



# **Anaconda**

## **Goldfields Gas Pipeline**

### **Submission on Access Arrangement**

**Prepared by Anaconda Nickel Ltd  
March 2000**

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## **ANACONDA GGTJV ACCESS ARRANGEMENT SUBMISSION**

### **CONTACT DETAILS**

*REGISTERED COMPANY NAME:*

**ANACONDA NICKEL LIMITED  
ACN 060 370 783**

*REGISTERED OFFICE:*

**LEVEL 12  
2 MILL STREET  
PERTH  
WESTERN AUSTRALIA 6000**

*MAILING ADDRESS:*

**PO BOX 7512  
PERTH WA 6850**

*TELEPHONE:*

**+61 (0)8 9212 8400**

*FACSIMILE:*

**+61 (0)8 9212 8401**

*CONTACTS:*

**SIMON LILL  
ALISTAIR BARON**

## Executive Summary

Anaconda have long been a vocal proponent that Tariffs on the Goldfields Gas Pipeline “GGP” could be reduced by **at least** 50%, and still provide a fair and reasonable return. Anaconda supported its position through a submission to Government titled “Goldfields Gas Transmission Tariffs – A Restriction to Regional Growth Potential” (February 1998).

We note that there have been reductions from the initial tariffs, but we remain consistent in our submission that tariffs must still reduce by at least a further 30% to current users before they can be considered fair and reasonable.

Growth in the minerals processing industry which is serviced by the GGP is **absolutely** dependent upon receiving the lowest possible energy cost.

This submission seeks to prove that:

- GGP Tariffs are high in the extreme;
- It is possible to significantly reduce these tariffs and protect the owners legitimate business interests in an asset of this type.

Further, and more specifically:

- ◆ The existing and proposed tariff scheme does not meet the requirements of the Code to encourage additional third party use. It places an undue burden on both the existing users and any future customers on the line.
- ◆ Lack of detailed information provided in the Access Agreement Information document does not allow for an informed analysis of the proposed tariff structure. The tariffs are not transparent - transparency is a critical aspect of the National Gas Access Code
- ◆ The current tariffs are not cost reflective and have limited basis in fact.
- ◆ The value used by the GGTJV as the initial capital base for the pipeline is inflated. The regulator’s acceptance of sale price as a basis for initial capital costs is dangerous in the extreme, and will lead to inflated asset sales to the detriment of the gas consumer.
- ◆ The pipeline replacement cost is significantly lower than the proposed initial capital base, and this, combined with GGTJV’s excessive depreciation of assets, leads to an inflated tariff structure.
- ◆ There is no justification for using notional data to calculate tariffs when actual data is available. The GGTJV have access to the actual data which should be used to generate the appropriate tariff structure.
- ◆ The proposed depreciation methodology, combined with the overly pessimistic views for future production, leads to inflated tariffs for the pipeline. It also offers the GGTJV the potential for large cost benefits in the future if they secure capacity over and above their predictions. These will result because the unit production depreciation method will have over-depreciated the assets in the early years.

- ◆ All tariff factors are considered in the GGTJV's favour to the detriment of all third-party users, present and future, and the development of Western Australia. The impact of this need to be examined by the regulator to ensure the tariffs encourage the use of the infrastructure by third parties - as intended by the Code.

**An immediate Tariff reduction of at least 30% on the current throughput is justified based on the actual cost of capital generated using reasonable values for the inputs. This would still provide a return of 11% on a cost of capital of 8.3%, and does not include any adjustment of the initial capital base.**

We were surprised that there was no comment on the Goldfields Gas Pipeline Agreement Act (1994), and trust this is through recognition by the GGTJV that it no longer has relevance to the current consideration. The regulator must operate under the National Gas Access Code – any issues under the State Agreement need to be sorted out between the GGTJV and the State, and are not the domain of the regulator or the users.

## FOREWORD

This submission has been prepared by Mr. Simon Lill and Mr. Alistair Baron of Anaconda Nickel Limited. All queries should be directed to them.

The Submission has been prepared in keeping with the structure of the Access Arrangement Information as prepared by Goldfields Gas Transmission. Hence it should be read in conjunction with that document.

Some sections are deliberately left without comment as we either did not believe the section required comment, had been covered in an earlier section, or was to be covered in a later section.

## **1. Introduction**

### **1.1 Purpose of Document**

### **1.2 Confidential Information**

The GGTJV have presented aggregated information, citing s 2.8 of the Code which allows for the aggregated presentation of data in the Access Agreement in order to protect the commercial rights of both the owners and the users.

Anaconda, as both an existing and prospective new user, is prepared to have its business interests disclosed as they relate to gas volumes and transportation arrangements through the GGP as it firmly believes that a transparent and open market is the best way to ensure the business interests of all stakeholders are properly considered.

We received no request from The GGTJV as to whether they could disclose the information, so they have assumed these rights on our behalf. Further the GGTJV have taken the extent of that aggregation to the extreme and in many instances there is inadequate detail to form a considered view on the data.

Further detail must be made available in the following areas:

- Cost basis for initial capital base;
- Depreciation Schedule;
- Supply volumes and revenues in each of the tariff zones;
- Proposed capital expenditure;
- Working capital estimate;
- Operating and Maintenance Costs;
- Benchmark data and KPI's; and
- Actual cost of debt and gearing ratio.

The Regulator must access the actual information – regardless it cannot be properly critiqued unless available to industry. As an example, throughout the document the GGTJV discusses theoretical values for issues such as Debt:Equity ratios. Actual costs must be available and should be used, as it is in the nature of a truism that owners will seek to optimise their actual capital structure dependant upon the existing market, whilst a theoretical structure will be sub-optimal.

### **1.3 Nomenclature**

## **2. Compliance with Code**

### **2.1 Access Agreement Review Date**

The proposed period of review for the Access Agreement is five years. This appears a reasonable balance between the competing issues of compliance with the code and protection of the legitimate business interests of the owners. We would request that a couple of safety options be included with this review period, as follows:

- Any major revision of the corporate tax rate, or associated tax changes should immediately trigger a review of Tariff Arrangements. Any changes in tax rate immediately flow through to the cost of capital, a major Tariff driver.
- A major variation in gas throughput. Given the GGTJV's lack of expectation in growth (s 4.2.3) we would suggest a 10% increase as reasonable.

### **2.2 Variation Charges**

There are many additional charges in the Access Agreement, which occur at GGTJV's discretion, based on various overrun circumstances. All the charges fall within the limits laid out in previous decisions but are regrettably at the upper end of this range. Penalties are an accepted part of the Gas Transporters portfolio to ensure proper management practices by the end user, and better management of pipeline capacity. However given that the additional charges are based on a percentage of tariff charges, the already high nature of the GGP Tariffs ensure an unfair impost to the user.

### **2.3 Unaccounted for Gas**

The GGTJV proposal allocates the charges for unaccounted gas to the users, proportional to their gas consumption. It is proposed to charge this gas "at cost". Again this is an unfair impost on the users, as unaccounted for gas can equally be the pipeline owners fault as it can be an end user. No liability to the owners and the already high nature of the tariffs result in a negative incentive for the pipeline owner to correct any unaccounted for gas concerns.

The Access Agreement should seek to:

- Place some liability on the owners through a reduction of the gas price that the owners are allowed to charge;
- Indicate the magnitude of this cost;
- Endeavour to charge the party who may have caused the additional cost otherwise efficient operators are unfairly penalised, and inefficient operators subsidised; and
- Benchmark performance of this variation to allow users to see the percentage of unaccounted for gas, and whether performance is improving.

It is worth noting that the DBNGP proposed Access Arrangement targets a zero value for unaccounted for gas. This would appear to be a reasonable target for GGTJV to set.



### 3. Overview: Goldfields Gas Pipeline

#### 3.1 Overview of Tariffs

##### 3.1.1 Historical Tariffs

The new ownership of the GGP by experienced pipeline operators, together with their improved attitude towards Tariffs, is welcomed. However their continued focus on historical tariff reductions is irrelevant and, consequently, puzzling.

The initial GGP tariffs were unfair and unreasonable. Anaconda argued this point in a comprehensive submission to the State Government, then controller of Tariffs through the Goldfields Gas Pipeline Agreement Act (1994). Anaconda argued then that Tariffs should be reduced by greater than 50% before they could be considered fair and reasonable. The GGTJV should not be given any credit for lowering tariffs that commenced at an unrealistic and unfair level.

