

Australian Energy Market Commission

Review into the scope of economic regulation applied to covered pipelines

Project: GPR0004

APA Group submission

As a major provider of pipeline services, and as an owner and operator of regulated transmission pipelines, APA Group appreciates the AEMC's invitation to make this submission responding to the Issues Paper initiating the review of Parts 8 to 12 of the National Gas Rules (NGR).

In the submission, APA addresses each of the questions raised in the Issues Paper. The submission also draws attention to what APA sees as an important preliminary issue concerning the support a well-designed and stable regulatory regime provides for pipeline investment.

APA is strongly of the view that, in proceeding with its review of Parts 8 to 12, the AEMC should recognise that, in the NGL and the NGR, there is a carefully crafted regulatory regime for covered pipelines which has evolved, over nearly two decades. It provides consistency and continuity, thereby providing investors with a degree of confidence that, over the longer term, the returns on, and the return of, investment are reasonably secure. It does this through processes which are managed, open, deliberative, and (at least until implementation of the recent decision to remove limited merits review) subject to external review. The AEMC should be careful not to make changes to that regime which would put at risk financing of the very substantial pipeline investment which supports the gas market in Australia.

To maintain the consistency in, and the continuity of, the regulatory regime, which APA sees as necessary for the support of pipeline investment, APA cautions against major change including:

- a change to the objective of the current regulatory framework
- adoption of a new regulatory model, possibly from another scheme of infrastructure access regulation such those which apply in telecommunications, railways and ports.

APA is of the view that the current negotiate-arbitrate framework supported by access arrangements developed under incentive based regulation generally works as intended, although particular parts of the framework may not be very effective.

One part of the framework which, APA believes, is not effective, is the scheme of three levels of regulatory discretion. Possibly because it is not effective, the level of regulator scrutiny over capital expenditures has been appropriate even though the relevant rules limit regulator discretion.

The Issues Paper suggests that, in respect of extensions and expansions of covered pipelines, service providers have discretion to determine whether those extensions or expansions are covered. This is not the case. The issue of coverage of pipeline extensions is of limited importance. Users typically source extensions through competitive tender processes. Whether the expansions of covered pipelines are to be covered is now a matter for the regulator under most access arrangements.

In APA's experience, the regulator has also been able to effectively apply the rules governing cost allocation and tariff setting in circumstances where the regulator has determined that an expansion of the capacity of a covered pipeline not to be covered.

Other parts of the regulatory framework, including the requirement that access arrangements specify one or more reference services, have, in APA's view, been reasonably successful.

The requirement for reference services has:

- provided an aid to negotiation in the bespoke environment of gas transmission
- facilitated standard contracting in the standardised environment of gas distribution.

Key provisions of the NGR ensure that the component costs from which the reference tariffs are determined are the efficient costs of providing those reference services.

Most access arrangements now include detailed terms and conditions for reference service provision. There have been debates on these terms and conditions during access arrangement approval processes, and the regulator has actively engaged with them as part of approval processes even though the NGR do not provide extensive guidance on non-tariff matters.

APA is not aware of there being uncertainty about how the arbitration framework of Chapter 6 of the NGL and Part 12 of the NGR is to operate, and does not see an immediate need for framework amendment.

The light regulation framework does have a continuing role. It provides the only avenue available under the regulatory regime of the NGL and the NGR for assessing the benefits of regulation, and for limiting the scope of regulation when costs exceed those benefits. Indeed, the principle underlying the light regulation regime – that the extent of regulation, and hence the benefits it can deliver, be commensurate with the costs it imposes – should have wider application within the regime of the NGL and the NGR

APA would be pleased to discuss with the AEMC any of the issues raised in its response to the Issues Paper.

Submissions responding the Issues Paper were to be lodged by 22 August. APA appreciates the AEMC's allowing it some additional time to prepare, and internally review, its submission before lodgement on 24 August.



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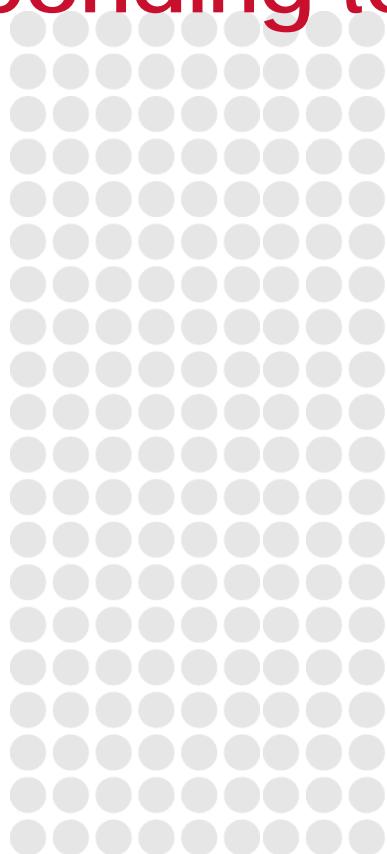
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**APA submission responding to
AEMC issues paper**



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1 This submission

As part of changes to gas market arrangements initiated in August 2016, the COAG Energy Council has asked the Australian Energy Market Commission (AEMC) to review Parts 8 to 12 of the National Gas Rules (NGR), and to make recommendations on any amendments it considers necessary 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.

To facilitate the review, the AEMC has published an issues paper (Issues Paper), and has invited submissions from stakeholders.

As a major provider of pipeline services, and as an owner and operator of regulated transmission pipelines, APA Group (APA) appreciates the AEMC's invitation, and sets out its views in this submission.

In the submission, APA responds to each of the specific questions raised in the AEMC Issues Paper.

APA has divided the questions under three headings, largely maintaining the question order in the Issues Paper. We address, in the sections 3 to 5 of the submission, the questions pertaining to:

- the objectives and structure of the regulatory regime (section 3)
- full regulation: access arrangements and access arrangement approval processes (section 4)
- light regulation (section 5).

An important issue for the review of Parts 8 to 12 is noted in section 2 of the submission. Parts 8 to 12 of the NGR are the core of a formal regulatory regime for covered pipelines. Continuity and consistency in the regime supports investment in these pipelines.

2

Parts 8 to 12 of the NGR apply to covered pipelines

As a pipeline service provider, APA has the task of persuading investors to invest in long-lived assets which are largely purpose-specific and location-specific. Once these long-lived, purpose-specific and location specific assets have been created, they have few, if any, alternative uses. Investors in these assets want confidence that, over the longer term, they have reasonably secure rights to a return on, and to the return of, their investments, and that the return on investment is comparable to returns available on other investments of equivalent risk.

The regime of Parts 8 to 12 has delivered – and continues to deliver – rates of return on investment which, APA believes, are low in comparison to rates available on other investments of equivalent risk. Under that regime the regulator has considerable discretion, and uses that discretion to choose the outcomes that achieves its broader objectives. Nevertheless, the rates of return chosen have been the outcomes of consultative processes, drawing on the knowledge of pipeline service providers, investors in pipelines, pipeline users, the regulator, and academic and market experts. The initial values of regulated assets were set through long processes of debate and consultation, and have been progressively and carefully updated. Through the depreciation allowances made for reference tariff determination, the regime of Parts 8 to 12 has provided for the return of investment.

The regulatory regime of the National Gas Law (NGL) and the NGR, the core of which in Parts 8 to 12 of the NGR, may not be ideal, but it provides consistency and continuity, thereby providing investors with a degree of confidence that, over the longer term, the returns on, and the return of, investment are reasonably secure. It does this through processes which are managed, open, deliberative, and (at least until implementation of the recent decision to remove limited merits review) subject to external review.

The AEMC has been asked to examine, in its review of Parts 8 to 12 of the NGR, issues identified by the Australian Competition and Consumer Commission (ACCC) in its earlier inquiry into the East Coast gas market, as well as any other related issues identified by the AEMC, including through stakeholder consultation. The AEMC is to give consideration to whether the access dispute resolution mechanism set out in the NGL and the NGR should be amended to provide a more effective constraint on the exercise of

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market power by pipeline service providers, and to make dispute resolution more accessible to shippers.

On 1 August 2017, the GMRG implemented, in the NGR, a regime of information disclosure and arbitration which is to apply to non-scheme pipelines. This regime has clearly been of interest to policymakers, with the COAG Energy Council, at its July 2017 meeting, accelerating its implementation. Although the terms of reference pre-date the new rules, the Council Chairman (and federal energy minister) has encouraged the AEMC to collaborate with the GRMG to ensure that the work on the information disclosure and arbitration regime was considered in the Parts 8 to 12 review.

There is, however, a fundamental difference between the GMRG's information disclosure and arbitration regime and the regulatory regime of Parts 8 to 12 of the NGR.

The GMRG's information disclosure and arbitration regime applies to non-scheme pipelines; it applies to pipelines which have previously been unregulated. The regulatory regime of Parts 8 to 12 is, in contrast, a regime designed for application to pipelines which the state has determined, largely *a priori*, should be regulated. It is also a regime the operation of which is overseen by an agency of the state – the regulator – created specifically for that purpose. A designated rule maker – the AEMC – undertakes careful review and consultation, guided by the NGL, before making new rules or changing existing rules.

