#### DAWSON VALLEY PIPELINE:

COVERAGE APPLICATION UNDER THE NATIONAL GAS CODE

Final Recommendation

August 2005

National Competition Council

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### **1** Final recommendation

- 1.1 This document contains the National Competition Council's (the Council) final recommendation in respect of the application from Molopo Australia Limited for coverage of the Dawson Valley Pipeline (DVP) pursuant to sections 1.2 and 1.3 of the National Third Party Access Code for Natural Gas Pipeline Systems (the Code).
- 1.2 The Council's final recommendation is that the DVP does not meet the criterion for coverage under the Code. The Council's reasons are set out in sections 6 to 9 of this document.

1.3 Abbreviations and glossary of terms

(the) Code	National Third Party Access Code for Natural Gas Pipeline Systems	
Council	National Competition Council	
covered pipeline	A pipeline covered under the National Third Party Access Code for Natural Gas Pipeline Systems	
DVP	Dawson Valley Pipeline	
GJ	Gigajoule, a unit of measurement for measuring the energy content of natural gas or other energy sources	
MJV	Mungi Joint Venture	
OCA	Oil Company of Australia (Moura) Transmissions Pty Ltd	
PJ	Petajoule (equal to 1,000,000 GJ or 1,000 TJ)	
PJ/a	Petajoules per annum	
PL	Pipeline licence	
QGP	Queensland Gas Pipeline	
TJ	Terajoule (equal to 1,000 GJ)	
TJ/d	Terajoules per day	
(the) Tribunal	Australian Competition Tribunal	

### 2 Overview of process

### Legislative framework

- 2.1 The Code establishes a framework for parties to negotiate access to gas pipeline services within an independent regulatory framework. Coverage mechanisms have been established to determine whether a particular pipeline is subject to the Code's obligations. The DVP was a covered pipeline at the commencement of the Code but coverage was revoked in 2000.
- 2.2 The Code recognises that the public benefits of regulating access to a service may change over time due to such factors as changes in market conditions (for example, the emergence of effective competition) or technological changes affecting the economic viability of new infrastructure. The Code therefore allows parties to seek coverage of a pipeline. The processes for dealing with coverage applications are specified in ss1–1.19 of the Code.
- 2.3 Coverage applications are made to the Council. Following consideration of issues raised in public consultations, the Council conveys a recommendation to the relevant Minister, who decides the matter.
- 2.4 In this case, the Minister responsible for deciding the DVP application is the Australian Government Minister for Industry, Tourism and Resources.<sup>1</sup> Upon receipt of the Council's recommendations, the Minister has 21 days to decide whether or not to grant coverage of the pipeline. The Minister may extend this period by advertising his intention to do so prior to the expiry of the 21 day period.
- 2.5 The Minister must provide copies of his decision and reasons to relevant parties, including the owner/operator and any party who made a submission. The Minister's decision (if it is to grant coverage) can take effect no earlier than 14 days after the date on which it is made.
- 2.6 Under clause 38 of the Gas Pipeline Access Law, any person adversely affected by the Minister's decision may apply to the

<sup>&</sup>lt;sup>1</sup> See the definition of 'Relevant Minister' in the National Gas Code and the Gas Pipeline Access Law, and Annex G to the *Natural Gas Pipelines Access Agreement* between CoAG Ministers in November 1997.

Australian Competition Tribunal for a review of the Minister's decision.<sup>2</sup>

2.7 If coverage is granted, the owner/operator of a pipeline has obligations under the Code. In particular, the owner/operator is required to submit an access arrangement for the pipeline to the relevant regulator<sup>3</sup>, or to respond to access requests by third parties.

### Background

- 2.8 On 16 March 2005, the Council received an application for coverage of the DVP under the Code. The Code has application in Queensland pursuant to the *Gas Pipelines Access (Queensland) Act 1998*. A copy of the Code can be found at http://www.coderegistrar.sa.gov.au.
- 2.9 The applicant, Molopo Australia Limited, seeks coverage of the entire pipeline (Qld: PPL 26) which extends from Dawson Valley to the Wallumbilla to Gladstone Pipeline. The owner of the pipeline is Oil Company of Australia (OCA) (Moura) Transmissions Pty Ltd which is a wholly owned subsidiary of Origin Energy Limited.
- 2.10 The Code previously covered the DVP. However, the Australian Government Minister for Industry, Science and Resources revoked coverage in 2000 following the Council's recommendation that regulated access to the DVP would not promote competition in another market or confer net public benefits.
- 2.11 The effect of revocation was to remove the DVP from regulation under the Code.
- 2.12 In considering the current application, the Council has applied the criterion set out in s1.9 of the Code, conducted a public consultation process, issued a draft recommendation, conducted a second round of public consultation, prior to issuing this final recommendation to the relevant decision maker.
- 2.13 The Council received several submissions during the public consultation phases which are available on the Council's web site at www.ncc.gov.au. In addition, the Council's secretariat held meetings with interested parties including: Molopo Australia Limited, Origin

<sup>&</sup>lt;sup>2</sup> See definition of 'Relevant Appeals Body' in the National Gas Code and the Gas Pipeline Access Law.

<sup>&</sup>lt;sup>3</sup> Which is the Australian Competition and Consumer Commission.

Energy Limited, and the Queensland Government Department of Energy.

- 2.14 This final recommendation draws on public submissions, meetings with stakeholders, the findings of the Australian Competition Tribunal (the Tribunal) in related matters, and the Council's consideration of the issues raised.
- 2.15 The Council's assessment of the DVP against the coverage criteria is set out in sections 6 to 9 of this report.

### 3 The application

### The application pipeline

- 3.1 The Dawson Valley transmission pipeline transports gas 47 km from the Dawson Valley gas fields to the Wallumbilla to Gladstone Pipeline (otherwise referred to as the Queensland Gas Pipeline (QGP)). The pipeline was constructed in 1996 and acquired by Oil Company of Australia (OCA) (Moura) Transmissions Pty Ltd in 1998 when it purchased all the issued share capital of Conoco Australia Pty Ltd. OCA (Moura) Transmissions Pty Ltd is a wholly owned subsidiary of OCA (Moura) Pty Ltd which in turn is wholly owned by Origin Energy CSG Limited, an Origin group company. Diagrams 1 and 2 provide illustrations of the DVP and adjacent and connecting pipelines.
- 3.2 OCA advised that the pipeline is a single high pressure gas pipeline constructed from high strength pipe of 168.33 mm outside diameter, operates at 14 000 kPa, and has a maximum capacity of 20 TJ per day (approximately 7.3 PJ per year). It is currently contracted at 50 per cent of maximum capacity.
- 3.3 OCA advised that there are three shippers of gas on the DVP:
  - Energex, which supplies gas to the Queensland Nitrates plant at Moura
  - The Mungi Joint Venture (MJV) Parties (of which Molopo Australia, through a subsidiary, is one), which supply their share of gas from the Mungi field to Origin at the interconnect with the QGP
  - Origin, which aggregates its own gas from the Dawson Valley fields (including its share of Mungi gas) with gas purchased from

the MJV parties for supply of Origin's customers in Gladstone and Rockhampton.

