Goldfields Gas Pipeline –
Submission on Proposed Access Arrangement

Department of Resources Development
Office of Energy
Treasury

Introduction

In April 1993, the Minister for Resources Development (the Minister) announced the State Government's call for Expressions of Interest for the Goldfields Gas Pipeline (GGP). The call for Expressions of Interest resulted from the Government's desire to promote economic development in the inland Pilbara and Goldfields regions of Western Australia by facilitating the availability of natural gas in these regions under arrangements that aim to reduce energy prices and assure reliability of energy supplies.

The Government received Expressions of Interest from a number of parties for the development of the new pipeline from the North West of the State to the inland Pilbara and the Goldfields regions. The Goldfields Gas Transmission Joint Venturers were selected through a competitive process by the Government as the preferred proponents to develop the project.

The State Government and the Joint Venturers subsequently negotiated the Goldfields Gas Pipeline Agreement, which was signed in March 1994. The GGP was constructed and is operated under the terms and conditions of the *Goldfields Gas Pipeline Agreement Act 1994* (the "State Agreement"), which is administered by the Minister through the Department of Resources Development.

State Agreement Acts have an important role in facilitating investment and in minimising sovereign risk so that the State can attract investment in high risk projects which bring substantial benefits to Western Australia. When the State Agreement was enacted in 1994, regulation of third party access was in its infancy. The State and the GGT Joint Venturers sought some future certainty and therefore agreed certain principles in respect of third party access, which are set out in the State Agreement.

As a preface to this submission we seek to alert the Regulator to relevant clauses in the State Agreement which interact with the *Gas Pipelines Access (Western Australia) Act 1998* (the "Access Act"), including the National Third Party Access Code for Natural Gas Pipeline Systems (the Code) set out in Schedule 2 of the Act, and the Natural Gas Pipelines Access Agreement.

We submit that in reaching his decision the Regulator needs to be aware of these interactions and suggest that the Regulator seek independent legal advice on the exercise of his powers in light of these interactions.

Description of Goldfields Gas Pipeline

Completed at a cost of approximately $456 million in October 1996, the 1380 km pipeline was built and owned by a joint venture comprising BHP, WMC and Normandy Poseidon to service their various mining operations between Newman and Kambalda, and other customers along the pipeline route requiring a gas transmission service. Ownership of the GGP changed hands in late 1998/early 1999 when the interests of WMC and Normandy Poseidon in the joint venture were acquired by Southern Cross Pipelines (owned by AGL Pipelines Limited, CMS Gas Transmission and Storage Company, and TransAlta Energy Corporation), and the interests of BHP were acquired by Duke Energy WA Power Pty Ltd. The pipeline remains the subject of the State Agreement. The new owners have been assigned the relevant interests under the State Agreement and the previous owners have been released from any continuing obligations under the State Agreement.

As part of the State Agreement the Government stipulated the minimum size of the pipeline and that the capacity of the pipeline should be able to be expanded by a minimum of 50% of the initial committed capacity. This was to ensure that the pipeline had the capacity to carry gas for third parties and that the pipeline size was not restricted to the capacity of the existing market (which was represented by the owners). The current firm capacity of the GGP is between 85 TJ/d and 95 TJ/d (6.2.1.2 of the Access Arrangement information). It is understood that capacity could be expanded to 164 TJ/d with the installation of 6 additional compressor stations.

State Agreement and Uniform Laws: Third Party Access to the GGP

Under the State Agreement the owners are to provide non-discriminatory third party access to unutilised capacity (i.e. capacity beyond that allocated as initial committed capacity and in use for this purpose) on fair and reasonable terms and conditions. The State Agreement provides for the tariff to third party users to be set in the first instance according to principles established under the State Agreement and approved by the Minister. The existing GGP tariff has been set in accordance with the State Agreement process.

The State Agreement anticipates, however, that the terms and conditions of third party access would be, at some time, subject to "uniform laws" or subsidiary legislation for gas pipeline access in Western Australia and it provides for the uniform arrangements to conditionally replace the State Agreement provisions. A particular condition is stated in clause 21(3) of the State Agreement. Under clause 21(3) the State has undertaken that any uniform laws and subsidiary legislation would not have effect to the extent that the Joint Venturers owning the pipeline can demonstrate that the uniform laws or subsidiary legislation have, or are likely to have, a material adverse effect on the legitimate business interests of the Joint Venturers as owners and operators of that pipeline. Further, so far as the use of the initial committed capacity by these Joint Venturers is concerned, the State has undertaken that the uniform laws will have no effect. This reflects provisions under section 2.25 of the Code safeguarding foundation contracts for use of Covered Pipelines.

