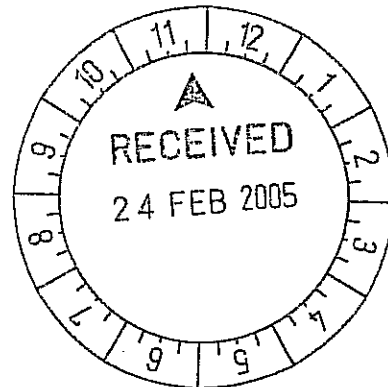




Department of Consumer
and Employment Protection
Government of Western Australia
Energy Safety

Your Ref: 7020/20/04
Our Ref: GR/0094
Enquiries: Mr G Wood
Telephone: (08) 9422 5294

Mr Lyndon Rowe
Chairman
Economic Regulation Authority
GPO Box 8469
PERTH BUSINESS CENTRE WA 6849



Dear Mr Rowe

**PROPOSED REVISED ACCESS ARRANGEMENT FOR THE DAMPIER TO
BUNBURY NATURAL GAS PIPELINE**

Thank you for your letter of 2 February 2005 and for forwarding a copy of the Proposed Revised Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline for our review and advice.

After reviewing the Proposed Revised Access Arrangement we make the following comments in relation to the gas quality specification outlined in the document.

The gas quality specification Item 1 of Schedule 2 of the Proposed Revised Access Arrangement is different in some respects to the gas quality specification contained in the *Gas Standards (Gas Supply and System Safety) Regulations 2000* that relates to gas distribution systems. The proposed specification has for delivery points different limits for minimum higher heating value and minimum Wobbe index:

Gas Specification Quality	DBNGP Delivery point	Gas Standards (Gas Supply and System Safety) Regulations 2000
Minimum higher heating value MJ/m ³	37.3	37.0
Minimum Wobbe Index	47.3	46.5

We can see no technical reason for the difference and accordingly consideration should be given to modifying the specification, although existing contracts may make this difficult.

The specification also has a very low maximum hydrogen sulphide requirement at 2mg/m³. This requirement is less than the amount specified in other Western Australian pipeline gas quality specifications which tend to be around the 5mg/m³. This could be

an issue if in the future it is contemplated that gas from other pipelines is blended with the gas in the DBNGP.

We understand that the limit was set at 2mg/m³ to reduce the amount of elemental sulphur that was crystallizing out of the gas and becoming attached to turbine blades, valves and blocking pressure reducing valves. If this problem is still occurring it may not be practicable to increase the level of hydrogen sulphide in the specification. However we draw your attention to the issue.

Item 3 of Schedule 2 titled "Broadest Specification" provides for some relaxation of the gas quality, but does not align with the values contained in the *Gas Standards (Gas Supply and System Safety) Regulation 2000* for minimum higher heating value and minimum Wobbe Index.

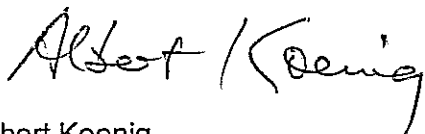
The *Dampier to Bunbury Pipeline Regulations 1998* which following the sale of the pipeline were revoked, included a gas quality specification in Schedule 1 titled the "Broadest Specifications". This specification came out of a review of the gas quality specification for the Dampier to Bunbury Natural Gas Pipeline, by the Office of Energy and the Standing Committee on Gas Quality, which resulted in a report in November 1995 containing a number of recommendations, one of which was to widen the gas quality specification.

The purpose of publishing the "Broadest Specifications" was to allow for the future widening of the gas quality specification to allow more producers access to the pipeline, and to alert parties to the need to consider the broader specifications when entering into contracts. The "Broadest Specifications" is attached for information.

As the "Broadest Specification" contained in the Proposed Revised Access Arrangement is similar to the "Broadest Specifications" contained in the *Dampier to Bunbury Pipeline Regulations 1998* what prevents that original specification being included in the Proposed Access Arrangement, in place of the specification contained under Item 3 of Schedule 2? Such a move would be consistent with the recommendations contained in the report of the Office of Energy and the Standing Committee on Gas Quality and would be a practical step towards implementation of the desired, wider gas specification. It should be considered.

I trust you find our advice of assistance. Given that it is provided under the provisions of s.7 of the *Energy Coordination Act 1994* rather than as a gas industry participant, I will leave it at your discretion as to whether or not to make it publicly available.

