

**GGT**



G O L D F I E L D S

G A S

T R A N S M I S S I O N

**REVIEW OF THE GAS ACCESS REGIME**

**Submission to the  
Productivity Commission**

**ON**

**ACCESS REGULATION ISSUES**

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## Table of Contents

1.0	Introduction .....	3
2.0	Summary.....	3
3.0	Gas Code Impact – The Need for Quantification.....	5
4.0	Shortcomings of the Gas Code.....	8
4.1	Conclusions of Previous Inquiries Reinforced.....	8
4.2	Impact on Prospects for Future Development.....	8
4.3	Other Conflicts with Regulatory Objectives .....	12
	Other Aspects to the Regulatory Cost Burden .....	14
5.0	Suggested Changes to the Code .....	16
5.1	Threshold Issues .....	16
5.2	Promotion of Development .....	22
5.3	Other Public Interest Issues.....	25
6.0	Regulatory Guidance Issues .....	27
6.1	Definition of the Role of Regulators .....	28
6.2	Need for Guiding Regulatory Principles.....	32
7.0	Conclusion.....	38

## **1.0 Introduction**

Goldfields Gas Transmission (GGT) operates the Goldfields Gas Pipeline (GGP) which extends 1380 kms from gasfields in the north-west of Western Australia to Kalgoorlie. Commissioned in 1996, before the introduction of the National Gas Access Regime (the Gas Code), it delivers gas to a small number of major mining and processing ventures in the Pilbara, Northern and Eastern Goldfields regions. The gas is used primarily for power generation.

The GGP was constructed pursuant to an Agreement with the State Government, which was ratified by the Goldfields Gas Pipelines Agreement Act 1994 (the State Agreement). When the Gas Code was introduced, the GGP was included on the list of covered pipelines.

In March 2003, following a protracted and difficult experience with the Western Australian Regulator and the Gas Code process, GGT submitted an application to the National Competition Council (NCC) seeking revocation of coverage.

The purpose of this submission is to draw upon GGT's experience with the Gas Code and its processes, to provide a critique from a Service Provider's perspective of its alignment to its objectives and its practical application, and to suggest and justify some possible improvements. GGT also intends to make other submissions to the Productivity Commission (the Commission) in regard to other specific issues where it considers a more particular focus is warranted.

In the time available to it (and within its own resource constraints), GGT has attempted to address the more salient issues it considers warrant the Commission's attention during the preliminary round of its inquiry. In making its submissions to the Commission, GGT anticipates that it may raise issues in regard to which the Commission might wish to obtain further information, substantiation or views. On the other hand, GGT may omit to make reference to an issue in regard to which the Commission might wish to solicit comment or evidence. In regard to both situations, GGT would be happy to provide further details at the Commission's request.

## **2.0 Summary**

From the very beginning of the development of the Gas Code, it was a Competition Policy priority that reform of the natural gas sector should establish a regulatory framework which would facilitate nationally consistent third party access to transmission and distribution pipelines. The Gas Code that has subsequently evolved, and at least as significantly, the manner in which that code has been implemented, very strongly reflects the specific wording, if not the actual intent, of the priorities and assumptions upon which it was founded.

As with any Grand Plan however, there comes a time during the process of its implementation, when the "gaps" in the assumptions underlying the original plan – and the nuances of reality – need to be accommodated if the Plan is to have any hope

of being fully implemented or more importantly of bearing the intended fruit. The current review of the Gas Code by the Commission is a welcome opportunity for this "reality check".

Since the Gas Code came into effect, regulators have been faced with the task of sorting through all manner of conflicting objectives and advice, while at the same time trying to climb the steep learning curve of understanding how an industry based around something so apparently simple as conveying gas through pipework, can be so technically and commercially complex. For them and the theoretical economists (and lawyers) upon which they have come to rely, this review is timely. Perhaps this is also true for those Service Providers who represent that portion of the industry that has been so recently spun off from its former government ownership and protected franchise, for whom the imperatives of Private Enterprise are themselves novel. It is apparent that much of the underlying emphasis of the Gas Code was intended for them.

However, for those Service Providers who have always been Private Enterprises – whether or not they have also formerly enjoyed positions of economic monopoly or are long used to dealing with the realities of competitive pressure in its many forms – the Commission's review of the Gas Code is very much overdue. For these companies, the commercial considerations of competitive response and/or the need for efficient (at least in a commercial sense) investment of available capital – the very forces which governments seek to harness when they privatise public utilities – are already realities. And they are realities which these Service Providers have had increasing difficulty in reconciling with the divergent objectives, mounting cost burden (in time and money) and growing intrusion of regulatory "central planning" which they have experienced under the Gas Code.

Much of the problem has stemmed from the objectives underlying the Gas Code as currently expressed. The most significant of these problems are:

- 1) An overstated emphasis on the intended outcomes of the regulatory framework rather than upon the establishment of circumstances which should lead to the economically sustainable realisation of those outcomes,
- 2) An unsubstantiated reliance upon the simplistic economic dogma that reducing prices for a good or service will inevitably lead to a greater demand for that good or service AND that the good or service will continue to be supplied at any price,
- 3) A lack of any objective guidance in regard to promoting development or essential investment,
- 4) A failure to give recognition to distinctions between the different types of infrastructure and investment risk characteristics which exist within the industry sector, or any recognition of the likely merits or otherwise of regulatory intervention in terms of whether the subject of regulation is essential infrastructure of national significance, and,
- 5) An implementation focus which interprets "national consistency" to mean a narrowly confined set of regulatory precedents imposing a "lowest common denominator" benchmark, as opposed to ensuring that regulatory outcomes are achievable which are relevant and appropriate

to specific individual circumstances but not inconsistent with the national framework.

Compounding the failure of the Gas Code to provide appropriate guidance, is the manner in which the continued development and interpretation of the Gas Code has evolved. The intensive involvement of regulatory authorities in defending their own interpretations and seeking to set the agenda in public policy debate, seems to have resulted in the adoption of bitterly polarised philosophical positions. While on the one hand, regulatory authorities decry the ability of an elected government minister to be able to make "independent" regulatory decisions on the basis that he or she is accountable to the electorate, regulatory authorities themselves openly collude in defence of the scope and scale of their authority, and the sanctity of the regulatory precedents which they themselves have established. Whatever failings of the Gas Code itself translate into regulatory uncertainty, provide apparent opportunities to game the system, and have other effects which pervert the intentions of competition policy reform. The approach adopted to date by regulatory authorities does nothing to engender confidence in the regulatory framework.

Clearly, whatever other changes to specific provisions may be necessary, if the Gas Code is to be an effective tool in achieving the objectives of competition policy reform, significant guidance in regulatory implementation is also essential.

Various aspects relating to these issues are discussed in the following sections which deal with the impact which the Gas Code has had, a critique of its shortcomings, followed by suggested improvements and finally a discussion of the need for regulatory guidance.

### **3.0 Gas Code Impact – The Need for Quantification**

In GGT's view, the Commission's review of the Gas Code should include some quantified (empirically based) analysis of the supposed price and/or other competition benefits which may be attributable – this needs to be substantiated - to the Gas Code. This is consistent with the Commission's Scope of Inquiry and should include the quantification of any national economic benefits that may be thought to have been derived but which have to date been only a matter of simplistic theoretical assumption. This will provide the opportunity and evidence to support or refute the simple underlying but unproven assumption that lower gas prices *per se* will lead to greater demand, competitiveness, economic efficiency or any other economic objective.

Of relevance to the inquiry would be an analysis of case studies of individual pipelines which demonstrated open (third party) access pre-existing the Gas Code, with an assessment of subsequent impacts, along with the flow on effects (if any) in upstream and downstream markets. This might provide some substantiated insight into the relevant merits of establishing commercially based open access rather than mandatory price controls in order to facilitate market growth.

A particular emphasis of the Commission's inquiry should be to conduct an empirical study of the impact on final delivered gas prices (before and) since the Code came

into effect, identifying contributory causes and effects. It is critical to note that a clear delineation and quantification is needed of the extent to which any price variations are transferred along, or absorbed, by any particular link in the gas value chain. A similar study should also be undertaken of any upstream industry effects that in any way can be similarly attributed to the introduction of the Gas Code, focussing relevantly on competitive impacts. Without such quantified measures, any present or future assessment of the effects of the Gas Code will continue to rely upon a subjective interpretation and ultimately somewhat arbitrary reconciliation of the dichotomous assertions of academic conjecture on the one hand, and commercial imperatives on the other.

An analysis is needed which identifies the key cost contribution of all major factors of production, for relevant sectors of the economy which consume gas. To the extent that measures to reduce the delivered cost of gas are then shown to be a relevant and effective means by which competitiveness (or any other objective of government policy) can be enhanced, such measures need to be efficiently targeted. This is particularly so given the acknowledged social and financial expense associated with the current implementation of the Gas Access Regime. At the least, a simple analysis of the breakdown of the key cost contributions along the entire gas delivery chain (from supplier to end user) is needed in order to establish where real leverage for cost reductions exist.

Of course, there is a substantial incentive for vested interest groups to provide their own analysis of the impacts of regulation – whether this be regulatory agencies defending their authority or industry groups seeking to further their own arguments. However, GGT believes that this should be a primary outcome of the Commission's current review, and that the information which will be available to the Commission during the course of its review means the onus must lay with the Commission. In fact, while GGT and other industry representatives can contribute, it is only if such studies are conducted objectively under the authority available to the Commission that they will carry broad credibility.

The issue of credibility is in fact critical. Certainly there is a long standing "credibility gap" between the assertions of regulators and Service Providers and the extent to which each views the others' claims. This is highlighted in oft-repeated claims made by regulatory agencies in evidence regarding extent of pipeline investment which has occurred under the Gas Code. A prime example of regulators' claims of investment made under the Gas Code is contained in *ACCC submission to the COAG Energy Market Review, May 2002, page 44-48*. This example seeks to associate any activity undertaken or even discussed by the gas transmission industry since 1995, with the introduction of the Gas Code. It includes pipelines which were commenced and sometimes even completed prior to the Gas Code being introduced in the relevant jurisdictions (and hence unlikely to have even been more than a minor consideration to the proponents at the time, if it was considered at all). It also includes pipeline proposals that would – if they were to proceed – be competing for the same markets and hence would either be mutually exclusive (that is only one would proceed and counting all of the possible contenders in the list is redundant) or they would be fiercely competitive and one would presume, not subject to the Gas Code anyway.

From the regulators' perspective, the publication by companies and industry associations of such lists of all the business proposals which might happen (usually but not always with the necessary qualification as to the circumstances necessary for projects to proceed), is obviously an indication that all is well. However, besides a need to better interpret the supposed evidence, it is important to distinguish between a supposed lack of detriment caused by the introduction of the Gas Code (which is in fact what such a claim as this example amounts to), from any actual positive benefit arising from the regulatory regime. Certainly, correlation does not imply causation.

However, the most significant problem with such spurious correlations is that, on no more than the strength of their repetition, they form a basis upon which government policy may be erroneously formed. For instance, see the perpetuation of the preceding inaccurate claim contained in *Towards a Truly National and Efficient Energy Market*, (i.e. "the Parer Report")<sup>1</sup>, page 109-111, and page 114.

The true measure that should be applied to the Gas Code is not the extent to which it has had or will have no negative effect but rather the extent to which its effects are positive.