The "legitimate business interests of the Joint Venturers" are defined in the State Agreement as the legitimate business interests of the Joint Venturers as owners and operators of the pipeline on the basis that they constitute an independent pipeline owner offering transmission services without any bundling of those services with other services such as the purchase, sale, storage or supply of gas.

As a party to the 7 November 1997 Council of Australian Governments Natural Gas Pipelines Access Agreement, the State is committed to a uniform national framework applying to access to natural gas transmission pipelines. The Access Act implements the uniform Gas Pipelines Access Law, including the Code, in this State. The Access Act provides that references in the State Agreement to uniform laws and subsidiary legislation include the Gas Pipelines Access Law.

As stated in the State Agreement, "the State desires fair and reasonable terms and conditions based on principles of a consistent nature to apply to access to natural gas transmission pipelines within Australia". Consistent with this desire, the GGP is listed in Schedule A to the Code and thus a 'covered pipeline' under the Code.

In accordance with the Natural Gas Pipelines Access Agreement, the Access Act provides that the access arrangement applicable under the State Agreement was deemed to comply with the Code until 1 January 2000. The Access Act imposed an obligation on the Joint Venturers to submit to the Regulator a proposed Access Arrangement for the GGP within nine months of the enactment of the Access Act ie before 9 November 1999.

Under Annex I of the Natural Gas Pipelines Access Agreement, the State committed to "…take all reasonable steps including negotiation with the service provider to seek to ensure that any rights of the service provider pertaining to third party access (which exist at the date of the State signing the Intergovernmental Agreement and derive … in the case of the Goldfields Gas Pipeline from the *Goldfields Gas Pipeline Agreement Act 1994*) do not prevent or impede the application of the Code to that pipeline."

At the time the Access Act was being drafted and thereafter, the State has taken all reasonable steps, including negotiation with the Joint Venturers, to seek to ensure that their rights under the State Agreement do not prevent or impede the application of the Code to the GGP. The most significant of these rights are found in Section 21(3) of the Agreement. Despite the steps taken by the State Clause 21(3) continues to apply.

The Access Act specifically provides in subsection 97(4) that nothing in the Act is taken to affect the operation of clause 21(3) of the State Agreement. Further, and reflecting the commitment of the State to remove impediments to the application of the Code, subsection 97(5) of the Access Act provides that subsection 97(4) does not prevent the State and the Joint Venturers from varying or rescinding clause 21(3).

In considering the proposed Access Arrangement the Regulator is required by the Access Act to function independently and to have regard to each of the relevant factors set out in the Code including in section 8 and subsection 2.24 of the Code. Amongst other factors, the Regulator would thus need to consider the Joint Venturers' legitimate business interests, as owners and operators of the GGP and having regard to clause 21(3) of the State Agreement, as well as, the interests of users and prospective users of the pipeline, the public interest, including the public interest in having competition in markets, and the economically efficient operation of the pipeline.

As previously indicated tariffs for third party access to the GGP have in the past been determined in compliance with the tariff setting principles approved under the State Agreement. The Regulator would need now to establish the relevance of those tariffs, determined under the State Agreement, to the decision he must now make in accordance with the relevant principles, including the tariff setting principles, of the Code.

This Submission on the Proposed Access Arrangement

All comments in this submission are sought to be made in the context of the relevant principles incorporated in the Code.

Some of the comments in this submission request the Regulator to consider whether the Access Arrangement Information is sufficient to permit interested parties to understand the derivation of the "elements" in the proposed Access Arrangement.

The understanding of key arguments and assumptions in the proposed Access Arrangement and supporting documents is included in italicised text at the beginning of the relevant sections of the submission.

General Comments

Business Risks related to the GGT - Discussion

The GGT has stated in its proposed Access Arrangement that the rate of return used in setting the transportation tariff is commensurate with the business risks taken in development of the pipeline in accordance with the State Agreement.

