

Examination of the current test for the regulation of gas pipelines

Report

14 December 2016

Dr Michael Vertigan AC

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14 December 2016

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Mr Shane Rattenbury, Australian Capital Territory Minister for Climate Change and Sustainability

The Hon Kenneth Vowles MLA, Northern Territory Minister for Primary Industry and Resources

The Hon Simon Bridges, New Zealand Minister for Energy and Resources

I am pleased to present the Report of the examination of the current test for the regulation of gas pipelines to the COAG Energy Council. The findings in this report are based on extensive consultation undertaken with relevant stakeholders, through a series of roundtable discussions and bi-lateral meetings. Further, a consultation paper was released seeking stakeholder feedback. This report considers the evidence presented by the ACCC, the effectiveness of the existing regulatory test, the relationship of this examination to other proposed reforms and outlines five potential solutions.

It is clear that pipeline owners do have market power and, based on submissions by, and discussions with, pipeline customers on their experiences in negotiations, the examination concludes that the existing regulatory arrangements require modification.

There is not widespread support for increasing the extent of regulation of the pipeline industry and, in fact, significant doubt exists whether such a resolution would address the real concerns of pipeline customers.

Two principal issues have been identified: the information asymmetry between the parties in negotiations, and the superior negotiating position of

the pipeline operators. While any solution to address the power imbalance should be backed by a credible threat of regulation, the coverage test is not the focus of the resolution.

The report recommends that the disclosure and transparency of pipeline service costs, pricing and contract terms and conditions be greatly enhanced and a framework for binding arbitration be introduced to the National Gas Law. This approach has the potential to facilitate efficient commercial solutions while avoiding unnecessary regulatory burden.

I would like to thank all of the parties who participated in the examination's consultation processes. The examination has been characterised by a very high level of engagement with industry participants which has materially assisted in arriving at the Report's recommendations. Further, I would like to thank the Consultative Panel, consisting of Professor Ian Harper, Mr Antony Cohen, Dr Byron Pirola, Mr Rob Heferen and Professor Paul Simshauser, for their valuable insights and advice. As always, the views and recommendations contained in the report are my own.

Throughout the course of the examination, I was supported by a small secretariat provided by the Department of the Environment and Energy. I wish to acknowledge that support and to thank the members of the secretariat for their commitment and contributions.

Yours sincerely

A handwritten signature in black ink, appearing to read "Vertigan". The signature is fluid and cursive, with a large initial 'V'.

Dr Michael Vertigan AC
Independent Chair
Gas Market Reform Group

Contents

Abbreviations and acronyms.....	6
Executive Summary	8
1. Introduction	18
2. Objective and history of the gas access regime.....	29
3. Identifying the problem	35
4. Effectiveness of the current regulatory test.....	55
5. Problem requiring addressing	77
6. Potential solutions.....	81
7. Conclusion	99
Appendix A: COAG Energy Council Gas Market Reform Package.....	101
Appendix B: ACCC Inquiry conclusions	106
Appendix C: Consultation list	108
Appendix D: Coverage applications and recent determinations.....	110
Appendix E: Transmission pipelines in Australia	118
Appendix F: Distribution pipelines in Australia	131
Appendix G: Glossary of terms	134

Abbreviations and acronyms

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGP	Amadeus Gas Pipeline
APGA	Australian Pipeline and Gas Association
APLNG	Australia Pacific LNG
APPEA	Australian Petroleum Production and Exploration Association
ASX	Australian Securities Exchange
CCA	Competition and Consumer Act 2010 (Cth)
CGP	Carpentaria Gas Pipeline
COAG	Council of Australian Governments
CWP	Central West Pipeline
DBP	DBP Transmission
DBNGP	Dampier to Bunbury Natural Gas Pipeline
DTS	Declared Transmission System
DVP	Dawson Valley Pipeline
DWGM	Declared Wholesale Gas Market
EGP	Eastern Gas Pipeline
Gas Code	National Third Party Access Code for Natural Gas Pipeline Systems
GLNG	Gladstone Pacific Liquefied Natural Gas
GMRG	Gas Market Reform Group
GPG	Gas Powered Generation
GSH	Gas Supply Hub
HSF	Herbert Smith Freehills
IPA	Infrastructure Partnerships Australia
LMR	Limited Merits Review
LNG	Liquefied Natural Gas
MAPS	Moomba to Adelaide Pipeline System
MEU	Major Energy Users Inc.
MSP	Moomba to Sydney Pipeline
NAR	National Access Regime
NCC	National Competition Council
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NGP	Northern Gas Pipeline

PIAC	Public Interest Advocacy Centre
PNO	Port of Newcastle Operations
QCLNG	Queensland Curtis Liquefied Natural Gas
QGP	Queensland Gas Pipeline
RBP	Roma to Brisbane Pipeline
RIS	Regulation Impact Statement
SCO	Senior Committee of Officials
SEPS	South East Pipeline System
STTM	Short-Term Trading Market
SWQP	South West Queensland Pipeline
TGP	Tasmanian Gas Pipeline
TPA	Trade Practices Act 1974 (Cth)
VTS	Victorian Transmission System

Executive Summary

The development of the Liquefied Natural Gas (LNG) export industry in Queensland has fundamentally shifted supply and demand dynamics in the domestic gas market. With the significant growth in demand, a low oil price and restrictions on unconventional gas development, a potential supply shortfall is emerging.

Since 2000, the gas transmission pipeline industry has invested or committed over \$10 billion in new pipelines, interconnections and enhancements of existing pipelines.¹

Pipeline infrastructure is evolving into an interconnected network, providing a larger range of services and supporting a series of increasingly interlinked wholesale gas markets. Pipeline operators no longer simply provide for the transportation of gas from a source of supply to a source of demand. Today the services offered by the interconnected pipeline network are more complex, with changing directions of gas flows and increased demand for more flexible services. As the market continues to transition, gas customers require more flexible transport arrangements such as bidirectional and backhaul shipping, park and loan services and some capacity expansion of existing pipelines.

Getting the regulatory settings for gas transmission pipelines right is important to promote an efficient transportation sector with competitive prices and more efficient gas trading markets. In a tighter gas market, continued investment in pipelines and related services will be needed to provide flexibility and choice for consumers. Gas also has an important role to play in the transition to a lower carbon economy. More flexible and efficient pipeline services are an essential consideration in energy security planning and ensuring gas power generation is able to provide capacity when required to balance the intermittent nature of renewable electricity sources.

¹ Australian Pipelines and Gas Association (APGA), submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 4.

Background

On 19 August 2016, the Council of Australian Governments (COAG) Energy Council (the Council) released a comprehensive Gas Market Reform Package responding to the findings and recommendations of the Australian Competition and Consumer Commission's (ACCC) *Inquiry into the East Coast Gas Market* and the Australian Energy Market Commission's (AEMC) *Eastern Australian Wholesale Gas Market and Pipelines Framework Review: Stage 2 Final Report*.

This Report is in response to Reform Measure 4 as agreed by the COAG Energy Council which directed that the Independent Chair of the Gas Market Reform Group '*Examine the current regulatory test for the regulation of gas pipelines, in consultation with stakeholders, and provide recommendations on any further actions to the Energy Council, including potentially replacing the test*'.

Consultations commenced on 19 September 2016. On 4 October 2016, a consultation paper was released seeking stakeholder feedback in response to the relevant findings of the ACCC Inquiry, the effectiveness of the existing regulatory test, the appropriateness of the ACCC's proposed market power test and, if stakeholders deemed a change in regulatory arrangements warranted, an alternate means of achieving this. Thirty submissions were received and submissions are published on the COAG Energy Council website - www.coagenergycouncil.gov.au.

During the week of 24 October 2016, a series of sector based roundtable discussions were conducted with gas producers, pipeline owners, retailers, large users, industry associations and economic consultants. Further bilateral meetings were held with a range of stakeholders in relation to specific issues.

Identifying the problem

The examination has not attempted to validate the evidence and conclusions of the ACCC in respect to monopoly pricing. It is clear that gas pipelines have natural monopoly characteristics creating a high barrier to entry for prospective competitors. This lack of competitive constraint on most existing pipelines translates into market power.

Pipeline customers ('shippers') have made clear in this examination their belief that pipeline operators are exercising market power during negotiations for pipeline services. This results in prices that are higher than would be the case in a fully competitive or fully regulated environment. Further, smaller shippers have indicated that the absence of adequate publicly available information on prices and terms, as well as the methodology used to determine these and costs incurred by pipeline operators, mean it is difficult to assess what a reasonable offering would be.

An analysis of total shareholder return to a pipeline operator was commissioned through JP Morgan's Equity Research Team. The analysis examined returns over a ten-year period and compared them directly with aggregated returns to regulated electricity asset owners and with the ASX 200. The results show that the total return on the pipeline business was double that of the average regulated electricity network operator. A difference in returns is to be expected when comparing regulated assets with those of an unregulated monopoly, and while the respective businesses will have different risk characteristics, that is not sufficient to explain the difference in returns.

The analysis was not commissioned to target specific companies, rather to further highlight in a business environment where market power exists, higher than average returns are being generated. As noted by the ACCC, this does not mean there is any improper behaviour under the *Competition and Consumer Act 2010* (CCA).

However, there is also evidence that in some instances the exercise of market power is resulting in inefficient outcomes that do not promote the *National Gas Objective*² or facilitate the achievement of the COAG Energy Council's Australian Gas Market Vision for the '*establishment of a liquid wholesale gas market that provides market signals for investment and supply*'.³ Enabling new gas supply and developing liquid trading markets requires the ability to readily move gas between trading locations. For instance, a number of market participants have reported a significant level of bilateral, off market trading around the Wallumbilla Gas Supply Hub, with one of the principal reasons

² As prescribed in section 23 of the *National Gas Law*, the National Gas Objective is: '*to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas*'.

³ COAG Energy Council, *Australian Gas Market Vision*, 11 December 2014.

being to avoid the transportation cost associated with physically moving gas to Wallumbilla. Continuation of this behaviour would be a significant inhibitor to achieving the policy objective to develop a deeper and more liquid trading market.

Concurrent policy considerations

It is recognised that a range of relevant policies are currently subject to review or being reformed, generating considerable uncertainty across the pipeline industry.

The Council's Gas Market Reform Package comprises 15 reform measures in four priority areas: gas supply, market operation, gas transportation and market transparency. A number of these reform measures, including the establishment of a capacity trading platform(s), day-ahead auction of contracted but un-nominated capacity, standardisation of key capacity contractual terms, and the publication of information on capacity trades, are being progressed through the Gas Market Reform Group (GMRG). The GMRG will commence design work of these reforms in early 2017.

Another component of the reform package is the AEMC's review of Parts 8-12 of the National Gas Rules (NGR), which will examine whether there are any gaps in the current regulatory framework that may be allowing pipelines subject to full regulation to exercise market power to the detriment of consumers and economic efficiency. This review will commence in early 2017.

There is also a range of amendments being made to the *Competition and Consumer Act 2010* (Cth) (CCA) in response to the Competition Policy Review (the Harper Review). These amendments include changes to the declaration criteria (which are currently largely reflected in the coverage criteria in the National Gas Law) and reframing the misuse of market power provision (section 46). The proper construction of criterion (a) is also being reviewed by the Federal Court in relation to the Port of Newcastle case.

Concurrently with this examination, the Senior Committee of Officials (SCO) has been reviewing the effectiveness of the Limited Merits Review (LMR) regime under the National Electricity Law and NGL. The Review team worked with the examination secretariat to ensure the respective recommendations would not be inconsistent. The Review report was provided to Energy Ministers

for their consideration and decision at the COAG Energy Council meeting on 14 December 2016.

The commercial environment

The unambiguous conclusion resulting from consideration of the ACCC and AEMC reports, along with the material provided to this examination through submissions and consultations, is that there is a significant difference in the relative strength of the parties to commercial negotiations for pipeline services on existing pipelines. This differential is ascribed principally to the information asymmetry between the parties and the lack of a credible threat of regulation.

The majority of stakeholders do not believe the gas access regime poses a credible threat of regulation, nor is it constraining pipeline operator's behaviour. The reason the coverage test does not provide a credible threat is twofold:

- There is a perception, and/or reality, that criterion (a) is too difficult to satisfy and consequentially it is near impossible for pipelines to become covered and subject to either full or light regulation; and
- For covered pipelines, the regulatory regime generally only regulates forward haul tariffs and does not sufficiently deal with the range of other services that are increasingly being sought by market participants.

Problem requiring addressing

The initial presumption and widespread expectation of the industry was that the focus of the examination would be on the appropriateness of the existing regulatory test and whether, and how, it should be changed. However, submissions and consultations have highlighted that the principal problem is that parties negotiating for pipeline services have unequal levels of bargaining power and information. Consequently, the examination has focused on the most effective and least onerous ways to address these factors.

The first of the issues contributing to the imbalance, information asymmetry, is already on the reform agenda and will be progressed as part of the gas market reforms.

Experience with the existing regulatory test confirmed that it is difficult to satisfy, especially in relation to criterion (a), and in any event, is ineffective for many services as generally only a single reference service (usually forward

haul) is specified. In its current form, the test does not therefore constitute a credible threat to the market power of a pipeline owner.

While the test for pipeline coverage could be amended to introduce a market power criterion, it is concluded that the objective of addressing the negotiating imbalance could more effectively be addressed by requiring binding arbitration where commercial negotiations fail.

The introduction of binding arbitration to the commercial framework for pipeline negotiation would retain negotiation between parties as the focus for the industry rather than regulatory solutions and would provide the credible threat to address the existence of market power which is required. This approach is consistent with the substantial alignment of interests between the parties and the fact that denial of access is not a significant issue.

This form of resolution is also consistent with the views of the majority of market participants. The pipeline industry and most shippers have little appetite for more onerous regulatory solutions. Rather, it provides shippers with increased negotiating power through the introduction of a credible threat of arbitration that when actioned, can be quickly resolved.

It is a time of serious uncertainty for Australian competition policy, resulting from judicial interpretation of the proper interpretation of criterion (a), the amendments being progressed to the declaration criteria and section 46 of the CCA, and from the review of the LMR regime. This uncertainty reinforces the undesirability of changing the regulatory test for pipeline access if an alternative solution is available.

Recommendations

The recommendations developed as a result of this examination are directed at the two principal issues: the information asymmetry between the parties in negotiations; and the superior negotiating position of the pipeline operators.

Recommendation 1

That the disclosure and transparency of pipeline service pricing and contract terms and conditions be enhanced, including requiring the provision of information on the full range of pipeline services which are available or sought (not solely focused on forward haul services).

As highlighted by the ACCC, there is little publicly available information on the costs incurred by pipeline operators in providing services and the relationship between these costs and the prices charged for services. Increased transparency provides parties seeking pipeline services with an improved ability to undertake timely and effective negotiations.

Pricing principles, and/or information on the methodology used to determine prices, including costs incurred, should be published to enable shippers, or potential shippers, to better assess the reasonableness of the tariffs and terms offered. These principles should also make transparent the process for expanding the capacity of a pipeline.

This recommendation could be implemented using a range of mechanisms and consideration will need to be given to the need for information to be subject to appropriate validation and/or compliance processes.

Recommendation 2

That a framework for binding arbitration, available to all open access pipelines in the event parties are unable to reach a commercial agreement, be introduced into the National Gas Law (NGL).

This arbitration would be activated where parties to a negotiation are unable to reach a commercial resolution.

The existing dispute resolution framework under the NGL is only available to those shippers experiencing difficulty accessing pipeline services on a light or full regulation pipeline. Thus, as recognised by the ACCC, the existing threat of arbitration is unlikely to be a constraint on the behaviour of pipeline operators.⁴ It is not appropriate that access to dispute resolution be predicated on whether or not the pipeline is covered.

Where commercial processes are working effectively, the resort to arbitration should rarely be required.

⁴ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 135.

On an indicative basis, the arbitration framework would encompass the following characteristics:

- 1) Commercial negotiation between parties would occur whenever any party sought pipeline services on an open access pipeline.
- 2) The existing provision for a fifteen year 'no-coverage period' would be retained and during that period any negotiations on services which are contained in the foundation contracts would be governed by the provisions of those contracts. However, negotiations involving parties to foundation contracts relating to services not covered in those contracts, or involving a new party, would be subject to the arbitration framework.
- 3) After negotiations had commenced either party could signal a breakdown which would trigger the arbitral process.
- 4) Arbitration would be commercially-based (as distinct from judicial or regulator based), with the arbitrator appointed by mutual agreement of the parties, but with provision for imposition of an arbitrator where there is no agreement. The framework would be designed for expeditious resolution of the dispute with provisions to avoid delay and gaming. Structures such as 'final offer arbitration' would be considered for inclusion.
- 5) The decision of the arbitrator would be binding on both parties.
- 6) Oversight and maintenance of the framework will be required, including in relation to procedural rules, pricing principles and the power to appoint an arbitrator to a dispute in the absence of agreement between the parties. The Australian Energy Regulator (AER) is the logical institution to undertake this role.

Recommendation 3

That the GMRG be tasked with developing a detailed design of the disclosure and transparency requirements and of the arbitration framework, after consultation with industry, other stakeholders, the ACCC, the AER and the AEMC, with recommendations to be considered by the COAG Energy Council in mid-2017.

Proposals received from market participants, including the Australian Pipeline and Gas Association (APGA), will provide a valuable basis for this consideration.

During the development of the arbitration framework consideration will need to be given to whether amendments to the existing regulatory structure will be required. For example, if the arbitration framework is to operate in the way it is envisaged then there may be no need to retain the light regulation option.

To avoid duplication, the COAG Energy Council's existing reform measure 6, the review of information disclosure requirements in the NGL, would be consolidated within the GMRG's detailed design for the transparency and arbitration framework.

Recommendation 4

That no change be made to the current coverage test at this stage. The appropriateness of amending the coverage test should be reviewed within five years after the arbitration framework is operational.

This recognises that the gas market is changing very quickly and any changes to the test should occur only after the effects of introducing binding arbitration, the capacity trading and transparency reforms, and the CCA amendments are known. Should the proposed amendments to the CCA declaration criteria be implemented, the NGL should also be amended to reflect these changes.

The form of the test should be reviewed within five years after the arbitration framework becomes operational. At this stage, it is envisioned that the AEMC would likely undertake the review.

Conclusion

The aim of the recommendations is to achieve commercial outcomes and therefore sustain investment. Contrary to the implementation of an altered coverage test that would likely lead to increased regulation of the pipeline industry, investment would still be in response to market signals rather than regulation. The reforms are not designed to damage the ability of the pipeline industry to generate appropriate commercial returns, but rather to limit excessive returns. The proposed solution should avoid any 'chilling' effect on investment. This approach has the potential to facilitate efficient commercial outcomes while avoiding the time, cost and uncertainty associated with regulatory processes.

The recommendations seek to reduce the imbalance in negotiating power, constrain the exercise of market power and encourage downward pressure on

gas transportation prices. This could see a minor reduction in delivered gas prices for Australian users and slightly higher ex-plant prices for producers, encouraging investment upstream and downstream.

The conclusions and recommendations arising from this examination are consistent with the views of the majority of industry participants that the specification of the coverage test itself is not the major issue at this time. Rather the existing imbalance between parties in gas transportation needs to be addressed in a manner which avoids the time delays and the high costs usually associated with formal regulatory processes. The recommended approach should address industry concerns relating to regulatory uncertainty.

1. Introduction

Australia's domestic gas markets consist of three distinct regions, separated on the basis of the gas basins and pipelines that supply them:

- an east Australian gas market encompassing Queensland, New South Wales, Victoria, South Australia, Tasmania and the Australian Capital Territory interconnected by a network of transmission pipelines, and principally supplied by the Surat-Bowen, Cooper, Gippsland and Otway basins,
- a Western Australian market, supplied by the Carnarvon and Perth basins
- a Northern Territory market, supplied by the Bonaparte and Amadeus basins.

In each of these markets, gas is produced for both domestic consumption and for LNG exports. Further, in eastern Australia there are also a number of facilitated markets, including Short Term Trading Market (STTM) in Adelaide, Sydney and Brisbane, the Declared Wholesale Gas Market (DWGM) in Victoria, and the Gas Supply Hubs in Wallumbilla and Moomba. These markets are operated by the Australian Energy Market Operator (AEMO) and allow retailers and other large users to purchase gas without entering into long term contracts. In the case of the STTM and DWGM, they are primarily used to manage short term imbalances that arise on a day when a buyer's actual demand differs from its contracted supply.

The eastern and northern markets are set to be connected in 2018 with the completion of the construction of the Northern Gas Pipeline (previously known as the North East Gas Interconnector).

The development of the LNG export industry in Queensland has fundamentally shifted supply and demand dynamics in the domestic gas market. With the significant growth in demand, a low oil price and restrictions on unconventional gas development, a potential supply shortfall is emerging.

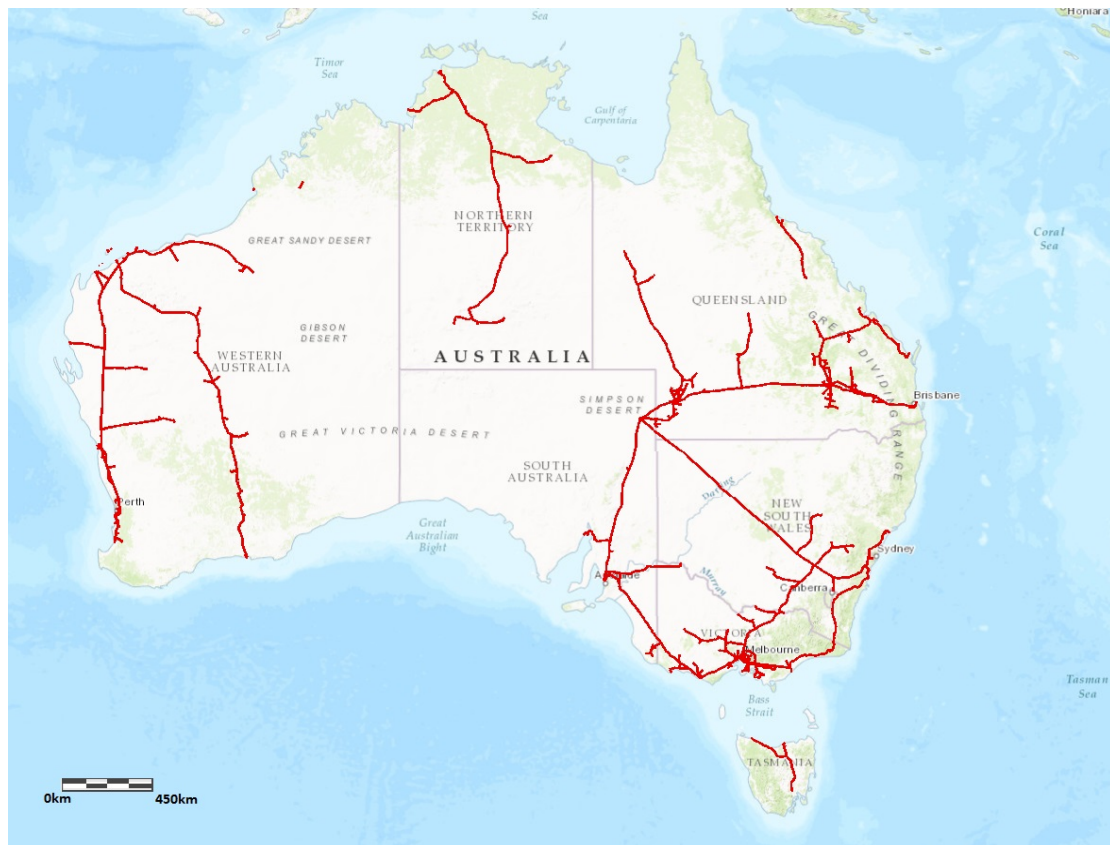
There are only a small number of cases where different transmission pipelines are competing for the transportation of gas to the same demand centres. Competition between pipelines into demand centres is a demand flow issue rather than a physical issue. For example, while there are two transmission pipelines into Sydney (the Moomba to Sydney Pipeline (MSP) and Eastern Gas Pipeline (EGP)), demand for gas in Queensland for the LNG export

industry has meant that in practice little gas is physically flowing to Sydney from Moomba.

Since 2000, the gas transmission pipeline industry has invested or committed over \$10 billion in new pipelines, interconnections and enhancements of existing pipelines (for example, to make some capable of operating in a bidirectional manner).⁵

Pipeline infrastructure is evolving into an interconnected network, as highlighted at Figure 1, providing a larger range of services and supporting a series of increasingly interlinked gas basins and end markets. The conversion of a number of pipelines into bi-directional pipelines is also enabling the flow of gas to change more rapidly in response to changing conditions.

Figure 1: Transmission pipelines in Australia



Source: Geoscience Australia 2015⁶

⁵ Australian Pipelines and Gas Association (APGA), submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p. 4.

⁶ Commonwealth of Australia (Geoscience Australia) 2015.

Pipeline operators no longer simply provide for the transportation of gas from a source of supply to a source of demand. Today the services offered by the interconnected pipeline network are more complex, with changing directions of gas flows and increased demand for more flexible services. As the market continues to transition, gas customers will require more flexible transportation such as bidirectional and backhaul transportation services, storage (e.g. park or park and loan services) and ancillary services (e.g. in-pipe trade services and capacity trading services). Some customers may also require existing pipelines to be expanded.

