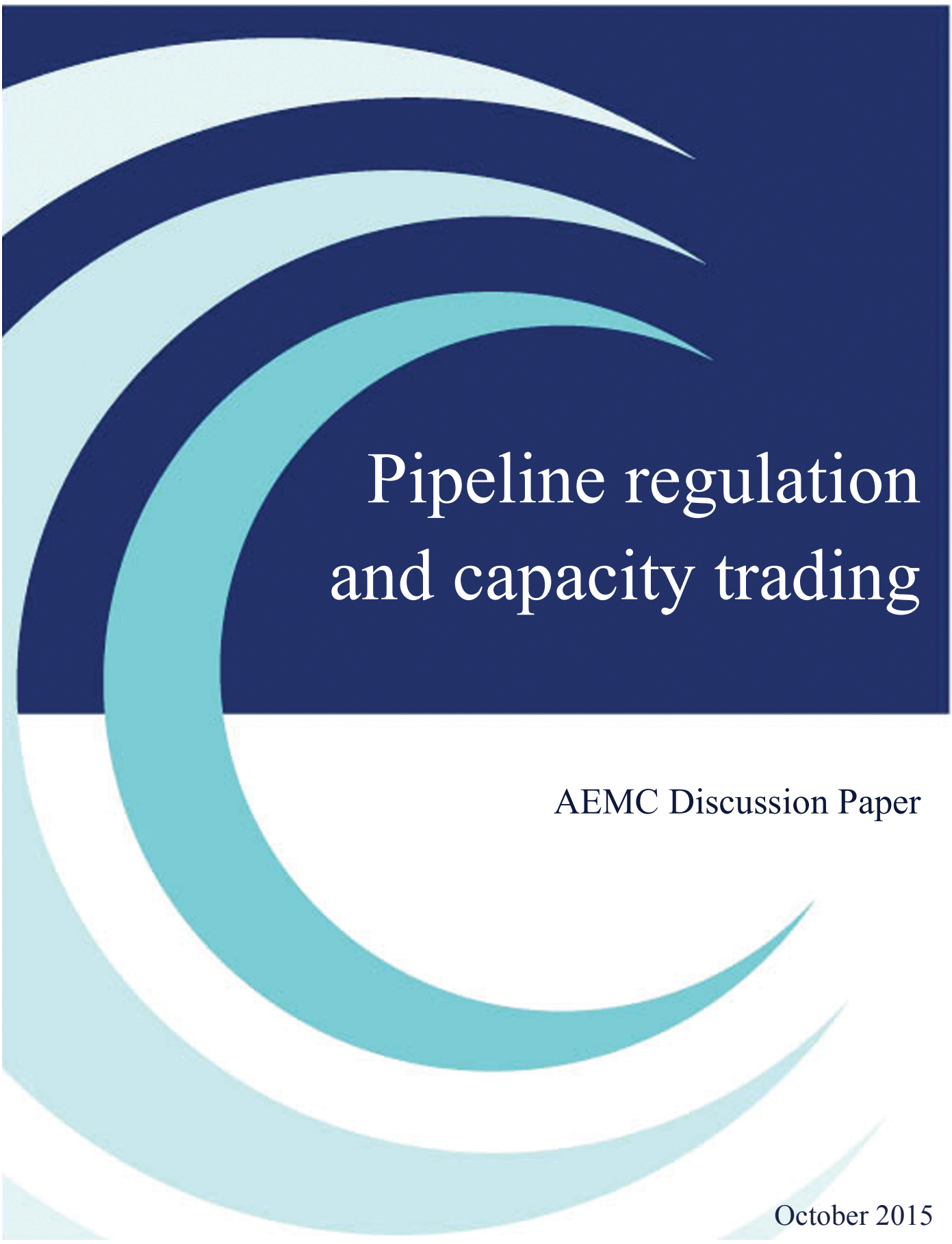

Pipeline regulation and capacity trading

AEMC Discussion Paper

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Key points

- APGA supports a strong secondary capacity trading market. It provides flexibility and increased risk management capability for shippers, which in turn complements the firm capacity market. Pipeline owners have an incentive to accommodate the market's needs and facilitate the growth of the gas market.

- The ACCC Inquiry into the East Coast Gas Market is investigating the issues presented in this Discussion Paper. Part of the AEMC's role will be to interpret these findings, in particular whether and how the findings of the ACCC impacts the types of markets that may or may not appropriate in the Australian context

- It is appropriate to support the development of a secondary trading market through market led initiatives that reduce transaction costs and time.

- To date, the industry led response has been more rapid than government initiatives.

- The AEMC has focused on perceived issues of market power in the transmission sector, but has not linked these to efficient market outcomes, in particular competition impacts.

- The Discussion Paper appears to be attempting to solve a problem that has not been properly defined. Without identification of the 'problem', and its importance, it cannot be expected that any proposed solutions will be appropriately and effectively targeted. This makes discussion of the AEMC's proposed options for policy and regulatory intervention set out in the paper impossible to assess in respect of efficacy or proportionality. Some options are focussed on improving the primary market, a market that appears to have very few issues.

- At this time, it is most appropriate to continue to focus on low cost initiatives to address the issues canvassed in the discussion paper. Most of these are already being undertaken by industry, and most are considered by the AEMC as part of Option A.

- There is still work to be done. APGA considers industry-led reforms can deliver a workable marketplace for secondary capacity that provides secondary capacity at prices reflective of demand.

- APGA disputes the AEMC's preliminary analysis regarding the rationale, role and utility of the Gas Access Regime. In particular, APGA notes:
    - Access regimes are not targeted at vertically integrated monopoly infrastructure.
    - The Gas Access Regime is specifically targeted at vertically separated monopoly gas transportation infrastructure.
    - The consistency of the coverage criteria across regimes is a deliberate decision.
    - The Gas Access Regime provides an appropriate constraint on monopoly power in the gas transmission sector.

- The gas access regime is a fundamental component of Australia's competition policy. The suggestion it could be changed to improve secondary capacity markets or address industry policy issues such as wholesale market development shows no appreciation of the relationship or the flow-on implications for competition policy that would arise from such changes.

1. Introduction

The Australian Pipelines and Gas Association (APGA) welcomes the opportunity to comment on the Australian Energy Market Commission's Pipeline Regulation and Capacity Trading Discussion Paper (the Paper). As the peak body representing Australia's gas transmission infrastructure, and an active participant in two decades of access and competition policy, APGA has strong views on the issues covered by the Paper.

2. An appropriate policy approach needs to interpret the findings of the ACCC

APGA offers its views on the issues and approaches presented by the AEMC cognisant that there is also a parallel inquiry being undertaken by the ACCC into many issues that are relevant to this discussion paper.

Many of the questions posed by the AEMC with regard to the existence and materiality of issues raised in the discussion paper are also being examined through the ACCC's East Coast Gas Inquiry. APGA supports continued close communication between the AEMC and ACCC understand the issues, but notes that the AEMC's task in conducting this policy review does not necessarily involve providing a remedies to all the issues that may be raised by the ACCC.