- 3.4 Molopo Australia has a 25 per cent interest in PL94 through which the pipeline runs. The MJV is an unincorporated joint venture between OCA Moura (50 per cent), Lowell Petroleum NL (25 per cent) and Helm Energy Australia LLC (25 per cent) in relation to that portion of the area of PL94 which lies to the north of latitude 24° 37' 20" south.
- 3.5 Since the revocation of coverage in 2000, access arrangements have been negotiated between OCA and the shippers for the transportation of gas from the Dawson Valley gas fields to the shippers' delivery points. The delivery points are currently the Alinta QGP, and the Queensland Nitrates plant.
- 3.6 OCA indicates that throughput for the DVP for the year ended December 2004 was 3.3 PJ and forecasts 3.0 PJ per year for 20 years based on current reserve and deliverability estimates for the Dawson Valley gas fields.



Diagram 1 – Dawson Valley Pipeline

Source: Oil Company of Australia (Moura) Transmissions Pty Ltd: submission

Note: Alinta Gas Pipeline (top left of page) is another name for the Queensland Gas Pipeline.

#### Diagram 2 – Dawson Valley Pipeline and region



Source: Molopo Australia Limited: application

### Reason for seeking coverage

- 3.7 The applicant, Molopo Australia, notes that within PL94 it is producing gas from proven reserves (the Mungi gas field). The initial production of gas from this field has been sold to Origin Energy (at the DVP and QGP interconnect point). Following the development of the Mungi gas field, the applicant submits that the prospect now exists for sales of gas directly to end users in the Queensland gas market.
- 3.8 Molopo Australia is of the view that gas sold to Origin Energy and other parties needs to be delivered through the OCA owned pipeline. For this reason the applicant considers that coverage will ensure:
  - access is available to the pipeline on terms and conditions reflecting the provisions of the Code
  - ring-fencing of OCA's gas transmission activities from related business activities.

### 4 Applying the coverage criteria

4.1 In recommending whether coverage of a pipeline should apply, the Council must consider whether the pipeline meets the coverage criteria in s1.9 of the Code (see below).

#### Section 1.9 coverage criteria: National Gas Code

The Council cannot recommend that coverage of a pipeline be revoked if the Council is satisfied of all of the following matters set out in s1.9 of the National Gas Code:

- (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.

The Council must recommend revocation of coverage (either to the extent described, or to a greater or lesser extent than that described in the application) if the Council is not satisfied of one or more of the s1.9 criteria.

Source: National Gas Code, ss1.9–1.31

- 4.2 The Council sets out its assessment of the Molopo Australia application against each of the coverage criteria in sections 6 to 9 of this recommendation. As the coverage criteria are very similar to those for declaration under Part IIIA of the *Trade Practices Act 1974* the Council's approach is consistent with that set out in The National Access Regime: A Guide to Part IIIA of the Trade Practices Act 1974. First, the Council considers a number of general matters relevant to all of the criteria, including specification of the application pipeline and its service. (refer to section 5)
- 4.3 The Council then presents its analysis of the coverage criteria in the following order: criterion (b); criterion (a); criterion (c); criterion (d). (refer to sections 6-9 respectively)

# 5 Services provided by means of the pipeline

- 5.1 The starting point in considering an application for revocation or coverage is to identify the 'services provided by means of the pipeline'.
- 5.2 Section 10.8 of the Code defines the term 'service' (for the purposes of s1 of the Code) to mean a service provided by a 'pipeline' including

without limitation haulage services, the right to interconnect with the covered pipeline and services ancillary to the provisions of such services but does not include the production, sale or purchasing of natural gas.

5.3 The relevant definition of 'pipeline' is that contained in schedule 1 of the *Gas Pipelines Access (South Australia) Act 1997* (Gas Pipeline Access Law — adopted in Queensland) in which:

> 'pipeline' means a pipe, or system of pipes, or part of a pipe, or system of pipes, for transporting natural gas, and any tanks, reservoirs, machinery or equipment directly attached to the pipe, or system of pipes, but does not include--

- (a) unless paragraph (b) applies, anything upstream of a prescribed exit flange on a pipeline conveying natural gas from a prescribed gas processing plant; or
- (b) if a connection point upstream of an exit flange on such a pipeline is prescribed, anything upstream of that point; or
- (c) a gathering system operated as part of an upstream producing operation; or
- (d) any tanks, reservoirs, machinery or equipment used to remove or add components to or change natural gas (other than odourisation facilities) such as a gas processing plant; or
- (e) anything downstream of the connection point to a consumer.
- 5.4 Under the definition of 'pipeline' set out above, the pipeline for the purposes of s1.9 is the system of pipes used for transporting natural gas and any tanks, reservoirs, machinery or equipment directly attached to the pipe making up the system referred to as the relevant pipeline.
- 5.5 The principal service provided by a pipeline is the gas haulage service from one point to another point serviced by the pipeline.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> This 'point to point' approach to defining the relevant service was accepted by the Australian Competition Tribunal (the Tribunal) in the Duke EGP decision.

5.6 Hence, the principal service provided by the DVP is the haulage of natural gas from the Dawson Valley gas fields to the QGP and all points in between.

# 6 Criterion (b) – uneconomic to develop another pipeline

- 6.1 Criterion (b) focuses on the service to which access is sought and asks whether the pipeline providing that service is a natural monopoly.
- 6.2 Criterion (b) requires that it be uneconomic for anyone to develop another pipeline to provide the services provided by means of the pipeline over which coverage is being sought. The Tribunal in the Duke EGP decision considered this to mean that:

[if] a single pipeline can meet market demand at less cost (after taking into account productive allocative and dynamic effects) than two or more pipelines, it would be 'uneconomic', in terms of criterion (b), to develop another pipeline to provide the same services. (para 64)

6.3 The Tribunal went on to state:

We agree with the submissions of NCC that the 'test is whether for a likely range of reasonably foreseeable demand for the services provided by the 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'. (para 137)

- 6.4 This test was applied by the Tribunal in the Sydney Airport decision in which it reiterated its view that 'uneconomical' should be construed in a social cost benefit sense rather than in terms of private or commercial interests (paras 204-205).
- 6.5 In considering whether it is uneconomic to 'develop' another pipeline, it is appropriate to have regard to pipelines that have already been developed (Duke EGP, para 57). The term 'develop' is sufficiently broad to encompass modifications or enhancements to existing pipelines.
- 6.6 Whether it is economic to develop a new transmission pipeline to provide the services of the DVP depends on whether a single pipeline can satisfy demand for relevant services at lower cost than two or more pipelines. If this is the case, then the pipeline is a natural

monopoly, and competition between two or more pipelines offering the same services would be inefficient (Ordover and Lehr 2001, p.4).

- 6.7 In making this assessment the Council looks at issues such as:
  - (a) whether the existing pipeline has sufficient spare or developable capacity to meet current or projected levels of demand
  - (b) whether there are any other pipelines that provide the same service, the projected levels of demand for that service and whether an alternative pipeline has spare capacity
  - (c) the capital costs of developing another pipeline compared with the capital costs (if any) of providing access on the existing pipeline
  - (d) the operating costs of a new pipeline compared with any increase in the operating costs of allowing access on the existing pipeline
  - (e) Whether there are overwhelming economies of joint production between the service subject to the application and other services produced by the access provider
  - (f) other reasons that may make it uneconomic to develop another facility such as legislative barriers or incumbency advantages.

