GOLDFIELDS GAS TRANSMISSION PTY LTD

Public Submission on STAGE 1

AS REQUIRED BY THE

6 NOVEMBER 2002 NOTICE

of the

Acting Gas Access Regulator

17 DECEMBER 2002

INTRODUCTION

This submission have been prepared in response to the public notice issued by the Regulator on 6 November 2002 indicating that an amended draft decision ("Draft Decision") arising from the proposed access arrangement ("Access Arrangement") for the Goldfields Gas Pipeline ("GGP") that would be issued and which would take into account:

(a) the impact of the decision by the Full Court of the Supreme Court of Western Australia in *Re Dr Ken Michael AM; ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 ('the *Epic* decision') on the Draft Decision;

(b) the effect of sub-clause 21(3) of the agreement ratified by the *Goldfields Gas Pipeline Agreement Act 1994 (WA)* ("the State Agreement") on the application of the *Gas Pipelines Access (Western Australia) Act 1998 (WA)* insofar as it relates to the GGP; and

(c) any amendments required as a result of further information provided in response to the notice.

The public notice also indicated that the making of the Draft Decision will involve three stages. The first stage involves applying the National Third Party Access Code for Natural Gas Pipeline Systems (the "Code") without consideration to whether sub-clause 21(3) of the State Agreement affects the applicability of the Code.

Goldfields Gas Transmission Pty Ltd ("GGT") confirms that this submission is lodged as a public submission as part of stage 1 of this process. In particular, this submission is made without prejudice to GGT's arguments that under sub-clause 21(3) of the State Agreement:

(a) certain provisions of the Code have no effect to the extent that such provisions, in their terms, have or are likely to have a material adverse effect on Goldfields Gas Transmission Joint Venture's ("GGTJV") legitimate business interests; and

(b) further or alternatively, the application by the Regulator of the Code provisions will have no effect to the extent that such application causes, or is likely to cause, material adverse effect to GGTJV's legitimate business interests.

GGT understands that the question of the effect of sub-clause 21(3) of the State Agreement on the application of the Code, or certain provisions thereof, will be given consideration by the Regulator at the end of stage 1, after part 1 of the Draft Decision has been issued.

In this submission, GGT deals specifically with the application of the principles set out in the *Epic* decision ('the *Epic* principles') to key elements of the Draft Decision, and puts forward a suggested approach which is consistent with those principles. In doing so, certain aspects of the Access Arrangement which was the subject of the Draft Decision have necessarily been revised for the following reasons.

(a) The previous proposed Access Arrangement covered a period of five years commencing in 2000. A substantial portion of that period has already elapsed with the result that certain aspects of the proposed Access Arrangement are no longer applicable and require modification.

(b) The proposed Access Arrangement previously lodged was prepared without the benefit of the principles enunciated by the Full Court in the *Epic* decision. It is now necessary to have regard to those principles in applying the provisions of the Code, and this has required a revision to the approach previously taken to some aspects of the proposed Access Arrangement.

(c) GGT notes that this approach is consistent with the position taken by the ACCC to a number of pending access arrangement proposals which require reconsideration and further submissions as a result of the *Epic* decision.

2. EPIC DECISION

2.1 General Principles

The *Epic* decision was handed down on 23 August 2002. While final declarations are yet to be made in the action, the Court made findings as to certain general principles underlying concepts dealt with in the Code which must now be applied by the Regulator in assessing a proposed Access Arrangement. Those general principles include the following.

(a) In the field of competition policy, especially market regulation, a reference to a 'competitive market' means a 'workably competitive market' (para. 124). The expectation is that with workable competition, market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although not necessarily achieving theoretically ideal efficiency (para. 128).

(b) It is a legitimate business interest of a service provider to seek to recover its investment in a pipeline at least over the expected life or operation of the pipeline, together with an appropriate return on investment. In this regard, the recovery of tariffs above the level of economically efficient prices should not be seen as an 'illegitimate' business interest (para. 130).

(c) The public interest extends to the protection of the interests of pipeline owners and the assurance of fair and reasonable conditions being provided where their private rights are overborne by the statutory scheme (para. 134).

(d) The general principle in s. 8.1(a) of the Code does not require that the service provider earn a stream of revenue that recovers 'no more' than the efficient costs of delivering the reference service (para. 142).

(e) In a workably competitive market, past investments and risks taken may provide some justification for prices above the efficient level (para. 144). There is a growing awareness of the long term disadvantages of striking the balance with too great an emphasis on the interests of consumers in securing lower prices, and without due regard to the interest of the service provider in recovering its investment (para. 145).

(f) If future investment in significant infrastructure, such as natural gas pipelines, is to be maintained and encouraged, as the public interest requires, regard must be given to the need for both existing and potential investors to have confidence that the various substantial long term investment decisions which are required, and which were sound when judged by the commercial circumstances existing at the time of the investment, are not rendered loss making, or do not result in liquidation, by virtue of future governmental intervention (paras. 148 and 149). Accordingly, the general principle in s. 8.1(d) does not deny the potential relevance of past investment decisions to the design of a reference tariff, and this reflects a public interest broader than the mere understanding and application of economic theory (paras. 152 and 153).

(g) It is an error to assume that only 'efficient' capital investment is relevant and that only 'regulated revenues' can be recovered (para. 205).

2.2 Interpretation Issues

As to the proper interpretation of the Code provisions controlling the Regulator's assessment of proposed Access Arrangements, the principles set out by the Full Court may be summarised as follows.

(a) Section 2.24 of the Code provides for a single process to be undertaken by the Regulator to decide whether or not to approve a proposed Access Arrangement (para. 58).

(b) The factors in s. 2.24(a) - (g) of the Code are relevant to, and are to be given weight as fundamental elements in, the Regulator's assessment of the proposed access arrangement, including the issue whether the Regulator is satisfied that the proposed access arrangement contains the elements and satisfies the principles set out in ss. 3.1 to 3.20 (which, for drafting convenience, incorporate the principles set out in part 8 of the Code) (paras. 66, 223).

(c) Paragraphs (a) to (f) of s. 8.1 of the Code are not finite or absolute criteria; they are objectives, which a reference tariff and a reference tariff policy should be 'designed with a view to achieving'. The different objectives may well be in tension in a particular case, and the achievement of one objective may be impaired to satisfy another (para.

136). In particular, s. 8.1(a) is but one of several objectives, and is not to be applied as an overarching requirement (paras. 157 to 159).

(d) The factors in s. 2.24(a) - (g) should guide the Regulator in determining, if necessary, the manner in which the objectives in s. 8.1(a) to (f) can best be reconciled or which of them should prevail (para. 223).

The principles, which the Full Court found applicable to other specific provisions of the Code will be dealt with in this submission.

3. GGTJV'S LEGITIMATE BUSINESS INTERESTS

3.1 Introduction

The concept of 'legitimate business interests' is fundamental to the assessment of the proposed Access Arrangement.

As mentioned in the introduction to this submission, sub-clause 21(3) of the State Agreement protects GGTJV's legitimate business interests from any material adverse effect, which may be caused by the Code provisions or their application. As previously stated, this issue is to be the subject of separate consideration by the Regulator after part one of the Draft Decision has been issued.

GGTJV's legitimate business interests are also a fundamental consideration under s. 2.24(a) of the Code, which provides:

> *"in assessing a proposed Access Arrangement, the Relevant Regulator must take the following into account:*
>
> *(a) the Service Provider's legitimate business interests and investment in the Covered Pipeline."*

In the *Epic* decision, the Full Court made a number of findings in relation to a service provider's legitimate business interests under the Code. In particular, the Court found that a service provider had a legitimate business interest in recovering its actual investment in the pipeline, together with a reasonable return on that investment, and in some circumstances, this recovery may extend to tariffs above the level of economically efficient prices (see para. 130).

Closely linked to the concept of legitimate business interests is the requirement that the reasonable expectations of the service provider under any previous applicable regime be given consideration. Such reasonable expectations are specifically identified in s. 8.10 (e)-(j) of the Code, which encompass considerations such as the basis on which past tariffs have been set, the historical return to the service provider from the pipeline, the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the Code commencing, and the price paid for any asset reasonably purchased. What is required of the Regulator in the assessment of these particular considerations was the subject of various comments by the Full Court in paras. 168 to 179, which may be summarised as follows.

(a) Each of the considerations has a potential relevance to past investment decisions in respect of the pipeline, particularly where there has been a sale of the pipeline before the Code commenced.

(b) If the previous regulatory regime was more favourable than the Code, the reasonable expectations of the service provider would be for a more favourable return on the investment in the pipeline, and as such the Code is not concerned only with forward looking considerations.

(c) The Regulator must consider the price paid for the pipeline according to the standards of reasonable commercial judgment as to value.

(d) A valuation methodology, which has regard to the present value of anticipated net returns should not be excluded from the Regulator's consideration of appropriate asset valuation methodologies, nor should there be excluded the reasonable expectations of service providers under the regulatory regime that applied to the pipeline before the commencement of the Code.

(e) Where there has been an acquisition of a pipeline on the open market before the commencement of the Code, that circumstance may take the application of s. 8.10 outside of what is normal within the meaning of s. 8.11, because a sale at market value may well involve the capitalisation of some returns greater than those suggested under the "perfect competition" model (which will have been paid to the original owner by the new purchaser) – the sale in these circumstances introduces as a consideration the legitimate investment and business interests of the new purchaser.

(f) Where the investment in the pipeline has been made in the course of an arm's length commercial transaction, and is based on a sound commercial assessment of the value of the pipeline at the time, the Regulator must consider the investment together with the interests of the service provider in recovering that investment together with a reasonable return, having regard to the reasonable expectations of the service provider at that time.

In light of the provisions summarised above and the interpretations of the Full Court in relation to them, the Regulator is obliged to gain a full appreciation of GGTJV's legitimate business interests, including the reasonable expectations of the joint venture, as a result of the prior regulatory regime, which applied before the commencement of the Code. The purpose of this section of the submissions is to provide a summary of these interests and expectations, which will form an important underlying consideration for the more specific submissions which follow.

3.2 State Agreement Regime

Historical Background

The GGP was funded, built and owned by a private consortium in 1995-96.

Prior to the development of the GGP, electrical power had been supplied to the Kalgoorlie and Kambalda areas by the State Energy Commission of Western Australia ("SECWA", now Western Power Corporation), while remote sites such as Mount Keith and Leinster were supplied by local, company owned, diesel power stations.

The Western Australian Government had for some time had its own broad objectives for wishing to see the development of a gas pipeline to the Goldfields. According to the then Minister for Resources Development and Energy the pipeline offered major benefits to the State in terms of a competitive, more reliable energy supply which would promote competition in downstream and upstream markets, increasing royalties to the State and improving the national balance of payments (see second reading speech of Mr C.J. Barnett, Hansard, 29 March 1994, page 10791).

There was general bipartisan political support for the provision of infrastructure to deliver energy to mines in order to facilitate downstream processing and value adding industry.

Furthermore, the economic significance of the reliance upon diesel fuel was noted for its detrimental impact. One politician at the time described the situation thus:

> *"Something like one million litres of fuel oil and/or diesel goes into the goldfields on a daily basis at a cost of about 80c a litre. It is not hard arithmetic to work out that on a daily basis about $800,000 of fuel oil and/or diesel goes to the goldfields regions. That costs Australia dearly because a significant part of that, on average about one-third, is imported annually. That is, about one-third of the $800,000 to $900,000 - say, $250,000 to $300,000 - flows overseas daily" (Hon. P.R. Lightfoot, Hansard, 12 April 1994, page 11890)."*

However the State Government had previously been unable to justify the infrastructure investment necessary to remedy this situation. According to the State Minister, SECWA had concluded that the building of a gas pipeline to bring gas from the north west of the state down to the Goldfields was not viable. The Australian Bureau of Agricultural and Resource Economics had confirmed that view, noting that insufficient demand existed to underwrite the investment (Hansard, 6 April 1994, page 11524).

Despite this adverse view by the government economists, there was certainly some demand for a gas pipeline from within the private sector. For the mining companies located in the Pilbara and Goldfields regions, particularly those companies that also owned a share of the substantial offshore gas fields located in the Carnarvon Basin, continued reliance on expensive electricity and diesel was economically inefficient. In the Kalgoorlie area, electricity supplied from the South West Interconnected (electricity transmission) System ("SWIS") was predominantly produced in large scale but distant coal-fired power stations and involved high transmission costs. For other remote power consumers, the linkage between the price of diesel fuel and the international oil price meant that consumers were exposed to world oil price “spikes”.

According to one of the main GGP project initiators, the project objectives, which underpinned the eventual development of the pipeline were:

(i) *To provide enduring low cost energy,*

(ii) *End risk exposure to crude oil price spikes,*

(iii) *Environmentally “clean” fuel,*

(iv) *Development of East Spar gas field (WMC 30% owner and Operator),*

(see Presentation: WMC's Involvement in the Goldfields Gas Pipeline (“GGP”), 12 March 2002).

During 1992, a number of companies independently undertook studies investigating the feasibility of constructing a natural gas pipeline to supply the Goldfields region of Western Australia. A number of pipeline options were considered, including links from the Dampier to Bunbury Natural Gas Pipeline (“DBNGP”), to supply gas from fields in the Carnarvon Basin to mining and related operations in the Goldfields.

Wesminco Oil Pty. Ltd ACN 004 968 389 (“WMC”), Normandy Pipelines Pty. Ltd ACN 063 551 888 (“Normandy”) and BHP Minerals Pty. Ltd ACN 008 694 782 (“BHP”) formed the GGTJV to pursue the project. (The original members of the GGTJV shall be referred to as the Joint Venture or the Joint Venturers.)

Given the spread of each Joint Venturer's interests along the pipeline route, the percentage interests in the joint venture was determined on the basis of volume of gas to be transported and distance to be covered.

The final composition of the Joint Venture, based on load forecasts of the time, was:

(a) WMC 62.664 percent

(b) Normandy 25.493 percent

(c) BHP 11.843 percent

In April 1993, the Western Australian State Government separately called for expressions of interest for the construction of a natural gas pipeline from the Pilbara to the Goldfields.

The Western Australian State Government received expressions of interest from numerous parties regarding the development of the new pipeline, with 16 formal submissions from national, international and local companies being received (see Hansard, 30 June 1993, page 859, question 45).

Following a competitive selection process and assessment which took into account factors including proposed access arrangements and tariff levels, the Joint Venturers were selected as the preferred proponent of the new pipeline, which would integrate the GGP as a transmission system with the demand of the market (see Hansard, 22 September 1993, page 4501, question 1001).

The State Government and the Joint Venturers subsequently negotiated the State Agreement, which was signed in March 1994. The State Agreement provided for private sector development of major infrastructure under commercial terms with light handed regulation while ensuring non-discriminatory access and tariffs, and requiring the Joint Venturers to pursue market growth and to provide for further development of the pipeline capacity to serve that growth (see Hansard, 29 March 1994, page 10793, Second Reading).

GGT was appointed to act as pipeline manager on behalf of the Joint Venture in May 1993. A tender for the provision of pipeline operations and maintenance services was called and a contract subsequently awarded to AGL Pipelines (WA) Pty. Ltd (now Agility).

The State Agreement imposed a number of obligations on the Joint Venturers, including:

(a) field and office studies related to pipeline construction and operations;

(b) the gaining of pipeline route approval;

(c) development of third party access arrangements and tariffs in compliance with agreed principles;

(d) active encouragement of third party transport customers;

(e) provision of 50% spare capacity; and

(f) funding of capacity expansion.

The government involved a number of agencies in the negotiations and applied considerable expertise in relation to issues concerning third-party access to the pipeline and the pricing principles, which would apply.

The Joint Venturers were granted a pipeline licence (WA: PL 24) on 27 January 1995 to design, construct, and operate a pipeline of approximately 1380 kilometres in length to transport natural gas from DBNGP Compressor Station One at Yarraloola to Kalgoorlie, via the East Pilbara and North East Goldfields regions of Western Australia.

Commissioning of the pipeline was done progressively, from north to south. Gas was first delivered to Newman in June 1996, Mount Keith and Leinster in August 1996, and Kalgoorlie and Kambalda in September 1996. The pipeline was officially opened by the then Premier, the Hon. Richard Court, on 4 October 1996.

From the outset, the Joint Venturers sought to promote third party access (as well as attempt to broaden the commercial basis upon which the investment in the GGP would be made). In 1994, prior to finalising the design and capacity requirements of the pipeline, GGT offered an 'open season' for foundation third party pipeline users. This open season provided for a discount of 7.5 percent on transport tariffs.

However at the time, no third party took advantage of this initial incentive to use the GGP.

It was not until 1997 that four third party users took capacity on the GGP. These were Plutonic Operations (at Plutonic), Wiluna Gold (at Wiluna), AWI for Great Central Mines (at Jundee), and AlintaGas (for the distribution system in Kalgoorlie). These were followed in 1998 by Anaconda Operations (at Murrin Murrin), and AWI for Centaur Mining (at Cawse).

These subsequent third party loads, combined with the GGTJV loads, lifted the utilisation of GGP capacity to its present level.

In March 1998, tariffs on the GGP were voluntarily discounted to approximately 85 percent of their original value.

In December 1998, WMC completed the sale of its share in the GGP to Southern Cross Pipelines Australia Pty. Ltd (62.664%). In January 1999, Pilbara Energy (i.e. BHP) sold its interest in the GGP to Duke Energy International (11.843%). In March 1999, Normandy Pipelines sold its interest in the GGP to Southern Cross Pipelines (NPL) Australia Pty. Ltd (25.493%). Ownership of the Southern Cross companies comprises CMS Goldfields Gas Transmission Pty. Ltd ("CMS") (45 percent), APT Pipelines Investment (WA) Pty. Ltd (45 percent), and TEC Projects Pty. Ltd (10 percent).

In July 1999, a further voluntary tariff discount saw the published third party transport prices fall to approximately 80 percent of their original value. In January 2000, tariffs were further voluntarily discounted to approximately 75 percent of their original value. In December of 2001, GGT removed voluntary discounts and reverted to the approved benchmark tariff of A1.

GGT remains as pipeline manager under the new ownership. CMS is the commercial services provider to GGT, and Agility (formerly AGL) remains as the contracted pipeline operator. These services are provided on a commercial basis under formal contracts.

<u>Specific features of the State Agreement regime concerning access and tariffs</u>

Under clause 9(1) of the State Agreement, the Joint Venturers were required to submit detailed proposals to the Minister dealing with, amongst other things, arrangements for access to the GGP, and tariff setting principles ("TSP") to apply to third parties other than Initial Customers (as defined). Pursuant to that requirement, the original owners submitted proposals to the Minister and the Department of Resources Development which included proposed TSP, proposed tariffs to be charged to third parties and certain project evaluation principles which formed part of the model underlying the proposed tariffs. A number of critical assumptions were underlying that tariff model. Among those were:

(a) the GGTJV would recover their costs over a project life of forty two years; and

(b) the expected return on equity for the original owners was 17.45%.

The fact that these project parameters were acceptable to the State Government was underlined in an address given by the Honourable N.F. Moore, leader of the Legislative Council on 26 August 1997 (see Hansard, 26 August 1997, pages 5361 to 5366). During that address, Mr Moore made the following statements:

> *"The tariffs that have presently been set by the GGP were judged by the State to be consistent with the tariff setting principles.' (See Hansard, page 5363).*
>
> *'Tariffs were set in the first place to produce the lowest possible tariff consistent with the tariff setting principles. This was because a net present value, rather than a cost of service approach, was used. This essentially means that the project has estimated the likely sales and costs over the full 42 years of the project and annualised the net cash flow on a discounted basis to produce an NPV of zero using an agreed discount rate. The effect of this is to shift present costs onto the future. The result is a lower tariff in the earlier years of the project compared with a cost of service approach where actual costs on an accounting basis are recovered each year from the volume of gas sent through the pipeline." (See Hansard, page 5364).*
>
> *"The model sets up a pipeline entity that effectively operates as though it is a separate company which raises funds in the capital markets and makes a return on equity as a stand-alone company. The rate of return it makes is set by comparison with comparable entities in the marketplace. The rate of return used in the model was reviewed by the State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand-alone company." (See Hansard, page 5364).*

The proposals lodged by the original owners under clause 9(1) were formally approved by the Minister for Resource Development by letter dated 27 January 1995. The approved proposal included thirteen TSP applicable to the setting of third party tariffs.

Significantly, the TSP included the following:

(a) tariffs will be set to provide a commercial rate of return on all project capital, including all of the costs reasonably incurred in the construction and operation of the GGP and to recover all reasonable GGP operating, maintenance and administration costs (TSP 2);

(b) the commercial rate of return is to be commensurate with the business risk associated with the Goldfield Gas Pipeline project (TSP 2);

(c) tariffs are to be structured to recover the capital cost of the pipeline equitably over time (TSP 8); and

(d) the tariffs are to be re-determined if at any time they do not promote the use of the pipeline, or do not generate a rate of return, which is consistent with TSP 2 (TSP 12).

It is important to understand the effect of the approved TSP on GGTJV's legitimate business interests and reasonable expectations. In particular, TSP 2, in allowing for a commercial rate of return commensurate with the business risk associated with the GGP project, has regard to firm-specific (or non-systematic) risks, which are unique to that project. Such risks, by their nature, need to be assessed separately for each project. The rate of return required by TSP 2 must therefore be sufficient to accommodate the unique business risks faced by this particular project (and not be limited to a rate of return which takes account of systematic risk only, such as that estimated by the Capital Asset Pricing Model "(CAPM")).

Furthermore, TSP 8 has important implications for the recovery of capital costs from the point of view of depreciation. This principle requires that the capital costs of the pipeline be recovered equitably over time. The only limitation in this regard is that the costs be 'reasonably incurred'. In the context of the tariffs applying under the State Agreement regime, this assumed such costs would be recovered over a 42 year life.

In addition to the approved TSP, certain provisions of the State Agreement deal specifically with access and tariff matters, including:

(a) clause 20 which requires the joint venturers to provide non-discriminatory third party access to such capacity as may from time to time not be contracted or utilised; and

(b) clause 22 which requires the joint venturers when negotiating contracts with third parties to incorporate tariffs that are fair and reasonable and consistent with the approved TSP.

The State Agreement regime also provided for dispute resolution procedures under clauses 22 and 37.

3.3 Reasonable Expectations When Investment Committed

Investors' Original Expectations

The GGP was constructed and is operated under the terms and conditions of the State Agreement and is also a 'covered pipeline' under the Code.

The State Agreement provided both the obligations and the government sureties under which terms it was possible for private investment in this infrastructure to take place. This was needed because, whilst the State Government wished to pursue regional development in the East Pilbara and Goldfields regions, it was not prepared to underwrite the project in any way.

> *"....at all times I have made it clear it is to be a private sector project conducted on strictly commercial grounds and that no government subsidy will be provided. The role of government will be to facilitate the project." (Mr C.J. Barnett, Hansard, 22 November 1994, page 7423, Question no. 621.)*

The State Government's objectives would therefore not have been realised without the GGTJV base load and the commitment of capital by the GGTJV to the construction of the pipeline. It was acknowledged that this investment decision involved certain risks, one of the most important being the actual capital cost of constructing the pipeline.

> *"However they (DRD) did say that in the early stages of the pipeline the operation might well be marginal, depending on a number of*

factors. One of the most important will be the cost of constructing the pipeline." (Mr. J.Grill, Hansard, 6 April 1994, page 11565, Second reading.)

Hence the appropriate sizing of the pipeline was critical in order to ensure that sufficient utilisation would underwrite the development cost.

Nonetheless, in the interest of promoting future market development and being able to meet foreseeable growth in demand, under the terms of the State Agreement, the GGTJV agreed to construct a pipeline, which was larger in size and hence greater in cost than what was required to satisfy the needs of the individual Participant companies. This requirement is explicitly articulated in the State Agreement, which stipulates that the capacity of the Pipeline shall be able to be expanded, by using additional compression, by a minimum of 50% of the Initial Committed Capacity.

"Initial Pipeline size

(5) Unless otherwise agreed by the Minister, the initial development of the Pipeline shall be such that its size is the greater of —

(a) a diameter of 400 mm from the commencement of the Pipeline through to Newman thence of 350 mm through to Kalgoorlie; and

(b) such diameter or diameters as are required so that the initial operating capacity of the Pipeline is sufficient to provide for all Initial Committed Capacity,

and such that —

(c) the Pipeline shall be suitable for operation at a pressure of not less than 10,200 kPa; and

(d) the capacity of the Pipeline shall be able to be expanded, by using additional compression, by a minimum of 50% of the Initial Committed Capacity." (Goldfields Gas Pipeline Agreement Act 1994, Clause 9(5).)

This meant that the GGTJV faced from the outset the commercial risk associated with the uncertainty surrounding the development of an expanded third party gas transport market. Further, the GGTJV determined initial and subsequent third party tariffs on a 'levelised' basis in order to yield tariffs which remained constant in real (i.e. inflation adjusted) terms. This "whole-of-life" methodology reduced tariff levels in the early years of the project with the explicit intention of promoting the use of the pipeline. This tariff levelising (ie. initial reduction in the early years of the project in exchange for sustained price levels later), results in capital cost recovery being deferred to later years of the project life.

This deferment of capital recovery in itself imposes further risks upon the GGTJV associated with the sustainability and growth of the market, as well as unforeseeable changes in the regulatory and commercial environment.

In 1993, the GGTJV was one of several proponents seeking to progress the development of the GGP. The State Government used a competitive process to select the GGTJV ahead of other project proponents. Selection was based on reasoned and comprehensive criteria, which included assessment of third party tariffs.

The initial development of third party tariffs for the GGP was done under clearly defined and prescriptive TSP agreed under the State Agreement which specifically promote third party access and protect the interests of third party users. The process by which initial tariffs were developed was overseen by the Department of Resources Development (now the Department of Mineral and Petroleum Resources), whose minister approved the project proposals, including the tariffs finally promulgated.