Further, the efforts to seek credit for Tariff reductions are irrelevant as historical tariff reductions have no bearing on the current exercise (ie. the calculation of the tariff structure under the proposed GGP Access Agreement). There is a clear and structured procedure for calculating tariffs, independent from the current tariff structure.

Anaconda has gratefully accepted the 25% of reductions from the initial tariff structure. However it's stance has not altered, and it remains convinced that Tariffs should still fall by greater than 30% before they are fair and reasonable, and offer the owners a reasonable rate of return for an asset of this nature.

We have a great concern that the GGTJV will seek to hide behind the State Agreement if they receive an unfavourable ruling from the Regulator. The Regulator must make it absolutely clear in his ruling that this historical agreement between the State and the then GGP owners has no relevance under the new Regulatory regime. Also any commercial concerns relating to this matter should be commercially resolved between the State and the GGTJV.

##### 3.1.2 Tariffs Today

The GGTJV states that:

***“The reduction of third party transport tariffs for the Goldfields Gas Pipeline over its short life has been substantial. This action indicates that GGT is dedicated to promoting the use of the Goldfields Gas Pipeline.”***

It is acknowledged that the new owners seem to be making more of an effort than the previous who, as both owners and end users of the GGP services, had different business drivers. However, as discussed in 3.1.1 above the issue raised is irrelevant, made more so by the refusal to provide the justification of initial capital, combined with the actual cost of capital and cashflows.

Anaconda believe the initial tariff derivation should have reflected actual data . The current review process must properly correct that tariff structure.

### **3.1.3 Economic Development Tariff (EDT)**

It is in the pipeline owners interests to prove to the Regulator that there is limited growth in the region, as that will assist both its argument of business risk, covered later in Section 3.3, whilst limited prospects for growth may affect its ability to achieve a reasonable rate of return.

This is a critical issue, and must be exposed for the falsehood that it is.

We quote the GGTJV Access Arrangement Information:

*“During September and October 1999, GGT received a number of enquiries regarding the EDT. However, no firm commitments to future gas transport arose from the Economic Development Tariff offer. This lack of commitment indicates that gas transport markets in the East Pilbara and Goldfields are comparatively inelastic, and that there is little prospect for load growth during the Access Arrangement period.”*

Anaconda, in conjunction with Statewest Power, submitted a request for services under the EDT covering some 20TJ/day of new load. To date we have not received an official response from the GGTJV.

A copy of that submission is attached in Appendix One.

Anaconda has previously requested indicative Tariffs for a number of new projects under consideration. In a letter dated 13 September 1999 (attached, Appendix One) it outlined potential volumes of some 200 TJ/day, and increase of approximately 220% of the pipelines existing committed throughput.

Whilst it is yet to be confirmed whether the Anaconda Projects will proceed, Anaconda has committed funds in the tens of millions to Feasibility Studies on its Stage Two expansion and Mt. Margaret Projects. It is working towards a construction commencement date of January 7th 2001 for the Mt. Margaret Project which will require approximately 60 TJ/day of gas.

Further it has held discussions with a number of parties interested in sourcing competitively priced power for their expansion plans, and has sought letters of support from them for this submission, attached in Appendix Two.

Clearly there is scope for considerable growth in the region.

Anaconda previously held discussions with ICI (now Orica) in respect of a proposed ammonia plant and associated sodium cyanide facility in Kalgoorlie to service the local gold industry. ICI unsuccessfully argued for lower tariffs as a result of their gas requirement being in the nature of chemical feedstock rather than power generation. Consequently they could not generate a suitable rate of return for their project and withdrew to the detriment of the Goldfields region and the pipeline owners and users.

Anaconda has itself considered gas requirements for chemical plants, most specifically an ammonia plant, where the gas price is the main driver behind the investment decision.

The GGTJV have taken the position that the nature of its market is large minerals processing industries where the Projects are unable to move their ore bodies and are therefore captive to the cheapest energy source. The market potential is far greater than that, and is absolutely dependant upon gas pricing. Even within the large minerals processing plants there are always trade-off decisions that depend upon the relative price of gas to the alternative, eg. borefields powered by diesel fuel versus gas, ammonia produced on site versus imported from Kwinana.

The proposed EDT was purely an early re-calculation of the tariff structure based on the increased throughput resulting from any new project. There was no real incentive for any parties to take up the EDT. A trigger mechanism contained in the proposed Access Agreement (AA), pertaining to increases in capacity, would have the same effect.

It is also suggested that the proposed level of the EDT (20% to 25% reductions) is above where the tariffs should be for existing users. The EDT concept is positive, but should be seeking users at Tariffs significantly lower than those suggested.

### **3.1.4 Reference Service Tariff**

The fact that the proposed Reference Service tariff is equal to the scheduled tariff after 1 January 2000 is not confirmation of a correct tariff structure. The reference tariff calculation in the AA is a stand-alone exercise and must be viewed as such.

Assumptions on the base CPI for escalation must be clear and the CPI figure used should be appropriate. It is widely accepted that the appropriate CPI is the Australian figure (ie. Including all capital cities). The base CPI must be assessed from the date of the final decision. Consideration should be given whether to take the CPI figure ex-GST or not. In fact, the changing tax regime may be a trigger point for a new Access Agreement

We have always found it interesting that Pipeline Operators seek to escalate at 100% of CPI when approximately 10% of the Tariff structure (operating costs) is actually affected by CPI changes. When considering that all aspects of the GGP Tariff structure are unfairly high then this escalation further unbalances the scales in favour of the owners.

Whilst the Tariffs will adjust every five years or so, and will consider CPI changes, it should not be a right of the GGTJV to charge that escalation. The regulators should seek a reducing tariff in real terms by requesting a CPI change that more accurately reflects the actual costs that are changing with CPI.

The tariff regime offers various incentives to sign long-term contracts, with greater tariff reductions given for longer contract periods. Anaconda feel this structure for tariffs is unfair as long-term contracts are inherently risky for end users. The Regulator has previously demonstrated his view of long-term contracts with his draft decision on the Parmelia pipeline. Anaconda feel the tariff structure should be re-visited with a lesser focus on time period.

## 3.2 Historical Overview

There is some discussion on the competitive bidding process for the right to construct the Goldfields Gas Pipeline. It is stated that one of the factors was tariff arrangements, but there could not have been a high weighting placed on these arrangements otherwise an equitable tariff would have been provided that did not stimulate the debate of the existing structure.

It must be noted that the award to the consortium of WMC, Normandy and BHP mixed the pipeline owners interests with companies with upstream interests (BHP and WMC) and downstream interests (WMC, BHP and Normandy.) Hence the award was completely against basic National Competition principles and, with the associated lack of transparency, acted to ensure Tariffs would not be competitive.

The history of the pipeline focuses to a degree on the tariff reductions and incentives offered by the GGTJV to attract new users. None of the incentive schemes have been utilised, other than the initial Foundation User discount accepted by the owners. This is both indicative that the Tariffs were too high to justify commitment and that there were no real benefits in the incentives offered.

## 3.3 What Makes the Goldfields Gas Pipeline Significantly Different?

### 3.3.1 Regulatory Environment

There are several points to consider in the description of the regulatory environment:

- If there was any additional risk to the GGTJV through constructing a larger pipeline than the three participants required, it has now disappeared with the pipeline at full capacity for its current configuration.
- It is generally considered best practice in the pipeline industry to size a pipeline to allow free-flow of the initial base-load. A long line such as the GGTJV can view this principle slightly differently, but the fact that the GGTJV sized the pipeline with two initial compressors suggests that it was never oversized. That Anaconda, when initially considering its Murrin Murrin requirements, was advised that the GGTJV required an additional compressor is testimony that the line was probably undersized.
- It needs to be acknowledged that the GGTJV did not eventually require a new compressor station for Murrin Murrin, but this was achieved by reducing some capacity bookings, believed to be those of the then owners.
- No evidence is provided to confirm that the levelised tariffs set initially deferred the capital recovery.

Again, the regulator should not overly consider the historical arguments, as they have little relevance to today.

### **3.3.2 Development Resulting from Competitive Process**

The GGTJV consider it appropriate to consider the tariff determination in the Access Agreement as a cross check on the existing tariffs which comply with the spirit and intent of the code. This is not a valid argument and should be discounted. The calculations in the Access Agreement are stand-alone and must be considered as such.

Indeed the argument can be seen as a nonsense when considering Charts contained in Appendix Eight showing distance based Tariffs in Australia and internationally. Even with the GGTJV at 75% of its initial Tariff it remains greater than any other Tariff in Australia.

