National Competition Council

Casselden Place Level 12 2 Lonsdale Street Melbourne Victoria 3000 Australia
GPO Box 250B Melbourne Victoria 3001 Australia

Telephone 03 9285 7474 Facsimile 03 9285 7477

19 February 2002

Parmelia gas pipeline: Application to revoke coverage under the National Gas Code

Final Recommendation

In October 2001, the National Competition Council (the Council) received an application from CMS Gas Transmission Australia for revocation of coverage of the Parmelia pipeline in Western Australia under the *Gas Pipelines Access (WA) Act 1998*. The details of the pipeline are:

Pipeline Licence	Location / Route	Operator	Length	Regulator
WA:PL1-3,5	Dongara to Pinjarra (incl. Fremantle & Rockinham laterals)	CMS Gas Transmission of Australia	445 km	Western Australian Independent Gas Pipelines Access Regulator
WA:PL23	CMS Pipeline to DBGNP (Dongara area)	CMS Gas Transmission of Australia	0.5 km	Western Australian Independent Gas Pipelines Access Regulator

The Council has now released its final recommendations on the application. The Council has recommended that coverage of the pipeline be revoked. The recommendation is available on the Council's website at www.ncc.gov.au

The application for revocation of coverage of the Parmelia pipeline will now be decided by The Hon Eric Ripper, MLA, Western Australian Minister for Energy. Under the National Code, the Minister has 21 days to decide the matter from the date that he receives the Council's recommendations. The Minister must provide a copy of his decision (with reasons) to the Council, the regulator, the service provider, the applicant, each party who made a submission to the Council, and any party who requests a copy.

Should you require any further information, the Council's contact officer for this matter is Ms Michelle Groves, who may be contacted on (03) 9285 7476 or via michelle.groves@ncc.gov.au.

Final Recommendation

Application for revocation of coverage of the Parmelia Pipeline under the National Gas Access Regime

February 2002

National Competition Council

Introduction

This document contains the National Competition Council's (**the Council**) final recommendation in respect of an application for revocation of coverage of the Parmelia Pipeline under the *Gas Pipelines Access (WA) Act* 1998 (**WA Act**). The application seeks revocation of the entire pipeline, covered laterals and any further extensions or expansions as might be described under sections 1.40 and 1.41 of the National Third Party Access Code for Natural Gas Pipeline Systems (**National Gas Access Code**) (CMS 2001, p. 2).[1]

The Council's final recommendation is that coverage under the National Gas Access Code of the Parmelia Pipeline should be revoked. The Council is not satisfied that all four of the criteria in section 1.9 of the National Gas Access Code are met for the whole of the Parmelia Pipeline.

This final recommendation is divided into three main parts:

Part A, which explains the legislative background to the National Gas Access Regime; the concept of coverage under the regime and the Council's approach to the revocation criteria under the Code.

Part B, which examines details of the application, including specifications of the pipeline, the structure of the natural gas industry in Western Australia and the state of competition in related markets in south west of Western Australia.

Part C, which contains the Council's detailed consideration of whether the Parmelia Pipeline meets each of the criteria against which revocation of coverage must be assessed (the coverage criteria).

[1] see page 2 of CMS' application.

Abbreviations and glossary of terms

$/GJ	Australian dollars per Gigajoule
ABARE	Australian Bureau of Agriculture and Resource Economics
ACCC	Australian Competition and Consumer Commission
Access Arrangement	A statement of policies and the basic terms and conditions that apply to third party access to a Covered Pipeline
ADP	Annual Delivery Product
Application	Application for revocation of coverage of the Parmelia pipeline lodged by CMS Gas Transmission of Australia dated 31 October 2001
AusAm	AusAm Resources NL; Empire Oil Company (WA) Limited; Yardarino Limited; and Springfield Oil and Gas Limited
AWE	Australian Worldwide Exploration Limited
Broadest gas quality specification	As specified in the DBNGP Access Manual
CMS	CMS Gas Transmission of Australia
Council	National Competition Council
Coverage Criteria	Criteria set out in section 1.9 of the National Third Party Access Code for Natural Gas Pipeline Systems
Covered Pipeline	A pipeline covered under the National Gas Access Code
CPI-X	Consumer Price Index smoothing mechanism whereby "X" can be reset every 5 years
CS	Compressor Station
DBNGP	Dampier to Bunbury Natural Gas Pipeline
DBNGP Regulation	Dampier to Bunbury Pipeline Regulation 1998
Draft Decision on the DBNGP Access Arrangement	Draft Decision on the Access Arrangement for the DBNGP, 2001

Duke	Duke Australia Operations Pty Ltd, operators of the EGP
EGP	Eastern Gas Pipeline
Epic Energy	Epic Energy (WA) Transmission Pty Ltd
Firm Service	Natural gas transportation services can be further classified into "**firm**" or "**interruptible**" transportation services. A "firm" transportation service is one in which the user is guaranteed delivery of gas at all times.
Gas Access Acts	The Acts in each State and Territory which provide for third party access to the services of natural gas pipelines. The Acts apply the Gas Pipelines Access Law and the National Gas Access Code as law in those jurisdictions
Gas Pipelines Access Law	In conjunction with the National Gas Access Code and the Gas Access Acts, sets out provisions of the regime for third party access to the services of gas pipelines
Gas quality specification	The gas quality specification set out in the DBNGP Access Manual
GJ	Gigajoule, a unit of measurement for measuring the energy content of natural gas or other energy sources
GST	Goods and services tax
CMS Interconnect	Point at which the DBNGP and the Parmelia Pipeline interconnect at Mondarra
Headberry	Headberry Partners P/L Energy Management and Procurement Services
Interruptible Service	Natural gas transportation services can be further classified into "**firm**" or "**interruptible**" transportation services. An "interruptible" transportation service is one where the pipeline owner reserves the right to interrupt the service at any time.
KCM	Thousand Cubic Metre
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MPa	Mega Pascal
Mt	Metric Tonnes

Mt/a	Metric Tonnes per year
National Gas Access Code	National Third Party Access Code for Natural Gas Pipeline Systems
OffGAR	WA Independent Gas Pipelines Access Regulator
Out of specification charge	Charge to users of the DBNGP for transmission of out of specification gas
Out of specification gas	Gas which does not comply with the DBNGP Access Manual
Pipeline	Defined in the National Gas Access Code and the GPA: as a pipe or system of pipes for transporting natural gas and tanks, machinery, etc attached to the pipes, but does not include any facilities of the upstream processing plant, or anything downstream of the connection point to the consumer
PJ	Petajoule (equal to 1,000,000 GJ or 1,000 TJ)
PJ/a	Petajoules per year
PJ/d	Petajoules per day
Reference Service	A service that is specified as a reference service on an Access Arrangement
Reference Tariff	A tariff specified in an Access Arrangement as corresponding to a Reference Service
Ring-fencing	A requirement on a Service Provider to establish arrangements to segregate or "ring fence" its business of providing services using a Covered Pipeline from other business activities
Tribunal	Australian Competition Tribunal

Table of Contents

Part A – Legislative background

The National Gas Access Code

The WA Act applies the National Gas Access Code to gas pipelines in Western Australia.

The National Gas Access Code entitles parties to negotiate access to the transport capacity in natural gas transmission pipelines and distribution networks which are covered by the National Gas Access Code on reasonable terms and conditions approved by an independent regulator. The National Gas Access Code sets out the rights and obligations of service providers, pipeline users and access seekers. It includes coverage rules, the operation and content of access arrangements, ring-fencing arrangements, information parameters, dispute resolution and pricing principles.

Classification of the pipeline

Schedule A of the National Gas Access Code lists transmission and distribution pipelines which have been covered by the National Gas Access Code from the commencement of the National Gas Access Code's operation. The Parmelia Pipeline is listed in Schedule A as a transmission pipeline system.

Mechanism for revoking coverage

The National Gas Access Code allows parties to seek revocation of coverage of a pipeline under the Code. Applications for revocation of coverage must be made to the Council. Following consideration of issues raised in public consultations, the Council issues a draft recommendation, conducts a further public consultation process then conveys a recommendation to the relevant WA Minister, who decides the matter. Both the Council and the Minister must consider the criteria set out in Section 1.9 of the National Gas Access Code. Those criteria are set out in Appendix 2.

If the Minister decides to revoke coverage of a pipeline, the owner and operator of that pipeline are released from their obligations under the Gas Access Act of the applicable State or States and the National Gas Access Code.

The WA Act includes a process for administrative (merits based) reviews of decisions to revoke coverage. The process is set out in section 38 of the Gas Pipelines Access Law, which has been incorporated as part of the law of WA by the WA Act. The WA Gas Review Board would hear any application for review.

The revocation criteria

Under the National Gas Access Code, the Council must recommend revocation of coverage of a pipeline if the pipeline does not satisfy all of the criteria set out in section 1.9 of the National Gas Access Code. If the Council recommends revocation, it may do so to the extent requested by the applicant, or to a greater or lesser extent.[2]

The Council must be "*affirmatively satisfied*" of the matters set out in clause 1.9 if it is to recommend that coverage not be revoked. (*Review of Freight Handling Services at Sydney Airport, Re* (2000) 22 ATPR 41,754 (**Sydney Airport Case**))

In making its final recommendation, the Council has complied with the general principles of administrative decision-making.

The criteria in section 1.9 of the National Gas Access Code were considered by the Australian Competition Tribunal ("the Tribunal") in *Re: Application under section 38(1) of the Gas Pipelines Access Law for Review of the Decision by the Minister For Industry, Science and Resources published on 16 October 2000 to cover the Eastern Gas Pipeline pursuant to The Provisions of the National Third Party Access Code for Natural Gas Pipeline Systems and the Gas Pipelines Access Law* [2001] ATPR 41,821 (**the Eastern Gas Pipeline decision**).

The Council has had regard to the principles and reasoning established by the Tribunal in the Eastern Gas Pipeline decision in its consideration of the application by CMS.

Process for considering the criteria

The Council has adopted the following process for considering the criteria:

[2] Taking account of any part of the pipeline that is necessary to provide services that potential users may seek (section 1.29).

- defining the service provided by the Parmelia Pipeline. In the Eastern Gas Pipeline decision, the natural gas transportation service provided by the Eastern Gas Pipeline was defined as a point to point service;

- examining whether it is economic to develop another pipeline to provide the service. In accordance with the Duke Eastern Gas Pipeline decision, other pipelines will be assessed to see whether a another pipeline can meet all of the demand within the market at decreasing cost;

- if there are no economically viable alternatives to that service, assessing whether the natural monopoly characteristics associated with provision of the service confer substantial market power with respect to a dependent market. As part of this evaluation, dependent markets will need to be identified, as will the indicia of market power. In the Eastern Gas Pipeline decision, the Tribunal examined demand in Sydney, capacity to supply that demand, likely spare capacity, the commercial imperatives facing Duke, the countervailing power of other market participants in dependent markets, and other sources of supply to dependent markets to determine whether the Eastern Gas Pipeline possesses market power. These considerations are relevant to whether criterion (a) is met;

- assessing whether access to the service can be provided safely. This is relevant to criterion (c); and

- determining whether access would not be contrary to the public interest. This is relevant to criterion (d). This criterion comes into play if the other criteria are satisfied and enables account to be taken of other factors not raised under the other three criteria, e.g. regulatory costs involved in providing access, transitional pricing arrangements.

The role of submissions and factual material in this application

The Council received the application on 31 October 2001. In accordance with section 1.26 of the National Gas Access Code, the Council advertised the application in the *Australian Financial Review* and *Western Australian* on 14 November 2001 and called for submissions. The Council also published a copy of the application on its website.

The Council received five submissions from three interested parties (listed at Appendix 1). All submissions have been published on the Council's website. Of the submissions received, two were lodged outside of the period prescribed by the National Gas Access Code and purported to withdraw earlier submissions made by those parties. The Council has discretion to accept submissions lodged outside of the prescribed period and it exercised that discretion and accepted the submissions received by AusAm and AWE. The Council understood by the second set of submissions that the parties purported to withdraw the first set of submissions following commercial negotiations between the interested parties and CMS. There is no scope under the National Gas Access Code for

submissions to be withdrawn. The Council treated the requests to withdraw submissions as supplementary submissions from the relevant parties and considered all submissions. The Council also received a supplementary submission from the Applicant outside of the prescribed period and it exercised its discretion to accept that submission.

In accordance with section 1.26 of the National Gas Access Code, the Council released its draft recommendation on 23 January 2002 and called for submissions in relation to it. The Council received one submission from the applicant (refer Appendix 1) which is published on the Council's website

Part B - The Application and it's historical context

The application

A private United States company, CMS Energy Corporation, owns the Parmelia Pipeline. The application for revocation of coverage was made by an Australian division of the US company named CMS Gas Transmission of Australia (**CMS**) which operates the pipeline.

The application seeks revocation of the entire pipeline, covered laterals and any further extensions or expansions as might be described under sections 1.40 and 1.41 of the National Gas Access Code (CMS 2001, p. 2).

The application pipeline

The Parmelia Pipeline transports natural gas from the Perth Basin near Dongara to Perth and south of Perth to Pinjarra, which is described more fully in Table 1. The Parmelia Pipeline (previously known as the WANG pipeline) was constructed in 1971 and was the first major gas pipeline to supply the Perth region.

