Major Energy Users Inc.

Australian Energy Markets Commission

Stage 2 East Coast Wholesale Gas Markets and Pipeline Frameworks Review

PIPELINE REGULATION AND CAPACITY TRADING DISCUSSION PAPER

Reference: GPR0003

Submission by

The Major Energy Users Inc

October 2015

Assistance in preparing this submission by the Major Energy Users Inc (MEU) was provided by Headberry Partners Pty Ltd and Bob Lim & Co Pty Ltd.

This project was part funded by Energy Consumers Australia (www.energyconsumersaustralia.com.au) as part of its grants process for consumer advocacy and research projects for the benefit of consumers of electricity and natural gas.

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1. Introduction

The Major Energy Users Inc (MEU) welcomes the opportunity to provide its views on the AEMC pipeline regulation and capacity trading discussion paper.

The MEU considers that Australia's energy resource endowments have contributed to the development of a range of energy-intensive industries. Stemming from the use of products from some of these industries (e.g. fertilisers and explosives), they have also contributed to fostering our internationally competitive mining, minerals, agricultural, manufacturing and processed foods industries. These linkages are particularly important, as are the linkages to the economic and social benefits arising from the location of these industries in regional, rural and remote areas and the development of a more broadly based economy.

However, the promising outcomes from the well thought out energy reforms, begun in the 1990s to enhance Australia's economic development, have been sadly overturned by the loss of our international competitiveness in electricity and, more recently, gas pricing.

A number of factors have contributed to this loss of competitiveness in electricity and gas supply costs. They include the failure of national regulation to restrain increases in gas and electricity network costs. However, they also include a lack of political and regulatory will to respond to emerging challenges in the energy market in an effective and timely fashion. The current review of east coast gas wholesale gas markets is welcome but, we conclude, lacks the focus and sense of urgency required to address the critical issues now facing Australian manufacturing industry.

The MEU, which represents large industrial operations that employ many ordinary Australians, particularly in regional areas, has made several submissions during the Energy White Paper process and, more recently, to the reviews of the east coast gas markets by the ACCC and the AEMC stage 1 review on the very real threats to these industries face due to higher gas prices and potential shortages in supply. We are very concerned that the AEMC's process takes note of these previous submissions and recognises the urgency of dealing with the core market issues.

1.1 About the MEU

The Major Energy Users Inc (MEU) represents the interests of large energy consumers operating on the east coast gas markets and in other jurisdictions. The MEU comprises some 30 large energy using facilities in NSW, Victoria, SA, WA, NT, Tasmania and Queensland. MEU member companies – from the steel, cement, paper and pulp, automobile, tourism, mining and the mining explosives industries – are major manufacturers in the NEM and in other

jurisdictions, are significant employers of labour and contractors, and are located in many regional centres, including Gladstone, Newcastle, Port Kembla, Albury, Western Port, Mount Gambier, Port Pirie, Kwinana and Darwin.

Analysis of the energy usage by the members of MEU shows that in aggregate they consume a significant proportion of the gas used domestically and electricity generated in Australia. As such, they are highly dependent on the competition that applies to the provision of gas and electricity, the retail functions needed to enable the competition to apply and to the transport networks to deliver efficiently the energy so essential to their operations.

Many of the members, being regionally based, are heavily dependent on local suppliers of hardware and services, and have an obligation to represent the views of these local suppliers. With this in mind, the members of the MEU require their views to not only represent the views of large energy users, but also those of smaller power and gas using facilities, and even at the residences used by their workforces that live in the regions where the members operate.

The companies represented by the MEU (and their suppliers) have identified that they have an interest in the **cost** of the energy as well as the associated network services as this comprises a large cost element in their electricity and gas bills.

A failure in the supply of electricity or gas effectively causes every business affected to cease production, and MEU members' experiences are no different. The loss of supply effectively prevents the operations deliver the high products the members make for their markets. Thus the **reliable supply** of electricity and gas is an essential element of each member's business operations.

With the introduction of highly sensitive equipment required to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly important with the focus on the performance of the energy transmission and distribution networks, because the transport systems control the quality of electricity and gas delivered. Variation of electricity voltage (especially voltage sags, momentary interruptions, and transients) and gas pressure, by even small amounts, now has the ability to shut down critical elements of many production processes. Thus member companies have become increasingly more dependent on the quality of electricity and gas services supplied.

Each of the businesses represented by MEU has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy supplies is required.

If sustainable supplies of energy are not available into the future, these investments will have little value.

Accordingly, MEU members are keen to address the issues that impact on the **cost, reliability, quality** and the long term **sustainability** of their gas and electricity supplies.

