen that:

- in terms of customer numbers and retail costs, AGLRE is most comparable to Integral but the revenue base for AGLRE is only half of Integral
- AGLRE's retail cost per customer on a \$ basis is below the regulated costs for the electricity suppliers and in between the two other NSW gas retailers
- AGLRE's retail costs as a percentage of turnover are higher than the regulated figure for the NSW electricity suppliers. This may be due to AGLRE's average revenue per customer being lower than that of the electricity suppliers. Thus if the retail cost structure is similar, the ratio of retail cost to turnover for gas retailers will be higher.

The other factor to consider is how costs would change over time in response to changes in customer numbers and sales volume in energy retailing. In this regard, the Tribunal notes the comment by OFGEM in its price cap determination for BGT that:

- 75 per cent of costs were related to customer numbers or gas volumes (the linear element), while 25 per cent of costs did not vary as a result of a change in customer numbers or gas volumes (the 'constant' element)
- 91 per cent of BGT's supply costs were driven by the number of customers served and 9 per cent of supply costs were driven by the volume of gas sold.

The above implies 68 per cent of BGT's supply costs were driven by customers, 7 per cent by gas sold and 25 per cent are fixed costs. The fixed cost component suggests scope for economy of scale for larger retailers.

5.3.4 Sensitivity analysis of AGLRE's retail margin to delivered gas prices

The Tribunal has undertaken a sensitivity analysis of AGLRE's gross retail margin on pricing outcomes for tariff customers. This analysis uses AGLRE's actual retail costs in 1998/99 and assumes a profit margin of 1.5 per cent of sales turnover.

Table 5.8 Sensitivity analysis of AGLRE's retail margin to average tariff price

	Base case (retail margin of 9.9% in 1998/99)		Retail margin of 9%		Retail margin of 8%		Retail margin of 7%	
	\$m	%	\$m	%	\$m	%	\$m	%
Retail cost	30	8.6	25.5	7.5	22.0	6.5	18.2	5.5
Profit margin	4.7	1.4	5.1	1.5	5.1	1.5	5.0	1.5
Gross retail margin	34.2	9.9	30.6	9.0	27.1	8.0	33.2	7.0
Av tariff/GJ	12.83		12.70		12.56		12.42	
% change from base case			-1.1		-2.1		-3.2	

Source: IPART analysis.

A reduction of AGLRE's retail margin means a reduction in the retail costs from the current level of \$30m to a range \$18-26m, representing a cost reduction of 14-38 per cent. Retail costs per customer for AGLRE would be well below those allowed for the NSW electricity suppliers. Whilst the cost impact on AGLRE is considerable under the lower retail margin scenarios, the price effect in terms of average tariff/GJ, is quite small - approximately 1-3 per cent reduction.

5.4 Conclusions

The Tribunal notes that data on retailing margins for energy suppliers are limited and that the usefulness of comparisons is limited due to the differing cost bases. Even so, it is possible to draw some broad conclusions from the analysis presented above:

- the range of profit margins proposed by energy regulators has been between 0.5 per cent and 1.5 per cent of turnover
- actual profit margins earned by UK electricity retailers vary significantly between businesses with the average over the past few years being around 1 per cent of turnover
- AGLRE's profit margin on its whole retail business (ie including miscellaneous, sundry income and non-regulated income) was 2.3 per cent of sales turnover in 1997/98, rising to 2.6 per cent in 1998/99
- regulated retail costs and actual retail costs of energy suppliers vary significantly between regulators and between businesses, ranging just below 2.5 per cent of sales to as high as 12 per cent; some estimates include the cost of metering whilst others do not
- AGLRE's retail costs as a percentage of turnover are higher than the corresponding figures for the NSW electricity suppliers reflecting in part AGLRE's lower average revenue per customer
- AGLRE's retail cost per customer on a \$ basis is below the regulated costs for the electricity suppliers and between those of the two other NSW gas suppliers
- AGLRE's average retail margin per customer in \$ terms is lower than those of electricity supplier in NSW and between that of Origin Energy and GSE
- a 1 per cent reduction in AGLRE's retail margin translates into approximately a 1 per cent fall in average tariff prices.

Based on this, the Tribunal's initial view is that there is AGLRE's retail margin is not unreasonable.

6 FACTORS AFFECTING COMPETITION

A key consideration for the Tribunal is the likely development of competition and the impact on prices and service levels once the tariff market becomes fully contestable.

6.1 Upstream access to gas

If competition is to be effective, new entrants to the tariff market must have access to sufficient supplies of gas. The principal source of gas is the Cooper Basin. Other sources of gas are available, but quantities available are small. However, in September 2000, two months after the introduction of full retail contestability, the Eastern Gas Pipeline (EGP) is expected to supply gas from Bass Strait into the AGL gas network. Its initial capacity of approximately 60 PJ pa compares with the current capacity on the Eastern Australian Gas Pipeline (EAPL) from Cooper Basin of 110 PJ pa.

Although natural gas sold in NSW must currently be sourced from either the Cooper Basin or Bass Strait, new entrants to the retail market need not purchase all gas directly from the producers controlling those fields. Instead, new entrants may have the capacity to buy gas from other retailers who have an oversupply of gas for their purposes. If the UK experience is reflected in Australia, a significant secondary market in gas supply will develop. However, this market is likely to be in its infancy in the early stages of contestability.

The Tribunal notes the difficulties new retailers have experienced in obtaining access to gas since contract customers (very large gas customers) became contestable in NSW. However, the Tribunal is confident that the EGP will substantially improve access to gas for independent retailers. Even so, the Tribunal will monitor the gas supply market and the availability of gas to retailers. The extent of price competition in commodity gas delivered to NSW following the completion of the EGP remains to be seen.

6.2 Economies of scale in gas retailing

The Tribunal notes that 34 organisations have currently taken out gas or electricity retail licences in NSW. This suggests considerable interest in entering the NSW energy retail market post contestability. However, it is acknowledged that not all 34 of these retailers may wish to serve the whole tariff market. Some may be concerned with supplying parts of the market, say contract customers or specific geographical areas rather than the entire tariff market. The greatest competition for the tariff market may come from companies that already have a developed retail base in other energy sources.

In order to be competitive and achieve economies of scale, new participants in the tariff market will have to achieve a critical number of customers. In NSW and Victoria there are over two million gas consumers: 750,000 in NSW and 1,300,000 in Victoria. New gas retailers may be able to 'leverage' off their existing customer base to achieve economies of scale. It is likely that several entrants to the NSW tariff market will already have established customer bases in energy retailing both in NSW and in the rest of Australia. The inclusion of electricity tariff market customers potentially increases the customer base available to new entrants. Existing Victorian retailers may supply customers in both NSW and Victoria from the date of full NSW contestability. Other potential NSW gas retailers may access Victorian residential customers only after 1 September 2001 (the scheduled date for full contestability in Victoria).