Table 1: The Parmelia Pipeline

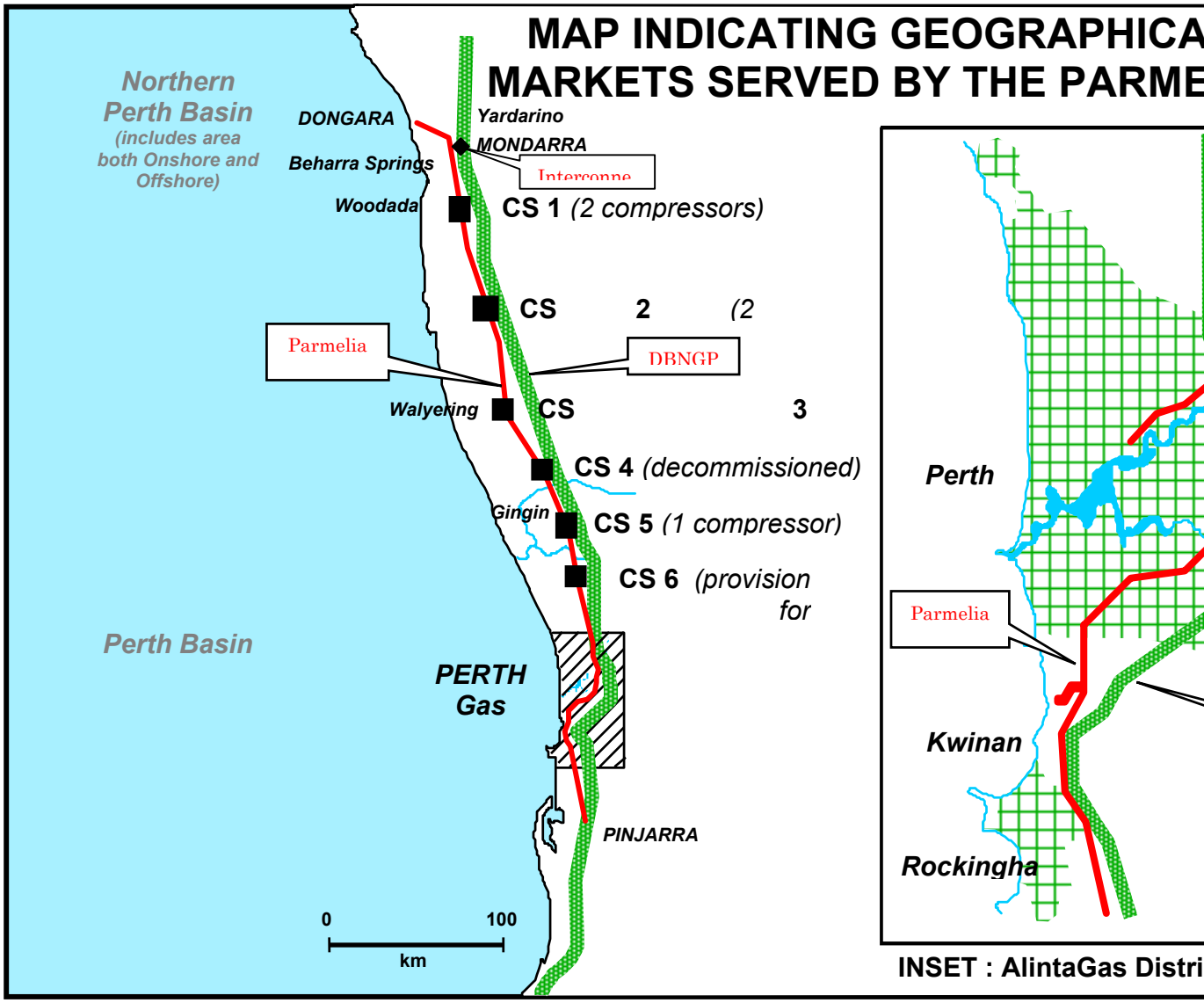
Pipeline Licence	Location/Route	Operator	Length (km)	Pipe diameter (mm)	Regulator
WA:PL1-3, 5	Dongara to Pinjarra (incl. Fremantle & Rockingham laterals	CMS Gas Transmission of Australia	445	356, 168, 114	Western Australian Independent Gas Pipelines Access Regulator
WA:PL23	CMS Pipeline to DBNGP (Dongara Area)		0.5	168	

Source: National Gas Access Code, Schedule A

The Parmelia Pipeline currently has inlet points located at Dongara, Beharra Springs, Woodada, and CMS Interconnect at Mondarra. It has drawn gas from the Dongara, Woodada, Beharra Springs, Mondarra, Gingin, Walyering, and Yardarino fields in the Perth basin. CMS reports that the Gingin and Walyering fields have "*long been abandoned*", the Mondarra field is now depleted, and production is declining from the remaining fields (CMS 2001, pp. 3 – 6). There are nine direct connection outlet points located between Chandala on the northern outskirts of Perth and Pinjarra. There is an additional gate station outlet at Canningvale as well as the interconnection with the metropolitan gas distribution system in conjunction with the Dampier to Bunbury Natural Gas Pipeline (DBNGP) at the Harrow street gate station in Beechboro.

The route of the Parmelia Pipeline is illustrated in diagram 1 below:

Diagram 1: **Map of Parmelia Pipeline (source: CMS 2001)**



Access arrangement for the Parmelia Pipeline

At present the Parmelia Pipeline is covered by the National Gas Access Code. This means that the CMS has been required to submit an access arrangement in respect of the Parmelia Pipeline.

CMS submitted a proposed access arrangement to the regulator, the WA Independent Gas Pipelines Access Regulator (OffGAR WA) on 7 May 1999. OffGAR WA issued a draft decision on 27 October 1999 requiring forty-one amendments to the proposed access arrangement and issued a final decision on 20 October 2000. CMS's revised access arrangement was submitted on 20 November 2000 and became effective on 15 December 2000 (CMS 2001, p. 7).

The Dampier to Bunbury Natural Gas Pipeline

The DBNGP was developed in 1984 to ensure long-term gas supply to the Perth region. It is owned by Epic Energy and transports gas to residential, business and industrial customers in the Geraldton, Perth, Mandurah and Bunbury areas from much more extensive gas reserves from the Carnarvon basin to the north of the Perth basin. A pipeline links the North Rankin and Goodwyn offshore platforms (part of the North West Shelf) to the Burrup Peninsula near Dampier. Two parallel pipelines from Varanus Island supply natural gas into the DGBNP at Compressor Station 1. Two parallel pipelines also run from Tubridigi to Compressor Station 2 on the DBNGP (Australian Gas Association 2001, pp. 32-33). The DBNGP runs close to parallel to the Parmelia Pipeline for the length of the Parmelia Pipeline.

The main part of the DBNGP pipeline has an external diameter of 660 mm from Dampier to the Kwinana junction and is 1399 km long. The maximum allowable operating pressure of the main line is 8.48 MPa, and of the line south of Kwinana - 6.9 MPa. The pipeline has ten compressor stations.

Capacities of the DBNGP and the Parmelia Pipeline

The relative capacities of the Parmelia Pipeline and the DBNGP are compared in Table 2 below.

Table 2: Capacities of the Parmelia Pipeline and DBNGP

Parmelia	Capacity
maximum capacity	120 TJ/d (with full compression but without looping)
current capacity	65 TJ/d
current contracted capacity	35 TJ/d approx.
DBNGP	
maximum capacity	650 TJ/d
current capacity	600 TJ/d
current contracted capacity	593 TJ/d

Source: CMS 2001, p. 9.

CMS notes, and the Council has independently verified, that in its Access Arrangement Information Package, Epic Energy states that the actual throughput of the DBNGP is approximately 540TJ/d, the difference between throughput and current contractual capacity being a function of the load factor (CMS 2001, p. 9).[3]

CMS states that the Parmelia Pipeline is currently utilised at *"somewhat under 30% of its maximum capacity (or 55% of its current configured capacity* [and that this] *represents approximately 15% of the total gas transmission market in which it competes*" (CMS 2001, p. 6).

The application cites a WA Department of Minerals and Energy publication (Department of Minerals and Energy 2000) which states with a 90% confidence rating that June 2000 reserves in the Perth basin amounted to approximately 1,400 million cubic metres (CMS 2001, p. 5, footnote 3). The Perth basin produced 284,818 thousand cubic metres in 2000-01, compared to almost 26 billion cubic metres produced by the Carnarvon basin (Department of Minerals and Energy 2001).

CMS also states that the Parmelia Pipeline is able to compete with the distribution network of AlintaGas for the reason that geographic expansion of the Perth metropolitan area has resulted in the Parmelia Pipeline running through built up areas (CMS 2001, p. 6).

3 Epic Energy, Amended Proposed Access Arrangement Information 2000 at page 61.

The Parmelia Pipeline holds around 0.5 per cent of the gas distribution network market in Perth, according to CMS (CMS 2001, p. 6).

The CMS interconnect

The Parmelia Pipeline and the DBNGP interconnect at Mondarra. The application states that the CMS Interconnect was established in 1994 and that it, "*arose out of a desire by the Parmelia Pipeline owners to use the DBNGP for the part haul delivery of gas which they also owned at Thevenard Island, further north on the Western Australian coast*" (CMS 2001, p. 6). It is not clear from the application whether the CMS Interconnect is still used for this purpose.

Inlet gas specification

The *Dampier to Bunbury Pipeline Regulation* 1998 ("**DBNGP Regulation**") provides that gas for transport in the DBNGP must achieve a particular quality inlet specification, which is documented in the DBNGP Access Manual. In the Draft Decision on the DBNGP Access Arrangement 2001 (**Draft Decision on the DBNGP Access Arrangement**) the Regulator notes that the gas specification set out in the proposed Access Arrangement is the same as the operating gas quality specification in the current DBNGP Access Manual.[4] However, this is not the "broadest specification" set out in Schedule 1 to the DBNGP Regulation (Draft Decision on the DBNGP Access Arrangement, 2001 Part B, p. 48). These differences are due to contractual obligations of Epic Energy in respect of the quality of gas delivered by the DBNGP to the Wesfarmers LPG plant. Those contractual arrangements will persist until at least June 2005 (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p 48). The Regulator considers the gas quality specification proposed by Epic Energy to be appropriate until June 2005 (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 48).

The Draft Decision on the DBNGP Access Arrangement states that DBNGP Access Manual and the relevant provisions of the DBNGP Regulation will cease to have effect when the DBNGP Access Arrangement enters into effect. The gas specifications in the draft Access Arrangement are the same as the specifications in the DBGNP Access Manual and the relevant provisions of the DBGNP Regulations.

---

4 OffGAR issued its draft decision on Epic Energy's proposed Access Arrangement on 21 June 2001. The period for public submissions closed on 28 September 2001. By a notice dated 14 December 2001, OffGAR has extended the assessment period to 15 February 2002.

The DBNGP's specification requires a high LPG content. The Council understands that Perth Basin gas is unable to deliver that content (AusAm 2001, p. 8), at least without upstream blending. In contrast, the Carnarvon basin gas is able to meet the specified LPG content (AusAm 2001, p. 8).

From the material available it appears to the Council that Perth Basin gas can be blended to meet the current specifications. However, while there exists a technical solution to the gas specification issue, the Council recognises there are costs in meeting that specification. As stated in the AusAm submission,

> *"A technical solution exists for most problems, but the issue is cost. The Perth Basin producers will be relatively small producers, and the economics of their operations will rely on minimising capital expenditures. The additional cost of installing additional processing facilities will substantially remove the competitive advantage that Perth Basin gas should otherwise enjoy over more distant gas"* (AusAm 2001, p. 9).

The Council understands that the DBNGP is technically capable of transporting out of specification natural gas. This is implied in the Access Contract Terms and Conditions, which provide that Epic Energy has a discretion to accept out of specification gas on terms and conditions acceptable to it (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 45).

The regulator has required these terms and conditions to be amended to provide that the terms and conditions on which Epic Energy may accept out of specification gas must be reasonable (Amendment (c) (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 49).

The Council notes that the regulator accepts that Epic Energy should have reasonable discretion to vent out of specification gas without the need to notify users (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 49).

Epic Energy has proposed an Out of Specification Gas Charge, which is to be levied at a rate of $15/GJ for out of specification gas (Draft Decision on the DBNGP Access Arrangement 2001 Part B, pp., 282). Section 2.3 of the DBNGP Terms and Conditions proposed by Epic states, "Epic Energy may agree with the Shipper to accept Out-of-Specification gas from the Shipper prior to that gas entering the DBNGP, on terms and conditions acceptable to Epic Energy." The regulator is requiring that the Out of Specification Gas Charge be reduced (Amendment 74, which requires maximum rates of the Out of Specification Gas Charge (and other amended charges) to be 350 percent of the relevant 100 percent local factor reference tariff) (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 282).

The Council also notes that the regulator has required the proposed Access Arrangement and Access Contract Terms and Conditions to be amended to

provide for revenue from the Out of Specification Gas Charge (and other named charges) to be rebatable as if the activities or events to which the charge relates were rebatable services within the meaning of the Code. The mechanism for rebate of revenue should provide for a rebate of a minimum of 95 percent of revenue from the named charges to users of the Firm Service (Amendment 79, Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 290).

The regulator has required the Access Contract Terms and Condition submitted as part of the DBNGP Access Arrangement to be amended to include a gas quality specification to apply from 1 July 2005, where that gas quality specification is no more restrictive than the broadcast specification currently set out in Schedule 1 of the DBNGP Regulations (Amendments 9, Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 49).

Epic Energy's reference tariff is based on the operating gas quality specification, which is currently prescribed in the DBNGP Access Manual. In its draft Access Arrangement, it states that if it is contractually able to do so, and with the approval of the Coordinator of Energy, Epic may broaden the gas quality specification. However, it is noted in the Draft Decision on the DBNGP Access Arrangement that,

> "*The 'Broadest Specification' is not referenced in Epic's Access Arrangements and should be explicitly included so as not to inhibit market entrants. We would note however that this specification is only broader in certain regards and is still far more restrictive than both the Parmelia and the Australia standard in other regards*" (Draft Decision on the DBNGP Access Arrangement 2001 Part B, pp. 47-48).

The Council notes that AlintaGas has proposed as part of its proposed Access Arrangement a gas quality specification which is consistent with the broadcast gas quality specification for the DBNGP (Draft Decision on the DBNGP Access Arrangement 2001 Part B, p. 47).

Natural gas basins and pipelines in Australia

Diagram 1 below contains a map of the major basins and pipelines in Australia. This shows the location of the Carnarvon Basin and Perth Basin and shows that the transmission pipelines in Western Australia are not connected with any transmission pipelines or gas fields other than those located in Western Australia.

Diagram 2 contains a map of the major pipelines in Western Australia. This shows that only the Parmelia Pipeline and DBNGP transport natural gas to Perth and south of Perth.

