
**GasNet Australia Ltd
Principal Transmission System
revised access arrangement**

Response to ACCC draft decision

*A report prepared
for Australian Paper Ltd*

19 December 2007

Marsden Jacob

A s s o c i a t e s

<http://www.marsdenjacob.com.au>

Marsden Jacob Associates

Financial & Economic Consultants

ABN 66 663 324 657

ACN 072 233 204

Internet: <http://www.marsdenjacob.com.au>

E-mail: economists@marsdenjacob.com.au

Melbourne office:

Postal address: Level 3, 683 Burke Road, Camberwell

Victoria 3124 AUSTRALIA

Telephone: +61 (0) 3 9882 1600

Facsimile: +61 (0) 3 9882 1300

Brisbane office:

Level 5, 100 Eagle St, Brisbane

Queensland, 4000 AUSTRALIA

Telephone: +61 (0) 7 3229 7701

Facsimile: +61 (0) 7 3229 7944

Author(s): Jeff Washusen and John Marsden

This report may be cited as: Gasnet revised access arrangement - Response to ACCC draft decision, Marsden Jacob Associates 2007

This report has been prepared in accordance with the scope of services described in the contract or agreement between Marsden Jacob Associates Pty Ltd ACN 072 233 204 (MJA) and the Client. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and Marsden Jacob Associates accepts no responsibility for its use by other parties.



Copyright © Marsden Jacob Associates Pty Ltd 2007

TABLE OF CONTENTS

	Page
Executive Summary	i
1. Introduction.....	1
2. Outcomes from Gasnet’s current tariff pricing methodology	3
3. Cost allocation and tariff methodology	5
3.1. Gas Code Requirements.....	5
3.2. Impact on Gasnet’s current methodology	9
4. Suggestions to improve tariff outcomes	12

LIST OF TABLES

	Page
Table 1: Demand Summary – Gippsland Region 2006-07	4

LIST OF FIGURES

	Page
Figure 1: Gippsland Region Gas MDQ 2006-2007	3

Executive Summary

INTRODUCTION

1. On 14 November 2007, the Australian Competition and Consumer Commission (ACCC) released a draft decision on revised access arrangements for Victoria's principal gas transmission system (PTS).
2. The draft decision was made following the ACCC's review of proposals made by Gasnet Australia Ltd (Gasnet) for a third five year access arrangement period from 2008 through to 2013 (AA3). While the ACCC rejected many of the changes to tariff policy and tariff methodology proposed by Gasnet for AA3, it accepted some changes that will have a significant adverse impact on Australian Paper Ltd's Maryvale Mill, which is the biggest pulp and paper mill in Australia and the largest single industrial gas user in Victoria.
3. A key feature of Gasnet's proposals that affects Australian Paper Ltd is the removal of a 'prudent discount' for the Latrobe (tariff pricing) zone that was applied by Gasnet for AA2 under section 8.43 of the *National Third Party Access Code for Natural Gas Pipeline Systems* (Gas Code). This proposal would have the effect of increasing gas transmission charges to the Maryvale Mill by (approximately) 160%.

OUTCOMES FROM GASNET'S CURRENT TARIFF PRICING METHODOLOGY

4. The Maryvale Mill consumes some 3% of Victoria's total gas consumption and has a very flat load profile particularly when compared with other users in the Gippsland region (which covers Gasnet's Latrobe, Lurgi and Tyers tariff zones). Similar load profiles for the Maryvale Mill have occurred throughout the last 5 years, and were being anticipated for the next 5 years.
5. Other major users in the Gippsland region, particularly the Latrobe Valley peaking gas generators, have significantly different load factors that are noticeable on all measures but become more apparent as the time period moves from annual to daily to hourly.
6. The differences in load factors between the different groups of user suggest quite different impacts on Gasnet's capital, operating and maintenance costs. However, the proposed tariff structure does not acknowledge these cost drivers and cannot reflect them.

COST ALLOCATION AND TARIFF METHODOLOGY

GAS CODE REQUIREMENTS

7. The Gas Code requires an access arrangement to establish a reference tariff for each reference service and to incorporate a reference tariff policy which sets out the principles that are to be used to determine reference tariffs. Reference tariffs and the reference tariff policy must comply with the reference tariff principles set out in section 8.

