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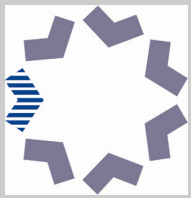
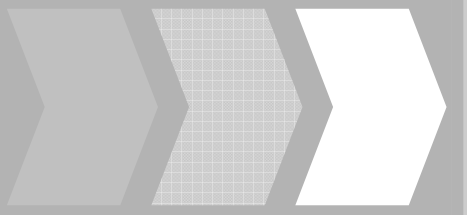


Application for revocation of coverage of the Moomba to Adelaide Pipeline System under the National Gas Access Regime



Final recommendation

14 December 2005

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The National Competition Council
The National Competition Council was established on 6 November 1995 by the *Competition Policy Reform Act 1995* following agreement by the Australian Government and state and territory governments.

It is a federal statutory authority which functions as an independent advisory body for all governments on the implementation of the National Competition Policy reforms. The Council's aim is to 'improve the well being of all Australians through growth, innovation and rising productivity, and by promoting competition that is in the public interest'.

Information on the National Competition Council, its publications and its current work program can be found on the internet at www.ncc.gov.au or by contacting NCC Communications on (03) 9285 7474.

Contents

1 Recommendation

1.1 On 15 March 2005, the National Competition Council (Council) received an application from Epic Energy South Australia Pty Ltd (Epic Energy) to revoke coverage of the Moomba to Adelaide Pipeline System (MAPS) pursuant to s1.24–25 of the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code).[1]

1.2 The MAPS is owned by Epic Energy, and is made up of the Moomba to Adelaide mainline, several smaller pipelines ('laterals') that connect to the mainline and two major lateral pipelines to Port Pirie/Whyalla and Angaston. Most of the MAPS is currently covered under the Gas Code.

1.3 The Council considers that it is uneconomical to develop another facility to provide the services of the MAPS (criterion (b) is met) and that the Gas Code can be applied to the pipeline without risk to human health and safety (criterion (c) is met). The Council is not satisfied, however, that coverage will promote competition in the three dependent markets it has identified (namely; Cooper Basin gas production and sales, Adelaide gas sales, and gas sales north of Adelaide along the MAPS mainline and major laterals) (criterion (a) is not met) and that coverage is not contrary to the public interest (criterion (d) is not met).

1.4 The Council's recommendation is that the coverage of the MAPS be revoked.

1.5 In making this recommendation the Council has taken account of information provided by interested parties and other organisations, publicly available information, submissions responding to the Council's issues paper (released on 30 March 2005) and submissions responding to the Council's draft recommendation (released on 16 November 2005) that coverage of the MAPS be revoked. The Council received 17 submissions in response to its issues paper and three submissions in response to its draft recommendation. The Council has taken account of these 20 submissions in reaching its final recommendation. The submissions the Council received are listed on page 81.

[1] The application and related submissions are available at www.ncc.gov.au.

1.6 Two submissions in response to the draft recommendation support revocation of coverage of the MAPS. Both parties consider Epic Energy's proposal to implement a code of conduct and provide access on a non-discriminatory basis to be important, and seek a means to enforce the code under legislation.

1.7 As Epic Energy's code of conduct is currently only a proposal, it could not be considered at this time to be an effective constraint on the exercise of market power. Revocation of coverage of the MAPS would not prevent Epic Energy and other parties developing and implementing a code of conduct, which has provision for supervision and enforcement.

1.8 Whether or not a code of conduct is developed, and the form of any such code, is a matter for industry parties. The existence or otherwise of a code of conduct is not a determinative factor in the Council's recommendation.

1.9 The third submission in response to the draft recommendation opposes revocation of coverage of the MAPS. The party, representing electricity consumer interests, considers that all but one of the large shippers using the MAPS do not have an incentive to constrain increases in the tariff for the MAPS because they either have an affiliation with the competing SEA Gas pipeline or can redirect their gas to another pipeline. The party considers that other factors, such as the prospect of re-regulation, provide little disincentive to Epic Energy from using its market power to adversely affect competition.

2 Revocation and the coverage test

2.1 The Gas Code enables parties to apply to the Council for coverage or revocation of coverage of a whole or any part of a pipeline. It also gives the Council discretion to recommend that coverage or revocation apply to a greater or lesser extent than requested by the applicant.

2.2 In recommending on an application for revocation of coverage of a pipeline, the Council must consider whether the pipeline meets the coverage criteria (a)–(d) in s1.9 of the Gas Code (see box 1). The Council commences with criterion (b) because the demonstration that a pipeline exhibits natural monopoly characteristics (and therefore satisfies criterion (b)) is a necessary, but not sufficient, condition for the pipeline to be a bottleneck facility (and so satisfy criterion (a)).

2.3 If revocation is granted, the pipeline owner is not required to submit an access arrangement to the Australian Competition and Consumer Commission (ACCC) and third parties no longer have the enforceable right to negotiate access to the services provided by the pipeline. In this situation, the parties negotiate access to the pipeline, including the terms and conditions of access, between themselves.

Box 1: The coverage criteria and revocation under the Gas Code[a]

The Council must recommend that coverage of the covered pipeline be revoked (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 following coverage criteria set out in s1.9 of the 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

(d) that access (or increased access) to the Services provided by means of the Pipeline would not be contrary to the public interest.

a A copy of the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code) can be found on the Code Registrar website at http://www.coderegistrar.sa.gov.au.

2.4 Epic Energy submits that, in addition to assessing each criterion for the covered pipeline (or part thereof), the Council must assess each

criterion in relation to the services that are provided by the pipeline (or where relevant, specific individual services). Epic Energy also considers that a pipeline may be covered in whole or in part, or in respect only of certain services provided by means of that pipeline (or part thereof).

2.5 The Council's role, under s1 of the Gas Code, is to recommend to the relevant Minister that a pipeline be covered or that coverage of a covered pipeline be revoked. Under the Gas Code it is pipelines that are considered for coverage. This contrasts with part IIIA where specific services provided by a facility may be declared. The Council considers that pursuant to s1.29 of the Gas Code it may recommend to the Minister only that:

(a) coverage of the MAPS be revoked

(b) coverage of the MAPS not be revoked, or

(c) coverage of part or parts of the MAPS be revoked, having regard to the part of the MAPS that is necessary to provide the services that prospective users may seek.

2.6 In applying the Gas Code criteria, the Council uses general principles of statutory interpretation and accords primacy to the language of the coverage criteria. In addition, the Council has regard to the objectives underlying the Gas Code and previous decisions of the Australian Competition Tribunal (tribunal). It also has regard to other relevant publications and material, including previous applications to the Council for coverage or revocation of coverage of a pipeline.

The decision maker

2.7 The Gas Code requires the Council to conduct a public consultation process and issue a draft recommendation followed by further public consultation, prior to making its final recommendation to the relevant decision maker, in this case, the South Australian Minister for Energy (the Hon. Patrick Conlon MP).

Time limits under the Gas Code

2.8 The Gas Code imposes time limits for consultation on and assessment of an application for coverage or revocation. It also permits the Council and the Minister to extend these time limits. In accord with ss7.16–18 of the code, the Council extended the time limit for publishing the draft recommendation on this matter. The Council published notices of extension in the Australian Financial Review.

2.9 The Council has 28 days following the release of its draft recommendation to submit a final recommendation to the relevant Minister. The Minister then has 21 days in which to make a decision on whether or not to revoke coverage of the MAPS.

3 The application

3.1 Epic Energy has applied for coverage of the MAPS (pipeline licence SA:PL1) to be revoked pursuant to ss1.24–25 of Gas Code (which applies as law in South Australia under the *Gas Pipelines Access (South Australia) Act 1997*).

3.2 Epic Energy seeks revocation of coverage of the entire covered pipeline (including extensions to or expansions of the capacity of the covered pipeline as described under ss1.40–41 of the Gas Code). Epic Energy considers that the pipeline no longer satisfies the coverage criteria under the Gas Code because market conditions have changed since the entry of the SEA Gas (South East Australia Gas Pty Ltd) pipeline, and the emergence of an increasingly competitive south eastern Australian gas market.

The applicant

3.3 Epic Energy is one of Australia's largest gas transmission companies. It owns the MAPS as well as the South West Queensland Pipeline and the South East Pipeline System.

3.4 Epic Energy is owned by Hastings Diversified Utilities Fund (HDUF), which invests in utility infrastructure. The fund is managed by Hastings Funds Management Ltd, which the Westpac

Institutional Bank acquired in September 2005. The fund manager now operates as a division of the bank.

3.5 Under a service agreement Epic Energy Corporate Shared Services Pty Ltd operates the MAPS for Epic Energy. In addition, this company provides operations and maintenance services for the Moomba to Port Bonython liquids pipeline and the Riverland Pipeline System.

The pipeline system

3.6 The South Australian Government constructed the MAPS in 1969 as a free flowing pipeline from Moomba to Torrens Island. Until January 2004, when the SEA Gas pipeline commenced operation, the MAPS was the only transmission pipeline transporting gas into Adelaide.

3.7 The MAPS is 1185 kilometres long. It is a system of pipelines that transport gas from Moomba to Adelaide and regional centres between Moomba and Adelaide. The MAPS comprises a mainline between Moomba and Adelaide (including a number of short lateral pipelines and the Wasleys to Torrens Island Loop) and two major lateral pipelines—the Port Pirie/Whyalla lateral and the Angaston lateral. The location of the MAPS is illustrated in figure 1.

3.8 Table 1 lists the pipelines that comprise the covered portion of the MAPS. The table shows the length and diameter of each pipeline in the covered system.

Figure 1: Location of the MAPS and other significant pipelines

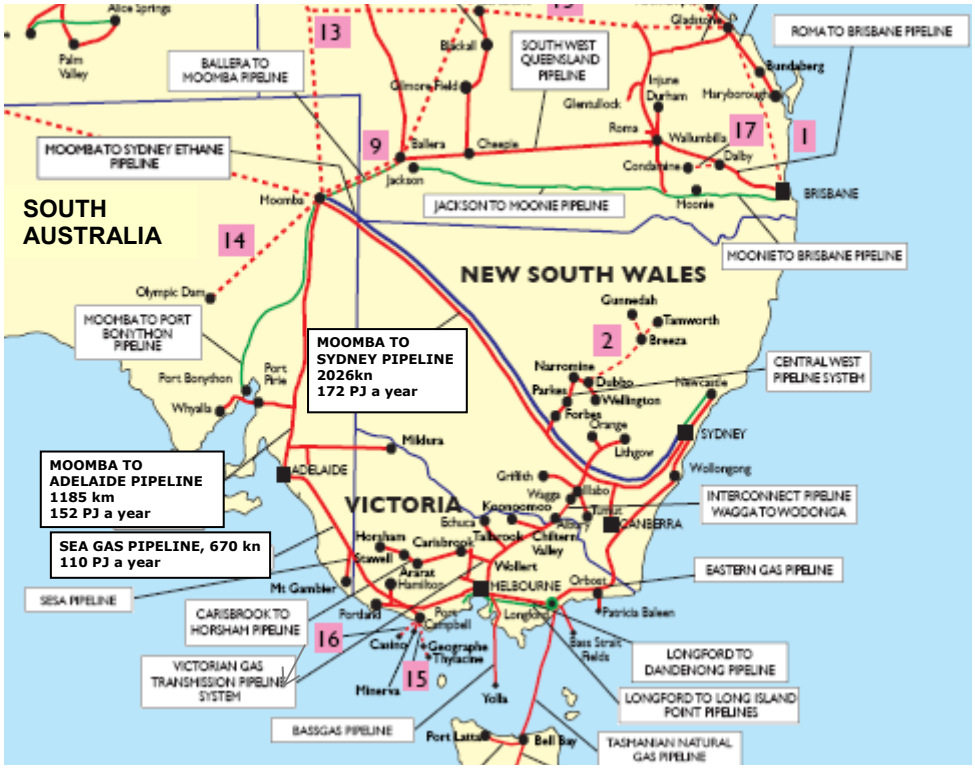

Table 1: The covered pipeline system of the MAPS[a]

Location/Route	*Pipeline length (kilometres)*	*Pipeline diameter (millimetres)*
MAPS mainline		
Moomba to Adelaide	781.0	559
Taperoo lateral	1.2	323
Dry Creek lateral	1.3	323
Peterborough lateral	1.9	89
Nurioopta lateral	1.6	114
Burra lateral	15.0	89
Mintaro lateral	0.3	219
Wasleys to Torrens Island Loop	42.0	508
Port Bonython lateral	5.5	114
Tarac	0.4	89
Port Douglas lateral	11.5	114
Osborne lateral	1.3	273
Major laterals		
Angaston lateral	38.7	219
Port Pirie/Whyalla lateral:		
Port Pirie lateral	77.8	168
Whyalla lateral	87.7	219

[a] Some of the details of the covered pipeline may have changed since the pipeline was covered under the Gas Code.

Source: Schedule A to the Gas Code.

3.9 Under the Gas Code, extensions to, or expansions in the capacity of, a pipeline form part of the covered pipeline only if provided for in the extensions/expansions policy under an access arrangement. Under the access arrangement for the MAPS, Epic Energy can choose whether extensions (but not expansions) to the pipeline system become part of the covered pipeline. According to Epic Energy, the covered pipeline *does not* include:

(a) the new facilities or expansion in capacity of the pipeline undertaken as part of the Pelican Point Power extension/expansion completed over the 1999–2001 period. This includes:

(i) the 1.7 kilometre lateral to the Pelican Point Power Station and the meter station at its downstream point

(ii) the 34 kilometre looping of the mainline between compressor stations 1 and 4

(iii) the upgrade of the Allison compressor units at compressor stations 1, 3, 5 and 6

(iv) the additional compressor unit installed at Wasleys

(b) the 10.2 kilometre Amcor lateral and meter station (located off the Angaston lateral)

(c) the 0.12 kilometre Quarantine Power Station lateral and meter station

(d) the 0.72 kilometre Hallet Power Station lateral and meter station.

3.10 Over time the capacity of the MAPS has been expanded incrementally through the addition of compressor stations and looping. The capacity of the entire MAPS (as currently configured) is 418 terajoules a day (or 152 petajoules a year). Firm capacity at December 2004 was 348 terajoules a day with usable maximum linepack of between 160 and 200 terajoules. The capacity of the covered portion of the system is 393 terajoules a day (or 143 petajoules a year). The covered portion had firm capacity at December 2004 of 323 terajoules a day.

3.11 The MAPS is fully contracted on a firm haulage basis until the end of 2005. The main parties with which Epic Energy has haulage

agreements are Origin Energy, AGL and International Power (Hastings Fund Management Limited 2005). Given that the MAPS is fully contracted, Epic Energy has not offered any contracts for gas transmission services on an interruptible basis. A secondary market exists for this service.

3.12 For the period 2006–2013 Epic Energy has existing contracts to transport 83 terajoules a day (this includes 18 terajoules a day supplied under a 10 year contract over the 2006–16 period). Hastings Funds Management expects that capacity use on the MAPS will be 194 terajoules a day (47.4 petajoules a year) in 2006 (ACIL Tasman 2004). It also expects volumes to grow steadily thereafter (Hastings Funds Management 2004).

Adelaide

3.13 The MAPS delivered approximately 30 petajoules of gas to customers, other than electricity generators, located south of the Angaston lateral in 2003. Approximately 28.5 petajoules was delivered through the three Adelaide distribution connection points (or city gates) at Elizabeth, Gepps Cross and Taperoo for supply to domestic, commercial and industrial users. In 2003 the MAPS delivered approximately 51 petajoules to gas fired electricity generators, most of which are located in the Adelaide region.

The mainline north of Angaston

3.14 On the mainline north of the Angaston lateral and the small laterals gas is transported to a small number of gas users via offtakes at Beverley Uranium Mine, Peterborough township, Burra, Hallet (where AGL has a gas-fired peaking station) and Mintaro (where International Power has gas/diesel-fired peaking station). Gas supplied at these offtakes in 2003 was approximately 0.84 petajoules. According to the Electricity Supply Industry Planning Council (ESIPC) AGL has announced plans to expand its peaking station at Hallet and International Power has indicated that the expansion of Pelican Point could be commissioned by 2008 should market conditions be suitable (ESIPC 2005).

The Angaston lateral

3.15 The Angaston lateral branches off the MAPS mainline near the Wasleys compressor station. It connects to the Riverland Pipeline System at its downstream point, which in turn connects to the Mildura transmission pipeline. The Riverland and Mildura pipelines are owned by Envestra Limited and operated by Epic Energy Corporate Shared Services and Origin Energy respectively.

3.16 The Angaston lateral has a maximum capacity as currently configured of about 18 terajoules a day. Current average throughput is about 10 terajoules a day. Over 90 per cent of the gas transported on the Angaston lateral is delivered to the Amcor meter station (on the uncovered Amcor lateral, which is approximately 20 kilometres from the MAPS mainline) or to other gas users clustered at the end of the Angaston lateral (that is, to the connection points in the vicinity of the Angaston meter station and into the Riverland Pipeline System). Only a small quantity of gas is transferred from the MAPS into the Riverland Pipeline System: for example, in 2004 less than one petajoule of gas was transferred.

