21 June 2002

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Australian Competition and Consumer Commissioner
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Dear Ms Kaur

GasNet & VenCorp Access Arrangements

Please find attached BHP Billiton's second submission on GasNet's and Vencorp's Access Arrangements applications. BHP Billiton's believes that the proposal by GasNet to "readjust" the Initial Capital Base, which is neither permitted by the Code nor equitable, is an ambit claim and as such must be rejected.

GasNets proposed WACC is, when compared to the real world benchmarks, unacceptably high. The ACCC must have the "regulatory courage" to move the WACC debate forward from an academic indulgence to one grounded in commercial reality.

The proposal by GasNet to tilt the playing field by seeking to disadvantage East Victorian system injectors (the majority of the Victorian gas market users) relative to Northern and Western injectors has been seen before in their SWP roll in application. GasNet has again attempted to justify it on flawed analysis and the ACCC must firmly reject this attempt to tilt the playing field.

GasNet's proposal to merge all its Victorian assets in to one access arrangement is, in principle, a reasonable proposal but the ACCC must ensure that the 'users pays' principle is maintained and that users of the PTS do not in any way subsidise the SWP or WTS.

As made clear in our first submission the information provided up till early June 2002 does not provide an adequate explanation of the derivation of the tariff. This information is necessary for both ACCC and users to establish whether the tariffs derived are fair, reasonable and efficient. BHP Billiton reiterates our formal request for the ACCC, under Section 2.9 (b) of the Third Party Access Code to consider whether the Access Arrangement Information provided by GasNet and VENCorp for the Victorian transmission network complies in full with Sections 2.6 and 2.7 of the Code.

BHP Billiton reserves the right to lodge further submissions on key issues when further information is made available by the applicants to in order to comply with their information disclosure requirements under the Code. In addition we have not yet had time to consider any of the issues raised in "GasNet's response to submissions" and "Annexure 9 – 2001 Comparative Performance Benchmarking for Natural Gas Pipeline Industry" and will be submitting a response in due course.

If you have any questions regarding this submission please do not hesitate to contact me on (03) 9652 6800.

Yours sincerely,

David Murphy
Gas Marketing Manager

bhpbilliton

BHP-Billiton Submission

To Australian Competition and Consumers Commission

On The GasNet And VENCorp

Access Arrangements Applications

June 2002

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1. *GasNet Australia: Proposal To Revalue The Initial Capital Base. Advice from Allens Arthur Robinson.*
2. *The Weighted Average Cost of Capital for Gas Transmission Services: Comment On WACC Proposals By GasNet Australia Report by Pareto Associates Pty Ltd.*
3. *2003 Victorian Gas Access Arrangements, VENCorp's Issues Paper. A review by BHP Billiton.*

Section 1 Introduction

This submission provides BHP Billiton's further comments to the Australian Competition and Consumers Commission regarding the GasNet and VENCorp Access Arrangements Applications. The submission is a review of the material that has been submitted by GasNet and VENCorp and is not a comprehensive and final assessment. Until GasNet (in particular) comes forth with sufficient information upon which to base a realistic review and support reasonable challenges to its proposals, no review of GasNet's application can be considered comprehensive.[1]

This submission draws particular attention to the extensive claims by GasNet for significantly higher capital and non-capital costs and the failure of GasNet to adequately justify and/or substantiate these claims (even with the sparse and selective information submitted in its application). It also evaluates GasNet's proposal to "tilt the playing field" to cross-subsidise particular assets in its system, and its overall approach in passing all significant risks to users of the GasNet system whilst still claiming a high WACC.

Section 2 begins by rejecting GasNet's claims that the ACCC should take a pro-infrastructure approach and instead highlights that the review should be carried out strictly in accordance with the Gas Code.

In **Section 3** detailed evaluation is undertaken to demonstrate GasNet's attempts at tilting the playing field. In this section, we critique the work by Saturn and in doing so demonstrate that there is no validity to GasNet's claims for its Longford assets to be depreciated faster than the South West Pipeline (SWP) assets. The Section also addresses GasNet's proposal to roll in SWP to its system.

In **Section 4** commentary is provided on the validity of GasNet's proposal to pass all significant risks to users of the system.

Section 5 rejects the proposal to revalue the Initial Capital Base against relevant Code provisions and the Victorian Tariff Order.

Section 6 analyses the ambit WACC claims by GasNet.

Finally, **Sections 7 to 10** examine a range of other issues, including on capex, opex and matters dealing with VENCorp.

[1] See BHP Billiton submission (May 2002) "Comments On GasNet's And VENCorp's Access Arrangements Applications" for a comprehensive review of information disclosure deficiencies, particularly by GasNet.

Section 2 The Access Review Must Meet With Code Provisions

BHP Billiton considers that, in the present access review, the ACCC should and must assess GasNet's application (particularly its claims on capital and non-capital costs, high WACC, and the pass through of all significant risks to users) against relevant provisions of the Code (e.g. on cost reflectivity), including the objectives of the Code which seek to establish a framework that:-

> " (a) facilitates the development and operation of a national market for natural gas; and
> (b) prevents abuse of monopoly power; and
> (c) promotes a competitive market for natural gas in which customers may choose suppliers, including producers, retailers and traders; and
> (d) provides rights of access to natural gas pipelines on conditions that are fair and reasonable for both Service Providers and Users; and
> (e) provides for resolution of disputes."

BHP Billiton also considers that the ACCC must, consistent with Code provisions, address the significant information deficiencies so apparent in the GasNet application.

We note GasNet has proposed to the ACCC that, in the present access review, it should support:-

> "…. GasNet's overall philosophy that in setting terms of access (including pricing) the Commission should adopt a pro-infrastructure approach. In the long run this will lead to benefits to consumers in the form of greater investments and competition in pipelines".[2]

GasNet selectively quotes from publications including those prepared by, or for, pipeline companies, to support its philosophy relating to access reviews. These arguments[3] are familiar to BHP Billiton and have been comprehensively critiqued by informed observers in other fora.[4]

A basic and familiar argument advanced by pipeline companies is often to assert that infrastructure owners may enjoy monopolies and argues that such monopolies and the extraction of monopoly rents from them can be justified as the price of investment. In other words they allege that what may seem

[2] GasNet Australia Access Arrangement Submission, p.16.
[3] Network Economics Consulting Group (2001). Submission to the Productivity Commission Inquiry into Part IIIA.
[4] Dwyer T and Lim RKH (2001). Some observations on economic arguments advanced on behalf of infrastructure owners in relation to the Productivity Commission Inquiry into access regimes.

from a static welfare economics perspective to be monopoly rent seeking is in a dynamic sense a process of entrepreneurial profit seeking which brings forth investment in infrastructure which would otherwise have not existed. From this point of view, the owners of monopoly infrastructure may see themselves as public benefactors.[5]

Moreover, as observed by Dwyer and Lim[6] this view "is essentially the argument that supply at some price is better than no supply or that the deadweight loss caused by an infinite price will exceed that caused by a finite price. This is perfectly true, but it does not logically follow that monopoly rents should be tolerated. This is like saying that, rather then complain about service failure, users should simply pay more to increase profits for the infrastructure provider in the hope (but with no contractual guarantee) that things will be better next time".

"The reality is that utility owners are enjoying good returns, and that their revenues often include an element of monopoly rent which has been capitalised into their business valuation. The existing situation is far from optimal. Appeals for further access to monopoly rents by monopoly owners of infrastructure (who rarely wish to pay access fees for their monopoly rights over public and private land) should not be entertained. Rent seeking is a socially unproductive activity which constitutes a form of hidden taxation, lowering the living standards of Australians and the productivity and international competitiveness of Australian industries".

BHP Billiton accepts that it is important to avoid disincentives to infrastructure investments. But it is a far cry for infrastructure owners to then argue that monopoly rents should be allowed as the price of that investment and security of infrastructure services. If the price of attracting capital into infrastructure investment is the destruction of profitability and investment (and employment) in downstream and upstream industries, the price is too high. It is precisely by removing monopoly rents that good regulation (i.e. by effective and informed access reviews) promotes downstream and upstream investments.

Rather than taking a pro-infrastructure approach in the access review, the ACCC should must and assess GasNet's application against the objectives and relevant provisions of the Code which, inter alia, seek to facilitate and promote a competitive national market for gas, prevent abuse of monopoly power, and provide access on fair and reasonable conditions.

[5] Ibid, p.1.
[6] Ibid, p. .6

Section 3 The Access Review cannot allow the "playing field" to be tilted

3.1 Forecasts of gas supply and basin depletion

GasNet originally embargoed the Saturn report on the "Remaining economic life of GasNet's transmission assets" but it was subsequently released in a format stated as suitable for public viewing. GasNet has used the report to substantiate a more rapid depreciation for Longford related assets (increasing the PTS tariff) and to artificially reduce the depreciation of SWP assets (causing a reduction in the SWP tariff). These decisions by GasNet place an inappropriate imposition on PTS users, and give SWP users an unnecessary and incorrect benefit, which cannot be reasonably justified.

As the report has been used to demonstrate that the Longford GasNet assets should be depreciated faster and the South West Pipeline (SWP) assets slower than might otherwise be expected, BHP-Billiton must take issue with the calculations, assessments and conclusions.

There have been extensive assessments of basin lives carried out by many commentators and it is not the purpose of this submission to critique any of them.

In assessing the GasNet access arrangement, the importance of the forecasts of gas supply must not be underestimated, as they underpin the tariff structure, the supply pattern for the regulatory period under review, the depreciation rate to be applied in the current and future allowable revenue streams, and the capex requirements to support the current and future regulated revenue streams.

It is not the intention of this submission to analyse the methodology used by Saturn, but rather to highlight that the outcomes from Saturn's analysis present some conclusions which do not equate well with established facts or indeed with actual investments made in the oil and gas supply industry. However, we do state that the entire Saturn report is scenario dependent, and does not represent the actual gas contract position nor future gas pricing. In particular, it appears to contain contradictions and inconsistencies and as such we will use the raw data incorporated in the report to demonstrate that an entirely different conclusion (i.e. that GasNet Longford-Melbourne assets should be depreciated no faster than other parts of the network) should be drawn from the report.

In any event a proposal that impacts the uses of gas injected into the PTS in eastern Victoria in the immediate 2003-08 period based on long term forecasts that by their very nature must be speculative and do not refect actual contractual positions is inequitable and must be rejected.

The most disconcerting feature of the Saturn report is the assumption of the drawdown rates from each gas basin serving the south eastern Australian states, which are then used to support conclusions of basin lives of Gippsland, Cooper, Otway and Bass. Table 4 Estimates of Gippsland, Otway and Bass basin depletions in the Saturn report (page 27) lists a total average drawdown for the four basins serving SE Australia of 942 pj/a up to 2020. ABARE, however, projects that the combined demand of all four states in south eastern Australia might rise to 743.5 pj in year 2015, and NIEIR contends that 2015 demand might reach 831.3 pj by that time. On the other hand, VENCorp's expectation for Victorian demand at that time indicates that both of these figures might be too high. GasNet itself is of the same view that these forecasts may well be high when it states[7]

> "However, based on recent research, it appears that previous forecasts from VENCorp and its predecessors were biased upwards."

Using the ABARE figures for the period to 2020 (allowing that NIEIR figures are higher and VENCorp's are lower), the average drawdown from all basins will be about 650 pj/a - a far cry from the implied 942 pj/a contained in the Saturn report. On the basis of this approach, the actual reserves of the four basins will in aggregate give a life of Saturn's assessed actual gas reserves of nearly 40 years, or a depletion date beyond 2040, rather than 2024.

