Application for revocation of coverage of the Roma distribution system under the National Gas Access Regime

Final Recommendation

April 2002

National Competition Council

Recommendation

This document contains the National Competition Council's (the Council) final recommendation in respect of an application for revocation of coverage of the Roma distribution system under the *Gas Pipelines Access (Queensland) Act* 1998 (Queensland Act). The application seeks revocation of the entire distribution system, 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) (Roma Town Council 2002, p. 3).

The Council's final recommendation is that coverage under the National Gas Access Code of the Roma distribution system 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 Roma distribution system.

This final recommendation is divided into three main parts:

Part A, which explains the legislative background to the National Gas Access Code; 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 distribution system, and the structure of the natural gas industry and the state of competition in the relevant markets.

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

Abbreviations and glossary of terms

$/GJ	Australian dollars per Gigajoule
$/TJ	Australian dollars per Terajoule
ACCC	Australian Competition and Consumer Commission
AGA	Australian Gas Association
Access Arrangement	A statement of policies and the basic terms and conditions that apply to third party access to a Covered Pipeline
Application	Application for revocation of coverage of the Roma distribution system lodged by Roma Town Council dated January 2002
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
EGP	Eastern Gas Pipeline
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
GJ	Gigajoule, a unit of measurement for measuring the energy content of natural gas or other energy sources
GST	Goods and services tax
National Gas Access Code	National Third Party Access Code for Natural Gas Pipeline Systems

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
Queensland Act	*Gas Pipelines Access (Queensland) Act* 1998. The act which applies the National Gas Access Code to gas pipelines in Queensland.
TJ	Terajoule (equal to 1,000GJ)
TJ/a	Terajoules per annum
TJ/d	Terajoules per day

Table of contents

Part A–Legislative background

The National Gas Access Code

The Queensland Act applies the National Gas Access Code to gas pipelines in Queensland.

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 Roma distribution system is listed in Schedule A.

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 National Competition Council. Following consideration of issues raised in public consultations, the Council issues a draft recommendation, conducts a further public consultation process then conveys a final recommendation to the relevant Queensland 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 Queensland 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. The Queensland Gas Appeals Tribunal 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.[1]

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 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 Australian Competition Tribunal in the Eastern Gas Pipeline decision in its consideration of the application by Roma Town Council.

Process for considering the criteria

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

---

1 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 Roma distribution system. 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 Eastern Gas Pipeline decision, other pipelines will be assessed to see whether another pipeline can meet all of the forseeable demand;

- 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 Australian Competition 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 4 February 2002. In accordance with section 1.26 of the National Gas Access Code, the Council advertised the application in *The Australian* on 18 February 2002 and in the *Western Star* (a regional newspaper covering the Maranoa region, including Roma) on 15 February 2002, and wrote to interested parties calling for submissions. The Council also published a copy of the application, and invited submissions, on its website. The Council received 2 submissions (listed at Appendix 1) which has been published on the Council's website.

In accordance with section 1.26 of the National Gas Access Code, the Council released its draft recommendation on 25 March 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

The applicant, the Roma Town Council, owns and operates the Roma distribution system.

The application seeks revocation for the entire Roma distribution system and any future extensions or expansions to that system as might be described under sections 1.40 and 1.41 of the National Gas Access Code (Roma Town Council 2002, p. 3).

The distribution system

Roma was the site of both the first discovery of natural gas in Australia (in 1900) and Australia’s first commercial gas project, the conversion of the Roma power station carried out in 1961 (AGA 2002, p 2)

The Roma distribution system serves customers in the area of the town of Roma. The distribution system supplies gas to a total of 295 customers through 69.8 km of reticulated gas pipe, and delivers an annual volume of gas of about 15.44 terajoules (TJ), worth about $190,000 per annum in total systems revenue.