The Port Pirie/Whyalla lateral

3.17 The Port Pirie/Whyalla lateral branches off the MAPS mainline near the Whyte Yarcowie compressor station. The lateral consists of a 77.8 kilometre pipeline from the mainline to Port Pirie and another 87.7 kilometre pipeline from Port Pirie to Whyalla (see table 1). The pipeline from the mainline to Port Pirie was opened in 1976. The Port Pirie to Whyalla portion, which crosses the Spencer Gulf, was added in 1989.

3.18 The Port Pirie/Whyalla lateral has a maximum firm capacity of 24 terajoules a day and average throughput of somewhat less than 18 terajoules a day. In its application Epic Energy suggests that the pipeline delivers approximately 6.5 to 8 petajoules of gas a year. The lateral is currently fully contracted, with much of this capacity (approximately 15 terajoules a day) sold to one user under a contract that is due to expire in 2005. Remaining capacity is used to serve small customers, principally at Port Pirie. From 1 January 2006, Epic Energy has contracted capacity to transport 18 terajoules a day to one industrial user located in Whyalla. Epic Energy states that demand on the lateral is primarily industrial.

3.19 Under the MAPS access arrangement, transport along the lateral to Whyalla attracts a surcharge. This was set at $0.18 a gigajoule in 2001 and has been adjusted annually by 95 per cent of CPI (see clause 5.2(A)(viii)(A) of the MAPS access arrangement (ACCC 2003)). According to Epic Energy, it is now $0.20 a gigajoule.

4 The natural gas industry

4.1 The natural gas supply chain comprises:

(a) exploration for and production of natural gas

(b) transport of natural gas via high pressure transmission pipelines (directly to large industrial users) and via medium and low-pressure distribution pipelines to smaller industrial, commercial and residential users

(c) gas sales by gas producers, wholesalers, distributors, retailers and other parties to gas users.

Exploration and production

4.2 The South Australian Government estimates total Australian conventional gas reserves to be 155 000 petajoules. These are mostly in basins off the Northern Territory and Western Australia, but also include approximately 12 000 petajoules of gas to be sourced from Papua New Guinea (PIRSA 2005). Significant additional volumes of gas could also be recovered from coal seam methane deposits (some commercial production exists in Queensland and New South Wales).

4.3 To date gas consumers in South Australia have largely sourced gas from the Cooper/Eromanga basins and the Katnook gas field in the South Australian region of the onshore Otway Basin. The entry of the SEA Gas pipeline has provided South Australian consumers with access to supplies from the Victorian region of the Otway Basin and potentially from other Victorian gas basins.

The Cooper and Eromanga basins

4.4 The Cooper and Eromanga basins lie across the north-east corner of South Australia and the south-west corner of Queensland. Much of the gas at these basins is fed into processing facilities at Moomba and Ballera.

4.5 Gas collected in the Cooper Basin is jointly produced and marketed by the South Australian Cooper Basin producers—Santos (which holds a 66.6 per cent interest), Delhi Petroleum (20.2 per cent) and Origin Energy (13.2 per cent) (Santos 2005b). Gas collected near Ballera in south west Queensland is produced and sold by the South West Queensland producers—Santos (60 per cent), Delhi Petroleum (23.2 per cent) and Origin (16.7 per cent).

4.6 Gas from the Cooper and Eromanga basins is principally sold into New South Wales and the Australian Capital Territory (using the Moomba to Sydney Pipeline (MSP)), Queensland (using the South West Queensland and Carpentaria pipelines) and South Australia (using the MAPS). Some of the gas may also be supplied to Victoria via the MSP and the Interconnect pipeline. In 2000-01, the Cooper and Eromanga basins produced 211.3 petajoules of gas (AGA 2002).

4.7 Estimates of remaining Cooper Basin and Cooper/Eromanga basin reserves vary significantly—available data suggest that the reserves vary in a range of about 1700–3500 petajoules (see, for example: PIRSA 2005; Dickson & Noble 2003; VENCorp 2004; and ACIL Tasman 2004). In its 2005 annual planning report, the ESIPC estimated that Cooper Basin reserves alone were 1660 petajoules, of which 1300 petajoules is currently under contract. The Cooper Basin has been explored by Santos and others in recent years, and the ESIPC considers that additional gas discoveries have the potential to extend the life of the basin (ESIPC 2005).

4.8 Santos reported to the South Australian Government that it produced 150.7 petajoules of sales gas for transport on the MAPS and the MSP in 2004 (Santos 2004). The amount of gas available to South Australia from the Cooper Basin depends on contracted quantities. According to the ESIPC current contracts potentially provide supplies of up to 250 terajoules a day for South Australia.

Moomba

4.9 The Moomba gas processing plant, which is located in the north-east corner of South Australia, is operated by Santos. Santos uses the plant to gather natural gas, oil and gas liquids, to process natural gas and oil, and to store processed sales gas and ethane. The Moomba plant has a production capacity of about 650 terajoules a day, and is connected to both the MSP and the MAPS. Gas liquids (condensate and liquid petroleum gases) are transported by pipeline to the Port Bonython plant for processing.

Ballera

4.10 Most of the gas extracted from the Queensland side of the Cooper Basin (and the Eromanga Basin that lies above it) is processed at Ballera. From Ballera some gas is shipped to the south east Queensland markets via a network of transmission pipelines. Some raw gas is transported from Ballera to Moomba through a pipeline owned by the South West Queensland Cooper Basin producers, where it is processed for supply to South Australia, New South Wales, the Australian Capital Territory and Victoria. The Council understands that approximately 30 petajoules of gas extracted at Ballera enters the MAPS each year.

The Otway Basin

4.11 The Otway Basin covers a large onshore and offshore area of western Victoria and south eastern South Australia. It is estimated to contain at least 1700 petajoules of natural gas (Dickson and Noble 2003). Otway Basin gas fields include the offshore Minerva, Casino, Geographe and Thylacine gas fields and the onshore Katnook field.

Minerva

4.12 BHP Billiton and Santos own the Minerva field, which is estimated to contain at least 317 petajoules of gas (Dickson and Noble 2003). Gas from the field is processed at the Minerva Gas Plant near Port Campbell, which has a capacity of about 150 terajoules a day (Santos 2005). The gas plant is connected to the SEA Gas pipeline providing access to South Australian and Victorian markets.

4.13 The Minerva Gas Plant is connected to the Iona Gas Plant, which provides additional storage and processing capacity of 200 terajoules a day. Gas processed at the Iona Gas Plant can be transported to South Australia and Victoria using the SEA Gas pipeline.

4.14 BHP Billiton sells most of its share of Minerva gas to International Power to supply the Pelican Point Power Station. International Power has contracted supplies for 10 years and has access to 135 terajoules a day (49 petajoules a year) on a take or pay basis (BHP Billiton 2002). Some of the gas also goes to Origin Energy.

Casino

4.15 The Casino field in offshore Victoria is owned by Santos, Australian Worldwide Exploration Limited and Mitsui. Santos (2005a) expects to commence production of natural gas from the Casino field at the Iona Gas Plant in early 2006 at a rate of about 90 terajoules a day. The parties have an agreement to supply up to 420 petajoules of gas to TXU (now Singapore Power), with an option to supply a further 105 petajoules over 12 years to the South Australian or Victorian markets (Santos 2005a).

Thylacine and Geographe

4.16 Woodside, Origin Energy, Benaris International and CalEnergy are jointly developing the Thylacine and Geographe fields. The developers expect gas supplies to start flowing in mid-2006. Woodside expects the fields to produce 885 petajoules of natural gas, which will be processed at a new plant that Woodside intends to build in Iona (DPI 2005a). The plant will have a typical daily sales gas production rate of 165 terajoules and be able to deliver 60 petajoules of gas into south east Australia each year. Singapore Power has purchased Woodside's share of the gas from the fields and intends to take up to 30 petajoules a year for 10 years (Woodside 2004).

Katnook

4.17 Origin Energy Resources Limited operates the Katnook gas field, which supplies gas to Mount Gambier and regional areas in south-eastern South Australia via the South East Pipeline system. Gas supplies from the Katnook field are falling and can no longer support

existing demand. Local gas exploration activity has found no new gas reserves in the area.

Major transmission pipelines

4.18 There are major transmission pipelines, other than the MAPS, that serve upstream and downstream markets in South Australia.

Pipelines serving upstream markets

The Moomba to Sydney Pipeline

4.19 The 2026 kilometre Moomba to Sydney Pipeline (MSP) is owned by the Australian Pipeline Trust (APT). The MSP consists of a 1299 kilometre mainline from Moomba to Wilton (to the south west of Sydney) and a number of laterals serving rural New South Wales and the Australian Capital Territory. A major lateral runs for 131 kilometres from Young to Wagga Wagga and connects to the Interconnect between Wagga Wagga and Barnawatha via Culcairn.

4.20 Coverage of the Moomba to Marsden segment of the main pipeline was revoked in 2004. This means that the services of this segment of the pipeline are no longer regulated by the Gas Code.

4.21 The capacity of the MSP, as currently configured, is 470 terajoules a day (roughly 172 petajoules a year) (ESIPC 2005). Its capacity can be expanded to at least 800 terajoules a day (292 petajoules a year) by adding compression (NCC 2002a; Epic Energy 2005).

4.22 The Electricity Consumers Coalition of South Australia (ECCSA) and GasNet both state that the MSP has significant spare capacity (ECCSA sub 2; GasNet sub 8). The Australian Department of Industry, Tourism and Resources estimates that the MSP's average capacity utilisation is 57 per cent, equivalent to annual throughput of approximately 98 petajoules (DITR 2005). This is broadly consistent with throughput figures (approximately 80–95 petajoules a year over the last four financial years, excluding loads entering the MSP from Victoria via the Interconnect) reported to the South Australian Minister for Energy.

4.23 AGL Wholesale has reserved 34 per cent of the pipeline's capacity (162 terajoules a day or 59 petajoules a year) for the period 2007–2017 (NCC 2002a). The APT notes that electricity generators make up a small but increasing component of its market (APT 2005).

The Ballera to Moomba pipeline

4.24 The 180 kilometre Ballera to Moomba Pipeline conveys semi-processed ('raw') gas from the South West Queensland Cooper Basin production facility at Ballera in Queensland to the South Australian Cooper Basin production facilities at Moomba. The pipeline is owned by South West Queensland Cooper Basin Producers. Pipelines that carry raw gas cannot be covered under the Gas Code.

4.25 The pipeline, which has a current capacity of roughly 30 petajoules a year, serves two purposes. First, it provides a means to dispose of liquid by-products from gas production at Ballera. The gas liquids (condensate and liquid petroleum gases) are shipped by pipeline to Port Bonython (South Australia) for processing and sale. Second, the pipeline is used to ship raw gas to Moomba for processing into sales gas, which is then sold into markets in South Australia, New South Wales, the Australian Capital Territory and Victoria. As noted above, around 25–30 per cent of South Australia's gas demand is currently met by gas sourced from Queensland via the Ballera to Moomba pipeline.

Pipelines serving downstream markets

4.26 The SEA Gas pipeline and the South East Pipeline system transport gas to downstream South Australian gas markets. Epic Energy considers that other pipelines, including the MSP, the Victorian Principal Transmission System (VPTS) (which includes the South West Pipeline (SWP) and the Longford to Melbourne pipeline), the Interconnect and the Eastern Gas Pipeline, form part of a network capable of serving the South Australian markets.

The SEA Gas pipeline

4.27 The SEA Gas pipeline system connects the Minerva gas processing plant and Singapore Power's Western Underground Storage (WUGS) facility at Iona and consumers in Adelaide. It comprises three main

interconnected legs—the Port Campbell to Adelaide pipeline, the Port Campbell to Iona pipeline and the Port Campbell to Adelaide lateral.

- The Port Campbell to Adelaide pipeline is a 680 kilometre transmission pipeline running from the Minerva gas processing plant in Victoria to Pelican Point in South Australia. It consists of a single 18 inch (46 millimetre) pipeline for half its length and twin 14 inch (35.5 millimetre) pipes between its two existing compressor stations (at Coomandook and Miakite).[2]
- The bidirectional Port Campbell to Adelaide lateral, which branches off the mainline north of the Minerva gas processing plant, connects the mainline to Singapore Power's WUGS facility.
- The 11 kilometre Port Campbell to Iona pipeline connects the Minerva gas processing plant to the South West Pipeline (and thus gas can flow to or from the VPTS).

4.28 Gas flow from the WUGS facility commenced on 1 January 2004 and from the Minerva field in January 2005. Gas from the Thylacine field is expected to begin to flow from mid-2006, and will be transported via the SEA Gas pipeline to markets in south eastern Australia.

Ownership and operation

4.29 The SEA Gas pipeline is owned by International Power, Origin Energy and Singapore Power. It is operated by SEA Gas (South East Australia Gas Pty Ltd).

4.30 International Power is a major electricity generator in South Australia. Its assets include the Pelican Point, Mintaro and Dry Creek power stations. It recently entered into a strategic partnership with EnergyAustralia to retail gas to residential, commercial and industrial consumers in South Australia and Victoria.

4.31 Origin Energy has interests in a number of gas pipelines and is Australia's second largest energy retailer. It retails both gas and electricity in South Australia. Origin Energy was the incumbent gas retailer in South Australia prior to the introduction of retail contestability. It is still the largest gas retailer in South Australia, supplying large industrial and small domestic and commercial consumers. It has gas production interests (including interests in the

[2] A site for a future, third compressor station has been identified at Yallamurray.

Cooper, Otway and Bass basins and the coal seam methane reserves in the Surat–Bowen basins in central Queensland. Origin Energy also owns and operates gas fired generators including the Quarantine and Ladbroke Grove power stations in South Australia.

4.32 Singapore Power is an electricity generator and gas and electricity retailer. Its retail business (which was formerly known as TXU) was recently sold to China Light and Power, which trades as TRU Energy. Singapore Power's assets include the gas-fired Torrens Island Power Station, which is South Australia's largest generator.

Capacity of the SEA Gas pipeline

4.33 The SEA Gas pipeline has a typical capacity of 300 terajoules a day (110 petajoules a year). Epic Energy estimates that the SEA Gas pipeline, if fully compressed, would have a viable maximum capacity of 411 terajoules a day (approximately 150 petajoules a year) or at a 75 per cent load factor the throughput would be 308 terajoules a day (112 petajoules a year). The pipeline transported 32 petajoules of gas in 2004-05 (Origin Energy 2005a).

4.34 GasNet states that SEA Gas is flowing at well below capacity (GasNet sub 8). Flows are expected to increase when the Geographe/Thylacine gas fields come on line.

4.35 The SEA Gas pipeline is operated as an open access pipeline. Firm capacity of the pipeline is, however, fully contracted until 2019 under foundation shipper agreements with entities controlled by International Power, Origin Energy and Singapore Power. ECCSA (sub 2) reports that any party seeking additional firm capacity on the SEA Gas pipeline would have to pay for an additional compressor station.

4.36 ECCSA (sub 2) states that at its current capacity the pipeline can satisfy about 80–90 per cent of current South Australian demand. GasNet and Origin Energy consider that capacity could be augmented economically. GasNet states that this could involve adding a third compressor and upgrading existing compressors.

The South East pipeline system

4.37 Epic Energy owns the South East pipeline system, which runs from the Katnook gas field to Mount Gambier and Snuggery in South

Australia. The pipeline is 71 kilometres long. Its current uncompressed capacity is 25 terajoules a day (Hastings Funds Management 2004). Prompted by declining local gas production in the Katnook field, Origin Energy recently constructed a 45 kilometre long pipeline through Victoria and South Australia connecting the South East pipeline system to the SEA Gas pipeline and Victorian Otway Basin gas (Minister for Energy and Resources – Victoria 2005). Epic Energy estimates that average throughput in the South East pipeline system pipeline is 4 petajoules a year.

The Victorian Principal Transmission System

4.38 The VPTS is owned and maintained by GasNet. It is operated by VENCorp, which also administers the gas spot market and the rules governing the gas market in Victoria.

4.39 The VPTS is 1935 kilometres long and includes the Longford to Melbourne pipeline, the South West Pipeline (SWP), and a pipeline from Wollert (north of Melbourne) to Wodonga close to the Victoria/New South Wales border. It transports Gippsland and Bass basin gas, Otway Basin gas that enters the system at Iona and Cooper Basin gas that enters the system via the MSP and the Interconnect. The VPTS is a covered pipeline under the Gas Code. Its typical throughput is in excess of approximately 200 petajoules a year (GasNet 2005b).

