

GasNet Australia Access
Arrangement -
Application to revise

24 August 2004

Contents

| | | |
|----------|---|-----------|
| 1 | Executive summary | 2 |
| 1.1 | Outline | 2 |
| 1.2 | K-factor revision | 2 |
| 1.3 | Refill tariff revision | 2 |
| 1.4 | Weather pattern revision | 3 |
| 1.5 | Clarification only | 3 |
| 2 | Introduction | 4 |
| 2.1 | GasNet's current Access Arrangement | 4 |
| 2.2 | Parallel applications | 4 |
| 2.3 | Access Arrangement Information | 5 |
| 2.4 | GasNet's approach | 5 |
| 3 | K-factor Revision | 6 |
| 3.1 | Outline | 6 |
| 3.2 | Present situation | 6 |
| 3.3 | Why is a revision needed? | 7 |
| 3.4 | GasNet's proposal | 10 |
| 4 | Refill Tariff Revision | 14 |
| 4.1 | Outline | 14 |
| 4.2 | Present situation | 14 |
| 4.3 | Why is a revision needed? | 15 |
| 4.4 | GasNet's proposal | 17 |
| 5 | Weather Pattern Revision | 20 |
| 5.1 | Outline | 20 |
| 5.2 | Current situation | 21 |
| 5.3 | Why is a revision needed? | 24 |
| 5.4 | GasNet's proposal | 25 |
| 6 | Basis for revisions | 28 |
| 6.1 | Code requirements | 28 |
| 6.2 | ACCC cannot re-open balance of Access Arrangement | 28 |
| 6.3 | Clarification rather than fundamental change | 30 |
| 6.4 | Certainty | 31 |
| 6.5 | Cherry picking | 31 |
| 6.6 | Offsetting benefits | 31 |
| 6.7 | Incentive mechanism | 32 |
| 6.8 | How the revisions materially affect GasNet | 32 |
| 7 | Interpretation and timing | 33 |
| 7.1 | Definitions | 33 |
| 7.2 | GasNet NSW | 34 |
| 7.3 | Timing | 34 |
| 8 | List of schedules | 37 |
| | Schedule 1 - Revisions to Access Arrangement | 38 |
| | Schedule 2 - Revisions to Access Arrangement Information | 39 |

1 Executive summary

1.1 Outline

The terms of GasNet's current Access Arrangement commenced on 1 February 2003.

During the last 18 months, a number of operational anomalies have emerged which were not anticipated prior to the rollout of the Access Arrangement. GasNet now seeks to cure these anomalies by revising three aspects of its Access Arrangement.

1.2 K-factor revision

The purpose of this revision is to cure an anomaly in the K-factor mechanism that has the potential to artificially ratchet down GasNet's tariffs, leading to an unwarranted deferral of revenue.

A key component of the Price Control Formula is the K-factor, which is designed to modulate the impact of within-system load shifting. For example, if in a year:

- (a) the aggregate gas volumes equalled the forecast; but
- (b) within that aggregate, some load shifted so that more gas flowed in a high tariff zone than anticipated (and correspondingly less gas flowed in a low tariff zone),

then the K-factor would apply so that the resulting over-recovery (ie above the target average tariff) is returned to Users in the following year in the form of lower tariffs.

A number of discounting mechanisms were included in the Access Arrangement to overcome potential bypass threats. The discounts have caused unintended volatility in GasNet's revenue, with a corresponding increase in the likelihood and extent of K-factor accruals. This effect, coupled with the year-on-year cap on tariff increases, produces a potential to ratchet down GasNet's tariffs and for significant amounts of revenue to be artificially deferred.

GasNet proposes that the K-factor mechanism be amended so that any over-recovery be repaid by a reduction in tariff over the **balance** of the Access Arrangement Period, rather than in a single tariff reduction in the year following the accrual of the over-recovery. This procedure will avoid substantial deferral of revenues and dampen tariff fluctuations.

1.3 Refill tariff revision

GasNet currently applies a lower tariff to withdrawals into storage facilities. This tariff is deliberately lower than other tariffs on the GNS to encourage storage.

GasNet has become aware that it is now possible for Users who have access to the WUGS storage facility at Iona to export gas from the GNS to the SEA

Gas Pipeline, via the WUGS facility, and receive the benefit of the cheaper withdrawal tariff. This opportunity is not available to Users who export through the nearby SEA Gas delivery point.

This use of the cheaper withdrawal tariff for exports was never intended. GasNet proposes to retain the storage incentives while preventing export “leakage” by:

- (a) removing the cheaper withdrawal tariff; and
- (b) instead operating a rebate system so that stored gas attracts the lower tariff when it is re-injected into the GNS.

1.4 Weather pattern revision

Weather forecasts are a critical element of GasNet’s price path methodology. A forecast that is artificially cold results in forecasts of higher gas consumption and, therefore, a price cap that is too low to recover required revenue, and vice versa.

During the Access Arrangement approval process in 2002, GasNet became aware of a possible warming shift in the weather in Victoria. However, as there was insufficient evidence to substantiate the shift at the time, GasNet proposed that the issue be revisited in 2004, when further evidence might be available. The ACCC observed that it would be open to GasNet to seek a mid-term revision if further information became available.

Since 2002, there has been further research done into the weather in Victoria which substantiates GasNet’s concern of a warming shift. Consistent with the ACCC’s observations in its 2002 decisions, GasNet now proposes to revise the forecasts in its Access Arrangement to reflect the impact of warmer weather. All other things being equal, this will marginally increase the average tariffs payable by GasNet customers. . However, if the existing tariffs remain, GasNet revenues will be reduced (on average) below the approved revenue requirement because the existing tariffs are based on a volume forecast which is higher than is expected to occur. Put another way, the current forecast artificially depresses the tariffs and the proposed change does no more than return the tariffs to a level that is likely to earn GasNet its approved revenue requirement.

1.5 Clarification only

A revision that seeks to clarify an access arrangement or cure anomalies will obviously raise fewer concerns than a revision that seeks to alter the fundamental structure or building blocks of an access arrangement. GasNet recognises that while a Service Provider is entitled to advance its legitimate business interests, this must be weighed against, for example, the interests of Users in avoiding the time and expense in considering repeated minor mid-term revisions.

However, it is GasNet’s view that the Access Arrangement Revisions do no more than articulate the spirit of the Access Arrangement as it was intended and remove identified anomalies. GasNet believes that they do not represent any alteration to the underlying principles of the Access Arrangement.

2 Introduction

2.1 GasNet's current Access Arrangement

This application relates to the GasNet Access Arrangement, which is an approved Access Arrangement under the Code.

GasNet's current Access Arrangement Period commenced on 1 February 2003 and will end on 31 December 2007. GasNet's Access Arrangement was concluded after extensive considerations by the ACCC, a public consultation process and a review by the Australian Competition Tribunal.

After 18 months' operation, a number of anomalies in the Access Arrangement have emerged, and GasNet now seeks to revise the Access Arrangement by:

- (a) fixing an asymmetry in the K-factor in the Price Control Formula;
- (b) removing a potential loophole in the structure of the Transmission Refill tariff at WUGS; and
- (c) adjusting the weather forecasts to accommodate a shift in the weather which was identified in 2002 but could not be incorporated at the time.

This submission has been prepared to explain the need for these revisions and sets out the form GasNet proposes the revisions should take.

2.2 Parallel applications

Each Access Arrangement Revision is independent and there is no connection between the three revisions such that an amendment to one would require an amendment to another. Nor does acceptance or rejection of one require acceptance or rejection of the other two.

GasNet seeks each Revision both individually and collectively in each combination of two or more Access Arrangement Revisions.

For convenience, the Access Arrangement Revisions have been compiled into one document. While the Code specifically contemplates a Service Provider submitting proposed "revisions" (Code 2.28), it provides no explicit guidance as to whether several revisions should be brought collectively or independently. GasNet cannot see any impediment in the Code to submitting three separate applications to revise its Access Arrangement in the one document.

After the ACCC has made its decision on the Access Arrangement Revisions, GasNet will provide it with a version of the revised Access Arrangement that shows the changes made as a result of the decision. This copy will be for placement on the ACCC website.

2.3 Access Arrangement Information

The Weather Pattern Revision requires an amendments to the AAI. Accordingly, GasNet has provided, in Schedule 2, the changes to GasNet's AAI.

2.4 GasNet's approach

This submission contains three types of material to assist the ACCC to consider GasNet's submission.

The revisions

GasNet has provided detailed supporting analysis on each of the three revisions and included an explanation of the current situation and why that situation requires revisiting.

GasNet's proposed changes

In Schedules 1 and 2, GasNet has provided the exact wording of the changes to the Access Arrangement and the Access Arrangement Information.

The philosophy

GasNet understands that the Access Arrangement cannot be considered separately from the regulatory environment in which it operates. In section 6, GasNet has provided an explanation of how that environment is likely to affect the merits of the Access Arrangement Revisions.

3 K-factor Revision

3.1 Outline

As part of the 2003 Access Arrangement revision, the ACCC approved a number of discounting mechanisms to certain withdrawal tariffs. With the benefit of 18 months' actual operation, it now appears that these discounts, which were significantly greater than in the previous Access Arrangement, may have an unintended adverse effect on GasNet's price path mechanism. They introduce an unanticipated volatility in GasNet's average price which, coupled with the asymmetric price path mechanism (there is a limit on price rises but no limit on price falls each year), could artificially defer significant amounts of GasNet's revenue.

GasNet continues to support the discounting mechanisms implemented in the tariff. However, it believes that the consequences of the asymmetry in the price path mechanism should be rectified. GasNet proposes that the K-factor mechanism be amended so that any over-recovery is "repaid" (ie via price reductions) over the balance of the Access Arrangement Period rather than in a lump sum the year following the over-recovery.

GasNet considers this revision complies with the requirements of the Code. In particular:

- (a) it is in GasNet's legitimate business interests to ensure revenues match targets as this maximises GasNet's ability to deliver a consistent return to investors; and
- (b) it is in the interests of Users to minimise any artificial depression or inflation of tariffs.

Further, as this revision simply corrects an anomaly and does not alter the main principles of GasNet's Access Arrangement, it should not raise any issues as a mid-term revision.

3.2 Present situation

Schedule 4 of the Access Arrangement contains GasNet's Price Control Formula. The formula is intended to allow GasNet to reset tariffs each year subject to two constraints on the extent to which the tariff components can be altered each year, namely:

- (a) a general constraint on the **average price** that can be charged each year (derived from the original target revenues and forecast volumes for the five year period of the Access Arrangement); and
- (b) a specific constraint (or "ceiling") on the **maximum increase** allowed on each tariff component. The tariff cannot increase by more than $CPI-X+2\%$ in one year where an X factor is predetermined for each tariff component. In contrast, there is no "floor" limiting how far tariffs can fall.

In this way, the Price Control Formula regulates the average price GasNet can earn. This determines the risk profile borne by GasNet with respect to variations in gas volumes, which has two key features:

- (a) firstly, GasNet bears the risk (and benefit) of fluctuations in actual volumes, as compared with forecast volumes. Because there is a pre-determined target for the average price in the Access Arrangement (the ATT factors, outlined in 4.4, Schedule 4 of the Access Arrangement), the risk borne by GasNet is governed by the total annual volume delivered in any given year. If the annual volume is higher than forecast, GasNet revenues are higher, and vice versa; and
- (b) second, GasNet does not bear the risk (or benefit) of how the volumes are allocated across the 69 tariff components. For example, if more gas flows in a high price zone and less in a low price zone, then, assuming that the total volume delivered is equal to the forecast, GasNet will over-recover as compared with the average flows and therefore will have to return that over-recovery.

The latter feature, which operates as a credit (or debit) allowance, is called the K-factor. If, for example, as a result of load-shifting between zones, revenue is less (more) than the revenue allowed by the price control (Average Price * Actual Annual Volume), then the average price in the next year is set higher (lower) than the pre-determined target by the amount of the under (over)-recovery.