For its part, GGT wishes to draw to the Commission's attention the fact that the GGP was built prior to the introduction of the Gas Code, and in fact under the terms of the State Agreement, it has certain specific exemptions from the application of the Gas Code. More details concerning the GGP and the costs and benefits associated with the introduction of the Gas Code are the subject of a separate submission to the Commission. In addition, GGT considers it relevant to the Commission's review that it should take account of what it took to get the GGP constructed given its particular regional aspects and recent development. Accordingly, GGT has submitted to the Commission, a copy of the GGP Revocation Application (recently made to the NCC) which contains a more detailed discussion of these circumstances. From any perspective, the GGP can certainly not be included in any list of investments attributable to the introduction of the Gas Code.

Moreover, GGT wishes to draw to the Commission's attention the fact that for the development of the GGP, many factors had to be brought together in a way which is inconceivable under the Gas Code. The conclusion is that under the Gas Code as it stands to date, the GGP (or a future regional pipeline facing similar complexities) would not be built. While this issue relates strongly to a current deficiency in the stated objectives underlying the Gas Code (the subject of a separate submission by GGT), it nevertheless raises the question as to how such an outcome as this serves the regional or national interest.

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<sup>1</sup> GGT notes that there appears to be two final versions of the Parer Report in circulation, the only difference between them appearing to involve page layout and hence pagination. Page references throughout this submission are in reference to the version identified on page 2 of the report as "ITR 2002/133".

## **4.0 Shortcomings of the Gas Code**

### 4.1 Conclusions of Previous Inquiries Reinforced

That problems appear to exist with various aspects of the Gas Code was a significant issue identified by the Commission in its Review of the National Access Regime, concluded in September 2001. For the most part, the relevant conclusions arising from that review were associated with the macro effects of the outworking of the Gas Code, with some acknowledgment that some of the problems are possibly attributable to the stated objectives underlying the regime. The Commission's conclusions from that review are now two years old and a number of significant regulatory developments have subsequently occurred, including (amongst other things):

- (i) The growing flight to revocation (of coverage) of gas delivery infrastructure, for which the Gas Code imposes significant costs without any compensating benefits and for which, under even the briefest consideration of the merits of coverage, it would never have been justified,
- (ii) A number of successful legal appeals by Service Providers against regulatory decisions, processes and interpretation, and,
- (iii) Growth in the solidarity of regulatory authorities throughout Australia, with regulatory precedent (in terms of everything from numerical parameter values to wider issues of interpretation) being firmly bounded within narrow and strongly defended ranges, supported by a growing number of commissioned studies, unsolicited "guideline" publications and numerous (expensive) self-asserting regulatory conferences.

However, the overall effect of these developments has been to merely add weight to the conclusions drawn by the Commission two years ago that there are substantial problems which seem to be associated with the Gas Code access regime. Instead of the passage of time demonstrating that the "bugs" are being ironed out of the Gas Code (as regulators have claimed), what the intervening developments have actually demonstrated is that the regime is considerably more costly and inefficient, the benefits (if any) likely to be more ephemeral, and the implementation even less objective than was previously evidenced.

It is GGT's view that the conclusions of the previous review into the National Access Regime, as well as the findings contained in the Parer Report of November 2002, should be taken as the basis upon which the current review can look to build. Except by way of ascertaining the extent to which the situation under the Gas Code has worsened, and in the interest of exploring the finer detail as to the nature of the problems which need to be addressed, there is no need to revisit the conclusions of those previous inquiries.

### 4.2 Impact on Prospects for Future Development

That problems continue to exist with the Gas Code – particularly its effect on investment – is evidenced in the wide acknowledgment (including by regulatory



authorities, particularly the ACCC and the NCC) of the likelihood of Service Providers choosing to opt for an Access Undertaking in preference to the Gas Code, especially in regard to greenfields investment. This recognition implies an acknowledgment that industry faces more uncertain and/or onerous outcomes under the Gas Code. As is identified in the Parer Report (page 114), *"for an otherwise marginal proposed pipeline, significant regulatory uncertainty may be sufficient to make the project unviable"*.

The Parer Report goes on to consider aspects of this issue (pages 124-127) and concludes with some recommended changes to the manner in which the Gas Code might be applied in terms of upfront agreements to either avoid the application of the Gas Code, or to lock in parts or all of the terms of access to apply under the Gas Code (recommendations 7.1-7.3, page 130). While this is welcome recognition of the failings of the application of the Gas Code, these recommendations merely seek to circumvent or delay the effect of the shortcomings, rather than to fix them.

This is a matter for serious concern, particularly given that these recommendation appear based on an underlying reliance in the Parer Report (pages 125-6) upon the "Draft Greenfields Guideline" paper issued by the ACCC in June 2002. The Commission should note that the ACCC's Greenfields Guideline is seen by industry as an abject failure to address any of the issues. It contains nothing to engender confidence in the regime and, in fact, it worsens the widely held perception that the ACCC is defending an entrenched, inflexible and highly biased position. It is also informative that the Guideline has not been finalised, remaining only in "draft" form since it was issued over a year ago.

The logic underlying the ACCC's Greenfields Guideline proposal relies heavily upon an ability to "theorise away" investment and indeed regulatory risks which are, in reality, inordinately resilient to being rationalised away. A good example is the proposal in the Guideline (referred to in sections 4.6 and 5.3, and repeating an argument often cited by regulators) that protection is afforded against downside investor risk by a Service Providers' ability to initiate an early access arrangement review (which the regulator can't do) if anticipated loads don't materialise. This serves to highlight the nature and impracticability of the theoreticians' regard to investment risk. In the first instance, it overlooks the limitations of increasing prices in a market which would, in the circumstances, already be demonstrably weak and which would normally be dominated by long term contracts anyway, and ignores the undesirability of such price spikes even if they were possible. Later in the Guideline however (in section 6.3), it is concluded that;

*"the protection is unlikely to come in the form of higher immediate tariffs (which would have the effect of reducing demand further) rather capitalisation of financial losses is the preferred mechanism"*.

No mention is made of the redundant capital provisions of the Gas Code, against which the Service Provider has no protection other than the regulator's economically defined good graces. Similarly, no mention is made of the view that the shareholders in the investment at risk might take of the regulator's unbounded ability to determine their cost recovery strategy.

Given the source of the proposal, it is understandable that it should overlook the fact that just because a Service Provider initiates an early access arrangement review, this does not guarantee by any means that the revised arrangement will be accepted. It merely means that he places himself afresh upon the mercy of the regulator. The Service Provider has no certainty that the proposal he makes will not then be rejected in favour of something which might even worsen his situation, particularly if the regulator perceives a theoretical benefit to society in an outcome which accords with the Pareto principle of economic optimality. As the Guideline makes clear, in the final analysis the regulator is bound to apply the legislative criteria (and by inference, regulatory precedent). More importantly perhaps, if a review trigger did actually result in the Service Provider attempting to charge higher tariffs, then the usual market structure which sees existing customers protected under existing (long term) contracts (at least in so far as transmission pipeline are concerned), would dictate that only potential new customers would see the higher tariffs.

The fact remains that there are significant deficiencies in the Gas Code's current (forward looking) "portfolio" approach to risk and regulated returns (as identified by the Commission in its report on the National Access Regime review, page 312). Hence, while it may be theoretically justifiable to isolate "diversifiable" risk (that is, risk which is project specific) within the Capital Asset Pricing Model (CAPM), to completely ignore it in determining an appropriate rate of return for a specific piece of infrastructure can only have the effect of guaranteeing that regulated rates of return are systematically too low.

Project specific risk is considered to be "diversifiable" on the basis that a company is theoretically able to diversify its investment in other market sectors, such that the varied returns (some higher than the average and some lower) averages out and (in the words of the ACCC's Guideline) "eliminates" the specific risk. However, one issue with this view is that if one follows the logic and, being a gas transmission or distribution Service Provider who is ringfenced under the Gas Code, hold a diversified interest across - but only within - the regulated industry to which one is confined, one can never cover the total risk of your pool of regulated assets. This is because every investment held will have had its project specific risk ignored from the permissible regulated rate of return. One would need to invest in some other unregulated industry or industries – if the ringfencing provisions permitted it – and seek to have inadequate risk weighted returns cross-subsidised that way.

This problem with the logic of the application of the CAPM approach to deriving regulated returns arises from a mismatch in the assumptions underlying the theoretical model, and the practical application to a market that is not characterised by these assumptions.

There is a clear discrepancy between the recognition and treatment of asset-specific risks under the Gas Code, and the sort of treatment which capital investors need to see. In its separate submission to the Commission, GGT discusses the regulatory principles that underscored the construction of the major regional investment in the GGP. This arrangement, the GGP State Agreement, went further than merely addressing the foundation investment risk. It also provided for certain capacity expansion obligations in return for certain "sanctified" protections and a tariff structure which recognised whole-of-life factors (eg. levelised NPV approach instead

of Cost of Service). Significantly, it incorporated the concept of a commercial rate of return (as opposed to the Code's "economically efficient" minimum cost recovery criteria), directly linked to the business risks identified as being specific to the individual project. It is a matter of public record that the former State Minister, under whom the State Agreement was established, observed that the GGP would not have been constructed under the Gas Code. GGT can add to that, that it is patently clear that the provisions made at the time of construction for capacity expansion of the GGP (specified to be 50% above initial foundation commitments) would not have been committed to under the Gas Code.

This is because the Gas Code, besides the obvious problems for investors associated with inadequate rates of return, also contains provisions which engender a second order investment risk which induces "capacity truncation" in any pipeline which might proceed, despite the Gas Code. GGT understands that this effect is exemplified in the South Eastern Australia Gas (SEAGas) pipeline, which has been built without any specific provision for expansion of capacity, as one might have normally expected of a pipeline facing the commercial prospects which might be anticipated in the circumstances of that particular investment.

This is a significant deficiency attributable to the Gas Code, as the effect of "capacity truncation" threatens the ability to realise "*[t]rading of pipeline capacity in secondary markets [which] provides opportunities to increase the efficiency and flexibility of gas transportation*", identified in the Parer Report (on page 115) as being a significant and desirable mechanism in the development of Australia's gas markets. However, without spare tradeable capacity, no secondary market will exist.

Furthermore, these investment disincentives and the lack of spare or readily developable capacity to which they lead, along with the practical effects of the Gas Code's limited mechanism to supposedly remove downside risk to the investor via the ability to invoke an early review trigger and consequently increase tariffs to new entrants, leads to the creation of a "second class citizen" category of gas consumer. Such an outcome is counter to the pro-competitive objectives of regulatory reform, and is patently inequitable.

It should be noted that the "truncation premiums" identified by the Commission in regard to addressing the Gas Code's contribution to investment risk, primarily address the first order investment risk (ie. that new investment will not proceed at all). Although there maybe some flow on effect to redressing the second order investment risk (ie. "capacity truncation" in those pipelines which proceed despite the Code), for the latter issue to be adequately addressed, it requires the "speculative investment" and "redundant capital" provisions of the Code to be removed.

From the preceding discussion, it is clear that there are a number of shortcomings associated with the Gas Code in its present form. In summary, it lacks the ability to:

- Promote new investment
- Adequately derive a rate of return which reflects specific investment risks
- Promote capacity expansion

- Promote construction of spare initial capacity (the failure of which gives rise to inequitable user impacts and reduction or elimination of possibilities for developing Secondary Markets for capacity trading)
- Facilitate regional development
- Provide light handed open access regulation rather than costly, onerous and information intensive mandatory price controls

#### 4.3 Other Conflicts with Regulatory Objectives

In addition to the negative investment impacts it embodies, the Gas Code has provided a significant and recurring opportunity for active and blatant gaming of the regime by existing users.