Diagram 1: **Natural gas basins and pipelines in Australia**

Source: reproduced with permission of Australian Gas Association

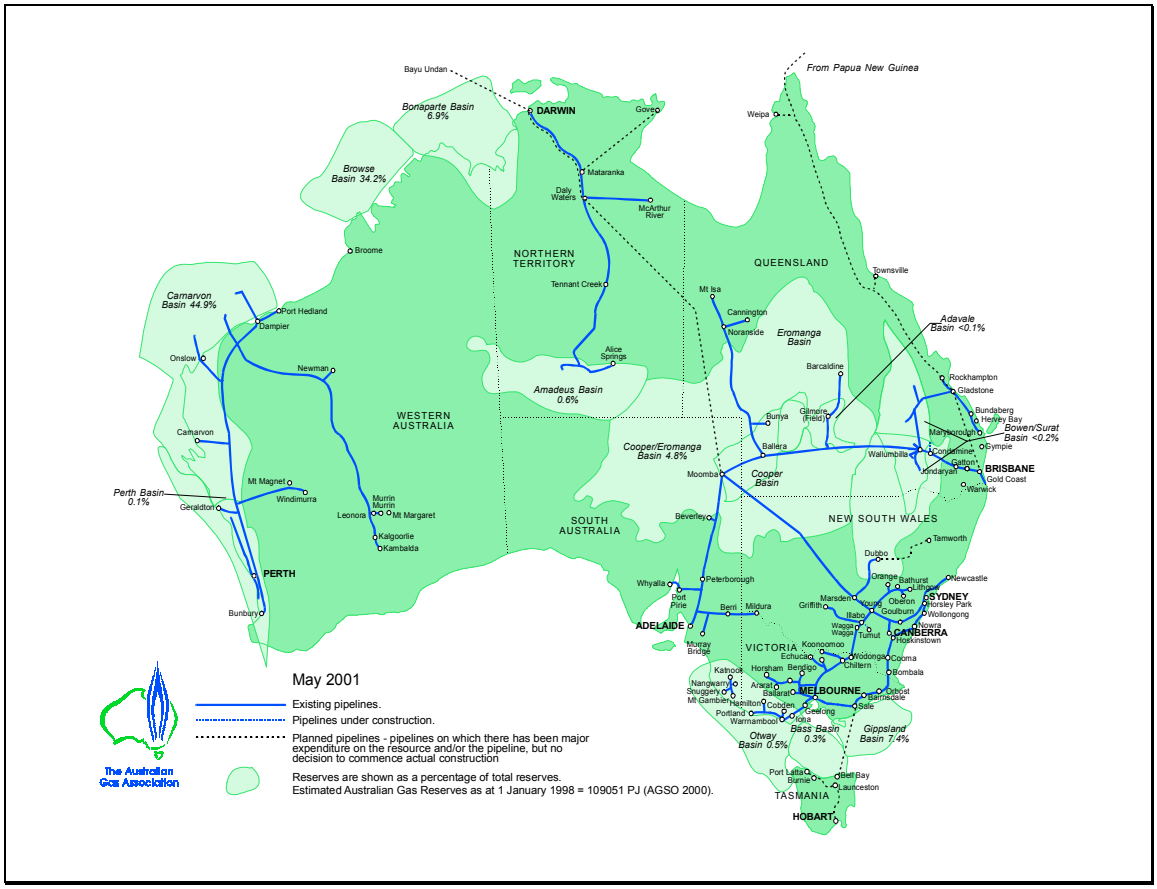
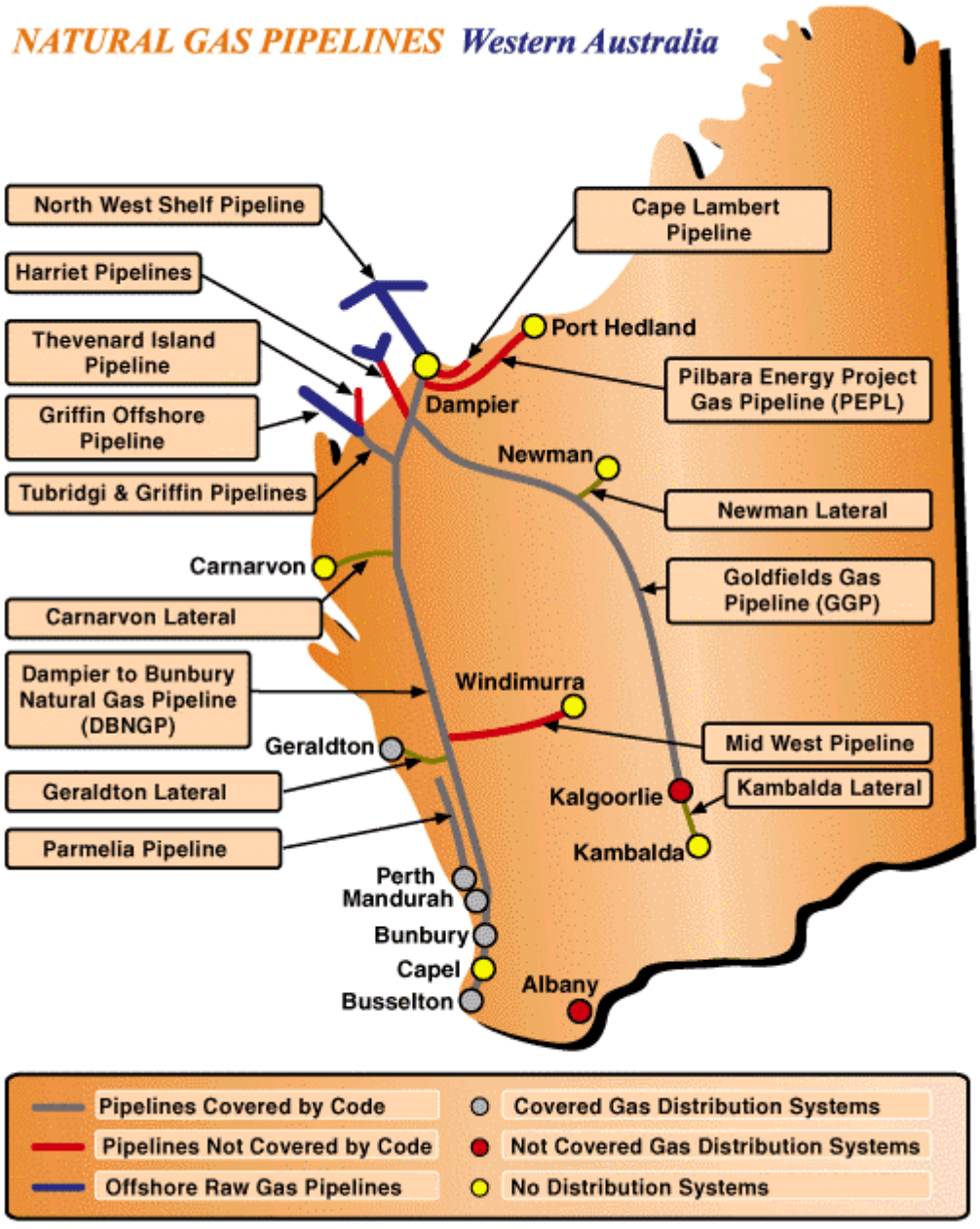


Diagram 2: **Natural gas pipelines in Western Australia:**

Source: reproduced with permission of OffGAR



Production

Western Australia and its immediate offshore areas possess significant resources of natural gas, holding more than three-quarters of the identified natural gas reserves within Australia. Natural gas accounts for 44 per cent of the State's identified energy resources and will last around 150 years at the current level of production (Office of Energy 2001a, p. 23). There are five sedimentary basins in this area: Carnarvon, Perth, Browse, Bonaparte and Timor Sea. Reserves have been discovered in the Browse Basin, Bonaparte Basin and Timor Sea. The Perth Basin and the Carnarvon Basin are the only basins which currently produce natural gas for sale.

In 1999/2000, a total of 728 PJ of natural gas was produced from these basins, as follows: Carnarvon Basin 718 PJ; Perth Basin 10 PJ (Australian Gas Association 2001, p. 59).

The Carnarvon Basin contains a number of natural gas production fields. The main fields currently producing natural gas are the Goodwyn, North Rankin, Cossack, Wanea, Tubridgi, Harriet and Griffin fields. The basin also contains substantial reserves in undeveloped fields, such as Gorgon.

The Perth Basin's main natural gas production fields are the Beharra Springs, Dongara and Woodada fields. The Beharra Springs field is operated by Origin Energy Resources Ltd, the Dongara field by Arc Energy NL and the Woodada field – which was owned and operated by Phoenix Energy Pty Ltd – was sold to Hardman Resources NL on 25 June 2001 (Australia Gas Association 2001, p. 28)

There are currently nine gas processing facilities in operation in Western Australia servicing the domestic market. Six of these are located in the Carnarvon Basin, with the remainder in the Perth Basin. The North West Shelf Gas Project (operated by Woodside Energy) also includes three onshore LNG trains, each with a capacity of 2.5 million t/a (see Table 3 below):

Table 3: **Natural gas processing facilities**

OPERATOR	PLANT LOCATION	BASIN	PLANT CAPACITY
Apache Energy (Harriet JV)	Varanus Island	Carnarvon	120 TJ/d
Apache Energy (East Spar JV)	Varanus Island	Carnarvon	240 TJ/d
BHP Petroleum	Onslow	Carnarvon	45 TJ/d
Chevron Australia	Thevenard Island	Carnarvon	21 TJ/d
CMS Energy	Dongara	Perth	100 TJ/d
Origin Energy Resources	Beharra Sprints	Perth	30 TJ/d
Origin Energy Resources	Onslow	Carnarvon	25 TJ/d
Phoenix Energy	Woodada	Perth	10 TJ/d
Woodside Energy (North West Shelf Gas project)	Dampier	Carnarvon	700 TJ/d
LNG			
Woodside Energy (North West Shelf Gas Project)	Dampier	Carnarvon	7.5 Mt/a

Source: Office of Energy, Energy Western Australia 2001 (September 2001: Government of Western Australia), p. 25.

There is only one natural gas storage site in Western Australia (out of only four in the whole of Australia) located in the Perth Basin at the Mondarra field. It is owned and operated by CMS.

Current reserves

Australian Gas Association estimated that recoverable reserves in the Carnarvon Basin as at 1 January 2000 amounted to 67,289 PJ, or about 52.6 per cent of Australia's total natural gas reserves. Carnarvon Basin production in 1999-00 was 718.4 PJ, at which rate reserves could continue to meet current rates of demand for 94 years (Australian Gas Association 2001, p. 59).

Australian Gas Association estimated reserves in the Perth Basin of about 112 PJ or roughly 0.08 per cent of Australia's total natural gas reserves. Perth Basin production in 1999-00 was 10.1 PJ, at which rate Perth Basin reserves could continue to meet current rates of throughput for 11 years (Australian Gas Association 2001, p. 59).

Processing plant capacity

The production capacity of the processing plants in the Perth Basin at Beharra Springs, Dongara and Woodada fields is relevant to the question of whether more gas could readily be supplied along the Parmelia Pipeline in response to an increase in demand by users.

The Perth basin as a whole produced 10.1PJ of natural gas in 1999-2000 (Australian Gas Association 2001, p.59).

The Beharra Springs plant has a capacity of 30TJ/d (Department of Mineral and Petroleum Resources 2001, p. 24).

The Dongara plant has a capacity of 100TJ/d. In 2000-01 it produced 68,233 KCM of gas (Department of Mineral and Petroleum Resources 2001, p. 28). According to Arc Energy *"Reserves are estimated to be sufficient to meet forecast gas sales for at least another 10 years".* The application and submissions do not provide any details of forecast demand for natural gas from the Perth Basin, Carnarvon Basin or generally.

The Woodada field has a capacity of 10TJ/d. In 2000-01 it produced 44,522 KCM of gas, with an estimated production in this field likely to continue only for another eight years ((Department of Mineral and Petroleum Resources 2001, p. 48).

New investment

According to the Western Australian Government "*[T]he production of natural gas is likely to increase significantly in the future with exploration continuing, and domestic and international demand expected to grow.*" (Office of Energy 2001a, p. 23).

There were a number of notable discoveries of natural gas from exploration drilling in 2000 which may lead to significant new investment, such as the Gorgon joint venture west of Dampier, Woodside at the Vincent/Enfield/ Laverda field; the North West Shelf partners in Gaea-1; BHP Petroleum at the Griffin-8 well; and Empire Oil and Gas at Rough Range (Department of Mineral and Petroleum Resources 2001, p. 6)

The Western Australian Government has reported improved prospects for the Perth Basin in general, especially in regard to large amounts of gas previously thought to be non-commercial. Its report claims that new drilling technologies, involving under balanced drilling and modified approaches to fracture stimulation (fraccing) have improved the prospects of successfully accessing these gas reserves (Department of Mineral and Petroleum Resources 2001, p. 6).

Gas transmission

There are currently 5 major onshore natural gas transmission pipelines:

- the DBNGP (covered pipeline)
- the Goldfields Gas Pipeline (covered pipeline)
- the Parmelia Pipeline (covered pipeline)
- the Pilbara Energy Pipeline (uncovered pipeline)
- the Mid West Pipeline (uncovered pipeline).

Of these pipelines, the Council considers that the DBNGP is relevant to considerations arising in criterion (b).

Gas distribution

Natural gas is distributed to over 406,000 domestic, commercial and industrial customers located in Perth and south of Perth by AlintaGas[5], which began operation on 1 January 1995.

The majority of natural gas supplied to those customers comes from the Carnarvon Basin through the DBGNP. The natural gas is then distributed via the AlintaGas distribution pipeline network. Operators in the Perth Basin sell to major customers in competition with AlintaGas using the Parmelia Pipeline (Australian Gas Association 2002). The application states that the Parmelia Pipeline holds less than 0.5% share (by volume) of the gas distribution network market in Perth (CMS 2001, p. 6) and accounts for approximately 15% of the natural gas transmitted to Perth and south of Perth (CMS 2001, p. 6).

Since January 2002, suppliers have been able to access the AlintaGas distribution network to access commercial and industrial customers using greater than 1 TJ/a. The approximately 430,000 domestic customers will remain uncontestable, nominally until July 2002. Recent indications are that full retail contestability is likely to be delayed until sometime in 2003.

Retail services

The primary energy domestic use of natural gas increased by 5 per cent in 1999/2000 to 335 PJ (918 TJ/d). The majority of gas supplied to customers located in Perth and south of Perth comes from fields in the offshore Carnarvon Basin. Currently, AlintaGas is the only retailer and distribution system network operator supplying natural gas to residential customers.

Progressive introduction of competition into the Western Australian retail gas market commenced in 1995. As from 1 January 2001 any gas customer taking at least 100 TJ/a transported through a single metered connection to a single site from outlet points on the AlintaGas distribution systems in the South West or on the DBNGP has been able to arrange its own gas transport and/or an alternative supplier. From that date, about 96% of the Western Australian gas market (by volume) were open to competition.

---

5 In August 2000 the Western Australian Government sold 45 percent of its interest in AlintaGas to the US energy group, Utilicorp United, and its Australian associate, United Energy. The remaining 55 percent of AlintaGas was sold to other investors in October 2000.

Since January 2002, approximately 500 additional customers with an annual gas usage of at least 1 TJ/a have been eligible to obtain gas through a supplier of their choice. All remaining customers, that is, those customers consuming less than 1 TJ/a, will become contestable on 1 July 2002. This will bring contestability to about 430,000 gas consumers (Office of Energy 2001b, p. 1). Recent indications are that full retail contestability is likely to be delayed until sometime in 2003.

Vertical linkages

CMS Gas Transmission of Australia owns and operates the natural gas processing facilities in the Dongara field. It transports the processed natural gas to sales outlets via its Parmelia Pipeline.