An important policy task for the AEMC, following the release of the ACCC inquiry report, will be to appropriately interpret the findings of the ACCC, in particular whether the findings should be (or even can be) addressed through changes in market structures currently under AEMC review. This will be a critical part of the AEMC's analysis, and one that must be guided by the National Gas Objective. The ACCC's work is not guided by the national gas objective, so the outcomes of findings of these processes are likely to be different.

To ensure consistency with the Council of Australian Governments Principles of Best Practice Regulation, a clear case for action must be established before regulatory interventions are considered. Additionally, there are a number of costs involved in implementing the potentially significant regulatory measures discussed under Approach C that must be very carefully considered when undertaking an assessment against the long-term interests of gas consumers.

In order to allow this important analysis to occur, APGA supports the AEMC's proposal to finalise its Stage 2 report shortly after the ACCC has delivered its Inquiry Report to the Commonwealth in April 2015.

3. The rationale for regulating natural monopolies

The AEMC Discussion Paper includes a high level discussion of gas transmission arrangements, as well as its views on the focus and operation of the gas access regime.

APGA is concerned that the AEMC have not fully understood the focus and policy rationale for gas access and the economic principles involved in Australia's competition policy, and in doing so have reached conclusions in relation to the application and operation of the access regime that are not accurate. Further, in discussing options to change the focus of the regime, the AEMC are contemplating a rationale for regulation of the gas transmission sector that is at odds with Australia's overarching National Competition Policy, and Part IIIA and IV of the Australian Competition and Consumer Act.

APGA discusses this further at Appendix A.

4. Identification of the "problem"

The AEMC Discussion paper includes a lengthy discussion on existing transportation arrangements and factors that it believes may be impacting the efficiency of pipeline capacity allocation and trading. Much of this discussion is based on theoretical description of possible impediments in the market without any accompanying analysis of these issues and whether they exist, or are materially impacting the market.

Importantly, the AEMC do not appear to have yet identified the problem that they are trying to solve in the pipeline capacity market. Issues discussed in the paper (but not confirmed) range from search and transaction costs/complexity, incentives on shippers and pipeline owners to offer capacity to the market, and the efficiency of the primary pipeline capacity market including the scope of economic regulation, as potential areas for reform.

Without identification of the 'problem', and its importance, it cannot be expected that any proposed solutions will be appropriately and effectively targeted. This makes discussion of the AEMC's proposed options for policy and regulatory intervention set out in the paper impossible to assess in respect of efficacy or proportionality. APGA provides comments on these options with reference to issues such as their impact on investment incentives and the long term interests of consumers, in line with the National Gas Objective, as providing some guidance in how to consider the options presented by the AEMC in the absence of the necessary analysis of the market.

5. Assessment of the options

The AEMC Discussion Paper presents three broad approaches to address issues that it believes may be impacting the efficiency of pipeline capacity allocation and trading. These approaches are grouped into:

- Approach A – Facilitating trade between parties
- Approach B – Improving the incentives of capacity holders in the provision of capacity; and
- Approach C – Improving the incentives of pipeline owners in facilitating access to capacity.

5.1 Approach A

APGA notes the AEMC's discussion on the likelihood of industry led solutions in this category through the pursuit of options that reduce transaction costs and the time taken to undertake a secondary trade.

APGA believes that the industry has already taken considerable steps to support the development of a pipeline capacity trading market, and can be expected to continue to do so in the future. For example, the pipeline sector has developed new products and services to support capacity trading through operating capacity transfer facilities, as well as developed websites and posting facilities to assist shippers to identify willing trading partners. The development costs of these initiatives have been borne by the pipeliners, with the expectation that the market will develop over time to make these investments economic.

Importantly, the scope of potential industry led initiatives are not limited to those raised in the AEMC Discussion Paper, and APGA has some concerns over the rationale for some of the initiatives suggested as to their need and efficiency as set out below.

5.1.1 Standardisation of contracts

APGA considers that the complete standardisation of primary market gas transmission agreements (GTA) is unnecessary to facilitate trade. Many of the terms and conditions in GTAs are already consistent across shippers and. as noted by the AEMC, tailoring of contracts can be of benefit in some circumstances, and may be important to support the particular circumstances of an investment.
It is unfortunate that the characterisations of GTAs as 'bespoke contracts', appears to have contributed to a view that each contract is developed from scratch. In practice, each GTA comprises a bespoke suite of services (such as firm, as available, park and loan and backhaul). Terms and conditions such as credit requirements, nomination timing, responsibilities and obligations of counter-parties tend to be consistent.

However, the standardisation of terms and conditions *relating to capacity trading* can reduce search and transactions costs for parties wishing to trade capacity. The operational capacity transfer service implemented by the gas transmission industry in 2014 seeks to undertake this task. It is likely that

further work is required to establish greater consistency of important contractual terms and conditions, particularly related to matters such as capacity transfers across receipt and delivery points.
The gas transmission industry continues to be willing to cooperate with shippers and prospective shippers to achieve this, and pipeline owners have an interest in facilitating this process. This is because capacity trading can increase pipeline throughput and generally support the growth and reliance of the gas market. Once such arrangements are in place, capacity trades should be able to occur quickly in response to short-term (day ahead) requirements.

5.1.2 Offer spare firm capacity in a transparent, open process

There seems to be general agreement in the AEMC's Stage 1 report that investment and the allocation of firm capacity in the primary market is working well. Most issues raised appear to relate to the secondary market, and the perceived lack of trading in that market.

APGA considers processes to improve transparency in the offering of spare firm capacity can be useful. The Commission is currently considering an information rule change proposal (developed following a RIS process run by the CoAG Energy Council) that will provide more information to the market on the availability of spare firm capacity.

APGA also notes that the existing system of negotiation should ensure that those parties that value the spare capacity most highly will be allocated it. Vertically separated pipeline owners have every incentive to ensure that capacity is allocated to those parties most willing to pay for that capacity.

It is important to also note that auction mechanisms for capacity tend to be supported most when it is believed they will apply downward pressure on prices. APA Group developed a proposal, in consultation with shippers, for an auction mechanism to apply under the queuing policy to allocate spare capacity on the RBP in its 2012 Access Arrangement. This proposal was rejected by the AER in favour of retaining a first come first serve system.

5.1.3 Information about available capacity and trades to be published through a bulletin board

Many pipeline owners publish price and standard GTAs on their websites.

The capacity listing platforms implemented by APA Group and Jemena to date are an important industry-led development in this area. APA Group has been using its capacity listing platform to advertise short-term arrangements, including arrangements using multiple pipelines to link northern and southern markets through a single transportation product. Shippers also have the ability to post capacity for trade. These platforms have the potential to develop further, into genuine capacity trading platforms. Such a development may require the anonymous matching of bids and offers.
Pipeline owners that have spare firm capacity have every incentive to sell it. Those pipeline owners that publish prices currently are providing a clear signal to market participants regarding tariffs.