Of course, it can be difficult to distinguish the legitimate (from an economic policy perspective) attempts by users to realise the intended benefits of regulatory reform from opportunistic gaming behaviour. The potential for such gaming is always a risk associated with the introduction of new economic controls, and where the possible windfall rewards are significant, it will be "economically rational" for firms (or individuals) to pursue whatever opportunities avail themselves. In circumstances where monopoly power historically has manifested itself as a denial of third party open access, the risk of policy objectives being distorted by the potential for gaming of the system by users may well be negligible. However, in other circumstances where non-vertically integrated pipelines that have never enjoyed the monopolistic benefits of a government franchise exist, and where commercially negotiated outcomes already prevailed, the objectives of Competition Policy may already be in evidence. This may not always extend to the ideal of having attained the state of "perfect" competition but it could feasibly be a market characterised by a workable degree of competition. As concluded by the Western Australian Supreme Court;

*"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..."* ([2002] WASCA 231, paragraph 124).

It is important to make this distinction between economically theoretical and pragmatic outcomes, particularly in circumstances where existing users weren't purely price-takers. In some circumstances, existing users (as distinct from *bona fide* access seekers) who were previously instrumental in establishing the tariffs that they pay, either as former parties to the construction of the pipeline or as parties to foundation contracts, have claimed that these same tariffs are unjust following the advent of the Gas Code. Such claims should be considered in the full context of the commercial benefits already derived by the claimants. As well, the alignment of the desired outcomes of the claimants and the real objectives of policy need to be considered, rather than the superficial acceptance of an unhappy consumer complaint. Unfortunately, the traditional consumer bias of regulatory agencies can make it seem quite unnatural for them to objectively evaluate such claims.

The critical issue is that the behaviour of a number of significant users seeking to realise opportunistic gains (as distinct from seeking access) by influencing regulatory outcomes since the advent of the Gas Code, and the extent to which they are encouraged and empowered under the Gas Code to pursue such behaviour, has a distortionary effect on the attainment of the objective of establishing workably competitive markets. It is GGT's contention that some segments of the gas transmission industry already represent the demonstrable attainment of the ends to which Competition Policy and the Gas Code are themselves aimed, with the GGP being a notable example. The gaming opportunities presented under the Gas Code regime have distorted and added significant uncertainty to these pre-existing markets.

Firm behaviour aimed at maximising profit opportunities is itself economically rational and entirely predictable (it is the potential for just such behaviour on the part of Service Providers which underlies the need for regulation of monopolies). However, under the Gas Code an undue bias exists which is counter-productive to the *raison d'être* of the regime. It is clear that much of the basis for this problem stems from a lack of adequate guidance under the Gas Code for regulators in definition and execution of their roles. In some circumstances, regulators have clearly conflicting roles (e.g. the ACCC) and in other circumstances, regulators simply appear to lack clear guidance towards their proper objectives. In the vacuum, they merely defer to the regulatory precedent and established traditional regulatory institution of consumer advocacy. Consequently, as consumer advocates (whether the role is explicit or presumed), regulators welcome and in fact solicit user antagonism towards whatever circumstances pre-exist the introduction of the Gas Code.

This situation also exacerbates the apparent need under the Gas Code for an extremely high information requirement in order for regulators to assess and make subjective judgements concerning all manner of details, ranging from minor contractual arrangements to parent company capital structure. Consequently, despite already high levels and costs of intrusive regulation under the Gas Code, regulators continue to seek even more intrusive and burdensome information gathering powers. This itself imposes an "information burden" upon regulators which, along with the commercial confidentiality issues involved, results in regulators resorting to ever increasing reliance on legal and economic consultants. (It ought to also require regulators to pursue appropriate commercial expertise, unfortunately for whatever reasons, this is one area of growth in the regulation industry which has apparently not developed). The mere volume of information involved in this approach to regulation results in inefficiencies for all parties in terms of the effort and cost involved in collecting, copying, collating, presenting, storing, interpreting and translating the great quantity of information demanded into regulatory outcomes. The magnitude of the information burden and the complexities which arise, further give rise to the prospects for misinterpretation, divergence and increased recourse to litigation and formal appeals processes.

Under the present institutional arrangements, it is little wonder that regulators have continually claimed to have information gathering difficulties. This arises directly from another aspect of the information burden faced by regulators, that the level of detail being considered inexorably leads to highly detailed decisions with explicit regard to matters of micro-management. Obviously greater information requirements will only mean more complexity, intrusion and a consequential level of increasingly

detailed decision making amounting to "centrally planned" or "virtually nationalised" economic regulatory control. This is already in evidence, clearly indicating that the Gas Code is already too intrusive, burdensome and heavy handed.

Another failing of the present institutional arrangements associated with the Gas Code is highlighted by further reference to the issue of the push for greater information gathering powers and reduced accountability thresholds sought by increasingly heavy handed regulators in the National Gas Pipeline Advisory Committee (NGPAC) forum. A number of regulators have collaborated to persistently push forward a proposal to that body (which is tasked with the ongoing maintenance of the Gas Code, including code change mechanisms) seeking specific code changes which would achieve these aims. However, despite having every, and multiple, opportunities under the processes of the committee to make their case for change, they have repeatedly failed to do so. In fact, the extent to which some of the regulatory agencies attempted to raise evidence in favour of their case actually exceeded the bounds of objectivity and in some cases, factuality. However, the failure of NGPAC to be able to dismiss the proposal from its agenda (despite due process), and the retention of the issue for future consideration at working group level, indicates a significant lack of effectiveness in the operation of NGPAC as an oversight mechanism. The common industry perspective is that NGPAC is a "stacked" forum. In any event, it has demonstrated itself to be an ineffective forum for addressing issues, essential to correcting deficiencies in the Gas Code, as recognised in the Parer Report (pages 44-5). Its current credibility accords with these views.

### Other Aspects to the Regulatory Cost Burden

In its analysis of the costs associated with the Gas Code, GGT requests the Commission give specific consideration to two aspects of concern (in addition to merely quantifying the magnitude, which is assumed to be a given task of the Commission). These issues relate to the equity of regulatory cost recovery, and the public liability issues associated with so called "independent" regulation.

There is a widely held view that the costs of regulation are most equitably borne by the beneficiaries of that regulation. GGT agrees with that principle. Under the Gas Code, the direct (financial) costs of regulation arise from both the need to fund the agencies of regulation (i.e. government bodies) and all of their activities, as well as the need for industry to comply with the regulatory process (i.e. compliance costs).<sup>2</sup>

Under the national Gas Code, the Service Provider is permitted to include the reasonable costs of complying with the third party access regime in his proposed access arrangement cost forecasts. The intention is that the costs imposed upon the Service Provider of providing fair and reasonable access (which is presumed to be unavailable in the absence of access regulation) should be passed on to the beneficiaries of the (newly provided) fair and reasonable access. It is clear that the

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<sup>2</sup> There are also other financial costs incurred, for instance by users (as discussed by the Commission in its report on the National Access Regime, pages 421-423) and other interested parties wishing to engage in regulatory debate. However it can be considered that the costs incurred by these parties are discretionary, whereas the costs incurred by regulators and Service Providers are obligatory. Consequently these other costs might be better considered to fall within the category of societal costs.

Service Provider cannot be construed to be a beneficiary of access regulation - theoretically he is either a monopolist and hence was previously maximising profits by "extracting monopoly rents", or he is not a monopolist and does not warrant the cost of regulatory imposition. Consequently, it is the pipeline or network user who is the direct beneficiary of access regulation. Public commentary widely recognises that it is the user who benefits (or is intended to benefit) – hence "user pays".

It is also the objective of the Gas Code (as part of the broader National Access Regime and wider Competition Policy reforms), that society should also be generally better off as a result of its implementation. Hence society, being what might be termed an indirect beneficiary, is intended to share its portion of the costs of regulation through the public funding of regulatory agencies. This too GGT supports as an equitable concept.

However, these basic principles of equity are thwarted in the practical implementation of the Gas Code. This happens in a number of ways, however GGT wishes to highlight the two most significant issues which it faces itself.

The first issue is an inability under the provisions of the Gas Code to directly pass on any cost incurred due to compliance with the regulatory regime. This is because, in practical terms, access regulators have adopted the view that published tariffs under access regulation must be reduced from whatever levels they were established at prior to the advent of the Gas Code. This means that whatever actual compliance costs are incurred by a Service Provider, any attempt to recoup these very real costs in the access arrangement cashflows will be subsumed in the overall revenue reductions mandated by the regulator. Besides violating the fair intention of the Gas Code, the immediate problem for Service Providers is that the revenue cuts calculated by the regulator will be largely predicated on theoretical margins and reductions in "non-cash" items, such as depreciation. In combination with this, many pre-existing pipeline users will have contracts which may mean that they are protected from paying for regulatory costs which are (theoretically) passed on as an element of the transportation tariff. They will therefore avoid bearing the costs incurred in the course of establishing lower future tariffs during the regulatory period when these costs were (theoretically) permitted to be recouped. However they will still receive the benefits of the (assumed) lower tariffs when they subsequently renew their contracts in a later regulatory period.

The second issue for GGT arises as a result of the implementation of the Gas Code in Western Australia, where the costs incurred directly by the regulatory agency (i.e. the government body) are passed on to Service Providers by means of an explicit charge. This could be explained by a view that access regulation is not expected to yield any benefits to Western Australian society other than the direct financial gains that might be achieved by gas transportation users. Unlike situations in much of the rest of the country, in Western Australia the majority of these beneficiaries are likely to be large existing corporations. This reasoning aside, these funding arrangements mean that society has been relieved of bearing the direct costs of a regulatory regime from which it is intended that it should bear benefits. In combination with the preceding point in regard to the Service Provider's practical inability to pass on regulatory costs via a component of tariff charges, GGT submits that the consequence of these funding

arrangements is to not only thwart the intended equity of cost apportionment underlying the Gas Code, but also amounts to a form of "tax by stealth".

In consequence of these issues, it is clear that the Gas Code engenders certain unintended inequities in terms of the allocation of the costs of access regulation. Specifically it lacks a mechanism for the explicit pass through of regulatory costs to the beneficiaries of access regulation. Given the practical limitations involved in Service Providers' ability to pass on the costs of regulation within their tariff structure, the only practical solution is for there to be an entitlement to pass on these costs via an explicit charge in much the same way that the Western Australian Regulator does.

A further matter relevant to the issue of equitable cost impacts, as well as the wider ramifications of the Gas Code, needs to be consideration of relativity in terms of commercial consequence. The fact is that the costs involved in delivering gas to consumers represent only a fraction of the operating cost of those who benefit from access to this cleaner, cheaper and generally more reliable form of energy. For the sort of resource projects serviced by the GGP (a pipeline which is somewhat unique in the limitations of its available economies of scale<sup>3</sup> relative to other transmission pipelines in Australia), this is seldom as high as 15% (according to some claims) and typically lower than this figure. If capital funding issues are taken into consideration, the fraction of overall cost is considerably smaller. However this cost, seen by the user as but a portion of his operating budget, represents for a gas transmission pipeline, the entire revenue of the Service Provider. Consequently, the exposure to regulatory uncertainty in regard to the extent which cashflows may be affected is, for a Service Provider, approximately an order of magnitude greater than for the downstream beneficiary.

## **5.0 Suggested Changes to the Code**

### **5.1 Threshold Issues**

It is GGT's fundamental assertion that coverage under the access regime should be premised on the need to demonstrate market failure. In this, the benchmark for failure needs to be one that is relevant to the real world and not reliant on theoretical constructs. In consideration of this, the Commission should be guided by the discussion concerning "workably competitive markets" contained in the decision of the Western Australian Supreme Court ([2002] WASCA 231).

Critically, there is a need to distinguish between open access (especially in circumstances where it existed prior to advent of the Code) and what "access" under the Code entails, in terms of incremental accessibility and costs. The emphasis needs to be shifted back towards an ability to negotiate commercially sustainable outcomes, consistent with the original Hilmer intentions.