4.40 The VPTS operates under a market carriage system. Gas is injected at a number of injection points in the network (including Longford, the Interconnect at Culcairn and Iona) and transmission tariffs for injection and delivery are levied separately. In determining tariffs, it is assumed that gas injected is transported to a central hub and from there to a transfer point (for transfer into the distribution network or another transmission pipeline) with each tariff intended to reflect the costs of gas transport to and from the hub. However, where the cost of transporting gas from the injection to withdrawal points is less than the cost of transporting gas from the hub, due to shorter distances, reduced tariffs apply. Where gas is to be delivered from an injection zone to withdrawal points along a different injection pipeline, this may not be reflected in the withdrawal tariff and an additional cross system tariff is payable (GasNet 2005c).

4.41 There is no requirement for shippers to contract for physical transmission capacity over each of the system pipelines between the

gas injection and gas delivery points (GasNet 2005c). Parties wishing to ship gas on the VPTS must however register with VENCorp as a participant in the Victorian gas market, and enter into a gas transportation deed with VENCorp (GasNet 2005a).

The South West Pipeline

4.42 The SWP runs from Iona in Victoria to Melbourne. It connects the Otway Basin to the VPTS and is primarily used during the winter peak period. The SWP is also connected to the WUGS at Iona and to the GasNet Western Transmission system that runs from Iona to Portland in Victoria. The SEA Gas Port Campbell to Iona pipeline connects the SWP to the Minerva gas processing plant.

4.43 The SWP has a transmission capacity of 220 terajoules (VENCorp 2004). The VENCorp Public Register of Spare Capacity, which is maintained pursuant to s5.9 of the Gas Code (and was last updated on 7 May 2003), shows that the pipeline has an 'approved authorised capacity' of 200 terajoules a day and spare authorised capacity of 100 terajoules a day from Iona to Melbourne. The register does not display capacity in respect of Melbourne to Iona flows, but states that deliveries to Iona cannot be achieved on a firm basis year round. The SWP is uncompressed and can be augmented if required by compression and looping.

The Longford to Melbourne Pipeline

4.44 The Longford to Melbourne Pipeline is a fully compressed 145 kilometre pipeline. It transports gas from the Gippsland Basin to Melbourne. The pipeline has a capacity of 990 terajoules a day (362 petajoules a year) (VENCorp 2004). It is usually operated at full capacity (DITR 2005), but is currently flowing at about 90 per cent of capacity (GasNet sub 8). GasNet states that it can carry an additional 32 petajoules a year and can be looped at low cost.

The Interconnect

4.45 The Interconnect is a 151 kilometre bi-directional pipeline connecting APT's MSP to GasNet's VPTS. The northern portion, owned by APT, runs from Wagga Wagga to Culcairn in New South Wales. The southern portion, owned by GasNet, branches off the

VPTS Wollert-Wodonga pipeline at Barnawatha and runs to Culcairn.

4.46 Epic Energy estimates the Interconnect's fully compressed capacity to be 52 terajoules a day (18 petajoules a year) or at 75 per cent load factor to be 39 terajoules a day (14 petajoules a year). VENCorp's register of spare capacity shows a northbound approved authorised capacity of 17 terajoules a day (with no spare capacity) and a southbound authorised capacity of 50 terajoules a day (19 petajoules a year), with 36.3 terajoules a day spare.

The Eastern Gas Pipeline

4.47 Alinta's Eastern Gas Pipeline (EGP) is 795 kilometres long and runs from Longford to Sydney. The EGP is currently uncompressed. As presently configured the EGP has the capacity to transport 65 petajoules of gas a year. It has approximately 12 terajoules a day (4 petajoules a year) of capacity available for firm forward haulage and approximately 100 terajoules a day (37 petajoules a year) available for 'as available' haulage (Alinta 2005b). Adding compression could expand the capacity of the pipeline to 105 petajoules a year. Alinta expects that the additional compression will be required from the beginning of 2009 (Alinta 2005a). Following a decision of the Australian Competition Tribunal (tribunal) in May 2001 the EGP is not covered under the Gas Code.

Distribution pipelines

4.48 The South Australian natural gas distribution network, which consists of approximately 7000 kilometres of pipeline, is owned by Envestra Ltd (OTR 2004). Origin Energy Asset Management Ltd (OEAM) operates and maintains the gas distribution networks. Envestra's distribution network is covered under the Gas Code. The Essential Services Commission of South Australia (ESCOSA) administers the access regime applying to the network.

4.49 Envestra enters into haulage agreements with gas retailers for the transport of gas to the retailer's customers. Envestra may also enter into separate haulage agreements with 'large volume customers' (Envestra 2005). Under Envestra's current access arrangement, the tariff for haulage in excess of 50 gigajoules differs across the region

serviced. Envestra's Adelaide region is split into four zones—the North West Zone, Northern Zone, Central Zone and the Southern Zone. The MAPS Angaston lateral passes through the Barossa Valley, which forms part of the Adelaide region. Outside Adelaide, Envestra's network is divided into five regions: Port Pirie, Riverland, South East (surrounding Mount Gambier), Peterborough and Whyalla. Envestra distributes gas to around 3000 customers in Whyalla, 5000 customers in Port Pirie and 40 customers in Peterborough off the MAPS mainline (OTR 2004). The network also serves 110 customers in Berri and Murray Bridge (via the Angaston lateral and Riverland Pipeline System).

4.50 The MAPS and the SEA Gas pipelines both connect to Envestra's Adelaide distribution network.

4.51 In 2004, Envestra delivered 38 petajoules of gas to 357 500 customers in South Australia (Envestra 2004).

Gas retailing in South Australia

4.52 Once licensed, a gas retailer may offer market contracts to any customer in any region of South Australia. Gas retailing in South Australia is predominately undertaken by Origin Energy. Other licensed gas retailers include: AGL South Australia; EnergyAustralia; Energy Australia Pty Ltd and IPower Pty Ltd; South Australia Electricity Pty Ltd; and TRUenergy. Only four of the licence holders are actively retailing gas in South Australia. The four also retail gas in Victoria. ESCOSA is considering two further licence applications.

4.53 Gas retailers operate in a contract carriage market, which requires them to have contractual arrangements in place: with producers for the purchase of gas; with the pipeline operators (SEA Gas or Epic Energy) for the transmission of gas; and with Envestra Ltd for the distribution of gas. At the retail level, the Minister for Energy sets standing contract prices for small gas customers, while gas retailers set market contract prices.

4.54 The Retail Energy Market Company (REMCO) is the retail market administrator for South Australia. REMCO's guiding principles include minimising, where possible, the costs of participating in retail gas markets; seeking to ensure that gas retail market

arrangements deliver benefits to consumers; and minimising barriers to entry for new retail market participants (REMCO 2005). REMCO is licensed by ESCOSA under the Gas Act to carry on business as a retail market administrator for South Australia, in compliance with the Retail Market Rules, which are intended to facilitate the operation of the gas market. The Retail Market Rules contain provisions relating to interactions between gas retailers, entities operating gas distribution systems and the retail market administrator itself, as well as other prescribed matters.

South Australian gas users

4.55 End users of natural gas include large industrial users (such as OneSteel, Amcor and Adelaide Brighton Cement), electricity generation companies (such as TRUenergy and International Power), other industrial users and smaller domestic and commercial users.

4.56 Major industrial users of gas obtain gas directly from the high pressure transmission pipelines. In South Australia, these major users tend to contract with a retailer—in the past this has principally been Origin Energy (SA Government 2003)—for the supply and delivery of gas, rather than to contract separately with Epic Energy for gas haulage and with a producer or gas wholesaler for supply. While a lack of uncontracted capacity may have been a factor in such decisions, the Council understands that it may be more economical (even for most large industrial users) to purchase through a retailer, because economies of bulk purchasing allow retailers to provide a bundled delivered gas product at lower cost, while end users are able to avoid transaction costs associated with separately securing supply and haulage. OneSteel is the only major industrial user in South Australia that, to the Council's knowledge, purchases haulage directly from Epic Energy.

4.57 Electricity producers who operate gas fired generators represent the largest segment of end users of gas, accounting for around 50–60 per cent of South Australian demand. The Council understands that they either contract directly with producers or gas sellers upstream for the supply of gas and with the pipeline for haulage, or acquire delivered gas from a retailer. Tarong Energy's Terra Gas Trader was the primary retailer to electricity generators and, on its acquisition by AGL in early 2005, supplied around 25 petajoules of South Australia's wholesale gas requirements to electricity generators via the MAPS (AGL 2005a).

4.58 Other industrial users and domestic and small commercial users obtain a bundled product of delivered gas from a retailer, via Envestra's distribution network. Envestra delivered 38 petajoules of gas to South Australian users in the year to 30 June 2004 (Envestra 2004). Of this, 27 petajoules (or 71 per cent) were delivered to 174 industrial and commercial users consuming in excess of 10 terajoules (0.01 petajoules a year). The remaining 11 petajoules (29 per cent) were delivered to 359 000 domestic and small industrial and commercial users.

5 Criterion (b): The uneconomical to develop another pipeline test

5.1 Criterion (b) requires the Council to identify the services provided by means of the MAPS, and to assess whether it would be uneconomic for anyone to develop another pipeline to provide those services. If over the range of reasonable foreseeable demand it would be uneconomic to develop another pipeline, that is the pipeline exhibits natural monopoly characteristics, then criterion (b) is satisfied.

The services provided by means of the pipeline

5.2 Reflecting the approach of the tribunal, the Council adopts a point-to-point approach to defining the services provided by means of the pipeline when considering coverage and revocation applications.

5.3 Epic Energy argues for an alternative broader approach to service definition that it believes better reflects the reality of the 'fully integrated gas transmission network within south-east Australia' (Epic Energy 2005, para 5.5). It considers that the MAPS comprises three separate pipeline systems: (1) the Moomba to Adelaide pipeline; (2) the Port Pirie/Whyalla lateral; and (3) the Angaston lateral. It considers that the relevant services on the MAPS fall into two categories, being:

1. the transport of gas within the integrated south eastern Australian gas market, and

2. the transport of gas to markets along the MAPS (north of the Angaston lateral) and along the Whyalla lateral.

5.4 Epic Energy refers to the concern of the Productivity Commission (2001) that a narrow interpretation of the uneconomic to duplicate test tends to place considerable reliance on criterion (a)—that coverage would promote competition in a dependent market—for ensuring that declaration (or coverage under the Gas Code) is not unnecessarily applied. Epic Energy notes that the Australian Government has decided to strengthen the criterion (a) test to require that coverage would achieve a material increase in competition.

5.5 Epic Energy also refers to the MSP matter, in which the Minister for Industry, Tourism and Resources stated that although he accepted much of the Council's methodology where it relates to the provision of a single point-to-point transmission service, it 'would be unduly restrictive to conclude that a single transmission pipeline must provide the same point-to-point service as the MSP Mainline to be considered relevant to Criterion B' (Macfarlane 2003, para 25).

Submissions from interested parties

5.6 The Australian Pipeline Industry Association (APIA) submits that defining services narrowly under criterion (b) makes this criterion effectively redundant as 'there could be no economic logic supporting the regulation of parallel pipelines' (APIA sub 1, p. 2). APIA argues that the intent of criterion (b) is to establish whether it is feasible for a new or existing pipeline to provide substitutable transport services for producers and purchasers of gas, and submits that the Council could 'reasonably consider a broader definition of service' by considering the original intent of the Gas Code and supporting legislation (APIA sub 1, p. 2).

5.7 Stuart Petroleum argues that it is appropriate to follow the decision of the tribunal and adopt a point-to-point approach to service definition in determining the services provided by the MAPS. Stuart Petroleum supports the Council's definition of service for the purposes of assessing criterion (b).

5.8 WMC Resources also supports a point-to-point approach, suggesting that the relevant services are 'gas transmission services from Moomba to Adelaide (in the case of the mainline) and to the end

points of the lateral lines making up the MAP system, and all points in between' (WMC sub 17, p 7). WMC Resources is critical of the Minister's decision in MSP on the basis that he took into account the role of swaps, backhaul and other synthetic arrangements (which WMC Resources considers is inconsistent with the requirement that the services be provided by a physical pipeline, and do not amount to firm forward haulage). WMC Resources also considers that the Minister's analysis in respect of service definition was influenced by competitive constraint issues that should be assessed under criterion (a).

The Council's views on service definition

5.9 The Council notes that the Productivity Commission did not recommend changes either to criterion 1.9(b) of the Gas Code or its TPA equivalent, and that the Australian Government is yet to formally respond to the Productivity Commission's recommendations in its review of the gas access regime. In any event, the Council is required to assess Epic Energy's application against the Gas Code as it currently stands.

5.10 Epic Energy's proposed approach to defining the services provided by means of the pipeline differs from the 'point-to-point' approach followed by both the Council and the tribunal. For instance, in *Duke*, the tribunal rejected the notion that the relevant services should be identified by reference to the markets they serve and concluded that the 'service' provided by means of the EGP was a haulage service for the transport of gas between one point on the pipeline to another. The tribunal stated:

> *The pipeline operator sells a (haulage) service consisting of the transport of gas from point A to point B. That is what the customer buys. EGP's standard contract describes the service to be provided as a firm forward haulage service involving the transport of natural gas in the pipeline between specified receipt points and delivery points.*
>
> *… 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 to the customers in the destination market, but it is the same service.* (Duke, paras 68–9).

5.11 The Minister in his decision on the MSP accepted that a point to point approach is appropriate for assessing coverage and revocation matters (including for regional laterals and offtakes), but he considered that the assessment should also take account of 'network-related developments' (Macfarlane 2003, para 23).

5.12 The Council sees difficulties in applying the broader service definition proposed by Epic Energy. For instance, the definition would seemingly require the Council to consider the capacity and foreseeable demand of the integrated south eastern Australian gas market as a whole. This would reveal little if anything about whether any particular pipeline that may be within this network (for example, the MAPS) satisfies the natural monopoly test—which is a focus of the coverage and revocation provisions under the Gas Code.

5.13 The Council has previously stated that the way in which a service is defined and delineated must be commercially meaningful. Consistent with the approach of the tribunal, the Council takes the view that the relevant service is the thing that is bought and sold, or for which there are potential transactions. In this case, it is the transport of gas from one point to another that is bought and sold.

5.14 Notwithstanding Epic Energy's submission and those of other interested parties, the Council remains of the view that the meaning of 'Services provided by means of the Pipeline', as used in s1.9 of the Gas Code, refers to those services provided by means of the pipeline in question. The Council does not consider that the term can extend to include a broad accumulation of services that may be provided by a wider network of pipelines owned by different parties. The MAPS alone cannot transport gas to an integrated south eastern Australian gas market even if such a market exists.

5.15 APIA considers that the Council's approach is inconsistent with generally accepted competition law principles for market definition and that the original intent of the Gas Code and supporting legislation supports a broader definition of the relevant services. However, assuming the existence of an integrated market such as that asserted by Epic Energy, the Council's view is that the question of whether the MAPS would be constrained in its pricing and other relevant conduct by substitutable combinations of gas supply and transport to various markets is a separate issue that is appropriate to address under criterion (a).

5.16 Accordingly, the Council considers that the principal services provided by means of the MAPS mainline and the Port Pirie/Whyalla and Angaston laterals are:

(a) the transport of gas from Moomba to Adelaide and all points in between and

(b) the transport of gas from Moomba to the end points of the Port Pirie/Whyalla lateral and the end points of the Angaston lateral and all points in between.

5.17 Other services provided by the MAPS include the right of interconnection and ancillary services as set out in the Gas Code.

Uneconomic to develop another pipeline

5.18 In assessing whether it is uneconomic to develop another pipeline to provide the relevant services, it is appropriate to consider existing pipelines and determine whether they can, or could be developed to, provide the services provided by means of the MAPS. This is consistent with the tribunal's approach in the Duke matter.

Existing pipeline developments

5.19 Epic Energy submits that, absent the MAPS, physical connection already exists for gas flows between Moomba and Adelaide via:

(a) the MSP from Moomba to Wagga Wagga in New South Wales

(b) the Interconnect from Wagga Wagga to Barnawatha in Victoria

(c) GasNet's VPTS to Iona

(d) the SEA Gas pipeline from Iona to Adelaide.

5.20 WMC Resources notes that, alternatively, gas could be transported via the MSP to Sydney, the Alinta-owned EGP to Longford, through GasNet's VPTS to Paaratte and the SEA Gas pipeline to Adelaide. However, it adds that at this time it is not physically possible to

transport gas from Moomba to Adelaide other than by using the MAPS, noting that 'anything but the most modest flow of Moomba gas to Adelaide would not be possible through the Culcairn-Barnawartha Interconnect without additional investment in the GasNet pipeline system' (WMC sub 17, p. 12). Network modifications involving a substantial capital investment would be required to transport gas from Moomba to Adelaide other than via the MAPS.

5.21 A number of other parties also question whether it is practical or feasible to transport gas from Moomba to Adelaide using an alternative to the MAPS. Santos (sub 13), for example, questions whether alternative routes are capable of transporting the required quantity of gas.