Getting the regulatory settings for gas transmission pipelines right is important to promote an efficient transportation sector with competitive prices and more efficient and liquid facilitated gas markets. In a tighter gas market, continued investment in pipelines and related services will be needed to provide flexibility and choice for consumers. Gas also has an important role to play in the transition to a lower carbon economy. More flexible and efficient pipeline services are an essential consideration in energy security planning and ensuring gas power generation is able to provide capacity when required to balance the intermittent nature of renewable electricity sources.

As highlighted in the Australian Competition and Consumer Commission's (ACCC) *Inquiry into the East Coast Gas Market Report*, most pipeline operators have responded to the changes currently underway in the market, undertaking necessary investments in a timely manner and offering more flexible services to meet the changing needs of some users and producers.⁷ Nonetheless, some market participants continue to express concerns about the significant market power wielded by some pipeline operators and the detrimental effects this can have on the efficiency of the gas market and related markets.

⁷ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 8.

Background

On 19 August 2016, the COAG Energy Council (the Council) released a comprehensive Gas Market Reform Package responding to the findings and recommendations of the ACCC's *Inquiry into the East Coast Gas Market* and the AEMC's *Eastern Australian Wholesale Gas Market and Pipelines Framework Review: Stage 2 Final Report*. Comprising 15 reform measures in four priority areas (gas supply, market operation, gas transportation and market transparency), the reform package is designed to drive the achievement of the Council's Australian Gas Market Vision:

'The Council's vision is for the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focused at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities.'

Further information on the Gas Market Reform Package is at **Appendix A**.

This Report has been prepared in response to Reform Measure 4, which directed the Independent Chair of the Gas Market Reform Group to:

'Examine the current regulatory test for the regulation of gas pipelines, in consultation with stakeholders, and provide recommendations on any further actions to the Energy Council, including potentially replacing the test.'

This reform measure was prompted by the ACCC's Inquiry which found that while transmission pipelines in eastern Australia have responded well to the changes underway in the market, a large number of established pipelines were engaging in monopoly pricing, to the detriment of consumers and economic efficiency. The ACCC also found that the ability and incentive of established pipelines to engage in this behaviour was not being effectively constrained by competition from other pipelines, competition from alternative energy sources, the risk of stranding, the countervailing power of shippers or regulation or the threat of regulation. Further information on the ACCC Inquiry is at **Appendix B**.

Consultation on the ACCC's findings commenced on 19 September 2016. On 4 October 2016, a consultation paper was released seeking stakeholder feedback responding to the relevant findings of the ACCC Inquiry, the effectiveness of the existing regulatory test, the appropriateness of the ACCC's proposed market power test and, if stakeholders deemed a change in regulatory arrangements warranted, alternate means of achieving this. Thirty submissions were received, with some stakeholders (APA Group and the APGA) supplementing their submissions with commissioned reports by economic consultants and legal professionals. Public submissions are published on the COAG Energy Council website - www.coagenergycouncil.gov.au.

During the week of 24 October 2016, a series of sector based roundtable discussions were conducted with gas producers, pipeline owners, retailers, large users, industry associations and economic consultants. Further bilateral meetings have also been held with a range of stakeholders submissions, participated in roundtable discussions and/or bilateral discussions are provided at **Appendix C**.

An expert consultative panel was also formed to provide insight and advice on infrastructure economics, investment, debt and capital raising and competition policy and laws. The panel membership comprised of Professor Paul Simshauser, Director-General, Queensland Department of Energy and Water Supply; Professor Ian Harper, Senior Advisor, Deloitte Access Economics; Mr Antony Cohen, General Partner, Same Business Different Outcome; Dr Byron Pirola, Managing Director, Port Jackson Partners; and Mr Rob Heferen, Deputy Secretary, Department of the Environment and Energy.

Concurrent policy considerations

A range of relevant policies are currently subject to review or being reformed, generating considerable uncertainty across the pipeline industry. The COAG Energy Council and the Australian Government are progressing, and/or considering, changes to address issues identified in a number of related policy arenas, including gas market reforms, amendments to the CCA, and limited merits review. While the substantive issues associated with these issues are beyond the scope of this examination, it is critical that the interaction between these changes do not have unintended consequences. Stakeholder feedback was sought on the relationship between, and potential implications of, these changes in the context of this examination.

Gas market reforms

The Energy Council's Gas Market Reform Package presents a wide-ranging suite of reform measures, of which this examination is but one component. The proposed reforms will be implemented concurrently, and over varying timeframes depending on the nature of the measure. Those reforms that are directly relevant to this examination are examined below. Further information on the broader reform package, including in relation to gas supply, market operation and transparency, is provided at **Appendix A**.

Reform measure 5: Review of Parts 8-12 of NGR

The ACCC identified concerns that even if a pipeline is subject to full regulation, the service provider of that pipeline may still be able to exercise market power to the detriment of consumers and economic efficiency. The current definition of 'reference service' requires that the service to be sought by a 'significant part of the market'. This definition results in many other services not being subject to regulation. Further, the ACCC identified that when a fully regulated pipeline is expanded the additional capacity from that expansion is not necessarily subject to regulation.

The ACCC also noted that the dispute resolution framework may not be providing an effective constraint on the behaviour of pipeline service providers, with barriers preventing usage. In doing so, the ACCC noted that the costs and resources associated with an access dispute, coupled with uncertainty surrounding the final outcome, can discourage shippers from triggering these provisions.

In light of these concerns, the ACCC recommended that:

'The COAG Energy Council should ask the AEMC to review Parts 8-12 of the NGR and to make any amendments that may be required to address the concern that pipelines subject to full regulation may still be able to exercise market power to the detriment of consumers and economic efficiency. In carrying out this review, the AEMC should also consider whether any changes can be made to the dispute resolution mechanism in the NGL and NGR to make it more accessible to shippers, so that it provides a more effective constraint on the behaviour of pipeline operators.'

On 19 August 2016, the COAG Energy Council agreed to task the AEMC to review Parts 8-12 of the NGR to address the concern that pipelines subject to full regulation may still be able to exercise market power to the detriment of consumers and economic efficiency. The terms of reference for this review are currently being developed. The review will commence in early 2017.

Reform measure 6: Review information disclosure requirements in the NGL

The ACCC found that there is little publicly available information on the costs incurred by pipeline operators in providing services and the relationship between these costs and the prices charged for services, limiting the ability of shippers to identify any exercise of market power. This is in direct contrast to other jurisdictions, such as the US, where financial reporting is seen as critical to enabling shippers to determine whether the charges are 'just and reasonable' and to negotiate effectively with pipeline operators.

The ACCC recommended that:

'The COAG Energy Council should ask the AEMC to explore how the scope of the information disclosure requirements in the NGL should be expanded to require all pipelines operating on an open access basis (that is, regulated and unregulated pipelines) to publish financial information that shippers can use to determine whether or not the prices they are offered by pipeline operators are cost reflective. The publication of this information would enable shippers to negotiate more effectively with pipeline operators and to identify any exercise of market power more readily.'

Responding to the ACCC, on 19 August the COAG Energy Council agreed to examine options for expanding the scope of the information disclosure requirements in the NGL to require all pipelines operating on an open access basis to publish financial information. The Gas Market Reform Group is leading this examination.

Reform measure 7-11: Capacity trading reforms

The COAG Energy Council's Gas Market Reform Package includes a range of reforms intended to assist the market to transact more efficiently with pipeline operators and facilitate capacity trading between market participants. Specifically, the Council agreed to establish a capacity trading platform(s), day-ahead auction of contracted but un-nominated capacity, standardisation

of key primary and secondary capacity contractual terms, and publication of secondary capacity trade information.

The capacity trading platform and auction/s are focused at facilitating secondary capacity. Day-ahead auctioning of pipeline capacity is likely to reduce short-term capacity prices, facilitate more pipeline utilisation and increase gas flows south and between STTMs. Standardisation of key contractual terms will assist in reducing search and transaction costs and increase ease of trading (more fungible products). The publication of secondary trade information will achieve greater price transparency and instil a greater level of confidence in the secondary market.

The GMRG is leading the detailed design and implementation of the suite of capacity trading reforms. The GMRG will commence this work in early 2017.

Amendments to the CCA

On 24 November 2015, the Australian Government released its response to the Competition Policy Review (the Harper Review) and on 16 March 2016, the Government further agreed to implement the Review's recommended changes to section 46 of the CCA concerning the misuse of market power.

On the 5 September 2016, the Government released an Exposure Draft of the Competition and Consumer Amendment (Competition Policy Review) Bill 2016. The Exposure Draft includes amendments to section 46 on the misuse of power, as well as a number of other amendments to the CCA which were supported by the Government, including, but not limited to, amending the National Access Regime (NAR) declaration criteria.

The Exposure Draft is available on The Treasury website at: https://consult.treasury.gov.au/market-and-competition-policy-division/ed_competition_law_amendments.

The Government initially invited stakeholders to provide written feedback on the Exposure Draft by 5pm (AEST) Friday 30 September 2016. This consultation period was later expanded to 28 October 2016, except in relation to the misuse of market power (Schedule 7).

Declaration criteria

The NAR provides a regulatory framework for third parties to seek access to nationally significant infrastructure services owned and operated by others.

The NAR provides a means of promoting competition in markets where the ability to compete effectively is dependent on being able to use a service provided by a piece of nationally significant infrastructure.

The NAR was reviewed by the Productivity Commission in 2013, and then by the Harper Review in 2015. Both review processes examined the application of the declaration criteria, and whether it was effectively promoting the objectives of the NAR by promoting effective competition in dependent markets.

As part of the response to the Harper Review, the Government decided to implement all of the recommendations of the Productivity Commission relating to the declaration criteria. The amendments seek to refocus and clarify the intent of the NAR, in particular the declaration criteria that the National Competition Council (NCC) and designated Minister must be satisfied of in order to recommend that a service be declared, as this determines when arbitration by the ACCC will and will not be available to access seekers or access providers.

Declaration criterion (a), stipulated at section 44H(4)(a), requires the designated Minister to consider whether access (or increased access) would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service. The amendments require the decision maker to consider whether access (or increased access) on reasonable terms and conditions following declaration would promote a material increase in competition in a market other than the market for the service. The amendments focus the test on the effect of declaration, rather than merely assessing whether access (or increased access) would promote competition.

Declaration criterion (b), stipulated at section 44H(4)(b) requires the designated Minister to consider whether it is uneconomical for anyone to develop another facility to provide the service. The amendment to this criterion asks whether the facility that provides the service could meet the total foreseeable market demand for the service or a substitute service at least cost. The amendment is intended to refocus the test to a 'natural monopoly' test instead of a 'private profitability' test.

Declaration criterion (f), stipulated at section 44H(4)(f), requires the decision maker to consider whether access (or increased access) to the service would

not be contrary to the public interest. The amendment requires the decision maker to consider whether access (or increased access) would promote the public interest. The amendment asks if declaration of the service, on reasonable terms and conditions, would promote the public interest. This means that a decision maker must be satisfied that declaration is likely to generate overall gains to the community.

Section 46

Section 46 prohibits a corporation with a substantial degree of power in a market from taking advantage of that power in any market for one of three specific purposes. These purposes focus on damaging an actual or potential competitor. Subsection 46(6A) sets out considerations that may be taken into account in determining whether a corporation has 'taken advantage' of its substantial market power.

On 16 March 2016, the Australian Government endorsed the Harper Review's recommendation to replace the misuse of market power provision in section 46 of the CCA with a new provision. The new provision re-frames section 46 to prohibit a firm with a substantial degree of power in a market from engaging in conduct with the purpose, effect or likely effect of substantially lessening competition in any market.

Review of the Limited Merits Review Regime

On 19 August 2016, the Energy Council tasked the SCO with undertaking a review of the Limited Merits Review (LMR) regime by December 2016. The Review assesses the effectiveness of the LMR regime, including the role of the Tribunal, under the National Electricity Law and NGL, and considers options for reform that will best advance the interests of consumers.

A consultation paper was released on 6 September 2016 and stakeholders were invited to submit written feedback by COB Monday 3 October 2016. Further, a public consultation session was held on 21 September 2016 in Melbourne.

Of relevance, the LMR regime allows parties affected by coverage recommendations by the NCC, coverage decisions by the relevant Energy Minister, and AER access arrangement decisions to apply for the decisions to be reviewed by the Australian Competition Tribunal where it can be

established that there are grounds for this to occur; for example, regulatory errors.

The Review team worked with the examination secretariat to ensure the respective recommendations would not be inconsistent. Similarly, to this report, the Review report was provided to Energy Ministers for their consideration and decision at the COAG Energy Council meeting on 14 December 2016.

2. Objective and history of the gas access regime

Objective

In the mid-1990s state and territory governments agreed to implement an industry specific access regime for gas transmission and distribution pipelines. The gas access regime came into effect in late 1997 through the *Gas Pipeline Access (South Australia) Act 1997* and the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code).

The 1997 intergovernmental Natural Gas Pipeline Access Agreement identified the objectives of the Gas Code as being to:

- a) facilitate the development and operation of a national market for natural gas;
- b) prevent abuse of monopoly power;
- c) promote a competitive market for natural gas in which customers may choose suppliers, including producers, retailers and traders;
- d) provide rights of access to natural gas pipelines on conditions that are fair and reasonable for both service providers and users; and
- e) provide for resolution of disputes.⁸

The Gas Code was replaced by the National Gas Law (NGL) and National Gas Rules (NGR) on 1 July 2008. The objectives of this new regulatory framework are captured in the National Gas Objective (NGO), which states the following:

'The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas'.⁹

The coverage criteria which are applied to determine whether a pipeline should be regulated largely mirror the declaration criteria outlined in Part IIIA of the CCA.

History

Following the report of the Hilmer Committee (1993), COAG agreed to a National Competition Policy package of reforms in April 1995. The National Competition Policy package provided for third party access to services of significant infrastructure

⁸ COAG, *Natural Gas Pipelines Access Agreement*, November 1997, p. 2

⁹ Section 23 of the *National Gas Law*.

facilities through the NAR (implemented in Part IIIA of then *Trade Practices Act 1974* (Cth) (TPA), subsequently the CCA.

For the gas industry, COAG decided to implement industry-specific access legislation. In implementing industry-specific legislation, the Australian Government acknowledged that Part IIIA of the TPA might be an alternative approach to such an industry-specific regime.

COAG established the Gas Reform Task Force in mid-1995 to undertake a scoping study of gas reform and then, among other tasks, develop a comprehensive set of principles to be reflected in an access code. COAG approved the Gas Code in November 1997. Each jurisdiction signed the intergovernmental Natural Gas Pipeline Access Agreement, thereby agreeing to enact the Gas Code as a law of its State or Territory.

The gas access regime was originally implemented by state and territory governments in 1997 through the *Gas Pipeline Access (South Australia) Act 1997* and the Gas Code.

Following the independent review of the strategic direction for energy market reform that was chaired by Warwick R. Parer, the Productivity Commission's 2003–4 review of the gas access regime, and the 2006 Expert Panel report on energy access pricing, COAG decided to implement a new legal, governance and regulatory framework. This new framework commenced on 1 July 2008 and was given effect via the NGL and NGR.

Current gas access regime

The NGL and NGR set out the regulatory framework for access to gas pipelines. The NGL is enacted as a law of South Australia. Each of the other jurisdictions in which the NGL applies has enacted legislation applying the NGL in its jurisdiction.

The NGL only results in the application of access regulation to pipelines that are 'covered'. Access to 'uncovered' pipelines is a matter for commercial negotiation.

Two forms of regulation are available for a covered pipeline – light regulation or full regulation.

Light regulation, as the name suggests, provides a light-handed approach to regulation. Under this form of regulation, the pipeline owner determines its own tariffs but must publish relevant access prices and other terms and conditions on its website and an access seeker may seek arbitration from the AER should

negotiations for access fail. This reflects the negotiate/arbitrate approach to access in Part IIIA of the CCA.

Full regulation requires the service provider to periodically submit an access arrangement to the AER for approval. The access arrangement sets out the terms and conditions under which third parties can access a pipeline. It must specify at least one reference service likely to be sought by a significant part of the market, and a reference tariff for that service. Third parties are entitled to access those reference services on the terms and conditions set out in the (approved) access arrangement. The reference service(s) are intended to operate as a benchmark for negotiations. Parties are free to negotiate access to 'reference' and 'non-reference' services on terms and conditions other than those set out in the (approved) access arrangement. This ability for parties to negotiate and agree on alternative terms and conditions to those set out in the approved access arrangement is recognised in section 322 of the NGL. In the event of an access dispute, reference terms may be enforced through arbitration.

Under the NGL a pipeline may become a covered pipeline in one of a number of the following ways:

- Pipelines that were covered pipelines under the Gas Code at the time the NGL was introduced were deemed by items 5, 6 and 7 of Schedule 3 of the NGL to be covered pipelines under the NGL (with some exceptions in Queensland).
- Any person may apply to the NCC for a pipeline to be covered under section 92 of the NGL. The application will, in the first instance, be considered by the NCC, who is required to make a recommendation to the relevant Minister having regard to the 'coverage criteria' (see Box 1) and the NGO. Once the relevant Minister has received the NCC's recommendation it must make a determination. In doing so, the Minister is required to have regard to the coverage criteria, the NGO, the NCC's recommendation and submissions (section 99 and 100).
- A pipeline can become covered if a service provider has been awarded a tender to construct and operate a pipeline as a result of a tender approval process approved under the NGR (section 126).
- A pipeline can become covered if a service provider voluntarily submits a full access arrangement to the regulator and the regulator makes or approves that voluntary access arrangement (section 127). Under this option, the pipeline will only remain covered for the duration of the access arrangement.

A party may seek a change to the coverage status of a pipeline by making an application to the NCC.

Box 1: Coverage criteria

Section 15 of the NGL sets out the pipeline coverage criteria:

- (a) that access (or increased access) to pipeline services provided by means of the pipeline would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the pipeline services provided by means of the pipeline;
- (b) that it would be uneconomic for anyone to develop another pipeline to provide the pipeline services provided by means of the pipeline;
- (c) that access (or increased access) to the pipeline services provided by means of the pipeline can be provided without undue risk to human health or safety; and
- (d) that access (or increased access) to the pipeline services provided by means of the pipeline would not be contrary to the public interest.

Decisions by the NCC

Pipeline classification

The NCC is responsible for determining the classification of the pipeline (i.e. if it is a distribution or transmission pipeline) in accordance with section 13 of the NGL.

Section 13 of the NGL: Pipeline classification criterion

- (1) The pipeline classification criterion is whether the primary function of the pipeline is to—
 - (a) reticulate gas within a market (which is the primary function of a distribution pipeline); or
 - (b) convey gas to a market (which is the primary function of a transmission pipeline).
- (2) Without limiting subsection (1), in determining the primary function of the pipeline, regard must also be had to whether the characteristics of the pipeline are those of a transmission pipeline or distribution pipeline having regard to—
 - (a) the characteristics and classification of, as the case requires, an old scheme transmission pipeline or an old scheme distribution pipeline;
 - (b) the characteristics of, as the case requires, a transmission pipeline or a distribution pipeline classified under this Law;

- (c) the characteristics and classification of pipelines specified in the Rules (if any);
- (d) the diameter of the pipeline;
- (e) the pressure at which the pipeline is or will be designed to operate;
- (f) the number of points at which gas can or will be injected into the pipeline;
- (g) the extent of the area served or to be served by the pipeline;
- (h) the pipeline's linear or dendritic configuration.

One of the primary reasons to classify a pipeline is to identify the relevant Minister to determine a coverage/revocation application, or an application for a 15-year no-coverage determination.

Form of regulation

The NCC decides the form of regulation (full or light regulation) for a pipeline, either in conjunction with its recommendation on a coverage application or, in respect of a covered pipeline, following an application to it for a light regulation determination. In making the decision the NCC is required under section 122 of the NGL to consider:

- the likely effectiveness of full and light regulation in promoting access
- the effect of full and light regulation on the costs that may be incurred by an efficient service provider, efficient users and prospective users and end users.

The NCC is also required to have regard to the form of regulation factors, the NGO and any other matters it considers relevant. As outlined in section 16 of the NGL, the form of regulation factors are:

- the presence and extent of any barriers to entry in a market for pipeline services
- the presence and extent of any network externalities (that is, interdependencies) between a natural gas service provided by a service provider and any other natural gas service provided by the service provider
- the presence and extent of any network externalities (that is, interdependencies) between a natural gas service provided by a service provider and any other service provided by the service provider in any other market
- the extent to which any market power possessed by a service provider is, or is likely to be, mitigated by any countervailing market power possessed by a user or prospective user
- the presence and extent of any substitute, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service

- the presence and extent of any substitute for, and the elasticity of demand in a market for, electricity or gas (as the case may be)
- the extent to which there is information available to a prospective user or user, and whether that information is adequate, to enable the prospective user or user to negotiate on an informed basis with a service provider for the provision of a pipeline service to them by the service provider.

Similarly to coverage decisions, a party may seek a change of the form of regulation of a pipeline, to reflect changing conditions, by applying to the NCC.

Greenfields exemption

A service provider who is proposing, or has commenced (but not yet commissioned), a greenfields pipeline project may apply to the NCC to be granted a 15 year no-coverage determination exempting the pipeline from being a covered pipeline. No-coverage determinations are intended to provide regulatory certainty for investors in new pipeline projects and to encourage efficient investment in new pipeline infrastructure.

Decisions on no-coverage determinations are made by the relevant Minister on the recommendation of the NCC. To be eligible for a no-coverage determination the Minister must be satisfied that one or more of the four coverage criteria will not be met for the 15-year period for which the determination would apply.

3. Identifying the problem

Box 2: Summary

The examination has not attempted to validate the evidence and conclusions of the ACCC in respect to monopoly pricing.

Pipeline customers ('shippers') have made clear in this examination their belief that pipeline operators are exercising market power during negotiations for pipeline services. This results in prices that are higher than would be the case in a fully competitive or fully regulated environment. Further, smaller shippers have indicated that the absence of adequate publicly available information on prices and terms, as well as the methodology used to determine these and the costs incurred by pipeline operators, mean it is difficult to assess what a reasonable offering would be.

An analysis of total shareholder return to a pipeline operator was commissioned through JP Morgan's Equity Research Team. The analysis examined returns over a ten-year period and compared them directly with aggregated returns to regulated electricity asset owners and with the ASX 200. The results show that the total return on the pipeline business was double that of the average regulated electricity network operator. A difference is to be expected when comparing returns of regulated assets with that of an unregulated monopoly, and while the respective businesses will have different risk characteristics, that is not sufficient to explain the difference in returns. The analysis was commissioned to highlight that in a business environment where market power exists, higher than average returns are being generated.

However, there is also evidence that, in some instances, the exercise of market power is resulting in inefficient outcomes, which is contrary to the NGO. It is also affecting the ability to achieve the COAG Energy Council's *Australian Gas Market Vision*, for the '*establishment of a liquid wholesale gas market that provides market signals for investment and supply*'.¹⁰ For instance, a number of market participants have reported that a significant level of trading around the Wallumbilla Gas Supply Hub (GSH) is occurring bilaterally, off-market, with one of the principal reasons being to avoid the transportation cost associated with physically moving gas to Wallumbilla. Continuation of this behaviour would be a significant inhibitor to achieving the policy objective to develop a deeper and more liquid trading market.

As outlined by the Productivity Commission in its Inquiry into the National Access Regime report,¹¹ access regulation can be used to address an enduring lack of effective competition, due to natural monopoly, in markets for infrastructure services — the questions are when, and how, should governments regulate access so that the benefits to the community are likely to outweigh the costs. There may be benefits from access regulation where infrastructure service providers have enduring market power and an ability and incentive to deny access or restrict output and charge monopoly prices.

Gas pipelines tend to have natural monopoly characteristics derived from the following three factors: investments in pipelines are indivisible; economies of scale exist, and; sunk costs are large. The natural monopoly characteristics of gas pipelines can create a high barrier to entry for prospective competitors to an existing pipeline, which in turn tends to enhance the market power of existing gas pipeline operators.

Market power comes from the lack of competitive constraint. Where market power is constrained, a service provider faces commercial incentives to operate efficiently by focusing on increasing throughput. A pipeline operator with market power is able to act without significant constraint from competitors, potential competitors, customers, alternative energy sources or asset stranding.

As noted by the Productivity Commission:

*‘Access regulation may be warranted where the provider of pipeline services has an ability and incentive to charge monopoly prices or deny access to a pipeline in order to generate monopoly rents... Conversely, access regulation is unlikely to be warranted where the market power of a provider of a pipeline service is constrained’.*¹²

Existence of market power

The ACCC investigated the concerns raised by a number of market participants about the market power exercised by some transmission

¹⁰ COAG Energy Council, *Australian Gas Market Vision*, 11 December 2014.

¹¹ Productivity Commission, *National Access Regime*, Productivity Commission Inquiry Report, No 66, 25 October 2013, p 7.

¹² Productivity Commission, *National Access Regime*, Productivity Commission Inquiry Report, No 66, 25 October 2013, p 8.

pipelines. For the purposes of assessing the market power of transmission pipelines on the east coast, the Inquiry considered the potential constraints affecting new and existing pipelines when negotiating with shippers and prospective shippers.