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<sup>3</sup> These limitations in available economies of scale arise from the physical characteristics of the pipeline – it has a reasonably small capacity (currently around 100TJ/d) but is very long (1380km) – and the nature of the market it serves – a small number of large regional users dispersed over a wide geographical area.



The access regime needs to give appropriate recognition to the relative importance of promoting growth in gas delivery infrastructure rather than merely attempting to promote declining price paths (primarily for the benefit of existing consumers with existing access to gas). The primacy which should be given to this objective was alluded to in the Parer Report. For example (on pages 109-112):

*"Significant new pipelines have dramatically enhanced gas supply flexibility and therefore promoted the development of a more competitive market."*

[...]

*"The combination of new pipelines and new suppliers is bringing greater competition to most markets." ... "The degree of supply competition in Australia's eastern markets is still weak – particularly compared to Western Australia. This is reflected in lower gas prices in WA." ... "Regulatory regimes implemented in the gas transportation sector, while freeing up access to existing pipelines,<sup>4</sup> are claimed to be impacting adversely on investment.<sup>5</sup> New pipelines will be needed if new basins are to be able to supply markets."*

The imperatives of promoting new infrastructure for regional areas and the development and competition benefits which are derived, are succinctly discussed in section 9 of the Parer Report (pages 145-8). The Government of Western Australia recognises the importance of this, and in an attempt to solicit feedback from interested parties, it released a recent discussion paper entitled "Regional Gas Reticulation" (November 2002, page 3), in which the Government listed (at the top of its list of objectives) the desire to;

*"encourage and facilitate the development and operation of financially viable gas reticulation in areas of the State not presently reticulated" as well as to "promote regional development in Western Australia".*

There are those who claim that the Gas Code has promoted regional development through direct investment in infrastructure and provision of competitively priced energy. However, the Western Australian Energy Minister, during the Second Reading of the "Energy Legislation Amendment Bill 2003" in the Legislative Assembly on 12 August 2003, recently made reference to the failure of the Government's initiative to solicit stakeholder interest in the expansion of gas reticulation:

*"The member for Stirling asked a couple of interesting questions. He referred to the reticulation of natural gas in regional areas and asked whether the Government intended to be active or passive in the matter. The legislation will provide an opportunity for the Government, following a competitive tender*

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<sup>4</sup> That the Gas Code has freed up access to existing gas pipelines is a dubious and unsubstantiated assumption which, it is to be hoped, the Commission will investigate in the course of its inquiry.

<sup>5</sup> The Parer Report goes on to identify that there are strong opposing views as to the impact that the Gas Code is having on investment. However it is hoped that the discussion in section 3.0 and 4.2 of this submission will, along with the facts revealed in the course of the Commission's inquiry, contribute to dispelling any misconception that the Gas Code does not represent a barrier to future investment and development growth.

*process, to offer an exclusive franchise for the reticulation of natural gas in a regional area. That may be required to persuade the private sector to take up the opportunity of providing natural gas to a regional centre.*

*There is the risk that if the private sector thinks that a second operator could step in, it will not be prepared to make the investment up-front. We sought feedback from industry and regional areas about what would be required to enable more centres to be supplied with natural gas. I am a bit disappointed with the results from the communication with stakeholders. It appears that there is not huge industry interest in reticulating natural gas to regional centres, except in a limited number of centres. The Government may have to reconsider how it approaches this issue. I have sought advice on the level of government assistance that may be required to make the supply of natural gas to regional centres a commercially feasible outcome. There is no reason that infrastructure for the provision of natural gas reticulation should not be considered in the same way as roads or other infrastructure. The Government does not have a lot of capacity, given its borrowing limits in this area. However, I see no reason that natural gas reticulation should not be set against other priorities when we decide what should happen. I have no idea whether government assistance will encourage the private sector to become involved, about the level of government assistance that would be required and whether it would be economically feasible. In view of the less than enthusiastic response from the private sector to the Government's initial consultation, I have sought advice on this matter."*

Clearly the Gas Code has not been (and is not expected to be) instrumental in promoting the Government's desire to expand the reticulation of gas in Western Australia. It is telling that the Minister also alludes to the possible need to grant monopoly franchises and/or subsidies in order to find a pragmatic means by which the benefits of expanding access to gas infrastructure might be achieved. Interestingly, Hansard records that the Minister follows on from the preceding statement, in answer to a question regarding the investment risk for pipeline investors associated with the Gas Code, by alluding to revocation of coverage as a solution. This would scarcely seem indicative of a view that the application of the Gas Code promotes investment.

Furthermore, as we have discussed, the argument presented in favour of the effect which the Gas Code has had in "promoting investment", is in reality an argument that "it has not had a detrimental effect on investment" – which is hardly the same thing as actually promoting investment. In any event, it is apparent that the argument is based on spurious examples and an erroneous correlation and interpretation of the facts. For instance the GGP is cited as one example that substantiates this claim. However, it is clear that the construction, operation and established open access to the GGP, along with the competitive energy benefits it introduced along its route, owe nothing to the subsequent advent of the Gas Code. Moreover, the GGP could not have been built under the conditions that now prevail under the Gas Code access regime. In fact, according to the feedback received by GGT from gas suppliers, shippers and consumers, the introduction of the Gas Code has resulted in increased levels of commercial uncertainty which go beyond only that of the risk to future pipeline investment alone. Market uncertainty associated with the advent of the Gas Code has made it difficult for companies to determine an appropriate basis upon which to make

commercial decisions and given rise to a general deterioration in customer-client relationships. In short, the claims that defend the Gas Code in regard to its effects on regional development are ill founded, misleading and wrong.

This is significant as there would appear to be a greater economic downside to society from a lack of timely investment in infrastructure occurring, than from possibly wrong (or at least initially wrong) price signals, as discussed in section 11 of the Commission's Inquiry Report on the National Access Regime review.

The development of regional energy competition involves a great many complexities – many unique to specific regions. GGT has invested considerable effort in seeking to understand and document these complexities (for both commercial and regulatory purposes) and included a substantial amount of analysis of various aspects in its Revocation Application for the GGP, currently before the NCC. Many issues discussed in that document also have wider relevance to understanding the evolution of regional energy market development and complexity, and in that context, GGT has separately submitted a copy of the application to the Commission for consideration in its inquiry.

A significant fact that has emerged is that in the evaluation of foundation risks to regional greenfields resource developments, feasibility studies to establish project viability routinely make much of the proximity of existing gas transportation infrastructure (if in fact it does exist). This is seen and usually advertised as being a substantial project advantage, mitigating costs and risks. However, GGT's experience, supported by literature searches, indicates that whereas the feasibility studies for these projects seek to evaluate all of the risks which might be anticipated to affect project viability or profitability, they seldom - if ever – include sensitivities to delivered gas price, let alone gas transportation tariffs.<sup>6</sup> This is unlikely to be a universal commercial oversight, as the factors that are reported in such sensitivity analyses include a broad range of considerations, and would typically represent a subset of only the most significant impacts out of a much larger range of factors evaluated.

One is left to the conclusion that new regional (energy consuming) projects are affected more by the availability or otherwise of accessible regional gas infrastructure than (within what would normally be the reasonably well defined range and known bounds of costs) the price of the gas delivered. Clearly, this is not to say that the delivered price of gas is not a factor to be considered, nor that gas can compete at any price, or that any price can be charged for its delivery. The point is that the threshold consideration for such projects is whether or not access to gas delivery infrastructure exists – it is a considerably lower order consideration as to where exactly within the bounds of "financial viability" that the gas being supplied is priced.

The significance of the consideration of the extent to which development is promoted through the wider geographical penetration of gas is such that it should be addressed as a threshold issue in any coverage consideration. In particular, this bears on the

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<sup>6</sup> The evaluation by existing businesses of the opportunity costs associated with changing from one form of energy source to utilise gas instead, provides the obvious exception to this statement – obviously in this case, the delivered cost of gas is critical to the evaluation. However this situation of "project optimising" must be clearly distinguished from the greater economic objective of establishing new projects, and hence promoting development and the expansion of infrastructure.

rationale underlying the criterion (b) "monopoly" test in the coverage criterion under the Gas Code. As this is concerned with "efficient investment in infrastructure", it might be that criterion (b) lends itself to be recast in terms of the extent to which development (or the incentive to develop) is promoted. At the very least, coverage criterion (b) needs to be modified to recognise competing energy forms and hence substitute services, consistent with section 9 of the Parer Report. The modification of criterion (b) to consider both competing forms of energy and the extent to which gas penetration is promoted, would be wholly in line with the relevant conclusions of the Parer Report in the last two points under Proposed Solutions at the end of section 9 (page 148).

For greenfields pipelines however, the coverage criteria need to shift the present emphasis away from supposed market power and overcome the Gas Code's present inability to consider project specific risk, moving towards an assessment of expectations of profit, risk and societal benefit associated with the specific investment. Together, these considerations may establish a valid threshold for considering the applicability of a regulatory exemption for a defined period in order to address the greenfields investment issues discussed in section 11 of the Commission's report on National Access Regime review, and section 7 of the Parer Report.

Both the Commission's review of the National Access Regime (recommendation 11.3) and the Parer Report (recommendation 7.2) recognised the negative effect of the Gas Code on the promotion of investment. Fixed term regulatory free periods are one mechanism by which the negative effects of the Gas Code might be deferred. The Parer Report recommendation postulated a 15 year regulation free period followed by evaluation of a coverage test. In GGT's view however, to establish a one-size-fits-all regulatory exemption of 15 years will not be long enough in certain significant circumstances and the logic by which that duration was derived was entirely arbitrary. In addition, any such regulation free period should also be applicable to extensions and expansion of both exempt and existing pipelines – to be effective all investment necessary to expand into and access new markets should be promoted.

Certainly the proposal for "non-binding" coverage guidelines by regulators would not be acceptable to investors. However GGT notes that both the Commission in its previous review (recommendation 11.1) and the Parer Report (recommendation 7.1) propose that rulings on whether a proposed investment would meet the relevant coverage criteria should be obtainable and be both binding and perpetual (subject to a change in circumstances and an appellable revocation process). This is a significant protection against an access regime which threatens to impede investment in essential infrastructure.

In fact, a major failure that currently exists in the Gas Code, is a failure to recognise the critical importance of the infrastructure affected by the regime. GGT would contend that in assessing the extent to which coverage (or an exemption from coverage) is warranted the Gas Code should be amended to include a "national significance test". This exists in the declaration criteria under the Trade Practices Act, and its absence from the Gas Code appears to be a contributory factor in the widespread misapplication of initial coverage (and hence unwarranted cost impost) as evidenced by the growing number of successful revocations of coverage assessed by the NCC.

As a matter of similar significance, GGT notes the Commission's conclusion in regard to the "competition test" for relevant coverage which recommends that coverage should only be warranted where it can be reasonably established that it would deliver a "substantial" increase in competition in a market other than that of the facility being covered (recommendation 7.1). GGT is strongly of the view that coverage should be predicated on delivering effects that are non-trivial and that the wording of the Gas Code should unequivocally state this. However, in line with the preceding observations, GGT is of the view that criterion (a) of the Gas Code should articulate the coverage threshold in even stronger terms such that "access should be essential to the promotion of a substantial increase in competition".

These are significant threshold issues and while dealt with only lightly here, they are pursued in greater detail in a separate submission to the Commission from GGT.