The members of MEU have identified that in addition to the need for strong competition in the competitive parts of the energy supply chains, energy transport plays a pivotal role in the energy markets. This role encompasses the ability of consumers to identify the optimum location for their investment in their production facilities, and provides the facility for generators and gas producers to also locate where they can provide the lowest cost for energy supplies. Equally, consumers recognise that the cost of providing the transport systems are not an insignificant element of the total cost of delivered energy, and due consideration must be given to ensure there is a balance between the competing elements of price versus reliability, quality and long term security;

The MEU recognises there is tension between the four elements of cost, reliability, quality and long term security and therefore makes its comments in this submission in full knowledge of the need for managing this tension.

1.2 The two elephants in the room

In regard to the issues raised in the AEMC's Discussion Paper, the MEU has identified that there are two overarching issues that dominate the domestic gas market operations on the east coast.

Elephant #1

> The domestic east coast gas market is dominated by a very few gas producers and very few gas production facilities. Adding to this, each gas production facility is served by a sole gas pipeline to transport the gas produced to each of the major domestic gas markets.
>
> Further, there are few providers of gas transmission services for the domestic east coast market, with APA Group having by far the largest holding of all of the east coast gas transmission pipelines. Because it controls so much of the gas transmission services, the contractual arrangements for accessing capacity over much of the east coast gas transmission system are effectively determined by APA Group.
>
> This domination by a very few of the production and transmission of gas on the east coast creates extraordinary challenges to develop a competitive gas market, and provides those few companies providing

production and transmission services significant control. Without some form of countervailing power to protect the interests of consumers, the current structure on the east coast limits the competition needed to provide efficient outcomes for consumers regardless of the market structures put in place.

Elephant #2

The domestic east coast gas markets are dominated by a small number of very large retailers which has resulted in them being the dominant shippers on the gas transmission pipelines. These large retailers have the ability to use their position in the markets to control the capacity of the gas transmission services. Because these retailers are so important to the gas transmission pipeline owners, there is a synergistic relationship between the pipeline owners and the large retailer/shippers which does not provide the most competitive outcome for consumers.

Supporting these views, the MEU notes that in a recent presentation on 17 September, ACCC Chair Rod Simms commented that:

"Indeed many aspects of the east coast gas market are opaque and complicated.

- The market is dominated by confidential, bi-lateral contractual arrangements which make price discovery almost impossible.
- Trading markets are immature and illiquid, with conflicting views as to their utility.
- At nearly all points along the value chain, the market is dominated by large players: be they gas producers and processors, pipeline operators or gas aggregators and retailers.

These types of characteristics have the potential to set a market up for the inappropriate exercise of market power."

MEU members have confirmed the views expressed by the ACCC Chair are what they see is occurring and which the reflects the ability of a very few to set prices for gas at various points in the supply chain that unnecessarily inflates the cost of gas to domestic end users.

1.3 MEU views expressed in the response to the Stage 1 draft report

The MEU provided views on the specific issues of the STTM and the DWGM, indicating that, on balance, there was no need for wholesale redesign of the STTM or the DWGM. The MEU commented that, by any measure, the DWGM had proved to be a resilient and reliable market. The MEU did agree that there were aspects of both the STTM and DWGM where improvements could be

made but these do not require redesign. Despite these observations, the AEMC appears to be persistent in the need for redesign.

The MEU makes to following observations regarding various aspects of the east coast gas markets

1.3.1 Competition impacts on liquidity

MEU has also noted that there is an essential assumption by the AEMC made that there is a need to redesign the current gas markets to enable increased liquidity in them. The MEU does not dispute that a competitive market might well exhibit significant liquidity in the gas markets but highlights that the fact that the markets do not exhibit liquidity could well be a result of limited competition in production, gas transmission and retail functions (see section 1.2 above) rather than a failure of the current market structures. By not addressing fundamental structural flaws that deliver very low competition in the production and delivery of gas, the AEMC could well be seeking solutions that are not needed by focusing on the wrong aspects of the supply chain.

What is also not addressed by the AEMC is that the current market arrangements may well exhibit increased liquidity if there was a need for this. If the overall supply chain structure does not provide a need, or does not allow the ability for the secondary markets to evolve, then the absence of a liquid secondary market is not necessarily the fault of the market arrangements in place. The MEU points out that the SA regional electricity market in the period 2008-2010 exhibited significant illiquidity but this was not caused by a flaw in the market arrangements but was a direct result of market power being exercised, permitted by low competition at the point of production.

The AEMC has drawn a conclusion that the illiquidity in the gas markets is a flaw in the market arrangements but has reached this conclusion without assessing what other causes might have led to the apparent illiquidity.