APGA considers the publishing of trades between shippers could be beneficial, but would need to consider the commercial imperatives of each shipper. This is an issue that the AEMC could take up with shippers.

5.1.4 Voluntary surrender of capacity mechanism

APGA accepts the rationale and is not opposed to an appropriate voluntary surrender of capacity mechanism.

This option is very similar to a novation or assignment of contracts between shippers. Shippers currently have the ability to do this - the key difference to this proposal is that the contracted shipper is seeking to use the pipeline owner as the agent in reselling its contracted primary capacity. In this respect the pipeline owner is being asked to perform a function that the shipper could do itself.

It is important that the design of a voluntary surrender of capacity mechanism recognises:

- The right of a pipeline owner to prioritise the sale of its own spare capacity over surrendered capacity.
- The right of a pipeline owner to not incur costs or losses as a result of a capacity surrender.

As the AEMC has stated, voluntary capacity surrenders should not be available to be used by shippers as a means of backing out of negotiated contracts, and absolving them from their obligation under take-or-pay contracts. Whilst recognising that the discussion paper does not contemplate this, AGPA reiterates that, should policy changes in the future remove this restriction, the basic economics of pipeline investment would be adversely affected, as financing for new investment is generally only provided where there is a commitment to firm capacity over an appropriate timeframe.

Importantly, voluntary capacity surrender mechanisms that follow the above principles can be introduced without regulatory intervention. Additionally, the capacity listing platforms available through APA Group and Jemena are examples of tools the pipeline industry provides that could be used to facilitate shippers finding parties to surrender capacity to.

5.2 Approach B

Approach B is considerably more interventionist than Option A, and is likely to have a number of costs to market participants, pipeline operators and gas consumers. This is discussed below and means that, although AGPA has some support for some parts of the option, overall, the case for such an interventionist approach has not been made, and would need to be considered very carefully to avoid these adverse impacts.

The basic issue being addressed by the elements of Approach B is one of "hoarding", which is a poorly-defined term in the discussion paper, and the misunderstanding of the role of real options for gas shippers.

Without making comment on whether hoarding does or does not occur in practice (something the forthcoming ACCC review will examine) it is worthwhile considering critically what the incentive to hoard really is, and from there whether other factors might underpin an observation that capacity is going unused. This assists policy makers in separating anecdotal ambit claims made by some market participants chasing their own self-interest from real impacts of concern.

A shipper that does not use capacity that it has paid for, rather than selling to a willing customer when possible, is incurring a cost. A rational shipper will only incur such a cost if there is an offsetting benefit to that shipper. A great deal more attention needs to be placed on the nature of this benefit, which is key to understanding appropriate policy responses. It is disappointing that the AEMC do not appear to have undertaken this type of analysis.

Only two benefits from holding on to capacity appear likely. The first of these is a malicious one involving the misuse of market power. That is, by holding capacity that it is not using, a shipper withholds that capacity from a downstream rival, and thus gains a competitive advantage in its downstream market. This may be occurring in some instances, but it seems unlikely that it would be a major cause of the problem for two reasons.

Firstly, all shippers need to be in the same downstream market for this to be a useful strategy to the shipper who has capacity to withhold; a cement manufacturer gains no advantage whatsoever if it withholds energy capacity from a brewer, as they operate in different downstream markets. In this case, selling capacity in the secondary market is likely to reduce the costs of the shipper holding form capacity, and assist it in competing in downstream markets.

On some pipelines, the majority of capacity is taken up by retailers. In such cases retailer A is in the same market as retailer B, so has an incentive to hoard capacity as they fight for retail market share. This may be a good reason to suspect that there may be significant hoarding that has a malicious basis, particularly since retailer A has an incentive to withhold supply from retailer B and from a cement factory or brewer whom it would like to make its customer, rather than lose it to a direct transport contract with the pipeline operator. In this instance, restricting the ability of retailer A to withhold supply may create a more liquid capacity market. However, whether or not it creates wider economic benefits depends upon the nature of the competition between the retailers. If this industry is an oligopoly, then the equilibrium is hard to predict. Unless the deeper capacity market creates more opportunities for entry for new retailers, it may well be the case that the wider economic impact of more liquid capacity markets is blunted as incumbents in the retail market divide the available rents between themselves. It would be disappointing if significant policy work created a market which succeeded in its own right, but had limited wider impact because focus on one particular part of the energy sector ignored wider issues.

Secondly, all potential shippers finding themselves unable to purchase unused capacity from an incumbent shipper have another option. They can go to the pipeline operator and request an expansion of capacity or seek short-term capacity options. Hoarding capacity is only an effective strategy if that

behaviour actually restricts the access of the competitor to capacity. It is not clear that in the current market the strategy would be successful.

The second reason for withholding capacity is not malicious; that capacity has value to the shipper as an option whether it is used or not. That is, a shipper might contract for 50TJ/d even if it expects to use only 40TJ in order to provide itself with an option to expand. The AEMC notes that this may be a possibility, but the finding does not appear to have been included in the analysis or the various options for reform.

Any option for reform which includes some kind of forced "use it or lose it" provision, or which otherwise has the effect of reducing the shipper's option value to zero when it otherwise wouldn't be, has serious consequences. The AEMC will need to very carefully consider these effects, particularly in light of its observation that the contract carriage model (which supports options) has successfully delivered new investment.

One might argue that the participant noted above does not really face a problem if there are liquid capacity markets, as the AEMC envisages would be the case subsequent to its reforms, because it could simply tap these markets instead of seeking an expansion of capacity. However, if the reason why there is significant unused capacity in the market at present is because incumbents place a positive value on the option to expand unused capacity provides them and the current market structure allows them to exercise this option, if government policy renders that option value zero (say through a "use it or lose it" rule), then the firms won't take the option in the first instance, and the liquidity which the AEMC hopes for will evaporate fairly quickly.

Whilst APGA would be generally supportive of policy options that prevented the "malicious" kind of hoarding behaviour noted above, policymakers need to tread carefully. In the first instance, "hoarding" of the malicious kind is difficult to distinguish. If a particular shipper has capacity that it is neither using nor offering for sale in the day-ahead market, then this is potentially evidence of malicious hoarding as outlined above. It is for this reason that day-ahead use-it-or-lose it provisions are supported and used by industry. However, if one is looking a week ahead, or a month ahead, it is much harder to determine whether a difference between planned and contracted capacity represents malicious hoarding or an option that has value to a shipper. More importantly, a mistake by policymakers in this regard is worse than an impact of zero; it destroys the very liquidity the AEMC seeks to create.

5.2.1 Oversell and buyback

APGA considers oversell and buyback a highly intrusive approach that introduces several issues to capacity markets, only some of which have been identified by the AEMC. In particular, it effectively requires a form of inclusive revenue type regulation of pipelines to shield pipeline owners from the potentially high costs and risks of a forced buy back scheme. As discussed by the AEMC this options also imposes a forced clearing auction of unused services to the market that removes the ability of

capacity holders to establish a price at which they are willing to release capacity. Such a mechanism is not featured in any competitive market.