In the specific case of the Gippsland basin (using a withdrawal rate based on ABARE usage figures for Victoria, Tasmania and an estimated supply of 25% of the NSW market) when combined with flows from Bass basin and 10% of Otway basin (currently 90% of Minerva field is contracted to South Australia), the Gippsland basin will have a depletion date beyond 2040 (using Saturn's numbers for actual reserves). Even on existing proven reserves the Gippsland basin has an economic life well past 2025. [Using Saturn's numbers for "actual reserves" and allowing 90% of Otway for SA, and 75% of NSW to come from Cooper, indicates a depletion date of Cooper basin reserves of about 2037].

As a reality check on the outworkings of the Saturn report, there are some aspects that need to be incorporated into the assessment of reserves and the numbers used by Saturn within the report.

a. It is well known and accepted exploration lore in the gas industry that "current reserves" are usually proven only to provide a future gas supply of between 8 to 12 years of supply at the current demand level. A review of reports over the years giving statements of current reserves of both Gippsland and Cooper Basins tends to support this practice. The current proven reserves show a greater life expectancy than is implied by this range.
b. The Saturn report, and all of the forecasters (NIEIR, ABARE, and VENCorp) indicate that the growth of the Melbourne and

[7] GasNet Australia Access Arrangement – Submission 27 March 2002, page 105

associated demands will be in the range of 330 to 360 pj/a by 2015 (VENCorp has slightly lower expectations). However, the maximum delivery capacity of the GasNet assets is 990 tj/d, which even allowing for a high load factor of 80%, limits the existing GasNet facilities to delivering some 290 pj/a, well below the forecast demands. In fact, based on some demand forecasts, some augmentation of the GasNet System from Longford may even be required during the current access arrangement.

c. As a result of the expectation of greater reserves, we have seen in recent years the completion of a gas pipeline from Longford to Sydney and a pipeline from Longford to Tasmania is in the process of construction. It would be surprising if these major investments were made based only on the current proven reserves and expectations data.
d. ExxonMobil and BHP Billiton have dedicated funds for further exploration in Gippsland basin, as have other parties. Further exploration of the Otway basin is also proceeding.

Not only are there concerns with the conclusions regarding basin life and reserves drawn by Saturn in its report, we would also highlight that the forecasts included in the report and used to indicate prospective usage, need to be treated with a degree of caution, and we would observe that:-

1. Projected gas consumption figures for Victoria in 2014 are (ABARE and NIEIR respectively):-
    a. for power use (70.6 pj and 38.4pj) and
    b. all other use (275pj and 323.5pj),

    demonstrating that there is considerable variation in the forecast demands, and particularly highlight the extent of the major variance of forecasts for both power usage and for other uses. GasNet itself prefers to use lower forecast figures (see points 2 and 3 below)
2. GasNet forecasts appear to show a lower gas usage growth and GasNet states that experience of the actual usage over the last period shows that the VENCorp and other forecasts were high, causing GasNet to under-run on revenue.
3. GasNet in its submission shows a weather warming trend and as a result wishes to reduce the VENCorp gas usage forecasts for the coming period. Thus, GasNet has an expectation that gas for uses other than power generation may not increase as quickly as other forecasters.
4. Gas usage forecasts included for the operation of the Maryvale cogeneration plant and the Golden Plains generation plant. Neither of these projects is expected to proceed in the near to medium term.
5. Much of the planned use of gas for electricity is to address the “needle peak” power demand experienced in Victoria. However, augmentation of the electricity interconnector between Victoria and NSW is proceeding, a further augmentation is planned, as is the BassLink electricity interconnector to Tasmania. All these will

> put downward pressure on the growth of gas fired generation in Victoria for the short to medium term.

As can be seen, the conclusions of the Saturn report present an extraordinary view on the economic life of gas basins supplying gas to the states of NSW, SA, Victoria, and Tasmania, on the recent investments made in pipeline construction and on the investments actually being made in oil and gas exploration.

Consequently, there are sufficient doubts about the outworkings of the Saturn report which in turn gives rise to concern as to the conclusions it makes, both with regard to the basin depletion rates and the forecast usage in the different markets.

Based on the information provided by Saturn an assessment of the actual reserves of the four gas basins serving south eastern States would give a depletion rate beyond 2040, rather than 2024 as suggested by Saturn. The proposal for Longford assets to be depreciated faster relative to SWP assets must be rejected.

3.2 South West Pipeline (SWP)

GasNet has already attempted to have the SWP "rolled into" the PTS. In that review, the ACCC had determined[8] that

> The Commission is not convinced that GPU GasNet's investment in the Southwest Pipeline would pass the system-wide benefits test. For this reason in particular, the Commission has now made a final decision under section 2.38(a)(ii) of the Code that it does not approve the revisions to the PTS access arrangement. The Commission also has reservations about the prudency of the investment and is uncertain as to the portion of the investment that would pass the economic feasibility test. In addition, the Commission considers that the proposed tariff structure is inconsistent with the principles of the Code.

The ACCC also stated[9] that

> It is concerned that GPU GasNet's proposal to fund the majority of its investment in the Southwest Pipeline through increased Longford charges is inconsistent with cost allocation and cost-reflectivity principles and would be likely to distort investment decisions.

[8] Access Arrangement for the Principal Transmission System, Application for Revision by GPU GasNet Pty Ltd, Southwest Pipeline 29 June 2001 – ACCC Final Decision, page ix

[9] ibid, page viii

There is little in the new GasNet submission to the ACCC which provides any support for the "rolling in" of all the GasNet assets into one effective tariff arrangement. In fact, GasNet has recognized this in its proposal that SWP and WTS should have stand alone and unique tariffs for each of the three pipeline elements comprising its one access arrangement.

There is no justification for the "rolling in" of the (SWP) pipeline of itself. To do so is tantamount to declaring that by the connection of the Melbourne (and associated Victorian) gas demands to a new gas field, that this new pipeline should be considered part of the existing system. If SWP were to be rolled into the PTS, it would be similar to accepting that (say) the Eastern Gas Pipeline could be rolled into the NSW gas system. The only advantage that users see for allowing GasNet to have a single access arrangement, is that there should be a reduction in regulatory costs which should be passed onto users.

BHP Billiton has no "in principle" objection to GasNet having one access arrangement for all its assets, and recognizes the cost benefits of such an approach. However, BHP Billiton is extremely concerned that acceptance of a single access arrangement provides the opportunity for GasNet to cross subsidise what may be uneconomic elements within the GasNet system.

In an earlier submission to the ACCC in response to the Issues Paper from the ACCC about the proposed "roll in" of SWP, BHP Billiton[10] stated:-

> If the Commission accepts GPU's design proposal it will send a clear signal to all stakeholders that the ACCC has disregarded the user pays principle and the ability of the market to determine how to most efficiently ensure supply.

BHP Billiton maintains this stance and reiterates its view that should the ACCC agree to allowing one access arrangement for all GasNet assets, then the allocation of costs, and recovery of revenue from the discrete elements of SWP and WTS needs to be clearly and fully identified and then ring-fenced to ensure there is no cross subsidization from PTS. Such ringfencing needs to ensure that costs which GasNet desires to be "postage stamped" also need to be properly and fairly allocated to the discrete elements. Further, as GasNet intends to allocate future benefits and K-factor under-recoveries, these need to be identified accurately and allocated to where they are generated.

BHP Billiton recommends that should the ACCC agree that GasNet may have one access arrangement applying to all its system assets, then it should also require GasNet to define how it will fully ring-fence its cost and revenue structures to demonstrate compliance with the ring-fencing requirement. As GasNet has already indicated that it desires separate tariff structures for these two elements, this requirement for a compliance audit is in keeping with the proposal put forward by the applicant.

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[10] Application for revision to access arrangement by GPU GasNet for roll-in of the south west pipeline BHP submission 17 January 2001

The ACCC must ensure that all cost allocations and revenue recovery from the three basic discrete elements of the GasNet system are clearly assessed, identified and ring-fenced to prevent cross-subsidisation. GasNet must demonstrate compliance with the appropriate ring-fencing requirements.

3.3 Tariff structure for South West Pipeline (SWP)

Whilst GasNet has advised that it wishes to have one access arrangement for all of its assets, it has also stated that it considers SWP should have its own "stand alone" tariff. BHP Billiton has no objection to this provided the tariff structure for SWP is based on the risk profile appropriate to the asset.

The history of the SWP and its tariff has included a government contribution, an accelerated construction program, an attempt to "roll-in" the asset, a two way flow of gas, and what appears to be a declining usage pattern (schedule 7 presents confusing data about injections and withdrawals). The Saturn report would indicate that it is unlikely there will be significant gas flows from the Otway basin in the near term, and the decision for Minerva gas to go to Adelaide via the recently committed SEAGas pipeline would support this view.

As the development of the Geographe and Thylacine wells has yet to commence it would be somewhat optimistic if the developers were able to bring these gas fields into production during the forth-coming regulatory period. As most of the gas from Minerva has been allocated to provide for the Adelaide market, it supports the view that SWP is unlikely to deliver significant quantities of "new" gas into the Victorian market in the near term.

There are anecdotal observations that gas from Iona (replenished from the Melbourne supply) might well be used for gas supply to service certain Adelaide demands. This raises the concept that SWP could well provide a significant backhaul service, higher than anticipated from the need to backhaul purely for the "stabilizing service" the WUGS is to provide. However development of such an alternative use of Gippsland gas might require much of the duration of the regulatory period under review and is unlikely to have a major impact on the revenue stream until later within the time frame.

There is no doubt that in the regulatory period under review, SWP will be a greatly under-utilised resource and consequently the tariff structure must reflect this.

GasNet, however, proposes to allocate "incremental costs" to SWP (schedule 5.7.4). This is inappropriate as this approach will provide an element of cross subsidisation from the rest of the GasNet assets. BHP Billiton accepts the GasNet proposal to have a single access arrangement, but is strongly of the view that any cross subsidy from PTS to SWP is contrary to the cost reflective principles embodied in the Gas Code. It should be noted that SWP was constructed as a separate pipeline to provide access to the more recently developed gas fields in south western Victoria.

Therefore, the tariff for SWP should contain the following features:-

1. It should be totally self sufficient, with all costs associated with it being allocated to the relevant tariff.
2. The K-factor carryover provision permitted for the total revenue base should be allocated to the SWP in proportion to the values of the asset base, and any SWP K-factor carryover share should only be recovered from future SWP tariffs.
3. Capex and depreciation applying to SWP must be directly allocated to SWP.
4. The proposal for postage stamp allocation exclusively on an "annual volume usage basis" of most non-capital items from the approved revenue is an inappropriate basis for allocating all of the SWP shares of these costs. We would suggest that MDQ usage, asset value, diameter-length and number of daily transactions involved are more cost reflective bases and should be used. [Refer also to section 9 of this submission on Opex]
5. As there is likely to be as much (or even more) "backhaul" as "forwardhaul" on SWP, the tariff should be structured to reflect this fact. Further, GasNet advises that it believes that as the gas sent for storage at Iona is to be used later for balancing the Melbourne system, it should only incur a single injection cost. This is not a cost reflective approach and all usage of the SWP should incur an appropriate charge, regardless of flow direction and the assumed later use of the gas. Thus, cost reflective tariffs would be more readily achieved by providing injection and withdrawal rates for both Iona and Lara.
6. We note that GasNet proposes a "low start" recovery of costs for SWP. Whilst we accept it is the province of the asset owner to decide to defer revenue in the early stage of the life of a new asset, we have serious concerns that permitting GasNet to significantly underprice the SWP tariff, may lead to unnecessary and unforeseen problems in the future. Therefore, the degree of early underpricing of tariffs for SWP should be minimized, and controls instituted to ensure GasNet is unable to recover from any other of GasNet assets, any of the planned shortfalls of costs from SWP either now or in the future. GasNet should be required to clearly segregate all SWP costs, and declare these in future access arrangements.