In proceeding with its review of Parts 8 to 12, the AEMC should recognise that, in the NGL and the NGR, there is a carefully crafted regulatory regime for covered pipelines which has evolved, over nearly two decades, from the regime of the National Third Party Access Code for Natural Gas Pipeline Systems (Gas Code). The AEMC should be careful not to make changes to a regulatory regime which would put at risk financing of the very substantial pipeline investment which supports the gas market in Australia.

3 Objectives and structure of the regulatory regime

3.1 Question 1: Purpose of the regulatory framework

- (A) What do you think are the objectives of the current regulatory framework? Are the objectives of the framework clear? Has the framework achieved them?
- (B) Are the objectives of the current regulatory framework still relevant, or should they focus on different issues such as monopoly pricing?
- (C) Has the current incentive based framework appropriately incentivised the efficient operation, use and investment in pipelines? Should a different approach to incentives be considered?
- (D) Are there other third party access regimes (for example, for rail, ports or telecommunications) that would better achieve the purpose of the gas regulatory framework?

The key objective of the current regulatory framework is the national gas objective of section 23 of the NGL.¹ APA is of the view that inclusion of this objective in the regime of the NGL and the NGR has given focus to application of the gas regulatory regime. The words of section 23 are relatively clear, and have been further clarified in decisions of the Australian Competition Tribunal, in reports of the AEMC, and in other documents pertaining to the regime.²

The national gas objective is targeted at particular outcomes without being unduly specific: efficient investment in, and efficient operation and use of,

¹ Before issuing a statement of policy principles, the COAG Energy Council must be satisfied that the statement is consistent with the national gas objective (NGL, s. 25(2)); the Australian Energy Regulator is to perform its functions or exercise its powers in a manner that will or is likely to contribute to the achievement of the national gas objective (NGL, s. 28(1)); in performing any of its functions under the NGL the AEMC must have regard to the national gas objective (NGL, s. 72); and the provisions of an access arrangement must be consistent with the national gas objective (NGR, rule 100).

² See, for example, the discussions in: AEMC, *Final Position Paper National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*, National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012, 15 November 2012; Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompt 1; and George Yarrow, Michael Egan, John Tamblyn, *Review of the Limited Merits Review regime: Stage One Report*, 29 June 2012.

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.

Refocusing the objective away from outcomes would risk introducing a more narrow focus, on specific practices or behaviours. It would risk losing the outcomes that the regulatory regime is intended to deliver. Decisions made by the parties governed by the regime (service providers, regulators and pipeline users) contribute to achievement of the outcomes as they are stated. Those decisions can address – and have addressed – among other things, specific practices such as monopoly pricing.

In APA's view, the current incentive based framework has incentivised the efficient operation and use of, and the efficient investment in, regulated pipelines. Even the ACCC has recognised that pipeline service providers have made significant investments in expanding and adapting their pipeline systems to new market conditions.³

The objectives and the incentive mechanisms of the existing regulatory framework should not now be changed in what are emerging as short term responses to a much broader set of energy market problems. These problems will not be addressed by changes to the structure and objectives of the gas access regime, changes which threaten the stability of that regime, and which threaten the continued ability of the pipeline sector to deliver innovation, investment and service.

The AEMC asks whether there are other third party access regimes (for example, for rail, ports or telecommunications) that would better achieve the purpose of the gas regulatory framework. Third party access regimes are complex legal structures which attenuate the property rights of the owners of infrastructure assets to achieve policy objectives like those specified in the national electricity objective and in the national gas objective. In their attenuation of those rights, these legal structures recognise – as they must – the very significant differences in the technologies with which infrastructure services are provided. Were, say, the access regime for telecommunications to be considered for application in gas, some of the economic principles might remain, but much of the regime, would have to be modified to be

³ ACCC, *Inquiry into the east coast gas market*, April 2016, page 93.

workable with the technology of gas transportation. The result would not be the telecommunications access regime. The same issues arise when comparisons are made between the electricity and gas access regimes. Broadly, the objectives are similar, but the technology of electricity supply is very different from the technology of gas transportation, leading to significant differences in the structures of regulation and in the commercial arrangements which those structures can support.

APA submits that other third party access regimes would not better achieve the purpose of the gas regulatory framework.

3.2 Question 2: Efficiency of full regulation

- (A) *Do you consider that the benefits delivered by the access arrangement review process for a full regulation pipeline outweigh the costs?*
- (B) *Is there a regulatory framework that may better achieve the desired objectives compared to the current negotiate-arbitrate framework supported by access arrangements developed under incentive-based regulation?*
- (C) *Do you think that the access arrangement process should be amended to be similar to the revenue determination process for electricity service providers? Should there be greater recognition of consumer consultation, particularly for distribution pipelines?*
- (D) *Have the NGR been effective and adaptable to the evolution of the gas industry?*

The question of whether the benefits delivered by the access arrangement review process for full regulation pipelines outweigh the costs is a question which might be answered by a properly structured and well-executed benefit analysis.

APA knows the costs it incurs in access arrangement reviews, considers these costs to be high, and has sought to limit them in a number of instances (for example, by seeking light regulation for the Allgas Energy gas distribution network). However, APA does not know the broader social costs of the review process. In any access arrangement revisions process, APA gives careful consideration to the outcomes for its business, which necessarily requires examination of the impacts on pipeline users and prospective users. APA does not, however, undertake any assessment of broader social

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benefits, and has not made any assessment of whether the social benefits of the regulatory regime itself exceed the costs which the regime imposes.

Part (B) of the AEMC's Question 2 is much like Part (D) of Question 1. Regulatory regimes are complex legal structures. In the absence of a reasonably well specified alternative, it is simply not possible to say whether there is another regulatory framework which might better achieve the desired objectives than the current negotiate-arbitrate framework supported by access arrangements developed under incentive-based regulation.

In APA's view, the current negotiate-arbitrate framework supported by access arrangements developed under incentive based regulation is an advance on the earlier framework of the Gas Code.

The competitive market standard of the Gas Code has now been replaced, in the regime of the NGL and the NGR, by an explicit objective of efficient outcomes, and by incentives, provided by regime, designed to promote achievement of that objective. The current focus on incentives as a way of delivering performance improvements which contribute to an over-arching objective targeted at particular outcomes provides a stronger basis for regulation.

APA sees no benefit, either for pipeline service providers or for the users of pipeline services, from a change which would make the access arrangement review process similar to the revenue determination process for electricity network services. As an investor in electricity transmission assets, Directlink and Murraylink, as well as being a major operator of gas transmission pipelines, APA has direct experience of both processes. They are inherently similar, leading to similar outcomes. The access arrangement review process is intended to guide the process of review, and the regulator, to an outcome consistent with the national gas objective. Revenue determination in electricity similarly guides a process, and the regulator, to an outcome intended to be consistent with the national electricity objective. But in electricity, the process is much more mechanical, rigid and slow, governed at each step by detailed rules. These rules could be necessary given the unusual nature of electricity network service. More likely, they are simply the work of earlier, and less experienced, regulatory designers.

In APA's view, regulation is rarely effective and adaptable in an evolving industry. Pipeline sector adaptation to the significant changes in the Australian gas market over the last five years could not take place outside

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the regime of the NGL, but it has taken place largely outside the full regulation regime of Parts 8 to 12 of the NGR. APA has sought to respond innovatively to the market changes through, for example, its development of new services and capacity trading arrangements to facilitate the movement of gas across the entire east coast gas market. This would have been much more difficult and costly if APA had been restricted to providing services on fully regulated pipelines.

3.3 Question 4: Efficiency of regulatory discretion

Do you consider that the three levels of regulatory discretion in approving elements within an access arrangement are useful and assigned appropriately?

The regulator's discretion within the regime of the NGR is fully circumscribed in only one instance. If a service provider proposes an access arrangement period of 5 years, the regulator must accept that part of the proposal (rule 50(2)). Rule 50(3) advises that the regulator has no discretion in applying rule 50(2).

Rule 40(2) purportedly provides for limitation of the regulator's discretion and, in the application of the following rules, the regulator's discretion is limited:

- rule 79: new capital expenditure criteria
- rule 89: depreciation criteria
- rule 91: criteria governing operating expenditure
- rule 94: tariffs (distribution pipelines)
- rule 95: tariffs (transmission pipelines).

Where a rule limits the regulator's discretion, the regulator may not withhold its approval of an element of an access arrangement proposal governed by the rule in question if the regulator is satisfied that the access arrangement element:

- complies with applicable requirements of the NGL and the NGR
- is consistent with applicable criteria (if any) prescribed by the NGL or the NGR.

The requirement for an element of an access arrangement proposal to be consistent with applicable criteria prescribed by the NGL and the NGR seems

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not to be a particularly strong limitation on a regulator's exercise of discretion.

In its August 2014 access arrangement revisions proposal for the Goldfields Gas Pipeline, the service provider, Goldfields Gas Transmission Pty Limited, proposed the use of the straight line method of depreciation for total revenue and reference tariff determination. Goldfields Gas Transmission chose the standard method of depreciation used throughout the business world, and used by regulated businesses in North America. The regulator, the Western Australian Economic Regulation Authority (ERA), had previously required use of the straight line method of depreciation for the Goldfields Gas Pipeline in the initial access arrangement for the pipeline in 2005, and in revisions in 2010.