Each year, the individual tariff components are reset, subject to the two constraints mentioned above. Provided actual volumes are not too different from forecasts, the tariffs can be set to achieve the average revenue target allowed under the Price Control Formula.

The present Price Control Formula is identical to the formula carried over from the First Access Arrangement Period of 1999-2002, with the exception that the cap on individual tariff component movements was CPI-X+1%. As it turned out, GasNet under-recovered in each year of the First Access Arrangement Period and ultimately carried forward a total K-factor claim of \$13 million into the current Access Arrangement Period. As a result of this unsatisfactory situation, the ACCC allowed the individual tariff cap to increase to CPI-X+2% for the current Access Arrangement Period.

3.3 Why is a revision needed?

Potential for unchecked downwards tariff movement

While the change to the cap on tariff increases from 1% to 2% went some way to alleviating the problem of an accumulating under-recovery, it has become apparent that a significant problem can arise even when there is a substantial over-recovery, if this is followed by one or more years of normal recovery or under-recovery.

The absence of a K-factor floor coupled with the CPI-X+2% year-on-year ceiling has the potential to cause an unintended downward ratcheting effect on tariffs (for a worked example, see Table 3.1 below). The Price Control Formula allows the K-factor amount to be compounded and carried forward

until such time as it is fully recovered, which may be in the next access arrangement period.

Under the current Price Control Formula, Users are protected from large tariff increases by a cap, but simultaneously face the risk of artificial fluctuations in tariffs and the risk that tariffs in the next access arrangement period may be higher than necessary.

This is illustrated by the following hypothetical calculation (Table 3.1). For simplicity the target average price is assumed to be constant each year, and the forecast and actual annual volumes are also assumed to be a constant 200PJ/a. The example is based on the assumption that there is a revenue over-recovery in the first year which is not repeated in subsequent years. As the example shows, the cap on tariff increases leads to a K-factor carry-forward of \$1.9 million in this instance and significant fluctuations in tariffs.

Table 3.1 - Worked example of K-factor over-recovery

| | Year 1 | Year 2 | Year 3 (a) | Year 3 (b) |
|---------------------|--------|---|--|---|
| Average Price \$/GJ | 0.3 | 0.3 - 0.015 = | 0.3 | 0.3 |
| Initial Target | | 0.285 | | |
| Achievable Target | 0.3 | 0.285 | 0.3 | 0.291 |
| Volume PJ | 200 | 200 | 200 | 200 |
| Revenue Target \$M | 60 | 57 | 60 | 60 |
| Revenue Outturn \$M | 63 | 57 | 60 | 58.1 |
| K-factor \$M | 3 | 0 | 0 | -1.9 |
| K-factor \$/GJ | 0.015 | 0 | 0 | .0095 |
| Tariff Impact | | Average tariff falls 5% to deliver the required revenue target | Average tariff must rise 5.3% to deliver the revenue target | Individual tariffs are constrained to rise by only 2% |

(a) No constraint on individual tariffs.

(b) Individual tariffs constrained to rise 2%.

Causes of tariff fluctuations

There are a number of possible causes for large revenue fluctuations under the current tariff design, principally related to prudent discounts implemented by way of matched rebates in the tariff. These rebates are significantly larger and more prevalent in the current tariff design than in the First Access Arrangement Period, because of the greater use of prudent discounts to avoid bypass threats. Table 3.2 shows the rebate allowed to Users who inject gas at Culcairn or Pakenham, compared to injecting at Longford. It is clear that significant variations in revenue can occur if the source of the gas injections changes, even when the total delivered volume is unchanged.

Table 3.2 - Existing Rebates

| Injection | Possible Rebate | Volume Range subject to Rebate | Variation in Revenue |
|---------------------------|------------------------|---------------------------------------|-----------------------------|
| Wodonga from Culcairn T-D | \$0.66/GJ | 3.5 PJ | \$2.3M |
| Wodonga from Culcairn T-V | \$0.84/GJ | 1.5 PJ | \$1.3M |
| Metro from Pakenham T-D | \$0.21/GJ | 10 PJ | \$2.1M |
| Metro from Pakenham T-V | \$0.24/GJ | 10 PJ | \$2.4M |

The injection volumes at Culcairn and Pakenham are very difficult to forecast. Pakenham injections, for example, would be strongly affected by delays in commissioning the Yolla production plant, and Culcairn injections might increase temporarily if there is a supply failure at Longford.

Other anomalies arise if there are changes in volumes in either low or high tariff zones. For example, a positive K-factor will be generated if there are temporary declines in volumes in low tariff zones and increases in high tariff zones. Temporary changes can arise from unusual weather conditions, from supply failures, or from transient increases or decreases in consumption in gas-fired power stations.

2004 tariffs

For 2004, GasNet has reduced tariffs below the normal CPI-X price path due to an over-recovery of revenues in 2003. The over-recovery in 2003 arose from changes in the pattern of demand and lower than expected rebates matched to injections from Culcairn. However, there is a further K-factor over-recovery of \$2.7 million to be carried forward into the 2005 average price, arising from revisions to the actual volumes and revenues from 2003 (called the KTb factor, see 4.7, Schedule 4 of the Access Arrangement). In GasNet's opinion, there is a significant risk of a large over-recovery in 2004 which, through the operation of the Price Control Formula, will lead to a large fall in the tariff in 2005.

Accordingly, GasNet's concern is that, if volumes return to normal in subsequent years, GasNet will not be able to increase tariffs from this low base by the required amount in order to achieve the allowed revenues, given the operation of the price cap on annual tariff movements. This will lead to unrecovered K-factor amounts in 2006 and 2007 which will accumulate and be carried forward into the next access arrangement period.

Based on GasNet's latest forecasts, it is estimated that the K-factor to be carried forward into the next access arrangement period will be \$3.7 million. However, under a range of possible alternative volume scenarios, the K-Factor could be between \$0 and up to \$12 million. Whilst it is difficult to assign probabilities to these scenarios, GasNet is concerned that potentially very large K-Factor balances might be left un-recovered at the end of the Access Arrangement period.

Whilst GasNet is likely to recover any possible shortfalls at some time over the next eight years through the operation of the Fixed Principle which allows

carry forward of the K-factor (see section 7.1 of the Access Arrangement), this raises two significant issues:

- (a) it is not in GasNet's legitimate business interests for revenues to consistently fall below targets for any length of time; and
- (b) if a large K-Factor balance is carried forward into the next access arrangement period, it will lead to higher tariffs in the next period than would otherwise be the case.

3.4 GasNet's proposal

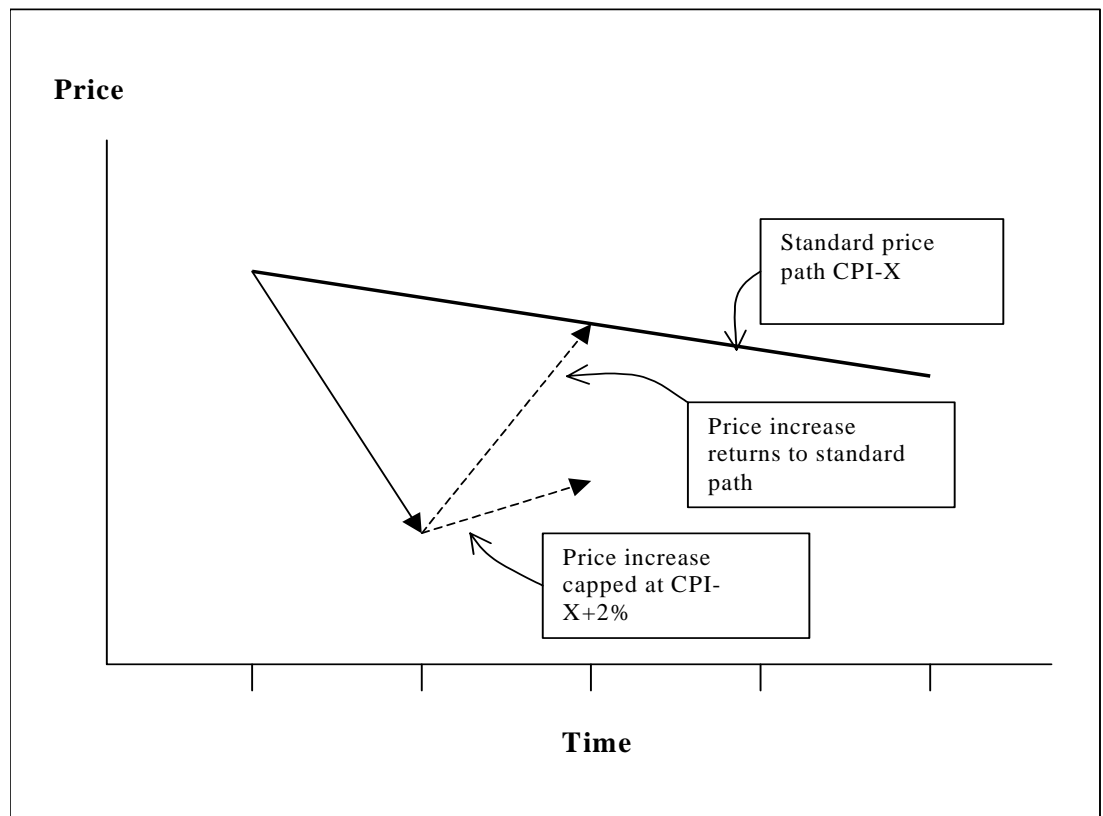
GasNet has considered two options for correcting this anomaly in the Price Control Formula.

Option 1: Rebound to price path

The cap on individual tariff movements is increased to allow a greater proportion of the K-factor to be recovered in any one year. However under this option any individual tariff would not be allowed to rise above the level that would have been projected if the standard tariff path had applied from the inception of the Access Arrangement.

This proposal ensures that no User will pay more than was contemplated when the Access Arrangement was approved in 2003. Although this method does allow for large annual price increases in certain circumstances, these will only occur if there were preceding large price decreases.

Figure 3.1 - Rebound to price path



Option 2: Smooth K factor

Under this option, the 2% cap on individual tariff variations is retained. However, where there is an over-recovery in any given year, the associated K-factor is spread over the remaining years of the Access Arrangement, rather than being paid back to customers via one large tariff reduction in the subsequent year.

For example, if GasNet determines there is an over-recovery at the end of 2004 then, under this option, only one third of that over-recovery would be paid back in 2005 via lower tariffs, (on the basis that at the end of 2004 the Access Arrangement has three years before it will expire). The remaining two thirds of the over-recovery would be credited to the calculation of the net recovery at the end of 2005 (that is, for payment in the remaining two years of the Access Arrangement Period).

If there is a net over-recovery in 2005 (after crediting the one third of the over-recovery held over from 2004), then one half of that over-recovery would be paid back in 2006 (on the basis that the Access Arrangement has two years left to run). The remainder of the 2005 over-recovery would be credited to the calculation of the net recovery at the end of 2006.

Finally, if there is a net over-recovery in 2006 (after crediting the part of the over-recovery carried over from 2005) then the whole of the over-recovery is paid back in 2007.

Under this option, there is a reduction in the amount by which tariffs can fall, at least in 2005 and 2006. Any over-recovery, rather than being paid back entirely in the next year, is spread over future years, so that there is a greater chance that a carried forward over-recovery will be cancelled by a future under-recovery. This leads to a greater likelihood of a smoother tariff path over time. GasNet's assessment indicates that this method gives a lower K-factor carry forward into the next access arrangement period, and results in significantly lower fluctuations in gas transmission prices.

Analysis

GasNet has modelled a range of scenarios for injections from Culcairn and Pakenham, and for exports to NSW and South Australia. Table 3.3 shows possible K-factor amounts to be carried forward under each of the models in option 1, option 2 and GasNet's present Price Control Formula, when applied to 20 possible volume scenarios.