The GGT had claimed that the pipeline is facing higher than usual business risks due to a number of factors, including:

- *Competition from alternative fuels and competing pipelines;*
- *Dependence on the mining industry, which is facing its own high business risks;*
- *Direct international competition in specific metals markets;*
- *Lack of long term transport contracts;*
- *Non-diversified end user market with a limited number of customers;*
- *Possible downturn in mining activities due to proposed changes to taxation law regarding depreciation.*

GGT's forecasted future throughputs (TJ/d) on an aggregated basis are:

Year	*2000*	*2001*	*2002*	*2003*	*2004*
Projection (TJ/d)	*71*	*71*	*74*	*72*	*69*

It is suggested that the Regulator would need to conduct a thorough business risk assessment in order to determine the appropriate rate of return for this pipeline. At the same time the Regulator would need to conduct a review of the throughput forecasts underlying the proposed reference tariffs.

In conducting his analysis, the Regulator may wish to consider the following issues, in addition to the matters raised by the GGT:

- the current owners' recent investment in the pipeline and the circumstances of that purchase. As pointed out in the proposed Access Arrangement the pipeline was recently sold for approximately $624 million, or about 140% the total establishment costs of the pipeline;

- the fact that the new owners of the pipeline are energy "utilities" and not mining companies;

- the opportunities to diversify the end user market in the context of major electricity generating assets serviced by the pipeline now being owned by independent power producers and not mining companies. It is noted that one of those independent power producers has already secured electricity supply contract with a substantial electricity user located in the Perth metropolitan area. The electricity to be sold under the contract is generated in one of the large capacity power stations supplied by the pipeline and is wheeled through the Western Power interconnected system;

- the extent of the unique risk claimed in terms of pipeline on pipeline competition given:
  - One of the competing pipelines mentioned in the proposed Access Arrangement Information is at present a potential project and given the relatively short length of the proposed Access Arrangement period associated risks could be taken into account (if then relevant) at the time of the next regulatory review;
  - With its limited capacity and location the second pipeline (the Mid West pipeline) mentioned in the proposal would only be able to compete for a limited part of the GGT market; and
  - Pipeline on pipeline competition exists for a number of pipeline systems covered by the Code across Australia, including in Western Australia;

- whether competition from alternative fuels can be claimed to constitute a "unique" business risks for the pipeline. For example the transmission pipelines supplying the South West of the State are facing competition from LPG and electricity;

- It is claimed that the vulnerable nature of the industry that is serviced by the pipeline contributes to the higher risk for the pipeline. Conversely the higher cost of capital and thus higher Reference Tariffs proposed by the GGT have the potential to considerably reduce the viability of that industry, unless third party users are able to negotiate access at “discounted” tariffs. Given the energy intensive nature of the industry serviced by the pipeline, a reduction in the reference tariff may be able to increase the viability of users and potential users and thus reduce the business risks for the pipeline;

- The forecast throughput appears to be conservative. It is suggested that the Regulator conduct a review of the throughput forecasts underlying the proposed tariff. In conducting this review it may be relevant for the Regulator to consider whether some elements of the throughput risk may have been accounted for in the proposed cost of capital.

Economic Development Tariffs

The GGT offered an Economic Development Tariff, which was available to be taken up during September and October 1999, and was applicable to new loads in the East Pilbara and Goldfields regions. This tariff was offered to encourage third party load growth for the Goldfields Gas Pipeline. However, no firm commitments to future gas transport arose from the Economic Development Tariff offer. According to the GGT this lack of commitment indicates that gas transport markets in the East Pilbara and Goldfields are comparatively price inelastic, and that there is little prospect for load growth during the Access Arrangement period.

The suggestion that the failure of potential pipeline users to take up the economic development tariff demonstrates a lack of market demand for pipeline services in the region appears on the face of it to be a reasonable argument. However an alternative interpretation is that potential users of the pipeline may have been reluctant to enter into contractual arrangements just before the time when the GGT was to submit its proposed Access Arrangement to the Regulator for his approval.

Content of proposed access arrangement

Expansions/Extensions

GGT has proposed that it may elect that an expansion or extension of capacity be covered by the Code, subject to the consent of the Regulator.

The proposal appears to circumvent the approval of the Regulator should GGT elect that an expansion or extension not be covered.