Choice of a method of depreciation is governed by rule 89, which is a limited discretion rule.

However, in 2015, the ERA was of the view that the national gas objective was an applicable criterion prescribed by the NGL, and that the depreciation method proposed by Goldfields Gas Transmission was not in the long term interests of consumers of natural gas with respect to price.⁴

Having found that the method of depreciation proposed by the service provider was not consistent with the national gas objective (in the regulator's view, an applicable criterion in the NGL), the ERA was unconstrained by Rule 89 of the NGR being a limited discretion rule.

The regulator is purportedly given limited discretion in dealing with a small number of matters – including the return of capital (depreciation) – each of which is important to service providers. But the scheme of limited discretion is ineffective. When approving an element of an access arrangement, the regulator effectively has full discretion.

⁴ Western Australian Economic Regulation Authority, *Final Decision on Proposed Revisions to the Access Arrangement for the Goldfields Gas Pipeline*, 30 June 2016 (As amended on 21 July 2016), pages 344-388.

4 Full regulation: access arrangements and access arrangement approval processes

4.1 Question 11: Purpose and definition of reference services

- (A) Is the purpose of a reference service as an aid to negotiation for pipeline services a relevant purpose for both transmission and distribution pipelines? Has this been a successful approach? Should access arrangements cover a broader range of services?
- (B) Should reference services continue to be defined in relation to market demand? Is there a more appropriate approach to defining reference services?
- (C) Does the access arrangement process limit the ability of the regulator and the service provider to make changes to the reference services for an access arrangement? If so, how could this be resolved? Is there merit in adopting the framework and approach process for access arrangements?

APA is of the view that requirement to specify one or more reference services in access arrangement has aided the negotiation of access to services provided by both transmission and distribution pipelines.

There are, however, fundamental differences between the two pipeline sectors which should be recognised.

Transmission pipeline operators contract with users of large quantities of natural gas (large users) whose pressure and volume requirements dictate that they be supplied directly from a transmission pipeline (rather than from a distribution pipeline), and with gas retailers. Both the large users and retailers will seek, from a pipeline operator, a gas transportation service which meets their specific requirements. Some attributes of the service sought – for example, high reliability (the service must be “firm”), and commercial recognition of the possibility of user force majeure – will be common to all users. Other aspects of the service must be “common”, because the pipeline itself must be operated as a common resource serving all users. For example, common nominations and scheduling arrangements are required because the pipeline operator must be able to plan the operation of its facilities to ensure that gas deliveries to all users, at least up to contractual entitlements, can be made each day. If contractual provisions for

curtailment in the event of disruption of gas flow are not to be in conflict, then a common curtailment regime must also apply across all users.

This commonality, arising from the common requirements of users, and from the requirement to operate a pipeline as a common resource serving all users, allows the specification of a reference service for a transmission pipeline, which can then be an aid to negotiations between prospective users and the pipeline operator.

The reference service is an aid to negotiation, but it may not be the service for which a user ultimately contracts with a transmission pipeline operator.

A prospective user of a transmission pipeline, whether a large user or a retailer, will also have requirements for service provision which are specific to the user's business. These requirements will typically include the location of the delivery point, the minimum pressure and minimum temperature at which gas is to be delivered at the delivery point, the permitted imbalance allowance, and the maximum hourly flow rate which the pipeline operator can guarantee, and on which the user can rely.

These specific requirements will be determined by the nature of the downstream facilities into which gas is to be delivered (those "facilities" including the portfolio of contracts held by a retailer). When the prospective user is a new user, for example a business requiring gas supply for process heat or power generation (or both), discussions on gas transportation arrangements proceed over an extended period – which may be as long as several years. During this time, the user negotiates with gas suppliers, develops a design for its facilities, determines the location for those facilities which is best suited to serving markets for its product or services, and obtains final sign offs from lenders and from its board of directors.

These user-specific requirements will, in turn, determine whether new pipeline facilities must be constructed to serve the user, and the type, scale and location of those facilities (including, for example, additional compression, a new offtake from the pipeline, the scale and type of metering which must be used, and communications and data transfer facilities which provide the user with information to manage obligations in both its gas purchase and gas transportation agreements).

Neither the prospective user's initial expression of interest in gas transportation service, nor the pipeline operator's response, is a "one-off"

offer. There is usually extensive exploration of the user's requirements, and of the way in which the pipeline operator is able to meet them, before the prospective user is ready to make a formal application for pipeline capacity, or to sign a gas transportation agreement.

Even for an existing user deciding to replace a terminating contract, considerations of technology and scale are important. More energy efficient technologies are likely to be available to the user. Markets for the user's products or services, and the cost of gas, are also likely to have changed since its current gas transportation agreement was negotiated. Again, there will usually be an exploration of requirements, and of transportation options, before a formal application to renew a gas transportation agreement is made, or a new transportation agreement is signed.

In gas distribution, the circumstances are different. A distributor typically contracts with gas retailers, and with a relatively small number of larger users with specific requirements which can be met within the lower pressures and lower volumes environment of a distribution network. To meet the needs of retailers, a gas distributor must provide a very large number (hundreds of thousands) of connections to its network, but each of one these will be one of a small number of standard types. The residential and commercial users of gas supplied from these connections use gas in appliances – cooktops, ovens, space heaters, water heaters – which are purchased "off the shelf" and which have been designed to standard specifications. The majority of consumers supplied with gas from a distribution network, including the larger users, require standard connections (pipework, pressure reduction and metering) for the delivery of gas into standard appliances. They do not have individual requirements for gas pressures, temperatures and flow rates, and do not require information systems to manage gas flows from producers (these are managed by the retailer).

In the transmission sector, gas transportation arrangements are bespoke. In the distribution sector, those arrangements are standardised.

APA is of the view that the requirement that access arrangements include reference services has been successful, albeit for different reasons in gas transmission and gas distribution. It has:

- provided an aid to negotiation in the bespoke environment of transmission

- facilitated standard contracting in the standardised environment of distribution.

A reference service is, as the AEMC indicates in question 11(B), to be defined in relation to market demand. APA does not believe this has been constraining on the range of services found as reference services in access arrangements. There is no obvious requirement for a broader range of services in access arrangements.

The relevant rule, rule 101(1), is broadly stated, and has been broadly interpreted by the regulators. Rule 101(1) requires that a reference service be a pipeline service:

- sought by a significant part of the market
- considered by the regulator to be a reference service.

APA is of the view that the access arrangement process has not limited the ability of either the regulator or a service provider to make changes to the reference services in an access arrangement.

The key issue is the way in which pipeline services become recognised as potential candidates for classification as reference services. Services sought by users or prospective users are brought to the attention of a service provider during the course of normal commercial interactions. The service provider then has the information needed to propose new reference services, or to propose changes to existing reference service, in an access arrangement revision proposal.

Users and prospective users may also advise the regulator about services which should be considered for classification as reference services. They may do this when they respond to the regulator's invitation to make written submissions on an access arrangement revisions proposal. This advice can then be taken into account by the regulator – proposing additions to the list of reference services, or proposing changes to existing services – in its draft decision.

Flexibility in being able to propose new reference services, or to propose changes to existing services, is desirable. It allows the gas transportation service requirements of users and prospective users to be better met, and allows the service provider to benefit from better meeting those service requirements. However, any proposal for a new service, or change to an

existing service, must be considered carefully in the context of the physical operation of a pipeline. A new service, or change to an existing service, can only be made if the service provider's ability to meet its existing contractual obligations to provide service is not compromised.

If there is a constraint on the ability of the regulator to specify a reference service, it arises from the requirement of the NGR for a reference tariff for that reference service. To determine the costs to be allocated to service provision, and to determine a tariff (as a cost per unit of service), the regulator must be able to forecast demand for a service which is to be a reference service. Only a service which is sufficiently likely to be sought by a significant part of the market that service volume can be forecast with a degree of precision can be included in an access arrangement as a reference service. Only for such a service will the regulator be able to determine a reference tariff.

The working of this process can be clearly seen in the AER's recent Draft Decision on APA's proposed revisions to the Access Arrangement for the Roma to Brisbane Pipeline (RBP).⁵ The RBP Draft Decision also shows how the access arrangement process enhances, rather than limits, the ability of the regulator and the service provider to make changes to the reference services of an access arrangement.

In the access arrangement revisions proposal for the RBP, APA had proposed:

- redefining the firm service reference service as bi-directional Long Term Firm Service (the existing firm service was only for transportation from west to east)
- introducing a new reference service, Short Term Firm service, which would have a maximum contract term of 3 years.

These changes, APA believed, better accorded with the current requirements of users in the market for gas transportation service.

⁵ AER, *Draft Decision Roma to Brisbane Gas Pipeline Access Arrangement 2017-22, Attachment 1 – Services covered by the access arrangement*, July 2017.