Whilst gas retailers will face some region specific fixed costs, such as region specific advertising, it is reasonable to assume that these costs will be small in relation to non-region specific fixed costs, such as gas supply management, computer/billing technologies and staff/management resources. The UK experience suggests that new retailers do not face significant area specific fixed costs. The vast majority of new entrants into gas retailing in the UK operate on a nationwide basis.⁴⁴

6.3 Sunk costs in gas retailing

Sunk costs of entering a market are those that cannot be fully recouped if the firm exits that market. These costs therefore represent the cost of unsuccessful entry. All other things being constant, the higher the sunk costs, the higher must be the probability of successful entry if new entrants are to be attracted into the market.

The Tribunal does not consider that sunk costs will pose a significant barrier to effective competition in the retail gas market. In gas retailing, sunk costs are likely to be considerably smaller than in many other competitive industries. Much of the capital equipment of new entrants (eg computer equipment and office space) is not sector specific, and should therefore have reasonable resale or lease value.

6.4 Contestability costs and protocols

The success of competition in the post contestability environment in NSW will depend on the costs (both price and non-price) incurred by new retailers and customers when customers switch from the incumbent gas retailer to new retailers. Switching is also referred to as 'customer churn'. If these costs are too high, they may act as a barrier to competition.

To support competition, systems and procedures must be developed, including:

- daily metering and/or a load profiling/reconciliation system for tariff customers
- information protocols between the network operator and retailers
- alterations to existing customer IT systems.

The costs of these developments could be significant. The way in which these costs are allocated between customers, the existing retailer, and the new retailer will have a direct bearing on how the market operates. For example, the spreading of contestability costs into general network charges would reduce the barriers to customer churn from both retailer and customer perspectives.

The MoEU is responsible for facilitating the introduction of retail contestability and to ensure that Government objectives in this area are being met. To examine and develop systems and procedures for retail contestability in gas in NSW, the MoEU has established the Retail Gas Project. A steering committee and several working groups with wide representation from interested stakeholders, are reviewing barriers to competition and examining options for resolution where possible. Contestability costs for the 1-10 TJ market have already been scrutinised by the MoEU.

⁴⁴ UK Office of Gas Supply, *A Review of the Development of Competition in the Domestic Gas Market*, October 1998.

6.5 Effective competition from electricity

Since the 1994 review of price setting principles for the gas tariff market, AGLRE have set their average tariff price below that permitted under the PCF. Perceived competition from electricity may be a factor in this. However, the Tribunal is not confident that competition with electricity will, of its own, be sufficient to constrain gas prices to efficient levels for all customers.

Competition between gas and electricity may be also limited by non-commodity price factors such as the cost of switching appliances, or the availability of energy sources, say in tenanted dwellings. Competition may also depend on the actual use. For example, while electricity and gas may compete strongly in the hot water market, competition is relatively weak in the space heating market. Furthermore, the decision to choose between alternative energy sources may be interrelated. The economics of gas space heating are better if the customer already has gas hot water.

6.6 UK experience with gas contestability

Experience in the United Kingdom⁴⁵ suggests that rather than constraining prices, competition in fact, lowers prices. In its October 1998 review of competition in the gas market,⁴⁶ the UK gas regulator, OFGAS⁴⁷, found that customers from all social and economic groups and all tariff groups were benefiting from competition. OFGAS found that competition had resulted in an increased number of gas retailers, considerable switching by customers between retailers, reduced prices, and improved customer service levels.

OFGAS found that gas costs for small consumers have fallen by approximately 25 per cent in real terms from December 1987 to December 1998.⁴⁸ Competition is even more firmly entrenched in the industrial and commercial market with the incumbent's market share down to around 24 per cent excluding power generation, and 28 per cent including power generation. Over 50 retailers currently compete in this market. Since 1992, gas prices in this market have fallen by around 30 per cent.

In its January 2000 consultation document OFGEM comments that competition in the gas supply market is developing.⁴⁹ This is demonstrated in terms of customer awareness of choice, customer churning, the number of competing retailers and the availability of price discounting between retailers. Suppliers continue to be innovative in terms of price, service and related products. OFGEM states that increasingly the gas and electricity supply markets are being characterised by 'dual fuel' offers. Almost half the electricity and gas customers switched to take advantage of combined gas and electricity offers.⁵⁰

⁴⁵ Almost 17 million homes are involved in the nationwide gas competition.

⁴⁶ Office of Gas Supply. *A Review of the Development of Competition in the Domestic Gas Market*, October 1998.

⁴⁷ OFGAS combined with OFFER in early 1999 to form OFGEM – the Office of Gas and Electricity Markets.

⁴⁸ Users who consumed around 650 therms or around 0.7 GJ pa. OFGAS *Annual Report*, 1998-99.

⁴⁹ Consultation document, Marketing Gas and Electricity, January 2000, OFGEM. Some 96 per cent of customers are aware of their ability to choose an alternative gas supplier, 25 per cent of customers have switched to another gas supplier, the level of customer switching continuing at about 32,000 per week, and the number of rival suppliers to BGT well in excess of that required for competition.

⁵⁰ *Review of British Gas Trading's Price Regulation, Final Proposals*, February 2000, OFGEM, p 15.

In May 1999, the UK National Audit Office (NAO) published a report into the introduction of domestic gas supply competition by OFGAS.⁵¹ The NAO reports that gas supply competition has brought significant benefits for gas customers, saving them a total of 1 billion pounds in real terms between the opening of the first phase of competition in April 1996 and February 1999.

The UK experience indicates what may occur with the introduction of competition in the NSW market. However, the Tribunal is cautious about the transferability of such findings to NSW given the differences between the two markets. Firstly, the NSW market is significantly smaller, with 700,000 customers compared with approximately 18 million domestic customers in the UK. Secondly, the NSW market also has a lower average consumption rate. Thus, the effect of competition on price may not be as large in NSW. For example, a 15 per cent saving in the UK may mean a saving equivalent to \$20, while the equivalent saving may be only \$1 in the NSW market. Thirdly, there is considerable upstream competition in the UK. Given this, it is possible that the primary benefit of competition in NSW will be value-added services, especially for residential customers, rather than direct price benefits.

6.7 Conclusion

The Tribunal is of the view that competition in the tariff market is likely to develop over time. Current structural impediments, such as limited alternative gas supply sources, the lack of business rules and systems to support contestability, economies of scale and contestability costs, are expected to diminish over the medium term. Even so, the extent of competition, the likely impact on prices and services, and the likely delivery time of the benefits from competition can not be predicted with any degree of certainty.

The experience in the UK gas industry suggests that effective competition can be achieved once markets become contestable and that the benefits of competition are considerable. While this provides some encouragement, the Tribunal accepts that the UK and NSW markets are substantially different and that the positive UK experience may not be replicated fully in NSW.

⁵¹ *Giving Customers a Choice - The Introduction of Competition into the Domestic Gas Market*, National Audit Office, May 1999.