Although meeting all the section 8.1 design factors is necessary (subject to conflicts between these design principles), the objectives in section 8.1 that are most relevant to cost allocation and tariff design are:

- *replicating the outcome of competitive market (8.1(b));*
- *not distorting investment decisions in pipeline transportation systems or in upstream and downstream industries (8.1(d)); and*
- *efficiency in the level and structure of the reference tariff (8.1(e)).*

In respect of issues of concern to Australian Paper covered by this submission, it is particularly relevant that section 8.42 may be reasonably interpreted (subject to application of ‘prudent discounts’ under section 8.43 and concatenation with satisfying the overall revenue requirements of section 8.38) to mean that:

- *a reference tariff should, to the maximum extent that is technically and commercially reasonable:*
 - *be designed so that a particular user's share of the portion of total revenue ... reflects costs incurred (including capital costs) that are attributable to providing the service;*
 - *with this share determined in accordance with a methodology that meets the objectives in section 8.1 and is otherwise fair and reasonable.* (Emphasis added)

IMPACT ON GASNET'S CURRENT METHODOLOGY

8. Despite endorsing several aspect of the ACCC's draft decision, MJA has concluded that Gasnet's current tariff policy and methodology does not explicitly consider a particular user's share of total revenue (as required by section 8.42). MJA has also concluded that Gasnet's current methodology is likely to result in a level of tariff where it becomes worthwhile for Australian Paper to consider switching to alternative sources of energy at the Maryvale Mill. Thus, the proposed tariff is, at least potentially, likely to also distort downstream investment decisions in breach of section 8.1(d).

And finally, from Gasnet's commercial perspective, applying a tariff methodology that results in tariff costs exceeding the bypass cost, which breaches section 8.1(e), requires Gasnet to invoke the provisions of section 8.43 to seek recompense for the undesirable bypass risks this creates.

9. These outcomes from Gasnet's current tariff policy and methodology indicate that Gasnet's approach is fundamentally flawed – and not consistent with the relevant provisions of the Gas Code.
10. Even though MJA does not have access to Gasnet's tariff models, it is clear there are three areas where Gasnet's cost allocation methodology could be improved, viz:
 - The first is to include cost allocation to particular users (or groups of users) causing disproportionate (or higher) costs within a pricing zone.

- The second is to address inconsistencies that arise from the distribution of overheads and ‘system-wide benefit’ costs that clearly contribute to the ‘bypass risk’ problem described by Gasnet (that breaches section 8.1(e)).
 - The third is to change the calculation of withdrawal tariff prices by allocating the relatively high indirect cost aggregate on a basis other than postage stamp costs per unit of energy
11. These are fundamental - but time consuming - changes to the structure of the reference tariff. A more expedient, albeit partial, solution would be to remedy the immediate issue by reducing the tariff applicable to the Maryvale Mill to efficient levels and to seek recognition of this reduction as a ‘prudent discount’ thus allowing recompense under section 8.43.

SUGGESTIONS TO IMPROVE TARIFF OUTCOMES

12. A longer term solution, though time consuming, would be relatively simple to implement within *the maximum extent that is technically and commercially reasonable* by:
- allocating part (or even all) of the indirect costs on the same basis as ‘injection costs’ – such that no zone has tariffs with costs exceeding the bypass cost; and
 - developing ‘load profile’ tariffs for each pricing zone where ‘load profile’ is a clear differentiator of cost drivers; or developing new pricing zones across the Gippsland region (and perhaps elsewhere) that segregate users with markedly different cost drivers.
13. MJA recommends that the ACCC incorporate the above suggestions into it’s final decision.

1. Introduction

On 14 November 2007, the Australian Competition and Consumer Commission (ACCC) released a draft decision on revised access arrangements for Victoria's principal gas transmission system (PTS). The draft decision was made following the ACCC's review of proposals made by Gasnet Australia Ltd (Gasnet) for a third five year access arrangement period from 2008 through to 2013 (AA3).¹

The ACCC's draft decision rejected many of the changes to tariff policy and tariff methodology proposed by Gasnet for AA3 and required Gasnet to retain the essential elements of the tariff policy and methodology approved for AA2. However, the ACCC has accepted some changes that will have a significant adverse impact on Australian Paper Ltd's Maryvale Mill, which is the biggest pulp and paper mill in Australia and the largest single industrial gas user in Victoria.

A key feature of Gasnet's proposals that affects Australian Paper Ltd is the removal of a 'prudent discount' for the Latrobe (tariff pricing) zone that was applied by Gasnet for AA2 under section 8.43 of the *National Third Party Access Code for Natural Gas Pipeline Systems* (Gas Code). Gasnet argued that a 'prudent discount' was justified for AA2 in order to remove a perceived risk that users in the Latrobe Zone would 'bypass' the PTS.² The application of this 'prudent discount' was approved by the ACCC in 2002,³ essentially on the basis that *Gasnet's proposals are reasonable*.⁴

Gasnet's decision to remove the 'prudent discount' in the Latrobe zone for AA3 was made without any consultation with Australian Paper. Australian Paper became aware of this proposal on receiving advice from its energy retailer that gas supply costs would increase significantly in 2008 because of a substantial increase in gas transmission tariffs for the Maryvale Mill of approximately 160%. In response to this advice, Australian Paper initiated a process of consultation with Gasnet and made a preliminary submission to the ACCC expressing concern about a number of Gasnet's proposals and highlighting the scale of the impending price rise.⁵ This preliminary submission was followed by a commercial-in-confidence submission to the ACCC outlining the potential implications of Gasnet's proposals for the Maryvale Mill.⁶ The contents of this later submission were discussed in

¹ The first access arrangement period was 1997 through 2002 and the second from 2003 through 2007.

