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Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235

22 August 2017

Dear John

Re: Submission to the review into the scope of economic regulation applied to covered pipelines

The AER welcomes the opportunity to make a submission on Parts 8-12 of the NGR to address concerns that covered pipelines are exercising market power.

Please find our submission attached. Our submission outlines seven key recommendations, which can be implemented in order to respond to the transformation occurring in the gas market and to address some of the concerns raised by the ACCC East Coast Gas Inquiry. The AER looks forward to assisting the AEMC in further developing the reform package in any way it considers helpful.

Should you wish to discuss any aspect of this submission, please do not hesitate to contact Kanwaljit Kaur on (02) 9230 9163 or at Kanwaljit.Kaur@aer.gov.au.

Yours sincerely

Jim Cox PSM

AER Board Member

Australian Energy Regulator



AER submission

Review into the scope of economic regulation applied to covered pipelines

August 2017



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Executive summary

There has been significant change in the gas market over the past 15 years, and we expect this to continue.

In particular, the gas transmission pipeline network has undergone a major transformation in response to market forces, including investment in new pipelines and a number of significant incremental investments in existing pipelines. The east coast is now an interconnected market where shippers can move gas across states in directions that were not envisaged 15 years ago.

Such industry transformation puts a spotlight on the cost of transportation, as one of the components of the delivered price of gas. Despite the changes in the flow of gas, and growth in the transmission pipeline network, the fundamental characteristics of the gas network remain unchanged.

Gas pipelines are natural monopolies operated by private businesses engaging in medium to long term commercial contracts with customised offerings. If there is any doubt about this:

- the ACCC, in its East Coast Gas Inquiry (Inquiry) found that a large number of transmission pipelines are taking advantage of their market power by engaging in monopoly pricing.¹
- Dr Michael Vertigan undertook his own analysis and confirmed the ACCC's findings that pipelines are exercising market power and this is resulting in inefficient outcomes.²

A well-designed and targeted legislative and regulatory access framework is therefore essential. The National Gas Law (NGL) and the National Gas Rules (NGR) provide the framework for gas regulation. Regulation is based around a negotiate-arbitrate model. The negotiate-arbitrate framework is an appropriate model for a sector that provides customised services, particularly when the end-customers themselves are large commercial entities. This framework makes judgments and balances competing interests. For example, it balances the cost of regulation (administrative costs and potential impacts on innovation) against the benefits of regulatory outcomes.

The Terms of Reference for the AEMC Review focuses on Parts 8-12 of the National Gas Rules (the rules), which cover the economic regulation of covered pipelines.

From our operational experience we consider that the rules are flexible and adaptable. For example, we consider the rules provide guidance suitable to regulate both contract carriage and market carriage models. We also consider that the foundation of the

ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p. 110.

Dr Michael Vertigan AC, Examination of the current test for the regulation of gas pipelines, 14 December 2016, p. 35.

regulatory regime, which is determining prices for services using the building block approach, is well understood. In fact the importance of having regard to cost when pricing services was affirmed most recently by Dr Michael Vertigan.³

However, given changing market dynamics due to interconnection, where gas is being transported around the east coast in directions never envisaged, there may be issues in transmission pipeline regulation that require reflection, both on the part we play in applying the rules, and also in the rules themselves. In particular, we consider there may be issues in appropriately identifying and defining services, given the different services sought by shippers as the market evolves. The ability to effectively define services is critical to the success of the gas regulation regime in addressing market power.

The transformation of the gas market is leading pipeline operators to become more innovative with their services. While we support this innovation we do not support monopoly pricing of such services. Our submission goes into detail regarding a pathway forward on this, but we also consider that there are a number of issues that require further consideration.

Recommendations

The purpose of our submission is to provide suggestions on how the rules could be improved in the short term to better respond to the transformation occurring in the gas market. These are:

- Recommendation 1: In order to be able to respond to a dynamic and evolving market, it is recommended that rules 79(6), 89(3), 91(2), 94(6) and 95(4) be removed as these rules limit the AER's discretion.
- Recommendation 2: Expansions should automatically form part of the covered pipeline.
- Recommendation 3: To improve efficiency and consistency, pipeline operators should be required to use the AER models (PTRM/RFM) as part of the access arrangement review. We also recommend that the rules provide for explicit indexation of the capital base.
- <u>Recommendation 4:</u> The AEMC should ensure the rules place beyond doubt the AER's ability to set multiple reference tariffs and to define and set rebateable services.
- Recommendation 5: Introducing an upfront process to identify reference services, rebateable services, application of incentives schemes and the form of control prior the commencement of an access arrangement review.
- <u>Recommendation 6:</u> Enhancing the AER's information disclosure powers over light regulation pipelines. We consider the amount of public information should be

Gas Market Reform Group, Gas Pipeline Information and Arbitration Framework, Initial National Gas Rules, Explanatory Note, 2 August 2017.

expanded and not just made available at the request of the access seeker via the regulator.

<u>Recommendation 7:</u> Subject to acceptance of Recommendation 6, the AER can improve the arbitration process through removing areas of uncertainty, introducing clear timeframes and aiming to minimise costs for disputing parties in its arbitration guideline. The AER would undertake a public process to revise its guidelines at the completion of the AEMC review. We are also cognisant of picking up lessons learnt from the non-scheme arbitration process which commenced on 1 August 2017.

These recommendations are commensurate with improving the operation of the existing regime. They will also improve the certainty of regulation for pipelines under Parts 8-12 and can be implemented now.

In the submission we also highlight that it would be worth further considering whether the negotiate-arbitrate model is the best fit for distribution pipelines,⁴ and whether a contingent project mechanism could be an addition to rule 79.⁵ However, we make no specific recommendations on these matters at this point as they deserve broader consultation.

The varied layers of gas regulation

The efficiency of the gas market is critically dependent on the efficiency of the transmission and distribution sectors, the prices pipeline operators charge for transportation services and the ability of participants to respond to change.

The ACCC Inquiry found that while the market is responding to substantial change, 6 concerns have been raised about 'the market power wielded by pipeline operators, the ways in which this market power is being exercised and the detrimental effect it is having on economic efficiency and consumers more generally'. The ACCC Inquiry found that market power is being exercised through monopoly pricing. Monopoly pricing gives rise to a higher delivered gas price for consumers and products and services produced using gas.