### **3.3.3 Explicit Recognition of Third Party Access**

A pipeline owners interests are best served through the development of increasing gas volumes. Whilst the then owners had different commercial drivers to the typical pipeline operator little weight should be given to their requirement for the pipeline to operate under standard third party access principles. The draft of the National Gas Access code agreed by the Council of Australian Governments was already available, and third party access was merely in keeping with the normal business interests of the owner, together with the changing regulatory environment.

Further little weight should be given to the acceptance by the DRD of the then promulgated Tariffs. The 25% reduction of Tariffs since that time bears testimony to the fact that the DRD were incorrect in their acceptance of the initial Tariff structure.

### **3.3.4 History of Tariff Reduction**

We again urge the Regulator not to place too much weight on historical Tariff reductions.

### **3.3.5 Direct Fuel on Fuel Competition**

Displacement of gas by alternative fuels is a risk taken by all gas pipelines and is not peculiar to the GGT.

Anaconda's calculations utilising the initial GGT Tariffs indicated that for a new user without pre-existing generating capacity the decision to consume diesel fuel was not an option. Since then diesel fuel has moved higher and gas prices lower, so we do not see any fact behind the diesel fuel competition argument as it relates to existing users.

Operating Gas Turbines (GT) along the GGT may well be able to consume diesel as an alternative, but the decision to do so is not as simple as merely operating a single switch, as the owner of the GT needs to consider their pre-existing capacity bookings with the GGT.

That 90% of the gas on the GGT is used for energy generation is equally indicative of gas pricing being too high to allow consideration of gas as a chemical feedstock.

### **3.3.6 Competition From Other Pipelines**

Anaconda studies on the Midwest line indicates that it is too small to provide any meaningful competition to the GGP. To extend it by a further 250kms to a region where it competes with the GGP is sub-economic as it either requires:

- An expensive small line to service a small load at the end; or
- A major amount of compression to supply a major load.

Anaconda has extensively studied the option of extending the Midwest line, as per the Worley study in Appendix Three. It proves that it is a substantially more expensive option than building a stand alone line, and hence this line cannot be considered competition to the GGP.

It should be noted that the sponsors of the Windimurra Vanadium project to which the Midwest line feeds found it more economic to access gas from the DBNGP, some 350 Kms away than the GGP, only 250kms away, indicative of the unusual Tariff disparity between the lines.

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Anaconda, as the sponsor of the proposed Geraldton to Mt. Margaret Pipeline (“GEMM”) is well placed to comment. The pipeline is only viable due to the high tariff structure on the existing Goldfields line. For a Mining company to even consider a 700 KM line to supply gas in competition to a line that virtually runs through the middle of its new projects is a clear indication that the Tariffs on the GGP are ludicrously high.

The competition from this new pipeline has not yet materialised, and may never do so. In reality it can only compete with new loads, on which the Access Arrangement has suggested there are few, if any. Anaconda has an existing transportation arrangement with the GGTJV that covers 16 years. It cannot utilise the alternative line for at least that period. It would also need to consider change over costs which can be substantial.

Further the economic reach of the proposed GEMM is more in the North Eastern Goldfields, and not in the major GGP markets of Newman and Kalgoorlie.

Finally, the argument that the GGP cannot be considered a monopoly is laughable. The definition of monopoly is “exclusive ownership through legal privilege, command of supply, or concerted action; exclusive possession or control; a commodity controlled by one party”. Clearly the GGTJV has a monopoly with its extreme monopolistic practices being the sole reason that an alternative line can even be considered by Anaconda.

### **3.3.7 Dependence on the Mining Industry**

Anaconda has already identified its significant expansion plans in the catchment area of the GGP. Whilst it is not happy about the proposed removal of accelerated depreciation it sees benefits in the trade offs such as reduced corporate tax and it has not changed its expansion plans. It also notes the expansion plans of some of the regional gold mines, and the other laterite projects with which Anaconda has an interest.

Many of the mines in the area are owned by some of the world’s major mining houses and are considering expansion plans .

The growth prospects for the GGP are actually exceptional (not gloomy as suggested by the GGTJV), and perhaps superior to those of W.A.’s other major pipeline, the DBNGP.

It is worth noting that the comparison can be made to the DBNGP as a significant portion of its load is also mining related (we understand that Alcoa consumes about 20% of the DBNGP load) The nature of the Western Australia market place is commodity driven so there are many gas consumers on the DBNGP that will be indirectly effected by the mining industry.

### **3.3.8 Competition in International Commodity Markets**

The GGTJV comment that global cost structures of competing mines are “a function of many variables, including ore reserves, ore grade and proximity to energy supplies”

Proximity of energy supplies should read cost of energy supplies, and hence the GGTJV acknowledge the absolute importance of energy pricing to the long term viability of the minerals processing industry. The high tariffs are acting to make the Goldfields region less competitive, consequently increasing risk to the GGTJV. A reduction in Tariffs therefore reduces risk.

It is also important to review where the Australian mines being discussed by the GGTJV are positioned on the cost curve for their commodities. Many of them are reportedly in the lower section of the cost curve which would provide a shield for them from downward movements in commodity prices.

Associated with that is the protection provided by the exchange rate. Australia is very much a commodity driven market and low commodity prices are generally accompanied by a lower exchange rate, allowing commodity producers to absorb low US\$ denominated commodity prices.

It is interesting to consider the market place 18 months ago when Nickel reached its all time low in real terms in 30 years. Much of the GGP load is dependant upon the Nickel producers, and WMC shut some of its higher cost mines but did not reduce output (other than through unplanned stoppages associated with the Kalgoorlie Nickel Smelter) and continued to consume gas.

The GGTJV should review where the mining houses are positioned on the cost curve before making statements on their ability to ride out changes in the commodity market. It is also necessary to view the prospect of an improved commodity outlook and the possibility of new projects opening.

### **3.3.9 Lack of Long Term Transport Contracts**

It is difficult to understand why the GGTJV are surprised that they have no contracts in excess of 20 years. The GGP Tariff structure shows the longest period offered for the Reference Service tariff is 16-20 years. There is no benefit for contract to 20 years and hence they will have found that the maximum contract period is 16 years. Anaconda may well have contracted for 21 years if a reduced price was available.

This highlights the danger in offering time based tariffs in an attempt to secure long term contracts. An alternative, and maybe preferable approach, is to offer a zone based tariff structure with aggressive pricing and let the users set the time frames. It is understood that a tariff structure based on the duration of the contract is not widely used in Australia.



The GGTJV state that one third of the GGP transport contracts will expire within five years. An isolated statement such as this is dangerous, as it does not reflect that:

- greater than 70% of the GGP volume throughput is contracted for 10 years plus;
- many of the gold producers operate on time horizons of 5 years rather than the longer term horizons that the more capital intensive nickel industry needs to consider. Most will continue to operate beyond their 5 year horizon.

It would be useful to review the situation on other pipelines throughout Australia to determine the distribution of their contract lives.

Overall the lack of long-term contracts does not give a meaningful indicator of project risk. Again hard data should be presented to show how different the GGP is with respect to the lack of long-term contracts.

### **3.4 Impact of Significant Differences**

#### **3.4.1 Overview**

We cannot accept Points 1 through 5 as being either accurate or particularly relevant, and also note that the GGTJV has not specifically commented on the other critical factor in pipeline risk, being that of supply risk. The north-west of Western Australia is blessed with world class gas reserves and the GGP risk is arguably far less than other pipelines which originate from areas of dwindling supplies.

#### **3.4.2 Demand Risk**

Anaconda would submit that the GGP does not face considerable demand risk, or demand risk that is particularly different from many other pipelines who may face industrial risks of a different nature.

The GGTJV are concerned that the laterite plants, and any subsequent expansions, will replace existing sulphide nickel operations. Let us consider some issues:

- WMC Limited have invested considerable funds in their Nickel operations. Their capital investment has been dominantly repaid and they will continue to operate if the cost of production is below the Nickel price. Nickel demand is forecast to grow by approximately 4% Year on Year, creating additional demand of 40,000 tpa. We consider it extremely unlikely that these Nickel operations will close.
- If it does occur it could only be due to the extreme success of the nickel laterites. If that is the case it could also be expected that new laterite projects have commenced production (Mt. Margaret, Cawse expansion etc) which will have created far more gas demand through the GGP than that which has been lost.
- It need also be noted that Anaconda estimate total laterite reserves in the economic reach of the GGP to be approaching 3 Billion tonnes. WMC shutting down because of replacement by laterite ores is extremely good news for the GGP.