GasNet has calculated in its roll forward of the new capital base the full amount for the SWP. The Code only permits the incorporation of the value of the SWP which meets the "prudency" test. Therefore the capital amount to be permitted for the SWP stand alone tariff can only be

> that amount [which] does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of delivering Services;[11]

[11] Gas Code Clause 8.16(a)

BHP Billiton's assessment is that SWP will be a greatly under-utilised resource in the GasNet system in the regulatory period under review and the tariff structure would need to reflect that reality. SWP tariffs should contain several identified features in order to prevent uneconomic and distortionary cross-subsidisation.

3.4 Depreciation allowances for various elements of the GasNet system

The GasNet assets have been divided into four effective categories, and there are stated economic lives for each (these are included in parentheses) - Longford-Dandenong (23 years), the South West Pipeline and WUGS (52 years), the WTS (30 years) and the rest of the system (32 years)[12]

GasNet has nominated these figures based on the GHD report on technical life, backed up by the Saturn report indicating that the economic life of the various assets may be affected by economic conditions, resulting in a useful life shorter than the technical life. It is appropriate to note that the technical depreciation rates used in the GHD report indicate a standard 60 year operating life for the pipeline assets.

GasNet states in its prospectus[13] that

> Asset condition
> GasNet's pipeline system has been designed for long life. All pipelines have been high pressure tested, have quality coatings and have been subject to corrosion protection … and that the transmission system has a long life.

and on page 30 of the prospectus adds:-

> All pipelines are coated and are catholically protected against corrosion. … and [are] being operated and maintained with a high level of competency to maintain system integrity.

The clear (and legal) implication of such statements is that GasNet itself is of the view that the GasNet assets will exceed the technical life stated by GHD.

In the most recent gas access arrangement Final Decision (for Envestra Ltd's South Australian assets) SAIPAR's assessment of the Envestra assets in South Australia, noted that "protected" pipelines are expected to have a life expectancy of twice that of unprotected pipelines[14] We understand that most of GasNet's assets are "protected" by both cathodic protection and impervious coating.

Against the above background, we recommend that the ACCC must review this technical life assessment by GasNet.

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[12] Summary table page 40 Remaining economic life of GasNet's transmission assets by Saturn Corporate Resources 18 February 2002
[13] GasNet Australia Trust Prospectus page 7
[14] SAIPAR Final Decision table 5.5.7.1

The figures presented by Saturn (when properly construed) do not support the discounting of the expected life of the Longford assets, and the depreciation rate of the Longford assets should remain as applied in the last regulatory review or longer. We would, however, recommend that the ACCC seeks from GasNet the amount of capex expended on the Longford assets since new and establish that this amount has been incorporated into the averaged asset life.

The issue of capex to extend the life of an asset introduces an interesting aspect concerning the appropriate depreciation amount that should be included in the revenue base. Maintenance and refurbishing capex is designed to extend the life of an asset. However, in the depreciation calculation the assessment of life extension due to capex injection, is a notable omission from the GasNet submission.

Nevertheless, what the Saturn report does highlight is that the economic life of the South West Pipeline would appear to be limited based on the gas reserves in the Otway basin, and the current plans for much of the Minerva gas to flow to South Australia. Using the data provided by Saturn in its report for likely demand and "actual reserves", indicates that Otway basin gas for the Victorian market is not needed before about 2035, and that Gippsland basin gas supply will be more than adequate for the Victorian and Tasmanian markets, including a significant part of the NSW market.

Even on the most conservative of analyses, the ability of Otway basin gas to impact on the Victorian market will be minimal. Thus, SWP can only have a relatively short term life as an asset to deliver gas from the Otway basin.

The wider implications of this with regard to South West Pipeline, therefore, need to be assessed. Currently SWP is an under-utilised resource, essentially providing access to the Western Underground Storage facility (WUGS). As can be seen from the limited data provided SWP has been used to provide some gas into the system on a few peak usage days each year, but for much of the time it has been receiving gas for storage. There is no doubt that at best SWP will provide a marginal benefit, and that its sizing (and cost) make it quite uneconomic for its prime purpose (of providing some injection on peak days).

In its report Saturn stated that the economic life for the SWP is measured as 50+ years and implies (in page 8) that:-

a. The Otway basin is unlikely to be significantly accessed until 2013 to 2025. [This would appear to be incorrect as the first gas from the basin (Minerva well) will flow in 2004, into Adelaide].
b. It will be an integral part of the system for "stabilising system flows" when Gippsland basin is depleted. [This is a bold statement as it assumes that if Gippsland basin is depleted, WUGS will be the major underground storage].

The current plans for the Otway basin would appear, as previously stated, to be predominantly a source of gas for South Australia to replace gas from the depleting Cooper basin, with minimal injection into the Victorian system. There

have also been plans mooted that WUGS may well be used as an intermediate step in the transfer of Victorian gas into the SA system for power generation, and neither of these options would appear to have been given credence by Saturn in its analysis.

Thus, there is insufficient analysis and data provided to determine that SWP will in fact be any more than what it is currently, and what data is available would appear to contradict the recommendation made by Saturn for SWP to have an economic life of 50+ years.

BHP Billiton strongly considers that at best SWP will have a minimal life and that the depreciation of SWP should reflect:-

1. That it is oversized for the task it will fulfil (i.e. for injection of relatively small amounts of gas into the Victorian system).
2. That it is likely to be used for stabilizing the Victorian gas system but only whilst the predominant gas flow is from the eastern side of Melbourne. If Saturn is correct that the next major inflow of gas is to come from Western Australia and/or Northern Territory, (using EGP and/or Culcairn for backhaul will not provide sufficient capacity in the absence of significant Gippsland injection), this new flow of gas will likely be from the west or north of Melbourne, indicating the need for a stabilising UGS facility on the eastern side of the Melbourne demand.

In the opinion of BHP Billiton, SWP assets should be depreciated over the same period as the Longford assets, and there is no reason for them to be depreciated over the suggested 50+ years.

The ACCC should review the technical life assessment of the GasNet assets. In addition, the claimed economic life for SWP is significantly over-stated as analysis does not support such claims.

3.5 "Flattening" the injection and withdrawal tariffs

GasNet alleges that because it is subject to the "unique" market carriage model of gas transport, it requires significant flexibility in its tariff structure. GasNet would appear to overlook that although it does have to set tariffs which will allow it to recover the regulated allowable revenue, through its use of the K-factor adjustment system, GasNet is able to vary its tariffs (and even carry forward into the next access arrangement) losses it may incur through setting incorrect tariffs.

In the introduction to the reference tariff principles section, the Gas Code states that

> ***Allocation of the Total Revenue***
> *The Reference Tariff Principles set out broad principles for determining the portion of the Total Revenue that a Reference Tariff should be designed to recover from sales of the Reference Service, and the portion of revenue that should be recovered from*

each User of that Reference Service. These principles essentially require that the Charge paid by any User of a Reference Service be cost reflective, although substantial flexibility is provided.

In the contract carriage method of tariff structure, the user is required to nominate and pay for an MDQ for the provision of service. In the event of an over-run, the user is usually charged a premium for the over-run as en ex-post charge. The MDQ level is reset (if practicable) to reflect the new maximum level of usage. The purpose of this requirement is to ensure that the user pays for the actual usage of the system. It should be noted that in gas transport the usage of the system is predominantly related to the demand imposed on the system at a particular time.

In the GasNet network, the system is essentially designed to accommodate the demand placed on the system during the winter months, ie the system recognises that there is a winter peak in demand. Thus the GasNet tariff design must recognise that the allocation of the cost of the system should reflect the demands put on the system by each and every user, even if that demand is for a limited time during the year. The contract carriage mechanisms readily accommodate this allocational issue.

The market carriage model used by GasNet and VENCorp, however, allows any user to use the system to any extent and providing there is no constraint in the system, there is no penalty for exceeding the nominal limits. Thus, there is potential for a distortion of the allocation of costs underlying the market carriage model and this has been identified as a potential drawback in the design of it. To overcome this drawback the tariff design initially introduced was to establish allocation of costs based on a high proportion of the revenue coming from the maximum demand requirements (in schedule 5.7.2 of the GasNet submission, GasNet states that this allocation currently accounts for 65% of the total revenue for a 1 in 20 high peak).

GasNet states that allocating costs on "the peak flow … as the relevant cost driver" is no longer appropriate (schedule 5.7.2), despite the fact that (**except in Victoria it would seem**) it underpins cost allocation methodology in almost every other pipeline system in this country and overseas. GasNet considers that such a cost allocational approach is "not a forward-thinking concept". As a result, GasNet proposes that the current levels of cost recovery through peak flow allocation should be reduced to 60% of a 1 in 2 year peak. This represents a significant reduction in allocation of true usage of the system.

BHP Billiton would point out that converting the cost allocation to one being driven more by annual flows does not send the appropriate signals to users to reduce their demand at times of constraint, and just as importantly does not fulfil the requirement of the Gas Code that costs be allocated on a cost reflective basis.

In its explanation for reducing its emphasis from a more cost reflective basis, GasNet (GasNet schedule 5.8) alleges that under the current system users cannot respond to pricing signals (and even that some signals would apply when no signals are needed), charges under the present system are

unpredictable, and the duplication of tariff and congestion signals places an excessive cost burden on peak flows. GasNet implies that these problems derive from the market carriage model. It should be noted that these same issues are inherent to a greater or lesser extent in the contract carriage model, and that they can be (and are) addressed without dispensing with the basic cost reflective approach of allocating costs to maximum usage of the system. There is no doubt that structures which apply in the gas contract carriage system (and even in the electricity pricing system which exhibits many features of the gas market carriage model) can equally apply to the gas market carriage system.

There is no reason given by GasNet that demonstrates that the only way to send market signals in the gas market is to "flatten" the tariff structure and so reduce the signals to users to modify their behaviour, or indeed, pay for what they actually use. We note the comment that[15]

> Finally, the current approach is based on the assumption that peak days occur during the winter period. The growth of summer gas-fired electricity generation might eventually introduce a summer peak, which could make the current winter peak approach inappropriate.

When reviewing the forecast data for the new regulatory period, there is no doubt that the peak gas demand will remain as a winter phenomenon. BHP Billiton observes that the assumptions underlying the current tariff structure have not changed.

GasNet further implies that using their "new" approach will make the forecasting of transmission costs by users easier. However, this overlooks that users will still incur the volatility inherent in the variable injection costs, congestion cost uplift and curtailment risks.

If, as GasNet states in schedule 5.3 (a) transmission costs only amount to 5-10% of the total delivered gas cost, it would be more appropriate to use tariff pricing which sends strong signals to modify usage behaviour, as by minimising the cost reflective signals in such a small proportion of the delivered cost will not achieve the desired user behaviour.

There is no valid substantiation by GasNet that the only way to send market signals in the gas market is to "flatten" the tariff structure and so reduce the signals to users to modify their behaviour.

3.6 Allocation of costs on a "postage stamp" basis

GasNet proposes to allocate the shared cost elements on a "postage stamp" basis, but does not specifically state what this means. Interpolating it would appear that GasNet proposes to allocate much of the shared costs on an

[15] Consultation Paper on Proposed Tariff Design for the Victorian Gas Transmission System, prepared by NERA. GasNet submission annexure 10 p.12

"annual volume" basis. This is at best a very coarse allocational basis and not reflective of the usage made of the network. All users should pay for usage in proportion to their usage *of the network,* rather than the volume of gas consumed. Thus whilst to use annual volume as the basis for allocation as it appears to be a simplistic solution to a complex issue, such an approach clearly discriminates against customers with flat loads to the benefit of customers with high and peaky demands which require greater use of the system in proportion to the total amount of gas used.

Thus, those costs not related to asset usage should be cost reflective to a more appropriate base such as on the basis of maximum MDQ or number of transactions required (for General and Administrative), diameter-length of pipeline (for working capital), and a K-factor redistribution towards those assets not returning the anticipated share of expected revenue.

Allocation of shared costs must be on a use of network basis, rather than on the volume of gas consumed.