In 1997, when CMS purchased the Parmelia Pipeline, it also purchased the Dongara, Yardarino and Mondarra gas fields. It sold the Dongara and Yardarino fields to an independent exploration company, ARC Energy (CMS 2001, p. 6).

ARC Energy currently owns the Dongara field and has an agreement with CMS for it to process and transport its gas at an agreed toll fee down the Parmelia Pipeline (ARC Energy 2001) The depleted Mondarra field was retained by CMS at the time of the sale of the Dongara and Yardarino fields to ARC Energy, in order for it to be developed as the Mondarra Gas Storage Facility (CMS 2001, p. 6).

On the 31 March 2000, CMS made application for waiver of certain ring fencing obligations under section 4.15 of the *National Gas Pipelines Access Code for Natural Gas Pipeline Systems* (the Code). The application was lodged in respect of the Parmelia Pipeline. The Council understands that CMS *"provides integrated supply and transport services (i.e. CMSGTA services gas and provides transportation of that gas to several end users). This business accounts for a small portion of the gas transported by the Parmelia Pipeline"* (CMS 2001, p. 3). The Draft Decision was issued on 22 May 2000. The Draft Decision was to not grant the waiver. On 5 September 2000, CMS lodged a submission withdrawing its application for waiver of ring fencing obligations and made application for an extension of time to comply with the ring fencing obligations of sections 4.1(a), (b), (h) and (i) of the Code, until 30 September 2001.

The submission from CMS advised that CMS Energy (the parent company of CMS) had embarked on an evaluation of its activities in Western Australia relating to its holdings in gas pipeline, gathering, processing and storage assets. The most recent documentation from the regulator on CMS's progress on the ring-fencing obligations was the notice of 30 March 2001 advising of an extension of time. It said that:

> *"As an interim measure, CMS has proposed physically separating the provision of gas transportation services, which will be based at CMS' operational facility at Kewdale, from CMS' gas trading activities, which will be located at its Perth corporate office. This physical separation will be accompanied by a separation of personnel responsible for the gas transportation and gas trading activities." (CMS 2001, p. 7).*

In the application, CMS states that:

> *These conditions were met and CMS, which has embraced the concept of ringfencing as a commercial imperative, has since finalised the necessary corporate restructuring. The ring fencing arrangements now in place involve the physical separation of trading and transportation responsibilities including geographical separation of staff. These arrangements have been accepted by the Regulator and customers and give every indication of being a satisfactory resolution to meeting the commercial needs of customers and compliance with the ringfencing requirements of the Code. (CMS 2001, p. 8)*

Gas prices

Most gas sold from the Carnarvon Basin and the Perth Basin is sold under long-term contractual arrangements. For example in the Perth Basin:

- Gas from the Beharra Spring production field has been sold on a long-term take-or-pay contract to Alcoa Australia since 1990.
- ARC Energy has contracted to sell gas from the Dongara field to Alcoa Australia, Midland Brick Company and other industrial companies in Perth, with an option to sell up to 6.5PJ of gas to another industrial customer commencing in January 2002.
- Dongara is currently producing at full capacity and additional gas sales are dependent on the success of well workovers and development and exploration drilling. Woodada currently supplies gas to Tiwest, Midland Brick and Whitemans Brick under long term contracts. (Department of Mineral and Petroleum Resources 2001, p. 28)

In the Carnarvon Basin, for example, the North West Shelf Gas Project (comprising the North Rankin, Goodwyn, Perseus, Wanaea, Cossack, Lambert and Hermes fields) which is Australia's largest resource development, supplies around 70% of Western Australia's natural gas demand under long-term take-or-pay contracts (see table 4 below):

Table 4: North West Shelf venture sales contracts

NORTH WEST SHELF VENTURE SALES CONTRACTS			
Buyer	Destination	Period	DCQ (TJ/d)
AlintaGas	South West market	1995-2002	96
		2003-2005	90
		2005-2020	62
		2000-2010	15.5
		2002-2012	30
Western Power	Power generation	1999-2002	90
		2003-2006	115.8
Alcoa Wagerup	Pinjarra and Kwinana alumina refineries	1997-2020	175
Hamersley Iron	Dampier power station	2000-2005	16
		2006-2010	10
Robe River	Cape Lambert iron ore operation	1995-2005	4.8
Mission Energy	Kwinana co-generation plant	1996-2012	7.5
BHP Minerals	Port Hedland HBI plant	1998-2013	110

Source: Department of Mineral and Petroleum Resources, Western Australian Oil and Gas Industry 2001, (2001: Western Australian Government), p. 40

Table 5: **Perth Basin sales contracts**

Perth Basin sales contractors				
Project	Operator	Purchaser	Contract End Date	Contract Delivery Rate (TJ/d)
Beharra Springs	Origin Energy Developments	Alcoa	2002	N/A
Dongara	Arc Energy	Alcoa Midland Brick Perth Industrial Customer	N/A N/A N/A	N/A N/A N/A
Woodada	Phoenix Energy	Midland Brick Whitemans Brick Tiwest	NA NA NA	NA NA NA

Source: Department of Mineral and Petroleum Resources, Western Australian Oil and Gas Industry 2001, (2001: Western Australian Government), p. 27

Liquefied Natural Gas is also sold by Carnarvon Basin producers to eight Japanese gas and electricity utilities under 20 year take-or-pay contracts through to 2009. The contracts allow for an annual delivery program (ADP) of a minimum of 6.8Mt (120 cargoes) and a maximum of up to 7.33Mt (131 cargoes). A fleet of eight 126,600m^3 tankers ship the LNG to Japan.

Current contracted prices for wellhead gas in the Carnarvon or Perth Basin are not published, as they are commercial-in-confidence.

However, the 1999 well-head price for Western Australia was reported to be $1.90 per GJ (Australian Gas Association 2001, p. 77). The Council notes that the submissions of AusAm and AWE suggest that price of Perth Basin gas is less than the price of Carnarvon Basin gas.

It is not clear whether this price advantage arises due to a lower well-head price for Perth Basin gas or a lower transportation price, resulting in a lower price for delivered gas from the Perth Basin compared to the price of delivered gas from the Carnarvon Basin.

Transmission tariffs

As noted earlier CMS has an approved access arrangement for the Parmelia Pipeline. The access arrangement specifies the transport tariffs that CMS proposes to charge for transporting gas along the pipeline.

The Access Arrangement with amendments required by the regulator was approved on 15 December 2000. The regulator opted for price capped tariffs, in preference to an average price control regime, with a CPI-X price smoothing mechanism and the ability to reset X every 5 years. The initial reference tariff service for transporting gas along the Parmelia Pipeline was the following:

Table 6: **Parmelia Pipeline reference tariffs**

Firm Extended Service: Reference Tariff			
	Tariff excluding GST	GST @ 10%	Tariff including GST
Reservation Tariff	$ 0.44 / GJ	$ 0.044 / GJ	$ 0.484 / GJ
Commodity Tariff	$ 0.11 / GJ	$ 0.011 / GJ	$ 0.121 / GJ
Interruptible Extended Service: Reference Tariff			
	Tariff excluding GST	GST @ 10%	Tariff including GST
Reservation Tariff	$ 0.396 / GJ	$ 0.040 / GJ	$ 0.436 / GJ
Commodity Tariff	$ 0.099 / GJ	$ 0.010 / GJ	$ 0.109 / GJ

Source: Parmelia Pipeline Access Arrangement General Terms & Conditions 2000, appendix 3, schedule 1.

Note that these prices are as at 1 July 1999. CMS has orally advised the Council that currently the transmission tariff is $0.57/GJ.

Delivered gas price

The delivered price of gas depends on the quantity of gas contracted. For residential and commercial users, the delivered gas price includes a gas commodity charge (based on the wellhead price of gas), a gas transmission charge, distribution charges, and retail charges. Commercial users could expect cheaper $/GJ prices because they consume significantly larger amounts of gas. Industrial users may pay lower or no retail charges, and lower distribution charges than residential or commercial users. Very large industrial users may take gas directly from the transmission system and thus pay minimal or no distribution or retail charges.

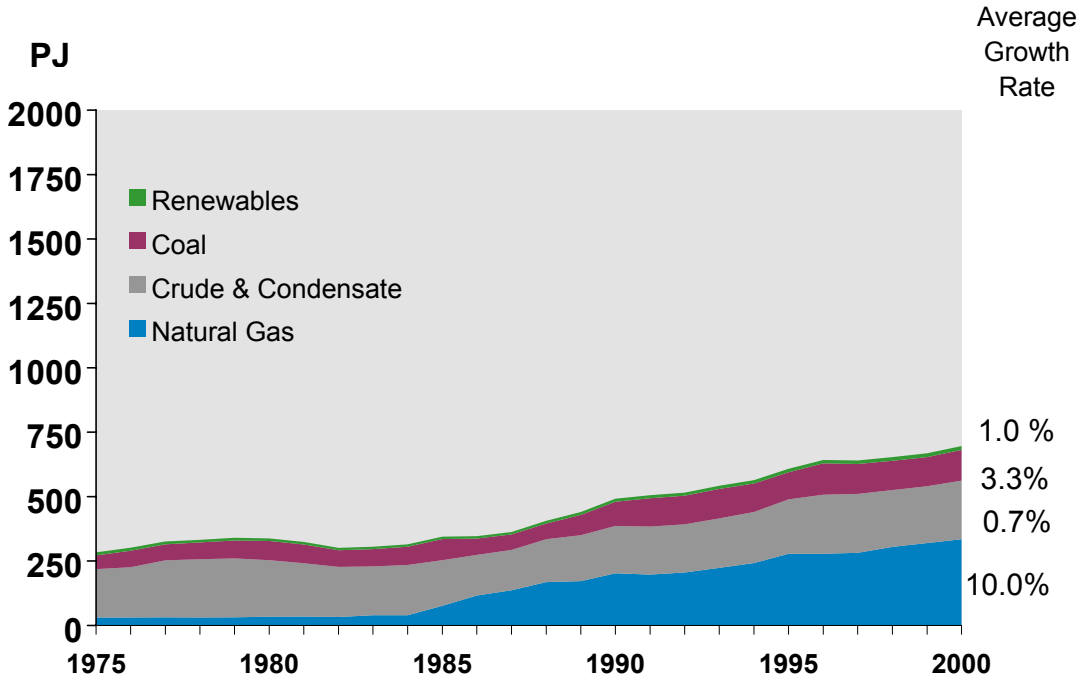
Delivered gas prices are not typically disaggregated into component charges such as the gas commodity charge, the transmission transport charge, the distribution charge, and the retail charge. It is understood that very large industrial customers have been able to negotiate delivered prices under which components have been disaggregated to some extent, and with provision for reductions in delivered prices where component charges fall (e.g., where transmission transport tariffs fall due to regulation).

Demand for natural gas in WA

Since 1984, natural gas demand in Western Australia has grown by an average of 16% per annum to the current level of around 630TJ/d. The increase in consumption has not been uniform with a high growth rate in the first four years followed by slower growth for the next five years. Over the last few years the growth rate appears to have increased again averaging around 9% since 1992. The uneven growth pattern reflects the nature of demand, which is primarily dependent on the major users. Around 48% is used in industrial processes whilst power generation consumes about 46%. The commercial and residential sectors account for less than 6% of usage. The largest single user, Alcoa, consumes in its three alumina refineries, around 35% of the total natural gas used in the State (North West Shelf Gas Pty Ltd 2001).

Table 7 summarises the average grown rate in demand for primary energy, including natural gas.

Table 7: Primary energy demand in WA



Source: Office of Energy 2001, p 12

In 2000, the Office of Energy estimated that the forecast annual growth rate of natural gas use is expected to be 8.4 percent to 2009/10 (Office of Energy, 2000, p. 21, Figure 3).

Gas demand price elasticity

The latest available information on the price elasticity of gas demand is contained in analysis by the Australian Bureau of Agricultural and Resource Economics (ABARE) for the Australian Gas Association (Australian Gas Association 1996). The study was conducted on data drawn from the period 1973-74 to 1993-94.

The Australian Gas Association/ABARE paper disaggregated price elasticities for the three sectors of energy use: residential; commercial; and industrial sectors.

The analysis provided results for the long-term price elasticity of demand for gas in response to a one per cent change in the price of gas. Long-term price elasticity provides users with a significant time period to switch to alternative

energy sources or reduce consumption in response to changes in gas prices. The outcome of the analysis is presented in table 8 below.

Table 8: **Price elasticity of demand for gas**

Per cent change in demand for gas by sector	Change in Demand in response to a one per cent change in price
Residential	- 0.78
Commercial	- 0.10
Manufacturing	- 0.30

Source: Australian Gas Association 1996, p. 22.

Part C – Coverage criteria

The Council has analysed the criteria in the following order: criterion (b); criterion (a); criterion (c); criterion (d). This approach is consistent with the approach adopted by the Tribunal in the Eastern Gas Pipeline decision (Eastern Gas Pipeline decision, paragraphs 55-80).

Criterion (b) that it would be uneconomic for anyone to develop another pipeline to provide the services provided by means of the pipeline.

The Council's Approach to Criterion (b)

Criterion (b) requires the Council to consider whether the Parmelia Pipeline is a natural monopoly or has natural monopoly characteristics.

In analysing this criterion in the context of the application, the Council's task is to:

- define the services provided by the Parmelia Pipeline; and
- assess whether it is economic to develop other pipelines to provide those services.

Service

The Council considers that criterion (b) requires the services provided by a pipeline to be defined by reference to the points between which natural gas is transported by the relevant pipeline i.e. a point to point service definition.

This approach was endorsed by the Tribunal in the Eastern Gas Pipeline decision, where the Tribunal decided that the "service" provided by the Eastern Gas Pipeline was a haulage service for the transport of gas between one point on the pipeline and another:

> *"The question of what constitutes the services provided by the pipeline is fundamentally a mixed question of fact and the proper construction of criterion (b), rather than a matter of economic analysis. Every haulage service will of necessity be from one point to another. That is the commercial service actually provided by the pipeline operator to its customers.*
>
> *That service may be of different use to the producers in the origin market or the customers in the destination market, but is it the same service. No market analysis is necessary or appropriate in the description of the services provided by the pipeline." (Eastern Gas Pipeline decision, paragraph 69).*

CMS contends that the service supplied by the Parmelia Pipeline is "*the supply of natural gas to the Perth metropolitan area and as far south as Pinjarra*" and more specifically "*the transportation of natural gas to Perth and Pinjarra from places located north of Perth as far as Dongara (near Geraldton) and reasonably proximate to the pipeline such that the cost of a lateral for interconnection would be a viable investment*" (CMS 2001, p. 18). CMS notes that since some of the gas field inlets are located partway along the length of the Parmelia Pipeline, there are, in effect, a number of possible point-to-point services.