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During its consultation on the proposed revisions, the AER received submissions from prospective users and from an organisation representing users:

- offering some support for the proposed bi-directional Long Term Firm Service
- proposing that "as available" and "park and loan" services be made reference services
- appearing to accept the proposal for a Short Term Firm Service, but expressing concerns about the proposed term of contract (recommending a maximum term of 1 year), and about pricing.

In its Draft Decision, the AER noted rule 101 and advised (footnotes omitted):

The term "likely to be sought" is not defined in the NGL or NGR, but the notion of "likely" means at its lowest that there is a "real chance or possibility" that something will occur, and at its highest that it is "more probable than not" that an event will occur. The term "significant part of the market" is also not defined in the NGL or NGR. However, the ordinary construction of the word "significant" is something that is less onerous than the "majority", and may mean no more than that the part of the market seeking the service must not be "insignificant".⁶

The AER also advised that:

- the reference service (and rebateable service) provisions of the NGR provide the regulator with full discretion
- when exercising this type of discretion the AER was required to do so in a manner that was likely to contribute to the achievement of the national gas objective.⁷

The AER then determined that the Long Term Firm Service should be a reference service because:

⁶ AER, *Draft Decision Roma to Brisbane Gas Pipeline Access Arrangement 2017-22, Attachment 1 – Services covered by the access arrangement*, July 2017, page 1-12.

⁷ AER, *Draft Decision Roma to Brisbane Gas Pipeline Access Arrangement 2017-22, Attachment 1 – Services covered by the access arrangement*, July 2017, page 1-16.

- it was likely to be sought by a significant part of the market over the access arrangement period
- its specification as a reference service was consistent with the revenue and pricing principles of the NGL, and was likely to promote the national gas objective.

The Short Term Firm Service, the AER found, was likely to be sought by a significant part of the market over the access arrangement period. However, the regulator was not satisfied that its specification as a reference service would be consistent with the revenue and pricing principles, or would promote the national gas objective.⁸

Uncertainties about the demand for park and loan service, and about the demands for in-pipe trading and capacity trading services, led the AER to determine that these be rebateable services.

Other services, in particular, as available service and interruptible service, would, the AER ascertained, be effectively replaced by firm service during the next access arrangement period, and did not need to be specified as reference services.⁹

The AER's July 2017 Draft Decision on APA's proposed revisions to the RBP Access Arrangement shows:

- service providers can, and do, propose changes to the reference services of an access arrangement; they are not limited by the access arrangement process
- the access arrangement process provides prospective users with the opportunity to provide the regulator with views on the service provider's proposals concerning reference services, and to advance their own views on what should be the reference services in an access arrangement
- the regulator is not especially restricted in making changes to the reference services of an access arrangement, drawing on information it

⁸ AER, *Draft Decision Roma to Brisbane Gas Pipeline Access Arrangement 2017-22, Attachment 1 – Services covered by the access arrangement*, July 2017, page 1-19.

⁹ AER, *Draft Decision Roma to Brisbane Gas Pipeline Access Arrangement 2017-22, Attachment 1 – Services covered by the access arrangement*, July 2017, page 1-26.

receives from the service provider and from prospective users during the access arrangement process.

Covered pipeline service providers once typically specified a single reference service – firm forward haul service – in their access arrangement proposals, and this was accepted by the regulator as the service likely to be sought by a significant part of the market. That has now changed. Reference service specification is no longer a passive or static process. Service providers, prospective users and the regulator are active participants in the design of the reference services which are included in access arrangements. That the approach of the NGR leads to important non-contestable services being excluded from the regulator's ex ante review, as the ACCC has proposed, is backward looking. It is no longer the case.

APA sees no merit in adopting the framework and approach process of electricity network access regulation for the review of gas access arrangements. In respect of reference services, adoption of that approach would add nothing to the existing arrangements whereby users and prospective users can raise issues pertaining to pipeline services when they respond to the regulator's invitation to make written submissions on an access arrangement revisions proposal.

4.2 Question 5: Conforming capital expenditure

- (A) *Do you consider it beneficial that both forecast and actual capital expenditure be assessed by the regulator?*
- (B) *Does an appropriate level of regulatory scrutiny on investment occur if the regulator's discretion is limited?*
- (C) *Can the same capital expenditure criteria apply to both market carriage and contract carriage pipelines? And to both transmission and distribution pipelines?*

To the extent that the reference tariffs to apply during an access arrangement period may be affected by a forecast of expenditure on a project which is expected to be undertaken during that period, regulator assessment of forecast capital expenditure may be beneficial to pipeline users.

A forecast of the expenditure on a project which is to be undertaken during an access arrangement period may be made more than five years before

the project is undertaken and the expenditure actually incurred. During the period between proposal of the forecast and execution of the project, changes in market conditions, and in the prices of materials (especially imported material) and services, may lead to changes in both project scope and cost.

Rule 80 (AER's power to make advance determination with regard to future capital expenditure) may assist the service provider in these circumstances. However, the process available via rule 80 is "large scale" and inflexible, and is not much used.

The actual expenditure on a project may subsequently be different from forecast expenditure, and regulator assessment, before the expenditure is added to the capital base, may again be beneficial to pipeline users.

In APA's view, regulator assessment, under the regime of the NGR, of both forecast and actual capital expenditures, has an important outcome which is less likely under regimes like that of the NER, in which only forecasts and overspending against those forecasts, are scrutinised. Under the regime of the NGR, a reasonable forecast of expenditure on a project can be made, for the purpose of revision of an access arrangement, well in advance of work on the project being carried out. The service provider then remains incentivized to examine other options for achieving the desired outcome at lower cost. If a lower cost option is available without compromising the outcome sought, the regulator can recognise this when subsequently assessing the actual expenditure for inclusion in the capital base.

The Victorian Transmission System (VTS) provides an example. In advance of the 2007 revision of the Access Arrangement for the VTS, the pipeline operator and the Victorian system operator identified a need to address capacity constraints which were expected to emerge during the next access arrangement period. These constraints could be eliminated by upgrading the Brooklyn Compressor Station, and the regulator assessed that the reference tariffs of the revised Access Arrangement should provide for recovery of some \$59 million forecast to be spent on the planned upgrading. The service provider, APA GasNet, undertook extensive system studies prior to the capacity constraints emerging, and found that looping of the pipeline system in the Sunbury area, with some work on the Brooklyn Compressor Station, would eliminate the constraints and provide a basis for future system development, at the much lower cost. That cost was approximately \$18

million. Under a regime like that in the NER, the service provider would have undertaken the work which had been planned, and would not have sought out the lower cost option.

The AEMC asks whether there can be an appropriate level of regulatory scrutiny of investment if the regulator's discretion is limited. APA is of the view it can.

Indeed, the regulator's scrutiny of forecast capital expenditure is sometimes "excessive" despite its discretion being limited. When forecasts are made well in advance of the time when a project is undertaken there are very considerable uncertainties, necessarily reflected in contingent amounts in the project estimates, which the regulator invariably ignores.

In APA's experience, regulator assessment of forecasts of capital expenditure, and of actual expenditures, is thorough (often involving the use of external technical consultants), and does not appear to be influenced by rule 79 being a limited discretion rule.

The criteria for capital expenditure justification in the NGR are essentially economic and technical criteria. They can apply to both market carriage and contract carriage pipelines, and they can apply to both transmission and distribution pipelines.

APA remains concerned that the absence of well-defined property rights in pipeline capacity, rather than the criteria by which capital expenditures are justified, is a critical issue for expenditure to expand market carriage pipelines. As a result, where capital expenditures are made in the Victorian Transmission System (a market carriage pipeline system), they are more likely to be made for safety or integrity reasons, rather than because they deliver superior economic outcomes (the overall economic value of the expenditure is positive).

4.3 Question 6: Extension and expansion requirements

- (A) Should there be discretion regarding which extensions and expansions are to be included as part of a covered pipeline? On which basis do you consider that such discretion should be exercised?
- (B) If a pipeline is partially covered, does this impact on the application of cost allocation and tariff setting rules? Does it impact on other aspects of an access arrangement?
- (C) Should the same extension and expansion requirements apply to both market carriage and contract carriage pipelines? And to both transmission and distribution pipelines?

When approving the initial access arrangement for the Goldfields Gas Pipeline in July 2005, the regulator, the ERA, approved the service provider, Goldfields Gas Transmission (GGT), having the right to elect whether an expansion of pipeline capacity would become part of the covered pipeline.

When the ERA came to approve the first revisions to the access arrangement, GGT's right to elect whether an expansion was to become covered was significantly circumscribed. GGT may still make an election as to whether an expansion is covered or uncovered, but that election is now subject to the consent of the regulator.

The Access Arrangement for the Roma to Brisbane Pipeline similarly gives the AER the right to decide whether an expansion of the capacity of the pipeline is part of the covered pipeline. Section 7.1(a) of the Access Arrangement drafted and approved by the AER in 2012 (the current access arrangement) states:

- (a) If Service Provider proposes an extension of the Covered Pipeline, it must apply to the AER in writing to decide whether the proposed extension will be taken to form part of the Covered Pipeline and whether this Access Arrangement will apply to the incremental services provided by the proposed extension.

...