Section 4 The Access Review must recognise the proposed increased passing of risks to users

4.1 Volume usage is a "user's risk" – K factor carryover

Throughout the GasNet submission it refers to its need for a high return due to the risk profile it is exposed to as part of its normal business.

However, of concern is the statement:[16]

> In addition, the higher return better reflects the risks resulting from GasNet's unique characteristics, such as:
>
> (i) the pay-as-you-go market carriage system, which prevents GasNet from securing long term haulage contracts; and
>
> (ii) the price cap regime, which exposes GasNet to volume risks and which will result in an estimated aggregate revenue shortfall of $19.3 million in the First Access Arrangement Period.

The second risk referred to by GasNet is not a risk at all. GasNet is permitted a revenue cap for the use of its assets during the regulatory period under review. It is the setting of the reference tariffs by GasNet which determines the method and extent of revenue recovery. Under the K-factor adjustment mechanism GasNet can vary tariffs within an agreed range to recognize any under and over-run experienced by the application of the tariffs set by GasNet.

Thus, at worst, the so called exposure experienced by GasNet is really only a matter of cash flow timing, and not a risk as to whether GasNet will in fact ever recover its approved revenue stream. The very fact that GasNet is seeking

[16] GasNet Australia Access Arrangement – Submission 27 March 2002, p 45

(and which tacitly has been agreed by the ACCC[17]) the under recovery from the current period to be carried over to the new period, highlights that it has little exposure to the volume forecasts.

However, it should be also noted that some users have already paid for their share of use of the GasNet assets, and that the allocation of the K-factor carry-over needs careful attention. Whilst GasNet has identified that in aggregate it has an under-run of revenue arising from the tariffs set, this is a net figure. It is quite likely that certain will elements actually return more than was estimated for the current period and therefore care should be taken to ensure that these users are not penalised by the broad brush application of a net amount of K-factor adjustment requirements.

Thus, GasNet should analyse the revenue streams from the various elements of its network, to identify how each element performed to its estimated revenue requirement, and the K-factor adjustment should be applied to each element in proportion to its actual performance.

A similar approach should be followed for the allocation of any performance (efficiency) benefits which GasNet must be required to return to users.

GasNet should be required to provide analysis of the revenue streams from the various elements of its network, so as to identify how each element performed to its regulated revenue, and the K-factor adjustment applied to each element in proportion to its actual performance.

As a general statement we are concerned that

a. There is a GasNet request that the K-factor carryover may be instituted in perpetuity. We accept that the Victorian Tariff Order requires ACCC as the regulator, to permit the K-factor carryover into this regulatory regime. For this practice to continue requires serious debate and it should be given significant attention as GasNet wishes it to be a fixed principle for this regulatory review.
b. The large risk reduction to GasNet by using the K-factor is not being seen by an equally large reduction in the WACC being sought.
c. The ACCC should recognize that if high tariffs are permitted for the new regulatory period there is a real possibility of a negative K-factor carry over into the subsequent period. It should be recognised that K-factor adjustments can be both positive and negative.
d. The K-factor distributions need to be applied only to the elements causing the need for the carryover, otherwise there will be a cross subsidy between elements of the system.
e. GasNet should use the K-factor on an annual basis to minimise the size of cost adjustments rather than having a large adjustment at the end of a review period.

[17] ACCC Issues Paper 19 April 2002, executive summary

As GasNet has advised that it wishes the carry forward of K-factor adjustments to be a "fixed principle" in the new access arrangement, this matter needs to be debated more fully, with more information provided by GasNet to sustain its request.

4.2 Efficiency gains

BHP Billiton agrees that asset owners of regulated enterprises should be incentivised to improve the performance of the assets for the ultimate benefit of users, and as such recognizes that a proportion of the benefit should be retained by the asset owner.

Equally, the asset owner should recognize that the improved performance arises from the activities of the individuals employed by the asset owner and by the capex expended in relation to this enhancement. As distinct from a non-regulated business, in a regulated business there is a direct link between the funds provided by the user to the asset owner. To put it simply, users are responsible for directly funding capex and employees, as part of the agreed revenue cap for the regulated business, and therefore the efficiency gains resulting from this capex and staff time, rightly belong to the users. To provide the benefit of the efficiency gains to GasNet is the equivalent of a "double dip" for GasNet. In addition as GasNet has "netted-off" gains and losses, users are paying for 100% of the under-run of poor capex and staff time, whilst GasNet gains its share of all upside. This is an inappropriate sharing of risk.

Because the users ultimately take all of the direct risk between cause and effect, there can be no doubt that the greater part of the benefits arising from good performance of the asset owner should accrue to the user. Where the asset owner takes the direct risk for enhancement or augmentation, then the asset owner should reap the benefit (or detriment) of such actions. It is clear from its submission that GasNet seeks funding for staff and capex to enhance the performance of the GasNet assets. As users will provide this funding, the larger part of the benefits should accrue to users.

GasNet has identified that it apparently generated some $2.22M in enhancements and proposes to levy its share of these as part of future revenue on an NPV basis. This raises two important issues

a. There is insufficient information provided by GasNet to demonstrate the validity of this claim for this amount; the concerns regarding insufficient disclosure was raised in our earlier submission
b. We do not support the GasNet suggested approach and strongly support the approach adopted by the Essential Services Commission, as it more readily reflects the risk profile of the funding, and avoids the debate over the NPV duration and the discount rates proposed to be used.

GasNet states that the ESC model used for benefit sharing was unknown to it at the time of the first access period. BHP Billiton finds this statement is at odds with the extensive presentations made by the developers of the Victorian access arrangements at the time the current access arrangement was being

put in place. At that time the ESC approach was referred to as the "glide path" method of benefit sharing, and which generated considerable debate.

Review of the GasNet approach to benefit sharing implies that GasNet alone will take a share of any gains made. The structure of the revenue cap and the K-factor allows losses from all of the GasNet activities (prudent investment being the only activity not necessarily protected) to be passed onto users, partly in the current period and the balance in the following regulatory period.

GasNet states in its prospectus [18]

> The Directors believe that the transmission system is well managed using sound engineering practices ….
>
> and
>
> Experienced Board and Management Team
> The Directors believe that GasNet has a highly experienced board of directors and management team, which have the requisite technical knowledge and commercial and regulatory experience and understanding to successfully operate a major high pressure gas transmission pipeline system.

with this statement, GasNet claims to be expert in the management of gas transmission assets, and therefore must take responsibility for consequential actions. BHP Billiton accepts that enhancements in performance should be "netted-off" against related loss making activities; in the event there is a net detriment to the system, GasNet should share in meeting its responsibilities in the same way as it enjoys the benefit.

As GasNet has advised that it desires its view as to the way to carry forward efficiency gains to be a "fixed principle" of the new access arrangement this matter needs to be debated more fully, with more information provided by GasNet to sustain its request

Efficiency benefits and losses should be shared between GasNet and users based on the funding provided and risks taken by each.

4.3 Pass through of asymmetric costs and risks

GasNet has identified a number of risks it faces as part of its activities as a gas transmission asset owner. BHP Billiton agrees that a number of these risks can increase the financial exposure of GasNet in providing its assets for use. GasNet then proposes that these risks should be provided for by way of additional funding from users.

Unfortunately the further explanation about these risks is contained in a report by Trowbridge which has been embargoed from general view. As users are the parties expected to provide the funding to provide for these risks, it is

[18] GasNet Australia Trust Prospectus p.7

somewhat odd for GasNet to deny users access to what would provide important information on such a significant issue.

Notwithstanding a lack of access to the Trowbridge report, we believe that the GasNet approach to this issue raises a number of basic questions

1. What was the allowance for each of these risks in the current period? Without knowing this it is difficult to make any sensible comment as the cost effectiveness of the proposal.
2. What protection is available (and at what cost) for external management of these risks.
3. Some of the risks would appear to be related to management of the assets and potentially already covered. Repair of pipelines after corrosion blowout might well already be recovered under the "maintenance" capex budget. Is there double-dipping?
4. A number of the proposed amounts for allowing for these risks imply that self insurance is being undertaken. GasNet does not advise what is to be done with the funds so collected. Experience shows that self funding requires careful management, and for the funds to be clearly segregated (both as a provision but more importantly as cash) to ensure the funds are available as and when they are needed. We recommend that any self insurance funds should be separately identified and placed in a trust account, and only to be used with the regulator's approval.
5. Some risks are associated with being part of a gas transmission asset owner and are captured in the risk premium included in underpinning the guaranteed revenue. We see the risk of stranding (and even bypass) is clearly in such a category.
6. Some risks are not even dignified with an explanation, being listed only as "other risks".
7. Some risks are not even risks, and are covered by the structure of the guaranteed revenue stream by the K-factor, including "revenue" risk, "cost" risk and "market development" risk. Are there ambit claims being sought?
8. The "construction" risk is covered by the non-specificity of the capex allowance. GasNet is required to properly manage the use of the funds allocated. Therefore, GasNet must accept some responsibility for its actions. There is adequate flexibility in the build up of the allowable revenue to absorb this type of risk.

While BHP Billiton is of the view that many of the risks so identified are inappropriate to be passed on to users, there are some that may have some merit. GasNet has implied that these funds will be absorbed into the general revenue stream and used as GasNet sees fit. As GasNet wishes any over-run of these costs to be borne by users, users expect to see any under-run equally passed onto users. In particular, any funds dedicated to self insurance must be isolated from GasNet and placed in a trust fund. In the event that GasNet is sold, these funds should be isolated from GasNet proceeds and available to the purchaser of the GasNet assets.

The ACCC should reject GasNet's ambit claims for pass-through of asymmetric costs and risks.

4.4 Capital raising costs

GasNet is of the view that users should be required to fund its capital structure[19].

Every gas transmission asset owner has a different capital structure, and each at the time of its regulatory review, has insisted that the regulator should not delve into its unique approach to capitalizing its business. This is achieved by the regulator addressing each access arrangement on a consistent basis using what is referred to as a "vanilla" approach. BHP Billiton does not object to such an approach being adopted.

However, GasNet has claimed that it requires that costs it might incur for raising capital to suit the "vanilla" WACC should be allowed as part of its revenue, rather than as an element of the return granted on the capital used in the business. GasNet goes onto say it would incur additional costs as a result of the approach to debt funding implicit in the "vanilla" WACC calculation. Whilst competitive enterprises are performance assessed over periods often measured in months, they do not capitalise themselves over such short periods, and to attempt to justify a cost based on the implied "vanilla" WACC financing structure is totally inappropriate.

The decisions as to how GasNet wishes to structure its capital and the costs associated are an issue for GasNet alone. That the regulator has assessed the capital based on a notional structure is for the purposes of consistency. However, even funding of the "vanilla" WACC is so greatly dependent on the style and structure of each entity that it is inappropriate for the regulator to even "second guess" an approach.

Inherent in the development of the CAPM approach to setting a "vanilla" WACC is a series of estimates for the costs associated with each core element. These inherently allow for the costs claimed by GasNet for capital raising.

The ACCC must reject GasNet's claims for capital raising costs to be funded by users.

Section 5 Revaluing the Initial Capital Base

BHP Billiton considers that the Code does not allow GasNet to revalue its Initial Capital Base. This position is based on legal opinion on the relevant Code provisions, the requirements of the Victorian Tariff Order, and the views of both the ACCC and the then Victorian Regulator.

[19] GasNet Australia Access Arrangement – Submission 27 March 2002, p 101

GasNet has submitted that because of “a number of errors and omissions in the expression of the Capital Base in 1998” the ACCC should revisit the Initial Capital Base established at the start of the First Access Arrangement Period (1998-2002) and increase the 1 January 1998 value by $35.8 million. The increase in value is to recognise the value of easements and some pipeline regulators (in addition to a few other minor adjustments).