5.22 Even if the pipelines along alternative routes can currently, or could be developed to, transport gas between Moomba and Adelaide they would not be capable of providing a service to points currently serviced by the MAPS laterals or to points along the mainline other than Adelaide. To provide services to these areas would require duplication of the much of the MAPS or the use of backhaul on the MAPS.

Gas swaps

5.23 A gas swap involves an agreement or agreements (between two or more parties) under which suppliers/shippers agree to physically redirect their gas deliveries. Swaps allow gas sales and potential sales to extend beyond the geographical, physical and technical constraints of the gas supply infrastructure. A swap could involve a supplier/shipper sending gas from Moomba to Sydney, for instance, rather than to Adelaide where the purchaser wishes to have the gas delivered. In exchange, a supplier/shipper at another supply source would divert the gas that it would send to Sydney to another location. In the simplest scenario, the gas would be diverted directly to Adelaide, but there could potentially be a series of swaps using other third parties and delivery locations. (See, for example, box 1 (p. 24) of Epic Energy's application, which describes a swap between the Cooper Basin producers and Origin Energy Retail.)

5.24 Epic Energy submits that holders of contracts for Moomba gas in Adelaide could swap with Sydney gas users who currently use the EGP or the Interconnect to source gas from the Otway or Gippsland basins. GasNet submits that gas can be carried from Moomba to

South Australian markets through the interconnected pipeline network via Sydney, Longford and Port Campbell, using gas swaps where required. It describes this as 'both viable and very competitive with the MAPS' (Gasnet sub 8, p. 5).

5.25 Stuart Petroleum states, however, that a Moomba producer has no guarantee of being able to enter into swaps or other arrangements for the virtual movement of gas from Moomba to Adelaide. ECCSA adds that gas swaps are available only to large shippers, such as gas retailers.

5.26 WMC Resources doubts whether swaps would involve the provision of the same services as the MAPS and whether swaps fit within the term 'another pipeline' in criterion (b). It states:

> *…swaps, backhaul arrangements and other synthetic arrangements that entail the receipt of gas at one location and the delivery of gas at another location are not relevant for the purposes of criterion (b) as they do not amount to 'another pipeline' as required under the criterion. In any event, the service provided by such contractual arrangements is not the point-to-point service the subject of the application for revocation. The Tribunal in the Duke EGP decision defined the relevant point-to-point service as a 'firm forward haulage service'. Contractual arrangements such as swaps and backhaul arrangements do not provide a firm forward haulage service but rather, interruptible services.* (WMC sub 17, pp. 5–6)

The Council's view on swaps

5.27 The Council considers that swap arrangements do not amount to the development of 'another pipeline'. Swaps may, however, provide for additional choice for suppliers or purchasers in various gas markets and are therefore relevant to the Council's assessment under criterion (a).

Is it uneconomic to develop another pipeline to provide the services?

5.28 In determining whether criterion (b) is satisfied the Council adopts the social cost benefit approach to interpreting 'uneconomic', considering not only private costs and benefits but the costs and benefits to the community as a whole. This approach has been endorsed by the tribunal in Duke in considering the application to

revoke coverage of the MSP. Using this approach criterion (b) is satisfied if, for the relevant range of demand, it is always cheaper for a single pipeline to provide the service under consideration rather than multiple pipelines. The pipeline is then a natural monopoly, and competition between two or more pipelines offering the same services would be inefficient.

The relevant range of output: reasonably foreseeable demand

5.29 The Council considers a period of about 10–15 years is sufficient for assessing the relevant range of output for determining whether a pipeline is a natural monopoly. This provides time for adjustments to capacity and the development of new pipelines and new gas fields, and takes account of current long term contracts while recognising the inherent uncertainties in forecasts of demand.

5.30 To determine the reasonably foreseeable demand for the services of the MAPS it is necessary to consider both forecast South Australian demand for natural gas (as demand for gas transport is derived from demand for gas), as well as the proportion of that demand that is likely to require the services of the MAPS.

South Australian demand

Current demand

5.31 Epic Energy submits that an appropriate base figure for South Australian demand for gas can be calculated by adding the annual MAPS throughput (as reported to the South Australian Minister for Energy), annual throughput on the South East pipeline system (4 petajoules a year) and fuel gas used on the MAPS (1 petajoule a year).

5.32 Epic Energy reports that in 2003 the volume of throughput on the MAPS was about 91.5 petajoules, down from approximately 100 petajoules in each of the preceding two years (Epic Energy 2005). This suggests that total South Australian demand is in the range of 96–105 petajoules a year (or average daily throughput of 262–288 terajoules). The ESIPC reports that South Australian gas demand, other than for electricity generation, is relatively steady at around 45 petajoules a year (ESIPC 2004).

5.33 Epic Energy attributes recent shifts in demand for gas in South Australia to changes in interstate electricity imports. It considers that demand for gas in South Australian electricity generation since 2003 has been affected by the establishment of the Murraylink interconnector and increased use of the Heywood interconnector. The ESIPC similarly observes that since the construction of the Heywood interconnector 'gas demand for electricity generation has been highly volatile, both instantaneously and annually' (ESIPC 2004, p. 82).

5.34 In 2004 throughput on the MAPS fell to 67.5 petajoules. This fall reflects a range of factors: including increased electricity imports; interruptions to flows on the MAPS following the explosion at Santos's Moomba gas plant; the emerging use of wind energy, which tends to displace gas fired generation (OTR 2004); and the commencement of gas haulage services to South Australia using the SEA Gas pipeline.

Forecast demand

5.35 Epic Energy estimates that South Australian natural gas consumption will increase from 105 petajoules to 153.1 petajoules over the period 2001-02 to 2019-20 (see table 2). This is based on estimates reported by Akmal, Thorpe, Dickson, Burg and Klijn (2004) of ABARE (see in column 2, table 2), which Epic Energy has adjusted to exclude primary energy consumption of LPG, ethane, butane and propane transported from Moomba using the Port Bonython liquids line. (Akmal et al state, however, that LPG is classified as oil suggesting that Epic Energy's forecasts may be too low).

Table 2: South Australian natural gas consumption

	Epic Energy[a]	*ABARE*[b]	*ESIPC*
Year	*petajoules*	*Petajoules*	*petajoules*
2001-02	105.0	141.8	
2004-05	103.1	139.2	108–125
2009-10[c]	123.1	166.3	116–137
2014-15[c]	137.1	185.2	132–155[d]
2019-20[c]	153.1	206.7	

[a] Based on Akmal et al (2004) and reported to exclude LPG, ethane, propane and butane. Akmal et al (2004) state, however, that LPG is classified as Oil. [b] Estimates of Akmal et al 2004. [c] Forecast estimates. [d] Data are for 2013-14.
Sources: Akmal et al 2004; ESIPC 2004; Epic Energy 2005.

5.36 As indicated by table 2, Epic Energy's forecasts are roughly consistent with the ESIPC's lower bound forecasts. The ESIPC forecasts that South Australian gas demand will grow to somewhere in the range of 132–155 petajoules by 2013-14, depending on assumptions made about growth in the electricity sector. The South Australian Government has adopted the ESIPC's assumption that competition from renewable energy sources will moderate growth in demand for gas to around 3 per cent a year so that gas consumption will reach about 150 petajoules a year by 2013-14 (Office for Infrastructure Development 2005).

5.37 Extending the ESIPC forecasts to 2019-20 by assuming similar trend growth suggests that demand for gas in South Australia could grow to about 145–170 petajoules a year by 2019–20. This is consistent with the Epic Energy forecasts.

5.38 While there are always questions about demand forecasts, there is a case (recognised in the estimates by Epic Energy and the ESIPC) for adjusting the Akmal et al (2004) forecasts (column 2, table 2) downwards, say by 15–30 per cent, to account for (among other things) likely demand for other gases. This suggests that a reasonable forecast of the demand for natural gas in South Australia is about 130–160 petajoules by 2014-15 and 145–175 petajoules by 2019-20.

Forecast demand for the services provided by the MAPS

5.39 Determining the proportion of South Australian gas that is likely to be supplied from Moomba and transported along the MAPS depends on a number of factors, including:

(a) the available Cooper Basin reserves

(b) existing contracts for Cooper Basin gas held by South Australian users

(c) the characteristics of users who depend on the MAPS services

(d) the likely use of the SEA Gas pipeline

(e) the price of Cooper Basin gas relative to gas from other sources

(f) whether Moomba will form a hub to transport gas from northern sources into south-eastern Australia over the relevant period.

5.40 Available data suggest that Cooper Basin reserves vary in a range of about 1700–3500 petajoules. The ECCSA (sub 2) notes that the expected life of the fields serving Moomba is about 20 years given current use, but considers that this could increase as fields in other basins commence operation. Potential new sources include northern fields (including Papua New Guinea), further development of coal seam methane and/or new discoveries. While the Council understands that several options for new supplies are being considered, no project has a firm commitment at present. The choice of project would also likely have an impact on whether Moomba forms a hub to transport gas from northern sources into south-eastern Australia over the relevant period.

5.41 While much of the Cooper Basin reserves are currently under contract over the next three to five years the New South Wales Government expects the availability of supplies of gas from the Cooper Basin to fall significantly (Government of New South Wales 2004). The ESIPC (2004) also expects gas supply contracts to progressively fall until 2013-14 when most contracts cease. Similarly, Epic Energy and ACIL Tasman expect demand from South Australia for Cooper Basin gas to fall from 2006, in line with the expiry of the contracts that have been supporting the MAPS. WMC Resources notes, however, that while the market changes cited by Epic Energy may result in changing contract behaviour regarding the MAPS services, this is not guaranteed and does not necessarily imply declining use of the MAPS services. WMC Resources suggests that a move to more flexible take or pay arrangements can be expected to increase the aggregate use of pipeline services.

5.42 Both Dickson and Noble (2003) and the ESIPC (2004) report that a northern supply of gas will be necessary by around 2012-13 to balance an expected shortfall of gas in eastern Australia. In the case of South Australia, the Otway Basin has started replacing Cooper Basin supplies. ACIL Tasman has forecast demand for Otway Basin gas in South Australia to be about 60–70 petajoules a year over the 2007–17 period (ACIL Tasman 2004). New gas flows from the Otway Basin can also be expected to increase throughput on the SEA Gas pipeline.

5.43 The extent to which gas from the Cooper Basin will be replaced by gas from other sources depends, in part, on the relative prices of the

gas from the different basins. Little is known about the actual price being paid for Cooper Basin gas because contractual arrangements are confidential. ESCOSA recently estimated that the wellhead price of Cooper Basin gas in 2003-04 was about $2.72 a gigajoule. In 2004-05 the price was less than $2.90 a gigajoule (ESCOSA 2005b). By comparison Vencorp reports that in Victoria the average spot price during 2005 was $3 a gigajoule ($2.95 a gigajoule in 2004). The spot market accounts for approximately 10-15 per cent of gas sales in Victoria (ECCSA sub 2).

5.44 Epic Energy estimates that the price of gas is somewhat higher. It reports 2005 Cooper Basin wellhead prices for gas ex-Cooper Basin to be $3.10–15 a gigajoule and the wellhead prices of Victorian gas to be $3.10 a gigajoule for Otway Basin gas and $3.05-10 a gigajoule for gas ex-Longford. The ESIPC states that the entry of Victorian gas into South Australia has assisted in containing ex-plant prices at the current level of around $3 a gigajoule, or around $3.50 a gigajoule delivered to Adelaide.

5.45 It is difficult to estimate the future wellhead price for Cooper Basin gas with any confidence. It may be reasonable to assume that Santos's production costs will increase as it works more difficult reserves. However, competition tends to be driven by the delivered price of gas and the MAPS, in view of its age, could be expected to have a lower cost structure.

5.46 Competition from the SEA Gas pipeline, which links Otway Basin (and potentially Bass Strait) gas supplies to South Australia, is likely to have the greatest influence on demand for the services of the MAPS. The Office of the Technical Regulator reported in mid-2004 that it expects the SEA Gas pipeline to be delivering around half of South Australia's gas requirements by late 2004 when additional Victorian supplies become available. SEA Gas delivered 32 petajoules of gas in 2004-05, and the amount that it delivers is expected to increase as production in other fields commences. Assuming that current demand for gas in areas other than those served by the South East pipeline system is somewhere between 90 and 100 petajoules a year, then actual MAPS throughput (as distinct from contracted capacity) in 2005 may be 45–50 petajoules a year (or 123–137 terajoules a day). This is consistent with the ACIL Tasman estimate of total MAPS throughput in 2006 of 47.4 petajoules (ACIL Tasman 2004).

5.47 The above discussion suggests that it may be reasonable to expect around a third to a half of South Australian demand for gas (that is,

55–70 petajoules of gas a year by 2019-20) to be transported on a pipeline other than the MAPS. On this basis therefore, the Council considers that a reasonable estimate of foreseeable demand for the services of the MAPS to 2019-20 is 75–120 petajoules a year.

Can the MAPS meet foreseeable demand?

5.48 The current maximum capacity of the MAPS is 418 terajoules a day (152 petajoules a year). For the covered portion of the pipeline the capacity is 393 terajoules a day (143 petajoules a year). Thus it would appear that the MAPS can meet the foreseeable demand for its services to 2019-20.

5.49 Epic Energy previously advised that there is scope to substantially increase the capacity of the MAPS by upgrading compression and by progressive looping (NCC 2002a). WMC Resources (sub 17) suggests that the capacity of the MAPS can be increased to 200 petajoules a year. Given that it is almost always cheaper to transport gas through existing pipelines (if capacity is spare or can be added) rather than to build another pipeline it would appear that the MAPS could transport considerably more gas than the currently forecasted volumes.

5.50 Moreover, expansion of the MAPS would likely be cheaper than using alternative pipelines. As noted above, the south east Australia gas transmission network is not well enough integrated to deliver all of the physical gas that could be produced at Moomba to South Australia using routes other than the MAPS without a substantial capital investment. In addition, the shipping costs would be higher than using the MAPS because of the extra distance involved and the need to negotiate and coordinate contracts with a number of pipeline operators.

The Port Pirie/Whyalla lateral

5.51 Average throughput on the Port Pirie/Whyalla lateral is somewhat less than 18 terajoules a day. Epic Energy's submissions suggest that demand along this lateral is in the range of 6.5 to 8 petajoules a year. Epic Energy states that because demand on the lateral is primarily industrial, it does not exhibit the base level of growth that is associated with domestic demand and an increasing population. Epic Energy is not aware of any proposed development that would substantially increase demand on this lateral. Any substantial

increase in demand would, however, require expansion of the pipeline (with looping likely to be the preferred option).

5.52 The lateral has a maximum firm capacity of 24 terajoules a day (8.8 petajoules a year) and is fully contracted, so no spare capacity currently exists. From 1 January 2006, 18 terajoules a day will be supplied to OneSteel under a 10 year contract, leaving approximately 6 terajoules a day of available firm capacity.

5.53 Epic Energy submits that the physical characteristics of the lateral mean that the costs of building a pipeline to bypass the section of the lateral between the mainline and Port Pirie to service uncontracted demand is likely to be relatively low. Given this and the spare capacity on the mainline, Epic Energy considers that there would be an economic case for bypass should it attempt to exercise market power. It also submits that competitive market conditions in Adelaide would provide an opportunity for third parties to establish a virtual pipeline connection via gas swaps between either Moomba or Adelaide and the Port Pirie offtake.

5.54 Epic Energy acknowledges that the existing lateral pipeline can satisfy likely demand over the medium term. This together with the apparent lack of development projects likely to significantly increase demand along the lateral indicates that it would be uneconomic to duplicate or bypass the lateral.

The Angaston lateral

5.55 Current average throughput on the Angaston lateral is approximately 10 terajoules a day (which equates to approximately 3.5 petajoules a year). Most of the demand on this lateral is for the transport of gas to the end of the lateral (either into the Riverland Pipeline System or to points in the vicinity of the Angaston meter station) or to the Amcor meter station. Epic Energy states that it is not aware of any factor likely to lead to a significant growth in demand on the Angaston lateral.

5.56 The lateral is currently configured with a nominal capacity of 18 terajoules a day (6.5 petajoules a year). Although the lateral is fully contracted until the expiry of contracts at the end of 2005, significant spare capacity currently exists on an interruptible basis. Epic Energy states that there is likely to be spare firm capacity when existing contracts expire.

5.57 Pointing to the possibility of bypass due to 'the low capital costs' of either interconnecting the Riverland Pipeline System (which commences at the end of the Angaston lateral) with the SEA Gas pipeline or duplicating the lateral, Epic Energy submits that it cannot be assumed that it would be uneconomic for anyone else to develop another pipeline to provide the whole or portion of the services that Epic Energy currently provides on the Angaston lateral.

5.58 Epic Energy states, however, that that the Angaston lateral can satisfy likely demand for services over the medium term. In view of this, the Council considers that it would be uneconomic to duplicate or bypass the lateral.