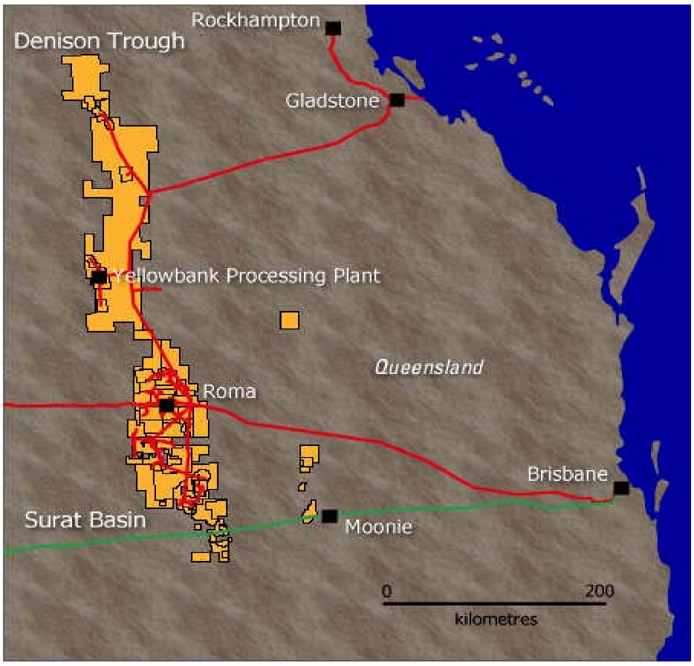
According to the application, the customer profile for 2000/2001 was:

2000/2001	Number of Customers	Annual Consumption (TJ)
Domestic	243	5.54 TJ
Commercial	50	6.64 TJ
Industrial	2	3.25 TJ
Total	295	15.44 TJ

Roma Town Council has orally advised the Council that the 243 domestic customers using gas refer to dwellings, and there are a total of 2,300 dwellings in Roma.

Roma Town Council has also orally advised that it purchases and receives the natural gas for the Roma distribution system directly from the "No. 2 Well" in Timbury Hills. Timbury Hills (PL 3) is part of the Surat Basin and the licence is majority owned (85%) by Santos (Santos 2001, p. 32). As the diagram below shows, the Town of Roma is located within Santos' acreage in the Surat Basin:

Diagram 1: Santos acreage (in yellow) in the Surat Basin



source: reproduced with permission from Santos website http://www.santos.com.au. Copyright Santos Ltd 2001

Natural gas in Queensland

Queensland's gas market is characterised by a number of large transmission pipelines, regulated by the ACCC, and several relatively small distribution networks. Around 132,000 customers are serviced by gas distribution systems (Queensland Competition Authority 2001, p. 39).

Natural gas is produced in Queensland from the Bowen/Surat, Cooper/Eromanga and Adavale basins. Gas is carried to end users via transmission pipelines and distribution networks.

Table 1 lists pipelines currently covered under the Queensland Act as at January 2002.[2]

---

2 Coverage of four pipelines originally listed at Schedule A of the National Gas Code, was terminated under the Code's revocation provisions in 2000. The relevant pipelines are: Kincora to Wallumbilla transmission

Table 1: Pipelines covered by Queensland Regime

Pipeline License (PPL) Number	Description of pipeline	Type of pipeline	Operator
2	Wallumbilla to Brisbane, commonly known as the Roma to Brisbane Pipeline, RBP.	transmission	Australian Pipeline Trust
24	Ballera to Wallumbilla, commonly known as the South West Queensland Pipeline, SWQP	transmission	Epic Energy
30	Wallumbilla to Rockhampton via Gladstone, commonly known as the Queensland Gas Pipeline, QGP.	transmission	Duke Energy
41	Ballera to Mt Isa, commonly known a the Carpentaria Gas Pipeline, CGP.	transmission	Australian Pipeline Trust
32	Gatton to Gympie pipeline[3]	transmission	pipeline not yet constructed
	Papua New Guinea to Queensland pipeline[4]	transmission	pipeline not yet constructed
	Allgas Energy/ENERGEX system (South Brisbane, Gold Coast, Toowoomba, Oakey)	distribution	Allgas Energy/ENERGEX
	Envestra/Origin Energy Asset Management system (North Brisbane, Ipswich, Gladstone, Rockhampton)	distribution	Envestra/Origin Energy Asset Management
	Roma system	distribution	Roma Town Council

Diagram 2 contains a map of the major pipelines in Queensland.

