WMC Resources

Submission on the Proposed Access Arrangement for the Goldfields Gas Transmission Natural Gas Pipeline

Background

This submission to the Office of Gas Access Regulation (O*ff* GAR) is made by WMC Resources Limited (WMC), in response to the invitation issued by O*ff* GAR on the 22nd December 1999 and the subsequent publication of an Issues Paper in January 2000.

The proposed Access Arrangement has been put forward by Goldfields Gas Transmission Pty Ltd (GGT) under the National Access Code for Third Party Access to Natural Gas Pipelines (the Gas Code).

WMC is the major customer of the Goldfields Gas Transmission (GGT) pipeline system - being a consumer of natural gas from the Southern Cross Energy gas and power supply systems which now supply the Mt Keith/Leinster and Kalgoorlie/Kambalda operations. WMC was the largest participant in, and Manager of, the original GGT Joint Venture which developed the GGT pipeline system. WMC sold its interest in the pipeline system to Southern Cross Pipelines in early 1999.

At the time of the sale, it was well understood by the purchasers of the pipeline that Access Arrangements needed to be submitted and assessed under the procedures of the Gas Code, with revised arrangements to apply as from the start of the year 2000.

WMC's view is that the proposed Access Arrangements are significantly deficient when measured against the requirements of the Gas Code; are not in the public interest and should not be accepted by O*ff* GAR.

Of particular concern to WMC is the magnitude of the Weighted Average Cost of Capital proposed by the proponents, and the assumptions made relating to future throughput levels for the pipeline system.

WMC's specific comments are submitted generally in the order of items listed in the Issues Paper (with the exception of the first item).

1. Access Arrangement Information Deficiencies

The submission made by GGT is deficient in that information on the expected throughput levels of the pipeline - past the end of the Access Undertaking Period - are not supplied.

GGT propose to use an NPV methodology, similar to that which has applied to the GGT pipeline since its inception. Such a methodology is critically dependent on throughput assumptions for future years. By inference and some calculation, WMC believes that GGT has adopted unreasonable assumptions for future throughput and thus derived Reference Service Tariffs which are higher than are justified.

The missing information needs to be made available to those making submissions as quickly as possible - preferably to allow supplementary submissions to be made prior to O*ff* GAR publishing a Draft Determination.

The Access Arrangement Information dwells significantly on the level of risk associated with the GGT Pipeline and the influence which this increased level of risk has on the proponents approach to the Access Undertaking.

While WMC accepts that the GGT pipeline does have some characteristics which make it more risky than pipelines feeding settled large urban areas, WMC cannot accept the strength of the arguments raised by the proponents, nor the consequences in relation to Reference Tariffs.

As the largest of the original developers and the manager of the GGT Joint Venture during the formative phases of the GGT pipeline project, WMC and the original partners gave careful consideration to the level of risk which they were running in proceeding with the investment in the project. While being aware of the difficulty (or impossibility) of securing long term contracts for the use of pipeline capacity from specific mining projects, the original developers were prepared to place great weight on the long term development prospects of the extensive mineral provinces through which the pipeline passes.

In the northern area of the pipeline route, world class iron ore reserves exist which have a prospective life of several hundred years, and which are being mined, processed, exported and sold at prices which are fully competitive with other supply areas around the world, and are expected to remain so. The Letter of Intent given to the Robe River consortium, which will allow them to develop the West Angelas deposits, including a third rail line to the coast, bears witness to the long term viability of the iron ore industry in the State. The GGT pipeline skirts the southern edge of this province and already feeds the Newman area. It is well placed to participate in the future development of the area.

In the Northern Goldfields/Mid West area, WMC itself is a major producer of nickel along with other, and major gold mines also exist. Nickel extracted from sulphide ores in this area is very competitive on the world scene given WMC's current methods of mining and processing, and the new processes for extracting nickel from lateritic ores, while still largely unproven in a technical and economic sense, hold out the promise of extending the nickel industry in the area once teething problems are overcome. Gold remains a major activity, and there are other mineral deposits (vanadium and magnesium) in the area which are also subject to development proposals.

In the Goldfields area itself, nickel and gold are produced in world scale quantities and at competitive prices. Nickel extracted by WMC from sulphide ores in this area is very competitive on the world scene, and several large gold mines with long prospective lives (especially the KCGM operation and WMC's operations at St Ives) exist in the area. There are also proposals to develop other nickel and gold prospects in the surrounding area and process the ores in Kalgoorlie.

Thus the diversity of the mineral base itself provides a considerable degree of long term security to the GGT pipeline owners.