Yours sincerely



Albert Koenig
DIRECTOR OF ENERGY SAFETY

encl

23 February 2005

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*Dampier to Bunbury Pipeline Regulations 1998***SCHEDULE 1 — BROADEST SPECIFICATIONS**

[r. 24(8)]

For the purposes of the definition of "broadest specification" in regulation 24(8), the gas quality specifications are as follows:

Component	Category A Gas	Category B Gas	Category C Gas
Maximum carbon dioxide (mol %)	3.6	4	4
Maximum inert gases (mol %)	6.5	7.0	7.0
Minimum higher heating value (MJ/m ³)	35.1	35.1	35.1
Maximum higher heating value (MJ/m ³)	42.3	42.3	42.3
Minimum Wobbe Index	46.0	46.0	46.0
Maximum Wobbe Index	51.5	51.5	51.5
Maximum total sulphur (mg/m ³) — unodorized gas — odorized gas	10 20	10 20	10 20
Maximum Hydrogen Sulphide (mg/m ³)	2	2	2
Maximum Oxygen (mol %)	0.2	0.2	0.2
Maximum Water (mg/m ³)	48	48	48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute	Below 0°C	Below 0°C	Below 0°C
Maximum radioactive components (Bq/m ³)	600	600	600
Minimum extractable LPGs (t/TJ)	Until 08:00 hours on 1 July 2005: 1.45 From 08:00 hours on 1 July 2005: 0:00	n/a	n/a

By Command of the Governor,

M. C. WAUCHOPE, Clerk of the Executive Council.

Gas Quality - Resource Implications

It is a significant finding that while Western Australia has vast gas resources, only about 20% of these (including probable and possible resources) fall within the current DBNGP gas quality specification after "moderate" cost gas treatment. While it is likely that new gas discoveries will add to the proportion of "within" specification gas, there is a good case for widening the gas quality specification to ensure the future availability of competitively priced gas into the South West.

The widening of the gas quality specification for the DBNGP, as recommended in this report, will increase more than three times the gas resources that fall "within" specification after "moderate" cost gas treatment.

RECOMMENDATIONS

The following is a summary of the recommendations. Some of these can be implemented immediately while others will need to be phased in over time. It is proposed that implementation of these recommendations, if approved, should be arranged by the Office of Energy in conjunction with other relevant agencies. Details of the recommended changes are summarised on pages 7 to 12.

Emergency Gas & New Contracts

It is recommended that Schedule 4 of the Gas Transmission Regulations 1994 be amended to include:

- 1 an "emergency" gas quality specification that gives the pipeline operator the authority to allow gas with a wider specification (as indicated in column 4 of the Revised Schedule 4 below) both into and out of the DBNGP when there is a disruption to the supply of specification gas; and
- 2 a provision that will allow for the future widening of the gas quality specification. It is recommended that where new contracts specify gas quality limits tighter than those given in column 5 of the Revised Schedule 4, those contracts will not restrict the future widening of the DBNGP specification up to the limits given in column 5 of the Revised Schedule 4. The adoption of tighter limits in contracts than those shown in Column 5 will be at the risk of those entering into the contracts. Any future actual widening of gas quality limits would need to be approved in accordance with the provisions of the Gas Transmission Regulations 1994.

It is recommended that both of the above changes to the structure of Schedule 4 be implemented immediately. Where pre-existing contracts impose limits more restrictive than the emergency limits, special arrangements will need to be agreed

with parties to pre-existing contracts so that the emergency gas quality limits can be implemented when necessary.

Pipeline Capacity

A wider gas quality specification can reduce the average energy value of gas per unit of volume carried in the DBNGP, its efficiency and delivery capacity. To compensate, it is recommended that pipeline charges be free to vary with gas quality.

It is recommended that AlintaGas Transmission in conjunction with the Office of Energy prepare a detailed recommendation on this matter and, if approved, arrange implementation.

Old Appliances

In order to provide for the widening of the gas quality specification, it is recommended that a program to identify, modify or replace old appliances which preceded the AGA approval scheme commence as soon as possible.

Various options for funding this work are available and a recommendation on this should be developed in conjunction with Treasury.

Commingling of Gas

It is recommended that where commingling arrangements can be safely provided, these should be left to the pipeline owner/operator (AlintaGas Transmission) to arrange on a first come first serve basis.

It is also recommended that the Gas Transmission Regulations 1994, be amended to clarify that AlintaGas Transmission may recover all costs associated with the provision of a commingling service including a premium to cover any risks involved.

Sanctity of Pre-existing Contracts

In line with the general thrust of competition policy reform, which includes the principle that the provisions of pre-existing contracts be honoured, it is recommended that gas quality commitments incorporated in pre-existing gas supply contracts should continue until these contracts either expire or are re-negotiated. This necessitates a period of transition, allowed for in the Regulations under pre-scheme provisions, during which the constraining provisions of contracts may delay implementation unless such contracts are freely re-negotiated.