Subsequent published third party tariff discounts have also been developed under the TSP set down in the State Agreement. Thus, the ability of third parties to equitably access the GGP under known terms of access has been (and continues to be) provided for from the time of the pipeline's inception.

The State Agreement specifically provides for rights of non-discriminatory third party access to spare and developable capacity, a basis for negotiation and pricing principles, as well as arbitration in the event of an access dispute arising. It should be noted however, that there have been no access disputes and no cases requiring arbitration under the pre-existing State Agreement regulatory regime.

So while the GGP as it exists today is a product of commercial and competitive forces and processes, the importance of ensuring access to the GGP by third parties was explicitly recognised at the time that the GGTJV and the State Government negotiated the State Agreement. The requirements that the GGTJV actively seeks third party users and that pipeline capacity be set at time of design to accommodate the needs of third party users are fundamental to the State Agreement.

Even more effectively, it is in the owners' interests to "grow" their business. GGTJV has demonstrated its desire to promote the use of the pipeline with a series of price discounts having been offered. The published third party tariffs available for the GGP have a history of discount offerings which have sought to increase the utilisation of the pipeline and hence realise the economic and social benefit of the pipeline's declining cost function.

<u>User's Original Expectations</u>

From the outset, the nature of the downstream competition that GGP would face was recognised. The then Minister for Energy stated;

> *"The pipeline operator will face competition from SECWA and vice versa." (Mr. C.J. Barnett, Hansard, 6 April 1994, page 11584, Second Reading).*
>
> And…
>
> *The anticipated impact of the cost savings in energy from the introduction of gas into the downstream market was significant, with estimated reductions in the order of around 15% in Kalgoorlie, 30% at Mt Keith and even larger savings further north. "The preliminary work and current work shows that the savings to energy consumers from the gas to the goldfields pipeline project will vary from around 15 per cent in Kalgoorlie to about 30 per cent at Mt Keith and perhaps up to 50 per cent in the eastern Pilbara." (Mr C.J. Barnett, Hansard, 22 November 1994, page 7419, Question no. 617.)*

And…

"The gas price of $2 per gigajoule from the Pilbara, with the delivery cost to the goldfields gas pipeline to Newman would be about $3.57 per Gj [sic]. As Hon Mark Nevill said, the price at Kalgoorlie it will be $5.67 per Gj. This compares to $8 or $9 per Gj for the distillate, which price is net of the diesel fuel rebate. If one looks at the prices at Newman - $3.57 delivered compared to $8 or $9 per Gj for distillate - it is a saving of 60 per cent." (Hon N.F. Moore, Hansard, 17 October 1996, page 6736.)

In fact, the Energy Minister at the time was forced to address concerns within the State Government about the necessity of the State energy utility reducing prices in order to compete with the proposed gas pipeline.

"Members opposite have got it all wrong. The whole point about the pipeline is to develop industry and to introduce competition in order to reduce prices. I would be the most foolish Minister in the world if I told them they could not reduce prices. Why do members opposite think we are deregulating the energy industry and introducing competition?" (Mr. C.J. Barnett, Hansard, 29 November 1994, page 8000, Question no. 641.)

However, it was also clear that the potential benefits were not restricted to the introduction of competition with electricity supplied by SECWA from the SWIS. Competition between power station fuels, particularly diesel, was also provided. This was also clearly recognised from the outset.

Nevill: "What is the basis for the claim by the Minister for Resources Development Legislative Council that energy costs will be reduced by 30% at the end of the goldfields gas transmission pipeline?"

Moore: "I thank the member for some notice of the question. The answer is: the comparison of the estimated cost of delivered distillate against delivered gas." (Nevill/Moore, Council, 24 October 1996, p7172.)

What is more, the benefits anticipated prior to the construction of the GGP have subsequently been realised. Gas delivered to Kalgoorlie has displaced electricity, which was previously provided via transmission line, and downstream customers have reaped the benefits.

Typical of the time was a comment made in 1997 by Wiluna Mines Ltd.

> *"With a switch to gas-fired power generation due later this month, Wiluna's managing director Jeff Gresham said the September quarter performance would not be a one-off result.*
>
> *"We are confident that these cost levels will be maintained, particularly with the commissioning of the gas-fired power plant in October, which is expected to yield savings of around $27/oz," [approx 8% nominal saving] he said." ("Lean, mean Wiluna fights takeover", in Gold Gazette, 20 October 1997, page 28).*

Since then, the dominant existing downstream customer on the GGP has stated that the energy costs of its Western Australian operations in 2001 were 5% below 1995 energy costs in nominal terms, which it equated to a 20% reduction in real terms. This was quoted as amounting to savings of more than $25 million p.a., while also avoiding exposure to diesel price shocks. (Presentation : WMC's Involvement in the GGP, John Harvey, Manager Energy Supply, WMC Resources, 12 March 2002).

Further there were other consequential benefits from the introduction of the GGP. For instance, it made possible gas reticulation in Kalgoorlie, where the retail price of LPG had previously been approximately $24/GJ. Following the supply of natural gas from the GGP, the State gas distributor began to provide natural gas in Kalgoorlie for $16/GJ. Even though gas transportation discounts have not to date been passed through to distribution customers, natural gas continues to be supplied at substantially lower prices than the bottled LPG alternative. This is based on current prices supplied by Kleenheat Gas and AlintaGas, showing that a domestic gas customer in Kalgoorlie who consumes 18 GJ of gas per year would pay an average price of $30.91/GJ for LPG or $21.15/GJ for reticulated natural gas. (For LPG, assumes one 45kg LPG cylinder represents 2,268 MJ, cost per cylinder is $59.64, delivery charge is $6.45, with annual rental charge of $38.50, per Kleenheat prices quoted in August 2002. Reticulated gas cost based on an Energy Charge of

$0.0604/unit, assuming 3.6 MJ energy equivalent per unit, with Supply Charge of $0.2174/day, per AlintaGas prices as at 1 July 2002.)

Finally, the benefits arising from the competitively tendered development of the GGP were carefully evaluated by the State Government against a range of "State benefit criteria". The Energy Minister at the time stated (with emphasis added) in parliament that;

> *"The 'net value added' computer model utilised assessed the gross value added to the State under a variety of energy price scenarios. Costs of the major inputs such as construction materials, labour etc, are deducted to give net value added. This was found to be positive for the project contemplated. Nine selected consortia were interviewed and they provided written response to a large range of questions, structured to enable the project team to evaluate their bids against a range of State benefit criteria. These criteria included –*
>
> (i) *Energy cost savings to WA*
>
> (ii) *accessibility - to suppliers and consumers*
>
> (iii) *Security - technical and financial*
>
> (iv) *Economic stimulus*
>
> (v) *Social benefits*
>
> (vi) *Minimised requirements of Government. "(Hon. C J Barnett, 15 September 1993, page 3974, question no. 863)*

3.4 Reasonable Expectations of the Current Owners at Acquisition

The current members of the GGTJV purchased their interests in the pipeline in about late 1998.

In arriving at a decision to invest in the pipeline at the agreed purchase price, the current owners relied on the features of the tariff setting regime, which then existed including:

(a) the approved TSP, in particular TSP 2, which guaranteed a commercial rate of return on all project capital, such rate of return to be commensurate with the business risk associated with the project, and TSP 8 which provided for full cost recovery over a 42 year life;

(b) the benchmark and discounted tariffs being charged for third party access to the pipeline; and

(c) the clause 9(1) proposals and the assumptions underlying those proposals which had been lodged with, and approved by, the Minister, and which were understood to fully justify the historical and current tariffs charged for access by third parties.

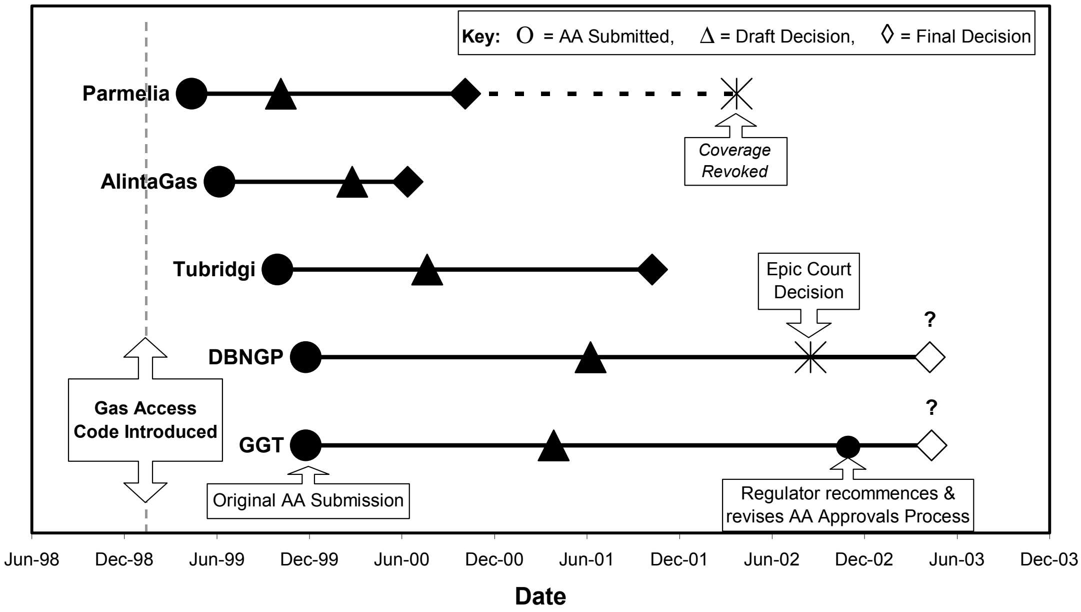
The current owners were also aware that the tariffs historically charged in respect of the pipeline had been determined in accordance with TSP 1 and TSP 2 on a 'levelised' basis in order to yield tariffs which remained constant in real (i.e. inflation adjusted) terms. This 'whole of life' methodology reduced tariff levels in the early years of the project with the explicit intention of promoting the use of the pipeline. This tariff levelising (i.e. initial reduction in the early years of the project in exchange for sustained price levels later) results in capital recovery being deferred to later years of the project life.

At the time of the investment decision, the current owners also gave consideration to the impending operation of the Code. Their expectation at that time was that the Code could or would be applied in a manner which was consistent with the financial parameters and assumptions underlying the State Agreement regime, on the basis of which the investment decision was made. To the extent that this may not transpire to be the case, the current joint venturers were comforted by the protection afforded by sub-clause 21(3) of the State Agreement.

3.5 Reasonable Expectations as to how the Code should apply

The Access Arrangement proposed by GGT was submitted in December 1999. At that time, implementation of the Code was still very much in its infancy and GGT had little basis upon which to found its expectations as to how the Code would be applied, particularly in Western Australia. The relative timing of Code processes in this State is illustrated below.

GAS ACCESS CODE PROCESS TIMING IN WESTERN AUSTRALIA



At the time of submitting the Access Arrangement proposal, the expectations of GGT, as to how the Code would be applied were shaped not only by the specific provisions of the regime which existed prior to the Code (that is the State Agreement) but also by views expressed by the State Government about how the Code would be implemented in Western Australia. The intention of pursuing light handed access regulation had been commented upon in Parliament on a number of occasions (see quote below), and this was wholly consistent with the recommendations of the earlier Carnegie Review (April 1993) and Hilmer Report (August 1993).

> *"What has been applied in this Bill is consistent with the Commission of Australian Governments on pipeline rules; so it is up in front with the practices that apply. The trend is that of light handed regulation. It is essentially working out. There will be probably hiccups, but it is better than going down the highly regulated route." (Hon C.J. Barnett, Hansard, 6 April 1994, page 11564, Second Reading).*

This was also the direction broadly perceived to be advocated by the Council of Australian Governments (COAG) in its initial deliberations as to the basis upon which the Code would be formulated. While certain early outcomes in eastern Australia were perceived to be divergent from the original COAG objectives, it was generally considered that these were teething issues and aberrations, which would not be permitted to persist.

Moreover, the situation in Western Australia was widely recognised in industry and government as being significantly different from that which underscored regulatory outcomes in New South Wales and Victoria (in particular). Consistent with this and after much discussion within Parliament, a state based Regulator had been appointed (as opposed to the ACCC who is the regulator for gas transmission pipelines everywhere else in Australia) with the stated intention that this would give appropriate regulatory recognition to the various unique circumstances which were acknowledged to exist in this state. For example:

> *"I accept the rules of the game for open, third party and non-discriminatory access. I am happy for that to be regulated in terms of fairness between players. However, I want that done in the context of energy policy in this State. As a Government, we will not cede energy policy to the ACCC. Other issues are involved. We have uniformity of regulation requirements. We have agreement Acts and issues which need to be honoured and respected. A local regulator will need to take into account the circumstances of the State. We have a small grid, great development potential and the need for new infrastructure. An ACCC regulator looking at a Sydney and Melbourne market will not be attuned to our circumstances." (Hon. C.J. Barnett, Minister for Energy, Hansard, Wednesday, 16 September 1998, p.1475).*
>
> *And…*
>
> *"The member is correct. I have expressed concerns, and I continue to have concerns, about this code applying to offshore pipelines. The member has provided a perfect example of why we need a state-based regulator. This issue is unique to Western Australia. We can imagine the lack of sensitivity to the mixture of onshore, three-kilometre limit, territorial sea and offshore gas reserves. It is precisely because of those types of considerations that we want a locally based regulator who understands what is taking place in the industry. If we get*

arbitrary decisions and a lack of understanding of the realities of production, the access code regimes will be applied further and further upstream, with the inevitable consequence that upstream producers will build smaller infrastructure, so it physically will not be available for open access, and that will be subeconomic and suboptimal. That is not the result we want. We have managed to get it to the stage where the code will apply only up to the gas processing facility, but even that, as the member has indicated, will produce anomalies. That is why we want a local input and some local say over the way in which this code is applied.

The code has great potential to cause enormous disruption and cost to our developing offshore gas industry. This State produces 52 per cent of Australia's natural gas and has 80 per cent of Australia's natural gas reserves. The code has been developed to suit a developed, stable situation in New South Wales and Victoria, not the developing gas sector that we have in this State; hence we want a local input, for exactly that reason." (Hon. C. J. Barnett, Hansard, Wednesday, 16 September 1998, p.1515)

"A state-based administrator in Western Australia can deal with both transmission and distribution within Western Australia. [...] It also allows that person to be close to the scene, to be conscious of the upstream issues that we have debated and all the other issues that apply, and to understand the history of resource development projects, of the agreement Acts, of the development of the Dampier to Bunbury natural gas pipeline and the goldfields gas pipeline - all unique, special circumstances here. That is what it is about." (Hon. C. J. Barnett, Hansard, Wednesday, 16 September 1998, p.1521)

"Again we come back to the local regulator, who we believe would understand Western Australia's unique conditions better than anybody else. Again I go through those conditions that have been indicated before, such as population density, a resource development based economy, standard delivered tariffs for residential and small business customers, and the importance of regional development. The eastern

states regulator is more likely to be familiar with higher population densities, a gas market in which the majority of gas transported is sold to residential customers as opposed to industry, and single gas fields servicing pipelines. Certain eastern states gas transmission pipelines are unlikely to have access arrangements and allow a wide variety of services, such as back haul and inlet points, and address the different quality of gas issues. The local regulator can develop special skills and knowledge in regulating gas pipelines. The ACCC regulates many industries involving consumer protection issues, whereas a local gas regulator here could become an expert in gas regulation." (Hon N.F. Moore, Hansard, Gas Pipelines Access (Western Australia) Bill, Second Reading, Thursday, 3 December 1998, p.4808).

The intentions of the State Government were clear and the basis for how the Code would be implemented in Western Australia seemed reasonably clear. The Code would be implemented in a manner which was consistent with the objectives and obligations of the regimes and arrangements which had previously served (in a light-handed regulatory manner), to achieve the development objectives of the State. Certainly it was the view of GGT that the GGP warranted at least consideration of a number of unique aspects in terms of both its history and the nature of the markets it served and the service it provided within those markets. These aspects were elaborated upon in some length in the original Access Arrangement Information submitted to the Regulator in November 1999.

The *Epic* decision has reinforced the obligations of the Regulator to consider GGTJV's legitimate business interests and reasonable expectations under the pre-existing regulatory regime.

A further consideration arising from the *Epic* decision in the context of considering GGTJV's reasonable expectations is that of the regulatory objectives of the State Government in pursuing competition in the energy industry.

"I again place on the record that when this Government came into power, it had a very clear set of principles for energy policy in this

State: Firstly, to grow the energy sector, recognising that this State needed to expand its energy infrastructure of gas pipelines, gas producers, power stations and the like. Secondly, to ensure that the interests of the private sector was in developing the expanded infrastructure. We had a clear economic development strategy of combining our energy resources with our mineral resources, both in a physical and commercial sense. Many of the projects around the State are a testimony to that. Thirdly, to deregulate the industry and to introduce competition into an industry which in 1995 was totally monopolised, totally regulated, with one large gas producer selling to one large government-owned authority, the State Electricity Commissioner of Western Australia, in turn selling essentially to one large customer, Alcoa Australia Ltd." (Hon. C.J. Barnett, Hansard, Wednesday, 16 September 1998, p.1470)

The clear emphasis in the preceding statement by the then Minister for Energy was the pursuit of infrastructure expansion. This is a sensible emphasis, borne out by subsequent studies which recognise the inherent initial disadvantages of gas transmission (due to the high initial committed capital requirement and the 'sunk' nature of the investment) and the need for the hurdle of accessibility to gas to be crossed before market growth can occur and competition begin to bring about sustainable price reductions. These considerations are nowhere less appreciable than they are in Western Australia.

"Members opposite ask why our gas is dearer. There are a number of reasons: The main difference is that we are servicing a market of approximately 1.8 million people, and in the eastern States the market for gas is probably 12 million to 14 million people. The capital cost of building a pipeline is offset much more quickly when one operates in a larger market." (Mr Bloffwitch, Hansard, Wednesday, 16 September 1998, p.1470)

"Real prices have come down. I recognise that there is still a margin, but, again, as the member for Geraldton said, we need to understand the geography of this State. Our coal is expensive, for historic reasons, and is of lower value. It is not the surface deposit that is

easily mined elsewhere. Our gas is abundant, but it is 1,500 kilometres away and is 120-odd kilometres out to sea; therefore, it is expensive and needs to be transported a long way. WA has a narrow market, and it has one principal population centre - Perth. We have a responsibility to provide power into regional areas, not just the isolated regional areas, but also the south-west grid area. That is a non-economic service, but we have a social responsibility to do that." (Hon. C. J. Barnett, Hansard, Wednesday, 16 September 1998, p.1473).

"The member for Albany would like to see gas delivered to Albany, and that is probably subeconomic. Gas delivery into the mid-west is subeconomic, and that is why the Government is assisting Western Power in that provision. Does the member for Cockburn think that arrangement would pass through the Australian Competition and Consumer Commission and the National Competition Council? Could we have gained approval for the goldfields pipeline through the ACCC? No way. We gave rights and privileges to investors in the pipeline. That would not happen under the Australian Competition and Consumer Commission". (Hon. C. J. Barnett, Hansard, Wednesday, 16 September 1998, p.1475).

It was clear, prior to the introduction of the Code, that there was an appreciation within government of the notion that access regulation, to the extent that it might promote competitive price behaviour, was constrained by the nature of the Western Australian market and its geography. Achieving lower prices through competitive processes was certainly an objective of the Government, however it was not the primary objective. It was recognised that before the situation conducive to achieving this outcome could be established, infrastructure development had to take place. It was also recognised that this could only happen in Western Australia if sufficient investment sureties were provided, whether by direct investment incentives, government guarantees of commercially attractive rates of return, or by underwriting demand growth.

"An investment is being made for the future of this State. That is exactly the vision these people had; they made an investment for the future

> *benefit of the people in this State. In doing so, a very courageous decision was made. As we bring more pipelines on stream, as we get more gas out and as more large industries are established, we will start to see gas prices come down. Surely in the future these people will not have a hard job. They will help us to reduce energy costs in this State. That is a very positive step and something all people in this State should all support." (Mr Bloffwitch, Hansard, Wednesday, 16 September 1998, p.1470)*

In terms of the basis upon which a Service Provider might reasonably form its expectations prior to the introduction of the Code in Western Australia, it was clear that the State Government had few illusions about the attainment of anything other than what might now, in accordance with the Epic decision, be termed "workably competitive outcomes". The preceding quotes provide adequate evidence of this. However, more concrete evidence exists in the form of the various State Agreements entered into by successive State Governments in order to facilitate development in Western Australia. Various aspects of the Epic decision make it incumbent upon the Regulator to consider the reasonable expectations of parties to these State Agreements (and specifically to the GGP State Agreement in this case) in the context of the pragmatic development of workably competitive markets.

3.6 Summary of GGTJV's Reasonable Expectations

In summary, under the tariff setting and access regime which applied pursuant to the State Agreement regime at the time the pipeline was purchased (and before the Code commenced), GGTJV's reasonable expectations were that:

(a) At some time in the future a uniform national code addressing the economic regulation would apply to the GGP to the extent that it did not conflict with the existing provisions of the State Agreement which protect the interests of the pipeline owners.

(b) Economic regulation under this uniform national code would be light handed.

Both the "Hilmer Report" and the Council of Australian Governments' Agreement dated 25 February 1994 ("CoAG 1994"), discussed in some detail in the *Epic* decision from para. 88 onwards, foreshadowed light handed regulation.

(c) Regulators would not set tariffs, but rather act as umpires in access disputes.

The Hilmer Report and CoAG 1994 clearly give this indication.

(d) The Western Australian Government would fully honour its contractual obligations, including those under the State Agreement.

(e) The owners of the GGP would recover all capital expenditure incurred in constructing and operating the GGP.

Given the existence of TSP 8 and a perception of low sovereign risk, this expectation is self evident.

(f) The A1 tariffs, determined as part of the final project approval process agreed and concluded with the Western Australian Government, were fair and reasonable. This conclusion is reasonable given the approval of the clause 9 Proposals by the then Minister for Resources Development in January 1995, and statements to the press and in Parliament by various stakeholders other than the pipeline owners (including but not limited to members of both the Government and Opposition of the day).

In particular, the Hon. Norman Moore, Leader of the House, stated in the Legislative Council on Tuesday 26 August 1997:

> *"The tariffs that have presently been set by the GGP were judged by the State to be consistent with the tariff setting principles.*
>
> ...
>
> *Tariffs were set in the first place to produce the lowest possible tariff consistent with the tariff setting principles. This was because a net present value rather than a cost of service approach was used. This essentially means that the project has estimated the likely sales and costs over the full 42 years of the project and annualised the net cash flow on a discounted basis to produce an NPV of zero using an agreed discount rate. The effect of this is to shift present costs on to the future.*

The result is a lower tariff in the earlier years of the project compared with a cost of service approach where actual costs on an accounting basis are recovered each year from the volume of gas sent through the pipeline.

...

The rate of return used in the model was reviewed by the State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand alone company."

(g) GGT would be entitled to charge tariffs which would provide a commercial rate of return on all project capital commensurate with the business risk associated with the GGP project;

(h) the fundamental parameters underlying the tariff model used to calculate the original tariffs, including a return on equity of 17.45% nominal post-tax over a project life of 42 years, were acceptable to the State and would continue to apply under the approved TSP;

(i) the principles underlying the 42 year levelised tariff model would continue to apply enabling full recovery and a commercial return on all reasonably incurred project capital during the balance of the 42 year project life.

(j) The action by the Western Australian Government in establishing a state-based economic regulator for natural gas transmission pipelines (rather than accepting, along with all other States and Territories, the Australian Competition and Consumer Commission) intended particular regard being given to state-specific circumstances, including but not limited to the State Agreement.

(k) Economic regulation of the GGP under any regime would properly and duly consider relevant factors, including but not limited to:

   (i) the competitive tender process to establish the GGP*;*

   (ii) the subsequent State Agreement and its provisions,; and

(iii) a reasonable balance between the legitimate business interests of the pipeline owners and the interests of users of the pipeline, upstream producers of natural gas, and downstream consumers of gas.

(l) The state-based regulator would take the necessary steps to become fully informed of the State Agreement, as it is ratified under State Law.

4. INITIAL CAPITAL BASE

4.1 Epic principles

All of the general principles summarised in Section 2 of this submission have relevance to the establishment of the initial Capital Base ("ICB") under the Code. In particular, the Court's findings concerning the meaning to be attributed to a 'competitive market', the legitimate business interests of a service provider in seeking to recover its investment, and the error in the assumption that only 'efficient' capital investment is relevant to the exercise, are matters which must be given significant weight in the establishment of the ICB.

More specifically, the important principles arising from the *Epic* decision insofar as establishment of the ICB is concerned may be summarised as follows.

(a) The task of 'establishing' the ICB is not simply one of valuation. It requires the Regulator to consider a variety of other considerations including:

(i) the basis on which past tariffs have been set;

(ii) the historical returns to the service provider;

(iii) the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code; and

(iv) the price paid for any asset recently purchased (para. 74).

(b) Such factors are not directly related to the value of the pipeline in the ordinary sense (para. 74).

(c) To treat past investment as sunken, i.e forever bygone, fails to recognise that a reference tariff which is based only on a cheaper present replacement value, and which has no regard to the actual unrecovered capital investment in the pipeline, may well undermine the viability of the earlier investment decision. If future investment in significant infrastructure, such as a natural gas pipeline, is to be maintained and encouraged, regard must be given to the need for both existing and potential investors to have confidence that the various substantial long term investment decisions which are required, and which were sound when judged by the commercial circumstances existing at the time of the investment, are not rendered loss making, or do not result in liquidation, by virtue of future governmental intervention (paras. 148 and 149).

(d) By s. 8.10(f), consideration is required to the basis upon which tariffs have been set in the past, the economic depreciation of the pipeline and the historical returns to the service provider from the pipeline (para. 168).