Other pipelines in Australia have a similar degree of exposure to a small number of customers. The Ballera to Mt Isa pipeline depends on the future of the copper/lead/zinc and fertiliser industries with a small number of players. The Palm Valley to Darwin pipeline has only two major customers, and even the Dampier to Bunbury pipeline system has well over 50% of its throughput dependent on the fortunes of the alumina industry.

In summary, WMC cannot agree with the strength of the arguments put forward by GGT that the pipeline is significantly different and greatly more risky than other pipeline projects in Australia.

WMC has some considerable experience in relation to the prospective life of the mining and processing projects in the Goldfields area. In the early 1980's, WMC entered into a joint venture with the then SECWA to enable a 220kV power line to be constructed to Kalgoorlie from the SECWA generating plant at Muja. At the time, the best estimate by all parties of the ultimate electrical demand in the Kalgoorlie Region was 63MW. Before the line was commissioned, the area load had increased to 100MW and the line load continued to increase to 170MW in the year in which gas arrived in Kalgoorlie. The present electrical load in the area is in excess of 200MW, but it is now serviced by both local gas fired power generation and the transmission line.

WMC believes that a similar future lies ahead for the throughput of the GGT pipeline, and with sensible pricing policies and professional marketing, throughput will increase in future years and not be constrained by the expiry of the initial set of contracts provided by the launch customers.

2. Reference Services

GGT is offering only a forward Firm Service as the proposed Reference Service, and offering to negotiate Non-Reference services.

However, since the start of the GGT pipeline, other services of the nature of Reference Services (Interruptible Service, Parking Service, and Authorised Imbalance Service), have been offered. GGT advances no reasons for deleting these services, and WMC believes that they should continue to be offered.

In general, WMC strongly supports the early development of a secondary market to trade contracted and uncontracted capacity, and such a service should be a feature of all Access Undertakings associated with gas pipelines. WMC comments further on this matter under the Trading Policy section of this submission.

3. Terms and Conditions (other than price)

WMC notes that in the case of the O*ff* GAR Draft Decision on the Parmelia Pipeline, O*ff* GAR examined the proposed Terms and Conditions in great detail to eliminate the scope for arbitrary decisions by the proponent and the ensure that the details were acceptable. WMC believes that the same process needs to be followed in this case as well.

We suggest in particular that there is scope for:-

- reducing the scope for the proponent to request additional information in and Access Request;
- specifying the reliability levels associated with "Firm Service";
- eliminating the scope for the proponent to add arbitrary or additional requirements between Access Undertaking approvals. It is O*ff* GAR, rather than the proponent, who is best able to judge whether the proposed changes detract or otherwise from the Reference Services.
- eliminating any obligation to make payment for amounts on invoices which appear to a shipper to be in error.

4. Capacity Management Policy

WMC supports the operation of the GGT system as a "contract carriage" pipeline as defined in the Code.

5. Trading Policy

As mentioned, WMC supports the development of active secondary markets for the trading of capacity in gas pipeline systems. WMC is aware of very efficient and effective screen-based/internet trading systems in use overseas, for both uncontracted or non-firm capacity, or to allow contracted capacity to be re-traded.

GGT has made provision for the "Bare Transfer" of capacity without consent and for other forms of transfer but only with their consent. They also have stopped short of firmly undertaking to publish a "Pipeline Capacity Notice" and make no provision for an on-line capacity trading system.

In WMC's view, GGT should be required to provide a full "Secondary Market" service, extending to the provision of an on-line capacity trading system. They also should undertake to make available any spare capacity held by themselves or able to be made available, and to allow unused but contracted capacity to be offered on such a system.

Such a system has been offered by the proponents of the Dampier to Bunbury pipeline system, and when the final form of it has been agreed with O*ff* GAR, similar provisions should be required for the GGT pipeline.

Once established and accepted, any proposed changes to the Secondary Market Rules should first be submitted to O*ff* GAR for approval before they are implemented.

6. Queuing Policy

WMC has no particular objection to the proposed Queuing Policy except to urge O*ff*GAR to ensure that the final rules are very clear as to the priority order of applications being processed, and to ensure that the proponent only has discretion to changing the priority order under clearly stated and reasonable circumstances.

7. Extensions/Expansion Policy

WMC has no particular objection to the proposed Extensions/Expansion policy proposed by GGT.

8. Review of the Access Arrangement

WMC understands that O*ff* GAR can only accept or reject an Access Undertaking and cannot revoke an acceptance once given. Once accepted, the Undertaking prevails for the duration of the Access Undertaking Period (proposed to be for five years).