7 OPTIONS FOR REGULATING THE MARKET POST CONTESTABILITY

The Tribunal is of the view that if the market is to be regulated during the transition to a competitive environment, considerable care is required in the design of any regulatory structure. The need to protect customers during this period must be carefully balanced against the potential impact on existing gas suppliers and emerging competition.

The Tribunal believes the main concerns for customers in the transition to competition are:

- the ability to obtain information and choose the retailer best suited to their needs without immediate time pressures
- the need for protection against excessive or overly frequent price increases.

The Tribunal has considered three options for regulating the tariff market:

- making a gas pricing order amending the PCF to allow for contestability changes
- removing the PCF and not regulating the tariff market
- replacing the PCF with a set of voluntary pricing principles (VPP) aimed at smoothing the transition to effective competition.

7.1 Making a gas pricing order

As discussed above the Tribunal may issue a pricing order that may:

- establish a methodology for setting tariff prices for delivered gas
- establish maximum tariffs or maximum average tariffs
- prohibit the imposition of certain charges.

The Tribunal could make a gas pricing order amending the PCF to take into account the change in network charges resulting from AGLGN's Access Arrangement. Under this option, AGLRE's retail costs and retail margin would continue to be regulated by the Tribunal insofar as these are costs that are under AGLRE's control. A gas pricing order could be structured to limit excessive increases in charges as well as allow the pass through of contestability costs.

However, in amending the PCF, the need for accurate forecasting volumes of gas and adjusting for customer churn would remain problematic.

A major point against this option is that a gas pricing order is a fairly formal instrument of regulation. This is particularly relevant given the more light handed approach taken to regulation in the tariff market in the past and more recently in the reviews of the delivered price of gas in Wagga Wagga and Albury.

7.2 Removing the PCF and not regulating the gas tariff market

The second option is the complete removal of price regulation from the tariff market. In support of this option, it might be argued that contestability will lead to competition, that current tariff prices are not unreasonable and that the incumbent's retail margin is within acceptable limits.

The principal difficulty with this option is that given current structural impediments, it may be some time before competition becomes effective. Moreover, there may be some concern among stakeholders that the complete removal of regulation may leave customers open to uncompetitive practices, especially in the transitional period to full competition. The concerns identified by the Tribunal in respect of consumer protection would not be addressed adequately through a nil regulation option.

7.3 Replacing the PCF with voluntary pricing guidelines

In some circumstances, a light-handed approach to regulation, such as through voluntary pricing agreements, may be appropriate. The Tribunal has used voluntary pricing guidelines, whereby the service provider agrees to certain pricing principles and constraints without the need for a formal pricing order, in the past. Indeed, under the current PCF, the side constraints applying to the tariff market are an example of voluntary pricing agreements.

The advantages of voluntary pricing agreements are that they may be structured to provide appropriate consumer protection whilst minimising regulatory costs to existing suppliers and encouraging new entrants into the market.

A further advantage of a voluntary pricing agreement in the current circumstances is that may be structured to overcome the problems associated with the continued use of the PCF. That is:

- they may allow for the pass through of changes in network charges including those associated with contestability
- they overcome the problem of AGLRE's having to forecast anticipated volumes in order to calculate the MATP.

The principle argument against a voluntary pricing agreement is that it may be perceived by some customers as providing insufficient protection and 'regulatory muscle'. However, while based on moral suasion, voluntary agreements are underpinned by the implied threat of more formal regulatory action should the desired outcome not eventuate.

8 THE TRIBUNAL'S PREFERRED APPROACH

Having regards to the analyses presented in earlier sections of this review, the Tribunal considers that some of regulation of prices is appropriate in the lead up to effective competition. However, the Tribunal recognises that the form of regulation must be carefully constructed to balance customers interests with the interests of existing suppliers as well as the need to encourage the development of competition in the post contestable market.

8.1 Maintaining a light handed approach to regulation

The Tribunal favours continuing with a light handed approach to regulation rather than issuing a gas pricing order. The Tribunal is of the view that a gas pricing order may not be necessary provided it continues to be satisfied that:

- future tariff movements are reasonable
- customers, or classes of customers are not being overcharged
- customers are not under pressure to enter into contracts, particularly long term contracts, without adequate exit provisions.

The Tribunal proposes removing the PCF and adopting a new set of VPP in conjunction with continued monitoring of prices. The Tribunal also favours a further review of the tariff market in the second half of 2001 to assess developments in the market post contestability.

In coming to this view, the Tribunal has taken into account of its duties under sections 3(4) and 3(5) of the Act:

- to ensure that the public receives the benefit of a competitive gas market
- to take proper account of the interests of tariff customers in respect of gas pricing and other terms of gas supply
- to take proper account of the interests of persons supplying gas to the tariff market
- to encourage the development of competitive gas supply in the non-tariff market, with a focus on free and fair trade
- in relation to gas users, to promote the efficient and safe use of gas.

8.2 Balancing customer interests and encouraging competition

The Tribunal is of the view that in the lead up to effective competition, customers will be best served by being given sufficient time in which to adapt to new market conditions and to obtain information on new services and tariffs. Without this, it is possible some customers could feel pressured to sign contracts before they had time to adjust to the new marketplace. This is particularly the case where there is some doubt whether gas will be available to new retailers until the EGP is completed.⁵²

The Tribunal acknowledges that, in the absence of a gas pricing order, there may be concern about the potential for the incumbent retailer to pre-empt competition and engage in undesirable pricing behaviour. However, the Tribunal is satisfied that AGLRE has abided

⁵² EGP is expected to connect to the AGLGN networks in September 2000.

by the current voluntary pricing guidelines and that ATP has been below the MATP. The proposed VPP are structured to allow customers to remain on existing tariffs for an extended period of time. This will allow customers to assess their needs against the services that might become available.

Customer protection will be further enhanced through the use of price rise constraints limiting the frequency and amount of any price increase for residential tariffs, as well as through continuing the current pensioner rebates.

Moreover, the Tribunal's continued regulatory role in monitoring price movements and the knowledge that a gas pricing order may be made at any time, will assist in constraining price movements until effective competition is established.

8.3 The business interests of suppliers to the tariff market

In terms of the incumbent supplier, the Tribunal's assessment of trends in AGLRE's costs, tariffs and revenues suggest that revenue growth has been strong over the past four years driven by a combination of strong market growth and tariff increases. Moreover, tariff increases have kept pace with increases in AGLRE's costs. The Tribunal also notes from AGLRE's forecasts, that costs and tariffs are expected to move in line.

The Tribunal believes that the proposed VPP will not impede AGLRE's ability to grow the market nor to maintain its financial viability. The Tribunal does not propose reducing the retail margin nor adopting more onerous price rise constraints than are embodied in the current voluntary pricing guidelines. The Tribunal considers that the administrative and compliance costs associated with the proposed VPP and price monitoring are not overly onerous.

The Tribunal is of the view that the proposed form of regulation will minimise the potential for negative impact on emerging competition. The Tribunal considers that there is sufficient headroom in the current retail margin to encourage potential competitors to enter the market.