The demand profile must improve with a more reasonable tariff structure which could allow development of chemical plants for regional consumers of ammonium nitrate or sodium cyanide as two examples. Note our earlier comments in respect of Orica's earlier interest in a cyanide plant.

Technology may indeed alter the demand curves for the resources mined in the goldfields. The GGTJV have assumed this change will be negative, but it is just as likely to be positive. Indeed historically technological improvements have led to ore reserves being increased - leading to longer mine lives. If this occurs then the gas demand curve would be radically different to that proposed by the GGTJV.

A pessimistic approach to demand suits the GGTJV's endeavours to retain its high Tariffs. This ensures their pessimistic predictions for growth and future pipeline throughput. The impact this pessimism has on the proposed tariff structure is discussed in detail later.

### **3.4.3 Limited Life**

All of Anaconda's Projects (operating or under study - identified in Section 3.1.3) have a Project life of 30 + years, with reserves and resources allowing consideration beyond 50 years.

Anaconda would expect to commit to additional gas loads for Mt. Margaret and Murrin Murrin by the end of the current calendar year. These commitments are most likely to be 16 years unless the GEMM proves a more suitable option.

Anaconda's ongoing detailed examination of four capital intensive Projects in the North East Goldfields region is testimony that the removal of the accelerated depreciation regime is not affecting project considerations. It is a new environment that we, and other mining companies, are forced to operate in and will effect financing structures more than project economics. We know of a number of mining expansions under consideration in the region.

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The GGTJV has a very pessimistic view for the future of the mining industry in both the Pilbara and Goldfields. Many of the organisations in the area would be puzzled to learn of their predicament! It is Anaconda's view that the GGTJV has the potential to increase their throughput by a greater percentage than the Dampier to Perth Gas Pipeline due to the new projects being examined in the area.

#### **3.4.4 Direct Competitors**

There is no sensible direct competition to the GGP.

Anaconda will develop the GEMM line whilst it remains a sensible economic alternative. That is absolutely dependant upon the GGTJV providing fair and reasonable Tariff structures.

To say that GGP could face more direct competition than any other pipeline is a nonsense, and only bears testimony both to the unrealistic tariff structure. Many pipelines throughout the world face actual competition rather than theoretical competition, and remain regulated to achieve a proper infrastructure rate of return.

#### **3.4.5 Tariffs and Tariff Reduction**

We find it difficult to reconcile the GGTJV's statement

*"that the GGTJV bore, and continues to bear, all facets of the pipeline's (unusually high) commercial risk"*

with the fact that the GGTJV, comprising two major pipeline operators and one major power generating company, acquired the pipeline for what would appear to be a significant premium to replacement costs.

As experienced operators they would have understood the regulatory risk associated with assets of this nature, but obviously found that the risk was still acceptable, and perhaps not *"unusually high"*.

#### **3.4.6 Competitive Development**

As argued earlier, the current tariff determination process should not consider any historical information and merely seek to reconcile actual figures with a fair and reasonable tariff balanced with a rate of return which accepts recognises the owners legitimate business interests.

We would reiterate – the Tariff determination cannot consider the State Agreement.

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## 4. Capital Costs

### 4.1 Asset Base

#### 4.1.1 Code Requirements

#### 4.1.2 Asset Valuation Methodology

The capital base is the most important element of a tariff derivation, and the Regulator must scrutinise this area rigorously.

We do not accept the purchase price of A\$624M, and would seek more detail, specifically a break down of the components of the purchase price.

Our concerns are that the assets which were purchased from WMC, or Normandy may include laterals, metering stations or power plants that were not part of the original GGP configuration, not essential to GGP operations and may be being used to unfairly increase the Tariff structure to all users. If it does include, as an example, a lateral to WMC's facilities that has been acquired at an unusually high price and then included in the GGP configuration, the Tariff to be paid on that lateral **must** be borne by WMC, and not by other users.

If the purchase price is accurate then the fact that the GGTJV has been prepared to present the original owners with such a handsome return over a two year period is not consistent with the risk that the GGTJV would suggest exists on the pipeline. It can only be justified through the high tariff structure.

The GGTJV proposes that their purchase price for the asset last year (\$624M) is to be used as the Actual Capital Cost, that is then depreciated to today's date.

Clearly this method allows for the elevated acquisition price of pipeline assets, with recovery from the users through high tariffs. Regrettably it is a precedent set by the Government of Western Australia through the structure of its sale of the DBNGP, and is a precedent that **must be resisted**.

This method of using acquisition price to determine tariffs, although highlighted in the Code as a possibility, is unprecedented elsewhere in Australia. A key danger in using acquisition price for the DAC is the inevitable inclusion of acquisition premiums in this price.

The value of \$624M is not an appropriate value for one boundary of the initial capital base. The actual book value of the current asset is a more accurate DAC than that used by the GGTJV.

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### **4.1.3 Goldfields Gas Pipeline Replacement Cost**

#### **4.1.3.1 Optimum Pipeline Size**

That the “as built” sizes are the minimum prescribed under the State Agreement and that the line currently provides capacity which just meets current load is not consistent with the GGTJV’s earlier assertions that they were forced by Government to oversize the line (Section 3.3).

This section actually revises the GGTJV’s earlier assertions that the current size of the pipeline is the optimal one is reassuring and confirms the foresight of the government when it first considered the construction of the Goldfields Gas Pipeline. It also reduces the GGTJV’s arguments on risk associated with having to oversize the line.

#### **4.1.3.2 Optimum Pipeline Replacement Cost**

It follows from the previous point that the optimal replacement cost (ORC) would be the cost to construct the above pipeline. The GGTJV have used the initial construction cost of \$457M and then made adjustments for foreign exchange, interest expense and inflation. We note that these adjustments have the effect of only increasing the construction cost, but do not consider issues such as falling commodity prices, excess production capacity etc during the period that might actually reduce construction costs.

To that end we requested Worley Engineering consider the issue, and have been advised that in their opinion to duplicate the GGP in today’s market would cost A\$428M. That advice is attached in Appendix Four

Further the GGTJV adjustments need to be reviewed with consideration of the following factors:

- The foreign exchange adjustment examines the average exchange rate over the construction period and the current rate. Actual data on the exact foreign currency payments should be used for the comparison.
- The sales tax burden was probably imposed on overseas materials purchased for the job. This decision would have been based on economic grounds and would have included sales tax. The purchase of overseas materials may not be an appropriate decision now.

The GGTJV have provided insufficient detail on the calculation of the interest expense incurred during construction. One major variable in the calculation of this cost is the cost of capital, this figure is the subject of some discussion. If this variable changes so will the value of the interest expense. Actual data must be used for this calculation.

- It is unclear whether the interest expense has also been indexed by inflation before the final ORC was calculated. This will have a significant impact on the ORC value for the pipeline.
- The support data for the initial construction cost is not clear about inclusions and exclusions. This data is required to determine if the calculated ORC is appropriate.

The GGTJV states that:

***“the actual unit construction cost of the Goldfields Gas Pipeline compares favourably, at 87%, with industry average.”***

To justify this statement the GGTJV refer to a paper by Venton which, they say, identifies weighted average pipeline unit construction costs as approximately \$25,800 per inch kilometre, and then suggests the average unit construction cost for the GGP is \$22,400 per inch kilometre.

We attach the Venton paper (Appendix Six) which actually states that:

*“The current evaluation shows that with a few particular exceptions, unit pipeline project costs have remained within a relatively tight band (\$400 - \$800/mm.km) since 1980, and there is some evidence that the costs have reduced over the period.”*

We then note the tabulation within the paper of the GGP unit costs as \$853/mm.km, some 7% greater than the upper limit identified by Venton.

The GGTJV clearly need to justify what can only otherwise be considered as misleading statements. Otherwise the only assumption can be that the pipeline construction was not carried out utilising best practice. Construction of long line pipelines such as the GGP is not particularly difficult, and the costs perhaps should have been at the lower end of the Venton benchmark.

The Regulator must carefully consider the value of the ORC, and the subsequent value of the depreciated ORC (DORC).

This is critical because the GGTJV propose using the DORC as their value for the initial capital base. The suitability of the DORC as the initial capital base may need to be reviewed depending on the assessment of the DAC.

### 4.1.3.3 Other Capital Assets

The regulator should review the list of other capital assets proposed for inclusion by the GGTJV to determine whether these meet the accepted standard operating practice for other pipelines. As noted earlier we have concerns about the acquisition price, and believe it maybe unfairly inflated to included assets that were not originally part of the GGP system and not essential to the GGP.