Table 3.3 - Possible K-factor carry forward amounts

| A | | | B Present Model | | | C Option 1 Rebound to price path | | | D Option 2 Smooth K-factor | | | |
|---------------------|------|-----------|--------------------|-----------------------|---------------------|--|-----------------------|-------|----------------------------------|-----------------------|------|------|
| 2004 | 2005 | 2006-2007 | K-Factor \$m | Tariff variability | S.D. ^(a) | K-Factor \$m | Tariff variability | S.D. | K-Factor \$m | Tariff variability | S.D. | |
| Culcairn Variations | | | | | | | | | | | | |
| 1 | 1 | 1 | -3.65 | 8.0% | 2.4% | -0.40 | 10.1% | 3.1% | 0.00 | 3.3% | 1.1% | |
| 0.5 | 1 | 1 | -8.00 | 10.6% | 3.4% | -0.79 | 15.4% | 5.1% | 0.00 | 3.5% | 1.1% | |
| 0.3 | 1 | 1 | -9.74 | 11.7% | 3.9% | -1.01 | 17.6% | 5.9% | 0.00 | 3.8% | 1.1% | |
| 0.5 | 0.5 | 1 | -10.00 | 11.9% | 4.0% | -1.05 | 17.9% | 6.0% | 0.00 | 6.1% | 1.8% | |
| 0.5 | 0.5 | 0.5 | -7.74 | 11.9% | 4.0% | 0.00 | 16.4% | 5.9% | 0.00 | 4.6% | 1.3% | |
| 0.5 | 1 | 0.5 | -5.71 | 10.6% | 3.4% | 0.00 | 13.7% | 4.8% | 0.00 | 3.7% | 0.9% | |
| 0.5 | 2 | 1 | -3.84 | 8.1% | 2.4% | -0.41 | 10.3% | 3.1% | 0.00 | 6.3% | 1.9% | |
| 1 | 0.5 | 1 | -5.71 | 9.3% | 2.8% | -0.56 | 12.6% | 4.0% | 0.00 | 5.3% | 1.6% | |
| Pakenham Variations | | | | | | | | | | | | |
| 0.5 | 1 | 1 | -6.36 | 9.7% | 3.0% | -0.62 | 13.4% | 4.3% | 0.00 | 3.2% | 1.1% | |
| 0.5 | 0.5 | 1 | -10.92 | 12.5% | 4.2% | -1.19 | 19.0% | 6.5% | -1.58 | 8.7% | 2.6% | |
| 0.5 | 1 | 0.5 | -1.81 | 9.7% | 3.0% | 0.00 | 10.3% | 3.3% | 0.00 | 4.9% | 1.4% | |
| 1 | 0.5 | 1 | -8.29 | 10.9% | 3.5% | -0.83 | 15.8% | 5.2% | -1.66 | 8.2% | 2.4% | |
| Export Variations | | | | | | | | | | | | |
| 2 | 1 | 1 | | 5.2% | 1.6% | 0.00 | 5.2% | 1.6% | 0.00 | 4.2% | 1.2% | |
| 2 | 2 | 1 | | 4.8% | 1.5% | 0.00 | 4.8% | 1.5% | 0.00 | 4.9% | 1.5% | |
| 2 | 1 | 2 | -3.32 | 5.6% | 1.7% | -3.32 | 5.6% | 1.7% | -0.56 | 6.7% | 1.7% | |
| Culcairn | 0.5 | 1 | 1 | | | | | | | | | |
| Pakenham | 0.5 | 1 | 1 | | | | | | | | | |
| Export | 1 | 1 | 1 | -10.71 | 12.4% | 4.2% | -1.15 | 18.8% | 6.4% | 0.00 | 4.0% | 1.2% |
| Culcairn | 0.5 | 0.5 | 1 | | | | | | | | | |
| Pakenham | 0.5 | 1 | 1 | | | | | | | | | |
| Export | 2 | 1 | 1 | -8.73 | 11.2% | 3.6% | -0.88 | 16.4% | 5.4% | 0.00 | 5.9% | 1.8% |
| Culcairn | 0.5 | 1 | 0.5 | | | | | | | | | |
| Pakenham | 0.5 | 1 | 0.8 | | | | | | | | | |
| Export | 2 | 1 | 2 | -6.33 | 9.9% | 3.1% | 0.00 | 13.9% | 4.5% | 0.00 | 2.8% | 1.0% |
| Culcairn | 0.5 | 0.5 | 0.3 | | | | | | | | | |
| Pakenham | 0.5 | 0.8 | 1 | | | | | | | | | |
| Export | 1 | 2 | 2 | -11.83 | 12.6% | 4.3% | -1.52 | 19.3% | 6.6% | 0.00 | 4.6% | 1.3% |
| Culcairn | 0.5 | 1 | 0.3 | | | | | | | | | |
| Pakenham | 0.5 | 0.8 | 0.8 | | | | | | | | | |
| Export | 2 | 1 | 2 | -7.34 | 11.0% | 3.6% | 0.00 | 15.1% | 5.3% | 0.00 | 4.6% | 1.3% |
| Averages | | | -6.50 | 9.9% | 3.2% | -0.69 | 13.6% | 4.5% | -0.19 | 5.0% | 1.5% | |

^(a) S.D. = standard deviation

The volume scenarios in table 3.3 are based on base forecasts at three injection points on the GNS, as set out in table 3.4.

Table 3.4 - Base forecasts for selected injection points

| Injection points | 2004 base forecast | 2005 base forecast | 2006 base forecast | 2007 base forecast |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Culcairn Injections (PJ) | 5.7 | 5.7 | 5.8 | 6.3 |
| Pakenham Injections (PJ) | 7.4 | 11.0 | 11.0 | 11.0 |
| Export Volumes at Port Campbell and VicHub (PJ) | 6.0 | 6.1 | 6.2 | 6.3 |

The volume scenarios in table 3.3 were generated by multiplying the base forecasts for each of the injection or withdrawal points in table 3.4 by a factor which represents an alternative possible outcome for that variable. These multiplicative factors are shown in table 3.3 (column A), and are applied

either independently to one variable at a time, or in combination with other variables. The GasNet price control model is then applied to the selected volume scenario (column B), and a forecast of the K-Factor carried forward into the next Access Arrangement period is calculated. The same exercise is conducted for each of the options proposed by GasNet in this revision (columns C and D). Finally, the model calculates the standard deviation and the average absolute deviation of the annual variations from the standard price path for an indicative tariff component. Table 3.5 summarises the results for the 20 volume scenarios modelled by GasNet.

Table 3.5 - K-factor options

| Scenario | K-factor Carried-Forward (a) | Tariff Variability | |
|----------------|------------------------------|--------------------------------|------------------------|
| | | Average Absolute Deviation (b) | Standard Deviation (c) |
| Current Method | \$6.5M | 9.9% | 3.2% |
| Option 1 | \$0.7M | 13.6% | 4.5% |
| Option 2 | \$0.2M | 5.0% | 1.5% |

(a) Averaged over 20 scenarios

(b) From Normal tariff Path (over 4 years)

(c) From Normal Tariff Path (over 4 years)

This modelling shows that option 2 provides for a lower K-factor carry-forward whilst at the same time leading to significantly lower fluctuations in tariffs than the current method.

Conclusion

The use of either option would have little impact on GasNet's earnings in net present value terms. However, the receipt of earnings will be smoothed over time, and there is a greater likelihood that GasNet will earn the allowed revenue during the current Access Arrangement period.

However, given that both option 1 and option 2 redress the anomaly and reduce the carried-forward K-factor, GasNet's preference is for option 2 since this leads to a smoother tariff path over time, and retains the 2% cap on individual tariff rises.

Schedule 1 describes the proposed revisions to Schedule 4 of the Access Arrangement to implement option 2. No changes are required to the AAI.

This revision has no effect on, and will not be affected by, the assessment of the Weather Pattern Revision or the Refill Tariff Revision.

4 Refill Tariff Revision

4.1 Outline

The purpose of this revision is to remove a potential loophole in GasNet's tariff structure. This loophole might allow Users to exploit the beneficial tariffs enjoyed by withdrawals from the GNS into underground storage.

GasNet has a Transmission Refill tariff in operation for withdrawals from the GNS into the Western Underground Storage ("WUGS") facility operated by TXU at Iona in Victoria. Under this tariff, Users who withdraw gas into the storage facility are charged a withdrawal tariff that is lower than the "standard" tariff that would otherwise apply, and in particular is lower than the tariff applying at the neighbouring SEA Gas delivery point (see figure 4.1, following).

However, since the start of the current Access Arrangement Period, GasNet has become aware that recent alterations at the WUGS facility now permit gas to be injected from WUGS directly into the SEA Gas Pipeline. In effect, this creates a "back door" and enables Users who have access to the WUGS facility to ship gas from the GNS to the SEA Gas Pipeline at the cheaper WUGS withdrawal tariff.

This was obviously never intended and GasNet proposes to rectify the anomaly by reverting to a "standard" withdrawal tariff at WUGS and creating a new rebate that applies when Users **re-inject** gas from WUGS into GNS. This proposal:

- (a) removes the discriminatory advantage that WUGS Users enjoy over other Users for exports and therefore removes a threat to competition in South Australia;
- (b) preserves the original intent of the Transmission Refill Tariff; and
- (c) continues to promote storage.

4.2 Present situation

When GasNet submitted the draft Access Arrangement for approval, it proposed a simplification of the structure of the withdrawal tariffs. GasNet's previous withdrawal tariff consisted of a high peak charge applying on the five peak withdrawal days over the winter, and a low off-peak anytime charge. GasNet revised the tariff so that it consisted of a fixed anytime charge applying over the whole year. As a result, charges during the peak season declined substantially, whilst charges increased during the off-peak season.

GasNet was aware that the new tariff methodology would have a significant and disproportionate impact on the WUGS withdrawal tariff. Under the previous peak/off-peak tariff, WUGS could achieve a relatively low refill charge because a storage facility would normally refill only during the off-peak season at lower cost. However, under the revised tariff methodology, the standard charge to WUGS in 2003 would have increased from \$0.12/GJ to \$0.23/GJ. This was considered to be an undue impost on storage and not

justified by the benefits storage brings to the market in comparison to the costs it imposes on the transmission system.

Accordingly, GasNet included in the Access Arrangement a new tariff class for refill of storage facilities to ensure that:

- (a) the revised tariff method did not have a disproportionate impact on storage refill charges¹;
- (b) storage was not discouraged;
- (c) the system continued to benefit from the competition and security benefits of economic access to storage, which justified the continuation of the previous low tariff for WUGS refill; and
- (d) an element of double-charging on storage was removed (transmission charges would otherwise be levied on transport to and from a storage facility².)

GasNet's storage refill tariff recovers only the marginal cost of supply, which is principally the cost of fuel to power the compressors which supply WUGS and the LNG storage facility at Dandenong. Storage refill volumes and associated revenues and costs are excluded from the target revenue requirement and the standard tariff calculations.

The effect of the refill tariff is that Users withdrawing gas at WUGS and Dandenong enjoy a significantly lower tariff. For example, withdrawals into WUGS in 2004 attract a charge of \$0.12/GJ, in contrast to the \$0.21/GJ charged for withdrawals at the neighbouring SEA Gas delivery point.³

4.3 Why is a revision needed?

Use of GNS

At the time the storage refill tariff was proposed, it was intended that it should apply to gas withdrawals that would subsequently be re-injected into the GNS. However, since the SEA Gas Pipeline became operational in January 2004, it has been possible for Users with access to WUGS to withdraw gas from the GNS into WUGS and then export the gas via the SEA Gas Pipeline to South Australia, in effect by-passing the more expensive standard delivery point on the GNS.