(e) By s. 8.10(g), regard is to be had to the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code. If that regime was more favourable in some respect than the Code, then the reasonable expectations of the service provider would be for a more favourable return on the investment of the service provider in the pipeline. Section 8.10(f) and (g) therefore reflect the relevance of the historical returns and tariffs and depreciation, as well as the reasonable expectations of the service provider before the commencement of the Code, in the establishment of the ICB for the purposes of the Code. These provisions preclude the view that the Code is concerned only with forward looking considerations in respect of the establishment of the ICB (para. 169).

(f) What must be considered is the price paid and the circumstances of the purchase. This includes an examination of the price paid according to the standards of reasonable commercial judgement as to value (para. 172).

(g) Economic efficiency is but one of the factors identified in s. 8.10 and there is no sufficient justification in that provision for regarding it as in any way a dominant consideration. While the DAC and the DORC methodologies have an acceptability for the purposes of the concept of economic efficiency, s. 8.10(c) requires other well recognised asset valuation methodologies to be considered and, under s. 8.10(d), the advantages and disadvantages of each are to be weighed. They are not to be weighed only according to the economic theory of economic efficiency. A valuation methodology, which had regard to the present value of anticipated net returns should not be excluded for these purposes. Nor should there be excluded the reasonable expectations of service providers under the regulatory regime that applied to the pipeline before the commencement of the Code, s. 8.10(g). Similar principles apply in respect of the purchase price for the purposes of s. 8.10(j) (para. 176).

(h) Where there has been an acquisition of a pipeline on the open market before the commencement of the Code, that circumstance may take the application of s. 8.10 outside of what is normal within the meaning of s. 8.11, because a sale at market value may well involve the capitalisation of some returns greater than those suggested under the "perfect competition" model. These will have been paid to the original owner by the new purchaser. Notwithstanding economic theory, a sale in these circumstances introduces, as an additional factor, the legitimate investment and business interests of the new purchaser which, at the time of the commencement of the Code, is the service provider. This investment has social, political and public interest dimensions, which are accommodated by the Code (para. 178).

(i) Where an investment in a pipeline before the Code applied is made in the course of an arm's length commercial transaction, and is based on a sound commercial assessment of the value of the pipeline in the circumstances then prevailing and anticipated, it is relevant to consider the investment, the interests of the service provider in recovering it together with a reasonable return, and the reasonable expectations under the preceding regulatory regime of the service provider. To exclude such interests would infringe seriously on established and legitimate rights, interests and expectations (para. 179).

4.2 Analysis of Draft Decision

Introduction

GGT considers that the Regulator made a number of errors when establishing the ICB for the GGP in the Draft Decision for the Access Arrangement for that pipeline. Further, GGT is of the firm conviction that individual, isolated consideration of the factors listed in Code s. 8.10 and s. 8.11 is in itself inadequate. Hence, GGT commences this analysis by considering the key issues applying to the Code, with particular reference to those identified and discussed in the *Epic* decision. This wider analysis is then followed by a point by point consideration of Code s. 8.10.

Key Issues

It is pertinent to first consider the requirements placed on the Regulator when considering the establishment of the ICB in accordance with the Code.

In the *Epic* decision, Justice Parker addresses these requirements in detail.

The nature and consequences of this detail is addressed below.

Code s. 8.10 and s. 8.11

The *Epic* decision confirms that Code s. 8.10 contains factors which the Regulator should consider when establishing the ICB for a Code covered pipeline.

Justice Parker states, at para. 56 (emphasis added), that:

> *"the Regulator is required by s 8.10 [of the Code] to take into account factors (a) to (k) and to give weight to them as fundamental elements in his decision in establishing the initial Capital Base"*

Having established that position, Justice Parker then states:

> *"There are many points, however, at which the principles enunciated in s 8 call for evaluation, the exercise of judgement, the formation of opinion and other exercises of discretion by the Regulator. With*

particular reference to the establishment of the initial Capital Base for a Covered Pipeline that was in existence at the commencement of the Code, s 8.10 and s 8.11 provide ready examples of this."

It is apparent that the processes of evaluation, judgement, formation of opinion and exercise of discretion identified as necessary by Justice Parker must now be considered in the proposed Access Arrangement for the GGP.

At para. 74, Justice Parker addressed some aspects of the Regulator's duty established in para. 73. In particular, Justice Parker states (emphasis added):

"The task of the Regulator under s 8.10 appears <u>not to be simply one of valuation</u>, however, despite the reference to value in s 8.4(a). It is described in s 8.8 and s 8.10 as "establishing" the Capital Base. The factors identified in s 8.10(e) to (j) require the Regulator to consider a variety of other considerations ... The process <u>is more than one of mere valuation</u>. There is, necessarily, a discretionary evaluation of what weight should be attached to each of these factors in the ultimate establishment of the Capital Base."

In contrast, in the Draft Decision the Regulator has addressed the issue of establishing the ICB for the GGP primarily as an exercise in selecting between asset values established by him (as distinct from those set in the open market in late 1998 and early 1999).

As such, the Draft Decision does not conform to the principles established in the *Epic* decision.

At para. 75 of the *Epic* decision, Justice Parker establishes the Regulator's discretion in assessing Code s. 8.11 when establishing the ICB. In particular, he specifically applies the moderating qualifier "normally" in s. 8.11. At para. 176, Justice Parker emphasises the importance of the qualifier "normally". At para. 178, Justice Parker emphasises that "s 8.11 is to be accepted for what it says, rather than seeking by implication to read much more into it".

In the Draft Decision, the Regulator identifies that the Depreciated Optimised Replacement Cost valuation methodology is not applicable to the GGP, but otherwise does not address the considerations identified by Justice Parker.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision. GGT proposes that the Regulator reconsider his position on these issues.

Code s. 8.1

The *Epic* decision establishes that Code s. 8.10 can not be considered in isolation when establishing the ICB.

At para. 76, Justice Parker indicates that Code s. 8.1 should guide the Regulator's interpretation of Code s. 8, and s. 8.10 and s. 8.11. Justice Parker states:

> *"In the absence of express statutory provision in this regard one would normally turn to the general policy and objects of the Act for such guidance. Within s 8, however, s 8.1 contains a statement of principles which define the objectives of s 8 with respect to reference tariffs and reference tariff policies. This suggests prima facie that it is the objectives in s 8.1 which should guide the Regulator in the exercise of discretion for the purposes of s 8.10 and 8.11. As the initial Capital Base is one element of the calculation of the Total Revenue, s 8.2(a) also offers some confirmation of the view that s 8.1 should guide the Regulator in the exercise of discretion for the purposes of s 8.10 and s 8.11."*

In the Draft Decision, the Regulator does not adequately or appropriately apply the factors contained in Code s. 8.1 to his consideration of the individual factors contained in Code s. 8.10.

As such, the Draft Decision does not conform to the principles established in the Epic decision. GGT proposes that the Regulator reconsider his position on these issues.

Code s. 2.24

The *Epic* decision establishes that the content of Code s. 8.1 can not be considered to contain the over-riding criteria for the interpretation and administration of s. 8 of the Code.

At para. 136 of the *Epic* decision, Justice Parker states (emphasis added):

In s 8.1 it is to be noted that par (a) to (f) are *<u>not stated as finite or absolute criteria</u>. They are objectives which a reference tariff and a reference tariff policy should be "designed with a view to achieving". Further, and importantly, s 8.1, in its concluding paragraph, expressly recognises that those objectives may be in conflict in their application to a particular reference tariff determination. The provision expressly recognises, what analysis of the objectives reveals, that the different objectives may well be in tension in a particular case. ... As has been mentioned briefly earlier in these reasons it is not possible for the Regulator in exercising these significant discretionary powers, to be guided only by s 8.1 itself. Of necessity, guidance in the exercise of discretion to resolve conflict within s 8.1 must be provided from outside that provision. As indicated earlier, ... the Regulator should be guided by the factors in s 2.24(a) to (g).*

In the Draft Decision, the Regulator does not adequately or appropriately consider the potential conflicts and tensions in Code s. 8.1. Further, the Regulator does not adequately or appropriately resolve any such conflicts and tensions by considering and applying the factors contained in Code s. 2.24.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision. GGT proposes that the Regulator reconsider his position on these issues.

<u>Workably Competitive Markets</u>

The *Epic* decision makes an important and clear distinction between the 'ideal' competitive market of (neo-classical) economic theory, and the "workably competitive" market encountered "in the actual conditions" of "any industry".

At para. 124, Justice Parker states (emphasis added):

"Perfect competition is a concept said to be still used in economic analysis, but it is a *<u>theoretical concept which is not met in the actual conditions</u> of competition in any industry. Workable competition is said originally to have been developed over half a century ago by anti-trust economists. In simple terms it indicates a market in which no firm has a substantial degree of market power. While the evidence of the three*

> *witnesses differed in some respects, I am left with the clear impression that in the field of competition policy, especially market regulation, the prevailing view and usage among economists is that a <u>reference to a competitive market is to a workably competitive market</u>. In the particular context of the promotion of a competitive market for natural gas it would be surprising if what was contemplated was a theoretical concept of perfect competition, as the subject matter involves very real-life commercial situations. <u>Workable competition seems far more obviously to be what is contemplated</u>."*

At para. 126, Justice Parker states (emphasis added):

> *"... it is clear from the evidence that there is division among economists as to how the concept [of a competitive market] is promoted where it does not exist, and how its outcomes can be artificially created in a monopolistic situation. A fundamental reason for this is that <u>a workably competitive market is itself a variable and varying state of things</u> — or rather <u>it is a process</u>."*

At para. 128, Justice Parker states (emphasis added):

> *"There may well be a degree of tolerance of changing pressures or unusual circumstances before there is a market reaction. The expert evidence and writings tendered in evidence suggest that <u>a workably competitive market may well tolerate a degree of market power, even over a prolonged period</u>. The underlying theory and expectation of economists, however, is that with workable competition market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although <u>not necessarily achieving theoretically ideal efficiency</u>."*

In the Draft Decision, the Regulator generally considers market mechanisms in the context of static 'perfect competition', and gives inadequate and inappropriate consideration to the dynamic operation of real-world markets.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision.

GGT further considers that it is incumbent upon the Regulator to clearly define his conception of a "workably competitive market" prior to engaging in any consideration of market mechanisms, their component parts, and delivered outcomes. Such an exposition is necessary to permit assumptions made and criteria employed to be fully understood as required by Code s. 7.7.

Forward Looking Costs and Past Investment Decisions

The *Epic* decision clearly directs the Regulator to give due and proper consideration to past investment decisions, and clearly establishes that forward looking costs can not be considered in isolation from prior investment.

Justice Parker discusses the interpretation of Code s. 8.1(d) at para. 152 and 153 of the *Epic* decision in the context of balancing the interests of pipeline owners and consumers. In particular, he states that Code s. 8.1(d):

> *"... has dealt with the issue [of balancing the interests of asset owners and consumers] expressly, and has done so by not denying the potential relevance of past investment decisions to the design of a reference tariff or a reference tariff policy.*
>
> and
>
> *Past investment in a Covered Pipeline has not been rendered necessarily irrelevant, as the application of economic theory might suggest."*

Justice Parker further states:

> *"The existence of s. 8.10(f) and (g) appear to preclude the view that the Code is concerned only with forward-looking considerations in respect of the establishment of the initial Capital Base."*

It is apparent that the Regulator is required to consider past investment decisions and not confine himself to the consideration of forward looking costs.

As the Regulator has not adequately or appropriately considered the issue of past investment decisions, the Draft Decision does not conform to the principles established in the *Epic* decision. GGT proposes that the Regulator reconsider his position on these issues.

Economic Efficiency

The *Epic* decision clearly establishes that economic efficiency is only one of several factors which the Regulator is required to consider, and that economic efficiency is not dominant over the other factors in question.

Para. 108 of the *Epic* decision provides an evaluation of the expert evidence given by Mr. Houston. Justice Parker states:

> *"Much of the content of par 1 to par 61 [of Mr. Houston's submission] is open to the general criticism that, in many passages, it appears to treat the regulation of infrastructure as solely a matter of the application of economic theory and ignores the material relevance of the precise form of the legislation under which the regulation is applied."*

At para. 141, Justice Parker states:

> *"Both the Regulator and Alinta, in their submissions, regard the notion of economic efficiency as allowing only capital costs calculated on a "forward looking" basis, ie not with regard to past actual investment, to be taken into account in the determination of "the efficient costs of delivering the reference service". ... While the evidence indicates that such a view has some support in economic theory, the application of "efficient costs" to the circumstances of this case is, of course, a matter for the Regulator. It is to be observed, however, that s 8.1(a) is concerned with the efficient costs of delivering the reference service over the expected life of the pipeline. That is, it is concerned with the transportation of gas by pipeline from and to various locations. It is not dealing with the economically efficient functioning of the Australian market in natural gas. Thus in s 8.1(a) the focus is much narrower. This may affect how efficiency in each of its three dimensions is evaluated. It is also to be noted that s 8.1(a) does not provide that the service provider should recover the efficient cost of delivering the reference service; the objective is that the service provider should be provided with the "opportunity" to earn a "stream of revenue" (NOT the defined term Total Revenue as in s 8.2(a) and s*

8.4) that recovers the efficient costs over the expected life of the assets used. Further, the provision is not stipulating that the stream of revenue must be designed to be constant over the expected life of the assets. A reference tariff may well be designed to meet many objectives. In the pursuit of some of these objectives revenues may be higher initially, or at some other period, and lower at other periods (although note s 8.33)."

Para. 142 states:

"In their submissions the Regulator and Alinta seemed to regard s 8.1(a) as fixing a ceiling on the revenue stream that might be earned. In my view, it would distort the words used to engraft the sense of "no more than the efficient costs" into s 8.1(a). Similarly, there would be a misconception to engraft "at least the efficient costs" into the provision. Each of these would add an emphasis not contemplated by the language of s 8.1(a). This may have particular relevance in a case where the Regulator is called on to exercise the discretions contemplated by the last paragraph of s 8.1."

It is clear from para. 141 and para. 142 that Justice Parker has emphasised that "efficient" costs in no way constitute a ceiling on the earnings of pipeline owners.

At para. 176, Justice Parker establishes that economic efficiency is only one of many factors, which the Regulator must consider when establishing the ICB, and that economic efficiency holds no special position amongst these factors. Justice Parker makes this clear when he states:

"Economic efficiency is but one of the factors identified in s 8.10 and there is no sufficient justification in that provision for regarding it as in any way a dominant consideration."

In contrast, the Draft Decision emphasises economic efficiency to the effective exclusion of all other factors.

As such, the fundamental approach of the Draft Decision does not comply with the express conclusions in the *Epic* decision.

GGT proposes that the Regulator reconsider his position on these issues.

Capital Recovery

A key issue when considering the Capital Base for any natural gas transmission pipeline (or for any other investment) is that of capital recovery.

When investors form the opinion that recovery of their initial capital investment is at risk, then their required rate of return on that capital investment increases commensurately. This risk versus return relationship is the subject of the CAPM (a theoretical construct), but is also well accepted in a more qualitative fashion in wider society. The risk associated with 'long odds' in horse racing is generally understood by the population at large.

The *Epic* decision clearly indicates that full recovery of capital by the pipeline owner is entirely appropriate because it falls within their legitimate business interests. Justice Parker states, at para. 130:

> *"The investment [made by Epic] in this case is relevantly the full purchase price of $2.407 billion, (some other items are also relied on). Within the meaning of s 2.24(a) both that investment and the legitimate business interests of Epic might properly extend to the recovery of that $2.407 billion, at least over the expected life or operation of the pipeline, together with an appropriate return on investment."*

In the Draft Decision, the Regulator gives inadequate and inappropriate consideration to the issue of full capital recovery. This issue is implicitly addressed in the Regulator's stipulation of a 70 year pipeline technical (as distinct from economic) life for the purposes of his depreciation schedule. The Regulator performs inadequate and inappropriate analysis to establish whether the economic life of the GGP is comparable to, or greater than, his estimate of its technical life or whether there is some basis for it to differ.

In the Draft Decision, the Regulator does not adequately or appropriately address the considerations pertinent to capital recovery identified by Justice Parker.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision. GGT proposes that the Regulator reconsider his position on these issues.

<u>Legitimate Business Interests and the Public Interest</u>

The *Epic* decision makes the important point that the legitimate business interests of the pipeline owner are part of the wider public interest.

This point is made by Justice Parker at para. 134, where he states:

> *"These [wider considerations] may extend to embracing the protection of the interests of the owners of pipelines and the assurance of fair and reasonable conditions being provided where their private rights are overborne by the statutory scheme."*

At para. 145 of the *Epic* decision, Justice Parker discusses the consequences of failing to consider the legitimate business interests of pipeline owners in the wider context of the public interest. He states:

> *"... the expert evidence, including the supportive expert writings, suggested a growing awareness of the long term disadvantages of striking the balance with too great an emphasis on the interest of consumers in securing lower prices, and without due regard to the interest of the service provider in recovering both higher prices and its investment."*

This point has been clearly made in a different, but entirely relevant, context by the Productivity Commission in its "Review of the National Access Regime Inquiry Report: Report No. 17 28 September 2001" ("the PC Report"). In establishing context, the Productivity Commission states at pages 82 - 83 of that report (emphasis added):

> *"Regulators must operate with limited information and imperfect regulatory tools. This implies that precise delineation after the event between genuine monopoly rents and balancing upside profits on successful projects will be well nigh impossible. Accordingly, even an 'unbiased' regulator could sometimes allow a service provider to <u>retain an element of rent</u>, and sometimes <u>truncate balancing upside</u>*

profits. (As discussed in section 4.5, service providers argued that a range of factors are likely to encourage regulators to err on the side of users.)

Some participants, including the NECG, argued that there is an asymmetry in the consequences of the two types of error, with under-compensation for service providers likely to be more costly for the community than over-compensation. In essence, the underlying proposition was that the cost conditions for natural monopoly facilities are such that the prospect of under-compensation can lead to non-provision of services. In contrast, over-compensation reduces, but does not eliminate, use of those services. Specifically, the NECG commented that:

In using their discretion, regulators effectively face a choice between (i) erring on the side of lower access prices and seeking to ensure they remove any potential for monopoly rents and the consequent allocative inefficiencies from the system; or (ii) allowing higher access prices so as to ensure that sufficient incentives for efficient investment are retained, with the consequent productive and dynamic efficiencies such investment engenders.

There are strong economic reasons in many regulated industries to place particular emphasis on ensuring the incentives are maintained for efficient investment and for continued productivity increases. The dynamic and productive efficiency costs associated with distorted investment incentives and with slower growth in productivity are almost always likely to outweigh any allocative efficiency losses associated with above-cost pricing. (sub. 39, p. 16)

For the reasons outlined above, the Commission does not subscribe to the view that, in a regulated environment, the community faces a choice between incurring the allocative efficiency costs of over-compensation and (more serious) dynamic costs of under-compensation. Both types of error are likely to influence investment outcomes and therefore have dynamic efficiency implications.

Nonetheless, the Commission accepts that there is a potential asymmetry in effects:

- *Over-compensation may sometimes result in inefficiencies in the timing of new investment in essential infrastructure (with flow-ons to investment in related markets), and occasionally lead to inefficient investment to by-pass parts of a network. However, it will never preclude socially worthwhile investments from proceeding.*
- *On the other hand, if the truncation of balancing upside profits is expected to be substantial, major investments of considerable benefit to the community could be forgone, again with flow-on effects for investment in related markets.*
- *In the Commission's view, the latter is likely to be a worse outcome. Accordingly, it concurs with the argument that access regulators should be circumspect in their attempts to remove monopoly rents perceived to attach to successful infrastructure projects."*

The PC Report applies substantial economic analysis to arrive at this conclusion. In particular, it identified as a *"threshold issue, the need for the application of the regime to give proper regard to investment issues" and "the need to provide appropriate incentives for investment"*.

The Government has decided to make changes to the TPA which *"endorse the thrust"* of the PC's recommendations. In particular, the Government will modify the Regime along the following lines.

- Include a clear objects clause: *"The objective of this part is to promote the economically efficient operation and use of, and investment in, essential infrastructure services thereby promoting effective competition in upstream and downstream markets…"*
- Insert pricing principles: *"The Australian Competition and Consumer Commission (ACCC) must have regard to the following principles:*

  (a) that regulated access prices should:

(i) be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services; and

(ii) include a return on investment commensurate with the regulatory and commercial risks involved…"

- Include a provision for merit review of decisions by the ACCC on proposed undertakings.

The Government is making amendments to the Trade Practises Act to *clarify* the Regime and to provide further guidance to regulators, rather than fundamentally *change* it. It is therefore not the Regime itself that Government has decided is the problem; the problem has been the implementation of the Regime by the relevant regulators.

The PC and the Government have clearly recognised that the way economic regulation is being applied in Australia is leading to sub optimal patterns of investment in essential infrastructure.

Therefore, it may be concluded that from the standpoint of economic theory, it is desirable for Regulators to err on the side of the pipeline owner.

The Draft Decision does not reflect this, and hence is in error.

The Regulator's error regarding this issue is compounded by the *Epic* decision showing that economic efficiency is neither the sole nor primary criterion for establishing the ICB.

Justice Parker states, at para. 205, that the Regulator made an error of law in the Draft Decision for the DBNGP Access Arrangement when he assessed the value of that pipeline as being a value which ""is consistent with future regulated revenues and efficient capital investment"". Justice Parker states that this error of law occurred because:

"... the Regulator appears to have understood that his function was to establish the value of the DBNGP on the assumption that it was subject to the Code and that a feature of the regulatory regime of the Code was

that only "efficient" capital investment should weigh and only "regulated revenues" could be recovered."

An input consideration to this conclusion is provided by Justice Parker at para. 142 of the *Epic* decision, where he indicates that "efficient costs" constitute neither a ceiling nor a floor on revenue earned by a Code regulated pipeline.

In the case of the GGP, full capital recovery is entirely consistent with the State Agreement. That Agreement clearly establishes, in TSP 8, that the pipeline owners should recover <u>all</u> capital.

Further, the rate of return <u>on</u> that capital should be a "commercial" rate of return, and not one derived from concepts of economic "efficiency". This latter point is discussed more fully elsewhere in this submission.

Therefore, the owners of the GGP are fully entitled to recover <u>all</u> capital committed to the construction, operation, expansion, and other development of that pipeline.

In the Draft Decision, the Regulator does not adequately or appropriately address the considerations pertinent to capital recovery, the legitimate business interests of the owners of the GGP, and the public interest identified by Justice Parker.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision. GGT proposes that the Regulator reconsider his position on these issues.

<u>Capital Cost Under-Recovery and Economic Depreciation</u>

GGT has developed a model to calculate under-recovery of capital costs which has occurred as a result of the levelised rate structure utilised by the GGP during the 1996-2002 period ("Pre-Access Arrangement Period") Using this revised tariff model, Schedule 2 to this submission, GGT now seeks to explicitly address the issue of capital under-recovery.

As discussed in more detail below, GGT has chosen to capture capital cost under-recovery via the mechanism of economic depreciation.

The concept of economic depreciation is well established both within the Code and in the administration of the Code.

Section 8.10(f) explicitly identifies economic depreciation as a factor to be considered in establishing the ICB.

Consequently, GGT is now proposing that economic depreciation should be incorporated in the determination of the ICB for the GGP to reflect the principles referred to above. Discussion of the specific aspects of the methodology employed and the results obtained are presented elsewhere in this submission.

Individual Code s. 8.10 Factors

Having considered wider implications pertaining to the establishment of the ICB, it is now appropriate to consider in turn the individual factors contained in Code s. 8.10.

Code s. 8.10(a) ('Actual Capital Cost')

In the Draft Decision, the Regulator states (Part B section 5.4.3.1, p. 91):

> *"The Regulator has interpreted section 8.10(a) of the Code (relating to the Depreciated Actual Cost value) as being a value based on the actual historical cost of the pipeline assets and not the purchase price."*

The Regulator acknowledges that ambiguity exists over which cost is relevant when he states (Part B section 5.4.3.1, p. 90):

> *"The term "actual capital cost" is not defined in the Code and its meaning is therefore open to interpretation."*

The *Epic* decision clearly indicates at para. 74 and para. 176 that the Regulator should consider and weigh a variety of factors when considering Code s. 8.10.

In not analysing the issue of whether purchase price constitutes "capital cost", the Regulator has erred in his consideration of "Actual Capital Cost".

At para. 152 and para. 153 of the *Epic* decision, Justice Parker identifies that the Regulator is required to consider past investment decisions.

Giving regard to:

(a) Justice Parker's statements at para. 171 of the *Epic* decision that pipeline purchases made in (and hence after) March 1998 qualify as "recent",

(b) the fact that the GGP was sold in late 1998 - early 1999, and

(c) the relevance of the GGP purchase price,

it is further apparent the Regulator has not addressed Code s. 8.10(a) adequately.

Furthermore the Regulator has not sought guidance from Code s. 8.1 when addressing the ambiguity (which he identified) in Code s 8.10(a).

Consideration of actual historical cost versus purchase price when addressing Depreciated Actual Cost potentially leads to some degree of conflict within Code s. 8.1, particularly between the factors contained in s. 8.1(a) and s. 8.1(d) respectively.

To the extent that there is conflict between the factors contained in s. 8.1(a)-(f) when determining this issue, it is apparent that the Regulator has not adequately or appropriately considered Code s. 2.24 to resolve this conflict.

Accordingly this aspect of the Draft Decision does not conform to the principles established in the *Epic* decision.

GGT proposes that the Regulator reconsider his position on this issue.

At para. 169 of the *Epic* decision, Justice Parker clearly states that the Code is <u>not</u> concerned <u>only</u> with forward looking costs.

In the Draft Decision, the Regulator does not adequately or appropriately address past investment decisions, but rather focuses on forward looking costs.

As such, the Draft Decision does not conform to the principles established in the *Epic* decision.

GGT proposes that the Regulator reconsider his position on this issue.