In these circumstances, it is most important that O*ff* GAR ensures that the initial Access Undertaking includes all of the features required and is capable of being accepted under the Code. It is also essential that the proponent agrees in the Access Undertaking to resubmit all or part of the Undertaking in the event that circumstances change to an extent which questions or undermines the assumptions made when the Undertaking was submitted.

Depending on the final approach adopted in selecting the WACC value and its treatment of tax (addressed later in this submission), one such circumstance would be a change in the corporate tax rate

- as is being proposed by the Commonwealth Government at present. There may be other specific changes of circumstances which become apparent to O*ff* GAR in the assessment process which should also trigger a review of particular aspects of the Access Undertaking.

9. Reference Tariffs - Initial Capital Base

WMC has no great objection to the proposal that the Initial Capital Base should be set based on the actual construction cost of the pipeline, depreciated appropriately and with justified adjustments. WMC agrees with GGT that the pipeline was constructed at a cost which was less than the length-weighted pipeline costs prevailing at the time.

However O*ff* GAR will need to carefully check the proposed adjustments to the actual construction cost once the WACC value and the depreciation policy is settled. Both will have an effect on the Initial Capital Base. In addition, the proposed adjustment for $US/$A exchange rates needs careful consideration, since it may have been possible to have sourced items of equipment from countries other than the USA and to have paid for equipment in other currencies. Finally, the starting Capital Base needs to be depreciated to account for the initial three and one half years of operation of the pipeline.

Obtaining the opinion of an competent and experienced outside consultant would be valuable in resolving these matters.

The Gas Code sets out the range of values to be considered in setting an Initial Capital Base (in 8.10). WMC wishes to draw O*ff* GAR's attention to sub-Clause (e) of the Gas Code which states:-

"(e) international best practice of Pipelines in comparable situations and the impact on the international competitiveness of energy consuming industries."

This sub-clause is especially important in relation to the GGT pipeline due to the very high proportion of its throughput which is used by industries operating in internationally competitive markets (including WMC at Mt Keith, Leinster and Kalgoorlie/Kambalda).

The Code does not provide for the regulated recovery of imprudent levels of expenditure on gas pipelines. In relation to a pipeline which has recently been purchased, sub-clause (j) states:

"(j) the price paid for any asset recently purchased by the Service Provider and the circumstances of that purchase."

WMC notes that GGT have not proposed the use of the purchase price as the Initial Capital Value and agree with this approach. The Code provides no reason which would allow GGT to recover any acquisition premium which they may have elected to pay above a reasonable valuation of the asset.

The GGT approach stands in rather stark contrast to that taken by the proponents of the Dampier to Bunbury pipeline system - where the full purchase price plus acquisition costs is put forward as the Initial Capital Base. WMC objects to this approach and supports the general approach taken by the GGT pipeline proponents.

From WMC's experience in the construction costs of gas pipelines[1] , it is expected that the DORC valuation on the basis outlined will be close to that proposed by GGT, but perhaps a little lower in value.

10. Reference Tariffs - Rate of Return

WMC has examined the latest regulatory decisions in relation to the assumptions used and the calculation of the Weighted Average Capital Cost (WACC) using the Capital Asset Pricing Model.

WMC has also noted, and generally agrees with, the approach and assumptions used by O*ff* GAR in the Draft Decision on the Parmelia pipeline.

Regulatory practice has generally favoured the use of a real pre tax WACC, using the prevailing corporate tax rate and assumptions relating to other parameters which usually lie in a relatively narrow range.

We note that the ACCC has only very recently updated its set of assumptions in the light of the prevailing economic settings in their Final Decision on the TransGrid NSW electricity transmission matter[2]. Without repeating all of the arguments supporting the various assumptions, WMC is of the opinion that the following set of assumptions are appropriate for calculating a WACC value for the GGT system.

Assumptions	
Market Premium	6.00%
Risk Free Rate	6.81%
Debt Premium	1.00%
Inflation Rate	3.00%
Cost of Debt	7.81%
% equity	40.00%
Debt Beta	0.2
Asset Beta	0.6
Equity Beta	1.20
Effective Tax Rate	30.00%
Imputation Factor	50.00%
Calculated Parameters	
Risk premium	6.00%
Nominal Equity Return after tax	14.01%
Real Equity Return after tax	10.69%
Nominal Equity return before tax	16.48%
WACC - Nominal pre tax	11.28%
WACC - Nominal after tax	7.90%
Market Practice conversion	
WACC - Real pre tax	8.04%
WACC - Real after tax	4.75%
Alternative practice conversion	
WACC - Real pre tax	6.79%
WACC - Real after tax	4.75%

1 WMC was the largest Joint Venturer in the Goldfields Gas Pipeline system and managed the design, construction and early operation of that pipeline.