Headberry submits that Parmelia is the only pipeline that can deliver Perth Basin gas in its current form to consumers of this gas (Headberry 2001, p.6) and that Parmelia provides a delivery mechanism for the Perth Basin producers that DBNGP cannot or will not provide without significant investment by either DBNGP and/or the Perth Basin producers (Headberry 2001, p.7). The Council infers from this that Headberry considers that the service provided by the Parmelia Pipeline is the transportation of Perth Basin natural gas in its current form from the Perth Basin to Perth and places south of Perth and that the service provided by the DBNGP is a different service to the service provided by the Parmelia Pipeline.

AusAm submits that "*there are a number of services provided by the Parmelia Pipeline, the most important of which is the haulage service of transmitting gas, being gas which does not necessarily meet the DBNGP inlet specifications, from any point on the Parmelia Pipeline to any other point on the Parmelia Pipeline…(T)he simplest formulation of the Parmelia Pipeline haulage service is the transportation of gas between points in the Perth Basin to points in Perth and Pinjarra*." (AusAm 2001, p. 4).

AusAm submits that the DBNGP does not currently provide substitute services for the services provided by the Parmelia Pipeline for the reason that the natural gas transported by the DBNGP is of a different specification to that transported by the Parmelia Pipeline (AusAm 2001, p. 2).

AWE does not give a view on the definition of the service provided by the Parmelia Pipeline (it does submit that it is not technically possible for Perth Basin producers to meet the DBNGP specification since the Perth Basin fields

do not contain sufficient LPG to meet that specification (AWE 2001, p. 1). It appears from AWE's submission, however, that it is technically possible for non-specification gas to be transported via the DBNGP, although the producers are required to pay a signification penalty to the owner of the DBNGP to do this).

Conclusion on service definition

The Council considers that the service provided by the Parmelia Pipeline is the transportation of natural gas from Dongara to Perth and Pinjarra as well between points along its route, including the exit flanges for various laterals along the length of the Parmelia Pipeline. This would include the transport of gas that has its source north of Dongara from Dongara to Perth and Pinjarra.

The Council does not consider that the definition of the services provided by means of the Parmelia Pipeline should be limited to the service of delivery of Perth Basin gas from Dongara to Perth and Pinjarra and points in between. The Council reaches this view for the following reasons:

- the Parmelia Pipeline does not solely transport Perth Basin gas. It also transports natural gas sourced from the DBNGP (CMS 2002a, p. 15).
- the difference between the inlet gas specification of the DBNGP and the Parmelia Pipeline are limited to the LPG content (CMS 2002a, p. 9).
- DBNGP in fact transports natural gas that does not meet the current specification (CMS 2001, p. 14).
- the heating gas specification which natural gas supplied to consumers in Perth and Pinjarra is required to meet is met by natural gas transported by the Parmelia Pipeline from the Perth Basin and by the DBNGP pipeline from the Carnarvon Basin (Headberry 2001, p. 8).

The essence of the service is point to point transportation rather than being limited to field to market transportation.

Develop another pipeline

Criterion (b) requires an assessment of whether it is uneconomic to develop another *pipeline* to provide the services of the Parmelia Pipeline. The use of the word *"pipeline"* in this criterion excludes from consideration facilities other than pipelines that could provide the services provided by the Parmelia Pipeline.

The Council considers that criterion (b) requires the Council to consider whether:

- it is economic to develop a new pipeline to provide the services provided by the pipeline; and
- existing pipelines such as the DBNGP do or could provide the services provided by means of the Parmelia Pipeline, for example by way of some enhancement to the existing capacity of such other pipeline.

The Tribunal in the Eastern Gas Pipeline decision endorsed this approach, where the Tribunal said *"there is no logic in excluding the existing pipelines from consideration in the determination of whether Criterion (b) is satisfied. The policy underlying the Code would not be advanced if the Tribunal were to proceed in that blinkered way".* (Eastern Gas Pipeline decision, paragraph 57).

New pipeline

CMS does not submit that it would be economic to develop a new pipeline to provide the services provided by means of the Parmelia Pipeline.

AusAm submits that:

- there are insufficient supplies of Perth Basin gas to justify the development of another pipeline to provide the services;
- the development of a new pipeline from the Dongara area to Perth would encounter substantial problems in securing land access rights (AusAm 2001, pp. 4-5).

CMS notes that the Parmelia Pipeline currently transports gas sourced from the DBNGP and the current exploration underway in the Perth Basin may result in increased volumes of natural gas to be transported to Perth (CMS 2002a, p. 15).

The Council understands that current reserves in the Perth Basin are sufficient to produce approximately 10 PJ/a for the next 11 years. As discussed in further detail below, the Parmelia Pipeline and an expanded DBNGP each have the capacity to transport that volume of natural gas.

The Council notes the Regulator's view that there is a "*low likelihood that the assets* [the Parmelia Pipeline] *would ever be duplicated or completely replaced, given that augmentation of the Dampier to Bunbury Natural Gas Pipeline would be a less costly means of providing the same service potential of the Parmelia Pipeline*" (CMS 2001, p. 23)

The Council considers it unlikely that it would be economic to develop a new pipeline to provide the services provided by means of the Parmelia Pipeline.

Does the DBNGP provide the services provided by the Parmelia Pipeline?

As noted by the Tribunal in the Eastern Gas Pipeline decision, section (b) includes consideration of whether it would be economic to develop another existing pipeline to provide the services provided by the Parmelia Pipeline.

CMS submits that the DBNGP provides the same *"point to point"* service as the Parmelia Pipeline (CMS 2001, p. 19) for the following reasons:

- The DBNGP runs parallel to the Parmelia Pipeline from Dongara to Perth and points further south to Pinjarra (CMS 2001, p. 19).
- Both the Parmelia Pipeline and the DBNGP provide gas into the Perth Metropolitan market and points further south to Pinjarra (CMS 2001, p. 19).
- The gas producers in the Northern Perth Basin can gain access to the DBNGP (CMS 2001, p. 26) and Epic Energy has offered to transport gas from the Perth Basin producers to Perth (CMS 2002a, p. 14).

The Council accepts the first two of these reasons (with which none of the submissions disagreed). However, the submissions do not agree that Perth Basin producers can access the DBNGP due to the inlet gas specification of the DBNGP and the current capacity constraints of the DBNGP. The Council's consideration of these issues is set out below.

Inlet gas specification

As set out in Part B of this recommendation, currently the gas quality specification for the DBNGP requires producers using that pipeline to input a blend of natural gas and LPG gas.

However, CMS does not consider that the difference in specification prevents Perth Basin producers from access to the DBNGP for following reasons:

- Technical and commercial arrangements exist which overcome the technical restriction to access to the DBNGP (CMS 2001, pp. 20-21).
- DBNGP currently accepts some non-specification natural gas from the Carnarvon Basin (CMS 2001, p. 21; CMS 2002b, p 5) and is offering to transport Perth Basin gas (CMS 2002a, p. 14).
- The Tubridgi joint venture that operates the Tubridgi field has delivered

off-specification gas to the DBGNP for approximately ten years under a commercial arrangement (CMS 2002b, pp 5-6).

The Draft Decision on the DBNGP Access Arrangement requires:

- the Access Contract Terms and Conditions to be amended *"to make a gas quality specification to apply from 1 July 2005 where that gas quality specification is no more restrictive than the broadest gas specification currently set out in the Dampier to Bunbury Pipeline Regulation of 1998"*; and

- the Access Arrangement be amended *"to make provision as part of the Firm Service for receipt of gas into the DBNGP at any location on the DBNGP"* (Draft Decision on the DBNGP Access Arrangement Part B, p. 26).

The submissions do not agree that Perth Basin producers can access the DBNGP for the following reasons:

- The inlet gas specification requires a high LPG content, which the Perth Basin producers are unable to meet (AusAm 2001, p. 8; AWE 2001, p. 1).

- Epic Energy proposes a $15 per TJ penalty for off-specification gas. It would not be economic for Perth Basin producers to transport Perth Basin gas via the DBNGP due to the increased cost compared to the Parmelia Pipeline arising from this penalty, at least until 2005 (AusAm 2001, p. 8; AWE 2001, p. 1).

- Acceptance of off-specification gas is currently at the discretion of Epic Energy and at the shipper's risk and it is uncertain whether Epic Energy would accept increased volumes of off-specification gas on an ongoing basis (AusAm 2001, p. 8).

- The cost of installing additional processing facilities by the Perth Basin producers in order to blend gas inlet sources to meet the DBNGP inlet gas specifications would potentially "*destroy the economic viability of some Perth Basin gas*", would "*substantially remove the competitive advantage Perth Basin gas should otherwise enjoy over more distant gas*" (AusAm 2001, p. 9).

- the requirement that the DBNGP provide a minimum quantity of LPG in gas transported by that pipeline and allow for stripping of LPG in Perth , has resulted in certain gas shippers being unable to inject gas into the DBNGP without significant upstream gas processing (Headberry 2001, p. 7).

The Council understands from these submissions and from the Draft Decision on the DBNGP Access Arrangement that it is technically possible for the DBNGP to transport natural gas from the Perth Basin which does not meet

the DBNGP specification but that Epic Energy will impose a penalty on shippers where their gas does not meet that specification, at least until 2005.

Capacity

CMS and AusAm note that the DBNGP is currently operating at near full utilisation (CMS 2001, p. 22; AusAm 2001, p. 3). Table 2 in Part B sets out the current capacities of the Parmelia Pipeline and the DBNGP. No data has been provided as to forecast demand for gas to Perth and regions south of Perth. Set out in Part B of this recommendation is information on likely demand for Western Australia as a whole. Other than information derived from pipeline throughput, there is little information on prospective demand for gas in the Perth and Pinjarra regions of Western Australia.

The capacity question that arises under criterion (b) is whether the DBNGP has sufficient capacity to transport an additional 35TJ/d, being the volume currently transported by the Parmelia Pipeline.

Assuming the current capacity of the DBNGP is 600TJ/d and its maximum capacity is 650TJ/d through adding compression, it seems that the DBNGP, fully compressed, has sufficient capacity to provide the current levels of throughput of Perth Basin gas from Dongara to Perth and Pinjarra. CMS states that the DBNGP, fully expanded, would have sufficient capacity to transport an additional 120TJ/d.[6] It would only require a small increase in compression for the DBNGP to accommodate the entire current throughput of the Parmelia Pipeline (CMS 2002a, p. 16).

The Council is satisfied that through additional compression, the DBNGP would have sufficient capacity to meet the current and likely levels of utilisation of the Parmelia Pipeline and would have sufficient capacity to meet any increase in that level of throughput up to 120TJ/d.

Conclusion on whether DBNGP currently provides the same service as the service provided by the Parmelia Pipeline

As set out above, the Council considers that the service provided by the Parmelia Pipeline is the transportation of natural gas from Dongara to Perth and Pinjarra as well as to points in between, including the exit flanges for various laterals along the length of the Parmelia Pipeline.

The Council does not consider that the DBNGP inlet gas specification means that the DBNGP does not or cannot provide the service provided by the

[6] In their second submission, CMS qualifies this statement by stating that this only refers to the portion of the pipeline south of the approximate location of DBGNP compressor station seven (CS7) (CMS 2002b, p 7)

Parmelia Pipeline. It is CMS' understanding that the DBNGP is currently offering to provide that service to Perth Basin producers. Further, the Regulator in the Draft Decision on the DBNGP Access Arrangement has required that the Access Arrangement be amended to make provision as part of the Firm Service for receipt of gas into the DBNGP at any location on the DBNGP (Draft Decision on the DBNGP Access Arrangement 2001, Amendment 2, Part B, p. 38).

The Council also considers that DBNGP has sufficient capacity, fully expanded, to provide the service.

The Council therefore is satisfied that it is technically possible for the DBNGP to provide the services provided by the Parmelia Pipeline. The Council is therefore required to consider whether it would be economic to develop the DBNGP to provide those services.

Uneconomic

The test for whether it is uneconomic to develop another pipeline to provide the services provided by means of the pipeline for the purposes of criteria (b) set by the Tribunal in the Eastern Gas Pipeline decision is as follows:

> *"the test is whether, for a likely range of reasonably foreseeable demand for the services provided by means of the pipeline, it would be more efficient, in terms of costs and benefits to the community as a whole, for one pipeline to provide those services rather than more than one" (Eastern Gas Pipeline decision, paragraph 137).*

In assessing whether it would be economic to develop the DBNGP to provide the service the Council has considered the following factors:

- the likely demand for natural gas in the Perth region and the Pinjarra region south of Perth; and
- the costs of developing the DBNGP to provide the service of transporting natural gas from Dongara to the Perth region. In this context the Council has considered:
    - the costs of overcoming the current inlet gas specification of the DBNGP; and
    - the costs of expanding the capacity of the DBNGP to meet the forecast demand for natural gas from the Perth Basin.

These factors are consistent with the factors considered by the Tribunal in considering whether it was economic to develop the Interconnect to provided the services provided by means of the Eastern Gas Pipeline.

The Tribunal in the Eastern Gas Pipeline decision asked whether a single pipeline could meet all of the foreseeable demand for the services provided by means of the pipeline over a reasonable time frame. In that decision, a reasonable time frame was somewhere between 'a few years' and up to 15 years. The Council considers that a similar time period is appropriate for the consideration of the application. If there are no economic alternatives to the services provided by the Parmelia Pipeline for the foreseeable range of demand for those services in that period, then criterion (b) is likely to be met.

Demand for services provided by Parmelia Pipeline

Empirical data showing the current and forecast demand for the transport of gas from Dongara to the Perth region is limited. Hence, the Council has attempted to derive the relevant demand from the following information:

- the current demand from gas in the Perth region;
- the current levels of gas supplied by the Perth Basin to the Perth region;
- the current contracted capacity of the Parmelia Pipeline; and
- estimates of the volume of Perth Basin gas available over the next 10-15 years.

As set out in Part B, in 1999-2000, the Perth Basin producers produced approximately 10.1PJ of natural gas. The Perth Basin producers and AWE each submit that they are currently exploring gas reserves in the Perth Basin and there may be scope for future increased production of natural gas from the Perth Basin (see Part B). However, no detail has been provided as to the likely volumes of natural gas that may be available nor the time frame in which it may become available.

The Council understands that Perth Basin producers have no current long term contracts in place for the supply of natural gas via the Parmelia Pipeline. Currently, the Parmelia Pipeline transports 35TJ/d.

In the absence of any forecast demand data for gas in the Perth region and any forecast data for throughput levels in the Parmelia Pipeline, the Council assumes that Parmelia Pipeline throughput will remain at least constant or will increase consistently with the forecast demand for gas in WA generally. The Council therefore considers that the likely volumes to be transported through the Parmelia Pipeline will be at minimum approximately 10PJ/a, with the Perth Basin capable of supplying that volume for the next 10-11 years.