1.3.1 Contract carriage v Market carriage

In addition to not addressing the lack of upstream competition, the AEMC has also asserted a view that (Discussion Paper page 6)

> "The contract carriage model has been generally considered to-date to have resulted in timely and efficient investment in new capacity."

The MEU challenges this assertion derived from the report to the AEMC in 2013 by K Lowe Consulting, *Gas Market Scoping Study*. In the Lowe report, the specific observation about the view that contract

carriage provides a better investment outcomes is made in contrast to supposed difficulties in gaining investment in the Victorian transmission network (the DTS) which operates under the market carriage model and the conclusion is drawn that the cause of the problem lies with the model of carriage used - market or contract. What is not highlighted, is that almost universally, transmission pipelines operating under contract carriage are not regulated. In contrast, the DTS is regulated and the augmentation of the DTS has to undergo both AER and AEMO assessments of the need for augmentation.

This means that the conclusion reached that contract carriage provides better investment could just as easily be a result of regulation and/or the AEMO processes rather than the type of transmission control. As the Lowe report was based on stakeholder interviews there could be a clear bias that stakeholders were really responding to the perceptions of regulation on investment and/or the AEMO approaches rather than the type of carriage model used. It should be recognised that the electricity market uses the market carriage model for energy transmission and there is no recommendation in the electricity market that market carriage should be replaced with contract carriage. The MEU therefore considers that greater investigation and more evidence than anecdotal stakeholder input (such the Lowe report is based on) is warranted to support the assertion.

The MEU also notes that the Lowe observations in table E.2 of its report (summary of stakeholder comments page x) under Victorian market carriage model:

> "In general stakeholders recognise that this model has a number of positive attributes but concerns have been raised about the timeliness and efficiency of investment in the DTS and the difficulties some have experienced in the past exporting gas via the DTS."

The MEU points out that the "difficulties" experienced in the past about timeliness and efficiency of investment is clearly a reference to the regulatory draft decision by the AER not to approve the augmentation of the Culcairn interconnect as a regulated augmentation and to gaining AEMO support for some augmentations of the SW Pipeline. The MEU points out that the AER decision was appropriate as the AER recognised that Victorian consumers should not have been required to pay for augmentations that do not provide value to Victorian consumers - an augmentation to provide greater export would have clearly been of no value to Victorian consumers[1].

[1] The MEU notes in the Lowe report that export of gas from Victoria should be funded by all users benefiting from the augmentation and that the AER was initially incorrect in not allowing the augmentation of the Culcairn interconnect. The MEU notes that in the electricity market, it has been recognised that importers of energy should contribute to the cost of the assets used

What is also overlooked in the Lowe report is that in the DTS, it is AEMO which identifies the need for augmentations and it has been demonstrated that AEMO actions have generally led to a DTS which has performed extremely well with regard to ensuring augmentations occur as and when required, despite there being some specific projects which might have seen some procedural delays.

MEU members have advised there are also instances under contract carriage where augmentations do not occur as and when required and that there are barriers to new entrants. This is a result of the contract carriage model tending to impose a requirement on the new entrant to underwrite the cost of the entire augmentation - a cost impost that actively militates against implementation of augmentation.

The MEU considers that the assumption that it is the contract carriage model which results in more timely investment is not proven and the AEMC needs to recognise this as it undergoes this stage 2 review.

A criticism made of market carriage is that, whilst capacity is provided on an as available basis to all shippers, when there is congestion, there are significant costs (eg uplift and ancillary payments) which are usually not known until ex post. Equally, in contract carriage there are significant charges for over-running capacity which apply regardless as to whether there are constraints or not[2]. Whilst over-run charges are set at known levels, the frequency of over-runs is unknown meaning that overall, over-run charges are also unknown. Few shippers are aware of an over-run until ex post so the cost of over-runs is only known ex post, just as in market carriage. So to assert that market carriage results in unknown (and at times significant penalties) and contract carriage does not does not reflect the realities.

1.3.3 AMDQ impacts on market carriage v contract carriage

The MEU points out that the reason for allocating MDQ in the DTS was primarily driven by a need for end users to "own" their own capacity on the transmission network. The risk for consumers is that if the capacity is "owned" by (say) retailers then retailers can use this ownership to utilise this capacity for other end users and so leave the initial "end user owner" of the capacity without firm access to the DTS, and so putting the initial end user at risk of insufficient gas supplies. AMDQ is

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in the exporting region that allow this import. However, under the Gas Rules, there is no similar provision so that (in the case of the Culcairn interconnect) there was no provision for NSW end users (the beneficiaries of the augmentation) to contribute to the augmentation made in Victoria and paid for by Victorian end users.