² Gasnet proposed (and the ACCC approved) 'prudent discounts' in zones near Wodonga, Pakenham, Warrnambool and Koroit during the AA2 period. Gasnet is also proposing 'prudent discounts' for Warrnambool, Koroit and Pakenham (tariff D only) for AA3, which the ACCC has accepted in the draft decision.

³ See: p. xvi, pp. 223-225 and pp. 232-233, *GasNet Australia access arrangement revisions for the Principal Transmission System – Final Decision*, ACCC, 13 November 2002.

The ACCC noted in this decision that it had decided to accept a range of major changes to the arrangements it approved in 1998. These included merging GasNet's two access arrangements, including the Southwest Pipeline and the Murray Valley pipeline in the asset base, the introduction of pass through mechanisms and prudent discounts, changes to the tariff control formula and the removal of the automatic requirement for small pipeline extensions to be regulated (p. xi).

⁴ p. xvi, *Ibid*.

⁵ Letter from Dean Thompson (Procurement Manager, Australian Paper) to Steve Edwell (Chairman, Australian Energy Regulator), 29 June 2007.

⁶ Letter from Julian Mathers (GM Supply Chain, Australian Paper) to Steve Edwell (Chairman, Australian Energy Regulator), 31 August 2007.

detail with Gasnet following completion of a confidentiality agreement with Australian Paper.

The ACCC's draft decision for AA3 noted Australian Paper's concern that removal of the 'prudent discount' for the Latrobe Zone would increase gas transmission charges for Australian Paper's Maryvale Mill by (approximately) 160%.⁷ However, despite this impact, the ACCC suggested that:

...if it (Gasnet) does not re-apply for a prudent discount at the end of AA2, the regulator under s. 8.43 of the code cannot by itself determine that the current prudent discount will be reinstated. This means that GasNet is not required to justify why it has not re-applied for a particular prudent discount, as any prudent discounts in place will simply expire at the end of the second AA period. This is consistent with the ACCC's decision for AA2 to accept the prudent discounts to apply only for the AA2 period.

Following release of the draft decision, Australian Paper sought advice from Marsden Jacob Associates (MJA) on whether Gasnet's proposals and the ACCC's draft decision complied with a reasonable interpretation of provisions of the Gas Code that are relevant to tariff pricing. In addition, where areas not consistent with a reasonable interpretation of the Gas Code were identified, MJA was requested to develop suggestions on how to achieve compliance that were consistent with the general thrust of Gasnet's stated tariff policy and the ACCC's draft decision.

This submission outlines MJA's independent advice on the tariff pricing issues related to Australian Paper's concerns. The submission identifies several elements of Gasnet's proposals and the ACCC's draft decision that appear to be inconsistent with a reasonable interpretation of relevant provisions of the Gas Code. The submission also summarises how Gasnet's tariff pricing methodology could be changed to better align with the Gas Code requirements.

The issues covered by this submission, and an outline of the suggested changes to Gasnet's tariff pricing methodology were discussed with Australian Paper and Gasnet in a series of meetings in early December 2007. It is MJA's understanding that Gasnet will consider the matters raised by Australian Paper and MJA as part of its response to the ACCC's draft decision.

⁷ p. 167 and p. 192, *Ibid.*

2. Outcomes from Gasnet's current tariff pricing methodology

As noted above, the Maryvale Mill is Victoria's largest single industrial gas user. The Maryvale Mill was built in 1937, but has been upgraded periodically over the years to improve efficiency and environmental. This mill can produce more than 500,000 tonnes of paper every year.