Capacity of Parmelia Pipeline and DBNGP to meet demand for transportation of gas from Perth Basin to Perth region

As set out in Part B, the Parmelia Pipeline has a current capacity of 64TJ/d, currently transports 35TJ/d and has a fully expanded capacity of 120TJ/d.

Given that Perth Basin producers produced approximately 10.1PJ in 2000, and the assumptions outlined above, the Council concludes that the Parmelia Pipeline has sufficient capacity to meet the natural gas transportation requirements from Dongara to Perth for the next 11 years (being the period in which the reserves in the Perth Basin are predicted to be depleted).

As set out in Part B, the maximum capacity of the DBNGP is 650TJ/d. The current capacity is 600TJ/d, the current contracted capacity is 593TJ/d and the actual throughput is 540TJ/d (CMS 2001, p. 9). Given these figures, the current production volumes of the Perth Basin producers and projected growth generally for natural gas in Western Australia, the Council considers that the DBNGP could be expanded to sufficient capacity to transport the current and forecast production volumes of Perth Basin gas.

Is it economic to develop the DBNGP to provide the service?

The question that the Council is required to answer is whether it is economic to develop the DBNGP to provide the service of the transportation of gas from Dongara to the Perth region whether sourced from the Perth Basin or other basins.

CMS argues that the presence of the DBNGP demonstrates the economic viability of developing another pipeline to provide the services provided by the Parmelia Pipeline. CMS argues that it is economic to expand the capacity of the DBNGP for the following reasons:

- the entire current throughput of the Parmelia Pipeline could be accommodated by the DBNGP with only a moderate investment in compression (CMS 2002a, p. 16);

- presently, there appears to be some spare capacity in the southern part of the DBNGP which should be adequate to accommodate a gas development which might be brought into production rapidly (around 10TJ/d) (CMS 2002a, p. 16); and

- the estimated cost of adding compression to expand the DBNGP capacity from Mondarra to Perth to provide a further 120TJ/d of gas transportation is $30 - $45 million (CMS 2001, p. 22, CMS 2002b, p 8).

By contrast, AusAm and AWE submit that it would be uneconomic to develop the DBNGP to provide the services of the Parmelia Pipeline as the installation of additional pipeline capacity on the DBNGP to service Perth Basin gas is an economically inefficient outcome given that ample unutilised capacity currently exists in the Parmelia Pipeline.

The Council does not consider that the existence of unutilised capacity on the Parmelia Pipeline of itself means that it would be uneconomic to develop the DBNGP to provide the service.

Headberry submits that it would be uneconomic to develop the DBNGP to provide the service provided by the Parmelia Pipeline for the reason that Perth Basin producers will need to construct a separate section of pipeline to connect to the DBNGP if the Parmelia Pipeline assets are not used (Headberry 2001, p. 5). The Council understands that it is necessary for any producer to construct some pipeline to connect their field or processing facility to any transmission pipeline and notes, for example, that the owners of the Beharra Springs gas field, Origin Energy Developments, could have elected to use the DBNGP to transport gas to Perth:

> *"[the Beharra Springs gas field]…is located adjacent to the Parmelia Pipeline at a point where the latter is separated from the DBNGP by a distance of only some 50 metres. Gas might have been transported to Perth via either pipeline…the Beharra springs proponents made the decision to seek, and subsequently gained access to, third party gas transportation services on the Parmelia Pipeline" (CMS 2001, p.6).*

In addition to the cost of adding further capacity to the DBNGP, it appears from the submissions that there is a cost associated with Perth Basin producers meeting the current DBNGP inlet gas specification. In theory the inlet gas specification can be met by:

- Perth Basin producers blending the natural gas which they produce with LPG so that the gas which they transport via the DBNGP meets the specification; or

- DBNGP blending Perth Basin gas so that it meets the specifications. Presumably, were DBNGP to provide such blending service, a tariff would be imposed. No details of these costs have been provided to the Council.

The cost to the producer of such blending does not appear to the Council to be a relevant cost of "developing the pipeline". The Council notes the acknowledgment by CMS that "*the cost of implementing a technical solution in order to meet the gas quality inlet specification for the DBNGP would be an onerous imposition on smaller scale Perth basin producers and generally would be sub-economic by comparison to not having to commit the expenditure and to simply use the Parmelia Pipeline*" (CMS 2001, p. 20).

Alternatively, the DBNGP could transport Perth Basin gas that does not meet

the specifications. This would avoid the costs to producers identified above. However, at least until 2005, an out of specification charge will be imposed by Epic Energy for the transportation of out of specification gas by the DBNGP.

It is not clear to the Council whether this charge is a pipeline cost to enable the DBNGP to physically transport out of specification gas or a commercial charge arising from the DBNGP contract with Wesfarmers (see Part B, "Inlet Gas Specification").

It is also unclear what the cost of this penalty to producers will in fact be, given the Regulator's Draft Decision requiring the revenue from charges such as the Out of Specification Charge, to be rebateable. CMS states that the $15/GJ penalty is akin to an overrun penalty and that "*the actual LPG shortfall compensation payment (to which … third party users in the Carnarvon Basin would equally be subject if their gas falls short of DBNGP specification) is of the order of approximately $0.50 GJ at the maximum (i.e. with zero LPG content). As the payment is based on the difference from which the third party gas varies from the specification, one might expect that it would normally be considerably less that this amount*" (CMS 2002a, p. 14).

The Council has considered whether the DBNGP can economically provide the services of the Parmelia Pipeline, given the likely level of demand for the transportation of gas along that route.

The Council has been guided by the assessment by the Tribunal of whether it was economic to develop the Interconnect to provide the service of transportation of Gippsland Basin gas to NSW/ACT. At the time of that decision, the Interconnect provided that service to a limited extent. The Tribunal considered it would be economic to expand the capacity of the Interconnect to around 10PJ/year through adding compression. However, it would be uneconomic to develop the Interconnect to a capacity sufficient to provide the services of the Eastern Gas Pipeline for foreseeable demands (80-100 PJ/annum), or to the maximum expanded capacity of the Eastern Gas Pipeline (110PJ/annum) due to the cost of augmenting or enhancing the Interconnect.

The only data before the Council in relation to foreseeable demand for the service of transportation of gas to Perth is derived from the AGA data set out above for Western Australia, the current and projected levels of throughput in the DBNGP Access Arrangement and the current levels of throughput of the Parmelia Pipeline. It appears that some expansion of the current capacity of the DBNGP would be necessary to meet this demand, although it appears likely that such expansion could be achieved by additional compression up to its current maximum capacity.

The Council has assumed that the current tariffs for the services provided by the Parmelia Pipeline approved and applicable under the Third Party Access Code are economically efficient. CMS has undertaken that following revocation it will honour the existing published tariffs (CMS 2002a, p. 11). This is an issue in the Council's consideration of criterion (a).

CMS states that it is aware that Epic Energy is offering to transport gas from Perth Basin producers to Perth at "rates which are significantly lower than the approved regulated tariff on Parmelia". No further information has been provided of the incremental cost of any required expansion and the likely tariffs for transportation of natural gas from the Perth Basin to Perth and south of Perth using the DBNGP.

The Council is therefore unable, on the information provided, to accurately compare the cost of the Parmelia Pipeline alone meeting the demand for transportation of Perth Basin gas to Perth with the cost of the DBNGP providing that service.

Conclusion on criterion (b)

The information before the Council suggests that it may be possible to economically develop the DBNGP to provide the service currently provided by the Parmelia Pipeline. While the information is not conclusive enough for the Council to be certain of this, it is sufficient for the Council to consider that it is a credible possibility.

It is therefore not possible for the Council to be affirmatively satisfied that, for the likely range of reasonably foreseeable demand for the transportation of gas from Dongara to the Perth region, it would be more efficient, in terms of the costs and benefits to the community as a whole, for the Parmelia Pipeline to provide those services rather than for those services to be provided by more than one pipeline.

The Council is therefore not satisfied that criterion (b) is met.

Criterion (a) that access (or increased access) to services provided by means of the pipeline would promote competition in at least one market (whether or not in Australia), other than the market for the services provided by means of the pipeline.

The Council's approach to criterion (a)

The rationale for this criterion is that access regulation is only warranted where access is likely to create better conditions or a better environment for competition in at least one market other than the market for the services provided by means of the pipeline the subject of the application.

CMS submits that "*access*" in the context of criterion (a) "*should be taken to carry with it all of the terms, conditions, prerequisites, constraints and incentives explicit in the development, review and approval processes for an Access Arrangement, as well as all of the implicit consequences underlying the form of regulation given effect, and the manner in which the Code has come to be applied in practice*" (CMS 2001, p. 11). In the Eastern Gas Pipeline decision, the Tribunal stated "*The object of the Code, and its structure, make it clear that criterion (a) does not have as its focus a factual question as to whether access to the pipeline services is available or restricted*" (Eastern Gas Pipeline decision, paragraph 74). The Council accepts this view.

The Council adopts the approach set out in the Eastern Gas Pipeline decision, where the Tribunal stated that the question posed by criterion (a) is *"whether the creation of the right of access for which the Code provides would promote competition in another market. The enquiry is as to the future with coverage and without coverage."* (Eastern Gas Pipeline decision, paragraph 74).

The Council's approach to criterion (a) is to:

- verify that the market or markets in which competition is said to be promoted is separate from the market for the services provides by means of the Parmelia Pipeline; and if so, then:

- determine if access (or increased access) would promote competition in this separate market (or markets) by comparing the other market with and without coverage of the Parmelia Pipeline (Eastern Gas Pipeline decision, paragraph 74).

Markets

In the Eastern Gas Pipeline decision, the Tribunal made the following findings on market definition:

necessity of market definition: market definitions are required for the application of criterion (a). In particular, the market in which the gas transmission services are provided and the market in which the services may promote competition must be defined (Eastern Gas Pipeline decision, paragraph 76);

product market: the relevant product is gas *"as there is little competition between energy sources at this time"* (Eastern Gas Pipeline decision, paragraph 77). The main evidence that gas and electricity are provided in separate markets is that "*the price elasticity of demand for gas is low, and that gas prices have little influence on the demand for electricity*" (Eastern Gas Pipeline decision, paragraph 79);

functional market: gas transmission services are provided in the gas transmission market, which is functionally separate from other parts of the gas market. Other functional areas are exploration, production/processing, sales and distribution/reticulation (Eastern Gas Pipeline decision, paragraph 77);

temporal market: the time dimension of a period of 10 to 15 years was a sufficient period in which to consider criterion (a) in the context of the EGP given the uncertainties surrounding the operation of a competitive market and forecasts of demand, the existence of spare capacity and significant long term contracts which expire in 2006, and the time to develop new pipelines in new gas fields (Eastern Gas Pipeline decision, paragraph 78);

The Council has considered each of these factors in its assessment of criterion (a).

Upstream market

In the Eastern Gas Pipeline decision, the Tribunal concluded that there was a downstream market, being the sale of gas to users in south-east Australia and an upstream market. The upstream market focuses on the options available to a producer to sell its gas. The downstream market focuses on the purchasing options in a given location or region.

The Council understands that the Parmelia Pipeline also transports some gas from the Carnarvon basin, which is delivered to the Mondarra storage facility by the DBNGP and then delivered from Mondarra to Perth by the Parmelia Pipeline. While the original justification for the interconnect at Mondarra was to facilitate access of gas from the Thevenard Island facility, also owned by WAPET, the then owners of the Parmelia Pipeline, the gas currently transported is not restricted to Thevenard Island gas (CMS 2002b, p 3). The Parmelia Pipeline has spare capacity which could be utilised provided that Carnarvon basin producers can use the DBNGP to transport the gas to the CMS Interconnect at Mondarra.

On the information before it the Council therefore considers that the geographic scope of the upstream market is the Perth basin.

Gas transmission market

CMS submits that gas producers in the Perth Basin can chose to ship gas to energy consumers in Perth and any other point along the pipeline as far south as Pinjarra either on the Parmelia Pipeline or on the DBNGP. Gas consumers can therefore chose to purchase gas from suppliers who utilise either the Parmelia Pipeline or the DBNGP (CMS 2001, p. 8).

The Council's view is that the Parmelia Pipeline provides transportation services in the relevant market for gas transmission within Western Australia. Given that the gas transmission market is a different functional market from the upstream production market or the downstream sales market, it is clearly a separate market, whatever the geographic scope of that market.

Downstream market

In the Eastern Gas Pipeline decision, the Tribunal concluded that there was a downstream market, being the sale of gas to users in south-east Australia. This was not in dispute between the parties. In that matter, the parties drew on the Tribunal's market determination in *AGL Cooper Basin Natural Gas Supply Arrangements* (1997) ATPR 41-593 (**AGL Decision**) where the Tribunal considered that the geographic scope of the market was south-east Australia and noted:

> *"It was freely remarked in oral evidence to the Tribunal that the major gas reserves of Australia's north-west must inevitably be linked eastward by pipeline in the long term, perhaps in 15 to 20 years, to serve unsatisfied demand for gas in Sydney, Melbourne and Brisbane as the closer gas reserves are exhausted. However, for the present, Western Australian gas industry is isolated from the eastern Australian market, as each of the eastern Australian gas industries are isolated from each other." (AGL Decision, p. 44, 183)*

The Tribunal considered that the geographic dimension of the natural gas market had expanded from New South Wales in 1986 to south-east Australia in 1997 due to pipeline connections between New South Wales, South Australia and Queensland enabling gas trading to occur via these interconnections (AGL Decision, p. 44,211).

In Western Australia, it is not possible for purchasers of natural gas to acquire natural gas from suppliers other than those located in Western Australia - see Part B, Diagram 1.

The application states that the relevant downstream market is the market for the provision of natural gas to meet the demands of gas consumers, primarily in Perth and as far south as Pinjarra (CMS 2001, p. 9). Of this market, the application states that CMS holds approximately a 15% share (CMS 2001, p. 9). CMS states that this market can be further distinguished in the following way:

Large industrial customers - being customers which use more than 10TJ/d. CMS estimates that of the 400TJ/d of gas supplied to these customers, CMS holds a 5% share;

Broader distribution market - including:

(a) small and medium industrial customers who use between 100TJ/a and 1 TJ/d. Of this market, CMS holds a 20-30% share; and

(b) the gas distribution network which accounts for approximately 60TJ/d. CMS holds 0.5% share of this market.