Such an approach introduces too great an ability to free-ride by forcing access to capacity that has been funded by another party, which would restrict the future development of infrastructure.

Regardless of the level of flexibility in the gas market, it is clear new infrastructure development is, and will continue to be, necessary and fundamental to its success.

APGA notes that this mechanism is very new to Europe and there are varying views regarding its suitability and achievements.

5.2.2 Firm day ahead use-it-or-lose-it

It seems unnecessary that a regulatory implementation of this approach is required. As the Brattle Group has noted in its report to AEMO in 2013, the ability of pipeline owners to sell 'as available' and interruptible capacity[1] is a form of day ahead UIOLI:

In the US, pipelines are required to sell interruptible capacity, which is equivalent to a UIOLI mechanism (because unused primary capacity is made available to the market if the primary capacity holder is not using it).[2]

That is, the market is already providing a solution which gives effect to a day-ahead use it or lose it policy, and it is not clear how making this compulsory would deliver any improvements to existing market outcomes. A more effective marketplace should address the AEMC's concerns that the price of 'as available' capacity should better reflect demand.

5.2.3 Long-term use-it-or-lose-it

Although day-ahead use-it-or-lose-it is supported, and indeed practised in the industry at present, compulsory long-term use-it-or-lose it is not supported as it is likely to have poor consequences for investment, and would lead directly to an evaporation of the very liquidity the AEMC is seeking to create.

For the reasons above, APGA has little support for any kind of compulsory long-term use-it-or-lose-it policy, and, whilst there may be some scope for limited application of such a policy as a remedy for

[1] APGA would also like to note that the term 'interruptible capacity' in unfortunate. It implies that a user of this capacity may be faced with a non-delivery of gas at any minute. In reality, once 'interruptible capacity' is scheduled following receipt of nominations, it will be delivered the next day. It is a firm, day ahead capacity service. The term 'interruptible' is used because it is this capacity that has the lowest priority in the event of curtailment. This is the difference between 'as available' and 'interruptible'. Until the recent focus on secondary capacity access, the phrasing was not an

[2] The Brattle Group, International Experience in Capacity Trading, 2013, p24

specific cases of identified malicious hoarding (which may be uncovered in the forthcoming ACCC investigation) there does not seem to be any case for using this as a blanket policy.

5.2.4 Prohibit contractual provisions limiting trade by owners

Where these provisions exist, they are typically insisted on by shippers, although APGA understands they are not a strong feature of the current market and contracting approaches. These provisions can support investment in new pipelines as they protect the foundation shipper from some risks associated with being a first mover. As such, APGA considers that the AEMC needs to consider the balance between supporting new investment and the actual impact these provision have on incentives on pipeline businesses before deciding to act.

5.2.5 Reserve capacity for short-term trades

This approach has major implications for future pipeline investment and the value of existing pipelines.

In essence, this provision has the potential to penalise first movers and encourage firms to be the second-mover in respect of accessing pipeline capacity. Policies which provide disincentives for first movers can distort investment decisions in a way which would be contrary to the long-term interests of consumers.

APGA notes that a strong secondary market would remove any first mover/second mover issues, and should be preferred.

5.3 Approach C

The elements of Approach C propose changes to the economic regulation of pipelines that should not be considered lightly. As APGA sets out in the analysis of the pipeline access regime in Section 6 of this submission, the pipeline access regime is specifically designed to address instances of market power in pipeline infrastructure where it is appropriate (where competition in other markets is impacted).

APGA considers that further analysis is required on contractual terms that the AEMC has raised as potentially limiting trading. Many (such as nomination times) are essential characteristics of ensuring efficient pipeline management, and it not clear that better alternative times are available.

5.3.1 Changes to the economic regulation of pipelines

Changes to the pipeline access regime that alter the test of regulation away from that imposed on all forms of infrastructure in Australia have major consequences for the ability of pipeline owners to access global capital markets. This is turn has implications for the cost of pipeline capacity (which is linked directly to the cost of capital) and the timing of investments.

Indeed, changes to the economic regulation of pipelines would have implications for competition policy in Australia, which is a sophisticated tool refined over 20 years of policy development. The recently completed Harper Review of competition policy in Australia did not identify the issues with the access regimes or the coverage criteria raised in the paper. Indeed, the Harper review, in line with the Productivity Commission, has recommended a further tightening of the criteria for economic regulation to ensure that the adverse impacts of price regulation are not imposed in circumstances where they are not warranted, that is, where they do not deliver an overall benefit.

Moreover, as discussed in Appendix A, changes to the coverage criteria which involve consideration of wider economic impacts may in fact make it harder to secure coverage in the first instance, as they run directly into the theory of second best. This would appear to be a unwise policy direction for the AEMC to take.

The AEMC has set out the issues arising from increased economic regulation of pipelines. However, it has not considered the costs and unintended consequences of changing the regulatory test. The regulatory test is consistent for all infrastructure in order to avoid investment distortion that is likely to introduce inefficiencies, both through over and under investment.

6. Analysis of the current regulatory regime

6.1 The contradiction in the AEMC's preliminary analysis

The National Access Regime and the gas third party access regime under the NGL (the gas access regime) are separate access regimes. The National Access Regime is the generic access regime that forms the basis for access regulation in Australia. In particular, it sets out the declaration criteria, the regulatory 'test', that should apply to all access regulation. The gas access regime is industry specific, with different regulatory tools from the National Access Regime, designed to address the specific issues arising from natural monopoly bottlenecks in the gas transmission and distribution industries. However, although the two regimes are different, they are based on precisely the same principles and operate in effectively the same way in respect to their core goal of preventing the deleterious consequences of monopoly.

APGA is concerned that the AEMC has drawn conclusions regarding the scope and application of the coverage criteria on the basis of statements made by the NCC that are of little relevance for the institutional framework that applies to gas pipelines. For example, the discussion paper notes the NCC's recent observation in relation to the Port of Newcastle that:

3.16. Declaration under the National Access Regime is not a mechanism for imposition of price regulation and was never intended to be such. "Excessive", "monopolistic" or "gouging" pricing per se is not the focus of Part IIIA. Where such pricing in one market merely transfers income or value from one party in a supply chain…[3]

[3] AEMC, Discussion Paper, p21-22

On this basis, the AEMC states that:

…the test for declaration provided under the national access regime may be directed towards a problem that may be unlikely to exist in the gas transmission sector, and not directed towards potentially more relevant problems.[4]

The AEMC then goes on to state that these 'more relevant problems' are:

The potential for market power in the transmission sector….[so that]…. pipeline owners may be able to price capacity at a level higher …than… would be expected to prevail in a workably competitive market….[with the consequence that there could be]… a detrimental effect on competition in the wholesale market, through the potential for the inefficient under-utilisation of pipelines.[5]

These statements highlight the contradictions in the AEMC's analysis.