[2] It needs to be recognised that contract carriage imposes over-run charges regardless as to whether the over-run caused congestion or not, so there is a cost for over-runs under contract carriage, potentially even higher than the costs of over-runs under market carriage

a recognition that it is end users of the DTS that effectively underwrite the building of the DTS through their commitment to use gas.

Under contract carriage, end users have already seen that retailer/shippers have used "ownership" of capacity to prevent competition through "hoarding" of the available firm capacity. Allocation of capacity to end users (as in the DWGM) has provided a clear and unambiguous approach to ensure that "hoarding" of capacity to the detriment of consumers, is much more limited and therefore protects the investments made by the end users by having capacity available which, in turn, prevents retailers from using capacity rights to prevent competition.

1.3.4 Gaining new capacity in a contract carriage model

The MEU notes that under contract carriage, the pipeline owner allocates capacity based on a queuing methodology usually where the first in the queue is assessed on when the application for capacity is made[3].

The most efficient method for allocating capacity on monopoly assets is by allocating capacity to the shipper that values it most, rather than capacity being allocated on an arbitrary basis by the pipeline owner. By allocating capacity on the value of the capacity to shippers and potential shippers provides a clear signal as to when augmentation is required. Allocation on any other basis does not provide a strong signal of the need for augmentation. An auction of the available capacity is a common approach to identifying which shipper values the capacity the most and to what value. This mechanism provides a clear value of the capacity provided and identifies whether augmentation is warranted and to what amount. Yet auctioning capacity is not common practice on the east coast.

Under the current approaches used in contract carriage, the signal for new investment is obtained when a new entrant advises that it will underwrite the augmentation. By allocating all of the costs to the new entrant provides a financial barrier to new entrants.

The MEU points out that in a market carriage model, such as augmentation of energy transmission in the NEM, is based on assessments of identified need for all shippers, and not just the new

[3] See for example the queuing requirements issued by NT Gas (an APA Group subsidiary) for access to the Amadeus gas pipeline. The Amadeus Gas Pipeline Access Arrangement Revision Proposal section 2.2.4 explains how capacity is allocated and is available at http://www.aer.gov.au/system/files/Amadeus%20Gas%20Pipeline%20-%20Access%20Arrangment%20revision%20submission%20%20-%20public%20-%20August%202015.pdf

entrant shipper. The cost of the augmentation is then allocated to all shippers so that all shippers ultimately benefit from greater utilisation of all the assets used in delivering energy to end use points.

1.3.5 Natural monopoly pipelines

In its submission to the ACCC east coast gas review, the MEU provided first hand experience of attempting to get a natural monopoly pipelines "covered" and subject to regulation. The experience demonstrates clearly that the coverage provisions in the Gas Rules (and Gas Code) are totally inadequate for the purpose of preventing monopoly rent seeking and provide no protection at all for consumers.

The MEU notes the reports to the AEMC from Incenta and Castalia that both point out that the rules for gaining coverage of monopoly pipelines are probably insufficient for the task. The experience of MEU member Kimberly-Clark Australia (KCA) in attempting to gain coverage of a monopoly pipeline in South Australia certainly supports the views expressed in the two reports that the rules for gaining coverage are not fit for purpose, particularly where the owner of the pipeline is not involved in upstream or downstream activities (the focus of the coverage test criterion (a)) and yet is willing to provide access to the asset, albeit at a price including monopoly rents. This even applies where the asset clearly provides a monopoly service where it would be uneconomical to duplicate the asset in order to break the monopoly.

1.3.6 Capacity trading and hoarding

The MEU agrees with the AEMC that there is limited capacity trading and it is probable that this is a direct result of the lack of a transparent and readily accessible market for capacity trading.

The MEU also points out that the lack of capacity trading is also impacted by capacity hoarding and MEU members have seen the outcomes of this first hand where available capacity is not made available as this would result in greater competition[4] to the shipper(s) holding the capacity. The MEU has provided advice to the ACCC east coast gas review regarding such activities in response to its review of the east coast gas market.

[4] Particularly in downstream markets

2. Accessing capacity on a pipeline

The AEMC provides a comprehensive assessment of how it is possible to acquire capacity on an existing pipeline.

What the assessment fails to discuss are examples where interruptible capacity is priced higher than firm capacity to other shippers. The AEMC comments (page 13) that:

> "…non-firm capacity does not require a long term commitment from a shipper on a take-or-pay basis. Were non-firm capacity priced too low, this may undermine the incentives to invest in new capacity as shippers free-ride on capacity underwritten by other shippers."

What the AEMC does not recognise that most end users seek capacity on a continuing basis and not on an interruptible basis. The reason for contracting on an interruptible basis is that there is no firm capacity being offered. The implication of the AEMC note is that interruptible capacity is being sought in preference to firm capacity. Pipeline providers will only increase the capacity of their pipelines when firm capacity is sought and the increased capacity is effectively underwritten in the long term.