Figure 4.1 shows schematically the connections between the GasNet South West pipeline, the Minerva development and the SEA Gas Pipeline. In particular, Figure 4.1 shows the SEA Gas delivery point on the South West pipeline, which is located adjacent to the WUGS facility. The SEA Gas

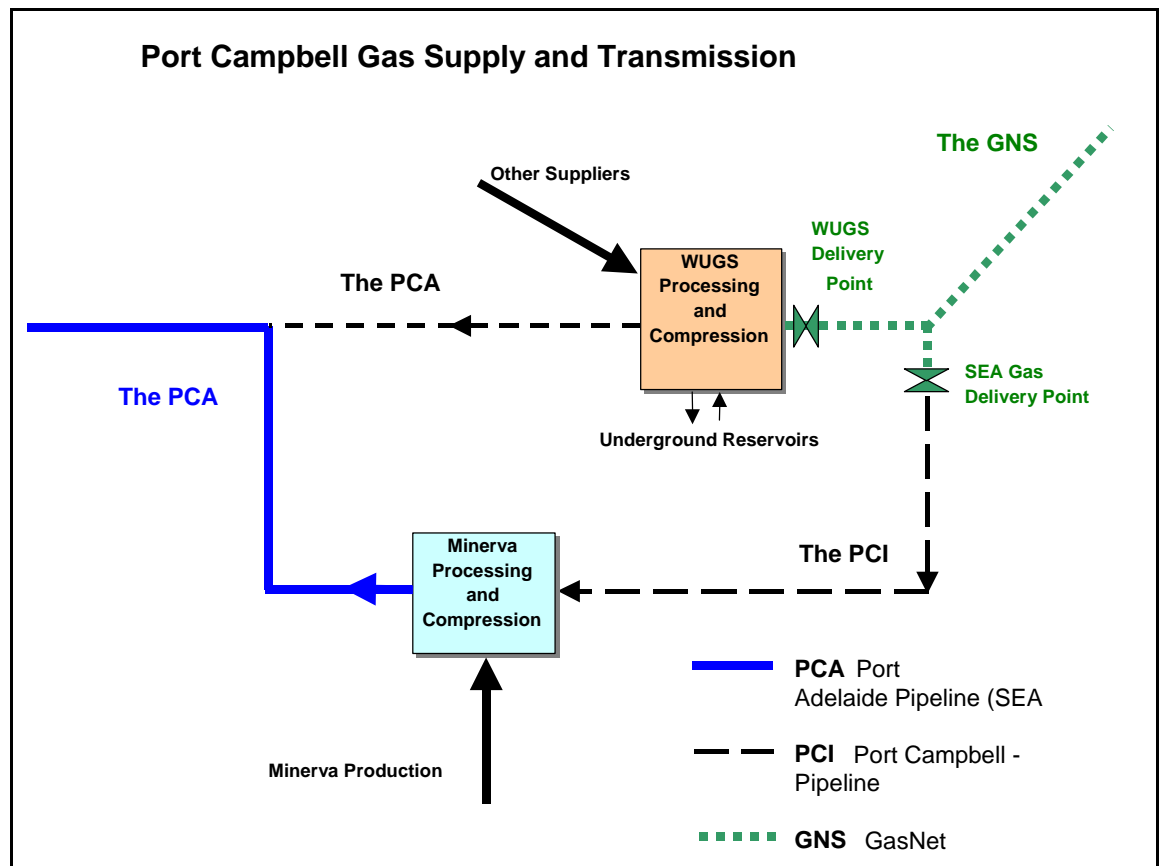
¹ The revised tariff structure would have effectively doubled the storage tariff, which was disproportionate to the effect of the new tariff structure on other end-Users.

² This means that storage Users would have had to pay for backhaul through parts of the system, and pay twice for the cost of operating overheads, which are recovered through the delivery charges.

³ The tariff at the SEAGas delivery point comprises the South West withdrawal zone tariff of \$0.08/GJ and the cross-system tariff of \$0.13/GJ, which applies when the withdrawals are sourced from injection points other than at Port Campbell.

delivery point allows for the two way flow of gas, from Minerva into the GNS, and from the GNS into the SEA Gas Pipeline. If gas is to flow into the SEA Gas Pipeline via the SEA Gas delivery point, it must be compressed to the required pipeline operating pressure using the compressors at the Minerva processing plant.

Figure 4.1 Port Campbell Facilities



The SEA Gas Pipeline became operational on 1 January 2004 but, for various reasons, the Minerva development has been delayed until late 2004. Without the Minerva compressors, the only practical way for gas to be supplied from the GNS into the SEA Gas Pipeline at sufficient pressure is via the WUGS facility, which has adequate compressor power for this task. Once the Minerva compressors are operational, it will be possible for gas from Gippsland or Yolla to be exported to South Australia via either the WUGS connection or the SEA Gas delivery point on the GNS. That is, there will be two routes to export Gippsland or Yolla gas to South Australia, via either the WUGS facility (after compression or storage) or the Minerva facility (after compression), as shown in Figure 4.1.

Special refill tariff

Under the Transmission Refill tariff, Users withdrawing gas from GNS at the WUGS delivery point are charged the lower tariff, regardless of whether the gas is being used for storage or is exported via WUGS to the SEA Gas

Pipeline. This differential in tariffs is discriminatory against Users who do not enjoy access to WUGS.

GasNet submits that it is appropriate to continue to offer a special tariff class for storage refill. However it is not appropriate to offer this special tariff to Users who take gas out of the GNS permanently via the WUGS facility. This is because:

- (a) the abuse of the Transmission Refill tariff has the potential to distort competition for gas in South Australia as only Users who have access to WUGS are able to take advantage of the lower refill tariff;
- (b) it is discriminatory to levy different tariffs for gas withdrawals at the same location when the withdrawals are used for the same purposes; and
- (c) permanent withdrawal from the system does not satisfy any of the reasons indicated above which justify a special refill tariff.

4.4 GasNet's proposal

GasNet proposes to retain the special tariff class for storage refill but to modify the WUGS refill tariff so that the benefit of the special tariff will only accrue to those Users who inject gas back into the GNS at some point in time. For these Users the impact of the change is simply the delay between making the initial payment for refill, and receiving the rebate when the gas is injected back into the GNS.⁴

GasNet will treat withdrawals at the WUGS facility in the same way as withdrawals at the adjacent SEA Gas delivery point, which means they will be considered to be exports or permanent withdrawals from the GNS. However, when gas is injected from the storage into the GNS, GasNet will provide a **rebate** on the injections to bring the original withdrawal tariff down to equal the special Transmission Refill tariff.

This procedure means that those Users who put gas into the storage and take it out at some later date to supply the GNS will only ever pay the refill rate (currently \$0.12/GJ) and those Users who withdraw gas permanently from the system will pay the same rate that other Users pay at the SEA Gas delivery point (currently \$0.21/GJ⁵).

The proposal guarantees competitive neutrality for all Users who withdraw gas permanently at Port Campbell. The proposal also avoids having to prove or disprove whether gas withdrawn from the system is being stored for future re-injection. Until gas is injected back into the GNS, withdrawals from the system will be deemed to be permanent.

⁴ Gas injected into the GNS from WUGS but withdrawn at the adjacent SEA Gas delivery point will not be credited the rebate.

⁵ As noted above, this tariff comprises the South West zone withdrawal tariff of \$0.08/GJ and the cross-system tariff of \$0.13/GJ, which applies when the withdrawals are sourced from injection points other than at Port Campbell.

This revision seeks only to correct an inappropriate use of the special Transmission Refill tariff. GasNet is not proposing to alter any forecasts or parameters which determine the Reference Tariff. Nor does the revision allow GasNet to earn more or less revenue than was intended when the Access Arrangement was approved in January 2003.

As the revenues will cover only the marginal costs, the only net benefit GasNet will receive for gas which is withdrawn from the system for the purpose of temporary storage is the time value of the rebate between the withdrawal and re-injection of the gas. For gas which is withdrawn from the system permanently, GasNet will receive the revenues as if it had been withdrawn from the SEA Gas delivery point as was intended when the Access Arrangement was approved.

If there were no other sources of supply into the storage facility, this procedure, on its own, would be sufficient to remove the incorrect and unintended use of the tariff. However, as depicted in figure 4.1, WUGS also provides processing and compression services for other suppliers in the area who effectively use the WUGS as an injection point into the GNS. It would be as inappropriate to give these Users the rebate as it would be to allow the unintended use of the Transmission Refill tariff. Therefore, it will be necessary to track the history of each User's injections and withdrawals into storage to ensure that any injections into the GNS are coming from gas previously put into WUGS from the GNS and not from other gas reserves.

The appropriate formula, applied to each User individually, to determine the rebateable volume each day is:

Daily Rebateable Volume = Volume injected into the GNS from storage that day, which must not exceed the sum of the amount put into storage from the GNS that day, added to the User's storage balance at the beginning of that day.

In mathematical terms:

Daily Rebateable Volume = Min(Daily Injection, Daily Withdrawal + Opening Daily Storage Balance).

Clearly, if the gas taken out of storage on any given day exceeds the net amount of gas stored in the facility from previous days, including any gas put into storage from the GNS on that same day, then that excess amount must have come from other suppliers into the WUGS facility, and should not be credited with the rebate.

For the purposes of this formula, the shipper's storage balance is defined as the amount put into storage from the GNS each day less any rebateable amount taken from storage on that day, summed over all days since the date this revision is implemented. The storage balance is not permitted to fall below zero, as this could only occur if gas was being injected into the GNS from other suppliers to the WUGS facility.

The storage balance as defined above is not the same as the physical balance since the physical balance will also include gas put into WUGS from local fields or withdrawn for export. The initial storage balance at the

commencement of this revision will be set at zero to reflect the fact that any gas held in storage from previous withdrawals has already paid the lower Transmission Refill tariff.

The amendments to the Access Arrangement to effect this change are provided in Schedule 1. No changes are required to the AAI.

This revision will have no effect on, and will not be affected by, the assessment of the Weather Pattern Revision or the K-factor Revision.

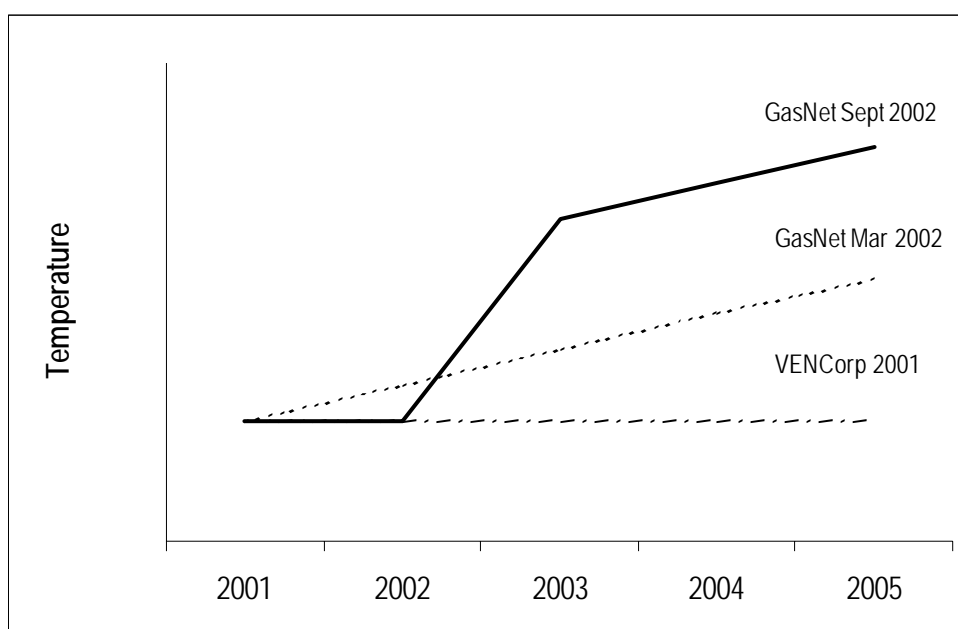
5 Weather Pattern Revision

5.1 Outline

When it submitted the draft Access Arrangement revisions in March 2002, GasNet provided evidence of a warming trend in the weather in Victoria, which affected GasNet's forecasts. The ACCC accepted GasNet's forecasts and directed VENCORP to adopt the same forecasts in its own access arrangement.