### Views put to the Council

6.8 The access seeker and pipeline owner both accepted that it is uneconomic to develop another pipeline to provide the service. The key reasons why they accept this are spare capacity, cost of building another pipeline, and the existence of another pipeline in the vicinity of the pipeline over which coverage is being sought.

### Spare capacity

6.9 OCA advised that the maximum capacity of the pipeline is 20 TJ per day (or 7.3 PJ per year), and is currently contracted at 50 per cent of maximum capacity. The forecast throughput is expected to be 3 PJ per year for the next 20 years based on reserve and deliverability estimates for their Dawson Valley gas fields. 6.10 Molopo Australia argues that the DVP currently has spare capacity in excess of OCA's estimates. Molopo Australia used a set of assumptions to suggest that the capacity of the DVP may be as high as 47 TJ per day, allowing Molopo to transport 35 TJ of gas per day from the Mungi location.

### Cost of building another pipeline

- 6.11 Molopo Australia estimates the cost of building a pipeline from the Mungi (and other gas fields) to the QGP to be \$2.5 million. This cost is based on 20 kms of 88.9 mm diameter pipeline, metering and regulating equipment.
- 6.12 OCA considers the costs of pipeline construction range between \$800 mm/km<sup>5</sup> and \$1300 mm/km for small diameter short distance pipeline construction, and that Molopo Australia's estimate of \$2.5 million [or approximately \$1406 mm/km] is at the upper end of OCA's proposed range.

#### Existence of another pipeline

6.13 OCA understands there are no capacity constraints on the Anglo– Mitsui Pipeline, and argues that the spare capacity on both the DVP and the Anglo-Mitsui Pipeline would make investment in another pipeline in the area uneconomic.

#### Other views put to the Council

6.14 The applicant, Molopo Australia, considers that:

the independently certified proven and probable (ie P50) reserves of the Mungi Gas Field are 25 PJ although it is estimated that the field may contain some 162 PJ of recoverable gas. In addition, other significant prospects exist for discovery of gas within the areas surrounding the Mungi Gas Field. (Molopo Australia 2005, para 6)

6.15 OCA indicated arrangements have been in place between OCA and shippers for the transportation of gas from the Dawson Valley gas fields to delivery points. The shippers are

<sup>&</sup>lt;sup>5</sup> \$# mm/km is a measure of the cost per millimetre diameter of pipeline multiplied by the length of pipeline in kilometres. For example, using \$800 mm/km for a pipeline that is 90mm in diameter and 20km in length, the construction cost would be \$1.44 million.

- (i) Energex which supplies gas to the Queensland Nitrates plant at Moura
- (ii) the Mungi joint venture parties (which includes Molopo Australia through a subsidiary), which supply their share of gas from the Mungi field to Origin at the interconnect with the QGP
- Origin which aggregates its gas from the Dawson Valley fields and Mungi fields with gas purchased from the Mungi joint venture parties for supply of Origin's customers in Gladstone and Rockhampton.
- 6.16 OCA argues that of Molopo Australia's estimate of 162 PJ of recoverable gas, only 25 PJ is independently certified proven and probable reserves, and 137 PJ is not classified as proven or probable reserves. It argues that the 137 PJ is speculative. Origin's assessment of the Mungi gas fields is less than half Molopo Australia's 25 PJ of proven and probable reserve, and less than one quarter of the 162 PJ recoverable reserves. OCA points out that if Molopo Australia's estimates of total recoverable gas are accepted, the presumed throughput would exceed the maximum capacity of the DVP.
- 6.17 OCA indicates that at the southern end of the DVP there are no alternative routes by which the gas haulage services could be provided.
- 6.18 OCA indicates that all current gas from the fields that supply the DVP (apart from the Mungi joint venture parties share of Mungi gas) is under long term contract.

### Analysis

### Other pipelines that provide the same service

6.19 The service provided by the DVP is the haulage of natural gas from the gas fields in the Dawson Valley gas fields and the QGP and points in between. For the purposes of this criteria, the Council needs to establish whether there is another pipeline that would provide the same service.

- 6.20 There is another pipeline, the Anglo-Mitsui Pipeline<sup>6</sup>, which provides a gas transportation service in close proximity to the service of the DVP.
- 6.21 The Council considered the relationship between these two pipelines in its 2000 recommendation to revoke coverage of the DVP (and various other Queensland gas pipelines including the Anglo-Mitsui Pipeline). The arguments are summarised in the following paragraphs.
- 6.22 At that time, the owner of the DVP and the owner of the Anglo-Mitsui Pipeline both contended that their pipelines provided a service which competed with the service of the other. The Council noted that while the pipelines run side by side for approximately 12 km, there were no gas consumers located in proximity to the pipelines in the area where they run side by side and therefore currently no person to whom they might provide the same services.
- 6.23 While the two pipelines share a common destination they have different origins. For a natural gas consumer obtaining gas from the OCA's Dawson Valley gas fields, the Anglo-Mitsui Pipeline does not provide the same service as the DVP. Nor does the DVP provide the same service as the Anglo-Mitsui Pipeline for anyone who wants to obtain natural gas from the Moura Mine (which is located at the origin of the Anglo-Mitsui Pipeline).
- 6.24 The Council also noted that a gas user's ability to switch between suppliers of both gas and gas transportation services are limited by contractual arrangements, which often include medium to long term obligations as well as take or pay components.
- 6.25 While the services provided by one of the pipelines may be an effective substitute for the services provided by the other pipeline for some users, the Council did not consider that the ability to switch between the two producers of natural gas is sufficiently easy to integrate the field of rivalry for the services provided by the two pipelines.
- 6.26 In that recommendation the Council considered that the services provided by the DVP were not the same services provided by the Anglo-Mitsui Pipeline, and that the DVP satisfy criterion (b).

<sup>&</sup>lt;sup>6</sup> Known as the Peabody-Mitsui Pipeline at the time of the 2000 recommendation to revoke coverage of the DVP.

- 6.27 In 2000, there were no access seekers or likely access seekers in close proximity to both pipelines.
- 6.28 Molopo Australia has discovered gas deposits in the vicinity of the two pipelines, though only seeks coverage of the DVP under the Code. In its application, Molopo Australia states that it already uses the services of the DVP. Molopo Australia did not assess whether other gas transportation services may provide the same service as DVP, including a service by the Anglo-Mitsui Pipeline.
- 6.29 Despite the impediments raised (limits of contractual arrangements) in the 2000 recommendation for substitution between the two pipeline services, the Queensland Nitrates plant is now connected and can obtain gas from either the DVP or Anglo-Mitsui Pipeline. This dual connection appears to support that substitution of services is possible.
- 6.30 The Council notes that the access seeker's current production site, the Mungi gas field, is not located along the stretch where the two pipelines (DVP and Anglo-Mitsui Pipeline) run side by side. The production site is located in close proximity, and is connected, to the DVP (see diagram 1). For a service to be provided by the Anglo-Mitsui Pipeline an interconnection pipeline of several kilometres would appear to be required. Consistent with the Council's previous view on these pipelines—same service for the distance that the two pipelines are side by side, but different services for their remaining lengths to respective origins—and the information provided on this application, the Council is of the view that the two pipelines are unlikely to provide the same service at the location of the Mungi gas fields.
- 6.31 The cost of constructing a pipeline to interconnect to Anglo-Mitsui Pipeline for potential access seekers could be significant. This may indicate that, while the availability of the alternative pipeline puts some constraint on OCA's ability to exercise monopoly power (this issue is discussed under criterion (a)), this constraint is not sufficient to result in a conclusion that the two pipelines provide services in the same market. Therefore, they may not provide the same point to point service.
- 6.32 However, it is difficult for the Council to conclude on this matter as there is insufficient evidence on the commercial viability of using the transmission services of the Anglo-Mitsui Pipeline.