8.4 Promoting the efficient, equitable and safe use of gas

The Tribunal has endeavoured to promote the efficient use of gas by requiring AGLRE to supply gas within a price structure that sends correct demand signals to customers. Equity issues are addressed through price rise constraints that will ensure that prices do not rise excessively or overly frequently. The proposed pricing structure is not expected to adversely affect the safety or reliability standards of gas supply.

8.5 Summary

The Tribunal considers that some of regulation of tariff market prices is appropriate in the lead up to effective competition. However, the Tribunal is of the view that a gas pricing order is not necessary at this time.

The Tribunal favours removing the current PCF and adopting VPP in conjunction with continued monitoring of prices. The Tribunal also favours a further review of the tariff market in the second half of 2001 to assess developments in the market post contestability.

9 THE PROPOSED FORM OF REGULATION

The Tribunal proposes adopting a new set of VPP in conjunction with continued monitoring of prices and a further review of tariff prices in the second half of 2001.

9.1 Key elements of the VPP

The key elements of the VPP are:

- maintaining existing tariffs for all tariff market customers until the end of 2001 (default tariffs)
- limits on price increases for default tariffs
- limits on price increases for residential tariffs in the event of tariff restructuring
- information requirements to assist the Tribunal in monitoring prices
- continuing pensioner rebates.

The elements of the proposed VPP follow. A more detail proposal for VPP is contained in Appendix 4.

9.1.1 Maintaining existing tariffs for an extended period of time

The Tribunal considers that allowing all existing tariff market customers (ie residential and industrial/commercial) to remain on existing tariffs after the introduction of contestability will help smooth the transition to a competitive market. It will help to ensure that existing tariff customers have sufficient time to adapt to the new market conditions and obtain information concerning which retailers are offering the best services for their needs.

In effect, this would make existing tariffs 'default tariffs' which customers would have to choose to leave. Of course, incumbent and new retailers may still offer existing customers new tariffs/contracts which are more favourable than existing tariffs. The use of default tariffs is consistent with the electricity industry.⁵³

The Tribunal considers that maintaining default tariffs until the end of 2001 for all tariff customers would be an appropriate period of time. This would allow customers sufficient time to adjust to new conditions while allowing time for the development of effective competition.

The Tribunal proposes monitoring developments in the tariff market throughout this period and conducting another review of the tariff market in the second half of 2001.

The Tribunal considers it appropriate to provide all tariff customers with the option to stay on existing tariffs until the end of 2001 subject to a further review of tariff market prices in the second half of 2001.

⁵³ Under the *Electricity Supply Act 1996*, electricity retailers must allow customers a 12 months period to decide which retailer they want to use. During this period, retailers must supply electricity at the regulated tariffs.

9.1.2 Limitations on price increases for default tariffs

The Tribunal considers that a price cap should apply to the default tariffs. After considering the cost component of gas including the Tribunal's draft decision on AGLGN's network charges, the Tribunal proposes that any increase in the default tariffs from 1 July 2000 should be limited to the annual inflation rate. This implies a CPI price cap will apply to the default tariffs at least until end of 2001. The Tribunal notes that tariffs will increase from 1 July 2000 as a result of the net cost effect of the GST package. Therefore, the CPI price cap will be applied to the default tariffs prior to the pricing effect of the GST package.

9.1.3 Limitations on price increases for future tariff restructure

AGLRE may wish to pursue price restructure in the future. This is allowed within the proposed VPP provided that:

Non-residential (industrial and commercial) tariffs

The increase in average non-residential tariffs is not to exceed the applicable CPI. The calculation of average tariff will be based on the number of non-residential customers supplied by AGLRE at the time of the proposed restructure.

Residential tariffs (residential general, residential economy and residential economy plus)

- a) The bill of individual residential customer is not to exceed the bill for the corresponding period of the preceding year (for the same pattern and volume of gas consumption) by more than \$20 or 5 per cent in real terms, whichever is the greater.
- b) The increase in average residential tariff is not to exceed the applicable CPI. The calculation of average tariff will be based on the number of residential customers supplied by AGLRE at the time of the proposed restructure.

The Tribunal considers the imposition of price rise constraints on residential 'default' tariff restructure in addition to the average tariff price constraints to be appropriate, given its objective of achieving outcomes that are efficient and equitable. However, the proposed constraints are to be limited to residential tariffs. The Tribunal does not intend price constraints to be applied to industrial and commercial tariffs, as this market group is likely to be better informed purchasers of energy than are residential consumers.

Under the VPP proposed, the annual increase in the tariff paid by a residential customer must not exceed \$20 or 5 per cent in real terms per annum, whichever is greater. This side constraint is applicable only to existing or default tariffs. This approach is consistent with the recent determination in electricity⁵⁴. The side constraint is consistent with the current voluntary pricing principles along with the PCF.

⁵⁴ The side constraint in electricity does not allow the bill of any individual residential customer to exceed the bill for the corresponding period of the prior year by more than \$30 or for the corresponding period of the previous year multiplied by the change in the CPI. IPART, *Pricing for retail supply of electricity to franchise customers*, December 1999.

Calculation of real changes in prices will be measured with reference to the Australian Bureau of Statistics March All Capital CPI series⁵⁵ adjusted to exclude the GST effect.

The Tribunal considers that any network contestability charges should be excluded from the operation of the price constraints to the extent that they are beyond the control of AGLRE. However, at this stage the Tribunal is of the view that any retail contestability costs should be included in the calculation of the price constraints. The Tribunal seeks comments on appropriateness of the inclusion of contestability costs in the proposed price constraints.

9.1.4 Information requirements

In order to facilitate its monitoring of prices, the Tribunal has asked incumbent retailers including AGLRE to provide the following information one month prior to any changes in default tariffs:

- a) an estimate (and associated methodology) of the expected impact on revenue of the proposed price changes. If the estimated revenue impact is positive, evidence should be supplied showing that either costs have increased for supplying that particular tariff customer or class of customer, or that existing prices were not covering costs in that particular tariff customer or class of customer. Costs may include an allowance for an appropriate margin
- b) a breakdown of the costs of supply into fixed costs per customer, and costs that vary with the absolute magnitude of gas consumption per customer (in \$ per GJ)
- c) a customer impact analysis detailing in tabular form:
 - number of customers in particular consumption ranges
 - current cost of gas per quarter associated with consumption at the midpoint of the relevant range
 - proposed cost per quarter associated with consumption at the midpoint of the relevant range
 - absolute and proportional changes in cost per quarter associated with consumption at the midpoint of the relevant range, and
- d) other supporting information required by the Tribunal.

9.1.5 Community service obligations

The Act⁵⁶ permits the Minister to impose a condition on a gas supplier's authorisation requiring the gas supplier to implement the Government's community service obligations (CSO) policy. This section of the Act also requires the Government to fund the CSO.