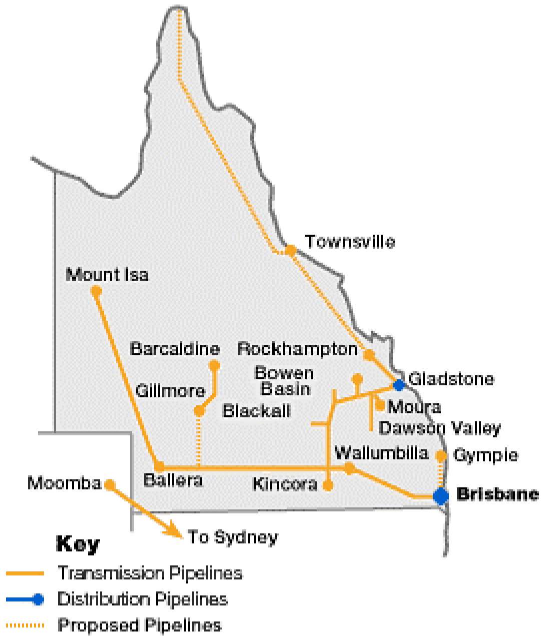
---

pipeline; Dawson Valley to Duke transmission pipeline system; Moura Mine to Duke transmission pipeline system; the Dalby distribution system.

3 Covered under a derogation at s.57 of the Queensland Act.

4 Covered under a derogation at s.57 of the Queensland Act.

Diagram 2: Natural gas pipelines in Queensland:



Source: reproduced with permission of the Code Registrar

Relative to other jurisdictions, Queensland's overall gas market is small, representing around 7% per cent of total energy consumed in the State (Australian Gas Association 2001, p. 56). Sales of gas to end users in Queensland are predominantly through direct contracting. Of the total of 109 PJ of gas consumed in Queensland in 1998-99, only 12.8 PJ, or around 12 per cent, was delivered via distribution networks – predominately the two major distribution networks Allgas and Envestra (Queensland Competition Authority 2001, p. 40).

Of gas delivered via distribution systems, most relates to those pipeline systems owned by Envestra and Allgas. As Table 1 shows below, Roma distribution system only accounted for 0.02PJ, or 0.14% of total gas sold through *distribution networks.*

Table 1: Details of gas distribution networks in Queensland, 1998-99

owner	*number of customers*	*length of mains (kms)*	*total gas sold (PJ)*
Envestra	70,161	2,026	4.3
Allgas	58,979	1,900	9.2
Dalby Town Council	2,400	87	0.14
Roma Town Council	305	21	0.02

Source: Queensland Competition Authority 2000, p 6

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 Australian Competition 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 Roma distribution system 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 Roma distribution system; 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. In the Council’s final recommendation on the application from Dalby Town Council to revoke coverage of the Dalby distribution system from the provisions of the *Gas Pipelines Access (Queensland) Act 1998*, the Council defined the service as being “a gas transportation service to gas consumers in the Dalby area.” (National Competition Council 2000a, p 18) On this approach the service provided by the Roma distribution system could be described as a “gas transportation service to gas consumers in the Roma area”.

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).*

The applicant does not give a view on the definition of the service provided by the Roma distribution system

Conclusion on service definition

The Council considers that the service provided by the Roma distribution system is the transportation of natural gas to gas consumers in the Roma area.

Uneconomic to develop another pipeline

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

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

- it is uneconomic to develop a new pipeline to provide the services provided by the pipeline; and
- existing pipelines do or could provide the services provided by means of the Roma distribution system, for example by way of some enhancement to the existing capacity of such other pipeline.

The Tribunal in the Eastern Gas Pipelines 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).

In considering whether it is uneconomic to develop a new or existing pipeline to provide the services provided by means of the Roma distribution system, it is necessary to define the word "uneconomic".

The Council adopts a social test rather than a private test. The Tribunal affirmed in the Sydney Airport decision that 'uneconomical' is construed in a social context (focussing on economic efficiency considerations) rather than in terms of private (commercial) interest:

> *... the uneconomical to develop test should be construed in terms of the associated costs and benefits of development for society as a whole. Such an interpretation is consistent with the underlying intent of the legislation, as expressed in the second reading speech of the Competition Policy Reform Bill, which is directed to securing access to "certain essential facilities of national significance". This language and these concepts are repeated in the statute. This language does not suggest that the intention is only to consider a narrow accounting view of "uneconomic" or simply issues of profitability ... If "uneconomical" is interpreted in a private sense then the practical effect would often be to frustrate the underlying intent of the Act. This is because economies of scope may allow an incumbent, seeking to deny access to a potential entrant, to develop another facility while raising an insuperable barrier to entry to new players (a defining feature of a bottleneck). The use of the calculus of social cost benefit, however, ameliorates this problem by ensuring the total costs and benefits of developing another facility are brought to account. (Sydney Airport decision, para 40793).*

The Tribunal endorsed this approach in the Eastern Gas Pipeline decision:

> *"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).*

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 this application. If there are no economic alternatives to the services provided by the Roma distribution system for the foreseeable range of demand for those services in that period, then criterion (b) is likely to be met.