- 6.33 Molopo Australia indicated that it has other potential prospects, including in ATP 602P, which lies to the south of the southern end of the DVP. Molopo Australia did not indicate whether gas reserves have been obtained or whether production is likely from this area. The Council considers that, consistent with its previous view, if gas production occurred in ATP 602P, the two pipelines (DVP and Anglo-Mitsui Pipeline) would not provide the same service for gas transportation from this area.
- 6.34 However, the Council notes that the close proximity of the two pipelines is likely to impact on any market power that the DVP owner may have. This is discussed under criterion (a).

### Current and projected levels of demand

- 6.35 The issue is whether the existing pipeline has sufficient capacity to meet foreseeable demand. If the required range of output exceeds the maximum potential capacity of a pipeline, new entry may be efficient.
- $6.36 \qquad \text{The relevant range of output for assessing whether the DVP is a natural monopoly in the provision of service between Dawson Valley and the QGP is the maximum foreseeable demand for relevant services over the next 10 15 years. }$
- 6.37 The Council notes that the applicant did not provide sufficient information to establish what its foreseeable demand for the DVP would be. However, the applicant provided information on reserves and a potential supply contract. It indicated that it has 25 PJ of independently certified proven and probable (i.e. P50) reserves from the Mungi gas field, 162 PJ of recoverable gas, and potential for other prospects within the areas surrounding the Mungi gas field. Molopo Australia also announced (10 May 2005) a memorandum of understanding with Ergon Energy Pty Ltd to supply gas from the Mungi field of up to 3.5 PJ per annum over a 15 year period subject to the adequacy of gas reserves.
- 6.38 OCA indicated that the level of throughput of the DVP is expected to drop to 3.0 PJ per year and remain at around that level for approximately 20 years based on current reserve and deliverability estimates for the Dawson Valley gas fields.
- 6.39 Based on this general information, the Council considers that the maximum foreseeable demand is unlikely to exceed 6.5 PJ per annum over the next 15 years. This demand estimate may be higher

if Molopo Australia's recoverable gas reserves, and production from other prospecting in the area, are taken into account.

6.40 The Council considers the maximum foreseeable demand is unlikely to exceed the capacity of the DVP.

# Does the pipeline have spare or developable capacity?

- 6.41 Molopo Australia states that the pipeline has current spare capacity. The applicant also estimated the maximum developable capacity of the DVP to transport gas to between 35 TJ and 47 TJ per day (depending on assumptions made). Molopo Australia submit that technical details of the DVP are, however, not publicly available.
- 6.42 The pipeline owner, OCA, stated that the DVP currently operates at 14 000 kPa and the maximum gas transport capacity is 20 TJ per day (which equates to 7.3 PJ per year). The pipeline owner did not provide any information on whether the DVP capacity could be expanded beyond 20 TJ per day (for example, through additional compression or through looping) and associated costs of doing so.
- 6.43 As discussed above, OCA throughput of the DVP is estimated at 3.0 PJ per year for 20 years. OCA consider that continuing spare capacity on the DVP would make it uneconomic to invest in another pipeline in the area, although it notes that if Molopo Australia's assessment of the size of Mungi field is correct the DVP would not have enough capacity to cater for the volume of gas transported. OCA does not consider, however, that the total recoverable reserves estimate of 162 PJ for the Mungi field is correct.
- 6.44 The Council considers that the forecast spare capacity, and likelihood that this capacity can be expanded further, is expected to result in the capacity of the DVP exceeding foreseeable demand for services. The Council did not receive substantial evidence that the DVP would not be able to meet foreseeable demand over the next 10-15 years or on the practicality and costs of expanding the capacity of the pipeline if this proved necessary.
- 6.45 The Council has come to a view that maximum foreseeable demand for the DVP services over the next 10–15 years is likely to be within current capacity of the pipeline.

### Uneconomic to develop another pipeline

- 6.46 The Council notes that gas transmission pipelines typically exhibit natural monopoly characteristics. This is because the costs of constructing and operating a pipeline are largely sunk and fixed, while the variable costs of increasing output are relatively small (Ordover and Lehr 2001). Therefore, the marginal cost of transporting a unit of gas is usually low. These characteristics mean that the average cost of transporting an additional unit of gas normally declines until the fully expanded capacity of a pipeline is reached. In other words, it is almost always cheaper to transport gas through an existing pipeline (up to the point of full developable capacity) than to build a new pipeline to transport gas along the same route.
- 6.47 Moreover, the high sunk costs of constructing additional pipelines serves as a barrier to the entry of new pipelines. 'Sunk costs' are those elements of an investment that are fixed or committed, and where, if the investment fails, little or none of the investment can be recovered. The presence of sunk costs also means that incremental or gradual entry – a common form of entry in other industries – is not feasible in gas transmission services.
- 6.48 The Council considers it likely, based on evidence available, that the DVP appears to fit the usual model.
- 6.49 For the current coverage application, the Council notes the pipeline construction costs provided by Molopo Australia and OCA range from approximately \$1.4 million to \$2.5 million.<sup>7</sup>

### Conclusion on criterion (b)

6.50 The Council concludes that it would not be economic to develop a pipeline to provide the services of the DVP at current and reasonably foreseeable levels of future demand. If the capacity of the DVP exceeds foreseeable demand for the service, significant additional gas could be accommodated on the existing pipeline without the need to construct a new pipeline. If foreseeable demand is greater than the capacity on the existing pipeline it is still likely to be more cost effective to expand the capacity of the existing pipeline than build a

<sup>&</sup>lt;sup>7</sup> This range of costs is based on constructing a pipeline (20 km length, 88.9 mm diameter) from Molopo Australia's Mungi field to the QGP, rather than the full length of the DVP (47 km).

new pipeline. So, from a social perspective, it is likely to be more efficient to utilise the existing assets effectively, rather than duplicating those assets. The Council therefore finds that the DVP satisfies criterion (b).