Currently, the only CSO provided by AGLRE is the pensioner concession that is discussed in section 2.4.4 of this report. The Tribunal understands that the Government intended to fund these rebates once the Tribunal had issued a gas pricing order. At this stage, the Tribunal has decided not to issue a gas pricing order. However, for the purposes of competitive neutrality with electricity, the Tribunal proposes recommending to the Government that it rebate to AGLRE the costs associated with the pensioner concessions.

⁵⁵ Please note that AGLRE's current PCF is linked to the Sydney CPI instead of the All Capitals rate. It is proposed that the CPI All Capital rate accord with recent Tribunal decisions for other utilities.

⁵⁶ Section 11.

9.2 AGLRE agreement

The larger volume tariff market (ie 1-10TJ) became contestable on 1 October 1999. An agreement to some form of pricing principles became necessary ahead of this review to ensure that those customers would not disadvantaged by any outcome flowing from the introduction of contestability.

As a result of discussions between the Tribunal and AGLRE on this matter, an 'in principle' agreement was reached whereby AGLRE would abide by the broad thrust of the VPP being proposed by the Tribunal in the draft report on the tariff review in Wagga Wagga and Albury.⁵⁷ At that time, AGLRE has agreed to maintain existing tariffs until 31 December 2000 for 1-10 TJ customers and until 30 June 2001 for 0-1 TJ customers. The longer time period for the 1-10 TJ customers allows for a reasonable period after the connection of the EGP, which is expected to be September 2000. In view of the recent developments, the VPP including the intended timing for the grace period requires reconsideration.

Any such agreement is subject to the Tribunal finalising its review of the tariff market and an appropriate change in AGLRE's authorisation by the Minister.⁵⁸ If in the process of this review, market conditions change significantly, or if a major concern in respect of the VPP is raised, the appropriateness of the VPP will be reconsidered.

A revised set of VPPs out of this review is shown in Attachment 4. Once this review is completed, the Tribunal will attempt to obtain AGLRE's agreement to the introduction of the revised VPPs.

9.3 Other matters

9.3.1 Additional information requirements

The Tribunal currently receives information under conditions 3.5.9 and 3.5.10 of AGLRE's authorisation in regards to the MATP and ATP. However, with the proposed removal of the PCF from AGLRE's authorisation, this information will no longer be available to the Tribunal. New information requirements will have to be designed to allow the Tribunal to monitor prices and the impact of retail contestability. The Tribunal considers that developing new information requirements covering service standards, prices and customer churns etc within AGLRE's Supplier's authorisation would be appropriate. The Tribunal will raise this matter with the MoEU.

9.3.2 GST issues

The *New Tax System (Goods and Services) Tax Act 1999* (the GST) due to commence on 1 July 2000 will introduce a 10 per cent GST, remove the wholesale sales tax, and make changes to the excise on petrol and diesel and some other indirect taxes.

⁵⁷ IPART, Draft Report on *Review of the Delivered Price of Natural Gas in Wagga Wagga and Albury*, October 1999.

⁵⁸ The authorisation changes the insert in clause 3.1 of the authorisation defining default and non-default tariffs. It also amends clauses 3.6.2 and 3.8 to incorporate the default and non default tariffs.

The package of taxation changes will affect the prices of all goods and services, lowering prices where the wholesale sales tax is higher than the GST. This will affect the economy-wide CPI calculated by the Australian Bureau of Statistics (ABS). The Tribunal is aware that there are likely to be substantial changes in the utilities' costs and that these changes may differ substantially from the economy-wide impact reflected in the CPI depending on their operating and capital costs and revenue structure.

In accordance with the ACCC guidelines, the Tribunal requires that the impact of the GST involves no 'windfall' loss or gain for the utility owner. The impact on the consumer will equal the net impact of the GST package⁵⁹ on the utility.

Thus, in respect of gas tariff regulation, the CPI is used to place limits on price movements. The price constraints exclude the impact of GST and other associated tax reforms. Thus, the CPI used to determine the 5 per cent limit on real price increases must exclude the impact of the GST and associated tax changes to avoid any double counting.

9.3.3 Miscellaneous charges

AGLRE's miscellaneous charges are not regulated at present. The Tribunal notes that the current level of miscellaneous charges is comparable to those levied by electricity suppliers. The Tribunal's initial view is to continue its light-handed approach, so that these charges remain unregulated. The Tribunal invites further submissions on this matter.

9.4 Summary of proposals

The Tribunal proposes adopting a new set of VPP in conjunction with continued monitoring of prices. The VPP will apply to the incumbent retailers – AGLRE. The key elements of the proposed VPP are:

- continuing to make existing tariffs available for all tariff market customers until the end of 2001 (the default tariffs)
- where price structure remains the same, any increase in each default tariff from 1 July 2000 will be limited to the annual inflation rate (CPI). This price cap is to be applied to tariffs prior to the net pricing effect associated with the GST package
- the default tariffs for residential and commercial/industrial customers can be restructured provided that
 - the increase in the average tariff for the particular customer class is capped at CPI; and
 - tariff increases for residential customers are not to exceed \$20 or 5 per cent in real terms per annum, whichever is greater
- new information requirements to assist the Tribunal in monitoring prices
- continued pensioner discounts.

The limitations on tariff increases for residential tariffs are subject to the final decision on AGL Gas Network's Access Arrangement and transportation charges.

⁵⁹ The net impact may include incremental compliance costs.

The maintenance of existing tariffs is subject to the Tribunal reviewing the tariff market and developments in competition, in the second half of 2001.

The Tribunal seeks comments on appropriateness of the inclusion of contestability costs in the proposed price rise constraints.

The Tribunal's initial view is to not regulate AGLRE's miscellaneous charges. However, it wishes to consider further submissions on this matter.

GLOSSARY AND ABBREVIATIONS

ACTEW	ACT Electricity and Water
AGC	Albury Gas Company (now part of Origin Energy)
AGLGN	AGL Gas Networks Limited
AGLRE	AGL Retail Energy Limited
ATP	Average tariff price
BGT	British Gas Trading
CoAG	Council of Australian Governments
EAPL	Eastern Australian Gas Pipeline
EBIT	Earnings before interest and tax
EGP	Eastern Gas Pipeline
GJ	Gigajoule
GSE	Great Southern Energy
GSN	Great Southern Energy Gas Networks Pty Ltd
GST	Goods and services tax
CPI	Consumer price index
IPART	Independent Pricing and Regulatory Tribunal
MATP	Maximum average tariff price
MoEU	Ministry of Energy and Utilities
MMC	Monopolies and Merger Commission
NAO	National Audit Office (NAO)
OFFER	Office of the Electricity Regulator (UK)
OFGAR	Office of the Gas Regulator (UK)
OFGEM	Office of Gas and Electricity Markets (UK)
OTTA	Office of the Tasmanian Electricity Regulator
ORG	Office of the Regulator General (Victoria)
PBT	Profit before tax
PCF	Price control formula
PES	Public electricity supplier
TJ	Terajoule
UAG	Unaccounted for gas
VPP	Voluntary pricing principles

APPENDIX 1 LIST OF SUBMISSIONS

Submissions to the Issues Paper on the Delivered Price of Natural Gas to Tariff Customers served from the AGL Gas Network in NSW.