In assessing whether it would be uneconomic to develop new or existing pipelines to provide the service the Council has considered the following factors:

- the likely demand for natural gas in the town of Roma; and
- the costs of developing new or existing pipelines to provide the service of transporting natural gas to consumers in the town of Roma. In this context the Council has considered:
    - the costs of building a new pipeline; and
    - the costs of expanding the capacity of existing pipelines to meet the forecast demand for natural gas in the Town of Roma.

Demand for natural gas provided by the Roma distribution system

Empirical data showing the current and forecast demand for gas from the Roma distribution system is limited.

Hence, the Council has attempted to derive the relevant demand from the following information:

- the current demand for gas in the Town of Roma;
- the current levels of gas supplied by the Roma distribution system;
- the current contracted capacity of the Roma distribution system;
- estimates of the demand for Roma distribution system gas available over the next 10-15 years; and
- the current economic population of the Town of Roma and future projections of the growth of the town

Currently, the Roma distribution system transports 15.44TJ/d. Roma Town Council have orally advised that they do not know, nor have the technical expertise, to be able to report the exact capacity of the system. Nevertheless they have orally advised that an example of its under-utilisation is that only 243 domestic customers of a potential 2,300 domestic customers use the system (10.5%)

The applicant has stated that Roma is experiencing very low population and industrial growth, and that it is unlikely that the market will expand in the future to have any significant impact on its economics (Roma Town Council 2002, p 6). Available empirical data supports this, indicating that Roma's population (currently 6,396) will only grow by approximately 1.5% in the next 11 years (Department of Local Government and Planning 2001). Over the period March 1994 to September 1998, the number of business establishments in the South West Statistical Division (which includes the Town of Roma) increased by only 0.15%. The number of businesses in Queensland increased by 25.0 per cent over the same period (Office of Economic and Statistical Research 2000).

Given the current under use of the Roma distribution system and the projected industrial growth and growth for natural gas demand in the Town of Roma, the Council considers that the Roma distribution system has sufficient capacity to cope with future demands for natural gas to consumers in the Town of Roma.

Developing a new pipeline

The applicant does not submit that it would be economic to develop a new pipeline to provide the services provided by means of the Roma distribution system. They submit that "the system is not currently capacity constrained, and there is considerable scope for load growth with limited capital investment" (Roma Town Council 2002, p 7).

Investment in new pipelines is, in economic language, 'sunk'. That is, the investment is fixed or committed, and if the investment is a failure, little or none of it can be retrieved. This means that entry and exit costs to provide these services are high, and that incremental or gradual entry – a common form of entry in other industries – is not feasible in the gas reticulation industry.

It is not uncommon for existing pipelines to have spare capacity. From a pipeline company's point of view, it is often prudent to cater to the unpredictability of future requirements by building a larger capacity pipeline. This is because the costs of laying a new pipeline rise slowly compared with increases in the capacity of that pipeline. In other words, it is much less expensive – per unit of capacity – to lay a large capacity pipeline than a small capacity pipeline.

The applicant refers to the Council's statement in its final recommendation on the application from Envestra Limited to revoke coverage of the Alice Springs distribution system under the *Gas Pipelines Access (Northern Territory) Act 1998*, to argue that it is uneconomic to develop an existing pipeline:

> *[T]he Council notes that gas pipelines typically have high construction costs and low operating costs, making the marginal cost of transporting a unit of gas very low. Moreover, up to the point of fully expanded capacity, average costs of transport per unit of gas decline. These features are indicative of natural monopoly characteristics. In lay terms, it is almost always cheaper to transport gas through existing pipelines (if spare capacity exists or can be added) than it is to build another pipeline to transport gas. Duplication of a gas distribution network that services a city or town may face additional*

> *obstacles of urban town planning and environmental restrictions.... In summary, therefore, it is generally not economic to develop another pipeline where an existing pipeline has existing spare capacity (or can develop it through greater compression and/or looping). Having said this, the Council recognises it will always be necessary to consider the facts of particular pipelines.* (National Competition Council 2000b, pp. 11-12)

In considering the services of the Roma distribution system, the Council has found no evidence to suggest that these pipelines deviate from the typical characteristics noted above. The Council notes in this regard that the Roma distribution system is currently servicing only 10% of potential domestic customers, suggesting that the most efficient way of satisfying any future expansion in demand would be through the services of the existing distribution system. The Council notes that the applicant has conceded that it is uneconomic to develop an existing pipeline. The Council considers it unlikely that it would be economic to develop a new pipeline to provide the services provided by means of the Roma distribution system.