Between March and September 2002, GasNet conducted further investigations into trends in the weather. In September, GasNet submitted to the ACCC evidence of an additional apparent warming shift, or step change. Figure 5.1 illustrates GasNet's conclusions.⁶

Figure 5.1 - Warming trend (schematic)



However, as the evidence available in September 2002 was inconclusive, GasNet proposed that there be a reassessment of weather in 2004, by which time it would be apparent if there had been a shift in the weather. GasNet proposed that, if this was substantiated, then the forecast volumes for 2005 to 2007 be adjusted for the impact of the shift.⁷

In its Final Decision, the ACCC accepted GasNet's original demand forecast included in its submission of March 2002 but did not comment on the evidence of a shift in the weather pattern put forward by GasNet in September. In particular, on a related issue, the ACCC concluded that it was not appropriate to accept a modification to GasNet's March submission on forecasts of peak demand, since interested parties had not had an opportunity

⁶ The evidence GasNet submitted to the ACCC in September 2002 can be found at Annexure D of <http://accg.gov.au/content/index.phtml/itemId/329235>.

⁷ GasNet's Response to Draft Decision, September 2002; pp 35-36.

to respond to the proposal. The ACCC acknowledged that GasNet may seek an early review of its access arrangement if it had sufficient evidence to support its contention that a further warming trend needed to be accommodated⁸.

The purpose of this revision is to incorporate newly available evidence, which substantiates the shift in Victorian weather identified by GasNet in 2002, into GasNet's volume forecast for the rest of the Access Arrangement Period. In seeking this revision, GasNet is expanding on the information it provided in 2002 and providing for public comment on the evidence.

5.2 Current situation

Access Arrangement approval process

When GasNet put forward the draft Access Arrangement revisions in March 2002, it generated the tariffs to apply for the second access arrangement period by amending the tariffs that applied in the First Access Arrangement Period. A key input in the calculation of the revised tariff was the forecast of gas demand. GasNet's forecast was principally derived from the VENCORP Annual Planning Review of November 2001.

In the November 2001 Annual Planning Review, VENCORP adopted a new weather standard, following a re-assessment of Effective Degree Day ("EDD") data. EDD is a mixed measure of temperature, wind chill factor, hours of sunshine and a seasonal factor. In broad terms, a higher EDD means a colder winter and vice versa. VENCORP determined that the best estimate for average weather in 2001 was 1445 EDD.

In the 2001 Annual Planning Review, VENCORP identified an historical warming trend for the first time. VENCORP was unsure as to the cause, and likely continuation, of the warming trend and so chose not to extrapolate it into the second access arrangement period. GasNet, however, using a CSIRO report, extrapolated the warming trend into the Access Arrangement Period, which reduced the annual forecast load in 2007 by approximately 1.2PJ.

In the Draft Decision in August 2002, the ACCC accepted the GasNet forecast, including the extrapolation by GasNet of the VENCORP forecast into the forecast period.

Between March and September 2002 GasNet conducted further research and formed the view that the extrapolation of the weather standard did not sufficiently take account of a further apparent warming shift in the weather. GasNet observed that the 2002 winter was the second warmest on record, which meant that there had been five consecutive years of warmer than trend weather.

Accordingly, in September 2002, in its response to the Draft Decision, GasNet raised new concerns about the weather standard used by GasNet in the March 2002 forecast (and which the ACCC directed VENCORP to adopt). In light of its observation that 2002 was proving to be the second warmest

⁸ Final Decision, p.205.

year on record, GasNet submitted that there appeared to be an anomaly in the weather pattern, since the EDD measures for the five years 1998 to 2002 were all at or below the VENCORP 2001 weather standard, and also below the extrapolated GasNet warming trend. GasNet stated that this was evidence of a shift in weather patterns to a regime of warmer weather, which was not captured by either the weather standard used by VENCORP in the 2001 review or the GasNet forecast trend incorporated in the March submission.

As a result of this new evidence, GasNet proposed that there was a real risk of a reduction in demand. GasNet pointed out that it operated under the market carriage system and, consequently, did not enjoy the benefit of long term take or pay contracts and the associated revenue certainties that these bring. The pay-as-you-go tariff system also meant that GasNet was subject to increased gas demand volume risk, which was extremely sensitive to circumstances outside GasNet's control, such as weather patterns.

GasNet proposed that there should be re-assessment of weather patterns in 2004, by which time GasNet considered it would be apparent if there had been a shift in weather patterns. If the shift could be substantiated, GasNet proposed that the forecast volumes for 2005 to 2007 be adjusted for the impact of the shift.

In its Final Decision of November 2002, the ACCC did not comment on GasNet's contention from September 2002 that there was a shift in weather. Instead, the ACCC accepted GasNet's original demand forecast submitted in March. Similarly, in the final decision on VENCORP's access arrangement, the ACCC confirmed its view that VENCORP adopt the GasNet forecasts.

The ACCC stated that it was unable to consider GasNet's related submission on peak demand forecasts due to time constraints. The ACCC stated that it required time to receive public comment before GasNet's tariffs were implemented at the beginning of 2003. In fact, the public consultation process had concluded by the time GasNet submitted its revised evidence of warmer winters in September 2002. As GasNet did not request further public consultation, the ACCC did not consider it appropriate at that stage of the process to accept the further changes proposed by GasNet to the VENCORP forecasts. The ACCC was concerned that interested parties had not had an opportunity to respond to GasNet's proposals and would have had a legitimate expectation that previously proposed forecasts would be adopted by the ACCC.⁹

However, the ACCC went on to observe that GasNet may seek a mid-term revision if further evidence of a warming shift emerged.¹⁰

Accordingly, the tariffs in the Access Arrangement are based on GasNet's extrapolation of VENCORP's 2001 forecasts, which do not take account of the shift in the weather but only reflect a warming trend.

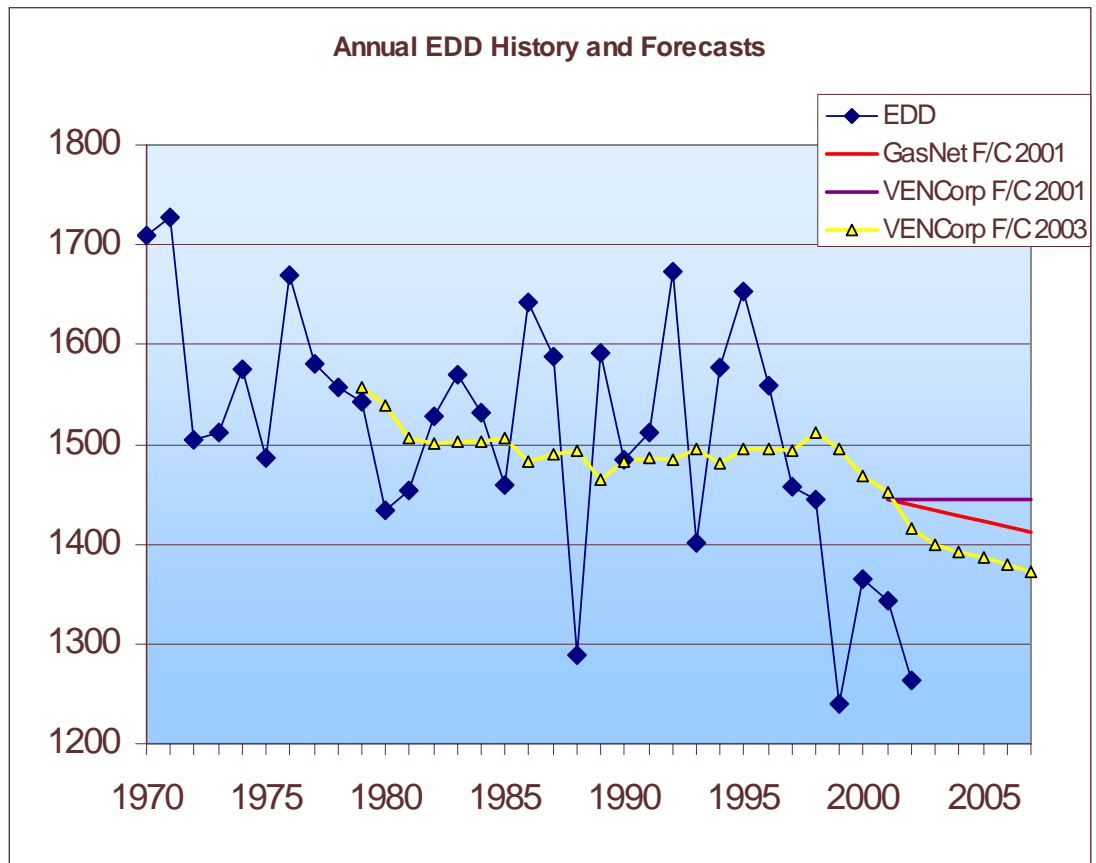
⁹ Final Decision, p.205.

¹⁰ Final Decision, p.205.

During 2003, VENCORP conducted a major review of the EDD formula and the methodology for establishing the weather standard, and revised the method it used to establish the weather standard.¹¹ VENCORP developed a new method which calculates the weather standard from a moving average of annual EDDs over 9 years. Because the new method looks at the previous 9 years, it is able to identify significant but sustained shifts in the pattern of weather. VENCORP’s analysis revealed a substantial reduction in the weather standard from 1445 EDD to an average of 1379 EDD over 2004 to 2008 (this analysis uses the old EDD formula for consistency of comparison).

The new standard does not simply recognise the trend in the weather, which was as far as GasNet was able to take the evidence in its March 2002 application. The use of an average of the previous 9 years (plus the trend) has the effect of adjusting the weather standard to take into account the apparent shift in weather since 1998. Figure 5.3 plots the variations in forecasts and EDD using the various weather standards, as projected for the forecast period, and illustrates how the revised weather standard has captured an apparent shift in weather patterns.

Figure 5.2 Comparison of Weather Standards



¹¹ The VENCORP 2003 Annual Planning Review is available at http://www.vencorp.com.au/docs/Gas_Transmission/Transmission_Planning/APR%202003%20Final.pdf

Effect of the new VENCorp method on GasNet's forecasts

The forecast EDDs derived from VENCorp's new method are shown in Table 5.1, which also shows the EDDs used by GasNet as the basis of its forecasts in the Access Arrangements. The table demonstrates that the average discrepancy from 2004 to 2007 is 38 EDD. Based on a temperature sensitivity of 40.3 TJ/EDD, this corresponds to a volume correction of -1.53 PJ per annum, as demonstrated in Table 5.2.

Table 5.1 Comparison of EDD weather standard forecasts

| | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|------|------|------|------|------|
| VENCorp Forecast 2003 (revision now proposed by GasNet) | 1400 | 1393 | 1386 | 1379 | 1372 |
| GasNet Tariff Forecast March 2002 | 1434 | 1429 | 1423 | 1418 | 1412 |
| Discrepancy | -34 | -36 | -37 | -39 | -40 |

Table 5.2 - GasNet volume forecast (including compressor fuel)

| | 2004 | 2005 | 2006 | 2007 |
|-----------------------|-------|-------|-------|-------|
| Current Forecast (PJ) | 225.3 | 232.7 | 237.2 | 241.3 |
| Revised Forecast (PJ) | 223.8 | 231.2 | 235.7 | 239.8 |

5.3 Why is a revision needed?

The forecasts in the Access Arrangements are based on inaccurate estimates of the EDD weather standard in Victoria. As GasNet is subject to the market carriage system, it is affected by increases or decreases in demand and has none of the revenue certainties of take or pay tariffs or a revenue cap. Without the revision to GasNet's forecasts to take account of the error in the weather forecast, GasNet faces the prospect of revenue shortfalls which it cannot offset through any incentive mechanism.

In addition, the ACCC acknowledged in 2002 that GasNet was entitled to seek an early review of its Access Arrangement if it had sufficient evidence to support its contention that there had been a shift in the weather. GasNet is seeking that review of the Access Arrangement now because it has evidence sufficient to demonstrate the shift and it is concerned that the volume forecasts in the Access Arrangement are based on incorrect information.