Organisation	Name	Date
AGC	B Rochford	5 August 1998
AGL Gas Networks Ltd	P Blackband	17 July 1998
AGL Retail Energy Ltd	M A Fraser	3 July 1998
BHP Petroleum	D Biggs	22 July 1998
Boral Energy Holdings Ltd	J Hayward	17 July 1998
Business Council of Australia	P Weickhardt	20 August 1998
Council of the City of Lithgow	S McPherson	23 June 1998
Dubbo City Council	A M McGrane	17 July 1998
Great Southern Energy	P Hoogland	17 July 1998
Integral Energy	C Glenn	20 August 1998
Parkes Shire Council	R I Wilson	21 July 1998
Westcoast Energy Australia Pty Ltd	R J Brintnell	10 July 1998

APPENDIX 2 OVERVIEW OF SUBMISSIONS

The submission by AGLRE predates the access arrangements currently proposed. The time lapse since these submissions were written may mean that some issues are no longer relevant, or stakeholders views have changed. The Tribunal will give stakeholders the opportunity to submit revised submissions on the draft decision prior to the release of the final determination.

A2.1 Submission by AGL Retail Energy Ltd

In its 1998 submission AGL Retail Energy Ltd (AGLRE) states:

- the access review for AGLGN and the development of the EAP Access Arrangement should be in place before the tariff price review is completed
- once contestability has become effectively established, regulation will not be required
- at the commencement of contestability, price regulation may be required to provide protection for customers but should not constrain competitive behaviour of retailers
- in the stages of pre-contestability, the PCF should be changed to allow the network charge to be included in the allowable gas costs
- the number of retailers with authorisations and the number of customers paying less than the maximum price may be relevant indicators of full contestability
- costs of the take-or-pay type agreements should be passed through to customers
- compensation should be received if AGLRE incur take-or-pay costs
- security deposits and pensioners security deposit are not charges as stated in IPART's issues paper
- the remaining charges are comparable with those for similar services levied by electricity retailers and telecommunication providers
- there is already non price regulation in place under *The Gas Supply (Customer Protection) Regulation* and further regulation is unlikely to result in better service to customers. Also question whether there is a need for this type of regulation under effective competition.

A2.2 Other submissions

The Tribunal has received eleven submissions from interested parties. The main points in regard to the delivered price of gas are:

- seven of the submissions agree that the tariff review should be done concurrently with the access arrangements
- four of the submissions agree that regulation should continue till the market is contestable
- Lithgow council is concerned that the tariffs imposed by AGLRE reflect the initial undertakings by AGL to this council
- both Parkes and Dubbo Councils are concerned that the tariffs set are similar to the prices in Sydney and that there are no distance based tariffs

- AGC state in regard to non price regulation, that AGLRE should have to conform to the Australian Gas Association's code for customer service
- AGC states in regard to costs that while regulation is still in force, haulage costs should be passed through to customers. Administrative and general (A&G) costs should not be passed through to customers. Unaccounted for gas (UAG) is at the moment too high and should be benchmarked at 2 per cent. This amount can be passed through to customers, but amounts above this should not be passed through. Retail costs should be benchmarked against the industry
- AGC states that restraints should be placed on the development of miscellaneous charges.

APPENDIX 3 COMPONENTS OF THE COST OF RETAIL SUPPLY OF GAS

In the newly contestable retail market, competitive constraints will tend to force retailers to minimise the pass through of costs to customers and to allocate those costs according to the customer class for which they are incurred. If incumbent retailers do not apply cost reflective prices, competitors are likely to attract their profitable customers with lower prices, and leave them with their least profitable customers.

The field price of gas, haulage and transportation costs for AGLRE is set by contracts already in place, or by reference to the relevant access arrangement. As such, the retailer's main opportunity to influence costs in the short term lies in retail costs and margin.

A3.1 Field price of gas

The cost of gas is currently beyond the control of AGLRE. However, in the future, AGLRE may have alternative supply options, and may be able to negotiate cheaper purchase costs. Given that retailers do not have control over current field prices, the Tribunal regards this contractual cost as reasonable.

A potential complication to this analysis is the treatment of AGLRE's take-or-pay contract. A take-or-pay contract requires the buyer of gas to pay for a minimum quantity, regardless of whether that buyer takes the gas. Potentially, where AGLRE cannot sell the gas to its customers, it must still pay the gas supplier for the minimum amount. The question which arises is whether AGLRE or its customers should pay for this unused gas in the eventuality that the take-or-pay clause becomes effective.

A competitive market will not, in general, allow individual firms to transfer contractual risks to their consumers. Options available to the supplier include: renegotiating, diverting gas interstate, or increasing the market.

The Tribunal considers that these options are sufficient and that the take-or-pay aspect of negotiated contracts should not influence the determination of the reasonable cost of retail gas supply.

A3.2 Cost of haulage and transport

Transport prices for the NSW network have been, or soon will be set by the finalisation of the relevant access arrangements for the distribution system. AGLRE's cost of haulage is set in its contract with AGLGN.

There is limited opportunity for the gas supplier to negotiate haulage or transport costs. However, as the price of haulage and transport is based on the demand placed on the transmission and distribution systems, there may be scope for the supplier to reduce costs by managing demand. The gas supplier could do this by providing customers with an incentive to reduce their consumption at peak times. Where managing demand is cost effective, it will be in the retailers' best interests to do so. Competition is likely to force cost reductions to be passed on to customers through lower prices.

The Tribunal considers that existing contractual haulage costs and reticulation costs (as per the relevant access arrangement) are reasonable and will be passed on directly to customers. Of course, where competitors achieve lower haulage costs, competition should force this to be reflected in lower prices to customers.

Haulage and transport costs have fixed and variable components. The Tribunal considers it appropriate for tariff price structures to reflect these cost structures in a practical manner.

A3.3 Unaccounted for gas

Unaccounted for gas (UAG) is gas lost during its transportation through the pipeline network. In its draft decision for AGLGN's Access Arrangement, the Tribunal proposed that UAG is a retailing cost rather than a cost of the network. In its draft decision for AGLGN's Access Arrangement, the Tribunal proposes that an allowance for UAG be set at 2 per cent. This decision will be subject to further consideration as part of the final decision for AGLGN's Access Arrangement.

A3.4 Retail costs and profit margin

As noted earlier, retail costs are expenses incurred to operate the retail component of the gas business. These may include: expenses such as billing, marketing, customer advisory services, advertising, promotions, time spent handling customer inquiries and negotiating gas contracts, haulage and reticulation. Where retailers are responsible for maintaining customer service standards, these costs must be covered in their retail margin.