In the first instance, the NCC's observations regarding the limitations of the national access regime are made in the context of Part IIIA, under which declaration simply delivers a range of outcomes from the opportunity for an access seeker to have a dispute as to the terms and conditions of access determined under arbitration(the negotiate/arbitrate regime) by the ACCC to a more prescriptive regime involving regulation. In the instance being discussed by the NCC, the remedy was towards the less intrusive end of the scale. This observation about the national access regime is not applicable to the gas access regime, where coverage triggers an outcome towards the prescriptive end of those possible under Part IIIA more generally, ie, the application of a comprehensive framework for the price regulation of pipeline tariffs.

It is therefore inappropriate and unhelpful for the AEMC to take observations in one context and suggest they may be relevant for another, very different context.

The AEMC seems also to have misunderstood the relevance of the coverage criteria for the very issues that are the subject of its discussion paper. For example, on one hand, the AEMC states that coverage criterion (a) is not designed to address the problem of monopoly pricing, but rather is designed to address concerns about the effectiveness of competition in upstream or downstream markets.

On the other hand, the AEMC states clearly that the basis for its concern in relation to monopoly pricing is precisely the question of the 'detrimental effect on competition in the wholesale market'.

[4] AEMC, Discussion Paper, p21
[5] AEMC, Discussion Paper, p21-22

These statements indicate that the AEMC is yet to establish the essential rationale for its suggestion that the coverage criteria are somehow inappropriate for addressing the question of whether or not a particular pipeline should be subject to tariff control.

The AEMC appears to conclude that many of the problems associated with the secondary capacity markets are due to pipeline owners exercising unconstrained market power, and that they are able to do so because aspects of the National Access Regime are not designed to deal with this exercise of market power, and that it is not "fit" for this particular purpose.

APGA believes this to be fundamentally untrue, as discussed below. There are several issues with the AEMC's preliminary analysis:

- Firstly, the AEMC appears to believe there is 'decoupling' of National Access Regime and the Gas Access Regime, but this is not true.
- Secondly, the AEMC believes the National Access Regime and the gas access regime were designed to address the actions of vertically integrated monopolists, and not those which are vertically separated. In fact separation is not an issue and the impacts of competition in other markets are assessed similarly regardless of the status of the monopolist.
- Thirdly, the AEMC appears to believe that the existing regime does not constrain the behaviour of gas pipelines, and provides them with an incentive to leverage their market power in transportation into other sectors. However, this is untrue on two counts; the regime is an effective brake on behaviour, and market power in one sector cannot necessarily be leveraged into another, particularly from primary pipeline transport markets to secondary capacity markets.

6.2 The two regimes are not decoupled

The National Access Regime and the gas third party access regime under the NGL (the gas access regime) are separate access regimes. The National Access Regime is the generic access regime that forms the basis for access regulation in Australia. In particular, it sets out the declaration criteria, the regulatory 'test', that should apply to all access regulation. The importance of having the same test in all access regimes is discussed below. The gas access regime is an industry specific access regime, having the same regulatory test but different regulatory tools to the National Access Regime. The tools are designed to address the specific issues arising from natural monopoly bottlenecks in the gas transmission and distribution industries.

However, at their core, the two regimes are completely consistent in their purpose to address natural monopoly infrastructure; they are not decoupled in the way the AEMC suggests. The National Access Regime is designed to cover a wide variety of industries, and necessarily has variety of remedies where it is deemed coverage is needed.

By contrast, the NGL recognises that gas pipelines are (mostly) vertically separated natural monopolies and thus that regulatory controls need to be more prescriptive. Therfore, it does not

provide for negotiate-arbitrate models but instead for varying degrees of price monitoring or control. In terms of remedies, the NGL offers a subset of those allowed under the National Access Regime.

The coverage criteria are also the same. This is by design. In its 2004 Review of the Gas Access Regime the Productivity Commission recommended maintaining consistent coverage criteria across the National Access Regime and the Gas Access Regime:

Recommendation 6.1
The Gas Access Regime coverage criteria should provide the same threshold for coverage as declaration under the national access regime, such that a pipeline not satisfying the coverage criteria of the Gas Access Regime also will not satisfy the declaration criteria of the national access regime.[6]

There are a number of reasons for maintaining consistent coverage criteria across all infrastructure access regimes:

- A natural monopoly is a natural monopoly. The ownership structure or industry sector is irrelevant to this fundamental characteristic. Having different coverage criteria for different ownership structures simply incentivises whichever ownership structure is deemed to have a higher coverage threshold.
- If the National Access Regime has a lower coverage threshold than an industry specific access regime, it enables forum shopping – whereby an access seeker can attempt to use the National Access Regime rather than industry specific access regime to gain access. The exception is for certified regimes. If an access regime is a certified access regime, forum shopping is not possible. APGA notes that the Victorian Government is the sole jurisdiction opposed to CoAG certification of the gas and electricity regimes.
- All significant infrastructure projects and facilities compete for capital in global markets. If different regulatory tests are applied to different types of infrastructure in Australia, those that are deemed easier to regulate will be considered riskier investments and will have more difficulty accessing capital and will be charged high costs for it. This is reflected negatively in investment activity and access pricing. It can lead to both over investment in infrastructure with a high regulatory threshold and under investment in infrastructure with a low regulatory threshold.

APGA does not agree with the AEMC's statement:

The fact that the gas access regime was established separately to Part IIIA suggests that such divergences were contemplated, and that it was not considered appropriate to use Part IIIA directly.[7]

The coverage criteria are a primary area of consistency between the two regimes. The fact that the separate regime was established with many areas of difference but maintained consistency in its

[6] PC, Review of the Gas Access Regime, pXLVI
[7] AEMC, Discussion Paper, p46

coverage criteria suggest a deliberate decision was made to not diverge in the vital area of the regulatory test.

The practical ramification of this is that, should the AEMC make changes to the gas access regime, and in particular to its coverage criteria, it will not be perpetuating and slightly changing differences which already exist, but will actually be introducing new differences that were neither anticipated nor desired. A case has not been made for introducing this difference.

6.3 The scope of the access regimes

The Discussion Paper states:

The gas third party access regime under the NGL, and the national access regime under Part IIIA of the Competition and Consumer Act 2010 (Cth) upon which the gas regime is based, are narrowly targeted tools for enabling third parties to use existing bottleneck infrastructure in those circumstances where the owner of the infrastructure does not wish to make it available, and where such use would promote competition in other markets. The access regimes are not comprehensive regulatory instruments designed to solve a broad range of problems that might affect markets, including monopoly power held by infrastructure owners or market coordination issues.[8]

This statement, when viewed in conjunction with the AEMC's preliminary analysis and the reports provided by Castalia and, in particular, Incent, appears to be saying that both the gas access regime and the National Access Regime are limited in scope to addressing economic problem of the denial of access by vertically integrated infrastructure owners.