In requiring a review of the capital base GasNet relies on the DORC valuation assessed by GHD at the time of the last review. What GasNet does not state is that the DORC valuation methodology is considered to be somewhat subjective, and that the asset owner at the time in conjunction with the ACCC assessed the DORC value of the assets at a lower figure than GHD, and gave reasons for the effective discounting of the GHD figure. It is these carefully considered discounts from the GHD DORC assessment that give rise to the request from GasNet to increase the asset valuation

Omission of the value of easements and pipeline regulators is claimed by GasNet to be due to policy decisions taken by EPD (at the time of privatisation). The ‘adjusted’ Initial Capital Base at 1 January 2002 will, consequently be considerably higher, when additional depreciation allowances and inflation are added. What GasNet overlooks is that EPD (effectively the asset owner at the time) was of the view that the valuation appropriate for the assets was not to be that calculated by the consultant employed (EPD considered a somewhat lower figure was appropriate) and the subsequent owner of the assets (GPU) purchased the assets based on this valuation.

Notwithstanding this, it must be remembered the principles for establishing the Initial Capital Base for each Access Arrangement Period after the first valuation are clearly set out in Section 8.9 of the Code. In essence, it allows for the roll-forward of the inflation adjusted capital base by adding new facilities investment and subtracting depreciation and redundant capital.

GasNet, however, submits that Section 8.9 of the Code does not mean that it allows only a mechanical roll-forward of the capital base from the start of the immediately preceding Access Arrangement Period, without adjustments to take account of any errors and omissions from the original valuation.

It should be noted that Section 8.14 of the Code has, to date, been generally interpreted as preventing a revaluation of the Capital Base viz “when an Access Arrangement has expired, the Initial Capital Base at the time a new Access Arrangement is approved is the Capital Base applying at the expiry of the previous Access Arrangement adjusted to account for the New Facilities Investment or the Recoverable Portion (whichever is relevant), Depreciation and Redundant Capital (as described in Section 8.9) as if the previous access arrangement has remained in force”.

GasNet also submits that:-

- "…the items which GasNet is seeking to rectify do not constitute a revaluation. Rather, they seek to reconcile the Capital Base back to the original GHD valuation, which was accepted by the Commission."
- "This approach is consistent with the requirements in section 2.24 of the Code that the Commission must take into account GasNet's legitimate business interests and investment in the GasNet system and with the underlying principle in section 8.1 (a) of the Code of providing a Service Provider with the opportunity to earn a stream of revenue that recovers the costs of delivering a service over the expected life of the assets used in delivering that Service."
- "… the Capital Base at the start of Second Access Arrangement Period should be identified as an independent exercise to reflect the requirements of Section 8.10 of the Code."

BHP Billiton notes that the ACCC states in its Issue Paper that it is its "understanding that the Code does not allow for such an adjustment". Further, GasNet alleges that the ACCC accepted the GHD asset valuation, which is incorrect – ACCC accepted the GHD valuation adjusted by the changes made by EPD.

BHP Billiton considers that the Code does not permit the Initial Capital Base to be changed in the manner proposed by GasNet.

Once the initial Capital Base of a Covered Pipeline has been determined and the related Access Arrangement is approved by the Relevant Regulator, the Code is clear that the determination cannot be re-opened. In order to ensure that the initial Capital Base is correctly determined, the Service Provider and interested parties are provided with the opportunity to make submissions and apply for administrative and judicial review, in advance of final approval of the Access Arrangement or, if the Relevant Regulator drafts and approves its own Access Arrangement, after such approval is made.

Having set the initial Capital Base, it can only be adjusted (in terms of Section 8.9) by indexation and allowances for New Facilities Investment or Recoverable Portion, Depreciation and Redundant Capital.

In the ACCC Final Decision of 6 October 1998 regarding the Access Arrangement applicable to the GNS System, the Commission determined:

> *"In terms of future regulatory period, however, the Commission notes that the Victorian Access Code requires that the Capital Base be determined mechanically, adjusted only for depreciation, new facilities investment and redundant capital (section 8.9). Therefore, in order for the methodology proposed by TPA to be consistent with requirements of the Victorian Access Code, the appropriate formula for determining the Capital Base at the commencement of the next access arrangement period is:*

Capital base = initial capital base (indexed) - depreciation (indexed) + new facilities investment (indexed) - redundant capital

The Commission notes that the Victorian Access Code does not provide scope to revalue the existing assets outside of what is permitted by this formula."

Section 3.5 of the Code prescribes that an Access Arrangement must include a Reference Tariff Policy. Clause 5.3.2 of the Access Arrangement currently applicable to the GasNet system provides that the reference tariffs applicable to the system are those described in the Victorian Gas Industry Tariff Order 1998. Clause 5.3.4 of the Access Arrangement provides (in part):

"Chapter 9 of the Tariff Order provides a mechanism whereby certain principles in the Tariff Order, and therefore by definition, the Reference Tariff Policy, cannot be changed at the 1 January 2003 review of reference tariffs."

Moreover, Clause 9.2(a)(3) of the Tariff Order provides that:

"(a) In making a price determination in relation to tariffed transmission services for the subsequent access arrangement period, the Regulator is to adopt the following fixed principles:

(3) Use the capital base for the TPA at the start of the initial regulatory period, adjusted to take account of inflation since 1January 1998, depreciation, wholly or partially redundant assets and additions and disposals in the ordinary course of business since 1 January 1998, other than a disposal of:

(A) all of the assets and liabilities of TPA;

(B) assets interdependent with a transaction pursuant to which all the issued shares in or the assets and business of TPA cease to be held by or on behalf of the State of Victoria or a statutory authority; or

(C) assets pursuant to which the assets of TPA are sold and leased back to TPA. "

Accordingly, it is one of the **fixed principles** of the Reference Tariff Policy incorporated in the current Access Arrangement that the initial Capital Base cannot be changed for the subsequent Access Arrangement period.

BHP Billiton also refers to the December 2001 decision by the then Regulator-General of Victoria (in relation to preliminary work on the principles to be applied in the access reviews of the Victorian gas distribution business) that

the Victorian Tariff Order prevents the regulator from re-visiting the Initial Capital Base.

BHP Billiton has commissioned a legal opinion from Allens Arthur Robinson on the GasNet proposal to revalue the Initial Capital Base. This opinion, which concluded that the ACCC is not able to accede to GasNet's proposal, is attached to this submission.

The Gas Code does not allow for any adjustments (in terms of those sought by GasNet) to the Initial Capital Base at the start of the Second Access Arrangement Period, and the Victorian Tariff Order also prevents a re-visiting of the Initial Capital Base for the Second Access Arrangement Period.

5.1 Depreciation amounts included in the new asset base

From the allowance made for depreciation in its schedule, GasNet has implied that its assets have an average life of approximately 30 years. This figure appears to change very little over the life of the current access arrangement. These amounts need to be verified and adjusted for the points made above with regard to economic depreciation.

We noted that GasNet has not provided any information to demonstrate how it arrived at the amounts included in the asset base for depreciation. What information that is provided is contradictory. In GasNet AAI there is an inconsistency in the amount of depreciation for the period 1998 to 2002 with a difference in the summing up total from table 2.2 (gives $82.4M) and the figure quoted in table 2.3 adjusted for depreciation between June 1997 and December 1997 (giving less than $81.7M).

The depreciation amounts claimed for GasNet's existing and new assets need to be verified.

5.2 The impact of the 2000 "GST spike"

With regard to the actual calculations used by GasNet it is noted that GasNet has used the actual CPI figures as the drivers of the capital base adjustment. However, what has been ignored in using the raw CPI figures was the impact of the GST spike on the CPI figures. It should be remembered that GST was introduced during the term of the access arrangement and that it had an elevating effect on CPI. This needs to be excluded from the CPI figures used for the calculation of the asset valuation. ACCC should require GasNet to recalculate the asset base carry forward excluding the GST spike impact.

The ACCC should require recalculation of the asset base carry forward to exclude the 2000 GST "spike" impact.

5.3 Capex included in the asset base

GasNet has sought to "roll in" the actual capex expended during the current access arrangement without reference to the actual capex allowed. There would appear to be significant over-runs in the actual capex expended against the capex allowed for each of the activities identified. It is sound business practice to audit new investments after the event to ensure that management can demonstrate competence in managing the execution of investment, and that the investment has achieved the goals intended.
The ACCC should require GasNet to demonstrate that:

a. The capex expended has resulted in the expected benefits to the system and to users.
b. The capex allowance was not exceeded.
c. If the allowance was exceeded, the reasons for the over-run and the mechanisms that have been put in place to prevent re-occurrence.
d. If the allowance was exceeded, does the actual capex still sustain the investment, and if not, to what extent should the regulator disallow some of the capex "roll in".

Failure to carry out such basic management practices provides the potential for GasNet to pass onto users the costs for any poor investment decisions, of poor management and poor execution of investments.

The ACCC should require GasNet to demonstrate the benefits of capex and that capex allowance has not been exceeded.

5.4 Redundant assets

GasNet has indicated that it desires to change the policy for a partial deletion from the asset base for assets which are only partially redundant. The Code recognises that assets may over time be utilised less than was previously the case and allowed for the reduction of the asset base to recognise the true economic value of the asset (ie a reduction in asset base to reflect the partial loss of utilisation of specific assets).

Clause 8.27 of the Code states

> ***Capital Redundancy***
> 8.27 A Reference Tariff Policy may include (and the Relevant Regulator may require that it include) a mechanism that will, with effect from the commencement of the next Access Arrangement Period, remove an amount from the Capital Base (***Redundant Capital***) for a Covered Pipeline so as to:
> (a) ensure that assets which cease to contribute in anyway to the delivery of Services are not reflected in the Capital Base; and
> (b) share costs associated with a decline in the volume of sales of Services provided by means of the Covered Pipeline between the Service Provider and Users.

Part (b) of the clause is quite specific that this issue must be examined. GasNet has supplied no information as to whether it has assets which fall into this category, and to what extent. Further GasNet proposes in future to optimise out only those assets which have no use at all.

BHP Billiton opposes the changes proposed by GasNet to value assets at the full value when in fact they are only partially used. We recommend that partially used assets should be optimised to the benefit they deliver to users and that tariffs should not allow the recovery from fully utilised assets to cross subsidise under utilised assets.

The ACCC should carry out an optimisation of partially used GasNet assets.

Section 6 Assessing the WACC

The setting of an appropriate regulated return on the value of the assets used to provide the service is usually the most contentious aspect of access regulation. Review of the many local and overseas regulatory decisions indicates that the development and justification of the final figure set by the regulator has often involved the greater proportion of attention when compared to other aspects of the access arrangement decisions.

It is apparent that there is widespread use of the CAPM to set WACC as it provides a "mechanical" approach to setting returns. Because of the apparent ease in replicating the approach to rate of return setting, regulated businesses and regulators have devoted significant attention to the minutiae of the CAPM. As a result, there has been less attention to what the outworkings of the CAPM have delivered.

Because of this lack of review of the many regulatory decisions on WACC, especially in Australia, BHP Billiton decided to commission a report from Pareto Associates Pty Ltd to examine in more detail what the comparative outcomes of WACC are, and if there were some disparity, what are the causes? In other words, we were seeking to compare the WACC levels awarded to regulated businesses with those achieved by enterprises in a competitive environment.

6.1 The Pareto Associates report

The Pareto Associates report is attached to this submission. It identifies the following:-

1. Notwithstanding the apparent repeatability of the CAPM approach, there is a major variation between the input parameters proposed by regulated businesses (even from the same consultants used by different businesses).This casts considerable doubt that the final WACC figure awarded can be reasonably justified. It is partly because of this, Pareto surmises that there

appears to be a trend amongst Australian regulators, when doubt arises, for the regulators to accommodate the doubt by allowing conservatism to favour the regulated business.