The retail profit margin is the margin on gas sales before interest and tax, but after all other costs (including retail costs) have been accounted. The net retail margin therefore represents a return on capital employed in the business and risks associated with the business. Incumbents and potential entrants alike must be able to expect to earn a net retail margin in order to make their investment in the business worthwhile. It follows that the appropriate profit margin will depend on the specific circumstances of the industry and market in which a firm is operating. For example, if the reasonable ratio of capital to sales is high for a particular firm, a higher profit margin is also reasonable. Analysis of AGLRE's retail margin is presented in chapter 5.

APPENDIX 4 VOLUNTARY PRICING PRINCIPLES

The proposed voluntary pricing principles are:

1. Customers on tariffs at the commencement of retail contestability will be given the option of remaining on those tariffs ('default tariff') until the end of 2001.
2. During this time, where the price structure remains the same, the level of each default tariff will be subject to the following explicit constraints :

$$\text{Default tariff}_{2000/01} < \text{default tariff}_{1999/2000} \times (1 + \text{CPI}) + \text{NetGST}$$

$$\text{Default tariff}_{2001/02} < \text{default tariff}_{2000/2001} \times (1 + \text{CPI}_{\text{excl GST}})$$

NetGST – net change in tax position of the utility under the GST package, expressed as a percentage of total pre GST costs

$\text{CPI}_{\text{excl GST}}$ = CPI excluding estimated impact of GST package on inflation (in percentage terms)

3. During this time, changes to the default tariffs structure will be subject to the following explicit constraints:

Non-residential (industrial and commercial) tariffs

The increase in average non-residential tariffs is not to exceed the applicable CPI. The calculation of average tariff will be based on the number of non-residential customers supplied by AGLRE at the time of the proposed restructure.

Residential tariffs (residential general, residential economy and residential economy plus)

- (a) The bill of individual residential customer is not to exceed the bill for the corresponding period of the preceding year (for the same pattern and volume of gas consumption) by more than \$20 or 5 per cent in real terms, whichever is the greater.
- (b) The increase in average residential tariff is not to exceed the applicable CPI. The calculation of average tariff will be based on the number of residential customers supplied by AGLRE at the time of the proposed restructure.

Calculation of real changes in prices will be measured with reference to the Australian Bureau of Statistics March All Capital CPI series⁶⁰ adjusted to exclude the estimated impact of GST package on inflation.

4. Where the full pass through of a change in **network charges** including those associated with contestability (whether under an access arrangement or otherwise) would result in the price constraint's being exceeded, the price constraint will be increased automatically to include the full pass through of those costs.⁶¹ The measurement of a change in network charges will reflect any changes in the treatment of unaccounted for gas (UAG) under the final decision on AGL Gas Network's Access Arrangement as these are currently included in network charges.

⁶⁰ Please note that AGLRE's current PCF is linked to the Sydney CPI instead of the All Capitals rate. It is proposed that the CPI All Capital rate accord with recent Tribunal decisions for other utilities.

⁶¹ Costs incurred by AGLRE on its own systems and procedures for the introduction of retail contestability are to be recovered within the constraints imposed by conditions 2 and 3 of the proposed voluntary pricing principles.

5. Net increases in costs resulting from the introduction of the goods and services tax (GST) as defined in the *A New Tax System (Goods and Services) Tax Act 1999* and associated tax changes may be added to the price constraint from the date that the GST becomes effective. The method of determining price increases resulting from the introduction of the GST and associated tax changes is to be determined separately.
6. AGLRE must notify the Tribunal in writing at least one month prior to amending its default tariffs for residential, industrial or commercial customers. This notification must include the following:
 - (a) an estimate (and associated methodology) of the expected impact on revenue of the proposed price changes. If the estimated revenue impact is positive, evidence must be supplied showing that either:
 - costs have increased for supplying that particular tariff customer or class of customer, or
 - existing prices did not cover costs associated with that particular tariff customer or class of customer.

Costs may include an allowance for an appropriate margin.

 - (b) a breakdown of the costs of supply into fixed costs per customer and costs which vary with the absolute magnitude of gas consumption per customer (in \$ per GJ)
 - (c) a customer impact analysis detailing in tabular form:
 - number of customers in particular consumption ranges
 - current cost of gas per quarter associated with consumption at the midpoint of the relevant range
 - proposed cost per quarter associated with consumption at the midpoint of the relevant range
 - absolute and proportional change in the cost per quarter associated with consumption at the midpoint of the relevant range.
 - (d) other supporting information required by the Tribunal.
7. The one month period for notice of advice (as required by paragraph 6) is for the purpose of information only. Under this voluntary agreement the Tribunal monitors price changes to determine whether they accord with the voluntary pricing principles set out in paragraph (1) to (5) above. Nothing in these voluntary pricing principles removes the Tribunal's ability to impose a gas pricing order pursuant to section 27 of the Gas Supply Act or indeed any other powers of the Tribunal.

APPENDIX 5 PRICE CONTROL FORMULA

The general form of the PCF applicable to AGLRE is shown below: ⁶²

$$M_t = P_t + Y_t - A_t, \text{ where}$$

M_t = maximum average price per GJ in relevant year

P_t = the non gas element, including transportation costs associated with the distribution network, retail costs and net margin.

Y_t = allowable gas costs including gas field prices, haulage price and certain government fees

A_t = the adjustment per GJ to be made; this allows the formula to be self-correcting

$$M_t = \left(1 + \frac{CPI_t - X}{100}\right)P_{t-1} + Y_t - A_t$$

$$P_t = \left(1 + \frac{CPI_t - X}{100}\right)P_{t-1}$$

Allowable gas costs (Y)

Y is the total of all costs that are considered to be beyond the immediate control of gas distributors, including: field prices, haulage prices and certain government charges. Field and haulage prices were traditionally subject to long term contracts. Costs included under Y are treated as fixed costs. AGLRE is allowed to pass on increases in the levels of fixed costs to consumers. Reductions in these costs must also be passed on to consumers.

The non-gas element (P)

P consists of the remaining components of price after the costs included in Y have been deducted. The initial value for P was determined by the then Minister for Energy. Effectively, the initial value of P was determined by subtracting actual expenditure on the components of Y in 1989/90 from a notional average price for that year based on a comparison of adjusted tariff revenue and the tariff quantity. P was taken to represent costs controllable by AGLRE as well as the retail margin. In each year, the value of P in the formula is the previous year's value increased by CPI -X.

The efficiency incentive (X)

The current efficiency factor of 1.5 per cent was set in 1994. Factors taken into account in setting X:

- an assessment of potential efficiency gains by AGL
- an assessment of the appropriate rate of return for comparison with previous returns for AGL and other similar utilities
- growth.

⁶² It should be noted that currently the PCF imposes a CPI-X restraint on the non-controllable costs of the business only (reticulation costs and retail costs). The formula allows the cost of gas and haulage to be passed through directly.

The adjustment factor (A)

This factor in the PCF provides a catch up provision from year to year which allows the formula to be self correcting. If the estimates of gas sales or fixed costs, in any given year differ from those forecast, a compensating adjustment (with interest) must be included in the formula for the following year.