New transmission pipelines

Distinguishing between new and existing pipelines, the ACCC found that competition to build a new pipeline can be effective in limiting market power.¹³ The ACCC found that if there is effective competition to develop and build a pipeline ('competition for the market'), then the market power of the ultimate pipeline owner is likely to be limited for a period of time. By negotiating prior to the pipeline being built, foundation shippers will usually be able to use competitive tension between prospective pipeline owners to negotiate long-term contracts that are not affected by the exercise of market power. The ACCC identified the Northern Gas Pipeline (NGP) and QSN Link as examples to suggest that competition to build a pipeline can impose an effective constraint on the access behaviour of new pipelines.

Stakeholders agree with the ACCC that competition to build a new pipeline can be effective in limiting market power. A number of stakeholders identified additional examples (to the NGP and QSN Link) to support that competition to build a pipeline can impose an effective constraint on the access behaviour of new pipelines. For example, Australia Pacific LNG (APLNG) highlighted that the Reedy Creek to Wallumbilla Pipeline was the outcome of a competitive bid and has resulted in a competitive tariff. Additionally, DBP Transmission outlined that the Fortescue River Gas Pipeline is another example of the competitive and efficient outcomes that are delivered at the time of a greenfields pipeline's investment decision. The development of this pipeline was a result of an expressions of interest process conducted by Fortescue Metals Group. DBP Transmission competed with other pipeline proponents for the construction of the pipeline and there was competition from other energy sources, including an overhead transmission powerline solution from Port Hedland and the pre-existing fuel source, diesel, which was being used to generate on site electricity at Solomon.¹⁴

¹³ ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 96.

¹⁴ DBP Transmission, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 10.

Greenfields exemption

The ACCC noted the importance of retaining the 15 year no-coverage option to counter the effect that regulation could otherwise have on investment in new greenfields pipelines.

There appears to be widespread stakeholder support for retaining the 15 year no-coverage option exempting the pipeline from being a covered pipeline. Gas producers are particularly supportive of maintaining the greenfields exemption. Santos' experience in greenfield pipeline discussions, including in relation to the NGP and the proposed Narrabri Gas Pipeline, is that competitive tension to tender for the right to secure pipeline rights elicits competitive market results. Accordingly, Santos recommends the 15 year no-coverage option be retained '*to ensure pipeline industry continues to be able to invest in new projects without the threat of regulation*'.¹⁵ Shell and Origin Energy also indicated that there is a case to maintain the existing 15 year no-coverage option as it has been effective in encouraging investment.

Existing transmission pipelines

In contrast to new transmission pipelines, the ACCC found that the majority of existing transmission pipelines on the east coast have market power and there are limited constraints on their behaviour.

The ability or incentive for a pipeline owner to exercise market power may be constrained by a range of considerations, including:

1. Competition from other pipelines (existing or new) – directly or indirectly

There a number of major transmission pipelines not subject to any form of competition from other pipelines, including the South West Queensland Pipeline (SQWP); QSN Link; Roma to Brisbane Pipeline (RBP); Declared Transmission System (DTS) and Tasmanian Gas Pipeline (TGP); as well as smaller pipelines servicing regional areas not subject to any form of competition from other pipelines.

¹⁵ Santos, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 3.

2. Competition from other energy sources

Material gathered through the ACCC Inquiry suggests that, at best, competition from other energy sources provides a weak constraint on existing transmission pipelines.

3. The risk of asset stranding (full or partial)

The ACCC found that while there is some evidence that the decline in Gas Powered Generation (GPG) on the east coast and changes in the pattern of gas flows are exposing some pipelines to partial asset stranding risk, the pipelines that are facing this risk have not reduced their prices to attract more demand to counter this risk. To the contrary, some have actually increased their prices, with one pipeline raising prices by over 90 per cent even in the face of declining volumes.

4. The countervailing bargaining power of shippers with special characteristics that enable them to credibly threaten to bypass the pipeline (for example, by building their own pipeline or sponsoring new entry)

The ACCC found that while there have been examples in the last 10 years of larger shippers developing pipelines to bypass existing pipelines or credibly threatening to use an alternative energy source, there was no evidence in the material provided by pipelines that countervailing power has placed a constraint on the prices negotiated in the last two to three years, or the prices currently being offered.

5. Regulation or the threat of regulation

The ACCC found, based on internal documents provided by pipeline operators, that the gas access regime, in its current form, is not posing an effective constraint on the behaviour of both unregulated and regulated pipelines.

The prices paid for some unregulated pipelines in sales processes carried out over the last five years also suggest that purchasers are assuming little reduction in returns from the potential for future regulation. Internal analysis

carried out by one pipeline operator indicated that it is earning 70 per cent more revenue than it would if it was subject to full regulation.¹⁶

A number of shippers also noted the lack of constraint posed by the existing regime, with some pointing to the decision not to regulate the South East Pipeline System (SEPS) in 2013 as evidence of the regime's inability to constrain the behaviour of pipeline operators even when the pipeline in question is a monopoly.

It is recognised that the extent to which market power is constrained for gas pipelines will differ according to particular the circumstances of each pipeline, including its geographic location, the number and type of shippers and competition from alternative gas pipelines.

The ACCC also identified that there is evidence that some pipelines that are subject to full regulation are taking advantage of the limitations in the gas access regime to exercise market power. The Inquiry was also presented with evidence that at least two pipelines subject to light regulation are exercising market power.

Exercise of market power

Utilising the information acquired during the inquiry, including contracts, board papers and correspondence, the ACCC assessed whether there was evidence of the exercise of different forms of market power, including monopoly pricing, anti-competitive bundling or tying, restricted access or denial of access, anti-competitive price discrimination and reductions in service quality.

The ACCC did not find evidence of anti-competitive bundling or tying, restricted access or denial of access and anti-competitive price discrimination.

The ACCC did find evidence of some retailers withholding capacity on some smaller regional pipelines where a retailer has contracted all the available capacity. Withholding of capacity on regional pipelines by incumbents restricts competition for supply from other retailers. Accordingly, as recommended by the Inquiry report, the ACCC is considering whether the availability or pricing of capacity on regional pipelines raises any concerns as a possible

¹⁶ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 100.

contravention of the misuse of market power provisions or the exclusive dealing provisions of the CCA.

The ACCC also noted that reductions in pipeline service quality were rare. The ACCC did, however, find evidence of monopoly pricing, with a large number of pipelines on the east coast found to be pricing at levels above what would be expected in a workably competitive market or under regulation.¹⁷

Monopoly pricing

In relation to a number of existing pipelines examined by the ACCC in response to concerns raised by market participants, the ACCC found that the majority of transmission pipelines on the east coast are using their market power to engage in monopoly pricing. While this does not amount to a contravention of the CCA, the ACCC found that a number of pipelines are engaging in monopoly pricing, with prices exceeding the long-run average cost of supply for a sustained period.

Many stakeholders, including some gas producers/explorers, retailers and users, agree with the ACCC's finding that the majority of existing transmission pipelines on the east coast have market power and are using this power to engage in monopoly pricing. Various stakeholders indicated their experience in the gas market is consistent with the findings of the ACCC. Numerous shippers highlighted that pipeline operators have market power as a natural extension of their natural monopoly characteristics, with a discrete number of gas pipelines available for gas transmission throughout Australia. One stakeholder indicated that transmission pipeline operators with market power are using their power to engage in monopoly pricing strategies, such as excessively priced interruptible services or shippers are forced to pay expensive overrun/variance charges.

Further, various shippers in eastern Australia indicated that they are hesitant to publicly challenge the prevailing prices for pipeline services, concerned that incumbent pipeline owners could 'retaliate' when their existing arrangements came up for renewal.

Central Petroleum, a gas producer looking to transport gas from the Northern Territory to eastern Australia, has been quite vocal in its belief that pipeline

¹⁷ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 102.

operators are exercising their market power by monopoly pricing. Central Petroleum outlined that gas pipelines exhibit natural monopoly characteristics, including a high initial capital requirement, and once built, significantly lower unit costs of expansion comparative to a new build alternative. Central Petroleum believes these characteristics result in a near insurmountable barrier to entry for any new competing pipeline development. This is evidenced by company growth through acquiring additional existing pipelines rather than investing in new builds, leading to operational savings unavailable to any new competing pipeline owner.

Central Petroleum states that without price regulation:

*‘the incumbent pipeline owner is incentivised to set tariffs at a level just below the higher new entrant alternative. As a result, the cost efficiencies that are inherent to existing pipeline assets are not shared with the markets upstream or downstream of that pipeline creating market inefficiencies and muted pricing signals to gas suppliers and customers’.*¹⁸

Pipeline operators strongly disagreed with the ACCC findings and the conclusion of monopoly pricing drawn from the information gathered during the Inquiry.

Pipeline operators primarily believe that the evidence of monopoly pricing relied upon by the ACCC are flawed, misinterpreted and/or represent ‘cherry-picking’. This was highlighted by APA Group which noted that: *‘The main findings of the report in relation to pipeline pricing are based on misinterpreted evidence or findings that have been inferred from examples presented out of context’.*¹⁹

The ACCC recognised during the examination that inferring the use of market power through pricing outcomes is difficult as there can be many interpretations of any individual piece of evidence. As noted by the ACCC Inquiry report, no single piece of evidence is definitive in demonstrating pipeline operators are exercising their market power. Rather, the totality of the evidence coupled with the lack of competitive constraints faced by most

¹⁸ Central Petroleum, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, page 16.

¹⁹ APA Group submission, to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 4.

pipelines, led the ACCC to conclude a large number of pipelines were engaging in monopoly pricing.

Tasmanian Gas Pipeline Pty Ltd (TGP Pty Ltd) noted that it does not consider that the ACCC has made its case that monopoly pricing is occurring and that pipelines are not effectively constrained by competition. TGP Pty Ltd argued that even though they operate the only gas transmission pipeline in Tasmania, it cannot be considered a natural monopoly in an economic sense because its customers have opportunities to substitute away from gas to other energy sources. However, given the high transaction costs of substituting gas with other energy sources, industrial and residential users are not readily able to switch, thus limiting their negotiating positions and increasing their reliance on their access to the TGP.

Some pipeline operators indicated that in comparing pipeline service tariffs against regulated rates rather than a competitive benchmark, the ACCC assumes that only the regulator is able to determine the efficient price. DBP Transmission indicated that in respect of the pipelines that it owns and operates, this is an incorrect assumption.

Returns

Numerous stakeholders indicated that pipeline operators are generating returns on existing pipelines that are not reflective of their risk profile. Santos highlighted that pipeline owners do not share the same level of risk that upstream and downstream users do, yet take a sizable portion of the margin. Santos believe that a more mature gas market '*would reward those who take the risks*'.²⁰

APLNG considers monopolistic pricing occurs in many existing transmission pipelines. APLNG's experience to date, based on firm, as available and interruptible transportation rights on numerous pipelines, is that existing pipelines seem to cost their service based on the '*maximum price the market will bear*' versus the actual cost plus a reasonable return to the pipeline operator.²¹ This contrasts with APLNG's experience with the Reedy Creek to

²⁰ Santos, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 2.

²¹ APLNG, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 1.

Wallumbilla Pipeline, which was the outcome of a competitive bid resulting in a competitive tariff.

Some Tasmanian stakeholders have raised concerns about price increases on the TGP despite the fact it is facing declining gas volumes and has significant spare capacity available. Tas Gas Retail (Tas Gas) has publicly reported difficulty in negotiating an acceptable gas transportation agreement in relation to the TGP.

According to the ACCC Inquiry, a recent proposal to extend the network from Port Latta to Smithton, which had secured Federal funding of \$6 million, did not proceed due, at least in part, to the TGP Pty Ltd asking shippers to pay a 200 per cent premium on their past charges.²² Tas Gas Chief Executive Officer, Roger Ingram, has publicly indicated that Tas Gas was not able to obtain acceptable commercial terms in relation to the TGP and therefore could not meet federal government timelines to secure supporting funding under its Tasmanian Jobs and Growth Package.²³

The ACCC Inquiry considered that the price increase was because the pipeline operator was trying to recover the revenue it expected to lose as a result of Hydro Tasmania reducing its Maximum Daily Quantity (MDQ) for gas-fired generation post-2017. The TGP Pty Ltd confirmed this in a recent submission, noting that *'if a commercially acceptable outcome cannot be reached with Hydro Tasmania or the State, then gas transmission pricing for industrial customers may increase on average 110% for some customers, placing their commercial viability and their role as major employers, particularly in the North West of Tasmania, at risk'*.²⁴

The ACCC also found that the high rates of return that pipeline operators expect to earn on incremental investments are consistent with monopoly pricing.²⁵

Infrastructure Partnerships Australia (IPA) contends that ACCC report incorrectly emphasises the rate of return on incremental investments and the

²² ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 118.

²³ Circular Head Chronicle, 'Gas still an option', <http://www.chchronicle.com.au/gas-still-an-option-19481/> (accessed 29/11/2016).

²⁴ TGP Pty Ltd, Submission to Tasmanian Legislative Council Public Accounts Committee on Financial Position and Performance of Government-Owned Energy Entities, 8 July 2016, p 2.

²⁵ ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 103.

rates of return when viewed in the context of a pipeline's entire asset base, are likely to be comparable with the returns on other forms of infrastructure. Further the enhanced risk profile of these investments and the fact that they make up only a small proportion of a pipeline's asset base needs to be taken into consideration.

Similarly, DBP Transmission submit that the ACCC's findings are *'drawn from 11 incremental projects and are far from conclusive, precisely because they are for incremental projects. The commercial opportunities and risks service providers (take) when investing in these projects are very different to those applying across the asset as a whole'*.²⁶ In the case of the Dampier to Bunbury Natural Gas Pipeline (DBNGP), incremental projects are estimated to make up around 5 per cent and are not significant investments when compared to the overall asset base.

APA recognised that most of the incremental investments cited involve small capital works projects to APA pipelines (representing less than 1.25 per cent of APA's enterprise value) and three of the projects were *'developed as a competitive response and the other three involved making pipelines bi-directional'*.²⁷ APA contends that the ACCC cites rates of return without taking into account the large underlying capital investment in the pipeline itself.

In response to stakeholder concerns that pipeline operators are generating excessive returns, this examination commissioned analysis from JP Morgan on the total shareholder return to a pipeline operator. The desktop analysis by the Equity Research Division examined total shareholder return over the last ten years for APA Group and compared it to the returns from other indexes, as well as the average returns from regulated asset businesses operating transmission services. Table 1 below contains the data provided by JP Morgan.

In conducting their analysis, JP Morgan identified caveats that affect how the comparison should be viewed including, stock specific factors like asset acquisitions conducted by individual companies, fundamental industry changes, such as revenue based regulation from tariff based and macro drivers such as interest rates and the cost of debt facilities. Further, that

²⁶ DBP Transmission, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 16.

²⁷ APA Group, submission to the Examination of the current test for the regulation of gas pipelines Consultation Paper, October 2016, p 4.

higher returns should be expected from non-regulated entities compared to regulated entities.

The analysis was not commissioned to target specific companies, but rather to demonstrate that in an environment where market power exists it is evident that higher than average returns are being generated.

Table 1: JP Morgan analysis of shareholder returns

Calendar Year	Networks Average			APA			Regulated Assets average			Merchant Utilities Average			Utilities Average			ASX200		
	Stock Index	Dividend Paid	TSR	Stock Index	Dividend Paid	TSR	Stock Index	Dividend Paid	TSR	Stock Index	Dividend Paid	TSR	Stock Index	Dividend Paid	TSR	Index	Dividend Paid	TSR
2004	2.25	0.04	N/A	3.03	0.21	25.2%	2.64	0.08	25.2%	5.69	0.08	49.3%	3.66	0.08	37.2%	4050.60	0.00	22.8%
2005	1.74	0.06	9.4%	3.70	0.22	29.1%	2.23	0.10	19.3%	6.38	0.07	14.8%	3.06	0.09	17.8%	4763.40	215.94	22.9%
2006	1.87	0.16	14.8%	4.04	0.22	15.2%	2.41	0.17	14.9%	11.02	0.12	12.6%	5.28	0.16	14.6%	5669.90	430.40	28.1%
2007	1.92	0.17	11.3%	3.50	0.30	-6.1%	2.31	0.21	6.9%	9.94	0.34	-2.3%	4.86	0.25	3.8%	6339.80	474.41	20.2%
2008	1.25	0.14	-26.2%	2.89	0.29	-9.1%	1.66	0.18	-21.9%	13.93	0.40	52.4%	5.75	0.25	2.9%	3722.30	473.89	-33.8%
2009	1.31	0.12	12.9%	3.37	0.31	27.2%	1.83	0.16	16.5%	13.67	0.48	1.7%	5.77	0.27	11.5%	4870.60	368.61	40.8%
2010	1.19	0.12	-0.9%	3.90	0.32	25.3%	1.87	0.17	5.6%	14.15	0.49	7.3%	5.96	0.27	6.2%	4745.20	390.14	5.4%
2011	1.32	0.10	18.9%	4.32	0.34	19.5%	2.07	0.16	19.1%	12.48	0.50	-8.2%	5.54	0.27	10.0%	4056.56	420.90	-5.6%
2012	1.58	0.10	26.3%	5.32	0.33	30.7%	2.52	0.15	27.4%	12.45	0.52	3.1%	5.83	0.27	19.3%	4648.95	424.70	25.1%
2013	1.59	0.10	7.6%	5.78	0.35	15.0%	2.63	0.16	9.4%	13.36	0.52	13.6%	6.21	0.28	10.8%	5352.21	465.61	25.1%
2014	1.92	0.11	26.3%	7.45	0.36	35.1%	3.30	0.17	28.5%	11.78	0.53	-8.2%	6.13	0.29	16.2%	5411.02	501.76	10.5%
2015	1.90	0.13	7.0%	8.68	0.33	21.0%	3.59	0.18	10.5%	11.39	0.49	-5.3%	6.19	0.28	5.2%	5295.90	509.75	7.3%
Approx YoY	0.8%	5.2%	6.0%	15.5%	6.7%	22.2%	5.5%	5.6%	11.1%	0.3%	3.4%	3.7%	9.3%	5.9%	15.2%	2.6%	6.6%	9.2%

The results show that the total return on the pipeline business was double that of the average regulated electricity network operator.

As noted by JP Morgan, some difference in returns is to be expected when comparing regulated assets with that of an unregulated monopoly. Some difference can also be expected given the different risk characteristics between the businesses, however, it is not believed that this is sufficient to explain the difference in returns.

Capital cost recovery and subsequent pricing

The ACCC found that the prices charged by pipeline operators that have already recovered the cost of construction are higher than would be the case under full regulation.²⁸

APA Group disagrees with the ACCC's premise that prices in any competitive market would be almost zero where capital was fully paid off. In a workably competitive market, an income producing asset would not be charged at almost zero pricing. APA believes this view leads the ACCC to undertake an analysis which effectively assumes monopoly pricing. APA submits that the

²⁸ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 103.

approach taken by the ACCC is inconsistent with how existing pipelines would be valued if they became regulated.

This examination has not attempted to resolve the debate as to the appropriate cost/investment base for a pipeline when setting the price for transportation services. However, this issue will be considered when the details of the framework recommended by this review are completed.

Pricing of as-available, interruptible and backhaul services

As gas flows become more dynamic throughout the east coast, the demand for as available, interruptible, backhaul and bi-directional services and other ancillary services is increasing, particularly amongst gas fired generators, LNG projects and producers.

The ACCC found that the prices charged by some pipeline operators for as-available, interruptible and backhaul services are excessive on key routes between Queensland and southern states and for hub services at Wallumbilla.²⁹ Financial data provided by the pipeline operators to the ACCC Inquiry indicated that this is a growing source of revenue for some pipelines. It is also contributing to a substantial increase in the profitability of those pipelines where the costs have been underwritten by long-term foundation contracts.

A number of submissions to the consultation paper for this examination reported that charges for ancillary services are 'excessive'. Various stakeholders indicated that the costs of hub services at the Wallumbilla GSH are limiting trading in that market. The costs of pipeline services around the GSH are further considered in the following section.

APLNG noted that it pays for backhaul transport, redirection fees, in-pipe trade fees and compression fees as well as fees associated with balancing of pipeline flows. These fees are unregulated and APLNG has no information on how these fees are determined.

Shell's experience is that as available services are priced at significant premium to firm service (often 120 per cent above the quoted firm price). This can represent 25-30 per cent of the market price for gas. In contrast, they

²⁹ ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 103.

would expect the as available service to be offered at a discount to the long-term price. Interruptible services, redirection and compression services are also more expensive than firm despite being an inferior product.

Central Petroleum provided a number of examples of ancillary services that it believes are excessively priced. The examination has not sought to verify the reasonableness of Central Petroleum's claims. Rather, it is suggested that Central Petroleum's experiences, as outlined below, are indicative of a wider sentiment from other shippers.

In its submission, Central Petroleum provided an example of a Gas Parking Agreement (Parking Service) they had with the pipeline owner for certain sales into the Amadeus Gas Pipeline (AGP). The Parking Service covered a relatively small volume of 10 TJ/day. In March 2015, this Parking Service came up for renewal, at which time the price offered by the pipeline owner for the exact same service increased by approximately 400%. When Central Petroleum questioned the pipeline owner as to the basis for this substantial price increase, the pipeline owner responded that they were able to charge another customer a higher rate and had to now charge Central Petroleum that same higher rate. In an effort to manage costs, Central Petroleum has subsequently reduced its Parking Service volume to a fraction of its original size, creating operating inefficiencies that Central claim are material for a small gas producer.

Central Petroleum also provided an example of backhaul charges set at prices higher than the 'cost of service'. NT gas production has the advantage of connecting into Mt Isa, which based on prevailing supply and demand dynamics means that none of its gas sold through the NGP will need to be physically transported. Instead, gas will be physically consumed at Mt Isa and notionally delivered via backhaul to east coast gas customers. Central Petroleum note that this is an efficient use of existing pipeline networks and something that should be (but is not currently) reflected in a tariff that is substantially lower than forward haul rates.

Central Petroleum contends that based on current contracted sales with the NGP and adding 22PJ east coast gas sales using the published tariff for the Carpentaria Gas Pipeline (CGP), there would be a 73 per cent decrease in gas physically transported, but a 75 per cent increase in revenue received by the pipeline owner. Therefore, Central believes backhaul is a windfall gain (i.e.

because there is no at-risk capital invested) to the pipeline owner, which will go on for the life of the CGP.

Central Petroleum estimates that gas demand at Mt Isa is largely tied up in long term GSA's or purchased by APA Group (Diamantina Power Station), therefore backhaul on the CGP provides the only transportation option available for new NT gas supplies into the east coast market.

Central Petroleum estimates that pricing CGP backhaul at 'cost of service' would reduce delivered gas costs by over \$1.00/GJ. As a result, Central Petroleum questioned the reasonableness of the tariff offered for these services. Central Petroleum suggested that whilst pipeline operators are not acting illegally or improperly, they are taking advantage of the absence of economic regulation.

IPA indicates that the pricing of as available, interruptible and backhaul service charges differ significantly from the services typically provided by pipeline owners and account for a very small proportion of total revenues. APA indicates that its east coast pipeline revenue from all available and interruptible services in H1 FY16 is less than 0.5 per cent of its total annual revenue in the east coast.

APA believes the ACCC used arbitrary benchmarks for pricing non-firm services. APA admits that the three instances of pricing of non-firm services above the benchmarks relate to pipelines owned by APA. Of the three, APA outlines that two are isolated instances of historical pricing and the other meets the benchmark when the correct forward tariff is used to do the calculation.

Economic inefficiencies

Evidence gathered by the ACCC indicated that monopoly pricing by transmission pipelines is giving rise to higher delivered gas prices for users and in some cases lower ex-plant prices for producers. The ACCC observed that this could have adverse effects on the economic efficiency of the east coast gas market and on upstream and downstream markets. Some of the more significant economic inefficiencies likely to flow from this behaviour include:

- lower than efficient levels of gas production and investment in gas exploration and reserves development;

- lower than efficient levels of gas use and investment in downstream facilities that use gas; and
- inefficient pipeline utilisation, distortions in gas flows across the market, and gas failing to flow to where it is valued most highly.

This examination has found evidence that, in some instances, the exercise of market power is resulting in inefficient outcomes that do not promote the NGO or facilitate the achievement of the COAG Energy Council's Australian Gas Market Vision, for the 'establishment of a liquid wholesale gas market that provides market signals for investment and supply'.³⁰

Wallumbilla Gas Supply Hub – Off-market trades

The Wallumbilla GSH was established in 2014 and is operated by AEMO. The GSH, which is a voluntary exchange, was introduced to enable improved wholesale trading and allows for a faster response, and greater liquidity and flexibility, in trading gas. The GSH is a physical trading hub requiring those wishing to participate in the market to physically supply gas to and from Wallumbilla. Thus, the costs associated with pipeline services to and from the GSH, as well as to move gas around the GSH using compression and redirection, are important considerations influencing the level of trade that occurs on-market.

During the examination, a number of market participants reported that a significant level of trading around Wallumbilla is occurring bilaterally, off-market, with one of the principal reasons being to avoid the transportation cost associated with physically moving gas to Wallumbilla.