The AER regulates covered gas distribution and transmission pipelines in all states and territories, except Western Australia. Currently we regulate ten pipelines under full regulation; of those, four are transmission pipelines, which amounts to less than 20 per cent of the transmission pipelines on the east coast (see **Attachment A** for the list of the pipelines we regulate). We have reached this point because over time regulation

Please see 2.1 of this submission.

Please see 3.1 of this submission.

⁶ ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p. 95.

ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p. 92.

⁸ ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p. 102.

⁹ ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p. 100.

has been revoked on a number of key pipelines and a large number of new pipelines have been developed not having to be subject to regulation.¹⁰

As the ACCC has noted, this relatively small number of pipelines subject to full regulation is in direct contrast to what occurs in other comparable jurisdictions, such as the US, European Union and New Zealand, where the vast majority of transmission pipelines are regulated. We believe that the coverage test and the form of regulation should be reviewed. A key element of such a review, will be questioning the form of regulation, in particular the objective/purpose of light regulation, given Part 23 of the rules.

Ensure change and reform is staged and incremental

We are proposing specific incremental recommendations to enhance the operation of Parts 8-12 that we consider can be implemented now, and that improve transparency and certainty.

We stress caution in considering more radical change to the gas pipeline sector at this juncture. Part 23 - the Information Disclosure and Arbitration Framework for non-scheme pipelines - has only just become operational. It will be a material change to the industry. It is important to let this new part of the NGR settle and assess its effectiveness in two years as planned. That said, there may be aspects of the non-scheme pipeline framework that should also be considered, in one form or another, as additions/amendments to Parts 8-12.

We are also conscious that the ACCC Inquiry into Gas Market Transparency Measures (announced in April 2017) will be an invaluable source of information, in a sector starved of information disclosure. Such information may provide evidence (following the information gathering exercise the ACCC is undertaking) into areas where further enhancements can be made to the gas regime, including the regulatory framework. In this context we may make further recommendations to the AEMC during the course of its review.

We encourage the AEMC in making recommendations for change to undertake a staged approach, which engages with all stakeholders.

As these reforms proceed, the AER looks forward to a transparent and productive working environment with industry and consumers.¹³

ACCC, Gas Market Transparency Measures < https://www.accc.gov.au/regulated-infrastructure/energy/gas-market-transparency-measures>.

For example, coverage was removed on the Dawson Valley pipeline (2014) and the Moomba to Adelaide Pipeline System (2005). There was also a move to light regulation for the covered part of the Moomba to Sydney Pipeline. See, National Competition Council, *Past applications* < http://ncc.gov.au/applications-past/past_applications >.

ACCC, ACCC Inquiry into the East Coast Gas Market, April 2016, p.10.

AER, 2017 ENA Regulation Seminar speech: Working together to restore confidence in energy regulation, 26 July 2017 https://www.aer.gov.au/news/2017-ena-regulation-seminar-speech-working-together-to-restore-confidence-in-energy-regulation.

1. Introduction

The Terms of Reference ask the AEMC to make recommendations on any amendments it considers necessary to Parts 8-12 of the NGR to address concerns that pipelines subject to full regulation are able to exercise market power to the detriment of economic efficiency and the long term interests of consumers.¹⁴

Parts 8-12 of the rules set out the economic framework for the regulation of gas transmission and distribution pipelines on the basis that these assets are monopoly infrastructure, as assessed by the National Competition Council (NCC). The objective of these parts of the rules is set out in the NGL.¹⁵

The purpose of this submission is to present specific suggestions on how the rules could be enhanced to better respond to the transformation occurring in the gas market.

Our comments are structured to reflect the AEMC's assessment approach, as outlined in the Issues Paper. ¹⁶ Our comments fall under three of the five assessment topics, specifically:

- Efficient and effective regulatory framework,
- · Efficient investment in gas pipelines, and
- Incentives to provide access to pipeline services.

2. Efficient and effective regulatory framework

2.1 There are many benefits to the negotiate-arbitrate model, but it is not beyond questioning

We support the National Gas Objective and consider it sets the appropriate target for regulation.¹⁷

The negotiate-arbitrate framework is an appropriate model for a sector that provides customised services, particularly when the end-customers themselves are large commercial entities. This form of regulation does not seek to regulate every commercial arrangement that is entered into by end-customers, rather it fixes prices for certain 'typical', 'benchmark' or 'reference' services.

COAG Energy Council, Terms of Reference, Australian Energy Market Commission, Review into the scope of economic regulation applied to covered pipelines, p. 3.

National Gas Law, Part 3.

AEMC, Issues paper, Review into the scope of economic regulation applied to covered pipelines, 27 June 2017, p.41.

¹⁷ NGL, s 23.

In order to minimise the exercise of market power, emphasis should be placed on information disclosure, ensuring all necessary services are defined, and that the arbitration mechanism provides appropriate dispute resolution when negotiations fail.

However, in many ways the negotiate-arbitrate framework sits more comfortably with transmission pipelines than it does with distribution pipelines. There are fewer services offered by distribution pipelines and they are more standardised than those offered on transmission pipelines, meaning tariffs charged for distribution pipelines are more likely to reflect the reference services.

Given this, when investigating the best framework for regulating distribution pipelines, it will be important for the AEMC to decide whether tailoring terms and conditions has value for distribution pipelines and their customers. If it does not, we question the value of having the negotiate-arbitrate framework for distribution, and whether more specific price determinations, such as those in electricity may be more appropriate. Pipeline operators and gas retailers would be in a good position to provide advice and evidence to the AEMC on this matter.

Our position is that the regulatory framework, as set out in the rules, enables flexibility for the regulation of both transmission and distribution pipelines. This flexibility provides the AER, the businesses and end-users the ability to create tailored access arrangements.

2.2 An incentive-based regime provides many benefits

We use incentive-based regulation across all the energy networks we regulate. Incentive-based regulation provides service providers with financial incentives to run their business more efficiently. This involves financial rewards where operators improve their efficiency and financial penalties where they become less efficient.

Consumers ultimately benefit from improved efficiency through lower regulated prices. Most access arrangements come up for review every five years. If a service provider is able to deliver the reference service(s) at a lower cost than the building blocks we forecast prior to the start of the access arrangement period, both consumers and the operator share the benefits.