### 7 Criterion (a): The promotion of competition test

- 7.1 Criterion (a) requires the Council to test whether access (or increased access) to services provided by means of the DVP would promote competition in at least one market (whether or not in Australia), other than the market for the DVP service.
- 7.2 In assessing whether criterion (a) is satisfied, the Council must:
  - (a) define the relevant market(s) in which competition may be promoted and verify that this market or these markets are separate from the market for the service to which access is sought
  - (b) determine whether access (or increased access) facilitated by coverage would promote a more competitive environment in the additional market(s), which requires assessing:
    - whether the incumbent has the ability and incentive to exercise market power to adversely affect competition in the dependent market(s)
    - (ii) whether the structure of the dependent market(s) is such that coverage would, by constraining the exercise of market power by the service provider to adversely affect competition in the dependent market(s), promote competition.
  - (c) assess whether the effects of declaration are large enough to have a material impact on the competitive environment in the dependent market.
- 7.3 The purpose of criterion (a) is to limit coverage to circumstances where it is likely to enhance the opportunities and environment for competition in any dependent market(s). Whether competition will be enhanced depends critically on the extent to which the incumbent service provider can, in the absence of coverage, use market power to adversely affect competition in the dependent market(s). If the service provider has market power, as well as the ability and incentive to use that power to adversely affect competition in a dependent market, coverage would be likely to improve the

opportunities and environment for competition, offering the prospect of tangible benefits to consumers (including reduced prices and better service provision).

- 7.4 At the time of the Queensland Gas Pipelines (2000) recommendation the Council understood that there were no other known deposits of natural gas in the Dawson Valley area (apart from OCA's gas reserves) in relation to which any producer would require access to the pipeline. However, the (now former) Queensland Department of Minerals and Energy informed the Council of an authority to prospect (ATP 606P) west of DVP, and that there were other authorities to prospect in areas south and west of the Dawson Valley which the Queensland Government was in the process of auctioning to prospectors. The Council understood that it may be possible to develop any deposit found within these prospecting areas within a relatively short time of discovery.
- 7.5 The Council also understood that it was possible that the most commercially viable way for a producer who discovered a deposit in these areas was to seek to interconnect its pipeline to the DVP or the Anglo-Mitsui Pipeline in order to transport gas to the QGP for sale into the Queensland gas sales market.
- 7.6 This situation has changed with the gas producer in the vicinity of the DVP, Molopo Australia, seeking coverage of the DVP to improve its prospects of supplying gas to end users.

## Defining the relevant market and market delineation

- 7.7 The first step in the application of criterion (a) is to define the market(s) in which competition may be promoted as a result of coverage and determine whether they are dependent market(s) separate from the market for the services provided by the pipeline that is the subject of the application. Typically, the dependent market(s) will be either upstream or downstream from the market for the services.
- 7.8 For the purpose of criterion (a), the Council needs to be satisfied as to the existence of 'at least one market other than the market for the service' in which competition would be promoted. The words 'other than the market for the service' require the identification of distinct markets from the market for the service.

- 7.9 In 2000, the Council identified a number of potential dependent markets, being gas exploration, production, processing, reticulation, distribution (wholesaling and retailing).
- 7.10 At that time, the Council considered that the most likely market in which competition may be promoted is the gas sales market and that this market is functionally separate from the market for the service for gas transport. The Council did not come to a final view on the geographic extent of this gas sales market, but referred to the market (which included at least southern and central Queensland) as the Queensland gas sales market. The Council did not delineate the gas sales market into upstream and downstream markets (or further consider other potential markets) due in part to lack of evidence in submission, and apparent lack of substantial interest in those markets.
- 7.11 In its application for coverage of DVP, Molopo Australia contends that the dependent market is the Queensland gas market.
- 7.12 The Council considers that functional markets exist within the gas sales market. The markets are upstream and downstream of the pipeline which connects the gas sales market. Since a third party interest in production of gas has occurred, and is seeking to sell gas to end users, this interest necessitates further consideration of the gas sales market – the market identified as the most likely market in which competition may be promoted.
- 7.13 The Council sought views on dependent market definitions in the issues paper. The main issue raised was OCA's suggestion that the dependent gas sales market was not the Queensland gas sales market. They argued that gas has substitutes in a broader Queensland energy market particularly in the longer term when investment decisions are more flexible.
- 7.14 In 2000, while the Council considered that the broader energy market (which includes electricity for example) can have substitutes for gas in some circumstances and it can also provide some constraints on the price of gas, the Council did not consider that the field of rivalry is so close as to put them in the same market. This issue has also been considered by the Council in later work (for example, in the Moomba to Sydney Pipeline Systems Final Recommendations, NCC 2002) which found that the relevant product market for the purposes of criterion (a) is the market or markets for natural gas.

- 7.15 While OCA questioned restricting the definition to the Queensland gas sales market it did not raise any new evidence, nor is the Council aware of any new evidence, that would cause it to change the conclusions reached in previous applications.
- 7.16 The Council considers that the dependent market of gas sales can be regarded as separate from the market for gas transmission based on the conditions that they are economically separable and economically distinct. Regarding the first condition (economically separable), the transaction costs associated with the separate provision of DVP gas transmission services, and gas production and sales are unlikely to be so large as to make vertical integration inevitable. That is, gas transmission services, and gas production and sales are economically separable. Regarding the second condition (economically distinct), the provision of DVP gas transmission service uses assets sufficiently specific to that activity such that the assets used in another vertically related activity (gas production or gas sales) cannot readily produce gas transmission services. That is, the provision of gas transmission services is *economically distinct* to other vertically related activities such as gas production and gas sales.
- 7.17 For the purposes of the draft recommendation, the Council considered that the geographic boundary of the upstream gas sales market is delineated by the producers served or potentially served by the pipeline in question; that is, gas producers within a particular gas field or within the scope of feasible interconnection with the pipeline. For the DVP, the geographic dimension of the upstream gas sales market is, in general terms, any field (including the Mungi gas field) that is in the vicinity of the DVP. The Council notes there are two gas producers (Molopo Australia and OCA), and while there are a number of other companies that have authorities to prospect in the area, the Council has no evidence of likely production from these prospects.
- 7.18 For the purposes of the draft recommendation, the Council also considered that the downstream gas sales market is the Queensland gas sales market.
- 7.19 In response to the draft recommendation, Molopo Australia raised a new argument that the Queensland gas market comprises four geographically discrete market sectors, and that these sectors function independently from each other. It argued that the independent functioning of these discrete sectors is associated with the distance between them, and the cost of transporting gas to these sectors through the various transmission pipelines. Molopo Australia

provided estimates of gas transportation costs from various gas sources to Gladstone and Brisbane. However, Molopo Australia acknowledged that all market sectors, except the Townsville region, are interconnected by gas transmission pipelines.

- 7.20 The Council is of the view that the discrete and independently functioning market sector argument proposed by Molopo Australia does not reflect the current situation in Queensland — physical interconnection between almost all gas sales markets and all producers, and transactions (including the ability for contractual swaps) in this gas sales market over a wider geographic area than that proposed by Molopo Australia.
- 7.21The Council acknowledges Molopo Australia's argument of cost effective transport of gas from its Mungi field to Gladstone rather than other areas, but this cost effectiveness does not appear to be a high enough barrier to result in discrete and independently functioning markets. The Council notes that Molopo Australia's submission states that gas that is displaced from the Gladstone market will be available to other sectors of the Queensland gas market, most likely the Brisbane market. The Council also understands from the Queensland Government Department of Energy that where no physical access is possible, or physical delivery is not cost effective, contractual swaps can and have occurred in the Queensland gas sales market. The Council also acknowledges Molopo Australia's argument that transporting gas from Papua New Guinea may be viable despite transport opportunities that are significantly closer, though the Council considers that this indicates that transport differentials are not the only drivers of competition rather than indicating that competition in the Queensland gas sales market may be constrained.
- 7.22 The Council also considers that large industrial users establishing new plants have the ability to negotiate between regions and then lock prices into long term contracts. This is another factor that generates competition across the state.
- 7.23 In 2000, the Council considered that the proposed construction of a major transmission pipeline from Papua New Guinea down the east coast of Queensland and connecting with southern and central Queensland markets would broaden the geographic dimension of the gas sales market in Queensland to encompass the whole of the State of Queensland (the Townsville region is not currently interconnected with other markets). The Council noted, however, that construction of this pipeline had not commenced and this situation is still current.