In their submission, Shell observed market conditions which demonstrate that gas has not been able to move to where it is needed most, at least partially due to the lack of appropriately priced transport.

Shell noted that the level of interest in gas trading, in and around the GSH area during the course of 2016, provides a very promising sign that this trading point could develop into a liquid market with improved incentives on pipelines (and shippers) to offer efficiently priced transportation services.

³⁰ COAG Energy Council, *Australian Gas Market Vision*, 11 December 2014.

However, the current pricing regime for pipeline services is materially impacting the level of trading through the GSH.

As a market participant, Shell has observed that the cost of transport is influencing the level of trading taking place 'on screen' through the GSH. In some circumstances, participants are seeking to trade 'off screen'/bi-laterally agreeing to delivery points downstream to avoid the charges associated with transporting gas to the GSH.

In the interests of developing the market, parties may be incentivised to trade at the GSH where it is commercial, but it is clear that pipeline costs (capacity, redirection and compression) are currently a limiting factor.

Shell indicated that pipeline costs are also making it difficult for AEMO to successfully implement a single Wallumbilla Hub product, which was agreed to by the Energy Council in 2015. In working through the implementation of the single product, it became apparent that transport costs play a significant role in determining whether it is economic for some participants to trade gas at the Wallumbilla Notional Point - the new reference point for the single product.

The removal of other trading locations (e.g. the RBP) following the introduction of the single Wallumbilla Hub product is likely to encourage some parties to trade bi-laterally to avoid the costly transportation changes associated with (or building these costs into their offer prices) delivering gas to the new reference point. This would see an immediate reduction in the level of liquidity at the GSH. Shell have raised these points with AEMO and is working with the GSH Reference Group to address this issue.

The implementation the single product at Wallumbilla is a vital component of the Energy Council's gas market reforms and, once fully implemented in March 2017, will transition the Wallumbilla GSH into the Northern Trading Hub.

Continuation of off-market trade would be a significant inhibitor to achieving the Council's policy objective to develop a deeper and more liquid trading market.

Materiality of the issue and impacts on the market

It is important to consider the materiality of the issues identified above and to assess their impacts on the market before determining what, if any, remedial actions should be taken.

While a range of issues and counter statements have been provided by representatives of all sectors of the gas market, it seems that the objectives of most stakeholders (other than pipeline operators), is lower prices for pipeline services.

Stakeholders did not all agree however, on the materiality of transportation prices on upstream development or downstream users.

The cost of gas transmission and distribution services varies between users and how far the gas is transported. The importance of pipeline tariffs for upstream producers is dependent on their market position. Those looking to produce gas in more remote areas argue that the price of transportation is material and determinative of their business case.

Central Petroleum submitted that gas transportation (excluding nitrogen processing costs which will be applicable to all NT producers) accounts for nearly half of the delivered gas price. At \$8/GJ – existing pipeline tariffs make up 34 per cent and the NGP 17 per cent (together 51 per cent), with the rest made up of ex-field price signal (40 per cent) and gas processing (9 per cent). Whilst the NGP tariff is a significant cost for NT production, Central Petroleum believes it is reasonable given the cost of the NGP development and the fact it was derived through a competitive process.

Most large users and retailers believe any reduction in price from increased regulatory intervention in the pipeline industry is a win but addressing this issue is not the 'main game'. The majority of large users and retailers in eastern Australia agree that the major issue is facilitating the development of new sources of gas supply for the domestic market.

Major Energy Users Inc. (MEU) note that total transportation costs contribute about 50 per cent to the retail price of gas, with transmission making up approximately 5-15 per cent. For large users and producers however, the transmission costs can be more like 30-50 per cent, as most offtake or input to the transmission system only and do not use the distribution network.

Pipeline operators contend that transmission charges are a minor component of the total price of gas. Jemena noted that gas transmission charges comprise only 7 or 13 per cent of a typical gas bill for NSW households and large industrial customers respectively. DBP Transmission noted that, in WA, less than 5 per cent of the delivered cost of energy to a residential customer relates to transmission pipeline costs. APA referred to the ACCC Inquiry report, which stated transmission charges constitute only 10-15 per cent of the delivered price of gas for retail customers. They also referred to the 2015 Gas Price Trends Review report which stated that in 2015, the national average retail gas price was 2.64 c/MJ, of which 42 per cent was the distribution component, 27 per cent was the retailer component, 23 per cent was the wholesale gas component and only 8 per cent was the transmission component.

Central Petroleum rebutted the pipeline operator's claims of immaterial transportation costs, highlighting the statistic commonly promoted by the pipeline sector that pipeline tariffs are only 5 to 10 per cent of delivered costs. They contend that this statistic is derived by using the delivered cost of gas into households which is in the order of \$40/GJ once the retailer charges and other retail delivery costs are factored in. This sector, however, accounted for only 25 per cent of the gas sold in 2014. For 75 per cent of gas sales, including those to industrial and commercial users, gas is purchased in the wholesale market at a city gate price. It is these prices which are used to forecast gas prices on the east coast. Central Petroleum suggests that delivered gas prices are in the order of \$8/GJ at the city gate which explains why pipeline tariffs are so significant to a functioning and efficient gas market.

It is clear from this examination that most shippers believe the prices charged for pipeline services, particularly ancillary services, are too high. As would be expected in relation to a largely unregulated industry, the returns of transmission pipeline operators indicate that they are exercising their market power. This results in prices that are higher than would be the case in a fully competitive or fully regulated environment. Most stakeholders recognised that any reduction in transport prices may not be passed on to gas consumers and instead may just shift the economic rent to the retailer or the producer. Even if this is the case, that shifting of economic rent would likely attract competition in upstream and/or downstream markets and over time be returned to consumers in the form of lower prices. In contrast, if the economic rent

remains in the pipeline segment of the market, then competition cannot be relied upon to ensure that it will be passed onto consumers.

Given gas has an important role to play in the transition to a lower carbon economy, efficient pipeline services and prices are an essential consideration in energy security planning and ensuring GPG is able to provide capacity when required. Less efficient, higher priced pipeline services may have a material effect on the price of dispatched electricity.

4. Effectiveness of the current regulatory test

The ACCC found that the threat of regulation under the NGL is not imposing an effective constraint on the behaviour of unregulated pipelines because the current test for regulation is not directed to the right failure (that is, monopoly pricing that results in economic inefficiencies with little or no effect on the level of competition in dependent markets). This examination tested this finding by examining previous coverage determinations and through stakeholder consultation. Elaborating on this further, the ACCC noted that the criterion that has proved most difficult to satisfy is criterion (a) because pipeline operators are, with one or two exceptions, not vertically integrated and so do not have an incentive to deny access or behave in a way that adversely affects competition in an upstream or downstream market.

History of coverage applications

With the initial enactment of access regulation in the Gas Code nineteen years ago, it appears that the default position was that all of the major gas pipelines should be regulated. At this time, the Australian gas market characteristics were quite different, with limited interconnection between gas transmission pipelines and the predominance of government, or vertically-integrated energy companies, ownership of gas pipelines. Since then, with the privatisation and de-merging of pipeline assets, the default position appears to have changed to become commercial negotiation rather than regulation for access to transmission pipelines.

Previous applications to the NCC for coverage, coverage revocation, light regulation and 15 year no-coverage determinations are outlined in **Appendix D**.

The Gas Code, which came into effect in 1997, stipulated transmission and distribution pipelines which were deemed to be covered pipelines from commencement of the Code. All pipelines, as of September 1997, were deemed to be covered pipelines under the Gas Code with the exception of one or two smaller transmission pipelines.

Some transmission pipelines became covered through a competitive tender process rather than an application of the coverage criteria, such as the Central Ranges Pipeline and the Mildura Pipeline. A pipeline can become a covered pipeline where a service provider was awarded a tender to construct

and operate a pipeline as a result of a tender approval process approved under section 126 of the NGL.

Over time, the owners of many covered pipelines have applied to the NCC for coverage to be revoked or changed from full regulation to light regulation.

Between 1997 and 2008 when the Gas Code was in effect, there were 23 revocation applications, with 20.5 successful, and two coverage applications, with one successful but later revoked (Dawson Valley Pipeline (DVP)).

In 2008, with the commencement of the NGL, pipelines that were still covered pipelines under the Gas Code were deemed to be covered, with some exceptions in Queensland.³¹

Some transmission pipelines built after 1997, such as the TGP, SEA Gas Pipeline, QSN Link and Vic-NSW Interconnect, have never been subject to regulation or applications for coverage. For further information on the regulatory status of transmission and distribution pipelines see **Appendix E** and **Appendix F**.

Since 2008, there has been just one coverage application, two coverage revocation applications, five applications for full regulation to be changed to light regulation, and four applications for 15-year no-coverage determinations.

Currently in Australia the majority of transmission pipelines are uncovered and most distribution pipelines servicing major cities are covered. Specifically:

- 20.5 pipelines are covered pipelines
- 6 transmission pipelines and 9 distribution pipelines are subject to full regulation
- 3.5 transmission pipelines and 2 distribution pipelines are subject to light regulation.

The NCC has changed the form of regulation from full regulation to light regulation in respect of all five applications made to it. The recent light regulation determinations for the Allgas and Australian Gas Networks

³¹ In relation to the SWQP and QGP coverage was revoked by the Queensland Government in the transition to the NGL and NGR by making a regulation. By the same regulation, the Queensland Government changed the form of regulation on the CGP to light regulation and has prohibited any change in this regulatory status being made until the end of 30 April 2023.

distribution pipelines in Queensland are the first major distribution networks to convert to light regulation. A number of pipelines are 'designated pipelines' that cannot be subject to light regulation, including the Victorian Transmission System (VTS), DBP, the four Victorian distribution networks (including AGN (Albury)), the South Australian distribution network and the Western Australia distribution network.

Additionally, four pipelines built to transport gas from the Surat Basin to Gladstone to support LNG facilities, the Wallumbilla to Gladstone Pipeline, APLNG Pipeline, GLNG Pipeline and Comet Ridge to Wallumbilla Pipeline Loop and, are subject to 15 year no-coverage determinations.

Consultation suggests the few applications for coverage is likely reflective of the costs and time associated with putting in an application, the perception of the improbability of success and the uncertainty associated with how the AER will determine tariffs should the pipeline be regulated.

There have been few attempts to have a pipeline covered by regulation (primarily under the Gas Code) but later revoked, then covered (again) by regulation. The Public Interest Advocacy Centre (PIAC) indicated that this is *'in part because an application to recover a pipeline must satisfy all four criteria. While it is technically possible for anyone to lodge an application, the financial and legal resources required make it practically impossible for consumers to lodge an application'*.³² Should the coverage application be unsuccessful, a party that wishes to challenge the determination of the relevant Minister faces a time-consuming and resource-intensive legal process that is likely to deter such legal challenges except by the largest players.

One stakeholder provided evidence to support that they had seriously considered submitting a coverage application, obtaining legal advice on the probability of success should they submit an application for coverage of a particular pipeline. The legal advice was not favourable. Rather than put in an application and face improbability of success, this stakeholder chose to continue to negotiate with the pipeline operator involved.

³² PIAC, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 7.

Numerous stakeholders indicated that putting in a coverage application is a measure of last resort and would only likely be used when negotiations have either ceased and/or show no prospect of reaching an acceptable outcome. An application for coverage was seen to negatively impact upon the relationship between the shipper and the pipeline operator. Thus, should an application for coverage fail, it would most likely leave the shipper in a more vulnerable position.

Further, one stakeholder indicated that the absence of publicly available information on the methodology the AER would use in determining the appropriate tariff/s in the access arrangement, is a significant deterrent to applying for coverage. This uncertainty is an important given the time and costs associated with coverage applications.

While providing useful context, the number of coverage applications is not directly indicative of the effectiveness of the coverage test. In fact, if the coverage test was effective you may expect the NCC to receive no applications for coverage because the threat of regulation would be sufficient to constrain the behaviour of pipeline operators. The absence of coverage applications on its own is not indicative of the effectiveness, or otherwise, of the coverage test. This context has to be considered in light of recent pipeline operator behaviour and stakeholder feedback on the coverage test.

Criterion (a)

Criterion (a) – that access (or increased access) to pipeline services provided by means of the pipeline would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the pipeline services provided by means of the pipeline – is a key component of the coverage test and usually the most difficult to satisfy.

The coverage criteria in the NGL largely mirror the declaration criteria outlined in the NAR in Part IIIA of the CCA.³³ The Productivity Commission has noted that declaration criterion (a), in Part IIIA of the CCA, seeks to ensure that an infrastructure service will only be declared where access to the service would materially promote competition in a dependent market. Under Part IIIA, the

³³ See ss 44G(2) and 44H(4) of the CCA.

promotion of competition is a proxy for more efficient outcomes, reflected in lower prices and/or higher output in a dependent market.³⁴

Under the NGL, regulation of access is not currently directed at eliminating monopoly pricing. It is only where access (or increased access) provided by coverage is likely to materially promote competition in a dependent market, and the other requirements in the coverage criteria are met, that a pipeline may be covered. The NCC highlights in the Gas Guide that *'disputes over gas tariffs of themselves are of little or no relevance to the question of coverage'*.³⁵

In accordance with criterion (a), the relevant Minister cannot decide that a pipeline be covered unless he/she is satisfied that access (or increased access) to the pipeline services provided by means of the pipeline would promote a material increase in competition in at least one market other than the market for the service. The markets in which competition might be promoted are commonly referred to as 'dependent markets'.

Competition in upstream and downstream markets is used as a vehicle for the promotion of the economically efficient operation of, use of, and investment in, the pipeline by which services are provided. Economic efficiency is seen to be achieved through improved conditions for competition.

The NCC outlines how it applies each criterion in the NCC Gas Guide. In relation to criterion (a) the NCC outlines that:³⁶

'The issue to be considered under criterion (a) is whether access would improve the opportunities and environment for competition in dependent markets such that it promotes materially more competitive outcomes. The assessment is concerned with the process of competition, rather than the particular commercial interests or pursuits of individual competitors, including an applicant for coverage, given that any access that may result from coverage is not limited to the party that made the application'.

³⁴ Productivity Commission, *National Access Regime*, Productivity Commission Inquiry Report, No 66, 25 October 2013, p 167.

³⁵ NCC, *Gas Guide*, October 2013, Version 1.0, p 35, para 3.56.

³⁶ NCC, *Gas Guide*, October 2013, Version 1.0, p 28, para 3.22.

The wording of criterion (a) of the pipeline coverage criteria in the NGL has been amended over time in response to reviews of the NAR. Prior to its amendment in 2006, declaration criterion (a) in the NAR required that access 'promote competition' which (broadly speaking) could be satisfied by a marginal or trivial increase in competition. The NAR was amended in 2006 so that criterion (a) required that access 'promote a *material* increase in competition'. The inclusion of 'material' was intended to '*ensure access declarations are only sought where the increases in competition are not trivial*'.³⁷ An analogous amendment to the pipeline coverage criterion (a) was inserted in the NGL on its enactment in 2008.

Criterion (a) limits coverage to circumstances where it is likely to materially enhance the environment for competition in at least one dependent market. The NCC indicates that whether competition will be materially enhanced depends on the extent to which the incumbent service provider can and is likely, in the absence of coverage, to use market power to adversely affect competition in a dependent market(s). If the service provider has market power, as well as the ability and incentive to use that power to adversely affect competition in a dependent market, coverage would be likely to improve the environment for competition, offering the prospect of benefits to consumers (including reduced prices and better service provision).³⁸

In assessing whether criterion (a) under the NGL is satisfied the NCC undertakes the following steps:

1. identifies the relevant dependent (upstream or downstream) markets

The NCC identifies one or more dependent markets where competition appears likely to be materially affected by the availability of access to the pipeline services provided by the pipeline that is the subject of the application. These markets will most commonly be upstream (production and sale of gas) or downstream (sale/retailing of gas) of the market for the pipeline services.

³⁷ Commonwealth of Australia (Treasury), *Government Response to Productivity Commission Report on the Review of the National Access Regime*, February 2004, p 7. See also the second reading speech for the Trade Practices Amendment (National Access Regime) Act 2006 (Cth), which among other things inserted the words 'a material increase in' after the word 'promote' in criterion (a) (ss 44G(2)(a) and 44H(4)(a)).

³⁸ NCC, *Gas Guide*, October 2013, Version 1.0, p 37, para 3.65.

2. considers whether the identified dependent markets are separate from the market for the pipeline services

The dependent markets identified by the NCC are required to be functionally distinct markets from the market for the pipeline services. Establishing this requirement is generally straightforward given the structural and operational separation requirements of the NGL.

3. assesses whether access (or increased access) on reasonable terms and conditions would be likely to promote a materially more competitive environment in the dependent markets.³⁹

This is the most challenging step and requires an assessment of: 'access (or increased access)'; the ability and incentive of the service provider to exercise market power; and the competitiveness of the dependent market.

'Access (or increased access)'

The '*promotion of a material increase in competition*' involves an improvement in the opportunities and environment for competition such that competitive outcomes are materially more likely to occur.⁴⁰ This question requires a comparison of the future state of competition in a dependent market with and without access (or increased access) to the provision of the service to which access is sought. The key case is *Sydney Airport Corporation Ltd v Australian Competition Tribunal* (2006) 155 FCR 124 (*Sydney Airport*) in relation to the interpretation of criterion (a). The Federal Court outlined that what section 44H(4)(a) of the CCA, which is analogous to criterion (a) of the pipeline coverage criteria in the NGL, '*requires is a comparison of the future state of competition in the dependent market with a right or ability to use the service and the future state of competition in the dependent market without any right or ability or with a restricted right or ability or with a restricted right or ability to use the service*'.⁴¹

The proper construction of criterion (a) was recently considered by the Australian Competition Tribunal in *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 (*Glencore*), in the context of determining an application for

³⁹ NCC, *Gas Guide*, October 2013, Version 1.0, p 29, para 3.24.

⁴⁰ NCC, *Gas Guide*, October 2013, Version 1.0, p 33, para 3.46.

⁴¹ *Sydney Airport Corporation Ltd v Australian Competition Tribunal* (2006) 155 FCR 124, 147 [83-84].

declaration under Part IIIA of the CCA in respect of shipping channel services provided by Port of Newcastle Operations Pty Ltd (PNO). Further information on *Glencore* is provided in Box 3.

The Tribunal concluded that it was bound by the Full Federal Court decision in *Sydney Airport*,⁴² which it considered made it clear that there was no place in criterion (a) for consideration of the current factual position with respect to access to the service.⁴³ The Tribunal held that the consideration of the phrase ‘access (or increased access)’ precludes the comparison with whatever usage or access the service provider does or will provide voluntarily or with the terms on which the service provider provides voluntarily such usage or access. This means that the Minister is not required to consider what (if any) access is already provided to access seekers. The Tribunal held that criterion (a) was met because: the Port Service (providing access to the shipping lanes) is a natural monopoly; PNO exerts monopoly power; and the Port Service is a necessary input for effective competition in the dependent coal export market as there is no practical and realistically commercial alternative; so access to the Service is essential to compete in the coal export market.⁴⁴

Further, in applying the ‘qualitative test’ of a material increase in competition, following the 2006 Amending Act, the Tribunal indicated it is necessary to see if there is an entitlement or opportunity for access or increased access under the existing state of affairs. The Tribunal noted that *Glencore* did not have any rights to access the Service.⁴⁵ The Tribunal was therefore ‘*satisfied that – adopting the approach mandated by the Sydney Airport FC decision – access to the Service would promote a material increase in competition in the market for the export of coal from the Hunter valley*’.⁴⁶ The Tribunal said this view was reached because ‘*...as the Full Court in Sydney FC said, in the absence of access (or increased access), the capacity to serve the coal export market is not to be measured against the actual existing usage but the entitlement to usage of the Service (to the extent it may exist)*’.⁴⁷

⁴² *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [92].

⁴³ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [103].

⁴⁴ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [113].

⁴⁵ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [120].

⁴⁶ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [121].

⁴⁷ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [121].

Box 3: Application for declaration of shipping channel services at the Port of Newcastle

In May 2015, the NCC received an application under Part IIIA of the CCA from Glencore Coal Pty Ltd, the largest coal producer in the Hunter Valley, seeking declaration of the right to access and use the shipping channels provided by PNO.

On 10 November 2015, the NCC issued its Final Recommendation to the relevant Minister recommending that the Service not be declared on the grounds that it did not meet the requisite criterion in section 44G(2)(a) of the CCA. In reaching this conclusion, the NCC applied its preferred test for criterion (a), being to compare:

- the likely future state of competition in the dependent market under the current access arrangements; and
- the likely future state of competition in the dependent market with declaration and the associated right to arbitration before the ACCC.

Under this test the NCC was not satisfied that declaration would lead to a material increase in competition primarily because the charges for the Port Service represented a minor component of the free on board (FOB) cost of coal at the Port, and were unlikely to have an effect on production or investment decisions such as to promote a material increase in competition in any dependent market.

On 8 January 2016, the Minister published his determination not to declare the Service, on the same basis as that recommended by the NCC, the Minister was not satisfied that criterion (a) was met. On 29 January 2016, Glencore applied to the Australian Competition Tribunal under section 44K(2) of the CCA for review of the Minister's determination.

Background

The Tribunal accepted that the Newcastle shipping channels are the only commercial option for the export of coal from the Hunter Valley. In May 2014, the NSW Government sold the Port to PNO and entered into a long-term lease of the assets, including the shipping channels. PNO's ability to charge users for use of the Port's shipping channels was not made subject to any controls. Following PNO ownership the prices to enter and exit the Port for some vessels increased

by approximately 40-60 per cent. Price increases were not accompanied by any change in the nature or quality of the service and without significant consultation.

Tribunal decision

The Tribunal stated criterion (a) was met:⁴⁸

The consideration of criterion (a) in the present circumstances, in accordance with the approach in Sydney Airport FC at [91], is quite straightforward. To paraphrase Sydney Airport FC at [91] and [92]: the Service providing access to the shipping lanes is a natural monopoly and PNO exerts monopoly power; the Service is a necessary input for effective competition in the dependent coal export market as there is no practical and realistically commercial alternative; so access to the Service is essential to compete in the coal export market. In the circumstances ..., s 44H(4)(a) must have been satisfied.

On 14 July 2016, PNO applied to the Federal Court of Australia for judicial review of the Tribunal's decision (*Port of Newcastle Operations Pty Ltd v Australian Competition Tribunal & Anor* NSD 1147/2016) (*Port of Newcastle*). The matter was heard by the Full Federal Court on 28-29 November 2016 and judgment is reserved. The outcome of this case may then be appealed to the High Court. The *Port of Newcastle* case will set important legal precedent for criterion (a) but could take some time to be settled. Thus, there is currently significant uncertainty about the proper construction of the phrase 'access (or increased access)' in criterion (a).

Ability and incentive to exercise market power

Whether competition will be materially enhanced as a result of access depends upon an assessment of the ability and incentive of the pipeline service provider, in the absence of coverage, to exercise market power to adversely affect competition in a dependent market. Where a pipeline operator is unable to exercise market power in the dependent market, then a coverage determination would be unlikely to promote competition or efficiency in that market.⁴⁹ However, the existence of market power does not in itself

⁴⁸ *Application by Glencore Coal Pty Ltd* [2016] ACompT 6 at [112]-[113].

⁴⁹ NCC, *Gas Guide*, October 2013, Version 1.0, p 35, para 3.54.

mean that criterion (a) will be satisfied. Market power is a necessary but not sufficient condition for coverage.

There are three mechanisms by which the use of market power by a pipeline operator may adversely affect competition in a dependent market:⁵⁰

- (a) a service provider with a vertically related affiliate may engage in behaviour designed to leverage its market power into a dependent market to advantage the competitive position of its affiliate
- (b) where a service provider charges monopoly prices for the provision of the service, those monopoly prices may restrict participation in the dependent market (thereby having an adverse effect on competition), and/or
- (c) explicit or implicit price collusion in a dependent market may be facilitated by the use of a service provider's market power. For example a service provider's actions may prevent new market entry that would lead to the breakdown of a collusive arrangement or understanding or a service provider's market power might be used to 'discipline' a market participant that sought to operate independently.

The NCC asks whether the service provider has the ability and incentive to engage in any of the types of behaviour described above, in assessing whether a service provider has the ability and incentive to use its market power to adversely affect competition in a dependent market.

Of the three mechanisms articulated by the NCC by which the use of market power may adversely affect competition in a dependent market, mechanism (b) - the charging of monopoly prices, restricting participation in the dependent market – is the most relevant based on the ACCC findings and stakeholder feedback. As recognised by the ACCC, given the majority of gas pipelines are vertically-separated, pipeline operators are incentivised to provide access to maximise throughput. The NCC indicates that if a pipeline operator *'has no vertical interests in a dependent market(s), and its facility has excess capacity, then it may be profit maximising for the service provider to promote increased competition in the dependent market(s), reduce margins and prices in the dependent market(s), and increase incremental demand for the*

⁵⁰ NCC, *Gas Guide*, October 2013, Version 1.0, p 37-38, para 3.69.

services provided by the facility.⁵¹ The NCC indicates that in these circumstances, the pipeline operator would not be incentivised to engage in monopoly pricing and access is unlikely to promote competition in a dependent market. However, the ACCC inquiry report highlighted that a transmission pipeline operator with decreasing gas demand has actually raised their prices.⁵² PIAC is concerned that the reason outlined by the NCC for changing the coverage of the Brisbane distribution pipeline from full regulation to light regulation was the decline in residential gas demand. PIAC is concerned that the ACCC finding indicates that pipeline operators may still be incentivised to charge excessive prices regardless of their decreasing demand.