More efficient expenditure will benefit consumers because:

- Only actual capex is added to the capital base during the next access arrangement review. So lower capex will, over time, put downward pressure on prices.
- For opex, we use historical expenditure to inform our forecasts, so lower actual opex will also put downward pressure on prices in the future.

Incentives to deliver an efficient service can be enhanced through the use of specific incentive schemes. Rule 98 provides for a full access arrangement to include one or more incentive scheme to further encourage efficiency. As the Issues Paper highlights the incentive scheme provisions in the rules are much less prescriptive than they are in the electricity rules. We are of the view that rule 98 allows both the AER and the

service provider to exercise judgment, which helps to deliver fit for purpose incentive schemes.

We have approved access arrangements which include an Efficiency Benefit Sharing Scheme (EBSS), and more recently we approved, in our draft decision for AusNet and AGN, a Capital Expenditure Sharing Scheme (CESS). Both these schemes encourage businesses to look for efficiencies during the access arrangement period. In regards to the CESS, AusNet and AGN undertook a thorough and responsive stakeholder consultation process, which we participated in, prior to lodging their proposals. This assisted the businesses to propose an incentive scheme that was tailored and in the long term interests of consumers.

2.3 Multiple levels of discretion should be removed

The ACCC Inquiry identified and discussed the changing dynamics in the east coast gas market.¹⁹ As the regulator we are becoming increasingly aware that in this evolving market the number of services demanded by shippers is broadening (see Box 1).

Box 1: Services provided by transmission pipelines

Transportation services

Transmission pipelines operating on a point-to-point basis usually offer:

- Forward haul services, which provide for the transportation of gas from a receipt point to a
 delivery point in the direction of the predominant flow of gas; and
- Backhaul services, which involve the 'virtual transportation' of gas in the opposite direction to the predominant flow of gas. The term 'virtual transportation' is used in this context, because a backhaul service does not involve the physical transportation of gas. It instead involves a physical swap of gas at the point at which it is supplied into the pipeline for an equivalent amount of gas at the backhaul delivery point. To be able to provide this service, the volume of gas being backhauled must be less than, or equal to, the volume of gas to be transported on a forward haul basis, which is why it is offered on an as available or interruptible basis.
- If a pipeline can physically flow in both directions across its full length (ie a bi-directional pipeline), then it will usually offer a single transportation service, which enables gas to be transported in either direction.

Forward haul and bi-directional services can be provided on:

• a firm basis – a firm service allows shippers to transport gas up to their maximum daily and

See, AER, AusNet Services - Access Arrangement 2018-22, Draft Decision < https://www.aer.gov.au/networks (Victoria and Albury) - Access Arrangement 2018-22 https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/australian-gas-networks-victoria-and-albury-access-arrangement-2018-22/draft-decision>.

ACCC, Inquiry into the East Coast Gas Market, April 2016, Box 6.1, p. 95.

- hourly capacity reservation. The priority accorded to this service in terms of scheduling is higher than any other services and is the last service to be curtailed.
- an as available basis an as available service allows shippers to transport gas without
 reserving and having to pay for capacity on a daily basis, if there is spare capacity
 available. The priority accorded to this service is lower than that accorded to a firm
 transportation service in terms of scheduling and is curtailed before firm services.
- an interruptible basis an interruptible service also allows a buyer to transport gas without
 reserving and paying for capacity on a daily basis. However, the priority accorded to this
 service in terms of scheduling is usually lower than as available services and is usually
 curtailed ahead of both as available and firm services.

Storage services

Transmission pipelines may also be used to provide the following storage related services:

- Park services, which allow shippers to inject more gas into a pipeline than they take out on a particular day, up to a specified level and to store that gas in the pipeline. The additional gas supplied into the pipeline may be withdrawn by shippers at a later point in time, subject to constraints in their transportation contracts.
- Park and loan services, which in addition to allowing shippers to store gas on the pipeline, also allows shippers to inject less gas than it takes on any given day (a loan), up to a specified level.

Ancillary services

- Transmission pipelines can be used to provide a range of ancillary services, including:
 - o Renomination services, which enable shippers to amend their nominations after the nomination cut-off time, which is typically the afternoon before the gas day.
 - o In-pipe trade services, which enable gas to be traded between shippers at a notional point on the pipeline and allow shippers to manage their imbalances.
 - Capacity trading services, which enables capacity traded between shippers to be managed by the pipeline operator rather than by the shippers (e.g. the shipper purchasing the capacity can make nominations directly to the pipeline rather than through the shipper selling the capacity). Note that the AEMC has recommended, as part of its capacity trading related reforms, that any trades carried out through the capacity trading exchange and day-ahead auction be given effect through this service. Pipeline operators will therefore have an effective monopoly on the provision of these services if this recommendation is implemented.

If the AER is to apply a forward looking approach and accommodate change then the rules need to be flexible enough to account for the different ways gas will be transported, and the changing services that shippers require.

Rule 40(2) of the NGR says:

If the Law states that the AER's discretion under a particular provision of the Law is limited, then the AER may not withhold its approval to an element of an access arrangement proposal that is governed by the relevant provision if the AER is satisfied that it:

- (a) complies with applicable requirements of the Law; and
- (b) is consistent with applicable criteria (if any) prescribed by the Law.

As set out in the Issues Paper, the AER has limited discretion in select rules in Part 9 of the NGR, specifically:

- r 79 New capital expenditure criteria
- r 89 Depreciation criteria
- r 91 Criteria governing operating expenditure
- r 94 Tariffs distribution pipelines
- r 95 Tariffs transmission pipelines

We consider that these limitations on the regulator's discretion under the gas rules should be removed.

For the purpose of this submission, we will focus on rules 95 and 79 (discussed in section 3.1) - however the points are in principle the same across the rules where the AER's decision making is limited.

Clearly there is limited incentive for a service provider to nominate more than one reference service and to identify any rebateable services. This is because if a service is not identified in an access arrangement it is the subject of negotiation. Any revenue the service provider earns from negotiable services is outside the revenue allowance forecast in the access arrangement. If a dispute arises over the negotiated service, then it can be the subject of arbitration.