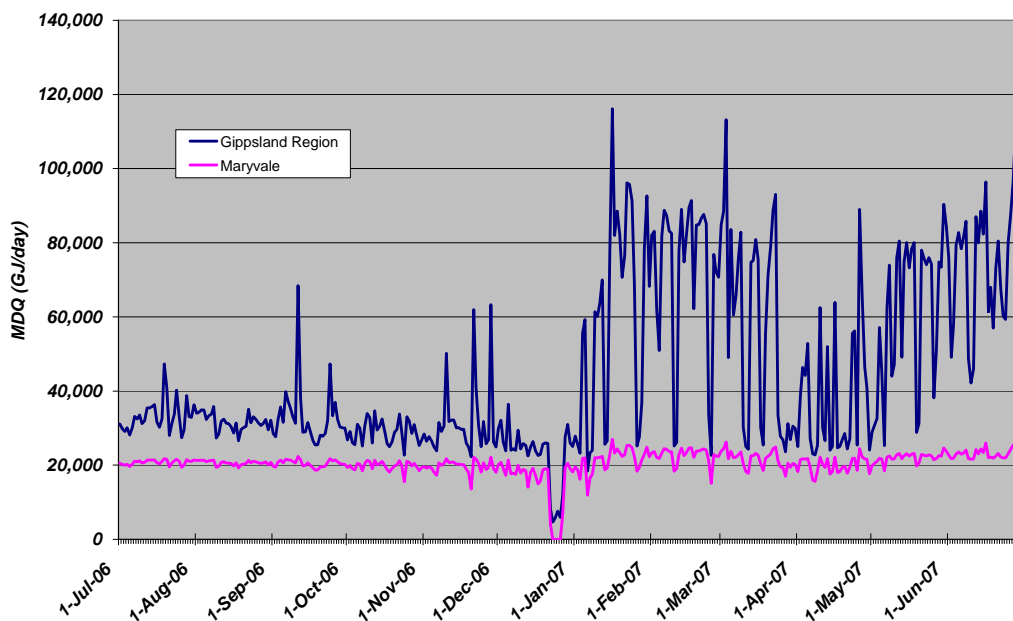
Maryvale Mill was converted from coal firing to gas in 1981 as part of a long-term investment to the Australian paper industry. The Mill now uses three main energy sources:

- natural gas;
- electricity from the Victorian grid; and
- wood waste from the pulp mills.

The mill meets almost half of its steam requirements and one-third of its electrical requirements by burning pulping residues. However, and most importantly for the above review, the Maryvale Paper Mill is connected directly to the GasNet gas transmission pipeline some 65km from the Longford injection point via a dedicated 5.4km, 150mm diameter branch pipeline.

As shown in Figure 1 below, the Maryvale Mill has a very flat load profile particularly when compared with other users in the Gippsland region (which covers Gasnet's Latrobe, Lurgi and Tyers tariff zones).

Figure 1: Gippsland Region Gas MDQ 2006-2007



Source: VENCORP

The Maryvale Mill consumed some 7.52 PJ of gas in 2006-07, which is some 3% of total Victorian gas consumption. Similar load profiles for the Maryvale Mill have occurred throughout the last 5 years, and were being anticipated for the next 5 years. That is, Australian Paper has not significantly changed its gas consumption profile over the last 5 years; and had no plans for any significant change over the next 5 years.

Other major users in the Gippsland region are the Ecogen peak gas generators at Jeeralang (466MW installed capacity) and the Valley Power peak gas generators at Loy Yang (300MW installed capacity). The Gippsland region gas consumption data for 2006-07 shown in the above figure has been summarised by Amcor⁸ in Table 1 below to show relative load factors on an annual, daily and hourly basis.

Table 1: Demand Summary – Gippsland Region 2006-07

User Groupings	AQ		MDQ			HMQ		
	Total GJ	LF %	Max GJ	Av GJ	LF %	Max GJ	Av GJ	LF %
Regional Towns	2,544,647	69%	10,079	6,972	69%	734	292	40%
Generators	6,401,716	21%	82,262	17,538	21%	9,068	731	8%
Maryvale	7,526,071	72%	28,721	20,619	72%	1,488	858	58%
Total	16,472,434	37%	121,062	45,129	37%	11,290	1,881	17%

Source: VENCORP and Amcor Ltd

The marked differences in load profile between Maryvale and other major user groups are noticeable on all measures but become more apparent as the time period moves from annual to daily to hourly. The differences in load factors between the different groups of customers suggest quite different impacts on the required size of pipelines and other capital costs. As a simple indication: to deliver on a standalone basis broadly the same volume of gas over a year, delivery capacity for the peak generators may need to be more than seven times the capacity required for Maryvale. In addition, the differences in short-term load factor (in particular) suggest quite different impacts on Gasnet's operating and maintenance costs.

Despite the magnitude of such differences and their likely impact on Gasnet's costs, the proposed tariff structure does not acknowledge these cost drivers and cannot reflect them.

⁸ Amcor provides strategic energy purchasing advice to Australian Paper and Paperlinx Ltd. Data used by Amcor was provided by VENCORP.