AusAm submits that the downstream market should be limited to "*the market for the sale of gas to industrial gas customers in Perth (and south of Perth) who are able to take gas of the Parmelia Pipeline"* (AusAm 2001, p.10). CMS submits that this approach is unduly restrictive for the following reasons:

- criterion (a) requires consideration of the future with and without coverage; and
- the Parmelia Pipeline "should not be solely classified as an industrial supply pipeline as Perth Basin gas is now co-mingled with DBNGP gas and supplied to residential customers" (CMS 2002a, pp. 17-18).

The Council considers that the geographic scope of the downstream market is defined by reference to the destinations to which the Parmelia Pipeline and other pipelines in Western Australia transport natural gas and the sources of that gas. The Council does not consider that the market should be limited by reference to the customers who currently purchase gas from the Perth Basin. The Council accepts that, currently, some barriers exist to full access of Perth

Basin gas into the AlintaGas distribution network in Perth. However, CMS states that it has entered into an Interim Interconnect Agreement with AlintaGas which allows Parmelia to supply up to 2TJ/d of gas into the north section of the AlintaGas Distribution System, and physical gas flow commenced in January 2002 (CMS 2002a, p. 18).

The Parmelia Pipeline transports natural gas to customers to the north of Perth, in metropolitan Perth and to the south-west of Perth. The DBNGP also transports natural gas to those customers. The CMS Interconnect at Mondarra makes it possible for producers in the Carnarvon basin to transport gas to Perth customers via the Parmelia Pipeline, from the CMS Interconnect, or via the DBNGP. The CMS Interconnect also in theory permits Perth Basin producers to transport their gas via the DBNGP to those customers. The other transmission pipelines in Western Australia do not supply natural gas to Perth or south of Perth.

The Council considers that the geographic scope of the gas sales market is likely to be the south-west of Western Australia. This is consistent with the approach of the Tribunal in the Eastern Gas Pipeline decision and AGL decision.

Having regard to the factors relevant to the Tribunal's consideration of the temporal dimension of the gas sales market in the Eastern Gas Pipeline submission, the Council considers that a period of 10 to 15 years is an appropriate time frame in relation to the application.

Conclusion on markets

The Council is satisfied that the downstream gas market in Perth and other areas of south-west Western Australia is separate from the market for transmission services. It is also satisfied that the upstream market for the sale of natural gas Perth Basin producers is separate to the market for transmission services.

Promote competition

The Council has considered whether the opportunities and environment for competition in either of the upstream or downstream markets identified above will be promoted if the pipeline remained covered under the Code.

The Tribunal approached this question in the Eastern Gas Pipeline decision by comparing the likely conditions in those markets with and without coverage of the EGP, on the basis of Duke's expressed intentions and evidence of market behaviour. The Council has adopted the same approach in its consideration of this application.

Market power

In the Eastern Gas Pipeline decision, the Tribunal stated that *"whether competition will be promoted by coverage is crucially dependent on whether the EGP has power in the market for gas transmission which could be used to adversely affect competition in the upstream or downstream markets"* (Eastern Gas Pipeline decision, paragraph 116).

The Council has considered whether the Parmelia Pipeline has sufficient market power in the market for transmission services to enable it to raise prices in the upstream or downstream markets without loss of customers to the DBNGP.

Submissions on market power

CMS does not consider that it has market power in the upstream or downstream markets. It states that the existence of a much larger, interconnected pipeline capable of serving the upstream market obviates any position of market power which the Parmelia Pipeline might otherwise enjoy (CMS 2001, p. 13). Implicit in that submission is that the existing spare capacity of the Parmelia Pipeline provides incentive for CMS to promote the use of that pipeline.

CMS further contends that arguments, which suggest that CMS has significant market power in the market in which AlintaGas operates, are groundless (CMS 2001, p. 14). The Council would tend to accept these submissions on the basis that the Parmelia Pipeline is fundamentally a transmission pipeline and is not engaged in the same operations or servicing the same market for gas as the distribution system operated by AlintaGas.

By contrast, AusAm submits that because the Parmelia Pipeline is the only viable gas transportation service option for producers in the Perth basin, "*…there is nothing to prevent the Parmelia pipeline from raising its prices without losing business to the DBNGP. This will increase the price of Perth basin gas beyond its economically efficient cost of supply, will remove any competitive advantage otherwise available to Perth basin gas and result in a substantial lessening of competition in the dependent market*" (AusAm 2001, p. 11).

AWE has submitted that CMS *"charge Perth basin producers a higher tariff to carry gas to Perth than producers who transfer gas from the DBNGP into the Parmelia line at Mondarra"*.

Headberry submits that CMS does have market power given the significant spare capacity on the Parmelia Pipeline and that the reasoning in Duke was fundamentally flawed and consequently should not be applied in this application (Headberry 2001, p. 4).

Approach to determining market power

The Tribunal stated that:

> *"there is no simple formula or mechanism for determining whether a market participant will have sufficient power to hinder competition. What is required is a consideration of industry and market structure followed by a judgment on their effects on the promotion of competition" (Eastern Gas Pipeline decision, paragraph 116).*

Following this approach, the Council has considered the above submissions, the information before it in relation to the Western Australian gas industry and the structure of the upstream and downstream markets identified above in considering whether the Parmelia Pipeline has sufficient market power in the transmission market to hinder competition in the upstream or downstream market.

In the Eastern Gas Pipeline decision, the Tribunal considered the following factors, as determinative in its finding the criterion (a) was not satisfied:

- *Spare pipeline capacity*: this is a factor which may encourage competition between pipelines (Eastern Gas Pipeline decision, paragraph 92) and militates against a pipeline being able to exert market power to the detriment of competition in the upstream or downstream markets (Eastern Gas Pipeline decision, paragraph 118).

- *Available gas supplies from another basin*: the existence of sufficient gas supplies from a basin other than the basin served by the pipeline may enable another pipeline to compete fully with the pipeline for gas sales to the downstream market over the next 10 to 15 years;

- *Competition:* evidence of competition currently occurring and likely to occur;

- *Commercial incentives:* the strong commercial incentives to increase throughput, given its high capital cost, low operating cost and spare capacity of the pipeline;

- *Countervailing power:* the power of gas producers and gas purchasers in dealing with pipeline operators; and

- *Existence of alternative pipelines:* the existence of alternatives to the use of the pipeline for producers and for purchasers of gas which provide countervailing influence on any attempted exertion of market power by the pipeline in the transport market (Eastern Gas Pipeline decision, paragraph 117);

The Tribunal concluded that the Eastern Gas Pipeline did not have sufficient market power to hinder competition in the gas sales market. The Council

considers that these factors are equally applicable to the consideration of criterion (a) in the context of this application.

Conclusions on market power

Only limited factual material has been put before the Council addressing each of these matters. The Council's view on each of these matters, on the basis of that limited material, is set out below:

Spare pipeline capacity

Currently the demand for natural gas in Western Australia is 630TJ/d. Of that volume, customers in Perth and south of Perth account for 510TJ/d (CMS 2001, p. 16).

No data has been provided which shows the forecast demand for natural gas in Perth and south of Perth. The Council has assumed that this demand will increase consistently with the forecast increase in demand for natural gas in Western Australia - see Part B, section "Demand for Natural Gas in WA".

As set out in Part B, Table 2, the Parmelia Pipeline is currently transporting 35 TJ/d, which represents 30% of its fully expanded capacity of 120 TJ/d. The DBNGP is currently transporting somewhere between 540 and 593 TJ/d, its maximum fully expanded capacity being 650 TJ/d.

The Council considers that there is some spare capacity on the DBNGP to meet the demand for natural gas in Perth and south of Perth. The Council considers that the presence of this spare capacity is likely to prevent an increase in the transportation price of the Parmelia Pipeline above competitive levels.

Available gas supplies from another basin

The existing reserves at the Perth Basin are sufficient to continue to supply approximately 10 PJ/a for the next 11 years. The reserves at the Carnarvon Basin are sufficient to supply approximately 718PJ/a for the next 94 years.

CMS suggests that Perth Basin gas has no price advantage over more distant Carnarvon Basin gas, stating:

> *"(s)ince the introduction of the DBNGP and NWSGP into Perth, Perth Basin producers have been unable to compete with Carnarvon Basin producers in terms of saleable volume, and have been relegated to "price takers" in the upstream market (as opposed to having the ability to determine the level at which the price for delivered gas can be set)" (CMS 2001, p. 5).*

CMS further states that the greater distance of the Carnarvon Basin producers from the downstream market *"is offset by the economies of scale*

associated with substantially larger gas reserves…and a larger diameter pipeline" (CMS 2001, p. 8).

The Council considers on the basis of these capacity and reserve figures that the Carnarvon Basin has sufficient supplies to enable it to supply all of the current demand for natural gas in Perth and south of Perth for the next 10-15 years and that gas sourced from the Carnarvon Basin and transported by the DBNGP will compete fully with gas sourced from the Perth Basin and transported by the Parmelia Pipeline over the next 10 to 15 years.

Competition

Various submissions have been made regarding competition currently occurring and likely to occur between the Parmelia Pipeline and the DBNGP.

CMS states competition currently exists in the gas transmission market and that

> *"the Parmelia pipeline has been relegated to the role of a price taker for gas transmission services",* its ability to increase its market share in the transmission services market being *"severely constrained by the relative economies of scale inherent in the cost structure of the Parmelia Pipeline relative to its much larger competitor" (CMS 2001, p. 6).*

Headberry submits that:

> *"with regard to competition in the downstream arena, most of Perth industry is involved directly…or indirectly …in a strongly competitive environment. Those consumers that require gas for heating or for power generation can see that by revocation of coverage, there is the ability of the Parmelia owners to avoid the discipline of the regulatory processes and use their new position to seek unjustified increases for the carriage of gas. Major users of gas from the Parmelia pipeline are Alcoa…and Western Power…"* (Headberry 2001, p. 5).

The Council notes that the contract in place with Alcoa for Perth Basin gas is to expire in 2002. The Council is not aware of any other long term contracts currently in place for transportation of Perth Basin gas via the Parmelia Pipeline. Given that consumers in Perth and Pinjarra can choose to purchase gas from the Perth Basin or the Carnarvon Basin, transported via the Parmelia Pipeline or the DBNGP, and that producers from the Perth Basin can use the services of either DBNGP or the Parmelia Pipeline, there is a material constraint on the Parmelia Pipeline to increase prices.

Commercial incentives

As was the case with the Eastern Gas Pipeline, the Parmelia Pipeline is characterised by excess capacity. It is also characterised by high capital cost and low operating costs. Further, CMS has limited upstream interests, being

the gas processing facility at Dongara and storage facility at Mondarra and only a limited downstream interest as discussed in Part B, section "Vertical linkages". That downstream interest is currently subject to the ring fencing requirements of the Code. It states that *"the current level of spare capacity on the pipeline continues to provide the Service Provider with ample incentive to encourage access and increase utilisation"* (CMS 2001, p. 13).

The Council also notes that CMS has stated that its commercial incentive is to increase throughput.

The Council considers that neither the gas storage facility nor the gas processing facility are significant enough to find that CMS has any incentive to use any market power it has in the transport market to attempt to increase price in the upstream market, particularly given the highly competitive downstream market.

Countervailing power of producers and purchasers

In the Eastern Gas Pipeline decision, the Tribunal considered that gas producers have significant power in dealing with pipeline operators. No material has been put before the Council in relation to the power which Perth Basin producers may have in dealing with the CMS as the owner of the Parmelia Pipeline. However, given the commercial incentives for CMS to increase the throughput of the Parmelia Pipeline, and given the potential for Perth Basin producers to use the DBNGP to transport Perth Basin gas to Perth and places south of Perth, the Council considers on the information before it that it is more likely than not that Perth Basin producers have significant power in dealing with Parmelia Pipeline.

The Council notes that AusAm and AWE, potential producers of natural gas in the Perth Basin, have each advised the Council that they wish to withdraw their submissions after discussions with CMS. The Council infers that these discussions have addressed the concerns, particularly the pricing concerns, identified by those parties in their submissions. This indicates a degree of power of those potential purchasers.

In the Eastern Gas Pipeline decision, the Tribunal considered that the major gas purchasers in the Sydney and Canberra markets had significant power in dealing with pipeline operators. A similar analysis is likely to apply to the position of purchasers in Perth and south of Perth, for the reason that there are alternatives to the use of the Parmelia Pipeline for purchasers of gas which provide a countervailing influence on any attempted assertion of substantial market power by Parmelia in the transmission market.

Existence of alternative pipelines

As set out in the above consideration of criterion (b), the Council considers it likely that the DBNGP can be developed to provide the service provided by the Parmelia Pipeline. The Council has considered whether a small increase in the price of transportation via the Parmelia Pipeline could be defeated by

the DBNGP that is, could the DBNGP at its current capacity, or through an increase in capacity, provide the transportation service at the cost of the current Parmelia tariff.

CMS' Access Agreement, approved by the regulator on 15 December 2000 established the tariffs set out in Part B, Table 6. CMS has orally advised the Council that the transmission tariff is presently $0.57 /GJ.

The Council has no information in relation to the tariff that Epic Energy would charge for the same service, as that service was not included in the proposed Access Arrangement and no tariff for that service was proposed. However, the regulator has recommended that the Firm Service (for which a tariff has been proposed) be extended to include transportation of natural gas from any point along the DBNGP to any destination along the DBNGP.

The Council understands that transport costs normally represent a significant proportion of total delivered costs, but can vary widely depending on the difficulty of collecting the gas, the cost of laying the transmission and distribution pipelines, and the distance from the gas basin to the final destination of use. Larger industrial users pay much lower distribution and retail charges than commercial or residential users, meaning that transmission charges represent a much larger share of their final price for delivered gas.

In 1998-99 Western Australian transmission charges represented approximately around 6.8 per cent of the final price of gas for residential users, and 13.1 per cent for commercial and smaller industrial users.[7]

The composition of the final price of gas for large and small users in Western Australia is important in determining the effect that lower or higher transmission charges will have on the final price. Based on the above figures, a ten per cent rise or fall in transmission tariffs will change final prices (all other charges remaining constant) for residential users by 0.68 per cent and for commercial users by 1.31 per cent.[8]

The Council agrees with CMS that there is an obvious disincentive to the Parmelia Pipeline of raising transportation prices, namely that this would have the effect of increasing the delivered cost of gas from the Perth basin to the downstream market. If this price increase exceeded the price of delivered gas from the Carnarvon basin, customers are likely to switch to gas supplied by the DBNGP, which appears to have sufficient capacity to meet that demand, thereby reducing the demand for production of gas at the Perth

---

7 Assumes an average transmission tariff on Western Australian pipelines of $1/GJ (Australian Gas Association 2001, p77) and final delivered prices of $14.78/GJ for residential users, $7.64/GJ for commercial and industrial users (Australian Gas Association 2001, p77).