The rules provide for the consideration and assessment of the reasonableness of prices for firm transportation services. These rules are a critical element of the regulatory regime because they establish the price and basis on which shippers should expect to be able to access pipeline services. However, under rule 95 the AER's discretion is limited.

This provision is limiting in a dynamic market, for transmission pipelines, and works against the objective of identifying reasonable terms. The current rules lock in the cost recovery methodology. Once a total revenue requirement is determined using the building block approach, the service provider determines how that revenue is to be recovered.

The AER needs to be able to look beyond what is proposed in a service provider's Access Arrangement proposal and in a dynamic market, limiting the AER's discretion inhibits our ability to account for potential change that the service provider may be reluctant to accept. By way of example, we understand that backhaul and derivative services are often priced as a multiple of or discount to firm transportation services. A service provider can propose the value of the multiple or discount to be applied to a derivative service. The limited discretion means that the AER is constrained in challenging proposals made by the service provider on the multiple or discount to be applied. Unlike in other countries where broad principles have been adopted to guide the setting of prices, no such principles exist in Australia.

The GMRG looked extensively at the issue of whether there was value in specifying principles for services that are a derivative of, or ancillary to, firm transportation

services and added a section to the pricing principles.²⁰ Such a provision may warrant further consideration as part of this review.

We are not proposing more prescription to the rules, and we believe change can be made simply by removing the AER's limited discretion. The AER would continue to be bound by the requirements of the National Gas Objective and the revenue and pricing principles in the NGL.

In summary, the original design of the rules was a propose/respond model, and layers of discretion were built into the design. However our regulatory approach has evolved over time, and importantly, so too has the gas transportation sector. Going forward, we consider flexibility in the gas rules is critical, in particular for gas transmission pipelines.

Recommendation 1: In order to be able to respond to a dynamic and evolving market, it is recommended that rules 79(6), 89(3), 91(2), 94(6) and 95(4) be removed as these rules limit the AER's discretion.

3. Efficient investment in gas pipelines

3.1 Assessments on conforming capex could be improved

As part of our access arrangement review we assess the pipeline operator's capex proposal and include a capex allowance in our final decision. The decision to actually invest rests with the pipeline operator, and this is consistent with our incentive-based regulatory approach. Actual capex is then rolled into the asset base at the next access arrangement review (subject to our ex post assessment).

The Issues Paper notes that we assess forecast capital expenditure against rule 79 to determine whether it is forecast conforming capital expenditure. The Issues Paper explains that the criteria in rule 79(1) includes the overarching requirement that:

(a) the capital expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted industry practice, to achieve the lowest sustainable cost of providing services.

In addition, under 79(2) the expenditure must meet either one or more of:

- (a) positive overall economic value (having regard to the service provider, producers, users and end users)
- (b) present value of expected incremental revenue must exceed the present value of the capital expenditure
- (c) the expenditure is necessary to maintain the safety or integrity of services or to meet regulatory obligations or to meet the level of demand existing at the time the expenditure is incurred.

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²⁰ GMRG, Gas Pipeline Information Disclosure and Arbitration Framework - Implementation Options Paper, March 2017, p. 134.

Notably, the discretion of the regulator is limited for this rule.²¹

The Issues Paper raises the question of whether an appropriate level of regulatory scrutiny on investment occurs when the regulator's discretion is limited.

Rules 79(2)(a) and 79(2)(b) are quite clear and may be assessed objectively in practice.

Rule 79(2)(c) is an area where limited discretion has the potential to limit the level of scrutiny on investments. For example, if a regulated business proposes to augment its network to meet a safety obligation, limited discretion means we cannot change the nature of this augmentation unless doing so would correct non-compliance with the safety obligation. However, this does not strictly suggest that the level of approved capex is inefficient or not appropriately scrutinised.

Rule 79(1)(a) also applies. Although this does not necessarily mean that the capex must provide an economic benefit, it effectively says that the service provider must propose an amount of capex necessary to undertake the proposed project in the most prudent and efficient manner.

Rule 74 is applied where the proposed capex relies on a forecast or estimate. Our assessment of prudent and efficient costs typically involves scrutinising volumes and unit rates proposed by the service provider. Under rule 74:

- (1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.
- (2) A forecast or estimate:
 - (a) must be arrived at on a reasonable basis; and
 - (b) must represent the best forecast or estimate possible in the circumstances.

In order to assess proposed volumes (such as length of mains or number of meters) we typically rely on engineering advice and historical data. This ensures that we accept volumes that are in line with historical performance or industry standards. The unit rates proposed by service providers may be previously tendered or forecast rates. We check that existing unit rates have been subject to a competitive tender process, and where they are forecast, we scrutinise the methodology used to derive the forecast. In summary, rule 74 allows us to scrutinise a forecast or estimate and ensure it is reasonable. Importantly, under rule 74 we have full discretion, which means that we can replace a forecast or estimate if we consider that a preferable alternative exists.

In practice, rule 74 may be more effective in assessing capex that is routine in nature (for example, new connections, mains replacement and meter replacement). In these circumstances, forecasts or estimates can be assessed objectively against historical performance.

²¹ NGR, r. 79(6).

Is there a better way to manage significant but uncertain capex?

We have also encountered proposals from distribution businesses where the proposed capex volumes varied greatly from historical amounts. For example, the Victorian gas distribution businesses proposed volumes of mains replacement for the 2013–17 access arrangement period that were significantly greater than the volumes achieved in the preceding access arrangement period (where each business had underspent its capex for mains replacement). We considered whether the proposed volumes of mains replacement met the prudency and efficiency requirements of rule 79(1), and made provision for a pass through event. This allowed the businesses, after they had delivered the total historical volume of mains replacement, to apply for additional expenditure. This provided us with a degree of oversight on the capex incurred during the access arrangement period, and ensured that capex underspends of the same magnitude would not occur again.

It is more challenging to assess estimates of volumes or unit rates for projects that are discrete or unique in nature. This is likely to be more common for transmission pipelines due to the characteristics of these pipelines. In these cases there may be uncertainty around whether the project is actually required, as well as the costs associated with the proposed project.