In addition to the Papua New Guinea sourced gas providing a broader market definition, Enertrade (a Queensland Government owned corporation) is planning to build a 420 km gas transmission pipeline from Moranbah to Central Queensland industries (including in Gladstone, Rockhampton and Biloela). This pipeline will be operational by 2007 (Enertrade 2005). The effect of these pipelines will be increased gas supply sources and a broadening of the geographic dimension of the gas sales market consistent with the view expressed by the Council in 2000.

#### Conclusions on market delineation

- 7.24 The Council is satisfied that the dependent markets of relevance to its criterion (a) assessment are as follows:
  - (a) an upstream market for gas production and gas sales from any field (including the Mungi gas field) that is within the feasible scope of connection with the DVP
  - (b) a downstream Queensland gas sales market.

### Whether access (or increased access) facilitated by coverage would promote a more competitive environment in the dependent market(s)?

- 7.25 The Council must determine whether access (or increased access) facilitated by declaration would promote a more competitive environment in a dependent market. This requires an assessment of:
  - (a) whether OCA has the ability and incentive to exercise market power to adversely affect competition in the dependent market
  - (b) whether the structure of the dependent market is such that coverage would, by constraining the exercise of market power by OCA to adversely affect competition in the dependent market, promote competition.
- 7.26 The "promotion of competition" test should not be assessed in terms of the effect on particular competitors. Rather, criterion (a) focuses on the impact of coverage on the broad competitive environment in the dependent market (*Sydney Airport decision 2000*, paragraph 106). If the dependent market is already effectively competitive, it would be difficult to argue that regulated access would improve the competitive environment.

### Views put to the Council

7.27 The access seeker and pipeline owner have different views on whether competition will be promoted in the dependent market and the effects of the pipeline owner being vertically integrated into the dependent markets.

#### Promotion of competition

- 7.28 Molopo Australia argues there is not yet effective competition in the Queensland gas market. The key reasons for this include:
  - the market being constrained by the limited availability of gas from competing producers
  - gas purchase contracts are dependent upon gas reserves being proven – and there are no uncommitted sources of gas available for delivery in Queensland
  - additional supplies of gas are essential in order to promote competition in the Queensland gas market
  - prospective gas reserves of the Mungi and surrounding gas resources play an important role in providing a competitive alternative for gas users in a market place where gas supply is constrained
  - their reserves are small relative to the size of the Queensland market, though argues that proving up and development of their reserves will contribute to development of effective competition in this market
  - access to the services provided by the DVP will facilitate Molopo Australia's marketing of gas. Prospects exist for gas sales directly to end users in the Queensland gas market from their Mungi gas field and from identified prospects within the vicinity of the pipeline (for example, supplying Ergon Energy 3.5 PJ per annum for 15 years). Molopo argues that it requires certainty that spare capacity in the DVP will be available on reasonable commercial terms to facilitate its gas marketing efforts.
- 7.29 Molopo Australia, in its response to the Council's draft recommendation, reiterated its argument that access to DVP would lead to a material improvement in competition in the Queensland

gas market, particularly in Gladstone. The key additional information includes:

- that gas delivered from Papua New Guinea represents an attractive alternative to gas supplied via the Queensland Gas Pipeline
- increasing costs of transporting gas to Gladstone with increasing distance from sources of gas
- a range of Gladstone gas market benefits that would result from gas price reductions if Molopo Australia has access to the DVP
- that improved competition in the Gladstone market would also improve competition in other market sectors, citing Brisbane as an example.
- 7.30 OCA argues that competition will not be promoted. Their key points include:
  - Molopo Australia's 25 PJ of proven and probable reserve is an extremely small proportion of gas resources in Queensland, and that current yearly production from Molopo is 0.1 per cent of Queensland's total yearly production of 197 PJ during 2002-03. Given this, OCA is of the view that competitive benefits flowing from access coverage are unsupported.
  - Molopo Australia's example of a fall in gas price (\$0.1 per GJ) that would flow from coverage of the pipeline is not supported by evidence
  - the Queensland gas market is not constrained, and is rather, highly competitive. There are a large number of gas fields owned and operated by a diverse group of companies, a number of different pipeline owners and operators, and a large range of customers.

#### Market power

- 7.31 Molopo Australia argues that there is significant incentive for OCA to abuse its monopoly powers in respect of the DVP. The key reasons for this are:
  - that Origin, and its subsidiary OCA, is a competitor in the gas sales market, and that this is a constraining factor in securing gas sales contracts

- that Origin Energy, through OCA subsidiaries, produces 25 TJ per day or 60 per cent of coal seam methane gas sold within Queensland
- As a small emerging gas producer Molopo Australia has negligible negotiating power relative to Origin. Origin is a competitor to Molopo for sales of gas into Gladstone. With Origin owning an uncovered pipeline upon which deliveries of gas by Molopo are dependent, Molopo Australia's attractiveness as a prospective supplier of gas has been compromised.
- 7.32 OCA raises the following key arguments:
  - there is no evidence that either OCA or Origin have exercised any market power since revocation of the DVP in 2000
  - the point of vertical integration (production, transmission and distribution) is not to extract monopoly rents, but to facilitate stability, a holistic investment approach and risk management
  - the Anglo-Mitsui Pipeline provides a natural limit to which the vertically integrated service provider can engage in monopoly pricing
  - Origin's market share has not changed markedly over the past five years, but is poised to grow marginally as a result of the Spring Gully project. The structure of the market has not changed substantially since revocation.

Other views put to the Council

- 7.33 Molopo Australia has not pursued the option of transporting its gas on the Anglo-Mitsui Pipeline. Molopo Australia indicated that this would be an option for its field locations towards the northern end of the DVP, but not for prospects to the south of the DVP.
- 7.34 Anglo Coal provided the following facts on the Anglo-Mitsui Pipeline:
  - maximum capacity is 44 TJ per day based on current configuration
  - spare capacity is 23 TJ per day although a new customer contract may decrease this to 2 TJ per day after 2007
  - a company currently has third party access to the pipeline

- the pipeline is connected to other pipelines and can transport gas to broader gas sales markets.
- 7.35 From discussions held with the Queensland Government Department of Energy, the Council has gained an understanding on the following general information on the Queensland gas industry including:
  - major gas pipelines—system of interconnected major pipelines including the Queensland Gas Pipeline, South West Queensland Pipeline, Roma to Brisbane Pipeline and Carpentaria Gas Pipeline (but North Queensland Gas Pipeline is not connected)
  - gas producers—eight companies produce and sell gas in Queensland from nine different fields, two more companies are likely to start producing and selling during 2006, and there is a possibility of gas from the Papua New Guinea gas project
  - market and market segments—Gladstone region has eight customers supplied with gas by four companies
  - gas transportation—cost advantages for producers who inject gas into the QGP for supply of the Gladstone market over producers delivering gas from other pipelines, and technicalities of gas transportation over longer distances
  - contractual swaps—can achieve delivery of gas where no physical access is possible or physical delivery is not cost effective, and that swaps have occurred
  - other tenures—companies (apart from Molopo Australia and OCA) with authority to prospect (ATP) adjacent or close to ATP 564, including ATP 768, 769 and 803.