A further issue concerning the established thresholds for access regulation, is the matter of relevance to specific market circumstances. Presently, the Gas Code makes no meaningful distinction between transmission pipelines and distribution networks concerning coverage requirements or regulatory objectives. Yet the distinction required between transmission pipelines and distribution networks with respect to such things as the nature of the investment risks concerned, scope for economies of scale, and characteristics of the markets served are substantial. Compounding this is a failure of the Gas Code regime to recognise the differences that often exist in maturity and types of markets (for example, urban sprawl and mixed commerce in a major city versus regional resource based depletion projects having finite lives). Section 9 of the Parer Report identifies the need to specifically promote infrastructure investment to achieve greater access to gas in regional areas, making certain distinctions in the different needs of regional development. However, there is a general lack of appreciation of the vastly different nature of the investment risks associated with constructing regional infrastructure, which can involve significant investment uncertainties relating to future demand growth. One only has to consider the variation in population levels of regional gold mining centres since the 1800's to begin to gain an appreciation of the vagaries of the demand for services to such regions. The Gas Code provides no guidance as to the requirement to recognise such issues, either in regard to the different thresholds which need to be established for coverage or for the subsequent application of the regime. This has been confused and compounded by the use of inappropriate international regulatory comparisons, commissioned and relied upon by regulators. Often, the studies involve uncontextualised analyses of mature, extensively developed infrastructure serving densely populated and largely homogenous markets linking multiple sources of supply. However, these studies need to be based on relevant analogues of the disparate market types which exist within Australia in terms of maturity, geographical disposition and usage diversity, etc. If such factors are not taken into account, as has been the case, the conclusions drawn from such comparisons become either partially or completely meaningless, and application of such conclusions dangerous.

Under the present implementation of the Gas Code, recognition of the practical range of commercial risks faced across Australia and the nature of the investment risk premiums necessary to compensate for these risks is completely absent.

## 5.2 Promotion of Development

As discussed in Commission's report on the National Access Regime review (box 13.1 on pages 354-5), use of the CAPM approach to establishing the rate of return underlying permissible tariffs, with no subsequent adjustment for 'diversifiable' risk "*run[s] counter to accepted business practice*". This, along with the lack of appropriate objective guidance and consequent approach to implementation, has resulted in regulated rates of return under the Gas Code that are systematically too low. Unfortunately, the Commission's optimism that regulators are "*now more aware of these issues*" and that therefore "*it is likely that, over time, some [of these issues] will be resolved*" does not seem to be well founded and in fact, the evidence seems to strongly contra-indicate this hope. Regulators' statements that regulatory rates of return have been allowed in the upper end of the permissible (or what they sometimes refer to as the "feasible") range indicate that regulators are defending an entrenched position despite the implicit<sup>7</sup> acknowledgment that returns are too low. This would seem to indicate that, if the current prescriptive form of access regulation under the Gas Code is to be maintained, there is a need for yet even stronger and clearer regulatory guidance as to;

- (i) the estimation of what might constitute an appropriate range of returns,
- (ii) the need to incorporate 'diversifiable' (ie. project specific) risks into regulated rates of return, and
- (iii) the manner in which this should be done.

Related to these issues, the Gas Code needs to address the need for specific regulatory incentives (not just mere removal of regulatory risk) necessary to promote the construction of spare capacity in new pipelines that do proceed under (or despite) the Gas Code. In this regard and as a basic premise, to the extent that regulators should rely on economic theory, the concept of "efficient costs" needs to at least be cast in a "long term" perspective and at least consistent with the future timeframe of the policy objectives underlying Competition Policy. Without engendering an element of "commercial sustainability" into the outcomes of the Gas Code, the current emphasis on short term "efficiency" seems likely to undermine the long term objectives of policy.

Currently however, the concept of commercial sustainability appears to be a consideration addressed by regulators only in terms of the acceptability in economic theory of "market corrections". That is, regulators are quite comfortable with the prospect of large capital write-downs (meaning investors have their funds all or partially written off) as infrastructure assets are revalued in line with newly established "economically efficient" valuations determined by the regulators themselves. Potential new infrastructure investors may view the commercial sustainability of such outcomes in a somewhat dim light, but of course, it does have the convenient advantage of reaffirming the accuracy of the regulator's asset valuation in the market. The political sustainability of such behaviour is also not likely to be

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<sup>7</sup> The regulators' argument is not usually so much that returns do not sometimes warrant being higher to accommodate an acknowledgement of greater risk but that the extent of that acknowledgement must be bounded by the upper end of the permissible range.

long lived however, once the inevitable social consequences begin to become apparent.

Rather, at a minimum, regulators should base their evaluations of new infrastructure capacity of the type characterised by gas transmission pipelines upon consideration of whole-of-life issues, including a distinction between commercially economic life and possible technical life. Without such considerations, problems associated with investment risk will persist. This is particularly so in respect to pipeline investment where the prospect of initial capacity truncation will mean that even those pipelines that do proceed will not be designed to accommodate future market growth, capacity trading or realise otherwise characteristic future declining economies of scale.

Interestingly, in the Commission's report into the National Access Regime review, it discusses concerns about inefficient "premature investment" in infrastructure (chapter 4 and pages 288 and 307). It is GGT's contention that this issue can be addressed in terms of comparing the relative economic impacts of "premature" investment in initially spare capacity, relative to the prospect of insufficient or delayed investment arising from the Gas Code as it presently stands. It would seem logical that early investment in gas delivery infrastructure is more likely to promote gas demand and up/downstream development than lower published prices for capacity that is non-existent.

In fact, as a company solely engaged in gas transmission, GGT finds it odd to be concerned about the economic inefficiency of premature investment in pipeline capacity. Such a concern appears to ignore the commercial need for forecast demand to sufficiently underscore predicted revenue requirements. In other words, initial spare pipeline capacity (which because of the declining economies of scale associated with it provides the Service Provider with the incentive to promote usage) will tend to be commercially "tuned" to the anticipated prospects for demand growth. A balance between the risk of initial over commitment of capital and the future risk of under efficiency of committed capital is required, and the resolution will be found on a commercial basis. This is just the sort of free market based efficiency that economists promote as being a benefit of the privatisation of government utilities. Perhaps the concern addressed by the Commission reflects in some way, a residual government utility perspective but in any event, it runs contrary to the necessity for the Gas Code to not distort the market price signals which lead to timely investment. This aspect of investment efficiency is alluded to in the Parer Report (on page 115 under a discussion of the importance of Tradeable Pipeline Capacity) with reference to the removal of price caps in order to *"allow potentially valuable market signals regarding when capacity should be augmented"*.

The point of tension with concerns about inefficient "premature" investment is that just such an investment can be warranted in order to provide initial spare pipeline capacity to accommodate market growth, while capturing available economies of scale in construction and future market growth. The Gas Code needs to be modified to remove those provisions that dis-incentivise pre-investing in excess initial capacity. The objective needs to be defined in terms which promote the offering of future economies of scale under prices which are constrained by the market. The risk of "capacity truncation" needs to be avoided and commercially sustainable, long term "efficient investment" promoted.

These issues also have relevance to consideration by the Commission regarding possible modifications to criterion (b) of the coverage test, particularly in regard to the promotion of "efficient" investment in essential infrastructure. In this regard, as well as in the context of the specific implementation of the provisions of the Gas Code, depreciation considerations (presently focused on consistency with "efficient market growth") need to be able to accommodate the prospect of uncertain markets. As already discussed, the Gas Code currently adopts an implicit simplistic assumption of perpetual market growth, regardless of market context. It does not recognise circumstances where, for instance, regional resource-based downstream markets, or finite and possibly strandable upstream supplies, have the prospect of diminishing or varying greatly, rather than always growing. Neither coverage considerations, rates of return decisions, nor depreciation provisions under the Gas Code adequately provide for such uncertainties or uniquely regional circumstances. Private infrastructure investors however must reflect these considerations, as must the risk premiums which they factor into their required rates of return (either explicitly or implicitly) when they negotiate the foundation contracts which will underscore a new development, or establish their long term tariff strategy for a greenfields project.

The Gas Code needs to give adequate recognition to the advantages (and indeed, primacy) of "market based pricing", particularly with relevance to greenfields developments and/or consideration of past foundation contracts. Under the current implementation of the regime, some recognition is in fact given, however, as indicated by ACCC comments in its submission to the COAG Energy Market Review, May 2002, (on pages 52-3), regulators can misconstrue meanings and intentions such that the result can hardly be termed "adequate recognition". For example:

*"In relation to the Gas Code a reference tariff operates as a benchmark tariff for a specified reference service while meeting the Gas Code objectives, which includes replicating the outcome of a competitive market. Accordingly, in principle a 'market based' negotiated tariff would only be expected to be greater than a reference tariff to the extent that the service provider could exert market power."* (page 53).

This conclusion reflects a strong and worrying presumption of regulatory omniscience. If the derivation of a reference tariff did in fact replicate "*the outcome of a competitive market*" with all of its real world complexities, then the ACCC's conclusion might also be correct. However, circular logic aside, given that the Gas Code (amongst other failings) embodies a methodology for deriving a rate of return on invested funds which is, as discussed, incapable of recognising project specific risks, quite clearly the ACCC's conclusion is at best misguided.

A significant factor in the establishment of market based pricing during the initial pre-construction stages of a new pipeline project is the consideration of the competitive effects of substantial countervailing market power held by the various stakeholders. Although the ACCC refers to this, it then merely dismisses its relevance in the conclusion cited above. However, as the Commission points out in its report on the National Access Regime review (on page 280):



*"Conversely, dealing with truncation of returns associated with the possibility of project failure raises more significant problems. The biggest of these stems from the fact that while incumbency in essential infrastructure markets sometimes confers the potential to exercise market power, new investments to provide these services are often contestable at the construction phase. That is, there are no barriers to entry at the construction phase, meaning that the behaviour of the firm that actually builds a facility will be influenced by the threat of competition."*

The point is, that in the initial stage, there are no barriers to entry that would prevent the user building his own pipeline, if in doing so he were able to satisfy his own needs at less cost than what the potential Service Provider were able. Alternatively, the user can seek tender prices from competing Service Providers. If a commercially viable price cannot be struck between the parties, then the deal is not consummated and the investment does not proceed – the pipeline is not viable and investment in it would be economically inefficient and one must conclude that the projects which might have used the pipeline have better alternatives.

This is a situation with which GGT is unfortunately all too familiar in regard to the economics of constructing lateral pipelines to connect existing mining projects to the GGP. Consideration needs to be given to the alternatives available to these mines (for example, ability to lease or purchase diesel-fuelled electricity generation and ancillary plant which can be readily redeployed from one short-lived mine site to another) and the economic vagaries which determine their gas demand and project life. These are competitive and complex factors in determining regional pipeline economics (in this case, of lateral pipelines) for which the Gas Code is ill equipped to give appropriate consideration. Indeed, in contributing to this situation only by way of increased risk through the asymmetric truncation of possible risk-reward premiums, the Gas Code presently only raises the hurdle and reduces the likelihood of any such gas infrastructure investment proceeding.