In response to these situations we are interested in analysing the merits of a contingent project mechanism in the rules. This would provide a formal mechanism for preventing large disparities in the capex we approve and the actual capex incurred by service providers. Such a mechanism might be a more workable option to the speculative capital account.²²

Under the NER, the contingent project mechanism allows us to determine an amount of capital expenditure for a project that is contingent on an event or condition occurring.²³ Specifically, the occurrence of the event or condition must be probable during the regulatory control period, but the inclusion of capex is not appropriate due to uncertainty that the event will occur, or the costs associated with the event or condition are not sufficiently certain.²⁴ Proposed contingent capital expenditure must also exceed either \$30 million or 5 per cent of the value of the annual revenue requirement for the first year of the regulatory control period, whichever is the larger amount.²⁵

In summary, we consider an appropriate level of scrutiny can be undertaken within the current rules. However, while the rules, as a package, provide us with the necessary tools to effectively scrutinize a proposal, the removal of limited discretion would enable us to more actively engage with businesses in developing alternative capital expenditure projects and proposals.

²³ NER, cl. 6.6A.1.

²² NGR, r. 84.

NER, cl. 6.6A.1(c)(5).

²⁵ NER, cl. 6.6A.1(b)(2)(iii).

3.2 Expansions to a covered pipeline should be covered

The ACCC Inquiry highlighted gaps in the regulatory regime that are enabling pipelines subject to full regulation to exercise market power and therefore engage in monopoly pricing.²⁶

A pipeline may be expanded in order to provide incremental services. Under the current regulatory regime, expansions to fully regulated pipelines are not automatically considered part of the covered pipeline. This means that there may be capacity on a covered pipeline, which is not subject to regulation.

Section 18 of the NGL states that an expansion forms part of a covered pipeline to which an access arrangement applies, if it is provided for under the expansion provisions in the access arrangement.²⁷ Rule 104 of the NGR provides that an access arrangement must include provisions setting out whether the access arrangement is to apply to expansions or how this would be decided at a later time. If expansions are to be included in a full access arrangement, the requirements must deal with the effect on tariffs.²⁸ This rule therefore enables the pipeline operator to determine its own expansions policy, which is approved by the AER as part of the access arrangement process.

We consider that pipeline operators should not have discretion to put forward an expansion policy which enables an expansion to a covered pipeline, to be excluded from coverage. All expansions to a pipeline subject to full regulation should be automatically covered. The AER should not need to make a decision on whether or not an expansion should be covered.

The ACCC Inquiry noted that if the AER allowed an expansion to a covered pipeline to be excluded from coverage, the only available remedy to users would be to apply to the NCC for coverage of the expansion.²⁹ The AER agrees that this would be difficult. The AER also recognises there are issues associated with having capacity on a covered pipeline, which is not subject to regulation (for example, cost allocation).

Section 19 of the NGL explains that extensions and expansions to a pipeline subject to light regulation (if there is no limited access arrangement) are automatically considered part of the covered pipeline unless the AER determines otherwise in writing.³⁰ We do not consider that it is appropriate that there should be discretion for expansions to pipelines subject to full regulation, when the default position for light is coverage.

Recommendation 2: Expansions should automatically form part of the covered pipeline.

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ACCC, Inquiry into the East Coast Gas Market, April 2016, p.141.

²⁷ NGL, s.18.

²⁸ NGR, r.104.

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

³⁰ NGL, s.19.

3.3 Other suggestions to improve the effectiveness of the Part 9 rules

Mandated use of PTRM and RFM

We believe our consultation and assessment of access arrangements will be improved by requiring the use of the Post Tax Revenue Model (PTRM) and the Roll Forward Model (RFM) for gas service providers. These models are required to be used under the NER,³¹ and consultation with stakeholders occurs formally when required, but this is currently not the case with gas stakeholders.

There are clear efficiencies for both the AER and pipeline operators in using consistent models, which implement the common post-tax regulatory framework. We note that:

- Reviewing different models is resource intensive.
- Different models raise the prospect of errors going undetected as modellers are required to familiarise themselves with more models.
- Making changes to bespoke models adds complexity, particularly when they feed into other business specific models - creating potential for error unless a change is followed though.
- Identifying areas of confidentially is more challenging in bespoke models, as compared to the systematic process the AER has developed for electricity regulation.
- Comparability of the models submitted by different businesses is reduced for all stakeholders. This reduces the ease of benchmarking businesses and other comparative analysis.

Indexation of the capital base

The NGR requires use of a nominal weighted average cost of capital (WACC) which is similar to the NER.³² This means there are two options for applying the nominal WACC to the capital base in calculating the return on capital. The two options and the impact on the revenue profile of the service provider are:

- Index the capital base and make an offsetting revenue adjustment. This is the
 approach the AER uses in its electricity and gas decisions. This approach
 promotes a relatively flat recovery profile of revenue over the life of an asset; or
- Not index the capital base, which means the assets remain at historical cost.
 Relative to the approach of indexing the capital base this effectively brings forward cash flow for the service provider, creating a steeper downward sloping revenue recovery profile, which in turn raises issues of how to manage and smooth this path.

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³¹ NER, cl 6.4, 6.5.1.

³² NGR, r. 87.

The decision to index the capital base has already been made for electricity in the rules, and electricity service providers have not raised objections with the AER's preferred approach.

To improve the smooth operation of the gas rules and to ensure that they reflect the current regulatory approach, the rules should be amended to require gas pipeline operators to index their capital bases. Because the gas rules are silent on indexing the capital base, we have had gas businesses propose changing the capital base to be unindexed as a means to bring forward their cash flows.

Having the requirement that pipeline operators must index the capital base would ensure a consistent treatment of the capital bases of all service providers operating under a common building block framework.

Recommendation 3: To improve efficiency and consistency, pipeline operators should be required to use the AER models (PTRM/RFM) as part of the access arrangement review. We also recommend that the rules provide for explicit indexation of the capital base.

4. Incentives to provide access to pipeline services

4.1 AEMC must ensure the AER is able to define reference and rebateable services

Reference services, and the linked reference tariffs, form the foundation for negotiations between pipeline operators and users. Appropriately defining reference services is critical to the success of the negotiate-arbitrate model for gas regulation. It is particularly important for transmission pipelines that offer a range of customised pipeline services.

Rule 101 states that:

- (1) A full access arrangement must specify as a reference service:
 - (a) at least one pipeline service that is likely to be sought by a significant part of the market; and
 - (b) any other pipeline service that is likely to be sought by a significant part of the market and which the AER considers should be specified as a reference service.
- (2) In deciding whether to specify a pipeline service as a reference service, the AER must take into account the revenue and pricing principles.