Interruptible capacity cannot be, by its very nature, a long term commitment and is unlikely ever to provide a signal for augmentation. As there is a risk to the shipper using interruptible capacity, there needs to be some reflection of this greater risk being carried by the shipper. To price interruptible capacity higher than firm capacity does not reflect the benefit and certainty that firm capacity holders have.

2.1 AEMC questions

In section 2.2 Potential Impediments to efficient outcomes, the Discussion Paper queries:

- "whether it has correctly identified the issues and their causes;
- any evidence of their materiality; and
- whether the issues could be addressed without regulatory intervention and, if so, over what timeframe this might occur."

The MEU considers that, subject to the comments above and in section 1, the AEMC has assessed the issues well.

The MEU considers that the issues are material as end users have been able to quantify the excessive costs they have incurred through:

- capacity hoarding which has prevented downstream competition both

  - directly where no firm access is made available to other shippers and
  - indirectly where the firm shipper proposes to re-allocate capacity away from the existing end user to alternative end users if the end user seeks another provider

- the non-provision of interruptible capacity being prevented because of concerns by firm capacity holders expressed to the pipeline owner, especially where there is physical capacity available for use by other shippers.

The costs that MEU members alone have incurred as a result of capacity hoarding and monopoly rents are measured in millions of dollars each year. Extrapolating these experiences to the wider east coast gas market indicates that the issues concerning MEU members are indeed material.

The MEU considers that the issues identified in the gas market in section 2 of the Discussion Paper are not those that can be addressed without regulatory intervention. If they could have been addressed, the MEU considers that they would have been done so, and the fact they haven't, is tantamount to support that regulatory intervention is needed.

The MEU notes that the Discussion Paper identifies that probably the most competitive of gas markets (that in the US) requires more regulation than seen in the east coast gas market, also supports a view that the east coast gas market needs regulation to address the anti-competitive elements already experienced by end users.

The Discussion Paper observes that there are constraints in the east coast gas market that mitigate the lack of regulation, viz (page 17)

- "competition from other pipelines in the provision of gas transportation services;
- the existence of competitive markets upstream or downstream from the pipeline which would price many shippers out of the market were they charged monopoly prices, imposing an indirect price constraint on the pipeline owner;
- countervailing negotiating power on the part of the shippers, because they are typically few in number and well-resourced; and
- the threat of economic regulation under the access regime, present because the regulatory status of pipelines can be changed over time."

The MEU comments that these constraints are not seen by end users.

- Whilst there is competition from other pipelines, each pipeline sources gas from a specific production point. This means that if a shipper has a contract for gas from a specific producer, then it must use the pipeline

that delivers from that production centre to the end use point. This means that pipelines do not have competition as there is no other pipeline to provide the necessary transport capacity. This therefore means that pipelines have monopoly stature when transporting gas from a specific production centre to a specific end use point. The only competition a pipeline has is derived from the competition afforded by other production centres.

For example, an end user in Adelaide has two options for sourcing gas (other than sourcing gas directly from the STTM) - from Moomba or Port Campbell. If the gas is sourced from Moomba, the shipper has to pay for gas transport on MAPS or if from Port Campbell to pay for transport on SEAGas. Once a source of gas is identified, the pipeline then has a monopoly characteristic

- Large end users might be considered to have some countervailing negotiating power due to their size, but in practice this is not real - regardless of size, a monopoly does not need to negotiate. Larger retailer/shippers have a little more negotiating power because of the large amounts of gas they need. This frequently requires them to source gas from multiple production centres and this then allows them to have some negotiating power with the transmission pipeline owners but smaller retailer/shippers are at a disadvantage in this regard and so limits their ability to compete on behalf of their customers which tend to be smaller end users.

- The threat of regulation is non-existent. The fact that KCA failed to gain coverage of what is clearly a monopoly pipeline has shown that the threat of regulation is a "paper tiger". The inability to gain coverage highlights that the current gas Rules are inadequate and the reports from Incenta and Castalia support this view. The MEU understands that KCA provided input to the ACCC regarding its experiences relating to the pipeline it tried to get coverage over for both itself and other gas users using the transport facilities.

The MEU notes the rhetorical question on page 21 of the Discussion Paper - Is the third party access regime addressing the relevant issues in the transmission sector?

The MEU considers that the issue in the gas transmission sector is not whether access will be made available, but the question is at what price and under what conditions will access to gas transmission pipelines be granted in the east coast gas market.

2.2 Conclusions

Overall, the MEU is of the view that the current regulatory regime is providing an appropriate level of regulation and does not address the most relevant market failures in the gas transmission sector.