The discretion proposed by GGT appears to be derived from sub-paragraph 3.16(a)(ii) of the Code. However, that sub-paragraph could equally be interpreted as requiring the Regulator’s consent for an expansion or extension of capacity not to be covered under the access arrangement. The Regulator could consider his desired role in monitoring the elections of the service provider whether or not to include extensions and expansions.

It is not clear that the service provider has satisfied the Code's requirements with respect to paragraphs 3.16(b) and 3.16(c), requiring information on how expansions/extensions may affect reference tariffs, and information on potential capital contributions by prospective users to expansions/extensions.

> *Incremental users, which have not made capital contributions towards incremental capacity funded by other users will be liable to pay surcharges.*

If incremental capacity "has been funded by others", it is not clear whether there is a mechanism to ensure that the structure of the surcharges reflect a fair and reasonable sharing of the total recoverable costs between incremental users as required under section 8.26 (c) of the Code.

Queuing Policy

> *GGT proposes a queuing policy that sets out the priority assigned to Prospective Users seeking a reference service.*

It is not clear from the information presented how existing users are dealt with by the Queuing Policy. The Queuing Policy would need to clarify the differences (if any) between the rights of the users (including the owners) with contracts existing before the proposed Access Arrangement was submitted to the Regulator, and prospective users seeking a reference service.

It is also not clear how Supplementary Quantity Options may impact on the rights of Prospective Users in the queue. This point may only be clarified by investigating the pre-existing contractual rights of the owners and existing third-party users.

Clause 21(3) of the *Goldfields Gas Pipelines Agreement Act 1994* has the effect that the *Gas Pipelines Access (WA) Act 1998* shall not apply in relation to the use of Initial Committed Capacity by the joint venturers. This provision appears to have identical effect to the grandfathering provisions in the Code, which needs to be taken into consideration by the Regulator in determining a position on Queuing Policy.

Investigations as to Developable Capacity

> *GGT will undertake such Investigations as are reasonably required to determine the nature, extent and approximate cost required to provide that Developable Capacity, subject to the payment by the Prospective User of the cost of those Investigations and the Prospective User committing to make an agreed contribution to the costs of installing the Developable Capacity.*

On the face of it, it appears reasonable for prospective users to pay to investigate the costs of installing developable capacity. It does not however appear to be justified to expect prospective users to commit to contribute to developable capacity before the investigations have been completed ie before the cost of providing that capacity is determined.

Content of proposed access arrangement information

Initial Capital Base

The Service Provider nominates the use of the Depreciated Optimised Replacement Cost (DORC) methodology for determining an Initial Capital Base. Its estimate is $452.6 million. The proposed Access Arrangement Information notes that the pipeline was constructed under capacity requirements mandated by Government and is operating at full capacity as currently configured.

The Service Provider states that the total pipeline construction cost in historical terms was $456.6 million stated in dollars of the day. In order to arrive at a cost reflective of today's environment, it makes adjustments (i) to reflect depreciation in the $A/US exchange rate (applied to overseas sourced materials), (ii) in respect of interest charges during construction; and (iii) for inflation over the period since construction. An "Optimised Replacement Cost" of $506.7 million reflecting these adjustments is then depreciated to $446.6 million (no depreciation schedule provided), future capital expenditure and working capital requirements are also added to arrive at the final figure of $452.6 million.

The methodology which the GGT has used to derive its DORC valuation is similar to that which is typically used for the derivation of a DAC valuation.

The GGT should be requested to submit a DORC valuation estimated by using a conventional methodology, as required under the Code. The (currently unrealised) upgrade potential of the pipeline may be a relevant consideration in determining such a value.

Having determined reasonable values for DAC and DORC, the Regulator is required to consider the full range of factors for determination of an initial capital base listed under sub-section 8.10 of the Code.

This submission considers that the pipeline capacity requirements, which were mandated by Government, are a significant factor to be considered by the Regulator in deciding upon an appropriate estimate of the initial capital base. They represent an imposed constraint on the investment decision of the original owners.

Amongst the other factors in section 8.10 of the Code, the Regulator will need to consider the basis on which tariffs have been set in the past and the historical returns to the service provider. That would include returns from all previous and current users of the pipeline.