Expanding on this issue – the lateral from the GGP to Anaconda’s Murrin Murrin Operations is owned by Boral Energy, and Anaconda pays a Tariff to Boral separate to that which it pays to the GGTJV. If this lateral was acquired by the GGTJV, and the acquisition price included in the total GGP costs, third parties would then unfairly pay for additional costs that do not effect their operations.

This issue can be amplified if the price of the lateral is unreasonably inflated, even though the inflated price might be low relative to the overall capital base.

## 4.2 Asset Depreciation

### 4.2.1 Asset Life

#### 4.2.1.1 Physical Asset Life

The asset life values used by the GGTJV are low. There is no argument provided as to why they are not similar to the figures used by Epic Energy for the Dampier to Bunbury pipeline. The following table shows the comparison:

	GGTJV	Epic
Pipeline Assets	70	100
Metering Assets	30/50	71
Compression Assets	30/50	57
Other Assets	30/10	50

It is unclear how these asset lives would be affected by the risk the parties assign to the two pipelines.

#### 4.2.1.2 Regulatory Life

#### **4.2.1.3 Economic Life**

The overall negative and uncertain outlook for the mining industry portrayed by the GGTJV is puzzling and inaccurate. A key reason for the inability to secure long term contracts could be the high price being charged for the gas supplied. BHP certainly has plans for iron ore production past 2016 and many of the other organisations in the area would be puzzled by this outlook.

Anaconda's Murrin Murrin Project has ore reserves which provide a Project life greater than 80 years at current design rates.

This assessment has not considered the following new projects currently under consideration by companies operating in the area:

- Murrin Murrin Stage 2 Expansion
- Mt. Margaret Ni/Co Project
- Mt. Weld Phosphate Project
- Mt. Weld Rare Earth Projects
- Thunderbox Gold Mine
- Red October Gold Mine
- Sunrise Dam Extension
- Cawse Ni/Co Expansion
- Bulong Expansion
- Granny Smith Wallaby Expansion
- North's West Angeles Project

We do not believe the above list to be exhaustive. A discussion paper regarding development in this region is included in Appendix Four. This highlights the scale of existing and proposed projects in the region.

The outlook provided by the GGTJV is overly pessimistic and does not give a realistic view of the future. This pessimism has the effect of pushing the recovery of costs through tariffs to the front end of the pipeline life, in turn leading to higher upfront tariffs than necessary (which do not encourage growth) and potentially significant over-recovery of capital by the GGTJV in the latter years of the pipeline life.

#### **4.2.1.4 Asset Classification**

Asset classifications proposed by the GGTJV should be in accordance with the practice of other service providers and should be reviewed to ensure correct depreciation allowances are being used.



#### 4.2.1.5 Depreciation Methodology

The GGTJV have used a units of production approach to depreciation. This approach is acceptable if the predictions for future throughput are appropriate. However, as discussed, the GGTJV future throughput predictions are extremely low, resulting in GGP assets being depreciated excessively early in their life, in turn leading to excessive early tariffs and over-recovery of costs later (when throughput exceeds the earlier predictions).

A sensitivity analysis follows of applicable toll reduction factors if the depreciated value is varied. The higher Depreciated Values (indicating depreciation over a longer period) show the schedule Anaconda would deem more appropriate based on sensible future throughput forecasts. The results are shown in the table below.

<i>Depreciated Value</i>	<i>Return</i>	<i>Toll Discount Factor</i>
440	11.1%	0.68
420	11.0%	0.71
400	11.0%	0.74
380	11.1%	0.78
360	11.0%	0.81
340	11.0%	0.84

The returns and toll discount factors are calculated using the WACC calculated using the Anaconda assessment (8.26%). Toll revenue is reduced to produce an NPV of zero, in line with the methodology for tariff setting adopted by the GGTJV.

On this basis Anaconda believe there is scope for a significant tariff reduction if a sensible approach to future throughput, and consequently depreciation, is taken.

There is insufficient information provided to enable an appropriate assessment of the depreciated value. The regulator should consider an appropriate depreciation schedule, and consequently a sensible depreciated value in 2004, which will allow cashflows to be modelled appropriately.

### 4.3 Future Capital Expenditure

The Code allows for the inclusion of capital expenditure into the tariff calculations if it is prudent and necessary for ongoing pipeline operation. The GGTJV have not supplied sufficient detail for this expenditure and it should not be included unless the Regulator is satisfied this expenditure is justified.

There is no mechanism in the Access Agreement for the removal of redundant capital equipment from the asset value. This item becomes more critical as the pipeline ages, and changes are made to the distribution system. It may become more critical if some users close-down, as predicted by the GGTJV, their delivery system would then be redundant and should be removed from the asset value.

#### 4.4 Working Capital

The working capital proposed by the GGTJV is excessive. Working capital should only include the linepack inventory and an amount for the daily running of the pipeline. There is insufficient data provided by the GGTJV to determine their performance figures using these criteria.

#### 4.5 Initial Capital Base

The Code generally requires the initial capital base to fall between the DAC and the DORC. Anaconda have previously stated their position that the DAC proposed by the GGTJV is not correct and hence not an appropriate boundary. The discussion below focuses on the use of the DORC as the initial capital base.

The value of the Initial Capital base is critical to the tariff calculation process. The impact of various values for the initial capital base is shown below:

<i>Value 1999</i>	<i>Depreciated Value 2004</i>	<i>Return</i>	<i>Toll Discount Factor</i>
460	358	10.9%	0.83
450	350	11.0%	0.82
440	342	10.9%	0.80
430	335	11.1%	0.79
420	327	11.0%	0.77
410	319	11.1%	0.76

The toll discount factor is calculated by reducing tariffs to get an NPV of 0, in accordance with the GGTJV approach for tariff calculation. The cost of capital value was 8.26% and the depreciated value was calculated using the same proportion as used by the GGTJV for the original. Anaconda believe these values for the depreciated value should be proportionally higher (Section 4.2).

It is imperative that accurate values be used for both the initial capital base (proposed by the GGTJV to use DORC) and the depreciated value after five years. The depreciated value after five years will be one of the boundaries values for the initial capital base to be used in the next Access Agreement.

The initial capital base proposed by the GGTJV is excessive. The optimised replacement cost has been estimated by Anaconda, with some assistance from Worley, to be approximately \$428M. The depreciation carried out is also excessive and creates a DORC which is comparatively too low. The correct figures are felt to be in the order of \$430M initially and around \$410M after 5 years. These assumptions, combined with Anaconda's WACC of 8.26%, justify tariff reductions, on existing throughput, of at least 30%.

## **5. Operating, Maintenance, Marketing and Overhead Costs**

### **5.1 Operating and Maintenance Costs**

The operating costs for the Goldfields gas pipeline are excessive - especially when compared to those of Epic for the Dampier to Bunbury pipeline. Operating costs generally don't have a major impact on tariffs – however the size of the Operating costs in this instance imparts some significance to them.

Several points must be considered:

- Actual data should be available and therefore used to justify these numbers.
- There is insufficient detail contained in the submission to justify the operating and maintenance costs.
- There is no improvement/reduction program for the operating costs. A company operating with best practice should have a cost reduction program, particularly as they appear excessive in the first place.

We would expect the Regulator to be able to benchmark costs to other pipeline operators and adjust the O&M costs accordingly.

### **5.2 Marketing and Overhead Costs**

The GGTJV marketing and overhead costs are high, particularly in a market where they are not anticipating any significant growth and they have limited customers with which to deal. We note the comment in 6.2.2 that

*“The Goldfields Gas Pipeline currently transports gas on behalf of its owners and five third party users.”*

Both functions must be minimal, and if benchmarking against other pipelines the regulator should take the lower end of that benchmark.

## **6. Pipeline System**

### **6.1 Pipeline System Description**

The pipeline description does not contain adequate detail on the various offtake points in the pipeline. This does not enable an accurate assessment of a sensible tariff structure or where the proposed structure may be deficient. More detailed information on this point would enable a more accurate picture to be developed.

## 6.2 Capacity and Volume Assumptions

The following data should be presented to enable an accurate throughput and risk profile for the pipeline to be calculated:

- Volumes delivered to each customer
- Volumes contracted in each tariff category (ie. Contract life)
- Revenue generated in each tariff category

The GGTJV have hidden behind the general umbrella of commercial confidentiality – ie non-disclosure as it is their clients business. It should be noted that Anaconda were not approached as to whether we would be prepared to allow disclosure, so the GGTJV has assumed our commercial requirements. Anaconda would be happy to have its contract volumes/arrangements, and its historical throughput disclosed.