2 Published in January 2000.

Comments on particular assumptions are:-

- given the size and stature of CMS, AGL and TransAlta, and the evidence of the cost of loans raised in the energy industry (as documented by the ACCC, ORG and IPART), a debt premium of 100 basis points is considered appropriate in this case;

- the beta values lie at the upper level of the range adopted in recent regulatory decisions and is also considered appropriate in this case due to the increased level of risk associated with this pipeline compared to others (see the comments made earlier regarding WMC's view of the relative risk faced by the GGT pipeline);

- since the change in Corporate Tax Rate from 36% to 30% seems now to be assured, the new rate has been assumed. The alternative is to set the WACC using the existing Corporate Tax Rate but to review the WACC when the reduced rate comes into effect;

- risk free rates appear to have declined since the ACCC last analysed them and *Off* GAR will need to update the rolling estimate;

The use of the assumptions listed above and the calculation method used in the recent regulatory decisions lead to values of pre tax real WACC of 6.79-8.04% depending on the conversion method from nominal after tax to real pre tax. Recent regulatory decisions have selected values towards the higher end of this range.

WMC has noted that the ACCC has expressed concern over the range of values obtained from the two conversion methods and the treatment of tax in general. They have stated a preference for the use of a nominal after tax WACC obtained directly from the CAPM, with compensation for tax liabilities (net of imputation credits) determined on the basis of cash flow assessments.

In the Final Decision on TransGrid, the ACCC states that the new approach is roughly equivalent to the old approach (although more complex to calculate), stating that the effective pre tax real WACC increased from 7.25% to 7.35% in that case.

In principle, WMC has no objection to this approach. However, since the publication of the TransGrid Determination, there has been some considerable doubt expressed regarding the accuracy of the ACCC's calculation methodology (and concern as to the lack of transparency and complexity in the approach). This matter remains unresolved at the time of making of this submission.

WMC believes that the pre tax real WACC approach remains appropriate for this assessment process unless and until the ACCC can satisfy other regulatory agencies and interested parties that they have an acceptable alternative way of assessing the overall revenue requirement.

This discussion leads WMC to believe that an appropriate pre tax real WACC for use in the determination of the annual revenue requirement of the GGT pipeline system is of the order of 8.0-8.1%, and certainly well below the 12.2% claimed by GGT.

11. Reference Tariffs - New Capital Expenditure

WMC has no particular comment to make on this issue, except to repeat earlier comments that the Initial Capital Base (both DORC and DAC basis), future capital expenditures and future operations and maintenance expenditures should be reviewed in detail by competent independent and expert consultants and allowed only to the extent that they are at efficient (best practice) expenditure levels and matched to the reasonably expected levels of throughput during the Access Period.

12. Reference Tariffs - Operations and Maintenance Costs

Again, WMC has no particular comment to make on this issue, except to repeat earlier comments that the Initial Capital Base (both DORC and DAC basis), future capital expenditures and future operations and maintenance expenditures should be reviewed in detail by competent independent and expert consultants and allowed only to the extent that they are at efficient (best practice) expenditure levels and matched to the reasonably expected levels of throughput during the Access Period.

13. Reference Tariffs - Economic Depreciation

GGT has proposed depreciation on a "units of production" method and for a pipeline economic life of 40 years.

However GGT also state that their view is that the physical life of the pipeline is as long as 70 years. The assumption of 40 year remaining life is predicated on the expiry of the second 21 year period of the State Agreement, less two years of operation since 1996.

WMC cannot agree with these assumptions. Prevailing regulatory practice in Australia, plus custom and practice as well as simplicity and ease of understanding, all point towards the use of straight line depreciation based on realistic asset lives. In addition, the 42 year period provided for in the State Agreement is not a limitation, as provision is made for the owners to apply for a continuation of the pipeline licence for a longer period. There can be no valid grounds for assuming that this extension would not be applied for and granted at the time. The pipeline has also been operating for three and a half years, not two years.

WMC supports the use of straight line depreciation applied to baskets of assets assigned realistic physical asset lives (along the lines of the Table included by GGT in Section 4.2.1.1 of the AUI document).

14. Reference Tariffs - Incentive Mechanisms

GGT proposes to escalate the Reference Tariff by 100% of the CPI - consistent with the use of a NPV tariff methodology.