Conclusion on criterion (b)

5.59 The capacity of the covered pipeline is currently about 143 petajoules a year. The maximum foreseeable demand for the MAPS services to 2019-20 is reasonably estimated at 120 petajoules a year. Based on these figures the Council considers that Epic Energy should be able to satisfy the demand for the services of the MAPS without reconfiguring the pipeline. This finding is consistent with Epic Energy's view that if a point to point definition is applied to the covered pipeline and total 2019-20 South Australian demand for gas is assumed to be 153 petajoules a year, then the MAPS (with appropriate enhancements) can meet the demand for gas transport services.

5.60 Epic Energy does not expect significant growth in demand for gas on the two major laterals. It is likely to have sufficient capacity to meet the demand for gas transmission services to the regions served by the laterals over the period to 2019-20.

5.61 The Council considers that criterion (b) is met in respect of the MAPS.

6 Criterion (a): The promotion of competition test

6.1 Criterion (a) is intended to ensure that a pipeline is covered only where there will be benefits in at least one market other than the

market for the services of the pipeline. The issue is whether coverage would improve the opportunities and environment for competition such that competitive outcomes are more likely.

6.2 In assessing whether criterion (a) is satisfied, the Council:

(a) defines the relevant dependent markets in which competition may be promoted and verifies these markets are separate from the market for the services provided by means of the MAPS

(b) determines whether the access (or the increased access) facilitated by coverage would promote a more competitive environment in one or more of the dependent markets.

Dependent markets

6.3 The MAPS is relevant particularly for gas production and sales. It is possible to identify three relevant dependent markets:

1. gas production and sales in the Cooper Basin, which includes the Moomba and Ballera hubs

2. gas sales in Adelaide

3. gas sales along the route of the MAPS mainline between Moomba to the first Adelaide city gate, and gas sales along the routes of the (major) Port Pirie/Whyalla and Angaston laterals.

6.4 These gas production and gas sales markets are functionally distinct and separate from the transmission services market. The MAPS transports natural gas only and it is therefore not necessary to expand the product dimension of the market to account for other energy products, such as liquid condensates or oil.

6.5 Epic Energy identifies similar dependent markets to the three in paragraph 6.3. It considers, however, that gas users along the Angaston lateral and along the route of the MAPS south of the lateral to Adelaide are part of the wider geographic gas sales market of south east Australia.

6.6 Epic Energy argues that the downstream electricity sales market in the Victorian and South Australian regions of the National

Electricity Market is also relevant to the Council's consideration of criterion (a). While the Council accepts that gas is an important fuel for generating electricity, especially in South Australia, it does not consider the wider electricity market to be a relevant dependent market.

The gas production and sales market

6.7 Epic Energy states that the geographic boundary of the upstream market should be delineated by the region of gas production and sales served by the pipeline in question; that is, gas producers and sellers within a particular gas field or within scope of feasible interconnection with the pipeline. For the MAPS this is largely the Cooper Basin, but also includes other gas fields served by the Moomba and the Ballera hubs.

6.8 Epic Energy indicates that producers currently served by the MAPS are located in the Moomba hub. In addition, a raw gas pipeline interconnects between the Ballera and Moomba gas processing plants, and the south west Queensland producers send gas to Moomba for processing and sale. Epic Energy states that the geographic boundary of the market does not extend to producers further afield (such as the Bowen and Surat basins) because of economic and technical constraints.

6.9 Most submissions generally agree that the geographic dimension of the gas production and sales market includes the Moomba and Ballera hubs. WMC Resources suggests that the geographic boundary may extend to gas fields beyond the Cooper Basin. WMC Resources points to recent market developments, including the sale of wet gas by the south east Queensland producers via Moomba, the marketing of PNG gas and the purchase of coal seam methane from Origin Energy by AGL, and notes that Moomba is becoming a staging point or market hub for producers entering the south east Australian market.

6.10 While in the future the Moomba hub may offer substantial commercial opportunities to producers, at this stage it appears that transactions involving the supply of gas at Moomba from other basins in Queensland occur only via swaps. Swap arrangements do not, however, change the upstream areas that supply or could supply gas via the MAPS. Moreover, swaps account for only a small proportion of the upstream gas sales market at this time and thus

may at most provide competition at the margins. WMC Resources indicates for example that there are substantial hurdles to arranging swaps, including the need to have matching gas profiles in different locations.

The gas sales market in Adelaide

6.11 The MAPS provides gas transport services to the Adelaide region, which also has access to a gas transport service provided by the SEA Gas pipeline. Neither pipeline can, however, independently serve the entire south east Australian market.

6.12 Epic Energy argues that the SEA Gas pipeline allows gas from Moomba transported on the MAPS to be physically delivered (via backhaul) into a south east Australian interconnected gas transmission network that includes South Australia, Victoria, New South Wales and potentially Queensland. Origin Energy argues that a workable level of competition exists in a downstream south east Australian gas market.

6.13 In contrast WMC Resources considers that the relevant gas sales market is confined to the Adelaide region. It argues that physical and contractual constraints limit the use of connections necessary to effectively integrate (on a firm supply basis) a south east Australian gas market.

6.14 The Council has considered this issue previously. In the MSP matter for example it found that:

> *…parts of south-east Australia have no access to gas; while much of western NSW and most of Victoria have access to gas from one gas producer or one gas field. Other regions, such as Sydney and Canberra, have access to gas from two distinct sources. While it is feasible that future pipeline development may eliminate barriers to entry in gas marketing and integrate the field of rivalry in gas retailing within south-east Australia, or even the whole of Australia, the Council does not consider that this reflects the current situation.* (NCC 2002a)

6.15 Since the Council came to its view on the MSP, the SEA Gas pipeline has commenced, providing services that are contributing to greater integration of a south eastern Australian gas markets. Nevertheless, there are some significant hurdles to integration, mainly related to pipeline capacity and flow direction that constrain the transport of gas. The Council considers therefore that the relevant portion of the

downstream market (aside from the markets along the MAPS mainline north of Adelaide and the major laterals considered below) is the area that the MAPS can physically serve, that is Adelaide.

The gas sales market(s) along the MAPS mainline and the major laterals

6.16 Unlike users in Adelaide (at the end of the mainline) who have two pipelines that provide gas transmission services, users north of Adelaide and along the major laterals have access only to gas transmission services provided by the MAPS. These users are therefore less able to respond to changes in the price of the MAPS services than users in Adelaide. It is therefore appropriate to distinguish between gas sales markets along the MAPS mainline and the major laterals, and the Adelaide market.

6.17 Epic Energy agrees that users along the mainline from Moomba to north of the Angaston lateral are solely reliant on gas transported using the MAPS. No other submission raised opposing views. As noted above, Epic Energy considers however that users along the Angaston lateral and south of the lateral along the route of the MAPS to the Adelaide city gate have access to viable alternative pipeline services and so are part of an integrated south east Australian gas market. WMC Resources, on the other hand, argues that customers along the Angaston lateral cannot currently obtain gas other than via the MAPS, and the market along the lateral is therefore not part of a wider downstream market.

6.18 Submissions suggest there are potentially three ways to deliver gas to the Angaston region other than via the MAPS: interconnection with the SEA Gas pipeline; interconnection with the Riverland pipeline; and swap and backhaul arrangements.

6.19 Over 90 per cent of the gas delivered via the Angaston lateral is transported to either the end of the lateral (that is, to the Riverland system and connection points in the vicinity of the Angaston meter station), or to the Amcor meter station (Epic Energy sub 6). Epic Energy argues that the proximity of the SEA Gas pipeline to Amcor meter station,[3] coupled with the low capital cost of constructing a

[3] Epic Energy states that the SEA Gas pipeline is 7 kilometres from the Amcor meter station.

pipeline, means it is possible that services might be provided to the Amcor meter station by bypassing the Angaston lateral. This could be achieved by constructing a lateral from the SEA Gas pipeline to the Amcor meter station.

6.20 Even if interconnection with SEA Gas were to occur, other customers along the Angaston lateral would remain reliant on the MAPS for backhaul transmission services from the Amcor meter station. Similarly, in the absence of an interconnect between the MAPS and the SEA Gas pipeline in Adelaide, gas users along the route of the MAPS mainline between the Angaston lateral and the Adelaide city gate can obtain gas only via the MAPS.

6.21 Delivery via the Riverland pipeline requires connecting this pipeline to the SEA Gas pipeline. Epic Energy estimates the cost of interconnection at approximately $3.08 million. Given the spare capacity on the Angaston lateral, the likely costs of interconnection and the relatively small volume of gas consumed by users along the Angaston lateral, this option does not appear to provide a viable means of responding to even a significant price increase for transmission services on the MAPS.

6.22 ECCSA states that the SEA Gas pipeline is fully contracted and that anyone seeking firm capacity would have to pay for additional compression. It also notes that obtaining gas from alternative sources via the SEA Gas pipeline would require backhaul on the main MAPS pipeline from Adelaide to the laterals. ECCSA considers that swaps and backhaul services, because they cannot avoid using the MAPS pipeline to deliver gas to customers north of Adelaide, do not offer a viable service.

Conclusion on dependent markets

6.23 The Council considers that the dependent markets relevant to the assessment of Epic Energy's application are:

1. gas production and sales in the Cooper Basin, which includes the Moomba and Ballera hubs

2. gas sales in Adelaide

3. gas sales along the route of the MAPS mainline from Moomba to the first Adelaide city gate and along the major Port Pirie/Whyalla and Angaston laterals.

Ability and incentive to exercise monopoly power

6.24 Whether coverage of a pipeline will promote competition depends critically on whether the provider of pipeline transmission services has market power that it could use to adversely affect competition in the dependent market(s). Competition can be adversely affected where a service provider has the ability to profitably raise prices above economic costs and/or restrict access to its services for a sustained period of time.

6.25 Epic Energy could adversely affect competition in the dependent market(s) where it has an ability and incentive to:

(a) leverage its market power to advantage a vertically related affiliate

(b) increase profits through explicit or implicit price collusion, and/or

(c) increase profits by charging monopoly prices for services.

Vertical leveraging

6.26 Coverage of the MAPS prevents Epic Energy from vertically integrating its pipeline business with gas production and sales in the Moomba to Adelaide market. Absent coverage therefore there may be an opportunity to form vertical links, which could provide an incentive for Epic Energy to engage in strategic behaviour designed to advantage its affiliate. For example, Epic Energy may be able to profit by charging lower prices for providing MAPS services to an affiliate and/or offering non-affiliates access on inferior terms.

6.27 Epic Energy's assets (including the MAPS) are owned by the HDUF, which is managed by Hastings Funds Management. The Council understands that Epic Energy is HDUF's only Australian investment to date. Hastings Funds Management, which was acquired by Westpac in September 2005, manages a number of funds in addition to the HDUF.

6.28 Epic Energy states that the Hastings Funds Management does not manage anything involving investments in relevant dependent

markets (Epic Energy sub 4). Further, it argues that vertical integration concerns can be dealt with by other parts of the TPA (part IV prohibits certain anti-competitive practices, for example).

6.29 Epic Energy submits that its commitment to a code of conduct and associated transparency in market dealings will limit the prospect for effective collusion or preferential self dealing. It considers that the small number of shippers and significant spare pipeline capacity in the southern and eastern Australia pipeline network are likely to limit the possibility that it will either collude or benefit from preferential self dealing.

6.30 There is no evidence before the Council of actual or potential ownership links that could allow Epic Energy to leverage its market power into a dependent market. Similarly, there is no evidence of any arrangements between Epic Energy and participants in dependent markets that would provide Epic Energy (or its owners or managers) with an incentive to leverage Epic Energy's monopoly power.

Explicit or implicit price collusion

6.31 Gas can be transported out of Moomba via the MAPS or the MSP and out of Ballera via the Ballera to Moomba raw gas pipeline, the Carpentaria pipeline to Mount Isa or via Epic Energy's covered South West Queensland pipeline to Wallumbilla. There is no evidence before the Council that the owners of these pipelines are likely to or have the ability to collude with Epic Energy to raise prices to producers above competitive levels.

6.32 ECCSA suggests that Epic Energy has an incentive to raise prices for the MAPS services to where they equal or exceed prices for SEA Gas pipeline services. SEA Gas would likely also seek to raise prices to match levels on the MAPS (ECCSA sub 2). Such parallel behaviour would not necessarily result in matching tariffs on the competing pipelines, for example, if there are differences in well-head gas prices across basins. Instead, it might involve pricing strategies that result in parity in delivered gas prices, while allowing the owners to earn relatively high returns for their transmission services.

6.33 In its submission on the draft recommendation, ECCSA notes that, apart from AGL, the large shippers on the MAPS are gas retailers that also hold capacity on the SEA Gas pipeline. ECCSA believes

that the shippers with a beneficial interest in the SEA Gas pipeline 'have the power and the incentive to want to increase the costs on the MAPS to eliminate a potential competitor (AGL) and to make the transport on MAPS high enough to maximise the profits of holding SEAGas capacity' (ECCSA sub 20, p. 4).

6.34 There is no evidence before the Council of explicit collusive behaviour between operator of the MAPS and the operators of the SEA Gas pipeline. The Council accepts that the possibility of parallel behaviour tends to be greater where, as here, a small number of pipelines (in this case two) serve the markets in question and notes the concerns of ECCSA. In this instance however, parallel behaviour seems unlikely, or at least difficult to sustain, for the following reasons.

(a) Shippers on both the MAPS and the SEA Gas pipelines appear to favour long term, high volume contracts, which are likely to intensify price competition among pipeline owners to secure the contracts. Indeed because gas retailers operate in a contract carriage market they are required to have contractual arrangements in place with producers for the supply of gas and with pipeline operators for the transmission of gas.

(b) The three SEA Gas owners have some incentive to compete among themselves to ensure take up of any unused contracted capacity. GasNet (sub 8, p 3) also notes that haulage may be bought from the SEA Gas operator itself.

(c) The service providers can price between customers in a non-public manner. While Epic Energy's commitment to non-discriminatory tariffs on the MAPS (see para 6.105) may increase the ability of the SEA Gas pipeline to observe pricing on the MAPS, the SEA Gas owners are able to negotiate on price in a non-transparent manner. This would make it difficult for Epic Energy to monitor whether the SEA Gas pipeline complies with any collusive pricing structure or for Epic Energy to follow SEA Gas pricing leads.

6.35 In addition, it is difficult to see how Origin Energy, as the major gas retailer in South Australia, could benefit from monopoly pricing on the MAPS. To the extent that gas haulage is cheaper on the MAPS than SEA Gas pipeline Origin Energy may be able to reduce its overall costs by sourcing some of its gas supplies from the Cooper

Basin transported via the MAPS. Given that the Minister for Energy sets the price Origin Energy may charge for standing contract for small gas customers there is an incentive for Origin Energy to reduce its costs. Further it is difficult to see what Origin Energy would gain by attempting to increase charges for market contracts to recoup losses in the standing contract market. Such behaviour would likely encourage entry into the gas retailing market or switching from gas to other fuel substitutes and therefore reduce Origin Energy's market share.

Monopoly pricing

6.36 Most studies suggest that demand for gas is relatively inelastic, that is, unresponsive to price movements (see, for example, Akmal and Stern 2001; and Frontier Economics 2003). Typically demand is found to be least responsive to price among commercial and industrial gas users. Relatively inelastic demand for gas is likely to translate into relatively inelastic demand for gas pipeline services. Moreover, since pipeline services typically make up only a portion of the overall delivered cost of gas, it is likely that the overall demand for pipeline services will be even more inelastic (Ordover and Lehr 2001). In the absence of any empirical evidence on the demand sensitivity for the particular services of the MAPS, it would seem reasonable to assume that overall demand for the MAPS services is inelastic. This creates incentives for monopoly pricing on the MAPS.

6.37 Absent coverage therefore, Epic Energy may be able to charge monopoly prices, which would likely result in the delivered cost of gas rising above efficient levels. (Delivered gas prices may also be above efficient levels if the gas commodity component is priced at monopoly rates.) This could weaken entry incentives in both upstream production and sales markets and downstream gas sales market, through decreased demand (due to higher prices to end users) or reduced returns (due to absorption of transport costs by retailers or producers).

Conclusion on the exercise of monopoly power

6.38 The Council has no evidence to suggest that Epic Energy has actual or potential vertical links that would provide it with an incentive to engage in strategic behaviour to advantage an affiliate. There is also no evidence of collusive behaviour among pipeline operators and it

would appear that the current operating environment is unlikely to be conducive to such behaviour.

6.39 Because the demand for gas is relatively inelastic, Epic Energy may have an incentive to restrict output and/or raise prices to earn monopoly rents.

The effectiveness of competition in dependent markets

6.40 Criterion (a) will not be satisfied if there is effective competition in the dependent market(s). Competition is likely to be effective where market participants have viable alternative services to those of the MAPS. That is, where:

(a) producers have alternative outlets for their gas at comparable rates of return to that earned if they use the MAPS and/or

(b) purchasers of gas are able to shift demand to alternative sources of energy.

6.41 Competitive outcomes may also be facilitated where market participants possess bargaining strength sufficient to constrain Epic Energy's ability to exert market power in relation to the services of the MAPS.