Effectively competitive dependent market

The NCC considers that where a dependent market is effectively competitive, access is unlikely to promote a material increase in competition and an application for coverage that seeks to add to competition in such a dependent market is unlikely to satisfy criterion (a).⁵³ Put simply, criterion (a) is unlikely to be satisfied where the related upstream or downstream market is already effectively competitive.

The NCC has taken a broad view of the meaning of ‘effectively competitive’⁵⁴ and has been unwilling to find that coverage would promote competition in downstream markets (such as a market where one retailer has a monopoly) where there are other significant barriers to entry to that market.

Recent applications for coverage related determinations, such as SEPS and the DVP (see **Appendix D**), highlight that it is difficult to demonstrate that the existing upstream and downstream gas sales markets are not already effectively competitive and therefore that access will promote a material increase in competition in one of these dependant markets.

⁵¹ NCC, *Gas Guide*, October 2013, Version 1.0, p 38, para 3.70.

⁵² ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 104.

⁵³ NCC, *Gas Guide*, October 2013, Version 1.0, p 35, para 3.52.

⁵⁴ The NCC considers ‘effective competition’ refers to the degree of competition required for prices to be driven towards economic costs and for resources to be allocated efficiently at least in the long term – see NCC, *Gas Guide*, October 2013, Version 1.0, p 34, para 3.51.

Can the coverage test address the market failure identified by the ACCC?

The ACCC found that the current gas access regime under the NGL is not imposing an effective constraint on the behaviour of a number of unregulated pipelines. The ACCC found that criterion (a) is not focused at the right question because pipeline operators are generally not vertically integrated and have an incentive to encourage access to maximise profits and reduce the risk of asset stranding. The ACCC concluded that the current coverage criteria are not designed to address the monopoly pricing observed in the Inquiry that results in economic inefficiencies with little or no effect on the level of competition in dependent markets.

The ACCC's conclusion is based on two key premises:

1. That criterion (a) will be difficult to satisfy when the pipeline operator is not vertically integrated
2. The inability of the coverage criteria to deal with instances of monopoly pricing that have little or no effect on competition in dependent markets

Vertical integration

As recognised by the NCC,⁵⁵ in the context of Part IIIA, criterion (a) for declaration of a service will most commonly be satisfied where a service provider is vertically integrated. However, vertical integration is likely to be less relevant in the context of gas pipelines and services given the structural and operational separation requirements of the NGL. These structural and separation requirements mean that upstream and downstream markets for gas production and supply are more likely to be separate from markets for pipeline services.

The ACCC argues that criterion (a) focuses on the wrong question because pipeline operators are generally not vertically integrated and do not have an incentive to deny access or behave in a way that adversely affects competition in an upstream or downstream market.

A number of stakeholders agreed with the ACCC that criterion (a) is unlikely to be satisfied because owners of pipelines in Australia are generally not

⁵⁵ NCC, *Gas Guide*, October 2013, Version 1.0, p 31, para 3.35.

vertically integrated. PIAC indicated that denial of access is a separate issue from monopoly pricing and that Part IIIA was designed to address denial of access when there are vertical interests. Similarly, Tri-Star Petroleum and Central Petroleum submit that while the NGL was designed to align with the CCA, the development of the gas market, including vertical-separation of pipelines over time makes the continued alignment inappropriate. Origin also indicated that the wording of criterion (a) may have been more appropriate when there were greater levels of vertical integration in the pipeline industry but this is no longer the case.

TGP Pty Ltd, IPA and APA Group highlighted that both the Hilmer report and the Productivity Commission (2013) considered that the NAR could apply to both vertically integrated and separated service providers. Further, the Courts and Tribunal have applied criterion (a) in relation to non-vertically integrated service providers, such as in the *Sydney Airport* case and recently in relation to the *Glencore* case highlighted above.

Ability to deal with monopoly pricing

As outlined above, the coverage criteria are not specifically focussed at addressing market power and monopoly pricing, although these issues are considered during the assessment of criterion (a). Given the core focus of the test is not reviewing the exercise of market power, sometimes focusing attention on the material increase in competition will allow pipelines that are exercising market power to be covered and sometimes it will not, depending upon the circumstances of the case.

With this in mind, the ACCC concludes that the current coverage criteria do not address the market failure identified, monopoly pricing that gives rise to economic inefficiencies with little or no effect on the level of competition in dependent markets. Similar views to the ACCC were also reached by independent economic consultants, Incenta⁵⁶ and Castalia⁵⁷, in reports prepared last year for the AEMC on the appropriateness of the coverage criteria.

⁵⁶ Castalia Strategic Advisors, *AEMC Gas Access Regime Advice*, 10 August 2015.

⁵⁷ Incenta Economic Consulting, *Assessment of the coverage criteria for the gas pipeline access regime*, September 2015.

The ACCC supports its proposition by describing four hypothetical examples for which it claims the existing coverage criteria would not result in coverage.⁵⁸ The ACCC indicates that while there would be an increase in efficiency associated with coverage in the examples listed, there would not be the required 'material increase in competition' to satisfy criterion (a). The ACCC's four hypothetical examples are provided at Box 4.

⁵⁸ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 130.

Box 4: ACCC Hypothetical examples⁵⁹

Example A: The elimination of monopoly pricing on a pipeline that is used by two retailers to supply gas in a regional area may not give rise to any change in competition in the retail market (for example because the scale of the market may be too small to attract other competitors) but could still benefit consumers in the region if the cost savings are passed on.

Example B: Restricting a pipeline operators' ability to effect a wealth transfer from producers can also be expected to result in efficiency improvements in the upstream market, but may not have any effect on the level of competition in this market if it results in existing producers carrying out more exploration and supplying more gas into the market. In this example, there would be an efficiency improvement and an improvement in consumer welfare but no change to the level of competition.

Example C: Eliminating monopoly pricing on a pipeline that is used to supply a mining company competing in a global commodities market that is already workably competitive could result in greater investment by the mining company (that is, because the risk of hold up is reduced) and increase the volume of commodities it supplies into the market. If the mining company is a lower cost operator, then the increase in supply would displace higher cost suppliers and the equilibrium commodity price would fall. In this example, restricting a pipeline operator's ability to engage in monopoly pricing would result in an improvement in economic efficiency and consumer welfare but would have little to no effect on competition if the market is already workably competitive.

Example D: In a similar manner to the previous example, restricting a pipeline operator's ability to engage in monopoly pricing on a pipeline that is used to supply an industrial customer that competes in a workably competitive market in Australia could result in greater investment by that company in its facility and greater output. While this may not give rise to any change in the level of competition in the market, there would still be an efficiency improvement and if the industrial customer is a lower cost producer, it could also result in a reduction in prices for that product, which would benefit consumers.

⁵⁹ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 130.

Numerous stakeholders believe the current coverage test is incapable of addressing monopoly pricing. Central Petroleum believes that the test *'was not designed for, and is not at all effective in, addressing abuse of market power within the pipeline sector itself via monopolistic pricing'*.⁶⁰ AGL also indicated that the test cannot address the market failure identified by the ACCC. MEU believes the SEPS application for coverage highlights the inability of the test to address monopoly pricing, stating that the SEPS *'is clearly a monopoly service and which would be uneconomic to duplicate (as the pipeline has significant spare capacity) yet coverage was not granted because criterion (a) could not be satisfied'*.⁶¹

Alternatively, the majority of transmission pipeline operators indicated that the test can already deal with monopoly pricing. Jemena considered that the hypothetical examples outlined by the ACCC *'are in fact likely to result in impacts on competition in related markets, and therefore can be addressed by criterion (a) in the current test'*.⁶² DBP Transmission indicated that monopoly pricing, by definition, must have some affect in a dependent market. Thus, where monopoly pricing is occurring and it meets the materiality threshold the pipeline is likely to be covered by the current coverage test. APGA contends that *'it is apparent that monopoly pricing and its impacts on efficiency are both contemplated and addressable under the existing test'*⁶³ and it is *'simply unfeasible to claim that pipeline monopoly pricing is adversely affecting efficiency but having no impact on competition'*.⁶⁴

APA Group believe that criterion (a) as it is currently drafted is capable of applying to monopoly pricing in appropriate circumstances, as a service provider's ability to exert monopoly power (including through monopoly pricing) is directly relevant to the assessment of criterion (a).

⁶⁰ Central Petroleum, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 18.

⁶¹ MEU, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 6.

⁶² Jemena, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 10.

⁶³ APGA, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 27.

⁶⁴ APGA, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 29.

APA procured a range of advice from consultants to accompany its submission to the Consultation Paper. N Young and C Dermody, and HoustonKemp, on behalf of APA, turned their minds to the hypothetical examples provided by the ACCC and the ability of the coverage test to be satisfied in these scenarios.

Young and Dermody stated that the *'conclusions the ACCC reaches based on the examples amount to no more than unsubstantiated assertions'*.⁶⁵

Specifically, in relation to example A, Young and Dermody believes the services provided by the pipeline would likely satisfy criterion (a), in relation to both the existing wording of criterion (a) and, the wording of criterion (a) of the proposed amendments to the CCA. In relation to example B, assuming the pipeline services are a necessary input, Young believes there is no reason why criterion (a) or the exposure draft formulation would not apply. With regard to examples C and D, Young and Dermody conclude that the facts are not sufficient to form a view in whether criterion (a) would likely be satisfied.

In reviewing the ACCC examples, HoustonKemp identifies that each of the examples involve an increase in efficiency in dependent markets in the sense that output increases and prices fall. Houston Kemp articulates the ACCC's examples as follows:

'The ACCC suggests that competition is unaffected, for two main reasons. In the first two examples, the ACCC states that competition would not be affected because the number of competitors would remain unchanged. This is because the improved opportunities for profits are not sufficient to elicit new entry into the dependent markets. In the final two examples, the ACCC suggests that competition cannot be increased in markets that are already workably competitive'.⁶⁶

Based on the above interpretation, HoustonKemp concludes that *'providing the materiality standard was also satisfied, each would be likely to meet the threshold for coverage under the existing criterion (a)'*.⁶⁷ Houston Kemp

⁶⁵ N J Young and C M Dermody, attachment to APA Group submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 11, para 34.

⁶⁶ HoustonKemp, attachment to APA Group submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 4.

⁶⁷ HoustonKemp, attachment to APA Group submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 1.

believes that the ACCC adopted a very narrow interpretation of the term 'promote a material increase in competition' and an *'implicit assumption that 'competition' should be measured by direct reference to the number of competitors in the market'*.⁶⁸

Is the regulatory test a credible threat?

Many stakeholders, including APLNG, Shell, Tri-Star Petroleum, Central Petroleum, AGL, PIAC, MEU and Encana Australia, share the ACCC's concerns that the existing test does not seem to be an effective constraint on pipeline owner's behaviour. Encana Australia indicated that the *'existing National Gas Regime has little effect on the behaviour of gas pipeline operators due to vis-à-vis market power abuse'*.⁶⁹ Central Petroleum believe that the coverage test *'is now ineffective in covering the pipeline network and constraining an abuse of market power within the pipeline sector itself via monopolistic pricing'*.⁷⁰

In relation to criterion (a), Shell, Tri-Star Petroleum, Origin Energy, MEU, PIAC and Encana Australia indicate the current hurdle for pipeline regulation (criterion (a)) is difficult to demonstrate. Origin stated that it is not clear why criterion (a) solely focuses on the impact of a pipeline's actions on a related upstream or downstream market. Origin believe it is *'equally important that competitive outcomes in the market for pipeline services are also considered'*.⁷¹

MEU believes the SEPS coverage application highlights that proving there will be increased competition upstream/downstream *'does not reflect the reality that a pipeline is a natural monopoly and permits the owner to set prices and conditions at whatever it likes'*.⁷² MEU considers that satisfying criterion (a) for

⁶⁸ HoustonKemp, attachment to APA Group submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 4.

⁶⁹ Encana Australia, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 24.

⁷⁰ Central Petroleum, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 17.

⁷¹ Origin Energy, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 2.

⁷² MEU, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 5.

downstream competition is impossible if the gas is used for residential purposes.

PIAC do not believe the test, and specifically criterion (a), addresses monopoly pricing and from a customer perspective the key market failure to be addressed is that of excessive market power.

Alternatively, pipeline operators, including APA Group, Jemena, DBP Transmission and TGP Pty Ltd, believe the coverage test does pose an effective constraint on their behaviour. APA Group highlighted that most gas shippers are large and sophisticated businesses and are capable of bringing a coverage application. Further, the APA stated that the *'threat of coverage under the current test is a material consideration in the way APA operates its business. APA executives provided an example under oath to the ACCC during the inquiry of a recent acquisition where the threat of regulation did materially reduce APA's bid price for an asset'*.⁷³ Another pipeline operator provided confidential evidence that in assessing their proposal to build a prospective pipeline, whether that pipeline would be covered was a threshold issue that had the potential to impact directly on the viability of their proposal.

In conclusion, the coverage test does not deal directly with monopoly pricing, instead criterion (a) requires that access (or increased access) must promote a 'material increase in competition' in a dependent market. As identified by the ACCC, the problem is not so much access but access on reasonable terms. Thus, focusing on the impact of access on competition in dependent markets does not necessarily prevent monopoly pricing from occurring. As noted by the NCC, coverage under the NGL *'is not directed to eliminating monopoly rents by providing for control of pipeline tariffs'*.⁷⁴

Criterion (a) may address instances of monopoly pricing depending on the specific facts of the case. However, as highlighted by the (few) recent applications made to the NCC, it is very difficult, with the hurdle posed by the materiality threshold and need to prove that the dependent market is not already effectively competitive key issues encountered.

⁷³ APA Group, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 62.

⁷⁴ NCC, *Gas Guide*, October 2013, Version 1.0, p 35, para 3.35.

Coverage/revocation determinations to date demonstrate that it is difficult to establish that coverage will promote an increase in competition in a dependent market, unless there are no alternative destinations for gas produced in the relevant upstream market or no alternative sources of gas for the relevant downstream market. This is because otherwise it is likely that those upstream and downstream markets will be considered to be effectively competitive.

Even where there is no alternative sources of gas for the relevant downstream market, it is difficult to establish that coverage will promote an increase in competition in the downstream market if the lack of other alternatives is due to some other barrier to entry into that downstream market that confers a practical monopoly on the incumbent downstream retailer. For example, it may be difficult to build sufficient scale in a regional market to make entry profitable.

In the gas context, the materiality threshold of criterion (a) is particularly difficult to meet in practice. The challenge of satisfying the 'material' threshold in the absence of the real prospect of a new entrant in the dependent market should not be understated. This is highlighted by the case of the SEPS.

It is also difficult to establish that any changes in the volume of gas via the pipeline, as a result of coverage, will amount to a material increase in competition in a dependent market, unless those increased volumes are very substantial.

Further, the SEPS and DVP applications for coverage highlight the challenge associated with proving that a market is not already effectively competitive and therefore that access would materially increase competition in a dependent market. It is also difficult to argue that the dependent markets are not already effectively competitive when the review is undertaken in isolation from other segments of the broader Australian gas market. APA argued in their submission that given the findings and recommendations of the AEMC and ACCC reports, as well as the reforms agreed to by the COAG Energy Council in August, that it would be hard to currently argue that the gas market is effectively competitive. However, this ignores the fact that the NCC and relevant Minister consider if a dependent market is efficiently competitive, not the gas market as a whole. If the scope of the dependent market was to be expanded, while it may be easier to argue it is not effectively competitive, it is also likely to be more difficult to meet the materiality threshold, that access

would materially increase competition in the broader gas market. Together, the materiality and effectively competitive assessments make the prospect of covering a transmission pipeline extremely difficult.

Based on stakeholder feedback and the application of criterion (a) to date, the regulatory test does not appear to be posing a credible threat of regulation. This is not to say that the objective of the test should be to regulate all gas pipelines, but if the threat of regulation is credible then it should pose a constraint on the behaviour of pipeline operators. Further, the test does not appear to be fit to deal with all instances of monopoly pricing. That does not, however, mean that the appropriate response is to change the regulatory test. The problem, defined in the next chapter, can be addressed in multiple ways, and regulation, with its costs and risk of regulator error, should be a last resort.

5. Problem requiring addressing

Box 5: Defining the problem

Consistent with the findings and views of the ACCC, the submissions and consultations to this examination have highlighted the market power of pipeline owners and the exercise of that power.

The existence of the market power is evidenced by unequal levels of bargaining power and information between the parties negotiating for pipeline access and services.

The principal problem requiring resolution, therefore, is how that imbalance can be addressed in the most expeditious and cost effective manner to deliver competitive outcomes in the market for pipeline services.

The majority of stakeholders do not believe the access regime poses a credible threat of regulation, nor is it constraining pipeline operator's behaviour. The reason the coverage test does not provide a credible threat is twofold:

- There is a perception, or reality, that criterion (a) is too difficult to satisfy and, as a consequence, it is near impossible to obtain a coverage determination for pipelines; and
- For covered pipelines, the regulatory regime generally only regulates forward haul tariffs and does not sufficiently deal with the range of other services that are increasingly being sought.

Significant imbalance in negotiating power

No regulatory regime is perfect. The risks associated with regulatory policy, primarily the risk of over-regulation or under-regulation, are well-recognised. The ACCC and many stakeholders believe that the hurdle posed by the coverage test means that the threat of regulation is not posing an effective constraint on pipeline operators.

The initial presumption for the examination and the widespread expectation in the industry was that the focus would be on the regulatory test itself and whether and how it should be changed, relating in particular to the operation of criterion (a) of the test.

However, it became evident during the extensive consultations that the majority of gas shippers, including large users, producers and retailers do not want increased regulation of gas pipelines. They recognise that regulation is not a panacea. Instead, most existing and potential gas shippers are looking for a means of reducing the significant imbalance of bargaining power during gas transportation negotiations.

This is not to say that the negotiating power of the parties to a gas transportation agreement will ever be equitable. Most stakeholders agreed with the ACCC that the majority of pipeline operators have market power, with few exceptions whereby pipelines do compete with one another to some extent (for example: Moomba to Adelaide Gas Pipeline System (MAPS) and SEA Gas Pipeline; MSP and EGP). Many shippers have just one pipeline available to transport their gas to the required location and thus the lack of competition to provide transportation services places that pipeline operator in a position of market power. Recognising the shipper has no or few other options available to transport gas, the pipeline operator is in a significant position of power and is incentivised to offer terms and conditions that are sufficiently high to ensure they profit but not so high as to force the shipper to exit the market. This is particularly the case for small shippers (relative to retailers with gas portfolios), such as industrial gas users which have limited bargaining power.

An inherent imbalance in bargaining power does not mean that more should not be done to enhance the conditions of commercial negotiations and ensure the outcomes from these negotiations are not economically inefficient in upstream and/or downstream markets.

Asymmetry of information

A key component of the Energy Council's Gas Market Reform package is enhancing the information available to gas market participants, policy-makers and the public. Ministers have expressly acknowledged that there are a number of significant information gaps and asymmetries across the gas sector that adversely affects the price discovery process and the way in which gas and other resources are allocated. Lack of transparency and information about the level of reserves, and commodity and transport prices are hindering efficient market responses to the changing conditions and are not signalling expected supply problems effectively. Accordingly, the Energy Council has

agreed to pursue better information to ensure the market is as transparent as possible and provides open pricing and reserve information for all customers.

Information about transportation services and their terms and conditions is partial and mostly private. The absence of pricing information on the range of services offered by pipelines, including the methodology used for forming these prices and costs incurred, impairs bargaining. A lot of information is confidential and particular to specific contracts and negotiations. Thus, there is a large disparity between the level and accuracy of information available to participants such as large retailers that negotiate access to multiple pipelines, and participants such as industrial gas users that are less frequently parties to negotiations and often seek access to comparatively small quantities of pipeline capacity.

When shippers, either foundation or new entrants, seek to access a service on a particular pipeline they often have no reference to historic or current pricing information to be able to negotiate a reasonable commercial outcome. Pipeline operators have no compulsion to divulge the pricing information and thus the level of information publicly available varies between pipeline operators and in relation to different pipelines. Shippers, or potential shippers, currently have no benchmarks to assess if the tariffs and terms offered are reasonable. Numerous stakeholders consulted, particularly large gas users frequently indicated that they have no way of knowing if they are being offered a reasonable deal. Additional information needs to be provided on not only the prices associated with different services but also an indication of the methodology used to determine the prices and the underlying costs of providing the services.

Perception of monopoly pricing

Consultation has highlighted that there is widespread belief, particularly in relation to the east coast gas market, that pipeline operators have market power and are exercising this power.

It is not suggested that the examples provided are definitive proof of the existence of monopoly pricing, with the interpretation of evidence assessed subject to various assumptions. Further, unlike the ACCC, this examination was not privy to all the information provided to the ACCC in accordance with their information disclosure powers. Nor was there adequate time to properly assess the commercial documentation provided.

However, the information assessed, in conjunction with significant stakeholder feedback and some examples of where existing pipeline pricing is not necessarily efficient, provide an indication that some pipeline operators are exerting market power. Regardless of the strength of the evidence, there is a widespread perception amongst stakeholders that monopoly pricing is occurring.

This perception, which has likely arisen from the significant power imbalance between pipeline service providers and their customers in access negotiations, needs to be addressed.

The need for a more credible threat

Actual regulation may not be necessary so long as the threat of regulation is credible. A credible threat is a critical means of restoring some balance to the negotiations, and incentivising pipeline operators to provide their services on more competitive terms. A credible threat may impact upon a pipeline operator's behaviour and decisions, influencing their pricing strategies.

The credibility of the threat needs to be appropriately balanced to avoid deterring pipeline investment and innovation. Regulatory interventions often have significant costs. These can be direct costs, associated with the regulatory burden, and indirect costs, such as impacts on investment incentives. As highlighted by the NCC in their submission to the examination, the intention of the NAR and NGL is to ensure that regulation is only applied where there are significant benefits that could not be achieved through other interventions. Regulatory interventions, such as amending the coverage test, need to be carefully reviewed to ensure an appropriate balance is achieved in determining whether regulation is justified and outweighs the costs.

There are currently a wide range of views as to whether the current test is credible in constraining the exercise of market power. Based on stakeholder feedback and the application of criterion (a) to date, the regulatory test does not appear to be serving as a credible threat. While the current test could be changed to be more credible, whether or not that be in line with the ACCC's proposed market power test or otherwise, it is not clear that it would solve the problem at hand – the significant imbalance of bargaining power during gas transportation negotiations.

Potential solutions to address the defined problem are examined in Chapter 6.

6. Potential solutions

A range of potential regulatory options have been considered during the course of this examination. These options represent potential solutions identified in response to consultation and the ACCC Inquiry.

Stakeholder feedback on potential options is explored below, before each option is outlined and examined with regard to its ability to address the problem identified and potential implementation requirements.

Stakeholder feedback

Stakeholder feedback was sought during this examination on the potential solutions available to address the defined problem, including in relation to the Energy Council's capacity trading reforms, the amendments to the CCA and the market power test proposed by the ACCC. Further, towards the end of the consultation process, APGA on behalf of its members, proposed a package of measures it believes would address the existing imbalance in negotiating power.

Capacity trading

Stakeholder views on the ability of the capacity trading reforms to address any existing problems with pipeline tariffs were mixed. Shell indicated that it has a strong preference for targeted market-based mechanisms and if designed appropriately it is reasonably confident the measures could provide the right incentives for the release of competitively priced capacity. APLNG believes the capacity trading reforms and any changes to the coverage test can be complementary. The Australian Petroleum Production and Exploration Association (APPEA) indicated that changes to the coverage criteria should be done in conjunction with the suite of gas market reforms being undertaken.

APA Group argued that market-based options be preferred to regulatory approaches. DBP Transmission indicated that the capacity trading reforms will increase competition between the spare capacity owned by the pipeline operator and pipeline capacity in the secondary market. Similarly, APGA outlined that increased capacity trading increases competition in the provision for pipeline services, primarily firm capacity.

Conversely, MEU do not believe the reforms will impact the ability of a non-regulated gas pipeline to set its own prices and terms for access. The ACCC indicated that even if secondary trading does start to compete with the pipeline operator:

*‘it will not obviate the need to regulate primary capacity through the gas access regime if the pipeline operator is found to have market power. This is because primary capacity holders can only compete to provide spare secondary capacity for the duration of their gas transportation agreements. There are limits therefore on how much of a constraint they can impose on the pipeline operator’.*⁷⁵

It was also noted by the ACCC and others in their submissions that the capacity trading reforms will take some time to establish and develop. APA highlighted that ‘Sufficient time must be given to market-based processes to allow them to work’.⁷⁶ Experience to date with the commencement of the Wallumbilla GSH and the Moomba GSH, is that new markets take some time to be used by participants. Potential market participants take time to understand how the market operates and how they can add value to their business. New gas market frameworks have commenced slowly and the auction and platform(s) are expected to be no different.