Notwithstanding the above the Regulator may wish to confirm the appropriateness of the adjustments reflected in the “Optimised Replacement Cost” proposed by GGT.

Firstly, he will need to confirm that it is appropriate for interest charges during construction to be calculated at the proposed WACC of 12.2%. Secondly, he will need to confirm that adjusting all historical construction costs with 100% of the CPI is reasonable.

Operating Costs

Operating costs should be independently assessed for their reasonableness.

Capacity assumptions

> *GGT has assumed that there will be no investment in new capacity over the life of the arrangement.*

Should the throughput projections put forward by the GGT be accepted, the Regulator may need to consider requesting the inclusion of a trigger mechanism whereby the GGT is required to submit revisions to the Access Arrangement in the event at any time in the initial Access Arrangement period the actual throughput exceeds the forecast throughput used in the determination of the proposed initial reference tariffs.

It is noted elsewhere in this submission that the methodology for dealing with firm specific risk requires either adjustment to the relevant forecasts for input into an NPV calculation or adjustments to the allowed cost of capital. Again, in the context of the proposed capacity assumptions, the Regulator is encouraged to use this opportunity to clarify his preferred methodology for dealing with such risks.

Cost of Capital Issues

Standardised parameters and firm specific parameters

> *GGT argues in effect that it is only appropriate to consider the tax rate and inflation rate as industry wide factors. It contends that its own circumstances need to be considered in determining all other parameter inputs.*

It is noted that there are various accepted methodologies employed for estimating a firm's cost of capital and that estimates are sensitive to variations in methodology and the various parameter inputs. The debate over both methodology issues and parameter values has been hotly contested in utility pricing regulation. The task is made even harder by the need to determine parameters that remain relevant over the extremely long life of the assets in question (though long term error may be reduced by periodically re-estimating these parameters).

There would be benefit in the Regulator requiring the use of a consistent methodology and transparently derived inputs for those parameters which are not company-specific (eg. inflation, typical gearing ratios, market risk premia, tax rates and gamma (dividend payout and imputation credit utilisation) factors).

It is also noted that certain parameters which can be argued to apply to all players in an industry may also reasonably be argued to vary over time in response to underlying economic conditions – so as to remain accurate estimates over the life of the proposed Access Arrangement. That said, given the relevant time horizon of up to 100 years for some assets, there is a case for considering outlying point estimates within the context of longer term averages of parameter values.

Cost of Debt

GGT proposes a debt premium of 2.25% over the risk-free rate.

The debt premium or risk margin used by GGT of 2.25% is substantially higher than that used in various regulatory decisions including those by the ACCC and Office of the Regulator General (ORG) in relation to the Victorian gas access arrangements. The Regulator would need to undertake a review of the debt premium being proposed with due consideration of GGT's and the individual Joint Venturers credit ratings and any special characteristics of the debt portfolio that affect the actual cost of borrowing.

Capital Structure

GGT nominates a debt to equity ratio of 50:50. GGT argues that the capital structure should be considered as a firm-specific variable.

The typical debt to equity ratio for the gas transportation industry is considered to be 60/40 as adopted in numerous other Australian decisions concerning access in the gas transmission industry.

Section 8.31 of the Code calls for use of parameter inputs that reflect standard industry structure and best practice.

Dividend Imputation

GGT has used a gamma factor of 0.30. GGT argues that the dividend imputation factor should be considered as a firm-specific variable.

It is considered that a gamma value of 0.50 is more representative of industry standards. This has been the recommended approach for past gas distribution access arrangements in Western Australia and is consistent with other access arrangements, including the ACCC's determination for the Victorian gas transmission access arrangements.

Risk free rate

GGT has nominated a risk-free rate of 6.7 per cent.

GGT has used the ten year Commonwealth bond rate immediately after the Reserve Bank decision on interest rates on 3 November 1999. The Capital Asset Pricing Model is a forward looking model and as such it is considered acceptable practice to use a point estimate for the ten year Commonwealth bond or to use an average over a shorter period eg 20 business days as used recently by IPART and supported by the Office of Energy for Western Power's 1998/99 and 1999/00 electricity access pricing redeterminations. Recent spot rates have averaged around 7.2% for the month of January and the latest spot rate at 24 February was 6.72%. This submission considers that the risk free rate of 6.7% proposed by GGT seems currently appropriate.