WMC is opposed to the inclusion of a generalised escalation based on a CPI-type of indicator or a fraction of it. We do not see there is a natural link between Australian CPI and the cost of providing pipeline services. In fact WMC operates in an environment where, over the long term the price of our commodities decline in real terms. Therefore, we would support one of the following schemes:

- No automatic tariff increases. All increases to be approved through O*ff*GAR,
- Tariffs are fixed for 5 years based on projected best practice cost improvements and cost input changes, or
- Revenue path determined by O*ff* GAR as part of the acceptance process.

The Gas Code obliges O*ff* GAR to take into consideration "the impact on the international competitiveness of energy consuming industries" - none of whom have the luxury of the sales prices for their products increasing at a stable and predictable rate based on some generalised index.

15. Reference Tariffs - Total Revenue Determination

WMC has already commented on the lack of detailed information on future throughput estimates, which makes it very difficult to understand and replicate GGT's calculations of the Reference Tariff in Section 7.5.3.10 of the AAI.

However, WMC did manage to generally replicate the results of the Discounted Cash Flow analysis in Section 7.5.3.10 - but only by assuming that the pipeline throughput decreases dramatically in future years - and by an even greater amount than is implied by the projected annual throughput provided by GGT in Appendix C.

WMC is of the view that the Reference Tariff calculation should be made on the assumption that the future pipeline throughput should at least remain constant at the levels predicted for the first five years i.e an annual throughput averaging around 72 TJ/day. Even this assumption may be regarded as being on the conservative side in the light of the comments regarding pipeline risk made earlier.

To make comparisons of tariff levels rather more easily understood, WMC has elected to express the average tariffs as the average annual revenue in year 2000 divided by the input flow to the pipeline. This simplification avoids the complexity due to the fact that the offtakes occur along the pipeline and a simple delivered tariff is not easily identifiable.

On this basis, GGT's calculation of a Reference Tariff gives a figure of **$3.48/GJ**. GGT are not proposing to use this result, but instead are offering to remain with the tariff currently on offer for the year 2000, which is equivalent to **$2.50/GJ** on this basis.

If WMC makes the assumption of a constant level of throughput and retains all other GGT assumptions, the estimated Reference Tariff reduces to **$2.60/GJ** - almost to the level being offered by GGT at present.

However, if WMC also changes the assumptions relating to Initial Capital Base, WACC and depreciation to those recommended in this submission, then the estimated Reference Tariff reduces to **$1.93/GJ -** almost 23% below the level being offered by GGT at the present time.

These indicative calculations show the extreme sensitivity of the Reference Tariff calculation to the future throughput assumptions (and the necessity for the proponents to document the exact assumptions made in this respect in the Reference Tariff calculation). They also illustrate that the Reference Tariffs for the pipeline, based on reasonable assumptions consistent with recent regulatory decisions, could be as much as 23% lower than those offered by GGT and over 44% lower than the Reference Tariff calculated by GGT.

Of course, once a specific escalation arrangement is determined by O*ff* GAR, the starting year tariffs will be different from those stated here. However, WMC would need further details from GGT and an indication of O*ff* GAR's preferences to be more precise than the figures indicated here.

WMC therefore believes that Reference Tariffs of the order of **$1.93-2.00/GJ** (based on average revenue in year 1 divided by pipeline input flow and escalated by CPI), or their general equivalent, should be the result of the application of the Gas Code provisions to this Access Undertaking.

16. Economic Development Tariff

WMC notes that the GGT submission refers to the Economic Development Tariff (EDT) which was floated in September and October 1999. It was intended to promote the use of the GGP to new users. The principle of the EDT is that it was to provide a substantially reduced tariff to new loads in order to stimulate resource development projects. The reduced tariff would apply to greenfields resource projects and expansion of existing projects, for a 'honeymoon' period of 3-5 years.

WMC are not supportive of this initiative and we see the proposed tariff as discriminatory against existing customers. We believe it is unjust to expect the existing customer, such as WMC, to subsidise new entrants into the area.

17. Conclusions

WMC is the major customer of the Goldfields Gas Transmission (GGT) pipeline system - being a consumer of natural gas from the Southern Cross Energy gas and power supply systems which now supply the Mt Keith/Leinster and Kalgoorlie/Kambalda operations. WMC was the largest participant in, and Manager of, the original GGT Joint Venture which developed the GGT pipeline system

WMC's view is that the proposed Access Arrangement is significantly deficient when measured against the requirements of the Gas Code; is not in the public interest and therefore should not be accepted by O*ff* GAR.