Secondary capacity trading reforms are unlikely to constrain the behaviour of pipeline operators. This is because primary and secondary markets have different characteristics. Secondary capacity is often, although not always, sought on a shorter-term basis and is used to capitalise on an arbitrage opportunity that has arisen, or deal with unscheduled demand for gas. Accordingly, the secondary capacity reforms such as the capacity trading platform and auction, will likely act as a constraint on some forms of capacity but not others. For example, secondary capacity is likely to compete with interruptible and/or as-available services commonly offered by pipeline operators at a higher premium than firm capacity. However, secondary capacity, which is often only available for discrete periods and volumes, is unlikely to compete with primary firm capacity.

⁷⁵ ACCC, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 4.

⁷⁶ APA Group, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 58.

Amendments to the CCA

The consultation paper for this examination asked stakeholders if they believe the coverage criteria should continue to be consistent with the CCA's declaration criteria. Tri-Star Petroleum indicated that the CCA and the NGL need not align, as the access regime in Part IIA addresses a different economic problem, vertically integrated companies, to that faced by the Australian gas industry. If the current pipeline access regime is not working, APLNG sees no issues with the coverage criteria being different from Part IIIA and supports an industry-specific test. MEU supports an industry specific test to reflect that most of the users of gas transportation are residential users and therefore any competition test is inappropriate. Shell highlighted in their submission a point made by numerous stakeholders during in discussions held, that the impact of the CCA amendments on the pricing of pipeline services is unclear. Further, the effectiveness of the changes will not be fully understood until they are tested by regulatory and legal processes which will take time.

Pipeline operators strongly argued for consistency to be maintained between the coverage criteria in the NGL and the declaration criteria of the CCA.

APGA stated:

'Continuing consistency is highly desirable. There is a substantial body of jurisprudence setting out the appropriate interpretation of the coverage criteria in the national access regime. It is clear from the jurisprudence that interpreting the coverage criteria is a complex undertaking and that the interpretation can change over time. Retaining the commonality in coverage criteria maintains this jurisprudence'.⁷⁷

IPA are concerned that the ACCC's market power test would result in significant inconsistency between the coverage criteria and the criteria applying to all significant infrastructure under the CCA. IPA argued there is a strong case for aligning access criteria across industries and a different coverage test will increase the regulatory risk associated with investment in this infrastructure, potentially distorting investment decisions and reducing economic welfare.

⁷⁷ APGA, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 32.

APA argued the equivalent changes to the coverage criteria should be made, *'to ensure that the criteria remain consistent across the economy and the NGL coverage criteria retain the benefit of jurisprudence and administrative developments applying to Part IIIA'*.⁷⁸ Similarly, Jemena considers that the government's proposed amendments to the declaration criteria should be mirrored in the coverage criteria.

Section 46

While recognising it is difficult to predict the outcome of any amendments to section 46 on gas pipeline operators in the future, Encana Australia indicates that it is difficult to imagine any improvements without overhauling the entire regulatory process. MEU considers that the proposed changes will not impact monopoly gas pipelines, especially for end users that are not in a competitive environment. MEU attached legal advice obtained from Dwyer Lawyers to its submission which indicated that there *'is nothing in the CCA which of itself prevents a pipeline owner from exercising monopoly power in pricing or which requires him to supply many shippers or to expand his capacity'*.⁷⁹

The ACCC does not consider that the amendments to section 46 will have any effect in addressing the problem identified in the inquiry report, nor that it is an appropriate means to address that problem. The ACCC stated:

'It is conceivable though that some factual circumstances could arise in which the effect of monopoly pricing by a pipeline operator is so great that it substantially lessens competition in a market, such that a party could consider taking a case under section 46 to seek redress. In the ACCC's view these circumstances are likely to be extremely rare, and in any event only a subset of the more general problem with monopoly pricing identified in the ACCC's report'.⁸⁰

APA Group's view is *'the introduction of the "effects test" broadens the scope of section 46 to the extent that it could apply to legitimate behaviour, including unilateral pricing decisions. Therefore it could apply to monopoly pricing or, for*

⁷⁸ APA Group, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 54.

⁷⁹ MEU, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, Appendix, Dwyer Lawyers Advice, October 2016, p 11.

⁸⁰ ACCC, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 3.

that matter, to discounting'.⁸¹ Further APA Group argues that the amendment will impose further discipline on businesses' pricing decisions. DBP Transmission indicated that the amendment gives the ACCC the tools it needs to address the monopoly pricing it believes it has found, and obviates the need to regulate.

Australian Pipelines and Gas Association Proposal

The Australian Pipelines and Gas Association (APGA), on behalf of its members, proposed a package of measures that it believes can complement the existing framework by providing shippers with 'enablers' to more effectively negotiate and if ineffective to seek coverage.

Measure 1: Enhanced price and service information

APGA considers there is material price and contract information that can be made available to all market participants to address the information asymmetry. At a pipeline-specific level, this includes:

- A package of service offerings available to access seekers. This would include a range of service offerings available on each pipeline.
- Tariffs, and associated terms, for each service offering.
- Associated terms could include term, credit worthiness, volume and other factors that have the ability to affect the tariff for a service

APGA does not recommend that the historical or new actual contractual outcomes be published, on the basis that it is likely to drive homogeneity in the pricing of services on each asset and the level of service innovation. They argue that this would reduce the ability of a pipeline operator to discriminate on price or service offering which could limit the potential for economically efficient outcomes, such as making allowances to assist a marginal project go ahead.

⁸¹ APA Group, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 65.

Measure 2: Pricing principles

Each company should publish pricing principles or behavioural guidelines that establish the basis for tariff offerings. Pricing Principles should also make transparent the process for expanding the capacity of a pipeline. Such principles could be developed either by each pipeline company or on an industry-wide basis.

Measure 3: Independent dispute resolution

Dispute resolution mechanisms under this framework could potentially be based on existing mechanisms available to counterparties during renegotiation of gas transportation agreements (e.g. escalation, expert determination and arbitration) and be determined by reference to the pricing principles. Such mechanisms would not duplicate existing regulatory approaches but provide an expeditious ‘tie-breaker’ solution against stated pricing principles that continues to provide strong incentives for parties to reach agreement through negotiation. The scope of any dispute resolution process should be limited to the satisfaction of the terms of the pricing principles.

Measure 4: Providing customers with an assurance of compliance

To provide customers with a level of assurance that the framework is being complied with, service providers could be required to provide a statement of compliance in the form of a statutory declaration signed by a relevant senior company officer or obtain an independent audit of compliance, particularly in respect of pricing in line with the pricing principles.

Five potential solutions

Based on stakeholder feedback, the examination has identified five potential solutions. Each of these options are examined below.

Option 1: Status quo

This option, the status quo, would retain the existing coverage test and focus efforts on implementing the COAG Energy Council's Gas Market Reform Package.

The vast majority of stakeholders consulted believe that the status quo is not a viable option. Regardless of whether they believe there is adequate evidence to demonstrate pipeline operators are engaging in monopoly pricing, stakeholders agree that the perception of monopoly pricing needs to be addressed.

Ability to address the problem identified

This option will not address the problem identified as the coverage test as currently understood and interpreted does not provide a credible threat of regulatory intervention. While the COAG Energy Council reforms will be designed to improve the functioning of the gas market, it is likely, on their own, they will be insufficient to address the existing disparity in negotiating power, which will have implications for the efficiency of the gas market and related markets.

Potential implementation

The gas market reforms will primarily be implemented by the GMRG. An indication of the timeframe and approach for each reform measure is available on the Energy Council website:

<http://www.coagenergycouncil.gov.au/publications/coag-energy-council-gas-market-reform-package>.

Option 2: Align the coverage criteria with the proposed amendments to the CCA

This option would amend the existing coverage criteria in the NGL to align with the amendments being made to the declaration criteria in Part IIIA of the CCA, maintaining consistency with the NAR. The proposed amendments to the declaration criteria are outlined in Chapter 1.

Pipeline operators strongly argue that the coverage criteria should remain aligned with the CCA. Other stakeholders do not believe the test needs to be linked with Part IIIA and that a new test could be appropriate.

Ability to address the problem identified

It remains unclear what impact the amendments being made to the CCA, should they be reflected in the coverage test, would have in practice given criterion (a) will be largely unchanged. Further, the effectiveness of the changes will not be fully understood until they are tested by regulatory and legal processes which will take time. It is not clear that the amendments would pose a more credible regulatory threat and act to constrain pipeline operator behaviour. This option is unlikely to address the problem and the existing disparity in negotiating power would be expected to continue.

Potential implementation

This option will likely require the completion of a COAG Regulation Impact Statement (RIS) and requires a legislative change to the NGL. A legislative change process is expected to take appropriately 12 months.

Option 3: CCA amendments + package of measures proposed by the pipeline industry

This option would amend the existing coverage criteria in the NGL to align with the amendments to the CCA, and introduce the package of measures proposed by APGA.

As outlined above, APGA's proposal consists of four measures:

1. Enhanced price and service information
2. Pricing principles
3. Independent dispute resolution
4. Providing customers with an assurance of compliance

Ability to address the problem identified

This option contains many of the elements required to address the problems of information asymmetry and market power. However, it is uncertain whether the proposals for transparency and disclosure and for dispute resolution are strong enough to ensure that the required balance in negotiating power would be achieved.

Potential implementation

APGA recognises that the package could be implemented through a number of mechanisms including a voluntary industry code of conduct, mandatory code of conduct or legislation.

Enhanced price and service information could be provided voluntarily by pipeline operators or it could be required under the NGL and/or the NGR. The enhanced voluntary provision of information could likely be achieved by pipeline operator faster than requiring the provision of the information via a legislative instrument

Similarly, to Option 2, the amendments to the NGL to align with the CCA will likely require the completion of a COAG RIS. A legislative change is expected to take approximately 12 months.

Option 4: CCA amendments + Enhanced transparency and a framework for binding arbitration

This option embraces the elements of Option 3 but involves more comprehensive transparency and disclosure requirements and a stronger form of dispute resolution. It would still anticipate the amendments to the CCA. This option would:

- 1. Enhance the disclosure and transparency of pipeline service pricing and contract terms and conditions, including providing information on the full range of pipeline services available and sought (not solely focus on forward haul services).**

As highlighted by the ACCC, there is little publicly available information on the costs incurred by pipeline operators in providing services and the relationship between these costs and the prices charged for services. In other jurisdictions, such as the US, *'financial reporting is seen as critical to enabling shippers to determine whether charges are 'just and reasonable' and to negotiate effectively with pipeline operators'*.⁸²

Increased transparency provides parties seeking pipeline services with an improved ability to undertake timely and effective negotiations.

Enhanced information should be provided by pipeline operators on the full range of services provided, including in relation to applicable pricing, terms and conditions.

Further, pricing principles, and/or information on the methodology used to determine prices for different services, including costs incurred, should be published to enable shippers, or potential shippers, to better assess the reasonableness of the prices and terms offered. These principles should also make transparent the process for expanding the capacity of a pipeline.

This recommendation could be implemented using a range of mechanisms and consideration will need to be given to the need for information to be subject to appropriate validation and/or compliance processes.

⁸² ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 135.

2. Introduce a framework for binding arbitration, available to all open access pipelines in the event parties are unable to reach a commercial agreement, into the NGL.

This arbitration would be activated where parties to a negotiation are unable to reach a commercial resolution.

The existing dispute resolution framework, under Chapter 6 of the NGL, is only available to those shippers/potential shippers experiencing difficulty accessing pipeline services on a light or full regulation pipeline. Thus, as recognised by the ACCC, the existing threat of arbitration is unlikely to be a constraint on the behaviour of all pipeline operators.⁸³ Access to dispute resolution should not be predicated on whether or not the pipeline is covered.

Where commercial processes are working effectively, the resort to arbitration should rarely be required.

On an indicative basis, the arbitration framework would encompass the following characteristics:

- 1) Commercial negotiation between parties would occur whenever any party sought pipeline services on an open access pipeline.
- 2) The existing provision for a fifteen year 'no-coverage period' would be retained and during that period any negotiations on services which are contained in the foundation contracts would be governed by the provisions of those contracts. However, negotiations involving parties to those foundation contracts relating to services not covered in those contracts, or involving a new party, would be subject to the arbitration framework.
- 3) After negotiations had commenced either party could signal a breakdown which would trigger the arbitral process.
- 4) The arbitration would be commercially-based (as distinct from judicial or regulator based), with the arbitrator appointed by mutual agreement of the parties, but with provision for imposition of an arbitrator where there is no agreement. The framework would be designed for expeditious resolution of the dispute with provisions to avoid delay and

⁸³ ACCC, *Inquiry into the East Coast Gas Market* Report, April 2016, p 135.

gaming. Structures such as 'final offer arbitration' would be considered for inclusion.

- 5) The decision of the arbitrator would be binding on both parties.
- 6) Oversight and maintenance of the framework will be required, including in relation to procedural rules, pricing principles and the power to appoint an arbitrator to a dispute in the absence of agreement between the parties. The AER is the logical institution to undertake this role.

The new arbitration framework would not replace the current arrangements for seeking coverage. No change is proposed to the current coverage test under this option. If the coverage test is satisfied regulation would continue to apply in accordance with the NGL and NGR. Further, full regulation would continue to be appropriate where the benefits associated with regulation are likely to outweigh the costs.

Changes to the coverage test should not be considered until the effects of introducing a binding arbitration framework, the broader gas market reforms and the CCA amendments are known. The form of the test needs to be kept under review as the industry develops. Accordingly, the appropriateness of amending the coverage test should be reviewed within five years after the arbitration framework is operational. At this stage, it is envisioned that the AEMC would likely undertake the review.

This approach is consistent with the views of the majority of industry participants that the specification of the coverage test itself is not the major issue at this time. Rather, the effectiveness of commercial negotiations needs to be addressed in a manner which avoids the time delays and high costs usually associated with formal regulatory processes. The recommended approach should also address industry concerns relating to regulatory uncertainty.

The aim of the framework is to achieve commercial outcomes and therefore sustain investment. Contrary to the implementation of an altered coverage test that would likely lead to increased regulation of the pipeline industry, investment would still occur in response to market signals rather than regulation. This proposal is not designed to damage the ability of the pipeline industry to generate appropriate commercial returns, but rather to limit excessive returns. The proposed solution should avoid any 'chilling' effect on investment.

This option has the potential to facilitate efficient commercial outcomes while avoiding the time, cost and uncertainty associated with regulatory processes. This should help to reduce the inefficiencies currently occurring, to the detriment of downstream and upstream markets, as a result of the exercise of market power.

This approach seeks to reduce the imbalance in negotiating power, constrain the exercise of market power and encourage downward pressure on gas transportation prices. This could see a minor reduction in delivered gas prices for Australian users and slightly higher ex-plant prices for producers, encouraging investment upstream and downstream.

There will be costs associated with pipeline operators providing enhanced information and these costs will be dependent upon the design of this measure. The likely costs will be considered during the development of a detailed design by the GMRG.

Ability to address the problem identified

This option is the most likely option to address the problem identified. This option, provided it is effectively designed, will provide a credible threat, encouraging more balanced commercial negotiations across all pipelines.

Potential implementation

The GMRG would be tasked with developing the detailed design of the disclosure and transparency requirements and of the arbitration framework, after consultation with industry, other stakeholders, the ACCC, the AER and the AEMC, with recommendations to be considered by the COAG Energy Council in mid-2017. Proposals received from market participants, including the APGA, will provide a valuable basis for this consideration.

The design of this option would need to be carefully considered by the GMRG to ensure the arbitration framework does not face the same challenges previously experienced by the telecommunications sector.

During the development of a detailed design, consideration would also need to be given to:

- the type and format of pipeline service information that should be published

- the development of pricing principles, and/or information on the methodology used to determine prices
- the parameters that determine when arbitration is available and ensure it is not overused
- the interaction of an binding arbitration outcome with the capacity trading arrangements
- what amendments to the existing regulatory structure would be required, such as if the option for light regulation should be extinguished
- the institutional arrangements required to ensure the arbitration framework has adequate oversight and accountability, and furthers the NGO and the objectives of the COAG Energy Council
- the development of guidelines for arbitrators, such as principles and objectives that should be considered during the arbitration process
- ensuring the framework provides for expeditious dispute resolution and gaming by parties.

To avoid duplication, reform measure 6, the review information disclosure requirements in the NGL, would be consolidated under this option into the development of a detailed design by the GMRG. The GMRG and the AEMC would also need to work closely to ensure that the detailed design for the transparency and arbitration framework and the Review of Parts 8-12 of the NGR are complementary, dovetailed and avoid duplication.

This option would likely require the completion of a COAG RIS and requires a legislative change to the NGL. A legislative change process is expected to take appropriately 12 months. A rule change would also likely need to be completed by the AEMC which is expected to take approximately 9 months.

Option 5: Change the coverage test

The ACCC indicate that competition and efficiency are not synonymous, and state that ‘while competition may promote efficiency, significant efficiency improvements can still be achieved in upstream and downstream markets, without any change in competition in a related market, if a pipeline’s market power is constrained’.⁸⁴ Thus, the ACCC indicates that criterion (a) with its focus on increased competition in dependent markets does not focus attention on the right question.

While recognising the likely stakeholder concerns about breaking the nexus between the gas access regime and Part IIIA, the ACCC outline that Part IIIA is not designed to address monopoly pricing that has little to no effect on competition and that an alternative test is required under the NGL.⁸⁵

The market power test

The ACCC highlighted that the majority of transmission pipelines in Australia are unregulated, in contrast with other comparable international jurisdictions, such as the United States of America, New Zealand and the European Union, where the majority of transmission pipelines are subject to economic regulation. In these jurisdictions, the decision to regulate or to revoke regulation has tended to turn on whether the pipeline has a substantial degree of market power and the ability and incentive to exercise that power rather than whether access will promote a material increase in competition in another market, as it does in Australia.

Reflecting international experience, the ACCC recommended replacing the current coverage test with a market power test to control monopoly pricing on gas pipelines. The ACCC’s proposed market power test is outlined in Box 6.

⁸⁴ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 130.

⁸⁵ ACCC, *Inquiry into the East Coast Gas Market Report*, April 2016, p 132.

Box 6: The ACCC's market power test

The COAG Energy Council should agree to replace the current test for the regulation of gas pipelines (the coverage criteria) in the National Gas Law (NGL) with a new test. This test would be triggered if the relevant Minister, having regard to the National Competition Council's recommendation, is satisfied that:

- *the pipeline in question has substantial market power;*
- *it is likely that the pipeline will continue to have substantial market power in the medium term; and*
- *coverage will, or is likely to, contribute to the achievement of the National Gas Objective.*

The COAG Energy Council should also ask the AEMC to carry out further consultation on the specific matters that should be considered when applying this test and how it should be implemented and to advise the COAG Energy Council of the amendments that would need to be made to the NGL and the NGR to give effect to this new test.

The market power test was designed by the ACCC to be industry specific under the NGL, targeted at addressing the market failure observed by the Inquiry, that is, monopoly pricing that results in economic inefficiencies and does not promote the NGO. A wider change to the National Access Regime was not proposed.

The Consultation Paper asked stakeholders a series of questions in relation to the market power test, including if it is likely to increase the number of pipelines covered and address the problem identified by the ACCC.

The majority of stakeholders believe that the market power test would likely increase the number of pipelines regulated. Herbert Smith Freehills (HSF) indicated that market power test will materially increase the prospect that currently unregulated pipelines will be subject to cost based revenue and pricing regulation and the mandatory provision of reference services. HSF went on to outline that the EGP, SEA Gas Pipeline, MAP, SWQP, Queensland Gas Pipeline (QGP), CGP, and the Victorian-New South Wales Interconnect are the pipelines that will be vulnerable under the proposed test.

Pipeline operators contend that the market power test would likely result in over-regulation.

Most stakeholders do not believe that full regulation of most pipelines, which they believe could occur under the market power test, is necessarily in the best interests of all market participants. Jemena noted that setting aside the question as to whether or not a problem exists *'the ACCC's proposed market power test does not offer a better basis for determining whether a gas pipeline should be subject to regulation'*.⁸⁶ APGA considers that promoting competition in upstream and downstream markets delivers superior outcomes for economic efficiency (compared to a market power test) such that the regulation of prices in the midstream pipeline market is only warranted if it results in that promotion of competition. Origin Energy have expressed the view that the objective should be to deliver competitive outcomes in the market for pipeline services.

Tri-Star Petroleum believes the market power test will reduce the hurdle for regulation, reduce inefficiencies in the marketplace and focus on efficiency and the national gas objective. MEU indicated that it supports further exploration of the market power test.

Central Petroleum believes that the market power test should lead to an increase in the ex-field price, stimulating supply, and a lower city gate price, ameliorating demand destruction. AGL indicated that the market power test *'may just provide a sufficient threat of regulation that will move access prices closer to efficient levels and improve the negotiating position of access seekers vis-à-vis pipeline operators'*.⁸⁷

MEU argues that other market participants other than pipeline operators should benefit by having greater certainty of transport prices and access.

Pipeline operators expressed concerns that the market power test would create significant uncertainty. SEA Gas stated that the proposal to change the test *'would add substantial compliance costs to our business, would likely be detrimental to future pipeline investment (i.e. debt and equity markets for pipelines) and to the long-term interests of consumers by creating instability*

⁸⁶ Jemena, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 19.

⁸⁷ AGL, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 2.

and uncertainty in our industry'.⁸⁸ APA Group highlighted that regulatory certainty or lack thereof is a relevant factor in raising capital and debt. DBP Transmission indicated that pipelines would likely stop investing in the short-term and once regulated would then start investing to respond to the incentives regulation provides, not to market signals. APGA outlined that:

'By lowering the threshold of regulation, the ACCC's test exposes the gas market to the inefficiencies that arise from regulators setting access prices too low and from regulators effectively having to approve every investment decision. The costs arising from such inefficiencies are greater than the costs arising from the inefficiencies of access prices being too high'.⁸⁹

Ability to address the defined problem

The introduction of the market power test for determining coverage would increase the likelihood that coverage applications would be successful and thus provide a more credible threat of regulation than the current test. However, there is not widespread support for increasing the extent of regulation of the pipeline industry and, in fact, significant doubt whether such a resolution would address the real concerns of pipeline customers.

This option would create considerable uncertainty, with little legal principle or precedent available to interpret the test likely to increase the legal and administrative costs associated with coverage determinations. Further, consultation suggests that this option risks over-regulation, discouraging investment and innovation.

Potential implementation

This option would likely require the completion of a COAG RIS and requires a legislative change to the NGL. A legislative change process is expected to take appropriately 12 months.

⁸⁸ SEA Gas, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 2.

⁸⁹ APGA, submission to the Examination of the current test for the regulation of gas pipelines: Consultation Paper, October 2016, p 9.

7. Conclusion

The widespread experience of shippers is that pipeline operators are exercising their market power to the detriment of efficient outcomes in upstream and downstream markets. There is some indication, and a widespread perception, that pipeline operators are using their market power to engage in monopoly pricing.

The principal problem is that parties negotiating for pipeline access and services have unequal levels of bargaining power and information. Consequently, the examination has focused on the most effective and least onerous ways to address this negotiating imbalance, with the objective of delivering more competitive outcomes in the market for pipelines services.

The recommendations (see Box 7) seek to reduce the imbalance in negotiating power, by instituting a credible threat of intervention in the event commercial negotiations break down. This approach will avoid the time delays and the high costs usually associated with formal regulatory processes, and is consistent with the views of the majority of industry participants that the specification of the coverage test itself is not the major issue at this time.

In an environment of significant change for the Australian gas market, the regulatory framework needs to be flexible enough to deal with changing market circumstances. The proposed arbitration framework will provide a means of overcoming impasses in commercial negotiation and provide the regulatory flexibility required to support the transition to a more competitive and liquid gas market.

Box 7: Recommendations

1. That the disclosure and transparency of pipeline service pricing and contract terms and conditions be enhanced, including requiring the provision of information on the full range of pipeline services which are available or sought.
2. That a framework for binding arbitration, available to all open access pipelines in the event parties are unable to reach a commercial agreement, be introduced into the National Gas Law.
3. That the GMRG be tasked with developing a detailed design of the disclosure and transparency requirements and of the arbitration framework, after consultation with industry, other stakeholders, the ACCC, the AER and the AEMC, with recommendations to be considered by the COAG Energy Council in mid-2017.
4. That no change be made to the current coverage test at this stage. The appropriateness of amending the coverage test should be reviewed within five years after the arbitration framework is operational.

Appendix A: COAG Energy Council Gas Market Reform Package

The eastern Australian gas market has experienced a transformation of a scale and speed that has changed the market forever. Gas customers are facing the challenges of higher prices, shorter and less flexible contract terms and conditions and increased uncertainty about gas supply. The commencement of LNG from Queensland signified a new era for gas in eastern Australia.

Gas prices have been rising, as a result of the connection with international markets, higher production costs of new gas reserves, and a tighter market.

Regulatory uncertainty such as moratoria on exploration of new gas reserves has also reduced the supply of new gas, contributing to both rising prices and increased uncertainty of supply.