The Regulator's determination of DAC excludes Interest During Construction. This is inconsistent with the intent expressed in the statement at Part B section 5.4.3.2, p. 100 of the Draft Decision:

> *"The Regulator considers that, in principle, a relevant WACC value may be used for calculating interest during construction. For the purposes of estimating the Depreciated Replacement Cost (Table 8) and DORC (Table 8) described above, the Regulator's technical*

consultant assumed an interest rate of 8 percent for calculating interest during construction".

It is an established regulated industry practice to compute a return on capital employed during the construction period and to capitalise such calculated return as allowance for funds used during construction. Such an allowance for funds used during construction is also provided for in the State Agreement by TSP 2 which provides for a return on all project capital. The Regulator, however, has chosen to utilise only capital expenditures as initial construction cost. Such an election excludes the return on capital, as discussed below and in Schedule 2, accrued during the construction period.

It is therefore apparent that the Regulator has made a significant omission in the determination of his prescribed ICB.

GGT proposes that the Regulator reconsider his position on this issue.

The Regulator's view that DAC derives from historical costs and not purchase price is formed essentially (but not completely; see below) in isolation of any other consideration required of the Regulator. In particular, it makes no cross reference to the requirements of Code s. 8.10(c) (other valuation methodologies), s. 8.10(d) (advantages and disadvantages of valuation methodologies), and s. 8.10(f) (past tariffs, economic depreciation, and historical returns). Notably, tariff setting under the State Agreement is considered but then ignored.

The Regulator does state, at Part B section 5.4.3.1, p. 93, that he:

> *"... considers that a straight line depreciation methodology is an appropriate assumption as to historical depreciation for the purpose of determining the Initial Capital Base that is consistent with what would have been reasonable expectations of future use of the assets since the time of construction."*

In choosing to apply straight line depreciation to calculate DAC, the Regulator has not followed Section 8.34 of the Code ("*Application of Depreciation Principles to the IRR/PV Methodology"),* which requires the calculation of notional depreciation. The Regulator has failed to take into account the notional revenue methodology outlined under the State Agreement. A proper application will result in negative economic depreciation and is illustrated in Schedule 2.

However, in his (later) discussion of Code s. 8.10(g) ('reasonable expectations under the prior regime') at Part B section 5.4.3.7, the Regulator makes no mention of asset life or depreciation.

The Regulator's failure to consider issues pertaining to ICB in a holistic manner is further exemplified at Part B section 5.4.3.1, p. 91 of the Draft Decision, where he states:

> *“The third party tariff for the Goldfields Gas Pipeline was determined under the Goldfields Gas Pipeline Agreement Act 1994. While an estimate of the accumulated historical depreciation charged to Users (or thought to have been charged to Users) could be based on the value of capital recovery through the third party tariff, this would require information on the amount of depreciation provided for in the tariff. However, information on the value of capital recovery through the third party tariff has also not been available.*
>
> *In addition, the third party tariff did not apply to the original owners of the pipeline and as these accounted for the majority of both reserved capacity on the pipeline and throughput the amount of depreciation attributed to third party users can be considered insignificant.”*

This statement does not recognise the basis upon which tariffs were set prior to the application of the Code and the requirement under the State Agreement that all capital be recovered. TSP 2 (approved by the (then) Minister for Resources Development pursuant to the State Agreement in January 1995) addresses the manner in which Owners' capacity should be treated for the purposes of tariff calculation. TSP 8 provides for the full recovery of all capital.

At para. 74, of the *Epic* decision, Justice Parker states that the Regulator should, when addressing Code s. 8.10, consider factors "which by their nature require the consideration of disparate issues which may well tend in different directions".

GGT therefore proposes that in reconsidering the Draft Decision, the Regulator should not look at each of the factors listed in Code s. 8.10 in isolation, but rather consider both the factors themselves and their inter-reaction.

GGT's proposal is relevant to the Regulator's consideration of each of the other factors contained in Code s. 8.10.

Code s. 8.10(b) ('Depreciated Optimised Replacement Cost')

In the Draft Decision, the Regulator presents values for Depreciated Replacement Cost and Depreciated Optimised Replacement Cost.

It is relevant to consider the applicability of the DORC concept to the GGP, with particular consideration to relevant provisions of the State Agreement.

The State Agreement mandates (in clause 9(5)) the size of the GGP.

The DORC concept is used as a proxy for the costs faced by an 'efficient new market entrant'. In the current context, a 'real world' perspective on "efficient" and "entrant" is required. Therefore, it is necessary to consider the potential obligations imposed by the State on a hypothetical project proponent seeking to construct a 'greenfields' GGP today.

Sections 3.16 and 6.22 of the Code clearly state that the Service Provider is not obliged to contribute any capital to the extension or expansion of a Code covered pipeline.

This issue has attracted considerable attention in Western Australia in recent times. Capacity constraints on the DBNGP and the issue of who is liable for funding additional pipeline capacity have been brought into sharp focus following the draft decision for the access arrangement for that pipeline.

Hence, if the GGP were to be constructed today, it is likely that the State of Western Australia would require greater over-sizing (compared with what was required in 1994) as part of a State Agreement concluded under today's circumstances.

The extent of such further over-sizing is a matter for speculation.

Thus, given that pipeline configuration was, in 1994, and in every likelihood would be, today, dictated by wider considerations relating to regional development and not the narrower consideration of technical and economic efficiency of the pipeline, consideration of DORC as a valuation method is rendered irrelevant.

The *Epic* decision provides insight regarding how such an outcome should be handled within the Code.

Code s. 8.1(b) requires that one (of the several) objectives of a Reference Tariff and a Reference Tariff Policy is to replicate the outcome of a "competitive market". In the case of the GGP, its development proceeded as the outcome of a competitive tender process run by the Western Australian Government. Hence, the 'as built' size and configuration of the pipeline satisfies the "competitive market" criterion.

The *Epic* decision establishes that Code s. 8.1(d) requires consideration of past investment decisions. As the State Agreement laid down the basis of pipeline configuration and investment was made on this basis, this must be given significant weight by the Regulator.

Code 2.24(b) requires the Regulator to take into account the:

> *"firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline"*

The owners of the GGP were under a firm and binding contractual obligation under the State Agreement to construct the GGP to <u>at least</u> the 'as built' size.

At various points in his discussion of ICB, the Regulator acknowledges that DORC is not a relevant concept given the constraints imposed by the State Agreement.

This result has direct impact on Code s. 8.11, which states (emphasis added):

> *"The initial Capital Base for Covered Pipelines that were in existence at the commencement of the Code <u>normally</u> should not fall outside the range of values determined under paragraphs (a) [i.e. DAC] and (b) [i.e. DORC] of section 8.10."*

As DORC is not a relevant valuation of the GGP due to the specific and unique circumstances applying to that pipeline, the qualifier "normally" must necessarily be both considered and invoked.

In the *Epic* decision at para. 75, Justice Parker refers to the Regulator's discretion in assessing Code s. 8.11 when establishing the ICB. At para. 176 to 178 he highlights the importance of the qualifier "normally", and emphasises that Code s. 8.11 should be "accepted for what it says" and that it is incorrect to "read much more into it".

It is apparent that:

(a) the owners of the GGP were contractually bound to construct the pipeline to the 'as built' configuration; and

(b) the Regulator has failed to give due regard to relevant issues when making the unsupported assertion that Depreciated Actual Cost is "a value based on the actual historical cost of the pipeline assets and not the purchase price"; and hence

(c) "normal" circumstances do not apply in this case.

GGT recognises that in the Draft Decision, the Regulator identifies some of the shortcomings of the DORC valuation methodology when applied to the GGP.

However, in establishing the ICB for the GGP on the (sole) basis of Depreciated Actual Cost, the Regulator does imply that the unqualified application of Code s. 8.11 is appropriate.

GGT proposes that as neither DAC nor DORC as determined in the GGP Access Arrangement are relevant valuations, the proposition that the ICB for the GGP should fall within the range defined by DAC and DORC is simply incorrect.

GGT proposes that the Regulator reconsider his position on these issues.

<u>Code s. 8.10(c) ('Other Well Recognised Valuation Methodologies')</u>

In the Draft Decision, the Regulator does not consider asset valuation in the context of the State Agreement. The State Agreement is contractually binding, and the clause 9 Proposals approved by the (then) Minister for Resources Development gave consideration to well accepted valuation criteria when selecting a 'levelised' tariff calculation methodology.

Further, the successful project proponents were selected on the basis of a competitive tender process. Those (original) owners then sold their interests in the pipeline to the current owners, again by tender. Thus, GGT proposes that these competitive tender processes are well recognised and that the value of the project thus established is relevant.

In ignoring the State Agreement and the competitive selection process, which preceded and followed the signing of the former, the Regulator has not properly applied the Code s. 8.10(c), s. 8.1(d), and s. 2.24.

GGT proposes that the Regulator reconsider his position on these issues.

<u>Code s. 8.10(d) ('Advantages and Disadvantages of Each Valuation Methodology')</u>

The shortcomings of the Regulator's consideration of Depreciated Actual Cost in the Draft Decision have been identified in the relevant section of this submission. These shortcomings propagate through to comparative analysis of various valuation methods.

In the Draft Decision, the Regulator does not consider the advantages and disadvantages of the asset valuation methodologies considered by him compared with those employed in the State Agreement, and does not consider the competitive tender process employed to select the successful GGP project proponents.

In ignoring these alternatives, the Regulator has not properly applied the Code s. 8.10(d), s. 8.1(b), s. 8.1(d), and s. 2.24.

GGT proposes that the Regulator reconsider his position on these issues.

<u>Code s. 8.10(e) ('International Best Practice')</u>

At Part B section 5.4.3.6, p. 105 the Regulator states:

"The Regulator does not, however, consider there to be any established or generally accepted "international best practice" in asset valuation that could be applied to the Goldfields Gas Pipeline."

GGT considers this to be an appropriate position for the Regulator to take, given the unique circumstances applying to the GGP.

<u>Code s. 8.10(f) ('Past Tariffs, Depreciation, and Historical Returns')</u>

The GGP has been the subject of economic regulation from its inception. The State Agreement, signed in March 1994 and ratified by the *Goldfields Gas Pipeline Agreement Act 1994*, required the then owners of the pipeline to submit proposals regarding the construction and technical and economic operation of the pipeline to the Minister for Resources Development for approval. Such approval triggered the granting of a Pipeline Licence on 27 January 1995 by the Minister for Mines, which in turn permitted pipeline construction to commence.

The proposals submitted to the Minister for Resources Development by the pipeline's owners pursuant to clause 9 of the State Agreement clause 9 Proposals included a set of TSP, and a set of tariffs developed in accordance with those TSP. These tariffs, known as the "<u>A1</u>" tariffs, were offered to all comers on a non-discriminatory basis.

In 1998, a set of discounted tariffs, known as "<u>A2</u>" were offered to all third parties wishing to utilise the GGP as an alternative to the originally determined A1. In 1999, a further discount, which has become known as "<u>A3</u>", was offered. From 1 January 2000, yet a further discount, which has become known as "<u>A4</u>", was offered. The offers of these three sets of discounted tariffs were in accordance with TSP 13. Table 1 provides an indication of the approximate relativity of the A1 tariff and the subsequent discounts. In December, 2001, GGT removed voluntary discounts and reverted to the approved benchmark tariff, A1.

Table No 1

Tariff	Level Relative to A1	Duration
A1	100%	From inception
A2	85%	1 Mar 98 to 31 Dec 99
A3	80%	1 July 99 to 31 Dec 99
A4	75%	1 Jan 00 to 21 Dec 01
A1	100%	1 Jan 02 to Present

The A1 tariffs were determined with the specific objective of reducing gas transport costs to users of the pipeline in the early years of its operation. To achieve this, the A1 tariffs were developed on a 'levelised' basis using a Net Present Value ("NPV") methodology, meaning that the pipeline's owners consciously deferred their return of capital from the early years of the project to its later years. In doing this, the pipeline's owners accepted additional risk.

A crucial aspect of the development of the A1 tariffs was the treatment, for tariff setting purposes, of the pipeline owners' pipeline capacity. This capacity was dealt with pursuant to TSP 2, which states (in part):

> *"For the purposes of this Principle, the Owners will be ascribed a notional tariff based on third party tariffs for their utilisation of [their] Pipeline capacity."*

In the Draft Decision, the Regulator states (at Part B section 5.4.3.6, pp. 105 - 106; emphasis added):

> *"The Regulator sought to examine the impact of past tariffs, economic depreciation and historical returns as these relate to the determination of the Initial Capital Base for the Goldfields Gas Pipeline. The pipeline has, however, changed ownership and under the terms of the State Agreement Act the <u>original joint venturers</u> who constructed the pipeline were <u>not required to pay the third party tariffs</u> provided for by the legislation. In view of the special arrangements provided for by the*

State Agreement Act, a historical record of revenues from third party tariffs would not be reflective of the returns to the pipeline."

It is apparent that the Draft Decision has given no consideration to the basis on which tariffs were set in the past.

As such, the Regulator has made a serious error.

The levelised A1 tariffs were developed using a 42 year project life. This had the necessary consequence that project capital was intended to be recovered in full in this period. The 42 year life corresponded to the life of the State Agreement, which in turn reflected the economic agreement between the pipeline's owners and the State of Western Australia.

It is apparent that the Draft Decision has given no consideration to the issue of depreciation within the context of the State Agreement.

As such, the Regulator has made a serious error.

Another inherent feature of the A1 tariffs is that they were developed on the basis that the pipeline owners would recover all capital expenditure. Such full recovery of capital is mandated by TSP 8, and should necessarily be seen as a key input to investment decisions.

The GGP is a capital intensive project. Capital expenditure, once made, is 'sunk'. Unlike motor vehicles or aircraft, the GGP can not be redeployed to serve transport markets in different geographic locations, and can not be readily reconfigured to serve different segments of the wider energy transport market (such as the transport of LPG or diesel).

Further, the GGP does not serve the diverse markets associated with transmission pipelines transporting natural gas to major population centres. Over 99 percent of its market rests in one industry, namely the mining of metals.

This reliance on one notoriously volatile industry requires a project rate of return, which is commensurate with the associated high risks faced. These include:

(a) the volatile nature of metals commodity markets;

(b) the expectations of investors in mining projects;

(c) the depletion of non-renewable resources;

(d) the high cost of lateral pipelines from the GGP to mining operations;

(e) the ever-present competition from alternative fuels, such as diesel and LPG (which can be easily transported and stored by 'non-fixed' assets such as trucks and tanks); and

(f) contract default risk which is many orders of magnitude higher than that associated with gas and electricity utilities serving major population centres.

The clause 9 Proposals incorporated a project Return on Equity of 17.45%. This was the rate of return, which compensated the pipeline's owners for the risks they assumed in sinking their own funds into the project.

In the Draft Decision, no consideration of historical returns is apparent.

As such, the Regulator has made a serious error.

It is apparent that the Regulator has completely disregarded all three components of Code s. 8.10(f), namely:

(a) the basis on which Tariffs have been (or appear to have been) set in the past;

(b) the economic depreciation of the Covered Pipeline; and

(c) the historical returns to the Service Provider from the Covered Pipeline.

These omissions by the Regulator have the result that the Draft Decision does not conform to the principles established in the *Epic* decision.

In the *Epic* decision, Justice Parker states, at para. 168, that the component parts of Code s. 8.10(f) have "a potential relevance to past investment decisions in respect of the pipeline, particularly in a case where there has been a sale of the pipeline before the commencement of the Code." At para. 171, Justice Parker indicates that the sale of the DBNGP in March 1998 qualifies as a "recent" sale. Given that the equity interests in the GGP were sold to the current owners in December 1998, January 1999, and March 1999, it is apparent that Justice Parker's comments apply directly to the case at hand.

At para. 169, Justice Parker emphasises that the Code is not solely concerned with forward looking costs.

It is apparent that the Regulator has erred in two respects:

(a) generally, in not considering the component parts of Code s. 8.10(f), and

(b) specifically, in not addressing past investment decisions.

In failing to consider past investment decisions, the Draft Decision fails to address the requirements of Code s. 8.1(d).

At a higher level, the Draft Decision fails to properly consider past investment decisions and the legitimate business interests of the pipeline's owners as required by Code s. 2.24(a), and the public interest, as required by Code s. 2.24(e).

GGT proposes that the Regulator reconsider his position on these issues.

Code s. 8.10(g) ('Reasonable Expectations Under Prior Regime')

When considering s. 8.10(g) of the Code, the Regulator's position is confined to asserting that:

(a) Depreciated Actual Cost, based on an arbitrary interpretation of that phrase, is the appropriate method of determining the ICB;

(b) determination of the ICB is (solely) an exercise in valuation, and

(c) stakeholders should have reasonably expected that the Code would apply in the manner adopted by the Regulator.

The first of these assertions does not require further analysis. The discussion of Code s. 8.10(a) in this submission deals with the shortcomings of the Regulator's interpretation of that section of the Code, and the wider issue of erroneously using Depreciated Actual Cost as the sole criterion for establishing the ICB.

The second of the Regulator's assertions may be analysed quite simply.

At para. 74 of the *Epic* decision, Justice Parker states that the "task of the Regulator" is more than one of 'simple' valuation.

It is apparent that the Regulator has made an error in effectively confining his attention to valuation when establishing the ICB.

The third assertion by the Regulator requires further analysis.

Prior to the enactment of the Code, GGT considers it reasonable to assume that stakeholders in the GGP would hold the following expectations:

(a) At some time in the future a uniform national code addressing the economic regulation would apply to the GGP to the extent that it did not conflict with the existing provisions of the State Agreement which protect the interests of the pipeline owners.

(b) Economic regulation under this uniform national code would be light handed.

Both the "Hilmer Report" and the Council of Australian Governments' Agreement dated 25 February 1994 ("CoAG 1994"), discussed in some detail in the *Epic* decision from para. 88 onwards, foreshadowed light handed regulation.

(c) Regulators would not set tariffs, but rather act as umpires in access disputes.

The Hilmer Report and CoAG 1994 clearly give this indication.

(d) The Western Australian Government would fully honour its contractual obligations, including those under the State Agreement.

(e) The owners of the GGP would recover all capital expenditure incurred in constructing and operating the GGP.

Given the existence of TSP 8 and a perception of low sovereign risk, this expectation is self evident.

(f) The A1 tariffs, determined as part of the final project approval process agreed and concluded with the Western Australian Government, were fair and reasonable. This conclusion is reasonable given the approval of the clause 9 Proposals by the then Minister for Resources

Development in January 1995, and statements to the press and in Parliament by various stakeholders other than the pipeline owners (including but not limited to members of both the Government and Opposition of the day).

In particular, the Hon. Norman Moore, Leader of the House, stated in the Legislative Council on Tuesday 26 August 1997:

"The tariffs that have presently been set by the GGP were judged by the State to be consistent with the tariff setting principles.

...

Tariffs were set in the first place to produce the lowest possible tariff consistent with the tariff setting principles. This was because a net present value rather than a cost of service approach was used. This essentially means that the project has estimated the likely sales and costs over the full 42 years of the project and annualised the net cash flow on a discounted basis to produce an NPV of zero using an agreed discount rate. The effect of this is to shift present costs on to the future. The result is a lower tariff in the earlier years of the project compared with a cost of service approach where actual costs on an accounting basis are recovered each year from the volume of gas sent through the pipeline.

...

The rate of return used in the model was reviewed by the State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand alone company."

(g) GGT would be entitled to charge tariffs which would provide a commercial rate of return on all project capital commensurate with the business risk associated with the GGP project;

(h) the fundamental parameters underlying the tariff model used to calculate the original tariffs, including a return on equity of 17.45%

nominal post-tax over a project life of 42 years, were acceptable to the State and would continue to apply under the approved TSP;

(i) the levelised tariff model would continue to apply enabling full recovery and a commercial return on all reasonably incurred project capital during the balance of the 42 year project life.

(j) The action by the Western Australian Government in establishing a state-based economic regulator for natural gas transmission pipelines (rather than accepting, along with all other States and Territories, the Australian Competition and Consumer Commission) intended particular regard being given to state-specific circumstances, including but not limited to the State Agreement.

(k) Economic regulation of the GGP under any regime would properly and duly consider relevant factors, including but not limited to:

  (i) the competitive tender process to establish the GGP;

  (ii) the subsequent State Agreement and its provisions,; and

  (iii) a reasonable balance between the legitimate business interests of the pipeline owners and the interests of users of the pipeline, upstream producers of natural gas, and downstream consumers of gas.

(l) The state-based regulator would take the necessary steps to become fully informed of the State Agreement, as it is ratified under State Law.

The Regulator has only partially considered point (a) of the list immediately above.

In not considering the remaining points adequately or appropriately, the Regulator has not properly applied the Code s. 8.10(g), s. 8.1(d), and s. 2.24.

GGT proposes that the Regulator reconsider his position on these issues.

<u>Code s. 8.10(h) ('Economically Efficient Utilisation of Gas Resources')</u>

In the Draft Decision, the Regulator states, at Part B section 5.4.3.8, pp. 107 - 108:

"That is, the asset valuation methodology and gas transportation pricing regime [employed by the Victorian Office of the Regulator General] should encourage the development and use of gas sources that minimise the (forward-looking) cost of gas exploration, extraction, transportation and supply to end users. The Regulator has adopted a similar interpretation in determining the appropriateness of the Initial Capital Base in relation to tariffs.

Efficient use of gas as compared with other energy resources would require that Users of the Goldfields Gas Pipeline, and ultimately the end users of gas, should pay at least the avoidable cost of gas transportation, which is the (forward-looking) cost that the Service Provider could avoid by ceasing to provide the service to that customer.

...

Satisfaction of this criterion would generally require that the valuation of the Capital Base be as low as possible while still being consistent with providing the signals to investors in both gas transmission assets and gas utilisation assets that motivate a longer-term efficient level of investment. This may necessitate a treatment of past investment in a similar manner as for new capital investment. Such a valuation would normally take inflation, changes in technology and changes in market related factors into account consistent with a DORC valuation of the pipeline. For the Goldfields Gas Pipeline, this needs to be balanced against the potential "unfairness" to the pipeline owner of a DORC valuation in the particular circumstances of this pipeline relating to the constraints imposed on pipeline design by the Goldfields Gas Pipeline Agreement Act 1994."

It is evident that the Regulator focuses on:

(a) forward looking;

(b) economically efficient costs; and

(c) within a context of asset valuation.

The *Epic* decision clearly indicates that this view, both in itself, and taken to the exclusion of other considerations, is erroneous on all three counts.

At para. 148 - 156, Justice Parker emphasises that past investment decisions must be considered.

At para. 169, Justice Parker emphasises that the Code is not concerned solely with forward looking costs.

It is therefore evident that the Regulator has erred in adopting an exclusively forward looking focus.

At para. 108 of the *Epic* decision, Justice Parker indicates that the task of the Regulator in assessing an Access Arrangement extends beyond the application of economic theory.

It is clear from para. 141 and para. 142 that Justice Parker has emphasised that "efficient" costs in no way constitute a ceiling on the earnings of pipeline owners.

It is therefore evident that the Regulator has erred in using "efficient" costs as effectively his only criterion to evaluate costs.

At para. 124, para. 126, and para. 128 of the *Epic* decision, Justice Parker indicates that the Regulator is required to consider a "workably competitive" market, rather than the "theoretical concept" of "perfect competition", which "is not met in the actual conditions of competition in any industry".

In the Draft Decision, the Regulator does not adequately or appropriately take into account the characteristics of a "workably competitive" market.

It is apparent that the Regulator has erred in effectively confining himself to the concept of "perfect competition" when considering the economically efficient utilisation of gas resources. As previously submitted, it is incumbent upon the Regulator to clearly define his conception of a "workably competitive market" <u>prior</u> to engaging in any consideration of market mechanisms, their component parts, and delivered outcomes. Such an exposition is necessary to permit assumptions made and criteria employed to be fully understood as required by Code s. 7.7.

At para. 74 of the *Epic* decision, Justice Parker states that Code s. 8.10 does not "simply" involve valuation.

It is therefore evident that the Regulator has erred in using asset valuation as effectively his sole criterion for establishing the ICB.

GGT proposes that the Regulator reconsider his position on these issues.

Code s. 8.10(i) ('Comparability with Cost Structures of New (Competing) Pipelines')

In the Draft Decision, the Regulator states (Part B section 5.4.3.9, p. 108):

> *"In regard to the proposed Geraldton to Mount Margaret Pipeline, such a development may be economic at the current Goldfields Gas Pipeline tariff."*

This statement is true, given sufficient load at Mount Margaret.

However, the Regulator has not made adequate or appropriate acknowledgement of the economies of scale inherent in natural gas pipelines. Pipeline capacity is not linearly related to diameter (given all other parameters held constant). Rather, a power law relationship exists, whereby a doubling of diameter results in a capacity increase (ceteris paribus) of over 5 times.

GGT proposes that the Regulator give further consideration to this matter.

Code s. 8.10(j) ('Purchase Price')

Given the temporal criterion applied by Justice Parker at para. 171 of the *Epic* decision to the purchase of the DBNGP, it is apparent that the GGP qualifies as a "recently purchased asset".

The Regulator has not adequately or appropriately addressed this temporal consideration and its consequences in the Draft Decision.

The relevance and importance of past investment decisions are identified in the *Epic* decision, particularly at para. 130, para. 144, para. 145, para. 148, para. 149, para. 152, para. 153, para. 168, para. 169, and para. 205. The preceding discussion identifies a number of areas where purchase price should be considered.

The Regulator has not adequately or appropriately addressed past investment decisions.

In ignoring the remaining points, the Regulator has not properly applied the Code s. 8.10(j), s. 8.1(d), and s. 2.24.

The current owners of the GGP had, at the time of purchase, a reasonable expectation that they would have the opportunity to recover all capital costs consistent with TSP 8 of the State Agreement.

The Regulator has failed to give this outcome adequate or appropriate consideration, and hence has not properly applied the Code s. 8.10(j), s. 8.1(d), and s. 2.24.