Develop existing pipelines

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 Roma distribution systems.

There is no other pipeline that could be developed to provide a substitute service to that of the Roma distribution system.

Conclusion on criterion (b)

The Council is affirmatively satisfied that, based on the information before it, that for the likely range of reasonably foreseeable demand for the transportation of gas on the Roma distribution system to the Town of Roma, it is more efficient, in terms of the costs and benefits to the community as a whole, for the Roma distribution system to provide those services rather than for those services to be provided by more than one pipeline.

The Council is therefore 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.

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 in which competition is said to be promoted is separate from the market for the services provides by means of the Roma distribution system; and if so, then:
- determine if access (or increased access) would promote competition in this separate market by comparing the other market with and without coverage of the Roma distribution system (Eastern Gas Pipeline decision, paragraph 74).

Markets

In considering the questions of market definition, the Council is guided by the work of the Federal Court, the Tribunal, and the High Court in their consideration of the market for the purposes of Part IV, as well as the Tribunal's and the Court's consideration of Part IIIA.

The Tribunal has defined the 'market' in the following way:

> *A market is the area of close competition between firms, or putting it a little differently, the field of rivalry between them (if there is no close competition there is of course a monopolistic market). Within the bounds of a market there is substitution – substitution between one product and another, and between one source of supply and another, in response to changing prices. So a market is the field of actual and potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run, if given a sufficient price incentive. (Re Queensland Co-operative Milling Association Ltd (1976) 25 FLR 169 at 190*)

This view of the market has been accepted by the High Court in the *Queensland Wire case*[5] and was adopted by the Tribunal in the context of Part IIIA in the *Sydney Airport decision* (40772 - 40773).

Dimensions of markets

The relevant dimensions of markets include the following:

- The <u>product market</u>, that is the types of goods and services in a market. Product markets can be considered separate if their respective products are not substitutable in demand or supply. Products are substitutable in demand (and therefore in the same product market) if consumers will substitute one product for the other following a small but significant change in their relative prices. Substitution in supply occurs when a producer can readily switch its assets from producing one product to another.

- The <u>functional market</u>. Functional market definition focuses on the different steps in a production process. In defining functional markets, the Council has had regard to the Tribunal's approach to functional market delineation in the *Sydney Airport case*[6] which is consistent with the approach used by the High Court in *Queensland Wire* and developed by Mr Henry Ergas (Ergas 1997, pp. 1 - 3). The Council considers that the two following conditions must be satisfied before markets can be regarded as functionally separate.

  – The layers at issue must be separable from an economic point of view (<u>*economically separable*</u>). This involves an assessment as to whether the transaction costs in the separate provision of the good or service at the two layers are so large as to prevent such separate provision from being feasible. In effect, to be in different markets, vertical integration must not be inevitable.

---

5 Queensland Wire Industries Pty Ltd v The Broken Hill Proprietary Ltd and Another (1989) 167 CLR 177.

6 See paragraphs 91 – 99.

- Each layer must use assets sufficiently specific and distinct to that layer such that the assets cannot readily produce the output of the other layer (*economically distinct*). In effect, supply side substitution must not be so readily achievable as to unify the field of rivalry between the two layers.

Markets may be functionally separate even though there is a *one for one* relationship, that is to say, perfect supply and demand side complementarity. However, where complementarity is associated with economies of joint production or consumption such that separate provision or consumption was not economically feasible, the services will not be in functionally separate markets.

- The geographic dimension of the market. This refers to the area covered by the market such as national, intrastate or regional markets. The reference to 'other markets' in criterion (a) includes markets outside Australia.

- The temporal dimension of the market. This refers to whether the size and scope of the market is likely to change over time. The temporal dimension is particularly relevant where production technologies are continually changing. In order to determine the temporal parameters of markets, the Council generally has regard to long-run rather than short-run substitution possibilities.