(1)The gas production and sales market

Alternative outlets for Cooper Basin gas

6.42 Epic Energy states that, in addition to South Australia, Moomba and Ballera producers currently have access or potential access to customers in New South Wales, Victoria, Tasmania, Mount Isa and South East Queensland.

6.43 Epic Energy states that the commissioning of the EGP has resulted in the MSP having considerable excess capacity. As a result, producers now using the MAPS could divert gas to the MSP should Epic Energy price above long run economic costs. Epic Energy

submits that Moomba gas already competes in the south eastern Australian market with gas from the Gippsland and Otway basins, and that:

…proximity of these supply sources to major demand centres and multiple transport options mean that gas from any of these basins is likely to find its way into each of the demand centres at differing times. (Epic Energy 2005, para 6.55)

6.44 Epic Energy also submits that the availability of swaps means that producers need not necessarily use a physical pipeline and that the cheapest gas will flow to each centre.

Views of interested parties

6.45 WMC Resources notes that natural gas from Moomba entering south eastern Australia can be sold in markets from Gladstone to Whyalla. It considers that this means that any attempt by Epic Energy to increase the prices of MAPS services would reduce demand for Moomba gas and/or reduce well head gas prices. Further it notes that the lowest cost transport for Moomba gas to markets is currently via the MAPS, with the higher transmission costs to markets not served by the MAPS meaning these markets are less preferred. WMC Resources states moreover that Moomba producers are restricted in their ability to sell gas to regions not served by the MAPS by the limits on installed capacity of other pipelines serving Moomba. It considers that market growth and the likelihood that new sources of gas will be connected to Moomba will exacerbate difficulties in using other pipelines. Its view therefore is that Epic Energy could significantly increase tariffs on the MAPS before Moomba producers would seek alternative markets or delivery infrastructure. WMC Resources submits that without assured access to the MAPS, investment in exploration and production at Moomba may be curtailed.

6.46 Stuart Petroleum, while acknowledging that a Moomba producer may be physically able to sell gas into other markets, considers that this is of little use for a Moomba producer with a contract to sell gas into Adelaide. Stuart Petroleum is not convinced that using swaps or an alternative route to Adelaide is feasible. Further it believes that entering into such arrangements would generally be complicated and more costly than arranging transport through a single pipeline. Accordingly, it considers that Epic Energy has substantial market power and some ability to dictate prices.

6.47 Stuart Petroleum rejects Epic Energy's statement that there is little room for improvement in competitive conditions upstream. Stuart Petroleum notes the statement by the Australian Competition Tribunal in Duke that 'any decline in production in the Cooper/Eromanga Basin can be countered by replacement with gas from other basins' (Stuart Petroleum sub 15).

6.48 APIA submits that both upstream and downstream markets are workably competitive as a result of the pipeline-on-pipeline and basin-on-basin competition. As a result, APIA considers that coverage cannot increase competition in these markets above the level that would occur in the absence of coverage.

Assessment

New South Wales

6.49 Information available to the Council indicates that the MSP, as currently configured, has sufficient spare capacity to divert a significant amount of South Australia's current supply of Cooper Basin gas, and a sizeable amount of developable capacity.

6.50 The available information suggests also that the MSP will continue to have spare capacity for some time into the future. In 2002 the APT reported that the MSP would be carrying 198.2 petajoules a year in 2014 (NCC 2002a). In May 2003 the APT announced that demand for the services of the MSP would be significantly less than previously forecast. It reported that demand would fall by around 34 per cent in the years to 2008, but did not provide revised figures to 2014.

6.51 If however Moomba is connected to a northern source of gas then demand for services on the MSP may increase relative to demand for services on other pipelines serving New South Wales, such as the EGP. AGL has recently announced a conditional agreement to purchase significant quantities of Papua New Guinea (PNG) gas from 2009 to meet future demand in New South Wales, the Australian Capital Territory, South Australia and Queensland. However, the PNG producers are not expected to make a final decision on this investment until around the end of 2006. To date, there have been numerous delays in securing foundation contracts to justify the development of the PNG fields or construction of the pipeline that would be needed to transport PNG gas to demand centres. Development of other potentially cheaper options, such as

coal seam methane, would delay development of PNG fields. Thus there would appear to be considerable uncertainty about northern sources of gas over the short to medium term.

6.52 Current ABARE forecasts also indicate that the demand for gas in areas served by the MSP may exhibit significant growth. ABARE (2004) forecasts that the demand for gas (including natural gas, some ethane and other gases) in New South Wales will increase from 140 petajoules in 2004-05 to 189 petajoules in 2014-15 and to 215 petajoules by 2019-20.

6.53 The above discussion suggests that it would be viable to redirect South Australian gas into the New South Wales market via the MSP over the short to medium term. Over the longer term the opportunity to redirect gas to the MSP may be reduced if northern sources of gas are developed (and a pipeline constructed to bring this gas to Australia) because this would reduce spare capacity on the MSP. At this time, the prospect for the development of northern gas sources is relatively uncertain.

Queensland

6.54 There is currently no sales gas pipeline between Queensland and South Australia or New South Wales. The only physical interconnection is provided by the Ballera to Moomba pipeline which is owned by the South West Queensland Cooper Basin Producers.

6.55 The Council understands however that the Ballera to Moomba pipeline could be reconfigured or twinned to transport gas from South Australia to Queensland (NCC 2002a).

6.56 While it may be technically feasible to supply gas to Queensland by reconfiguring and reversing the flow of the Ballera to Moomba pipeline, this would impede the supply of Queensland gas into Moomba (to supply South Australia and New South Wales demand) and have an impact on liquids disposal at Ballera. The Council is not aware of any plans to twin the pipeline to provide such a service. Also, twinning would involve transporting gas over greater distances than from current sources of Queensland gas supplies. Thus returns to Cooper Basin producers may be eroded by higher transport costs.

6.57 Producers located in the vicinity of Ballera may direct Cooper Basin gas to Mount Isa via the Carpentaria pipeline or to South East Queensland markets via Epic Energy's South West Queensland

Pipeline from Ballera to Wallumbilla. Although the South West Queensland Pipeline has spare forward haul capacity, the firm capacity of each of the Roma to Brisbane pipeline, the Wallumbilla to Gladstone pipeline and the Carpentaria pipeline from Ballera to Mount Isa, appears to be substantially or fully contracted in the medium term (Hastings Funds Management Limited 2004; APT 2005; Alinta 2005) thus constraining the additional supply of gas to these regions. Although there may be plans to further expand the capacity of the Roma to Brisbane pipeline, Cooper Basin gas would need to be priced sufficiently competitively (bearing in mind transport costs) to compete with gas from South West Queensland sources, including coal seam methane.

6.58 Regardless of whether there is sufficient growth in demand for gas in Queensland to take up increased supply from the Cooper Basin, technical constraints may mean that redirecting South Australian gas sales into the Queensland market is not likely to be viable over the medium to long term, and the ability of Queensland Cooper Basin producers to direct significant additional quantities of gas into Queensland may therefore be limited.

Gas swaps

6.59 Gas swaps can result in gas being contractually delivered without requiring transmission haulage. Swaps can occur on a short term or long term basis. Generally swaps involve only small quantities of gas, but can involve more significant quantities as in the arrangement between Santos and Origin outlined in Epic Energy's application.

6.60 Gas swaps can provide a means for Cooper Basin producers to redirect gas supplies away from the MAPS. Cooper Basin producers could, for example, enter into a swap that redirects their supplies to Sydney while their contractual obligations in Adelaide are met by gas sourced from the Otway Basin using the SEA Gas pipeline. Swaps may also provide a way for Cooper Basin producers to pursue gas sales in Queensland, although capacity constraints at Ballera may make this impractical (NCC 2002a).

6.61 There are some factors that limit the ability of producers to use swaps to redirect gas from the MAPS. Swaps depend on a producer being able to locate an appropriate party to swap supplies with and on there being sufficient transmission capacity to allow the diversion of gas to alternative locations. Access to capacity on the SEA Gas

pipeline would be essential to any swap involving Cooper Basin gas contracted for sale to a customer in Adelaide. Swaps would be of little benefit for gas sales along the MAPS mainline and laterals north of Adelaide because there is no means of avoiding the use of the MAPS either for forward haul or backhaul.

The bargaining power of Cooper Basin producers

6.62 The NECG found that Cooper Basin producers would need to divert only a small quantity of gas into other markets to make a 5 per cent price rise unprofitable to the MSP. From this the NECG concluded that the 'Cooper Basin producers have significant countervailing market power when dealing with the MSP' (NCC 2002a, para 7.169).

6.63 Because Cooper Basin gas is jointly produced and marketed by the South Australian Cooper Basin producers, Epic Energy deals with what is effectively a single producer in the upstream market. This potentially provides the South Australian Cooper Basin producers with substantial bargaining power when negotiating with Epic Energy, especially given their capacity to supply gas into other markets via other pipelines.

6.64 On the other hand, because Epic Energy has no alternative use for the MAPS but to ship gas to South Australia from the Cooper Basin there is an incentive for Epic Energy and the Cooper Basin producers to bargain jointly. Collusion between the parties could manifest in a variety of rent sharing arrangements and act to create a significant barrier to entry to potential new entrants in the Cooper Basin. Such an outcome would weaken the competitive environment in the upstream gas sales market. Coverage of the MAPS mitigates the risks of this behaviour occurring.

6.65 The Council has no evidence of collusion between Epic Energy and the Cooper Basin producers and considers that collusion is unlikely. Cooper Basin producers largely negotiate directly with downstream gas retailers thus providing little opportunity for joint bargaining with Epic Energy. The commencement of services on the SEA Gas pipeline means that Cooper Basin producers face competition from producers in other basins. The combination of competition from the SEA Gas pipeline and spare capacity on the MAPS means that Epic Energy rather than seeking to constrain competition may have an incentive to encourage competition to maximise throughput.

Conclusion

6.66 It would appear that competition in the gas production and sales market is effective. There appears to be sufficient actual or developable capacity on the MSP now and into the short to medium term to enable the Cooper Basin producers to divert gas sales into markets other than South Australia. Demand forecasts suggest that New South Wales would be able to absorb any gas sales diverted from South Australia. Gas swaps also potentially provide a mechanism to facilitate the diversion of gas sales. Moreover, because gas swaps alter only the source of supply not the quantity of gas delivered, swaps would appear to mitigate the impact of diversions on the wellhead price of gas. The joint production and marketing arrangements of the South Australian Cooper Basin producers are also likely to provide producers with substantial bargaining power when negotiating with Epic Energy.

6.67 There may be some scope for adverse effects on competition in the gas production and sales market if in the future Moomba is connected to a northern source of gas. However, there appears to be little prospect of this occurring over the short term and prospects further out are still uncertain.

(2)The gas market in Adelaide

6.68 Epic Energy submits that coverage will not enhance competitive conditions in gas sales markets in the south east Australia because:

(a) gas users in Adelaide have an ability to choose to meet part, or all, of their demand for gas from sources of supply other than Moomba

(b) there is 'significant current and developable capacity' on the SEA Gas and the MAPS pipelines, which will encourage vigorous competition to secure market share

(c) the services of the MAPS are purchased by only a few well-informed customers who each have significant bargaining power

(d) the cost structure of pipeline infrastructure (high capital costs and low operating costs) provides a strong incentive for the operator to maximise throughput.

Views of interested parties

6.69 Origin Energy considers that there is some basin on basin and pipeline on pipeline competition. It sees the ability to economically expand the SEA Gas pipeline as a constraint on prices charged for services of the MAPS, and the price of gas substitutes, including electricity imports. Origin Energy agrees that Epic Energy faces a number of well informed large shippers and producers and has some incentive to maximise throughput. Also should coverage be revoked Epic Energy would be subject to s46 of the TPA and parties could apply for the coverage of the MAPS if Epic Energy priced excessively.

6.70 GasNet considers that pipeline on pipeline and gas on gas competition curbs Epic Energy's ability to exercise market power. It submits that 'a customer in South Australia has access to at least three retailers all in vigorous competition, who can supply gas from any of Moomba, Longford, Bass and Otways, along either the MAPS or the SEA Gas Pipeline' (GasNet sub 8, p. 7). It considers that the SEA Gas partners are in vigorous competition and, additionally, the SEA Gas operator has every incentive to offer spare capacity and further develop the pipeline. It submits that because competition will be based on the delivered price of gas, any attempt by Epic Energy to hold up prices on the MAPS, restrict access or behave collusively is bound to fail.

6.71 The Institute of Public Affairs supports Epic Energy's application and expresses the view that the MAPS and the SEA Gas pipeline tariffs are likely to soften in light of surplus capacity serving the market.

6.72 WMC Resources considers that there are limited prospects for users to switch gas supplies because of capacity and access constraints on alternative pipelines and the need to secure gas that is not already committed for sale. It submits that if an increase in the tariffs on the MAPS did not result in decreased well head prices, then it would increase prices downstream and discourage gas use.

6.73 WMC Resources considers that swaps and backhaul need to be supported by underlying physical capacity in pipelines if they are to satisfy consumer needs and be a substitute for firm service. It considers that the degree to which these arrangements constrain Epic Energy's market power is limited by the preparedness of customers and sellers to substitute firm for interruptible service.

6.74 OneSteel is satisfied that the 10 year transportation agreement recently concluded with Epic Energy delivers 'value and security'. OneSteel supports ongoing coverage of the MAPS to ensure that, post-2015, Epic Energy remains bound by any undertakings or constraints imposed by coverage to limit its ability to extract monopoly rents.

6.75 ECCSA doubts whether the SEA Gas pipeline provides true competition to the MAPS because it is fully contracted. This means that an access seeker would have to pay for compression to expand the capacity of the SEA Gas pipeline. ECCSA considers that coverage would promote competition in downstream markets, including those capable of being served by the SEA Gas pipeline, and that revocation would result in increased prices on the MAPS and allow the SEA Gas partners to increase their gas delivery prices. It suggests that competition between the MAPS and the SEA Gas pipeline is limited to users located in northern Adelaide.

6.76 Santos contends that the south eastern Australian gas transmission network is not sufficiently integrated to deliver all Moomba gas other than via the MAPS. The services of the pipeline therefore continue to have a powerful impact on downstream gas and electricity sales markets.

6.77 Stuart Petroleum questions whether all gas users can access capacity on the SEA Gas pipeline and notes that the competition it provides is of little assistance to Adelaide users who have Moomba supply contracts.

Assessment

6.78 Submissions received by the Council suggest that there are two main ways in which downstream market participants may be able to bypass the MAPS. These involve:

(a) obtaining Otway Basin (or other Victorian) gas via the SEA Gas pipeline and/or

(b) (to a lesser extent) using swaps.

6.79 Some submissions also discuss sending Cooper Basin gas via a south eastern Australian pipeline route such as described in paragraph 5.19. In assessing criterion (b), the Council considered that such an option is not a viable alternative to using the MAPS

because it requires further development of the pipeline systems and transport of the gas over a much longer distance. Such an alternative route would also require access to the SEA Gas pipeline.

Otway Basin gas reserves and availability

6.80 Epic Energy submits that the Otway Basin is reasonably prospective and cites 2002 estimates that suggest that the basin contains at least 1700 petajoules of natural gas in commercial and non-commercial reserves (Epic Energy 2005, p. 43). In addition, the ESIPC (2004) estimates that the Gippsland and Bass basins contain approximately 6800 petajoules of natural gas, with PIRSA suggesting that 6500 petajoules of those reserves exist in the Gippsland Basin.

6.81 Of the submissions received, only WMC Resources casts doubt on the possibility of obtaining an alternative to Cooper Basin gas. It states that virtually all gas in the Otway and Gippsland basins that is already developed or committed to being developed is sold and/or committed for sale.

6.82 International Power, Origin Energy and Singapore Power have secured sizeable contracts for Otway Basin gas, reportedly totalling approximately 1100 petajoules. PIRSA estimates that approximately 2940 petajoules of the total known reserves in the Gippsland Basin have been contracted to supply the Victorian and New South Wales gas markets. ESIPC notes however that there is exploration occurring in the south east that is resulting in new discoveries and development, including in the Otway and Gippsland basins (ESIPC 2004). The South Australian Government states that :

> *[e]xisting sales gas production contracts and commitments are sufficient to meet South Australian gas demand until the end of 2012. Beyond this, existing uncontracted reserves in the Cooper, Otway and Gippsland basins have the potential to meet demand until around 2016. Future discoveries in these basins have further potential to extend supply beyond this date.* (Office of Infrastructure Development 2005)

6.83 In addition, because the Iona gas storage facility is connected to the SEA Gas pipeline and to the VPTS (via the SWP), it is possible to supplement South Australian supplies with gas injected into the network from other basins. Any future development and connection of a northern supply of gas would also likely extend the life of the Otway and Gippsland basin reserves.