In its 2013 Review of the National Access Regime, the Productivity Commission provides a different rationale for the national access regime:

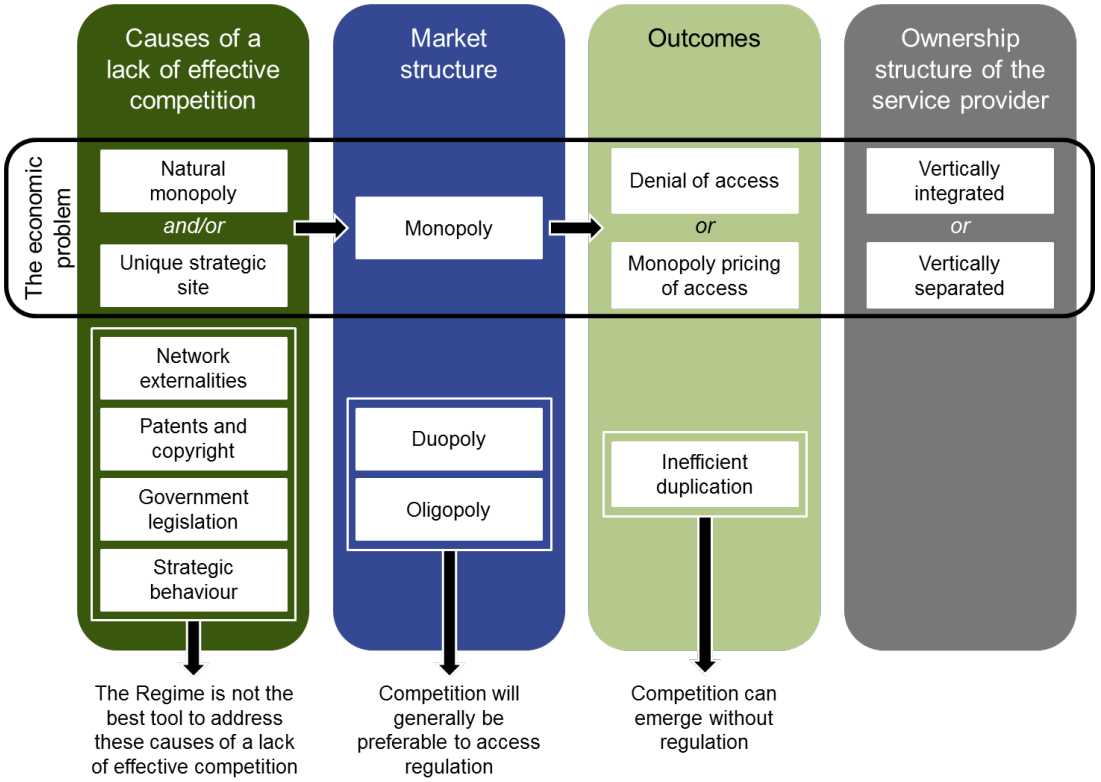
In sum, ***the Regime should only address market failure from an enduring lack of effective competition where there is monopoly provision of infrastructure services due to natural monopoly****. Competition between service providers will generally be preferable to access regulation in markets where two or more infrastructure service providers are able to provide the same service (or an effective substitute service).*

A lack of effective competition is likely to constitute an economic problem where access is required for third parties to compete effectively in dependent markets, and an infrastructure service provider denies access altogether or ***(for both vertically integrated and separated service providers)*** *restricts output in order to charge monopoly prices (figure 3.2). As a consequence, transactions that would enhance community wellbeing may not proceed.* ***The Commission considers that the purpose of***

[8] AEMC, Discussion Paper, p19

access regulation is to facilitate improvements in allocative efficiency, *(APGA emphasis) rather than to improve productive efficiency through avoiding wasteful duplication.*[9]

Clearly, the Productivity Commission considers the purpose of access regulation is broader than addressing the denial of access by vertically integrated infrastructure owners. Figure 3.2 of the Review provides an excellent synopsis of what is and what is not covered by the access regimes.



Indeed, the Productivity Commission considers that:

Constraining the Regime to only vertically integrated service providers could also raise significant problems with legal interpretation and incentives for service providers to change structure to avoid coverage.[10]

Quite rightly, the Productivity Commission recognises that applying regulation differently to different ownership structures simply creates an incentive for owners to be creative in developing ownership structures for infrastructure that meet whichever structure has the higher regulatory threshold.

[9] PC, Review of the National Access Regime, 2013, p86
[10] PC, Review of the National Access Regime, 2013, p86

The need to treat vertically integrated and separated infrastructure consistently was also recognised in the Hilmer Review. Chapter 11 of the Hilmer Review discusses access to essential infrastructure, whether vertically integrated, vertically segregated, public or privately owned. The third paragraph of Chapter 11 states:

This Chapter proposes the establishment of a new legal regime under which firms can be given a right of access to essential facilities when the provision of such a right meets certain public interest criteria. ***The regime is general in nature and has the flexibility to deal with access pricing and related issues in designated essential facilities irrespective of ownership*** *(APGA emphasis).*[11]

The Hilmer Review did however propose different remedies depending on ownership structure. That is the meaning of the quote referenced in the discussion paper. As the Hilmer Review finds, price regulation and monitoring is the appropriate tool for vertically separated infrastructure.

6.4 The Gas Access Regime is an effective constraint on behaviour

The third and final issue for the AEMC appears to be that the existing gas access regime is not acting as a sufficient constraint on pipeline behaviour. This is not true. The access regime in the gas transmission sector essentially balances the power between gas pipeline operators and their customers by providing the prospect of costly regulation as an incentive to ensure appropriate behaviour from natural monopoly gas pipeline operators. Absent of such a regime, pipeline operators would likely use their market power to negotiate outcomes which favour them when dealing with shippers.

Regulation is a highly costly exercise for a natural monopoly infrastructure owner, which they seek to avoid if possible. Providing infrastructure services through negotiated outcomes is the best way to do this. The prospect of regulation constrains the behaviour of natural monopoly infrastructure owners. It does so at almost zero cost. The very existence of the access regime is a constraint. Sophisticated regulators, and regime designers, recognise this and there is extensive economic literature on the topic.

APGA has set out its reasoning as to how the gas access regime is specifically targeted at the issues arising from natural monopoly gas transport infrastructure and would like to offer further evidence that the gas access regime does act as a constraint on behaviour.

6.4.1 Number of covered pipelines and the threshold level of coverage

Some market participants and policy makers have taken the view that the mere fact that there are few covered pipelines on the East Coast as evidence that the coverage criteria are too strict. Judging the effectiveness of a policy by the number of times the mechanism it creates is used is an unsophisticated way of forming that judgement. It fails to take into account that if the policy is well-developed it will cause an outcome where the mechanism it creates does not need to be used very often to engender the outcomes the policy seeks. For example, we would not judge a new sentencing law for a particular crime to be a failure because it had been rarely used, but would rather count it as a success because

[11] Hilmer Review, p239

the presence of the new law had markedly reduced the incentive of people to commit that particular crime in the first instance.