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

Market analysis

In the Eastern Gas Pipeline decision, the Tribunal was satisfied that gas transmission services are functionally separate from other parts of the gas market. They identified other functional areas as including exploration, production/processing, sales and distribution/reticulation (Eastern Gas Pipeline decision, paragraph 77). Distribution services are clearly in a separate market from gas sales.

The application states that the relevant downstream market is the market for the provision of natural gas to meet the demands of gas consumers in the town of Roma (Roma Town Council, pp. 5-6). The application provides the following information about the composition of the market:

2000/2001	Number of Customers	Annual Consumption (TJ)
Domestic	243	5.54 TJ
Commercial	50	6.64 TJ
Industrial	2	3.25 TJ
Total	295	15.44 TJ

Source: Roma Town Council 2002, p. 2

The applicant submits that the geographic scope of the market is defined by the dimensions of the distribution system in the Town of Roma. They state that:

> *The gas market in Roma is clearly a local market, restricted to the customers served from the Roma gas distribution system. For many of the commercial and industrial customers, the market for products is similarly limited to the general region. No customers use gas as an input into the production process of a product which is subject to national or global competitive pressures* (Roma Town Council 2002, p 6).

This approach is consistent with the views of the Tribunal in the Eastern Gas Pipeline decision and the approach taken by the Council in its draft recommendation on the application for revocation of coverage of the Moomba to Sydney pipeline.

Conclusion on markets

The Council is satisfied that the gas sales market in the Town of Roma is separate from the market for gas distribution services in the Town of Roma.

Promotion of competition

The Council now must consider whether the opportunities and environment for competition in the downstream market 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. It stated that:

> *The Tribunal* [in the Sydney Airport case] *concluded that the TPA analogue of criterion (a) is concerned with the removal of barriers to entry which inhibit the opportunity for competition in the relevant downstream market. It is in this sense that the notion of promotion of competition involves a consideration that if the conditions or environment for improving competition are enhanced, then there is a likelihood of increased competition that is not trivial. We agree.* (Eastern Gas Pipeline case, paragraph 75)

The Tribunal went on to state 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 … 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).*

Council's consideration

The question for criterion (a) in this matter is whether coverage of the Roma distribution system would reduce impediments to entry in the Roma gas sales market. According to Ordover and Lehr:

> *A reduction in entry barriers in either an upstream or downstream market need not automatically induce new entry. Because of other market frictions, entry may be slow in coming. Hence, criterion (a) cannot be taken to mean that coverage would rapidly induce entry relative to the no-coverage benchmark. Rather, we take the criterion to mean that coverage is justified if imposition substantially increases the overall competitive conditions in relevant market(s), including the likelihood of entry… In any case, since the pipeline "connects" two separate markets – the upstream production market and the downstream retail market – it is necessary to evaluate the ability of the incumbent pipeline to exercise significant market power at least in these two distinct markets. For example, it is conceivable that the incumbent may not be able to exercise market power in one of the markets but be able to exercise market power in the second of the two markets. As we shall see, such a possibility cannot be excluded on merely theoretical grounds.* (Ordover & Lehr 2001, pp. 10-11)

Ordover and Lehr identify three key elements in assessing the competitive conditions in the upstream and downstream gas markets for the purposes of criterion (a):

- the ability of the relevant pipeline owner to charge monopoly prices for transport services;
- the ability of the relevant pipeline owner to engage in explicit or implicit price collusion; and
- other incentives and opportunities for the relevant pipeline owner to distort competition in adjacent markets.

The Council has applied this analytical framework in considering whether the Roma distribution system satisfies criterion (a). The Council does not consider that the second element is relevant to its consideration of the present case, as there are no other relevant service providers such that it would be able to engage in price collusion.

Ability to charge monopoly prices

A firm who has the ability and incentive to exploit its market power to effect conditions in the downstream market can set prices for its services that substantially exceed its forward-looking, long-run economic costs.