In 2002, two particular restrictions prevented the ACCC and GasNet from reflecting accurate weather data in GasNet's demand forecasts: evidentiary and procedural restrictions. Neither of these restrictions operates now.

Evidentiary restriction

In the Draft Decision in August 2002, the ACCC was sufficiently concerned at the inconsistency between GasNet's and VENCorp's demand forecasts to propose that VENCorp adopt GasNet's March 2002 demand forecasts, which

showed a continuing warming trend, over VENCORP's demand forecasts, which did not show a continuing warming trend.

By September 2002, GasNet was aware of a potential inconsistency between the forecasts in the draft Access Arrangement and the actual EDDs. Accordingly, GasNet proposed to the ACCC that, when it had evidence to substantiate the shift in weather patterns, it would revise its volume forecasts for 2005 to 2007.

GasNet is now able to substantiate the shift. In fact, the evidence on which it now relies to demonstrate the shift is more conclusive and reliable than the evidence on which GasNet relied in March 2002 to demonstrate a warming trend. If the evidence in March 2002 of a trend was sufficient to warrant a revision to VENCORP's 2003 to 2007 forecasts, then GasNet submits that the presence of extra data and analysis, which demonstrates a shift in the weather, is credible enough to support a revision to GasNet's 2005 to 2007 forecasts.

Procedural restriction

GasNet was also restricted in 2002 by the lack of time available to it in the access arrangement approval process, since material evidence based on actual outcomes of the 2002 winter was not available in March.

However, by September, the ACCC was not able to accept any further evidence submitted by GasNet as interested parties were not able to scrutinise the evidence in time for the Access Arrangement to be in force by the beginning of 2003. The ACCC concluded that interested parties would have had a legitimate expectation that it would adopt forecasts proposed by GasNet, and accepted by the ACCC, in March 2002.

GasNet submits that this procedural obstacle no longer hinders the ACCC's examination of this issue. There is sufficient time for the ACCC and interested parties to consider the new data and, in fact, as the 2003 VENCORP Review has been public for over 8 months, it is likely to have been considered by interested parties already. GasNet welcomes the opportunity for interested parties to respond to GasNet's proposal to incorporate the revised forecasts into the Access Arrangement.

Conclusion

Due to the further evidence and the lack of a procedural obstacle to scrutinising the evidence, GasNet submits it is now appropriate to seek this revision. It is also consistent with GasNet's intention in 2002.

5.4 GasNet's proposal

Revised forecast

GasNet proposes to adopt the revised forecasts outlined in table 5.2 for the period 2004 to 2007 on the basis of data released by VENCORP for 2004 to 2008 in the VENCORP 2003 Review. This does not affect the calculation of the approved target revenues but it does affect the volume forecasts, which are contained in the AAI.

Revised tariffs

The revised forecasts will produce a modest increase in tariffs of 0.65%. This will be accounted for in the Access Arrangement by revising the ATT average price factors (see 4.4, schedule 4, Access Arrangement).

Table 5.3 Impact of revised volume forecast on ATT factors

| ATT | 2004 | 2005 | 2006 | 2007 |
|------------|-------------|-------------|-------------|-------------|
| Current | 0.353196 | 0.347617 | 0.357148 | 0.366662 |
| Revised | 0.355617 | 0.349924 | 0.359473 | 0.369008 |

For administrative simplicity, GasNet does not propose to amend the current 2004 tariffs. The effect of the higher ATT factors will be that there will be a notional under-recovery this year against the revised target average price factor ATT(2004), which will cause a negative K-factor to be carried forward into 2005. The tariffs in 2005 will then need to be increased within the current bounds of the price control model by 0.65% to match the revised ATT(2005), plus a further amount to allow for the recovery of the K-factor from 2004.

These increases are well within the current cap on tariff increases of 2% over the standard CPI-X price path. In fact, GasNet is currently predicting that tariffs in 2004 will generate an over-recovery against the existing average price factor for 2004, hence the impact of this revision will be to reduce the amount of the K-factor over-recovery to be carried forward into 2005 tariffs.

This procedure has the advantage that GasNet does not need to revise and republish the individual tariffs for 2004, since the revision is absorbed into the standard annual price recalculation.

Impact on Users

The tariffs paid by Users will increase by 0.65% for the years 2004 to 2007. This amounts to a tariff increase of \$0.002/GJ on average.

As stated above, GasNet is not proposing to amend the 2004 tariffs but rather will alter the ATT for 2004 to account for the revised forecasts. By amending the ATT factors for 2004 in this way, GasNet will recover revenues that it may have recovered if it had retrospectively increased the 2004 tariffs through operation of the K-factor mechanism.

However, by retaining the cap on the K-factor mechanism, GasNet is able to protect the interests of users by ensuring tariff certainty. Under the present Access Arrangement, users cannot predict the price path from year to year, given the uncertainties in the calculation of the K-factor, but users are assured that any individual tariff component will not increase by more than the tariff cap in the formula $CPI - X + 2\%$. This tariff cap will be preserved for each tariff component. Accordingly, if any 2004 revenues are recovered through operation of the K-factor, this is in effect no different to the situation that would have prevailed prior to amending the volume forecasts.

The proposed revision to the Access Arrangement does not affect the GasNet target revenue requirement, That is, if this revision is approved, GasNet will be delivered a revenue stream which is no more than was intended at the time the Access Arrangement was approved.

Impact on GasNet

In contrast, the revision has a material impact on GasNet. As discussed above, the revision cures what would, all other things being equal, constitute an annual revenue shortfall of \$0.5 million.

Based on GasNet's regulated asset base and approved rate of return, this shortfall would be equivalent to a 26 basis point reduction in the return to GasNet's equity investors. It is obviously in GasNet's legitimate business interests to cure such a defect.

This revision will have no effect on, and will not be affected by, the assessment of the K-factor Revision or the Refill Tariff Revision.

6 Basis for revisions

6.1 Code requirements

The Code specifically contemplates that a Service Provider may seek to revise its Access Arrangement during an access arrangement period (Code 2.28). However, the Code provides no explicit guidance on how mid-term reviews should be assessed, as compared to the standard 5-yearly reviews.

In these circumstances, GasNet considers that the ACCC should apply the same principles it applied when assessing the Access Arrangement itself, that is, the ACCC will scrutinise the revisions for compliance with 2.24 and 3.1 to 3.20 of the Code and the specific provisions of the Access Arrangement. That said, GasNet recognises that mid-term reviews raise a number of issues that would not receive the same level of prominence on a standard 5-yearly review. These issues, together with GasNet's analysis in the current context, are discussed below.

6.2 ACCC cannot re-open balance of Access Arrangement

The Code is potentially ambiguous about the scope of the review open to the ACCC. Section 2.46 of the Code, which determines the scope of the review, makes a distinction between considering the "proposed revisions" and considering the "access arrangement as revised". The first concept appears narrower than the second and the Code contemplates that a different analysis is undertaken for each. This analysis, and its effect on the Access Arrangement Revisions, is discussed below.

Proposed revisions

When assessing "proposed revisions", the ACCC must take into account:

- (a) the factors described in 2.24; and
- (b) the provisions of the Access Arrangement.

A natural reading of this section suggests that it is only when considering specific revisions that the economic environment in which the Access Arrangement operates may be considered (2.24). By implication, the broader operating environment **cannot** be considered for any matter that GasNet is not seeking to amend.

For example, if GasNet chose to change one part of the K-factor, a related part of the K-factor might require consequential amendment, since it otherwise would not operate as intended. It would be difficult to argue that this related change was not appropriate. However, the ACCC could not unilaterally change GasNet's opex since:

- (a) opex is not directly related to the K-factor; and
- (b) opex would not otherwise come under the headings in 2.24.

GasNet submits that the ACCC should consider each Access Arrangement Revision separately, and in so doing, consider the environment in which the Access Arrangement operates only in relation to:

- (a) the K-factor;
- (b) the Transmission Refill tariff; and
- (c) the forecast of the weather standard.

Access arrangement as revised

Similarly, when assessing the “access arrangement as revised” GasNet submits that this exercise does not allow the ACCC to go beyond an examination of the terms of the Access Arrangement. There is some guidance on this point in the form of previous ACCC decisions on access arrangement revisions.

In previous revisions applications,¹² the ACCC has stated that, while it focuses on the specific revisions before it at the time, it will only approve revisions to an access arrangement if it is satisfied that the “access arrangement as revised” would contain the elements and satisfy the principles set out in sections 3.1 to 3.20 of the Code. As section 3.4 requires the ACCC to determine whether an access arrangement complies with the reference tariff principles described in section 8, the ACCC’s practice has been to examine whether an “access arrangement as revised” would still comply with section 8 of the Code.

To confirm compliance with section 8, the ACCC has examined whether the environment in which the particular access arrangement under review operates has changed so substantially that the access arrangement as revised would no longer comply with section 8. Although the ACCC did not give an indication as to when changes would be so “substantial”, it did note that “the costs and uncertainties likely to be associated with frequent re-assessments” militated against a reassessment where the change was not “significant”.

The ACCC has also noted that it did not consider it appropriate for its task on a revisions application to extend to repeating the full review of the access arrangement undertaken when the particular access arrangement was established, or to anticipate the review that would be conducted on the revisions commencement date.

GasNet submits that the Access Arrangement as revised with these Access Arrangements Revisions is not taken outside the principles in section 3.1 to 3.20. Nor has the environment in which the Access Arrangement operates changed so substantially that the Access Arrangement no longer complies with the Code.

However, if the ACCC considers that the environment has changed such that the reference tariff principles are affected, it is GasNet’s view that this change is not so significant that the costs and uncertainties associated with this

¹² The Final Decision on the Interconnect Application for Revision, 28 April 2000, pp.55-56 and Final Decision on the Southwest Pipeline Application for Revision, 29 June 2001, pp.65-66.

review are outweighed by the need to amend the Access Arrangement. GasNet notes particularly that the ACCC should not conduct a review at this point as this may amount to repeating the full review undertaken in 2002 or anticipating the review expected in 2007.

Conclusion

GasNet submits that the ACCC may only examine the circumstances in which the Access Arrangement operates, and to amend the Access Arrangement accordingly, if:

- (a) circumstances have changed so substantially that the Access Arrangement as revised no longer complies with the Code; or
- (b) a related part of one of the Access Arrangement Revisions will not operate as intended without examining the surrounding circumstances and amending the Access Arrangement accordingly.

Without such changes to the surrounding circumstances, GasNet submits the ACCC's task is limited to ensuring the Access Arrangement as revised includes the mandatory matters in 3.1 to 3.20 of the Code.

As there are no significant changes to the circumstances in which the Access Arrangement operates, GasNet submits that the Access Arrangement as a whole should not be re-opened before the scheduled 2007 review.

6.3 Clarification rather than fundamental change

A revision that seeks to clarify an access arrangement or cure anomalies will obviously raise fewer concerns than a revision that seeks to alter the fundamental structure or building blocks of an access arrangement. GasNet recognises that while a Service Provider is entitled to advance its legitimate business interests, this must be weighed against, for example, the interests of Users in avoiding the time and expense in considering repeated minor mid-term revisions.

In particular, the Access Arrangement Revisions do not alter the balance of risks on which the Access Arrangement is based. Any access arrangement constituted under the current incentive-based access regime will contain, at the time it is approved, an implicit balance between potential upsides and potential downsides, which acknowledges risk that both revenues and costs might deviate from the original forecast. The fact that revenues or costs might diverge one way or the other from the original forecast does not of itself change the original balance of risks, since it merely reflects the outworking of the uncertain variables that constitute the calculation of the revenue requirement (for example, volumes might be higher or lower due to changes in the GDP against the original forecast). A revision which sought to amend GasNet's tariffs to correct for the outcomes in one or more variable could change this implicit balance.

GasNet is not seeking to reduce its tariffs to compensate for an unfavourable outcome in a variable. Nor is it seeking to reduce the likelihood of experiencing the downside (or upside) of volume risk.