It is also relevant to consider whether current quoted rates represent above-average volatility in financial markets or once-off inflationary expectations. If these factors may be present, the spot rate or its short-term average should be adjusted appropriately to reflect that it only serves as a proxy for a financial asset with a term to maturity that matches the relevant regulatory life of the pipeline.

Beta Values

GGT makes a case that its assets are unique and present unique risks that should be accommodated by adjustments to the relevant beta values and therefore the cost of capital.

It is noted that theoretically, beta values are intended to represent the variability (covariance) between the earnings of a particular asset (or class of asset) against returns on a standard asset (eg. a standard industrial investment). They are not meant to reflect specific risks that are able to be hedged or minimised by diversification. Firm specific factors could be accounted for by appropriate adjustments to projected earnings and should not be factored into the cost of capital. However, a clear distinction needs to be made to avoid double counting.

Asset Beta

It can be inferred from the information presented that GGT is advocating an asset beta of around 0.87.

This submission contends that the most meaningful comparison between beta values of various companies or industries is done by comparing the asset betas. It would be possible to decide on a particular asset beta by a consideration of historical values placed in context within a range of values that is appropriate to the natural gas pipelines industry. Determining an appropriate place within that range can reflect the systematic (non-diversifiable) variability in earnings associated with the pipeline in question. If a standard leverage ratio is assumed (discussed below), estimates of an appropriate equity beta can then be derived from a levering formula, since the debt beta is discernible from the allowable risk premium. However, caution needs to be exercised in deciding upon an appropriate levering formula so as to derive the appropriate equity beta.

Debt Beta

> *From the debt risk premium nominated by GGT, it is apparent that a debt beta of 0.346 has been adopted.*

It is noted that previously a value within the range of 0.06 and 0.12 has been assumed to be reflective of industry standards but that the debt beta value is derived from the ratio of the allowable debt margin to the market risk premium. Firm specific factors leading to a higher cost of debt need to be considered and this submission addresses those matters in the cost of debt section.

Equity Beta

> *GGT has proposed an equity beta of 1.40.*

The Regulator is encouraged to consider the appropriateness of the estimate, and to nominate a preferred formula for deriving equity betas from other parameter inputs (ie. the asset and debt betas and assumed capital structure).

Market Risk Premium

> *GGT proposes using a market risk premium of 6.5 per cent.*

The assumed typical market risk premium of 6.5% appears to be within the range of accepted industry values.

Inflation rate

> *GGT proposes adopting an inflation rate of 2.5% for the term of the proposed arrangement.*

The inflation rate assumed by GGT of 2.5% is the same as the most recent Commonwealth Treasury forecast of 2.5%. Perhaps more importantly due to the relevant time horizon, the parameter value of 2.5% is midway between the Reserve Bank of Australia's inflationary target range over the course of the business cycle. On this basis, the inflation rate assumed by GGT of 2.5% appears to be appropriate.

Tax rate

> *GGT has assumed a corporate tax rate of 36% over the life of the proposed arrangement.*

The Regulator is encouraged to consider whether an average tax rate to reflect the pending staged reduction in the corporate tax rate, in the absence of other information, should be assumed to prevail over the life of the Access Arrangement. For example, an average rate of 30.8% would reflect the relevant rate as at 1 July 2000, where one year would be spent subject to a 34% tax rate and four years subject to a 30% tax rate.

Method of Transformation

> *GGT has adopted the "Market Transformation" method of adjusting the nominal post-tax WACC for tax first then for inflation.*

The Regulator is encouraged to consider the efficacy of the market and reverse transformation methodologies. It is contended that a uniform practice should emerge to allow comparability between accepted costs of capital across Western Australian pipelines - and may inform regulatory processes for other utilities in the future. It is noted that, using all of GGT's nominated inputs, use of the reverse transformation methodology reduces the quoted WACC by around 1.4%.

Calculation of the Reference Tariff

> *GGT has chosen an NPV methodology for calculating reference tariffs. The Reference Service tariff required to obtain an NPV of zero in the calculations is approximately 22 percent higher than the Goldfields Gas Pipeline benchmark tariff scheduled for introduction on 1 January 2000. In order to maintain continuity with the tariff schedules as currently posted, the Reference Service tariff is set to equal to the tariff currently (November 1999) scheduled for introduction on 1 January 2000.*

In general, this submission considers that the Access Arrangement Information is not sufficient to permit interested parties to understand the derivation of the proposed Reference Tariff. The principles and reasoning behind the structure of the tariff and the relative magnitude of the three components of the tariff, including an explanation of the costs those components are designed to recover, are also not presented in the Access Arrangement Information.