6.84 Assessing the likely sufficiency of the reserves over the relevant period is complicated by different estimates of reserves, the limited information regarding the extent that reserves are committed under existing contracts and uncertainty surrounding the likelihood of future discoveries. At the present time it appears that there are existing or likely reserves sufficient to satisfy a substantial portion of foreseeable South Australian demand.

Competition from the SEA Gas pipeline

6.85 Epic Energy submits that the entry of the SEA Gas pipeline has effectively doubled capacity into Adelaide and that significant current and developable capacity in the MAPS and the SEA Gas pipelines creates strong incentives for the owners of the two pipelines to compete vigorously to secure market share (Epic Energy 2005).

6.86 The capacity of the SEA Gas pipeline as currently configured is 110 petajoules a year, but firm capacity is fully contracted. However, the pipeline manager, South East Australia Gas Pty Ltd will provide third parties with access to additional firm capacity subject to the access seeker buying additional compression. Forecasts indicate that there will continue to be some unused contracted capacity on the SEA Gas pipeline.

6.87 Access seekers may approach the pipeline manager or any one of the three SEA Gas foundation shippers. In effect there are four competing pipeline operators. The presence of spare contracted capacity would appear to provide an incentive for the SEA Gas foundation shippers to compete with one another to provide services. Also, unused capacity may provide opportunities for new entrants. Thus competition to the MAPS, provided by the SEA Gas pipeline, will likely limit the opportunity for Epic Energy to exploit market power in the Adelaide market.

Gas swaps

6.88 Gas swaps provide much the same choice and flexibility for downstream users as upstream gas suppliers. Thus much the same arguments as those presented in paragraphs 6.59–6.61 apply to the downstream market. That is, gas swaps provide gas retailers and users with an opportunity to access alternative sources of gas supply and transmission services regardless of contractual obligations.

Swaps depend however on the existence of competing services and matching gas profiles in different locations.

Conclusion

6.89 Reserves in the Otway and Gippsland basins appear to be sufficient to provide a substitute supply of gas to the Cooper Basin capable of satisfying a substantial portion of Adelaide's demand over the next 10 to 15 years. In addition, there appear to be some unused capacity and opportunities to expand the capacity on the SEA Gas pipeline. This provides existing and potential new entrant gas retailers and users in Adelaide with an ability to transport gas without relying on the MAPS. Gas swaps may also expand opportunities for gas retailers and users in Adelaide to bypass the MAPS. These features suggest that there is effective competition in the Adelaide gas sales market.

(3) The gas sales market along the MAPS mainline north of Adelaide and the major laterals

6.90 Gas retailers and users in the gas sales market along the MAPS mainline north of Adelaide and the two major laterals use Cooper Basin gas transported on the MAPS. They do not have access to gas supplies other than from the Cooper Basin or to viable gas transport services other than those provided by the MAPS.

6.91 Major industrial users in South Australia generally tend to contract with a retailer to supply and deliver gas, rather than contract separately with a producer or gas wholesaler for supply and with Epic Energy for haulage. (There are, however, opportunities for unbundling of services as demonstrated by OneSteel having negotiated a contract for gas transmission with Epic Energy that is separate from any agreement to purchase gas.)

6.92 Epic Energy faces only a few large buyers for its services along the MAPS mainline north of Adelaide and the two major laterals. These include Origin Energy, one of the six South Australian gas retailers, which is the only supplier of standing contract gas to small domestic and commercial users in rural and regional areas of South Australia. Large buyers, such as Origin Energy, AGL and International Power, will have some bargaining power in negotiating with Epic Energy.

Origin Energy for example would likely seek to negotiate all-encompassing gas transmission contracts covering both areas where there is an alternative to the MAPS and areas where there is not. (To the extent that Origin Energy, for example, has access to alternatives to the MAPS for supplying the Adelaide market it is likely to be able to use this as a bargaining chip when negotiating rates for haulage services in the regions solely reliant on the MAPS. Given the volume of gas consumed in the Adelaide region relative to the volume not already subject to long term contracts consumed in the regions north of Adelaide, any threat to transfer to a competing pipeline would likely be a strong deterrent to monopoly pricing by Epic Energy in those areas where it is the only provider of transmission services.) Small regional users (who rely solely on the MAPS) may therefore have some protection conferred by the bargaining power of Origin Energy and other bulk transmission service purchasers.

6.93 Small regional gas users (those consuming less than 1 terajoule a year) have a choice between remaining on standing contracts or moving to market contracts. Standing contracts are regulated by ESCOSA providing some insulation from any monopoly pricing of MAPS services.

Conclusion

6.94 The Council considers that, on balance, Epic Energy's capacity to exert market power in the regions where gas users depend solely on the services of the MAPS is likely to be constrained by the bargaining strength of the parties with which Epic Energy is required to negotiate, such that coverage of the MAPS will not promote competition in this dependent market.

Other factors that may constrain the exercise of market power

6.95 Epic Energy submits that it does not have the ability or an incentive to misuse market power in markets along the mainline north of the Angaston lateral and along the Port Pirie/Whyalla lateral. Epic Energy offers a number of reasons including:

(a) the (small) size of the market involved

(b) its price commitments, which it submits will ensure that customers along the mainline and the Port Pirie/Whyalla lateral share in benefits arising from the competitive market for gas sales in south east Australia

(c) its commitment to develop and implement a behavioural code of conduct

(d) the threat of re-regulation should it seek to misuse its market power.

The size of the market

6.96 Much of the capacity along the Port Pirie/Whyalla lateral is currently contracted to a large industrial gas user, leaving capacity of only 6 terajoules a day (approximately 2.2 petajoules a year), which represents about 2 per cent of the total South Australian demand. Demand along the mainline north of the Angaston lateral and along the Angaston lateral (which the Council understands is not yet the subject of long term haulage agreements) represents approximately 1 per cent and approximately 3-4 per cent respectively of South Australian demand.

6.97 There is not expected to be a significant increase in demand for gas along the two major laterals over the foreseeable period, although possible future expansion of the two gas-fired peaking stations along the route of the MAPS may increase demand along the mainline. WMC Resources may seek to construct a lateral from its Olympic Dam site to the MAPS mainline at some future point, although recent reports suggest that this may be some way off (ExxonMobil 2005).

6.98 Of the six licensed gas retailers in South Australia, only four are actively retailing gas and much of the competition is focused on the Adelaide market. Origin Energy is the only retailer to offer market contracts to small domestic and commercial users in rural and regional distribution areas in 2004-05. Two retailers (in total) have indicated an intention to offer contracts to small users in at least one of the four regional areas in 2005-06 (ESCOSA 2005a).

6.99 In response to approaches from ESCOSA, some retailers suggested that they have not entered regional markets because they consider it is not economic to do so while some suggested there is a difficulty in gaining access to lateral pipes (ESCOSA 2005a). Entry into regional

markets requires there to be unused capacity available for purchase and requires retailers to negotiate separately with Epic Energy in relation to gas transmission and with Origin Energy in relation to access to the distribution system gates.[4]

6.100 Gas swaps may be of little benefit to gas users along the MAPS mainline and the laterals north of Adelaide. This is because any swap transaction would require the use of the MAPS.

Assessment

6.101 Stuart Petroleum submits that the small amount of gas involved should not be determinative to the coverage decision, noting that even in a small market coverage may be justified where the potential for misuse of market power is great (Stuart Petroleum sub 15). The Council agrees that criterion (a) does not require that coverage will promote competition in a market of a particular size. However, it is necessary for the Council to consider whether factors other than access to the MAPS would prevent entry to the relevant markets, in which case coverage would not promote competition. Where demand is low, for instance, new entry into the market may be unlikely, even with coverage.

6.102 The small size of the market relative to the transaction costs of negotiating access to the transmission and distribution system may be influencing retailers' decisions about whether or not to supply gas to users located in regional areas served by the MAPS, including along the Port Pirie/Whyalla lateral. A lack of access to capacity may also have restricted opportunities to enter the market, although there appears to have been some resale of unused capacity by MAPS shippers previously (Epic Energy 2005a; ACCC 2000). While some gas retailers have expressed interest in servicing regional areas in future, it would appear that access to capacity, at least on the major laterals, may continue to limit the opportunity for entry into these markets for the foreseeable future. Coverage would not necessarily address this problem.

6.103 Coverage of the MAPS, by improving transparency, could help to alleviate some of the transaction costs involved in negotiating access

[4] The Council understands that until 2006, Origin Energy has fully contracted access to 21 of the 25 gate stations through which gas is transferred off the MAPS and into the metropolitan and regional distribution systems, including the gates at Angaston, Port Pirie and Whyalla.

on the MAPS. However, it would also seem open to retailers to reduce transactions costs by negotiating with Epic Energy for bundled gas transport service covering Adelaide and regional areas.

6.104 The Council cannot be certain that coverage of the MAPS affects the incentives for Epic Energy to behave in a way that adversely affects competition. As discussed above Epic Energy's ability to raise prices for transport services on the laterals and mainline may be constrained by the prospect of retailers retaliating by withdrawing from using Epic Energy's services to Adelaide. Epic Energy's best strategy may therefore be to encourage competition so as to increase demand for its services. In such circumstances coverage would not be necessary to promote competition.

Epic Energy's code of conduct and price commitments

6.105 Should coverage of the MAPS be revoked, Epic Energy has committed to develop and implement a code of conduct consistent with and based on APIA's draft voluntary code of conduct. APIA's code is based on the following 'core' principles:

1. develop market-responsive pipeline services
2. use non-discriminatory tariffs
3. publicly disclose dealings with affiliates
4. publicly disclose key contract details
5. protect confidential information
6. facilitate capacity trading
7. perform independent external audits of compliance with the principles
8. implement a binding independent dispute resolution process. (APIA 2003, p. 72; Epic Energy 2005, paras 4.12-4.16 and 6.45)

6.106 Epic Energy submits that these principles are consistent with those developed by Duke and applied by Alinta in relation to the (uncovered) EGP. In Duke, the tribunal took account of EGP's

operation as an open access pipeline in determining whether coverage would promote competition (Duke, para 74).

6.107 Epic Energy also submits that, should coverage be revoked, it is 'committed to ensuring that all customers, irrespective of their location along the pipeline, will be able to take advantage of the benefits accruing from the increased competitive conditions resulting from the commissioning of the SEA Gas pipeline' (Epic Energy 2005). It states that:

- *customers on the mainline north of Adelaide who currently pay a postage stamp tariff will pay no more than customers in Adelaide and potentially less should Epic Energy decide to move to a zonal or distance based tariff;*

- *users of the Port Pirie and Whyalla lateral who currently pay a surcharge in addition to the mainline tariff will, at a maximum, pay the lesser of the current rolled forward surcharge as stipulated in the MAPS approved Access Arrangement or the price offered under the long term OneSteel contract. To the extent that a user or prospective user seeks a service different to the OneSteel service, then Epic Energy will commit to ensuring that the price will not exceed the rolled forward reference tariff surcharge. Any customer seeking a service on the lateral will be given the opportunity to have independent audit of this tariff promise;*

- *customers on the Angaston lateral currently do not pay a lateral surcharge but simply pay the prevailing mainline tariff. Epic Energy commits to ensuring that these users continue to pay no more than customers in Adelaide for a similar service. Again, this commitment is to a price cap and as such provides for the possibility of lower price should conditions dictate and does not simply maintain existing prices.* (Epic Energy sub 4)

6.108 Stuart Petroleum and Santos question whether such a code of conduct would act as a constraint on Epic Energy's ability and incentive to exercise market power. The concerns raised by Santos relate in part to the fact that Epic Energy is yet to provide details of the form of its proposed code of conduct, including how its commitment to treat parties equitably will be implemented. Origin Energy also has concerns about Epic Energy's intention to disclose contract information without specifying the exact nature of this disclosure. It considers that inappropriate disclosure could undermine the competitive position of market participants and is unnecessary for ensuring non-discriminatory treatment (Origin Energy sub 19).

6.109 Origin Energy, International Power, WMC Resources and OneSteel also appear concerned that in the absence of monitoring and strong incentives for compliance, the potential and incentive for misuse of market power remains. Given this, WMC Resources considers that undertakings of the sort proffered by Epic Energy cannot be taken into account as a potential constraint on the ability of Epic Energy to exercise market power. GasNet, however, submits that the MAPS should be regulated only if it does not abide by its proposed code of conduct.

6.110 International Power emphasises that competitive delivered gas prices are important to the viability of its power station businesses. It notes that Epic Energy's proposed code of conduct would be voluntary, and seeks a firm commitment from Epic Energy regarding the code and associated procedures. In response to the Council's draft recommendation International Power (sub 18) expresses a preference for implementing a code of conduct that is transparent and enforceable. It suggests that this could be achieved by incorporating the code into Epic Energy's licence for the MAPS so that the code would require Ministerial approval. International Power is concerned that, without some means for enforcing the code, service levels on the MAPS may deteriorate and it would become more difficult to seek changes to access arrangements should circumstances in the gas supply market change.

6.111 Alternatively, Origin Energy (sub 19) considers that its concerns about the code of conduct could be addressed by Epic Energy submitting the code to the ACCC for endorsement under sections 51ACA and 51AE of part IVB the TPA. Origin Energy considers that this would ensure that Epic Energy undertakes appropriate consultation with stakeholders. The ACCC's authorisation of the code would also make it legally binding under the TPA and ensure it is consistently applied across industry.

Assessment

6.112 In Duke, the tribunal considered Duke's standard terms and conditions for access to be indicators that monopoly pricing was unlikely (Duke, paras 132–3). The tribunal appeared to give weight to Duke's non discrimination clause indicating that it had the potential to ensure that any benefits from competition between pipelines would flow to consumers in regional markets.

6.113 At this stage, however, Epic Energy has provided only a proposal to develop and implement a code of conduct. As such there is little assurance for users that Epic Energy will not attempt to exercise its market power to the detriment of competition in dependent markets. Absent a workable code of conduct the most effective remedy available to parties should Epic Energy not comply with its undertaking on the code of conduct is their ability to seek coverage of the pipeline. Thus the Council does not consider that Epic Energy's proposal for a code of conduct is an effective constraint on the exercise of market power.

6.114 The Council would give greater weight to behavioural commitments or undertakings where there is a mechanism in place, which has provision for supervision and enforcement. However, whether or not a code of conduct is developed, and the form of any such code, is a matter for industry parties.

6.115 The Council notes Origin Energy's suggestion to mandate the code of conduct through regulation. It is not clear, however, that the provisions of section 51AE of the TPA could be applied to the code given that Epic Energy's proposal applies to a single pipeline rather than the pipeline industry. International Power's suggestion for mandating the code appears to create a danger that ad hoc access conditions could be imposed as part of a licence. Such action may undermine the nationally consistent approach to gas access regulation envisaged under the Gas Code.

The threat of re-regulation

6.116 Epic Energy submits that the threat of re-regulation via coverage under the Gas Code acts as a disincentive to it using its monopoly power to adversely affect competition in downstream markets. In addition, Epic Energy submits that it will continue to be, or become subject to, various constraints under other regulatory systems, including the South Australian *Petroleum Act 2000*, *Gas Act 1997* and *Essential Services Commission Act 2002*, should coverage be revoked.

6.117 In particular, Epic Energy argues that if coverage of the MAPS is revoked, it will be subject to 'a default form of potential access arrangement' under the Petroleum Act. Section 49 of that Act empowers the Minister to require a pipeline licence holder to convey a regulated substance, including natural gas, for another person on

terms agreed between the licence holder and the other person or, in default of such agreement, on terms determined by the Minister. In deciding whether to require the pipeline licence holder to convey gas, and the relevant terms on which transport should be required, the Minister is required under s49(4) of the Petroleum Act to have regard to:

(a) the legitimate business interests of the licensee

(b) the public interest including the public interest in facilitating competition in markets

(c) the interests of other persons who have rights of access to the pipeline

(d) the cost of providing access to the pipeline

(e) the operational and technical requirements for the safe, efficient and reliable operation of the pipeline, and

(f) any other matters the Minister considers relevant.

6.118 Epic Energy also indicates that, absent coverage, it is potentially subject to price regulation by ESCOSA. In addition to being the relevant regulator of South Australian distribution pipelines under the Gas Code, ESCOSA has a price-setting role, where authorised to do so under regulations made under the Essential Services Commission Act (the ESCOSA Act) or the Gas Act.

6.119 WMC Resources submits that the threat of re-regulation is an ineffective constraint on Epic Energy's behaviour because the timeframe and cost makes it irrelevant for prospective users. In response to the draft recommendation International Power raised similar concerns.

6.120 ECCSA considers that, by and large, smaller customers do not have sufficient resources to seek coverage. In addition, it considers that few of the large shippers have an incentive to seek re-regulation because most (apart from AGL) have an affiliation with the SEA Gas pipeline or (in the case of Santos) can transfer their gas to a pipeline other than the MAPS.

6.121 Stuart Petroleum considers the threat of re-regulation to be 'a poor substitute for actual regulation in a situation where the pipeline operator clearly has the ability to exercise control over a downstream market with no other feasible means of supply' (Stuart Petroleum,

sub 15, p. 5). In contrast, GasNet considers that the threat of regulation makes it unlikely that the MAPS would exploit market power and believes the MAPS should be regulated only if it does not abide by its proposed code of conduct.