GGT proposes that the Regulator reconsider his position on these issues.

Code s. 8.10(k) ('Other Relevant Factors')

In the Draft Decision, the Regulator's consideration (Part B section 5.4.3.11, p. 110) of "other factors considered relevant" is confined to the issue of working capital.

GGT considers that the Regulator has made serious errors in failing to consider the issues relevant to the GGP discussed above.

Regulator's Conclusions

In his conclusions regarding determination of the ICB for the GGP, the Regulator directly or indirectly demonstrates many errors.

These include:

(a) confining consideration of costs to "efficient" costs within a theoretical framework of "perfect competition" and not defining or considering the concept of "workably competitive markets";

(b) failing to properly consider the economic regulatory regime applying to the GGP under the State Agreement prior to the enactment of the Code;

(c) failing to recognise the relevance and importance of past investment decisions including the actual purchase price of the GGP;

(d) failing to consider whether his application of the Code would inequitably undermine the recoverability of past investments;

(e) failing to recognise that the public interest includes the legitimate business interests of the owners of the GGP;

(f) failing to properly balance the interests of the owners of the GGP and the interests of other stakeholders;

(g) failing to appropriately weigh the factors contained in Code s. 8.10;

(h) failing to appropriately consider the (potentially conflicting) factors contained in Code s. 8.1;

(i) failing to resolve any conflict in the factors contained in Code s. 8.1 by considering the factors contained in Code s. 2.24;

(j) failing to appropriately weigh the factors contained in Code s. 2.24;

(k) establishing the ICB solely on the basis of valuation; and

(l) not giving due consideration to the factors contained in Code s. 8.10(e), Code s. 8.10(f), Code s. 8.10(g), Code s. 8.10(h), Code s. 8.10(i), Code s. 8.10(j), and Code s. 8.10(k).

4.3 Correct Approach

Introduction

The value of ICB in GGT's original submission was based upon Depreciated Optimised Replacement Cost (DORC) and units of production (UOP) depreciation. The Draft Decision was based upon historical cost and straight line depreciation.

Three years have passed since GGT submitted its proposed Access Arrangement and almost two years have passed since the Regulator issued his Draft Decision. As a result, GGT proposes moving the Access Arrangement period forward to the July 2002 – June 2007 period and calculating a new ICB as of 30 June 2002.

In light of the *Epic* decision, GGT believes that the approach to determining the ICB must be revised. Specifically the approach should give proper weight to ss. 8.10 (f), (g) and (j) Code which require the Regulator to consider:

> *"(f) the basis on which Tariffs have been (or appear to have been) set in the past, the economic depreciation of the Covered Pipeline, and the historical returns to the Service Provider from the Covered Pipeline;*
>
> *(g) the reasonable expectations of persons under the regulatory regime that applied to the Pipeline prior to commencement of the Code.....*
>
> *(j) the price paid for any asset recently purchased by the Service Provider and the circumstances of that purchase."*

Tariffs for the GGP were originally developed in 1994 using an NPV methodology applied over the 42 year life of the project. In accordance with TSP 2, revenues, which included tariffs paid by third parties and notional tariffs paid by the project's owners, were set to provide the agreed upon rate of return to the GGP's sponsors, a return which was "commensurate with the business risk associated with the project."

GGT submits that s. 8.10(f) and (g) of the Code require the Regulator to give consideration to GGT's legitimate business interests under the State Agreement in establishing the ICB and that such consideration will result in an ICB of at least $554 million, as at 30 June 2002.

Under the NPV tariff setting methodology utilised under the State Agreement, the terminal value, at any point in the project's life, can effectively be viewed as a residual or derived value which measures, at that time, the owner's unrecovered capital investment, which is equivalent, in the terminology of the Code, to Capital Base.

As discussed in more detail under the ICB Model section below, GGT has developed a cost of service model, which calculates quarterly values for Capital Base over the 1994-2002 period. In order to capture the substance of the economics of the GGP under the State Agreement, this model develops economic, as opposed to accounting, depreciation. As stated in s. 8.33(a) of the Code the depreciation schedule should be designed:

> *"so as to result in the Reference Tariff changing over time in a manner that is consistent with the efficient growth of the market for Services*

provided by the Pipeline (and which may involve a substantial portion of the depreciation taking place in future periods, particularly where the calculation of the Reference Tariffs has assumed significant market growth and the Pipeline has been sized accordingly)."

GGT's tariffs were levelised in constant dollar terms but escalated in nominal dollar terms. As a result of the extreme back end loading of capital recovery and lack of growth in third party loads over the initial years, the Reference Tariff proposed under the Draft Decision generated revenues that were insufficient to recover not only depreciation but also a portion of the GGT's return. As a result, the model provides for economic depreciation.

The following table summarises the ICB calculations. The ICB at 30 June 2002, is calculated to be $553.5 million. Table 2 presents the detailed calculations:

Table 2 – ICB Calculations

Item		**Amount($M)**
Construction Expenditures		456.5
Add: Capitalised Interest during Construction @ WACC		$42.3
Initial Construction Cost		498.8
Add: Capital Expenditures		14.8
Add: Negative Economic Depreciation		37.3
Add: Working Capital		2.6
Initial Capital Base		$553.5

Southern Cross Pipelines Australia Pty. Limited and Southern Cross Pipelines (NPL) Australia Pty. Limited, wholly owned subsidiaries of SCP Investments (No.1) Pty Limited ("SCP") acquired 62.664% and 25.493% interests in the GGP plus associated lateral lines in the fourth quarter of 1998 and first quarter of 1999, respectively. SCP's purchase price for the combined 88.157% interest and associated laterals was $550 million. After making necessary adjustments for non-regulated assets SCP's 88.157% interest value is $518 million, which equates to a $587.4 million purchase price for 100% of the

GGP. The remaining 11.843% was purchased in conjunction with a series of other assets and, therefore, the price paid cannot be easily isolated.

The calculated ICB in the fourth quarter of 1998 is $556.1 million or about 6% lower than the purchase price. The 6% difference is well within accepted market fluctuation range and the two numbers are practically the same from an economic standpoint. The close match between the purchase price and the calculated ICB in fourth quarter of 1998 is a clear indicator of the market's expectations and how it views assets covered by a State Agreement. The ICB calculated using the ICB Model is $610.6 million. This also reflects the critical importance of the Regulator having regard to the purchase price in establishing the ICB.

The NPV methodology in lieu of the Cost of Service approach can also be used. The NPV methodology will calculate an ICB of $553.5 million at June 2002. The same result is, thus, obtained regardless of the methodology employed.

An alternative to calculating the ICB at 30 June 2002 based upon initial construction cost is to calculate the ICB at 30 June 2002 based upon the current owner's purchase price for an 88.157% share of the GGP.

This approach results in an ICB at 30 June 2002 of $610.6 million. Under the purchase price based methodology, the capital base accounts are reset as of December 31, 1998, i,e. Capital Base = Purchase Price = $587.4, and Accumulated Depreciation = 0; and new values for capital base are calculated going forward to 30 June 2002 using the methodology described above. GGP has used the ICB of $553.5 million (calculated from the actual construction cost) in its tariff model for the Access Arrangement period.

ICB Model

An alternative to calculating the ICB at June 30, 2002 based upon initial construction cost is to calculate the ICB at June 30, 2002 based upon the current owner's purchase price for an 88.157% share of the GGP.

This approach results in an ICB at 30 June 2002 of $610.6 million. Under the purchase price based methodology, the capital base accounts are reset as of December 31, 1998, i,e. Capital Base = Purchase Price = $587.4, and

Accumulated Depreciation = 0; and new values for capital base are calculated going forward to June 30, 2002 using the methodology described above. GGP has used the ICB of $553.5 million (calculated from the actual construction cost) in its tariff model for the Access Arrangement period.

The ICB model, which is attached as Schedule 1, was constructed to calculate the value of the GGP's Capital Base at 30 June 2002. The model is based upon the following premises:

(a) Transfer of ownership from WMC, Duke and Normandy in December, 1998, January 1999 and March 1999 did not change the GGT's tariff structure, i.e., the current owners are entitled to the revenue stream envisioned in the Joint Venturer's clause 9 Proposals. This revenue stream consists, for tariff setting purposes, of notional revenues from Joint Venturers' and associates as provided for by the State Agreement TSP, and realised revenue from third parties.

(b) The levelised tariff design used by the pipeline's owners caused revenues to be deferred during the initial years of project operation thus causing a delay in the recovery of and return on capital.

(c) The absence of third party shippers in the early years of project operation further reduced project revenues.

(d) The TSP allow the owners to earn a commercial rate of return on all project capital.

(e) By purchasing the previous owners' interests in the pipeline, the current owners acquired the right to earn a commercial rate of return and to recover revenues deferred pursuant to the levelised tariff structure.

As was discussed in great detail in the clause 9 Proposals, the levelised tariff structure provided substantially lower tariffs than those which would have been calculated on a Cost of Service basis. In essence, the levelised tariff design deferred revenues from early years of operation until later years of operation. The purpose of this model is to quantify the amount of this revenue deferral and calculate the amount, which must be added to the pipeline's Capital Base to ensure that these deferred revenues are recovered in the future.

It should be noted that levelised rates are normally developed using a NPV model. All of the calculations of the current ICB model are implicitly made by a NPV model. The Cost of Service approach has been taken to explicitly show the calculations that are buried in NPV arithmetic

The model extends from the commencement of construction, second quarter 1994, until the second quarter 2002. The model is designed to accumulate a construction cost during the construction period and to accumulate a regulatory asset during the in-service period equal to GGTJV's unrecovered return of capital during the in-service period.

Construction Period

During the construction period, the model calculates an allowance for interest on funds used during construction. This amount is then added to cash costs of construction to calculate initial construction cost. This period was assumed to extend from the second quarter of 1994 to the third quarter of 1996. Ascribed notional revenues of $1.1 million in the third quarter of 1996 were netted against the allowance for funds used during construction. The total allowance for funds used during construction was $42.3 million.

In-Service Period

For each period the model calculates a beginning investment and a cost of service, including a pre-tax nominal WACC of 18.81% and operation and maintenance costs, but excluding accounting depreciation. The cost of service is then compared to the revenues calculated ascribing notional tariff of A1 to the entire pipeline load. The A1 tariff corresponds to a pre-tax nominal WACC of 18.81% pre tax return and is the only approved tariff in effect. The difference between cost of service and the realised revenues is added to the previous period's regulatory asset balance. This calculation continues until the regulatory asset balance is extinguished. The ending regulatory asset balance totals $37.3 million.

5. LIFE

5.1 Epic Principles

There were no findings made by the Full Court in the *Epic* decision, which relate specifically to project life.

However, a number of the general principles outlined in Section 2.1 of this submission must be given proper consideration when dealing with this issue.

In particular, s. 2.24(a) requires significant weight to be given to the service provider's legitimate business interest in seeking to recover its investment at least over the expected life or operation of the pipeline, together with an appropriate return on investment (*Epic* decision para. 130). In addition, the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code are highly relevant to both the legitimate business interests of the service provider under s. 2.24(a) and the principle enshrined in s. 8.1(d). Care must be taken to ensure that the Code is not applied in such a manner as to infringe seriously on established and legitimate rights, interests and expectations (*Epic* decision para. 179).

5.2 Analysis of Draft Decision

In the Draft Decision the Regulator notes that considerations of asset life are relevant to the calculation of depreciation (that is, the rate at which the capital invested in the asset is returned to the investors). The Regulator makes a distinction between consideration of historical depreciation for the purpose of calculating the Capital Base (refer to section 5.4.3.6 of the Draft Decision), and the future depreciation schedule assumed for the purposes of determining tariff (section 5.8 of the Draft Decision).

The issue of the Regulator's treatment of historical depreciation is addressed in Section 4 of this submission in the discussion regarding ICB.

The Regulator's consideration of the future depreciation schedule needed in order to determine the allowed return of capital to be factored into the reference tariff is addressed in section 5.8 of the Draft Decision in the context of s. 8.32 to s. 8.35 of the Code.

The proper consideration by the Regulator of asset life and the rate of depreciation which derives from that consideration, is essential to the proper consideration of the Service Provider's legitimate business interests and reasonable expectations at the time of making its investment, or indeed at any subsequent time. The rate at which capital employed by an investor is to be returned to the investor, and the certainty of that return, are critical considerations for any investor. In the Draft Decision however, besides briefly noting the attempt by GGT to facilitate consistency with the (pre-existing) levelised approach (part B, page 156), the Regulator appears to have sought to apply his discretion in a manner that is inconsistent with the TSP under the State Agreement. No consideration has been given to the project life specified in the State Agreement by virtue of clause 46(1) and clause 33(b) upon which basis the original investment was committed, and upon which basis the current owners had reasonably based their own expectations pursuant to the Assignment clause in s.28(1) of the State Agreement. The lack of consideration given to these matters indicates that the Regulator has failed to properly address matters which he is required to under s. 2.24(a) and s. 8.1(a), s. 8.1(b) and s. 8.1(d) of the Code.

Furthermore, in section 5.8 of the Draft Decision, the Regulator also considers that the potential interconnection of the GGP and the DBNGP mean that future gas supply constraints are unlikely, and that the public submissions before him "indicate optimism about the future demand for gas transmission services over 30 and even 50 years of pipeline life". The Regulator concluded however that a weighted average asset life of 65 years (70 years for the pipeline and laterals) was appropriate on the basis of assumed technical life of similar physical asset categories in regulatory decisions elsewhere in Australia.

However references to broad Australian regulatory precedents and a generically derived assessment of technically feasible asset life, do not address the unique historical, commercial and environmental circumstances of the GGP. This approach fails to give proper consideration to the unique (in terms of applicability of the Code) nature of the market which the GGP services.

In regard to this last consideration, it must be noted that the GGP services a very different market from the majority of Australian gas transmission pipelines. It is characterised by direct competition with electricity as well as competition with diesel and LPG as a fuel for electricity generation. The market, which it serves is characterised by a few, large corporate customers with their own significant negotiating power. Nonetheless, these same companies are engaged in mining projects with relatively uncertain and potentially short life spans.

The Joint Venturers of the GGP and the Western Australian State Government were unable to foresee a commercially realistic asset life for the pipeline beyond 40 years. For the Joint Venturers this was despite a longer life arguably serving their own best interests (in determining a lower tariff) as they were fully aware that they would be the very customers which the pipeline would serve over this time.

In asserting that the GGP has an economic life of 70 years, the Regulator in effect is expressing a view of 100% certainty in the GGP being utilised at substantial levels of throughput for that entire duration. However, even the most optimistic of the public comments the Regulator cites in the Draft Decision for justification of this, refers to "potential life-spans of up to 50 years" (Part B page 86 of the Draft Decision). This approach fails to properly consider the historical basis upon which tariffs and depreciation have been derived in the past.

This failure to give proper consideration to the historical expectation regarding project life, besides having an immediate direct and adverse impact upon tariff calculation, also substantially changes the owners' risk horizon. Relative to the original 42 year term sanctioned by the State Government under the State Agreement, extending the time frame for returning owner's capital beyond that which is commensurate with the nature of the market being serviced and upon which basis the investment was committed, adds significant investment uncertainty.

In addition to the failure in the Draft Decision to give proper consideration to realistic indications of economic asset life as it might be determined in the specific and unique circumstances of the GGP, the Regulator has also failed to give proper consideration to the consequences of the levelised tariff originally established for the GGP. No consideration has been given to the original market development objectives or wider social or user benefits of establishing a levelised tariff, nor of the consequences for GGT of past capital under-recovery as a result of this.

The concept of developing a levelised tariff is neither new nor unique and the benefits of establishing initial pipeline tariffs on a levelised basis are widely recognised. Commenting upon GGP specifically, it was observed in Parliament (Hon. N.F. Moore, Hansard, 26 August 1997, page 5364) that (emphasis added);

> *"Tariffs were set in the first place to produce the lowest possible tariff consistent with the tariff setting principles. This was because a net present value rather than a cost of service approach was used. This essentially means that the project has estimated the likely sales and costs <u>over the full 42 years of the project</u> and annualised the net cash flow on a discounted basis to produce an NPV of zero using an agreed discount rate. <u>The effect of this is to shift present costs on to the future. The result is a lower tariff in the earlier years of the project</u> compared with a cost of service approach where actual costs on an accounting basis are recovered each year from the volume of gas sent through the pipeline."*

For a regional development project like the GGP, faced with the uncertainties associated with having a customer base comprised (in terms of volume) of only a few large customers, each facing their own unique commercial uncertainties, a levelised tariff approach requiring that the investment be recouped over a realistically foreseeable timeframe was required in order to satisfy both the needs of the investors and the desirability (in social, political and commercial terms) of establishing the lowest practicable and sustainable tariffs. Under the regulatory terms agreed at the time of the investment being made, an economic asset life of 42 years was determined to be appropriate to reconcile the disparate requirements for both the investment to proceed and consumers to benefit. These are factors which GGT contends need to be given appropriately weighted consideration. The *Epic* decision merely serves to reinforce this requirement.

5.3 Correct Approach

The pipeline is licensed for 42 years. The licence period was explicitly specified in the State Agreement, clause 16.

The clause 9 Proposal envisioned a 42 year design life for the GGP. All of the project's original economics were prepared on the basis of a 42 year project life and tariffs derived were levelised over the same 42 year period. The useful life was based upon economic life, not physical life, which may be extended beyond 42 years. Equally, the GGP could conceivably become stranded by that time, as a result of an unsustainable drop in demand due to trends in resource extraction or as a consequence of technological advances in competing energy delivery technologies.

Over 90% of the gas transported by the GGT is used for power generation to support gold and nickel mining operations. Unlike other pipelines which supply residential and commercial markets, the GGT, thus, supplies customers with finite lives, i.e., when its mineral resources are depleted, a mine closes and its energy requirements end. Even optimistic resource forecasts only talk about future prospects for 20 to 50 years.

In view of the above, GGT sees no technical basis to change the project life used to determine depreciation from that established under the State Agreement.

For all of the reasons outlined in this submission, the ICB and Tariff Models utilises a 42 year project life for calculating depreciation. As the period to which the proposed Access Arrangement applies has now been updated this means that there are 36 years remaining.

6. LOAD

6.1 Epic Principles

The *Epic* decision did not contain any specific findings relating to this issue.

6.2 Analysis of Draft Decision

In his section 5.3 of the Draft Decision, the Regulator identified that "the throughput forecast has emerged as a major issue in the assessment of the proposed Access Arrangement for the GGP". After consideration of the submissions received and noting that they generally express considerable optimism about future demand, the Regulator concluded on page 88 of Part B of the Draft Decision that;

> *"for tariff calculation purposes the GGT forecast [as submitted] has been adopted for the period of the proposed Access Arrangement. Additional advice on the throughput forecast is likely to be required before the Regulator issues the Final Decision."*

The Draft Decision replicates a graph of GGP load forecast contained in the Offer Document issued by Australian Pipeline Limited for the Australian Pipeline Trust, dated 5 May 2000. This was some time after the proposed GGT Access Arrangement was submitted. An apparent inconsistency between this forecast and that submitted by GGT in the original Access Arrangement Information package was identified. This has been subsequently addressed by GGT in section 3.3 (page 49) of its public submission dated 13 July 2001 in response to the Draft Decision (“Public Submission”). In summary, GGT's response points out that the Regulator, whilst accurately replicating the graph, had unfortunately failed to also represent in either the graphical version of the data or the commentary, the distinction made in the Offer Document between contracted volumes and <u>potential</u> increases. Nor did the Draft Decision consider the qualification in the Offer Document which explains that the medium term forecast is "<u>Subject to</u> a positive mining industry outlook...". The Draft Decision also failed to consider that on page 37 the Offer Document concludes that, "in the short term, the Directors expect that there will be little growth over the existing contracted customer base".

In addition, while the Regulator had accurately indicated that the forecast which the Draft Decision replicated (Part B, page 88) only extends for ten years, no consideration was given to the significance of this fact. This is one of the characteristics, which distinguish the GGP from other Australian gas transmission pipelines. The short forecast horizon is indicative of the difficulties in making meaningful forecasts of market demand when the market in question is not a major population centre having the characteristics of relatively predictable, naturally exponential organic growth. GGT faces a vastly different market exposure, having been built by a group of regional resource developers in order to provide a lower cost alternative to their existing energy sources, whilst also providing a service to a developing regional market.

The original Access Arrangement period proposed by GGT in 1999, was for five years from the start of 2000. At the time that the original proposal was submitted, GGT had available to it less than three years of reliable load history and capacity performance data. One of the issues which has developed for GGT is that of capacity management to accommodate the demand characteristics of the GGP's unique downstream market.

An interesting characteristic of the demand for gas transmission services faced by GGT is that mining operations, besides having a predictably high level of day-to-day load factor variability, also exhibit lower demand once they have become operationally stable. This is usually associated with the resolution of initial operational inefficiencies, whether it follows mine-site start up or merely follows conversion of plant to utilise cheaper gas as a replacement for either diesel or reticulated electricity. The consequence is that for some mining operations, predicted growth in resource throughput can actually be associated with a decline in gas demand to some degree.

In summary, subsequent to the submission of the original proposal, a number of significant changes have taken place in regard to both the capacity of the pipeline and the potential for load growth along the GGP. These include:

(a) Installation of additional compression at Wiluna in 2001, bringing throughput capacity up to approximately 100TJ/d.

(b) Three additional years of actual load history have been obtained (for a pipeline that had only been in operation for three years at the time the original Access Arrangement proposal under the Code was required to be submitted).

(c) Somewhat higher than expected short term throughput has materialised as an apparent consequence of plant startup and commissioning requirements (noting that, based on indications from GGT's customers these processes are now complete).

(d) Decisions by a number of third party potential gas consumers to elect to use diesel fired power plant as the quantities of gas which they demanded, and the duration to which they were able to commit, failed to justify the expenditure in gas lateral and generation fixed capital. (See Public Submission, page 51).

(e) Conclusion in the first half of 2002 of a third party contract for the supply of gas to Esperance for electrical power generation in 2003 conditional upon power station proponents meeting financial close.

(f) Firm indications have developed of a need for the installation of an additional compression station to be located at Paraburdoo in order to contractually meet planned total system reliability levels. This capital expenditure (which now must be included in the capital expenditure estimates underscoring the reference tariff calculations) will have system wide benefits, including an enhancement of peak capacity.

Finally, given the time, which has elapsed under the Code regulatory process, GGT considers that it is now appropriate to update the period of its proposed Access Arrangement. As a result of these factors, the revised load forecast as illustrated in the following section of this submission is now proposed by GGT.

6.3 Correct Approach

GGT is proposing a load forecast based upon identified markets which is aligned to its budget forecasts. GGT has canvassed its existing customers and the forecast reflects the results of that survey. Information provided regarding existing proposals for customer expansions and revised customer project planning have been incorporated.

Further additional load would require the addition of new customers, which do not currently exist. GGT's experience is that it has been unable to add new mining customers since 1998. The only major addition has been Burns Roe and Worley's Esperance Power Project, which has been underwritten by Western Power. If the proponents reach financial close then this project which will go into service in financial year 2004 is scheduled to initially add just a few TJ/day of incremental load.

As a result of its experience resulting from active involvement in the relevant markets, GGT has reached the conclusion that there are no new mining projects, which could add additional load to the GGT in the short to medium term.

While GGT continues to pursue new opportunities and is optimistic that additional load will ultimately be added, there are simply no high probability projects on the horizon today.

Table 3 – Provides GGT's 2002 Outlooks for its Load Forecasts.

	2002 Outlook	
June 30 Fiscal Year	**MDQ**	**Throughput**
2000	108.4(a)	77.4(a)
2001	110.3(a)	83.5(a)
2002	109.3(a)	81.5(a)
2003	108.4	81.5
2004	100.1	78.5
2005	97.9	80.3
2006	98.2	80.6
2007	98.2	80.5

7. WACC

7.1 Epic Principles

The *Epic* decision did not specifically deal with the interpretation of provisions of the Code concerning WACC or rate of return. However, the general principles outlined by the Full Court as to the objectives and intended operation of the Code are relevant to this issue.

As discussed in previous sections of this submission, the Regulator is required under the Code to give weight to the service provider's legitimate business interests as a fundamental consideration under s. 2.24(a). This includes the service provider's interest in recovering its investment in the pipeline, together with an appropriate return (*Epic* decision para. 130). In this regard, past investments and risks taken by the service provider may provide justification for prices above the theoretical economically 'efficient' level (*Epic* decision para. 144). To this extent, past investment decisions are highly relevant to the design of the reference tariff in accordance with both s. 2.24(a) and s. 8.1(d). As a result of the *Epic* decision, it is clear that the Code does not limit a service provider to recovering only 'regulated revenues' (para. 205). Where an investment in a pipeline before the Code applied is made in the course of an arm's length commercial transaction, and is based on a sound commercial assessment of the value of the pipeline in the circumstances then prevailing and anticipated, it is relevant to consider the investment, the interests of the service provider in recovering it, together with a reasonable return, and the reasonable expectations under the preceding regulatory regime of the service provider (*Epic* decision para. 179).

Applying the *Epic* principles, it is clear, for example, that the financial model specifically referred to in s. 8.31 of the Code is not a model which must be applied by the Regulator in every circumstance. As the section itself makes clear, other approaches may be adopted where the Regulator is satisfied that they are consistent with the objectives contained in s. 8.1.

7.2 Analysis of Draft Decision

It is GGT's submission that the Regulator's determination of the WACC does not:

(a) recognise the basis upon which the WACC was set prior to the application of the Code (i.e. previous regulatory regime - State Agreement); or

(b) provide the owners of the GGP with a commercial rate of return.

Therefore, GGT contends that the Regulator has not given proper consideration to the GGTJV legitimate business in the determination of the WACC.