APPENDIX 6 PRICE REGULATION OF BRITISH GAS TRADING (BGT)

The following summary is based on OFGEM's various reports on its regulation of BGT: BGT's present price control takes the form of RPI-X⁶³ for supply and meter reading costs to customers who consume at or below 2,500 therms of gas a year.

For the period 1 April 1997 to 31 March 2000, X was set at 4. Transportation, storage, meter provision and gas purchase costs are passed through to customers. A profit margin of 1.5% is allowed. As part of the price control, BGT is required to establish a set of service standards and record its performance against these standards. It also requires BGT to operate a compensation scheme for service failures.

The price control set caps on four categories of BGT's national tariffs: Direct Debit, PromptPay, Standard and Prepayment. BGT is required to continue to offer these four regulated tariff categories to all its customers for the duration of the price control. The tariff cap form of price control is to ensure that all BGT's customers were protected from unduly high prices in the new competitive environment. During 1997/98, BGT applied to OFGAS to have its tariff caps rebalanced. New tariff caps for the 1998/99 formula years were introduced. Standing charges were reduced; the Standard and Prepayment tariff caps were unified into a single tariff cap.

During 1999/2000, OFGEM conducted a review of BGT's price regulation. Its initial proposals were released in November 1999. OFGEM final proposals for BGT's price regulation were released in February 2000. These proposals reflect OFGEM's judgement on the most appropriate balance between promoting effective competition, protecting customers' interests where competition is not effective and ensuring that BGT can finance its licensed activities. In essence,

- OFGEM believes that competition is sufficiently developed for Direct Debit customers to be removed from the scope of revised price control. This will remove price controls for about 5 millions customers, or 35 per cent of BGT's total customers.
- Competition is not yet sufficiently developed to remove price controls from BGT's other domestic customers. OFGEM intends the revised controls to last for one year only. Subject to satisfactory progress in removing barriers to entry, it is OFGEM's intention to remove the price controls for remaining customers from 1 April 2001.
- OFGEM's final proposals imply a cut in BGT's revenue in 2000/01 of about 4.5 per cent.
- Approval of BGT's proposal to remove standing charges. The new tariff structure has no standing charge and a two-tier unit charge.
- OFGEM believes that the level of its revised tariff caps for BGT do not act to discourage competitors and potential competitors from innovating and competing, and leave substantial headroom for competitors offering 'dual fuel' suppliers.
- OFGEM's assessment of BGT's supply costs showed that supply costs were 12 per cent of BGT's total costs of serving domestic gas customers in 1999/00. The opening level of supply costs were adjusted downwards to account for (a) costs relating to other

⁶³ RPI – Retail price index.

BGT businesses which were included in the domestic gas supply cost base and (b) the forward looking level of domestic supply costs.

- OFGEM estimated that 75 per cent of supply costs were related to customer numbers or gas volumes while 25 per cent of costs represent the 'constant' element. OFGEM concluded that efficiencies of 8 per cent on a total cost basis is achievable given the potential for economies of scope and BGT's historical efficiency performance.
- Final proposals to include an allowance for supply costs in the form of \$/customer by tariff categories: 20.12 pounds per PromptPay customer; 41.55 pounds per Standard customer and 44.77 pounds per Prepayment customer.
- OFGEM's assessment of profit margin stated that 1.5 per cent of turnover was appropriate for BGT. The allowed profit margin is to cover the costs of all interest paid by the business including the cost of working capital, ie the profit margin is profit before interest.

OFGEM's breakdown of attributable and joint profit margin: % of turnover

	PromptPay	Standard	PrePayment	Average
Allowed margin (ie profit before interest)	1.5	1.5	1.5	1.5
Attributable margin	0.33	1.03	-0.61	0.44
Joint margin	1.06	1.06	1.06	1.06
Total margin	1.39	2.09	0.46	1.50

Note: Profit margins on individual tariffs reflect differences in attributing working capital balances. 1.5% of turnover is the allowed margin for supplying domestic customers only. There is no information on the appropriate margin for supplying non-domestic customers.

- The price control includes a correction factor, the "K factor" mechanism, which allows BGT's domestic supply business to recover in subsequent years any allowed revenue not recovered in previous years and vice versa. On this issue, OFGEM concluded that:
 - i. average bills are below tariff caps => ie under-recovery of costs but the amount estimated by BGT was higher than OFGEM's estimate
 - ii. given the proposal for a one-year price cap and the continuing development of competition, OFGEM considers it appropriate to remove the correction factor mechanism from the revised control for any under or over recovery in 2000/01. No provision to reflect previous under- or over-recovery.

APPENDIX 7 EXISTING TARIFFS

Residential Tariffs

NSW (excluding Yass)

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Residential General	21.90	All		1.1821	
Residential Economy	24.00	All		1.0859	
Residential Economy Plus	35.00	4,500	Remainder	0.8087	1.0421

Yass

Rate	Minimum Bill (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Residential General	23.60	750	Remainder	3.2080	1.7930
Residential Economy	27.80	750	Remainder	4.6140	1.2682

Note: In 1992, it was determined that charges to natural gas tariff customers in Yass would need to recoup the necessary infrastructure costs and therefore be higher than charges to other NSW regions.

Industrial and Commercial Tariffs

Sydney, Central Coast, Bowral, Queanbeyan Bathurst, Orange, Lithgow, Oberon, Blayney, Cowra and Junee

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Rate 1	35.00	150,000	Remainder	1.1320	0.9135

Newcastle and Hunter Valley

Rate	Minimum bill (\$ per quarter)	Quantity per block (megajoule per quarter)			Charge per megajoule (cents)		
		Block 1	Block 2	Block 3	Block 1	Block 2	Block 3
Rate 1	9.00	1,500	148,500	Remainder	2.0970	1.1644	0.9859

Griffith, Leeton, Narrandera, Coolamon, Young, West Wyalong and Cootamundra

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Rate 1	35.00	150,000	Remainder	1.1320	0.9135
Commercial fruit and seed drying rate ^(a)	0	All		0.8228	

Notes: (a) Available for gas used in a commercial fruit and seed drying process, approved by AGL where the consumption is a minimum of 200 GJ per month when used, and is used only in the period November to April. Gas for other purposes must be metered separately and will be billed at the appropriate Industrial and Commercial rate.

Goulburn City

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Rate 1	35.00	150,000	Remainder	1.1320	0.9135

Yass Shire

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)			Charge per megajoule (cents)		
		Block 1	Block 2	Block 3	Block 1	Block 2	Block 3
Rate 1	35.00	150,000	15,000	Remainder	1.4541	1.1616	0.7268

Wollongong and Shellharbour areas

Rate	Supply fee (\$ per quarter)	Quantity per block (megajoule per quarter)		Charge per megajoule (cents)	
		Block 1	Block 2	Block 1	Block 2
Rate 1	35.00	150,000	Remainder	1.1320	0.9135