### 5.3 Other Public Interest Issues

In its Report on the National Access Regime review (on page 307), the Commission expresses the following view:

*"Further, the Commission agrees with participants that where a government allocates the right to build and operate an essential infrastructure facility by competitive tender, that facility should be exempt from (other) access regulation for the period of the tender. Indeed, from a theoretical perspective, such competitive tendering has major attractions in that the role of competition in dissipating any prospective monopoly rents will be manifested through lower prices for access seekers rather than through advancing the timing of investment. In addition, it obviates the need for subsequent regulatory involvement in the establishment of access prices — the source of most of the concerns of both service providers and access seekers. As the NECG noted:*

*The essence of this mechanism is that potential owners of infrastructure are requested to define just how much 'blue sky' they require before committing to the investment. From a theoretical perspective, it facilitates the market mechanism focusing on the most contentious issue (ie the area of greatest complexity), being the nature of the risk associated with the project. This is appropriate given a regulator's inherent informational asymmetry and its inability to accurately assess the cost of capital associated with risky investment. (sub. DR113, p. 21)*

*Competitive tendering is also likely to rate highly against the community acceptability criterion. Not only does it provide some certainty to users about the access prices that will prevail in the future, but it provides assurance that (for the period of the tender) prices will not embody significant monopoly rent."*

In this regard, GGT wishes to point out to the Commission that regulatory exemptions based on competitive tendering need to be cognizant that tenders are usually not, nor should they be, let purely on the basis of lowest price. In many cases there will be other factors which determine who is the preferred and final winner of a tender. Such realities should not nullify the prospect of qualifying for a regulatory exemption, and express provisos may be required in any amended wording in the Gas Code to give specific recognition to this possibility. Foundation contracts in any event should be exempt from access regulation, as the effects of countervailing power will be reflected in the contractual provisions which have under-written the project.

Issues of "community acceptability" referred to, here and on page 287 of the Commission's Report, may be addressed through upfront publicised third party access and pricing criteria for that portion of pipeline capacity in excess of exempt foundation contracts. This might, if the specific circumstances warranted it, be combined with voluntary profit sharing thresholds (ie. once pre-defined third party profit triggers are exceeded). Issues with information (and potentially other administrative difficulties associated with alternate regulatory approaches) could be alleviated by periodic reporting of throughput volumes and costs by users. This type of regulatory monitoring (similar in form to GGT's own reporting obligations under the GGP State Agreement) provide a light handed alternative to intrusive regulatory oversight. In this way, any pre-agreed threshold triggers upon which benefit sharing arrangements depend, could be effectively monitored without excessive complication or cost.

In conjunction, there should also be a requirement under the Gas Code to relate regulatory cost burdens to incentive measures in order to ensure equitable apportionment. As discussed previously, the appropriate disbursement of regulatory costs is an important matter of equity, although it can be complicated by questions of apportionment and practicability. The simple and equitable resolution to the problems of allocation of regulatory costs, is to make express provisions within the Gas Code for those costs (reasonably incurred in compliance with the access regime) to be explicitly passed through to the beneficiaries of regulation. This could be done via an auditable charge that is unrelated to tariff levels. Issues of apportionment would need to be resolved but, as the Western Australian funding arrangements for the Gas Code make apparent, this is no barrier to implementation.

## 6.0 Regulatory Guidance Issues

There appears to be a widespread acceptance by stakeholders that under the current implementation of the Gas Code, greater interpretive guidance is both necessary and inevitable. For example, the following comment was made just prior to the release of the Supreme Court Decision ([2002] WASCA 231) which pointed out errors contained in a regulatory decision that the Western Australian Regulator had made in regard to interpretations of certain expressions and due process specified within the Gas Code:

*"Mr Kolf said that differing interpretations of the gas access code were a source of delays and disputes, and that parties most affected by an access decision would be the ones to test a new code in detail. Litigation could be necessary and helpful, Mr Kolf said, whenever the interpretation of phrases containing the word 'normally' came into dispute and required specific determination."* ("Regulator talks on gas access", Peter Kolf (Executive Director, OffGAR), WA Business News, 8 August 2002, page 14).

As a result of unsatisfactory outcomes under the Gas Code, both regulators and Service Providers have expressed the desire for regulators to be given stronger regulatory guidance, although perhaps for different reasons. The detailed and highly intrusive form of regulation currently engendered by the Gas Code necessitates considerable detailed and contentious interpretation. Perhaps as a consequence, regulators have expressed (and demonstrated) a view of their own inability to move away from regulatory precedents or exercise the considerable discretionary latitude available to them in ways other than that which accord with existing precedent.

If such intrusive regulation is to remain, or indeed if any degree of scope for eventual regulatory withdrawal is to be introduced, clearer regulatory guidance is required. Preferably this can be achieved without the burden of increasing the requirement for expensive and time-consuming legal interpretation (providing this does not involve any diminishing of appeal rights). To the extent that regulators have discretion, or the Code affords flexibility, clear and unequivocal guidance appears to be needed as to how these can and should be applied. This is particularly needed in order to overcome the potential danger of a lack of common sense being reflected in regulatory outcomes, as for instance alluded to in the Commission's Report on the National Access Regime review (page 280). The need to provide unequivocal and objective regulatory guidance in order to direct regulatory outcomes towards common sense decisions is necessary to overcome the current barriers to utilising the claimed flexibility of the Code in addressing such issues as investment risk. This is particularly relevant to the conclusions drawn in the Parer Report in its discussion of up-front regulatory agreements (pages 126-7). Unfortunately the discussion in the Parer Report fails to recognise the limitations (whether self-imposed or arising from lack of formal regulatory guidance) which exist in the ability of regulators to utilise the existing flexibility of the Gas Code to arrive at common sense decisions. Without modification to regulatory practices as they currently stand under the Gas Code, these limitations mean the likely failure of recommendation 7.3 and possibly 7.1, put forward in the Parer Report (page 130).

## 6.1 Definition of the Role of Regulators

Recent concerted efforts by the ACCC and the NCC to defend the status quo of the Gas Code have, instead of buoying confidence in the current regime and its implementation, only served to further erode industry and investor confidence with regard to the independence and bias of those agencies. It is not apparent how the Parer Report recommendations for the establishment of a National Energy Regulator would establish a body that could be relied upon to behave in any different manner to that currently envisaged, although the separation of regulatory roles is an essential first step.

A significant challenge for government in revamping the Gas Code, whether or not it includes the establishment of a new regulatory agency, is the issue of establishing the credibility of objective regulatory oversight. A good example of the sort of threats to credible regulatory oversight is provided in a recent speech by one of the commissioners of the ACCC, entitled "Security of Gas Supply in Australia: an ACCC perspective" (27 June 2003). While it might be recognised that this was a speech presented to an overseas forum (the IEA Workshop with Gas Regulators on Security of Gas Supply, in Paris) and may have therefore been intended to represent the rosiest possible view of investment risk in Australia, to the domestic reader it represents an appalling misrepresentation of the true situation. While the paper warrants a full critique to understand the full extent of its misrepresentation of the facts, it is sufficient for this discussion to summarise its content as providing further strong and current evidence of the entrenched views held at the highest levels of Australia's regulatory bureaucracy. Particular reference can be made to section 2.3.3 ("*The ACCC promotes security of supply by allowing adequate returns to pipeline owners*") and section 2.3.3 ("*Investment in pipelines since the inception of the Gas Code*") for evidence of regulatory bias and misrepresentation of issues that have been specifically addressed in this submission. That such views were expressed in the speech without regard or reference to recent government reviews, which have confirmed long held public and industry concerns regarding the regime, or to the current review and the issues raised by the Commission for inquiry, fuels the regulatory credibility crisis.

Of fundamental concern to industry and development proponents is the critical need for a distinction and separation of the regulatory roles of consumer advocate and access regulator. Evidence – should it be needed – of the extent to which these roles are currently merged and confused can be found in a recent speech to the National Press Club by the ACCC's outgoing chairman, entitled "Competition Policy: A Report Card for the last 12 years and an Agenda for the Future" (Allan Fels, 30 June 2003). The overwhelming tenor of this speech demonstrates the view of the nation's lead regulator that the task of the regulator is to be a consumer advocate with a focus on how best to "split up the pie" rather than to bring to bear any consideration of how to "make the pie bigger". The speech also provides a number of indicators as to the extent to which the author sees a need for public policy to be steered by the capable hands of regulatory authorities in preference to being left to industry and elected governments.

It is clear from such evidence (as well as the outcomes of regulatory decisions to date) that access regulators need to be subject to ring-fencing requirements in order to

clearly distinguish their role from the conflicting (but the otherwise valid) role of consumer advocate. In fact, such a requirement is not so far removed philosophically from the requirements under the Gas Code for Service Providers to be effectively ringfenced from other aspects of vertically integrated gas business.

Furthermore, there is a strong need to remove the conflicts that arise from regulators developing strongly entrenched positions through their involvement in public policy debate. The strength of the positions which have developed within regulatory agencies is evidenced in various unsolicited publications issued by regulators, for example, the ACCC's "Draft Greenfields Guideline" and the NCC's more recent "Guide to Certification and Declaration". Neither document could be described as being quite objective.

The extent to which these views might have arisen and solidified as a result of participation in public policy debate is evidenced, by way of example, in the nature, volume and relative contribution of submissions made by regulatory authorities to the Commission's review of the National Access Regime. In terms of quantification, the following table indicates the significant participation and contribution by volume made to that review by regulatory agencies themselves.<sup>8</sup>

#### **Submissions to Productivity Commission on Review of National Access Regime, 2001**

	No.Submissions	Total Pages	Volume %
<b>Total :</b>	126	2467	100%
<b>Contributors :</b>			
Service Providers	37	620	25%
Users	30	600	24%
Regulatory Agencies	8	499	20%
Industry Rep's (SP&Users)	25	388	16%
Government (incl. Other Agencies)	16	218	9%
Academics	10	142	6%

The Commission discussed a number of aspects relating to institutional arrangements in section 14 of its report on the National Access Regime review, although it only touched lightly upon the subject of regulatory authority involvement in public policy development. In regard to decisions relating to coverage, the Commission observed that it, "*concur with the widely held view*" that judgements involving "*trade-offs between the need to provide appropriate protection for private property rights and wider efficiency and public interest considerations that might warrant regulatory intervention to facilitate third party access*"... "*are generally more appropriately made by elected officials than by regulators*" (page 376). GGT agrees with the Commission in this regard, but wishes to add that the discussion needs to be broadened to consider the fundamental issue of the need for a separation of powers. Philosophically, it is not a good practice of governance for the police who administer

<sup>8</sup> It should also be noted, that a significant proportion of the argument put forward by Service Providers or their agents, was necessitated by the need to respond to alarmingly inaccurate or incorrect statements or interpretations made by Regulators or their agents. If anything, the total volume of effort committed to addressing matters of regulatory damage and uncertainty is illustrative of the inefficiency of the Gas Code and the extent to which it distracts from the actual pursuit of its very objectives.

the law to be the ones to make the laws - or in the case in hand – for regulators to lead (or even strongly influence) the development of the objectives and scope of regulation.

To date, access regulators have had their function defined (either explicitly or by default) in terms of primarily being consumer advocates. The nation's lead regulator, the ACCC makes no bones about this being its primary function. The Gas Code provides no guidance to regulators of access to infrastructure that would substantially modify this view. In fact, much of the turn of phrase associated with the rationale of Competition Policy indicates a strong bias towards consumers being the ultimate beneficiaries of reform. This is understandable in the context that we are all, as individual members of society, ultimately consumers. However, the combined effect of this emphasis has meant that the implementation of the Gas Code *in toto*, has been strongly biased in favour of consumer advocacy.

While this is an important and necessary role in society, in the context of the objectives underlying the Gas Code, the conflicts that exist between consumer advocacy and the promotion of future development need to be recognised. The effect to date, and without modification, the result that will continue to arise from the Gas Code, is an emphasis on determining "how the pie should be split" at the expense of considering "how the pie can be made bigger". The "pie" in this case is Australia's future economic development to the extent that this depends upon investment in energy infrastructure. Ultimately, given the nature of the Australian economy, this will have a major effect on the future welfare of our society as a whole. Of course, the economic dilemmas that exist in resolving the tensions that can exist between these two views will continue to exist but that does not mean that the imperatives of equity and development should by any means be mutually repugnant. The issue which needs to be addressed in the Gas Code, is a matter of finding an appropriate balance between these tensions, rather than the present emphasis on seeking a short term (and maybe politically popular) redistribution of wealth in exchange for a poorer future.