It is also necessary to review the capacity distribution used in the equity risk calculation to ensure it reflects current and predicted position - not an historical average.

### 6.2.1 Goldfields Gas Pipeline Capacity

#### 6.2.1.1 Mandated Capacity Requirements

#### 6.2.1.2 Goldfields Gas Pipeline Operational Capacity

### 6.2.2 Goldfields Gas Pipeline Throughput Projections

The GGTJV's pessimism on load growth has been queried in a number of previous sections. We have noted some of the major new projects currently under consideration, and suggest that the mining industry is far from depressed. Nickel, in Australian dollar terms, is currently at 10 year highs, whilst gold is tracking at sustainable A\$ prices for most producers.

An average load factor of 0.72 has been assumed, which indicates significant peaks and troughs. We note that this load factor will have been impacted by the Murrin Murrin commissioning difficulties as well as the shut down at the Kalgoorlie Nickel Smelter.

None the less, we raise the question as to whether the load factor should be relevant to the Tariff determination. The GGTJV have advised in the submission that the GGP is at 100% capacity, and a load factor of 1 should therefore be used.

The load factor provides the owners with the opportunity to effectively sell gas transportation twice. Again the actual historical revenue should be considered rather than some notional, and most likely inaccurate load factor into the future.

We also note that the majority of the GGP's delivery is in the lower third of the pipeline, and thus query the comparison raised between the GGP's pipeline inlet parameters versus the DBNGP's 'city gate' values.

## 7. Access and Pricing Principles

### 7.1 Pipeline Access

#### 7.1.1 Access Philosophy

We reiterate – the regulator should not put too much stock in the GGP's development as an open access pipeline at a time when the Pipeline market was well aware as to the pending regulatory environment, nor should there be any credence given to the State Agreement.

### **7.1.2 Nature of Services Offered**

It is perhaps difficult to imagine any other service than a forward haul service through the GGP. We also applaud the negotiated services concept, though it should extend to the GGTJV's ability to provide variable tariffs. There is not enough flexibility within the Negotiated Services or the prudent discounting concept to allow the GGP to compete with a Project that otherwise might locate, for example, at Geraldton. Anaconda has a project of this nature.

## **7.2 Evaluation of Acceptable Tariff Determination Methods**

### **7.2.1 Available Methodologies**

#### **7.2.2 Evaluation**

Levelised tariffs are an acceptable philosophy as long as the assumptions for future capacity are sensible. Pessimistic assumptions regarding future capacity will lead to an over-recovery of costs from the pipeline. This leads to higher prices for the earlier users of the pipeline, which are then allowed to escalate, and works against a competitive supply of energy.

## **7.3 Cost Allocation and Tariff Determination Methodology**

### **7.3.1 Code Intention**

One intention of the code is to reward a supplier if his performance exceeds agreed benchmarks. This is exceptionally difficult if no benchmark data or Key Performance Measures have been developed.

Anaconda submit that the GGTJV need to revise the benchmark and KPI section of their document to provide some data in this area. It is essential that a series of performance measures be developed and used in determining the GGTJV's performance.

### **7.3.2 Cost Allocation**

We have argued above that the concept of price discrimination is a normal economic function and should be allowed under certain circumstances.

### **7.3.3 Tariff Determination Methodology**

## **7.4 NPV Discount Rate: WACC**

### **7.4.1 The WACC Calculation in Context**

#### **7.4.1.1 Input Variables and Results of Calculations**

Anaconda recognise there are a large number of variables that impact on the cost of capital calculation, and subsequently on tariff charges. One factor missing from the GGTJV submission is any sensitivity analysis showing the impact of changes to key variables. We have provided some comparisons to enable the Regulator to see the effect of changing particular assumptions, though the absolute accuracy can only be as good as the assumptions – hence our constant request for actual data rather than theoretical data.. This is also in keeping with the GGTJV’s GIGO Theory, which we note works in both directions. It is not just the low end of plausible ranges being abused.

Consistently the GGTJV has made assumptions for all variables which are at the high end of plausible ranges, significantly in their favour and leading to higher reference tariffs.

The GGTJV’s arguments in relation to the input variables that are specific to the Pipeline Operator are a nonsense. That the pipeline operator is based overseas and cannot benefit from dividend imputation is irrelevant to the Australian asset. That one operator might have a significantly different risk profile to another is irrelevant. It is for the regulator to assess the nature of the risk in the asset, rather than for the regulator to assess the different operators risk profiles.

#### **7.4.1.2 Methodological Issues**

The views of Sharpe are well quoted:

*“Since risk and return relate present price to future prospects,...”*

The GGTJV has argued a return commensurate with risk, and yet, by their statements, have paid a substantial premium with limited future prospects.

The tension in their position is obvious.

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### 7.4.1.3 Consequences of Regulatory WACC Determinations.

## 7.4.2 The Capital Asset Pricing Model

### 7.4.3 Cost of Equity

The CAPM uses the following formula to calculate the after tax cost of equity:

$$k_e = \left( r_f + (r_m \times \beta) \right)$$

where:

$k_e$	=	after tax cost of equity
$r_f$	=	the nominal risk free rate
$r_m$	=	Australian market risk premium
$\beta$ (beta)	=	systematic risk of equity

The following table shows a comparison of the effect of beta ( $\beta$ ) on the cost of equity:

<b>Beta (<math>\beta</math>)</b>	<b>Cost of Equity (GGTJV)</b> <b><math>r_f = 6.7\%, r_m = 6.5\%</math></b>	<b>Cost of Equity (Anaconda)</b> <b><math>r_f = 6.8\%, r_m = 5.5\%</math></b>
0.8	11.9%	11.2%
1.0	13.2%	12.3%
1.2	14.5%	13.4%
1.4	15.8%	14.5%

It can be seen that the assumptions of all three variable have a major impact on the after tax cost of equity. This then impacts on the final cost of capital calculation. It is imperative that sensible assessments of these variables occurs.

### 7.4.3.1 Risk Free Rate

It is not clear whether the GGTJV submission for risk free rate is determined within the guidelines laid out in previous regulatory decisions. The following methodology is widely recognised as an appropriate calculation of real risk free rate, nominal risk free rate and inflation:

- Real risk free rate should be the 20 day average yield of the 10 year capital-indexed Commonwealth Government securities
- Nominal risk free rate should be the 20 day average of yields for 10 year nominal bond
- An inflation estimate is the difference between these two rates.

The timing of this assessment should be aligned with the release of the draft decision on the GGP Access Agreement.

### 7.4.3.2 Beta Value

The calculation of the after tax cost of equity is highly dependant on the definition of the systematic risk of the equity ( $\beta$ ). Any assumptions on this value have a major impact on the cost of capital calculation.

The GGTJV have used a calculation based on the beta's of the end users to provide a guideline for the final beta, weighted dependant on the capacity used by these organisations. Anaconda is honoured by its position as the second lowest risk Company in the table, but would also query the approximate %age of GGP demand, which seems at odds with the throughput figures provided by the GGTJV in the submission.

The methodology does not provide an accurate picture, and the values used in the table are highly questionable. The raw beta figures for some of Australia's largest mining companies are far too high.

If the calculation method involves using company betas then an assessment of the individual project risks must be made. Several of the projects being supplied are large and have considerable lives - with the option of extensions and expansions.

Various decisions handed down for the beta values in other access agreements are summarised below:

Decision	Equity Beta
Parmelia Pipeline (Draft)	1.0
Albury Gas Company	0.9 - 1.1
Central West Pipeline (Draft)	1.48
AGL - Natural Gas System	0.9 - 1.1
ACCC/ORG Victorian final decisions	1.2

One important point to note is the decision for the Parmelia Pipeline had an equity beta of 1.0. This pipeline was subjected to a much larger risk from another pipeline supply than the Goldfields gas pipeline.

Anaconda feel the value for the equity beta should be 1.0.