On 19 August 2016, Energy Ministers released a comprehensive gas market reform package, considering the recommendations in the reports by the ACCC and AEMC which included the following broad themes:

- Better information for trading in the market, including improvements to the Gas Bulletin Board for public gas demand information;
- Creation of trading hubs in the North and South through law and rule changes to enable price transparency and flexibility;
- Easier access to transport infrastructure through auctioning of secondary capacity enabling gas to get to where it needs to be;
- Better pricing information including the introduction an ABS Price Index for gas; and
- Encouraging more gas supply and suppliers through the Gas Supply Strategy.

The reform package comprises of 15 reform measures in four priority areas: supply, market operation, gas transportation, and market transparency.

Supply

The Energy Council accepts the evidence provided by the ACCC and AEMC that tightening gas supply has created considerable uncertainty for all gas market participants and is a core contributor to rising gas prices.

While supply regulation is primarily a state and territory matter, the gas market effects are not confined to a single jurisdiction, and there are opportunities to improve regulation and address community concerns through learning from each other's experiences. The ACCC findings on the importance of increasing gas supply and suppliers reinforce the importance of the work already underway by the Energy Council on supply-side matters.

- Reform measure 1: implementation of the Energy Council Gas Supply Strategy.

As a matter of priority, the Energy Council will continue to collectively work through its Gas Supply Strategy, to develop regulatory systems which build and sustain the confidence of the community and investors. The Gas Supply Strategy Implementation Plan for Collaborative Actions⁹⁰ provides more detail on how jurisdictions will work together on scientific and regulatory issues associated with onshore gas.

New gas supply from new producers and new basins are vital to promote competition and ensure gas users have a range of supply options.

Market Operation

The Energy Council recognises the consensus from the ACCC and the AEMC that changes to the gas markets have reduced the traditional options available to users to manage their gas requirements and that more flexible short-term trading options and risk management tools are required.

- Reform measures 2-3: Establishment of two primary trading markets in eastern Australia, a northern hub and a southern hub, with improved and more unified market designs at each location.

The Energy Council has agreed that the trading of gas should be concentrated at two facilitated markets, at a Northern Hub at the existing GSH at Wallumbilla and at a Southern Hub on the Victorian Declared Transmission System, with improved and more unified market designs at each location.

The development of the detailed arrangements for the Southern Hub is subject to the outcomes of the AEMC's Review of the Victorian Declared Wholesale Gas Market (DWGM). The Energy Council has also given in principle support to the simplification of STTM hubs to balancing mechanisms

⁹⁰ COAG Energy Council, *Gas Supply Strategy*, 4 December 2015.

following the development of the Northern and Southern hubs and pipeline capacity trading.

Gas Transportation

- Reform measure 4: Examine the pipeline coverage criteria in the NGL

Getting the regulatory settings for gas transmission pipelines right is important to ensure an efficient transportation sector with competitive prices. In a tighter gas market continued investment in pipelines and related services is needed to provide flexibility and choice for consumers.

This examination is a key component of the Council's broader market reforms and complements parallel efforts to increase gas supply, improve market operation and enhance market transparency.

- Reform measures 5-11: development of a gas transportation capacity market to underpin the new wholesale market design.

In the shorter term, there are reforms which could help the market transact more efficiently with pipeline operators and the Energy Council will pursue these as a priority. In particular, facilitating capacity trading between market participants is an important means of providing competitive tension to pipeline prices. The Energy Council supports the establishment of a capacity trading platform(s), day-ahead auction of contracted but un-nominated capacity, the standardisation of key primary and secondary capacity contractual terms and information on capacity trades.

Market Transparency

The development of liquidity in both the wholesale gas and transportation capacity markets is dependent on market participants' decisions being made on the basis of relevant and readily available information.

The Energy Council acknowledges the findings of the ACCC that the gas market is opaque and inflexible. Lack of transparency and information about the level of reserves, and commodity and transport prices are hindering efficient market responses to the changing conditions and are not signalling expected supply problems effectively.

The Energy Council is taking a holistic approach to improving market transparency – an approach which improves the broader understanding in the

market about the underlying drivers influencing gas pricing and availability. With greater confidence in market information, trading markets are likely to see increased participation and the development of liquidity which can be used as a reference in future supply contract negotiations.

- Reform measure 12-13: ABS Gas Price Index and Biennial report on growth in liquidity in wholesale gas and pipeline capacity trading markets

The Australian Bureau of Statistics (ABS) Gas Price index will show trends in price movements to give participants more consistent information to inform efficient decision making. This survey-based gas price index will measure the trends in prices payable under bilateral contracts over time. The ABS is already progressing this recommendation and is currently collecting data from gas market participants. The ABS expects to first publish the index in early 2017 with ongoing updates to the index.

The Energy Council will also task the AEMC to undertake a biennial report on growth in liquidity in wholesale gas and pipeline capacity trading markets. Monitoring liquidity on an ongoing basis will allow industry participants and policy makers to understand how the trading markets are performing, the value they are providing to gas market participants, and how they could be improved to better meet market participants' needs.

This report will be an important mechanism for reviewing the implementation of current reform measures, as well as the potential implementation of the recommendations of this examination, and will also be a key input for assessing the need for future reforms.

- Reform measure 14: Bulletin Board improvements

The Energy Council has agreed to pursue improvements to the Natural Gas Services Bulletin Board to enhance the breadth and accuracy of information provided to the market. The ACCC's findings further strengthen the AEMC's recommendations (A-K) for improving market transparency through the proposed improvements to the Bulletin Board.

These reforms include improving the reporting model, strengthening the reporting requirements, changing the way some information is published, adjusting the funding arrangements, and setting provisions for future

development. These reforms will be implemented in stages according to the changes required (law changes, rule changes or procedure changes).

It is important that these information provision enhancements dovetail with the broader reforms of the Energy Council, as well as with the recommendations put forward in this examination, to fully realise the Energy Council's Vision.

Gas Market Reform Group

The Energy Council has created the GMRG to lead the design, development and implementation of gas market reform measures in response to the strategic policy direction provided by the Energy Council.

The GMRG will be led by Dr Vertigan as the independent Chair and will provide technically feasible and commercially viable options for consideration within the broader policy context.

The GMRG will be supported through a set of technical working groups utilising the skills of technical experts and industry representatives to develop the detailed designs for these reform measures. The strong industry presence provided by the GMRG will draw out the expertise needed to drive successful reform.

Appendix B: ACCC Inquiry conclusions

The report from the ACCC East Coast Gas Inquiry into the competitiveness of wholesale gas prices in eastern and southern Australia was released on 22 April 2016.

The report raised a number of concerns about the transmission segment of the gas supply chain in the east coast and made a number of specific findings and recommendations, which are reproduced below:

Findings

- Pipeline operators have responded to the changes underway in the market. There is, however, evidence that a large number of pipeline operators have been engaging in monopoly pricing. This gives rise to higher delivered gas prices and is having an adverse effect on the economic efficiency of the east coast gas market and upstream and downstream markets, the costs of which will ultimately be borne by consumers. There is also evidence that the ability and incentive of existing pipeline operators to engage in this behaviour is not being effectively constrained by competition from other pipelines, competition from alternative energy sources, the risk of stranding, the countervailing power of shippers, regulation or the threat of regulation.
- The current gas access regime is not imposing an effective constraint on the behaviour of a number of unregulated pipelines. The current test for regulation under the National Gas Law (NGL) (the coverage criteria) is not designed to address the market failure that has been observed in this Inquiry, that is, monopoly pricing that results in economic inefficiencies with little or no effect on the level of competition in dependent markets. Other gaps in the regulatory framework are also allowing pipelines that are subject to regulation to continue to engage in monopoly pricing. Information asymmetries are limiting the ability of shippers to identify any exercise of market power and to negotiate effectively with pipeline operators.
- Less than 20 per cent of the transmission pipelines on the east coast are currently subject to regulation under the NGL and National Gas Rules (NGR). This is in direct contrast to other comparable jurisdictions, such as the United States, the European Union and New

Zealand, where the vast majority of transmission pipelines are regulated. It is well recognised in these jurisdictions that pipelines can wield substantial market power even where producers and users have a number of transportation options.

Recommendations

- The COAG Energy Council should agree to replace the current test for the regulation of gas pipelines (the coverage criteria) in the NGL with a new test. This test would be triggered if the relevant Minister, having regard to the National Competition Council's recommendation, is satisfied that: the pipeline in question has substantial market power it is likely that the pipeline will continue to have substantial market power in the medium term, and coverage will or is likely to contribute to the achievement of the National Gas Objective. The COAG Energy Council should also ask the AEMC to carry out further consultation on the specific matters that should be considered when applying this test and how it should be implemented and to advise the COAG Energy Council of the amendments that would need to be made to the NGL and the NGR to give effect to this new test.
- The COAG Energy Council should ask the AEMC to review Parts 8–12 of the NGR and to make any amendments that may be required to address the concern that pipelines subject to full regulation may still be able to exercise market power to the detriment of consumers and economic efficiency. In carrying out this review, the AEMC should also consider whether any changes can be made to the dispute resolution mechanism in the NGL and NGR to make it more accessible to shippers, so that it provides a more effective constraint on the behaviour of pipeline operators.
- The COAG Energy Council should ask the AEMC to explore how the scope of the information disclosure requirements in the NGL should be expanded to require all pipelines operating on an open access basis (that is, regulated and unregulated pipelines) to publish financial information that shippers can use to determine whether or not the prices they are offered by pipeline operators are cost reflective. The publication of this information would enable shippers to negotiate more effectively with pipeline operators and to identify any exercise of market power more readily.

Appendix C: Consultation list

Stakeholders that participated in the roundtables

- AGL
- Alinta Energy
- APA Group
- ATCO Gas Australia
- Aurora Energy
- Australia Pacific LNG (APLNG) Pty Ltd
- Australian Energy Council
- Australian Gas Networks Limited (AGN)
- Australian Petroleum Production & Exploration Association (APPEA)
- Australian Pipelines and Gas Association (APGA)
- Blue Energy
- Citic Pacific Mining
- Competition Economists Group
- DBP Transmission
- Dow Chemical
- Energy Australia
- Epic Energy (Epic)
- Yara Pilbara Fertilisers Pty Ltd
- ERM Power
- Exxon Mobil
- HoustonKemp Economists
- Hydro Tasmania
- Infrastructure Partnerships Australia (IPA)
- Jemena
- Major Energy Users (MEU) Inc.
- Orica
- Origin Energy
- Plastics and Chemicals Industries Association (PACIA)
- Santos Limited/GLNG
- Senex Energy
- Shell Australia (Shell)
- South East Australia Gas (SEA Gas)
- Tas Gas Retail
- Tasmanian Gas Pipeline (TGP) Ltd Pty / (Palisade Investment Partners Ltd)
- The Brattle Group
- Tri-Star Petroleum Company (Tri-Star)

Bi-lateral meetings conducted

- Adelaide Brighton Limited
- AGL
- APA Group
- Australian Pipelines and Gas Association (APGA)
- Australian Competition and Consumer Commission (ACCC)
- Australian Energy Market Commission (AEMC)
- Australian Energy Regulator (AER)
- Central Petroleum Limited
- DBP Transmission
- Epic Energy (Epic)
- Hydro Tasmania
- Jemena
- National Competition Council (NCC)
- Origin Energy Limited (Origin)
- Public Interest Advocacy Centre (PIAC)
- Qenos
- Santos Limited
- South East Australia Gas (SEA Gas)
- Shell Australia (Shell)
- The Grattan Institute
- The Treasury (Commonwealth)

Submissions received in response to the Consultation Paper

- AGL
- APA Group
- ATCO Australia
- Australia Pacific LNG (APLNG)
- Australian Competition and Consumer Commission (ACCC)
- Australian Energy Council
- Australian Gas Networks Limited (AGN)
- Australian Petroleum Production & Exploration Association (APPEA)
- Australian Pipelines and Gas Association (APGA)
- Blue Energy
- Central Petroleum Limited
- DBP Transmission
- Encana Australia
- EnergyAustralia
- Epic Energy (Epic)
- ERM Power
- Herbert Smith Freehills
- Infrastructure Partnerships Australia (IPA)
- Jemena
- Major Energy Users (MEU)
- National Competition Council (NCC)
- Origin Energy Limited (Origin)
- Plastics and Chemicals Industries Association (PACIA)
- Public Interest Advocacy Centre (PIAC)
- Santos Limited
- Senex Energy
- South East Australia Gas (SEA Gas)
- Shell Australia (Shell)
- Tas Gas Retail
- Tasmanian Gas Pipeline (TGP) Pty Ltd
- Tri-Star Petroleum Company (Tri-Star)

Appendix D: Coverage applications and recent determinations

Past applications considered by the NCC

Year	Application sought	Pipeline	Location	Outcome
2015	15 year no-coverage determination	Comet Ridge to Wallumbilla Pipeline Loop	Wallumbilla Gas Hub to Comet Ridge, Queensland	15 year no-coverage (expires 13 July 2030)
2015	Light regulation	Allgas Distribution Network	Southern Brisbane, Gold Coast, Tweed Heads and Banora Point in north east New South Wales, and the Toowoomba and Oakey	Light regulation
2014	Light regulation	Envestra's Queensland Gas Distribution Network	Brisbane Region (Brisbane CBD, Ipswich and suburbs north of the Brisbane River) and Northern Region (Rockhampton and Gladstone)	Light regulation
2014	Revocation of coverage	Dawson Valley Pipeline	Dawson River Gas Processing Facility to the Queensland Gas Pipeline at the Jemena Moura meter station.	Revoked
2013	Revocation of coverage	Wagga Wagga natural gas distribution network	Wagga Wagga and Uranquinty, New South Wales	Revoked
2013	15 year no-coverage determination	GLNG Pipeline	Surat Basin to Curtis Island, Queensland	15 year no-coverage (expires 13 July 2030)
2012	Coverage	South Eastern Pipeline System (SEPS)	Located in lower south east of South Australia, transports gas from Katnook to Safries and from Katnook to Glencoe, Mt Gambier, Kalangadoo and Snuggery	No coverage
2012	15 year no-coverage determination	APLNG Pipeline	Surat Basin to Curtis Island, Queensland	15 year no-coverage (expected expiry February 2030)
2010	Light regulation	Kalgoorlie to Kambalda Pipeline	Transports gas from the Kalgoorlie South outlet on the GGP to Kambalda, Western Australia	Light regulation
2010	15 year no-coverage determination	QCLNG Pipeline	Surat Basin to Curtis Island, Queensland	15 year no-coverage (expected expiry March 2029)

Year	Application sought	Pipeline	Location	Outcome
2009	Light regulation	Central West Pipeline (CWP)	Marsden to Forbes, Parkes, Narromine and Dubbo, central west of New South Wales	Light regulation
2008	Light regulation (of covered portion)	Moomba to Sydney Pipeline (MSP)	Marsden to Wilton; Dalton to Canberra; Young to Lithgow; Young to Wagga Wagga; Burnt Creek to Griffith.	Light regulation
2008	Commencement of the National Gas Law and National Gas Rules			
2005	Revocation of coverage	Tubridgi Pipeline and Griffin Pipeline	Tubridgi gas processing facility (25km south of Onslow) to Compressor Station 2 on the Dampier to Bunbury Natural Gas Pipeline, Western Australia	Revoked
2005	Coverage	Dawson Valley Pipeline	Dawson River Gas Processing Facility to the Queensland Gas Pipeline at the Jemena Moura meter station.	Covered
2005	Revocation of coverage	Moomba to Adelaide Gas Pipeline System (MAPS)	Moomba to Adelaide, South Australia	Revoked
2003	Revocation of coverage	South West Slopes natural gas distribution network	Services towns of Culcairn, Henty, Holbrook and Walla Walla, New South Wales	Revoked
2003	Revocation of coverage	Temora natural gas distribution network	Services Temora, New South Wales	Revoked
2003	Revocation of coverage	Goldfields Gas Pipeline (GGP)	Extends from Yarraloola, in the Pilbara region of Western Australia, to Kalgoorlie, in the Goldfields-Esperance region	Not revoked
2003	Revocation of coverage	City Gate to Berrimah Pipeline	Darwin City Gate to Berrimah, Northern Territory	Revoked
2002	Revocation of coverage	Mildura distribution system	Services Mildura and nearby towns of Merbein, Red Cliffs and Irymple, northwest Victoria	Revoked
2002	Revocation of coverage	Roma distribution system	Services Roma, Queensland	Revoked
2001	Revocation of coverage	Parmelia Gas Pipeline	Transports gas from gas fields at Dongara in the Perth basin (south of Geraldton) and from the Carnarvon basin gas fields (via the Dampier to Bunbury Natural Gas Pipeline) to industrial markets in the Perth, Western Australia	Revoked

Year	Application sought	Pipeline	Location	Outcome
2001	Revocation of coverage	MSP system	Links the Cooper basin gas fields at Moomba in South Australia to gas distribution systems in Sydney, Newcastle, Wollongong, Canberra and some NSW regional centres	Revoked for part of the MSP mainline (Moomba to immediately upstream of the off-take point of the Central West pipeline at Marsden, New South Wales)
2001	Revocation of coverage	Mildura Pipeline	Berri to Mildura, South Australia	Revoked
2001	Revocation of coverage	Riverland Pipeline	Transports gas from Angaston lateral on the MAPS to Murray Bridge and Berri, eastern South Australia	Revoked
2000	Revocation of coverage	Dalby Distribution System	Services Dalby, Queensland	Revoked
2000	Revocation of coverage	Peabody Mitsui Pipeline	Connects the Moura mine (now known as the Dawson mine) to the Queensland Gas Pipeline and the Queensland Nitrates plant near the town of Moura, central Queensland	Revoked
2000	Revocation of coverage	Kincora to Wallumbilla Pipeline	Kincora gas plant to the Roma to Brisbane Pipeline at Wallumbilla, Queensland	Revoked
2000	Revocation of coverage	Dawson Valley pipeline	Dawson River Gas Processing Facility to the Queensland Gas Pipeline at the Jemena Moura meter station.	Revoked
2000	Revocation of coverage	Palm Valley to Alice Springs Pipeline	Transports gas from Palm Valley and Mereenie gas fields in the Amadeus Basin to Alice Springs, Northern Territory	Revoked
2000	Revocation of coverage	Alice Springs Distribution Network	Services Alice Springs, Northern Territory	Revoked
2000	Coverage	Eastern Gas Pipeline (EGP)	Transports gas from the Gippsland Basin gas fields from Longford, Victoria to markets in Sydney and regional centres (Cooma, Canberra and Wollongong).	No coverage AGL applied to the Competition Tribunal for a review of the Minister's determination to cover the EGP. On 4 May 2001, the Tribunal determined not to cover the pipeline.

Year	Application sought	Pipeline	Location	Outcome
1999	Revocation of coverage	SEPS	Located in lower south east of South Australia, transports gas from Katnook to Safries and from Katnook to Glencoe, Mt Gambier, Kalangadoo and Snuggery	Revoked
1999	Revocation of coverage	Karratha to Cape Lambert Pipeline	Transports gas from the Dampier to Bunbury Natural Gas Pipeline (DBNGP) near Karratha to Cape Lambert, Western Australia	Revoked
1999	Revocation of coverage	Tubridgi Pipeline	Tubridgi gas processing facility (25km south of Onslow) to Compressor Station 2 on the Dampier to Bunbury Natural Gas Pipeline, Western Australia	Not revoked
1999	Revocation	Beharra Springs Pipeline	Connects the Beharra Springs gas plant to the Parmelia Pipeline, Western Australia	Revoked
1999	Revocation	Goldfields Gas Pipeline (GGP)	GGP to Keith power station GGP to Leinster power station GGP to Kalgoorlie power station	Revoked
1999	Revocation	Kalgoorlie to Kambalda Pipeline	Transports gas from the Kalgoorlie South outlet on the GGP to Kambalda, Western Australia	Not revoked
1997	Gas access regime (via the Gas Code) implemented by state and territory governments			

Recent coverage determinations

South East Pipeline System (SEPS)

The only application for a coverage determination under the NGL was made in relation to the SEPS. The SEPS was constructed in 1991 to transport gas from the Otway basin Katnook gas fields to users at Penola, Snuggery and Mount Gambier in south east South Australia. In 2005, following the decline in production from the Katnook gas fields, the SEPS was linked to the SEA Gas Pipeline via the South East South Australia (SESA) Pipeline. Gas is now sourced from the offshore Otway basin gas fields near Port Campbell and the western underground gas storage at Iona in southern Victoria. The SEPS is 70km in length and consists of two mainline pipelines (Katnook to Snuggery and Glencoe to Mount Gambier) and two lateral pipelines (Katnook to Safries and Kalangadoo to Nangwarry).

The SEPS was initially a covered pipeline when the Gas Code was introduced. In 2000, coverage was revoked after the owner, Epic, applied to have it removed. The NCC's final recommendation concluded that criterion (a) and (d) were not satisfied.

On 28 November 2012, Kimberly-Clark Australia Pty Ltd (KCA) submitted an application to the NCC for a coverage determination for the SEPS. KCA was a foundation customer for gas produced at Katnook and is the largest single user of gas shipped on the SEPS. The application arose out of negotiations between, initially Epic and then APA, and KCA for gas transportation following the expiry of the foundation contract. KCA submitted that under the foundation contract a higher tariff applied from 1991 until 2005 and a lower tariff for the last five years to 2010. KCA was informed by Epic that open access would be available upon expiry of the foundation contract but at a higher tariff. KCA sought coverage because it considered that Epic provides a monopoly service and coverage 'is the only feasible way for the establishment of shipping rates and the cost of new connections that do not contain monopoly rents'.⁹¹ KCA submitted that Epic was able to maintain its pricing position because there was no credible alternative to the SEPS for gas transportation to KCA's Millicent mill. KCA argued that if the SEPS was subject to regulation the tariff would be lower because the regulator would set the initial capital base at a lower value than Epic has used.

The NCC released its final recommendation in April 2013, recommending that the relevant Minister not cover the SEPS because the NCC was not satisfied that criteria (a) and (d) were met.

In assessing criterion (a), the NCC identified the following dependent markets:⁹²

- a) a (downstream) market for the sale of gas for use by domestic, industrial and commercial users in the area served by the SEPS
- b) an (upstream) market for the production and sale of gas, and
- c) Australian markets for paper tissue products and other products.

⁹¹ Kimberley Clark Australia, Application for Coverage of a Pipeline, October 2012, p 10.

⁹² NCC, *Final recommendation: Application under the National Gas Law for a coverage determination for the South East Pipeline System*, 8 April 2013, p 21.

The NCC found the following in relation to the identified dependent markets:

- a) While acknowledging that Beach was exploring in the area, the NCC found that the probability of sufficient local gas becoming available in the short to medium term (so as to materially affect the competitiveness of the gas sales market in the region served by the SEPS) was low. Greater surety as to the availability of sufficient gas and that coverage is instrumental to its development, is required for the NCC to conclude that coverage would materially promote competition in the downstream gas sales market.⁹³
- b) Gas from south east South Australia upstream of the SEPS is part of a competitive gas production and sales market. Producers (including Beach) are able to transport gas for supply to a range of locations in southern and eastern Australia using the transmission network. The known volume of gas in the area of the SEPS is low based on the information available. Coverage of the SEPS is therefore unlikely to promote a material increase in the already competitive upstream gas production and sales market.⁹⁴
- c) The paper tissues market is likely to be already effectively competitive, such that coverage would not promote competition. Access (or increased access), even if it is assumed to reduce the price of delivered gas for KCA, is likely to have little effect on competitive conditions in the Australian paper tissue market.⁹⁵

On 13 October 2013, the South Australian Minister for Mineral Resources and Energy, the Hon Tom Koutsantonis MP, agreed with the NCC final recommendation and determined that criterion (a) was not satisfied and thus that SEPS could not be covered. The Minister reasoned this determination by indicating that Beach Energy was not yet in a position to enter the relevant dependent market and was unlikely to be so in the short, medium or long-term unless the results of the current review of existing gas fields and further exploration suggest sufficient gas reserves are available. The Minister regarded this as a

⁹³ NCC, *Final recommendation: Application under the National Gas Law for a coverage determination for the South East Pipeline System*, 8 April 2013, p 28.

⁹⁴ NCC, *Final recommendation: Application under the National Gas Law for a coverage determination for the South East Pipeline System*, 8 April 2013, p 28-29.

⁹⁵ NCC, *Final recommendation: Application under the National Gas Law for a coverage determination for the South East Pipeline System*, 8 April 2013, p 30.

major barrier to Beach Energy and a barrier not alleviated by regulated access. The Minister indicated ‘*there is no guarantee or even probability of sufficient gas becoming available so as to enable enhanced competition in the dependent sales market*’ and ‘*the scope of entry to the relevant dependent market is not real*’.⁹⁶

Dawson Valley Pipeline

Similarly to the SEPS, the Commonwealth Minister for Industry, the Hon Ian Macfarlane MP, was not satisfied of criterion (a) in relation to the most recent application for a coverage revocation determination in respect of the DVP.

The DVP is a transmission pipeline owned by Meridian SeamGas Joint Venture and operated by WestSide Corporation Limited. The DVP was constructed in 1996, is 47 km in length and is located in the Dawson Valley, near the town of Moura. It transports gas sourced from nearby coal seam gas fields in the Bowen basin, to the Queensland Gas Pipeline. Under the Gas Code, the DVP was a covered pipeline. Coverage was subsequently revoked in 2000 and covered again in 2006. In 2014, an application was lodged with the NCC by WestSide for revocation of coverage of the DVP.