However, the AGA submits that the Roma distribution system does not have sufficient ability or incentive to use their market power to charge monopoly prices. Their submission refers to the decision of the Tribunal in the *Eastern Gas Pipelines decision* which recognised limitations on the ability of transmission pipelines to exercise market power to hinder competition in regional markets (AGA 2002, p 2). Specifically:

> *[As] gas has not previously been available, the ability to monopoly price would be restricted because potential users have bargaining power, the costs of conversion to enable the use of gas are significant, and EGP has committed assets which it has incentives to use. In other words, the prices of existing forms of energy will be a countervailing force on the price of gas and pipeline services.* (Eastern Gas Pipelines decision, para 129

The Tribunal in the *Eastern Gas Pipelines decision* also recognised commercial imperatives to maximise throughput and also noted evidence that the extremely small nature of regional energy markets could mitigate against the likelihood of any anti-competitive conduct.

Distortion of competition in adjacent markets

A pipeline with monopoly power over transport may seek to leverage its market power into downstream markets. This is possible when the pipelines have vertical linkages with the downstream market. If it has (or plans to have) vertical interests, it may seek to extend, protect, or exploit whatever market power it may have in the transport market into the downstream market. Roma Town Council has such vertical linkages, being both the owner and operator if the distribution system, as well as being the sole gas retailer in the downstream market.

However, the Council accepts the views of the applicant and the submission from AGA, that due to the small loads used by consumers in Roma, and the high transaction costs involved, it is uneconomical for individual gas users to negotiate contracts directly with producers to buy gas and then seek access to transmission pipelines and the Roma gas distribution system in order to have the gas delivered to those users. Therefore, continued coverage would not promote competition in the market for gas sales to consumers in the Town of Roma. This is supported by statements that no third parties have ever sought access, or desired to seek access, to the Roma distribution system (Roma Town Council 2002, p. 6; AGA 2002, p. 3).

Conclusion on criterion (a)

Criterion (a) will be satisfied if coverage of the Roma distribution system would reduce impediments to the Roma gas sales market. Whether coverage would be likely to reduce impediments to entry in this market should be assessed by examining if the Roma distribution system possesses:

- the ability to charge monopoly prices for transport services;
- the ability to engage in explicit or implicit price collusion; and
- other incentives and opportunities to distort competition in adjacent markets.

The Council agrees with the application and the submission by AGA, relying on the statement of the Tribunal in the *Eastern Gas Pipelines decision* concerning regional markets, that the Roma Town Council does not have the ability or incentive to exercise market power to hinder competition because of the very small size of the market. Nor does it have the ability or incentive to use its vertical linkages to distort competition in the downstream market, as it is in its interest to promote increased throughput into the gas sales market.

The Council is not affirmatively satisfied that continued coverage of the Roma distribution system is warranted. The Council considers that continued coverage of the Roma distribution system is unlikely to promote competition in the downstream market for natural gas sales in the Town of Roma.

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

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 Roma distribution system; and
- if risks are identified, to consider whether they can be addressed in a satisfactory manner while still providing access.

The applicant stated that it is “not aware of any reasons that access to the [Roma distribution system] would pose a risk to human health and safety” (Roma Town Council 2002, p. 8).

None of the submissions received by the Council in relation to the application addressed this issue.

Conclusion on criterion (c)

There is no evidence before the Council to suggest that regulated access cannot be provided to the Roma distribution system 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.

The applicant considers that the benefits of access to the Roma distribution system via an access arrangement under the National Code would be outweighed by the regulatory and compliance costs associated with access under the National Code.

The applicant notes that any regulatory and compliance costs would need to be recouped from existing gas users in the form of higher distribution tariffs. It considers that in view of the small number of users and the high costs of regulation, that the costs of regulation under the National Code are likely to be greater than any benefits delivered by greater competition.

One significant regulatory cost identified is the cost of preparing an access arrangement setting out the tariff and the terms and conditions on which access to the services of the Roma distribution system would be provided. This access arrangement needs to be approved by the regulator, the Queensland Competition Authority. The applicant estimates it may cost them $150,000 to prepare an access arrangement under the National Code, averaged over current loads this cost would add an average of $10 per GJ to prices. The applicant doubts that access would provide benefits sufficient to offset this regulatory cost. This is supported by the AGA in their submission (AGA 2002, p 4)

The applicant also considers that the costs and benefits of open access would not be shared equally across the system. While all customers would bear the costs of open access, only those very few customers who are able to arrange alternate gas supply would reap any benefits. The applicant is of the view that this unequal sharing of costs and benefits is also not in the public interest.

The applicant is also concerned that any reduction in size of the current gas supply contract would inhibit its ability to negotiate a new gas supply contract on favourable terms. Any gas supply increases as a result of the smaller contract would be borne by those customers not seeking access. The applicant is of the view that this unequal sharing of costs and benefits is also not in the public interest.