It is in GGT's submission, the Regulator's decision to propose a pre-tax real rate of return (WACC) of 7.95% is in direct conflict with s. 8.1(d) of the Code, which states:

> *"A Reference Tariff and Reference Tariff Policy should be designed with a view to achieving the following objectives:*
>
> ......
>
> *(d) not distorting investment decisions in Pipeline transportation systems....;"*

In the *Epic* decision, Justice Parker discussed the interpretation of s. 8.1(d) of the Code at para. 152 and 153 in the context of the Regulator being required to consider:

(a) past investment decisions; and

(b) balancing the interests of pipeline owners and consumers.

In particular, Justice Parker stated in para. 152 of the *Epic* decision that:

> *"....s 8.1(d) has dealt with the issue expressly, and has done so by not denying the potential relevance of past investment decisions to the design of a reference tariff or a reference tariff policy."*

Furthermore, Justice Parker stated in para. 153 of the *Epic* decision that:

> *"In this respect, in my view, s 8.1(d) can be seen to reflect a public interest broader than the mere understanding and application of economic theory, by taking account of wider political and social considerations. Past investment in a Covered Pipeline has not been rendered necessarily irrelevant, as the application of economic theory might suggest. In particular, there may be seen in s 8.1(d) a reflection of the general scope and policy of the Act, in so far as this sought to provide for third party access to pipelines on terms and conditions that were fair and reasonable to owners and operators....."*

It is GGT's submission that the Regulator has failed to also take into account or give proper weight to s. 2.24(a) of the Code, which states:

> *".... In assessing a proposed Access Arrangement, the Relevant Regulator must take the following into account:*
>
> *(a) the Service Provider's legitimate business interests and investment in the Covered Pipeline;"*

At para. 145 of the *Epic* decision, Justice Parker discusses the consequences of failing to consider the legitimate business interests of pipeline owners in the wider context of the public interest. Justice Parker states (emphasis added):

> *"... the expert evidence, including the supportive expert writings, suggested a growing awareness of the long term disadvantages of striking the balance with <u>too great an emphasis on the interest of consumers</u> in securing lower prices, and <u>without due regard to the interest of the service provider</u> in recovering both higher prices and its investment."*

GGT's submission is that the Regulator's determination of a low WACC value will have a serious impact on the GGTJV's legitimate business interests by its:

(a) distortion of GGTJV's investment in the GGT; and

(b) discouragement of further capital investment.

Furthermore, GGT contends that the Regulator therefore has not taken into account s. 2.24(e) of the Code, which says:

> *".... In assessing a proposed Access Arrangement, the Relevant Regulator must take the following into account:*
>
> *(e) the public interest, ...;"*

The *Epic* decision makes the further, important point that the legitimate business interests of the pipeline owner are part of the wider public interest. Justice Parker makes this point at para. 134 of the *Epic* decision, where he states:

> *"The notion of public interest in s 2.24(e) is expressed first in its generality, and then more narrowly as the public interest in having*

competition in markets. In the latter and limited aspect, s 2.24(e) is clearly reflecting the objective of the promotion of a competitive market stated in the preamble. The public interest at large, however, would have regard to wider considerations. These may extend to embracing the protection of the interests of the owners of pipelines and the assurance of fair and reasonable conditions being provided where their private rights are overborne by the statutory scheme, as submitted by Epic, but it is not necessary to explore this exhaustively."

GGT proposes that it is in the public interest that neither the GGTJV original investment in the GGP nor any future investment in the GGP be distorted by the Regulator failing to determine a commercial rate of return for the owners of the GGP. Further expansion-based investment in the GGP will only occur when the GGTJV's are guaranteed to obtain a commercial rate of return on their invested capital.

Justice Parker at para. 130 of the *Epic* decision stated that (emphasis added):

"The service provider's legitimate business interests and investment in the pipeline (s 2.24(a)) would appear directly relevant to the objective that access rights by third parties be on conditions that are fair and reasonable for the owners and operators of a pipeline. The investment in this case is relevantly the full purchase price of $2.407 billion, (some other items are also relied on). Within the meaning of s 2.24(a) both that investment and the legitimate business interests of Epic might properly extend to the recovery of that $2.407 billion, at least over the expected life or operation of the pipeline, <u>together with an appropriate return on investment</u>. (In the Regulator's unquestioned finding the expected life of the DBNGP is 70 years). The business interests of Epic might well extend much further than this, but it is unnecessary to explore those matters. There was a submission from Alinta that in the context of this Code the recovery of monopoly prices or tariffs, above the level of economically efficient prices, should not be seen as "legitimate". I find no support in the Act or the Code for such a view. While some expressions of economic theory and passages in the Hilmer Report would suggest that it is against the interests of society as a

> *whole, at least in some situations, for a monopolist to be able to recover monopoly prices or exercise monopoly power in the market, that does not make the enjoyment by a monopolist of a monopoly an illegitimate business interest. On the other hand there may be much scope for the notion of illegitimate, as opposed to legitimate, business interests in the context of arrangements which, for example, constitute a contravention of the Trade Practices Act or involve manipulations of the prices paid for assets with a view to the avoidance of revenue charges. There is no basis shown, however, upon which the interests of Epic in recovering the actual investment it made in the DBNGP when it acquired it from the State, together with a reasonable return on that investment, should be categorised as other than a legitimate business interest for the purposes of s 2.24(a)."*

Justice Parker further emphasises that the Regulator should be guided by the factors in s 2.24 in para. 136 of the *Epic* decision when he states:

> *"... the intended operation and interpretation of the Code appears to require that in the exercise of the discretionary powers provided by the concluding paragraph of s 8.1, the Regulator should be guided by the factors in s 2.24(a) to (g)."*

Further the quote by Justice Parker, in para. 149 of the Epic decision he refers to the Hilmer Report at page 251:

> *"..... the public interest would need to place special emphasis on the need to ensure access rights did not undermine the viability of long-term investment decisions, and hence risk deterring future investment in important infrastructure projects."*

This view is further supported by the recent Federal Government Report entitled "Towards a Truly National and Efficient Energy Market", which observed on page 114 that:

> *"Many submissions from the gas industry expressed the view that aspects of the current regulatory frameworks and/or the interpretation of them by regulators are having the effect of discouraging investment in new infrastructure."*

Further on page 114 of this Report it repeated a portion of Duke's submission by noting:

> *"The actions of regulators strongly influence investor assessment of risk and the returns which might be expected from investment, and are significant when decisions are being made on the placement of global capital. Hence the approach adopted by regulators strongly impacts upon Australia's international competitiveness. In addition, investors and gas pipeline owners have found that the Code, as it has been interpreted and applied by regulators, acts as a substantial disincentive to investment in gas pipelines. ..."*

APIA pointed out this major issue to the Regulator in its submission dated 6 July 2001 on the Draft Decision in the following advice:

> *"The low WACC value proposed by the Regulator is cause for major concern as the pipeline in question faces a risk profile which mirrors that of a minerals project. The position is significantly different from that of a normal 'distribution' pipeline project which has a much more diversified risk."*

APIA's statement was supported the Public Submission in the following discussion of the risk it faces:

> *"The mining industry is widely acknowledged as a risky one. However, the risk faced by the GGP is greater than that applicable to the industry as a whole, because the pipeline can serve only a small segment of the industry. This limitation is imposed by geography. For the GGP to successfully gain new business, the mining operations providing such new opportunities must be located close to the pipeline. If they are not, the economics of constructing lateral pipelines to serve typically short lived mining projects simply do not prevail over the ever present alternative - liquid hydrocarbon fuels."*

GGT considers that the Regulator has failed to take into account this risk that is faced by the GGTJV, as required in s. 8.30 of the Code, which states :

> *"The Rate of Return used in determining a Reference Tariff should provide a return which is commensurate with prevailing conditions in*

the market for funds and the risk involved in delivering the Reference Service (as reflected in the terms and conditions on which the Reference Service is offered and any other risk associated with delivering the Reference Service)."

It is important to understand the effect of the approved TSP on GGT's legitimate business interests and reasonable expectations. In particular, TSP 2, in allowing for a commercial rate of return commensurate with the business risk associated with the GGP Project, has regard to firm-specific (or non-systematic) risks which are unique to that project. Such risks, by their nature, need to be assessed separately for each project. The rate of return required by TSP 2 must therefore be sufficient to accommodate the unique business risks faced by this particular project (and not be limited to a rate of return which takes account of systematic risk only).

Furthermore, in the Public Submission GGT revealed a number of errors in the Regulator's determination of the GGP's WACC. GGT stands behind those comments and would like to further emphasise the following key principles that the Regulator should follow when determining a WACC:

(a) determination of the Inflation Rate should not be based on short-term data but on the longer-term historical averages;

(b) the Risk Free Rate should be determined based on long term averages;

(c) the calculation of the Market Risk Premium and Franking Credit Value are inter-related; and

(d) the value attributable to risk must be determined based on the risk faced by that pipeline and that pipeline owner's commensurate requirement for return on their investment.

The following Section 7.3 provides GGT's correct approach to determine the WACC.

7.3 Correct Approach

The GGP was funded, built and owned by a private consortium in 1995-96.

The Western Australian State Government received expressions of interest from numerous parties regarding the development of the new pipeline, with 16 formal submissions from national, international and local companies being received (see Hansard, 30 June 1993, page 859, question 45).

Following a competitive selection process and assessment which took into account factors including proposed Access Arrangements and tariff levels, the GGTJV was selected as the preferred proponent of the new pipeline, which would integrate the GGP as a transmission system with the demand of the market (see Hansard, 22 September 1993, page 4501, question 1001).

The State Government and the GGTJV participants subsequently negotiated the State Agreement, which was signed in March 1994. The agreement provided for private sector development of major infrastructure under commercial terms with light handed regulation while ensuring non-discriminatory access and tariffs, and requiring the Joint Venturers to pursue market growth and to provide for further development of the pipeline capacity to serve that growth (see Hansard, 29 March 1994, page 10793, Second Reading).

The State Agreement imposed a number of obligations on the GGTJV. The owners committed capital taking a significant risk on developing a pipeline unlike any pipeline that serves a metropolitan area with hundreds of thousands of customers. In return for the risks taken by the owners, the State agreed to protect the legitimate business interests of the owners. The capital committed by the owners (owners equity) was the capital at risk and the State reviewed and agreed that commensurate with the risks, GGTJV is entitled to receive its total investment along with the agreed return.

The clause 9 Proposals approved by the Minister for Resources Development on 27 January 1995 included TSP, which governed tariff setting on the GGP. TSP 2 shown below enshrined the requirement for tariffs to be set to provide a commercial rate of return on the GGTJV investment in the construction and operation of the GGP:

"Tariffs will be set to provide a commercial rate of return on all project capital, including all Owners' costs, reasonably incurred in the construction and operation of the Pipeline and to recover all reasonable Pipeline operating, maintenance and administration costs. The commercial rate of return shall be commensurate with the business risk associated with the project...."

The approved A1 tariff at the time of the State Agreement used a calculated nominal pre-tax WACC of 18.81%. The WACC was derived from a 17.45% return on equity, 50/50 debt / equity ratio, imputation credit of 0% and prevailing debt risk margins, risk free rate, and corporate tax rate at the time. What was agreed and protected was the return on equity (to offer return commensurate with risks on owners capital), debt equity ratio (to define the total amount of owners capital at risk), and imputation credit. The owners were expected to recover their capital along with the agreed return over the 42 year term of the State Agreement.

The importance of recognising previous investment and expectations is referred to by the Productivity Commission in its "Review of the National Access Regime Inquiry Report: Report No. 17 28 September 2001". The Productivity Commission states at pages 67 - 68 of that report:

"in the Commission's view, the concerns about the potential for access regulation to deter investment appear to be well-founded. This in turn means that minimising the potential for such effects should be an important consideration in the design of access regimes."

Pursuant to the State Agreement, the Joint Venturers in the GGP negotiated with the Minister for Resource Development to define TSP and determine the initial tariffs for the pipeline consistent with those principles. At that time, the State and the GGT agreed to use the following economic parameters to set the WACC, as shown in Table 4:

Table 4: State Agreement - WACC Input Parameters

Input Parameter	Value
Debt/Equity Ratio	50/50
Interest Rate	11.56%
Return on Equity	17.45%
Corporate Tax Rate	33%
Debt Risk Margin	2.5%
Inflation Rate	4%
Risk Free Rate	9.06%
Imputation Credit	0%

It is the GGT's contention that the return on equity, debt/equity ratio and imputation credit percentages were fundamental elements of original arrangement with the State in 1994 and should not be altered. These three parameters, which provide for return on and recovery of the original investment in the pipeline, represent the legitimate business interests of the owners. Any variation to these input parameters will be considered by GGT to have a serious impact on the legitimate business interests of the Joint Venturers.

The original Joint Venturers proceeded to invest funds in the construction of the GGP based on the firm expectation of a return on equity of 17.45% over the life of the State Agreement being for 42 years.

This rate of return was later supported by the State Government by the Leader of the House, Minister for Mining and Pastoral, Norman Moore during a sitting of the Legislative Council on 26 August 1997 where it was reported in Hansard at page 5364 that (emphasis added):

> *"a separate company which raises funds in the capital markets and makes a return on equity as a stand alone company. The rate of return it makes is set by comparison with comparable entities in the marketplace. <u>The rate of return used in the model was reviewed by the</u>*

State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand alone company. This means that the tariff is not affected by the actual borrowings made by the Joint Venturers or the individual tax positions."

The imputation tax credit is held constant to the agreed value in 1994 because there have been no substantive changes to the tax law regarding imputation credits or franking since 1994.

The debt/equity ratio is held constant because it determines the relative percentage of the equity contribution and therefore, the project owner's initial committed at-risk dollars. If the rate of return was for the total owner's capital, and total equity at the time of committing the capital is changed, the return on the owner's equity investment is changed.

GGP's current owners were assigned all of WMC's, BHP's and Normandy's rights, title and interest under the State Agreement and, thus, the transfer of ownership in December 1998, January 1999 and March 1999 should not change the GGP's tariff structure and the current owners should be entitled to the return on equity, debt/equity ratio, and imputation tax credit percentage included in the November 1994 clause 9 Proposals approved by the Minister for Resources Development.

GGT considers that the remaining parameters depend to a certain extent on changes in legislation and movements in money markets. These parameters may be revised to reflect such changes. GGT proposes to recalculate or revise the input parameters of the inflation, risk free rate, cost of debt margin and the corporate tax rate.

GGT proposes to revise the inflation rate to 2.5%, as the Reserve Bank of Australia's current long term target for inflation is still between 2% and 3%.

Cost of debt for corporate borrowers is commonly determined in Australia by adding a risk premium to the risk free rate.

The GGT proposes to revise the risk free rate to 5.90%. This rate represents the average rate for 10 year Government Bonds over the past five years ending September 2002.

Empirical evidence supports a cost of debt margin of between 140 basis points and 175 basis points. This range has been chosen after consultation with financial institutions. The range is comprised of the following margins:

(a) 25 basis points for the typical margin between the 10 year Commonwealth Government bond rate and a "bank" rate against which credit margins would be levied;

(b) 90 basis points to 125 basis points for the credit margin on debt funding the GGP given the risks it faces; and

(c) 25 basis points margin for swap costs.

Taking the mid point of the credit margin, the total debt margin is 157.5 basis points.

In line with s. 8.1(d) of the Code, GGT proposes the following inputs shown in Table 5 to determine the WACC.

Table 5: WACC Input Parameters

Parameter	**Parameter symbol**	**Value proposed by GGT**	**Source**
Return on Equity	R_e	17.45%	clause 9 Proposals
Risk Free Rate (Nominal)	R_f	5.90%	1997 - 2002 10 Year Bond Rate
Cost of Debt Margin	D_m*	1.575%	Financial Institutions
Corporate Tax Rate	t_c	30%	Statutory Tax Rate
Franking Credit Value	γ	0	clause 9 Proposals
Debt to Total Assets Ratio	D/V	0.5	clause 9 Proposals
Equity to Total Assets Ratio	E/V	0.5	clause 9 Proposals
Expected Inflation	π_e	2.5%	GGT December 1999 AA Submission

* parameter symbol used for clarity

In line with s. 8.31 of the Code, GGT proposes the following typical approach to calculate the WACC using the pre-tax transformation of the 'Officer' WACC formula:

$$WACC = R_e \times \frac{E}{V} \times \frac{1}{(1-t_c(1-\gamma))} + R_d \times \frac{D}{V}$$

where,

the nominal cost of debt, R_d, is normally represented as a margin over the risk free rate as shown in the following formula:

$$R_d = R_f + D_m$$

where for clarity,

D_m = Cost of Debt Margin

Using the above WACC formula and the WACC input parameters shown in Table 5, GGT calculates the nominal pre-tax WACC shown in Table 6.

Table 6: Proposed WACC for the GGP

	WACC
Nominal Pre-Tax	16.2%

This rate of return is considered by the GGTJV to be realistic given the risks the GGP faces and meets the expectations of the GGTJV in relation to commercial rate of return, as envisaged under the State Agreement. Furthermore, it meets requirements under s. 8.1(d) of the Code of not distorting investment decisions.

8. TARIFF

8.1 Epic Principles

All of the general principles outlined in Section 2 of this submission apply to the Regulator's assessment of the tariff for the GGP.

Of particular relevance to the general issue of proposed tariffs are the following principles:

(a) s. 8.1(a) of the Code is not an overarching requirement, and does not require that the service provider earn a stream of revenue that recovers 'no more' than the efficient costs of delivering the reference service (paras. 142 and 157-159);

(b) past investment decisions and risks taken by the service provider may justify prices above the efficient level (para. 144) and due regard must be given to the interests of the service provider in recovering both higher prices and its investment (para. 145);

(c) In the field of competition policy, especially market regulation, a reference to a 'competitive market' means a 'workably competitive market' (para. 124). The expectation is that with workable competition, market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although not necessarily achieving theoretically ideal efficiency (para. 128).

(d) past investment decisions are therefore highly relevant to the design of the reference tariff, reflecting the broader public interest identified in s. 8.1(d) of the Code (paras. 152 and 153);

(e) a reference tariff which has no regard to the actual unrecovered capital investment in the pipeline may undermine the viability of the earlier investment decision (paras. 148 and 149); and

(f) specific consideration is required to the basis upon which tariffs have been set in the past, the economic depreciation of the pipeline, the historical returns to the service provider from the pipeline, and the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code (paras. 168 and 169).

8.2 Analysis of Draft Decision

Before considering specific aspects of the Regulator's determination of the Reference Tariff for the GGP, it is appropriate to consider several wider issues which impinge directly on a proper consideration of tariffs.

Code s. 8.49

Code s. 8.49 commences by stating:

> *"Subject to the requirement for public consultation, the Relevant Regulator may determine its own policies for assessing whether a Reference Tariff meets the requirements of this section 8."*

The balance of Code s. 8.49 provides, without limitation, three examples of how a regulator might exercise this discretion.

It is evident that the Regulator has discretion when considering the Reference Tariff applicable to the GGP.

GGT proposes that the Regulator should exercise this discretion when formulating his Amended Draft Decision to appropriately consider and accommodate the unique circumstances applicable to the GGP.

"Greenfields" Pipeline

The GGP had been in operation for approximately one year when the Code was ratified at the national level, and less than three years when the Code came into effect in Western Australia.

Consequently, it can not be considered a 'mature' pipeline in chronological terms.

The GGP facilitates regional development, and does not serve any major population centres. Rather, it is almost solely (i.e. around 99%) dependent on the metals mining industry. This combination of remoteness and reliance on a single, volatile industry results in a risk profile which is markedly different from pipelines which serve diverse, stable markets in Australia's capital cities.

Its market penetration is limited compared with the ultimate (i.e. fully expanded) transport capacity of the pipeline.

Consequently, the GGP can not be considered a 'mature' pipeline in economic or commercial terms.

Decisions by investors whether or not to commit their capital to new projects are the critical determinant of whether a pipeline project proceeds or not.

The *Epic* decision establishes that the Regulator is obliged to consider such decisions.

In the case of the GGP, the Regulator is required to give careful consideration to the following issues:

(a) protection of the pipeline owners' legitimate business interests under the Code (s. 2.24(a), s. 8.1(d)) and the State Agreement (clause 21(3), TSP);

(b) honouring of the contractually binding provisions of the State Agreement (Code s. 2.24(b)); and

(c) the public interest, which includes the legitimate business interests of the pipeline owners (*Epic* decision para. 134) and the development of regional Western Australia (Code s. 2.24(e)).

The specific circumstances applying to the GGP mean that the Regulator's obligations identified in the *Epic* decision regarding the consideration of past investment decisions and the circumstances under which they were made assume even greater importance.

In applying *Epic* principles when formulating the Amended Draft Decision for the GGP, explicit consideration must be given to the <u>differences</u> between the circumstances applying to the DBNGP and to the GGP.

<u>Private Sector Development</u>

The GGP was developed following a competitive tender process conducted by the Western Australian Government, and has been financed entirely by the private sector.

This makes it substantially different (in a variety of ways) from public sector assets which have been privatised.

Consequently, any 'conventional wisdom' or (explicit or implicit) 'rules of thumb' deriving from the economic regulation of natural gas transmission pipelines, and more particularly natural gas distribution systems elsewhere in Australia, simply can not be applied to the GGP.

Original Arrangement with the State Government

A further difference between the GGP and the majority of (previously) public sector and private sector natural gas transmission pipelines rests in the fact that the GGP has, from its inception, been subject to economic regulation.

The State Agreement establishes the nature and form of this economic regulation which affects the periods both prior and subsequent to the introduction of the Code.

The pipeline owners capital was ‘sunk’ on the basis of the original arrangement with the State prior to construction of the pipeline (“Original Arrangement”). This included, among other things, the nature and form of the economic regulation embodied in the State Agreement negotiated and agreed between them and the Western Australian Government.

The Original Arrangement is contained in the clause 9 Proposals approved by the (then) Minister for Resources Development in January 1995. Key aspects of the Original Arrangement were later confirmed by the Hon. Norman Moore in the Legislative Council in August 1997 as follows.

> *'The tariffs that have presently been set by the GGP were judged by the State to be consistent with the tariff setting principles.' (See Hansard, page 5363).*
>
> *'Tariffs were set in the first place to produce the lowest possible tariff consistent with the tariff setting principles. This was because a net present value, rather than a cost of service approach, was used. This essentially means that the project has estimated the likely sales and costs over the full 42 years of the project and annualised the net cash flow on a discounted basis to produce an NPV of zero using an agreed discount rate. The effect of this is to shift present costs onto the future. The result is a lower tariff in the earlier years of the project compared with a cost of service approach where actual costs on an accounting*

basis are recovered each year from the volume of gas sent through the pipeline.' (See Hansard, page 5364).

'The model sets up a pipeline entity that effectively operates as though it is a separate company which raises funds in the capital markets and makes a return on equity as a stand-alone company. The rate of return it makes is set by comparison with comparable entities in the marketplace. The rate of return used in the model was reviewed by the State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand-alone company.' (See Hansard, page 5364).

GGT contends that the introduction of the Code should not undermine, jeopardise, compromise or detract from the Original Arrangement in any shape or form.

In the context of determining transport tariffs, the Original Arrangement may be viewed as having several parts, including:

(a) Assumptions regarding factors <u>exogenous</u> to the project.

These include company tax rates, the rate of inflation, debt interest rates, etc.

(b) Assumptions regarding factors <u>endogenous</u> to the project.

These include return on equity capital invested, notional project capital structure (i.e. debt / equity ratio), project life and capital recovery / depreciation, debt amortisation, and treatment of dividend payments.

(c) The <u>methodology</u> used to calculate tariffs.

Levelised tariffs are calculated using a NPV methodology.

GGT contends that the characteristics of these component parts lead to the following principles:

(a) Values allocated to <u>exogenous</u> factors can <u>vary over time</u>.

This is because such 'external' factors are beyond the control of the signatories to the State Agreement.

(b) Values allocated to <u>endogenous</u> factors should <u>not vary over time</u>.

This is because such 'internal' factors:

(i) are within the control of the signatories to the State Agreement,

(ii) were agreed at the time the State Agreement was concluded, and

(iii) formed the basis on which the owners' capital was (irreversibly) sunk.

In other words, the endogenous factors form the economic heart of the Original Arrangement.

(c) A consistent tariff calculation methodology should be applied throughout the project life.

Draft Decision Reference Tariff

In the Draft Decision, the Regulator gives inadequate and inappropriate regard to both prior investment decisions made by the owners of the GGP and the State Agreement, which underpinned and protects those decisions.

Rather, the Regulator has adopted a forward looking, 'bottom up' approach to Reference Tariff determination firmly rooted in theoretical neo-classical economics, and has ignored the practical, 'real world' issues identified in the *Epic* decision.

The Regulator's calculation of Total Revenue and hence Reference Tariff is predicated on a number of erroneous assumptions regarding the determination of values assigned to the input variables for those calculations. These assumptions include:

(a) the "theoretical model" of "perfect competition" rather than a "workably competitive" market;

(b) economic efficiency being the (overwhelmingly) dominant criterion for assessing revenues and costs;

(c) past investment decisions are not relevant, and only forward looking costs should be considered;

(d) an ICB which was established solely on the basis of asset valuation and without regard to the price paid for the GGP;

(e) capital recovery over the 70 year technical life of the pipeline;

(f) a value of return on equity which does not take into account to the Original Arrangement;

(g) an assumed capital structure (i.e. debt to equity ratio) which does not take into account to the Original Arrangement;

It is appropriate to address these assumptions in turn to identify the errors they contain and propose alternatives which comply with the intent of the Code as clarified in the *Epic* decision and with the State Agreement.

(a) Workably Competitive Markets

The *Epic* decision makes an important and clear distinction between the 'ideal' competitive market of (neo-classical) economic theory, and the "workably competitive" market encountered "in the actual conditions" of "any industry". Further, the *Epic* decision directs the Regulator to consider "workably competitive markets" when assessing Access Arrangements.