The Access Arrangement Revisions do not make it any more likely that GasNet will receive more revenues than forecast where volume is lower than forecast. That is, GasNet's proposed revisions do not affect its risk profile. Rather, with the K-factor Revision, the adverse effects on Users under the present risk profile are reduced, where GasNet is proposing to "smooth" the amounts under- or over-recovered to decrease the chance of tariff upsets.

Therefore, it is GasNet's view that the Access Arrangement Revisions do not alter the underlying principles or affect the substance of the Access Arrangement in such a way that it is taken outside the principles in 3.1 to 3.20.

6.4 Certainty

GasNet understands that Users seek certainty. But the need for certainty must be balanced with (and, indeed, certainty is enhanced by) ensuring the Access Arrangement operates as intended. GasNet is not making substantial changes to the Access Arrangement that would change its operation. The Access Arrangement Revisions clarify the Access Arrangement so that it better reflects the access arrangement agreed by the ACCC, GasNet and interested parties in 2002.

6.5 Cherry picking

The ACCC and Users will naturally be concerned that a Service Provider is cherry picking its amendments to seek some unfair advantage to the Service Provider (and, correspondingly, ignoring potentially unfavourable amendments).

While GasNet recognises this issue will likely attract some attention, its importance should not be overstated.

First, the cherry picking concern has no express foundation in the Code. Indeed, the Code expressly establishes a selective framework, under which only the Service Provider can seek mid-term reviews (and by implication the Service Provider can select which, if any, revisions it wishes to pursue).

Second, GasNet considers that the two main underlying concerns reflected in the cherry picking objection, are:

- (a) that a Service Provider seeks a revision to accommodate a negative aspect of, for example, a particular event, without taking into account a corresponding positive aspect; and
- (b) that a revision undermines the incentive mechanisms built into an Access Arrangement.

GasNet discusses these concerns below in 6.6 and 6.7.

6.6 Offsetting benefits

GasNet accepts that where a Service Provider seeks a revision to address a particular adverse event, the ACCC should take into account any corresponding off-setting benefits. For example, if the introduction of a new

tax is coupled with the removal or reduction of another tax, then the net impact should be considered.

However, in this case, none of the Access Arrangement Revisions has a matching event or circumstance. In particular, the Access Arrangement Revisions are either revenue neutral or simply return GasNet to the originally intended target revenue requirement.

The Code does not require either GasNet or the ACCC to consider wider issues and GasNet considers the ACCC has no basis to embark on a more wide-ranging enquiry.

6.7 Incentive mechanism

The ACCC should ask itself whether the proposed revisions undermine the objectives of the incentive mechanisms established within the Access Arrangement. It is GasNet's view that the incentive mechanisms will not be adversely affected.

For example, the Refill Tariff Revision will ensure GasNet has an incentive to expand export flows. Without the change sought in that revision, GasNet will not have such an incentive because it will only be remunerated for its fuel gas costs.

6.8 How the revisions materially affect GasNet

Finally, the Access Arrangement Revisions are not likely to deliver a windfall to GasNet. Instead, they will simply return GasNet to the status quo, making it more likely (although not a certainty) that GasNet will achieve its target revenue and that the GNS will be used in a manner that was intended when the Access Arrangement was concluded. If the revisions are not made, the intended balance of risks inherent in the spirit of the Access Arrangement may not be met and Users may potentially be disadvantaged.

For example, the K-factor Revision will not benefit GasNet in NPV terms, but GasNet's cashflow management will be improved. To the extent that this smooths out tariff fluctuations, Users will also benefit.

Similarly, the Refill Tariff Revision simply corrects an unforeseen anomaly. It gives GasNet the opportunity to earn greater revenues by applying the correct tariff to each use of the GNS. It was intended at the establishment of the Access Arrangement that GasNet benefit from any exports that occur. Revising the Refill Transmission tariff in this manner will provide an incentive to try to expand export flows by, for example, modifying or augmenting the compressor arrangements at the Brooklyn Compressor Station, since GasNet will be adequately compensated by the revised tariff.

7 Interpretation and timing

7.1 Definitions

Defined terms in this submission have the meaning given to them in the Access Arrangement, apart from the following terms:

Access Arrangement means GasNet's current access arrangement for the GNS, drafted and approved by the ACCC under section 2.42 of the Code and which commenced on 1 January 2003.

Access Arrangement Period means the period commencing on 1 January 2003 and ending on 31 December 2007.

Access Arrangement Revision means each of:

- (a) the K-factor Revision;
- (b) the Refill Tariff Revision; and
- (c) the Weather Pattern Revision.

AAI means GasNet's access arrangement information provided in support of the Access Arrangement.

Draft Decision means the decision of the ACCC dated 14 August 2002 on GasNet's proposed access arrangement.

EDD has the meaning given in section 5.2 of this submission.

Final Decision means the decision of the ACCC on 30 November 2002 on GasNet's proposed access arrangement.

First Access Arrangement Period means, in relation to the former principal transmission system, the period commencing on 15 March 1999 and ending on 31 December 2002 and, in relation to the former western transmission system, the period commencing on 1 January 1999 and ending on 31 December 2002. (The principal transmission system and the western transmission system now comprise the GNS.)

GasNet means GasNet Australia (Operations) Pty Ltd, ABN 65 083 009 278.

GJ means gigajoules.

K-factor has the meaning given in section 3 of this submission.

K-factor Revision means the revision described in section 3.2 of this submission.

Price Control Formula means the constraints on GasNet's Transmission Tariff, set out in Schedule 4 of the Access Arrangement.

PJ means petajoules.

Refill Tariff Revision means the revision described in section 4 of this submission.

SEA Gas Pipeline means the Port Campbell to Adelaide Pipeline system, the Port Campbell to Adelaide lateral system and the Port Campbell to Iona system.

TJ means terrajoules.

VENCorp 2003 Review means the Annual Gas Planning Review 2004 to 2008, published by VENCorp in November 2003.

Weather Pattern Revision means the revision described in section 5 of this submission.

WUGS has the meaning given in section 4.1 of this submission.

7.2 GasNet NSW

GasNet makes this submission for revisions to the Access Arrangement on its own behalf and on behalf of GasNet Australia (NSW) Pty Ltd, ABN 14 079 136 413, as owners of the GNS. However, GasNet and GasNet Australia (NSW) Pty Ltd are not partners. Where relevant, all references to GasNet are taken to be references to each of GasNet and GasNet Australia (NSW) Pty Ltd severally.

7.3 Timing

Under its current Access Arrangement, GasNet is required to submit to the ACCC by 17 November 2004 GasNet's proposed annual tariff adjustment for 2005. Ideally, the ACCC decision on this revision application will be made before then. However, GasNet recognises that, for a variety of reasons, the ACCC may not be able to make a decision on this revision application submission until December 2004 or even January 2005.

This has an important consequence.

The K-Factor Revision and the Weather Pattern Revisions will, if approved, affect the calculation of GasNet's 2005 tariffs. Therefore, the (routine) tariff adjustments submitted by 17 November 2004 (intended to apply for all of 2005) may well be overtaken by subsequent ACCC approval of this revision application. This would require the 2005 tariffs to be effectively re-adjusted for the outcome of the ACCC's approval.

Proposal

If the ACCC decision is not finalised before 17 November 2004, then GasNet proposes to adopt the following process.

- (a) GasNet would lodge its routine annual tariff adjustment by 17 November 2004, setting out tariffs to apply for all of 2005, based on the current Access Arrangement (ie ignoring the Access Arrangement Revisions).

- (b) If the ACCC subsequently approves one or more of these Access Arrangement Revisions, then GasNet would then re-lodge its annual tariff adjustment for approval by the ACCC based on the revised Access Arrangement.
- (c) The ACCC would then consider the re-lodged annual tariff adjustment. As with the routine tariff lodging, the ACCC would have 20 business days to consider the tariffs, although GasNet considers it is likely the ACCC would be able to make a decision in a shorter period.
- (d) The new tariffs would then take effect on a date specified in the ACCC approval.

Contingencies

This process needs to deal with a number of contingencies.

What if the final ACCC decision on the Access Arrangement Revisions is made in time to re-calculate and approve the 2005 tariffs before 1 January 2005?

This is the simplest situation. Given likely timing constraints, this would arise provided the ACCC final decision was made no later than early December 2004. In this case, the re-calculated tariffs (ie incorporating the Access Arrangement Revisions) could be approved by the ACCC before 31 December 2004, to take effect from 1 January 2005.

What if the final ACCC decision on the Access Arrangement Revisions is made too late to re-calculate and approve the 2005 tariffs before 1 January 2005?

This assumes the ACCC final decision is made later than early December 2004. In this situation, GasNet would then lodge for ACCC approval (as described above):

- (a) the re-calculated tariffs (ie incorporating the Access Arrangement Revisions); and
- (b) a nominated start date for the tariffs, which would be after 1 January 2005 (as described below, the tariff period is an input to the tariff formula and therefore having a nominated start date is critical).

The ACCC would consider the tariffs and (assuming the ACCC was satisfied) approve the tariffs and the start date.

What if the ACCC rejects all of the Access Arrangement Revisions?

If the ACCC decides against GasNet on all three revisions, then, regardless of when that decision is reached, the tariffs submitted on 17 November 2004 (as approved by the ACCC) will apply for all of 2005.

Start and end dates

GasNet's tariff model operates on a periodic basis and requires, as a key input to the tariff calculation, a start and end date for the relevant period.

Typically, this occurs on a calendar year basis, although it can accommodate other periods. For example, when GasNet lodges its proposed annual tariff adjustment by 17 November 2004, it will assume the tariffs start on 1 January 2005 and end on 31 December 2005.

GasNet to nominate start date

As described above, GasNet proposes that, if the ACCC final decision is delayed, then GasNet would, as part of its re-calculated tariff proposal, nominate a start date and then use that start date to calculate the tariffs. GasNet will still assume the tariffs end on 31 December 2005.

This obviously raises the possibility that:

- (a) one set of tariffs will start on 1 January 2005 (ie based on the current Access Arrangement); but
- (b) these would be replaced shortly thereafter by revised tariffs (ie based on the Access Arrangement Revisions).

GasNet believes its Access Arrangement Revisions can accommodate this scenario. If the Access Arrangement Revisions do not take effect until after 1 January 2005, the tariffs to apply from the nominated date to the end of 2005 can be adjusted to accommodate the under recovery from 1 January 2005 to the nominated date.

GasNet believes this modest adjustment preserves the intent of the Access Arrangement Revisions and has no significant detrimental impact on Users.

AA Revisions

In order to accommodate these transitional issues, GasNet proposes some further revisions to its Access Arrangement. These are set out in Schedule 1.

8 List of schedules

Schedule 1 - Revisions to Access Arrangement

Schedule 2 - Revisions to Access Arrangement Information

Schedule 1 - Revisions to Access Arrangement

1.1 K-Factor Revision

The following changes are required to Schedule 4 of the Access Arrangement. Insertions have been underlined and deletions have been struck out.

4.3 MATT

If regulatory year “t” is the year ended 31 December 2003 then $MATT_t$ is calculated as for $FATT_{2003}$.

Otherwise $MATT_t$ is calculated using the following formula:

$$MATT_t = ATT_t - K_t$$

where:

If regulatory year “t” is the year ended 31 December 2003 or 31 December 2004, then $K_t = KT_t$.

If KT_t is less than zero, then $K_t = KT_t$.