The 'test' for whether a service is a regulated service is whether the service is likely to be demanded by a significant part of the market. This is very different to the electricity service classifications. The test for service classification in the NER is essentially whether the service is contestable or not.

We consider that defining reference services according to market demand is still the best approach. In sectors where services purchased by end users are typically customised, it is appropriate for a regulatory framework to seek to set prices for

'typical' or 'reference' services. As long as there is a reference service that is a close substitute for the service the end user desires, each end customer can be effectively protected against the exercise of market power.

Once a reference service is defined, we factor in demand, determine a revenue forecast, allocate costs and make decisions on reference tariffs.

There are some services where it may be difficult to accurately forecast demand, and therefore to forecast the future revenue requirement and tariffs. This could be because either the price of the service, or the volume of sales is difficult to determine in advance. It is important that a pipeline operator has incentives under the regulatory regime to innovate and provide a variety of services. It is equally as important to ensure the pipeline operator does not exercise unlimited market power with respect to these types of services.

The rules allow the AER to define certain services, where demand is uncertain, as rebateable services.³³ These services must be in a substantially different market to the reference service. If a service is defined as a rebateable service, the costs associated with this service can, in whole or in part, be included in the calculation of the reference tariff if an appropriate portion of revenue derived from the sales of this service is returned to the reference service users through a rebate or refund.

The ACCC Inquiry stated that 'the reference service approach used in the NGR has resulted in a number of non-contestable services being excluded from the AER's ex ante review, whereas non-contestable services are arguably a primary target for regulation'. ³⁴

While we consider that the concept of 'reference services' is sound, there has been debate in the past as to how to interpret rule 101 (that an access arrangement to contain statement of reference services sought by a significant part of the market) and its interaction with rule 93(4) (the definition of a rebateable service). For the AER this has primarily been an issue in relation to transmission pipeline services (Box 2).

Box 2: Reference service and rebateable service rule change proposal

In 2011 we sought a rule change to the reference service and rebateable service definitions. The request was triggered by concerns we had that APA was earning material revenue from the sale of AMDQ Credit Certificates (AMDQ cc). Whilst AMDQ cc was sought by a significant part of the market, we were reluctant to define it as a reference service due to difficulties in estimating an efficient tariff.

We considered AMDQ cc was better defined as a rebateable service under rule 93(4) as there was uncertainty regarding the revenue to be generated from the service. However, we considered that the requirement for a rebateable service to be in a substantially different market

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³³ NGR, r.93(3).

ACCC, Inquiry into the East Coast Gas Market, April 2016, pp. 134-135.

from the market for any reference service may constrain our ability to effectively define pipeline services.

At the time we took the view that AMDQ cc was in a similar market to the market for basic transportation services.

We requested that the AEMC remove the requirement that the rebateable service be in a substantially different market

The AEMC did not consider the potential benefits of making the proposed change to the rebateable service definition outweigh the costs.³⁵

Given the importance of appropriately defining reference services and rebateable services, particularly in response to recent industry changes, we have undertaken further consideration of the appropriate interpretation of the rules.

We consider that the appropriate approach to identifying 'reference services' is one that is based on the economic and competition law concept of a market. In competition law, markets are defined as groups of services which are close substitutes for each other. Services which are not close substitutes for each other are in separate markets. Given the variety of services pipelines offer, and the end user customisation, we consider that ideally services that are close substitutes for each other could be grouped together, and at least one reference service established for each group. In this way each group of services represents a significant part of the overall (i.e. non-economic) 'market'. It follows that services that are not close substitutes could be represented through different reference services and reference tariffs. This is consistent with the negotiate-arbitrate model and can assist us to ensure that regulated reference services are available for as many non-substitutable services as required.

Following this reasoning, if a pipeline offered a service that was not a substitute for a defined reference service, and there was uncertainty regarding the demand or revenue to be generated from this service, it could be defined as a rebateable service.

We have followed this reasoning in our approach to defining the services covered in our draft decision for the Roma to Brisbane 2017-2022 access arrangement review.³⁶ In our draft decision we consider that the park and loan services and in-pipe trading services offered by RBP should be defined as rebateable services. This was not proposed by RBP and we have used our discretion under rule 93 (3) to make this draft decision.

AEMC, Rule determination: National Gas Amendment (reference service and rebateable service definitions) Rule 2012, 1 November 2012, p. iii.

AER, *Draft Decision Roma (Wallumbilla) to Brisbane Pipeline - Access arrangement 2017-22*, 6 July 2017 https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/roma-wallumbilla-to-brisbane-pipeline-access-arrangement-2017-22/draft-decision.

APA's response to our Draft Decision raises issues with our definition and treatment of rebateable services.³⁷ The draft decision and APA's revised proposal are currently out for stakeholder comment. Submissions close on the 15 September 2017 and comments are welcome.

Recommendation 4: The AEMC should ensure the rules place beyond doubt the AER's ability to set multiple reference tariffs and to define and set rebateable services.

4.2 Introduce a mechanism to consult prior to access arrangement reviews

The gas market is becoming more dynamic and we need to be able to adapt to changes in the market. We need to be more engaged to ensure that we are approving access arrangements that are reflective of the services being offered by the service provider.

As discussed, the ACCC Inquiry found that pipelines subject to full regulation may engage in monopoly pricing when negotiating the tariffs for non-reference services. ³⁸ A possible solution is to define more services (as reference and rebateable services) through the access arrangement process. In the past, most service providers only provide for a single reference service in their access arrangements and consequently, we have adopted the habit of only approving one reference service. We could establish additional reference services under the current definitions of reference and rebateable services but this is extremely difficult under the current timeframes.

Currently, it is not feasible for us to define additional reference services once an access arrangement has been submitted as the timeframe for consideration of a revised access arrangement is tight. In order to meet timelines we have felt constrained to accept the design elements proposed by the service provider. This may be despite our consideration of the issues raised by access seekers, for example, for the consideration of alternative services or for more than one reference service. The definition of the reference service(s) flows through into the demand, cost allocation and ultimately tariff components of the proposal. The AER, the business and end-users need time to appropriately consider all of the issues, form a decision on service definitions and then flow this through into the other components of a decision.