2. This view is supported by the work of others, which compares the returns garnered by regulated businesses with those businesses in a competitive environment. For a regulated business (with its guaranteed revenue, relatively inelastic market, and no competition) to be granted a return which is equal or better than that achieved by the average of the best run business in a competitive environment, is seen as totally inappropriate. As Pareto states:-

> WACC should be set at the ***minimum*** level necessary for ***financial markets*** to voluntarily continue support for ***efficient, well-managed firms.***

3. The need for a high WACC on existing assets to encourage future investment is not a sustainable argument. Pareto points out that the large investment required in the water industry in the UK is in fact being sustained by returns set well below those awarded by Australian regulators and that it must be remembered that with the deregulation of the Australian financial industry, access to funds by Australian regulated businesses is from the same international market as those sought by the equivalent UK businesses.
4. Pareto highlights that the decisions of various regulators demonstrate a level of consistency between setting of debt levels in the CAPM approach, but notably there is a major divergence with comparing the levels of equity return awarded. It provides an explanation for this in that Australian regulators are faced with the paucity of Australian data on regulated businesses which has been "independently collated and existing over a sufficiently long period that can be used as a reliable source for forming judgements on parameters for the CAPM". This prevents comparisons and sound judgements to be made. It is, however, clear that Australian regulators are consistently allowing higher market risk premiums than their UK counterparts, and much higher asset beta's. As regulated businesses in both countries now source their funding on the international market, there would appear to be no valid reason for such a disparity.
5. Pareto strongly recommends that the ACCC should actively seek input on key financial indicators from widely diverse sources and stakeholders not closely aligned with the regulated industries. In this regard, we note that regulated businesses provide statements from their banks advising the banks' views on such financial indicators.

6.2 Use of the CAPM approach

There is a view that CAPM is a tool to be used only for setting a return on future investment and that it is inappropriate for use in setting a rate of return

for sunk assets. Notwithstanding this view, regulators almost invariably use CAPM for assessing a combined WACC for both sunk and future assets.

Australian regulated businesses are of the view that they need a WACC applied to their sunk assets which will encourage them to carry out future investment in infrastructure. This stance would appear to be inconsistent. At best it would seem to support a view that the return on future investment should be assessed and set at a different rate to the return made on sunk assets. At worst, it supports a view that the regulated businesses are seeking a higher than appropriate return on their assets.

Regulators in other jurisdictions have overcome this anomaly by setting a return on both sunk and future assets based on the minimum needed to permit the regulated business to obtain financing for future investment.

BHP Billiton supports this approach and observes that none of the regulated businesses in Australia have had any difficulty raising funds for their investment activities. In fact, it would seem that by the increasing high level of gearing now prevalent in regulated entities, financial institutions are providing them with ready access to debt funding. This demonstrates that the current levels of regulated returns exceed the minimum needed to permit financing for future investment.

6.3 Observations on WACC from the current arrangement

At the time of the previous access arrangement (in 1998) there was considerable controversy as to the WACC which was to apply to the TPA. The then owner argued strongly for a WACC in excess of 10%. In their draft determinations ORG and ACCC advised a WACC of 7% was considered appropriate. Finally a WACC of 7.75% was awarded. The Victorian Government was convinced that at these levels it would not achieve its target sale price for the assets. In fact the sale price actually achieved exceeded expectations significantly. Equally when GasNet Australia floated at a listing price based on the current level of WACC, the float was significantly oversubscribed.

The actual prices paid for the assets would indicate that the WACC set in the last review was significantly over priced. This view is supported by the comparisons obtained by Pareto, Sims and NERA. There is no doubt that other jurisdictional regulators have set WACC's well below that previously awarded on the GasNet assets.

In its decision on Envestra SA assets SAIPAR commissioned K Davis[20] to review the WACC appropriate for the Envestra assets[21] Davis notes in his summary that

[20] Kevin Davis is Colonial Professor of Finance, Department of Accounting and Finance, The University of Melbourne

> 1. There are no strong grounds for regarding the S.A. Gas market as different to that of Victoria in such a way as would lead to a different required rate of return by investors.
> 2. The cost of capital used in the Victorian decisions appears, given subsequent information, to have been too high.

Davis adds on page 5 that

> The only explanation with significant credibility is that the rate of return applied by the regulators in the Victorian case was higher than that required by the eventual purchasers.

BHP Billiton concurs with this assessment

6.4 The risks faced by GasNet

GasNet alleges that it is faced with a series of risks which they consider would class them as a "risky business". Amongst others, they cite regulatory risk, value risk, asymmetrical risk, market carriage model risk, as if these are unique and large.

As discussed elsewhere in section 4 of this submission, many of the risks supposedly faced by GasNet are proposed to be passed onto users of the GasNet asset. Even those risks which are not being passed on, greatly pale in comparison to the risks faced by enterprises in a truly competitive environment.

We submit that for the ACCC to grant a return to GasNet that even equates to the returns achieved by competitive enterprise, is totally inappropriate when the real risks between the classes of business are identified and compared.

6.5 Risk free rate

There has been much debate as to the appropriate level for the "risk free rate" used as the basis of the CAPM approach. GasNet alleges that the five year rate is inappropriate due to its short term outlook and that it does not reflect the way GasNet needs to source its funding. As mentioned above, how GasNet elects to fund its activities must remain an issue for GasNet.

However, we consider the ACCC should apply the 5 year bond rate instead of 10 year bond rate, consistent with its normal practices. CAPM is just a tool - it is not a definitive and perfect route to a solution. As GasNet itself states, there is a need for judgement to be used in assessing all of the various parameters used in the CAPM. The "risk free rate" is just another of the

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[21] The Weighted Average Cost of Capital for Access Arrangements for Envestra A Report prepared for the South Australian Independent Pricing and Access Regulator (SAIPAR) by Kevin Davis October 20, 1999

parameters needed to be assessed if the CAPM approach is to be used. The ACCC decision to use the five year bond rate as the risk free rate has more justification than using the ten year bond rate, in that the regulatory period is after all, for a five year period.

GasNet avers that there is more volatility in the five year rate than the ten year rate, and that is the reason for using the longer term rate. This concern can be easily addressed by averaging the bond rate over a longer term. It is apparent to users that the real reason GasNet wishes to use the longer term rate is that it leads to a higher WACC.

6.6 What should the GasNet WACC be?

The WACC awarded should be sufficient only to maintain the economic will being of the regulated business, and not be set at a level which demonstrates excessive concern for the regulated business or any degree of conservatism.

It is the view of BHP Billiton that a fair WACC for GasNet can only be properly assessed by: -

1. The benchmarking of returns of regulated enterprises with businesses in the competitive environment and recognising that regulated businesses are seen as less risky investments than those where the revenue stream is not guaranteed.
2. Using CAPM as a guide to setting the WACC , and comparing and setting the parameters of the model to return the minimum level necessary for financial markets to voluntarily continue support for efficient, well-managed firms .

BHP Billiton is of the view that an appropriate WACC for GasNet, bearing in mind the risk profile of the GasNet business should be lower than the 7% proposed by ACCC in its draft determination on TPA in 1998.

> ***An appropriate WACC for GasNet should be lower than the 7% proposed by the ACCC in its draft determination on TPA in 1998. The ACCC must have the regulatory courage to move the regulatory WACC debate forward from an academic indulgence to one based on commercial reality.***

Section 7 Tariffs

7.1 Variance between VENCorp and GasNet forecast usage

GasNet advises, because of the apparent increase in Melbourne winter warming over the past fifty years, that this trend will continue. GasNet advises that they consider VENCorp has made little accommodation for this trend in its forecasts. Further, GasNet states that the forecasts used to underpin tariffs for the current period were set too high (i.e. tariffs were too low) and so under-

recovered revenue, requiring the use of the K-factor carry over to the new regulatory period.

As users will ultimately fund the under-recovery, or benefit from an over-recovery, it is appropriate to examine views of users on the issue. The following probably best encapsulate users' views regarding tariffs.

1. Users do not want to incur unforeseen costs - they want to maintain or improve on their budget.
2. Users would prefer to pay the correct tariff.
3. Users do not want to see prices rise.
4. On the whole users would prefer to pay less now, and more in the future.

On balance, users would prefer to see options 1 and 2 apply to regulated charges. This fits well with how most enterprises operate within each budgetary year and an unexpected reduction in expected costs is universally welcomed by enterprises.

As the GasNet estimate of volume is less than 0.5% under the VENCorp estimate, and providing that this sits within the "X" factor adjustment range of the K-factor carry over, there is a ready adjustment mechanism included in the access arrangement. Bearing this in mind, and accepting that GasNet is able to adjust tariffs through the K-factor, it would seem that a slight under estimation of forecast volume would be preferred to an over estimate.

However, this view is entirely predicated on GasNet being supervised to ensure that any over recoveries resulting from poor gas volume forecasting are quickly returned to users, and that the ACCC verifies and approves the new tariff as properly incorporating the necessary adjustments.

All over-recoveries of revenue resulting from gas volume forecasting errors must be quickly returned to users. An adjustment mechanism must be incorporated in GasNet's access arrangement.

7.2 Annual tariff reset

GasNet stated that the high level of the K-factor carry over resulted from not introducing a tariff adjustment to reflect under-recovery during the current period.

Following on from the comments above, providing that the reset is supervised by the ACCC as being necessary and appropriate then an annual reset tends to be in keeping with the preferences of users noted above.

An annual tariff reset should reflect both under and over recoveries in the previous twelve month period and fit within an acceptable range of tariff movements. For example, we would suggest that the "X" factor could lie within a limited band width, sized to keep price shocks within reasonable bounds.

An annual tariff reset should reflect under and over-recoveries in the previous year.

7.3 Tariff pricing for zones

Clause 8.42 of the Code states

> ***Allocation of Revenue (Costs) between Users***
> Subject to section 8.43, a Reference Tariff should, to the maximum extent that is technically and commercially reasonable, be designed so that a particular User's share of the portion of Total Revenue to be recovered from sales of a Reference Service (which may be on the basis of forecasts) is consistent with the principles described in section 8.38.

GasNet provides some annual and monthly demand data for each of the zones. However, these quantities are inappropriate allocation bases to reflect usage of the system elements. What is more appropriate as the basis for cost allocation are the MDQ's for each zone. The MDQ's are readily available from GasNet's system flow measurements and BHP Billiton does not consider that there is any excuse for not using actual MDQ's as a fundamental part of the generation of tariffs and allocation of the revenue cap allowed.

GasNet fails to provide any workings of the various tariffs it proposes in relation to the revenue requirement to be garnered from each of the zonal tariffs. This information is required to demonstrate that in fact each of the tariffs is cost reflective and that there is no cross subsidisation between zones

This issue has potentially greater impact as there is a proposal by GasNet to carryover a large element of K-factor under-run, and to postage stamp much of the opex cost elements

The ACCC must require GasNet to provide more appropriate data to enable derivation of the elements of its tariffs for each zone.

Section 8 Terms and conditions

8.1 Responsibility between GasNet and VENCorp

There appears to be some confusion as to who is the service provider of the Victorian transmission pipeline system. It would appear that at a practical level VENCorp is the service provider and that GasNet (the asset owner) has no responsibility to users of the system. This issue needs to be clarified immediately because the determination of risk and liability will fundamentally affect any decision on allowable WACC.

As it currently stands, because of this lack of clarity, GasNet has a high level of protection from disgruntled users. If GasNet retains this protection effectively afforded it by VENCorp, the WACC granted to GasNet should be reduced to reflect its lower risk exposure.

If VENCorp is indeed the service provider this presents users with a major difficulty. In the event that anything goes wrong with the transmission of gas through the network, users have only recourse to VENCorp. However, under its legislation, VENCorp is not required to take any responsibility or liability for its actions, basically precluding any user from gaining recompense for failure to supply gas, regardless of the cause. In the event that GasNet causes users costs for which GasNet would normally be liable, users are then in the unenviable position of relying on VENCorp to seek restitution on their behalf, bearing in mind that VENCorp has no incentive to maximize the restitution sought by users.