### Ability and incentive to exercise market power

- 7.36 In the issues paper the Council sought views as to the effect on dependent markets of any exercise of market power by OCA. The Council stated that where declaration enables the applicant to sell directly to end users, OCA's market power in the dependent markets may be constrained. This would be in contrast to the current arrangement where gas is sold to Origin Energy who then sells the gas to end users.
- 7.37 The Council notes that OCA is a subsidiary of the Origin Energy group that operates in numerous functional levels of the gas market

including production, transmission and distribution. These vertical linkages may provide OCA with an ability and incentive to exercise market power in the absence of coverage.

- 7.38 In essence, there are three means by which OCA may seek to use its presumed monopoly power to adversely affect competition in a dependent market or markets:
  - (a) charge monopoly prices for the provision of the service
  - (b) engage in explicit or implicit price collusion
  - (c) and in being vertically integrated, engage in strategic behaviour designed to leverage its presumed monopoly power into the dependent markets.
- 7.39 The Council has considered the views of Molopo Australia (in its application, supplementary information, and response to the draft recommendation), OCA, Anglo Coal and the Queensland Department of Energy in assessing whether OCA has the ability and incentive to exercise market power in the dependent markets.
- 7.40 The Council considers that to the extent that Origin Energy sells gas in the upstream and downstream gas sales markets, it appears to have an incentive to exercise any market power it has in these markets to maximise returns.
- 7.41 However, the Council considers that there are likely constraints on the extent to which OCA may exercise market power in both the downstream and upstream markets. The most likely constraints are:
  - competition in the dependent market from other sources
  - the Anglo-Mitsui Pipeline.
- 7.42 The Council notes the conflicting views on the competitiveness of the downstream Queensland gas sales market raised by Molopo Australia and OCA, which range from a market that experiences relatively constrained competition to one that is highly competitive. The Council notes that these views were not supported by robust factual evidence that enables the Council to ascertain their veracity.
- 7.43 In relation to this market, the Queensland Government Department of Energy has informed the Council there are currently eight companies producing and selling gas in Queensland from nine different fields, two more companies likely to start producing and

selling during 2006, and the possibility of gas from the Papua New Guinea gas project. Using the Gladstone region as an example, there are eight customers supplied with gas by four companies (though Molopo Australia contends there are only three gas suppliers).

- 7.44 The total coal seam gas production in Queensland increased to approximately 27 PJ in 2004. This is about 25 per cent of Queensland's current gas demand, and a dramatic increase from around 2 PJ in 1998 and about 11 PJ in 2001 (DNRM 2005a). The combined conventional and coal seam gas sales were 195 PJ in 2003-04 (DNRM 2005b).
- 7.45 The Council has not reached a final view on the level of competition in the Queensland gas sales market. However, based on the description of competitive conditions offered by the Queensland Department of Energy, the Council considers the market unlikely to be 'constrained' as suggested by Molopo Australia. In any event the small volumes of gas transported on the DVP into the Queensland gas sales market are unlikely to materially change the state of competition in that market or provide OCA with an ability to exercise market power in that market through ownership of the DVP. In Molopo Australia's argument about promotion of competition in downstream markets it did not address the potential for the Anglo-Mitsui Pipeline to counteract OCA's ability to exploit its market power.
- 7.46The Council considers that OCA's market power in the downstream and upstream markets is to some degree constrained by the presence of another pipeline in the vicinity of the DVP and Mungi gas field. Despite the Council's criteria (b) finding that the Anglo-Mitsui Pipeline does not provide the same service as the DVP, this does not preclude it from constraining OCA's ability to exploit its monopoly power. The Council considers that the presence of the Anglo-Mitsui Pipeline would provide a cap on the ability of OCA to charge monopoly prices for transmission services on the DVP. Put another way, OCA would only have the ability to exercise monopoly pricing up to the point at which building an interconnection pipeline and seeking access to the Anglo-Mitsui Pipeline becomes a commercially viable option. Given that the Anglo-Mitsui Pipeline has spare capacity currently available for use by third parties, it would appear that the commercial option to utilise Anglo-Mitsui Pipeline services, even if this required additional pipeline construction to link a field to that pipeline, would come well before the commercial option of building another pipeline to connect to the QGP. Although this

option has not been pursued by Molopo Australia, there is no evidence before the Council that indicates such an option is not viable.

- 7.47 The upstream markets include gas production and gas sales in the vicinity of the DVP. There are two gas producers in this market— Molopo Australia and OCA—currently producing approximately 3 PJ of gas per annum, and several prospectors. To the extent that most potential gas producers would need to utilise the gas transmission services of the DVP, the vertical linkages between OCA's transmission services and gas production and sales provide OCA with an incentive and ability to leverage its transmission market power into this upstream market. However, as noted earlier, the Council considers that OCA's market power in the upstream market is to some degree constrained by the presence of another pipeline in the vicinity of the DVP and Mungi gas field.
- 7.48 There do not appear to be any other constraints on entry that would make declaration ineffective in promoting competition.

## Would the effects of declaration be large enough to have a material impact on the dependent markets?

- 7.49 The impact of access coverage will depend on whether any fall in price or improvement in service would be large enough over a significant enough range of services to have a nontrivial impact in the dependent market.
- 7.50 The Council notes the argument posed by OCA that Molopo Australia's yearly production is a very small proportion of Queensland's total yearly gas production—one tenth of one per cent of yearly gas production. OCA's argument, however, is only based on one year (the first year) of production at Mungi gas fields by Molopo Australia.
- 7.51 Molopo Australia have provided evidence of gas reserves (independently certified proven and probable reserves) and potential gas supply contracts (Ergon Energy) which suggest that gas production looking forward has the potential to be a greater proportion of Queensland's yearly production of gas.
- 7.52 That said, the Council is of the view that the looking forward proportion is only a small per cent of the Queensland gas sales market, and an amount that it unlikely to be able to improve the environment for competition in that market.

7.53 Despite the Council finding that OCA is likely to have the ability to exercise market power in the upstream market, the benefits from coverage on price or service improvement is likely to be reduced by the presence of the Anglo-Mitsui Pipeline.