The applicant is also concerned about the longer term effects on the viability of the system. They believe that since in the domestic and commercial markets, gas is competitively priced relative to electricity any increases in gas costs (either through increases in distribution costs, supply costs, or both) would induce customers to switch to electricity. The resultant decreases in volumes would force unit prices to increase, reducing the competitiveness of gas, and promoting a downward spiral.

The applicant notes that the town's gas supply contract does not contain provisions for reducing load on implementation of an access arrangement. Should access be implemented, the applicant believes that costs associated with renegotiating the gas supply contract could be significant. Again, this would be an inequitable sharing of costs and benefits, as the applicant states they would have to recover these costs either through network charges (causing price increases to customers not seeking access) or from those customers that choose to continue to source supply from the Town of Roma (Roma Town Council 2002, pp. 8-9).

Conclusion on criterion (d)

The Council accepts that there are regulatory and compliance costs associated with coverage under the National Code. In this regard the Council has said previously that the quantum of regulatory costs faced by a company is also affected by the degree to which relevant information has been previously generated for internal purposes, and how much must be created specifically for regulatory purposes.

The Council accepts, however, that there would be significant costs imposed if the pipelines are regulated. The Council accepts that the costs of coverage would be borne ultimately by the gas consumer. However, these matters must be balanced by an analysis of the practical effect of regulation in respect of the Roma distribution system.

This criterion calls for the Council to engage in a balancing exercise to determine whether the benefits of open access outweigh the costs. On the evidence currently before the Council, no third party intends to seek access to the Roma distribution system, and there would appear to be no benefit from regulated access, which the Council could weigh against the costs associated with regulated access. The most significant benefit of continued coverage is the possibility that access to the Roma distribution system will facilitate competition. In its consideration of criterion (a), the Council has concluded that continued coverage of the Roma distribution system would not promote competition in the downstream markets.

Accordingly the Council is satisfied that continued coverage of the Roam distribution system is contrary to the public interest. The Council is therefore satisfied that criterion (d) is not met.

Appendix 1: Submissions to the Council

The following submissions were made to the Council:

No.	Submission	Date
1.	Australian Gas Association	11 March 2002
2.	Commerce Queensland South West Region	11 March 2002
3.	Commerce Queensland South West Region – submission in response to draft recommendation	8 April 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

Australian Gas Association (AGA) 2001, *Gas Statistics Australia 2001*, September.

Australian Gas Association (AGA) 2002, *Submission in relation to the application to revoke coverage of the Roma distribution system*, March

Department of Local Government and Planning 2001, Planning Information and Forecasting Unit, *Population Trends and Prospects for Queensland 2001 edition*, Queensland Government

National Competition Council 2000a, *Final Recommendation on application from Dalby Town Council to revoke coverage of the Dalby Distribution System from the provisions of the Gas Pipelines Access (Queensland) Act 1998*, November

……………. 2000b, *Final Recommendation on application from Envestra Limited to revoke coverage of Alice Springs gas distribution network under the Gas Pipelines Access (Northern Territory) Act 1998*, July

……………. 2002, *Final Recommendation on application from CMS Gas Transmission Australia to revoke coverage of the Parmelia pipeline under the Gas Pipelines Access (WA) Act 1998*, February

Office of Economic and Statistical Research 2000, *Community profiles: Roma and the South West region*, Queensland Government

Ordover J & Lehr W 2001, *Should coverage of the Moomba-Sydney pipeline be revoked?*

Queensland Competition Authority 2000, *Access Arrangements for Queensland Gas Distribution Networks – Issues Paper*, November

Queensland Competition Authority 2001, *Proposed Access Arrangements for Gas Distribution Networks: Allgas Energy Limited and Envestra Limited – Final Decision*, October

Roma Town Council 2002, *Application for revocation of coverage of Roma distribution system*, January

Santos Ltd (Santos) 2001, *Annual Report 2001*.

Cases

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 (the Eastern Gas Pipeline decision)
Review of Freight Handling Services at Sydney Airport (2000) Re ATPR 41,754
Re: AGL Cooper Basin Natural Gas Supply Arrangements (1997) ATPR 41-593 (AGL Decision)
Review of Freight Handling Services at Sydney Airport, Re (2000) 22 ATPR 41,754 (Sydney Airport Case)