Therefore, there needs to be a mechanism within the access arrangement that permits users to bypass VENCorp and seek restitution directly from GasNet who not only does not have legislative protection, but also has assets and a revenue stream from which restitution can be funded.

Establish a mechanism in the GasNet and VENCorp access arrangements to allow users to by-pass VENCorp and seek restitution from GasNet.

8.2 Costs to users of a cumbersome system

There is no doubt that the system as designed for the Victorian market is not only cumbersome, but places significant compliance costs on users.

The market carriage model has some positive features but the MSOR as developed minimizes the benefits coming out of this model, and interpolates a number of the negative features of the contract carriage model.

The provision of the gas spot price comprises the need for many of the costly features of the MSOR as they are written. A review of the variation of the spot price since introduction of the MSOR indicates that a cost/benefit review of the MSOR has never attempted to identify the costs to users of the MSOR. This is a major flaw of the Victorian gas management system.

VENCorp has stated in its submission and in previous issues, that its operations do indeed provide benefits to users of the Victorian gas system. However despite these contentions, VENCorp consistently fails to provide any quantitative analysis or argument demonstrating a financial benefit to balance the undoubted cost detriments of the system. ACCC must require such cost/benefit analysis to be carried out in order for it to authorise the continued use of the MSOR.

In December of 2001, BHP Billiton made a submission[22] to VENCorp reviewing and commenting on its issues paper regarding the 2003 Victorian Gas Access Arrangements. This review is published on the VENCorp website and is appended to this submission. BHP Billiton considers that VENCorp has

[22] 2003 Victorian Gas Access Arrangements, VENCorp's Issues Paper, A review by BHP Billiton, December 2001

made little change to its proposals despite the consultation process it undertook late last year and BHP Billiton's comments still remain unaddressed.

VENCorp must be required to demonstrate the cost benefits of the MSOR.

8.3 User's evaluation of the efficacy of the proposed Terms and Conditions

There are three sets of Terms and Conditions applying to the transmission access arrangement – viz those of GasNet, those of VENCorp and the MSOR. To fully understand the rights and obligations of GasNet, VENCorp and users requires review of all the arrangements. As they are considered each to have certain applicability, there is every expectation of confusion and potential conflict.

Regarding terms and conditions, there are two comments that we would make.

1. There is a need to establish a single set of all-encompassing rules, rights and obligations of the three parties to the Victorian gas access arrangements, - GasNet, VENCorp and users.
2. There is a need to discuss in an open forum whether all users of the rules find that they are fair, do not impose unnecessary costs on users, assign responsibility to the party best able to manage the risk and allow wronged parties to seek and obtain restitution for errors by another party

ACCC to require:-
(a) a single set of rules, rights and obligations affecting GasNet, VENCorp and users; (b) establish that the rules are fair and are cost efficient.

Section 9 Opex

9.1 Benchmarking is a surrogate for competition

The importance of using benchmarking in regulatory reviews cannot be under estimated. In the absence of true competition, the regulator must use performance benchmarks for comparing the costs of a regulated business against best practice – this is the concept of "competition by comparison".

There appears to be a trend amongst regulators to accept that if the performance benchmark is within the range of a group of similar businesses, then there is an acceptance of the proposals put by the regulated business. This being the case, regulated businesses are able to identify those similar businesses with equal or worse performance and so demonstrate that their

allowances are reasonable. Thus, users are levied for charges which lie within the lower performance range.

In Australia, there are few gas transmission businesses but the current practice is for all to compare their performance only against each other. If each business is assessed to be within the range of other Australian businesses, then ultimately there will be a trend for the performance benchmarks to be circular, and competition by comparison effectively ceases.

What users seek is for the regulated business to be driven towards the higher performance range - towards world's best practice. To achieve this goal requires the regulator and the regulated business to include in the comparisons of performance, data from decisions given by overseas regulators on similar regulated businesses. The ACCC will be able to readily identify and obtain such "best practice" benchmarks from its equivalents in other jurisdictions. Failure to include such benchmarks will consign Australian gas users to mediocre performance and the resultant cost penalties

VENCorp must be required to provide appropriate benchmarking data for opex.

9.2 What should performance be benchmarked against?

VENCorp has stated its operations are unique and cannot be benchmarked. BHP-Billiton raised this matter in a response to a VENCorp issues paper last year[23]. A copy of the BHP Billiton response was forwarded to the ACCC for information. We disagreed with the VENCorp assertion, and pointed out that as a minimum that there are equivalent organisations carrying out similar operations to VENCorp in the electricity market. VENCorp has not decided to compare itself to these organisations as the benchmark comparisons indicate that VENCorp does not perform well.

GasNet has used as its benchmarks[24]

(a) Operating costs per GJ of gas delivered;
(b) Operating costs as a percentage of capital investment;
(c) O&M costs per metre of pipeline;
(d) G&A costs per GJ of gas delivered; and
(e) O&M costs as a percentage of the capital investment.

We would point out that such benchmarking whilst easy to generate does not really relate well to actual operations and therefore produce meaningful benchmarks. We consider that in addition, performance should be related to the MDQ of the system or subsystem (as MDQ sizes the system), to the

[23] Review of Access Arrangements for the Principal Transmission System Issues Paper 23 October 2001

[24] GasNet Australia Access Arrangement – Submission Dated 27 March 2002, p 93

diameter-length of the system or subsystem (as this makes due allowance for the relative sizes of the pipelines involved), O&M cost for compressors related to the compressor output ($/KWh as this is a standard used in the gas turbine industry), O&M cost for pipelines related to the materials of construction and the type of protection provided, and to the number of transactions involved (as these better define the number of customers and the overheads related to administration of the assets). We also consider that G&A has a useful relationship to asset value.

In summary VENCorp and GasNet have jointly provided perhaps six benchmarks/KPI's to demonstrate the efficacy of over $40M pa of joint expenditure. As this comprises over 40% of the total revenue the degree of benchmarking is clearly inadequate.

VENCorp and GasNet must be required to provide more appropriate and relevant benchmarks.

9.3 VENCorp and GasNet offer a combined service

VENCorp alleges that it cannot benchmark its service as it is unique. GasNet has provided some benchmark performance data but declines to allow the Cap Gemini report on benchmark performance (annexure 9 of GasNet submission) to be released.

Because of the vagaries of the Victorian gas transmission system, no one party has full carriage of the total operation of the system, and so individual comparisons are somewhat understated. As a first cut of benchmark performance analysis, the costs of VENCorp and GasNet should be aggregated and then compared with other operations.

In this regard it should be noted that pipelines operating under the contract carriage model can and do offer the same total service that the Victorian market carriage model offers, including provision of a spot gas market, assessment and allocation of system constraint costs and forward planning.

GasNet advises that its forecasts exclude for a number of "exceptional costs" and these are excluded from the performance benchmarks. BHP Billiton is of the view that most of these so-called "exceptional costs" are related to the operation of a system such as GasNet's (see comments below) and should be included in the performance comparisons. Including these costs will further demonstrate that the GasNet/VENCorp management of the Victorian gas transmission assets is much more expensive than comparable systems, and falls well below international best practice

When the total costs of VENCorp and GasNet are aggregated a new picture of performance arises. Instead of GasNet appearing to be in the mid to low range of opex costs for the few benchmarks provided, we see the combined costs sit at the very high end of the range of local performance.

There are no clear calculations provided by GasNet for the development of GasNet's costs in figures 8-4 to 8-8 of its submission. GasNet has also

excluded costs which should have been included in the benchmark development. The lack of data and clear calculation methodology makes recalculation of the supplied benchmarks somewhat difficult. We believe that GasNet and/or VENCorp should prepare the fully developed benchmark costs for review, using combined and costs that have been inappropriately excluded.

Notwithstanding this we have attempted this exercise and bearing in mind the lack of proper information provided up till mid June 2002, we have assessed that on a combined basis, the revised GasNet benchmarks (on an apples for apples basis) for the combined services of VENCorp and GasNet would increase, viz:

- Operating costs/gj becomes $0.16,
- Operating cost/capital investment becomes 4.1%;
- O&M cost /metre becomes $10.20,
- G&A cost/gj delivered becomes $0.04; and
- O&M cost/ORC becomes 2.4%.

Inappropriate benchmarking of operational costs in the current arrangement would have allowed GasNet to accrue easy "efficiency" gains which the incentive mechanism would allow GasNet to share. It is therefore essential that GasNet be set challenging targets for efficiency gains for the new arrangement.

The ACCC should require VENCorp and GasNet to provide calculations of combined costs and compare the correct benchmarks with local and international best practice.

9.4 Carry forward of Opex efficiency savings

GasNet has elected to use its **original tariff model forecast** costs for year 2002 modified for some adjustments, less its **average** forecast costs for years 2003 to 2007 modified for some adjustments, and offered the difference as its efficiency savings. Not only is this approach highly **questionable**, but it completely avoids the whole purpose **of** incentive regulation

Section 8.46 of the Code requires for the incentive mechanism to

> (e) to ensure that Users and Prospective Users gain from increased efficiency, innovation and volume of sales (but not necessarily in the Access Arrangement Period during which such increased efficiency, innovation or volume of sales occur).

This clearly relates to actual savings that are achieved to be shared, whereas GasNet has used forecasts only as the basis for its incentive mechanism.

What GasNet has failed to do is to provide information as to what the actual savings that are to be shared. In fact, the savings that should be shared are those accruing from the current period, ie arising form the actual recorded costs for opex during the current period less the amount for opex that was

allowed in the current period, with appropriate adjustments for certain amounts which may have been added or deleted due to changed circumstance. The glide path approach to efficiency savings would allow GasNet to retain all of the savings generated during the current period, and to share an equal basis those savings for the duration of the new regulatory period.

We note that GasNet proposes to carry forward its "efficiency" savings by way of assessing the NPV of the saving into perpetuity. GasNet failed to advise what discount rate it used for this calculation. If the ACCC does agree with such a mechanism (which we consider totally inappropriate) we believe that the discount rate needs to be clearly noted, debated and should be of such an amount as to very quickly "wash out" the benefit to GasNet.

ACCC should require GasNet to provide more information as to the actual savings made in the current period, and award GasNet a share of these savings for the new regulatory period.

As GasNet has advised that it desires its view as to the way to the carry forward of efficiency gains to be a "fixed principle" of the new arrangement this matter needs to be debated more fully, with more information provided by GasNet to sustain its request

The GasNet proposal to carry forward efficiency savings is opaque. More information is required.

9.5 Exceptional costs, fuel gas and working capital

GasNet lists a number of costs (that are included in claims for regulated revenues) which it wishes to exclude from its benchmarking for operating costs, including Longford fire litigation, listing and governance costs, increase in insurance costs, regulatory reset costs, fuel gas cost and working capital.

There is an amount for insurance which GasNet would appear to have decided to be a contingent item and therefore has been excluded from the operating cost comparisons. [This matter should be noted in conjunction with the earlier comments made regarding asymmetric risks]. However, as GasNet has proposed to pass through those costs associated with asymmetric risks there needs to be some allowance made in the cost comparison data which replicates the equivalent exposure to costs of similar enterprises. Thus, the insurance allowances should be included in the benchmarks as these are related to the operation of similar systems and would be included by other operators as costs of operation.

GasNet states that regulatory reset costs, return on working capital, and listing and governance costs should not be included in the comparisons for performance. There is no doubt that all other regulated pipeline operations face similar costs for regulation and working capital, and therefore these costs should be included in any benchmarking. For GasNet to wish to require users to fund its approach to its capital structure and then to want to exclude it from benchmarking is inconsistent. As BHP Billiton is of the view that GasNet's

costs for capital raising are not costs for users to pay, the exclusion from any benchmarking is appropriate.