At para. 124, Justice Parker states:

> *"Perfect competition is a concept said to be still used in economic analysis, but it is a theoretical concept which is not met in the actual conditions of competition in any industry. ... I am left with the clear impression that in the field of competition policy, especially market regulation, the prevailing view and usage among economists is that a reference to a competitive market is to a workably competitive market. ... Workable competition seems far more obviously to be what is contemplated."*

In the Draft Decision, the Regulator does not consider a "workably competitive market", but rather bases his analysis on the "theoretical" concept of "perfect competition". As previously submitted it is incumbent upon the Regulator (pursuant to his obligations under Code s. 7.7) to clearly define his conception of a "workably competitive market" prior to engaging in any consideration of market mechanisms, their component parts, and delivered outcomes.

As a consequence of these errors by the Regulator, the Draft Decision does not conform to the principles established in the *Epic* decision.

GGT proposes that the Regulator reconsider his position on these issues.

(b) Economic Efficiency

The *Epic* decision clearly establishes that economic efficiency is only one of several factors which the Regulator is required to consider, and that economic efficiency is not dominant over these other factors.

Justice Parker states at para. 108 of the *Epic* decision:

> *"Much of the content of par 1 to par 61 [of Mr. Houston's expert evidence submission] is open to the general criticism that, in many passages, it appears to treat the regulation of infrastructure as solely a matter of the application of economic theory and ignores the material relevance of the precise form of the legislation under which the regulation is applied."*

At para. 141, Justice Parker states:

> *"It is to be observed, however, that s 8.1(a) is concerned with the efficient costs of delivering the reference service over the expected life of the pipeline. That is, it is concerned with the transportation of gas by pipeline from and to various locations. It is not dealing with the economically efficient functioning of the Australian market in natural gas. Thus in s 8.1(a) the focus is much narrower. ... It is also to be noted that s 8.1(a) does not provide that the service provider should recover the efficient cost of delivering the reference service; the objective is that the service provider should be provided with the "opportunity" to earn a "stream of revenue" (NOT the defined term Total Revenue as in s 8.2(a) and s 8.4) that recovers the efficient costs over the expected life of the assets used. ... A reference tariff may well be designed to meet many objectives."*

Para. 142 states (emphasis added):

> *"In their submissions the Regulator and Alinta seemed to regard s 8.1(a) as fixing a ceiling on the revenue stream that might be earned.*

In my view, it would distort the words used to engraft the sense of "no more than the efficient costs" into s 8.1(a). Similarly, there would be a misconception to engraft "at least the efficient costs" into the provision. Each of these would add an emphasis not contemplated by the language of s 8.1(a). This may have particular relevance in a case where the Regulator is called on to exercise the discretions contemplated by the last paragraph of s 8.1."

It is clear from para. 141 and para. 142 that Justice Parker has emphasised that "efficient" costs in no way constitute a ceiling on the earnings of pipeline owners.

At para. 176, Justice Parker reinforces the point that economic efficiency is only one of many factors which the Regulator must consider when establishing the ICB, and that economic efficiency holds no special position amongst these factors. Justice Parker makes this clear when he states:

"Economic efficiency is but one of the factors identified in s 8.10 and there is no sufficient justification in that provision for regarding it as in any way a dominant consideration."

In the Draft Decision, the Regulator's pervasive and dominant focus is on "efficient" costs, and he has made no allowance for revenues and costs which might be considered otherwise.

As such, the Regulator has made a serious error.

GGT proposes that the Regulator reconsider his position on these issues.

(c) Past Investment Decisions

The *Epic* decision clearly directs the Regulator to give due and proper consideration to past investment decisions, and clearly establishes that forward looking costs can not be considered in isolation of prior investment.

Justice Parker discusses balancing the interests of pipeline owners and consumers at para. 152 and 153 of the *Epic* decision. He states that Code s. 8.1(d):

"... has dealt with the issue [of balancing the interests of asset owners and consumers] expressly, and has done so by not denying the

potential relevance of past investment decisions to the design of a reference tariff or a reference tariff policy.

and

Past investment in a Covered Pipeline has not been rendered necessarily irrelevant, as the application of economic theory might suggest."

Justice Parker further states (at para. 169):

"The existence of s. 8.10(f) and (g) appear to preclude the view that the Code is concerned only with forward-looking considerations in respect of the establishment of the initial Capital Base."

In contrast, the Regulator confines himself to a forward looking view, for example, he states at Part B section 5.4.3.10, p. 109 of the Draft Decision:

"... sale price is of limited relevance as an asset valuation methodology for the Goldfields Gas Pipeline"

In not giving adequate or appropriate consideration to past investment decisions, the Regulator has made a serious error in the Draft Decision.

GGT proposes that the Regulator reconsider his position on these issues.

<u>(d) ICB as Valuation Only</u>

The *Epic* decision establishes that asset valuation is only one of several factors which the Regulator is required to consider when establishing the ICB.

At para. 74, Justice Parker addressed some aspects of the Regulator's duty established in para. 73. In particular, Justice Parker states:

"The task of the Regulator under s 8.10 appears not to be simply one of valuation, however, despite the reference to value in s 8.4(a). It is described in s 8.8 and s 8.10 as "establishing" the Capital Base. The factors identified in s 8.10(e) to (j) require the Regulator to consider a variety of other considerations ... The process is more than one of mere valuation. There is, necessarily, a discretionary evaluation of what weight should be attached to each of these factors in the ultimate establishment of the Capital Base."

In contrast, in the Draft Decision the Regulator has addressed the issue of establishing the ICB for the GGP primarily as an exercise in selecting between asset values established by him (as distinct from those set in the 'real world' open market). In particular no regard has been given to the purchase price, as required by s. 8.10 of the Code.

As such, the Regulator has made a serious error, and the Draft Decision does not conform to the principles established in the *Epic* decision.

GGT proposes that the Regulator reconsider his position on these issues.

(e) Project Life

In the Draft Decision, the Regulator increases the project life of the GGP from 42 years to 70 years - approximately 67% over what was envisaged at the time the State Agreement was concluded and the pipeline owner's capital was sunk.

The Regulator does this without adequate or appropriate justification for his assumption that the economic life of the GGP is (at least) equal to its technical life.

In arbitrarily increasing project life, the Regulator substantially increases the risk of capital recovery achieved falling well short of capital expenditure and investors' return on capital falling short of the expectations upon which the capital was sunk.

Such an outcome is contrary to both the interpretation of the Code established in the *Epic* decision and the provisions of the State Agreement.

At para. 130 of the *Epic* decision, Justice Parker establishes that a proper interpretation of Code s. 2.24(a) provides for full capital recovery over the "expected" life of the pipeline. Further, the pipeline's owners are entitled to an "appropriate" return on investment.

TSP 8 of the State Agreement also provides for the full recovery of project capital.

Code s. 2.24(b) requires the Regulator to consider contractual obligations, such as those deriving from the State Agreement.

The proposals approved under the State Agreement envisage a project life of 42 years for the GGP.

At para. 149 of the *Epic* decision, Justice Parker establishes that regulatory intervention should not "undermine" the viability of a previous investment decision. Continuing with the consideration of past investment decisions at para. 152 and 153, Justice Parker establishes that consideration of Code s. 8.1(d) must include past investments, the wider public interest, and requires more than just the application of economic theory.

By arbitrarily increasing project life, the Regulator has distorted the basis upon which past investment decisions were made. If the original owners of the pipeline had been required to amortise their investment over 70 years at the time the project was originally proposed, it is likely that the project would not have proceeded.

The Regulator has also potentially distorted future investment decisions. On the basis of Western Australian regulatory precedent (including but not limited to severe tariff reductions, large differences between ascribed and commercial asset values, the rendering of selected assets as "redundant", unacceptably low allowed rates of return, unrealistically long ascribed asset lives, and inordinately long periods of regulatory uncertainty), it is likely that investors' appetite for investing in new gas pipeline projects has been considerably reduced. The notable failure by the Western Australian Government to secure interest in the construction of a second natural gas transmission pipeline from the Carnarvon Basin to the South West of the state provides a topical case in point.

The prevention of such distortion is expressly contemplated in Code s. 8.1(d).

It is apparent from examination of these issues that the Regulator has made serious errors in dealing with project life in the Draft Decision.

(f) Return on Equity

In the Draft Decision, the Regulator determines a value for return on equity by applying the CAPM in a 'bottom up' fashion - i.e. by determining values for each input parameter in isolation and then submitting these to the model.

In determining values for these CAPM input parameters, the Regulator violates a key CAPM assumption by not matching the time horizons considered when determining the value for each input parameter with the holding period applicable to the result returned from the CAPM. For example, the 20 day time horizon used to determine the Risk Free Rate does not match the 5 year holding period applicable to the Return on Equity calculated or the 42 year holding period applicable under the State Agreement.

Reference may be made to chapters 6, 7, and 8 of "Investments" (fourth edition, 1990) by William F. Sharpe (co-founder of the CAPM) and Gordon J. Alexander for a comprehensive discussion of this and the many other assumptions underpinning the CAPM.

GGT considers that this error alone is sufficient to undermine the Regulator's determination of discount rate and hence Reference Tariff calculation.

However, GGT considers that the Regulator has made a far more serious error when considering Return on Equity.

The Regulator considers the issue of Return on Equity solely in the context of the assumptions underpinning the CAPM, and applies no method, criterion or consideration other than the CAPM in reaching his final value.

This restricted and narrow approach contravenes the interpretation of the Code established by the *Epic* decision and fundamental assumptions underpinning the State Agreement.

Economic efficiency, deriving from the theory of perfect competition, is a fundamental assumption applicable to the CAPM.

However, under the Code, economic efficiency is not a dominant consideration. The *Epic* decision establishes this at various points and in various contexts.

At para. 124 of the *Epic* decision. Justice Parker states:

> *"Perfect competition is a concept said to be still used in economic analysis, but it is a theoretical concept which is not met in the actual conditions of competition in any industry. Workable competition is said originally to have been developed over half a century ago by anti-trust*

economists. In simple terms it indicates a market in which no firm has a substantial degree of market power. While the evidence of the three witnesses differed in some respects, I am left with the clear impression that in the field of competition policy, especially market regulation, the prevailing view and usage among economists is that a reference to a competitive market is to a workably competitive market. In the particular context of the promotion of a competitive market for natural gas it would be surprising if what was contemplated was a theoretical concept of perfect competition, as the subject matter involves very real-life commercial situations. Workable competition seems far more obviously to be what is contemplated. This is clearly consistent with the approach of the Hilmer Report and is the notion of competition that was explored in the Queensland Cooperative Milling Association Ltd case quoted above."

At para. 142, Justice Parker states:

"In their submissions the Regulator and Alinta seemed to regard s 8.1(a) as fixing a ceiling on the revenue stream that might be earned. In my view, it would distort the words used to engraft the sense of "no more than the efficient costs" into s 8.1(a). Similarly, there would be a misconception to engraft "at least the efficient costs" into the provision. Each of these would add an emphasis not contemplated by the language of s 8.1(a). This may have particular relevance in a case where the Regulator is called on to exercise the discretions contemplated by the last paragraph of s 8.1."

At para. 144, Justice Parker states:

"In particular, at the time of the Hilmer Report, it was recognised that economic theory offered no clear answer to how best to resolve many competing considerations, including how to achieve the most appropriate balance between the interests of consumers in obtaining low prices and the service provider in receiving higher prices, including monopoly rents, that might otherwise be obtainable (Hilmer p 253). It was noted, however, (Hilmer p 269) that where the

conditions for workable competition are absent, firms may be able to charge prices above the efficient level for periods "beyond those justified by past investments and risks taken", it being a primary goal of competition policy to increase competitive pressures in such situations. It appears to be inherent in this that in a workably competitive market past investments and risks taken may provide some justification for prices above the efficient level."

At para. 205 of the *Epic* decision. Justice Parker states:

> *"An error of law appears to be inherent in these passages. They disclose that the Regulator is assessing the value of the DBNGP on the basis that it should represent a value "that is consistent with future regulated revenues and efficient capital investment". In effect, the Regulator appears to have understood that his function was to establish the value of the DBNGP on the assumption that it was subject to the Code and that a feature of the regulatory regime of the Code was that only "efficient" capital investment should weigh and only "regulated revenues" could be recovered."*

The criterion of a "workably competitive market" has important and wide ranging implications for pipeline owners. The *Epic* decision indicates this at various points. As previously submitted it is incumbent upon the Regulator to clearly define (in accordance with his obligations under the Code s. 7.7) his conception of a "workably competitive market" prior to engaging in any consideration of market mechanisms, their component parts, and delivered outcomes.

At para. 108 of the *Epic* decision. Justice Parker states:

> *Much of the content of par 1 to par 61 [of Mr. Houston's submission] is open to the general criticism that, in many passages, it appears to treat the regulation of infrastructure as solely a matter of the application of economic theory and ignores the material relevance of the precise form of the legislation under which the regulation is applied.*

At para. 134, Justice Parker states:

"The notion of public interest in s 2.24(e) is expressed first in its generality, and then more narrowly as the public interest in having competition in markets. In the latter and limited aspect, s 2.24(e) is clearly reflecting the objective of the promotion of a competitive market stated in the preamble. The public interest at large, however, would have regard to wider considerations. These may extend to embracing the protection of the interests of the owners of pipelines and the assurance of fair and reasonable conditions being provided where their private rights are overborne by the statutory scheme, as submitted by Epic, but it is not necessary to explore this exhaustively."

It is apparent that:

(a) GGP the pipeline's owners are entitled to at least a "reasonable" return which is "commercial" and which should not be determined solely through the application of economic theory;

(b) deriving benefits within market structures which do not conform to the "perfect competition" model is legitimate;

(c) pipeline owners' rights and their protection constitute part of the wider public interest;

(d) in particular, the rights of pipeline owners should be protected from regulatory overbearance.

GGT contends that the Regulator has failed to give due regard to all the points immediately above in the Draft Decision.

The *Epic* decision clearly establishes that the Regulator is required to consider past investment decisions as being relevant, government intervention through regulation should not adversely affect those past investment decisions, and that the application of the Code should maintain investor confidence.

At para. 145, Justice Parker states

"Indeed the expert evidence, including the supportive expert writings, suggested a growing awareness of the long term disadvantages of striking the balance with too great an emphasis on the interest of consumers in securing lower prices, and without due regard to the

interest of the service provider in recovering both higher prices and its investment."

At para. 149, Justice Parker states:

> *"If future investment in significant infrastructure, such as a natural gas pipeline, is to be maintained and encouraged, as the public interest requires, regard seems to be required to the need for both existing and potential investors to have confidence that the very substantial long term investment decisions which are required, and which were sound when judged by the commercial circumstances existing at the time of the investment, are not rendered loss-making, or do not result in liquidation, by virtue of future governmental intervention".*

At para. 152, Justice Parker states:

> *"The extent to which this growing concern has been or will come to be accommodated into economic theory and practice is one issue. In my view, however, s 8.1(d) has dealt with the issue expressly, and has done so by not denying the potential relevance of past investment decisions to the design of a reference tariff or a reference tariff policy."*

At para. 153, Justice Parker states:

> *"In this respect, in my view, s 8.1(d) can be seen to reflect a public interest broader than the mere understanding and application of economic theory, by taking account of wider political and social considerations. Past investment in a Covered Pipeline has not been rendered necessarily irrelevant, as the application of economic theory might suggest. In particular, there may be seen in s 8.1(d) a reflection of the general scope and policy of the Act, in so far as this sought to provide for third party access to pipelines on terms and conditions that were fair and reasonable to owners and operators. In this respect there is some underlying consistency of objective between s 8.1(d) and provisions such as s 2.24(a), and s 8.10(c), (d), (f), (g) and (j)."*

The State Agreement clause 9 Proposals incorporated a Return on Equity of 17.45%.

This was one of the critical elements of the Original Arrangement between the pipeline owners and the State of Western Australia.

It was the basis on which the original A1 tariffs were determined. In turn, these tariffs were one of the fundamental bases of commitment to the project by the pipeline's original owners.

This Return on Equity was acknowledged by the State to be reasonable some time after the pipeline commenced operation. On Tuesday 26 August 1997, the Hon. Norman Moore, Leader of the House, stated in the Legislative Council:

> *"The rate of return used in the model [to calculate the A1 tariffs] was reviewed by the State and agreed to as a realistic rate of return, taking into account the commercial risk that project would represent to a stand alone company."*

In placing sole reliance on a 'bottom up' application of the CAPM to determine Return on Equity for the purposes of determining the Reference Tariff for the GGP, the Regulator has failed to consider the Code in an appropriate manner, and has not considered key aspects of the State Agreement relating to the bases upon which the project proceeded.

As such, the Regulator has made serious errors in the Draft Decision.

GGT proposes that the Regulator rectify these errors by recognising and applying the originally agreed Return on Equity of 17.45% in his Draft Decision.

(g) Assumed Capital Structure

Both the original determination of the A1 tariffs and the GGP Access Arrangement Reference Tariff determination utilised a debt to equity ration of 50:50.

In the Draft Decision, the Regulator states at Part B section 5.7.7, pp. 130 - 131:

> *"Practice among Australian and UK regulators is to adopt a debt to equity ratio based on a financing structure relevant to a standard and efficient entity for the particular industry. This approach is consistent*

with the requirements of section 8.31 of the Code that requires the weighted average return on funds to be calculated by reference to standard industry financing structures. There are two main reasons for adopting a standard debt to equity ratio:

1. *The adoption of a standard debt to equity ratio will ensure that customers have the benefit of an efficient debt to equity ratio.*

2. *The selection of a debt to equity ratio is particularly important in that it impacts on a number of other inputs to the estimation of the WACC. Examples include the cost of debt, the equity beta and the relationship between betas and gearing.*

As shown in Table 18, Australian regulators have generally used a debt to equity ratio of 60:40 as the industry standard for transmission pipelines."

The above analysis gives no regard to the specific and legitimate business interests of the owners of the GGP.

This is in direct conflict with the principles established by Justice Parker at para. 149 and para. 205 of the *Epic* decision. Decreasing the equity component of the cost of capital reduces returns to the pipeline's owners, which in turn compromises their earlier investment by assuming "efficient" capital investment.

It is therefore contended that the Regulator has made serious errors in dealing with assumed capital structure in the Draft Decision.

GGT proposes that the Regulator reconsider his position on these issues.

<u>Conclusions</u>

The Regulator's determination of Reference Tariffs in the Draft Decision contains many errors.

These include:

(a) confining his consideration of revenues and expenditures to "efficient" revenues and expenditures within a theoretical framework of "perfect competition" and not defining and considering the concept of "workably competitive markets";

(b) failing to properly consider the economic regulatory regime under the State Agreement applying to the GGP prior to the enactment of the Code;

(c) failing to recognise the relevance and importance of past investment decisions in particular the price paid for the GGP;

(d) failing to consider whether his application of the Code would undermine the viability of past investments;

(e) failing to recognise that the public interest includes the legitimate business interests of the owners of the GGP;

(f) failing to properly balance the interests of the owners of the GGP and the interests of other stakeholders;

(g) failing to appropriately weigh the factors contained in Code s. 8.10;

(h) failing to appropriately consider the (potentially conflicting) factors contained in Code s. 8.1;

(i) failing to resolve any conflict in the factors contained in Code s. 8.1 by reference to the factors contained in Code s. 2.24; and

(j) failing to appropriately weigh the factors contained in Code s. 2.24.

8.3 Correct Approach

Introduction

GGT is proposing the adoption of the revised tariff model in Schedule 2 in place of the model used in the proposed Access Arrangement, which was previously lodged. As mentioned in the introduction to this submission, this has become necessary for the following reasons:

(a) A substantial portion of the period covered by the previous proposed Access Arrangement has already elapsed with the result that certain aspects of the proposed Access Arrangement require modification; and

(b) The proposed Access Arrangement previously lodged was prepared without the benefit of the *Epic* decision, and the principles of that case have necessitated modifications to the approach previously adopted.

GGT Revised Tariff Model

The GGP Reference Tariff model has been developed to allow a transition from regulation under the State Agreement to regulation under the Code. The model has been developed to meet the following objectives:

(a) Establish a Capital Base at 30 June 2002 which, in accordance with s. 8.10(f), reflects:

"the basis on which Tariffs have been (or appear to have been) set in the past, the economic depreciation of the Covered Pipeline, and the historical returns to the Service Provider from the Covered Pipeline"

(b) Develop a levelised tariff for the July 2002 - June 2007 period consistent with the levelised tariff structure originally selected by the GGT and reflecting the following factors carried over from the State Agreement:

(i) Return on Equity: 17.45% after tax,

(ii) Imputation Credit: 0%,

(iii) Depreciation: 42 years Straight Line,

(iv) Debt/Equity Ratio: 50/50

The Reference Tariff Model consists of two modules. The primary module, the Access Arrangement Period Tariff Module calculates a Reference Tariff levelised in constant dollar terms. The supporting module, the ICB module, calculates the ICB as of 30 June 2002.

The ICB module is described under the discussion on ICB elsewhere in this submission.

The Reference Tariff Model incorporates updated values for Operating Costs. These are briefly discussed below, prior to discussion of the determination of the Reference Tariff.

Operating, Maintenance, Marketing and Overhead Costs

The original Access Arrangement period was proposed for five years from the start of 2000. Given the time, which has elapsed under this regulatory process, GGT is now updating the period of its proposed Access Arrangement to the period of 2003 to 2007.

GGT considers that it is now appropriate to also revise its forecast on Operating, Maintenance, Marketing and Overhead Costs. Table 7 outlines GGT's forecasts for these costs for the period 2003 to 2007.

Table 7: Operating, Maintenance, Marketing and Overhead Costs

Financial Year Ending 30 June	**2003** $,000's	**2004** $,000's	**2005** $,000's	**2006** $,000's	**2007** $,000's
Pipeline Operating & Maintenance Cost	6,459	7,374	7,669	7,976	8,295
Management Cost	9,793	8,482	7,994	8,123	8,221
Total	16,252	15,856	15,663	16,099	16,516

Management Cost includes communications lease and maintenance costs, pipeline operations management charge and commercial operations management charge.

The costs have increased significantly to those costs that were previously forecast as a result of:

(a) Pipeline Operating & Maintenance Cost has increased in 2003 as a result of increases in the cost of compressor station parts, DCVG survey, cleaning prior to intelligent pig, motor vehicles and fly in - fly out travel.

(b) Management Cost has increased substantially from previously forecast due to following major cost increases:

(i) Increase in insurance costs;

(ii) Administration cost increase previously budgeted under Operating Budget;

(iii) Contingent provision in 2003 for OffGAR costs and increases in general regulatory costs.

GGT considers these costs are reasonable and need to be recovered through the GGT tariff as per TSP 2, which states:

> *"Tariffs will be set to provide a commercial rate of return on all project capital, including all Owners' costs, reasonably incurred in the construction and operation of the Pipeline and to recover all reasonable Pipeline operating, maintenance and administration costs. The commercial rate of return shall be commensurate with the business risk associated with the project...."*

Access Arrangement Period Model

The Access Arrangement Period Model is a five year, NPV Model.

This Model calculates a Reference Tariff levelised in constant dollar terms.

The model is an annual model.

Total Revenue is calculated so as to provide a NPV for the GGP project equal to zero:

(a) Discount Rate = pretax WACC

(b) Cash Flows = Tariff Revenue,

less Operating Costs

less Ongoing Capital Expenditures

(c) Initial Investment = ICB

(d) Residual Value = Ending Capital Base

Reference Tariff is calculated assuming:

(a) All Shippers pay the same tariff.

(b) Maximum Daily Quantities, throughput, and transport distance reflect the 2002-03 load forecast.

(c) Notional Revenues for the GGTJV are in accordance with the TSP incorporated in State Agreement.

(d) Tariff structure is per the clause 9 Proposals. Allocation of costs to Toll, Reservation, and Throughput reflect the current load forecast.

Major model assumptions are listed in Table 8:

Table 8: Model Assumptions

Item		**Value**
Residual Value		ICB Plus:Arrangement Period Capital Exp Less: Accumulated Depreciation = Residual Value
ICB		See ICB Module
Volume Determinants		
1. MDQ		2002-07 load forecast
2. transport distance		2002-07 load forecast
3. Throughput		2002-07 load forecast
Financial Parameters/WACC		
1. Risk Free Rate		5.90%:Average 1997 - 2002 10 year bond rate
2. Debt Premium		1.575%: Current Market Conditions
3. Tax Rate		30%: Actual
4. Imputation Credit		0%: clause 9 Proposals
5. Inflation		2.5%: 1999 AA submission
6. ROE		17.45%: clause 9 Proposals
7. D/E		50/50: clause 9 Proposals
Depreciation		36 years: remaining portion of 42 year project life

9. NON-TARIFF MATTERS

9.1 Epic Principles

There were no findings made by the Full Court in the *Epic* decision which specifically relate to 'Trigger Mechanisms' in relation to review periods that are otherwise catered for pursuant to s. 3.18 of the Code.

However, a number of the general principles outlined in Section 2.1 of this submission must be given proper consideration when dealing with this issue.

In particular, s. 2.24(a) requires significant weight to be given to the service provider's legitimate business interest in seeking to recover its investment at least over the expected life or operation of the pipeline, together with an appropriate return on investment (*Epic* decision para. 130). In addition, the reasonable expectations of persons under the regulatory regime that applied to the pipeline prior to the commencement of the Code are highly relevant to both the legitimate business interests of the service provider under s. 2.24(a) and the principle enshrined in s. 8.1(d).

9.2 Analysis of Draft Decision

This submission to some extent reiterates parts of the submissions made previously in relation to the Draft Decision.

For the reasons set out below, GGT contends that proposed Amendment 28 of the Draft Decision is unreasonable and unnecessary, and is inconsistent with the provisions and intention of the Code.

<u>Purpose of Trigger Events Under Code</u>

The effect of a trigger event is that it triggers a review of the Access Arrangement, requiring GGT to submit revisions to the Access Arrangement and the Regulator to undertake a full public consultation process. Accordingly, the effect of a trigger event occurring is to shorten the effective term of the Access Arrangement from that approved by the Regulator.