After considering Service Provider's application, and undertaking such consultation as the AER considers appropriate, the AER will inform Service Provider of its decision on Service Provider's proposed coverage approach for the pipeline extension.

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The AER's decision referred to above, may be made on such reasonable conditions as determined by the AER and will have the effect stated in its decision on Service Provider's proposed coverage approach for the pipeline extension.

Similar provisions appear in the access arrangements of other transmission pipelines.

If there is discretion regarding which extensions or expansions to a covered pipeline are to be included as part of the covered pipeline, that discretion is now firmly in the hands of the regulators (the AER and the ERA).

Between 2012 and 2014, GGT significantly expanded the capacity of the Goldfields Gas Pipeline to deliver gas to iron ore mining operations in the Pilbara region of Western Australia. Seeking to retain flexibility to negotiate future commercial arrangements, GGT elected that the expansion not be part of the covered pipeline. In May 2014, the regulator, the ERA, gave its consent to the election. Under the expansion and extension requirements of the Goldfields Gas Pipeline Access Arrangement which was in effect at the time, the regulator did not need to provide reasons for giving its consent. The expanded capacity was provided by means of additional compression, which has an expected life of 30 years. Before the additional compression was installed, that capacity had been fully contracted for a period exceeding 20 years (the contracts provided the commercial support for the expansion). GGT understands that this may have influenced the regulator's decision.

APA does not believe that partial coverage of a pipeline impacts on the application of cost allocation and tariff setting rules, or on other aspects of an access arrangement.

Again, APA points to the example of the Goldfields Gas Pipeline, which might be the only transmission pipeline in Australia where this could be an issue.

The ERA has been able to effect an allocation of costs to the covered pipeline, for the purpose of setting a reference tariff, and has been able to approve other aspects of the access arrangement for the covered pipeline, within the scheme of the rules (initially, the rules of the Gas Code, now the rules of the NGR).

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In its December 2015 Draft Decision on proposed revisions to the Access Arrangement for the Goldfields Gas Pipeline, the ERA proposed a change in the allocation of costs between the covered and uncovered parts of the pipeline. That proposed change was made within the framework of the existing rules. The service provider, GGT, contested the change, which lowered the reference tariff. GGT argued that all cost allocations are to some degree arbitrary, and that the regulator's change did not lead to a reference tariff consistent with the broad requirement of the regulatory regime for the promotion of efficiency. This was not an argument about rules governing the allocation of costs between the covered and uncovered parts of the pipeline. It was an argument about the outcome.

Subsequently, the ERA carried the cost allocation proposed in the Draft Decision into its Final Decision, and the change was not further challenged by GGT. The fact that the Goldfields Gas Pipeline was partially covered did not impact on the application of the cost allocation and tariff setting rules of the NGR. Nor did it impact on other aspects of the access arrangement for the pipeline.

APA does not see any need to change the cost allocation and tariff setting rules for covered pipelines to take account of the fact that some pipelines are partially covered.

The current regulatory framework requires that a full access arrangement set out extension and expansion requirements (NGR, rule 48(1)(g)). Specific requirements concerning extensions and expansions are set out in rule 104. These requirements are quite general, and APA sees no fundamental reason why they cannot apply to both market carriage and contract carriage pipelines, and to both transmission and distribution pipelines (as, indeed, they currently do apply).

Generally, a distribution pipeline operator will be less likely to seek to have the coverage status of extensions and expansions – which are largely driven by population growth and the growth of urban areas – different from the coverage status of the rest of its network. In contrast, an extension or expansion of a transmission pipeline is usually a discrete investment (in the case of an extension, often an investment which has been competitively sourced by a user or users), and there may be sound commercial reasons for it having a coverage status different from the coverage status of the rest of the pipeline.

4.4

Question 7: Investment in excess capacity

- (A) *In your opinion, why has the speculative capital expenditure account rarely been used?*
- (B) *Should the regulatory framework support more or less investment of a speculative nature? If more, how could it do so most efficiently and effectively? With which parties should the risk of speculative investment reside?*
- (C) *If the regulatory framework permits speculative investment, should it also allow for the management of redundant assets?*

Transmission pipeline capacity expansion is effected by the addition of compression, or by looping (duplication of congested sections of a pipeline). Both the addition of compression and looping are capital intensive; they involve expenditures of millions of dollars.

In APA's experience, board of directors approval is required for the large expenditures required for capacity expansion, and that approval is not forthcoming unless the commercial viability of the expansion is supported by gas transportation agreements with users of the expanded capacity. Directors will not approve large capital expenditures of a speculative nature. They will not approve expenditures in the absence of contractual arrangements which provide some certainty for recovery of the investment.

The speculative capital expenditure account of Rule 84 has rarely been used because it does not provide any means of recovering expenditures which have been made, but which are not supported by current revenue streams from pipeline users.

Rule 84 simply recognises certain capital expenditures as being non-conforming (and not able to be added to the capital base for recovery from existing users via reference tariffs), and allows those expenditures to be brought into the capital base, together with a holding cost assessed at a rate to be determined by the regulator, at some future date. There is nothing in rule 84, or elsewhere in the NGR, which would provide for the financing of speculative investment.

The regulatory framework might be modified to support speculative investment but, in the absence of investor appetite to bear the cost, the only revenue stream which might support recovery of that investment is from existing users of a pipeline. Those users would have to bear the risk that the

pipeline service provider would be unable to find users for the expanded capacity.

Rule 84 permits speculative investment. Rule 85 facilitates the management of redundant assets. APA, as a pipeline service provider, seeks to avoid the creation of assets which are likely to become redundant and subject to consideration under rule 85.

4.5 Question 8: Capacity available under an access arrangement

- (A) *Does the current regulatory framework offer appropriate incentives for a service provider to offer spare capacity on a covered pipeline where it is efficient to do so?*
- (B) *Do you think that scheme pipeline service providers maintain useful spare capacity registers? Does this rule need to be amended in the light of expected market reforms?*
- (C) *Are the rules on defining a service provider interacting with ownership and operational structures in a way that impacts on disclosure of potentially available pipeline capacity?*

Under the current regulatory framework, the cost of unused capacity is borne by the equity investors in a pipeline. This provides, through the investment and other decisions of the board of directors, strong incentives on the pipeline operator to market any spare capacity with a view to ensuring that capacity is always "fully contracted".

A prospective user of a transmission pipeline will usually have multiple issues which it wants to explore with the service provider, including the issue of the availability of pipeline capacity. The exploration of these issues typically proceeds informally, and over an extended period, well in advance of any specific commitment to contract for capacity. (For most prospective users, pipeline capacity is only one element of a larger project and may not be a major element of that project). The spare capacity registers which must be maintained by scheme pipeline service providers seem, to APA, to be largely irrelevant to this process. Few, if any, prospective users appear to use the spare capacity registers.

APA does not see the current gas market reforms as requiring any change in the rules relating to the maintenance of spare capacity registers. The GMRG

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"reforms" are not based on any understanding of how the market for pipeline capacity actually works.

APA is of the view that the rules defining a service provider do not interact with ownership and operational structures in a way which impacts on the disclosure of potentially available pipeline capacity.

APA is aware that, on some pipelines, pipeline owners, or companies affiliated with the owners, have what are effectively foundation shipper rights to capacity in the pipeline.¹⁰

In APA's view, this does not restrict the disclosure of potentially available pipeline capacity.

"Spare capacity", as defined in the NGL, means "unutilised capacity of a pipeline".

Capacity may be spare if it is uncontracted, or if it is contracted but unutilised. The fact that capacity is, in some instances, capacity to which the owner of the pipeline, or an affiliate, has access for its own transportation of gas does not necessarily mean that the capacity is utilised.

As unutilised capacity, information about that capacity must, if requested, be provided to a user (NGR, rule 110). If a user provides information about "unutilised contracted capacity" to any person under rule 110, it must also provide that information to the service provider.

As spare capacity, information about unutilised owner's capacity must also be made available on the spare capacity register for the pipeline.

But owners, like other holders of capacity, are reluctant to bear the costs of capacity being unutilised and, therefore, spare. They will aggressively market any spare capacity with a view to ensuring that capacity is always "fully contracted".

Perceived problems with the disclosure of potentially available pipeline capacity are likely to be addressed through the current work of the GMRG to:

¹⁰ The two APA Group entities which own the Goldfields Gas Pipeline have foundation shipper rights to capacity. These rights are recognised in the Goldfields Gas Pipeline Agreement Act 1994, which ratifies an agreement between the State of Western Australia and the joint venturers who built, own and now operate the pipeline.

- promote capacity trading, and implement a national capacity trading platform
- mandate the day-ahead auctioning of contracted but un-nominated capacity.

4.6 Question 9: Extensions to the pipeline

- (A) *Does the ability of service providers to exclude extensions from an access arrangement raise concerns for pipeline users?*
- (B) *Would service providers and users benefit from the NGR including a negotiation framework for the connection of separately owned assets to covered pipelines?*

An extension to a covered pipeline will typically serve one user, or a small number of users. That one user, or the small number of users, will usually undertake a competitive tender process to source the provision of the extension. Recent market activity for development of extensions clearly demonstrates the strength of competition in this segment. In these circumstances, the service provider does not usually have market power in relation to an extension of a covered pipeline.