3. Cost allocation and tariff methodology

3.1. Gas Code Requirements

The Gas Code requires an access arrangement to establish a reference tariff for each reference service and to incorporate a reference tariff policy which sets out the principles that are to be used to determine reference tariffs. Reference tariffs and the reference tariff policy must comply with the reference tariff principles set out in section 8 of the Gas Code.

Broadly, section 8 of the Gas Code requires that the reference tariffs and the reference tariff policy should be designed:

to achieve a number of objectives, including... [providing the service provider with the opportunity to earn a stream of revenue that recovers the costs of delivering the reference service over the expected life the assets used in delivering that service, to replicate the outcome of a competitive market, and] to be efficient in level and structure.⁹

Section 8 provides specific guidance about reference tariffs and the reference tariff policy. These include:

- section 8.1, which outlines that a reference tariff and a reference tariff policy should be designed with a view to achieving the following objectives:
 - (a) *providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service;*
 - (b) *replicating the outcome of a competitive market;*
 - (c) *ensuring the safe and reliable operation of the Pipeline;*
 - (d) *not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries;*
 - (e) *efficiency in the level and structure of the Reference Tariff; and*
 - (f) *providing an incentive to the Service Provider to reduce costs and to develop the market for Reference and other Services.*

Section 8.1 also recognises that these objectives may conflict in their application to a particular reference tariff determination, and assigns a role for the relevant regulator in exercising discretion to determine the manner in which they can best be reconciled or which of them should prevail.

- section 8.2, which sets out the matters about which the regulator must be satisfied when approving a reference tariff and reference tariff policy;
- section 8.3, which provides guidance on the methodologies or approaches that may be adopted to provide for the variation of reference tariffs within an access arrangement;

⁹ See the preamble summarising the general principles at the beginning of section 8. The preamble has no legal weight but Gasnet and the ACCC 'may have regard' to its contents in interpreting the Code.

- sections 8.38 to 8.41, which provides guidance on the allocation of costs between Services;
- section 8.42, which provides guidance on the allocation of costs between users;
- section 8.43, which permits the regulator to approve the recovery of ‘prudent discounts’ given to one user (or group of users) from other users;
- sections 8.44 to 8.46 which provides for the establishment of incentive mechanisms; and
- sections 8.47 and 8.48 which provides guidance in relation to fix principles.

In considering the reference tariff policy, it is also relevant for the regulator to consider the matters in section 2.24, which it must have regard to when assessing the proposed access arrangement. These include:

- the service providers legitimate business interests and investment in the covered pipeline;
- economically efficient operation of the covered pipeline;
- the interests of users and prospective users; and
- any other matters that the regulator considers the relevant.

In respect of issues of concern to Australian Paper covered by this submission, it is particularly relevant that section 8.42 may be reasonably interpreted (subject to application of ‘prudent discounts’ under section 8.43 and concatenation with satisfying the overall revenue requirements of section 8.38) to mean that:

a reference tariff should, to the maximum extent that is technically and commercially reasonable:

- *be designed so that a particular user's share of the portion of total revenue ... reflects costs incurred (including capital costs) that are attributable to providing the service;*
- *with this share determined in accordance with a methodology that meets the objectives in section 8.1 and is otherwise fair and reasonable. (Emphasis added)*

Although meeting all the section 8.1 design factors is necessary (subject to conflicts between these design principles), the objectives in section 8.1 that are most relevant to cost allocation and tariff design are:

- replicating the outcome of competitive market (8.1(b));
- not distorting investment decisions in pipeline transportation systems or in upstream and downstream industries (8.1(d)); and
- efficiency in the level and structure of the reference tariff (8.1(e)).¹⁰

It is noted that the Gas Code does not provide any guidance that assists interpretation of the terms ‘*to the maximum extent that is technically and commercially reasonable*’ or ‘*fair and reasonable*’. However, fundamental economic principles clearly assist in interpretation of section 8.1(e). The Victorian Essential Services Commission (ESC), for example, has paid

¹⁰ This is consistent with the Victorian Essential Services Commission’s interpretation. See pp 206-212, *Review of Gas Access Arrangements - Final Decision*, ESC, October 2002.

particular attention to clearly defining the criteria for determining the ‘*efficiency in the level and structure of tariffs*’. Two criteria that are directly relevant are:

- the total costs allocated to any user must fall between a band defined by a lower bound of marginal cost and an upper bound of bypass cost (the Baumol Bound of efficient costs);¹¹ and
- tariff structures should provide incentives that will assist in achieving efficient outcomes in the longer term, in particular by signalling long-run marginal costs (this criteria is also relevant to interpretation of section 8.1(b), as indicated below).¹²

That is, section 8.42 has previously been and may, in this case, be interpreted as requiring Gasnet to ensure – *to the maximum extent that technically and commercially reasonable* – that the reference tariff that applies to Australian Paper’s Maryvale Mill:

- reflects costs incurred;
- results in costs that lie within the Baumol Band (above marginal cost and below bypass cost);
- effectively signal long-run marginal cost; and
- are otherwise fair and reasonable.