In addition, following are some specific matters the Regulator may wish or need to consider.

The Regulator may wish to consider whether adequate information has been provided to allow Prospective Users to understand the basis upon which the NPV calculation in sub-section 7.5.3.10 was derived. For example, it is not apparent that a depreciation schedule has been provided - therefore it is not possible to determine how the value for the residual capital base has been determined.

The statement made in sub-section 7.5.3.10 of the proposed Access Arrangement Information that the tariffs offered in the proposed Access Arrangement are 22 per cent lower than that required to achieve a zero NPV raises the question whether current tariffs would be sustainable and should be queried.

Incentive structures

GGT asserts that its commitment to constant real tariffs over the life of the proposed Access Arrangement provides it with incentives to achieve efficiency gains.

The Regulator is encouraged to also consider the merits of other incentive structures (such as CPI-X) designed to share some of the benefits of efficiency improvements with third-party users of the pipeline.

The Regulator could also consider the efficacy of including an adjustment factor in any incentive mechanism that would reasonably share the benefits of unexpected growth in pipeline volume and demand between the owners and the users. This has been incorporated as a "K factor" in other Australian access arrangements.

General Terms and Conditions

The Access Contract terms and conditions appear reasonable on an initial consideration, but would need to be assessed for their compliance with applicable industry standards.

Clause 4.4 – Supplementary Quantity Option

*In order that Users may correct imbalances or transport Gas in excess of their MDQ on an occasional basis, a User who has a Service Agreement for the Firm Service and who is not in default thereunder may apply to GGT at any time to take up a Supplementary Quantity Option (**SQO**). GGT will provide a SQO solely at its discretion.*

The Regulator should consider whether, subject to technical and operational circumstances, it is appropriate for the GGT to provide a SQO, which is effectively offered as part of the Firm Service, solely at its discretion.

Clause 6.1 - Connection to the Pipeline

It is understood that the existing inlet facilities capable of receiving gas from the Harriet and East Spar Joint Ventures' pipelines at Yarraloola have been installed by the GGT, and that the operating and maintenance costs of those facilities are going to be borne by the GGT (ref. Section 6.2(b)). It is assumed that those costs are rolled-in the proposed reference tariff for the pipeline. It is also understood that any additional inlet facilities, and connection to the pipeline at the inlet point, will be provided by the GGT at the user's cost (ref. Section 6.1(b)).

It may be desirable to give the ability for users to provide (and operate and maintain) their own inlet facilities subject to those complying with the technical requirements in the First Schedule of the General Terms in Conditions. One particular circumstance that may need to be taken into account in this respect is a possible interconnection between the GGP and the DBNGP at the inlet point.

Clause 6.6 - Ownership and Possession

> *This clause gives GGT exclusive control over Outlet Facilities owned by the User (except any outlet facilities owned and maintained by a third party as accepted by GGT).*

Given that this implies that a third party can operate and control outlet facilities, it is not clear why a user would not be able to operate its own outlet facilities subject to the requirements contained in section 6.4(b).

Clause 7.2 Gas Balancing

The clause appears to include all gas received by the User as counting towards a potential Imbalance. The clause should clearly exclude gas received through a Supplementary Quantity Option or through the secondary market.

Clauses 7.2, 7.3, 7.4 and 7.5, and clauses 4 and 5 of the sixth schedule - Charges

In section 7.2(c), the figures for AITF and AITV appear reasonable, but it is of concern that they can be unilaterally altered by GGT. The same concern is relevant to the GGT ability to alter the values of VTF and VTV in the variance tolerance under the proposed section 7.5(b). In addition, the same concern is relevant to the value of the supplementary Quantity Option factor, the Accumulated Imbalance Tariff, and the Daily Overrun Charge, the Hourly Overrun Charge, and the Variance Charge factors under section 4 and section 5 in the sixth schedule of the General Terms and Conditions.