APA does not believe that any – necessarily limited – ability which a service provider might have to exclude an extension of a covered pipeline from an access arrangement raises concerns on the part of pipeline users.

A user's gas transportation agreement on a covered pipeline may specify, at the user's request, a delivery point on that pipeline which may be the point of interconnection with an extension owned by others. The user's gas transportation agreement will also specify the pipeline capacity (and hence the maximum flow rate) at that delivery point, and the pressure and temperature at which gas is to be delivered into the extension. Once these key parameters have been set through negotiation of the agreement for gas transportation in the covered pipeline, pipeline extension can proceed.

Agreement on these parameters, as part of the process of negotiating a gas transportation agreement on the covered pipeline, and not in a process which might be governed by a negotiating framework, pipeline interconnection (unlike the interconnection of electricity networks) is not technically complex.

Neither service providers nor users are likely to benefit from inclusion in the NGR of a negotiation framework for the connection of separately owned assets similar to that which is found in the National Electricity Rules (NER).

4.7

Question 10: Performance indicators

- (A) *Do the requirements to provide key performance indicators as part of an access arrangement result in useful information to users and prospective users of a pipeline?*
- (B) *Should the rules allow for the regulator to be more specific on which key performance indicators for distribution and transmission pipelines should be reported? Would this provide for better comparison across pipelines and over time? If not, how could greater consistency be achieved?*

Rule 72(1)(f) of the NGR requires that the access arrangement information for a full access arrangement proposal include key performance indicators.

Question 10(A) asks whether the requirement to provide key performance indicators leads to the provision of information useful to the users and prospective users of a pipeline.

The purpose of the current requirement that access arrangement information for a full access arrangement proposal include key performance indicators is the provision of information to assist the regulator in making a decision on the expenditure forecasts in the proposal. It is not the provision of information for users or prospective users of a pipeline.

Rule 72(1)(f) specifically requires that the access arrangement information for a full access arrangement proposal include key performance indicators used by the service provider to support expenditure to be incurred over the access arrangement period.

The rule has its origin in the Gas Code. Section 8 of the Code set out reference tariff principles. The explanatory notes at the commencement of section 8 explained that application of the principles of that section when calculating total revenue could lead to a range of feasible outcomes. In narrowing this range, the regulator was to have regard to various financial and performance indicators. Section 8.6 and 8.7 were, then, quite specific:

- 8.6 *In view of the manner in which the Rate of Return, Capital base, Depreciation Schedule and Non-Capital Costs may be determined (in each case involving various discretions), it is possible that a range of*

values may be attributed to the Total Revenue described in section 8.4. In order to determine an appropriate value within this range the Relevant Regulator may have regard to any financial and operational performance indicators it considers relevant in order to determine the level of costs within the range of feasible outcomes under section 8.4 that is most consistent with the objectives contained in section 8.1.

- 8.7 If the relevant regulator has considered financial and operational performance indicators for the purposes of section 8.6, it must identify the indicators and provide an explanation of how they have been taken into account.

In access arrangement approval processes under the regime of the Gas Code, there was little use of financial and operational performance indicators. They were of little relevance to the setting of the rate of return, which proceeded (and which continues to proceed) from the principles of financial economics rather than from the performance of particular businesses. They were (and continue to be) of little relevance to the capital expenditure projections of transmission pipeline service providers. Those expenditure projections were typically projections of expenditures on facilities which were specific to individual transmission pipelines, and were made using asset management plans and engineering studies pertaining to those facilities.¹¹

A regulator may, nevertheless, call for particular performance indicators to support a specific expenditure proposal, and question 10(B) asks:

- Whether the rules should allow for the regulator to be more specific on which key performance indicators for distribution and transmission pipelines should be reported?
- Would this provide for better comparison across pipelines and over time?
- If not, how could greater consistency be achieved?

In view of the limited use which is made of key performance indicators, APA sees the making of specific rules pertaining to those indicators as being of little value. The regulator is not precluded from asking for whatever

¹¹ These asset management plans and engineering studies are routinely requested by the regulator for the purpose of establishing whether capital expenditures are conforming.

indicators it considers will assist regulatory decision making, and can request indicators which facilitate comparisons across time and across different pipelines. There may not be a rule requiring the provision of key performance indicators on which the regulator can rely but, in such situations, APA believes, service provider compliance generally produces a better outcome than forcing the regulator into issuing a regulatory information notice in accordance with section 48 of the NGL.

4.8 Question 13: Providing information

- (A) *Do access arrangements and access arrangement information documents contain relevant and accessible information for users and prospective users seeking access to a covered pipeline? Is consistency in the provision of information important to aid in its understanding?*
- (B) *Do the Part 11 information requirements result in the provision of information that is relevant to users and prospective users seeking access to a covered pipeline? Is there other relevant information that could be provided? How do these requirements compare to the reforms for non-scheme pipelines?*
- (C) *Could the Bulletin Board, or scheme register, play a greater role in making available information regarding covered pipelines.*

The context in which gas transportation agreements are negotiated was broadly outlined in APA's response to question 11 (section 4.1 above). The users and prospective users who negotiate those agreements are commercial organisations. The people in these organisations who negotiate are professionals with relevant education and experience who know their tasks and responsibilities. They rarely act alone: gas transportation agreements are usually financially significant for their organisations, and negotiation, decision making and final "sign off" involve many people, often at different levels within the user organisation.

The people who negotiate for prospective users are adept at obtaining the information they need for successful negotiation. APA is well aware that they access the information available from its website, in particular, the reference service terms of conditions and the reference tariffs which are included in the access arrangements of covered pipelines.

This information will, however, rarely be sufficient. A professional buyer for a prospective user will usually seek to informally engage with the pipeline

service provider, well in advance of making any commitment to purchase gas transportation, to source information which will subsequently inform a specific request for service. (A professional buyer will also seek external expert advice, including the advice of lawyers with resource sector expertise on the drafting of the transportation agreement. This legal advice will typically be sought irrespective of whether a standard agreement, approved by the regulator as part of an access arrangement package, is available.)

Part 11 of the NGR sets out, among other things, requirements for service provider provision of:

- information on services requested by a prospective user
- tariffs for services for which there are no published tariffs.

In APA's experience, prospective users have made little specific use of the provisions of Part 11. There would seem to be two reasons for this:

- the buyers within prospective user organisations seek to informally engage with the pipeline service provider well in advance of wanting to signal any commitment to purchase gas transportation
- in advance of engaging with the operator of a fully regulated pipeline to which Part 11 applies, those buyers will have carefully assessed the information available from the access arrangement for the pipeline, including information on reference services and reference tariffs, and on terms and conditions of service; they will also be aware that the regulatory process itself generates extensive and public information about pipeline operations and costs, and will have carefully assessed that information.

Both the Bulletin Board, and the scheme register, might – at a cost – be adapted to play a greater role in making available information regarding covered pipelines. However, the information which could be provided through these alternative channels is unlikely to be different from the information which scheme pipeline service providers must already provide, on their websites in accordance with rule 107(1). It will be the general information which is relevant to all prospective users. For APA's pipelines, that information is available on APA's website, in the form of the access arrangement for each scheme pipeline, the associated access arrangement information, and the current reference tariffs. APA does not post on its

website regulator decisions, but prospective users are well aware that these are easily sourced from the regulator's website.

4.9 Question 15: Tariffs

- (A) Do you consider that the reference tariffs for transmission and/or distribution pipelines reflect the efficient costs of providing those reference services? If not, which provisions of the NGL or the NGR are contributing to the outcome?
- (B) Should the NGR recognise partially covered pipelines and provide specific guidance on cost allocation in this context?
- (C) Do the tariff setting requirements in the NGR provide the appropriate balance between discretion and guidance to achieve cost reflective tariffs. Should the discretion of the regulator be limited?
- (D) Why do you think that distribution pipeline service providers tend to charge the reference tariffs as the prices for the services they provide?
- (E) Is the balance between prescription and discretion for the reference tariff variation mechanism appropriate? Would more guidance in the NGR or from the regulator better support the development of these mechanisms?

Key provisions of the NGR are designed to direct the service provider and the regulator to efficiency in each of the component costs from which reference tariffs are to be determined:

- rule 79 requires that any capital expenditure which is to be added to the capital base must be that which would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing service
- the rate of return to be applied to the projected capital base is to be commensurate with the efficient financing costs of the benchmark efficient entity of rule 87(3)
- the depreciation schedule, the schedule which sets out the way in which previously incurred efficient capital expenditure is to be allocated over time, is to be designed so that reference tariffs vary over time in a way that promotes efficient growth in the market for reference services (NGR, rule 89(1)(a))

- the estimated cost of corporate income tax is to be determined, in accordance with rule 87A, from an estimate of the taxable income that would be earned, by a benchmark efficient entity, from the provision of reference services
- operating expenditure must be the expenditure which would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline service (NGR, rule 91(1)).

In any access arrangement revision process there will be debate between the service provider, the regulator, and users and end users about whether particular costs are, or are not, the efficient costs of providing reference services. Nevertheless, in APA's view, neither the provisions of the NGL, nor those of the NGR, perhaps with the exception of rule 87, systematically bias determination of the costs from which reference tariffs are determined so that those tariffs do not reflect efficient costs of reference service provision.