Currently, a pipeline operator may request a 'pre-submission conference' before submitting its full access arrangement proposal (rule 57(1)). This process can provide substantial benefits to both parties and enables the pipeline operator to develop a complete and well-framed proposal. However, rule 57 only provides for the service provider to request a pre-submission conference. This means that we cannot initiate any pre-proposal submission process.

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See: https://www.aer.gov.au/system/files/APTPPL%20-%20Access%20arrangement%20submission%20-%2014%20August%202017.pdf

ACCC, *Inquiry into the east coast gas market*, April 2016, p.135.

Given this, we recommend that the AEMC consider introducing a mechanism which allows the regulator, the businesses and end users to be consulted, and determine the services covered in an access arrangement before the access arrangement review process commences. This mechanism could include other components that would benefit from more stakeholder consultation prior to access arrangement proposals being submitted, such as incentive schemes and the form of control.

The proposed process should be tailored to gas and should maintain the flexibility of the gas rules. The process should not be compulsory. We recommend that the mechanism could be triggered by the AER, the pipeline operator or shippers, when there is a material change to the services offered (for example, either the business or the AER wishes to propose changes to reference services or rebateable services), incentive schemes or form of control. We envisage that the process could allow for one round of stakeholder consultation before we are required to make a decision. This decision should be made at least 6 months prior to the review commencing.

<u>Recommendation 5:</u> Introducing an upfront process to identify reference services, rebateable services, application of incentives schemes and the form of control prior the commencement of an access arrangement review.

4.3 Information requirements for light regulation should be enhanced

Covered pipelines have been found to exercise market power. The light regulation regime was introduced to provide a form of regulation that was suitable for pipelines that were to some extent constrained in their ability to exercise market power, and where the benefits of full regulation outweighed the costs. Light regulation is thought to provide 'more timely and lower cost outcomes than full regulation'.³⁹

Unlike full regulation, there is no ex ante approval of price and non-price terms of reference services through access arrangements. If negotiations are successful, light regulation gives rise to reduced front end costs and delay, but if unsuccessful and an access dispute is triggered, the arbitration process would likely be longer and more costly to undertake than in full regulation. These risks are considered by the NCC when a light coverage determination is made. 40 While we understand the differences between full and light regulation, some of the features of the new GMRG framework for non-scheme pipelines differ significantly from the existing light regulation approach. The aim of this submission is not to comment on the future of light regulation but to build a bridge between the GMRG framework and light regulation, until this issue can be properly considered.

National Competition Council, Gas Guide: A guide to the functions and the powers of the National Competition Council under the National Gas Law, October 2013, p. 65.

National Competition Council, Gas Guide: A guide to the functions and the powers of the National Competition Council under the National Gas Law, October 2013.

Both the ACCC Inquiry and Dr Michael Vertigan's Examination highlighted that information asymmetry is at the heart of market power and consequently, monopoly pricing. Information asymmetry gives rise to a power imbalance between shippers and pipeline operators in negotiations. Shippers are unable to identify the extent of market power because they do not have access to cost of service information. Shippers are therefore unable to assess the reasonableness of the tariffs and terms offered. Access to information levels the playing field and allows for more effective negotiation.

Building a bridge between the GMRG framework for non-scheme pipelines and light regulation

The obvious gap between the light regulation regime and the GMRG framework is in information disclosure. We consider that this gap is inappropriate.

The GMRG framework provides for pipeline operators to publish the information that shippers need to make an informed decision about whether to seek access to a pipeline service and to assess the reasonableness of an offer made by the pipeline operator. The publication and exchange of this information is intended to facilitate timely and effective commercial negotiations in relation to access to non-scheme pipelines.⁴¹

A service provider for a non-scheme pipeline must prepare, maintain and publish:

- service and access information⁴²
- standing terms⁴³
- financial information⁴⁴
- weighted average price information⁴⁵

This information is to be published by service providers in accordance with the NGL, Part 23 of the NGR and, where relevant, the financial reporting guideline that is currently being developed. Information must be provided in accordance with the access information standard and timetable set out in the rules. The timetable provides for the publication of the first set of:

- service and access information and standing terms by 1 February 2018; and
- financial information and weighted average price information by October 2018 or January 2019, depending on the service provider's financial year.

This information is to be published on each service provider's website. 46

⁴¹ NGR, Part 23.

⁴² NGR, r. 553.

⁴³ NGR, r. 554.

⁴⁴ NGR, r. 555.

⁴⁵ NGR, r. 556.

⁴⁶ NGR, r 552.

The light regulation regime provides a limited amount of information for potential users. A service provider must publish its tariffs and terms and conditions of access on its website. The owner must also comply with the facilitation of, and request for, access rules in the NGR. Under these rules, pipeline operators are required to provide certain information to the AER, when requested by shippers who are seeking access to pipeline services. Pipelines subject to light regulation must report to the regulator on access negotiations and have minimal annual compliance obligations. Light regulation places greater emphasis on commercial negotiations and information disclosure than full regulation and users are accorded some degree of protection through the following safeguards:

- The dispute mechanism in the NGL and NGR,
- Section 136 of the NGL, which prohibits a service provider of light regulatory services from engaging in price discrimination, unless it is efficient to do so; and
- Sections 133 and 137-148 of the NGL which are designed to present service providers from engaging in conduct that may adversely affect third party access or competition in other markets.⁴⁹

There is still however a noticeable gap between non-scheme pipelines and pipelines subject to light regulation in relation to information disclosure.

How to close the gap

We recommend that the AER be provided with greater information gathering powers under Part 11 of the NGR in relation to scheme pipelines subject to light regulation. In particular we consider the requirement in rules 107 and 108 should be reconsidered. Currently, shippers need to request specific information from pipeline operators through the AER.

The AER should have discretion to collect information that it considers necessary to enable proper decisions around seeking access and for effective negotiation for pipeline services. Further, more information should be available up front to access seekers, either publicly or on request by an access seeker, without the need to involve the AER as an intermediary. This information should build on the information required under the GMRG framework. However, because we are dealing with covered pipelines, we may require additional or different information. We would like to continue to discuss with the AEMC and stakeholders the most appropriate type of information to be collected and made available to access seekers. As recommended in the ACCC Inquiry, with broader information gathering powers, the AER could consider increasing annual reporting requirements for covered pipelines.