Section 8.1 (b)) provides further guidance on the signalling of long run marginal costs. A key outcome of a perfectly competitive market is that prices are set by marginal costs. Real markets are not described by perfect competition, but the guiding principle remains: prices should reflect marginal costs and (consistent with 8.1(e)) the tariff structures should minimise the efficiency losses due to the necessary departures from marginal cost pricing. Aligning prices with marginal costs is also consistent with a ‘service provider’s legitimate business interests’ in that a rise (or fall) in sales volume is reflected by a rise (or fall) in both costs and revenue. However, consideration also needs to be given to ensuring tariff prices reflect differing cost profiles of different users (or groups of users).

While ‘*fair and reasonable*’ is not defined in the Gas Code, a practical and pragmatic interpretation is that the tariff policy and tariff methodology must produce outcomes that are both:

- fair, which means ‘without irregularity or unevenness’ (and is generally accepted in the practice of economic regulation to also mean that users who create similar cost drivers for a service provider face similar costs; and users who create significantly different costs face significantly different costs); and
- reasonable, which means ‘governed by or being in accordance with reason or sound thinking’ (and is generally accepted in the practice of economic regulation as also being

¹¹ The ESC requires gas distributors to include this criterion in their published tariff policies and expects the distributors to demonstrate to users that the criterion is achieved (see: p. 214, *Review of Gas Access Arrangements - Final Decision*, ESC, October 2002 and p. 472, *Gas Access Arrangements Review 2008-2012 Draft Decision*, ESC, 28 August 2007).

¹² The ESC has gone to considerable lengths in its water pricing determinations to explain why signalling of long-run marginal cost is an important criterion for economic efficiency. The essential elements of the supporting arguments are that this allows users to make rational decisions about the long-term impacts of their consumption decisions, it leads to greater equity between users and between generations of user and it is more likely to ensure ‘self-funding’ of future incremental capacity.

based on accepted economic principles and practices and capable of being understood by users).

Section 8.42 clearly places an explicit obligation on Gasnet to consider cost allocations to different users. Equally clearly, it is not reasonable to interpret section 8.42 as requiring Gasnet to develop individual tariffs for every single user. Even if it were possible to develop a cost allocation model yielding that result, the cost of doing so would be considerable and the resulting model would only produce 'fair' (or equitable) results and satisfy the 'revenue adequacy' requirements of sections 8.1(a) and 2.24 by making a large number of arbitrary judgements about how costs should be allocated between individual users.

MJA accepts Gasnet's view that the existing tariff model is already complex. It is also MJA's view that the cost of developing a detailed cost allocation model that could produce individual tariffs would undoubtedly outweigh the benefits delivered to the overwhelming majority of users; and neither the methodology nor its outputs would be capable of being understood (or accepted) by the majority of users.

However, given section 8.42 specifies explicit obligation that is to be executed *to the maximum extent that is technically and commercially reasonable*, it is not an obligation that Gasnet (or the ACCC) can ignore. Even if it were impossible to produce a 'technically and commercially reasonable' model, it would be reasonable to expect Gasnet to explain – in detail – what the obstacles were and why it was not *technically and commercially* reasonable to address them.

It is MJA's view, based on substantial experience of working with clients in a range of utility industries, that it is both *technically and commercially* reasonable and practicable to take account of different user types and/or different user consumption characteristics in tariff calculations. This occurs frequently, if not universally, in gas and electricity distribution and in water services.

Even accepting that there are practical limitations to any cost allocation methodology, Gasnet's existing methodology already results in at least 42 separate tariffs (Tariff D and Tariff V in 21 separate tariff zones). For the purposes of illustration, there is (approximately) 1 tariff for each 2.4% of total gas withdrawal. Therefore, it appears reasonable for Gasnet to also consider tariffs for the largest individual users such as Australian Paper's Maryvale Mill and the Latrobe Valley gas generators, particularly where these users each:

- account for up to 3% of total gas withdrawals from the PTS and together account for around 85% of withdrawals from the Gippsland region (represented by the Latrobe, Lurgi and Tyers zones);
- have markedly different load profiles that would be expected to generate significantly different cost drivers in both the short and long terms;¹³ and
- are currently allocated to tariff zones containing regional towns which also have significantly different load profiles to the major users.

¹³ Based on information provided to Australian Paper by VENCORP for 2006-07 that covers meters in the Latrobe, Tyers and Lurgi zones and Gasnet's forecasts for AA3 (see: Table 10.3, p. 87, *GasNet Access Arrangement Submission*, APA Group, 14 May 2007).