APA is of the view that there is no need for explicit recognition, in the NGR, of partially covered pipelines, or for specific guidance on cost allocation between covered and uncovered pipeline assets. APA's reasons for this are set out above in its response to question 6 (B).

The tariff setting guidelines of rule 95 of the NGR provide guidance on reference tariffs for transmission pipelines. Although broad, that guidance does not seem to be constraining on either service providers, or the regulator, setting cost reflective tariffs.

Transmission pipeline tariffs are relatively simple (although there may be more complex overlays in particular circumstances).

A large proportion (often more than 90%) of transmission pipeline costs is fixed. The costs do not vary with the volume of gas transported for users. Pipeline fixed costs are predominantly capital-related costs (return on investment and depreciation), and the costs of scheduled (or programmed) maintenance. These fixed costs are usually recovered through a tariff – a capacity or reservation tariff – which is directly related to users' contracted capacities.

A much smaller proportion of transmission pipeline costs (sometimes zero) varies with the volume of gas actually transported. These costs are usually only compressor fuel costs which, on many compressed pipelines, are

effectively zero because users provide their own fuel gas. Where they are incurred, the variable costs are usually recovered through a tariff – a throughput or commodity tariff – which is directly related to volumes of gas transported for users.

That the regulator's discretion in applying the other parts of rule 95 is limited has, in APA's view, been irrelevant to the setting of cost reflective reference tariffs for transmission pipelines.

Rule 94 guides the setting of reference tariffs for distribution pipeline networks, and does so in a way different from the way in which rule 95 guides tariff setting for transmission pipelines.

Rules 94(1) and 94(2) recognise the division of consumers of gas supplied from distribution pipelines into "tariff classes" – the small number of "standard types" to which APA refers in its response to question 11 above.

Rules 94(3) and 94(4) are anomalous.¹² They appear to be inconsistent with the scheme of incentive regulation within Parts 8 to 12 of the NGR, and within the NGL and the NGR more generally.

Rules 94(3) and 94(4) require consideration of:

- an upper bound of standard alone cost
- a lower bound of avoidable cost
- long run marginal cost (when setting a reference tariff, or the charging parameters for the elements of a reference service).

These are factors which would be taken into account when setting efficient prices in a perfectly contestable market. A single firm in a perfectly contestable market is driven by the competitive pressures of unimpeded and costless entry and exit to price competitively. But costless entry and exit are possible only when assets have alternative uses into which they can be deployed at no cost.¹³ Gas distribution networks, like transmission pipelines, comprise long-lived, purpose-specific and location specific assets which

¹² Rule 94 first appeared in version 1 of the NGR, which is dated 1 July 2008. There was no earlier draft of the rule on which comments could be made in the consultation process which preceded promulgation of the NGL and the NGR.

¹³ See P Dasgupta and J E Stiglitz (1988), "Potential Competition, Actual Competition and Economic Welfare", European Economic Review, 32: pages 569-577.

have few, if any, alternative uses. The perfectly contestable market benchmark is unlikely to be relevant to pricing in gas distribution.¹⁴

The initial reference tariffs of an access arrangement can only be varied during the access arrangement period in accordance with the terms of the reference tariff variation mechanism specified in the access arrangement (NGR, rule 97).

The reference tariff variation mechanisms found in most access arrangements usually permit variation of the reference tariff:

- for unanticipated inflation, in accordance with a formula set out in the access arrangement
- for certain defined events (cost pass through events) which may be anticipated but which cannot be forecast with any precision at the time the access arrangement is approved.

In APA's experience, proposals for reference tariff variation mechanisms have not been matters over which there has been substantial disagreement with the regulator. Where there have been disagreements, they have been confined to the way in which proposed mechanisms will operate in specific circumstances, and have been resolved through discussions between officers with the appropriate technical expertise.

The reference tariff variation mechanism in an access arrangement operates in much the same way as the price escalation provisions in a long term contract and, like those escalation provisions, its purpose is well understood by both service provider and the regulator. Additional guidance in the NGR is unlikely to better support the development of such mechanisms.

Rule 97 of the NGR allows for considerable flexibility in the design of reference tariff variation mechanisms for regulated gas pipelines, including their incorporation of various forms of price caps. If a service provider is able to outperform the forecast service and expenditure levels from which its capped prices have been determined, it can retain the gains for the

¹⁴ Given the high proportion of sunk costs in transmission, application of the principles on which rule 94 appears to have been based would have been inconsistent with the technological and economic characteristics of transmission pipelines. Use of the perfectly contestable market benchmark to guide the setting of transmission tariffs would have been irrelevant and wrong.

remainder of the regulatory period and, if a sharing scheme is in place, for part of the next. This provides the service provider with financial incentives to continuously:

- promote the use of existing pipeline services
- innovate in the delivery of services
- lower the costs of service provision.

These incentives for promoting existing services, for innovation and for cost reduction are very much weaker, if not non-existent, under the revenue capping regime of the NER.

APA is of the view that the flexibility in the rules governing reference tariff variation which allows the use of price caps makes the regime of the NGR superior to the regulatory regime of the NER. It should not be removed.

4.10 Question 16: Non-tariff conditions

- (A) *Do the non-tariff requirements for access arrangements result in relevant information being provided to users and prospective users of covered pipelines? Are there other non-tariff requirements that would be relevant?*
- (B) *Should the NGR or the regulator provide more guidance on which non-tariff requirements should be included in an access arrangement? Is there a need to provide greater guidance regarding the regulator's assessment of non-tariff requirements?*

A review of the approved access arrangements on the websites of the AER and the ERA shows that a few include (as an attachment) a complete pro forma gas transportation agreement. Others include, usually as a schedule, the terms and conditions of service on which the reference services will be supplied.

The inclusion, in an access arrangement, of detailed terms and conditions on which the reference services will be provided now seems to be the norm. (An obvious exception is APA's Access Arrangement for the Victorian Transmission System, which operates within the policies and procedures governing to the Declared Wholesale Gas Market in Victoria.)

The reference service terms and conditions included in access arrangements have been the subject of consultation and debate, all of which has occurred within the existing regulatory regime and has been framed by considerations of consistency with the national gas objective. Certainly, the

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AER felt no constraint in its ability to seek changes to APA's proposed "standard" terms and conditions when these were first presented in revisions to the Amadeus Gas Pipeline Access Arrangement proposed in 2011. Users and prospective users also engaged in the consultation process on these terms and conditions. They have continued to engage on APA's standard terms and conditions in the consultation processes in respect of the access arrangement revision proposals for other APA pipelines.

Prospective users of covered pipelines have access to comprehensive, regulator-reviewed and approved terms and conditions should they be considering contracting for a reference service. Relevant non-tariff information is currently available to users.

There seems, to APA, to be no requirement for additional guidance in the NGR on the non-tariff requirements to be included in an access arrangement; nor does there seem to be a need for greater guidance regarding the regulator's assessment of non-tariff requirements.

4.11 Question 14: Arbitration

- (A) *If there is uncertainty about how the current arbitration framework operates, how could this be resolved? Should Chapter 6 of the NGL and/or Part 12 of the NGR be amended with regard to the information and/or the processes?*
- (b) *Are there aspects of the arbitration framework for non-scheme pipelines under development by the GMRG that could also apply to scheme pipelines?*
- (C) *Which pipeline services should be subject to arbitration? Are there any pipeline services that should be excluded?*

APA is not aware of there being uncertainty about how the arbitration framework of Chapter 6 of the NGL and Part 12 of the NGR is to operate, and does not see an immediate need for framework amendment.

The framework of Chapter 6 and Part 12 is the subject of a detailed guideline prepared by the AER which explains the provisions for the hearing and determination of access disputes, and outlines how the AER will run the

dispute resolution process.¹⁵ The AER describes the guideline as being procedural in nature, and providing guidance to the parties involved in a dispute.

APA understands that the arbitration framework of the NGL and the NGR is little used. This could be a consequence of uncertainty about how the framework operates. However, the framework operates in respect of covered pipelines. It operates in circumstances where the obligations of the access seeker, the obligations of the service provider, and the process to be followed by the access seeker in obtaining access to a pipeline service are set out in an access arrangement which has been subject to extensive prior review and approval by the regulator. If the arbitration framework of the NGL and the NGR is little used, it could well be that, where an access arrangement is in effect, there is not much need for such a framework.

The GMRG has now implemented an arbitration framework for access to non-scheme pipelines in the NGL. That framework is supported by extensive information disclosure requirements which APA sees as being unnecessary in the context of a fully regulated pipeline (to which the framework of Chapter 6 of the NGL and Part 12 of the NGR applies). The new rules have been in place for less than one month, and there has not yet been any recourse to arbitration which could test out the working of the framework which they implement.

In APA's view, any consideration, at this time, of whether there are aspects of the GMRG arbitration framework for non-scheme pipelines which could also apply to scheme pipelines would be premature.