3. Overseas approaches

The Discussion Paper identifies that overseas approaches to regulation in gas transmission have addressed (page 24):

- define and standardise the capacity right product, in order to reduce transaction costs;
- improve the procedures by which capacity is provided to the market, so that the information available to the market is increased and to improve the ability of shippers that value capacity to obtain it;
- compulsorily reallocate capacity where it is being underutilised, to address potential hoarding behaviour; and
- regulate the price of capacity, to reduce the market power of pipeline owners.

3.1 A standard product

The MEU considers that the ability of pipeline owners to decide on their own approaches to capacity products clearly highlights that the competition in the gas transmission market is a misnomer. Where there is competition, asset owners ensure that they seek the most customer effective approach to selling their products. In contrast, where the market is based purely on a small number of providers being able to set the parameters for their own unique product because they don't compete, then a secondary market will not develop and this is what is seen in the east coast gas market. In the absence of a standard product, there can be no liquidity in a secondary market.

The MEU sees there is value in a market where trading of a standard capacity product can be readily implemented.

At the same time, the MEU recognises that end users will still tend to rely on long term bilateral contracts, reflecting their own unique needs, for at least some of their gas transport needs.

3.2 Hoarding

As noted above, hoarding of capacity has actively prevented many end users from accessing competition for the gas they need by not being able to access capacity.

Some end users (mainly those within the DWGM and STTMs) have accessed gas directly from those markets to overcome the impacts of hoarding of capacity, but the MEU highlights that end users outside those markets do not have the DWGM and STTMs to fall back on when capacity hoarding is occurring. The MEU particularly notes that capacity hoarding is especially

prevalent on laterals from main transmission pipelines where buying all of the firm capacity is not as significant a financial impost.

3.3 Monopoly pipelines

Also as noted above the MEU is aware that there are monopoly pipelines that are not regulated and have used their monopoly status to acquire monopoly rents. For example, the pipeline from Moomba to Sydney is effectively a monopoly service provider for delivering gas from Moomba to Sydney - no other pipeline provides this service. There are many other such pipelines that provide monopoly services from specific production centres to specific demand centres. The Australian approach to assessing whether pipeline should be covered relies purely on aspects of upstream or downstream competition rather than an assessment of whether the service is unique (and therefore effectively being a monopoly).

In contrast to the Australian model, the MEU notes with interest that the US gas market (one highlighted as being competitive with a liquid secondary market) assumes that a pipeline is a monopoly and will be regulated as such unless the pipeline can demonstrate that it does not have market power. This is the reverse of what occurs in the Australian gas rules (regardless as to whether the gas rules are effective - which they are demonstrably not). The US approach reflects what was done by Australian governments when Appendix A to the Gas Code was published where they considered that all gas pipelines providing a unique service were effectively monopolies.

Subsequent to the issue of Appendix A, the Australian market model effectively assumed that if there is a duopoly (ie two gas pipelines delivering gas to a demand centre) this is tantamount to competition and little or no regulation is needed. The MEU points out that the National Competition Council considered that the entire Moomba to Sydney gas pipeline system should be regulated but was over-ruled by the relevant government minister who effectively decided that two pipelines from different production centres provided competition and the Competition Tribunal agreed with the Minister's decision. A similar conclusion was reached for the same reasons when coverage was revoked for the Moomba Adelaide pipeline system.

3.4 Conclusions

Overall, the MEU is very concerned that the gas rules have been used (and abused) to generate greater wealth for the asset owners and large shippers at the expense of providing a competitive market which is designed to provide a market that operates "in the long term interests of consumers".

It is concerning that overseas markets long ago identified that there are a number of controls that must be in place on gas transmission pipelines to ensure there is equity between providers and end users yet, in Australia, we are only just starting to address concerns that consumers have been raising for some time and have been addressed in other jurisdictions.

The MEU also notes that in the EU, non-firm capacity is considered to be a lesser service than firm capacity and must be priced as such. This clearly points out that the observation made on page 13 of the Discussion Paper attributed to pipeline owners (note 28) that non-firm capacity should effectively be considered a market signal for new investment.

4. Potential reforms

The Discussion Paper posits three broad reforms to address three identified impediments, viz

- high transaction costs;
- lack of incentives to provide access by shippers that hold capacity; and
- lack of incentives to facilitate access by pipeline owners.

The reforms proposed are

- **Approach A** – Facilitate trading between parties, which primarily addresses transaction cost issues;
- **Approach B** – Improve the incentives of capacity holders in the provision of capacity; and
- **Approach C** – Improve the incentives of pipeline owners in facilitating access to capacity.