A further reason for Gasnet to consider the cost impacts of these differing load profiles is that future load growth is likely to be very different for the three major users (or user groups) in the Gippsland region. As noted in the Introduction, Australian Paper had not anticipated any significant changes to future gas usage patterns; and apart from the effects of demographic or population changes it seems unlikely that there will be any substantial change in consumption patterns in the regional towns. However, it is more likely there will be increased consumption by gas generators in the Latrobe Valley (and possibly elsewhere), particularly in response to any Government policy initiatives that seek to impact greenhouse gas emissions.¹⁴

3.2. Impact on Gasnet's current methodology

MJA has undertaken a detailed review of information provided in Gasnet's various submissions to that ACCC for each of the access arrangement reviews. MJA has also reviewed in detail the ACCC's decisions for each access period. The ACCC's 2007 draft decision provides a reasonable and concise summary of the current tariff methodology (applying in AA2),¹⁵ which is (essentially) to be re-applied for AA3. MJA sees no value in repeating this information in this submission.

MJA also notes that the ACCC's draft decision rejected the majority of modifications to the tariff policy and methodology proposed by Gasnet for AA3, many of which were intended to address concerns raised by energy retailers about billing complexity.

MJA understands, and has some sympathy for, the '*administrative simplicity*' arguments put forward by Gasnet. MJA reviewed details from all gas bills received by the Maryvale Mill over the AA2 period, many of which appeared to contain errors and '*billing adjustments*'. The current methodology relies, in part, on applying tariffs to the 10 peak winter demand days, which cannot be known until the end of the winter peak period. This necessitates retail billing based on '*estimated peak demand days*' and '*retrospective adjustment*' which appear to cause significant challenges for all retailers, and make it very difficult for users – even the largest users – to use information on their bills to discern '*pricing incentives*' that might contribute to effecting efficient outcomes for Gasnet.

For example, Gasnet's explanation of its tariff methodology (and the ACCC's interpretation of this) makes repeated references to 'peak load cost drivers'. MJA also notes that nearly 75% of Gasnet's forecast capital expenditure is required to meet growth related 'network augmentation'. One might, therefore, expect that 'pricing incentives' in billing information would signal increasing cost with increased consumption. Yet analysis of the gas transmission costs on the Maryvale Mill gas bills shows that average monthly costs are inversely related to monthly demand. That is, the average cost of gas transmission rises, *albeit* only slightly, when monthly consumption is lower than average and falls when monthly consumption rises.

Modifications to the tariff methodology proposed originally by Gasnet for AA3 would have further weakened and distorted incentives for efficient behaviour. Thus, MJA endorses the

¹⁴ The load profile data shown in Figure 1 also illustrates that gas generation demand can change at short notice and occur at any time of year, including during the winter peak period. This reinforces the potential benefit to Gasnet from introducing different and cost-reflective tariffs in the Gippsland region.

¹⁵ See pp. 159-162, ACCC draft decision 2007.

principle arguments advanced by the ACCC to reject the changes proposed by Gasnet. Gasnet's proposals, particularly the proposal to use total winter period consumption to allocate peak demand pricing signals, would have further diluted 'peak pricing incentives' and resulted in transfer of costs from users contributing more to peak demand costs and long run marginal costs (such as the peak gas generators) to those contributing less to peak demand costs (such as the Maryvale Mill). Such an outcome would clearly contribute to breach of the requirements of sections 8.1(b), 8.1(e) and 8.42 of the Gas Code. Even if billing information sends 'confused signals' to users, a tariff methodology that is more cost-reflective (than less) is more likely to signal efficient outcomes over the long term; and provide revenue that more closely tracks Gasnet's actual costs.

Despite endorsing this aspect of the ACCC's draft decision, MJA's review of the information provided by Gasnet's on its tariff methodology, and application of the criteria listed above, has led MJA to conclude that Gasnet's current tariff policy and methodology does not explicitly consider a particular user's share of total revenue. MJA has also concluded that Gasnet's current methodology is likely to result in a level of tariff where it becomes worthwhile for Australian Paper to consider switching to alternative sources of energy at the Maryvale Mill. Thus, the proposed tariff is, at least potentially, likely to also distort downstream investment decisions in breach of section 8.1(d). And finally, from Gasnet's commercial perspective, applying a tariff methodology the results in tariff costs exceeding the bypass cost requires Gasnet to invoke the provisions of section 8.43 to seek recompense for the undesirable bypass risks this creates.

These outcomes from Gasnet's current tariff policy and methodology indicate that Gasnet's approach is fundamentally flawed – and not consistent with the relevant provisions of the Gas Code.