### Conclusion on criterion (a)

- 7.54 The Council concludes that coverage of the DVP:
  - (a) would be unlikely to materially promote competition in the downstream Queensland gas sales market as a consequence of the lack of ability and incentive of the pipeline to distort competition in those markets through vertical leveraging
  - (b) would be likely to promote competition in the upstream gas production and sales markets as a consequence of the ability and incentive of the pipeline to charge monopoly prices for transport services. However, the Council notes that the upstream market is small with little participation, and the impact of any declaration would be limited due to market power already being constrained by the presence of another transmission service. This has relevance to the Council's consideration of criterion (d).
- 7.55 The Council therefore finds that the DVP satisfies criterion (a) in respect of the upstream gas production and sales market.

### 8 Criterion (c): Health and safety

8.1 Criterion (c) requires 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 criterion (c) is that the National Gas Code should not be applied to pipelines where access or increased access may pose a legitimate risk to human health or safety.

### Views put to the Council

8.2 The Council did not receive submissions arguing that it would be unsafe to provide access or increased access to the services of the DVP. This is consistent with the Council's experience in relation to a number of applications seeking revocation of coverage of pipelines, where safety concerns were not raised to support coverage or revocation.

### Analysis

- 8.3 The National Gas Code contemplates the provision of access to pipelines throughout Australia under Gas Access Acts in each State and Territory. The Council is not aware of any instance where safety concerns have been raised in relation to access or increased access to the services of pipelines. Nor is there any available evidence to suggest that safety is a particular concern in relation to the provision of access or increased access to the services of the pipeline for which coverage is sought.
- 8.4 Queensland has passed regulations dealing with the safe operation of gas pipelines. The Council is confident that these regulations deal appropriately with any safety issues arising from access to the pipeline.

### Conclusion

8.5 The Council concludes that access (or increased access) can be safely provided to the services of the DVP. The Council therefore finds that the DVP satisfies criterion (c).

### 9 Criterion (d): Public interest test

- 9.1 Criterion (d) requires that access (or increased access) to the services provided by means of the pipeline would not be contrary to the public interest.
- 9.2 The Council adopts a broad view of the types of matters that may raise public interest considerations under criterion (d), including the overall costs of regulation, and any effects that regulated access might have on the environment, regional development, and equity.
- 9.3 Because criterion (d) is phrased in the negative, a recommendation to cover would require that the costs of regulated access do not outweigh the benefits of regulating natural monopoly services with substantial market power. The extent of these benefits depends on the likely effect of regulating natural monopoly services on competition in related markets; issues considered under criterion (a).

### Views put to the Council

- 9.4 In its application, Molopo Australia argues:
  - that OCA, in its 2000 application for revocation, estimated the costs associated with the development of access arrangements to be in the order of \$100 000 to \$150 000. Molopo Australia considers that these costs would be outweighed by the potential benefits that can flow from increased competition.
  - a gas price improvement of \$0.10/GJ would deliver a benefit of \$1.6 million per annum with the benefit limited to 162 PJ (the estimated quantity of gas recoverable from the Mungi gas field) of gas over a ten year period.
- 9.5 In its response to the draft recommendation, Molopo Australia argues:
  - that the estimate of \$500 000 for the total cost of regulation is excessive
  - that a gas price improvement of \$0.03/GJ, with the benefit limited to a quantity of gas that can be delivered through spare capacity in the DVP, would exceed the costs associated with coverage over five years.

9.6 In submission, OCA argues:

- that the figures quoted by Molopo Australia of pipeline coverage do not consider inflation, general increases in regulation costs or costs incurred by the regulator and the Queensland Government
- the total cost of regulation would be over \$500 000, not including the costs to all parties of the Council coverage review. Total regulatory costs would be equivalent to approximately \$200 000 for each of the three pipeline users.
- Molopo Australia's \$0.10/GJ price improvement as a result of coverage is arbitrary and unsupported
- the economic benefits that need to be considered are those related to improvement in allocative efficiency, and there would be significant allocative efficiency detriments from imposing coverage of the DVP
- that regulation would result in significant cost without realisation of net benefits.

### Analysis

- 9.7 The most significant benefit of coverage is the possibility that access to the DVP will facilitate competition. In its consideration of criterion (a), the Council concluded that the dependent market where the environment for competition would be promoted is the upstream market for gas production and sales in the vicinity of the DVP.
- 9.8 The Council notes the new arguments raised by Molopo Australia in its response to the draft recommendation regarding the total costs of regulation and gas price improvements which exceed the costs of coverage. As discussed earlier, the Council is not convinced that there is a narrower geographic market than the Queensland gas sales market as proposed by Molopo Australia, nor that there is a large ability to exercise market power given other gas sources and the existence of the Anglo-Mitsui Pipeline. Therefore, Molopo Australia has not established that such price improvements are likely, nor that they are likely to extend over the volume of gas claimed.
- 9.9 Satisfaction of criterion (a) usually suggests that there are efficiency gains from coverage of the service. However, the Council notes that coverage of a service provided by a bottleneck may not always be in the public interest. Where the costs of regulation are likely to outweigh the benefits from regulation it would not be in the public

interest to declare the pipeline. The economic efficiency gains from coverage depend on the extent of market power possessed by the facility owner, any constraint on exercise of that market power and the size of the market concerned. The costs of regulation include direct administrative and compliance costs faced by parties and regulators and other economic costs that may arise from regulation.

- 9.10 In this instance, the Council is of the view that the upstream market is small with little participation and the market power possessed by OCA is constrained by the presence of the Anglo-Mitsui Pipeline. OCA has the ability and incentive to raise prices only up to the point where a transmission service user would decide to switch from the DVP to the transmission services of the Anglo-Mitsui Pipeline. OCA's market power is therefore constrained by the cost of constructing a pipeline to interconnect to the Anglo-Mitsui Pipeline and any additional cost of obtaining transmission services via the Anglo-Mitsui Pipeline. Based on estimates of pipeline construction costs, construction of an interconnect pipeline appears likely to range from \$140 000 to \$500 000. As noted in criterion (a) the option of using the Anglo-Mitsui Pipeline transmission service has not been explored by Molopo Australia in its application for coverage of the DVP, or in discussion with the owners of the Anglo-Mitsui Pipeline, but the Council is not aware of any factor that would discount this constraint.
- 9.11 The estimated direct (or administrative) costs of regulation (for example, legal and expert fees) provided by the applicant and OCA range from \$100 000 to \$600 000. However, the lower bound of this range is only based on costs for a pipeline owner in 2000. The Council considers the direct costs to parties participating in developing an access arrangement are likely to be towards the upper bound of these estimates or perhaps greater. The Council also notes that the costs of regulation are not limited to these direct costs. The total cost of regulation could be significantly greater when all relevant costs were included.

### Conclusion on criterion (d)

9.12 The Council considers, given the small size of the dependent upstream market and constraint on the pipeline owner's ability to exercise market power, there is a significant likelihood that the costs of regulation in this instance exceed the benefits. The Council therefore concludes that the DVP does not satisfy criterion (d).

### **Public submissions**

Molopo Australia Limited: application

Molopo Australia Limited: supplementary information

Molopo Australia Limited: response to draft decision

Oil Company of Australia (Moura) Transmissions Pty Ltd

Anglo Coal Australia Pty Ltd

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Sydney International Airport; Re Review of Declaration of Freight Handling Facilities (2000) ATPR  $\P41\text{--}754$