In terms of aligning regulatory outcomes with intended objectives, the Gas Code needs to be modified to emphasise the role of regulators as being to approve acceptable ("reasonable") access arrangement proposals, rather than being to dictate the minutiae of all aspects of open access. What is needed is a de-emphasis on the present levels of virtual "central planning" by unelected beauraucrats which has been fostered by the Gas Code under its current implementation. By their own admission, regulators appear to need guidance in order to be able to exercise discretion in order to come to sensible but non-standard judgements, including acceptance of proposals from Service Providers which comply with the objectives of the Code even if they otherwise vary from narrow regulatory precedents in form and content.

To the extent that regulators are obliged to manage the information burden imposed under the Gas Code as it currently exists, with its commensurate obligations in terms of commercial impact and detail decision making, there is also a need for greater accountability and transparency in regulatory outcomes. In so far as regulators are permitted to operate "independently" of government direction and control, there is also a greater need for accountability in terms of alignment of regulatory outcomes with policy objectives. Significantly, the need for regulatory accountability also extends to the need to manage the exposure of governments to the (currently

unfettered) risk of substantial financial liabilities being incurred by regulators. If the Commission is able to obtain meaningful data, it should include a quantification of the burden to date that the Gas Code has placed on the public purse through direct government funding of regulators and their consulting and legal costs. The recent Western Australian Supreme Court Decision ([2003] WASC 156) in regard to the challenge to the regulator's entitlement to recover the costs of regulatory litigation provides a case in point. With the Court finding against the regulator, the costs of the regulator failing to correctly interpret certain definitions and processes under the Gas Code, are an inefficient cost burden which must be funded by (in this case) the State Government. Given the nature of the dispute over which the relevant legal proceedings arose in this case (that is that amongst other things, the regulator had failed to take adequate consideration of the expectations created by and arising from the stated policy intentions and pursuant actions of the State Government), such an outcome is doubly inefficient.

Although it can be difficult to ascertain a consistent view as comments from stakeholders are often determined by which view seems likely to best serve their vested interests from time to time, on the whole, industry appears to remain unconvinced of the real need for (or reality of) regulatory "independence". Its basis appears to be intended to be restricted to application to the regulatory oversight of monopoly utilities that are retained in government control. This makes sense to ensure a separation of decisions which affect both short term government revenues and longer term societal welfare. However, this is not (for the most part) the basis of its acceptance in regard to the Gas Code, where the majority of Service Providers subject to regulation are fully privatised. In respect to the Gas Code, the basis for its acceptance as a principle of regulatory oversight appears to be unjustified. At the least, it is a concept which has risks associated with it that do not appear to have been adequately evaluated in the process of regulatory development to date.

Certainly there is a case to be made for ministerial roles to be at least maintained (if not strengthened) in order to balance the demonstrated propensity of regulatory authorities towards developing a heavy handed, biased and all embracing regime. If there is going to be a (less than desirable) form of centrally planned economic control over Australia's essential infrastructure, then it should at least be designed to ensure that over-arching decisions are made by elected representatives answerable to society, rather than unelected officials (however altruistic their intentions). However, it would be commendable for the Commission to give consideration to the whole presumption of the need for independent regulation as it is currently understood to apply to the Gas Code. Although it sounds unfashionable, lower levels of regulatory independence could more efficiently facilitate greater levels of regulatory accountability and potentially, greater alignment of regulatory outcomes with policy objectives. Such an approach is likely to also better facilitate the promotion of regulatory withdrawal (currently lacking under the present regime) as markets develop, as well as any moves which might be made (either now or in the future) towards a lighter handed form of regulatory oversight and correction.

## 6.2 Need for Guiding Regulatory Principles

In May 2003, the Western Australian Gas Access Regulator released his Final Decision regarding the proposed access arrangement for the Dampier to Bunbury Natural Gas Pipeline (the DBNGP Final Decision). This is a document which provided a critical regulatory outcome (in this particular case, a particularly controversial tariff decision) but which contained insufficient and apparently contradictory detail such that, based on public commentary and GGT's own efforts, the quantitative conclusions could be neither replicated nor exactly determined. The consequential inability of stakeholders and other interested parties to either comment or ascertain the extent to which they may be affected, while a clever political tactic, nonetheless reflects poorly upon the transparency of the regulatory process. It could be argued that such an outcome – to the extent that it provided broadly indicative guidance to the Service Provider and other stakeholders, might be acceptable as an outcome at the Draft Decision stage of the process. However, its publication as a regulator's Final Decision, suggests that greater guidance as to the principles underlying the necessary content and form of regulators' decisions is required. There is a need for a certain level of regulatory consistency in matters of process in order for the regulatory regime to avoid giving rise to concerns regarding timing and due process. The Gas Code does contain some measure of guidance on these issues, however the current provisions appear to have little practical effect, and in fact appear to merely be misconstrued in ways which increase rather than reduce certainty.

The Commission might note that numerous comments made by various access regulators have confused the ideas of "regulatory consistency" and "regulatory certainty" with "investment certainty". It is obvious to investors that improvement of investment certainty is not assisted if the uncertain chance of better than expected returns, is simply replaced by a more certain expectation of unacceptably low returns. Unfortunately, regulators under the Gas Code do not appear to share this view. It would appear that whatever appreciation of the need for adequate investment returns to be allowed under the Gas Code, regulators prefer to err towards a greater goal of "national consistency". However, in spite of the Commission's conclusion leading to recommendation 6.1(b) in its report on the National Access Regime, GGT believes that national consistency in the specific mechanism of regulation should be subsidiary to the goal of appropriately facilitating the promotion of development wherever and whenever the opportunity arises. Without appropriate regulatory guidance however, the present principle of lowest common denominator will prevail in regulatory decision making, and economic development in Australia will suffer.

There is a clear need for the Gas Code to clearly enunciate certain principles of regulatory practice. However, merely specifying regulatory principles is demonstrably insufficient to ensure regulatory objectives are fulfilled. For instance, the ACCC's "Draft Greenfields Guideline" heavily relies upon the accommodation of "fixed principles" which, under section 8.47 of the Gas Code, can be "locked in" to access arrangements in order to provide investor certainty. However a regulator's supposed acceptance of a "fixed principle" is, under section 8.48 of the Gas Code, heavily qualified and cannot extend to any "Market Variable Element", defined in the Gas Code to mean;



*"... a factor that has a value assumed in the calculation of a Reference Tariff, where the value of that factor will vary with changing market conditions during the Access Arrangement Period or in future Access Arrangement Periods, and includes the sales or forecast sales of Services, any index used to estimate the general price level, real interest rates, Non Capital Cost and any costs in the nature of capital costs."*

Such a list of exclusions basically eliminates the key financial determinants which underscore the viability of a project and to which the risks that a project faces, apply. Obviously, even if one were to accept (or even modify the Gas Code to include) the regulatory principle espoused by the ACCC that investment certainty should be accommodated through the mechanism of defining agreed values as "fixed principles" within an access arrangement, the practicality would fall well short of the objective. In its discussion of these considerations on pages 126-7 of the Parer Report, recognition of practicalities of this nature are unfortunately lacking. As a consequence, the Parer Report understates the significance of the problem the Gas Code poses as a barrier in regard to the objective of promoting the wider penetration of gas (section 7).

The Gas Code needs modification to provide regulators with both the clear guidance as to practical principles, and also to make practicable the principles that are established. In particular, the Gas Code needs to provide both the guidance and the facility to make it practicable for Service Providers to have proposals accepted which have regard to whole-of-life project determinants, whether or not aspects of these may change over time.

A similar concern would exist as to the principles which would apply to the concept of regulatory "truncation premiums" proposed by the Commission (recommendation 11.3, on page 320 of the report on the National Access Regime review). For industry to have any confidence in such an approach, very clear guidelines would be needed as to how to determine such premiums, and in what circumstances they would apply. Based on the current implementation of the Gas Code, it would not be sufficient to define the principle merely in terms of the need to encourage new investment. Given the present difficulties in convincing regulators and their consultant economists of the inadequacy of permissible rates of returns and the need to recognise project specific risks, the guiding principles would need to be expressed in the most unequivocal terms. Without clear and specific instructions as to the acceptability of values which may lay outside the range of established regulatory precedent, current regulators are almost certainly likely to grossly understate the premium required to compensate for greenfields pre-investment risks. Experience under the Gas Code would indicate that regulators are likely to come up with risk premium values that are a mere fraction of what might be a commercially acceptable truncation premium.

This concern is also evidenced by way of reference to the emphasis which has, under the present implementation of the Gas Code, been put by regulators on the use of input parameter values to various regulatory calculations (particularly the CAPM) that are entirely theoretically derived. It is bad enough that the CAPM approach to calculating WACC (as a proxy for permissible rate of return) is based on a set of assumptions uniquely pertinent to the liquid, almost infinitely divisible stock market (with "perfect" knowledge for all thrown in for good measure). However, the fact that

the tool is theoretically based does not (obviously) mean that it cannot be used (as it most certainly is), although with some qualification, as a means of providing an indicator in real world applications. However, the use of the CAPM approach under the Gas Code to date has been wholly unqualified and relied upon by regulators, not as an indicator but more as the quantified evidence by which outcomes in the real world have been proven to be irrelevant.

A very important aspect to this is that the choice of values selected by regulators for input into the CAPM and WACC calculations have demonstrated a high degree of selectivity in terms of their effects on the calculation results. Perhaps more importantly, the input parameter values selected by regulators have (for apparently similar reasons) tended to bear little relationship to the real world in which the calculated results are to apply. Moreover, the basis for the value selected, is often inconsistent with even the theoretical derivation of financial determinants. A particularly common and poignant example is the basis upon which the "risk-free" interest rate (used in the CAPM calculation as the basic point of reference) is typically selected. In the original application of the CAPM methodology to the highly liquid market for equities, the risk free rate would theoretically be selected on the basis of some average value of a robust investment bond (or similar), held over a suitably short term consistent with a liquid equity portfolio. This is what the finance literature instructs. However, the use to which CAPM is put under the Gas Code, is not that use to which the finance literature instructions relate. If the methodology is to be applied in a context other than it was originally intended, then adjustments need to be made to the method. If the tool is to be applied to a single, real and long lived infrastructure project, then the values used for the input parameters to CAPM need to be genuinely representative of actual project financing practices. Hence realistic financial assumptions pertinent to project funding are needed, including the adoption of realistic "holding periods". Clearly investment in a gas pipeline is not analogous with holding a liquid stock market portfolio. Without modification to the principles underlying the use of the CAPM methodology, its translation in application from diversified equities to asset specific is incomplete. The quasi-solution under the Gas Code has been to establish the risk free interest parameter based on the value of a long-term bond (of which there are limited candidate investment types available due to the typically long life of a pipeline investment) - but then to consider its average value over a matter of only days.

Clearly the manner in which values are selected for the input parameters underlying regulatory calculations require additional regulatory guidance.

However, the problem does not end with the selection of values. The manner in which the CAPM approach is applied by regulators under the Gas Code requires further guidance in order to overcome another major deficiency in current practise. It is well recognised that the CAPM approach methodologically excludes any element of investment return which is associated with diversifiable (that is, project specific) risk. (Section 4.1 of the Draft Greenfields Guideline discusses this at some length). This is not inappropriate in the original context of determining a rate of return in an equities (i.e. stock) market, where portfolio diversification is eminently achievable. However, in the context of application to a different market that does not share the stock market's qualities of investment liquidity or diversity, then clearly an adjustment for specific "non-diversifiable" risk is required. Obviously, if the methodology is to be

applied (for want of a ready theoretically acceptable alternative) to determining an indicative rate of return in application to a specific industry and more particularly to an individual asset, as it is under the Gas Code, then that risk adjustment is critically important.