⁴⁸ NGR, rr. 107-108.

⁴⁷ NGR, r.36.

We release annual compliance reports and no breaches have been recorded. See our website: https://www.aer.gov.au/networks-pipelines/compliance-reporting?f[0]=field_accc_aer_sector%3A5.

While there are costs associated with information disclosure, since the rules inception, the AER has invested heavily in minimising the cost of information disclosure though the development of a consistent, streamlined information gathering framework. This provides certainty and consistency for all participants, and balances the cost of information gathering with the benefits of having it available for the regulatory process. Stakeholders have benefited from the significant investment the AER has made in streaming information collection (a direct response to the 2004 report). ⁵⁰

Recommendation 6: Enhancing the AER's information disclosure powers over light regulation pipelines. We consider the amount of public information should be expanded and not just made available at the request of the access seeker via the regulator.

4.4 Arbitration mechanism should be clarified and more transparent

The ACCC Inquiry found that market power is not being effectively constrained by the threat of arbitration on scheme pipelines. It argued that shippers are discouraged from triggering the access dispute provisions due to:

- · uncertainty around the potential costs and resources involved, and
- uncertainty about the final outcome due to a lack of clarity around the methodologies to be relied on by the AER and information asymmetry between parties to the dispute.⁵¹

The negotiate/arbitrate model adopted in gas regulation, provides for arbitration by the AER in the event of an access dispute. Chapter 6 of the NGL provides for the arbitration of access disputes by the AER, with a few small additional provisions on access disputes, outlined in Part 12 of the NGR. The AER has a non-binding guideline to arbitration of access disputes for scheme pipelines that was last revised in 2008.⁵²

We do not propose any changes to the rules in Part 12 of the NGR. We consider that the best way forward is to simplify and amend our guideline, subject to the AEMC's recommendations on information disclosure coming out of this review. This can be facilitated by the rule changes that will be proposed by the AEMC as a result of this review. We note that the absence of access disputes does not necessarily mean the arbitration mechanism is not effective but our amended guideline would seek to address the key concerns raised in the ACCC Inquiry; minimising uncertainty, costs and time in the arbitration of access disputes. If the AEMC considered it appropriate, some of these changes could later be reflected in the NGL and NGR. The aim is to

The Allen Consulting Group, Expert Panel on Energy Access Pricing: Report to the Ministerial Council on Energy, April 2006, p. 130.

⁵¹ ACCC, *Inquiry into the east coast gas market*, April 2016, p. 101.

AER, Guideline for the resolution of distribution and transmission pipeline access disputes under the National Gas Law and National Gas Rules, November 2008

https://www.aer.gov.au/system/files/Access%20dispute%20guideline.pdf >.

make the arbitration mechanism more accessible so that it becomes a more effective constraint on pipeline operators.

Specific issues to be addressed by amending the guideline

Lack of information disclosure leads to uncertainty about the outcome of arbitration

We are recommending that the AEMC initiate rule changes to provide the AER with greater information gathering powers under Part 11 of the NGR in relation to scheme pipelines. Information asymmetry is one of the key contributors to pipeline operators exercising market power and therefore engaging in monopoly pricing. If there is greater information disclosure, shippers will be better equipped to assess the reasonableness of the price and non-price terms and conditions offered, resulting in effective negotiation. Not only will this reduce the need for arbitration but it will provide parties with greater certainty around the likely outcome of an access dispute, as they are able to make their own judgments on the basis of the information provided before seeking arbitration by the AER.

Uncertainty around timeframes for conducting arbitration

The NGL does not provide any timeframes for the conduct of arbitration. Subject to amendments to the rules to allow for greater information disclosure, the AER would amend its guideline to include timelines, providing certainty to participants. We would seek to include stop the clock provisions and establish the maximum days it should take to decide the different categories of access disputes.

Uncertainty around the methodologies the AER would use in arbitrating an access dispute

The NGL does not explicitly refer to provisions in the NGR or how the AER would assess the various components of an access dispute, such as price and revenue. The AER would amend the guideline to ensure it is clear, for example, that the AER would determine an access dispute in accordance with Part 9 of the NGR. We note that Part 23 of the NGR, which details the Information Disclosure and Arbitration Framework for non-scheme pipelines, adopts an approach to asset valuation for pre 2008 pipelines (and especially for pre 1997 pipelines) that differs from the approach in rule 77 of the NGR. We would like to continue to discuss with the AEMC and stakeholders whether an approach that is more closely tied to the depreciated cost of construction, and that therefore provides greater certainty for stakeholders, should be adopted for arbitrations on all pipelines.

<u>Recommendation 7:</u> Subject to acceptance of Recommendation 6, the AER can improve the arbitration process through removing areas of uncertainty, introducing clear timeframes and aiming to minimise costs for disputing parties in its arbitration guideline. The AER would undertake a public process to revise its guidelines at the

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Please see section 4.3 of this submission.

completion of the AEMC review. We are also cognisant of picking up lessons learnt from the non-scheme arbitration process which commenced on 1 August 2017.

Attachment A: Gas pipelines subject to regulation by the AER

Type of regulation	State/territory	pipeline	Distribution or transmission
Full	Northern Territory	Amadeus gas pipeline	Transmission
Full	Queensland	Roma to Brisbane gas pipeline	Transmission
Full	Victoria	APA Victorian transmission system	Transmission
Full	New South Wales	Central Ranges Pipeline	Distribution and Transmission
Full	ACT	ActewAGL	Distribution
Full	South Australia	Australian Gas Networks	Distribution
Full	Victoria	Australian Gas Networks (Albury, Vic)	Distribution
Full	Victoria	AusNet Services	Distribution
Full	Victoria	Multinet Gas	Distribution
Full	New South Wales	Jemena Gas Networks	Distribution
Light	NSW	Central West Pipeline (Marsden to Dubbo)	Transmission
Light	Queensland	Carpentaria Gas pipeline	Transmission
Light	NSW	Moomba to Sydney (unregulated Moomba to Marsden)	Transmission
Light	Queensland	APT Allgas Energy Networks	Distribution
Light	Queensland	AGN - gas distribution network	Distribution