If KT_t is greater than or equal to zero, then

_____ If regulatory year “t” is the year ended 31 December 2005, then $K_t = KT_t/3$, and

_____ If regulatory year “t” is the year ended 31 December 2006, then $K_t = KT_t/2$, and

_____ If regulatory year “t” is the year ended 31 December 2007 or 31 December 2008, then $K_t = KT_t$.

and where:

| | |
|----------|--|
| $MATT_t$ | (in \$/GJ) is the maximum average Transmission Tariff for regulatory year “t”. |
| ATT_t | (in \$/GJ) is the average Transmission Tariff for the regulatory year “t” and adjusted for CPI and the price path factor for the Second Access Arrangement Period, based upon the forecasts at the commencement of the Second Access Arrangement Period, as calculated in accordance with clause 4.4 of this Schedule, |
| KT_t | (in \$/GJ) is a retrospective correction factor, calculated in accordance with clause 4.5 of this Schedule. |

4.6 KTa

$$KTa_t = ETR_{t-1} - (ETV_{t-1} \cdot MATT_{t-1}) - PTA_{t-1} - EEA_{t-1} + \frac{KT_{t-1} - K_{t-1}}{t}$$

where:

ETR_{t-1} (in \$) is the estimated transmission revenue in regulatory year “t-1”, based on full Transmission Tariffs as approved by the Commission for regulatory year “t-1” (i.e., no discounts are to be included).

ETV_{t-1} (in GJ) is the estimated volume of gas transmitted in regulatory year “t-1”.

$MATT_{t-1}$ (in \$/GJ) is the figure used for $MATT_t$ for regulatory year “t-1”.

PTA_{t-1} (in \$) is the Pass Through Amount submitted in t-1 as approved by the Commission for recovery (pay back) in regulatory year t.

EEA_{t-1} (in \$) is the estimated expansion allowance for Unanticipated System Expansion for regulatory year “t-1”. EEA_{t-1} is calculated as follows:

$$EEA_{t-1} = EETR_{t-1} - (EETV_{t-1} \cdot MATT_{t-1})$$

where:

$EETR_{t-1}$ (in \$) is the estimated “expansion” transmission revenue in year t-1 which is attributable to Unanticipated System Expansion, determined as follows:

If the regulatory year is the year ending 31 December 2003, then $EETR_{t-1} = 0$.

If the regulatory year is after the year ending 31 December 2003, then;

$$EETR_{t-1} = \sum_{tc} TTC_{t-1} \cdot {}^{\circ}ETD_{t-1}$$

Where:

TTC_{t-1} (in \$/GJ) is the relevant Transmission Tariff component applicable in year “t-1”

${}^{\circ}ETD_{t-1}$ (in GJ) is the estimated quantity of the relevant Transmission Tariff component in regulatory year “t-1” attributable to Unanticipated System Expansion.

\sum_{tc} is the sum over all relevant Transmission Tariff components.

EETV_{t-1} is the estimated calendar year volume that is attributable to Unanticipated System Expansion in the year “t-1”.

1.2 Refill Tariff Revision

The following changes are required to sections 1.3(c) and 1.3(d) of Part B of Schedule 1 of the Access Arrangement. Insertions have been underlined and deletions have been struck out.

(c) *Transmission Refill Tariff*

Where a Connection Point services ~~a~~the LNG Storage Facility, all gas Withdrawn through that Connection Point is subject to the Transmission Refill Tariff specified in the table below, instead of the Withdrawal Tariffs specified in clause 1.3(a) of Part B of this Schedule.

| Storage Facility Number | Storage Facility Name | Transmission Refill Tariff (\$/GJ) | X-factor |
|-------------------------|-----------------------|------------------------------------|----------|
| 1 | LNG | 0.1167 | 0.0 |
| 2 | WUGS | 0.1250 | 0.0 |

Where a Connection Point services the Western Underground Storage Facility (WUGS) at Iona, all gas Withdrawn through that Connection Point is charged at the Withdrawal Tariffs specified in clause 1.3(a) and 1.3(d) of Part B of this Schedule. This gas is not subject to or associated with the Transmission Refill Tariff and is not excluded from the calculations described in clause 4.1 of schedule 4, except as described below.

Gas which has been withdrawn from the GNS into WUGS and then re-injected into the GNS (as identified by the procedure below) is described as the “Rebateable Volume” in this schedule. The Rebateable Volume is deemed to be associated with the Transmission Refill Tariff for the purposes of this clause, clause 1.3(d) of Part B of this Schedule and clause 4.1 of schedule 4. This gas is credited with a rebate.

For the purpose of calculating the rebate, and for the purpose of determining the volumes and revenues which are excluded from the calculations of clause 4.1 of schedule 4, the Rebateable Volume in regulatory year “t” is allocated between the regulatory year “t” and the previous regulatory year “t-1” as follows:

Rebateable Volume in year “t” = the minimum of the Total Rebateable Volume for regulatory year “t” and the gas volume Withdrawn at the Connection Point during that year, and

Rebateable Volume in regulatory year “t-1” = the remainder of the Total Rebateable Volume.

where

Total Rebateable Volume = the sum of the Daily Rebateable Volume over each day of the regulatory year.

where

Daily Rebateable Volume = the lesser of the volume injected into the GNS from the Connection Point during the day, and the sum of the volume Withdrawn from the GNS at that Connection Point on that day and the Opening Balance for that day.

where

Opening Balance for a given day is the sum over all days from the Effective Date to the beginning of that day of the difference between the Daily Withdrawal from the GNS and the Daily Rebateable Volume at the Connection Point;

where

the Effective Date is the date on which the Refill Tariff Revision to GasNet’s Access Arrangement takes effect, and the Opening Balance on that day is set at zero

The gas volumes injected at the WUGS Connection Point and matched to gas Withdrawals subject to the System Export Tariff at Port Campbell as described in clause 1.3(b) of Part B of this Schedule, are not deemed to be gas Injections for the purposes of calculation of the Rebateable Volumes.

The rebate payable on the Rebateable Volume is the difference between the Withdrawal Tariff specified in clauses 1.3(a) and 1.3(d) of Part B of this Schedule, and the Transmission Refill Tariff shown in the table above, for the regulatory year “t”, or the applicable tariffs applying in the previous regulatory year “t-1”.

(d) *Cross System Withdrawal Tariff*

If:

- (i) gas is Withdrawn at a Connection Point, other than ~~a Connection Point servicing a Storage Facility~~ other than gas associated with the Transmission Refill Tariff, located on an Injection Pipeline other than the Interconnect Pipeline; and
- (ii) that Withdrawal is a Matched Withdrawal with respect to an Injection Zone other than the Injection Zone for that Injection Pipeline,

then the Withdrawal is subject to the following Cross System Withdrawal Tariff in addition to the applicable Injection Tariff and Withdrawal Tariff.

1.3 Weather Pattern Revision

The following changes are required to section 4.4, Schedule 4 of the Access Arrangement. Insertions have been underlined and deletions have been struck out.

4.4 ATT

ATT_t-1 (in \$/GJ) is determined in accordance with the following:

| For regulatory year "t" | ATT _t |
|-------------------------|---|
| 2004 | = 0.353196 <u>0.355617</u> .CPI ₍₂₀₀₄₎ . $(1 - PPT)$ |
| 2005 | = 0.347617 <u>0.349924</u> .CPI ₍₂₀₀₄₎ .CPI ₍₂₀₀₅₎ . $(1 - PPT)^2$ |
| 2006 | = 0.357148 <u>0.359473</u> .CPI ₍₂₀₀₄₎ .CPI ₍₂₀₀₅₎ .CPI ₍₂₀₀₆₎ . $(1 - PPT)^3$ |
| 2007 | = 0.366662 <u>0.369008</u> .CPI ₍₂₀₀₄₎ .CPI ₍₂₀₀₅₎ .CPI ₍₂₀₀₆₎ .CPI ₍₂₀₀₇₎ . $(1 - PPT)^4$ |

where:

CPI_t is the CPI for regulatory year "t". (i.e., annual CPI movement for the period to the previous 30th September expressed as index at 30 Sept_{t-1} /index at 30 Sept_{t-2})

PPT is the price path factor for the Second Access Arrangement Period expressed as an index, as follows:

$$PPT = 0.05$$

1.4 Timing amendment

The following changes are required to Schedule 3 of the Access Arrangement. Insertions have been underlined (there are no deletions).

3.6 Proposing tariffs after revision

If, at any time prior to the Revisions Commencement Date, this Access Arrangement is revised under the Code and, as a result of the revision, the Reference Tariffs or the Reference Tariff Policy is (or are to be) revised, then GasNet may give the Commission a statement:

(a) specifying a date on which the revision will take effect ("Start Date");

(b) setting out its proposed Transmission Tariffs for the period commencing on the Start Date and ending on the day before the start of the next Regulatory Year;

- (c) setting out the proposed tariff components for each of those Transmission Tariffs;
- (d) demonstrating compliance of the proposed Transmission Tariffs with the relevant principles and formulae in Schedule 4; and
- (e) setting out the proposed changes (if any) in the billing parameters contained in Schedule 1, or to any other matters in that schedule.

3.7 Commission's approval

- (a) The Commission must not approve a statement given by GasNet under clause 3.6 of this Schedule if the statement does not comply with the relevant principles and formulae in Schedule 4.
- (b) The Commission must approve a statement given by GasNet under clause 3.6 of this Schedule if:
 - (i) the statement complies with the relevant principles and formulae in Schedule 4; and
 - (ii) all the forecasts included in the statement are satisfactory to the Commission.
- (c) If the Commission does not notify GasNet of the Commission's decision regarding a statement given by GasNet under clause 3.5 of this Schedule within 20 Business Days of the Commission receiving the statement, the Commission is taken to have approved the statement.
- (d) If, under clause 3.7(a) of this Schedule the Commission does not approve a statement given by GasNet, the Commission may allow GasNet to replace the statement within such time as specified by the Commission.
- (e) Where a statement has been replaced in accordance with clause 3.7(a) of this Schedule, the replacement statement will be taken to be a statement validly provided under clause 3.6 of this Schedule and the replaced statement will be taken not to have been submitted by GasNet.

3.8 Effective date

The Transmission Tariffs in the statement given by GasNet approved or taken to have been approved by the Commission under clause 3.7 of this Schedule apply from the latest of:

- (a) the date on which the Commission approves or is taken to have approved the alteration; or
- (b) the Start Date specified in the statement.

3.9 Interpretation

In clauses 3.6 and 3.7 of this Schedule, a reference to Schedule 1 or Schedule 4 is taken to be a reference to that Schedule as amended by any relevant revisions under the Code.

Schedule 2 - Revisions to Access Arrangement Information

2.1 Weather Pattern Revision

Following are the amendments required to tables 4.2 and 4.4 in section 4.

Table 4.2: Forecast demand 2005-2007

| Demand and Volume | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------------|-------------|------------------------|------------------------|------------------------|------------------------|
| Peak Demand (TJ/d) | 1132 | 1174 | 1209 | 1235 | 1257 |
| Annual Volume (PJ) | 216.2 | 225.3 223.8 | 232.7 231.2 | 237.2 235.7 | 241.3 239.8 |

The revised volumes for Table 4.4 (excluding compressor fuel) are as follows:

| | Revised Forecasts | | | |
|---------------|--------------------------|---------------|---------------|---------------|
| | 2004 | 2005 | 2006 | 2007 |
| La Trobe | 14363 | 17335 | 17851 | 18165 |
| Lurgi | 1548 | 1595 | 1644 | 1695 |
| Metro NW | 92720 | 94593 | 96016 | 97693 |
| Metro SE | 80833 | 82183 | 83298 | 83858 |
| Calder | 9956 | 10241 | 10483 | 10662 |
| South Hume | 862 | 886 | 907 | 921 |
| Echuca | 7043 | 7218 | 7355 | 7405 |
| North Hume | 2197 | 2251 | 2293 | 2305 |
| Murray Valley | 1355 | 1597 | 1837 | 2114 |
| Wodonga | 4723 | 4770 | 4818 | 4867 |
| Tyers | 3119 | 3241 | 3661 | 4282 |
| SWP | 580 | 584 | 687 | 789 |
| Warrnambool | 1406 | 1464 | 1525 | 1588 |
| Koroit | 836 | 869 | 903 | 936 |
| WTS | 1850 | 1926 | 2004 | 2083 |
| Total | 223391 | 230755 | 235283 | 239363 |