The current framework of Chapter 6 of the NGL and Part 12 of the NGR applies in the event of a dispute about access to a pipeline service provided by means of a scheme pipeline. "Pipeline service" is defined quite broadly in the NGL: a pipeline service is a service provided by means of a pipeline including a haulage service (such as firm haulage, interruptible haulage, spot haulage and backhaul), and a service providing for, or facilitating, the interconnection of pipelines. A pipeline service also includes a service ancillary to provision of any of the services referred to in the previous

¹⁵ AER, Guideline for the resolution of distribution and transmission pipeline access disputes under the National Gas Law and the National Gas Rules, November 2008.



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sentence. APA does not see that the pipeline services which are subject to arbitration require further specification.

That the arbitration framework of Chapter 6 and Part 12 applies in the event of a dispute about access to a pipeline service provided by means of a scheme pipeline, means that it also applies to disputes about access to light regulation services.

5 Light regulation

5.1 Question 3: Efficiency of light regulation

- (A) Do the form of regulation factors consider relevant structure, conduct and performance issues to enable the NCC to make an informed decision on the application of full or light regulation?
- (B) Do you consider that the light regulation regime has been fully utilised and appropriately enforced to produce benefits to pipeline users and achieve its objectives? If not, why not?
- (C) Are there other regulatory requirements that should be applied to light regulation pipelines? Are there current requirements that should not be applied?
- (D) Having regard to the new proposed non-scheme pipeline regulatory arrangements on information disclosure and arbitration, is the light regulation regime still relevant? Should it be retained, removed or amended?

APA owns and operates four covered pipelines on which there is light regulation of pipeline services. They are the Carpentaria Gas Pipeline, the Central West Pipeline, the Moomba to Sydney Pipeline, and the Kalgoorlie Kambalda Pipeline. APA is also an investor in the Allgas Energy gas distribution network in Brisbane, which is a covered pipeline network on which there is light regulation of pipeline services.

APA is of the view that the light regulation regime provides the only avenue available under the regulatory regime of the NGL and the NGR for assessing the benefits of regulation, and for limiting the scope of regulation when costs exceed those benefits. Indeed, the principle underlying the light regulation regime – that the extent of regulation, and hence the benefits it can deliver, be commensurate with the costs it imposes – should have wider application within the regime of the NGL and the NGR.

Light regulation of pipeline services becomes an option only when a pipeline is covered, and is potentially subject to full regulation under the regulatory regime of the NGL and the NGR.

When responding to an application for the coverage of a pipeline under s. 92 of the NGL, the National Competition Council (NCC) must usually make a recommendation to the relevant minister that the pipeline be covered, or

that it not be covered. The NCC may, at the same time as it makes a coverage recommendation, make a determination that the services to be provided by the pipeline are light regulation services (NGL, s. 110).

The NCC may also make a determination that services are light regulation services in response to an application from a service provider providing services using a covered pipeline requesting that those services be designated light regulation services (NGL, ss. 111-114).

In either case (in responding to a coverage application, or in responding to a service provider application for designation of services as light regulation services), when making a light regulation determination, the NCC must consider, in accordance with s. 122 of the NGL:

- the likely effectiveness of the forms of regulation provided for under the NGL and the NGR
- the effects of the forms of regulation provided for under the NGL and the NGR on:
 - the likely costs that may be incurred by an efficient service provider
 - the likely costs that may be incurred by efficient users and efficient prospective users
 - the likely costs of end users.

In considering these matters, the NCC:

- must have regard to the national gas objective
- must have regard to the form of regulation factors
- may have regard to any other matter it considers relevant.

The primary factors to which the NCC is to give consideration under section 122 are the effectiveness and costs of the alternative forms of regulation available under the regime of the NGL and the NGR. This is well-recognised by the NCC in its light regulation decisions. In paragraph 3.2 of its light regulation determination for the Allgas Energy gas distribution network the NCC advises:

In essence, the determination of whether or not to apply light regulation to a network turns on a comparison of the effectiveness and costs of the two

forms of regulation provided for in the NGL – light regulation and full regulation.¹⁶

In making its assessment of whether services should be light regulation services, the NCC is to have regard to the form of regulation factors in s. 16 of the NGL. These are a broad-based set of structural factors which assist in determining the extent of any market power in the market for pipeline services. They are, in APA's view sufficiently broad to enable the NCC to make an informed decision on the application of full or light regulation, especially when the NCC may also have regard to any other matter it considers relevant.

When implementing the NGL and the NGR in Queensland, in 2008, the Queensland Government made transitional regulations under which, until 30 April 2023, the Carpentaria Gas Pipeline:

- would be taken to be the subject of a light regulation determination
- cannot be made the subject of a full access arrangement.¹⁷

Light regulation was applied to services provided using the Moomba to Sydney Pipeline. In making its light regulation determination, the NCC found:

. . . the light regulation regime will be as effective as full regulation in protecting users and other parties that are dependent on access to the pipeline. This is due to the availability of relevant pipeline costs information, as well as the legislative protections contained within the light regulation regime.¹⁸

The NCC made a similar finding in its light regulation determination for the Central West Pipeline.

The cost of regulation was a key factor in the NCC's light regulation determinations for the Kalgoorlie Kambalda Pipeline, and for the Allgas Energy network.

¹⁶ NCC, *Application by Allgas Energy Pty Ltd for Light Regulation of the Allgas Distribution Network: Final Decision*, 28 April 2015. Similar statements can be found in other NCC light regulation determinations.

¹⁷ National Gas (Queensland) Regulation 2008, section 3(4).

¹⁸ NCC, *Light Regulation of the Moomba to Sydney Pipeline System: Final Decision and Statement of Reasons*, 19 November 2008, paragraph 3.21.

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The Kalgoorlie Kambalda pipeline had, at the time of the determination (June 2010), and still has, only two users.¹⁹ Those users had long term contracts for pipeline service. The NCC found that the likelihood of access disputes regarding the Kalgoorlie Kambalda Pipeline was, given its location, low, and that a shift to light regulation would result in cost savings to the service provider, with smaller savings to other parties including the regulator.²⁰

In its light regulation determination for the Allgas Energy network, the NCC found that a shift to light regulation would result in significant cost savings for the service provider, and small savings to the AER, retailers and end users.²¹

The light regulation regime applies in the context of covered pipelines which are already subject to full regulation. It provides a mechanism whereby an independent party – the NCC – can review the effectiveness of the alternative forms of regulation available under the NGL and the NGR and determine that, even though a pipeline remains covered, a lesser cost option than full regulation is appropriate in the particular circumstances of that pipeline.

In APA's view, the light regulation regime remains relevant, and remains relevant even though there is now an information disclosure and arbitration regime for non-scheme pipelines.

¹⁹ During the last five years only two parties have initiated negotiations for access to the pipeline services provided using the Kalgoorlie Kambalda Pipeline. In each case, those negotiations ceased when the prospective user found other fuels to be available at lower cost than gas transported by pipeline.

²⁰ NCC, *Light Regulation of the Kalgoorlie Kambalda Pipeline: Final Decision and Statement of Reasons*, 29 June 2010, paragraphs 3.24 and 3.26.

²¹ NCC, *Application by Allgas Energy Pty Ltd for Light Regulation of the Allgas Gas Distribution Network: Final Decision*, 28 April 2015, paragraph 3.31. Costs were not the only consideration in the NCC's decision to make a light regulation determination in respect of the Allgas Energy network. The NCC found that, in the circumstances of the Allgas network, light regulation was likely to be as effective as full regulation.

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5.2 Question 12: Light regulation and limited access arrangements

- (A) Does the light regulation regime achieve its objective of providing relevant information to users and prospective users on access to a pipeline?
- (B) Should the information reporting requirements and limited access arrangement provisions specified for light regulation pipelines be amended to better achieve the regime's purpose?

The light regulation regime can provide relevant information to users and prospective users seeking access to pipeline services, as the NCC has found when making its light regulation determinations. It also provides a prospective user of light regulation services, and the provider of those services, with flexibility to negotiate arrangements for service provision, and with access to arbitration should their negotiations fail.

In APA's view, light regulation provides a low cost alternative to full regulation for certain covered pipelines. There is, at the present time, no strong imperative to change the information reporting requirements and limited access arrangement provisions for these pipelines in ways which would be likely to increase the costs of regulation.

APA notes that, although the provision of light regulation services may not receive the same regulatory scrutiny as the provision of services subject to full regulation, the AER monitors, from the responses to its Annual Compliance Order:²²

- the provision of light regulation services
- any differences between the prices of light regulation services provided, and the reasons for those differences
- publication, on the service provider's website, of the tariffs and other terms and conditions for light regulation services, and the date on which this information was first made available
- negotiations regarding access to light regulation services, including:
 - the names of parties requesting service

²² Annual Compliance Order, made under s. 48(1)(b) of the National Gas Law on 7 November 2008.

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- the pipeline services requested
- the outcome of the access negotiations.

Service provider compliance reports, and the regulator's overview of those compliance reports, are published, annually, on the AER's website.

Although the report is not published, APA Group entity Goldfields Gas Transmission prepares, for the ERA, a similar compliance report on the provision of light regulation services using the Kalgoorlie Kambalda Pipeline.