Assessment

6.122 In Duke, the tribunal had regard to the threat of coverage, with its associated costs, as a constraint on Duke in regional markets where there was only one pipeline, noting (at para 130) that a submission before the Council indicated that the threat of coverage had been used effectively as a means of moderating the behaviour of pipeline owners in New Zealand. The Council considers that the threat of re-regulation is likely to partially constrain Epic Energy from monopoly pricing for the MAPS haulage services in regional markets.

6.123 Notwithstanding Epic Energy's submissions that it is potentially subject to regulated access under local legislation, the Council considers it unlikely that such regulation will eventuate. In particular, the Council considers that the South Australian Government's likely intention in agreeing to the implement the Gas Code under South Australian law and seeking certification of the code under the TPA as an effective access regime was that regulated access to the MAPS would be determined under the coverage criteria in the Gas Code.

Conclusion on criterion (a)

6.124 Epic Energy is likely to have a significant cost advantage in the transport of gas from the Cooper Basin. This gives it some capacity to raise prices above current levels.

6.125 While Epic Energy has a monopoly over the transport of Cooper Basin from Moomba to Adelaide, its ability and incentive to exploit its market power is constrained. Gas reserves in the Otway and Gippsland basins can substitute for Cooper basin gas, and appear to be capable of satisfying a substantial portion of Adelaide's demand over the next 10 to 15 years. Epic Energy generally faces only a few well informed large shippers and producers, some of whom have the ability to divert gas away from the MAPS. The entry of SEA Gas has increased the capacity to supply gas into Adelaide, which will likely provide an incentive for Epic Energy to behave competitively so as to

maintain throughput and capture market share. Gas swaps may also expand opportunities for gas retailers and users in Adelaide to bypass the MAPS. Even in the markets along the mainline north of Adelaide and the two major laterals (that depend solely on services provided by the MAPS) the scope for Epic Energy to apply its market power to the detriment of competition is constrained by the bargaining strength of its major customers, such as Origin Energy. The threat of re-regulation also provides some disincentive for Epic Energy to use its market power to adversely affect competition.

6.126 The Council is not satisfied that access (or increased access) to services provided by means of the MAPS would promote competition in a dependent market. That is, the Council considers that criterion (a) is not met.

7 Criterion (c): The health and safety test

7.1 The rationale for criterion (c) is that the Gas Code should not be applied to pipelines where access or increased access may pose a legitimate risk to human health or safety.

7.2 In its application Epic Energy states that it 'does not consider that coverage under the Code will cause undue risk to human health or safety and therefore believes that criterion (c) is satisfied' (Epic Energy 2005, para 7.2)

7.3 Santos, WMC Resources and Stuart Petroleum agree that criterion (c) is satisfied and no other submissions argued that access would compromise health and safety. This is consistent with the Council's experience with other applications for revocation or coverage of pipelines.

7.4 The Gas Code contemplates the provision of access to pipelines throughout Australia under gas access legislation 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 the provision of access or increased access to the services of the MAPS.

7.5 The MAPS is currently a covered pipeline and access is provided consistent with the Gas Code. The Council is unaware of any human health or safety concerns resulting from access in the past.

Conclusion on criterion (c)

7.6 The Council considers that access (or increased access) to the services of the MAPS can be safely provided. The Council therefore finds that criterion (c) is met.

8 Criterion (d): The public interest test

8.1 Criterion (d) requires the Council be satisfied that the overall benefit of regulated access outweighs the cost. The test is whether there are any matters, other than those addressed by criteria (a)–(c), which would lead to the conclusion that coverage would be contrary to the public interest.

8.2 In assessing criterion (d) the Council considers whether any benefits of coverage, such as cheaper prices and more efficient use of resources, are outweighed by regulatory costs. The Council considers, in particular, whether coverage may have adverse incentives for investment in gas pipelines. Where relevant it also considers other matters of public interest including environmental considerations, regional development, equity, impending access regimes or arrangements, national developments and the desirability for consistency across access regimes, relevant historical matters and privacy.

8.3 In considering the application of criterion (a) above, the Council noted that, unlike for the upstream gas production and sales market and the Adelaide gas sales market, gas users in areas along the MAPS mainline north of Adelaide and the two major laterals have no alternative to the MAPS for obtaining gas. For the market in these areas, the Council based its view on criterion (a) largely on the fact that Epic Energy primarily deals with only a few large buyers of gas transmission services and it is likely that these buyers have considerable bargaining power. In addition, gas prices to some end

users are regulated by ESCOSA. Given that Epic Energy is the monopoly provider of gas transport services along the mainline north of Adelaide and along the two laterals, the Council has assessed arguments relating to criterion (d) focusing on this market.

The application

8.4 Epic Energy submits that while it is very difficult to accurately assess the costs and benefits of coverage, the application of the Gas Code imposes significant costs on business. Such costs include the direct costs incurred by both the service provider and the regulator (and other involved parties) as well as the indirect costs of regulation. Epic Energy considers that the Australian Government has acknowledged this by accepting the Productivity Commission's recommendations for changes to the code.

8.5 Epic Energy states that it has already incurred substantial direct costs from regulation of the MAPS. Epic Energy points to protracted regulatory processes and notes that its costs for developing the current access arrangement for the MAPS exceeded $800 000 for external consultants alone. (The Council notes that this represents an annual nominal cost of about $250 000 since commencement of the current access arrangement.) Epic Energy considers that the next regulatory review (due to commence soon) would not necessarily be easier because issues related to the impact of competition from SEA Gas need to be considered. Epic Energy estimates that the cost of coverage could exceed $1 million a year (Epic Energy 2005, para 8.7). This includes expected costs associated with a proposed industry levy to fund the Australian Energy Regulator (AER) and the Australian Energy Market Commission (AEMC).

8.6 Epic Energy also points to other costs identified by the Productivity Commission, such as administrative costs for government and compliance costs for business; constraints on the scope for access providers to deliver and price their services efficiently; reduced incentives to invest in facilities to provide new essential services or to maintain existing facilities; inefficient investment in downstream markets; and wasteful strategic behaviour by both service providers and access seekers.

8.7 Epic Energy argues that adverse incentive effects call for a cautious approach in considering the costs and benefits of regulation under

the Gas Code and therefore coverage should be recommended only where there are clear and material benefits.

8.8 Epic Energy considers that coverage would not be justified on the basis of a finding that it has market power only in the downstream market for gas sales north of the Angaston lateral. Epic Energy implies that the costs of regulation would outweigh the benefits given the small size of this market. It also emphasises its intention to develop and introduce a behavioural code of conduct and price undertakings for the MAPS mainline north of Adelaide and the major laterals.

8.9 Moreover, Epic Energy considers that the threat of re-regulation is a significant incentive against it attempting to misuse market power.

Assessment

8.10 Submissions received by the Council raised issues about the direct costs of regulation and the possible adverse impacts of regulation on incentives for investment. Several market participants are concerned to maintain the benefits of coverage to prevent Epic Energy from exploiting its market power by raising prices. The Council is therefore focusing on these matters of public interest. No party raised other issues in relation to criterion (d).

Direct costs of coverage

8.11 Direct costs of regulation include the costs of preparing access arrangements, which are incurred by both the service provider and regulator. APIA raises concerns about the direct costs of regulation, noting in its submission to the Productivity Commission Review of the Gas Access Regime that it conservatively estimated the direct costs associated with economic regulation under the Gas Access Regime to 2001-02 at around $35 million.

8.12 Epic Energy argues that the costs of complying with the Gas Code are substantial. Epic Energy states that it has incurred in excess of $800 000 developing its first access arrangement (aspects of which were reviewed by the tribunal) and anticipates that future costs could be in excess of $1 million a year, including costs associated with the AER and the AEMC (see para 8.5).

8.13 Stuart Petroleum, by contrast, argues that the cost of regulating the MAPS under the Gas Code is immaterial compared with the estimated revenue from the MAPS (Stuart Petroleum sub 15). Stuart Petroleum also considers that any costs or inefficiencies inherent in the regulatory regime are a matter for legislative change and not a matter that the Council should consider in applying the relevant tests under that regulatory regime.

8.14 No submission comments on the costs incurred by the regulator. However, given the number of parties involved in the regulatory decision making process (which include the Council, the relevant Minister and, in particular, the ACCC (and in the future, the AER) and the tribunal) and the time it can take to settle some access arrangements the costs to government can be relatively substantial. The Council anticipates that the direct costs of coverage to government could range from about $250 000 to $2.5 million for a pipeline such as the MAPS. If it is assumed that the access arrangement is in place for a period of around 5 years this would equate to an annual figure of roughly $50 000–$500 000. The Council also acknowledges that other parties incur costs, but these might be expected to be generally closer to the lower bound of those incurred by the service provider and the government.

8.15 These costs are not overly high. Moreover, some that are commonly associated with regulation, including those borne by the service provider, may be incurred in any case; for example, in settling terms and conditions of access with third party shippers. Although the Ministerial Council on Energy has canvassed options for funding the AER and AEMC, the Council understands that there is no decision yet on whether or not funding will take the form of an industry levy (whether on covered pipelines or otherwise). Moreover, the establishment of these bodies, by streamlining administrative and regulatory functions, should lower overall regulatory costs over time.

8.16 In a similar way, the costs incurred by a service provider in obtaining approval for revisions to an approved access arrangement could be expected to be significantly less than those incurred when obtaining approval of a new access arrangement. However, Epic Energy submits that issues associated with the entry of SEA Gas and the need to revise the reference tariff mean that costs associated with revisions to the access arrangement will not necessarily make the next regulatory review easier.

Impact on investment

8.17 Epic Energy argues that coverage of the MAPS may have a negative impact on investment. Epic Energy points to the Productivity Commission's analysis, which identified the potential under regulation for reduced incentives to invest in facilities to provide new essential services or to maintain existing facilities and the potential encouragement of inefficient investment in downstream markets.

8.18 Epic Energy argues in particular that adverse incentive effects should lead to a cautious approach in considering the costs and benefits of regulation under the Gas Code, with a recommendation for coverage only where there are clear and material benefits. Criterion (d) requires however that the Council be satisfied only that the costs of regulation do not outweigh the benefits.

8.19 TXU believes the best outcomes for gas consumers in Australia will be delivered not through stringent price regulation of pipelines, but through the development of vigorous upstream competition. TXU considers that investment in pipelines will be inhibited if heavy-handed price regulation continues. TXU supports instead the replacement of the current system with a light-handed approach in which the service provider offers access to the pipeline on a non-discriminatory basis according to a set of 'open access principles' (TXU sub 16, p. 1). TXU therefore appears to support Epic Energy's proposal that it adhere to the proposed code of conduct. GasNet considers that regulation is warranted only if the MAPS does not abide by the code of conduct. Some other respondents, including Origin Energy, are concerned, however, that the potential and incentive for the misuse of market power remain without an effective enforcement system.

8.20 WMC Resources raises concerns that Epic Energy's pricing proposal, which is a 'postage stamp' tariff approach, would give little comfort to users at the northern end of the MAPS who seek a part haul service. WMC Resources considers that the postage stamp tariff will become inappropriate as use of the pipeline changes and consumption points are developed in the northern reaches of the MAPS. WMC Resources considers that the postage stamp tariff will effectively entrench a cross-subsidy from users along the northern end of the pipeline to those along the southern end. The effect of this cross-subsidy would be to distort investment decisions by encouraging use of the southern end of the pipeline. Accordingly, WMC Resources considers that the ongoing application of a postage

stamp tariff to all users of the MAPS is not efficient and is indicative of an exercise of monopoly power. The Council notes that Epic Energy has flagged the potential to offer alternative tariff structures, based say on distance or zones, at a lower price than the current postage stamp approach.

8.21 While the Council accepts that regulation can distort investment decision-making, it is not aware of any reasons why coverage of the MAPS would raise unique issues of investment risk. The MAPS has been covered under the Gas Code since its inception. Thus, issues of investor uncertainty that might reasonably be associated with greenfields pipeline investments do not arise in this case. Also Ordover and Lehr (2001) find that pricing mechanisms within the Gas Code lessen the standard concerns about inefficiencies that may result from regulatory pricing rigidities because the code does not restrict the ability of parties to negotiate away from regulated reference tariffs.

Benefits of coverage

8.22 Much of the benefit of regulating access flows from the restraint of monopoly pricing. Access regulation can make upstream and downstream industries more viable, reduce delivered gas prices to consumers and reduce the unnecessary investment in alternative facilities. Given the spare capacity on much of the MAPS and unused contracted capacity on the SEA Gas pipeline, investment in another pipeline for the region could, for example, be an inefficient use of resources over the short to medium term.

8.23 The Council's discussion of criterion (a) concluded that Epic Energy is unlikely to be able to exploit market power that it may possess in upstream and downstream markets. Continued coverage of the MAPS under the Gas Code would therefore not bring substantial competition benefits.

8.24 Epic Energy is however the sole provider of gas transport services along the mainline north of Adelaide and along the two major laterals. Epic Energy argues that because this market is small and there is little spare capacity the benefits of regulation are unlikely to outweigh the costs of regulation.

8.25 Epic Energy transports about 11–12.5 petajoules a year to Angaston and to the markets north of the Angaston lateral, including the Port

Pirie/Whyalla lateral. Of this, the Council understands that up to 6.5 petajoules a year is not subject to a long term contract. A tariff reduction of 1¢ a gigajoule (which represents about 1-2 per cent of the current regulated tariff) would therefore represent annual savings to users in the vicinity of $65 000. This means that regulation would need to restrain tariff price rises to in the order of 4-10¢ to offset the impact of the direct costs of regulation to Epic Energy on delivered gas prices (assuming all of the regulatory costs are passed on and accepting Epic Energy's estimate of the costs).

8.26 Epic Energy expects that the MAPS will have significant spare capacity across a significant portion of the system from 2006 such that the regulated tariff could rise significantly. Both Epic Energy and GasNet state that the regulated tariff could rise to about $0.85 a gigajoule. GasNet states that the dynamics of competition in the market will, however, lead to a tariff for the MAPS that is significantly less than the tariff likely to be approved under regulation (GasNet Australia sub 8).

8.27 ECCSA states, however, that Epic Energy purchased the MAPS in the knowledge that, with the entry of the SEA Gas pipeline, gas flow on the MAPS would likely halve in volume. ECCSA therefore considers that any tariff increase on the MAPS would provide a 'windfall profit' to Epic Energy to the detriment of consumers (ECCSA sub 20, p. 3).

8.28 In determining the regulated tariff the ACCC aims, among other things, to provide the service provider with the opportunity to earn a return on investment while replicating the outcome of a competitive market. It is not clear therefore that the regulated tariff would necessarily be set as high as $0.85 a gigajoule, because this price does not appear to reflect the outcomes of a competitive market, at least over the short to medium term.

8.29 Epic Energy estimates the likely price required by an efficient new entrant to be up to $0.85–$0.92 a gigajoule. This suggests there is considerable scope to raise prices for MAPS services above current levels. Indeed tariffs of $0.85–$0.92 a gigajoule are around 20–30¢ higher than the current SEA Gas offer of $0.63 a gigajoule ($2004) for firm capacity. Excessive pricing would however likely be detrimental to competition in upstream and, in particular, downstream markets, and threaten MAPS throughput. The Council considers there is therefore some doubt as to whether Epic Energy could raise prices to such levels on the MAPS.

8.30 Epic Energy states that it would not attempt to raise prices above competitive levels and has committed to a code of conduct and price undertakings. In the absence of a mechanism to enforce the code of conduct there is however no stricture on Epic Energy to adhere to its commitments. Given the time taken to resolve coverage matters, the opportunity to raise prices could extend over several years.

Conclusion on criterion (d)

8.31 The Council is not satisfied that access (or increased access) to the services provided by means of the MAPS would not be contrary to the public interest — that is, criterion (d) is not satisfied.

Submissions and references

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Epic Energy 2005, *Application under sections 1.24 And 1.25 of the National Third Party Access Code for Natural Gas Pipeline Systems for revocation of coverage*, Melbourne, March 2005.

Submissions in response to the issues paper

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1	APIA (the Australian Pipeline Industry Association)
2	ECCSA (Electricity Consumers Coalition of South Australia)
3	Epic Energy, Letter concerning response to issues paper, May 2005
4	Epic Energy, Response to issues paper, May 2005
5	Epic Energy, Further submission, May 2005
6	Epic Energy, Cover letter to supplementary submission, May 2005
7	Epic Energy, Supplementary submission, May 2005
8	GasNet Australia
9	Institute of Public Affairs
10	OneSteel Manufacturing
11	Origin Energy
12	Pelican Point Power
13	Santos
14	SEA Gas (South East Australian Gas)
15	Stuart Petroleum
16	TXU
17	WMC Resources
	Submissions in response to the draft recommendation:
18	International Power
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