The approaches are summarized in table 4.1

Table 4.1 Approaches to address inefficiencies in the allocation of capacity

Approach A – Facilitate trading between parties	Approach B – Improve the incentives of capacity holders in the provision of capacity	Approach C – Improve the incentives of pipeline owners in facilitating access to capacity
Standardisation of capacity rights	Compulsory capacity reallocation mechanisms	Changes to the economic regulation of pipelines
Pipeline owners required to offer spare firm capacity in a transparent, open process	Prohibit contractual provisions in GTAs which limit capacity trading by pipeline owners	Prohibit contractual provisions in GTAs which limit capacity trading by shippers
Information about available capacity and trades to be published through a bulletin board	Reserve capacity for short term trades	
Voluntary surrender of capacity mechanism		

The MEU considers that these different approaches should be assessed against specific criteria. The MEU member experiences in relation to gas transmission the east coast market has highlighted that:

1. Pipelines have used their monopoly status to extract monopoly rents. The MEU considers that the criteria for gaining coverage needs to reflect whether the pipeline is a monopoly asset rather than be assessed on upstream/downstream competition grounds

2. Shippers have hoarded capacity to extract monopoly rents through preventing access to competitors

3. Pipelines have used their queuing practices to impose on new entrants the full costs of augmentation and so impose barriers to entry

4. There is little trading of capacity and a more liquid capacity trading market would benefit all shippers

The MEU uses these four test criteria as a basis to assess the merits and detriments of the three approaches posited.

4.1 Approach A - facilitate trading

The Discussion Paper posits that approach A assumes that:

> "…shippers and pipeline owners have incentives to trade capacity but that transaction costs are the primary barrier to such trades." (page 33)

The approach does provide the basis for greater trading of capacity when the pipeline owners and shippers seek to make available capacity that each might hold. This would then address assessment criterion 4 of the four assessment criteria identified by the MEU. However, as the Discussion Paper identifies

> "… it may not, on its own, change the incentives of shippers or pipeline owners in providing or facilitating access to capacity." (page 34)

The MEU agrees with the AEMC assessment as approach A does not address any of the other three assessment criteria posited by the MEU that must be addressed. As the approach A is based on voluntary involvement, it does not address underlying inefficiencies in the current arrangements. Specifically, approach A does not provide any incentive on owners or shippers to limit their use of capacity where this capacity provides them with an ability to extract monopoly rents.

Auctioning of spare capacity does not necessarily provide a signal for investment in new capacity and its practice might well undervalue the capacity available and lead to existing shippers seeking lower prices for capacity.

Auctioning capacity when there is a constraint provides a signal as to the value shippers place on the limited capacity available and so generates a

clear indication of the need for new investment. Such an auction would also provide the basis for the allocation of limited capacity before any augmentation is provided. But approach A does not require auctioning of all capacity - just of spare capacity.

The AEMC observes that making capacity trades publicly available could expose trades that the counterparties might want to keep commercial in confidence, particularly price considerations and amount of capacity traded. When pipelines are regulated, price information is publicly available. Unless capacity trading is made public, the value of such information is minimised. The MEU accepts that some end users might not want the total amount of capacity accessed made public, but having subparts of the capacity they have contracted made public would be less of a problem.

It must be remembered that the lack of information provides the owner of the capacity with a greater ability to use their knowledge to the detriment of consumers. Overall, consumers benefit from greater disclosure.

The MEU considers that approach A would provide some benefit to the market but would do little to address the underlying major concerns of end users.

4.2 Approach B - increase incentives on holders to provide capacity

Approach B assumes that intrusive methods are required to release unutilised capacity that is being hoarded, usually in order to prevent competition downstream. The MEU sees that incentives to encourage the release of hoarded capacity would need to be greater than the reward achieved by the hoarding. Therefore relying on incentives will still deliver a reward to the capacity holder through either the continuation of the hoarding practice or from the reward from releasing the unused capacity. Either outcome imposes an unnecessary cost on consumers and is inefficient.

Allocation of capacity to end users (eg as in the DWGM with its allocated MDQ) recognises that it is ultimately end users that underwrite the investment made in delivering gas. Retailers access capacity as a means to provide a service to end users as they only trade the gas rather than use it. This means that retailers will underwrite pipeline transmission augmentation on the basis of actual or expected additional gas usage that their customers have identified. If by underwriting an augmentation, a retailer can then hoard the capacity to prevent competition, then this is also a reason for commissioning additional capacity.

The Discussion Paper highlights how the issue of capacity hoarding is overcome in the EU but does not show how the problem is addressed in the

US. This is particularly important as the US is based on contract carriage which is currently used by most pipelines on the east coast.