GasNet has excluded the allowance for fuel gas from the cost benchmarking. Regardless of who dispatches the compressors, it remains a cost to the operation of the system and must be included in the benchmarking assessment. For GasNet to allege that it has no impact on the amount of gas used is incorrect, as the maintenance of the compressor drivers has a marked impact on the efficiency of the compressors, and this is clearly a GasNet responsibility.

The ACCC should reject GasNet claims for a number of costs to be excluded from its benchmarking of operational costs.

9.6 Trends in current opex

In figures 8-1 to 8-3, GasNet indicates past actual expenditure for various opex and extrapolates with its expected expenditure over the coming period. These figures raise three questions:-

1. GasNet does not include the amounts that were forecast in the current access arrangement for comparison along with the actual opex costs incurred. Review of forecasts provided in the last access arrangement indicates that GasNet has been able to significantly reduce costs from those allowed. There is no reason not to expect some further reduction in allowed costs over the new access arrangement. This view is supported by the benchmark comparisons for the total costs of operating the GasNet system
2. The trend lines indicate that GasNet has assumed a real increase from the low actual amounts achieved in the past year. This assumption supports the issue in 1 above that GasNet is of the view that it has now reduced its costs to the minimum and that users can only expect GasNet to suffer increases in its opex
3. GasNet has made efficiency savings during the current period. The new opex figures do not appear to recognise the savings made in the current period.

The trend lines indicate that GasNet would appear to be overstating expected opex for the new period, and that there would appear to be few operational savings to be made in the new period.

The ACCC should require GasNet to substantiate why it sees that non-capital costs should increase in real terms following on from the significant reductions made over the current period.

Section 10 Proposed and past Capex

10.1 Past Capex

Clause 8.16 of the Code allows that

> The amount by which the Capital Base may be increased is the amount of the actual capital cost incurred (***New Facilities Investment***) provided that:
> (a) that amount does not exceed the amount that would be invested by a prudent
> Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of delivering Services; and
> (b) one of the following conditions is satisfied:
>
> (i) the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment; or
> (ii) the Service Provider and/or Users satisfy the Relevant Regulator that the New Facility has system-wide benefits that, in the Relevant Regulator's opinion, justify the approval of a higher Reference Tariff for all Users;
> or
> (iii) the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services.

In its roll forward of the new capital base, GasNet does not provide any information on the cost/benefit substantiation of the roll forward of the capex incurred during the current period. In fact there appears to be significant cost over-runs on some items of planned capex (table 5.4 of the submission clearly highlights cost over-runs on the automation of the Gooding and Brooklyn compressors, Brooklyn upgrade and non system capex). GasNet makes no comment or explanation about these over-runs, other than for them to be accepted into the new capital base. Notwithstanding this, GasNet intends to "roll in" the actual costs incurred without any explanation, nor any calculation provided to show that the capex over-runs were indeed necessary and that even with the actual costs incurred, the investments were prudent and appropriate.

Further, there is little information provided to demonstrate that capex (other than for SWP) used in the current access arrangement was necessary and effective. GasNet has not provided any process of audit to show that earlier capex has resulted in the cost/benefit outcomes expected.

> ***ACCC should require GasNet to justify under the prudency test that the over-run costs totalling nearly $4M should be rolled into the new capital base.***

10.2 Proposed capex

In its earlier submission, BHP-Billiton commented that GasNet had only provided qualitative explanations for the proposed capex to be included in its

revenue cap. Release of some of the previously embargoed annexures has not provided any further detail sustaining the capex requested by GasNet.

Clause 8.16 of the Code states that for new capital investment to be included in the capital base it must be prudent and the incremental revenue must exceed the cost of the investment.

GasNet has failed to provide any cost/benefit analysis for the proposed capex to be included in the revenue cap. Without this information ACCC and interested parties are unable to assess whether the proposed capex is prudent.

ACCC must require GasNet to substantiate the "prudency" of the proposed capex for the new period.

10.3 Audit of capex

It is common practice for Boards of enterprises to require management to provide a detailed and fully costed submission to substantiate any request for capex. As GasNet operates under an effective revenue cap (through its ability to carry forward losses using the K-factor) it is only reasonable for GasNet to provide similar quantitative and fully costed information to users (who underwrite the revenue cap) as to the plans for future investment which is to be recovered directly from the allowed revenue.

There is a view that the regulator should not put itself into the role of managing the business it regulates. BHP-Billiton concurs with this view. However, the regulator does have the responsibility to ensure that the regulated business does provide properly substantiated reasons for its proposals for capex during the period.

Further the regulated business should be required to provide an update on the capex spent in previous access arrangements, to demonstrate that the reasons for the earlier capex continue to be valid. GasNet needs to demonstrate the prudency of the capex proposed to be included in the revenue cap. Such demonstration needs to define the expected outcomes, the focus of the capex and the benefits to users. As users provide the funding for the capex, it is inappropriate that GasNet should be the only arbiter of the capex to be used. It is imperative that all capex, past, present and future be fully substantiated, reviewed and audited.

BHP-Billiton is of the view that there is insufficient cost/benefit information to sustain the capex proposals. We note that despite GasNet's view (via the Saturn report) that the Gippsland basin will be exhausted in the early 2020's, to achieve this "state of exhaustion" would require a significant investment in new assets between Longford and Melbourne. Notwithstanding this requirement, GasNet does not refer to this extended 'new gas demand' with regard to its new capex. With this in mind it would appear that the planning aspect for new capex has little coordination with other aspects of the GasNet's claims which raises significant questions.

BHP-Billiton also refers the ACCC to its comments on capex made in its earlier submission.

Section 11 Conclusion and Recommendations

In evaluating GasNet's and VENCorp's Access Arrangements the ACCC is required to have regard to the legitimate property rights and economic interests of the applicants, while at the same time ensuring that customers are protected from abuse of monopoly power and that the terms and conditions of access are fair, reasonable and efficient.

The ACCC's obligations under the Gas Code are clear. But it is also clear that the ACCC cannot proceed with its access review without adequate information disclosures, particularly from GasNet. To date, GasNet has failed to deliver sufficient information to enable ACCC and users to derive the elements of their tariffs and to establish that they are fair, reasonable and efficient.

Without the information, neither the ACCC (nor users) are in the position to evaluate the many basic issues, including the following:-

- Are the capital and non-capital costs claimed by GasNet reflective of its legitimate costs, or do they represent monopoly rents and hence, windfall gains for GasNet's shareholders?
- Are the South West Pipeline assets bearing a fair and efficient share of the costs and common expenses of the GasNet system?
- Are shared costs properly allocated and substantiated?
- Are proposed and past capital expenditures efficient and prudent?

But even on the basis of the scant information available, it is clear that the GasNet application is seeking significantly higher capital and non-capital costs and seeks to tilt the playing field in favour of the South West Pipeline

assets. Accordingly, this access review cannot reasonably proceed without the ACCC resolving the information disclosure deficiencies.

Against the above, the following initial recommendations are made:-

- *Rather than taking a pro-infrastructure approach in the access review, the ACCC must and should assess GasNet's application against the objectives and relevant provisions of the Code which, inter alia facilitate and promote a competitive national market for gas, prevent abuse of monopoly power, and provide access on fair and reasonable conditions.*
- *Based on the information provided by Saturn an assessment of the actual reserves of the four gas basins serving south eastern States would give a depletion rate beyond 2040, rather than 2024 as suggested by Saturn. The proposal for Longford assets to be depreciated faster relative to SWP assets must be rejected.*
- *The ACCC must ensure that all cost allocations and revenue recovery from the three basic discrete elements of the GasNet system are clearly assessed, identified and ring-fenced to prevent cross-subsidisation. GasNet must demonstrate compliance with the appropriate ring-fencing requirements.*
- *BHP Billiton's assessment is that SWP will be a greatly under-utilised resource in the GasNet system in the regulatory period under review and the tariff structure would need to reflect that reality. SWP tariffs should contain several identified features in order to prevent uneconomic and distortionary cross-subsidisation.*
- *The ACCC should review the technical life assessment of the GasNet assets. In addition, the claimed economic life for SWP is significantly over-stated as analysis does not support such claims.*
- *There is no valid substantiation by GasNet that the only way to send market signals in the gas market is to "flatten" the tariff structure and so reduce the signals to users to modify their behaviour.*
- *Allocation of shared costs must be on a use of network basis, rather than on the volume of gas consumed.*
- *GasNet should be required to provide analysis of the revenue streams from the various elements of its network, so as to identify how each element performed to its regulated revenue, and the K-factor adjustment applied to each element in proportion to its actual performance.*
- *As GasNet has advised that it wishes the carry forward of K-factor adjustments to be a "fixed principle" in the new access arrangement, this matter needs to be debated more fully, with more information provided by GasNet to sustain its request.*

- *Efficiency benefits and losses should be equitably shared between GasNet and users based on the funding provided and risks taken by each.*
- *The ACCC should reject GasNet's ambit claims for pass-through of asymmetric costs and risks.*
- *The ACCC must reject GasNet's claims for capital raising costs to be funded by users.*
- *The Gas Code does not allow for any adjustments (in terms of those sought by GasNet) to the Initial Capital Base at the start of the Second Access Arrangement Period, and the Victorian Tariff Order also prevents a re-visiting of the Initial Capital Base for the Second Access Arrangement Period.*
- *The depreciation amounts claimed for GasNet's existing and new assets need to be verified.*
- *The ACCC should require recalculation of the asset base carry forward to exclude the 2000 GST "spike" impact.*
- *The ACCC should require GasNet to demonstrate the benefits of capex and that capex allowance has not been exceeded.*
- *The ACCC should carry out an optimisation of partially used GasNet assets.*
- *An appropriate WACC for GasNet should be lower than the 7% proposed by the ACCC in its draft determination on TPA in 1998. The ACCC must have the regulatory courage to move the regulatory WACC debate forward from an academic indulgence to one based on commercial reality.*
- *All over-recoveries of revenue resulting from gas volume forecasting errors must be quickly returned to users. An adjustment mechanism must be incorporated in GasNet's access arrangement*.
- *An annual tariff reset should reflect under and over-recoveries in the previous year.*
- *The ACCC must require GasNet to provide more appropriate data to enable derivation of the elements of its tariffs for each zone.*
- *Establish a mechanism in the GasNet and VENCorp access arrangements to allow users to by-pass VENCorp and seek restitution from GasNet.*
- *VENCorp must be required to demonstrate the cost benefits of the MSOR.*
- *ACCC to require:-*
  - *(a) a single set of rules, rights and obligations affecting GasNet, VENCorp and users;*
  - *(b) establish that the rules are fair and are cost efficient.*
- *VENCorp must be required to provide appropriate benchmarking data for opex.*
- *VENCorp and GasNet must be required to provide more appropriate and relevant benchmarks.*
- *The ACCC should require VENCorp and GasNet to provide calculations of combined costs and compare the correct benchmarks with local and international best practice.*

- *The GasNet proposal to carry forward efficiency savings is opaque. More information is required.*
- *The ACCC should reject GasNet claims for a number of costs to be excluded from its benchmarking of operational costs.*
- *The ACCC should require GasNet to substantiate why it sees that non-capital costs should increase in real terms following on from the significant reductions made over the current period*.
- *ACCC should require GasNet to justify under the prudency test that the over-run costs totalling nearly $4M should be rolled into the new capital base.*
- *ACCC must require GasNet to substantiate the "prudency" of the proposed capex for the new period*
- *BHP-Billiton is of the view that there is insufficient cost/benefit information to sustain the capex proposals. We note that despite GasNet's view (via the Saturn report) that the Gippsland basin will be exhausted in the early 2020's, to achieve this "state of exhaustion" would require a significant investment in new assets between Longford and Melbourne. Notwithstanding this requirement, GasNet does not refer to this extended 'new gas demand' with regard to its new capex. With this in mind it would appear that the planning aspect for new capex has little coordination with other aspects of the GasNet's claims which raises significant questions.*
- *BHP-Billiton also refers the ACCC to its comments on capex made in its earlier submission.*