A lack of applications (only two have been made in the last decade) on its own is neither evidence of success or failure of the policy initiative of blunting the effects of market power of which the coverage criteria are a part. Instead, two interpretations are possible:

- one could suggest either that the regime is working because the threat of regulation is constraining behaviour by pipeline owners in such a way as to render the actual seeking of coverage unnecessary; or
- that the regime is not working because the criteria are too onerous for shippers to seek coverage despite the fact that market power abuses are being perpetrated upon them by pipeliners.

APGA considers the former interpretation to be the correct one, and notes as support of this claim, the recently concluded Competition Policy Review (the Harper Review) found:

However, the Panel is also concerned that criterion (a) sets a low threshold for declaration. The burdens of access regulation should not be imposed on the operations of a facility unless access is expected to produce significant efficiency gains from competition. This requires that competition be increased in a market that is significant and that the increase in competition is substantial.[12]

In contrast to some concerns with regard to criterion (b) and the 'private profitability' test setting a new high threshold, the Harper Review found:

The Panel considers that maintaining the 'private profitability/economically feasible' test for criterion (b) will best promote the competition policy objectives underpinning Part IIIA. Under that test, access regulation will only be considered where there is a bottleneck that needs to be addressed. Absent a bottleneck problem, competition and economic efficiency will be advanced if market participants are free to negotiate private arrangements concerning access.

The alternative approach, evaluating whether a facility is a natural monopoly, suffers from a number of shortcomings.[13]

It would seem unlikely that the Harper Review would have found that the threshold for declaration is too low if it believed that the threshold was preventing access seekers from seeking declaration. APGA notes that the Harper Review is not a single voice, and that the Productivity Commission has presented different viewpoints, but the analysis leading to a conclusion of ineffectiveness needs to move beyond simply counting the number of covered pipelines and noting the lack of applications.

[12] Harper Review, p434
[13] Harper Review, p435

6.4.2 The use of the Greenfields incentive

As further evidence that the threat of regulation is real, it is relevant that four pipelines associated with the LNG projects in Gladstone have made applications for, and been granted, 15 year no-coverage determinations under the Greenfields incentive.

Judging from the number of consultant reports provided in each application, the making of an application is a costly exercise and one that is undertaken because regulation is considered a material risk.

6.4.3 The role of negotiation is not removed for covered pipelines

With regulation, shippers have a default option of the regulated service, which is controlled by the regulator to ensure market power is not exercised. For a regulated business, dealing with customers via a regulator is costly, and to be avoided where possible through negotiated contracts. However, because these contracts are negotiated with the regulatory contract as a backstop, the negotiation power a gas pipeline has without regulation is largely removed. This creates a significant change in behaviour, even when regulation does not directly drive the gas business in question.

DBP, for example, recently re-negotiated its standard shipper contracts with most of its shippers, with most shippers opting to stay within the negotiated framework rather than move to a regulated regime. The key to a successful negotiation in this instance, from the perspective of the shippers, was the presence of the regulatory regime as a backstop.

6.5 Conclusion

The above analysis appears to negate the AEMC's concern that:

Consequently, the test for regulation provided under the national gas access regime may be directed towards a problem that may be unlikely to exist in the gas transmission sector, and not directed towards potentially more relevant problems.[14]

[14] AEMC, Pipeline Regulation and Capacity Trading Discussion Paper, p21

7. Assessment of Issues

The AEMC summarises the issues raised by market participants in section 2.2 of the discussion paper. In this section, APGA provides a response to some of those issues that have not been addressed above.

7.1 GTA Provisions

The capacity holders' incentive and/or ability or compete with the pipeline owner for the provision of capacity, examples being:
• nomination cut-off times in GTAs that favour capacity sales by pipeline owners compared to sales by shippers that hold capacity

There has to be a nomination time, this is not something that is planned or manipulated by pipeliners. Whatever the time is, a claim could be made it is inconvenient. The consideration of establishing a standard gas day could be an opportunity to review nomination times as well.

With regard to the short-term market, firm day or week ahead, pipeline owners can only sell 'as available' capacity (interruptible is not firm) after nominations close. All shippers can trade capacity whenever they want. The proposal that shippers do not have a clear understanding of their gas requirements at nomination time is questionable. By nomination time they have highly accurate weather forecasts, weather being a primary variable that drives gas demand levels. Shippers have advance awareness of probable gas demand, particularly at non-peak times, and are able to trade capacity well before nomination time, including in the days leading up to it. At peak times there is likely to be less demand for trades.

With regard to pipelines serving the STTMs, APGA notes that pipeline nomination cut-off times are after the STTM nomination time so should not be that inconvenient to shippers.

• restrictions on a shipper's ability to change receipt and delivery points in GTAs (or to move maximum daily quantity (MDQ) (or maximum hourly quantity (MHQ)) between points) without renegotiation of the GTA. This means that a prospective shipper would need to find an existing shipper with the right combination of receipt and delivery points for the capacity trade to proceed.

Specification of receipt and delivery points is standard practice. Capacity to deliver at one point on a pipeline is not directly transferrable to another point of the pipeline without potentially impacting the pipeline's ability to meet its firm contractual obligations to other customers. This does not mean that it cannot be transferred in all cases. Pipeline operators are willing to negotiate the ability to transfer it when it is technically possible, which is not always, and establish rules that may exist with transfers. It does take time. Any shipper contemplating such trades can execute them quickly if the time has been taken to work out arrangements in advance. This only needs to occur once for the ability to made available.

• *the requirement to negotiate allocation agreements at delivery/receipt points;*
Pipeline operators are typically ambivalent regarding allocation rules at delivery/receipt points and are generally comfortable allocating deliveries on a pro-rata basis when changes occur. It is shippers that insist on negotiating these agreements between each other when trades occur.

• *other fees and charges levied by pipeline owners that limit capacity trading;*
Capacity trading platforms and services have been implemented at a cost to pipeline businesses, and they provide trading opportunities that attract charges on a per GJ basis. The use of these platforms is voluntary.

Bare transfers, available to all shippers, attract no fees.

APGA notes that AEMO markets also charge on a per GJ basis yet do not attract criticism of overcharging for what should be (according to shippers) a flat administrative charge.

The pipeline owner's incentive and/or ability to compete with capacity holders for the provision of capacity, examples being:
• *a direct prohibition on the pipeline owner selling capacity to another party;*
Prohibitions on pipeline owners selling capacity to another party are not typical. The ACCC Inquiry should uncover any evidence as to whether such practices are prevalent in the market.