Even though MJA does not have access to Gasnet's tariff models, it is clear that there are three areas where Gasnet's cost allocation methodology could be improved, *viz*:

- The first is to include cost allocation to particular users (or groups of users) who cause disproportionate (or higher) costs within a pricing zone. This (logically) would reduce the problems evident in the Latrobe zone.

It is also possible that a similar problem exists in other zones (covering Jeeralang, Newport, Laverton and Somerton). However, if these problems do exist, they may not be as obvious or as material outside the Latrobe and Tyers zones because of smaller relative scale of (poor load profile) gas-fired generation compared to aggregate industrial, commercial and residential loads.

- The second is to address the inconsistencies that arise because overheads and 'system-wide benefit' costs are allocated on a postage stamp basis, while (at least some) injection 'peak load' costs are allocated on the basis of asset type and location and distance from injection points. This combination clearly contributes to the 'bypass risk' problem described by Gasnet (that breaches a reasonable interpretation of section 8.1(e) of the Gas Code).

For example, the proximity of Maryvale (and the peak gas turbines) to Longford combined with the 'mature age' of the Longford-Melbourne line means the 'asset cost' component of the Latrobe zone injection tariff is very low relative to the aggregate of indirect costs. It is clear that a relatively large postage stamp tariff is likely to exceed the 'bypass cost' criteria (for at least some, if not all users) in any pricing zone containing an injection point and 'mature (i.e. substantially depreciated) assets'.

- The third is to change the calculation of withdrawal tariff prices by allocating the relatively high indirect cost aggregate on a basis other than postage stamp costs per unit of energy.

These are fundamental – but time consuming – changes to the structure of the reference tariff. A more expedient, albeit partial, solution would be to remedy the immediate issue by reducing the tariff applicable to the Maryvale Mill to efficient levels and to seek recognition of this reduction as a ‘prudent discount’ thus allowing recompense under section 8.43.

4. Suggestions to improve tariff outcomes

In MJA's view, even though time consuming, it would be relatively simple to amend Gasnet's current tariff methodology to improve compliance with the Gas Code. This could be achieved within *the maximum extent that is technically and commercially reasonable* by:

- allocating part (or even all) of the indirect costs on the same basis as 'injection costs' – such that no zone has tariffs with costs exceeding the bypass cost; and
- developing 'load profile' tariffs for each pricing zone where 'load profile' is a clear differentiator of cost drivers; or developing new pricing zones across the Gippsland region (and perhaps elsewhere) that segregate users with markedly different cost drivers.

MJA recognises that Gasnet is still required to achieve the 'revenue adequacy' outcomes of sections 8.38 and 2.24; and that it is both consistent with the Code and in Gasnet's legitimate business interests to consider trade-offs between cost reflectivity and revenue stability. But these requirements and trade-offs must not compromise compliance with other, equally important, criteria such as those explicitly required by section 8.42.

MJA is also fully aware that application of the suggested modifications would require Gasnet to make judgements on the weightings to be applied to efficient tariff bounds and on the proportions of cost to be allocated between differing load profiles. However, these judgements can be informed by quantitative analysis. For example, in the case of the Latrobe (and Tyers) zone, bypass and/or 'load profile' cost relativities could be quantified objectively by considering feasible, but notional, stand alone gas transmission systems that could supply:

- Maryvale alone;
- the Loy Yang gas peaking generators (and Jeeralang in the Tyers zone) alone; and
- the Regional Towns alone.

Given the time it would take to review the current tariff policy and methodology, re-calculate tariff prices and subject the outcomes to a public review by the ACCC, it would appear that the most practical approach that Gasnet could implement is to:

- acknowledge that the current policy and methodology result in outcomes that are incompatible with a reasonable interpretation of the Code (i.e. by producing tariff costs above the bypass cost and not reflecting differences in "particular users' costs");
- acknowledging that there is merit in Australian Paper's argument that Maryvale imposes materially different cost drivers than does peak gas generators and the Latrobe zone Regional Towns (both of which have distinctly different short-term load profiles to the Maryvale Mill);
- implement a temporary remedy by reinstating a 'prudent discount' for Maryvale, possibly in concert with creation of a new 'Maryvale tariff zone' – justified not on a narrowly conceived 'bypass risk' basis, but on the basis that the Maryvale Mill's load profile imposes distinctly different cost drivers to the peak gas generators and the Regional Towns and that a tariff structure which is not cost reflective and efficient distorts behaviour and risks, potentially pricing Maryvale off the system; and

- commit to a complete review of tariff policy and methodology and re-calculation of tariffs for the next access arrangement review in 2013.

Accordingly, MJA recommends that the ACCC incorporate the above suggestions into it's final decision.

— || —