Such an adjustment could be factored into the calculation implicitly, for instance by a suitable accommodation within the beta parameter, or explicitly, along the lines of the regulatory "truncation premium" proposed by the Commission. However the current application of CAPM under the Gas Code includes no such necessary qualification and in fact, its inclusion is strongly and steadfastly resisted by regulators and their economic consultants on the basis of defending the sanctity of the original economic theory. It is revealing however, that regulators do concede that an adjustment for specific risk is valid - the problem is the manner in which they then seek to address the issue. The Draft Greenfields Guideline provides (on pages 12-3) a statement of the present regulatory view, thus:

*"Consistency with the CAPM framework therefore requires that specific risks be factored into projected cash flows rather than the cost of capital. [...] prospective service providers will need to undertake detailed market surveys, technical and financial analysis of a range of matters in the project evaluation phase of a greenfields pipeline and that a number of parties involved in such a project will need to assess such data. [...] Financiers similarly need to conduct a comprehensive due diligence of the market survey assessments and projections undertaken for a pipeline financing proposal to assess the overall risk and viability of the funding proposition sought."*

The first point that needs to be made in relation to the approach espoused above, is that in current practice, a Service Provider has to substantiate every element of cost included in an access arrangement - and justify it as being both efficient and consistent with common industry practice. However, asset specific risk is substantially subjective and tends to be unique (in Australia even more so due to the maturity and diversity of the relevant circumstances) and hence difficult enough to ascertain for commercial investment purposes. Even if a cashflow quantum, which represented a commercially acceptable compensation for the more generally understood expectation of a particular rate of return on an investment, can be determined, it is unlikely that it could be substantiated according to the quantitative measures understood by regulators. In reality, the contention that an allowance for asset specific risk can be (or is) factored into regulated cashflows is a nonsense. However, notwithstanding the view cited above, the Draft Greenfields Guideline immediately goes on to state:

*"Regulatory decision making processes similarly need to consider such data. However, in the regulation of gas transmission pipelines the ACCC does not conduct traditional rate of return regulation. Rather, it adopts an incentive regime that encourages the regulated business to outperform the benchmarked return (as determined by the reference tariff for the 'reference service', forecast costs and forecast demand) for the regulatory period. This regime provides incentive mechanisms by encouraging service providers to reduce their costs in any given regulatory period and maximise the efficient use of the infrastructure. If the provider realises cost savings in that period, while*

*maintaining a given level of service standards, it may be able to retain those savings."* (Page 13).

It is significant that the ACCC qualifies this statement with the prospect that a Service Provider only "*may*" be able to retain the savings it has made. Even if the approach adequately addressed the issue of appropriate risk recognition, this statement (which appears to substantially accord with experience) raises its own uncertainty. It is also not clear how asset specific risk is factored into the divergence from "*rate of return regulation*" (which the ACCC apparently "*does not conduct*", despite the emphasis of regulatory decisions on the headline rate of return<sup>9</sup>) to the less well defined "*incentive regime*" which it purports to adopt.

Too often in regulatory decisions, the incentive mechanisms referred to above are in fact merely limited to mechanisms by which any upside returns which might be otherwise retained by the Service Provider, are substantially redistributed to users. This generally related to "benefit sharing". That these upside returns may quite possibly represent the cashflow compensation for risks that are not otherwise factored into the regulated rate of return, appears to be overlooked. In such cases where the emphasis of the regulatory mechanisms that have been imposed are primarily concerned with redistribution, it is not clear who is the subject of the incentive mechanism, or what the object of the incentive is.

It is apparent that regulatory guidance is therefore also needed in the specification of the distinction which needs to be made between "benefit sharing" mechanisms and the concept of "incentive regulation". In current practice, the latter expression seems to owe its common use more to its obfuscatory merit and political appeal than to any substantive aspect which might be associated with a positive incentive for any party to progress towards a socially desirable outcome. The term "incentive regulation" itself is further confused within the application of the Gas Code, it being used in the context that negative pressures are represented by regulators as being positive incentives. Granted, it takes only a short sojourn into the literature regarding the concept of incentive regulation, for it to become apparent that it refers to the establishment of negative cost pressure in order to sustain profitability – although it is questionable how many people outside of regulatory agencies or economic academia are informed of this. Certainly the manner in which the topic of incentive regulation is referred to by regulators can easily and erroneously (as in the previous quote) appear to be a reference to a positive incentive to pursue development or growth. In the following further example, (taken from page 3 of the ACCC's Draft Greenfields Guideline), the reference to incentive mechanisms has quite deliberately been intended to indicate a positive encouragement to investment. In doing so however, it assiduously glosses over the fact that the Service Provider faces the real prospect of being able to "*reap*

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<sup>9</sup> In fact it has become an increasingly common ploy by regulators to cite a "return on equity" figure as the headline for their access decisions. The primary motivation is to be able to make a direct comparison to average equity (i.e. stock) market returns, which have been conveniently less-than-buoyant over the recent short-term investment period. However, as discussed in this paper, this comparison is not relevant to project investment in infrastructure. Nonetheless, return on equity figures also have the appeal of an apparently higher face value. The substantive issue though is that the return on equity figures cited by regulators are almost always based on (i) a theoretical transformation formula (of which a number, each giving somewhat different results, exist) and (ii) are based on theoretical input values selected by the regulator for his own calculations, which bear little or no relationship to real cashflow determinants.

[only] *some of the returns that exceed the [already inadequate] expected level*" of regulated returns.

*"The gas code recognises that to encourage investment, a prospective service provider should be given the opportunity to reap some of the returns that exceed the expected level where those returns are attributable to the efforts of the service provider. Often referred to as the 'blue sky' potential of the pipeline such an approach requires regulatory certainty about the treatment of any greater than normal returns, if realised, in the initial regulatory period/s. The inclusion of an incentive mechanism in an access arrangement (or access undertaking) is an important component of a service provider's regulatory framework. The ACCC encourages service providers to develop mechanisms that will best suit their particular needs."*

The reality of "incentive regulation" as it is currently implemented under the Gas Code, is that pressures are created to reduce costs in order to counter regulatory mechanisms which will penalise profits over time. In fact, as regulated profits under the Gas Code are currently predicated on the principle of theoretical least cost recovery, Service Providers are actually faced with the necessity of reducing costs in order to maintain not just profitability but ultimately, viability. While it may be meritorious (and good business practice) for Service Providers to reduce costs on an ongoing basis, this is a distinctly different form of incentivisation from that of providing an incentive to invest in either new infrastructure or market growth. The Gas Code should make provision to ensure that the objectives of "incentive" measures in regulatory decisions should be explicit (on a case by case basis) and clearly distinguish who is intended to have the incentive to do what and with what objective. Moreover there needs to be a reasonable and equitable association of likely rewards with likely risks and likely costs.

In essence, greater regulatory guidance is needed to engender the prospect of more reasonable outcomes under the Gas Code. Critically, this also requires greater regulatory guidance in terms of the inputs to the processes under the Gas Code.

The fundamental issues concern the choice by regulators to operate within narrow ranges of acceptable input and output regulatory values, and a failure and self-imposed inability to recognise commercial returns and risks. Consequently, what regulators' represent as being a "reasonable range" is either not reasonable for any practical purpose, or is only reasonable within a narrowly defined and often inappropriate application. One aspect of addressing this problem that has been proposed is the concentration of regulatory expertise. This has been proposed by the Western Australian Government in terms of creating an Economic Regulatory Authority based on a similar rationale to the proposal in the Parer Report for the establishment of a National Economic Regulator. The latter proposal is founded upon the idea that such a centralised authority will;

*"...have available to it the practical skills, experience and knowledge of the operation of the upstream and downstream gas industry necessary to form sound commercial judgements ..."* (page 128).

Unfortunately, given the lack of "*practical skills, experience and knowledge*" demonstrated by regulators to date and inability to appreciate commercial factors, let alone "*form sound commercial judgements*", the realisation of this objective will require something more than the mere establishment of a centralised regulatory authority. In particular, sound and robust guidance will be needed to specifically and sustainably engender the current regulatory community – from whom any centralised agency will inevitably be drawn – with even basic skills in commercial judgement and technical and (practical) economic understanding of the relevant markets. In fact, if the expertise is to be as broad as envisaged in the Parer Report, then this will require a very substantial commitment in terms of guidance and training. This is because the upstream and downstream gas markets are considerably more complicated than the gas transport market, of which regulators have revealed a lack of both understanding and desire to understand, favouring instead established (albeit misapplied) academic economic theory.

In terms of providing appropriate guidance, a starting point might be the provision of policy interpretation of the legal precedents that are relevant to the evolution of access regulation in Australia. Regulators have demonstrated some reluctance to acknowledge or accept some aspects of the legal interpretations of certain Gas Code provisions following the successful appeal against regulatory decisions in the Australian Competition Tribunal (in particular the EGP case) and the Western Australian Supreme Court (the DBNGP case). There appears to be a need for certain elements of specific guidance in terms of both the requirement to give such interpretation due weight, as well as guidance as to the effects on specific provisions in the Gas Code. The Commission might also consider whether the policy interpretation of these court decisions should be specifically incorporated into the Gas Code as modifications to existing provisions.

Very strong and (quite apparently) firmly entrenched views have been expressed by public servants employed in the regulatory area (and the consultants to which they have recourse). Whatever conclusions the Commission arrives at as a result of its present inquiry, it will need to give precise implementation instructions regarding whatever recommendations it proposes. Given the finite pool of public sector expertise available to government, this is particularly critical in respect to proposed modifications to the Gas Code in order to avoid the risk of bureaucratic reinterpretation at the drafting stages.

## **7.0 Conclusion**

The conclusion that GGT draws from its experience with the Gas Code is that it is an inefficient, burdensome and highly intrusive form of access regulation. The high level of detail involved in the regulatory process engenders regulatory decisions which seek to micro manage an industry which is ostensibly intended to be operating in a private enterprise environment. The participation of regulatory agencies in policy debate has crystallised firm and narrowly prescribed views at the expense of reasonable assessment or regulatory flexibility. Given the nature of the direction dictated by the Gas Code in its present form, the solution to better access regulation appears to be even greater levels of regulatory prescription. The best that can be hoped for currently

appears to be an access regime that minimises its detrimental impact on a vital sector of Australia's development and essential infrastructure.

GGT's experience under the State Agreement leans it towards the merits of the original vision Hilmer had for light handed regulation. Much of the preceding discussion of the need for safe guards and prescriptive refinements to the Gas Code would become unnecessary if a more light handed regulatory framework were to be adopted. This would be the most efficient approach. Certainly it is hard to imagine, that it could possibly be any more inefficient or economically burdensome than the present regime embodied in the Gas Code. In fairness however, it might be that a transition to a lighter handed approach beginning with the Commission's current inquiry, would substantially benefit from the structure reforms and regulatory "inroads" (however inefficient or otherwise) which have occurred over the past few years.

From GGT's perspective, such a transition is inevitable if access regulation is not to become an ever-increasing mill-stone to the nation's economy and future prospects. Given that the country stands at the threshold of its future right now, particularly in regard to the development of its energy markets, the transition would be timely. However, it will take a very strong guiding hand to convince the present regulatory authorities to release their grip and turn over market control to another hand they cannot see, and whose behaviour they find difficult to understand.