• *most favoured nation provisions, whereby foundation shippers are entitled to the prices offered by the pipeline owner to other shippers; or*

Such clauses are almost always added at the request of shippers and are in favour of shippers. In many cases, these clauses are important to support investment as they provide a mechanism for shippers to protect themselves as the first mover. Pipeline owners have an incentive to agree to them in order to secure foundation contracts that facilitate investment.
As the Commission has noted MFN clauses apply to equivalent services. A firm service and an as available or interruptible service are not equivalent.

• *provisions that require the pipeline owner to rebate some or all of the revenue it receives from the sale of capacity to third parties back to the capacity holders.*
Again, where such provisions exist (which, it seems are not typical) they are implemented at shippers' behest and provide a mechanism for shippers to protect themselves as the first mover and therefore can support investment.

7.2 Prices

The AEMC's Discussion Paper raises, as an issue, prices offered by pipeline owners for unutilised contracted capacity. The paper suggests that these prices, being for non-firm capacity, are higher than

they would be in a workably competitive market, and may be contributing to inefficient under-utilisation of pipeline capacity.

APGA is concerned that, on this important issue, the AEMC nowhere elaborates on how a workably competitive market for secondary capacity might be structured, about how transactions would be effected in that market, or about the way in which prices might be set in such a market. The AEMC appears unclear about rights to capacity, and about the ways in which those rights might be priced.

APGA looks forward to working with the AEMC, the gas transmission industry and market participants to set out a framework for industry to deliver a secondary capacity market that provides prices reflective of demand.

Appendix A: The rationale for pipeline regulation and the nature of market power

AGPA discusses the rational for access regulation below, as well as some of the issues that arise in the AEMC's proposal to regulate on the sole basis of market power.

In general, competition policy is concerned with the rise of market power in a given market; this was the concern of much of the competition policy reforms two decades ago where policy sought to unwind monopoly positions where possible and is one of the primary concerns of aspects of the Competition And Consumer Act such as merger assessments and abuse of market power provisions. Thus, for example, the ACCC would likely act to prevent a merger between Woolworths and Coles because such a merger would be likely to seriously restrict competition in the grocery market.

However, there are some areas of the economy which are subject to "natural" monopolies. That is, the least-cost way in which to deliver a given service is via one service provider, due mostly to economies of scale in that industry. Gas pipelines, as well as other utility industries, are classic natural monopolies. Here the focus is different. If the least cost way to transport gas from Field A to City B is via a single pipeline, then it makes little sense to try and make sure there is more than one pipeline serving this market, as this would raise the costs of gas transportation. Instead, the focus is on the impacts of having one gas pipeline. More importantly, the impacts assessed are not in the gas transportation industry itself, but in upstream and downstream industries.

This is the basic premise of the current coverage test; the test considers whether infrastructure is a natural monopoly, and if it is, it thus focuses on the impacts on competition upstream and downstream.[15] This test applies whether the particular gas pipeline stands alone or is owned as part of a vertically integrated monopoly that also has operations upstream or downstream, although the relevant policy framework appreciates that the incentives of firms are different where they are vertically separated, and that vertical separation lessens the incentive to affect competition between firms downstream or upstream.

The nature of the test in essence examines the size of the impacts upstream and downstream and, if these are considered to be sufficiently large, price regulation (or monitoring) can be imposed. This regulation then seeks to ensure that prices set by the regulated monopolist reflect efficient long run marginal costs (the outcome of a workably competitive market) and thus to limit the impacts of any distortions on competition and efficiency that might be caused by the natural monopoly. This is, essentially, the role of economic regulation.

[15] Some pipelines have been found not to be natural monopolies, in that they compete to provide services. This includes the Eastern Gas Pipeline, which competes with the Moomba Sydney Pipeline. APGA notes the analysis by the PC referenced in Section 6 clearly states the competitive tension of a duopoly is considered superior to regulation.

Consideration of any changes to the test need to take this basic framework into consideration. Clearly, a change which also considered impacts of monopoly in the gas transportation sector itself would be largely meaningless; if the industry is a natural monopoly then it would and should have one player, and policymaking focussed on this would be a wasted effort. However, it is not clear that widening the focus would provide any new insights into whether a particular pipeline ought to be regulated or not. Any effect on wider economic efficiency must necessarily flow through the immediately affected upstream and downstream industries, and it is not clear how a focus on wider economic effects would meaningfully pick up anything that an examination of impacts in the immediately affected industries does not. Perhaps more importantly, if the scope is widened to a general equilibrium framework, policymakers will need to confront Lancaster and Lipsey's Theory of Second Best which shows that, in a general equilibrium framework, it is very difficult, if not impossible to clearly show that removing market power from one sector of the economy will lead to an increase in overall economic welfare.[16] This issue lies dormant under the current coverage criteria which, by restricting analysis to upstream and downstream industries, requires only partial equilibrium analysis. If the coverage criteria are extended to encompass wider economic effects, policymakers run directly into problems associated with the theory of second best, most particularly when the NCC attempts to cover a pipeline, and make it very hard for the NCC to mount an argument which shows that it is increasing economic efficiency in a wider sense by imposing coverage. It is not clear what is gained by introducing this difficulty.

A second issue is the apparent presumption by the AER that a firm with market power in pipeline transportation would also have a monopoly in any secondary trading markets on that pipeline. This is simply not true.

It is true, in many cases, that a pipeline operator is a monopolist in the provision of transportation services. There might also be a natural monopoly in the provision of a trading platform whereby the least cost solution is for a pipeline operator to provide the physical infrastructure associated with the trading platform. However, it does not follow from this that a pipeline operator with market power in transportation has any market power in a secondary capacity trading market. If, on the 25th of January 2016 Shipper A on Pipeline B has 10TJs of capacity available to sell, and the pipeline operator also has 10TJs to sell, it is unclear why a buyer of this capacity would perceive a difference between the two blocks of 10 TJs.

This has important consequences because, if the identity of the seller of the 10TJs is irrelevant to the buyer, then both sellers have exactly the same incentives. That is, if, on a given day, Shipper A is the only seller of 10TJs, then it will have precisely the same incentives in regards to its pricing decision as

[16] For a summary of this debate, and for a detailed discussion on the difficulties a policymaker will encounter if it tries to address the theory of second best in a best practice manner, see https://www.erawa.com.au/cproot/13290/2/Submission%2012%20-%20Appendix%20I%20-%20Efficiency%20and%20the%20Theory%20of%20Second%20Best.PDF. The scale of what is required is often poorly understood by policymakers.

the pipeline operator would, and if both were selling 10TJs on the same day, both would behave in the same way as if two shippers were selling capacity on the same day.

The consequences for policy are that any policy solution which focuses on pipeline operators because they are monopolists in the provision of pipeline services, ignoring the fact that they are not monopolists in the secondary market for trading capacity, is likely to be problematic, because all it would (at best) is constrain one player in the secondary trading capacity market without constraining any of the other players. Importantly, constraining pipeline owners means that, at any point in time when someone other than the pipeline owner is the sole seller of capacity, the outcome will be precisely the kind of monopoly pricing the AEMC appears to be seeking to avoid for such markets.