### 7.4.3.3 Market Risk Premium

The GGTJV acknowledge that the market risk premium is "potentially the most inaccurate variable applied in the CAPM". Several values have been considered in recent times and can be summarised as follows:

- Hathaway suggested a premium of 6.6% in September 1999 presentation to the Melbourne Business School
- Traditional Australian studies have suggested a long-term market risk premium in the range of 6-7%
- A value of 6% was applied by the ACCC in its Victorian Gas Access Arrangement Decision. The probable range for the risk premium was considered to be from 4.5% to 7.5%.
- Recent studies by various parties have identified values in the range between 5% and 7.5%
- A value of 6% was applied by the Office of the Regulator General



- ACCC has recently suggested in a draft statement regarding the regulation of transmission revenues that a value of 5% may be more appropriate. This was in view of the ongoing debate and evidence supplied by the financial markets
- Regulators in the United Kingdom currently use values of between 3% and 4% for the market risk premium
- WA Regulator used a figure of 6% in it's draft decision for the Parmelia pipeline
- A value of 5.5% was used in the IPART draft decision for the Central West Pipeline (NSW)
- A range of 5% to 6% was used by IPART in its draft decision for the Natural Gas System in NSW

It is felt that a value towards the lower end of the range is the most appropriate for this pipeline. Anaconda have used a value of 5.5% in their calculations.

The table below shows the sensitivity of the cost of capital to various assumptions of market risk premium:

<b><i>Market Risk Premium</i></b>	<b><i>WACC (GGTJV)</i></b> <b><i>(Uses GGTJV assumptions for WACC input)</i></b>	<b><i>WACC (Anaconda)</i></b> <b><i>(Uses Anaconda assumptions for WACC input)</i></b>
5.0%	10.86%	8.03%
5.5%	11.32%	8.26%
6.0%	11.77%	8.49%
6.5%	12.23%	8.73%
7.0%	12.69%	8.96%

It is clear that any movement in the market risk premium assumed by the GGTJV, and using their assumptions, leads to a corresponding movement in the WACC. This shows it is important to make an accurate assessment of this variable.

#### **7.4.4 WACC Formula**

#### **7.4.5 Cost of Debt**

The GGTJV have used a value for the debt margin in their calculations of 2.25%. This is felt to be excessive. Previous rulings from the ACCC and ORG have been in the range of 1.0 to 1.2 for the debt margin. A value at the lower end of this range is considered appropriate for this pipeline and Access Agreement.

The WA Regulator has arrived at a figure of 2.0% in their draft decision for the Parmelia pipeline. This took into account the considerable risk due to the uncertainty of the gas resources in the Perth basin. The Goldfields gas pipeline has minimal risk associated with the upstream supply and therefore this high value is not justified.

One additional factor to consider is the actual cost of debt incurred by the GGTJV during the asset purchase. The market during the purchase of the assets would have had a debt margin in the order of 1.0%.

The asset was also initially financed through the usage of Infrastructure Bonds, a tax effective bond (now defunct) specific to infrastructure assets, which had the effect of lowering the effective interest rate of the pipeline by up to 50%. This I-Bond effect was taken by both WMC and Normandy as an extraordinary profit in their accounts, with no benefits passed onto the end users.

The Regulator must consider the effect of this issue. Commentary from the previous Anaconda submission is attached in Appendix Seven.

Anaconda have used a debt margin of 1.0% in their calculations. This gives a nominal cost of debt of 7.8%.

#### **7.4.6 Capital Structure**

Section 8.31 of the Code requires that the WACC calculation should reference a financing structure that reflects standard industry structures. Previous decisions, in both the Eastern States and Western Australia, have determined the appropriate value for the gearing level is 60%.

One factor which must also be examined is that several energy asset sales in Victoria used gearing levels of 70%. The regulator may consider it appropriate to review the actual gearing level used in the recent purchase of pipeline assets by the GGTJV. It may well be appropriate to set the gearing level at 70%.

More mature overseas markets commonly use Debt Equity ratios of 80%.

We have used what we consider to be a conservative value of 60% in our calculations and assessment.

#### **7.4.7 Tax Rate**

The GGTJV have used a company tax rate of 36% in its assessment. This is considered to be inaccurate and misleading with the company tax rate to drop to 30% within the period of the access agreement. The main reason for accurately reflecting the company tax rate is that the proposed terms and conditions already allow the GGTJV to increase their tariffs to pass on the impact of GST. A reduced tax rate is an outcome of the taxation changes and must be considered.

Anaconda feel a value of 32% is more appropriate for the company tax rate. This will reflect the impact of the reduction for the last three years of the proposed Access Agreement.

#### **7.4.8 Dividend Imputation (Gamma) Factor**

The GGTJV propose that a gamma factor of 0.3 is appropriate in this instance. This is at the low end of the range on several decisions, and below the 0.5 laid out in the draft decision for the Parmelia pipeline. The Parmelia pipeline is comparable to the Goldfields gas pipeline. Probably the gamma factor is consistent with the GGTJV's earlier comments about ability of shareholders to access that benefit. We reiterate – that is irrelevant to an Australian asset.

When considering an appropriate gamma factor the regulator must form a view on best practice. It is necessary to examine the structure for other similar organisations, as well as best practice, when reviewing and setting this variable.

A movement in the gamma factor of 10% can change the WACC by 0.5%, a significant impact.

#### **7.4.9 Inflation Rate**

As discussed earlier in the submission the inflation rate estimate should be the difference between the 20 day average nominal and real risk free 10 year bond rates. This is a widely accepted method for determining this value and has been used for previous regulatory decisions.

#### **7.4.10 Nominal to Real Transformation**

#### 7.4.11 Calculation: Weighted Average Cost of Capital

The rate of return calculated using the input variables assumed by the GGTJV leads to a value of 12.23% for the pre-tax real WACC. This value is significantly higher than that currently being reached by the Eastern States regulators (a range of 7.5% to 7.75%). It is also significantly higher than the 8.3% the WA Regulator reached in his draft decision for the Parmelia pipeline.

Anaconda have made assessments based on their understanding of the variables and have arrived at a value of 8.26% for the pre-tax real WACC. This is considerably less than the GGTJV calculation and close to the results of recent ACCC and IPART decisions. It is slightly lower than the 8.3% arrived at by the WA Regulator for the Parmelia pipeline.

The following table summarises the differences:

		<i>GGTJV Case</i>	<i>Anaconda Assessment</i>	<i>Parmelia Pipeline</i>
$r_f$	Nominal risk free rate	6.70%	7.20%	6.30%
$r_m$	Australian market risk premium	6.50%	5.50%	6.00%
$r_d$	Pre-tax debt rate	8.95%	8.2%	8.30%
$\beta$	Systematic risk of equity	1.40	1.00	1.00
$r_e$	After-tax cost of equity	15.80%	12.70%	12.30%
$\gamma$	Franking credit utilisation	30%	50%	50%
E	Market value of equity	50%	40%	40%
D	Market value of interest bearing debt	50%	60%	60%
V	Market value of entity	100%	100%	100%
$t_c$	Corporate tax rate	36%	32%	36%
f	Inflation	2.5%	2.5%	2.5%
$W_{tr}$		12.23%	<b>8.26%</b>	<b>8.27%</b>

Anaconda would contend that the following items have changed since the Parmelia decision:

- Company tax rate will be lower for the majority of the Access Agreement. The calculation should be altered to satisfy this occurrence
- The risk free rate has increased in the order of 0.5%
- The debt premium for this project is substantially lower than that for the Parmelia pipeline, predominantly due to the reduced supply risk

The proposed GGTJV WACC of 12.23% would place an unfair burden on the end users of the Goldfields gas pipeline. Anaconda feel a value in the order of 8.26% is more appropriate and defensible using accepted financial calculation methods.

## **7.5 Tariff Determination**

### **7.5.1 Introduction**

### **7.5.2 Reference Service Tariff Structure**

### **7.5.3 Tariff Determination Methodology**

#### **7.5.3.1 NPV Approach**

#### **7.5.3.2 Tariff Calculation Model Structure**

#### **7.5.3.3 Taxation Assumptions**

#### **7.5.3.4 Pipeline Utilisation Assumptions**

#### **7.5.3.5 Tariff Calculation Model: Gas Transport Revenues**

#### **7.5.3.6 Tariff Calculation Model: Expenditures**

#### **7.5.3.7 Tariff Calculation Model: Asset Value and Depreciation**

#### **7.5.3.8 Tariff Calculation Model: Discount Rate**

#### **7.5.3.9 Consumer Price Index**

The Regulator must ensure that the appropriate CPI value is used in the calculation for indexing tariffs and cashflows. The appropriate CPI is the capital cities CPI for Australia, and not just the Perth value. This is consistent with previous decisions on this matter.