Such shortening of the term has implications for the costs of regulation, regulatory certainty, and the effectiveness of the incentive mechanism in the approved Access Arrangement. The Code recognises that short regulatory periods can have such undesirable effects – it is for this reason that the Code only suggests that trigger events should be considered where an access arrangement period is more than five years (Code, s. 3.18).

Additionally, the circumstances in which the Code indicates that it may be appropriate to incorporate the use of trigger events is to address significant errors in load forecasts, not as a means of seeking to reflect changes in taxes or underlying costs.

As well as being reflected in the words of s. 3.18, this is demonstrated by the introduction to s. 8 of the Code which states (emphasis added):

> *"[Section 3 permits] the Reference Tariff Period to be any length of time that is* <u>*consistent with the objectives*</u> *for setting Reference Tariffs. However, the Relevant Regulator must consider (but is not bound to require) inserting safeguards against excessive forecast error if the Reference Tariff Period is over five years."*

Clearly, imposition of trigger events during a five year Access Arrangement, or trigger events which address matters other than the risk of excessive forecasting error, is inconsistent with the intent of the Code.

<u>Regulatory treatment of trigger events</u>

In support of the proposed trigger for load forecasts, the Draft Decision refers to the Regulator's own decision in June 1999 in regard to the AlintaGas Distribution Network, the September 1999 Australian Competition and Consumer Commission (ACCC) Draft Decision on the Central West Pipeline, and the October 1999 Draft Decision by IPART on the AGL Gas Network in NSW.

In relation to the Draft Decisions by the ACCC and IPART, GGT notes that these Draft Decisions have been superseded by Final Decisions in which no trigger events were required.

In the Final Decision on the Central West Pipeline, the ACCC reconsidered its proposed requirement for a trigger mechanism. In the event, it not only revoked the requirement for a trigger mechanism, but also for any alternate revenue sharing mechanism as well.

In the Final Decision on the AGL Gas Network, IPART removed the proposed requirement for a trigger mechanism. In its consideration of the merits of a trigger mechanism, IPART also makes the following statement (Section 18.6.4).

> *"Unless the benefits outweigh the disadvantages, the Tribunal prefers not to use trigger mechanisms within the Access Arrangement. The disadvantages are:*
>
> (i) *trigger mechanisms may create regulatory uncertainty*
>
> (ii) *a trigger mechanism may lessen the impact of any incentive mechanism*
>
> (iii) *the effect of a trigger event is a full review of the Access Arrangement, notwithstanding that the trigger would normally be designed to address a specific issue."*

Furthermore, in the draft decision for the DBNGP issued shortly after the release of the Draft Decision, the Regulator states (on page 17, Part A);

> *"In regard to a trigger mechanism in respect of gas throughput, the Regulator notes that for the DBNGP a 25 percent increase in pipeline throughput would not be possible without substantial New Facilities Investment, which has not been taken into account in determination of Reference Tariffs. Given this, the Regulator does not consider that it is necessary to make provision for triggering of a review of the Access Arrangement on the basis of realised gas throughput."*

GGT wishes to emphasise that for the GGP, the circumstances in regard to the necessity for New Facilities Investment in order to be able to meet a 25 percent increase in gas throughput are no different to those of the DBNGP, as both pipelines are operating at or near capacity. In proposing a trigger for the GGP, it appears that the Regulator has failed to exercise consistency with either the applicable precedents of the other regulatory authorities to which the Draft Decision makes reference, or within the Regulator's own jurisdiction.

Impact on Form of Regulation

The imposition of a tariff re-determination during a five year Access Arrangement Period has the effect of rendering ineffective the Incentive Mechanism adopted by GGT in the Access Arrangement, and is also inconsistent with the price path form of regulation adopted by GGT and accepted in the Draft Decision. The Code permits the Service Provider to determine the manner in which Reference Tariffs are to vary during the Access Arrangement Period and, in particular, s. 8.3 of the Code provides (emphasis added):

> *"Subject to ... the Relevant Regulator being satisfied that it is consistent with the objectives contained in section 8.1, the manner in which a Reference Tariff may vary within an Access Arrangement Period through implementation of the Reference Tariff Policy is within the discretion of the Service Provider."*

Section 8.3 then goes on to specifically distinguish between a *price path form of regulation*, under which Reference Tariffs are determined in advance and are *not adjusted* to account for subsequent events, with a *cost of service form of regulation* under which Reference Tariffs are continuously adjusted in light of actual outcomes.

The combined effect of the proposed trigger events may be that the Service Provider's discretion in choosing the form of regulation is over-ridden and the proposed price path form of regulation is converted into a de facto cost of service approach.

Impact on Incentive Mechanism

The Incentive Mechanism underlying the proposed Access Arrangement is the ability of the Service Provider to retain returns according to s. 8.44 of the Code. The relevant sections of the Code state (emphasis added):

> *"8.44 The Reference Tariff Policy should, wherever the Relevant Regulator considers appropriate, contain a mechanism that permits the Service Provider to retain all, or a share of, any returns to the Service Provider from the sale of a Reference Service during an Access Arrangement Period that exceeds the level of returns expected at the*

beginning of the Access Arrangement Period (an Incentive Mechanism), particularly where the additional returns are attributable (at least in part) to the efforts of the Service Provider. Such additional returns may result, amongst other things, from lower Non Capital Costs or <u>greater sales of Services than forecast</u>.

8.45 An Incentive Mechanism may include (but is not limited to) the following:

> *specifying the Reference Tariff that will apply during each year of the Access Arrangement Period based on forecasts of all relevant variables (and which may assume that the Service Provider can achieve defined efficiency gains) regardless of the realised values for those variables;*

8.1 A Reference Tariff and Reference Tariff Policy should be designed with a view to achieving the following objectives:

> *(a) providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service;"*

It is apparent that if GGT achieves throughput in excess of 25 percent of that forecast, or if the changes in taxes or regulation occur, then a full Access Arrangement review and tariff redetermination will result with the new value of Reference Tariff being determined with regard to the increase in load. This in turn would lead to a loss of revenue, which would otherwise have been retained as part of the Incentive Mechanism underpinning GGT's Access Arrangement.

However any significant additional load which might materialise will almost certainly necessitate additional capital expenditure in order to accommodate the increased capacity requirements, as well as a commensurate increase in non-capital expenditure. Furthermore there is the possibility that the facilitation of some or all additional load growth may be associated with further tariff discounts. Consequently it is clear that potential future increases in load are unlikely to result in proportional increases in revenue.

GGT recognises that the Regulator has discretion in the treatment of an Incentive Mechanism. However, GGT is of the firm opinion that Incentive Mechanisms are included in the Code so that the Regulator may fulfil his obligations under ss. 8.1(b), 8.1(d), and 8.1(f) of the Code, namely:

(i) replicating the outcome of a competitive market;

(ii) not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries; and

(iii) providing an incentive to the Service Provider to reduce costs and to develop the market for Reference and other Services.

Consequently, GGT considers that the Regulator has not reasonably exercised its discretion in specifying a trigger mechanism in respect of volumes in an access arrangement period not exceeding five years.

In the event that the Regulator remains of the view that a trigger dealing with load forecasts should be included, GGT proposes the Regulator to consider that such a trigger should recognise that an increase in throughput will not necessarily be accompanied by a commensurate increase in revenue particularly given the additional capital and operating costs which may be incurred, and the fact that additional throughput may have been provided at reduced tariffs. Accordingly, any such trigger should not apply purely on the basis of volumes being exceeded by a certain amount.

General Comment on Terms of Trigger

The remaining trigger events specified relate to changes in taxation or regulation, which are likely to reduce costs by 5% of total revenue in the subsequent year. GGT believes that these triggers are an unnecessary imposition and that the imposition of such triggers is inconsistent with the form of regulation and incentive mechanism adopted by GGT. In addition, it will often not be possible for the impact of changes in taxation or regulation to be quantified with any reliability (and certainly not within 5% accuracy) for some considerable period of time after the introduction of the relevant change.

The motivation underlying this proposed amendment by the Regulator is provided in the Draft Decision (Part B page 73). It appears to stem from an interpretation of s. 8.1(b) of the Code, whereby the Regulator associates the Code objective of replicating the outcomes of a competitive market with nothing more than a pass through of "cost reductions" to yield lower prices to consumers. If this is the case, GGT submits that the Draft Decision has incorrectly interpreted the Code and has failed to recognise the form of regulation proposed by GGT.

Conflict With State Agreement

In keeping with earlier submissions regarding the reasonable expectations of service provider under the previous regime, the State Agreement established that the then owners were entitled to tariffs, as provided for in TSP 2 that would "provide a commercial rate of return on all project capital. The commercial rate of return shall be commensurate with the business risk associated with the project".

It has been established in this submissions that the Service Provider was entitled to a certain rate of return on all project capital and in light of these fixed and immutable standards nothing would be added to the proposed Access Arrangement by including a trigger mechanism. Should it be the case that load variations occur during the Access Arrangement period, then any variation to the tariff to align the actual returns with originally agreed bargain concerning the rate of return on this asset can be facilitated by adjustments to the tariff that relates to the next Access Arrangement period.

9.3 Correct Approach

GGT proposes that the Regulator reconsider the proposed amendment in light of the application of the Epic principles and GGT's submissions and requests that no trigger mechanism be included in the proposed Access Arrangement.

Schedule 1

ICB CALCULATION

		30 June 1994 ($,000)	30 June 1995 ($,000)	30 June 1996 ($,000)	30 June 1997 ($,000)	30 June 1998 ($,000)	30 June 1999 ($,000)	30 June 2000 ($,000)	30 June 2001 ($,000)	30 June 2002 ($,000)
	CAPITAL BASE									
1	Beginning Balance	0	2,361	38,498	367,164	521,434	545,371	561,188	565,419	564,109
2	Capital Expenditures	2,361	35,070	302,550	109,588	7,800	1,337	1,634	9,094	1,855
3	AFUDC @ WACC	0	1,067	26,116	15,084	0	0	0	0	0
4	Capitalized Return	0	0	0	29,598	16,136	14,480	2,597	-10,404	-15,100
5	Less:Accounting Depreciation	0	0	0	0	0	0	0	0	0
6	Ending Balance	2,361	38,498	367,164	521,434	545,371	561,188	565,419	564,109	550,864
7	Accumulated Plant Expenditures	2,361	37,431	339,981	449,569	457,369	458,707	460,341	469,435	471,290
8	Accumulated AFUDC	0	1,067	27,183	42,267	42,267	42,267	42,267	42,267	42,267
9	Accumulated Economic Depreciation	0	0	0	29,598	45,734	60,214	62,811	52,407	37,307
10	Net Plant	2,361	38,498	367,164	521,434	545,371	561,188	565,419	564,109	550,864
11	Working Capital	0	0	0	2,600	2,600	2,600	2,600	2,600	2,600
12	Total Capital Base	2,361	38,498	367,164	524,034	547,971	563,788	568,019	566,709	553,464
	REVENUE REQUIREMENTS									
13	Allowed Rate of Return/WACC	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%
14	Return on Capital	0	1,067	26,116	77,282	94,036	97,593	99,795	99,770	99,027
15	Less: AFUDC	0	1,067	26,116	15,084					
16	Net Return	0	0	0	62,198	94,036	97,593	99,795	99,770	99,027
	Operating Expenses									
17	O & M				7,285	8,453	8,920	9,237	9,786	11,207
18	Depreciation				0	0	0	0	0	0
19	Total				7,285	8,453	8,920	9,237	9,786	11,207
20	Revenue Requirement (16) +(19)	0	0	0	69,483	102,490	106,513	109,032	109,556	110,234
	NOTIONAL AND THIRD PARTY REVENUES									
21	JV Notional Revenue- GGTP AR				36,894	71,908	60,113	60,872	62,402	77,556
22	Initial Committed Capacity Discount				7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
21	JV Undiscounted Notional Revenue				39,885	77,738	64,987	65,808	67,462	83,844
22	Third Party Revenue				0	5,322	13,295	19,281	23,000	22,354
23	Credit for Voluntary Discount				0	3,293	13,751	21,346	29,498	19,136
24	Total Revenue				39,885	86,353	92,033	106,435	119,959	125,335
	ECONOMIC DEPRECIATION									
25	Cost Over (Under)Recovery				-29,598	-16,136	-14,480	-2,597	10,404	15,100

Notes

(1) Nototional Revenues of $1.082 million in 3nd Qtr 1996 offset against AFUDC

GOLDFIELDS GAS TRANSMISSION
JUNE 2002 INITIAL CAPITAL BASE CALCULATIONS

		T=0	1994			1995				1996				1997			
			2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1	WACC-50% Gearing		18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%
	Gross Plant	**Totals**															
2	Beginning Balance		0	2,361	4,070	7,187	10,617	38,498	106,385	187,088	261,162	367,164	440,544	473,756	493,103	521,434	528,300
3	Capital Expenditures	471,290	2,361	1,605	2,938	3,114	27,414	66,192	76,018	65,837	94,503	58,295	22,749	10,113	18,430	3,423	2,918
4	AFUDC @ WACC	42,267	0	104	179	316	467	1,695	4,684	8,238	11,499	15,084	0	0	0	0	0
5	Purchase Price																
6	Capitalized Return	37,307											10,463	9,234	9,901	3,442	3,508
7	Ending Gross Plant	550,864	2,361	4,070	7,187	10,617	38,498	106,385	187,088	261,162	367,164	440,544	473,756	493,103	521,434	528,300	534,726
8	Accum Capital Expenditures		2,361	3,966	6,904	10,018	37,431	103,623	179,641	245,478	339,981	398,276	421,026	431,139	449,569	452,992	455,910
9	Accum. AFUDC		0	104	283	600	1,067	2,762	7,446	15,684	27,183	42,267	42,267	42,267	42,267	42,267	42,267
10	Accum.Deferred Revenue		0	0	0	0	0	0	0	0	0	0	10,463	19,697	29,598	33,040	36,549
11	Less: Accum. Depreciation												0	0	0	0	0
12	Subtotal		2,361	4,070	7,187	10,617	38,498	106,385	187,088	261,162	367,164	440,544	473,756	493,103	521,434	528,300	534,726
13	Working Capital												2,600	2,600	2,600	2,600	2,600
14	Total Capital Base												476,356	495,703	524,034	530,900	537,326
15	Allowed Rate of Return												18.81%	18.81%	18.81%	18.81%	18.81%
16	Return on Capital												19,397	20,974	21,826	23,074	23,376
	Operating Expenses(1)																
17	O & M												2,428	2,428	2,428	2,113	2,113
18	Depreciation	0											0	0	0	0	0
19	Total	550,864											2,428	2,428	2,428	2,113	2,113
	Revenue Requirement																
20	(16)+(19)	607,307											21,826	23,403	24,254	25,187	25,489
21	Notional Revenue- GGTP AR												10,511	13,106	13,277	18,883	19,101
22	Joint Venturer Discount	7.50%											7.50%	7.50%	7.50%	7.50%	7.50%
21	Notional Revenue- GGTP Al	399,724											11,363	14,168	14,354	20,414	20,650
22	Credit for Voluntary Discoun	87,025															
23	A1 Tariff-FY																
24	A2 Tariff-FY	3															
25	A4 Tariff-FY	1=no;2=yes JV's															
26	Ratio	3=yes both															
27	Third Party Revenue	83,252											0			1,331	1,331
28	Total Revenue	570,000											11,363	14,168	14,354	21,744	21,981
29	Cost Over (Under)Recovery	-37,307											-10,463	-9,234	-9,901	-3,442	-3,508

Notes
(1) Nototional Revenues of $1.082 million in 3nd Qtr 1996 offset against AFUDC
(2) Dollars expressed in thousands

GOLDFIELDS GAS TRANSMISSION

JUNE 2002 INITIAL CAPITAL BASE CALCULATIONS

		1998				1999				2000				2001				2002	
		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr
1	WACC-50% Gearing	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%
	Gross Plant																		
2	Beginning Balance	534,726	540,846	545,371	549,603	553,515	557,579	561,188	563,394	565,809	565,697	565,419	563,425	562,550	564,126	564,109	561,559	558,089	554,885
3	Capital Expenditures	936	524	258	805	200	75	81	194	760	599	539	1,746	4,236	2,573	1,084	498	146	127
4	AFUDC @ WACC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Purchase Price				0														
6	Capitalized Return	5,184	4,001	3,975	3,106	3,865	3,534	2,124	2,222	-872	-877	-2,533	-2,621	-2,659	-2,590	-3,635	-3,968	-3,350	-4,148
7	Ending Gross Plant	540,846	545,371	549,603	553,515	557,579	561,188	563,394	565,809	565,697	565,419	563,425	562,550	564,126	564,109	561,559	558,089	554,885	550,864
8	Accum Capital Expenditures	456,846	457,369	457,627	458,432	458,632	458,707	458,788	458,982	459,742	460,341	460,880	462,626	466,862	469,435	470,519	471,017	471,163	471,290
9	Accum. AFUDC	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267	42,267
10	Accum.Deferred Revenue	41,732	45,734	49,709	52,815	56,680	60,214	62,338	64,560	63,688	62,811	60,278	57,657	54,997	52,407	48,772	44,804	41,455	37,307
11	Less: Accum. Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Subtotal	540,846	545,371	549,603	553,515	557,579	561,188	563,394	565,809	565,697	565,419	563,425	562,550	564,126	564,109	561,559	558,089	554,885	550,864
13	Working Capital	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600
14	Total Capital Base	543,446	547,971	552,203	556,115	560,179	563,788	565,994	568,409	568,297	568,019	566,025	565,150	566,726	566,709	564,159	560,689	557,485	553,464
15	Allow ed Rate of Return	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%	18.81%
16	Return on Capital	23,659	23,928	24,128	24,314	24,486	24,665	24,824	24,921	25,027	25,022	25,010	24,922	24,884	24,953	24,953	24,840	24,688	24,546
	Operating Expenses(1)																		
17	O & M	2,113	2,113	2,230	2,230	2,230	2,230	2,309	2,309	2,309	2,309	2,446	2,446	2,446	2,446	2,802	2,802	2,802	2,802
18	Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Total	2,113	2,113	2,230	2,230	2,230	2,230	2,309	2,309	2,309	2,309	2,446	2,446	2,446	2,446	2,802	2,802	2,802	2,802
20	Revenue Requirement (16)+(19)	25,772	26,042	26,358	26,544	26,716	26,895	27,133	27,230	27,337	27,332	27,457	27,369	27,330	27,400	27,754	27,642	27,489	27,348
21	Notional Revenue- GGTP AR	17,813	16,110	14,536	15,366	14,905	15,306	15,218	15,218	15,218	15,218	15,601	15,601	15,601	15,601	16,726	16,880	21,671	22,279
22	Joint Venturer Discount	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
21	Notional Revenue- GGTP AR	19,258	17,416	15,715	16,612	16,114	16,547	16,452	16,452	16,452	16,452	16,865	16,865	16,865	16,865	18,082	18,249	23,428	24,085
22	Credit for Voluntary Discount		3,293	3,344	3,502	3,414	3,491	3,737	3,737	6,936	6,936	7,374	7,374	7,374	7,374	7,719	7,773	1,822	1,822
23	A1 Tariff-FY		$3.89	$3.92	$3.92	$3.92	$3.92	$3.98	$3.98	$3.98	$3.98	$4.10	$4.10	$4.10	$4.10	$4.22	$4.22	$4.22	$4.22
24	A2 Tariff-FY		$3.31	$3.34	$3.34	$3.34	$3.34	$3.38	$3.38										
25	A4 Tariff-FY									$3.00	$3.00	$3.09	$3.09	$3.09	$3.09	$3.18	$3.18	$3.18	$3.18
26	Ratio		1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
27	Third Party Revenue	1,331	1,331	3,324	3,324	3,324	3,324	4,820	4,820	4,820	4,820	5,750	5,750	5,750	5,750	5,589	5,589	5,589	5,589
28	Total Revenue	20,588	22,040	22,383	23,438	22,852	23,361	25,009	25,009	28,209	28,209	29,990	29,990	29,990	29,990	31,389	31,610	30,839	31,496
29	Cost Over (Under)Recovery	-5,184	-4,001	-3,975	-3,106	-3,865	-3,534	-2,124	-2,222	872	877	2,533	2,621	2,659	2,590	3,635	3,968	3,350	4,148

Notes

(1) Dollars expressed in thousands

Schedule 2

GGT TARIFF MODEL

GOLDFIELDS GAS TRANSMISSION
GGT ACCESS ARRANGEMENT PERIOD MODEL

ASSUMPTIONS							
Long-Term Inflation	2.50%						
June 30 FY Actual		**CPI Index**	**Annual Change**				
2001		128.4	4.5%				
2002		134.0	4.4%				
Tax Rate	30.0%		Imputation Credit		0.0%		
Risk Free Rate	5.90%		Cost of Debt Margin		1.575%	Source: ANZ and CBA	
	Fraction	**Rate**	**Contribution**				
Debt	50.0%	7.48%	3.7%				
Equity	50.0%	17.45%	8.7%				
Taxes			3.7%				**BASE TARIFF**
			16.2%				**RATES**
				Allocation of NPV of Cost of Service		**NPV of Billing Units**	**CPI = 134.0**
	A1	**A4**		**%**	**$MM**		
Toll	0.228520	0.224494		11.3%	$43.8	128,696	$0.33999
Capacity	0.001581	0.001297		72.2%	$279.6	144,486,055	$0.00193
Throughput	0.000595	0.000412		16.5%	$63.9	115,176,052	$0.00055
Base CPI	112.8	120.2					
	$4.3382	*$3.2714*	*85% LF Rate to Kalgoorlie at T=0*				*$4.3013*

				FISCAL YEAR ENDED JUNE 30				
	CALCULATIONS		**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
	Cost of Capital	**16.202%**	**T=0**					
1	CPI Index		134.0	137.4	140.8	144.3	147.9	151.6
	Nominal Dollar-- Base CPI = 134.0							
2	Toll		$0.33999	$0.34849	$0.35720	$0.36613	$0.37529	$0.38467
3	Capacity		$0.00193	$0.00198	$0.00203	$0.00208	$0.00214	$0.00219
4	Throughput		$0.00055	$0.00057	$0.00058	$0.00060	$0.00061	$0.00063
5	85% LF Rate Kalgoorlie($/GJ)		$4.30	$4.41	$4.52	$4.63	$4.75	$4.87
	Forecast Demand							
6	MDQ			108.4	100.1	97.9	98.2	98.2
7	Average MDQ Distance(Km)			1108.1	1122.7	1130.1	1131.7	1129.6
8	Average Throughput Distance(km)			1145.4	1134.9	1114.9	1116.5	1114.4
9	Throughput		**NPV @**	81.5	78.5	80.3	80.6	80.5
	Billing Units		**16.202%**					
10	Toll (7)*365		128,696	40,553	38,393	38,490	39,561	40,542
11	Capacity (7)*(8)*365		144,486,055	44,936,674	43,104,322	43,497,231	44,770,892	45,795,680
12	Throughput (8)*(9)*365		115,176,052	34,939,604	34,166,108	35,205,943	36,235,042	37,063,698
	NPV of Tariff Reveue							
13	Initial Capital Base	553.5	553.45					
14	Add:NPV of O&M		52.34					
15	Add:NPV of Investment		14.01					
16	Less: NPV of Residual	492.8	232.59					
17	Total		387.22					
	Revenues							
18	Toll			13.8	13.1	13.1	13.5	13.8
19	Capacity			86.9	83.4	84.2	86.6	88.6
20	Throughput			19.4	19.0	19.5	20.1	20.6
21	Total			120.1	115.4	116.8	120.2	123.0
	Operating Expenses	Years Remaining						
21	DD&A	36		15.5	15.7	15.8	15.8	15.9
22	O+M			16.3	15.9	15.7	16.1	16.5
23	Total			31.8	31.6	31.5	31.9	32.4
24	Operating Income			88.3	83.8	85.3	88.3	90.6
	Cash Flow							
25	Operating Income			88.3	83.8	85.3	88.3	90.6
26	Depreciation			15.5	15.7	15.8	15.8	15.9
27	Capital Expenditure			(11.1)	(3.3)	(1.3)	(1.2)	(1.2)
28	Initial Investment		(553.5)	0.0	0.0	0.0	0.0	492.8
29			(553.5)	92.8	96.3	99.8	102.9	598.0
30		IRR	16.20%					
	Conversion From Nominal to Real							
31	Inflation Index		1.000	1.025	1.051	1.077	1.104	1.131
32	Real Cash Flows		(553.5)	90.5	91.7	92.7	93.2	528.6
33		IRR	13.37%					

GOLDFIELDS GAS TRANSMISSION
IMPUTED GGT REGULATORY MODEL

		FISCAL YEAR ENDED JUNE 30					
		2002	2003	2004	2005	2006	2007
Capital Base							
Initial Investment			$553.5	$549.0	$536.6	$522.1	$507.4
Add: Capital Expenditures			11.1	3.3	1.3	1.2	1.2
Less Depreciation			15.5	15.7	15.8	15.8	15.9
Ending Capital Base		553.5	549.0	536.6	522.1	507.4	492.8
Gross Plant		553.5	564.6	567.8	569.1	570.3	571.5
Less: Accum Deprec.		0.0	15.5	31.3	47.0	62.9	78.7
Net Plant		553.5	549.0	536.6	522.1	507.4	492.8
Capitalization-Beginning Investment							
Debt	50.0%		276.7	274.5	268.3	261.0	253.7
Equity	50.0%		276.7	274.5	268.3	261.0	253.7
Operating Income			88.3	83.8	85.3	88.3	90.6
Interest	7.48%		20.7	20.5	20.1	19.5	19.0
EBT			67.7	63.3	65.3	68.7	71.6
Taxes	30.0%		20.3	19.0	19.6	20.6	21.5
			47.4	44.3	45.7	48.1	50.1
Return on Equity			17.1%	16.1%	17.0%	18.4%	19.8%