On 2 September 2014, the Commonwealth Minister determined to revoke coverage of the DVP based on the recommendation of the NCC. The Minister could not be satisfied of criterion (a) in relation to the DVP for the following reasons:

- From 2015 the DVP was to be fully contracted to GLNG participants and there was unlikely to be any unused capacity available to third parties;
- Small gas tenement holders within the vicinity of the DVP could partner with LNG projects or access the QGP;
- The possibility of another pipeline being developed by Queensland Nitrates Pty (QNP) to provide similar services to the DVP lessens the necessity for access to the DVP to maintain or enhance competition in the market for gas production and gas in the vicinity of the DVP; and
- the volumes of gas likely to be transported on the DVP are at such a level that access (or increased access) is unlikely to have a material

⁹⁶ SA Minister for Mineral Resources and Energy, the Hon Tom Koutsantonis MP, *Coverage determination in relation to the SEPS*, 13 October 2013, p 4.

effect on competition in the dependent downstream Queensland gas sales market.

Further, the Minister was not satisfied of criterion (b), that it would be uneconomic for anyone to develop another pipeline to provide the services provided by means of the pipeline, as the proposal by QNP to develop an alternative pipeline to the DVP tended to suggest it might be profitable to build another pipeline.

Appendix E: Transmission pipelines in Australia

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
NSW	Moomba to Sydney Pipeline (MSP)	APA Group	Length: 2029km Constructed: 1976 Capacity (TJ/d): 439 / 381 (reverse MDQ)	Unregulated Moomba to Marsden / light regulation remainder	<p>In 2003, the Commonwealth Minister for Industry, Tourism and Resources decided to revoke coverage between Moomba and Marsden because criterion (b) was found not to be satisfied on this part of the pipeline. The remainder of the pipeline was found to satisfy all of the coverage criteria, including criteria (a) so remained covered. At the time this determination was made AGL had a 30% interest in APA and one of the factors that the Commonwealth Minister pointed to when noting that criterion (a) was likely to be satisfied in this case was the 'substantial risk of vertical leveraging discrimination in favour of the wholesale and retail markets, given the close relationship between AGL, EAPL and Australian Pipeline Limited.</p> <p>Following an application by APA, the NCC decided in 2008 that the covered portion of the pipeline should be subject to light regulation.</p>
	Eastern Gas Pipeline (EGP)	Jemena	Length: 795km Constructed: 2000 Capacity (TJ/d): 291	Unregulated	<p>In 2000, AGL submitted a coverage application to the NCC. While the NCC and the Commonwealth Minister for Industry, Science and resources found that the EGP satisfied all the coverage criteria, on appeal the Australian Competition Tribunal found that criterion (a) was not satisfied and concluded that the pipeline should not be covered.</p>
	Central Ranges Pipeline (CRP)	APA Group	Length: 300km Constructed: 2006 Capacity (TJ/d): 7	Full regulation	<p>In 2006, the CRP became a covered pipeline through a competitive tender process. The competitive tender process did not require the application of the coverage criteria.</p>
	Central West Pipeline (CWP)	APA Group	Length: 255km Constructed: 1998 Capacity (TJ/d): 10	Light regulation	<p>Following an application by APA, the NCC decided in 2010 that the CWP should be subject to light regulation.</p>

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
SA	Moomba to Adelaide Pipeline System (MAPS)	Epic Energy	Length: 1185km Constructed: 1969 Capacity (TJ/d): 241 / 55 (reverse MDQ)	Unregulated	In 2007, the South Australian Minister for Energy decided to revoke coverage because criteria (a) and (d) were found not to be satisfied.
	SESA Pipeline (SESA)	APA Group	Length: 45km Constructed: 2005 Capacity (TJ/d): 40	Unregulated	No-coverage application has been made for these pipelines.
	South East Pipeline Systems (SEPS)	Epic Energy	Length: 70km Constructed: 1991 Capacity (TJ/d): 15	Unregulated	In 2000, the South Australian Minister for Minerals and Energy decided to revoke coverage because criteria (a) and (d) were found not to be satisfied. In 2012 KCA submitted a coverage application to the NCC, but both the NCC and South Australian Minister for Mineral resources and energy found that criteria (a) and (d) were not satisfied, so the coverage status was not changed.
	SEA Gas Pipeline	Retail Employees Superannuation Trust (REST) / APA Group	Length: 680km Constructed: 2002 Capacity (TJ/d): 314	Unregulated	
	Riverland Pipeline System	Australian Gas Networks	Length: 237km Constructed: 1995 Capacity (TJ/d): 5	Unregulated	The Riverland Pipeline was initially a covered pipeline under the Gas Code. In 2001, the South Australian Minister for Minerals and Energy decided to revoke coverage because criteria (a) and (d) were found not to be satisfied.

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
VIC	Victorian Transmission System (VTS) (includes the SWP and the LMP)	APA Group	Length: 2035km Constructed: 1969 Capacity (TJ/d): 1030	Full regulation	The VTS was a covered pipeline under the Gas Code. No revocation of coverage application has been made for this pipeline. The VTS is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.
	Vic-NSW Interconnect (VNI)	APA Group	Capacity (TJ/d): 153 / 196 (reverse MDQ)	Unregulated	
	Carisbrook to Horsham Pipeline (CHP)	Gas Pipelines Victoria	Length: 181km Constructed: 1998	Unregulated	
	South Gippsland Pipeline (SGP)	Multinet Gas	Length: 250km Constructed: 2007	Unregulated	
	Mildura Pipeline	Australian Gas Networks	Length: 148km Commissioned: 1999 Capacity (TJ/d): 30	Unregulated	Similarly to the Riverland Pipeline, coverage was revoked by the relevant Minister in 2001.
QLD	Roma to Brisbane Pipeline (RBP)	APA Group	Length: 440Km Constructed: 1969 Capacity (TJ/d): 233 / 125 (reverse MDQ)	Full regulation	The RBP was a covered pipeline under the Gas Code. No revocation of coverage application has been made for this pipeline. Current regulatory period: 1 September 2012 – 20 June 2017.

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	South West Queensland Pipeline (SWQP)	APA Group	Length: 756km Constructed: 1996 Capacity (TJ/d): 404 / 340 (reverse MDQ)	Unregulated	<p>The SWQP was initially a covered pipeline under the Gas Code. However, it was the subject of a Queensland Government derogation which precluded the ACCC from reviewing the reference tariff and reference tariff policy for the full forward haul service specified in the access arrangement until 2016. The reference tariff was instead approved by the Queensland Minister.</p> <p>In the transition to the NGL and NGR in 2008, the Queensland Government revoked coverage through a regulation, rather than through a formal assessment of whether the pipeline satisfied the coverage criteria. This change was made through <i>National Gas (Queensland) Regulation 2008</i>.</p>
	Spring Gully Pipeline	Origin	Length: 87km Constructed: 2004 Capacity (TJ/d): 142 / 40 (reverse MDQ)	Unregulated	
	Queensland Gas Pipeline (QGP)	Jemena	Length: 629km Constructed: 1989 Capacity (TJ/d): 149 / 40 (reverse MDQ)	Unregulated	<p>Initially subject to regulation as a covered pipeline under the Gas Code by the ACCC. However, it was the subject of a Queensland Government derogation which precluded the ACCC from reviewing the reference tariff, reference tariff policy and reference service until 2016. The reference tariff was instead approved by the Queensland Minister.</p> <p>In passing the National Gas (Queensland) Act 2008 to implement the NGR, the Queensland Government also passed a regulation that, among other things, specified that the QGP was not a covered pipeline and that coverage could not be sought for the first three years after the NGR commenced in Queensland.</p>
	Carpentaria Gas Pipeline (CGP)	APA Group	Length: 840km Constructed: 1998	Light regulation	<p>This pipeline originally became covered through Queensland Government legislation but was subject to a derogation, which precluded the ACCC (later the AER) from reviewing the reference tariff until May 2023. In the transition to the NGL and NGR in 2008, the</p>

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
			Capacity (TJ/d): 119		Queensland Government decided to change the form of regulation to light regulation and prohibit changes to the regulatory status until May 2023. This change was made through the National Gas (Queensland) Regulation 2008.
	Berwyndale to Wallumbilla (BWP)	APA Group	Length: 113Km Constructed: 2009 Capacity (TJ/d): 164 / 276 (reverse MDQ)	Unregulated	
	Darling Downs Pipeline	Origin	Length: 205km Constructed: 2009 Capacity (TJ/d): 270 / 530 (reverse MDQ)	Unregulated	
	Cheepie to Barcaldine Pipeline (CBP)	Ergon	Length: 404km Constructed: First stage: 1995; Second stage : 2003	Unregulated	
	QSN Link (QSN)	APA Group	Length: 182km Constructed: 2009 Capacity (TJ/d): 404/340	Unregulated	
	North Queensland Gas Pipeline	Vic Funds Management Corp.	Length: 391km Constructed: 2004	Unregulated	

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
			Capacity (TJ/d): 108		
	Wallumbilla to Gladstone Pipeline (previously known as QCLNG pipeline)	APA Group	Length: 334km Commissioned: 2014 Capacity (TJ/d): 1588	15-year no-coverage	15 year no-coverage determination granted by Commonwealth Minister for Energy and Resources in 2010 because criteria (a) and (d) were found not to be satisfied.
	APLNG Pipeline	Origin / Conoco / Sinopec	Length: 530km Commissioned: 2015 Capacity (TJ/d): 1560	15-year no-coverage	15-year no-coverage determination granted by Commonwealth Minister for Energy and Resources in 2012 because criteria (a), (b) and (d) were found not to be satisfied.
	Reedy Creek to Wallumbilla Pipeline (proposed)	APA Group	Length: 50km Proposed commissioning: 2018 Proposed capacity: bi-directional service up to 300 TJ/day	n/a	
	GLNG Pipeline	Santos / Petronas / Total / Kogas	Length: 435km Constructed: 2015 Capacity (TJ/d): 1430	15-year no-coverage	15-year no-coverage determination granted by Commonwealth Minister for Industry and Resources in 2013 because criteria (a), (b) and (d) were found not to be satisfied.

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	Comet Ridge to Wallumbilla Pipeline	Santos / Petronas / Total / Kogas	Length: 119km Constructed: 2007 Capacity (TJ/d): 950 / 175 (reverse MDQ)	Unregulated	
	Comet Ridge to Wallumbilla Pipeline Loop	Santos / Petronas / Total / Kogas	Length: 119km Commissioned: 2015	15-year no-coverage	15-year no-coverage determination granted by the relevant Minister in respect of the CRWP Loop in 2015 because criteria (a), (b) and (d) were found not to be satisfied.
	Silver Springs to Wallumbilla Pipeline	AGL	Length: 101km Constructed: 1978 Capacity (TJ/d): 8.8	Unregulated	
	Dawson Valley Pipeline (DVP)	Meridian / Westside JV	Length: 47km Constructed: 1996 Capacity (TJ/d): 16	Unregulated	<p>The coverage status of this pipeline has changed four times since the gas access regime came into effect:</p> <p>When the Gas Code was introduced the DVP was deemed a covered pipeline.</p> <p>In mid-2000 coverage was revoked by the Commonwealth Minister for Industry, Science and Resources because criterion (a) was found not to be satisfied. In this case the Minister noted that because there was only one user of the pipeline with a long-term GSA and no indication of any other producer seeking access or interconnection to the pipeline, access was unlikely to promote competition in any other market.</p> <p>In 2006 coverage was reinstated by the Commonwealth Minister for Industry, Tourism and Resources because all the coverage criteria were found to be satisfied. In this case, the Minister found that because the owner of the pipeline had vertical interests in gas production, it would have 'the ability and incentive to leverage its transmission market power into the upstream market in the absence of coverage'. It was on this basis that the Minister concluded that access would</p>

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
					<p>promote a material increase in competition in the upstream market because it would constrain the pipeline operators' ability to charge monopoly prices for transportation services.</p> <p>In 2014 coverage was revoked by the Commonwealth Minister for Industry because criterion (a) and (b) were found not to be satisfied. Criterion (a) was found not to be satisfied at this time because the owners had entered into a 20-year GSA with GLNG, which meant that there was unlikely to be any spare capacity available for third party use from 2015.</p>
	Kincora to Wallumbilla Pipeline	Origin Energy	Length: 53km Constructed: 1977 Capacity (TJ/d): 30	Unregulated	In 2000, coverage of the KWP under the Gas Code was revoked. It remains an uncovered pipeline under the NGL and is therefore not subject to regulation under the NGR.
	Peabody Mitsui Gas Pipeline	Anglo American Metallurgical Coal Pty Ltd	Length: 23km Constructed: 1996 Capacity (TJ/d): 50	Unregulated	The PMP was initially a covered pipeline under the Gas Code when that regime commenced in 1997. However, no access arrangement was submitted to, or approved by, the ACCC (the relevant regulator at the time). In 2000, the PMP's coverage under the Gas Code was revoked by the Commonwealth minister as recommended by the NCC.
TAS	Tasmanian Gas Pipeline	Palisade Investment Partners Limited	Length: 734km Constructed: 2002 Capacity (TJ/d): 129	Unregulated	
NT	Amadeus Gas Pipeline	APA Group	Length: 1512km Constructed: 1986 Capacity (TJ/d): 104	Unregulated	

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	Northern Gas Pipeline (proposed)	Jemena	Length: 622km Proposed commissioning: 2018 Capacity (TJ/d): 90	n/a	
	Bonaparte Pipeline	Energy Infrastructure Investment (APA 19.9%)	Length: 287km Commissioned: 2008 Capacity (TJ/d): 80	Unregulated	
	Daly Waters to McArthur River Pipeline	Power and Water Corporation	Length: 330km Constructed: 1994 Capacity (TJ/d): 16	Unregulated	
	Wickham Point Pipeline	Energy Infrastructure Investment (APA 19.9%)	Length: 12km Commissioned: 2009	Unregulated	
	Palm Valley to Alice Springs Pipeline	Australian Gas Networks	Length: 140km Constructed: 1983 Capacity (TJ/d): 27	Unregulated	The Palm Valley Pipeline was initially subject to regulation as a covered pipeline under the Gas Code by the ACCC. However, no access arrangement was either submitted to or approved by the ACCC. In July 2000, following a recommendation from the NCC, the relevant minister decided to revoke coverage of the pipeline.
	Darwin City Gate to Berrimah Pipeline	APA Group	Length: 19km	Unregulated	The DCGBP was initially subject to regulation as a covered pipeline under the Gas Code by the ACCC. However, no access arrangement was lodged with or approved by the ACCC. In May 2003, following a recommendation from the NCC, the relevant minister decided to revoke coverage of the DCGBP. At the time that coverage was

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
					revoked only small volumes of gas were being transported by the DCGBP.
WA	Eastern Goldfields Pipeline	APA Group	Length: 293km Constructed: 2015	Unregulated	
	Goldfields Gas Pipeline	Goldfields Gas Transmission Pty Ltd (APA Group 88.2% and Alinta Energy 11.8%)	Length: 1427km Constructed: 1996 Capacity (TJ/d): 202.5	Full regulation	GGP was a covered pipeline under the Gas Code. In 2003, GGT made an application to the NCC for coverage of the GGP to be revoked. In 2004, after considering the NCC's recommendation the relevant Minister decided that coverage should not be revoked.
	Fortescue River Pipeline	Fortescue River Gas Pipeline JV (DDG Fortescue River Pty Ltd 57% and TransAlta 43% interest)	Length: 270km Constructed: 2015 Capacity (TJ/d): 26	Unregulated	
	Telfer Gas Pipeline	Energy Infrastructure Investment (APA 19.9%)	Length: 443km Commissioned: 2003 Capacity (TJ/d): 29	Unregulated	

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	GGP to Kalgoorlie Power Station Lateral	Southern Cross Pipelines Australia Pty Ltd. (Wholly owned subsidiary of APA Group)	Length: 8km Constructed: 1996	Unregulated	The GGPKPS lateral was initially a covered pipeline under the Gas Code. However, in July 1999 the relevant minister decided to revoke coverage of the GGPKPSP after an application was made to the NCC and the NCC subsequently made a recommendation that coverage should be revoked.
	Kalgoorlie Kambalda Pipeline	APA Group	Length: 44km Constructed: 1996 Capacity (TJ/d): 20	Light regulation	The KKP was a covered pipeline and regulated by the Western Australian Office of Gas Access Regulation (now the Economic Regulatory Authority (ERA)) under the Gas Code. As a result of a number of time extensions to submit an access arrangement, no access arrangement was submitted or approved for the KKP prior to it becoming subject to light regulation by the ERA under the NGL in 2010.
	Midwest Pipeline	APA Group / Horizon Power	Length: 353km Commissioned: 1999 Capacity (TJ/d): 20	Unregulated	
	Parmelia Gas Pipeline	APA Group	Length: 445km Commissioned: 1971 Capacity (TJ/d): 70	Unregulated	
	Pilbara Pipeline System	APA Group	Length: PEP - 216km; BEP – 24km;	Unregulated	

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	Comprises of three pipelines: <ul style="list-style-type: none"> • Burrup Extension Pipeline (BEP) • Pilbara Energy Pipeline (PEP) • Karratha Lateral (KL) • Wodgina Lateral (WL) 		KL – 5km; WL – 80km. Commissioned: 1996 Capacity (TJ/d): PEP - 166		
	Dampier to Bunbury Pipeline Constructed by the State Energy Commission of WA.	DBP Transmission (jointly owned by DUET Group and Alcoa Australia)	Length: 1854km (not including loop) Commissioned: 1984 Capacity (TJ/d): 845	Full regulation	The DBNGP was a covered pipeline under the Gas Code. Under the National Gas Access (Western Australia) Regulations, the DBP is a 'designated pipeline' and cannot be the subject of a light regulation determination.
	Tubridgi Pipeline System	DBP Development Group (wholly owned by the DUET Group)	Length: 87km Constructed: 1991 The TPS is built parallel to the Griffin Pipeline, constructed in 1994.	Unregulated	The TPS was a covered pipeline under the Gas Code. In May 1999, SAGASCO SE Inc. submitted an application to the NCC for the revocation of coverage under the Gas Code. In August 1999, following recommendation from the NCC, the relevant minister decided not to revoke coverage of the TP. In November 2005, BHPPAO submitted an application to the NCC for the revocation of coverage under the Gas Code with respect to both the TP and the GP. In April 2006, following recommendation from the NCC, the relevant minister decided to revoke coverage of the TP and the GP (that is, the TPS).

State	Pipeline	Owner	Details	Regulatory Status	Regulatory Details
	Karratha to Cape Lambert Pipeline	Robe River Iron Associates Joint Venture	Length: 57km Constructed: 1984	Unregulated	The KCLP was initially a covered pipeline under the Gas Code. However, in September 1999 the relevant minister decided to revoke coverage of the KCLP.
	Beharra Springs Pipeline	Origin Developments Pty Ltd	Length: 1.6km Capacity (TJ/d): 35	Unregulated	The Beharra Springs Pipeline was initially covered under the Gas Code although no access arrangement was proposed by the service provider. In 1999 Boral Energy Developments submitted an application for revocation of the pipeline. In August 1999, the WA Minister revoked coverage of the pipeline following the NCC's recommendation.
	Wheatstone Ashburton West Pipeline	DBP	Length: 123km Constructed: 2015	Unregulated	
	Ashburton Onslow Gas Pipeline	DBP	Length: 30km Constructed: 2016	Unregulated	

Appendix F: Distribution pipelines in Australia

State	Pipeline	Owner	Regulatory Status	Length of Mains (Km)	Customer Numbers
QLD	Allgas Gas Network	GDI (EII) Pty Ltd (Marubeni Corporation/Deutsche AWM/APA Group)	Covered pipeline subject to light regulation from July 2015	3 060	90 200
	Envestra Gas Distribution Network	Australian Gas Networks (Cheung Kong Infrastructure)	Covered pipeline subject to light regulation from February 2015	2 700	91 800
	Dalby Distribution System	Western Downs Regional Council	Unregulated	86	2 500
	Roma Distribution System	Maranoa Regional Council	Unregulated	70	300
NSW and ACT	Jemena Gas Networks	Jemena/Singapore Power International	Covered pipeline subject to full regulation	25 380	1 264 800
	ActewAGL	ACTEW Corporation/Jemena/Singapore Power International	Covered pipeline subject to full regulation	4 620	134 300
	Wagga Wagga	Australian Gas Networks (Cheung Kong Infrastructure)	Unregulated (coverage revoked 2014)	690	20 000

State	Pipeline	Owner	Regulatory Status	Length of Mains (Km)	Customer Numbers
	Central Ranges System	APA Group	Covered pipeline subject to full regulation	220	7 000
	Envestra (Albury) Gas Network	Australian Gas Networks (Cheung Kong Infrastructure)	Covered pipeline subject to full regulation	368	20 000
VIC	AusNet Services	Listed Company	Covered pipeline subject to full regulation This distribution system is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.	10 440	637 500
	Multinet	DUET Group	Covered pipeline subject to full regulation. This distribution system is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.	10 090	687 400
	AGN Vic Gas Network	Australian Gas Networks (Cheung Kong Infrastructure)	Covered pipeline subject to full regulation. This distribution system is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.	10 560	633 900

State	Pipeline	Owner	Regulatory Status	Length of Mains (Km)	Customer Numbers
	Mildura Distribution System	Australian Gas Networks (Cheung Kong Infrastructure)	Unregulated (coverage revoked in 2002)	100	900
SA	Australian Gas Networks	Cheung Kong Infrastructure	Covered pipeline subject to full regulation. This distribution system is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.	7 950	423 300
NT	Alice Springs Distribution Network	Australian Gas Networks	Unregulated (coverage revoked in 2000)	38	1000
WA	Mid-West and South-West Gas Distribution Systems	ATCO Gas Australia	Covered pipeline subject to full regulation. This distribution system is a 'designated' pipeline under the NGL, which means it cannot apply for light regulation.	12 800	620 000
TAS	Tas Gas Networks	Brookfield Infrastructure	Unregulated	710	12 000

Appendix G: Glossary of terms

Term	Description
15-year no-coverage determination	As defined in section 2 of the NGL: <i>15-year no-coverage determination means a determination of a relevant Minister under Chapter 5 Part 2.</i>
Access arrangement	An arrangement setting out the terms and conditions of access to pipeline services provided by means of a pipeline
Coverage or covered	The status of a pipeline which is, or is deemed to be, the subject of a coverage determination and accordingly subject to economic regulation under the NGL and NGR
Coverage criteria/test	Criteria for the coverage or revocation of coverage of a pipeline outlined in section 15 of the NGL
Full regulation	The form of regulation applicable to covered pipelines without a light regulation determination
Gas Code	The gas access regime was originally implemented by state and territory governments in 1997 the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code).
Greenfields pipeline project	As defined in section 149 of the NGL: <i>means a project for the construction of—</i> <i>(a) a pipeline that is to be structurally separate from any existing pipeline (whether or not it is to traverse a route different from the route of an existing pipeline); or</i> <i>(b) a major extension to an existing pipeline that is not a covered pipeline; or</i> <i>(c) a major extension to a covered pipeline by means of which light regulation services are provided if that extension is exempted by the AER under section 19</i>
Light regulation	The form of regulation applicable to a covered pipeline when a light regulation determination of the council is in force
NGL	National Gas Law, the Schedule to the <i>National Gas (South Australia) Act 2008</i>
NGO	National Gas Objective as set out in section 23 of the NGL

Term	Description
NGR	National Gas Rules, initially made by the South Australian Minister under section 294 of the NGL and subsequent amendments made by the AEMC under the NGL
Reference service	As defined in section 2 of the NGL: <i>means a pipeline service specified by, or determined or approved by the AER under, the Rules as a reference service</i>
Reference tariff	As defined in section 2 of the NGL: <i>means a tariff or charge for a reference service—</i> <i>(a) specified in an applicable access arrangement approved or made under a full access arrangement decision; or</i> <i>(b) determined by applying the formula or methodology contained in an applicable access arrangement approved or made under a full access arrangement decision</i>
Relevant Minister	As defined in section 2 of the NGL: <i>means if, in a coverage recommendation, no-coverage recommendation, classification decision under the Rules or reclassification decision, the NCC determines the pipeline is—</i> <i>(a) a cross boundary transmission pipeline—the Commonwealth Minister;</i> <i>(b) a transmission pipeline situated wholly within a participating jurisdiction—the designated Minister;</i> <i>Note—</i> <i>The term designated Minister is defined in the Act of this jurisdiction that applies this Law as a law of this jurisdiction.</i> <i>(c) a distribution pipeline situated wholly within a participating jurisdiction—the Minister of the participating jurisdiction;</i> <i>(d) a cross boundary distribution pipeline—the Minister of the participating jurisdiction determined by the NCC in the recommendation as being the participating jurisdiction with which the cross boundary distribution pipeline is most closely connected</i>
Service provider	As defined in section 8 of the NGL: <i>(1) A service provider is a person who—</i> <i>(a) owns, controls or operates; or</i> <i>(b) intends to own, control or operate,</i> <i>a pipeline or scheme pipeline, or any part of a pipeline or scheme pipeline</i>