### 7.5.3.10 Calculation of the Reference Service Tariff

A summary of the cashflows used by the GGTJV to reconcile their returns and tariffs to meet the code is found in the table below:

	1999	2000	2001	2002	2003	2004
Reservation (TJ/d)	0	98.2	98.2	102.2	100.5	95.9
Average Throughput (TJ/d)	0	70.7	70.7	73.6	72.4	69.0
Average Transport Distance	0	1091	1093	1104	1117	1134
Toll Revenue (\$MOD)	0	10.3	10.5	11.2	11.3	11.1
Reservation Revenue (\$MOD)	0	64.8	66.4	71.5	72.9	72.6
Throughput Revenue (\$MOD)	0	14.8	15.2	16.4	16.7	16.6
Average Fixed Charges (\$MOD)	0	0.02	0.02	0.02	0.02	0.01
Annual Revenue (\$MOD)	0	89.9	92.1	99.1	100.9	100.3
Cap. Base Initial & Resid. (\$MOD)	452.6	0	0	0	0	-352.1
Capital Expenditure (\$MOD)	0	1.5	1.2	1.2	1.2	1.2
Operating Expenditure (\$MOD)	0	11.3	11.3	11.3	11.6	12.7
Net Cash Flow (\$MOD)	-452.6	77.12	79.62	86.62	88.12	438.5
Discount Factor (WACC)	1	1.122	1.258	1.412	1.584	1.778
Discounted Cash Flow (\$MOD)	-452.6	68.78	63.23	61.3	55.6	246.6
Discounted Cash Flow (\$MOD Real)	-452.6	67.0	60.1	56.8	50.2	217.3
<b>IRR</b>	<b>15.0%</b>					

The table below uses the data from the Anaconda Assessment values. This leads to return of 11% on a calculated cost of capital of 8.26%. A scaling factor of 0.69 has been applied to the transport revenue to simulate the effect of a 30% reduction in tariff. The depreciated value has been altered to reflect a more accurate picture of the depreciation schedule.

	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
Reservation (TJ/d)	0	98.2	98.2	102.2	100.5	95.9
Average Throughput (TJ/d)	0	70.7	70.7	73.6	72.4	69.0
Average Transport Distance	0	1091	1093	1104	1117	1134
Toll Revenue (\$MOD)	0	7.11	7.25	7.73	7.80	7.66
Reservation Revenue (\$MOD)	0	44.71	45.82	49.34	50.30	50.09
Throughput Revenue (\$MOD)	0	10.21	10.49	11.32	11.52	11.45
Average Fixed Charges (\$MOD)	0	0.02	0.02	0.02	0.02	0.01
Annual Revenue (\$MOD)	0	62.1	63.6	68.4	69.6	69.2
Cap. Base Initial & Resid. (\$MOD)	452.6	0	0	0	0	-430
Capital Expenditure (\$MOD)	0	1.5	1.2	1.2	1.2	1.2
Operating Expenditure (\$MOD)	0	11.3	11.3	11.3	11.6	12.7
Net Cash Flow (\$MOD)	-452.6	49.3	51.1	55.9	56.8	485.3
Discount Factor (WACC)	1	1.083	1.172	1.269	1.374	1.488
Discounted Cash Flow (\$MOD)	-452.6	45.5	43.6	44.0	41.4	326.2
Discounted Cash Flow (\$MOD Real)	-452.6	44.4	41.4	40.8	37.4	287.5
<b>IRR</b>	<b>11.0%</b>					

The above spreadsheet shows that the tariffs could be reduced by at least 30% of those proposed, using conservative estimates of cost of capital, and still provide a

return of 11% on a cost of capital of 8.26%. This return would still be significantly higher than those generally expected in the mature North American markets.

The above analysis indicates that the Access Agreement fails to provide adequate data in several areas to allow a meaningful and fair assessment of the reference tariffs to be made. Key areas which must be addressed are:

- There is continuous mention of the reduction in tariffs which has taken place in the short life of the project. It is difficult to give credit to the GGTJV for reducing the tariffs if they were too high, and fell outside the intent of the code, in the first instance.
- Initial tariff calculations probably allowed for additional compressor stations at some stage, these have not been required. There are no current plans to construct these compressor stations during the period of the access agreement.
- There are several additional payments due under the agreement for the following:
  - Supplementary Quantity Option Charge
  - Quantity Variation Charge
  - Daily Overrun Charge
  - Hourly Overrun Charge
  - Variance Charge

The additional income the GGTJV receive from these payments is not indicated clearly in the Access Agreement. An assessment of this income should be made to determine whether these charges are fair and reasonable. It is necessary that actual data be used for this assessment.



## 7.6 Incentive Structures

The price path method for tariff calculation is acceptable provided that sensible assumptions are made regarding future pipeline throughput. In this case there is no allowance for capacity increase in the pipeline. This ignores the following projects which are currently being examined (at least some of which should be commissioned within the period of this Access Agreement):

- Murrin Murrin Stage 2 Expansion
- Mt. Margaret Ni/Co Project
- Mt. Weld Phosphate Plant
- Mt. Weld Rare Earth Projects
- Thunderbox Gold Mine
- Red October Gold Mine
- Sunrise Dam Extension
- Cawse Ni/Co Expansion

These projects will potentially use large quantities of gas, but only if this resource is provided at an appropriate price. The major operating cost for many of the plants is energy cost. The GGTJV should offer appropriate incentives, on a continuous basis, to encourage these projects to be developed. This would involve expanding the pipeline and reducing overall tariffs for all pipeline users.

Anaconda is of the view that the price path method of tariff pricing does not provide the incentive mechanism encouraged by the Code. The main shortfall is in the lack of information on how the efficiencies will be shared with the end users.

Several regulatory decisions have encouraged the pipeline owners to use a CPI-X format as an incentive package. Anaconda feel this may be a more appropriate incentive structure for the GGTJV to use on this pipeline.

## **8. Key Performance Indicators**

### **8.1 Australian Benchmarks**

The amount of benchmarking carried out by the GGTJV was minimal. Some of the benchmark data which should have been provided is:

- Capital Cost comparisons
- Operating Cost comparisons
- Tariff comparisons
- Unaccounted for gas
- Gas sold per kilometre of main
- O&M costs per customer
- Unplanned interruptions

A previous review by Grant Samuel indicated that the GGP tariffs were the highest in the world. Appendix 8 benchmarked GGP Tariffs on a \$/GJ/km basis and compared the Tariffs to both Australian and overseas pipelines. An additional benefit offered in some overseas pipelines is end-users can negotiate lower rates with high usage.

The Independent Pricing and Regulatory Tribunal (IPART) commissioned a research paper to benchmark the efficiency of Australian Gas Distributors. This report detailed various performance indicators which can be used. The Regulator should prescribe some performance indicators to ensure the GGTJV are performing adequately and at “best practice” level.

The inability of the GGTJV to obtain information on the KPI’s and their reticence to supply and use real data indicates they may not be operating at world’s best practice. It also brings into question their commitment to making the tariff calculations transparent.

### **8.2 Key Performance Indicators in a Competitive Environment**

We have previously considered the issues raised in this section and reiterate:

- GGP is a monopoly asset - it is only the high tariffs that allow the consideration of competition
- GGP does not face meaningful competition from diesel fuel

## **APPENDICES**

<b>APPENDIX ONE</b>	<b>Anaconda/Statewest Power - EDT Submission</b>
<b>APPENDIX TWO</b>	<b>Letters of Support</b>
<b>APPENDIX THREE</b>	<b>Worley Study</b>
<b>APPENDIX FOUR</b>	<b>Anaconda Infrastructure Submission (enclosed separately)</b>
<b>APPENDIX FIVE</b>	<b>Worley Pipeline Estimate</b>
<b>APPENDIX SIX</b>	<b>Venton Paper</b>
<b>APPENDIX SEVEN</b>	<b>Infrastructure Bonds Discussion</b>
<b>APPENDIX EIGHT</b>	<b>Pipeline Tariff Comparisons</b>

## **APPENDIX ONE**

### **Anaconda/Statewest Power**

### **EDT Submission**

## **APPENDIX TWO**

### **Letters of Support**

## **APPENDIX THREE**

### **Worley Study**

## **APPENDIX FOUR**

### **Anaconda Infrastructure Submission**

**(enclosed separately)**

## **APPENDIX FIVE**

### **Worley Pipeline Estimate**



## **APPENDIX SIX**

### **Venton Paper**

## **APPENDIX SEVEN**

### **Infrastructure Bonds Discussion**

## **APPENDIX EIGHT**

### **Pipeline Tariff Comparisons**