Regulation of pipelines operating on a contract carriage basis can assist in addressing hoarding, but not entirely as there is still the ability for a shipper to acquire capacity which is then hoarded to limit competition. Market carriage (as used in the DWGM and the electricity market) would appear to overcome the issue of hoarding as there is no value in a shipper buying capacity that it is not using as spare capacity is allocated automatically to other users.

MEU members advise that they see the issue of hoarding almost invariably on lateral pipelines off a large capacity pipeline indicating that the issue of hoarding might be predominantly being applied on smaller pipelines where the physical capacity can be more readily acquired by a single user or, less frequently, by two or three shippers. Where there are multiple shippers on a pipeline (such as occurs with large capacity pipelines), the issue of hoarding effectively seems to disappear as there is usually multiple sources for available capacity.

A disincentive to hoard capacity could be to impose a requirement that all pipelines must offer interruptible capacity at a price lower than the price for firm capacity reflecting the lower value service. This would allow new shippers to access available capacity at a discount to the price for firm capacity and so make hoarding of firm capacity less attractive. But this approach would only be successful where there is unused capacity available at all times.

In the discussion of the various options, it should be noted most end users either have a reasonably fixed capacity requirement for the entire year (eg typical manufacturing requirements) or high capacity needs on a seasonal basis (eg residential needs for space heating in winetr). Retailers and some electricity generators can have relatively short term needs for capacity depending on how their portfolio of gas use needs to optimised in the short term. All three sectors need to be accommodated and the MEU counsels the AEMC to address the various approaches contemplated in the Discussion Paper against these options so that all groups have their needs addressed.

For example, except perhaps for trading at the margin, most large end users have a need for relatively fixed capacity for gas on a continuous basis. This would mean that this group would be seeking long term capacity availability and oversell and buyback and firm day-ahead use it or lose it have less value than the long term use it or lose it option. This implies that no one option would address all circumstances.

The Discussion Paper also raises the issues of the "free rider" and property rights which might lead to a risk that new investment in capacity might not be underwritten and so not provided expansion when needed. The MEU sees that the market carriage model provides a potential solution when coupled to

an independent assessment of future needs - again as successfully seen in the electricity market and the DWGM.

The MEU sees that approach B addresses some of the four criteria identified above but, as with approach A, not all of them.

4.3 Approach C - increase incentives on owners to provide access to capacity

The MEU considers that getting coverage of pipelines under the current rules - even those with clear monopolies for transmission of gas - is very difficult and allows pipelines without competition to garner monopoly rents. The reports by Incenta and Castalia both identify that this is a major flaw in the current gas rules.

The MEU considers that pipelines without competition should be regulated, and even those providing supposed competition by bringing gas from other gas fields should be regulated. This approach is consistent with the way gas pipelines in the US and Europe are treated. The absence of regulation is a detriment to consumers' long term interests. The MEU notes the concerns raised in the Discussion Paper about the disadvantages of regulation, but considers these are readily overcome - just as they were in 1997 when the Gas Access Code was established by government edict, and the Appendix A to the Gas Code declared which pipelines were monopolies.

Whilst new pipelines could be exempted from regulation for 15 years, this can be managed by setting a haulage tariff for this period. Once the foundation haulage tariff agreement expires, the pipeline should be regulated unless it is truly subject to competition. This would allow the owner/developer of the pipeline to recover a risk premium prior to receiving a regulated return.

The MEU notes that pipeline owners have actively sought revocation of coverage and points out that the prime reason would be so the owner can get an overall better return on its assets. This provides prima facie evidence that lack of regulation provides a better outcome for owners and the ability to garner monopoly rents.

An asset owner (particularly one providing a unique service) will impose on users conditions that benefit the asset owner. These are included in any gas transportation agreement. Even where the prospective shipper is a large organisation, if the pipeline provides a unique service, the pipeline owner can impose restrictive conditions as the prospective shipper has no reasonable alternative to accepting the onerous conditions. The term "negotiating" when used in relation with a monopoly is an oxymoron.

The MEU considers that providing there are reasonable physical controls on subsequent shippers (eg compliance with gas quality, providing nominations in accordance with market rules, etc) the primary shipper should be able to sell some or all of the capacity it holds to other parties.

4.4 Conclusions

All of the approaches (A, B and C) address different aspects of pipeline operations and so all are needed to deliver an efficient gas transmission service for the east coast.

The MEU notes that while approach A would be the easiest to implement, it does not address the fundamental issues that have caused consumers considered harm under the current regime.

Implementation of controls to prevent hoarding of capacity coupled to regulation of monopoly pipelines (ie pipelines that have no competition to the unique service they provide) - ie approaches B and C - will result in more efficient usage of gas transmission assets and will prevent pipeline owners and shipper/retailers imposing unnecessary costs on consumers.