It is also noted that it is at GGT's discretion whether or not to apply an accumulated imbalance charge to a particular user. The same practice which may be of concern to the Regulator is also proposed for the Daily Overrun Charges (under section 7.3(b)) and Hourly Overrun Charges (under section 7.4(b)).

Clause 7.4 - Hourly Overrun

> *The maximum permitted hourly overrun is 120% of 1/24 of the permitted daily volume.*

The Regulator would need to consider if this permissible hourly overrun is appropriate.

Clause 9.11 – Goods and Services Tax

> *GGT is entitled to pass on as part of the Transportation Charges, Quantity Variation Charges, Used Gas Charges for the Service and any other charges, and recover from the User the amount of any GST levied upon GGT.*

It is noted that under the Code revisions to the reference tariffs only come into effect after approval by the Regulator. It is considered that this would also apply to any GST (or other tax) applicable passthrough. It is noted that clause 9.11 does not reflect the requirement for prior agreement of the Regulator with revisions of the reference tariff in this respect. The submission considers that it is in the interest of the users that the clause is amended to reflect that revisions to any of the charges only come into effect after approval by the Regulator.

Clause 9.13 – Bond/Deposit

> *The User shall pay a deposit to GGT or arrange a bank or other person acceptable to GGT acting reasonably (**Surety**) to post a bond equivalent to the amount specified in the applicable Order Form.*

It may be in the interest of the users and potential users for the amount of the bond to be specified as part of the Access Arrangement.

Clause 11.4 - Costs (of measurement facilities) to be Borne by User

It is not clear whether a User would bear the entire costs to the Owner of installing, operating and maintaining measurement facilities that are shared with other users. There needs to be a fair mechanism for determining the proportion of the Owner's total costs that the User should pay in respect of a facility it shares with other users.

Clause 18.2 - Direct losses only

GGT's liability clause, seeks to exclude liability for "indirect losses" defined very broadly to include not only loss of profit but also loss of revenue or income. The Regulator needs to consider whether breach of contract or negligence should lead at least to liability for the value of gas lost.

Clause 18.3 - Proximate losses

The Regulator needs to consider whether the clause might make the User liable for damage caused by events not reasonably within its control.

Clause 18.5 - Reduction of Average Fixed Charges

It is not clear why the reduction in charges only commences after 48 hours of failure to provide the service. The Regulator should also be satisfied that the charges to be reduced include all those applicable charges that the User is paying for services that GGT is failing to provide.

Clause 20.7 - Transfer other than Bare Transfer

The Regulator should consider whether GGT's right of veto over transfers of capacity other than bare transfer might inhibit development of a secondary market.

Ring Fencing Arrangements and Associate Contracts

> *In the proposed Access Arrangement (sub-section 1.4) GGT states that it operates the GGP on behalf of each of the owners; and that it is the Service Provider under the Code. In sub-section 3.2 of the proposed Access Arrangement Information, GGT states that it is the pipeline manager; whereas under formal contracts with GGT, CMS Energy Corporation is the commercial services provider and AGL is the pipeline operator.*

It is noted that:

- Southern Cross Energy (a joint venture between Transalta and AGL) owns and operates 160MW of electricity generation infrastructure at Mt Keith, Leinster, Kambalda and Kalgoorlie);

- Transalta owns and operates 120MW of electricity generation infrastructure at Parkeston (Kalgoorlie);

- Duke Energy owns and operates 115MW of electricity generation infrastructure at Newman; and

- AGL is also a part-owner and operator of 14MW of electricity generation infrastructure at the Cawse mine.

The Code imposes certain minimum requirements on Service Providers and their Associates in relation to ring-fencing. To satisfy himself that these minimum requirements are met, the Regulator may wish to enquire into the corporate relationships enshrined in the Joint Venture.

For example, where the Code requires a service provider to establish arrangements to ring-fence its business of providing services using a pipeline, as a minimum amongst other things, the Service Provider is required to ensure that marketing staff of the service provider are not also working for an associate that takes part in a related business, and vice versa.

In addition, the Regulator would need to closely examine all relevant cost structures in order to be satisfied that appropriate ring-fencing arrangements have been established.

It is noted that under the provisions in section 7 of the Code new contracts between GGT and each of its holding companies would need to be approved by the Regulator as “associate” contracts.