8 Based on assumptions in footnote above.

basin and in turn reducing demand for transportation services provided by the Parmelia Pipeline.

Alternatively, Perth basin producers may switch to the DBNGP to provide the service of transportation of Perth basin gas to Perth, although the Council notes the technical specification issue may at least in the short term act as a deterrent to such a switch occurring.

The Council therefore does not consider that the Parmelia Pipeline has sufficient market power in the transmission market to hinder competition in the upstream or downstream markets.

Would continued coverage improve efficiency, prices or services in another market?

Promotion of competition in the downstream market

CMS contends that coverage of the Parmelia Pipeline has not resulted in even a trivial increase in competition and that the same level of competition exists in the relevant markets currently as existed prior to coverage (CMS 2001, p. 17).

The application contends that coverage has not resulted in any new business and there is no evidence of increased competition in the gas sales market because of coverage of the Parmelia Pipeline.

AusAm puts a contrary argument that suggests that the Parmelia Pipeline does possess power to influence competition in the downstream market for the following reasons:

The Parmelia Pipeline supplies into a significant share of the dependant market and there is potential for this to increase as new Perth Basin reserves are commercialised; (AusAm 2001, p. 11) and

The service provided by the Parmelia Pipeline cannot be substituted with the service from the DBNGP because the Parmelia Pipeline is the only viable gas transportation service option for producers in the Perth Basin. (AusAm 2001, p. 11).

The Council notes that AusAm submitted that the downstream market be defined more narrowly than the market definition adopted by the Council above. The Parmelia Pipeline supplies only 15% of the broader downstream market adopted by the Council. As set out above, the Council considers that it is likely that the DBNGP can be developed to provide the service provided by the Parmelia Pipeline, thus offering another gas transportation option for producers in the Perth Basin.

Headberry suggests that for gas users such as Alcoa and Western Power to remain competitive in their respective industries "*they need the lowest cost services possible*". It is suggested that CMS exercises market power in the downstream market as follows:

> *"The current cost per distance travelled for gas on the Parmelia [sic] indicates that competitive pressures (if such pressures are indeed present) are not achieving the benefits stated by CMS. If they are present, then CMS would be offering lower prices for transport than those set by regulation". (Headberry 2001, p. 18).*

CMS notes that no quantification or qualification for economies of scale is provided to support this submission (CMS 2002a, p. 6).

For the reasons set out above, the Council does not consider that CMS has sufficient market power in the transmission market such that it is able to affect the conditions for competition in the downstream market. It follows that coverage of the Parmelia Pipeline will not improve efficiencies, prices or service in the downstream market.

Promotion of competition in the upstream market

The application contends that coverage has not resulted in any new business and there is no evidence of increased competition in the production market because of coverage of the Parmelia Pipeline.

AWE submitted that CMS exercises market power in the upstream markets. It suggests in its submission:

> *"CMS already exercise market power on the Perth Basin producers, as evidenced by the fact that they charge Perth Basin producers a higher tariff to carry gas to Perth than producers who transfer gas from the DBNGP into the Parmelia line at Mondarra. This indicates that the CMS recognise that Perth Basin producers do not have any technical alternative to using the CMS pipeline". (AWE 2001, p. 1).*

AWE states that the assumption that the Parmelia Pipeline would be covered, that is, that third parties had the ability to access spare capacity in the Parmelia Pipeline under a fair and transparent "covered" tariff regime, was relevant to its decision to invest in gas exploration in the Perth Basin over the last 3 years (AWE 2001, p. 1).

AusAm states that absent coverage, CMS would have the power to increase prices for access to the Parmelia Pipeline and that Perth basin producers would have no option but to pay it (AusAm, p. 10).

The Council notes that the subsequent submissions of both AWE and AusAm purport to withdraw their earlier submissions, from which the Council infers that the concerns expressed by these parties in their earlier submissions were

addressed by bilateral arrangement with CMS. The Council understands from the letter from AWE that commercial arrangements have been reached between AWE and CMS which address the concern previously stated by AWE that CMS had sufficient market power to increase the price of transmission of Perth Basin gas.

As set out above, the Council considers that CMS has commercial incentives to increase the throughput of the Parmelia Pipeline, which will constrain the exercise of any market power it may have in respect of transmission services.

The Council notes CMS' statement that:

> *"Concerns expressed by AWE that the tariff for using Parmelia will increase following revocation are not supported by fact as CMS has undertaken to honour the existing, regulatory approved, published and historically consistent tariffs" (CMS 2002a, p. 11).*

The Council recognises that the undertaking by CMS is limited to honouring the current regulated tariffs and it is not a commitment to continue to provide gas transmission services on the bases set out in the Access Arrangement approved by the regulator in December 2000. The tariffs to be charged by CMS in the future are a relevant consideration in the Council's assessment of competitive conditions with and without coverage and the Council has relied on that undertaking given by CMS.

In light of the Council's conclusion that the Parmelia Pipeline has limited market power in the provision of transmission services, the constraints which exist on its ability to exercise that power and the undertaking given by CMS, coverage is not likely to improve efficiency, prices or services in the upstream market.

Conclusion on criterion (a)

The Council does not consider that the Parmelia Pipeline has sufficient market power in the transmission market to hinder competition in the upstream or downstream markets.

The Council considers that continued coverage of the Parmelia Pipeline is unlikely to promote competition in the upstream or downstream markets identified above given the commercial imperatives CMS faces, the existence of spare pipeline capacity, the countervailing power of other market participants and the ability to transport gas through either the Parmelia Pipeline or the DBNGP.

The Council is not affirmatively satisfied that coverage or continued coverage of the Parmelia Pipeline would promote competition in either the upstream or downstream markets.

Criterion (c) that access (or increased access) to the services provided by means of the pipeline can be provided without undue risk to human health or safety

The rationale for this criterion is that the National Gas Access Code should not be applied to pipelines where access might pose an undue risk to human health or safety.

The Council's approach to this criterion is:

- to identify any risks to human health and safety posed by access to the Parmelia Pipeline; and
- if risks are identified, to consider whether they can be addressed in a satisfactory manner while still providing access.

The application recognises that continued access to the Parmelia Pipeline on a commercial basis at current or increased levels can be provided without undue risk to human health or safety.

None of the submissions received by the Council suggest that access to the Parmelia Pipeline poses or would pose a risk to human health or safety.

Conclusion on criterion (c)

There is no evidence before the Council to suggest that regulated access cannot be provided to the Parmelia Pipeline without undue risk to human health or safety. Consequently, the Council is satisfied that this criterion is met.

Criterion (d) that access (or increased access) to the services provided by means of the pipeline would not be contrary to the public interest

The Tribunal in the Eastern Gas Pipeline decision at paragraph 145 considered that:

> *… criterion (d) does not impose an additional positive requirement which can be used to call into question the results obtained by the application of pars (a), (b) and (c). Criterion (d) accepts the results derived from the application of the other criteria, but enquires whether there are any other matters which lead to the conclusion that coverage would be contrary to the public interest.*

A relevant matter of public interest is whether any benefits of access, such as cheaper prices and more efficient use of resources, are outweighed by regulatory or compliance costs. The Council in determining this criterion has considered the following submissions.

CMS argues that it has incurred substantial costs of regulation under the National Gas Access Code and these costs have not been offset by any promotion in competition. The application states that CMS has incurred costs of approximately $660,000 and also incurs an annual fee of around $50,000 and estimates that future reviews of the access arrangement could cost between $150,000 and $200,000. Despite coverage, CMS reports that there have been no requests for access to the pipeline under the Access Arrangement approved by OFFGAR and no new gas transportation business has been concluded despite active marketing by the operator (CMS 2001, p. 10).

AusAm submits the question of whether CMS is bearing an unfair share of the costs of regulation is a matter which should be addressed by Government and industry and that it is not an issue which should influence the Council in considering the application (AusAm 2001,p. 13).

Headberry submits that the costs of regulation under the National Gas Access Code is not a relevant consideration for the Council in determining the application because the National Gas Code permits persons to recover reasonable costs associated with regulatory processes (Headberry 2001, pp. 2-3) and consumers "*universally accept that the costs of regulation are preferred to allowing the potential for enterprises to extract monopoly rents*" (Headberry 2001, p. 3).

Conclusion on criterion (d)

The Council accepts that the Code envisages that the costs of coverage would be borne ultimately by the gas consumer and that consumers universally accept that the costs of regulation are preferred to "*the potential for enterprises to extract monopoly rents*" (Headberry 2001, p. 3). In fact, this submission goes to the very rationale behind the Code. However, these matters must be balanced by an analysis of the practical effect of regulation in respect of the Parmelia Pipeline.

The Council does accept that a major cost of continued coverage is the cost to CMS of preparing, implementing, maintaining and reviewing its Access Agreement and that no new gas transportation services have been concluded since coverage of the Parmelia Pipeline.

The most significant benefit of continued coverage is the possibility that access to the Parmelia Pipeline will facilitate competition. In its consideration of criterion (a), the Council has concluded that coverage or continued coverage of the Parmelia Pipeline would not promote competition in either the upstream or downstream markets.

The Council is satisfied that the CMS has demonstrated that the regulatory costs of coverage under the Code are significant. On balance, having regard to the Council's analysis of criterion (a), CMS's undertaking as to pricing and to the benefits of access it would, on balance, it would be contrary to the public interest to maintain coverage. The Council has formed the view that, having regard to the submissions made in the application and the submissions made by the interested parties, criterion (d) is not satisfied.

Appendix 1: Submissions to the Council

The following submissions were made to the Council:

No.	Submission	Date
1.	Headberry Partners P/L Energy Management and Procurement Services	18 December 2001
2.	Australian Worldwide Exploration Limited	19 December 2001
3.	Joint submission made by AusAm Resources NL; Empire Oil Company (WA) Limited; Yardarino Limited; and Springfield Oil and Gas Limited	19 December 2001
4.	Submission by Australian Worldwide Exploration Limited seeking to revoke submission issued on 19 December 2001	15 January 2002
5.	Joint submission made by AusAm Resources NL; Empire Oil Company (WA) Limited; Yardarino Limited; and Springfield Oil and Gas Limited seeking to revoke submission issued on 19 December 2001	15 January 2002
6.	Submission issued by CMS Gas Transmission of Australia	16 January 2002
7.	Submission issued by CMS Gas Transmission of Australia in response to Draft Recommendation	6 February 2002

Appendix 2 – Coverage criteria in the National Gas Access Code

Section 1.9 of the National Third Party Access Code for Natural Gas Pipeline systems provides:

> *Subject to sections 1.4(a) and 1.10. the NCC must recommend that the Pipeline be covered (either to the extent described, or to a greater or lesser extent than that described in the application) if the NCC is satisfied of all of the following matters, and cannot recommend that the Pipeline be Covered, to any extent, if the NCC is not satisfied of one or more of the following matters:*
>
> *(a) that access (or increased access) to services provided by means of the Pipeline would promote competition in at least one market (whether or not in Australia), other than the market for the services provided by means of the Pipeline;*
>
> *(b) that it would be uneconomic for anyone to develop another Pipeline to provide the services provided by means of the Pipeline;*
>
> *(c) that access or increased access to the services provided by means of the Pipeline can be provided without undue risk to human health or safety; and*
>
> *(d) that access (or increased access) to the services provided by means of the Pipeline would not be contrary to the public interest.*

References

AGL Cooper Basin Natural Gas Supply Arrangements (1997) ATPR 41-593
ARC Energy, http://www.arcenergy.com.au/main/Dongara.htm
AusAm 2001, Joint submission made by AusAm Resources NL; Empire Oil Company (WA) Limited; Yardarino Limited; and Springfield Oil and Gas Limited dated 19 December 2001
AusAm 2002, Joint submission made by AusAm Resources NL; Empire Oil Company (WA) Limited; Yardarino Limited; and Springfield Oil and Gas Limited seeking to revoke submission issued on 19 December 2001, dated 15 January 2002
Australian Gas Association 2002, http://www.gas.asn.au/gas2.htm#gas13 , January
Australian Gas Association 2001, *Gas Statistics Australia 2001*, September.
Australian Gas Association, 1996, *AGA Research Paper No 3 – Price Elasticities of Australian Energy Demand*.
AWE 2001, Australian Worldwide Exploration Limited submission dated 19 December 2001
AWE 2002, Submission by Australian Worldwide Exploration Limited seeking to revoke submission issued on 19 December 2001 dated 15 January 2002
CMS 2001, Application for revocation of coverage of pipeline: Parmelia Pipeline, dated 30 October 2001
CMS 2002a, Submission issued by CMS Gas Transmission of Australia, dated 16 January 2002
CMS 2002b, Submission issued by CMS Gas Transmission of Australia in regard to National Competition Council's Draft Recommendation on application to revoke coverage of Parmelia Pipeline, dated 6 February 2002
Department of Mineral and Petroleum Resources 2001, *Western Australian Oil and Gas Industry 2001*, Government of Western Australia
Department of Minerals and Energy 2000, *Petroleum in Western Australia,* October.
Department of Minerals and Energy 2001, Production in WA: 2000/01 Production by Basin, www.dme.wa.gov.au, accessed 7 November 2001
Epic Energy, Amended Proposed Access Arrangement Information, 28 July 2000

Gas Pipelines Access (WA) Act 1998
Headberry 2001, Headberry Partners P/L Energy Management and Procurement Services submission dated 18 December 2001
North West Shelf Gas Pty Ltd 2001, http://www.nwsg.com.au/industry/index.html
Office of Energy 2001a, *Energy Western Australia 2001*, Government of Western Australia, September
Office of Energy 2001b, (Gas Retail Deregulation Project), *Full Retail Contestability Issues – Scoping paper*, June
Office of Energy 2000c, *Energy Western Australia 2000*, Government of Western Australia, October
Office of Gas Access Regulation (OffGAR) 2001, *Parmelia Pipeline Access Arrangement General Terms & Conditions 2000*, Government of Western Australia
Parmelia Pipeline Access Arrangement 2000
Parmelia Pipeline Access Arrangement General Terms & Conditions 2000
Parmelia Pipeline Access Arrangement Information 2000
Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Company Limited (1989) 167 CLR 177.
Re: Application under section 38(1) of the Gas Pipelines Access Law for Review of the Decision by the Minister For Industry, Science and Resources published on 16 October 2000 to cover the Eastern Gas Pipeline pursuant to The Provisions of the National Third Party Access Code for Natural Gas Pipeline Systems and the Gas Pipelines Access Law [2001] A Comp T 2
Regulator's Draft Decision Parts A and Part B combined: Proposed Access Arrangement Dampier to Bunbury Natural Gas Pipeline issued 21 June 2001
Review of Freight Handling Services at Sydney Airport (2000) Re ATPR 41,754